

PENN TOWNSHIP ACTIVE RECREATION PARK

MASTER SITE PLAN

PENN TOWNSHIP, CHESTER COUNTY, PA

July 2009

PLANNING DRAFT

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INTRODUCTION

The development of a Master Plan for the lands owned by Penn Township, Chester County, PA, dedicated for active recreational uses, will explore the most appropriate ways to allocate the spaces necessary to provide the required facilities. The Plan will use the resources of the State, County and Local recreation planning to determine the number of each facility that can be accommodated through local level discussions. The benefits of the master planning process will provide the Township with the most efficient use of the open space resources available, assure public input during the planning processes, develop plans for short and long term improvements, develop cost estimates for development, suggest possible funding sources and provide maintenance estimate for future budgets. The Township will have a plan that provides a basis for assuring the long-term needs of the residents, existing and future are met, thereby making Penn Township a sustainable community. The Township has identified the need to provide open space for recreation and protection of environmentally sensitive areas within the Township. Through prudent planning, the Board has been diligent over the past few years to acquire the necessary land through conservation techniques. The development of a Master Site Plan will provide for the recreational uses needed by the Township in a manner respectful of the needs to conserve open space in the face of heavy development pressures in southeastern Pennsylvania. The Master Site Plan will include analysis of a trail system to connect existing Township facilities and surrounding developments to the proposed park and adjoining regional connecting greenways in neighboring townships. The ability of the residents to conveniently access the proposed facility, through and around some of the excellent vistas and environmental features of the property, will create the desired connection to the outdoors for the residents of Penn Township and their guests.

The site chosen for study has been selected due to its centralized location within the Township. The site is also located within walking distance of several large planned communities in the Township. There is access to the site using existing infrastructure such as roads, sewer and water. The site will also be located adjacent to proposed improvements by developers of other projects including completion of the Lewis Road connection to provide access to the site from two major thoroughfares. Land for the site was acquired with little cost to the Township through prudent land planning decisions by the elected officials of the Township.

The site provides appropriate topography for active recreational uses. There is sufficient “flat” land for team sports fields and parking facilities. The site has a significant woodlands area, which can be used for nature, hiking, and biking trails. The site is convenient to Township sewage facilities and public water is available on site. The size of the adjoining parcels provides room for planning for future needs, as well as current needs. Additional land acquisitions are possible when surrounding farm lands are eventually developed.

The Master Plan will be developed to “utilize” the existing environmental conditions of the site to provide for recreational activities. Natural features will be protected. Woodlands will be disturbed only to the extent necessary to install low-impact ADA accessibility trails. Through the use of stormwater management best management practices runoff from development can be used to enhance natural features while treating pollutants prior to reintroducing the runoff back into the natural environment. The existing natural conditions are an opportunity, not a hinderance, if addressed at this stage in the planning process.

The development of recreational facilities is consistent with Local, County and State Plans to provide Community Facilities and Services that meet the needs of the residents through cooperation of public and private partnerships. The integration of the multiple levels of government plans supports the principle to *Plan Regionally; Implement Locally*.¹ The Development of the Penn Township Park will provide infrastructure to increase the recreational potential for residents and visitors, as well as incorporate open space resources into the project, thereby addressing the principle of *Enhance Recreational/Heritage Resources*.¹ The Master Plan will incorporate the use of stormwater management best management practices, interconnect project walkways and streets with public streets and connect nearby communities, addressing the principle of *Density, Design and Diversity of Uses*.¹ The Master Plan will incorporate natural resource features and protect wetlands, surface and ground water resources to address the principle of *Restore/Enhance Environment*.¹

A Study Committee was formed by the Board of Supervisors to provide input in developing the Master Plan for the Penn Township Active Recreation Park. The Study Committee members have been selected from the community to represent Township Officials, appointed members of the Planning Commission, Recreation Committee, Residents and Business Leaders. The Board of Supervisors made an open call to residents to participate in the process, including the addition of two residents from the adjoining residential development most affected by the proposed Active Recreation Facility. The Study Committee developed alternative concept plans considering relationships between areas, facilities and support facilities, along with circulation patterns. The Committee evaluated the alternatives highlighting both positive and negative points, and through community discussions and public participation determined which solution or combination of ideas from the alternatives, offer the best compromise. Consideration was given, not only to what facilities the community desires, but also to site limitation, applicable laws and regulations, and accepted good design practices and standards. Once the alternatives had been evaluated a final conceptual plan was prepared and presented at a public meeting for final comment. The Master Site Plan provides a blueprint for the development of appropriate active recreational facilities to meet the needs of the Community.

