



**MONTGOMERY COUNTY DEPARTMENT OF PARKS**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

MCPB  
Item: 12.B  
Date: 9/15/11

September 1, 2011

**MEMORANDUM**

**TO:** Montgomery County Planning Board

**VIA:** Mary R. Bradford, Director of Parks *Mary R. Bradford*  
Michael F. Riley, Deputy Director *M*  
Mitra Pedoeem, Chief, Park Development Division *Mitra*

**FROM:** Patricia McManus, Design Section Supervisor, Park Development, 301-495-3580 *pm*  
CJ Lilly, Project Manager, Park Development Division, 301-495-3589

**SUBJECT:** Facility Plan for the Renovation of Kemp Mill Urban Park

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**STAFF RECOMMENDATION**

- 1) Approve Recommended Plan, including cost estimate.

**PROJECT DESCRIPTION**

**Introduction**

The purpose of this project is to prepare a facility plan for the renovation of Kemp Mill Urban Park located at 1200 Arcola Avenue in the Kemp Mill neighborhood near Wheaton. The 2.7 acre park, located at the intersection of Lamberton Drive and Arcola Avenue, was acquired from the adjacent shopping center development in the 1960's and includes 2.2 acres for the park and 0.5 acre for Lamberton Drive. Land uses adjacent to the park site include the Yeshiva School of Greater Washington to the north, Kemp Mill Shopping Center to the west, Young Israel Shomrai Emunah of Greater Washington synagogue to the south, and the single family residential development of Kemp Mill Estates (zoned R-60) to the east. Other nearby land uses include townhouses, apartments, an elderly housing complex and a swim club to the south of the park, and Sligo Creek Stream Valley Park to the west. The park serves as an important central open space for the Kemp Mill community.

During its early years, Kemp Mill Urban Park received awards and acknowledgements for innovative design. The original design theme of the park reflects a sensitive blending of Eastern and Western garden design with the central feature of the park being its 0.46-acre pond with complementary features such as a pedestrian bridge, surrounding trails, gazebo, pergola, raised planters and park benches for relaxation. These features are enjoyed by many residents who visit the park to contemplate its inviting surroundings. Active recreation is provided by a playground and basketball court at the north end of the park. The park receives heavy use and

considerable pedestrian flow from residents walking from their homes to the Kemp Mill Shopping Center and nearby religious institutions and schools. Over the years many trees have matured into large specimens which increase the natural aesthetic appeal of the park environment.

The original infrastructure of the park has slowly deteriorated over time, and the entire park is in need of renovation. There are significant issues with the infrastructure of the pond and storm drainage outfall pipe, which have resulted in periods of extended maintenance and down time of the park in recent years. The pond presents significant problems with siltation, water quality and nuisance wildlife. Over the last several years, temporary repairs have been made to the pond and the storm drainage system, the playground, cracked paving, walls and stairs to keep the park operational until a complete renovation occurs. Refer to Attachment A for the Facility Plan Report.



*Neighborhood Context*

### **Project Funding**

The facility planning study was funded with \$344,965 from the FY 2009 – 2010 Capital Improvements Program in the Facility Planning: Local Parks PDF. Facility planning represents thirty percent complete construction documents, including a proposed design, cost estimate and determination of regulatory feasibility. The consulting team of LSG Landscape Architecture, Huron Consulting, and Straughan Environmental was hired in 2009 to prepare the facility plan. If approved the project would be proposed for design and construction in the Fiscal Year 2013-2018 Capital Improvements Program (CIP.) The schedule of the project would be determined during review of the CIP.

## Facility Planning Process

The facility planning process includes the following sequence of work:

1. Collect data, prepare site survey, and perform geotechnical investigations.
2. Analyze existing site conditions.
3. Prepare and obtain approval of Natural Resources Inventory/Forest Stand Delineation Summary Map.
4. Meet with the community to discuss program of requirements.
5. Finalize program of requirements.
6. Prepare park design alternatives.
7. Present design alternatives to the community and stakeholders.
8. Develop preferred alternative based on input received.
9. Prepare stormwater management concept submission and obtain approval from the Department of Permitting Services.
10. Present recommended plan to the community and stakeholders.
11. Finalize plan based on input received.
12. Prepare preliminary forest conservation plan submission.
13. Coordinate any outstanding issues with stakeholder groups and regulatory agencies.
14. Prepare facility plan report, cost estimate, and operating budget estimates.
15. Present facility plan recommendations and costs to the Montgomery County Planning Board for approval.

