# Lower Allen Township Community Park Master Plan



# Prepared for: Lower Allen Township Cumberland County, Pennsylvania

Prepared by: The ARRO Group, Inc. Simone Jaffe Collins Landscape Architecture

# Lower Allen Community Park Master Plan

# July 2005

Prepared for:

## Lower Allen Township, Cumberland County Pennsylvania

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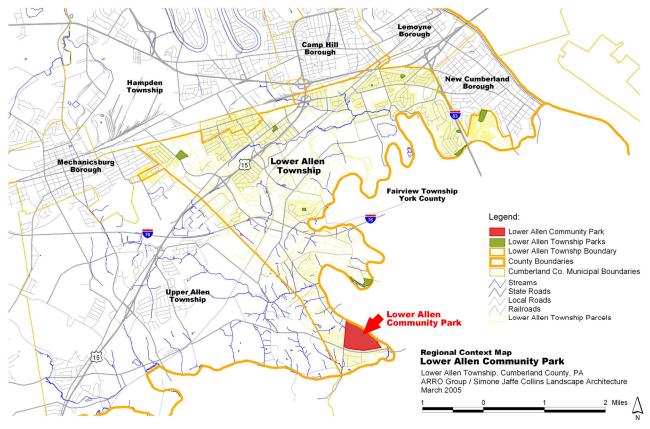
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# Introduction

Lower Allen Community Park is an approximate 115-acre regional park located in the southeast corner of Lower Allen Township, Cumberland County PA. Lower Allen Township purchased the land for the park from the Deckman family during the 1960's. The first park master plan was completed for the park in 1967 and a subsequent master planning effort was conducted sometime during the 1970's. The most recent park master planning efforts provided the planning basis for the construction of the many park and recreational facilities and improvements that exist at the park today.

During the past three decades, Lower Allen Community Park has evolved into a very successful and popular regional recreational facility. The use of the park for a popular summer concert series and the need for a performance area became the catalyst to develop a new master plan for Lower Allen Community Park. The new park master plan analyzes the existing park conditions in order to determine recommendations that will guide the development and construction of future improvements at the park.

In the fall of 2004, the Lower Allen Township Board of Commissioners solicited proposals from consultants for the development of a master plan for Lower Allen Community Park. From the proposals received, the Township interviewed and



Regional Context Map.

Lower Allen Township Community Park Master Plan

selected the team of ARRO Group Incorporated and Simone Jaffe Collins Landscape Architecture to complete the work.

# **Community Background Information**

Lower Allen Township is a Township of the First Class located in Cumberland County, PA. The Township Recreation and Parks Board serves as an advisory Board to a five member Board of Commissioners that governs the Township.

Lower Allen Township encompasses approximately 10.26 square miles of land. According to the 2000 US Census, the Township is home to a population of 17,437 residents that reside in 6,314 households. The Lower Allen Township Parks Department maintains a variety of active and passive park facilities at twelve locations throughout the Township. There are approximately 131 acres of developed park and playground land throughout the Township, and 34.6 acres of currently undeveloped park land.

Lower Allen Community Park is the largest and most developed regional recreational facility in the Township. Lower Allen Community Park provides a substantial amount and variety of recreational improvements that facilitate both active and passive activities. The park is a very popular recreation destination for Township residents and residents from surrounding communities. The goal of the Lower Allen Community Park master plan is to enhance the park user experience by utilizing the park to the fullest extent for active and passive recreational uses while preserving the natural areas of the site.

# **Relevant Planning Documents**

Existing and on-going planning documents provided background information used in the development of the park master plan.

The Lower Allen Township Zoning Ordinance and Subdivision and Land Development Ordinance protect the health, safety, and welfare of the Township and residents. The Zoning Ordinance



Park entrance at Lisburn Road.



The Lower Allen Community Barn is available for community use and is a popular rental facility.

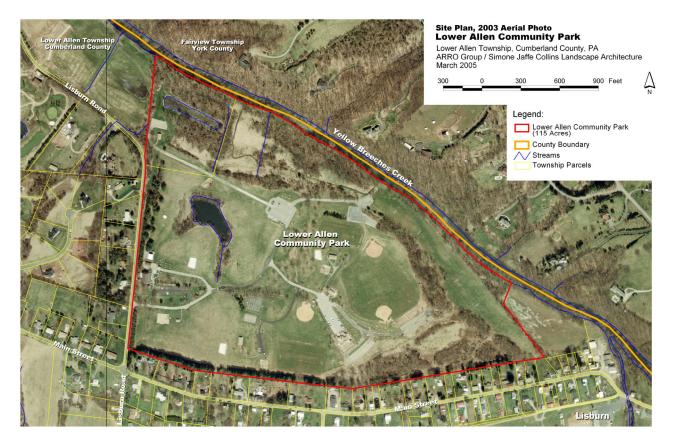


The main entry drive viewed towards the center of the park.

outlines permitted land uses within certain zoning districts and establishes setbacks and building heights applicable to the development of Lower Allen Community Park. The Subdivision and Land Development Ordinance generally deals with the specifics of required improvements and provides design standards for all types of development within the township.

Recognizing the need to analyze current development patterns and to plan for future development, the Lower Allen Township Commissioners have begun the process of updating the Township Comprehensive Plan. The draft Comprehensive Plan contains a significant study of the existing park and recreation facilities within the Township. Goals identified in the draft comprehensive plan include enhancement of existing park areas and recreation facilities and the development of a system of trails and greenways. Specific improvement opportunities suggested for Lower Allen Community Park include construction of an amphitheater and regrading of the lower meadow flood plain area to provide a turf area more suitable for active recreation fields.

The draft Cumberland County Open Space Preservation Plan was presented in September 2004. The Phase 1 recommendations of the Open Space Preservation Plan include the allocation of funding for the development of a water trail in the lower watershed of the Yellow Breeches Creek. One of the goals of the Open Space Preservation Plan is to create a comprehensive



2003 Aerial Photo of Lower Allen Community Park.

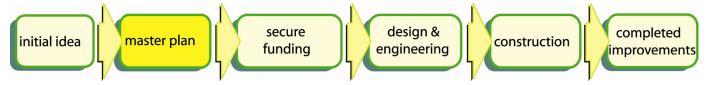
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greenway system through the County. A Cumberland County Greenway Study was completed in 2000 and this plan recommends the development of a greenway along the Yellow Breeches Creek as one of eight identified regional greenway corridors.

The Yellow Breeches Creek Watershed Assessment and Rivers Conservation Plan is being prepared by the Yellow Breeches Watershed Association and a public review period of the draft plan is currently underway. Recommendations are made to protect the Yellow Breeches which is classified as a cold water fishery and PA Scenic River.

# Master Plan Process/Public Participation

Public participation is a key ingredient in the success of any community project. Public meetings are designed to not only inform the public of the project status, but also to receive input as to the desired facilities and address any questions, comments, or concerns relative to the proposed improvements at Lower Allen Community Park.



As shown in the graphic above, the completion of the Master Plan is an early stage in the process of constructing new improvements and facilities at Lower Allen Community Park. The goal of the Master Plan study is to develop a general consensus for what facilities should be constructed at the park and to establish an estimate of probable construction costs that can be used for developing an implementation strategy.

The Master Plan forms the basis of the design and engineering phases of the project where detailed design decisions are documented through the completion of construction drawings. Upon completion of construction documents, the project can then be bid and constructed. It is important to consider that implementation will likely take place over a number of years with construction completed in phases as funding becomes available.

The six-month master planning process began with a project kick off meeting with Township staff and maintenance personnel. The planning process included three public meetings; the first of which was held on March 8, 2005 at the Lower Allen Community Park Barn. The focus of this meeting was park programming and attendees were encouraged to provide input relative to the facilities and improvements that they would like to see at the park. Public Meeting #2 was held on May 18, 2005 and the meeting featured the presentation of the DRAFT Lower Allen Community Park Master Plan Report. Following the presentation of the DRAFT master plan, a three week draft plan public review period was

conducted. Upon review of the public comments and discussion with the Steering Committee, revisions were made to the DRAFT plan and the final master plan was presented at the third Public Meeting on July 12, 2005.

A total of four (4) Steering Committee meetings were held throughout the Master Plan process. Attendance records and notes from all project meetings are included in the appendix of this final master plan report.

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# Site Analysis

# Data Collection / Methodology

Lower Allen Township provided park base information to the consultants in the form of GIS (Geographic Information Systems) mapping and aerial photographs, previous park master plans, and information from Township staff and park maintenance personnel. This data was supplemented by information gathered by the consultants from several site visits over the course of the master plan preparation.

# General Site Data

# Existing Land Use and Zoning

The triangular-shaped park is approximately 115 acres in size. It is bordered along its northern border by the Yellow Breeches Creek. Large residential lots exist on the north side of the creek which is located in Fairview Township, York County. The western boundary of the park is bordered by Lisburn Road and existing residential lots. Six hundred feet of the park's northwest boundary abuts the Liberty Forge golf driving range. The southern park boundary abuts residential properties. The park's eastern "tip" abuts a 5 acre wetland meadow. Zoning for the park property and surrounding lands to the south are situated in the R-1 Single Family Established Residential zoning district. The western boundary of the park adjoins the Lower Allen Township R-2 Single Family Rural Residential zoning district.

# Site Access / Circulation

The main and only vehicular entrance to the park is via Lisburn Road. The main access road is at a high point of the road and it enjoys good sight lines and visibility.

Circulation through the park is via a pleasantly situated if somewhat confusing roadway. These roads take good advantage of the site's topography, and are gently curving both horizontally and vertically to limit vehicle speeds in the park. Visitor confusion springs from lack of definition to the hierarchy of primary versus secondary roads. The primary access road splits off to three sets of secondary roads to park areas and parking.

The first driveway to the "barn area" parking lot is located too close to the Lisburn Road entry for safety. The main road proceeds to the north and the large parking lot adjacent to the dog park. The parking lot lacks a sense of "arrival", and is barrenly open. Smaller gravel roads proceed from this parking lot – one to a lower parking area near the creek and camping areas – and the second due west to the old skating pond / nature area trail where a gravel parking area and the Fernlawn pavilion are located. This gravel road also leads to the uphill tee area for the golf driving range.

The main access road also splits to the east. One secondary drive heads south to a small parking lot near the tennis and basketball courts, tot lot, pavilion and sand volleyball court.

The main drive continues to a larger parking area at the Fun Fort, baseball field, soccer field, and restrooms. The drive awkwardly intersects the parking lot and continues down hill to two other parking areas – one halfway down the hill and the second at the bottom of the hill – providing parking for the meadow soccer fields. This drive to these lower areas is also in a drainageway and there is significant, recurring erosion and water damage along these drives.

With the exception of the accessible path between the concession/restroom building and the lower pavilion, there are no pedestrian paths between active sports fields, playgrounds or pavilion areas. There is an extensive 1 mile nature trail system in the northern area of the park adjacent to the Yellow Breeches Creek.

# **Topography**

The site enjoys significant topographic change which greatly adds to the park's aesthetic appeal. The highpoint of the site, approximately 305' feet above sea level, is located near the east/west midpoint of the park along the southern property line. The park's topographic low points are at the northwest and corners of the park where elevation is approximately 220' above sea level.

# **Utilities**

Overhead electric lines provide service from Lisburn Road to the barn and existing maintenance area. The interior of the park is served by an underground electric service line that roughly parallels the existing access drive. A sanitary sewer trunk line runs adjacent to the Yellow Breeches creek. Park restroom facilities at the barn are served by a lateral that connects to a sanitary line in Lisburn Road while the central restrooms have a lateral that ties to the trunk line along the creek. There are currently four wells located within the park. All wells located within the park require treatment and testing to address fecal coliform levels. Public water service is not currently available in the area however there are talks of PA American possibly extending service within the Township. Potable water is supplied to the barn, barn restrooms, and existing maintenance buildings from a well located adjacent to the south side of the barn. A well located east of the lower pavilion provides potable water to the restroom building located at the central area of the park. The limitations of the treatment system for this well prohibit use of the central restroom building during the winter months. None of the existing pavilions are served by potable water. There are no stormwater management facilities in the park. A map of the existing utilities is located at the end of this chapter.



View toward the lower pavilion and the Yellow Breeches Creek.



The Yellow Breeches Creek.



The Farm Pond looking towards the Barn.

# <u>Views</u>

The varied topographic relief in the park allows for some spectacular views within and surrounding the park. Most prominent are the views across the Yellow Breeches Creek to the steep hillsides on the northern side of the creek that are located in Fairview Township. Despite continuing residential development on these hillsides, the views are still pleasing.

Within the park, there are a variety of views that are mostly pleasing and in some cases very scenic. Probably the best interior park views are within the nature trail area of the park. The long narrow pond is very scenic and many views in this area create the illusion of being in a remote area. The long views parallel to the creek over the meadow soccer fields are great and without soccer players present, give the feel of an old field meadow.

The views from the barn are similarly pleasing. The water surface of the upper pond, however, is not visible from the barn.

# **Natural Features**

# <u>Hydrology</u>

The park has two primary watersheds which roughly split the park east / west in half. Please refer to the Hydrology Map.

In the western watershed, south of the entry road, storm water sheds over the surface. There also exists a groundwater seep that surfaces on the south side of entry road. This water is collected in a culvert under the road into a swale that coveys water into the upper farm pond. The pond's outfall is beneath an earthen embankment into the wetlands / natural area.

The eastern watershed, larger than the western side, flows almost exclusively over the park surface without the benefit of natural or naturalized drainage swales or drainageways. There are some rudimentary catch basins and stormwater piping along the drive to the lower parking areas; however these are inadequate as evidenced by the substantial, recurring erosion that occurs there. The lower, easternmost parking area does drain into a holding area of sorts, but this sheet drains over the eastern half of the meadow fields, exacerbating the playfields wet soils.

The FEMA (Federal Emergency Management Agency) has established the limits of the 100 year and 500 year floodplain. These areas include the meadow fields and the wetlands in the Nature Trail area. These areas will experience periodic flooding and the wet soils will occasionally limit the use of athletic fields. Also, these soils will dry out more slowly after moderate to heavy rainfalls. Recreational uses are well suited to these areas since these conditions will cause little, if any, damage to athletic field facilities.

The Hydrology Map also indicates the approximate boundaries of wetlands on the site. This represents a generalized location based upon Township GIS data. An on-site evaluation by a soils/wetlands expert is needed to determine an exact delineation of the site's wetlands.

# Vegetation

The parklands are primarily open fields based on their use for active sports play. However, there exists significant areas of mature vegetation, that appear to have been preserved from when the park was first developed.

Along Lisburn Road an existing mature evergreen hedge of effectively screens the park. When driving south on Lisburn Road, the hedge is so effective that it hides the park barn until very close to this facility. The barn is an important artifact of the area's ever shrinking agrarian heritage and the extent of visual screening from the road is not warranted.

Over the years, ornamental tree planting throughout the park has been effective in creating a classical Olmstedian character to sections of the park. The southern park boundary is screened with mature evergreens, mostly white pine, and is beginning to "shade out" in the lower ten feet. This buffer will need evergreen understory plantings to maintain its effectiveness as a privacy screen to adjoining residences.

A large "naturalized" area exists in the lower southeast corner of the park. Various native and invasive species exist in the area. Above the meadow soccer fields, there is a steep embankment area that is heavily vegetated with mature trees. The upper pond and feeding swales are populated by a combination of mature and large trees, and woody deciduous shrub species, some that are invasive species that help hold the steep embankments. The park's most significant vegetation exists in the nature trail area. This vegetation includes a variety of tree and shrub species.

The lack of stable vegetation along the banks of the Yellow Breeches Creek, together with high velocity storm water flows, has resulted in significant erosion of the stream bank.

### <u>Soils</u>

The park soils are illustrated on the soils map, keyed to the outline soil description contained in this master plan report. The six soil types present on the site have limitations based on either wetness or slope. The soils that exist within the 100 year floodplain (Lindside Silt Loam and Melvin Silt Loam) have severe limitations for playfield due to wetness. The other four types of "upland" slopes have some limitations based on slope and erosion potential, but through proper management techniques and regrading (as has been done to date in the park) these limitations can be minimized.

### Environmentally Sensitive Areas

The parks' wetlands located along the Yellow Breeches Creek are the most environmentally sensitive areas of the park. These wetlands, while preserved, are affected by the uphill runoff from the park's sports fields and nearby residential lawns. Since virtually no stormwater control features exist in the park, there is no protection to the park's wetlands from stormwater flows that may contain high levels of nitrogen (from lawn fertilizers) and perhaps herbicides, and road oils. See the Hydrology Map for the approximate locations of the site's wetlands.

The banks of the Yellow Breeches Creek are also very sensitive and subject to continued erosion and deterioration unless measures are taken to stabilize these embankments and protect them from high velocity water flows. The 100 year and 500 year floodplains are also sensitive areas and are subject to state regulations that prohibits filling within the 100 year floodplain.

There are several areas of steep slopes in the park, however, these are mostly wooded and stable, and to date have been preserved throughout development of the park.

# **Existing Facilities Analysis**

The Barn and Maintenance Building is the "nerve center" of the park. The barn's all weather restrooms, its heavy use as a rental facility and the adjacent maintenance building and shed, with a nearly constant presence of maintenance personnel, have made this the focal point of the park. The barn is heavily used for events and parties and continued heavy use is anticipated. The barn lacks comfortable outdoor facilities that take advantage of the beautiful park, and could help to extend or expand rental use.

The Upper Pond is an underutilized attribute of the park. The pond's edge plantings could be refined to encourage better waterfront access in some areas. The pond's water level drops significantly during dry spells and when it does this amenity is lost. The western swale to the pond is surprisingly deep and its steep slopes need to be stabilized. The eastern swale from the entry road carries the bulk of the stormwater runoff and water from the ground seep into the pond. There is significant erosion along this swale which should be repaired.

The Barn parking lot is undersized when larger events take place at the barn. Also, its two-driveway access should be clarified and the driveway closest to the street may be considered for removal since it is too close to this intersection.

**The Tot Lot** just south of the entry drive, and its associated pavilion, while popular and heavily used, is too close to the entry drive for child safety. These facilities should be relocated to another location.

The Tennis Courts and Basketball Court are in great condition and in a good location.



View of the Barn and Maintenance Area.



Existing Tot-Lot south of the entry drive.



Existing Basketball and Tennis Court.



The Dog Park is a popular facility that is used year-round.



The Fernlawn Pavilion is a popular rental facility.



The upper Baseball Field.