¹ The Keystone Principles & Criteria for Growth, Investment & Resource Conservation adopted by the Economic Development Cabinet on May 31, 2005. Developed by the Interagency Land Use Team, a working group of the Governor's Cabinet.

BACKGROUND

The site consists of four contiguous parcels. Parcel 1 contains 35.2643 acres of land. The parcel is zoned R-2 Residential. The R-2 Residential district permits single-family detached dwellings on one acre minimum lot sizes. This zoning district also permits: golf course and golf house, public utility operating facilities and non-commercial recreational uses. Municipal, County, State or Federal uses are permitted as a Conditional Use when authorized by the Board of Supervisors, in accordance with the appropriate sections of the Zoning Ordinance. Parcel 2 contains 20.4237 acres of land. The parcel is zoned CI – Community Institutional. The CI – Community Institutional district “encourages location of support facilities uses within the district in conjunction with existing community facilities, and to address the need for expansion of existing community facilities within the district to serve the future needs of the region.”² Uses permitted in this section include hospitals, medical offices, active adult communities and municipal uses including public utilities or sewage treatment plants. Parcels 1 & 2 were acquired by the Township in 1999, pursuant to the terms of a settlement agreement between the Southern Chester County Hospital and Penn Township. The settlement agreement included a third parcel to the north of Parcel 1 which contains a sewage treatment plant. Parcel 1 contains four rapid infiltration basins for the land application of treated wastewater from the treatment plant. Parcel 3 contains 35.5683 acres of land. The parcel is zoned R-3 Residential. The R-3 Residential district is a high density residential district, which permits residential structures at a density of 4 dwelling units per acre provided certain conditions are met; including a minimum of 40% of the gross tract is maintained as open space. Parcel 3 was offered to the Township for dedication as part of the Estates at London Brook Subdivision. The subdivision contains 79 residential lots and 5 open space areas. Parcel 3 is the largest open space area “E.” Parcel 4 contains 2.3944 Acres of land. The parcel is zoned I-1 Limited Industrial. The I-1 Limited Industrial district permits industrial uses which would not be a hazard or nuisance to the adjacent areas.³ Municipal, County, State or Federal uses are permitted by Conditional Use when authorized by the Board of Supervisors in accordance with the appropriate sections of the Zoning Ordinance. Parcel 4 was recently acquired by the Township. The Board of Supervisors, together with the Penn Township Open Space, Recreation and Environmental Resources Committee, based upon recommendations contained within the Open Space, Recreation and Environmental Resource Plan, adopted by the Township in September of 1993, have reserved this land as the cornerstone of a program to meet the active recreational needs of the community.

The Township prepared a master plan for the Penn Township Community Park in January of 2001. The committee which developed this plan quickly realized that the site adjacent to the municipal building was not large enough to accommodate all of the recreational needs of the Township. All analysis of the site indicated that the site could not support the league sponsored active recreational needs such as baseball, football, soccer and basketball. They proceeded to construct a ten acre facility designed to provide for less organized passive recreational activities, such as a walking and jogging trail, horseshoes, volleyball and informal field games. The Community Park has been well received by the residents of the Township, as

² Penn Township Zoning Ordinance as amended through 8/1/99, Article XIII, §1300 Preface.

³ Penn Township Zoning Ordinance as amended through 8/1/99, Article XII, Preface

evidenced by the growing use of the facility. The Community Park Master Plan recommended the development of an active recreational facility to meet the growing needs of the Township.

SITE ANALYSIS

The 93.6507 acre site is centrally located in the Township and is within walking distance of several planned residential communities. The proximity of the proposed Active Recreation Park to existing Municipal Facilities will enable the Township to expand services currently offered at the Penn Township Community Park.

A thorough site investigation and survey has been completed and a base map of existing conditions prepared. Wetlands were delineated by Great Valley Environmental of Devault, PA in July of 2008 following the Corps of Engineers Wetland Delineation Manual (Environmental Laboratory, 1987) Routine on Site Method for Large Areas. The site contains approximately 11.7175 acres of wetlands. The largest areas of wetlands are associated with two unnamed tributaries to the East Branch of the Big Elk Creek. The Big Elk Creek Basin in Chester County has a Chapter 93 Water Quality Standards designation of HQ-TSF; MF. The HQ designation indicates a High Quality Waters special protection watershed. The Aquatic Life designations of TSF; MF indicates that the streams are Trout Stocking⁴ and Migratory Fishes⁵ waterways. Projects that involve earth disturbance in high quality watersheds require the applicants to demonstrate that the project will maintain and protect the existing quality of the receiving waters. Best management practices will be required to assure that additional runoff from the site, created by additional impervious surfaces, will meet this requirement. The site contains the following soils as delineated from the "Soil Survey for Chester and Delaware Counties, Pennsylvania," prepared by the United States Department of Agriculture Soil Conservation Service in cooperation with Pennsylvania State University College of Agriculture and Agricultural Experiment Station and the Pennsylvania Department of Agricultural Soil Conservation Commission, issued May 1963.

