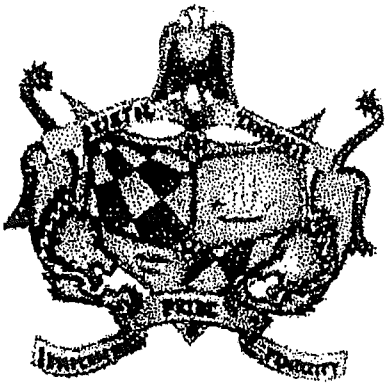
MUNICIPAL OPEN SPACE PLAN

Bristol Township
Bucks County, PA



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BRISTOL TOWNSHIP
MUNICIPAL OPEN SPACE PLAN

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BRISTOL TOWNSHIP
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TABLE OF CONTENTS

A. Community Background

B. Goals & Objectives

C. Identification of Existing Protected Lands

D. Inventories of Potentially Vulnerable Resources

E. Potential Open Space Linkages

F. Analysis of Unprotected Resources

G. Recommendations

H. Policies and Methods for Protecting Open Space

I. Implementation

APPENDIX

- Overlook Park Plan
- Greentrees Park Plan
- Riverside Preserve Concept Plan
- Black Ditch Creek Plan

LIST OF MAPS

- Comprehensive Land Use Map
- Natural Features Map
- Protected Open Space Map
- Potential Links Map
- Recommendations Map

A. COMMUNITY BACKGROUND OF BRISTOL TOWNSHIP

The Character, Setting and Geographic Location of the Community Known as Bristol Township

Located in southeastern Pennsylvania, Bristol Township is a large suburban community which is home to 57,129 people. The Township is the largest municipality in Bucks County. It is centrally located within the Lower Bucks County region and is surrounded by Bensalem, Middletown and Falls Townships, and Tullytown and Bristol Townships.

The Township is made up of more than fifty small neighborhoods, some with history that predates the American Revolution. Bristol Township also possesses unique natural features including the Delaware River as a major part of its southeastern boundary and the Neshaminy Creek running along its southwestern boundary with Bensalem Township. It possesses many natural streams, wetlands, Township, County and State parks, green areas, lakes and ponds.

Primarily a bedroom community with 20,073 housing units, Bristol Township is also traversed by such important travel and commuting accessways as Interstate 95, the Pennsylvania Turnpike, U. S. Route 13, Route 413, and the main line of the Conrail/Amtrak Commuter Railroad. Nearby is access to U. S. Route 1. All of these manmade features allow easy access to center city Philadelphia and New Jersey, as well as points north and south along the eastern seaboard of the United States. PennDOT has recently reactivated detailed planning for the construction of an interchange between I-95 and the Pennsylvania Turnpike. The majority of the land required for the interchange is located in Bristol Township and the final design selected will have an important impact upon not only the Township's economic base but will also make the township an important stopping place for travelers to the region.

Bristol Township also boasts convenient shopping for its residents within the community and easy access to the large Oxford Valley Mall in Middletown Township.

Brief History of Bristol Township
And Significant Influences on its Development

Originally occupied by Dutch, Swedish, and English colonists in the Seventeenth Century, village development in Bristol Township began shortly after William Penn became Proprietor of Pennsylvania in 1681. The Penn family was from the English County of Buckingham. A court commission created Buckingham Township in 1692; but commonly known as Bristol Township, the community received its official name change in 1702.

The Township's location adjacent to the Delaware River in the coastal zone was an early catalyst in its development. Mineral springs within the Township's boundaries provided the most fashionable watering place until 1821. Small settlements appeared in various parts of the Township such as Newportville in 1808 at the head of navigation on the Neshaminy Creek.

In 1686, the Kings Highway was ordered constructed from Philadelphia to Morrisville through Bristol. Beginning in 1804, what is now known as Bristol Pike (U. S. Route 13) was built in the bed of this early highway. William Penn originally laid out the north-south roads in the Township in Lower Bucks County. By the mid-1800's, most of the major arteries which serve Bristol Township today were in existence.

Still, roads were generally poorly paved and difficult to use; and most traffic was water borne, first on the Delaware River and then, in 1830, on the 60-mile long Delaware Canal which runs from Bristol to Easton and connected with the Lehigh Canal. Coal from the Pennsylvania Anthracite mines was brought by canal barge to Bristol where it was transferred to ships bound for Philadelphia or New York. A portion of this historic Canal is located in Bristol Township.

However, until the Second World War, Bristol Township's location in the coastal plain of the Delaware River meant it was ripe for farming; and its economy was based on agriculture.

Beginning in 1900 with a number of interurban trolley lines and later with commuter service on the railroad, the Township became more accessible to Philadelphia and development increased slightly. Up until the end of 1940, approximately 3,500 housing units existed in Bristol Township; 1,665 of these units were constructed to house World War II workers in the area when Rohm and Haas expanded its plant to meet demands for its products. From 1940 to 1950, the Township's population rose from 5,827 to 12,184 people.

In December 1950, Carnegie-Illinois Steel, which became U. S. Steel in 1951, announced that it would construct a large steel-making facility in adjacent Falls Township. The new plant was named for U. S. Steel's new President Benjamin F. Fairless. From this beginning, the plant is now commonly known as the Fairless Works.

Between 1950 and 1954, 9,000 housing units were constructed and occupied. Between 1955 and 1960, another 3,000 units were added. The largest of the housing developments, of course, is well known as Levittown; but, there were others ranging from a dozen homes to 400 homes in size. Residential land use boomed while industrial and commercial uses were an afterthought. Between 1950 and 1960, Bristol Township's population grew 337% to a high of 59,298 persons.

By 1970, the Township's population reached its maximum of 67,498 persons. However, the loss of major industries, which employed many of the Township's residents throughout the 1970's, led to an out-migration of the working age population and a reduction in family size in the Township. Losses in population occurred in the age groups between 35 and 49 years of age. Another national trend evidenced itself in the Township's population drop: people were having fewer children. Therefore, not only did those 35 to 49 years of age begin to out-migrate and take their children, families were having fewer children. This is reflected in consistent drops in population in the age groups 0 through 18 years of age. At the same time, the percentage of senior citizens grew from 3.5% of the population in 1970 to 6% in 1980, to 11% of the population in 1990. The result was that the Township's population took a major downturn. Bristol Township lost 13% of its population dropping to 58,733 in 1980 from the high of 67,498 in 1970.

During the 1980's, population loss continued but at a greatly reduced rate. Bristol Township's population dropped to 57,129 in 1990, a decline of 2.71% from 1980. Bristol Township's working age population declined by 3.8% and its school age population dropped by 15.07%. Significantly, the segment of the population which has seen dramatic growth is the senior citizen/retirement age population. During the 1980's, this segment of the population grew by 73.63%.

Since the 1960's, housing growth has been more thoughtful and planned. Population has declined somewhat and leveled off. In 1990, the Township's population stood at 57,129 people living in 20,073 housing units.

Government in Bristol Township

For some thirty years, until December 1985, Bristol Township, a first class township, was governed by eleven commissioners. One commissioner was elected from each specific ward of the Township.

In January 1986, a new form of government, Executive-Council, was instituted. Under this form of government, the Executive, elected at large, is charged with the duty and authority to enforce the laws and carry out Township policy as set forth by Council. The five-member Council is a body elected at large which exercises the legislative powers of the Township. A Managing Director, appointed by the Executive with the advice and consent of Council, is charged and responsible for the administrative management of the Township.

The Executive with the advice and consent of Council appoints department Heads, the Solicitor and the Township Engineer. The Chief of Police serves in accordance with the Civil Service Provisions of the First Class Township Code. Administratively, Department Heads and the Police Chief are under the direction of the Managing Director who reports directly to the Executive.

Currently, Bristol Township government and services are carried out by the following Departments and staff:

- ***Department of Administration:*** Headed by the Managing Director and including the Office of Finance, the Tax Office and the Office of Community Development.

- ***Department of Police:*** Headed by the Chief of Police who is responsible to the Managing Director for performance of the functions of the department.

- ***Department of Public Safety:*** Headed by the Fire Marshal.

- ***Office of Licenses and Inspections:*** Headed by the Code Enforcement Officer.

- ***Department of Roads and Public Property:*** Headed by a Superintendent.

- ***Office of Recycling:*** Headed by a Recycling Coordinator.

Square Mileage

Bristol Township contains approximately 16.26 square miles (10,406 acres) of land. A detailed breakdown of the uses of that land by square mile is as follows:

Land Uses By Category and Percent of Total

Type of Land Use		Number of Square Miles	% of Total
Residential: (includes internal neighborhood thorougfares)	Single-Family	6.34	38.99
	Multi-Family	0.37	2.28
Retail/Office:	Retail	0.59	3.63
	Office	0.06	0.37
Industrial:	Heavy	0.78	4.80
	Light	0.53	3.26
Public & Semi-Public:	Park & Open Space	1.15	7.07
	Public	0.64	3.94
	Semi-Public	0.40	2.46
Rights-of-Way:	Power Lines & Substations	0.36	2.21
	Local Service Thoroughfares	0.89	5.47
	I-95	0.31	1.91
	Turnpike	0.21	1.29
	Conrail	0.16	0.98
Vacant Land:	Farm	0.03	0.18
	Residential Related	0.95	5.84
	Retail Related	0.09	0.55
	Light Industrial	1.06	6.52
	Heavy Industrial	1.34	8.24
Totals:		**16.26**	**100.00%**

Zoning and Land Use

As can be seen from the table above and with respect to zoning and land use, the Township is almost completely developed (See Comprehensive Plan Land Use Map). The entire Township is zoned and an examination of land use clearly demonstrates the Township's recent development history.