**The Dog Park** is a heavily used facility in the park. It is well-sized but the surface needs improvement and the drainage from the dog park needs to be controlled and contained. The current location for the dog park is a good one; however, alternate locations should be explored as part of the master plan process. The parking lot associated with the dog park is adequate but aesthetically bleak.

**The Golf Driving Range** is a safety liability as the park becomes more heavily used. The development of the new private sector driving range next door raises the question of whether or not this facility is really needed in Lower Allen Community Park.

The Fernlawn Pavilion, old skating pond, parking area and nature trails are magnificent. This area should be maintained, protected and enhanced to maintain the high quality user experiences in this area.

**The driveway** from the dog park parking is minimally adequate and needs improvement. The small parking lot above the creek (and below the small soccer field) is inadequate and too steeply sloping. This should be redesigned and possibly relocated.

**The Camping Areas** (4) along the creek are minimal facilities that may continue to exist as park needs and user comfort allows. The camping sites are located in a wet area along the floodplain and are therefore not available for use at certain times of the year.

**The Baseball Field and Soccer Field** in the upper center of the park are in very good condition. The baseball field has incorrect solar orientation. The soccer field also has incorrect orientation; however, this is not as serious a safety concern as is the baseball field. **The Fun Fort** is a highly used facility that exhibits the community involvement and pride that created it. The treated wood is showing the first signs of deterioration and it is estimated that the useful life that remains for this facility is approximately ten years. The planning for its replacement should be a part of this master plan.

**The Restroom Building** in the center of the park is a serviceable building with a concession area and deck. The existing well water supply purification system has limitations which require the restrooms to be closed during the winter months.

The Tot Lot, Pavilion, and Sand Volleyball Court are centrally located. The tot lot

equipment is minimal and needs improvement.

The Lower Baseball Fields that face each other are in very good condition. One of the fields has incorrect solar orientation which is a safety concern.

The Small Soccer Field is in good condition but is of limited value due to its size.

The Lower Access drives to the eastern most parking lots convey large amounts of storm water and are subject to erosion. These facilities need to be redesigned. The park does not address storm water management in any significant manner and the master plan should address this issue. A detailed description and discussion of the existing park drive is discussed above under "site access".

**The Meadow Soccer Fields** are heavily used. They need complete regrading to eliminate ruts and the existing uneven surface of play. Under drains and soil improvements should be considered to improve the condition of these fields.



The Lower Allen Community Park Fun Fort.

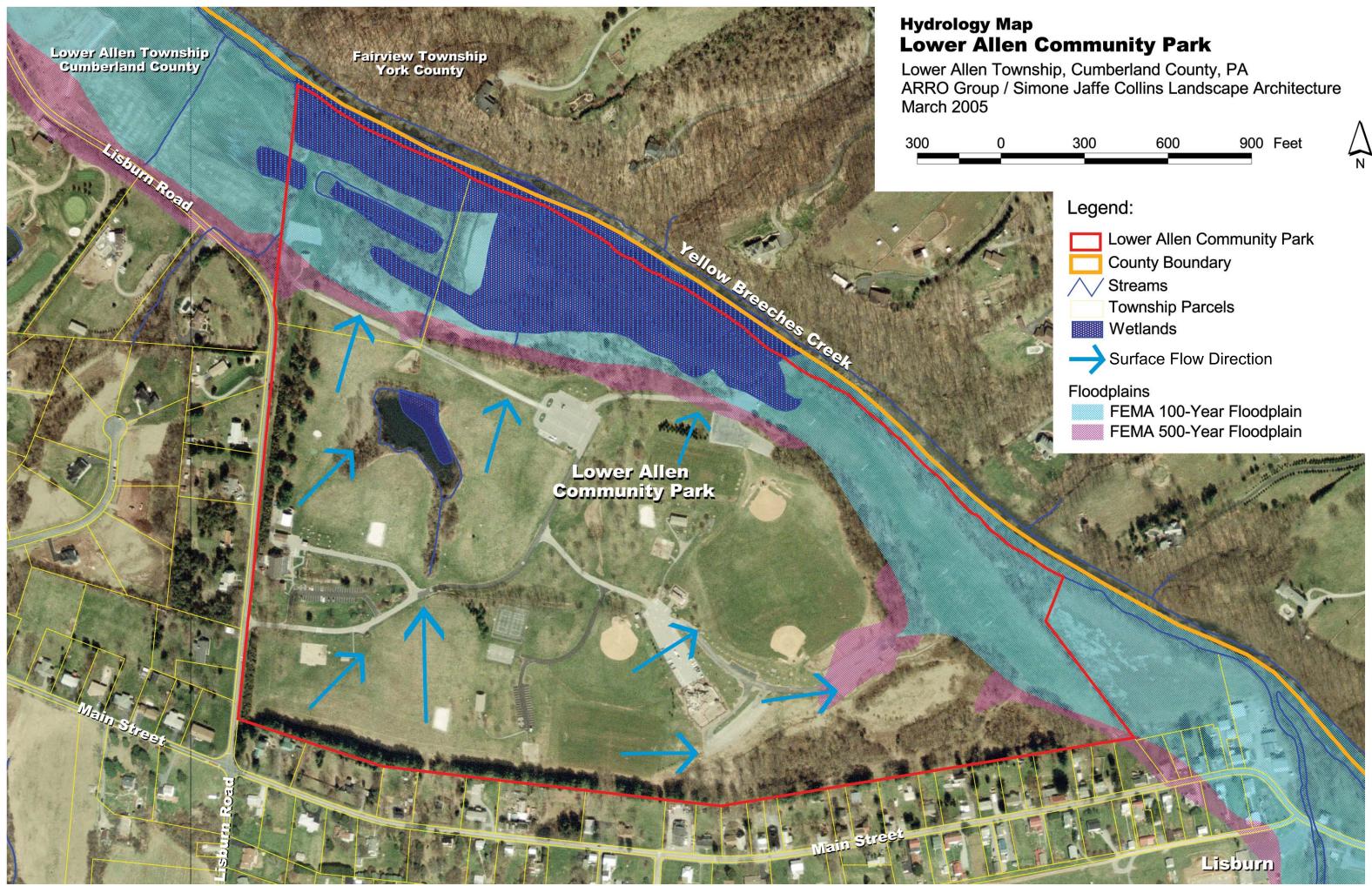


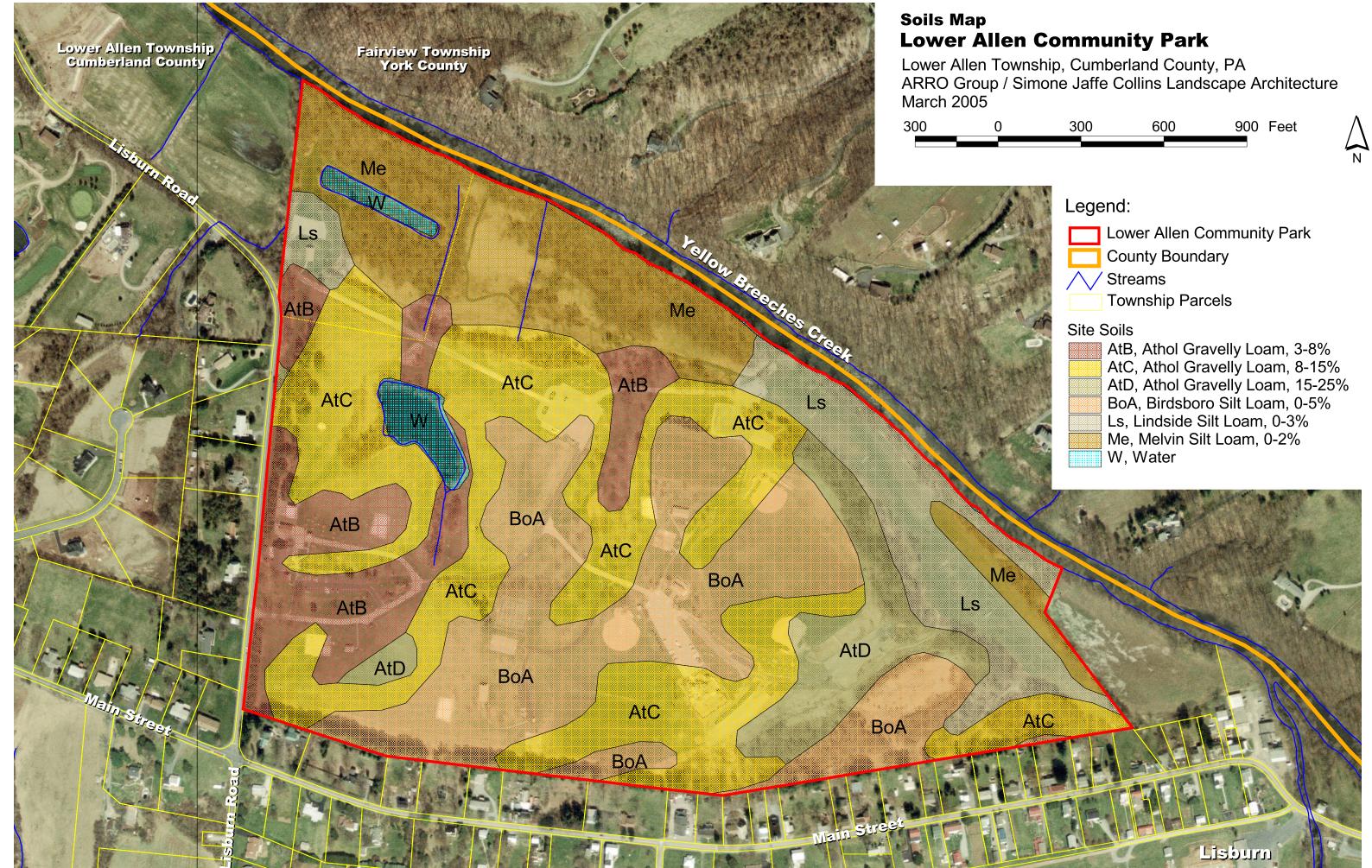
The lower baseball field (correct orientation).



The meadow soccer fields.

**The Embankment** of the Yellow Breeches Creek is subject to severe erosion and measures should be undertaken to prevent additional loss of land. Improvements should also be considered to make the creek accessible for fishing and non-motorized boating. This page intentionally left blank.





# Lower Allen Community Park Soil Analysis Summary

Source: Soil Survey of Cumberland and Perry Counties PA, 1986

# **Building Site Development**

Map Unit Symbol	Soil Name	Slope	Depth to Bedrock	Depth to Seasonal High Water Table	Hydric Soil (Yes or No)	Limitations for Shallow Excavations	Limitations for Roads & Parking Lots	Limitations for Lawns & Landscaping	Limitations for Small Buildings
AtB	Athol Gravelly Loam	3 - 8%	40" +	greater than 6'	No	Moderate: Depth to Rock	Moderate: Frost Action.	Slight	Moderate: Slope
AtC	Athol Gravelly Loam	8 - 15%	40" +	greater than 6'	No	Moderate: Slope, Depth to Rock	Moderate: Slope, Frost Action	Moderate: Slope	Severe: Slope
AtD	Athol Gravelly Loam	15 - 25%	40" +	greater than 6'	No	Severe: Slope	Severe: Slope	Severe: Slope	Severe: Slope
BoA	Birdsboro Silt Loam	0 - 5%	60" +	4 - 6'	No	Severe: Cutbanks Cave	Moderate: Frost Action.	Slight	Slight
Ls	Lindside Silt Loam	0 - 3%	60" +	1.5 - 3'	No	Severe: Wetness	Severe: Flooding, Frost Action	Moderate: Flooding	Moderate: Flooding
Me	Melvin Silt Loam	0 - 2%	60" +	0 - 1'	No	Severe: Wetness	Severe: Low Strength, Wetness, Flooding	Severe: Wetness	Severe: Flooding, Wetness

## **Recreation Site Development**

Map Unit Symbol	Soil Name	Soil Name Slope Limitations for C		Limitations for Picnic Areas	Limitations for Playgrounds	Limitations for Paths and Trails
AtB	Athol Gravelly Loam	3 - 8%	Slight	Slight Slight Moderate: Slope, Small Stones		Slight
AtC	Athol Gravelly Loam	8 - 15%	Moderate: Slope	Moderate: Slope	Severe: Slope	Slight
AtD	Athol Gravelly Loam	15 - 25%	Severe: Slope	Severe: Slope	Severe: Slope	Moderate: Slope
BoA	Birdsboro Silt Loam	0 - 5%	Slight	Slight	Slight	Severe: Erodes Easily
Ls	Lindside Silt Loam	0 - 3%	Severe: Flooding Moderate: Wetness Moderate: Wetness, Flooding		Slight	
Ме	Melvin Silt Loam 0 - 2% Severe: Flooding, Wetness		Severe: Wetness	Severe: Wetness	Severe: Wetness	



# **Proposed Activities & Facilities**

The proposed master plan recommends a number of new or improved facilities. The major facilities in each area of the park are listed below. More detailed information can be found on the master plan drawing and in the Opinion of Probable Development Costs.

# 1. Barn Area / Entrance Road

- Barn deck
- Civic Plaza
- Expanded parking lot
- New tot lot area



Proposed civic plaza and deck at the Barn.

# 2. New Maintenance Area

- A new maintenance area is proposed in the underused southwest corner of the park. A 4,000 square foot building with two garage bays is proposed to be access from new drive and parking area on the south side of the existing entry drive. The building is envisioned to aesthetically compliment the Barn and designed to be responsive to the agrarian history of the site. Proposed utility service to the building includes a water line extension, sanitary sewer lateral, and extension of underground electrical service.
- A sledding hill area is proposed above the maintenance area that will be created through earthmoving and grading in conjunction with the maintenance area construction.
- New parking lot on south side of entry road.



Proposed sledding hill overlooking the new maintenance area.

- 3. Upper Pond
  - Small Performance Area
  - The proposed park plan suggests the utilization of the upper pond adjacent to the existing dog park for stormwater management. This pond's water surface is normally well below the spillway elevation; the spillway is a grass-lined low area through the embankment which opens to the wide-open downstream side of the embankment.



Proposed performance area at the upper pond.

Cumberland County, Pennsylvania

The entire pond side of the embankment is covered with vegetation, including significant trees, and there are also sizeable groundhog holes located in the embankment. If the pond water surface were often significantly higher, for an extended period, the vegetation and burrows would need to be addressed; both provide increased opportunity for water seepage through the embankment that can ultimately lead to embankment failure. Increased water levels would be expected if this pond were utilized for stormwater management. With the current water levels, the width of the embankment at those levels is sufficient to provide a significant factor of safety against seepage through the embankment. The higher the water rises, the less width of embankment there is due to the trapezoidal shape. After an engineering analysis is done to establish the necessary stormwater storage requirements and their associated pond depths, the necessity of removing the vegetation and repairing the burrows should be evaluated. Trapping and relocation of the groundhogs would be a necessity, as new burrows are quickly established otherwise; this is recommended even with the current water levels. Review of the adequacy and stability of the spillway and its downstream slope would also be required following determination of the new stormwater flows.

# 4. Pavilion Grove

 Three new pavilions above the small performance area (area previously occupied by the golf driving range)

# 5. Dog Park

- New surface (shredded mulch) with well-drained subgrade (gravel) with integral drainage system.
- Potable water supply, shade trees and other user amenities.
- Consideration was given to the contamination effects of the dogs' waste. Regulations for the dog park require that solid waste be removed and disposed of immediately. However, the liquid wastes are uncontrolled and seep into the ground. With infiltrated water ultimately becoming groundwater which can either discharge to surface waters or the groundwater supplies, there could be concerns over pollution. Multiple personnel within the South Central Regional office of DEP indicated that they have no regulatory requirements which would address dog parks. Additionally, personnel from the Pennsylvania Department of Health and also personnel from the Department of Agriculture both indicated that their departments held no controls concerning dog parks. In summary, then, there are no requirements for addressing the potential effects of the dogs' liquid wastes. Treatment by bacteria within the soil could function the same way as an on-lot sewage system, treating the waste as it percolates. Additionally, the contaminating organisms from animal waste are significantly less harmful than fecal coliforms associated with human waste. In the interest of treating dog urine infiltration in a conservative

manner, the drainage of this area into a seepage bed or similar facility is recommended.

# 6. Overflow Parking Area

 Grading, surface and access improvements to maintain the area as lawn with a stabilized based for event overflow parking

# 7. Baseball Field / Roadway Realignment

 Reposition the field for proper solar orientation and realign the park drive and parking lot for safety and utility.

# 8. Fun Fort

 New Fun Fort centrally located when the current facility needs to be replaced.

# 9. Water Play Area

New water play area centrally located in the park.

# 10. Large Performance Area

 Regrading of the small soccer field to create an open-air audience seating area, access improvements and design and construction of a multi-purpose performance facility.

# 11. Reorientation of Softball Fields & Lower Parking Lot Improvements

- Reposition fields for proper solar orientation
- The proposed park plan suggests an additional parking lot adjacent to the existing stone parking area at the eastern end of the park. The initial concept for this parking area is to maintain the existing stormwater swale to the east of the existing gravel parking area and to create a new parking bay to the east of the drainage swale by partially excavating the hillside in this location. The entrance to this new parking bay would cross the swale at the northern and southern end of the parking area to create a turn around loop by traveling through the existing and new parking bay. To create the drive loop between the two parking bays, the swale drainage would be piped beneath the surface of the parking lot drives.
- Consideration was given to utilizing this swale area between the parking lots as a stormwater detention pond, reducing the increased peak flows generated due to the additional paving. Unfortunately, in relation to the size of the upstream contributing drainage area (approximately 40 acres), the available swale area would be very small to function as a detention basin. The required peak stormwater flow reduction would be in the order of reducing 50 cubic feet per second (cfs) to 48 cfs for a 10-year storm, assuming a one acre increase in impervious area. While a basin in the swale area may be theoretically large enough to accomplish such a reduction, the practicality of trying to achieve such a reduction is an exercise in impractical hydraulics. To obtain a noticeable and achievable



Option #1 -Large performance area with tensile fabric canopy.



Option #2-Large performance area with structural canopy.

Lower Allen Township Community Park Master Plan

peak flow reduction, the area would be undersized. Stormwater for the parking lots would be better served through a stone infiltration pit beneath the parking lot paving, which would not only provide stormwater peak flow reductions, but also water quality improvements as well as groundwater recharge. Verification of the suitability of the underlying soils would need to be made prior to proceeding with design. The swale area could still be enhanced, and could be set up with in-swale best management practices for some water quality improvements.

# 12. Wetlands Meadow Purchase

 It is suggested that the township consider the purchase of the wetland meadow to preserve this area and to incorporate it into the park's nature area and to provide for trail access to Lisburn Village and the fire station athletic fields.