Ch - Chewacla Silt Loam

This soil occurs along streams where it is flooded occasionally. These soils are flooded by the normal high waters of streams. These soils may be flooded from two or three times a year to once in several years. Some areas of these soils may have value as parks and recreational areas, and some may be used for agriculture. These soils are not suitable as sites for homes or other buildings.

LIMITATIONS: Flooding
Slightly Eroded
Depth to Seasonal High Water Table – 0 to 1 feet
Depth to Bedrock – 3 to 6 feet
Suitability:

⁴ Trout Stocking – from Table 1 § 93.3 – Maintenance of stocked trout from February 15 to July 31 and maintenance and propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat.

⁵ Migratory Fishes – from Table 1 § 93.3 – Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which ascend to flowing waters to complete their life cycle.

Winter Grading	– Fair
Road Subgrade	– Poor to Fair
Road Fill	– Fair
Topsoil	– Good
Sand and Gravel	– Unsuitable
Characteristics that affect:	
Highway Vertical Alignment:	
Materials	– Generally Suitable
Drainage	– Seasonal H.W.T.
Septic Tank Waste Infiltration	– Flooding
Dikes and Levees	– Generally Suitable
Pond Embankments	– Flooding
Building Site Suitability	– Flooding
Resistance to Frost Action	– Fair
Hazard of Erosion	– Slight
Shrink-swell Potential	– Low

GnB - Glenville Silt Loam, 3%-8% Slopes

Most of this soil is wooded and the surface layer is covered with a thin layer of hardwood leaves and twigs. Just beneath the litter is a black mull of decayed or well rotted leaves and roots. This soil may be wet for long periods due to a high water table.

GnB2 - Glenville Silt Loam, 3%-8% Slopes, Moderately Eroded

This soil has moderately slow permeability and is moderate in available moisture capacity. This soil may be wet for long periods due to a high water table.

LIMITATIONS: 3 to 8% Slopes

Moderately Eroded

Depth to Seasonal High Water Table – 1 – 1 ½ feet

Depth to Bedrock – 3 to 6 feet

Suitability:

Winter Grading – Fair

Road Subgrade – Poor to Fair

Road Fill – Poor

Topsoil – Good

Sand and Gravel – Unsuitable

Characteristics that affect:

Highway Vertical Alignment:

Materials – Unsuitable

Drainage – Seasonal High Water Table

Septic Tank Waste Infiltration – Seasonal High Water Table

Dikes and Levees	– Instability
Pond Embankments	– Variable Substratum
Building Site Suitability	– Seasonal High Water Table
Resistance to Frost Action	– Poor
Hazard of Erosion	– Moderate to Slight
Shrink-swell Potential	– Low

GeB2 – Glenelg Channery Silt Loam, 3% - 8% Slopes, Moderately Eroded

The Glenelg series consist of moderately deep, well-drained soils of uplands. The soils developed in material weathered mainly from granite, gneiss, and mica schist. Their surface layer is dark-brown silt loam. Their subsoil is dark brown to strong dark-brown silt loam, and it contains a little more clay than the surface layer. The Glenelg series have moderate available moisture capacity. Permeability and fertility are also moderate. In areas that have been limed the soils are acid throughout the profile. The profile of the typical Glenelg soil consist of a well drained channery silt loam and silty clay loam, 2 to 3 feet thick underlain by schist, gneiss, gabbro, quartzite, and granite of uplands of the Piedmont Plateau. The stony soil has cobbles and stones, 6 inches to 2 feet in diameter, on the surface and throughout the profile. They are deep, moderately well drained soils. The soils have gentle slopes that are favorable for stores, factories schools, and similar large structures requiring ready access. Most of the areas are suitable for foundations, but bedrock is only 2 to 4 feet from the surface in most places. The upper part of the bedrock is partially weathered and soft and in many places bedrock of varying hardness is reached in excavating. If very stony soils are used for construction the many boulders may increase the cost of excavating and grading. Because these soils are well drained and permeable, they readily absorb wastes and are suitable fields for septic tanks.