## MASTER PLAN RECOMMENDATIONS

### Approved and Adopted Kemp Mill Master Plan, December 2001

Kemp Mill Urban Park is located within Planning Area 2. The governing master plan document is the Approved and Adopted Kemp Mill Master Plan. The plan recommends a neighborhood commercial center, including Kemp Mill Urban Park, to serve as the focal point for the surrounding residential neighborhoods. Relevant information from the master plan is cited below. The Kemp Mill Town Center is described on page 24 as follows:

*The commercial activities of the Kemp Mill Shopping Center, the public amenities of the Kemp Mill Urban Park, and the adjacent medium and high-density residential development of townhouses and apartments collectively function as a town center. The commercial development and the urban park were built in the 1960s and eventually will be refurbished or rebuilt at some time in the future. The adjacent residential developments have sidewalks that lead to the shopping center; the paved trail from Sligo Creek Park terminates in the same location. Upon reaching the shopping center, however, there are no paved sidewalks or paths that the pedestrian can safely walk on to reach the stores. When the shopping center redevelops or refurbishes through the development process, paved and safe access to the shopping center from the sidewalk for the apartments and elderly housing development and the paved trail in Sligo Creek should be provided.*

Plan recommendations on page 24 continue as follows:

*When redevelopment for the Kemp Mill Shopping Center occurs, it should include non-vehicular access through the parking lot from the sidewalk on Arcola Avenue to the trail in Sligo Creek Park. This access should be landscaped and separated from free flowing interior vehicular movements. Pedestrian access to the stores within the shopping center should be improved as well.*

On page 56, recommended public facilities improvements in Table 5 include “Revitalization of Kemp Mill Urban Park”.

## **2005 Land Preservation, Parks, and Recreation Plan**

The 2005 Land Preservation, Parks, and Recreation Plan (LPPRP) includes a park classification system and provides quantitative estimates of future recreational facility needs to the year 2020. Urban parks are classified under the category of Community Use Parks, which provide everyday recreation needs for residents close to home.

On page III-23, the Kemp Mill/Four Corners planning area shows no future need for additional basketball, tennis courts or playgrounds. On page III-26, the Silver Spring/Takoma Park planning area (which includes this park) shows a need for 9 adult softball fields, 4 baseball fields, and 11 adult multi-purpose rectangular fields by the year 2020. Additional facilities that are needed countywide are identified on page III-28 and include skate parks, dog exercise areas, regional trails, picnic areas and natural areas within parks. The Kemp Mill planning area does not have any specific outstanding needs identified that could be met in Kemp Mill Urban Park.

## **Vision 2030: The Parks and Recreation Strategic Plan**

Vision 2030 is a strategic plan for park and recreation services in Montgomery County for the next twenty years. The current draft plan, dated June 2011, shows Kemp Mill Urban Park located in the East Transit Corridor planning area. Volume 2 of the current draft (page 63) indicates that the East Transit Corridor area has the highest population of all planning areas and also has the greatest concentration and access to recreation components. On page 22 of Volume 2, user surveys identified certain facilities of highest importance, and these included trails, playgrounds and natural areas. There are no detailed recommendations in the plan that would inform the renovation of Kemp Mill Urban Park.

## **EXISTING CONDITIONS**

### **Demographics and Area Facilities**

The Kemp Mill Master Plan identifies notable demographic characteristics of the Kemp Mill area. The population is less diverse than is typical countywide and is approximately 90 percent Caucasian. Retirees make up approximately 26 percent of the population. The population growth has remained relatively static over time, because of the lack of vacant land for new development. The housing stock on average is affordable and there are many housing types available to accommodate a variety of life-styles. Kemp Mill offers an ideal mix of housing so that residents can remain in the community from the time they first form a household through their retirement years, and the age profile of the area indicates that many residents take

advantage of these opportunities to stay in Kemp Mill as their housing needs and life styles change.