# 13. Meadow Play Fields

- The proposed park plan enhances the informal soccer fields in the floodplain along the Yellow Breaches Creek. In order for these fields to become viable top-level playing fields, they need to be regraded and provided with proper drainage. The fields in this area are fully within the 100-year flood plain.
- Part of the soccer fields will be located within not just the floodplain, but also within the floodway. The floodway is that area of the floodplain which is not permitted to have fill placed within according to FEMA regulations. Any work within the floodway will require FEMA review and approval. To place fill within the floodplain, DEP approval and permitting will be required under their chapter 105 and 106 regulations. Even if local regulations allow some increase in water surface elevations due to the placement of fill in the floodplain, it is recommended that the municipality not exacerbate flood levels. An engineering study will therefore be required to show that the final grades of the soccer fields will not cause increase flood levels. The placement of fill without equal removal of existing soil will therefore most likely be unacceptable.
- To aid in the draining of these soccer fields, it is recommended that subdrains be installed, with perforated pipes installed in a geotextilewrapped narrowly graded stone trench just below the improved topsoil layer. The subdrains can discharge directly to the creek with appropriate streambank erosion protection.

# 14. Boat Launch Area

- The proposed park plan suggests the construction of a boat ramp along the Yellow Breeches Creek, to provide for canoe launching and tubing access. The optimal location for this ramp is at the point where the existing meadow area ends at the existing gravel parking area at the easternmost portion of the nature trail.
- The streambank in this location would not require extensive clearing of

existing vegetation excavation could be completed to construct a sloped ramp to the stream bottom. Construction of the boat ramp will include the placement of interlinked concrete beams within portions of the stream channel which will require permitting under DEP chapter 105 regulations. Additionally, the streambank will have to be anchored to prevent streambank erosion.

# 15. Nature Area / Lower Pond

 Control vehicular access to this area for events and rentals only and incorporate the existing gravel road into the proposed loop trail. Establish winter use of the pond for ice skating and add signage and perhaps a fire pit for scheduled skating night events operated by the Township.

# 16. Yellow Breeches Creek Riparian Buffer

In order to preserve the high quality of the Yellow Breeches, riparian buffer plantings are proposed to anchor the streambank and to filter stormwater runoff before it reaches the creek. Installation of streambank improvements within the park offers an opportunity to partner with nonprofit organizations such as the Yellow Breeches Watershed Association and the buffer can act as a demonstration for environmentally sound management of riparian corridors.

# 17. Loop Trail

 A 1.2-mile multi-use loop trail is planned for construction around the perimeter of the park. The trail shall be constructed with a width of 12' to accommodate a variety of uses and to allow adequate room for passage. To comply with ADA requirements, the trail should be graded so that the slope does not exceed 5%. The asphalt surface loop trail will also be used for maintenance access to various areas of the park.

# **18. Entry Drive Improvements**

 Shade trees and security lighting are proposed along the main entry drive from the Lisburn Road intersection to boat launch area.

# 19. Southern Park Boundary Improvements

 Post and rail fencing, additional buffer planting, and signage is proposed along the southern park boundary to clearly delineate the boundary between the public park and private property. This page intentionally left blank.

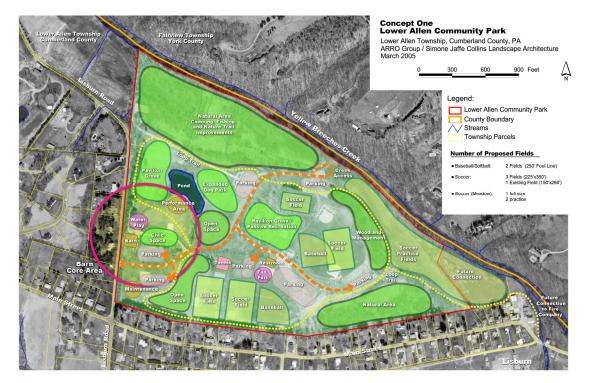
# Site Plan

# Concept Plan One

Concept Plan One examines the concept of a "Barn Core Area".

Main features of the Barn Core Area Plan include:

- Relocation of the current maintenance facility to the southwest corner of the park (near Lisburn Road) into an existing "hollow" of a little used area of the park.
- Creation of an expanded civic plaza adjacent to and south of the barn. This plaza could be utilized for both events and non-structured activity.
- Create a deck off of the second floor of the barn (on an existing roof structure) that will enhance the attractiveness of renting the barn for events and parties. The deck will be a great observation area and be a wonderful place to sit during non-event times.
- Creation of a water play area in close proximity to the barn to allow close access to existing barn restrooms, possible concession area, etc.
- Remove existing maintenance area vehicular access to make the area more accommodating for pedestrians.
- Expand (double) the capacity of the existing parking lot located just north of the main access road. Create a similar parking area just south of the access road.



Concept Plan One.

Lower Allen Township Community Park Master Plan

- Create a modest performance area adjacent to the existing farm pond. This performance area would complement the naturalistic setting at the pond. The stage might be a simple wood or masonry "deck" with a framing arbor structure or pergola. Strengthen the pedestrian and visual connections between the proposed performance area and the barn.
- Replace the existing golf driving range with a "pavilion grove" adding several pavilions for use and rental with additional shade trees.

Other features of Concept Plan One are:

- Create a loop trail around the perimeter of the park. This trail could link the park to Lisburn Village and the sports fields of the Lisburn Fire Company (to the southeast). The loop trail is also shown replacing the existing gravel trail that runs from the dog park parking lot to the west to the Fernlawn pavilion near the northwest corner of the park. The loop trail in this section of the park could have limited vehicular access (keyed) for pavilion rentals in the Pavilion Grove and in the Nature Area.
- Expand and improve the dog park in its current location.
- Re-orient existing baseball/softball field for correct solar orientation.
- Plan for the future relocation of the Fun Fort when it needs to be replaced (estimated in ten years).
- Expand the existing parking lot that is located adjacent to the existing Fun Fort.
- Consider township acquisition of the wetland / meadow that is located to the east of the existing park land and adjacent to the Yellow Breeches Creek.
- Create improved creek access for non-motorized boat access.

# Evaluation of Concept One

The Township study committee liked the idea of relocating the park's maintenance area and to utilize the existing maintenance area for activities related more to recreational and barn rental use. Relocation of the maintenance operation will allow the adaptive reuse of the primary maintenance building.

However, too much activity and too many new facilities in close proximity to the barn was seen as a possible detraction from daily and rental use of the barn. Specifically, the placement of the water play facility near the barn might create conflicts during the summer months and conversely "dead space" during the nine months when the water play area will not be used. Regardless of the final uses around the barn, expanded and new parking off of the entrance road was viewed as a welcomed improvement.

The elimination of the park golf driving range was positively received, especially since a private sector driving range adjacent to the park was recently constructed.

The modest sized performance area at the pond was thought to be a facility that could function well for smaller events and might also be appropriate for outdoor wedding ceremonies at the park (a frequent request) and even for rentals – similar to pavilion rentals. However, it was recognized by the committee that really large events might not be well suited for this location.

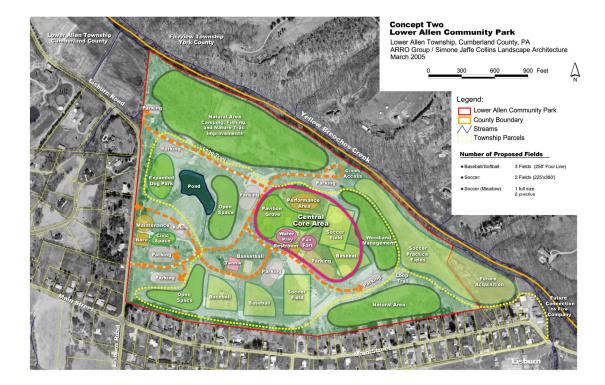
The loop trail was seen as a needed improvement and one that will be heavily utilized. The loop trail will also serve for park maintenance vehicle access.

# Concept Plan Two

Concept Plan Two examines the concept of a "Central Core Area".

Main features of the Central Core Area Plan include:

- Create a large performance area in the current location of the "small" soccer field. Seating would occur on the sloped bank above the soccer field. This embankment could be expanded and graded to be gradual and longer to better accommodate spectators.
- Locate the water play area and the relocated Fun Fort to flank the



Concept Plan—Option 2.

Lower Allen Township Community Park Master Plan

existing restroom building (to be improved).

• Create additional parking on the north side of the existing access road that runs to the lower parking and meadow soccer fields.

Other features of Concept Plan Two are:

- De-emphasize the creation of too many new activities and facilities at the barn.
- Expand (double) the existing parking lot on the north side of the entry drive. Create a mirrored parking lot on the south side of the road.
- Create an expanded civic space adjacent to and east of the barn.
- Create a one-way in and one-way out road circulation from Lisburn Road. (Further investigation showed sight lines for additional road access are questionable).
- Replace the existing golf driving range with an expanded dog park. Creation of a new parking area north of the new dog park location off of the existing park road. Replacement of the existing dog park with passive open space.
- Create a loop trail around the perimeter of the park similar to the trail described in Concept One.
- Re-orient existing baseball/softball field for correct solar orientation.
- Create improved creek access for non-motorized boat access.

# Evaluation of Concept Two

The Township Study Committee favored the idea of locating the proposed water play area away from the barn, as the location at the barn would lead to potential user conflicts and the potential of too much activity in this area during rental functions. When the Fun Fort lives out its life-span, relocation of the new Fun Fort is proposed in the same general location as the water play. This location will help create a central core area of the park and is in close proximity to rest rooms and pavilions

The center of the park is also the most compatible area for creating a venue that will accommodate large audiences (over 100) for performances at the park. While maintaining sports fields in this area, there is also ample room to accommodate additional pavilions that will be used on a regular basis. The pavilions are also anticipated to be available for rental during specials performance events at the amphitheater.

The relocation of the dog park to the former driving range has limited, if any benefits. The land to the west of the pond is more sloping (creating more challenges to control run-off from the dog park) and this location is closer to residences on Lisburn Road.

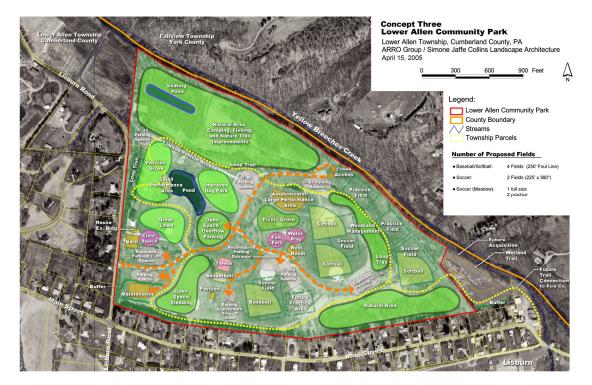
Existing ball fields are repositioned for proper solar orientation.

# Concept Plan Three

Concept Plan Three combines proposed improvements from Plan One and Plan Two. This plan forms the basis for the draft Master Plan.

Main features of Concept Plan Three include:

- Recommends the small performance area at the pond <u>and</u> the larger performance venue at the central core of the park. The Township Study Committee felt that both of these areas will be used. The smaller area at the pond will be used for wedding ceremonies and smaller intimate musical, drama or other events. It is estimated that the pond performance area will accommodate 100 to 150 people in the lawn sitting area. Additionally, several pavilions can be constructed in the uphill Pavilion Grove which will provide a premium event rental facility. The larger amphitheater in the center of the park will provide for audiences of up to 400 + and be well suited to music and performances.
- Relocates the park's maintenance operation to the southwest corner of the park. This will create much needed expansion to the parks maintenance operation while providing an expansion of the park's user facilities at the barn area – primarily through a new civic plaza at the barn and the adaptive reuse of the former maintenance building. Complete grading and other improvements in this area to facilitate the



Concept Plan One.

Lower Allen Township Community Park Master Plan

use of the existing hill for winter sledding.

- Maintains the dog park area while making major surface, drainage and amenity improvements to the area.
- Increases the number of parking spaces in the park from approximately 300 spaces to 500 spaces through existing parking lot expansion and the creation of new parking lots. Additionally, the plan recommends that an events or overflow parking area be created adjacent to and southeast of the pond.
- Creation of a loop trail system around the "active" perimeter of the park and a trail connection to the village of Lisburn and the recreational fields at the fire company. A pedestrian connection from Main Street is also recommended at the park's midpoint, through an access easement to be acquired by the Township.
- Acquisition of the wetland meadow at the eastern tip of the park to add to the park's natural areas and existing nature trails while providing for the above mentioned trail link to Lisburn.
- Re-establish the use of the long and narrow pond at the northwest corner of the park for ice skating.
- Regrading and surface improvements to the meadow soccer fields including creation of a new softball field. The plan recommends proper solar orientation for the three other softball fields.
- Provide for stormwater management facilities throughout the park. These stormwater management facilities include utilization of the existing pond for stormwater detention, creation of new infiltration and detention facilities, sports field under drains and other methods.

### Evaluation of the Concept Plan Three

The Township Study Committee felt that this plan combined the best elements of Plan One and Plan Two. The committee recognized that the plan will require a careful phasing of improvements to ensure a logical and cost effective improvement program.

While most of the proposed improvements in the park can proceed as independent projects, there are a few park improvements that are linked since they revolve around earthmoving and the need to balance cut and fill on the site. This will hopefully prevent having to bring any earth materials or "fill" to the site and likewise prevent having to remove any excess "cut" earth materials out of the park.

Proposed improvements that will require the major "cut" of earth materials from the site are:

• Creation of the new maintenance area, maintenance yard, new parking lot south of the entry road and sledding hill improvements in the existing hollow will require expansion of this hollow;

Cumberland County, Pennsylvania

- Improvements to the dog park will require the excavation of earth and replacement with clean gravel below a mulch surface;
- Expansion of the southeast parking lot and its integral detention basin / bioswale will require major cuts;
- The overflow parking area will require earth cuts and replacement with modified gravel beneath a turf surface;
- The "hill" of the great lawn between the barn and pond can be "lowered" or cut to provide direct sight lines from the barn to the surface water (if cut and fill calculations indicate that additional fill is required).

The creation of the gently sloping audience seating area for the large performance area will require the filling of the southern half of the existing small soccer field.

Since the earthmoving required by these park improvements is so critical in terms of balancing cut and fill, the procurement of an accurate topographic survey will be one of the first actions that should be undertaken in the implementation of the master plan.

Since these earthmoving activities will greatly affect construction costs, it is also recommended that construction plans be prepared for all phases of all proposed park improvements at one time, so that the ramifications of all site improvements can be understood and anticipated.

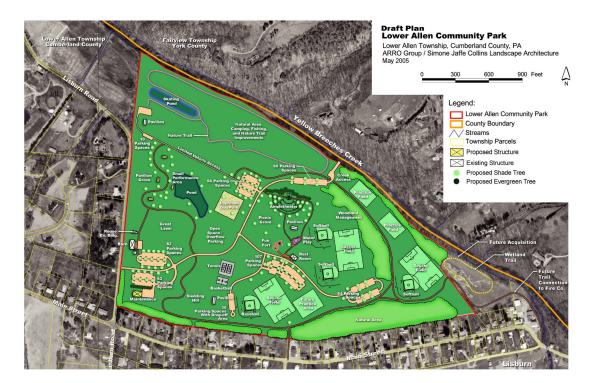
### Draft Plan

Based upon review of the Draft plan public comments with the Steering Committee, the Draft plan was revised to the reflect the current layout and improvements shown on the Final plan. The following is a summary of the major Draft plan revisions that are reflected in the final plan:

- To address noise and privacy concerns along the southern park boundary, additional evergreen buffer planting is proposed. Additionally, fencing along the southern park boundary is included in the Final Plan proposed to visually delineate between park land and private property. Costs for fencing and landscape buffer material have been added to the estimate of probable construction costs.
- Playing fields with overlapping field areas has been addressed by eliminating the softball field from the lower meadow area and by the removal of the proposed soccer field in the area of the existing softball fields. The number of playing fields within the park will remain the same as what currently exists. The only exception is the existing small soccer filed which is slated for future elimination to allow for the

construction of the large performance area. It is important to note that the small soccer field will remain until the Township decides to construct the large performance area. Through discussions with the Steering Committee, the large performance area was envisioned to be one of the final phases of development at the park and construction may not occur for many years.

- Circulation and parking has been revised within the central area of the park. By realigning the access drive in this area, parking is now shown provided on each side of the drive. This revision addresses the safety concern noted with the Draft site plan layout where pedestrians would have to cross the access drive to reach the future fun fort location and existing restrooms.
- The park entry drive on Lisburn Road is proposed to be widened to include an exit turning lane onto Lisburn Road to improve vehicular ingress and egress from the park.



Draft Plan.