GeB3 – Glenelg Channery Silt Loam, 3% - 8% Slopes, Severely Eroded

The profile of this soil is similar to the profile for GeB2 but is shallower. In most places depth to the parent material is only 18 to 20 inches.

Limitations: 3 to 8% Slopes

Moderately Eroded

Depth to Seasonal High Water Table – 5+ feet

Depth to Bedrock – 3 to 5 feet

Suitability:

Winter Grading – Good

Road Subgrade – Fair to Good

Road Fill – Fair to Good

Topsoil – Good

Sand and Gravel – Unsuitable

Characteristics that affect:

Highway Vertical Alignment:

Materials	– Generally Suitable
Drainage	– Generally Suitable
Septic Tank Waste Infiltration	– Generally Suitable
Dikes and Levees	– Rapid Permeability
Pond Embankments	– Permeability
Building Site Suitability	– Generally Suitable
Resistance to Frost Action	– Fair
Hazard of Erosion	– Slight
Shrink-swell Potential	– Low

WoA - Worsham Silt Loam - 0% to 3% Slopes

The Worsham Soils consist of deep, poorly drained soils of uplands. Their surface is dark grayish-brown or black silt loam. These soils occur around seepy area fed by springs at the heads of streams, in slight depressions and along areas at the bases of slopes. The Worsham soils are near the Chester, Glenelg and Glenville soils. The Worsham Soils are waterlogged most of the year. They are not so well drained and are mottled from the surface downward throughout the profile.

LIMITATIONS: 0% to 3% Slopes

Slightly Eroded

Flooding

Depth to Seasonal High Water Table – 0 to 1 feet

Depth to Bedrock – 3 to 5 feet

Suitability:

Winter Grading – Poor

Road Subgrade – Poor

Road Fill – Poor

Topsoil – Fair

Sand and Gravel – Poor

Characteristics that affect:

Highway Vertical Alignment:

Materials – Instability

Drainage – High Water Table; Seeps

Septic Tank Waste Infiltration – Slow Permeability

Dikes and Levees – Instability

Pond Embankments – Instability

Building Site Suitability – Wetness

Resistance to Frost Action – Poor

Hazard of Erosion – Moderate

Shrink-swell Potential – Low

These soils descriptions and limitations are not a substitute for the detailed investigation that may be needed at the site proposed for development. Any onsite material that will not be suitable for structural fill shall be removed and properly disposed of in an approved manner at an approved offsite location if not used elsewhere onsite. The onsite soils shall be checked for permeability when used as sediment trap embankment material. If permeability will allow

seepage to occur, imported material with sufficient clay content shall be used to construct the embankments.

The easterly portion of the site is bounded on the north by an active adult community buffered from the site by woodlands with dense underbrush, which straddles the property line. The remaining northern portions and the westerly side are bounded by agriculture lands. These agricultural areas are zoned Community Institutional and are potential sites for additional active adult communities. The site is bounded on the north by the Estates of London Brook, a clustered development of single family homes. The site is bounded on the easterly side with light industrial businesses. Access to the site is provided by Lewis Road from Route 796. (S.R. 0796) Route 796 is a Minor Collector Road with runs through the Township from North to South.

Parcel 1 is predominately maintained as meadow open space and contains four rapid infiltration beds for the land application of treated sewage effluent from the Township owned sewage treatment plant. Except for the areas associated with the infiltration beds the site drains to the south to an unnamed tributary of the East Branch of the Big Elk Creek. Parcel 2 is predominately wooded and drains to the northeast to a second unnamed tributary of the East Branch of the Big Elk Creek. A utility easement crosses the site from north to south and contains a high tension electric tower and overhead lines. Parcel 3 is predominately wooded with dense underbrush and contains a significant area of wetlands, which surround the unnamed tributary of the East Branch of the Big Elk Creek. Areas to the north of the wooded area contain steep and very steep slopes. Parcel 4 is open space currently meadow. A farmhouse on parcel 3 was previously removed. The well and septic facilities appear to have been removed, as well. The existing conditions do not appear to restrict or limit the ability to develop the proposed park on this site. The existing natural conditions are an opportunity, not a hinderance, to provide active recreational and educational facilities to meet the future needs of the Township.