The 2005 LPPRP provides projections of population change in all planning areas through 2020. On Page A XVI-3 of the plan, the Kemp Mill/Four Corners area was expected to remain stable with demographic change largely between age groups. The greatest increase (19.5%) is projected in the 65+ population as residents age in place. There is also projected growth in the 5-9, 10-14, and 25-34 age groups, which would represent families with young children. These projections may be important considerations for the types of active and passive park facilities to be included in the renovation of Kemp Mill Urban Park. Input from public meetings indicated an interest in serving these populations.

Most of the homes in the Kemp Mill area are within walking distance to parkland. Three large parks surround the master plan area and provide a wide variety of recreational and leisure activities and experiences: Wheaton Regional Park, Sligo Creek Stream Valley Park, and Northwest Branch Stream Valley Park. Wheaton Regional Park provides a wide range of programmed activities including tennis, ice skating, picnicking, ballfields, an adventure playground, carousel, miniature train, dog park, trail system, equestrian center, and Brookside Gardens and Brookside Nature Center. Sligo Creek and Northwest Branch Parks have extensive hard and natural surface trail systems, as well as small playgrounds and picnic areas. Kemp Mill Estates Local Park is a nearby 12-acre park that includes a small recreation building, playground, softball field, basketball court, and two tennis courts.

## **Site Conditions**

The park is highly visible from Arcola Avenue and serves as a focal point for the Kemp Mill Town Center. The park is immediately bounded by Arcola Avenue on the east, the four lane Lamberton Drive shopping center entrance on the south, the shopping center building and parking lot on the west, and a vegetated slope and driveway for the school on the north. The central feature of the park is a concrete-lined pond, surrounded by large areas of open lawn. Additional amenities associated with the pond include a small gazebo, trellis, bridge, concrete walkways, seat wall, planters and site furnishings. The northern end of the park, which is separated from the pond by a row of trees, includes two playground areas on a wood fiber surface (totaling approximately 5,400 square feet) as well as a small asphalt basketball court. The playground is very popular for neighborhood families with young children. The basketball court is heavily used by teens, especially on weekday afternoons after school hours.

Most visitors walk to the park from the surrounding neighborhood or pass through it to reach other destinations. Some visitors use a small number of parking spaces within the shopping center at the west boundary of the park, although they are not dedicated for this purpose. The park is served directly by a bus stop and shelter on Arcola Avenue near Lamberton Drive. There is also a connection from the Sligo Creek Hiker-Biker Trail to the Kemp Mill Center on the west side of the parking lot, which is heavily used by pedestrians to reach the center. There is no designated pedestrian access from the trail through the parking lot to the shopping center or to Arcola Avenue.

There are six pedestrian entrances to the park, but only two at the north end of the site meet requirements of the Americans with Disabilities Act Accessibility Guidelines (ADAAG.) Main access points from the shopping center parking lot, Arcola Avenue, and the bus stop near the intersection of Lamberton Drive and Arcola Avenue have stairs, which present physical challenges to some park users and to parents with strollers. The sidewalk connection to the

park from Lamberton Drive does not meet minimum width requirements. Much of the pedestrian pavement is worn and cracked.

Within the park, there is fifteen feet of elevation change from Arcola Avenue to the low side of the park near the shopping center. The long axis of the site is much flatter with an average slope of 1.5 percent that slopes north to south. The site contains many mature trees along the south and west boundaries of the park and around the playground and basketball court. At the northwest corner of the site, approximately one-tenth acre of an adjacent forest stand crosses into the park.