Cumberland County, Pennsylvania

### **Opinion of Probable Cost**

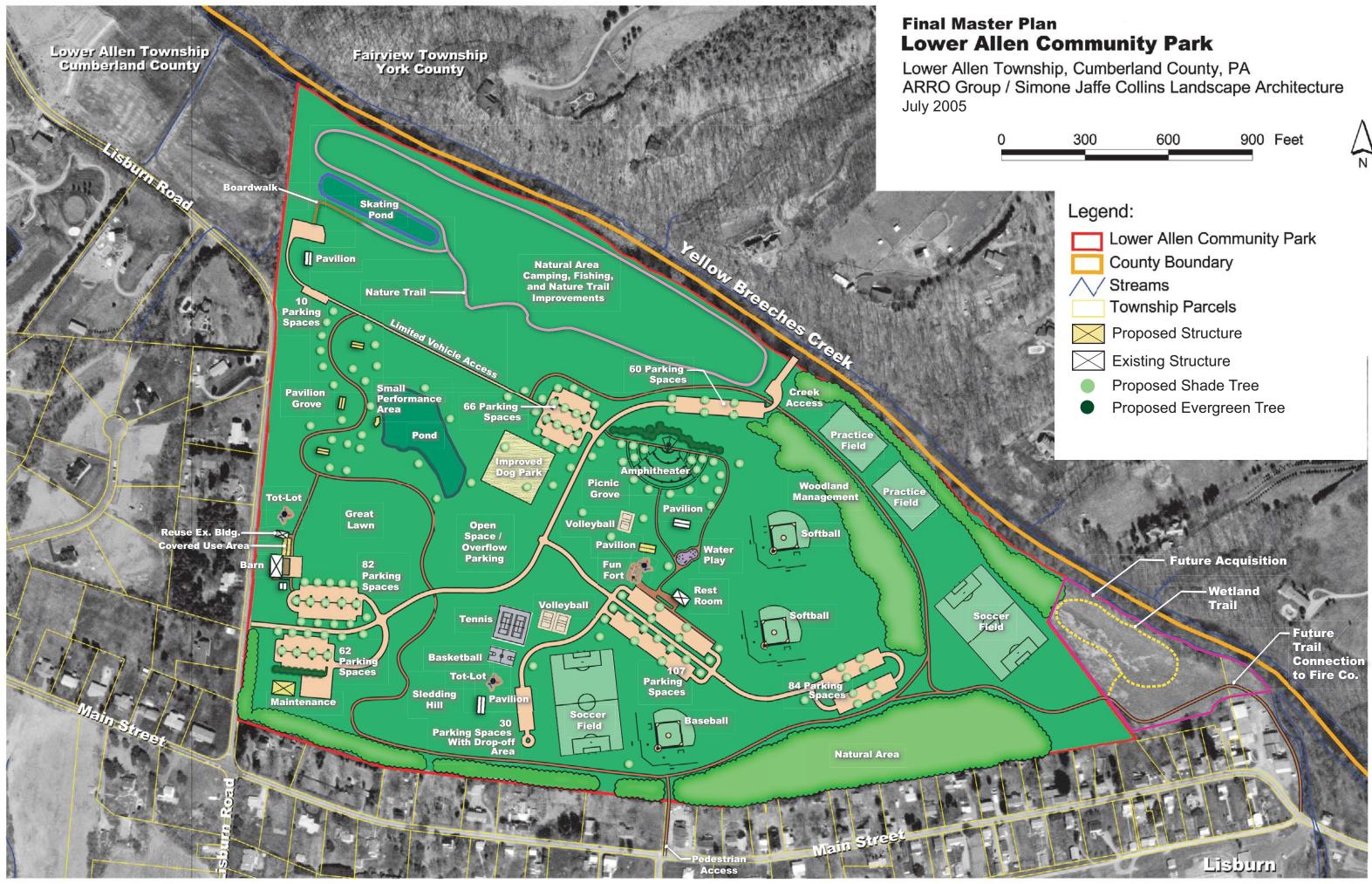
A detailed estimate of cost for the construction of improvements at Lower Allen Community Park was completed based upon the proposed recreation facilities and improvements shown on the Final site plan. The detailed estimate of cost can be found in the appendix of this report. Specific construction costs for improvements are broken out into smaller areas as outlined below to allow the Township to consider construction costs in regards to project phasing and the availability of project funding.

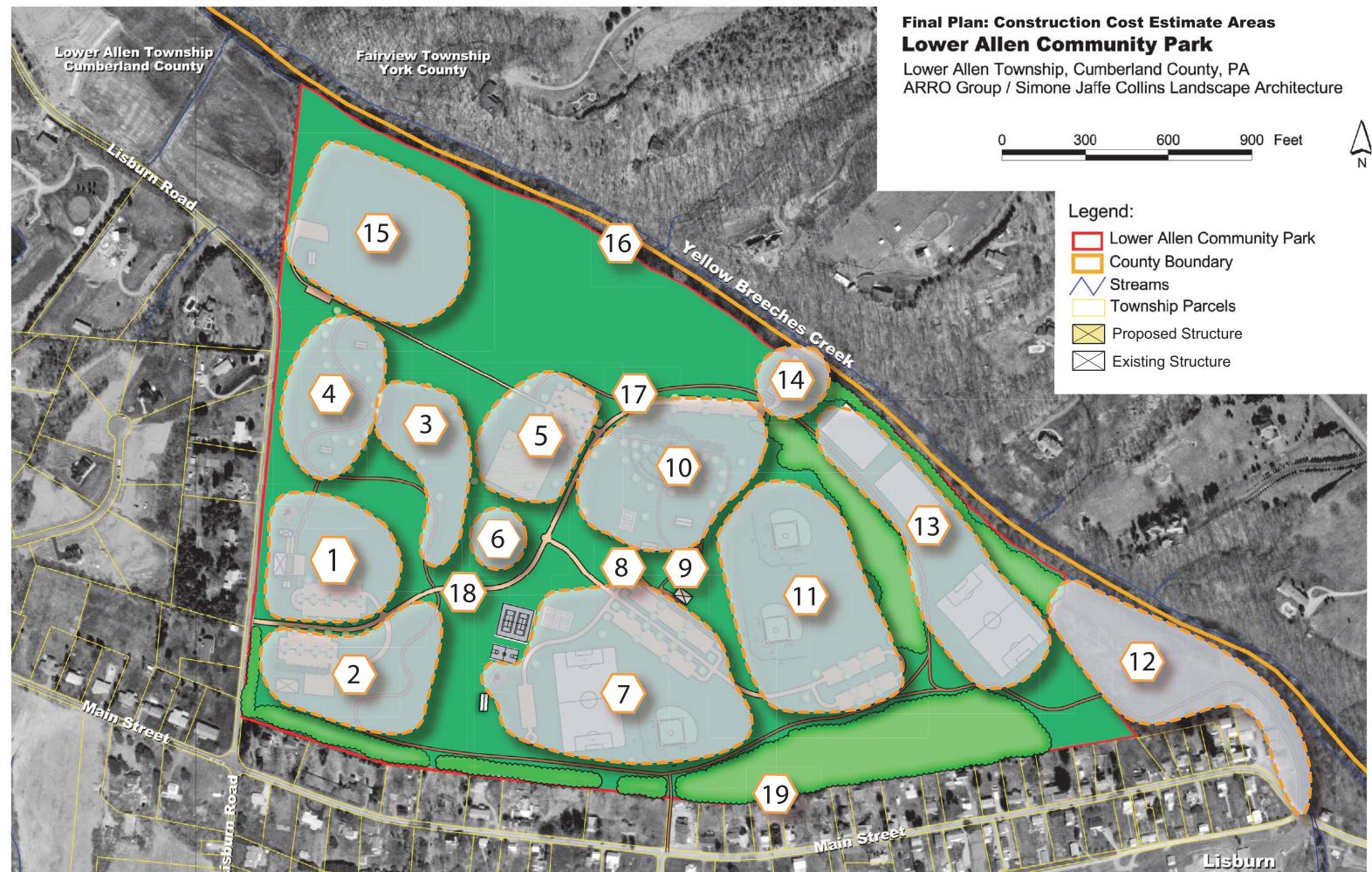
Improvement Costs:

1. Barn Area / Entrance Road / Parking	\$207,000
2. New Maintenance Area	\$431,550
3. Upper Pond	\$111,100
4. Pavilion Grove	\$ 75,750
5. Dog Park	\$124,550
6. Overflow Parking Area	\$ 48,650
<ol><li>Reorientation of Baseball/</li></ol>	
Redesigned road & parking	\$254,100
8. New Fun Fort	\$150,000
9. Water Play	\$374,350
10. Large Performance Area	\$267,700
11. Reorientation of two softball fields	
and Parking	\$245,250
12. Wetlands Meadow (Excludes Purchase)	\$ 17,400
13. Meadow Play Fields	\$177,650
14. Boat Launch Access	\$ 20,500
15. Nature Area Trailhead / Lower Pond	\$ 51,900
16. Yellow Breeches Creek Riparian	
Buffer Plantings	\$ 82,500
17.Loop Trail	\$178,950
18. Entry Drive Improvements	\$104,100
19. Southern Park Boundary Improvements	\$48,000
Deals lasa as seas a to Totals	<b>#0.004.000</b>
Park Improvements Total:	\$3,624,900

Unit cost figures are based upon construction fees for similar park projects and reflect prevailing wages that are required for public construction jobs. The park improvements total includes a 10% contingency and a 10% engineering and design fee. Also, prior to beginning detailed design of proposed improvements it will be necessary for the Township to complete a topographic survey of the park. A cost for the survey is included in the detailed estimate of probable cost contained within the Appendix of this report.

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### Implementation and Funding Strategy

The Lower Allen Community Park Master Plan represents a long-term vision for the construction of improvements at the park. The plan is intended to act a guide for the Township to determine the location and type of future improvements that the Township desires to install at the park. During the period of time over which the park improvements will be implemented, potential funding sources along with other factors such as an increase in demand for certain park facilities may affect the implementation and sequencing of park improvements. Realizing these factors, the Steering Committee recommended the following master plan components for consideration as future improvement priorities:

- 1. Area 1 (Barn Area Deck, Civic Space, Entrance Road, and Parking)
- 2. Area 3 (Upper Pond and Small Performance Area)
- 3. Area 4 (Pavilion Grove)
- 4. Area 2 (New Maintenance Area)
- 5. Item 17 (Loop Trail). The loop trail can be constructed in sections with individual projects which it passes through or adjacent to.
- 6. Area 13 (Meadow Soccer Fields)
- 7. Area 15 (Nature area trailhead/Lower Pond Improvements)

Note: The area and item numbers listed above correspond to the detailed cost estimate information found in the appendix of this report. Reference the Final Plan Construction Cost Estimate Areas plan located at the end of Chapter four for the location of the proposed facilities.

### **Potential Funding Sources**

The Community Conservation Partnership Program (C2P2)

The State of Pennsylvania makes available grant money to municipal governments through this program to support greenway and park planning, design, and development. Applications for these grants are due in the fall of each year (September 30, 2005), and a 50 percent match is required from the local project sponsor. The amount of maximum award varies with the requested activity. Planning grants are typically awarded for \$50,000 or less. Land acquisition and construction (development) grants range from \$150,000 to \$200,000. It is recommended that Lower Allen Township discuss a September 2005 grant application with their regional DCNR advisor as soon as possible.

### Growing Greener 2

Growing Greener is the largest single investment of state funds in Pennsylvania's history. Growing Greener funds can be used for farmlandpreservation projects; preserving open space; cleanup of abandoned mines, watershed planning; recreational trails and parks; and help communities address land use concerns. Eligible applicants include nonprofit groups, counties, and municipalities. A local match is encouraged, but not required. This fund may be especially applicable for stabilization of the Yellow Breeches Creek bank.

### PA Urban and Community Forestry Grants Program

Can be used to encourage the planting of trees in Pennsylvania communities. Municipal challenge grants provide 50 percent of the cost of the purchase and delivery of trees. Special grants are available for local volunteer groups, civic clubs, and municipalities to train and use volunteers for street tree inventories, and other projects in urban and community forestry. The program's total annual allotment varies but is generally around \$500,000.

### <u>Pennsylvania Department of Community and Economic Development</u> (DCED)

DCED's mission includes four elements that each has a relationship to parks and greenways: economic development, travel and tourism, technical assistance, and community development. DCED's applicable funding programs are listed and described below:

Community Revitalization Program - These grants, from \$5,000 to over \$50,000, support local initiatives aimed at improving a community's quality of life and improving business conditions.

Community Development Block Grants - This program provides financial and technical assistance to communities for infrastructure improvements, housing rehabilitation, public services, and community facilities. The program targets local governments and 70% of each grant must be used for activities or projects that benefit low to moderate-income people.

All of the DCED programs are dependent on the active support of state legislators.

### Historic and Museum Commission (PHMC)

The competition in this program is considerable for relatively small grant awards. Application and administration for these grants are time consuming and this should be considered when deciding whether to apply.

### Keystone Historic Preservation Grants

Local governments and non-profit groups may apply for typically modest grants that ranges in value from \$5,000 and up. A 50% local match is required and funds may be used for preservation, rehabilitation, and restoration of historic properties, buildings, structures, sites, or objects. Grants may be considered for historic interpretation at Lower Allen Community Park.

<u>The Recreational Trails Program (DCNR)</u> - National Recreation Trails Fund Act (NRTFA) or Symms Act Grants. This source of funding is a subset of TEA-21, and is administered by DCNR. Funds from this program can be used for the acquisition of land and the construction of trailheads and trail facilities. Land acquisition will require a 50 percent match from the local sponsor. Construction projects will require a 20 percent match from the local sponsor. The typical maximum award has been \$150,000.

### Private Foundations

There are various corporations and foundations, which support public works such as park improvements. The competition for these funds has become brisk, but the opportunities should be researched. Funding must often be to non-profit organizations.

### **Schools**

The local School Districts may also be of assistance in several ways. The student body might get involved with clubs, fundraising events, and park cleanup days. The faculty could incorporate the site into various curricula with students helping to develop and possibly maintain the park as part of a classroom assignment or after school club. While the amount of funds raised may be relatively small, this process builds constituents and support for the park, critical to its long-term success.

### Friends-of-the-Park

Similar to participation by school groups, the establishment of a non-profit (501(C)3) Friends-of-the-Park group can help raise grass roots funding for the park and be a conduit for tax-deductible donations and foundation funding.

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# <u>APPENDIX</u>

### Contents:

- Opinion of Probable Development Costs
- Meeting Notes and Attendance Sheets
  - Bibliography

## Lower Allen Community Park Master Plan ARRO #6104.01 - SJC#04091.1

## Opinion of Probable Development Costs FINAL PLAN

ltem	<u>Unit</u>	Quantity	Unit Cost	Cost	Notes
4. Dawn Anap / Entrance David / Daviding					
1. Barn Area / Entrance Road / Parking Barn Deck	SF	1,400	\$30.00	\$42,000	
Barn Civic Space	0.	1,100	<i>\</i>	<i>.</i> 2,000	
Paving, Unit Pavers	SF	4,000	\$12.00	\$48,000	
Trees	EA EA	15 8	\$350.00 \$600.00	\$5,250 \$4,800	
Benches Tables	EA	0 10	\$650.00	\$4,800	
Parking Lot expansion paving	SY	1,700	\$18.00	\$30,600	
Tot-Lot Area	LS	1	\$35,000.00		Includes equipment and surfacing
Tot-Lot Area Fencing	LF	200	\$7.50	\$1,500	
Covered Use Area between Barn and Ex. Maint. Building Storm water management areas / drainage improvements	LS LS	1	\$15,000.00 \$5,000.00	\$15,000 \$5,000	
Miscellaneous Plant materials	LS	1	\$5,000.00	\$5,000	
Pathway connection to loop trail	SY	420	\$18.00	\$7,560	
Erosion Control / Stabilization	LS	1	\$750.00	\$750	
Subtotal				\$206,960	
2. New Maintenance Area					
Demolition of existing maintenance area/ re-work area	LS	1	\$10,000.00	\$10,000	
Remove existing asphalt driveway	SY	1,200	\$6.50	\$7,800	
Topsoil and Seed former road area	SY	1,200	\$2.25		6" topsoil & seed
Remove existing dumpster area Convert ex. Maintenance Building for indoor rec. use	LS LS	1		\$1,000	interior fit-out
New pavilion between barn and "old" maintenance bldg.	LS	1	\$20,000.00	\$20,000	
New Maintenance Location					
Grading - Building / Yard Area	CY	3,000	\$10.00		create large flat area - "cut"
Gravel Pavement - Maintenance yard Grading - new parking lot south of entry road	SY CY	1,000 1,630	\$6.00 \$10.00	\$6,000 \$16,300	
Grading - New parking lot south of entry road	CY	1,630	\$10.00		mostly "fill"
Entrance Gate	LS	1,000	\$2,500.00	\$2,500	
Dumpster Enclosure	LF	70	\$14.35	\$1,005	
Evergreen Screening Plantings	EA	8	\$250.00		8-10' Evergreen
New Parking area paving	SY	3,255	\$18.00	\$58,590	
Parking Space Line Striping Misc. Plant Materials	LF LS	1,080	\$0.50 \$5,000.00	\$540 \$5,000	
Shade Trees	EA	10	\$350.00	\$3,500	
Seeding	SY	277	\$0.55	\$152	
New Maintenance Building & Office	SF	4,000	\$50.00	\$200,000	
Storm water management areas / drainage improvements Maintenance Building Utilities	LS	1	\$10,000.00	\$10,000	
6-inch, SDR 35 PVC Sanitary Sewerline (installed)	LF	240	\$10.50	\$2,520	
Sanitary Sewerline Excavation & Backfill	CY	107	\$6.20		Assumed 2'x6' depth trench
2-inch, SDR 21 PVC Finished Waterline (installed)	LF	375	\$5.05		Potable water connection from the Barn
Waterline Excavation and Backfill	CY	112	\$6.20	\$694	Assumed 2'x4' depth trench
Maintenance Building Electrical Service Trench, backfill, tamp, sand	LF	75	\$5.00	\$375	
Direct burial cable, (2)#1 conductors w/ ground	CLF	1	\$1,175.00	\$1,175	
Service and distribution	SF	6,300	\$0.46	\$2,898	
Basic materials, lighting, devices	SF	6,300	\$2.10	\$13,230	
Miscellaneous Subtotal	LS	1	\$1,000.00	\$1,000 <b>\$431,536</b>	
				φ <del>4</del> 01,000	
3. Upper Pond					
Thin / remove invasive plantings	LS	1	\$5,000.00	\$5,000	
Wood Stage / Platform Arbor at stage	SF	1,000 1		\$30,000 \$30,000	
Shade Trees	EA	5		\$30,000	
Benches	EA	4	\$600.00	\$2,400	
New pondside plantings	LS	1		\$15,000	
Feeder swale invasive removals	LS	1	1 - 1	\$5,000	
Feeder swale embankment plantings Repair Animal Burrows	LS LS	1	\$2,500.00 \$2,000.00	\$2,500 \$2,000	
Berm Repair - Construct Berm	CY	600	\$3.00	\$1,800	
Construction Erosion and Sedimentation Controls	LS	1	\$2,500.00	\$2,500	Cost excludes draining existing pond; silt fence to surround embankment
2-inch, SDR 21 PVC Finished Waterline (installed)	LF	450	\$5.05		Untreated water line to pond for replenishment
Waterline Excavation and Backfill	CY LS	134	\$6.20 \$500.00	\$831 \$500	Assumed 2'x4' depth trench
Misc.water meter, valves, etc. Electrical Service to stage	10	1	φουυ.υυ	ουσφ	
Direct burial cable, (2)#1 conductors w/ ground	CLF	5	\$1,175.00	\$5,288	
Trench, backfill, tamp, sand	LF	650	\$5.00	\$3,250	
Miscellaneous	LS	1	\$1,000.00	\$1,000	
Subtotal	1			\$111,091	
4. Pavilion Grove					
Remove golf driving range equipment	LS	1	\$500.00	\$500	
Pavilions	EA	3		\$54,000	
Bar-b-que Trash receptacles	EA	3		\$1,800 \$2,700	
Picnic Tables	EA	15			five per pavilion
Shade Trees	EA	20	\$350.00	\$7,000	
Subtotal				\$75,750	