DESIGN OBJECTIVES

EXISTING FACILITIES

An inventory of facilities that exist in Penn Township and the Surrounding area was presented in the Penn Township Open Space, recreation and Environmental Resources Plan completed in 1993 as part of the Chester County Heritage Park and Open Space Municipal Grant Program. In addition the Township completed the improvements developed in the Penn Township Community Park Master Plan completed in 2001. Presently Penn Township owns and operates a recreational facility on 10.6 Acres of land adjacent to the Township Building on Lewis Road south of Baltimore Pike. A portion of the adjoining 3.8 acre site which contains the Township building has also been developed into passive recreation uses along with parking to support both the park and Township Building. The Penn Township Community Park was designed to provide for less organized active and passive recreation activities, such as, Walking and Jogging, Picnicking, Horseshoes, and Volleyball. Large open areas were designed for informal passive recreation. A putting green was installed as well. The design of this facility was sympathetic to the active adult communities immediately adjacent to the park as well as the needs of all Township residents. The Site was enhanced with landscaping, berms and planted gardens. The entrance captures the historical and economic importance of the nursery industry in Penn Township and honors the veterans with a memorial, lighted flag pole and reflection area.

There are two other established recreation areas within the Township that are not controlled by the Township. One is the Avon Grove School District Complex where facilities are available to the public on a limited basis. The local Little League schedules practices as well as games for one of the two baseball fields. The other facility is that of the YMCA however those facilities are only available to members and their guest.

Virtually all other recreational needs of the residents of Penn Township are met using resources outside the Township. These include facilities located at the Avon Grove High School, West Grove Borough Park, Nottingham Park, Avondale Borough Park, Avondale Quarry, Ox-Grove Lanes, Lincoln University and others farther from the Township. Also available are recreational programs offered by the Cub Scouts, Boy Scouts, Brownies, Girl Scouts, Area Little Leagues, Softball Teams, Soccer Leagues and the Avon Grove Recreation Association. The Avon Grove Recreation Association offers a number of opportunities including organized Basketball, Soccer, Softball, Dance, Gymnastics, Swimming, Hockey, Track and Field and Cross Country Running.

Additionally, there are a significant number of recreational opportunities within one hour drive of the Township. Although these facilities are not convenient on a daily basis, they are readily accessible on weekends. These facilities are located in or near Philadelphia, PA, Wilmington, DE and Baltimore, MD.

TOWNSHIP RECREATIONAL NEEDS

Based upon projections contained within the Open Space Plan, the Township's recreational acreage deficit projected for the year 2020 will be approximately 20 acres. One Community Park was projected to be sufficient for the Township. The service area for a Community Park is 20 square miles, and the Township is 9.6 square miles. The maximum population to be served by a Community Park is 25,000. The Chester County Planning Commission prepared a County-wide Comprehensive Plan which included demographic, economic, environmental and infrastructural data. The Plan entitled "*LANDSCAPES*" was adopted in 1996 and endorsed by 72 of the 73 municipalities in Chester County including Penn Township. The Plan has been a source of data for municipal and region planning since it was adopted. The Chester County Planning Commission currently is preparing an update to the 1996 plan entitled "*LANDSCAPES2*" using current technology to update the original plan. Population data obtained from the draft update projects the population of Penn Township to be 4,310 in the year 2020 and 4,760 in the year 2030. The plan also provides population projects for the Avon Grove Area which includes Avondale Borough, Franklin Township, London Grove Township, New London Township, Penn Township and West Grove Borough, all within the Avon Grove School District. The population is project to be 34,460 in the year 2020 and 38,830 in 2030. The demographics of this population data indicate the less than 18 age bracket comprises 31.5% of the total population. Additional population data has been reviewed that has been completed by the Delaware Valley Regional Planning Commission (DVRPC) in June 2007. This data appears to indicate the Chester County data is somewhat understated. The DVRPC report projects the population of Penn Township to be 6,219 in the year 2020 and 7,104 in the year 2030 which is significantly greater. However the total population projects for the Avon Grove Region are more consistent with the Chester County population projections at 32,059 for 2020 and 36,230 for 2030. Penn Township Municipal Officials project the current population totals anticipated for the upcoming 2010 census to be 5,050. The DVRPC study completed in 2007 appear not to include a significant slow down in growth due to the current economic conditions caused by the recent recession. The Township and surrounding region is poised for significant growth as the economic conditions improve. Based upon the projected population it appears the Township can support and needs a community facility to provide active recreation for the target population. The following standards for Recreational Facilities are based upon the 1993 Open Space Plan for Penn Township adjusted for the project population 5,950 in the year 2030.