In 1950, Bristol Township was predominately an agricultural community. Its rich lands adjacent to the Delaware River were ideal for farming. The Township is relatively flat; and, at one time in its early prehistoric history, much of the Township was under water or flooded resulting in rich soil making it an ideal farm location.

The Township has extremely strong physical boundaries including the meandering and scenic Neshaminy Creek to the west, the Delaware River to the south and the Piedmont or rockfall line area of significant topographic change between the lower flat bottom land and the hilly sections to the north.

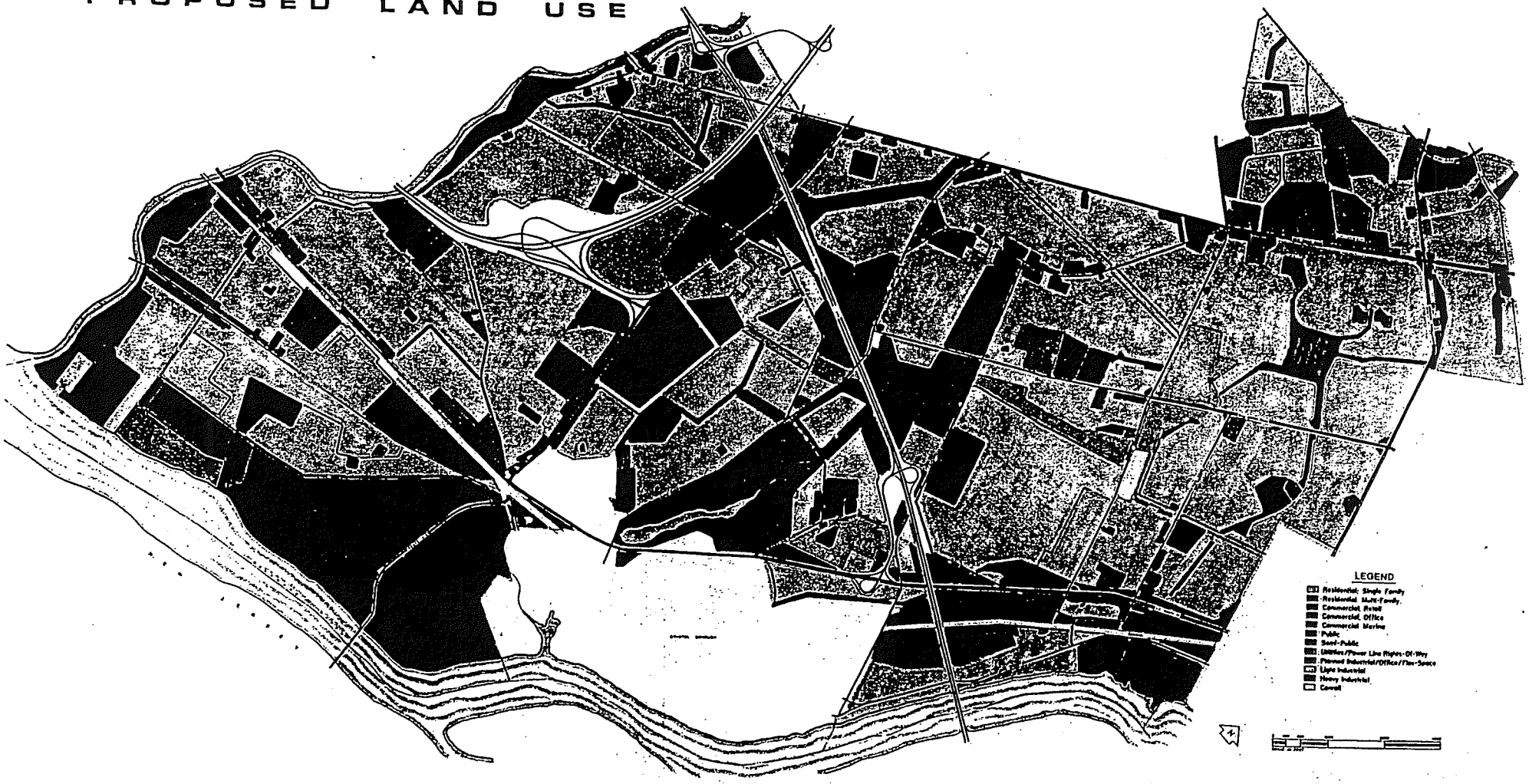
In the early 1950's, the Levitt organization, recognizing the need for an enormous amount of housing to provide for the thousands of workers projected to be employed at the new steel mill being constructed by U. S. Steel in adjacent Falls Township, assembled vast portions of Bristol Township through acquisition of hundreds of large and small farms. The Levitt organization planned a community in accordance with the then-current subdivision small lot, single-family development standards in practice in the early 1950's.

Residential density in Levittown averages between 3.5 and 4 dwelling units per acre on approximately 10,000 square foot lots, in some cases, to a high of 12,000 to 13,000 square feet. On each of these lots was placed a standard Levittown housing unit that was constructed, for the most part, on a slab without a basement. Many of the models provided an expandable attic. These homes constituted inexpensive housing in a community environment.

Neighborhoods were planned utilizing the European and "broad acre cities" planning module as established by an American architect-planner, Frank Lloyd Wright. Curvilinear street designs were established within the mile square neighborhood grid and, wherever possible, a school was located to serve the mile-square grid.

Obviously, municipal infrastructure was required to support density of this magnitude; and throughout the 1950's and 1960's, municipal water and sewer served almost the entire Township developed in the "Levittown neighborhoods". The older sections of the Township, including Newportville, Croydon, and West Bristol, were not served by municipal water and sewer until later dates, nor were these areas as well planned as the Levittown neighborhoods.

PROPOSED LAND USE



BRISTOL TOWNSHIP COMPREHENSIVE PLAN 1986 - 2006

BUCKS COUNTY, PENNSYLVANIA

DIRECTION ASSOCIATES - PLANNING CONSULTANTS

With respect to zoning, the Township zoning ordinance dates from 1954 and appears to have been developed by the Levitt organization in conjunction with the growing Township since there is no provision for large-lot residential development nor was there provision of any midrise housing nor any attention devoted to providing a balance in land uses especially in the industrial and commercial sectors of the Township's zoning and early land use plans.

Some of the seeds of the problems facing the Township in the 1990's and beyond were sown at the time that the Township's rapid development took place during the decades of the 1950's and 1960's.

With respect to park and recreation planning, the Levitt organization and other large developers active in the Township during the 1950's and 1960's created an extensive series of parks, walkways, and green spaces. The majority of the recreation facilities created by the developers referred to above were fields connected with schools that were required to serve a rapidly growing population which demanded the simultaneous construction of schools and housing.

It is appropriate to again state that Bristol Township's population jumped from a 1950 figure of 12,710 to a 1970 figure of 67,498 representing one of the largest increases in community population and housing ever experienced by any community in the Commonwealth of Pennsylvania.

Other elements of construction planned for utilization of recreation involved the need to provide for storm water management. As previously mentioned, most of Bristol Township, extending from the Piedmont fall line to the Delaware River is extremely flat. Storm water management was not provided through the construction of an extensive system of large-scale subsurface storm sewers. Rather, it was provided for through the construction of a network of open drainage ditches that were planned to function primarily as the storm water collection system and to be utilized in a secondary manner as pedestrian walkways. These systems remain to this date and represent an excellent opportunity to provide for passive walking, cycling, or sitting areas through a substantial portion of the Township.

SOCIO-ECONOMIC FEATURES

Overview – Social Characteristics

Bristol Township is a densely populated, primarily bedroom community located in Lower Bucks County. Although a first-class township by designation, it is very much a small city with many of the problems and characteristics of urban living. The following data is a brief overview of the social fabric of Bristol Township.

- ***Size:*** Bristol Township is the largest municipality in Bucks County with a 1990 population of 57,129 persons and the *tenth largest municipality* in the Commonwealth of Pennsylvania.

- ***Age of Population:*** Bristol Township's population is aging. In 1970 the median age was 22.8 years; in 1980, 27.7 years; and in 1990, 32.1 years.

- ***Population:*** From 1980 to 1990, the Township's population decreased 2.71% while the elderly segment of the population, 65 years and older, *increased* by 73.63%. These changes in population translate into smaller family sizes, more single-person residences, and more senior citizens choosing to remain in their own homes.

- ***Race:*** Bristol Township's population is primarily white (87.6%). Blacks make up the majority of the remaining races in the Township at 6.37% of the population.

- ***Housing:*** The Township is a bedroom community with 20,073 housing units, 19,314 are occupied year round. Of the occupied units, ***76.4% are owner-occupied.*** The housing stock is primarily made up of 1-unit detached (15,359) and 1-unit attached (594) structures.

- ***Households:*** Bristol Township residents reside predominately in family-type households (78.4%) with an average 2.94 persons per household. The elderly living alone account for 6.25% of the Township's households.

- ***Income:*** Of Bristol Township 59 block groups in 1990, 35 have percentages of low/moderate income persons of more than 30%. Sixteen (16) of the block groups have between 40% and 74.18% low/moderate income persons.