### **Opinion of Probable Development Costs**

FINAL	PLAN	

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Item	Unit	Quantity	Unit Cost	<u>Cost</u>	Notes
5. Dog Park		400	00.50	<b>#1</b> 000	
Remove fence for construction Excavate topsoil & grading	LF CY	400 2,222		\$1,000	
Clean gravel base	CY	2,222	\$10.00 \$30.00		18" deep cut 1' depth
4" Perforated PVC	LF	825	\$30.00	\$8,250	
Geotextile fabric (separator)	SY	516		\$1,032	
Fibar or mulch surface	CY	810			6" Deep
Shade trees	EA	25		\$8,750	
Benches	EA	10		\$6,000	
Trash receptacles	EA	6		\$2,700	
Doggie bag station	EA	2		\$1,000	
2-inch, SDR 21 PVC Finished Waterline (installed)	LF	315		\$1,591	
Waterline Excavation and Backfill	CY	94			Assumed 2'x4' depth trench
Reinstall fence	LF	200		\$2,500	
Storm water management areas / drainage improvements	LS	1	\$5,000.00		BMP Facility
Subtotal			+-,	\$124,526	
6. Overflow Parking Area					
Grading	CY	2,678	\$10.00	\$26,780	18" depth
Gravel base	CY	67	\$30.00	\$2,010	1' depth
4" Perforated PVC	LF	1,200	\$10.00	\$12,000	4 lengths along overflow parking area
Replace 6" topsoil	CY	893	\$5.00	\$4,465	
Turf seeding	SY	5,355		\$2,945	
20' Wide, 10' deep Asphalt apron entry	SY	23	\$18.00	\$414	
Subtotal				\$48,614	
7. Reorientation of Baseball / redesigned road & parking					
Remove and reinstall backstop	LS	1		\$3,750	
Remove ex. Infield, construct new infield	LS	1	+,	\$15,000	
Grading	CY	6,000		\$60,000	ALE STATE ALE TO PAL
Baseline and outfield fencing	LF	925			6' height chain-link
Re-align road / pave	SY	2,196		\$39,528	
New parking lot paving	SY	4,898		\$88,164	
Upper lot turnaround Paving	SY	222	\$18.00	\$3,996	
Shade trees	EA	20		\$7,000	
Sand Volley Ball Courts	EA	2		\$20,000	
Tot-Lot Area	LS	1	\$35,000.00		Includes equipment and surfacing
Subtotal				\$254,088	
8 New Fun Fort	1				vear 2014
8. New Fun Fort	19	1	\$150,000,00	\$150.000	year 2014
8. New Fun Fort	LS	1	\$150,000.00	\$150,000	year 2014 Community project
New playground	LS	1	\$150,000.00	\$150,000	7
New playground 9. Water Play Area					7
New playground 9. Water Play Area Grading	CY	345	\$10.00	\$3,450	7
New playground 9. Water Play Area Grading Water Play Equipment and installation		345 1	\$10.00 \$250,000.00	\$3,450 \$250,000	Community project
New playground 9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed)	CY LS	345 1 1,515	\$10.00 \$250,000.00 \$5.05	\$3,450 \$250,000 \$7,651	7
New playground 9. Water Play Area Grading Water Play Equipment and installation	CY LS LF	345 1	\$10.00 \$250,000.00 \$5.05	\$3,450 \$250,000 \$7,651 \$7,651	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn
New playground 9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed)	CY LS LF LF	345 1 1,515 1,515	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568	Community project Ex. Restroom well water piped to Barn for treatment
New playground 9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill	CY LS LF LF CY	345 1 1,515 1,515 898	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities
New playground 9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal	CY LS LF LF CY	345 1 1,515 1,515 898	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area	CY LS LF LF CY SF	345 1 1,515 1,515 898 1,000	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 <b>\$374,319</b>	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope	CY LS LF CY SF CY	345 1 1,515 1,515 898	\$10.00 \$250,000.00 \$5.05 \$6.20 \$100.00 \$100.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 <b>\$374,319</b> \$55,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities
New playground 9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal 10. Large Performance Area Grading - extend slope Concrete seating bands	CY LS LF LF CY SF CY LS	345 1 1,515 1,515 898 1,000 5,500	\$10.00 \$250,000.00 \$5.05 \$6.20 \$100.00 \$10.00 \$30,000.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 <b>\$374,319</b> \$55,000 \$30,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees	CY LS LF LF CY SF CY LS EA	345 1 1,515 1,515 898 1,000 5,500 1 30	\$10.00 \$250,000.00 \$5.05 \$6.20 \$100.00 \$10.00 \$30,000.00 \$350.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure	CY LS LF CY SF CY LS EA LS	345 1 1,515 1,515 898 1,000 5,500 5,500 1 1 30 1 30	\$10.00 \$250,000.00 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$100,000.00	\$3,450 \$250,000 \$7,651 \$5,568 \$100,000 <b>\$374,319</b> \$55,000 \$30,000 \$10,500 \$100,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage	CY LS LF CY SF CY LS EA LS EA	345 1 1,515 1,515 898 1,000 5,500 1 30 1 20	\$10.00 \$250,00.00 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$100,000.00 \$150.00	\$3,450 \$250,000 \$7,651 \$5,568 \$100,000 <b>\$374,319</b> \$55,000 \$30,000 \$10,500 \$10,000 \$10,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables	CY LS LF CY SF CY LS EA LS EA EA	345 1 1,515 1,515 898 1,000 5,500 1 5,500 1 30 1 200 10	\$10.00 \$250,000.00 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$100,000.00 \$150.00 \$650.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500 \$10,500 \$30,000 \$33,000 \$10,500 \$3,000 \$3,000 \$3,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts	CY LS LF CY SF CY LS EA LS EA EA EA	345 1 1,515 1,515 898 1,000 5,500 5,500 1 30 1 30 1 1 20 10 1 1 1	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$100,000.00 \$150.00 \$650.00 \$10,000.00	\$3,450 \$250,000 \$7,651 \$7,661 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500 \$10,500 \$10,500 \$10,000 \$10,000 \$6,500	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion	CY LS LF CY SF CY LS EA LS EA EA	345 1 1,515 1,515 898 1,000 5,500 1 5,500 1 30 1 200 10	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$150.00 \$150.00 \$650.00 \$10,000.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500 \$10,500 \$30,000 \$33,000 \$10,500 \$3,000 \$3,000 \$3,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading  Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service	CY LS LF CY SF CY SF LS EA LS EA EA EA EA	345 1 1,515 1,515 898 1,000 5,500 1 300 1 1 20 10 1 1 1	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$150.00 \$150.00 \$10,000.00 \$25,000.00	\$3,450 \$250,000 \$7,651 \$5,568 \$100,000 <b>\$374,319</b> \$55,000 \$100,000 \$100,000 \$100,000 \$100,000 \$100,000 \$25,000	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading  Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service Service and distribution	CY LS LF CY SF CY LS EA LS EA EA EA EA EA SF	345 1 1,515 1,515 898 1,000 5,500 1 30 1 30 1 1 200 10 1 1 1 5,000	\$10.00 \$250,000.00 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$100,000.00 \$150.00 \$100,000.00 \$100,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$0.70	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500 \$10,500 \$10,500 \$10,000 \$3,000 \$10,000 \$3,0000\$3,000 \$3,0000\$3,0000\$3,0000\$3,0000\$3,	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service Service and distribution Rigid conduit, 1"	CY LS LF CY SF CY LS EA LS EA EA EA EA EA EA	345 1 1,515 1,515 898 1,000 5,500 1 30 1 30 1 1 30 1 1 30 1 1 30 1 1 30 1 1 30 1 1 30 1 1 30 1 4 5 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 1 5,500 1 5,000 5,000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$150.00 \$150.00 \$150.00 \$150.00 \$650.00 \$10,000.00 \$650.00 \$10,000.00 \$67.00 \$0.70	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500 \$10,500 \$10,000 \$10,000 \$10,000 \$3,000 \$3,000 \$3,500 \$3,500 \$3,150	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service Service and distribution Rigid conduit, 1" Trench, backfill, tamp, sand	CY LS LF CY SF CY SF EA EA EA EA EA EA EA EA EA EA	345 1 1,515 1,515 898 1,000 5,500 5,500 1 30 1 30 1 1 30 1 1 30 1 1 30 1 1 30 1 1 5,500 0 450 900	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$100,000.00 \$150.00 \$150.00 \$10,000.00 \$650.00 \$10,000.00 \$7.00 \$7.00 \$7.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$10,500 \$10,500 \$10,500 \$10,000 \$3,000 \$10,500 \$10,000 \$3,000 \$3,500 \$3,500 \$3,150 \$3,150 \$4,500	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading  Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service Service and distribution Rigid conduit, 1" Trench, backfill, tamp, sand Direct burial cable, (2)#1 conductors w/ ground	CY LS LF CY SF CY LS EA LS EA EA EA EA EA EA LF LF CLF	345 1 1,515 1,515 898 1,000 5,500 1 300 1 1 200 10 10 1 1 5,000 450 9000 6	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$3350.00 \$150.00 \$150.00 \$150.00 \$25,000.00 \$25,000.00 \$5.00 \$11,175.00	\$3,450 \$250,000 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$100,000 \$100,500 \$100,000 \$10,000 \$10,000 \$10,000 \$3,000 \$10,000 \$3,150 \$3,500 \$4,500 \$4,500 \$7,050	Community project  Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities  Fill, assumed 4' depth across terraced area  Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading  Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service Service and distribution Rigid conduit, 1" Trench, backfill, tamp, sand Direct burial cable, (2)#1 conductors w/ ground Miscellaneous	CY LS LF CY SF CY SF EA EA EA EA EA EA EA EA EA EA	345 1 1,515 1,515 898 1,000 5,500 5,500 1 30 1 30 1 1 30 1 1 30 1 1 30 1 1 30 1 1 5,500 0 450 900	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$100,000.00 \$150.00 \$150.00 \$10,000.00 \$650.00 \$10,000.00 \$7.00 \$7.00 \$7.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$10,500 \$10,500 \$10,500 \$10,000 \$3,000 \$10,500 \$10,000 \$3,000 \$3,500 \$3,500 \$3,150 \$3,150 \$4,500	Community project  Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities  Fill, assumed 4' depth across terraced area  Fill, assumed 4' depth across terraced area
New playground  9. Water Play Area Grading  Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service Service and distribution Rigid conduit, 1" Trench, backfill, tamp, sand Direct burial cable, (2)#1 conductors w/ ground Miscellaneous Amphitheater Water Service	CY LS LF CY SF CY SF CY LS EA EA EA EA EA EA EA EA EA EA EA EA EA	345 1 1,515 1,515 898 1,000 5,500 5,500 1 30 10 10 10 11 1 5,000 450 900 6 6 1	\$10.00 \$250,000.00 \$5.05 \$5.05 \$100.00 \$100,000.00 \$100,000.00 \$150.00 \$150.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$11,175.00 \$1,175.00 \$1,175.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$10,000 \$10,500 \$10,000 \$10,500 \$10,000 \$10,000 \$10,000 \$3,000 \$10,000 \$3,100 \$3,500 \$3,150 \$3,150 \$4,500 \$1,000	Community project  Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities  Fill, assumed 4' depth across terraced area  Fill, assumed 4' depth across terraced area
New playground         9. Water Play Area         Grading         Water Play Equipment and installation         2-inch, SDR 21 PVC Raw Waterline (installed)         2-inch, SDR 21 PVC Finished Waterline (installed)         Waterline Excavation and Backfill         Restroom improvements         Subtotal         10. Large Performance Area         Grading - extend slope         Concrete seating bands         Shade trees         Stage structure         Evergreen tree backdrop to stage         Picnic grove tables         Sand Volley Ball Courts         New Pavilion         Amphitheater Electric Service         Service and distribution         Rigid conduit, 1"         Trench, backfill, tamp, sand         Direct burial cable, (2)#1 conductors w/ ground         Miscellaneous         Amphitheater Water Service         2-inch, SDR 21 PVC Finished Waterline (installed)	CY LF LF CY SF CY SF CY LS EA EA EA EA EA EA EA EA LF LF LF LF	345 1 1,515 1,515 898 1,000 5,500 5,500 1 30 10 10 10 10 10 10 10 10 10 10 10 10 5,000 6 6 1 1 5,500 5,500 5,500 10 10 10 10 10 10 10 10 10 10 10 10 1	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$10,000.00 \$10,000.00 \$650.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$5.00 \$1,175.00 \$1,000.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500 \$10,500 \$10,000 \$10,500 \$10,000 \$3,000 \$25,000 \$3,500 \$3,150 \$3	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area Fill, assumed 4' depth across terraced area
New playground           9. Water Play Area           Grading           Water Play Equipment and installation           2-inch, SDR 21 PVC Raw Waterline (installed)           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterline Excavation and Backfill           Restroom improvements           Subtotal           10. Large Performance Area           Grading - extend slope           Concrete seating bands           Shade trees           Stage structure           Evergreen tree backdrop to stage           Picnic grove tables           Sand Volley Ball Courts           New Pavilion           Amphitheater Electric Service           Service and distribution           Rigd conduit, 1"           Trench, backfill, tamp, sand           Direct burial cable, (2)#1 conductors w/ ground           Miscellaneous           Amphitheater Water Service           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterline Excavation and Backfill	CY LS LF CY SF CY SF CY LS EA EA EA EA EA EA EA EA EA EA EA EA EA	345 1 1,515 1,515 898 1,000 5,500 5,500 1 30 10 10 10 11 1 5,000 450 900 6 6 1	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$10,000.00 \$10,000.00 \$650.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$5.00 \$1,175.00 \$1,000.00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$30,000 \$10,500 \$10,500 \$10,000 \$10,500 \$10,000 \$3,000 \$25,000 \$3,500 \$3,150 \$3	Community project  Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities  Fill, assumed 4' depth across terraced area  Fill, assumed 4' depth across terraced area
New playground           9. Water Play Area           Grading           Water Play Equipment and installation           2-inch, SDR 21 PVC Raw Waterline (installed)           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterline Excavation and Backfill           Restroom improvements           Subtotal           10. Large Performance Area           Grading - extend slope           Concrete seating bands           Shade trees           Stage structure           Evergreen tree backdrop to stage           Picnic grove tables           Sand Volley Ball Courts           New Pavilion           Amphitheater Electric Service           Service and distribution           Rigid conduit, 1"           Trench, backfill, tamp, sand           Direct burial cable, (2)#1 conductors w/ ground           Miscellaneous           Amphitheater Service           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterline Excavation and Backfill           Existing Pavilion Electrical Service	CY LS LF CY SF CY LS EA EA EA EA EA EA EA EA EA LF LF LF LF CLF LS CY CY CY CY CY CY SF	345 1 1,515 1,515 898 1,000 5,500 1 30 1 30 1 30 1 1 20 0 10 10 10 10 10 10 10 10 10 10 10 5,000 6 6 6 1 1 5500 163	\$10.00 \$250,000.00 \$5.05 \$6.20 \$100.00 \$30,000.00 \$30,000.00 \$350.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$11,000.00 \$7.00 \$7.00 \$7.00 \$5.05 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000 \$1,000.00 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000 \$1,000.00 \$1,00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$10,500 \$10,500 \$10,500 \$10,500 \$10,000 \$3,000 \$10,500 \$10,000 \$3,000 \$10,500 \$10,000 \$3,000 \$1,500 \$1,000\$1,000	Community project  Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities  Fill, assumed 4' depth across terraced area  Fill, assumed 4' depth across terraced area  Assumed 2'x4' depth trench
New playground           9. Water Play Area           Grading           Water Play Equipment and installation           2-inch, SDR 21 PVC Raw Waterline (installed)           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterine Excavation and Backfill           Restroom improvements           Subtotal           10. Large Performance Area           Grading - extend slope           Concrete seating bands           Shade trees           Stage structure           Evergreen tree backdrop to stage           Picnic grove tables           Sand Volley Ball Courts           New Pavilion           Amphitheater Electric Service           Service and distribution           Rigid conduit, 1"           Trench, backfill, tamp, sand           Direct burial cable, (2)#1 conductors w/ ground           Miscellaneous           Amphitheater Water Service           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterline Excavation and Backfill           Existing Pavilion Electrical Service           Basic materials, lighting, devices	CY LS LF CY SF CY EA EA EA EA EA EA EA EA EA EA SF LF LF C CY SF	345 1 1,515 1,515 898 1,000 5,500 1 30 1 30 1 1 20 10 1 1 20 10 1 1 5,500 4 50 600	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$3350.00 \$100,000.00 \$150.00 \$150.00 \$10,000.00 \$650.00 \$11,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,275.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,275.00 \$1,175.00 \$1,000.00 \$1,	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$10,000 \$10,500 \$10,000 \$10,500 \$10,000 \$10,000 \$10,000 \$10,000 \$1,000\$1,000 \$1,000\$1	Community project Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench Building addition with changing facilities Fill, assumed 4' depth across terraced area Fill, assumed 4' depth across terraced area
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New playground  9. Water Play Area Grading  Water Play Equipment and installation 2-inch, SDR 21 PVC Raw Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) 2-inch, SDR 21 PVC Finished Waterline (installed) Waterline Excavation and Backfill Restroom improvements Subtotal  10. Large Performance Area Grading - extend slope Concrete seating bands Shade trees Stage structure Evergreen tree backdrop to stage Picnic grove tables Sand Volley Ball Courts New Pavilion Amphitheater Electric Service Service and distribution Rigid conduit, 1" Trench, backfill, tamp, sand Direct burial cable, (2)#1 conductors w/ ground Miscellaneous Amphitheater Water Service Basic materials, lighting, devices Direct burial cable, (2)#8 conductors w/ ground Trench, backfill, tamp, sand	CY LS LF CY SF CY SF CY EA EA EA EA EA EA EA EA SF LF CLF CY SF CY SF CY LF LF CY SF	345 1 1,515 1,515 898 1,000 5,500 1 30 1 30 1 1 20 10 1 1 20 10 1 1 5,500 4 50 600	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$350.00 \$10,000.00 \$150.00 \$150.00 \$10,000.00 \$25,000.00 \$10,000.00 \$10,000.00 \$10,000.00 \$5.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000.000\$1,000.00 \$1,000.000\$1,000.00\$1,00	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$10,500 \$10,500 \$10,500 \$10,500 \$10,500 \$10,000 \$3,000 \$3,000 \$3,000 \$3,300 \$10,500 \$1,000 \$3,300 \$1,000\$1,000\$1,000\$1,000\$1,000	Community project  Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench  Fill, assumed 4' depth across terraced area  Fill, assumed 4' depth across terraced area  Kasumed 2'x4' depth trench  Lighting to 0.5 watts per SF
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New playground           9. Water Play Area           Grading           Water Play Equipment and installation           2-inch, SDR 21 PVC Raw Waterline (installed)           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterine Excavation and Backfill           Restroom improvements           Subtotal           10. Large Performance Area           Grading - extend slope           Concrete seating bands           Shade trees           Stage structure           Evergreen tree backdrop to stage           Picnic grove tables           Sand Volley Ball Courts           New Pavilion           Amphitheater Electric Service           Service and distribution           Rigid conduit, 1"           Trench, backfill, tamp, sand           Direct burial cable, (2)#1 conductors w/ ground           Miscellaneous           Amphitheater Water Service           2-inch, SDR 21 PVC Finished Waterline (installed)           Waterline Excavation and Backfill           Existing Pavilion Electrical Service           Basic materials, lighting, devices           Direct burial cable, (2)#8 conductors w/ ground           Trench, backfill, tamp, sand           Miscellaneous           Exi	CY LS LF CY SF EA EA EA EA EA EA EA EA EA EA EA CLF CLF CY SF CLF LS CY LS EA EA EA EA EA EA EA EA EA EA EA EA EA	345 1 1,515 1,515 898 1,000 5,500 1 30 10 1 1 20 100 11 1 1 20 5,500 10 10 10 11 1 5,000 450 900 6 6 11 5550 600 3.0 2550 163	\$10.00 \$250,000.00 \$5.05 \$5.05 \$6.20 \$100.00 \$30,000.00 \$3350.00 \$100,000.00 \$150.00 \$10,000.00 \$10,000.00 \$10,000.00 \$11,000.00 \$5.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000.00 \$1,175.00 \$1,000.00 \$	\$3,450 \$250,000 \$7,651 \$7,651 \$5,568 \$100,000 \$374,319 \$55,000 \$10,000 \$10,500 \$10,000 \$10,500 \$10,000 \$10,000 \$10,000 \$1,0000\$1,0000\$1,0000\$1,0000\$1,0000\$1,000\$1,000\$1,000\$1,000\$1,000	Community project  Ex. Restroom well water piped to Barn for treatment Potable water return line from the Barn Assumed 2'x4' depth trench  Fill, assumed 4' depth across terraced area  Fill, assumed 4' depth across terraced area  Kasumed 2'x4' depth trench  Lighting to 0.5 watts per SF
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## Opinion of Probable Development Costs FINAL PLAN