Baseball and Softball Fields

Standard Field Sizes

Regulation hardball	2.8 acres
Junior hardball	1.4 acres
Regulation Softball	1.8 acres
Junior Softball	0.8 acre

Capacity

90 persons per field per day, involving 18 persons per field times a daily turnover of 5.

Standard

0.5 fields per 1000 population

Football Fields

Standard Field Sizes

Regular football	2.0 acres
Touch football	1.4 acres

Capacity

88 persons per field per day, involving 22 persons per field times a daily turnover of 4.

Standard

0.4 fields per 1000 population

Soccer Fields

Standard Field Size

Regulation soccer	1.4 acres
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Capacity

108 persons per field per day, involving 24 persons per field times a daily turnover of 4.5.

Standard

0.5 fields per 1000 population

Basketball Courts

Standard Court Size

Regular full court	0.2 acre
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Capacity

72 persons per court per day, comprised of 3.2 persons per court, on the average, times a daily turnover of 5.

Standard

0.4 courts per 1000 population

Tennis Courts

Standard Court Size

Two regulation courts 0.25 acre

Capacity

16 persons per court per day, comprised of 3.2 persons per court, on average, times a daily turnover of 5.

Standard

0.5 courts per 1000

Volleyball Courts

Standard Court Size

Regular court 0.1 acre

Lawn areas may be used as well as formal court surfaces.

Capacity

90 persons per court per day, comprised of 18 persons per court times a daily turnover of 5.

Standard

0.3 courts per 1000 population

Swimming Areas

Swimming areas include not only pools but also swimming beaches at both natural and artificial water bodies. Only 30 to 40 percent of the bathers at a swimming area are actually in the water at any one time. Of those in the water, few are actually swimming. Other recreational activities,

particularly picnicking, are very important in conjunction with swimming. Where possible picnic and swimming areas should be provided adjacent to each other.

Diving areas should be provided where practical. They should be separate from main and swimming and wading area.

For safety purposes, lifeguard and telephone facilities should be provided at all swimming areas. Parking and sanitary facilities are also essential. Food service concessions and dressing and shower facilities should be considered for inclusion. General deck or beach area should equal approximately twice the water surface area at any swimming area.

Capacity

One swimmer per 30 square feet of water surface area or 1,470 swimmers per acre. With a daily turnover of 2.8. This computes to 4,116 swimmers per acre of water per day, or 780 swimmers per 50 meter regulation size pool.

Standard

0.2 swimming areas per 1000 population.

PROJECTED NEEDS

Based upon the population projection and the previously noted standards the open space plan determined the year 2020 needs of the Township included:

Baseball/Softball Fields	Three
Football Fields	Two
Soccer Fields	Three
Basketball Courts	Two
Tennis Courts	Three
Volleyball Courts	Two
Swimming Areas	One

The Master Plan Task Force Committee determined during Public Meetings the principal design objectives would be as follows:

1. To develop Active recreational opportunities for Residents within the approximate boundary of the Avon Grove School District within a centrally located Active Recreation Park Facility.
2. To not only promote local recreation, but to protect the Community's natural resources, by promoting native plantings, watershed protection, habitat enhancements, or other environmentally friendly facilities.

3. To provide for Community-wide and group activities at the site for groups such as the Avon Grove Little League, Avon Grove Wildcat Football League and the Avon Grove Recreational Association and the Avon Grove School District.
4. To make all hard court facilities designed for multi-purpose capabilities to ensure the best use and all provide for multi-use fields to be used multi-seasonal recreation use.
5. To provide an integrated trail system that can be connected to similar proposed facilities throughout the Township and adjoining regional connecting greenways in neighboring townships.
6. To take advantage of Community Park Grant Funds to aid in construction and maintenance of park facilities.
7. To Integrate the Recreational Organizations into the design, funding, construction and maintenance of the proposed facilities to ease the financial burden to the Township.
8. To enhance the site with managed plantings and landscaping.
9. To ensure all proposed park facilities, met all Americans with Disabilities Act (ADA) accessibility standards.

The Park Study Group proceeded with the following facilities and activities.

Active Recreation

Little League Baseball
 Big League Baseball
 Playground/Tot Lot
 Football
 Soccer
 Lacrosse / Field Hockey
 Deck Hockey
 BMX/Mountain Bike Trails

Passive Recreation

Picnicking Pavilions with Bar-B-Q
 Large Group Pavilion
 Walking Trail
 Wetland Education Stations
 Organized Group Camping

The Study Group also felt the following facilities were important for the Active Recreation Park:

- A. An entrance that captures the Historical significance of Penn Township as well as its leadership in providing for the recreational needs of the region.
- B. A veteran memorial, lighted flag pole and reflection area should be a focal point.
- C. A community events sign should be located along Route 796.