Population and Gender – 1990

The 1990 Census of Population determined that Bristol Township's population at 57,129 people, a decline of 2.71% from 1980. Almost evenly divided between males and females, females have .5% more persons than males. An examination of the gender breakdown of each of the Census Tracts reveals an almost perfect reflection of the Township's population as a whole.

Population and Gender Breakdown – 1990[1]

		Population	Males	Females
Bristol Township		**57,129**	**28,279**	**28,850**
....Percent of Population:		100%	49.5%	50.5%
Census Tracts	1003.02	5,335	2,663	2,672
	1003.03	5,551	2,626	2,925
	1003.04	2,349	1,229	1,120
	1003.05	8,400	4,170	4,230
	1004.01	6,521	3,275	3,246
	1004.02	7,142	3,590	3,552
	1004.03	2,391	1,136	1,255
	1004.04	6,865	3,350	3,515
	1004.05	8,979	4,489	4,490
	1004.06	3,596	1,751	1,845
....**Totals:**		**57,129**	**28,279**	**28,850**

[1]Source: 1990 Census of Population

Comparison of Age Groups – 1980-1990

This table, which follows the exhibits discussed above, reflects changes in population for each of the Census Tracts. Although overall Township population declined by only 2.71%, an examination of what is happening in the school-age, working-age, and retirement-age population is interesting.

Comparison of Age Groups – 1990-1980[4]

Census Tracts	1990 Total Pop.	1980 Total Pop.	% Growth/ Loss +/-	1990 Total Pop. 0-17	1980 Total Pop. 0-17	% Growth/ Loss +/- 0-17	1990 Total Pop. 18-64	1980 Total Pop. 18-64	% Growth/ Loss +/- 18-64	1990 Total Pop. 65+	1980 Total Pop. 65+	% Growth/ Loss +/- 65+
Totals	57,129	58,723	-2.71%	15,418	18,154	-15.07%	35,693	37,103	-3.80%	6,018	3,466	73.63%

As can be seen from the table, the working age population declined by 3.8%. this out-migration can be attributed primarily to a loss of jobs. As can be expected, a decline in the working age population, which can also be considered the child-bearing and raising population, would be reflected in a decline in the school-age population. Bristol Township's school-age population declined by 15.07% over the decade.

Importantly, during this same period, the retirement-age population increased by 73.63%.

These changes in population translate into smaller family sizes, more single-person residences, more senior citizens choosing to remain in their own homes. Perhaps, more than anything, these changes in population growth and the aging of the baby boomers have been considered in depth during the park update and planning process.

[4]Source: 1990 Census of Population

PHYSICAL DATA

Floodplain, Wetlands, Scenic Rivers
An Overview

Floodplains, wetlands, and scenic rivers in Bristol Township include the Delaware River and Neshaminy Creek as Township borders containing floodplains and wetlands and both are of an extremely scenic nature representing great potential for recreation use (See Natural Features Map).

Regrettably, the Delaware River is hidden from view throughout the Township since most of its shoreline is developed.

South of Bristol Township, much of the shoreline is in industrial use and includes lands owned by Rohm and Haas and the Philadelphia Electric Company. North of Bristol Township, numerous private residential properties front on the river in the Edgely section of the Township; and at the northernmost boundary in Bristol Township, the Delaware Riverfront is the location of the Riverside Park Industrial complex which is an ongoing private industrial redevelopment of the former Paterson Parchment Paper Company property.

Access to the Delaware River is extremely limited with the best facilities being the Neshaminy State Marina providing mooring and river access to the Delaware River at the point of confluence of the Neshaminy Creek and the Delaware River.

With respect to the Neshaminy Creek, this beautiful creek separates Bristol Township from Bensalem Township. The creek banks have many areas with adjacent wetlands.

South of Route 13, a number of marinas and boat storage yards are located on the banks of the Neshaminy Creek. To the north of Route 13, extending to portions of Newportville, are scattered residential neighborhoods including portions of Croydon where older residential development has taken place adjacent to the Neshaminy Creek.

In the very northern area of Bristol Township adjacent to the Neshaminy Creek, open space exists on the banks of the Creek. The area north of the intersection of Ford Road and Newportville Road, extending through Fergusonville and into Newportville, contains significant amounts of land which are in the flood plain and are considered unbuildable. Some of this property is owned by Bristol Township and the Redevelopment Authority of the County of Bucks owns others.

Some years ago, the Authority with the objective of acquiring property in the flood plain that had been previously flood damaged planned a redevelopment project. This area, known as the Riverside Redevelopment Project, represents a location where the Township, working with the County, can renew its efforts to the realizing the hope of acquiring unbuildable lots, combining properties, cleaning up debris in this area and creating a greenway park for active and passive recreation use.

Floodplains

The floodplain is the lowland and relatively flat areas adjoining inland and coastal waters including flood-prone areas of offshore islands that are subject to a one percent or greater chance of flooding in any given year. The base floodplain refers to the 100-year floodplain (1% change floodplain). The critical action floodplain refers to the 500-year floodplain (.2% change floodplain).

Both the base floodplain and the critical action floodplain occur in Bristol Township.

Given Bristol Township's location in the coastal plane, along with its western boundary the Neshaminy Creek, and portions of its southwestern, southeastern, and eastern boundaries formed by the Delaware River, both the base floodplain and the critical action floodplain occur in Bristol Township. Lands along the following waterways fall within these floodplain areas:

- **The Delaware River.** The Delaware River is the eastern border of the township to the north and south of Bristol Borough. Since the river possesses tidal activity the flood plains may vary greatly. This tidal activity combined with the amount of development in the watershed creates great potential for extreme flooding activity during significant storms.

- **The Neshaminy Creek.** The Neshaminy Creek also is located as a boundary for the township. It also is subject to significant deviations in the floodplains along its banks. Older residential and commercial development still exists and is impacted by flooding along the creek and is the cause for concern by the township.

- **Martin's Creek Tributary No. 1**: Located in Falls Township but flowing close to the Township's boundary with Falls Township in the area between Brentwood Lane and Magnolia Drive in the Magnolia neighborhood.

- **Unnamed Tributary**: Flowing toward the Delaware River, this tributary follows along Stonybrook Drive and then along Kingswood Lane on toward the River, affecting small portions of the Greenbrook, Stonybrook, Farmbrook, and Kenwood neighbors.

- **Black Ditch**: Meandering through the Township in a north-south direction from Huckleberry Lane in the Holly and Crabtree sections of Levittown, through a portion of the Oaktree neighborhood, then just touching the Dogwood neighborhood, flowing across the former 3M Airport property, then past the Bloomsdale/Fleetwing neighborhoods on the west, then under the Pennsylvania Turnpike past the Magnolia Industrial Park and the Venice-Asby neighborhood, and finally into Silver lake.

- **Mill Creek**: Flowing from the Township's boundary with Middletown Township and separating the Mill Creek and Plumbridge neighborhoods, then generally following the Pennsylvania Turnpike to its confluence with Black Ditch just west of the Bloomsdale/Fleetwing neighborhoods. Other portions of the Township in the floodplain include small areas along Mill Creek as it leaves Bristol Township heading across Bristol Township and re-entering the Township on its way to the Delaware River.

- **Queen Anne Creek**: With the Wistarwood and Fairless Hills neighborhoods on one side and the former Thiokol property and the Bristol Township Authority property on the other, Queen Anne Creek enters at the Bristol Township/Falls Township boundary and leaves at the Bristol Township/Middletown Township boundary.

  The Creek then enters the Township again at the Bristol Township/Middletown Township boundary in the area between the Indian Creek and Plumbridge neighborhoods flowing to its confluence with Mill Creek. Queen Anne Creek splits off from Mill Creek at the Pennsylvania Turnpike passing under the Turnpike and re-emerging near the intersection of Routes 13 and 413.

  After its re-emergence, Queen Ann Creek runs generally southwestward, passing under Interstate 95, flowing toward and through the Newportville-Fergusonville neighborhoods toward the Neshaminy Creek.

- **Croydon Run**: Running primarily through the neighborhoods known as Croydon Park, Croydon, Croydon Acres, and Bristol Heights, Bristol and St. Mark's Cemeteries, and the neighborhoods of West Bristol, and Pennfield, as well as between the Brightside and Rockdale neighborhoods to the Neshaminy Creek. The floodplain is also located in portions of Croydon Manor, Maple Shade, and Belardlyville.

- **Croydon Tributary**: Passing through a portion of the Rohm & Haas property and the southeastern portion of the Croydon neighborhood to the Neshaminy Creek.

Other neighborhoods located in the floodplain include Maple Beach, and portions of Edgely.

Wetlands

Wetlands improve water quality, control floodwaters, control erosion, provide natural resource products, support fish and wildlife, provide a setting for outdoor recreation, provide educational opportunities, and help preserve the natural beauty of the community.

Found primarily in the areas between water and dry land, wetlands in Pennsylvania are of three different types:

Emergent: characterized by freestanding nonwoody plants such as cattails and soft rush. Scrub-shrub: consisting primarily of woody plants less than 20 feet tall such as dogwood, arrow-wood, alder, and buttonbush. Forested: characterized by trees over 20 feet tall such as red maple, hemlock, river birch, yellow bird, pin oak, and ash.

In Bucks County, there are three basic wetland systems: the Riverine System (along the Delaware River shore including tidal marshes and mudflats in the coastal plain); the Lacustrine System (surrounding lakes and ponds); and the Palustrine System (including upland marshes and nonglacial bogs).