Item	Unit	Quantity	Unit Cost	Cost	Notes
11. Reorientation of two softball fields & parking					
Remove existing infields Remove and reset backstops	LS LS	1	\$2,500.00 \$7,500.00		
Grading	LS	1	\$10,000.00		
New infield areas	CY	575	\$40.00		
Turf seeding Baseline and outfield fencing	SY LF	27,600 1,850	\$0.55 \$18.00		6' height chain-link
Lower parking lot improvements	LF	1,650	φ10.00	\$33,300	
Lot expansion - grading	CY	3,800	\$10.00		3' of grading over entire area
Asphalt Paving	SY	3,800	\$18.00		
Shade trees Lower parking lot stormwater improvements	EA	10	\$350.00	\$3,500	
19 Inch x 30 Inch HERCP	LF	60	\$80.00	\$4,800	Swale crossings
Concrete Flare End Sections	EA	4	\$175.00		End sections for swale crossings
Bioswale plantings Check Dams	LS LS	1	\$7,500.00 \$500.00	\$7,500 \$500	
PADOT Type M Inlet	EA	2	\$1,600.00	\$3,200	
4" Perforated PVC	LF	1,000	\$10.00		
AASHTO #3 Stone Geotextile	CY SY	700 2,150	\$13.00 \$2.00		Underground stormwater storage area
Excavation	CY	700	\$2.50		
Construction Erosion and Sedimentation Controls	LS	1	\$2,000.00	\$2,000	silt fence, rock filter, temporary diversion?
Subtotal				\$245,230	
12. Wetlands Meadow					
Purchase meadow area					5 acre parcel in floodplain, wetland area
Asphalt Trail along edge of meadow (trail to firehouse)	LF	1,300	\$8.00	\$10,400	
Wetlands trail (mulch) Subtotal	LF	1,400	\$5.00	\$7,000 <b>\$17,400</b>	
	·	·	·	ψ17,400	I
13. Meadow Play fields	<u></u>			A 10	AB.1. 0
Strip topsoil 4" Perforated PVC	CY LF	2,800 4,000	\$6.00 \$10.00	\$16,800 \$40,000	4"depth 4 lengths along each field in floodplain
PVC Connections	LF	4,000	\$500.00	\$500	Connect 4 inch PVC with 12 inch PVC
AASHTO #3 Stone	CY	300	\$13.00	\$3,900	Surround pipe
Geotextile	SY	2,500	\$2.00		Surround stone
Trench Excavation Spread topsoil	CY CY	310 2,800	\$2.50 \$4.00		Trench excavation is 1.5 feet x 1.5 feet x length
seeding/straw mulch	SY	20,600	\$1.05		
Construction Erosion and Sedimentation Controls	LS	1	\$2,500.00	\$2,500	Silt fence and rock filters
Stormwater Conveyance Around Soccer Fields Swale Grading	LF	2,000	\$2.50	\$5,000	Swales to convey stormwater around fields
Type M Inlet	EA	2,000	\$1,600.00		2 Inlets per field; direct stormwater from swale into 12" pipe
12 Inch Perforated PVC	LF	1,250	\$20.00	\$25,000	Convey swale flow to discharge; junction between 12 inch and 8 inch
8 Inch Perforated PVC	LF	930	\$15.00	\$13,950	Upgradient end of fields
AASHTO #3 Stone Geotextile	CY SY	260 1,950	\$13.00 \$2.00		Surround perforated pipe Surround stone
Erosion Protection at Endwalls (R-3 riprap)	CY	100	\$30.00	\$3,000	Assume 15 feet square aprons, 2 foot depth
Type DW Endwall	EA	6	\$1,500.00		6 outfalls
Construction Erosion and Sedimentation Controls Subtotal	LS	1	\$2,500.00	\$2,500 \$177,635	silt fence and rock filters; temporary diversion
				<i></i>	
14. Boat Launch access			<b>*</b> 0 <b>5</b> 00 00	<b>#0</b> 500	
Grading / excavation Retaining walls	LS LS	1	\$3,500.00 \$7,500.00		1' depth
Gravel paving	LS	1	\$1,500.00		8" Gravel for new parking area
Stabilization Plantings	LS	1	\$3,500.00		
signage Subtotal	LS	1	\$4,500.00	\$4,500 <b>\$20,500</b>	
		·	I	<i>\_</i> 3,000	I
15. Nature area trailhead / lower pond			<b>0-</b> 0.5	AF	
Gate on old road/ new trail for controlled vehicle access Fire pit	LS LS	1	\$5,000.00 \$2,500.00		
Signage	LS	1	\$4,500.00		
pond side benches	EA	4	\$600.00	\$2,400	
Accessible boardwalk Subtotal	SF	1,500	\$25.00	\$37,500 <b>\$51,900</b>	
	1		1	<i>4</i> 51,900	1
16. Yellow Breeches Creek Riparian buffer plantings					
Riparian buffer plantings	LF	3,300	\$25.00	\$82,500	
17. Loop Trail					
Asphalt loop trail - 12 feet wide	SY	8,405	\$18.00		Distance 1.2 mile loop
Connection to Wetland Meadow Parcel	SY	1,120	\$18.00		
Misc. Seeding Misc. Drainage Improvements	LS LS	1	\$2,500.00 \$5,000.00		
Subtotal			ψ0,000.00	\$178,950	
		-		· ·	
18. Entry Drive Improvements Shade Trees	EA	30	\$350.00	\$10,500	
Miscellaneous Planting	LS	30	\$10,000.00		
Turning Lane	LS	1	\$20,000.00	\$20,000	Includes price for HOP Study
Speed Awareness Tables Entry Drive Security Lighting	EA	3	\$2,500.00	\$7,500	
Fixture on 20' aluminum pole on concrete base	EA	15	\$2,100.00	\$31.500	HPS, 150 watt shoebox fixture.
Direct burial cable, (2)#6 conductors w/ ground	CLF	24	\$545.00	\$13,080	Service from maintenance building.
Trench, backfill, tamp, sand	LF	2,200	\$5.00		Entry drive lighting from Lisburn Road to creek access, 150' o.c.
	10		<b>#FOO OO</b>	AFCC	
Miscellaneous Subtotal	LS	1	\$500.00	\$500 <b>\$104,080</b>	

### Opinion of Probable Development Costs FINAL PLAN

Item	Unit	Quantity	Unit Cost	Cost	Notes
19. Southern Park Boundary Improvements					
Post and Rail Fence	LF	2,400	\$7.50		75% of park boundary
Landscape Buffer Planting	LF	2,400	\$12.50	\$30,000	75% of park boundary
Subtotal				\$48,000	
		Topogra	aphic Survey	\$25,000	
			Total	\$2,995,752	
		10%	Contingency	\$299,575	
			Total	\$3,295,327	
		10% Eng	jineering Fee	\$329,533	
PARK	IMP	ROVEME	NTS TOTAL	\$3,624,860	



SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

2/9/05 Lower Allen Community Park Master Plan SJC# 04091.10

### TOWNSHIP STAFF/CONSULTANT PROJECT KICK-OFF MEETING

Date/Time: 2/2/05, 1 PM

Location: Lower Allen Township Municipal Building

 In Attendance:
 Jim Chianos – Twp. Parks Superintendent

 Jan Faust – Twp. Community & Human Resource Coordinator

 Dan Flint – Twp. Engineer

 Gary Frazer – Twp. Public Works Coordinator

 Mark Hoffman – Twp. Maintenance Specialist

 Karen MacKay – Twp. Community Coordinator

 Jeri McClune – ARRO Group, Inc.

 Donna Paul – Twp. Administrative Assistant

 Ray Rhodes – Twp. Manager

 Peter Simone – Simone Jaffe Collins, Inc. (SJC)

 David Stauffer – SJC

### Notes:

- Ray R. stated that the master plan process began out of the desire to build a band shell at the park to accommodate summer concerts. Concerts with up to a few hundred attendees are anticipated. A multi-use band shell structure is desired and should consider the accommodation of dressing rooms. The potential for noise concerns from adjacent residents was also discussed along with the need for adequate parking to accommodate large crowds.
- A dog park was recently constructed/relocated to Lower Allen Community Park (LACP) due to high usage at the previous location. The Township is looking for feedback on the layout of the dog park and would consider relocation to another area of the park if necessary.
- 3. It was noted that minimal improvements have been made to accommodate soccer fields in the lower park area along the Yellow Breeches floodplain. Primary funding has been used to improve the barn area, and the main soccer fields.
- 4. Jim C. noted that the Fun Fort is a high use area of the LACP. The driving range was noted as receiving some use and important to keep at the park because of the volunteer efforts of the community to construct this facility.
- 5. It was noted that Yellow Breeches is stocked with trout by the PA Fish Commission and that fishing at LACP is a considered a high-use activity. The creek is a cold water fishery. Karen M. indicated that there is a Yellow Breaches Watershed Association that is currently working on a river conservation plan. ARRO/SJC will contact the watershed association. ARRO/SJC will research the Cumberland County Open Space plan to determine if any water trails are planned along the Yellow Breeches Creek.

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- 6. It was indicated that a paved loop trail around the perimeter of the park is desired. It is anticipated that the trail would be used for walking and open to cyclists.
- 7. It was indicated that the smallest soccer field is undersized and can be considered as an area of the park that could be used for other activities.
- 8. The Township Staff requested that the ARRO/SJC team analyze the existing play equipment located at each pavilion.
- 9. It was noted that the main use of the park pavilions is by families and church groups. The largest pavilions can accommodate up to 120 people.
- 10. The Township indicated that a shaded area is needed at the dog park. Additionally, water service is needed in this area. The closest water source is a well located at the barn.
- 11. The bass pond, the original farm pond on the site, was noted as being up to 17' deep at the deepest point in the center of the pond, although during droughts the depth of water decreases substantially.
- 12. Peter S. requested the Township public works and maintenance staff create a wish list as to improvements that are needed at LACP. This feedback is important to the overall master planning process as the maintenance staff is the most knowledgeable about the daily operations and upkeep of the park.
- 13. The idea of creating a one way loop drive through the park by creating a second park access point to Lisburn Road was discussed. It was noted that an older entrance to Lisburn Road was closed due to sight distance limitations at the northwestern corner of the park where there is a curve in the road.
- 14. The Township asked ARRO/SJC to review the potential to improve walking access to the park from the surrounding community. Currently, there is not a Township trail plan, but it may be in the soon-to-be completed comprehensive plan.
- 15. A play area may be desirable at the barn. The existing tot lot in this area is close to the access drive and it was stated that the safety surface tends to wash out.
- 16. Construction of a new little league baseball field and pavement of existing stone parking areas are improvements that should be considered in the master plan.
- 17. Peter S. indicated that the solar orientation of one of the softball fields is not optimal and that this is something that DCNR looks for when considering funding improvements.
- 18. The ARRO/SJC team will analyze the need for new restroom facilities as it was noted that many portable facilities are located throughout the park.
- 19. The idea of adding a deck to the upper level of the barn was discussed. Dan F. indicated that a structural engineer had indicated that this would be feasible.
- 20. It was noted that the park campsites and stairs from the parking area to the lower softball field were constructed as Eagle Scout projects.
- 21. Township staff stated that a volunteer attendant is used to direct traffic and parking during large events held at the park.
- 22. A former ice skating pond, located in the floodplain near the lower pavilion, is not currently maintained. Ice skating at the park could possibly be resurrected in this area.
- 23. It was noted that the park is used for sledding and cross country skiing during the winter months.
- 24. The Fun Fort was completed in 1993 and the master plan should consider the long term replacement of this play structure. Also, a new pavilion in the vicinity of the Fun Fort shall be considered.

- 25. It was noted that trail improvements are necessary to connect the parking areas to the lower soccer fields.
- 26. All wells located within LACP require treatment and testing to address fecal coliform levels. Public water service is not currently available in the area however there are talks of PA American possibly extending service to this area of the Township. Lower Allen Township provided well testing results to ARRO/SJC.
- 27. The concession area of the restroom building near the Fun Fort is not used because concessions were not cost effective. This restroom building is shut down during the winter months.
- 28. Peter S. will ask the Township maintenance staff to make a site plan to indicate the approximate location of underground utilities installed throughout the park.

Respectfully Submitted, SIMONE JAFFE COLLINS, INC. LANDSCAPE ARCHITECTURE

T. Stanfr

David T. Stauffer, RLA Project Manager



SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

2/9/05 Lower Allen Community Park Master Plan SJC# 04091.10

### **STEERING COMMITTEE MEETING #1**

Date/Time:2/2/05, 3 PMLocation:Lower Allen Township Municipal BuildingIn Attendance:(See Attached Sheet)

### Notes:

- 1. It was suggested that the steep slope area between the floodplain and the developed areas of the park be examined for reforestation and clean-up of downed trees. Additionally, streambank restoration was discussed.
- 2. Jeri M. will contact Dan F. in regards to acquiring available Township GIS Data.
- 3. Karen M. provided park revenue figures generated from rental and use fees. Karen M. will forward ARRO/SJC available park maintenance information.
- 4. Karen M. noted that park rental fees and regulations are located on the Township website.
- 5. Dan F. indicated that the Township Zoning Ordinance is also located on the Township website. **Dan will forward ARRO/SJC a Zoning Map.**
- 6. Dan F. stated that the Township does not have an Open Space Plan and the Township Comprehensive Plan is currently under development. A draft dopy of the Comprehensive Plan is expected in approximately 1 month.
- 7. Donna P. provided ARRO/SJC with copies of 2004 well test records for Lower Allen Community Park.
- 8. Dan F. provided ARRO/SJC with traffic counts for vehicular circulation entering and exiting Lower Allen Community Park.
- 9. Dan F. provided ARRO/SJC with copies of prior park master plans. **ARRO/SJC to copy** and return to Dan F.
- 10. The project meeting schedule was discussed and revised to avoid meeting conflicts. A revised schedule is attached.
- 11. The advertisement of public meetings was discussed. Lower Allen Township will notify adjoining property owners and advertise meetings in local newspapers.
- 12. Lower Allen Township will send a meeting invitation to a representative of the various sports leagues and renters who frequently use the park facilities.

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- 13. It was indicated that alcoholic beverages are permitted at the barn when a Community Service Officer is in attendance for barn rental functions.
- 14. ARRO/SJC will contact Stephanie Williams, Cumberland County Recreation/Greenway Coordinator, to discuss County plans for the Yellow Breeches corridor.
- 15. February 11<sup>th</sup> will be Karen MacKay's last day with Lower Allen Township and Donna Paul will become the main project contact at the Township.

Next Meeting: Public Meeting #1 - March 8, 2005, 7PM. Location - TBD

Respectfully Submitted, SIMONE JAFFE COLLINS, INC. LANDSCAPE ARCHITECTURE

Jan T. Stanffr

David T. Stauffer, RLA Project Manager

### Lower Allen Community Park Master Plan

Revised Project Schedule - February 2, 2005

# Feb 2 Meeting with Township Staff joint site walk with THE ARRO TEAM and Township Staff and Committee Meeting #1.

THE ARRO TEAM will meet with Township Staff (**10 AM**). This initial meeting with the Township will also be used to introduce the team, to advise the consultants of key facts about the areas, and to discuss preparations for public meeting # 1.

Following this meeting, THE ARRO TEAM will walk the corridor with Township staff and any available members of the Steering Committee.

In the evening **(7 PM**), the ARRO TEAM will meet with the Project committee to develop a program for the park.

### February Develop Base Maps, Base Information, Site Analysis

The month of December will be used to develop base maps, GIS information and initiate the site analysis for the park.

### March 8, 2005 Public Meeting #1 – Programming 7 PM

Meeting attendees will be taken through a discussion of the key goals, facts and concepts for the project. Most of the two-hour meeting will be soliciting ideas and comments from those in attendance about the park, the area or concerns that residents may have about the improvements. THE ARRO TEAM will use the "card technique" to ensure clear communication with all those in attendance and as a record of the meeting. THE ARRO TEAM will present a "photo-tour" of the parklands via PowerPoint for reference and to discuss key points.

### March / April Work on Design Concepts

The ARRO TEAM will work on all aspects of proposed improvements for the park, developing multiple options for sections of the park as appropriate.