The existing utility infrastructure is inadequate to serve the park. An existing storm drainage pipe bisects the park from east to west and conveys stormwater collected from inlets on Arcola Avenue through the park, continuing through the shopping center and ultimately to Sligo Creek. This storm drain collects overflow water from the park pond, the Yeshiva school, as well as water from the shopping center. The drainage pipe is sized inadequately to carry the flow of water and is shallow both in grade and depth. The pipe has been periodically clogged primarily with debris washing down the inlets from Arcola Avenue. The shallow grade of the pipe causes debris to gather, and the shallow depth of the pipe can result in debris and water freezing, further obstructing the pipe. The pond does not have a backflow prevention device, so the clogged line has resulted in water and trash backing up the pipe and into the pond, where it ultimately overflows over a retaining wall on the low side of the park and floods businesses in the shopping center. The pipe was last cleared in Fall 2010 and a temporary inlet installed in the shopping center paved area, in order to create another outlet for overflow water to prevent it from backing up into the pond. There is no maintenance easement over this collector pipe, which would normally fall under the purview of the Montgomery County Department of Transportation (MC-DOT), and the shopping center is technically responsible for maintenance of the line. The storm drain needs to be reconstructed and the maintenance should be turned over to the MC-DOT to prevent future problems.



The pond is currently served by public water from a hydrant on the opposite side of Arcola Avenue. The pond does not have any mechanism or connection to fill it on site or to make up evaporated water. It is filled manually from a hose that runs from the park across the road to connect to the source of water. The pond is shallow, constructed of concrete and has one centrally located spray fountain for aeration, but no pond circulation or filtering capabilities. This lack of adequate infrastructure results in low oxygen levels, poor water quality, and contributes to the build-up of algae and organic waste. These problems are exacerbated by the presence of large numbers of Canada geese, and goose excrement can be found throughout the park site. The following conditions have contributed to attracting nuisance levels of geese to this site:

- The pond is wide and still, and provides easy access for landing and taking off
- The side slopes along the pond edge are low and easy to climb
- There is open lawn adjacent to the pond for feeding and resting
- There are few things to obstruct views, thus promoting a sense of safety and well being for geese
- Park visitors are feeding the geese

## **PROGRAM OF REQUIREMENTS**

### **Community Outreach During Programming Phase**

A workshop was held with the community on May 20, 2009 to obtain public input and ideas for the renovation of the park. Existing park conditions were presented, and participants were subsequently divided into small groups. The groups were asked to identify what they like about the existing park, what they would like to change about the park, and what new elements should be added to the park. The community responses for what they liked about the existing park emphasized the park layout and uniqueness, the playground area, and the water feature and wildlife. The responses for what they would like to change about the park included addressing the issues associated with nuisance geese, expanding the opportunities for children using the playground, and improving the function of the water feature. When asked what new element should be added to the park, responses included new kinds of playground equipment and play opportunities, equipment to improve water quality, landscaping and sustainable elements.

Many participants stated that they liked the existing site in many ways but simply wanted it to be improved. A complete record of the meeting minutes is included in Appendix D of the facility plan report.

### **Program Elements**

The following program of requirements was developed for the park based on input received from the community and meetings with the staff team.

- Multi-age playground that is expanded and improved in quality from the current playground and is separated from the road and other active park uses
- Water feature that is low maintenance, can be operated on site, and is designed to reduce the quantity of geese on site
- Basketball half-court, designed to accommodate multiple sports
- Gazebo, arbor or other type of shade structure for seating and relaxation
- Upgraded furnishings including seating, bicycle racks, trash receptacles, drinking fountain, picnic and/or game tables
- Information kiosk
- Interpretive signage for public education about pond and wildlife
- Accessible connections into the park from the parking lot and bus stop
- Loop walkways within the park, possibly including boardwalks and bridges to span the water feature
- Fitness stations along walkways

- Vehicle access for park maintenance
- Attractive, safe lighting
- Naturalized, attractive, low maintenance plantings
- Incorporation of artistic elements in the park
- Stormwater management and improvements to off-site drainage system
- Maximum use of sustainable design materials and construction practices
- Incorporation of Crime Prevention through Environmental Design (CPTED) principles

## FACILITY PLAN DESIGN STUDY

### Alternative Plans Considered

Three initial alternative plans were developed based on the feedback from the first public meeting. Each option proposed a significantly different water feature with respect to form and size. Each plan also provided different ideas for the play area, general site layout and supporting elements. The following table summarizes features included in the alternatives.