Bristol Township, by its very location, contains all three types of wetlands and all three basic wetland systems found in Bucks County. Besides the obvious location of wetlands along the Neshaminy Creek and the Delaware River, wetland areas are scattered throughout the Township. They include those associated with open water, forested areas with broad leaf deciduous growth, emergent growth, and general forested areas.

Bristol Township and its neighbor, Bensalem Township, contain some of the few small remaining tidal wetlands remaining along the Neshaminy Creek. Within Bristol Township, along the Neshaminy Creek, a tidal wetland is located in the area where Newport Road is closest to the Creek. Two tidal wetland areas are located within Bristol Township along the Delaware River. One area runs from approximately Maple Avenue along the River to Emily Avenue if it were extended to the River. The second tidal area within the Township and along the Delaware River is located at the Bristol Township/Tullytown boundary and follows the river almost to the Edgely neighborhood.

Scenic Rivers

According to the criteria of the National Wild and Scenic Rivers Act (P.L. 90-542, as amended), a Scenic River is one that meets the following criteria:

An eligible river must be:

1. Five miles or more in length.

2. A free-flowing river or stream (rivers may have undergone some impoundment or diversion in the past).

3. Generally undeveloped (river corridors may be developed for the full range of agricultural uses and can include small communities as well as dispersed or cluster residential housing).

OR

Largely undeveloped (rivers or sections of rivers with shorelines or watersheds essentially primitive or largely undeveloped.)

4. Adjacent to or within a related land area that possesses an outstandingly remarkable geologic, ecological, cultural, historic, scenic, botanical, recreation or other similar value. (Interpreted to mean an area of multi-state or national significance.)

One-hundred, ten (110) miles of the Delaware River have been designated as scenic river, including the upper Delaware River for 73 miles from Pennsylvania to New York at the Pennsylvania/New York border and the middle Delaware River for 37 miles from Milford Township to the Delaware Water Gap in Pennsylvania. Currently, no portion of the Delaware River that is located in Bucks County is considered a scenic river.

Other areas of Delaware River have been proposed for inclusion and they include the area several miles north of Point Pleasant to Point Pleasant and then from a point beyond New Hope Township to Yardley. No portion of the Delaware beyond this point, including that portion adjacent to Bristol Township, is included on the National List.

The area along the Bristol Township riverfront are navigable and there is a deep water channel which allows ocean-going vessels with deep water drafts up to 44 feet to navigate the river from the Atlantic Ocean to the port facility upriver from Bristol Township in Falls Township owned by the USS Steel Corporation and now leased to and operated by NOVOLOG Bucks County, Inc. as the Port of Bucks

County. This recently reactivated port has resulted in a significant increase in large vessel/ocean-going ship transportation through the channel in the Delaware River adjacent to Bristol Township's river shoreline.

Finally, along the Neshaminy Creek, Bristol Township lays claim to some of the most scenic views which, at present, are only readily seen by boaters. In the future, Bristol Township hopes to develop Overlook Park which will allow residents to enjoy views of the serene and ecologically sensitive creek banks which support plants and wildlife which thrive in the wetlands along the Neshaminy Creek.

Historical/Cultural Sites

Within Bristol Township are several significant historical sites that are important parts of the Township's history and its character.

Delaware Division of the Pennsylvania Canal

Constructed as a link to the Lehigh Canal for transporting coal to Philadelphia and New York and supplies to isolated communities, the Canal operated continuously from 1832 until 1931. The Canal and locks accommodated boats of 67 tons. The Delaware Canal is 60 miles in length and follows the Delaware River from Bristol to Easton. It was incorporated into the Roosevelt State Park in 1940.

This important resource from the Township's past represents considerable potential for park and recreation activity. This barge canal, constructed in the era prior to the expansion of the railroads, provided a towpath and barge canal extending from Bristol Township as an accessway for shipments which reached the Delaware Canal. Cargo could be taken from ships, placed on barges, and barges could be pulled on the canal to Easton and points north. Similarly, coal from regions to the north in Pennsylvania could be shipped from the coal regions in Pennsylvania.

For several decades, the Canal has not functioned as a transportation corridor; and portions of the Canal have actually been paved over eliminating the continuous nature of the Canal, towpath and its linear green space extending through Bristol Township.

This physical feature remains very much a part of the Township and it's reuse as a restored linear park is clearly an objective of this plan.

Bolton Mansion

The Bolton Mansion is constructed of fieldstone and is 2-1/2 stories in height. The structure is L-shaped, with modified gabled and gabled roof sections. It presents central and end chimneys, a center entrance with fanlight set into a pediment. The original portion was constructed in 1687 expanded by two additions and finally by the construction of a large 2-1/2 story late Georgian dwelling. The first section and two additions were the home of Phineas Pemberton, a politically active early Pennsylvania settler, who served as a member of William Penn's council of state. The construction of the late Georgian dwelling was constructed by a later Pemberton family member for his daughter. This latter building is known as the Farmer's Residence.

The Bristol Mansion is the sole Bristol Township property on the National Register of Historic Places. Until the late 1960's, the building was used as a municipal

headquarters. After the Township vacated the building for its present and more modern facility, the mansion experienced significant deterioration. Through the efforts of the Bucks County Conservancy (now known as the Heritage Conservancy), a nonprofit group, and the Friends of Bolton Mansion, the degradation of the building and vandalism to it have been controlled. These two groups joined in renovating the building. These efforts have included fund raising from foundations, application and receipt of CDBG funds from Bristol Township, and funds from the National Historic Act administered by the U. S. Department of the Interior. CDBG funds, through Bristol Township, were provided in 1977, 1979, 1980, 1982, 1985, 1990, 1991 and 1992. Funding is also proposed to be provided from Fiscal 1998 funding. This project continues to be supervised by the Heritage Conservancy and the Pennsylvania Historic and Museum Commission.

This historic property is located in the center of Bristol Township's "Levittown" residential area and is buffered from major highways by the residential areas surrounding it.

It is the object of this plan that Bristol Township acquire the property and expedite its restoration so that it may be used for purposes that relate to the building's historic heritage including, but not necessarily limited to, a place which would house office and museum space for the Friends of Bolton Mansion and, possibly, other local historic preservation organizations.

The buildings on the site, including the adjacent Farmer's Residence, if appropriately renovated, have the potential to house a museum which could provide the public with a place to see not only historic artifacts but also graphic information depicting the history of Bristol Township and the historic growth and development of "Levittown". Levittown was a 1950's planned community designed to establish a prototype for suburban residential development.

The site, if appropriately landscaped and improved, could also provide a location where citizens of the Township can gather for small public meetings or, if appropriately regulated, could be used for semi-public or private functions and a beautiful and functional gathering place for public and private functions including corporate business meetings, weddings, receptions, family gatherings and other types of public and semi-public functions.

Sunbury Farms

Sunbury Farms, formerly known as the Caleb N. Taylor Estate, is a building eligible for inclusion on the National Register. The building as it now stands was constructed over several periods. It is a two-story structure with especially fine paneling and retains many important interior molding features and fireplaces. It is located in the Newportville/Fergusonville neighborhood of Bristol Township and has been used by Bucks County Head Start as a child day care facility since 1978.

In 1979, the Pennsylvania Historical and Museum Commission determined that this building is historically significant.

"Sunbury House" is believed to have been constructed in 1700. Evidence of 1726 and 1840 details have been found in the structure and it is one of the oldest surviving houses in Bristol Township.

Its earliest known owners were the Coxe family who took possession of the property in the later half of the 18th century. The Coxe family was influential in local government in Pennsylvania, New Jersey, and New York. The building was used primarily as a summer residence for the family. Tench Coxe, an early national economic theoretician and precursor of the "American School" of economics, served as an assistant to Alexander Hamilton in the Treasury Department. He was a leading Philadelphia Merchant and strong Tory during the Revolutionary War and spent part of the war at Sunbury House. Coxe family ownership ended in 1796, and the house was passed to several owners before the Taylor family purchased the property in 1809.

In 1810, Anthony Taylor (father of Caleb), one of the founders of Taylor and Newbold engaged in East India trade, "retired from business, and removed permanently to 'Sunbury Farm', which he had previously purchased for a country seat." At his countryseat he pursued agricultural interests and was once the largest landowner in Bucks County.

Caleb Newbold Taylor was the seventh child of Anthony Taylor and became the owner of Sunbury Farm. Caleb was reported to have keen interest in agricultural affairs, was an able businessman, and active in political life. In 1832, at the age of 18, he was elected to represent Bucks County in the Whig convention at Harrisburg. After running for congress a number of times, Caleb was elected in 1866 and re-elected in 1868.

In 1893, the Caleb N. Taylor estate was described as "an old-fashioned mansion among trees, large and small, growing naturally and not forced into artificial forms, on an eminence above the creek". The Taylors retained possession until 1972.

The Township is negotiating for the acquisition of properties surrounding Sunbury Farms and land parcels fronting on the Neshaminy Creek.