### March 22 Committee Meeting #2- 7 PM - Public meeting review, site analysis, initial concepts

THE ARRO TEAM will meet with the Steering Committee to review the site analysis, the results of the first public meeting and to discuss early concepts for the park. We will present initial design options and discuss the various options for improvements, programming and linkages in and through the park.

### April 27 Steering Committee #3 – 7 PM

THE ARRO TEAM will present to the Committee refined concepts for all aspects of the plan. The Committee will give THE ARRO TEAM feedback and suggestion for the direction of the Draft Master Plan.

### May 18 Public Meeting #2- Present Draft Master Plan – 7 PM

THE ARRO TEAM will present the Draft Master Plan to the Public via a PowerPoint presentation. THE ARRO TEAM will make electronic copies available to the Township for posting on the Township Web site. There will be a thirty-day review period of the Draft Plan.

### June 15, 2004 Steering Committee #4 – Review Draft Plan Comments

The Steering Committee and THE ARRO TEAM will review comments and agree to the scope, type and extent of revisions to the Draft Plan.

### June - July Revisions to the Draft Plan

The ARRO TEAM will revise the plan as necessary.

### July 13 Public Meeting #3 – Final Plan Presentation

THE ARRO TEAM will present the final plan at Public Meeting #4

Steering Committee Meeting #1 February 2, 2005, 5 PM @ Lower Allen Township Municipal Building Lower Allen Community Park Master Plan

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SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

3/18/05 Lower Allen Community Park Master Plan SJC# 04091.10

### PUBLIC MEETING #1

<u>Date/Time:</u> 3/8/05, 7 PM

Location: Lower Allen Community Park Barn

In Attendance: (See Attached Sheet)

### Summary of Public Comments:

- Many dog park advocates were in attendance the existing dog park is very popular.
- More shade is needed for the dog park.
- Dog park drainage is important along with mitigation of waste impacts.
- It was suggested that some unstructured open space should be maintained throughout the park.
- The dog park is used 365 days a year.
- Dog park lighting was suggested.
- Dog parks create opportunities for social contact for humans as well as pets.
- A paved bicycle path at the park is a possibility that should be considered.
- Natural stream bank vegetative stabilization should be considered.
- More trees are needed for shade.
- Improved access to Yellow Breeches Creek is desired.
- Improved park directional signage was suggested.
- A paved bike path within the park is not desired along the creek. The bike path location should not compete with the nature trail and natural areas of the park.
- Expand soccer fields within the park; drainage swales may need to be relocated to accomplish field expansion. (lower meadow)
- Maintain and expand existing soccer fields.
- A band shell or entertainment area should blend with the natural park setting.
- A paved walking trail that provides for year round park use was suggested.
- The nature trail needs more stabilization in wet (sump) areas however it is important to maintain the natural appearance.
- Additional screening of the park from adjacent neighbors was suggested.
- Noise during special events is an issue that impacts neighboring residents.
- A designated area for group overnight camping was suggested, perhaps along the creek.
- The number and location of restrooms should be considered in the master plan.
- Active play field lighting should be considered in the master plan.
- Additional park access points were suggested.

- It was indicated that an upstream dam on the Yellow Breeches Creek will be removed.
- Stream access within the park is desired for tubing, and boating on the Yellow Breeches Creek.
- The master plan shall consider access road lighting for security and safety.
- Strategies to improve operations and maintenance are desired (materials, field rotation, etc.).
- Containment around soccer fields is needed to contain soccer balls within the playfield areas.
- Stream access was suggested near the lower gravel parking area that is used for the campsites.
- It was suggested that cooperation with Upper Allen Township should be considered for establishing put in and take out water access areas along the Yellow Breeches Creek.
- The idea of another dog area and rotation of dog use areas was suggested to maintain a stable ground cover.
- It was suggested that dog use could occur in areas of the park that have natural rock areas, slopes, etc.
- Proposed park improvements shall respect people's privacy around and the park.
- A snack bar was suggested for vendors and special occasions.
- Permanent restrooms that are accessible all year long are needed. Different areas for Port-A-Pots on slabs should be considered.
- The potential for relocating a park amenity/facility should be considered if the use is better suited to a different area in the park.
- The master plan should address management issues of the park and incorporate projections of park use.
- It was suggested that a multi-faceted park should be maintained rather than a concentration of one particular use.
- Barn usage for daytime activities such as school visits was mentioned.
- The use of wood carpet over gravel for the dog park surface was discussed.
- An irrigation system to maintain a good lawn area for the dog park and athletic fields was discussed.
- Noise from a band shell or performance area may be an issue.
- It was indicated that Lisburn Fire Co. has a 500-seat indoor social hall that is available for rental use.
- The park is used for cross country skiing and sledding. The master plan shall consider reestablishing an ice skating area at the existing pond area along the creek.

<u>Next Meeting:</u> Steering Committee Meeting #2, March 22, 2005, 4PM. Lower Allen Township Municipal Building Public Meeting #2 - May 18, 2005, 7PM. Lower Allen Community Park Barn

Attachments: Public Meeting #1 Attendance Sheets and Cards Record

Respectfully Submitted, SIMONE JAFFE COLLINS, INC. LANDSCAPE ARCHITECTURE

how T. Standy

David T. Stauffer, RLA Project Manager

# Public Meeting #1 March 8, 2005, 7 PM @ Lower Allen Township Community Park Barn Lower Allen Community Park Master Plan

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# Public Meeting #1 March 8, 2005, 7 PM @ Lower Allen Township Community Park Barn Lower Allen Community Park Master Plan

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SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

4/11/05 Lower Allen Community Park Master Plan SJC# 04091.10, ARRO# 6104.01

### STEERING COMMITTEE MEETING #2

Date/Time: 3/22/05, 4 PM

Location: Lower Allen Township Municipal Building

In Attendance: (See Attached Sheet)

Meeting Minutes:

- 1. The project schedule was reviewed. The ARRO/SJC consultant team will provide a revised concept plan for review by the Steering Committee prior to Steering Committee Meeting #3.
- 2. It was noted that the final plan will likely evolve from early concept plans and that the current conceptual plans will be revised according to Steering Committee feedback and an additional visit to the site by the ARRO/SJC team.
- 3. The meeting date for the originally scheduled April 27 Steering Committee #3 at 7 PM has been rescheduled to April 25 at 4 PM.
- 4. A Site Analysis drawing was issued for the park, showing the existing facilities, existing circulation, and generalized usage areas.
- 5. Specific analysis items discussed included roadway hierarchy, proper athletic field solar orientation, and canoe access to the Yellow Breeches Creek.
- 6. The Steering Committee noted that the design team should contact Sara Nicholas at American Rivers (<u>www.americanrivers.org</u>) for information on potential uses of or adjacent to the Yellow Breeches Creek. It was indicated that a dam removal project in the vicinity of the park will also involve trail installation.
- 7. A "Concept One" plan was issued for the park, utilizing "blob diagrams" to represent potential usage areas. Items of note in Concept One are as follows:
  - The maintenance area is relocated to the southwest corner of the park, providing a new civic space in its place (committee reaction was that this is a good idea).
  - A new performance area would be located adjacent to the existing pond, providing the opportunity for waterside views and interaction.
  - The driving range would be eliminated, noting the hazard potential with increased park usage and the availability of nearby golf areas.
  - The dog park would be expanded, with the recognition that this is a very popular usage.

- The natural area in the northwest corner of the park would be expanded, eliminating the Fernlawn Pavilion and pavilion access drive. Concern was expressed by the committee due to this pavilion being the second most popular pavilion.
- The committee indicated that at least one more baseball field would be needed within the Concept One plan.
- The committee indicated that the lower parking near the streambank soccer fields could be enhanced, with additional soccer or baseball fields added in the area.
- The committee indicated that a smaller pavilion near a tot lot would be a very attractive addition.
- A "Concept Two" plan was issued for the park, also utilizing "blob diagrams" to represent potential usage areas. Items of note in Concept Two are as follows:
  - There would be no relocation of the maintenance area.
  - There is a second access point to the park off of Lisburn Road, providing a loop system to allow one way in and out (sight distance may be a determining factor in the location or the acceptability of the idea).
  - Concept Two presented a central core area in the park with the anticipated high use areas, such as a new fun fort, water play area, and a performance area.
  - The Fernlawn Pavilion remains along with the existing access drive to the pavilion from the existing parking adjacent to the dog park.
  - The existing dog park is shown relocated to the area where the driving range exists. Additional parking would be located along the Fernlawn Pavilion access drive.
- 9. General comments from the committee were as follows:
  - It is probably not a good idea to have a water play area near the barn, since this could be a high use area, and would probably conflict with the rental of the barn.
  - It is important to provide some type of vehicular access to the pavilions. The idea of using bollards for controlled vehicular access to an asphalt loop path was discussed. Pavilion renters could be provided a key to access the asphalt path for use in unloading and loading items at the pavilion.
  - The development of a civic space adjacent to the barn is a good idea, as is an upper deck for the barn.
  - It is important to provide another softball field, even if it overlaps or replaces one of the soccer fields.
  - There is an apartment in the barn which could be moved to the relocated maintenance area. It is currently used by the soccer association as an office.
  - There are bathrooms upstairs and downstairs in the barn.

- If new wells are developed (for instance, to fill the pond or for irrigation), they must not affect the Lisburn subdivision's wells.
- The design team may want to consider two performance areas, especially if they are multi-purpose and can be rented out for public use.
- The design team may want to consider providing a space for a tent to be set up adjacent to the performance area.
- There is a need for expanded parking, either utilizing stabilized turf or actually expanding the paved parking, especially to accommodate July 4<sup>th</sup> activities.
- Keeping the natural area isolated from pavilions and a loop trail is a good idea.
- Concept plans should incorporate the idea of providing play areas in close proximity to existing and proposed pavilions.
- Winter uses should be considered and it was indicated that the Township had previously determined costs to set up a temporary ice skating area on the existing tennis courts.
- 10. The Township may want to consider a direct outreach to the adjacent properties, specifically notifying them of potential plans for the park instead of relying on general advertisements.
- 11. The Township will contact a property owner in the adjacent Lisburn subdivision to investigate the potential for acquiring a right of way for a pedestrian access to the park across from McCormick Drive.
- 12. The Township will investigate property ownership of the lot adjacent to the eastern end of the park and will make any initial contact concerning potential property acquisition.
- 13. A park plan was left with the Township for the park maintenance personnel to mark up electrical service, sewer lateral, well and waterline locations.

### <u>Next Meeting:</u> Steering Committee Meeting #3, April 25, 2005, 4PM. Lower Allen Township Municipal Building Public Meeting #2 - May 18, 2005, 7PM. Lower Allen Community Park Barn

### Attachments: Steering Committee Meeting No. 2 Attendance Sheet

Respectfully Submitted, ARRO CONSULTING, INC.

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Gerald R. McClune, P.E. Project Manager

March 22, 2005, 4 PM @ Lower Allen Township Municipal Building Steering Committee Meeting #2

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SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

May 13, 2005 Lower Allen Community Park Master Plan SJC# 04091.10, ARRO# 6104.01

### **STEERING COMMITTEE MEETING #3**

Date/Time: 4/25/05, 4 PM

Location: Lower Allen Township Municipal Building

In Attendance: (See Attached Sheet)

Meeting Minutes:

- 1. The Township provided the consulting team with a Township Zoning Map.
- 2. The next meeting date will be a public meeting at 7:00 P.M. on May 18, 2005, at the Lower Allen Community Park Barn. The draft plan will be presented.
- 3. The consulting team made another field visit to the park to further investigate the concept plans and alternatives considered to date.
- 4. The skating pond is an attractive area it is proposed to be served by a limited width (probably 12' wide) paved path that allows for controlled vehicular access. The vegetation growing within the pond does need to be mowed.
- 5. A sledding hill is suggested adjacent to the new maintenance area, at the site which is currently used for sledding.
- 6. The maintenance area is to be relocated, and provided with more screening. The elevation difference compared to the adjacent residential area will provide additional buffering. The existing maintenance building closest to the barn could be reused for other activities such as a kitchen, food preparation area, etc.
- 7. A new performance area would be located on the west side of the existing pond; this area could be utilized for weddings, in conjunction with the barn. Evergreen plantings on the opposite side of the pond will be needed to screen views from the performance area towards the dog park.
- 8. Stormwater management could easily be incorporated into the park, with 3 different watersheds addressed. The Township does want to incorporate this and it was mentioned that stormwater BMP's could be installed.
- 9. A spring flows from near the tot-lot to the existing pond; however supplemental well water would likely be needed to maintain the pond at favorable levels during the summer months. The supplemental well could also act as a source for athletic field irrigation.
- 10. The loop trail which winds through the park is to be at a maximum slope of 5% to comply with ADA requirements.
- 11. Stabilized overflow parking is to be provided near the dog park.
- 12. The location of the dog park is adequately sited; this area does need additional shade.

- 13. Realignment of the intersection near the existing central restroom building is highly recommended.
- 14. The park plan shows the existing fields to be realigned to obtain the correct solar orientation.
- 15. The Township staff expressed concern over the maintenance of the overlapping soccer/softball fields. Peter S. indicated that the Township can control the amount and levels of field use so that the ability to grow an acceptable lawn is not compromised.
- 16. The soccer fields along the creek need regraded to provide a level playing field. Installation of fill without equivalent excavation would be unacceptable due to the potential effect on floodplain elevations. Sub drainage for these fields is needed to provide adequate drainage.
- 17. It was noted that grandstands or bleachers for the lower soccer fields are not necessary.
- 18. A water play area is shown adjacent to a new fun fort in the central area of the park, with a larger amphitheater located nearby.
- 19. Pictures of the Mount Gretna Tabernacle performance structure were shown. A similar structure would most likely be cost prohibitive with costs estimated to be well over one million dollars for construction.
- 20. Pictures of Swarthmore College's outdoor amphitheater and Tredyffrin Township's amphitheater and pergola were shown as potential examples for this park.
- 21. Various parks' tensile fabric and concrete performance covers were shown for consideration.
- 22. It is highly recommended that a deck is provided off of the barn with a civic plaza below.
- 23. Fill from the construction of the new maintenance area could be placed at the small soccer field to create the sloped terraces needed for future amphitheater seating.
- 24. Examples of water play areas were shown.
- 25. The lower parking area, downhill of the existing fun fort, could be expanded by cutting into the bank on the hill on the opposite side of the swale, with a stormwater management area located between the two halves of the parking lot.
- 26. Treatment of drainage from the dog park needs to be investigated for DEP concerns.
- 27. The Township verified that sewer capacity is not an issue for any new facilities in the park.
- 28. The barn improvements and relocation of the maintenance area would probably be in the first phase of park improvements.
- 29. The barn with a new deck could be used in conjunction with the new civic area for performances.
- 30. Improvement of the water system would probably also be recommended for the first phase of park improvements.

- 31. The proposed park plan should identify the relocated and new playground equipment.
- 32. Handicapped parking should be considered near the pavilions.
- 33. It should be verified if a new boat launch would require a permit.
- 34. Stream bank stabilization along the Yellow Breeches Creek was recommended and it was noted that a draft Yellow Breeches Watershed Conservation Plan is available online.
- 35. A future walking path along Lisburn Road, from the adjacent golf course property, should connect to the proposed park pathways.
- 36. Boardwalks should be considered for trail access through wetland areas, perhaps from the parking area to the skating pond.

### Next Meeting: Public Meeting #2, May 18, 2005, 7PM. Lower Allen Community Park Barn

Respectfully Submitted, ARRO CONSULTING, INC.

erold R. We Chine

Gerald R. McClune, P.E. Project Manager

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NAME	ADDRESS	PHONE	EMAIL	2
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Shar And	11021-1114 amp 111-1211	1(717)903-1509	amp Hill - 1701/ (717) 903 -1509 (Sparryode jazzd. com	
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April 25, 2005, 4 PM @ Lower Allen Township Municipal Building Lower Allen Community Park Master Plan Steering Committee Meeting #3

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SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

### 6/2/05

### Lower Allen Community Park Master Plan - Public Meeting #2

Date/Time: 5/19/05, 7:00 PM

Location: Lower Allen Township Community Park Barn

<u>In Attendance:</u> Bud Brown – ARRO Lola Mowen – ARRO Peter Simone – Simone Jaffe Collins, Inc. (SJC) David Stauffer – SJC (See attached attendance sheet)

### Notes:

- 1. Peter S. started the meeting by introducing the ARRO/SJC team and each firm's involvement with the Master Plan.
- 2. Peter S. indicated that the Draft Master Plan will be on the Township's web site and a hard copy will be available for review at the Township Building. Comments from the public were requested by June 10, 2005.
- 3. Peter S. identified individuals who are members of the steering committee which has been working on the Lower Allen Community Park Master Plan.
- 4. Peter S. indicated that many ideas were suggested at the initial public meeting and discussed during previous meetings with the steering committee. It was noted that not all of the initial suggestions have been included in the master plan.
- David S. reviewed a PowerPoint presentation of the Draft Master Plan. Existing features shown on the 2003 aerial photo were reviewed to orient attendees to the location of various park facilities. The following site analysis information was addressed in summary:
  - Existing Features
  - Soils Map
  - Existing Utilities
- 6. David S. explained the three (3) concept plans and briefly touched on some of the proposed facilities (e.g. water play area). It was noted that the Draft master plan has been developed from Concept #3.
- 7. David S. explained the proposed features and the need to re-orienting fields with improper solar orientation.
- 8. The following items were discussed:
  - Dog Park: Relocation had been discussed, but a decision was made that the current site is the best location. Proposed dog park improvements include regrading and providing an underdrain system with mulch surface. A stormwater Best Management Practice (BMP) facility is proposed to treat the dog park runoff before this water is released into the park.

