

Rolling Hills Park

Master Site Development Plan



Letter Report
February 2, 2018



Rolling Hills Park Master Site Development Plan



Park Master Plan

Design Process

The design process involved review of background documents, including the 2016 Park and Recreation Comprehensive Plan and its recommendations for the Township. Document and mapping reviews also included an investigation of the properties geology, soils, vegetation, slopes, utilities, zoning and land use, watercourse, wetlands, and a PNDI report.

Several site field reviews were conducted by the design team, including a kick off meeting and country club house tour attended by the project steering committee and township staff.

Peters Township provided 'Guiding Principles' for the plan and a project steering committee to lead the design process.

Early in the project, it was established that the Guiding Principles, continued coordination with the School District, and an understanding the West Penn Power easement requirements were important to the project's success.

The master plan process utilized the below public engagement sessions to develop a scope for the parks design, recreation and leisure facilities and programs, and priority projects and budgets.

Public Engagement

- 4 Steering Committee Meetings
- 4 Staff Meetings
- 14 Key Person Interviews
- 2 Public Meetings
- 4 Organization Meetings, including a Benchmark Tour
- Web Support and Progress Reports



2016 Park and Recreation Comprehensive Plan Findings:

Pg 38: Community Recreation Questionnaire

“Residents are most often attracted to local parks by their trails, sports fields, water features, programs, and playgrounds.”

“The top five facilities respondents indicate are needed:

1. Outdoor swimming pool
2. Indoor swimming pool
3. Sledding/tubing hills
4. Outdoor basketball courts
5. Protected natural areas

“Respondents suggested that the least needed facilities are softball, baseball, and football fields; skateboard facilities, pickle-ball, tennis, and volleyball courts; equestrian trails, disc golf course, and horseshoe pits.”

“Existing facilities that need the most improvements were shown as picnic shelters and playgrounds.”

Pg 40: Common Themes among Public Input Venues

“The Study Committee and the Consultant worked together to identify common themes that occurred in multiple venues of public participation.”

“The Following Items were Identified:

- Demand for a community swimming pool
- Need to upgrade the Community Center – facilities, programming, operations
- Need for additional park land and preserved open space
- High level of care for all parks – preserve, sustain, upgrade
- Promote bicycle and pedestrian connectivity and trails
- Preservation of Peters Lake Park
- Top quality parks and recreation system
- Need for certain new recreational facilities

Public & Stakeholder Outreach

At the May Kick-Off Meeting the design team presented a Visioning PowerPoint of ‘What the Park Could Be’. The vision used recommendations from the Comprehensive Plan and the Guiding Principles. The vision presentation was followed by a Priority Park Facility Exercise where participants voted, with a limited number of stickers, for what they want in the park. The priority project exercise yielded the following:

1. Leisure Pool /Municipal Outdoor Pool; 12 votes
2. Tennis Center; 12 votes
3. Bike Trails and Connection to Arrowhead Trail; 11 votes
4. Cross Country Ski and Sledding Areas with Warming Hut; 10 votes
5. Community Conference Center; 8 votes
6. Competitive Swimming (Indoor) Pool; 8 votes
7. Nature Play Area; 8 votes
8. Water Playgrounds / Outdoor Spray Park; 8 votes
9. Bocce Courts; 7 votes
10. Dek Hockey; 7 votes
11. Dog Park; 7 votes
12. Open Fields and Meadows / Naturalized Wooded Areas; 7 votes
13. Picnic Areas; 7 votes
14. Walking Trails; 7 votes
15. Tot-lot and playground; 6 votes

The park master plan was presented to the public twice during the planning process; the final meeting was a public hearing attended by over 100 residents. The plan was received positively and several attendees asked when construction would be started.