- D. Sufficient parking facilities convenient to the facilities and restroom facilities should be provided.
- E. The design should be maintain large areas of Open Space within the park.
- F. The Design should include recreational areas nested within the playing fields to accommodate younger families while older children are involved in organized sporting events.
- G. The operations and maintenance of the facility should be a combined effort of the municipality and the local recreational organizations that would benefit from the construction of the facility.

MASTER PLAN

The Final Master Plan has evolved through several stages of Conceptual Development. The Final Draft Plan being the most responsive to the objectives of the Task Force Committee, including the comments and concerns of Township residents who attended the public Task Force Meetings. The Final Draft Plan would also require addressing the needs and benefits requirements to obtain funding for the Development of the Penn Township Active Recreation Facility.

The Task Force Committee encouraged the development of an active recreational facility that included protection of natural resources, watershed protection, habitat enhancement and environmental focused activities. The Master Plan and accompanying project narrative will provide information detailed sufficiently to assure that the facilities can be developed to meet the current recreation standards as well as protecting and enhancing the natural resources the exist on the site. The Plan also includes a Forest Stewardship Plan for the woodland areas that are larger than 5 acres.

The Master Plan must also address the significant potential impact that must be considered due to a portion of the site containing reserve areas for land application of treated sanitary sewage effluent from the Township Sewage Treatment Facility. Currently the effluent from the treatment facility is pumped to a facility on the Conard-Pyle Nursery through a Public/Private Partnership Agreement. The Conard-Pyle Co. is a retail mail order firm and wholesale container nursery. As one of the pioneer container growers on the East Coast and one of the largest and most respected, they have over 5 million plants growing in their Pennsylvania nursery. The treated effluent is used to irrigate the nursery stock. There are no plans to remove or modify the existing four rapid infiltration beds on the northern portion of the site. The Master Plan does contemplate development of an area reserved for back-up spray irrigation facilities. The Task Force Committee recommends that the Board of Supervisors consider alternate land parcels to provide the required back-up areas for the land application of effluent as an alternative to the park property. The Task Force believes that the Township may qualify for State and Local grant funding opportunities to acquire the necessary land and easements for this alternative.

The Master Plan evaluates the ability of the Township to partner with various Community groups. Among these entities are the Adjacent Municipalities, School Districts, County, State, and Federal resources in order to provide for a facility that supports the needs and benefits of the users.

The Task Force Committee reviewed several alternative concept plans. Each plan considered the placement of facilities within the park based upon the user group of the facilities, the ability to phase the construction, proper field orientation and most importantly input for the surrounding residential neighbors. Each successive iteration of the conceptual layouts included two (2) Little League Baseball Fields, Two (2) "Big League" Fields, Two (2) Soccer Fields, one (1) Football Field, Deck Hockey, Basketball and the related parking required. It quickly was realized based upon the public comments that the residential neighbors to the south preferred less intense activities adjacent to their properties. Field orientation was also a driving factor in the placement of sports fields through out the park. The location of a large area of wetlands along the southern portion of the site associated with the head waters of a perennial stream provides a natural buffer

to the residential area as well as an opportunity to provide for passive recreation at the site. The Committee also spent significant time discussing the entrance options to the facility. Currently vehicles travel through the Estates at London Grove development to reach Route 796 to avoid a congested intersection at Corby Road and Route 796. The first three conceptual plans included a single entrance at Lewis Road and Route 796 with a provision to re-establish Lewis Road through the Jenner's Pond Development to the North as the Park development continued. It was apparent to the Committee that an alternate entrance should be considered.

The Final Conceptual Plan proposes the Main Entrance for the Active Recreation Park to be located on Route 796 approximately 1500 feet north of Lewis Road. The entrance is proposed to be located on land currently owned by a developer. The Task Force has approached the developer and determiner that an agreement could be reached that would allow the Township to construct a boulevard type entrance street that provided access to the main parking facility for the proposed park as well as address future development considerations for the developer. It is recommended that the Township formalize an agreement with the developer to be included with the Master Site Plan. The Main Entrance would provide a centralized access point to avoid the potential for extra traffic through the Estates of London Grove. The additional access in the existing right of way of Lewis Road through Jenner's Pond Development is also too maintained for future use.