- Performance Facilities: Several areas of the park were considered for use. The emphasis was on providing facilities that will allow for a variety of performing activities e.g. concerts, plays, etc. in addition to the potential use of the performance areas for private rentals. Photos of conceptual and actual performing facilities were presented including timber structures, tensile fabric structures, and terraced seating areas.
- Fun Fort and Water Play: Photos of various equipment combinations were presented.
- Traffic patterns and the proposed multi-use loop trail around the perimeter of the park were reviewed.
- Use of the existing barn and the proposed deck overlooking a civic space with lawn area that could be used as an initial performance area.
- Parking Areas: Proposed additions and expansions were discussed. Currently there are approximately 300 parking spaces and the plan proposes an additional 200 spaces.
- Winter activities including a sledding area adjacent to the proposed maintenance area. Earthwork would be required to create berms that would separate the sledding area from the proposed parking area and the existing entry drive.
- Peter S. noted that the new Growing Greener State funds may be available for use in addressing the eroding stream banks along the Yellow Breeches Creek.
- The total estimated cost of the Master Plan improvements was reviewed. It was noted that the total cost of the improvements will be spread over perhaps 10-20 years. Also, it was noted that it is possible that not all of the features shown on the Master Plan will be constructed and it was noted that there are many funding sources available to assist the Township with the cost of constructing the proposed improvements.
- Residents were encouraged to review the Draft Master Plan and to provide comments. It was noted that the Master Plan is designed for continued and expanded use of the park as the community grows.
- 9. The following questions and concerns were raised by the public:
  - Q. Why is there interest in providing performance facilities?
  - A. The Township would like to provide facilities that will formalize the existing Township concert series and allow the Township to have the ability to accommodate larger and different types of performances.
  - Q. How can the area along Main Street be prevented from being overrun by park patrons/sports players?
  - A. The existing evergreen plant buffer along the southern boundary of the park needs to be enhanced as the bottom of this plant material is starting to shade out. Signage installation to address rules of behavior can also be installed in the park to limit the use of portable sound devices at the park pavilions.
  - Q. Currently there is not much interest in summer concerts. Why should the Township build expensive facilities that might not be used?
  - A. The initial option for a performance facility is likely the construction of a deck at the barn which would use the proposed civic space and lawn area for spectator seating. The construction of additional performance spaces would follow over time as needed to accommodate larger performances.

- Q. What can be done to deter rude drivers (dog owners in particular)?
- A. Peter S. stated that the installation of speed bumps on the main entry drive may be an option to help slow down drivers. Additionally, it was noted that the proposed multi-use path will provide a safer alternative for pedestrians that currently walk along the existing park roads.
- Q. The narrowness of the park entrance is a problem according to neighbors and widening was suggested. Will this be the only entrance?
- A. Other entry locations were investigated, but the current park entry is the best location for sight distance along Lisburn Road. Making the existing entry wider to provide better sight lines will likely be examined by the Township. A pedestrian connection to the park is planned from Main Street through an access easement across private property. The property owner is agreeable to this option.
- Q. What will happen to wildlife when the lower parking lot is enlarged?
- A. Currently the area is sparsely vegetated and there is no stormwater control. BMP facilities will be applied to control stormwater and minimal wildlife impacts are anticipated. It was noted that the overall impact of proposed improvements to existing natural areas is very minimal.
- Q. Is there a need for new baseball field(s)?
- A. Based on information provided by the Township, one additional baseball field is needed.
- Q. What will happen to the sports that are currently using the fields that are now shown with shared fields?
- A. Peter S. noted that plan is still in Draft form and can be changed. The need to reorient fields to proper solar orientation is a safety issue. Funding by the state typically requires that sports fields have the correct solar orientation. The reorientation of the existing baseball fields is the basis of the proposed field relocation. Additionally, it was noted that there is not an area of the park that can easily accommodate additional active recreation fields.

Concerns were expressed about having areas available for sports activities during the construction of park improvements. The concern was biggest for the soccer club which will be sharing fields with softball during the same seasons. Also, the fields would not be allowed to "rest" and the existing level of maintenance may be compromised. It was noted that Lower Allen Community Park is the only Township Park with soccer fields. If soccer fields are displaced, will they be replaced in another park?

Peter S. suggested that these and other concerns be presented to the Township in a letter.

- Q. In regards to water availability, will more wells be drilled within the park?
- A. Currently there is adequate water supply to meet existing and proposed needs. ARRO has recommended that all potable water be treated at the barn location.

- Q. Will anything happen to the green area along the creek?
- A. A width of approximately 50' 100' will be maintained as a natural riparian buffer along the creek. There is existing bank erosion along the creek that must be addressed.
- Q. Do we know from where the park patrons come?
- A. No study has been done to study where park patrons come from and there is no knowledge of the sports league(s) composition. The Master Plan has been developed based on the assumption that the community will continue to grow.
- Q. How much of a vote input will residents have in determining future park improvements?
- A. This is not a vote issue. After the Master Plan is finalized and adopted, it will be up to the Township Commissioners to authorize expenditures by responding to their constituents concerns. Also, state funds can be procured to help with the costs.
- 10. Concerns about well water contamination, in relation to the dog park were expressed. Also, issues of security relating to the park remaining open until late were discussed. Peter S. suggested that a "neighborhood watch" arrangement may be implemented to ensure that the park gate is locked at dusk.

## Next Meeting: Public Meeting #3 – July 12, 2005, 7PM, Lower Allen Community Park Barn.

Respectfully Submitted, SIMONE JAFFE COLLINS, INC. LANDSCAPE ARCHITECTURE

T. Stanfr

David T. Stauffer, RLA Project Manager

May 18, 2005, 7 PM @ Lower Allen Township Community Park Barn Public Meeting #2 –Draft Plan Presentation Lower Allen Community Park Master Plan

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	May 18, 2005, 7 PM @ Lower Allen Township Community Park Barn	iip Community Park	Barn	
NAME	ADDRESS	PHONE	EMAIL	
Mark Hoten	Comer aller tup	249.8P31		
Gerry Brandon	WSSC Bowd Member	697-2257	gbrandon e pseq. org	
Donna Paul	1993 Hummel Avenue C.H.	915-757S	denna- and a lower-allen . 00 . 115	2112
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Public Meeting #2 –Draft Plan Presentation

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Lower Allen Community Park Master Plan

**SIMONE JAFFE COLLINS** • LANDSCAPE ARCHITECTURE 511 OLD LANCASTER ROAD • BERIVYN, PENNSYLVANIA 19312 (610) 889 0348





SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

July 7, 2005 Lower Allen Community Park Master Plan SJC# 04091.10, ARRO# 6104.01

## **STEERING COMMITTEE MEETING #4**

Date/Time: 6/15/05, 4 PM

Location: Lower Allen Township Municipal Building

In Attendance: (See Attached Sheet)

Meeting Minutes:

- 1. At the public meeting, adjacent residents indicated that strangers seem to wander from the park onto private property due to the fact that there is not a clearly defined boundary to portions of the park. A split rail fence should be included where no fence exists, and costs should be included in the Master Plan.
- 2. The next meeting date will be the final Public Meeting at 7:00 P.M. on July 12, 2005, at the LACP Barn. The final plan will be presented.
- 3. Widening of the park entry road to include an exiting turn lane is recommended. However, PennDOT approval and an HOP (Highway Occupancy Permit) will be required. Dan F. noted that PennDOT may have concerns with allowing an additional lane.
- 4. Considerable discussion took place concerning the parking near the future site of the new fun fort, and the need for pedestrian to cross the road to get from the parking to the fun fort. The final Steering Committee recommendation is to have a separate parking area on each side of the road in this area.
- 5. There are 3 existing sand volleyball courts in the park which are shown as being removed on the Draft plan. The Township would like to have at least 3 courts, with the possible addition of another.
- 6. There is currently a significant demand for a pavilion which is close to both the fun fort and the restrooms. An additional pavilion should be provided in a similar location on the final Master Plan.
- 7. A tot-lot play area should be added near the tennis courts.
- 8. A play area could be added adjacent to the maintenance building near the Barn, but it would require fencing to prevent access to Lisburn Road. A play area in this location could provide a benefit to other functions occurring in the barn.
- 9. The maintenance department currently utilizes temporary fencing between adjacent ball fields, but would like to install permanent fencing. The Opinion of Probable Development Cost will be updated to reflect permanent fencing.
- 10. The shared use of soccer and softball fields would make maintenance difficult and cause scheduling conflicts. The Township would like to eliminate the shared use by eliminating the baseball/softball field from the lower meadow

and by removing the soccer field from the existing softball field area located north of the existing restroom building. It was noted that the 3 existing baseball/softball fields currently seem to be an adequate number.

- 11. In the public meeting, adjacent residents were concerned about noise generated from the proposed improvements. It is the opinion of the consultants that all of the significant noise generating uses are a significant distance away from any of the neighborhoods.
- 12. A cost should be included for a boardwalk in the nature area.
- 13. The cost estimate area plan with numbered areas was reviewed in order to assist in the establishment of priorities for future park improvements. Area 1 (Barn Area, Entrance Road, and Parking), Area 3 (Upper Pond), and Area 4 (Pavilion Grove) were identified as the first priorities, followed by Area 2 (New Maintenance Area). The loop trail can be constructed in sections with individual projects which it passes through or adjacent to. The soccer fields along the creek would most likely be the next priority, followed by the improvements at the nature area.
- 14. The Steering Committee indicated that the amphitheater large performance area should be a late phase of construction that is completed after the deck at the barn and after the small performance area at the pond. The existing small soccer field will remain in place until the amphitheater is constructed.
- 15. It is recommended that the Township submit a September 2005 DCNR grant request in the range of \$200,000 to \$300,000 with a \$350,000 match from existing Township park development funds.

#### <u>Next Meeting:</u> Public Meeting #3, July 12, 2005, 7PM. Lower Allen Community Park Barn

## Attachments: Steering Committee Meeting No. 4 Attendance Sheet

Respectfully Submitted, ARRO CONSULTING, INC.

erold R. Wk Chine

Gerald R. McClune, P.E. Project Manager





SIMONE JAFFE COLLINS LANDSCAPE ARCHITECTURE

July 21, 2005 Lower Allen Community Park Master Plan SJC# 04091.10, ARRO# 6104.01

#### PUBLIC MEETING #3

Date/Time: 7/12/05, 7 PM

Location: Lower Allen Township Community Park Barn

In Attendance: (See Attached Sheet)

#### Meeting Minutes:

- 1. An overview was provided of the purpose of the Park Plan; it is a guide for the Township for the development of the park, so that facilities which the Township decides to install in the park are compatible with existing and future facilities and with the surrounding portions of the Township.
- 2. Public meetings are an important consideration by DCNR in their grant review process.
- 3. An overview was provided of the steps which have been taken thus far in the development of the park plan:
  - Multiple site visits have been conducted by the consultant team to observe the existing environment and the existing facilities, and to evaluate potential future uses.
  - Committee meetings were held throughout the master plan process. The Steering Committee includes Township personnel and park staff.
  - Public meetings (three total).
  - Public input was obtained from the first public meeting and the 3-week comment period which followed, during which time approximately 12 letters were received by the Township.
  - Three concept plans were developed considering the public input.
  - A draft plan was then developed based upon Steering Committee review of the concepts. The highlights of the draft master plan included:
    - a. A new deck on the existing barn for enhancement of barn rentals as well as for performances overlooking a new civic area.
    - b. A small amphitheater adjacent to the existing pond for performances, weddings, etc.
    - c. A loop trail around the park.
    - d. Dog park improvements.
    - e. Shared use of sports fields for baseball/softball and soccer which would increase the total number of fields at the park.
    - f. Streamside Soccer fields.
    - g. Improved restrooms.

- h. Relocated maintenance facility.
- 4. It was shown how each draft plan concern expressed by the public and the committee members was addressed in the final plan:
  - Public concern over trespassing on private property from park users would be addressed by the installation of a post and rail type fence along the southern park boundary. Addition buffer plantings and signage were discussed as ways to clearly delineate between the public park and private property. The intent of the fence is not to physically prevent trespassing, but to reinforce the delineation of the park boundary.
  - Park staff and sports league concerns over scheduling and the level of maintenance required for shared sports fields was addressed by eliminating the overlapping fields. The park will maintain the current number of sports fields, although they will be reoriented for proper solar orientation.
  - Concern over the safety of those needing to access the future fun fort from the proposed parking areas, crossing the road in the process, was addressed by providing parking on both sides of the park road, minimizing the necessity for crossing the road.
  - Concern over the narrowness of the entrance road to the park would be addressed by providing a left turn lane out of the park, if approved by PADOT.
- 5. Additional changes which were incorporated in the final plan were presented, as discussed in the following items.
- 6. Speed tables, raised pedestrian road crossings, could be incorporated in the park as needed for speed control. One location for consideration would be where the loop trail crosses the main park entrance road.
- 7. Reuse of the existing maintenance building has been incorporated, providing supplemental space to complement barn rental functions, etc.
- 8. A play area has been added adjacent to the existing maintenance area. A play area in this location requires restrictive fencing to prevent access to the adjacent main road.
- 9. The new maintenance building location will require significant excavation resulting in the creation of excess fill material. This fill can be utilized to construct a berm adjacent to the maintenance area, separating it from the existing/proposed sledding hill. Any remaining fill could be utilized in the location of the future large amphitheater.
- 10. Three new pavilions have been added in the existing golf area, near the small performance area.
- 11. A large amphitheater is proposed near the water play area. There are many options for its construction, including a pavilion, a canopy, hillside seating, and permanent structure over the stage area.
- 12. As the existing fun fort's wood reaches the end of its useful life, a new fun fort would be constructed near the water play area. Illustrations were provided of various examples of current designs for similar facilities.

- 13. The opinion of probable construction costs for all improvements included in the final plan is approximately \$3.6 million dollars.
- 14. The following questions arose following the presentation, with the responses as shown:
  - The requirements for solar orientation of the baseball/softball fields were questioned. The safety requirements are based upon recognized park development standards that would be required to be followed for state funding eligibility.
  - The safety of the tot lot adjacent to Lisburn Road was questioned. A fence which prohibits access to Lisburn Road would be essential.
  - The direction of the pond amphitheater was questioned, based on noise concerns. It was felt that the terrain and the infrequency of significant noise events would provide an acceptable situation to the surrounding areas.
  - It was questioned as to whether the dog park was going to be lighted. It will not, but there may be some security lighting added to the park along the entry drive for use in times when performances or special events create a need for lighting during later departures from the park.
  - Staffing of the park was questioned, especially in relation to the cleanup of trash after large sports tournaments. The Township has notified groups using the park of their responsibilities, especially those which seemed to have caused problems in the past. Additionally, Township staff do perform regular cleanup of the park. The concern expressed by the public can provide the catalyst for closer monitoring of the situation by the Township.
  - The accommodation of access to the creek, especially in regards to a future greenway or water trail, was questioned. An access ramp to the creek is proposed with an adjacent parking area, from which non-motorized boats, tubing, and fisherman will find easy access.
  - Concern was further expressed over access to and through private property. Clearer delineation of park boundaries is proposed through fencing, screening, and signage.
  - Concerns were expressed over the potential noise from rock music. The Township will be responsible for the programming provided in the park. If rock music is included, it may only be an occasional item within the programming, and could be eliminated if identified as a problem.
  - It was suggested that the Fernlawn access road be opened in the winter for access to the skating area. This access road will be provided with a controlled access point which can be opened for pavilion access or seasonal use.
  - Potential loss of a soccer field due to installation of the large amphitheater was expressed as a concern. The Township will review future needs and priorities in the park as the plan progresses.
  - The size of the water park was questioned. A typical size would be in the range of 2500 square feet (50'x50').

- The type of fencing to be provided for delineation of the park boundary was questioned. It is to be post and rail or similar, which is to only provide a visual barrier, not a physical restraint.
- Questions were raised as to why there must be any development of the park. The comprehensive plan identifies the need for park lands in the Township, and the populace in general desires areas to recreate. This park already has many facilities with room for more. The purpose of the park master plan is to identify what would logically fit within the park and where the optimum location for such facilities would be if in fact a specific facility were identified by the Township to be a desired facility to have at the park. The Township Commissioners will determine the actual steps to be taken and the associated timetables.
- A resident preference was identified for 3 softball fields instead of 2 softball fields and one little league field. The proposed plan is equivalent to the existing use, which appears to adequately serve the current needs.
- Concern was expressed over fire access due to the single access road to the park. No location exists for an acceptable second entrance to the park from Lisburn Road due to PaDOT criteria. Additionally, there are no facilities within the park which would need fire protection which are not accessible directly from Lisburn Road.
- 15. All residents were invited to attend a Parks and Recreation Board tour of the Lower Allen Community park facilities on Wednesday, August 24, 2005.
- 16. Thomas Vernau, Interim Township Manager, provided his phone number to the residents, inviting them to call him with any concerns.

## Attachments: Public Meeting No. 3 Attendance Sheet

Respectfully Submitted, ARRO CONSULTING, INC.

crold R. Wk Chine

Gerald R. McClune, P.E. Project Manager

# Lower Allen Community Park Master Plan Public Meeting #3 –Final Plan Presentation July 12, 2005, 7 PM @ Lower Allen Township Community Park Barn

NAME	ADDRESS	PHONE	EMAIL
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JACKIE JUMPER	1641 MAIN ST. LISBURN	697-8376	
	1729 mn St Lisburn	7665949	
Don Turbett	4132 the Burns Rd histor	766-6664	
HAROLD A. TURBETT	4132 The BURNS RD LISBURN	766-6664	
Terrie Hosey	1633 Main St, Usburn	766-3311	
gene hosey /		11 11 -	
DANIEL FLINT	LOWER ALLEN TOWNSHIP	975-7575	
PRODRICK TOONG	LOWER ALLEN TOWNSHIP	920-1741	'
VAN FAUST	LOWER AllEN TOUDLOHIP	975- 7575,	
Donna Paul	Lower Allen Twp	975-7575	
MARY ELLEN BONKS	1780 MAIN St. LISPURN	697-5003	
thomas Bauks	11 11 11	10	
Brenda & Bob Gossard	1653 Main St Lisburn	791-0835	
Ses Halfman	1239 E Lishern R. Machles PH.	766-3877	
Ella Mal Klene	1425MAIN ST LISBURN	766-5778	
JOHN EBY	254 EWE ROAD MECHANICSBURG PA 17055	737-3603	John eby elower-allen parts
	218 EWERD MELHINNIGBUIGPA 17055	761-2756	REDWARDS @ SRBC. NET
Bob Pelles	23 CORNELL TR CAMPHILL PA 17611	737-3152	
TOMVERNAL	LOWER ALLEN TOWNSHIP	975-7575 x1002	2

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## Lower Allen Community Park Master Plan Public Meeting #3 –Final Plan Presentation July 12, 2005, 7 PM @ Lower Allen Township Community Park Barn

NAME	ADDRESS	PHONE	EMAIL
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Scott Duncanson	220 GRANITEEUN DR. LANCASTER	730-2159	Sduncanson @ Verizon.nel
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Pouglas Brown	1724 Main Storel, Lisburn 17655	796 - 0331	
JAMOR W. Chignos	LOWER ALLEN TWP	975-7575-021-2	
	1761. Main St. (15130M 1705 5-	691-1275	
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Lower Allen Community Park Master Plan SJC#: 04091.1

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