Newportville Historic District

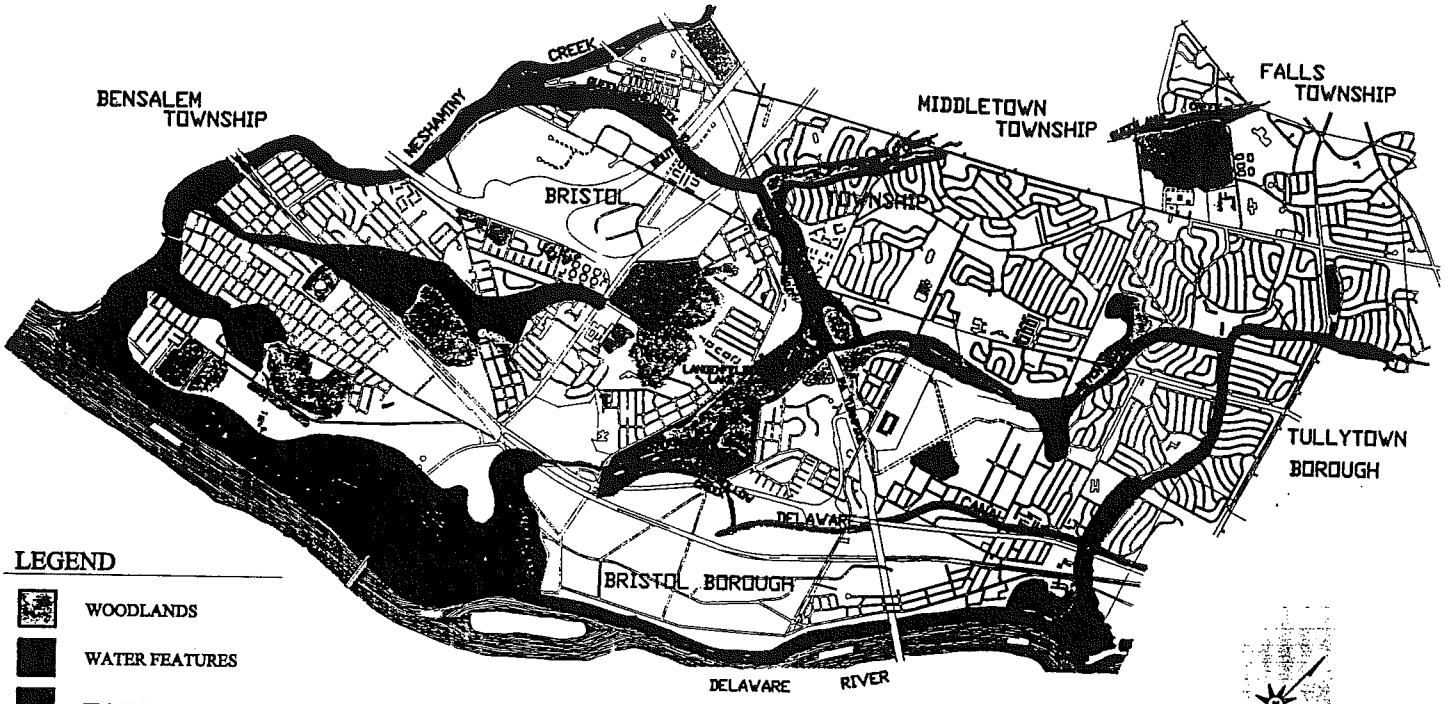
Newportville occupies a terraced site on the east bank of the Neshaminy Creek at the tidewater head four miles from the Delaware River and retains the air of an early Pennsylvania mill and farming village. Newportville has links with persons and events of state and national importance. It illustrates early methods of town formation. Swedes settled nearby in 1677, and English Quakers by 1690. Newportville's pioneer, Henry Mitchell, arrived in 1714. Mithcell, a protégé of

Joseph Growden of Trevose, was Bucks County's first millwright. The area has ties to the Revolutionary War when American troops camped there. Mitchell's heirs sold land to Captain John Green, the first sea captain to carry the U. S. flag to China.

A large inventory of significant buildings remain including the first settler's early 18th century homestead, an 18th century store and landing, ten Federal stone or frame buildings (houses and an inn) dating from 1801-1822 most constructed by housewright George Ransom, an 1835 brick Federal dwelling, four small farmhouses dating to 1840, a high-style late Federal mansion (1848), a street of ten frame and brick Victorian mechanics' houses (1850), a Federal store expanded in 1860 into a Victorian commercial building, three Gothic Revival houses built before 1876, a 19th Century stable block, agricultural implements works, barns, sheds, and several bungalows built as vacation homes around 1925. Sites include a former millrace, log landing, and schoolhouse lot.

Bristol College, also known locally as White Hall and China Hall

In 1796 Holland's ambassador to China, Andreas Everardus VanBraam Houckgeest, built a large mansion facing the Delaware River which he called "China's Retreat" which came to be known as China Hall. This mansion no longer exists. However, on the grounds of what was once China Hall, Bristol College was built in 1835. This building which is no longer standing consisted of a large, severely dilapidated, center building and attached rowhouse wings. The site served as a hospital during the Civil War and later as a state school and is located at Shadyside Avenue and Minot Avenue in the Croydon area of Bristol Township.



MUNICIPAL OPEN SPACE PLAN

BRISTOL TOWNSHIP, BUCKS COUNTY, PA

JUNE 2000

DEPALLO DESIGN & PLANNING

NATURAL FEATURES & VULNERABLE RESOURCES

B. GOALS AND OBJECTIVES

Goal

To protect and preserve remaining significant open space areas in the township for the future enjoyment of the residents.

Objective

- To plan for the acquisition and protection of significant lands along the Neshaminy Creek for future open space needs.
- To protect remaining woodland and wetland areas, specifically those in danger of negative environmental impacts.
- To identify and plan for the protection of lands that can improve storm water management in the township.

Goal

To provide active and passive recreational and open space opportunities for the residents of the township.

Objective

- To identify potential sites that may provide Delaware River access, and plan for developing these areas as a long-range objective.
- To plan for and develop a passive park and conservation area along the Neshaminy Creek, specifically in the area of the Riverside Preserve.
- To plan for and develop a greenway along the Black Ditch Creek Trail for multi use activities and environmental protection.

Goal

To take advantage of the physical and cultural resources in the township to expand on the recreational and open space opportunities for the residents.

Objective

- To plan for and develop sites along the Delaware Canal as cultural and recreational opportunities for passive use and interpretive features.

C. EXISTING PROTECTED LANDS

Although Bristol Township is a highly developed, urbanized community, it possesses a wide array of significant recreation and open space areas (See Protected Lands Map). Ownership of these significant sites in the township can be differentiated by state owned facilities (approximately 305 acres), county owned facilities (approximately 758 acres), township owned facilities (approximately 146 acres) and lands in private ownership (approximately 17 acres). The following list the existing protected lands throughout the township and an identification of the type of ownership for each facility.

State Owned Facilities	***Acreage***
1. Neshaminy State Park (Bristol Twp.)	75.00
2. Neshaminy State Park (Bensalem Twp.)	214.00
3. Roosevelt State Park (Delaware Canal – portion of)	16.00
County Owned Facilities	
4. Black Ditch Park	80.00
5. Delhaas Woods	95.00
6. Humphrey Park	3.00
7. Magnolia Lake	28.00
8. Queen Anne Park	159.00
9. Silver Lake Park	393.00
Township Owned Facilities	
10. Birch Valley Park	0.50
11. Bloomsdale Park	2.29
12. Crabtree Park	0.50
13. Croydon Park	2.66

14. Croydon Acres Park	2.45
15. Green Lawn (Murphy) Park	4.63
16. Green Lynne Park	0.50
17. Green Trees Park	15.74
18. Hanks (Spencer) Park	0.48
19. Hazel Park	2.63
20. Hilltop Park	0.32
21. John F. Kennedy Park	3.60
22. Kenwood Court Park	0.47
23. Magnolia Park North	1.00
24. Magnolia Park South	0.25
25. Main Street/Lenape Playground	1.05
26. Municipal Campus	11.60
27. Orangewood Park	4.36
28. Overlook Park	16.80
29. Oxford Valley Park	1.00
30. Pacific Park	2.10
31. Red Cedar Park	0.70
32. River Road Park	1.00
33. Violet Wood Park	0.67
34. Winder Village Park	0.46
35. Bolton Mansion – *Proposed*	
36. Indian Creek Park – *Proposed*	