Top -12 Facilities the public would like to see offered in Rolling Hills Park

<ol style="list-style-type: none"> 1. Water Playgrounds / Outdoor Spray Park 2. Bike Trails and Connection to Arrowhead Trail 3. Picnic Areas 4. Leisure / Municipal Outdoor Pool 5. Walking / Hiking Trails 6. Multi-Purpose Aquatic Center (indoor) 		
		<ol style="list-style-type: none"> 7. Tennis Center 8. Basketball Courts 9. Paddle Ball Courts 10. Open Fields / Meadows 11. Pickle Ball Courts 12. Cross Country Skiing 

Park Design

The park design is influenced by the school district’s plan to build a new high school and the township’s desire to construct a local road through the site to serve the school, the park, and to modify traffic flow accessing East McMurray Road from Center Church Road.

The guiding principles for the park project are shown below. This park is to provide complimentary recreation, leisure, and nature programs; and facilities to minimize duplication and enhance what the township already has. The site topography, the project guiding principles, and direction from the project committee helped to develop the plan.

Guiding Principles

1. The park will incorporate recreational facilities not found in the other park facilities
2. The park shall include picnic facilities
3. If feasible, the Clubhouse shall be retained as a community/conference center
4. The park will incorporate a community aquatics facility
5. Consideration will be given to moving other Municipal facilities to this site including the Peters Township Tennis Center
6. Access to Arrowhead Trail as well as a walking trail contained within the site will be incorporated into the design
7. Shared access for the future school site and the park along East McMurray Road and Center Church Road will be incorporated into the design
8. The Township will cooperatively work with the School District, so as to make best use of the property

School District's High School Project

Mackin's Landscape Architects met with the school district four times during the design process to coordinate projects and the layout of the municipal Connector Road, property lines, and driveway locations along the Connector Road.

The park design coordinates with the new high school by providing tennis and racquet courts near the school property and connecting the sites with an overhead pedestrian bridge. Students and faculty will not have to cross the road to access the park.

Additionally, the park proposes to provide a stormwater management facility in the northern valley to accommodate half of the new connector road, and anticipates using some of the excess earth from the school project for embankment to build the Park Loop Road, and/or the Nature Center driveway.

Entrance Road Design

Mackin met with the township and their traffic engineer several times during the process to review and discuss the new driveway entrance along East McMurray Road. According to the traffic engineer, the park design will not create a need for a new driveway design or a traffic signal. The school project, however, will increase traffic volumes during peak times along the state route and along Center Church Road. The new entrance road, or connector road, will require new tree plantings along the park buffer yard since the design creates large cuts and exposes the hillside slope.

Utilities

New underground utilities are proposed for the park, including a water service line for fire protection and potable water, and electric, gas, and Wi-Fi for the Park Lodge, Tennis Center, Aquatic Center, Nature Center and Picnic Pavilions. A new sanitary sewer is proposed to be extended from East McMurray Road, along the new Connector Road, to the top of the ridge to serve the Lodge, Tennis Center, Maintenance building, and Aquatic Center. The Nature Center, in the North Valley, proposes to use drop pits, or a compost system toilet since the valley development would be costly to either pump or build a gravity flow system to Brush Run.

Roadway & Driveways

The park design follows the townships ordinance for municipal roadway design criteria. The Park Loop Road, at 3,334 LF, follows the Connector Road criteria. The Nature Center Driveway follows Local Road criteria and the Tennis Center and Lodge are considered driveways.

Earthwork for the Park Loop Road and the Nature Center Driveway construction is estimated at 45,000 CY; of which 6,000 CY is proposed to be borrowed from the school district project for placement at the Nature Center Driveway and intersection with the Park Loop Road.

Park Facilities & Programs

The plan was created to best fit the program, park facilities, appropriate sized building pads, and park infrastructure onto the land all while conserving earthwork, and preserving trees, wetlands and watercourses. The design began by studying the landscape and creating PLACES for people to enjoy the park.