Option One	Option Two	Option Three
Open, two level pond with weir, similar in size to existing but with improved pond function and emergent plantings	Urban stream water feature, with upper and lower pools and planted areas	Small, interactive fountain and plaza
Slight increase in size of playground	Largest playground with resilient rubber surfacing	Slightly expanded playground
Small lawn area	Small lawn area	Large irregularly shaped open, flexible lawn area
Skate plaza		Skate plaza
Retains basketball court	Eliminates basketball court	Eliminates basketball court
Loop walkways similar to existing configuration	Curved loop walkway configuration	Loop walkways
		Picnic Area
Pergola	Pergola with overlook terrace/stage area	Pergola/Trellis
Gazebo	Gazebo and terrace	
Boardwalk across pond	Boardwalk across stream	

### Community Outreach During Design Phase

The second public meeting was held with the community on October 7, 2009 to present design alternatives for public feedback. Generally, there was little support for Option Three and positive support for Options One and Two. A large contingent of citizens with young children supported Option Two, because it had the largest playground which they expressed as their primary interest. A comparably large contingent of older residents voiced support for Option One, because it preserved many mature trees and retained a relatively large pond water feature. These respondents stressed the naturalistic and unique features as their primary interest, and they preferred a water feature with reflective qualities over the Option Two stream configuration.

The overall consensus was to retain the character of the existing park and improve it. A summary of key comments is outlined below.

- Expand and improve the playground at the north end of the park (playground shown in Option Two is preferred.)
- Retain as much open water as possible (pond with reflective quality shown in Option One is preferred.)
- Address safety issues for small children by separating children from Arcola Avenue and maintaining open views for parents to survey their children in the larger play space.
- Retain existing trees and planted areas as much as possible.
- Do not include a skate spot (basketball is an acceptable activity for teens.) Skate park could be built at Wheaton Regional Park.
- Large lawn area in Option Three is not desirable, as people may use it as a dog park.

A third public meeting was held on January 12, 2011 to present Option Four, which was a plan that refined and combined features from Options One and Two. The design team presentation included an overview of the entire project history, including public feedback and how it was incorporated into the design process. The plan expanded the playground, while reducing the water feature area. Elements were adjusted to better promote safety and security around the play and pond features.

Feedback was generally positive. Several individuals voiced appreciation for their belief that the community as a whole had been heard during the process and that the plan reflected a good balance of the most widely expressed perspectives. There was a request to expand the playground further and refine the types of play equipment shown. There was a request to confirm with experts that the methods proposed in the plan to discourage waterfowl will work. There were comments regarding accessibility to confirm that park access from the intersection of Lamberton Drive and Arcola Avenue would be improved. There was also interest expressed in volunteering to help keep the park clean and a question regarding how the park would continue to be maintained until it is redeveloped. The community also requested that they be included in determining priorities, if the plan were proposed to be phased due to budget considerations.

The Mid-County Citizens Advisory Board subsequently wrote a letter on March 15, 2011, supporting the general direction of the design. They offered the following comments on Option Four: consider a larger expansion of the playground; develop a plan to maintain the pond's filter mechanisms; develop a maintenance plan for cleaning the large quantity of trash that accumulates in the park on a regular basis; and examine the environmental and health implications of using rubber surfacing for the playground. They also suggested organizing periodic community clean-up events to help maintain the park.

After the third meeting, the plan was refined to expand the playground further by removing a small number of additional evergreen trees. Play equipment was revised to increase the quantities of the most popular elements currently in use, including swings and monkey bars. A complete record of meeting minutes for both public meetings is included in Appendix D of the facility plan report, and public correspondence is included in Appendix C of the report.

## **Additional Coordination and Regulatory Approvals**

### Montgomery County Department of Transportation (MC-DOT), Division of Highway Services

Staff met with Field Operations staff from MC-DOT and a maintenance contractor to perform short term maintenance to clear the clogged storm drainage line in September 2010. In a follow up meeting held on February 23, 2011 and in subsequent written correspondence with the Chief of Field Operations, MC-DOT agreed to take maintenance responsibility of the storm drain system from the inlets on Arcola Avenue through the park and shopping center to the point of outfall, provided the park project rebuilds and upgrades the drainage line to county standards and the shopping center grants a maintenance easement.