37. Neshaminy Creek Park and Historic Area – *Proposed*

38. Neshaminy (Croydon Manor) Park [Twp. Municipal Auth.] 0.32

School District Owned Facilities

39. Edgely Park 8.59

40. Jefferson Park 1.00

41. Abraham Lincoln Elementary 3.00

42. Clara Barton Elementary 3.50

43. F. D. Roosevelt Junior High 11.50

44. George Washington Elementary 3.50

45. Harry S. Truman High 12.00

46. James Buchanan Elementary 4.50

47. John Fitch Elementary 2.50

48. Lafayette Elementary

49. Maple Shade Elementary 1.50

50. Mary W. Devine Elementary 3.50

51. Neil Armstrong Middle 10.00

52. Ralph Emerson Elementary 3.00

Private Owned Facilities

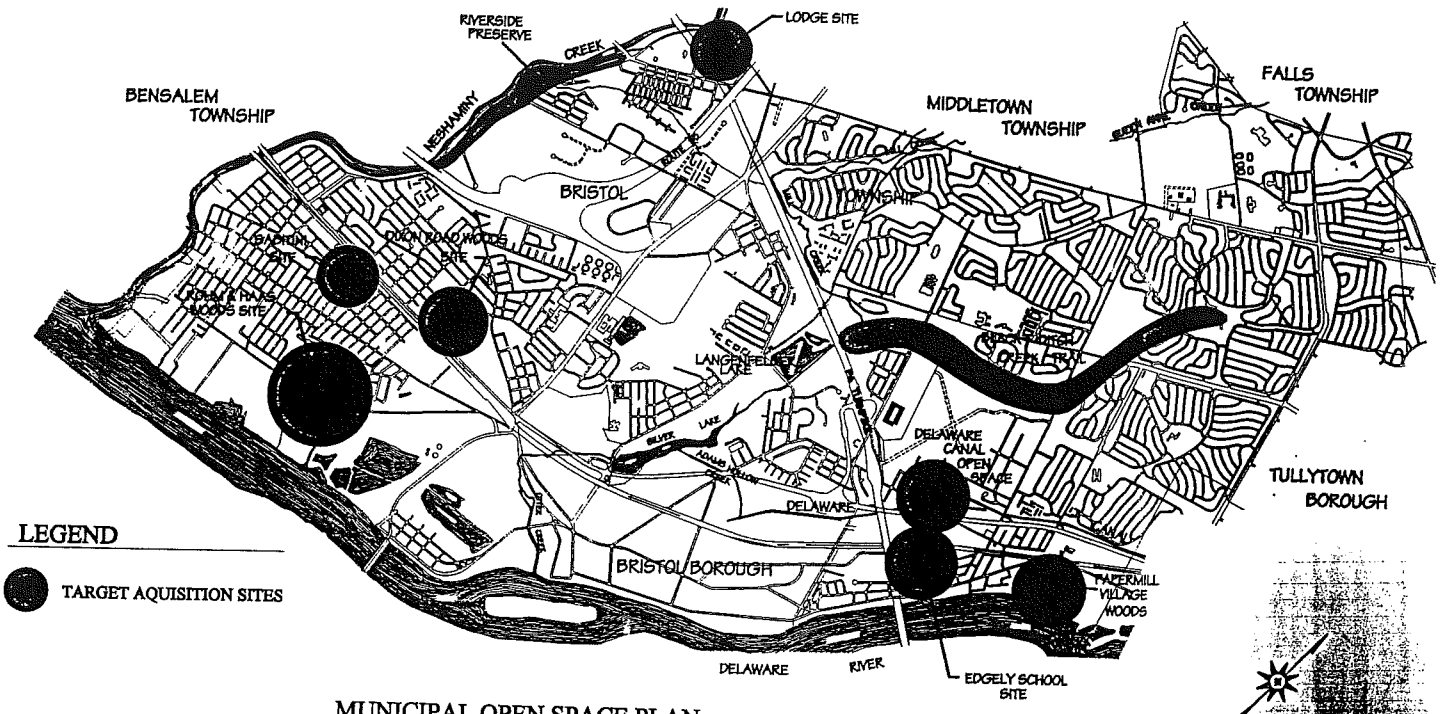
53. Laurel Bend Park [PECO] 4.15
Municipal Campus [PECO] 12.90

Rohm and Haas Woods

The preservation of the Rohm and Haas Woods is identified as an important natural feature and recommended as a lower priority. The 50 to 60 acres site is owned and controlled by the company and presently is in no danger of being removed. The continued preservation of this woodlands is an important community objective.

Dixon Road Woods

Similar to the Rohm and Haas Woods, the Dixon Road Woods is identified as a significant natural feature and worthy of preservation. The privately owned 25-acre site incorporates a beautiful natural feature into a very urbanized neighborhood framework. The preservation of the woods is recommended as a priority and added to the list of significant sites.



MUNICIPAL OPEN SPACE PLAN

BRISTOL TOWNSHIP, BUCKS COUNTY, PA

JUNE 2000

DEPALLO DESIGN & PLANNING

RECOMMENDATIONS

H. POLICIES AND METHODS FOR OPEN SPACE PROTECTION

Policies Used to guide acquisition sites.

Bristol Township has in place an administrative and decision making structure as with similar Townships. The Bristol Township Council has consistently been in charge of property disposition including acquiring lands and properties or preparing easements throughout the Township. The Bristol Township Planning Commission reviews planning decisions and makes recommendations to the Township Council on appropriate issues. All of these boards have had input into the management of the Township's open space system and its operation and management.

A number of policies have been used as standards for analyzing potential acquisition sites and their inclusion into this plan. The following is a list of these general policy statements:

- *Provide recreation and open space amenities that are accessible for all residents of the Township.*
- *Improve the ability of the township to manage the stormwater impacts of the watershed area.*
- *Protect and properly manage significant natural features in the township for the future enjoyment of the population.*
- *Take advantage of the natural features and cultural resources to provide opportunities for the township residents.*

Acquisition

The most effective method to acquire and control open space land is through outright purchase of the land. The Township proposes to acquire a number of significant parcels of land for additional open space uses. The Township intends to utilize its own funding sources and leverage it with county, state, or other grant programs to acquire the highest priority land for this open space control and protection.

The Township is strongly considering the purchase of individual properties along the Neshaminy Creek for the development of the preserve, the Sabitini Site for stormwater management, and specific sites adjacent to the Delaware Canal Lock.

All of these sites and areas have significant potential for land acquisition and incorporation into the Township's park, recreation, and open space system.

Noting that acquisition is not the only method to protect or control land parcels, listed below are other methods that may apply to Bristol Township's open space control or management.

Changes in zoning.

Bristol Township may consider changes in their zoning ordinance to implement stronger protection and preservation measures. Various features of the zoning ordinance may be modified to achieve the desired results. Examples of these techniques follow:

Paper Mill Village Woodlands. As such, design standards and Best Management Practices (BMP) guidelines may be created and applied to this zone to guide development on the parcel or parcels. As potential development ensues, design criteria that is specific to the amount of required open space, natural resource protection measures, minimum setbacks from the river, and providing for public access should be instituted. These are effective measures utilized as leverage when negotiations with developers are entered into.

Placing easements on key properties

The creation of an easement on a property as an alternative to outright acquisition for open space usage is an effective management tool. Easement can be prepared as a formal boundary area or as a general agreement on land usage. Also, restrictive covenants to limit certain uses are also an effective protective technique for land management and control. Financial retribution usually is associated with granting an easement.

This method of creating an easement relates directly to the need to utilize the Black Ditch Creek corridor as a greenway. A fifty to one hundred foot easement could be established and delineated on the properties and dedicated for the trail public usage.

Adopting a Natural Resource Protection Ordinance

The Township may take the necessary steps to create and adopt an ordinance that will protect specific natural features, such as riverbanks, stream corridors, wetlands, and woodlands, etc. Many of the areas that will be affected by this ordinance are those areas that are in direct relationship with the Delaware River,

the Neshaminy, Mill and Black Ditch Creeks. Existing floodplains privately owned wetlands and marsh areas may also be more readily managed by this approach.

One specific objective of a Natural Resource Protection Ordinance will be to maintain the ecological balance between each natural systems elements, including wildlife, vegetation, etc., dependent upon the wooded areas, wetlands, stream corridors, etc., within the Township of Bristol.

Encourage Donation of Land for Tax Incentives

The township may encourage property owners or developers to donate land to the township, permanently restricting future development from occurring on the property. The landowner will, in return, receive various tax benefits from their donation. The Transfer of Development Rights (TDR) is another option for preservation. This technique permits a landowner to quantify the development potential of a sensitive site and add that development potential to a more environmentally suitable site.

Grant Money

Many townships are successful at acquiring grant funding to finance a variety of acquisition and development projects. Bristol Township will continue to utilize the variety of grant funding available, such as its Community Development Funds, the Keystone Grant Program, and other sources. This will permit the to acquire the necessary parcels of land or easements that will allow township residents easy access to the Neshaminy, Mill, and Black Ditch Creeks and additional proposed trails as shown on the Open Space Linkages Map.

Donation of land

The township will encourage developers and landowners to donate land or provide access or improvements easements at significant locations in the township. This will restrict any further development from occurring on this land while allowing the township the opportunity to prepare adaptive reuse strategies.

This approach may be applied to one specific instances. Discussions may be undertaken with the owner s of lands adjacent to the Delaware Canal at the Lock. Recently, a private donation of land in this proximity has allowed the township to plan for increased parking and access to the canal. A similar scenario may continue to aid in the preservation and development of this historic area.

I. IMPLEMENTATION SUMMARY

The Implementation Summary is a list of all the township's recommended projects and preservation efforts under this Municipal Open Space Plan. Each item is prioritized according to its importance within this plan, making implementation efforts easier. A strategy for implementation is listed with each item as well as the time phasing necessary to successfully complete each one.