Places for Walking, Hiking, & Biking



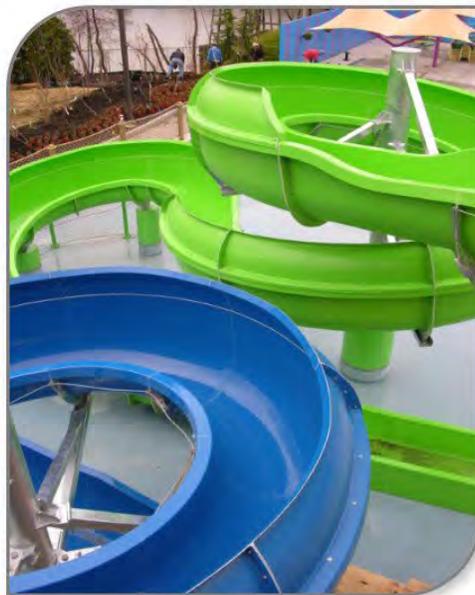
Places for Learning & Playing



Places for Year-round Activities & Events



Places for Water Play, Instruction, & Exercise



Places to Relax, Rest, & Enjoy



The townships park and recreation department, local tennis professional, the township maintenance staff were interviewed. Their recommendations were included in the design.

Maintenance and Operations Staff

- Housing equipment at this park will be very beneficial
 - Facilities to include:
 - Larger garage doors, at least one 12x14
 - Fenced and paved surfaces with material bins
- Equipment upgrades and staff expansion to facilitate additional parks and maintenance needs
- Staff is pleased with park layout and the variety of facilities
 - Would like to see quality signage in park, disc golf, self-guided nature trails, and “QR” fitness course

Steve Happe-Tennis Pro Coordination

- Indoor Facility
 - Permanent building similar to Glen Creek Tennis facility in South Park (No Bubble Structure)
 - Design layout- visitors enter at registration desk
 - Pro Shop, Lobby, Kitchen, and Locker Rooms
 - 6 hard surface courts with a centralized viewing area
 - 4 tennis pro offices
- Outdoor Facility
 - 5 hard surface tennis courts for high school use
 - 2 clay tennis courts for seniors and people with lower body issues/rehabilitation
 - 4 pickleball courts
 - 4 platform tennis courts with warming hut would allow for league play

Maintenance and Operation Staff & Tennis Pro Coordination

Park and Recreation Department

- Offer new programming to residents- including all age groups and abilities- age deficient, family focused and special needs
- Move some existing programs to Rolling Hills Park- summer camps, racquet sports, and the Community Day and Touch-a-Truck events.
- Offer educational programs, environmental programs and specialty programs
 - facilities to support programming include:
 - Paved roadway for festivals with available electrical access
 - Pavilions with water & grill
 - Playgrounds
 - Nature Center with indoor space (or indoor facility elsewhere in park)
 - Fire pit or fire place at nature area/winter fest area
- Relocation of Tennis Center and, if the Recreation Center is to expand, relocate the skate park
- The aquatic center- offer new programming for entire community and new summer programming opportunities
 - If the aquatic center is to be built later, the department would request a stand-alone spray park to be incorporated in the early phases of design
- Coordinate with School District for future programming
- Staff expansion to facilitate additional programming and meet residents need, including summer help, volunteers, and interns & recreation coordinator (program dependent).