### Kemp Mill Center, Della Ratta, Inc.

Staff held multiple meetings throughout the course of the project with Della Ratta, Inc., owner of the Kemp Mill Center. The meetings were held to address ongoing maintenance issues, as well as coordinate the proposed plans for the park. In a meeting held on August 3, 2011, Della Ratta, Inc. supported the recommended plan for the park and agreed to allow the Department of Parks to upgrade the existing storm drain line through shopping center property and to grant a ten-foot wide maintenance easement to MC-DOT for future maintenance of the line. Della Ratta, Inc. also agreed to the staff proposal to narrow the four lane access driveway by three feet to allow widening of the existing walkway on the north side of Lambertson Drive to meet requirements of the Americans with Disabilities Act and avoid affecting critical root zones of existing mature trees in the park. Della Ratta, Inc. requested that the Department of Parks place no parking signs on the south side of the road to discourage parking that occurs in this location, which narrows the driveway width and obstructs drivers' views of pedestrians who cross the driveway to the park and shopping center.

### Yeshiva of Greater Washington

At the beginning of the project, staff met with the Executive Director of Yeshiva of Greater Washington to discuss the feasibility of providing a trail link from Kemp Mill Urban Park and the school to the Sligo Creek Hiker-Biker Trail through undeveloped school property north of the shopping center. Concerns were expressed by the school about the loss of land and security. The proposed idea was rejected with no further analysis.

### The Humane Society of the United States

Natural Resources Stewardship staff contacted the Director of Urban Wildlife Education and Research at the U.S. Humane Society to review and comment on the recommended plan with respect to discouraging and reducing numbers of Canada geese in the park. On February 25, 2011, the Humane Society and natural resources staff provided the following suggestions to reduce the overall attractiveness of the pond to geese. A number of documented case studies in North America were also identified to support these recommendations, and these measures have been incorporated in the recommended facility plan.

- Provide buffers around the water with use of tall vegetation or large boulders to create a vertical barrier.
- Consider creating preferred access points for geese to haul out of the water that are removed from the playground and other high use areas of the park, such as the peninsula shown on the plan.
- Provide boulders in the narrow weir channels to make swimming between ponds more difficult.
- Reduce the water surface volume. Three small ponds will reduce the sense of security on the water compared with a single body of water and make it more difficult to land.

- Put human foot traffic on elevated decks that waterfowl can't readily hop up on from the water to reduce droppings on walking surfaces.
- Avoid creating sheltered nesting sites under the elevated walkways by using open decking material.
- Do not include islands.
- Reduce lawn areas to reduce the amount of available food. Any other types of plants, such as groundcovers or shrubs, would make the site less attractive.
- Plant more shrubs around the waters' edge to close the sight lines for geese, while keeping sight lines open for human security.
- Make the pond edge adjacent to the playground the least attractive area for geese with methods previously mentioned, and eliminate all lawn in this area.
- Consider strategic placement of tall trees adjacent to pond to reduce ease of landing and taking off from the pond.
- Provide public education and signage to discourage feeding the waterfowl.

#### Montgomery County Department of Permitting Services

The stormwater management concept plan for the park was approved on June 20, 2011 (File #239875.)

#### M-NCPPC Department of Planning

A Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) was approved for the park on May 16, 2011 (File #420111340.) A preliminary forest conservation plan was submitted in June 2011 and a recommendation will be presented to the Montgomery County Planning Board by Department of Planning staff with the park facility plan.

#### Maryland Department of the Environment (MDE)

The park pond is identified on the National Wetland Inventory Map for Montgomery County, Maryland as a palustrine, unconsolidated bottom, permanently flooded, excavated (PUBHx) wetland. A Nontidal Pre-Application (#AI 134649) was submitted to MDE for assessment of the jurisdictional relevancy of the pond. On June 24, 2011, MDE responded by letter that this pond is non-tidal and would not be regulated by the state; however a U.S. Army Corps of Engineers authorization may be required.