PROJECT IMPLEMENTATION SUMMARY CHART

Recommendation:	Implementation Strategy:
A. Highest Priority	

1. Black Ditch Creek Trail
Acquire lands and easements for trail development along the Black Ditch Creek Corridor.
	- Acquire easements and or land along both sides of the creek.
	- Prepare final designs and construction documentation with phasing plan.
	- Fund project with CD funds and Grants
	  - Acquisition 2 years
	  - Development 5 years

2. Riverside Preserve Project
Acquire land parcels for development of Neshaminy Creek waterfront park.
	- Acquire remaining privately owned sites
	- Prepare final designs and construction phasing
	- Fund project with CD funds and Grants
	- Proposed completion time
	  - Acquisition 1 year
	  - Development 2 years

3. Edgley School Site
Acquire land parcels for continued use as a neighborhood park.
	- Acquire site from school district
	- Prepare master plan for future usage
	- Fund project with Recreation, CD funds and grants
	- Proposed completion time
	  - Acquisition 1 year
	  - Development 2 years

PROJECT IMPLEMENTATION SUMMARY CHART

Recommendation:	Implementation Strategy:
B. Second Priority	

1. Sabitini Concrete Site
Process subdivision and acquire wooded parcel of land for natural features preservation.
	- Implement land appraisals and environmental evaluation for necessary for land purchase
	- Implement subdivision procedures.
	- Acquire wooded parcel of site.
	- Proposed completion time
	  - Acquisition 1 year
	  - Development 3 to 5 years

2. Delaware Canal Sites
Process subdivision and acquire strategic parcels of land adjacent to the canal right of way for passive recreation and interpretive features.
	- Prepare concept and identify specific sites for acquisition.
	- Prepare final designs and construction documentation with phasing plan.
	- Enter into discussions with PA DCNR about potential partnering for development.
	- Implement land appraisals and environmental evaluation for necessary for land purchase
	- Proposed completion time
	  - Acquisition 2 year
	  - Development 3 to 5 years

3. Lodge Property Site
Implement methods to preserve land and possibly develop property for public recreation and open space area.
	- Implement land appraisals and environmental evaluation for necessary for land purchase
	- Prepare master plan alternatives for the site.
	- Investigate alternative methods for protection including acquisition, easements and zoning changes.
	- Proposed completion time
	  - Acquisition 2 year
	  - Development 3 to 5 years

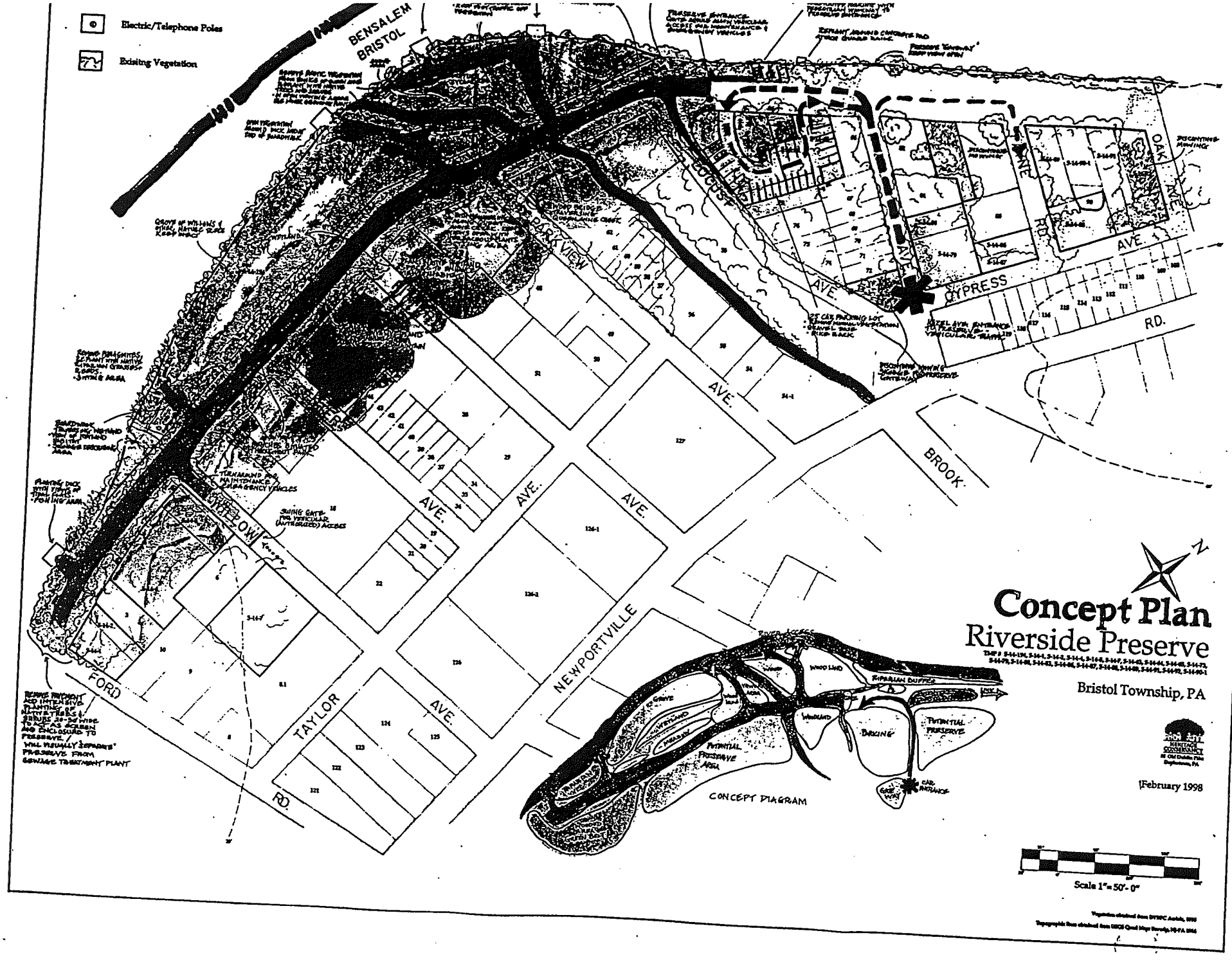
PROJECT IMPLEMENTATION SUMMARY CHART

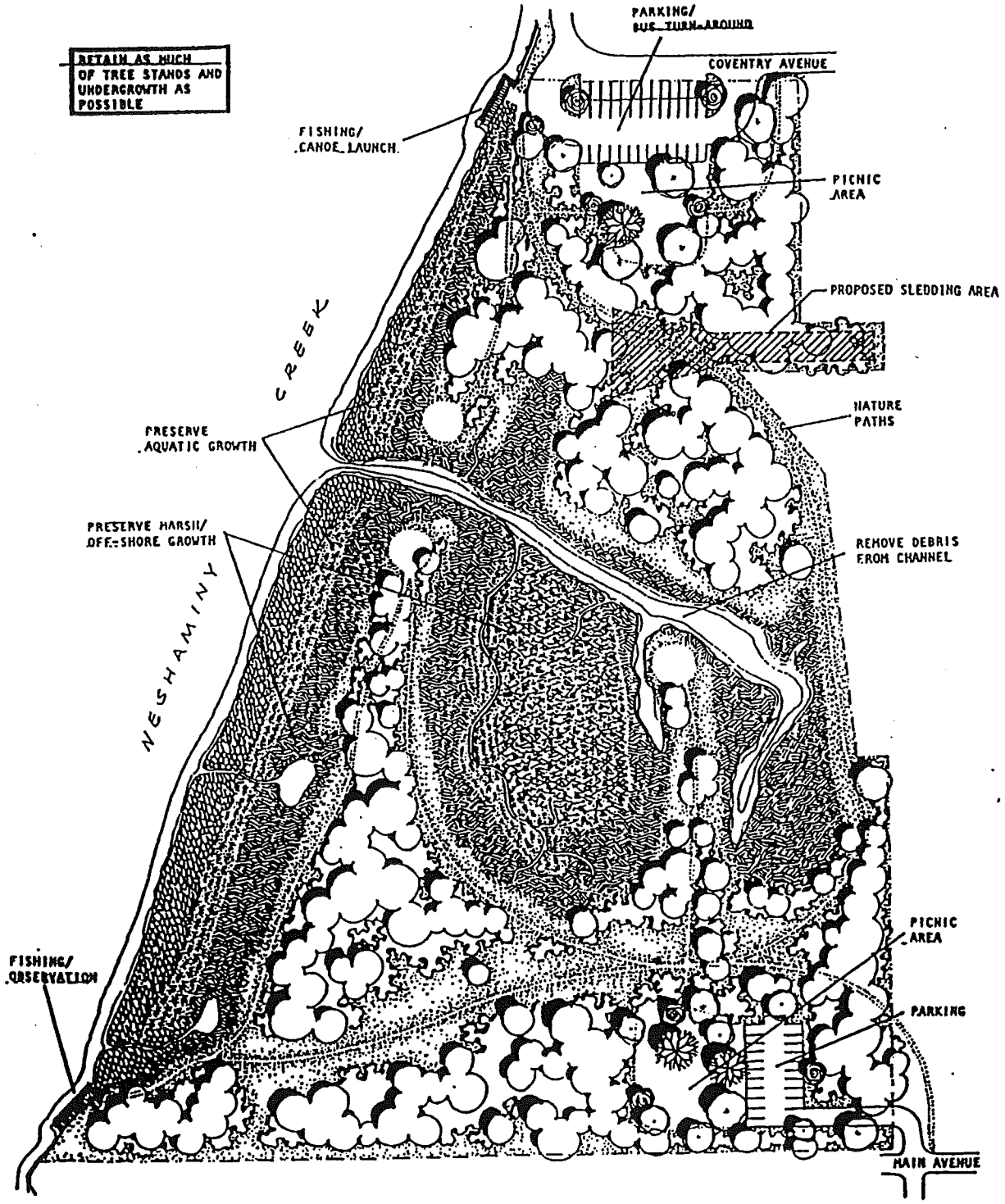
Recommendation:	Implementation Strategy:
C. Third Priority	