The project site is in the Chesapeake Bay watershed, the plan should be in accordance with, and help to achieve, the goals of the Chesapeake Executive Council's Adoption Statement on Riparian Forest Buffers dated October 10, 1996. The maintenance of existing and the establishment of additional sustainable riparian native grass and/or forest buffers has been considered and included in the final master site plan. Protection of environmentally sensitive areas including the streams, and associated wetlands, existing forests and established trees, and other natural areas of the site that provide wildlife habitat and protect water quality have been considered. The Master Site Plan has considered the use of Best Management Practices from the "*Pennsylvania Stormwater Best Management Practices Manual*" published in December of 2006. The master site plan integrates site design and stormwater management to provide for a comprehensive stormwater management plan that included inventorying and evaluating the various natural resources on the site to determine potential conflicts and opportunities for stormwater management. Non-Structural BMP incorporated into the site plan include protection of sensitive and special value features, clustering and concentrating facilities to minimize disturbance and future maintenance, disconnect and decentralize the stormwater containment and reduce impervious cover to reduce runoff. Structural BMPs include the use of infiltration basins, the construction of permanent wet ponds with constructed wetlands, riparian buffer restoration and forest management.

The Master Plan includes three phases. This has been done to allow the Township to develop the facilities as funding is obtained and obtain achievable goals to provide active recreation for the target group. Phase One has further been broken down into two areas. The first area includes the two Little League Fields, a youth soccer field within the outfield of one of the baseball fields, entrance road and main parking lot, access trails, tot lots, restroom facilities and stormwater management facilities. The second area includes a regulation size hardball field, football field, two hard surface courts and two deck hockey courts with the associated parking lots, access trails, tot lots, restroom facilities and stormwater management facilities. The Second phase would include the

construction of a second big league baseball field, two regulation soccer fields, a lacrosse/field hockey facility and the associated parking lots, access trails, tot lots, restroom facilities and stormwater management facilities. The Third phase proposes the development of a BMX/Mountain Bike Facility, Woodland Nature Trail, and an organized group camping and picnic area. The development of the woodland phase could precede the development of Phase two if desired, however the access road and parking areas would need to be constructed. It is conceivable due to funding and volunteer efforts that a large portion of the third phase could be completed without heavy equipment and extensive disturbance. The woodland phase is proposed to utilize the existing natural trails and surface features. It is to be constructed within the woodland area without significant disturbance.

The Task Force Committee recommends that the facilities be connected by a 8' wide bituminous trail except within the riparian areas associated with the stream and in the woodland areas. This surface was selected to provide for minimal maintenance and ADA accessibility for those portions of the facilities designated accessible. The width provides for sufficient surface for Walking, Jogging, Skate Boards, and Roller Bladers without conflict. Trails and Access road are to be planted with native trees and shrubbery to provide a natural setting and buffer the activities in the individual areas. The nature trail and woodland areas will provide for an opportunity to partner with school groups, Boy Scouts and Girl Scouts as well as other conservation organizations to encourage and support natural wildlife areas.

Each group of fields and service areas are to be provided with Park Service Building to support Concession Stands to be operated by the Leagues, Rest Room Areas and Storage Areas for maintenance equipment. All of the Concession Area Facilities are to ADA accessible.

Parking has been provided with due consideration to the standards associated with each use and consideration of AASHTO design practices. Consideration has also been given to the ability of scheduling the events to avoid conflicts. A chart is included in the appendix to summarize the parking tabulations.

The lighting of the fields would provide for extended use of the facilities. The required number of fields has been based upon the ability to "turn-over" a field for use by the next event. By lighting the fields the hours of use can be extended gaining more use of a single field, reducing the number of fields required if used during the daylight hours. An important consideration in lighting fields is the impact to the surrounding neighborhoods. During the planning process the study group solicited public comment from residents that would be impacted by the lighting. The Master Plan recommends that selected fields will require lighting to maximize the required use. All lighting should be in accordance with the recently adopted Penn Township Lighting Ordinance. In addition, the fields located adjacent to the signal family residents along the southern boundary of the proposed park should be designated for daylight use only at this time. The duration of lighting shall be set by the Board of Supervisors with a designated time to turn-off any lighting to avoid creating potential nuisances with neighboring properties. The design of any lighting should incorporate the most current standards for direct, shielded, down-throw lighting that provides for the standards required for the safety of the participants without projecting lighting off the site.

PLAN IMPLEMENTATION