#### U.S. Army Corps of Engineers (USACE)

Straughan Environmental contacted the USACE to clarify any regulatory processes that may apply to the renovation of the pond. The USACE requested photos and a description of how the water feature overflow connects with the wooded area at the west boundary of the shopping center and indicated if there is a clear hydrologic connection between the storm drain outfall and Sligo Creek, the project would be required to go through the Federal review process. Straughan Environmental compiled the information and determined that there is an apparent hydrologic connection between the storm drain outfall and Sligo Creek via channels and a wetland. As a result, it is likely that the USACE will need to review the project and make a determination whether the water feature is considered to be waters of the U.S. This coordination will be pursued further during the detailed design stage of the project. Staff and consultants do not believe this water feature will be considered jurisdictional, as it is a man-made feature in an upland area similar to a stormwater management facility.

#### Arts and Humanities Council of Montgomery County (AHCMC)

On May 10, 2011, staff presented the project to the Public Arts Trust Steering Committee of the AHCMC as a potential candidate for public art. Given the parks' central location in the community, high level of use and high public visibility, the Public Arts Trust supports the inclusion of public art in this project.

## Recommended Plan

Option Four was refined based on all comments received into a Recommended Facility Plan. The plan specifically increased the size of the playground from Option Four and refined the pond and goose reduction strategies. The recommended plan enhances the forms of the existing park with a more sinuous and self-sufficient water feature that provides improved opportunities to interact safely with the water's edge, and it provides a reorganized and expanded play experience. The plan also offers improved accessibility, circulation and interpretive components. The recommended plan includes the following features:

- A large, approximately 7,000 square foot multi-age playground with resilient rubber surfacing, seating for parental supervision and four-foot high ornamental perimeter fencing. The playground is relocated further from traffic on Arcola Avenue.
- A small, fenced multi-purpose court located near the playground that can be configured for basketball, tennis or soccer for children and teens.
- A clay-lined pond with three irregularly shaped pools, two weirs, with forty percent reduction in the water surface area of the existing water feature. The pond will include an on-site source of water, mechanical and utility system to reduce maintenance, and design features to improve biological function. The entire water perimeter will have a twelve-foot wide shallow shelf with aquatic vegetation, and depths will gradually increase from one-foot depth on the shelf to 4-5 feet at the deepest point. There will be continuous barriers along the entire water's edge to meet code requirements, either a 3-1/2 foot height guardrail with raised decking or areas with shrub plantings and boulders. Goose reduction strategies are also incorporated into the design.
- Three overlook areas at the pond edge with decking and continuous guardrail. Interpretive signage would be incorporated into the railing to educate users about the sustainable features of the pond and site and provide information about the wildlife.
- Trellis structure with solar collection panels to power a small number of path lights, located at the lower pond where it is removed from traffic in an intimate setting with sounds of the nearby waterfall.
- Distinct seating areas for small and larger groups with benches at a range of heights to allow for users of different ages and mobility levels, including tables for picnicking.
- Upgraded furnishings and amenities including benches, bicycle racks, trash receptacles, drinking fountain, information kiosks, and public art.
- Accessible connections into the park with improved circulation patterns within the park, including accessible loop walkways. Walkways range in width from 6-10 feet, with the widest to allow for maintenance vehicle access. Fitness stations are provided along some walkways.
- Naturalized, attractive, low maintenance plantings, including protection and retention of existing large trees. Elevated walkways are provided in areas near the playground to retain large trees.
- Security level LED lighting with motion sensors to allow safe passage through the park at night.

- Re-striping of Lambertson Drive to narrow the four lane access driveway by three feet to allow widening of the existing three-foot wide walkway to six feet on the north side of Lambertson Drive to meet requirements of the Americans with Disabilities Act and avoid affecting critical root zones of existing mature trees in the park. New curbs will be installed on the north side of the driveway and a new access ramp will be provided at the intersection of Lambertson Drive and Arcola Avenue.
- Stormwater management facilities, including three bioretention areas and a poured in place pervious playground surface that will provide the required storage volume underneath it. Remaining areas of the site will run off into the water feature and discharge through the outfall structure to the west. Improvements are also proposed to the off-site drainage system to meet county standards.
- Maximum use of sustainable design materials and construction practices to allow future project certification in the Sustainable Sites Initiative (SITES) program.