1. Paper Mill Village Site
Implement methods to preserve and possibly develop riverfront property for public access.
	- Implement land appraisals and environmental evaluation for necessary for land purchase
	- Prepare master plan alternatives for the site.
	- Investigate alternative methods for protection including acquisition, easements and zoning changes.
	- Proposed completion time
	  - Acq./Protect 2 year
	  - Development 5 years

2. Rohm and Haas Woods Site Implement methods to preserve woods for natural features protection.	- Investigate alternative methods for protection including deed restrictions, easements and zoning changes. - Proposed completion time - Protection 3 year
3. Dixon Road Woods Site Implement methods to preserve woods for natural features protection.	- Investigate alternative methods for protection including deed restrictions, easements and zoning changes. - Proposed completion time - Protection 3 year

APPENDIX


Electric/Telephone Poles
Existing Vegetation
BENSALEM
BRISTOL
BAY VIEW
OAK
AVE.
CYPRESS
RD.
BROOK
FORD
TAYLOR
NEWPORTVILLE
CONCEPT DIAGRAM
Concept Plan
Riverside Preserve
Bristol Township, PA
February 1998
Scale 1"=50'-0"

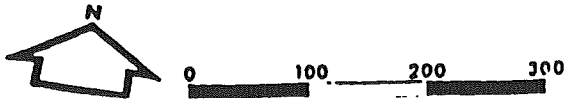


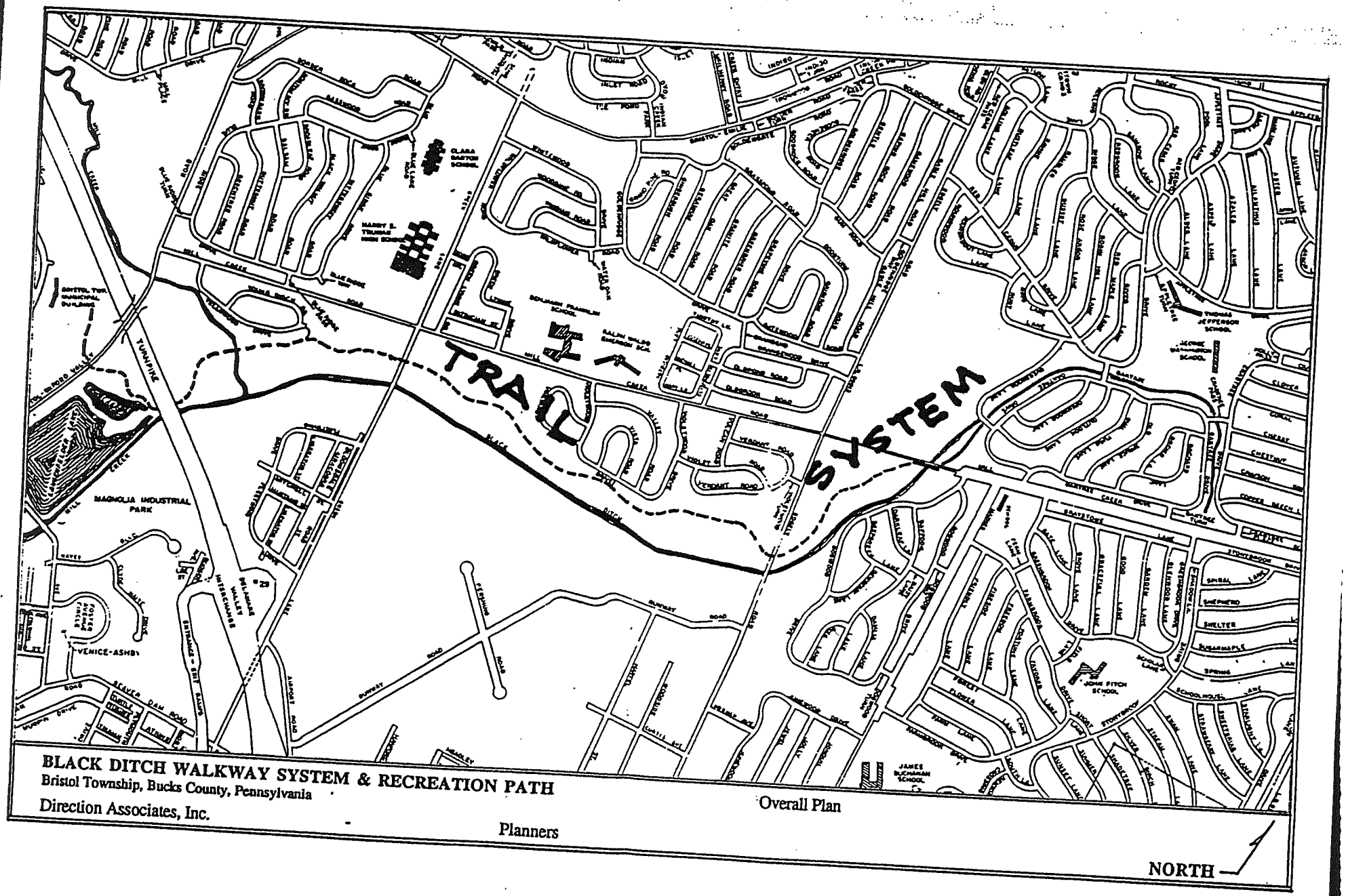
Recommended Plan

Overlook Park

Bristol Township, Bucks County, Pa.

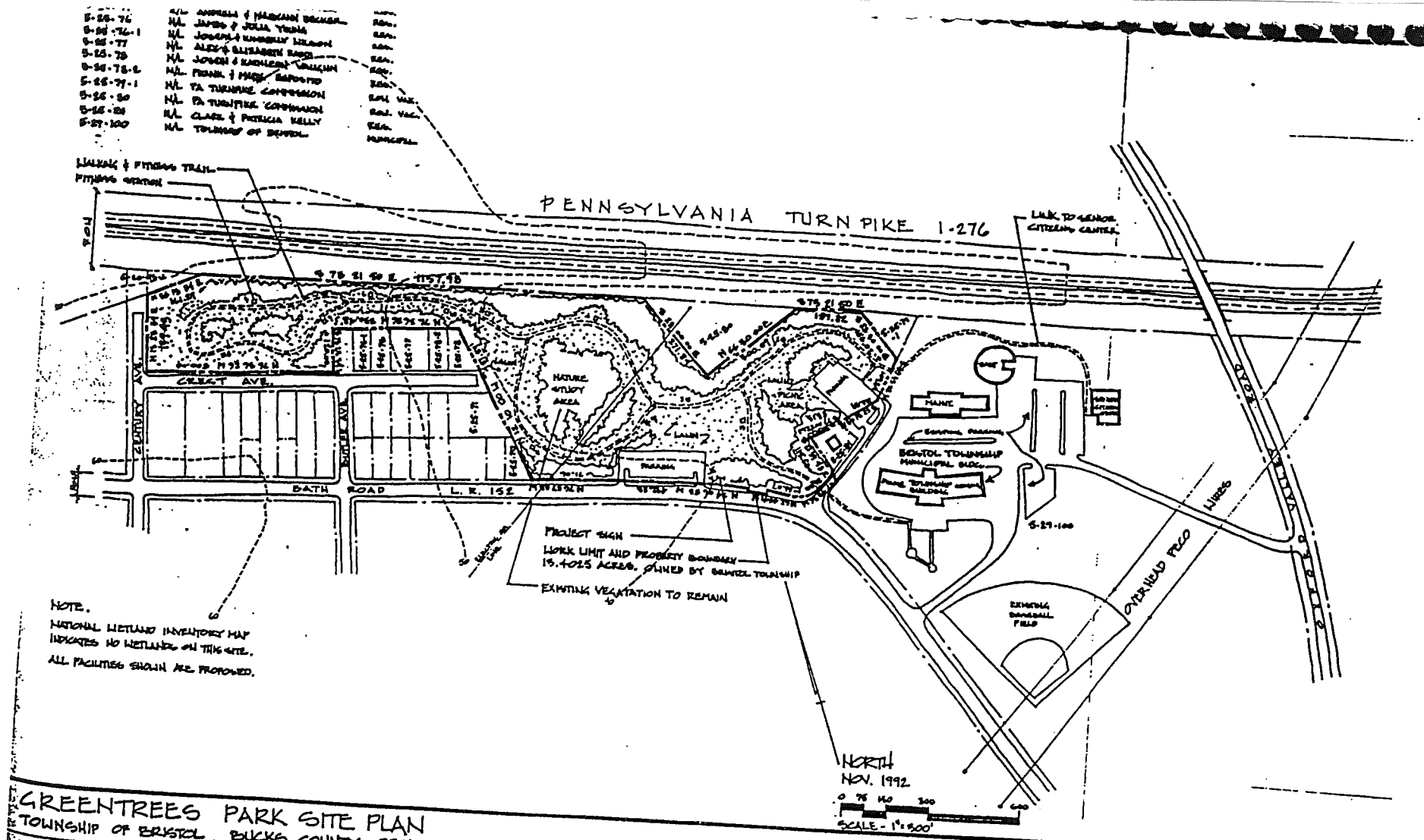
Direction Associates, Inc. . . . . Consultants





BLACK DITCH WALKWAY SYSTEM & RECREATION PATH
Bristol Township, Bucks County, Pennsylvania
Overall Plan

Direction Associates, Inc.
Planners



GREENTREES PARK SITE PLAN

TOWNSHIP OF BRISTOL, BUCKS COUNTY PENNSYLVANIA

DIRECTION ASSOCIATES - PROJECT PLANNERS