*Recommended Facility Plan*

## COSTS AND PHASING

### Construction Costs

A summary of construction costs is outlined in the table below. A detailed cost estimate is included in Appendix A of the facility plan report.

<b>Item</b>	<b>Subtotal</b>
Site Preparation and Demolition	\$246,900
Sediment and Erosion Control	\$171,300
Earthwork	\$45,800
Stormwater Management	\$156,800
Off-site Storm Drain Replacement	\$205,000
Utilities (water, electric service)	\$104,100
Vehicular Pavement	\$23,500
Pedestrian Hardscape (paving, walls, boardwalk, bridge, railings, etc.)	\$934,200
Recreation Facilities (playground, court, fitness equipment)	\$523,800
Pond Construction (includes 2 years maintenance)	\$362,300
Structures (trellis)	\$56,600
Site Amenities (signage, lighting, furnishings, shelter, public art)	\$442,000
Landscaping (includes 2 years maintenance for plant establishment)	\$290,700
As Built Drawings	\$35,000
<b>Construction Subtotal</b>	<b>\$3,598,000</b>
Construction Contingency (30% of Construction Subtotal)	\$1,079,400
<b>Construction Total (Subtotal plus Contingency)</b>	<b>\$4,677,400</b>
Design Contract with Contingency (15% of Construction Total)	\$701,600
Staff Chargebacks for Design (20% of Design Contract)	\$140,300
Construction Management & Inspections (4% of Construction Total)	\$187,100
<b>TOTAL PROJECT COST</b>	<b>\$5,706,400</b>

### Operating Budget Impact

Staff conducted an analysis of operating costs to compare the renovated park with the existing park. The general conclusion is that the renovated park will not create additional operating budget impact. The new pond system, while more complicated mechanically, will significantly lower maintenance costs when compared with the maintenance required for the existing pond system. Permanent improvements to the off-site storm drainage system will ensure the conveyance of water through the site and eliminate future emergency repairs. In addition, the rubber playground surfacing, more efficient site lighting and the durable materials proposed in the renovated plan will reduce operating costs for those components and offset increased operating costs required to maintain new planted areas around the pond edges. A detailed comparison of estimated pond operating costs is included in the facility plan report. The maintenance required for the new pond system is estimated to be approximately 35-40 percent less than the existing pond system.

While the recommended plan would not increase operating budget impact, it should be noted that the operating budgets for park maintenance have not kept up with existing and new park

facilities over the years, and this park presents unusual challenges for operations staff. The staff team met with senior management and the Director of the Mid-County Regional Services Center in November 2010 for guidance on whether the recommended plan should include a pond. Given community support for the water feature, the fact that the existing park includes a similar feature, and the new design would reduce pond maintenance requirements, staff was given direction to proceed with a recommendation for a pond, provided it is designed as sustainably as possible and that the overall park design reduces operational requirements as much as possible. In order to assist with the initial maintenance and establishment of the park, the cost estimate for the park renovation includes two years of landscape maintenance for plant establishment and two years of pond maintenance by an outside contractor. A maintenance and operations manual, including a video to demonstrate pond maintenance techniques, will also be delivered with the new park. As an interim measure to control geese, natural resources staff has been oiling goose eggs in nearby park nesting areas in order to help control the local population.

Staff met with the Montgomery Parks Foundation and Department of Parks partnerships and donations staff to discuss the special operational needs of this park and potential opportunities for outside assistance with park maintenance. The Parks Foundation has been recently established and is not in a position to provide assistance with this project in the short term. It was suggested that a friends group within the community might be established to provide volunteer assistance for some park maintenance activities.

## **CONCLUSION**

Staff recommends approval of the Facility Plan and associated cost estimate. The proposed plan enhances the existing park elements, while retaining the character and spirit of the original award-winning park. The program is balanced to meet the needs of all park users, and greatly improves the appearance and function of the existing park. This park reflects the collective vision of the Kemp Mill community for the future and merits special attention as a highly visible and important focal point for the Kemp Mill Town Center.

## **Attachments**

Attachment A: Facility Plan Report