Park and Recreation Department Coordination

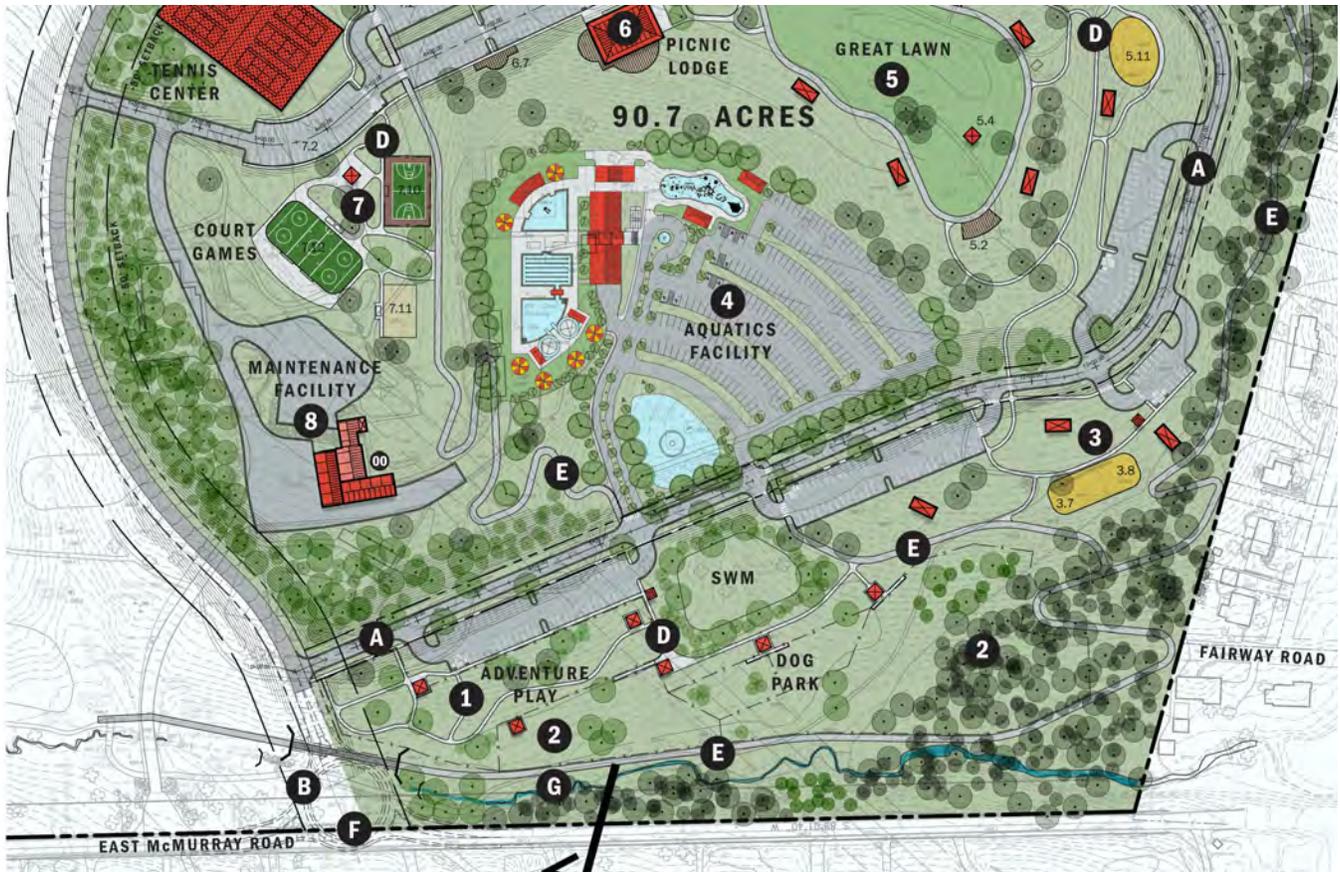
The park and recreation director was interviewed by our CPRP to develop programming for the park and for the aquatic center.

Programming for over 50 activities, including staff requirements, and expense and net revenue projections are listed in the appendix.

Below is an excerpt from the Rolling Hills Park Programming Opportunities List.

ROLLING HILLS PARK PROGRAM OPPORTUNITIES

Facility	Description	Programs	Administered By	Minimum Number Participants	Participant Fee	Gross Revenue	Expenses	Net Revenue
Adventure Playground	1.5 acres, agility apparatus, climbers, slides, ropes, swings, nets, tunnels, etc	Safety training	Staff	6	One day session \$15	\$90	Staff time	\$90
		Basic Team Building	Instructor	6	8 week session \$60	\$360	\$252	\$108
		Timed challenge events	Staff	10	\$5	\$50	Staff time	\$50
Dog Park	2 acres- small dog area, 2- large dog areas (rotate use), shelter for shade and seating, shade trees, apparatuses for animals, sloped lawns and woods	Dog agility training	Instructor	6	6 week session \$130	\$780	\$546	\$234
		Dog shows	Staff	20	\$5	\$100	Staff time	\$100

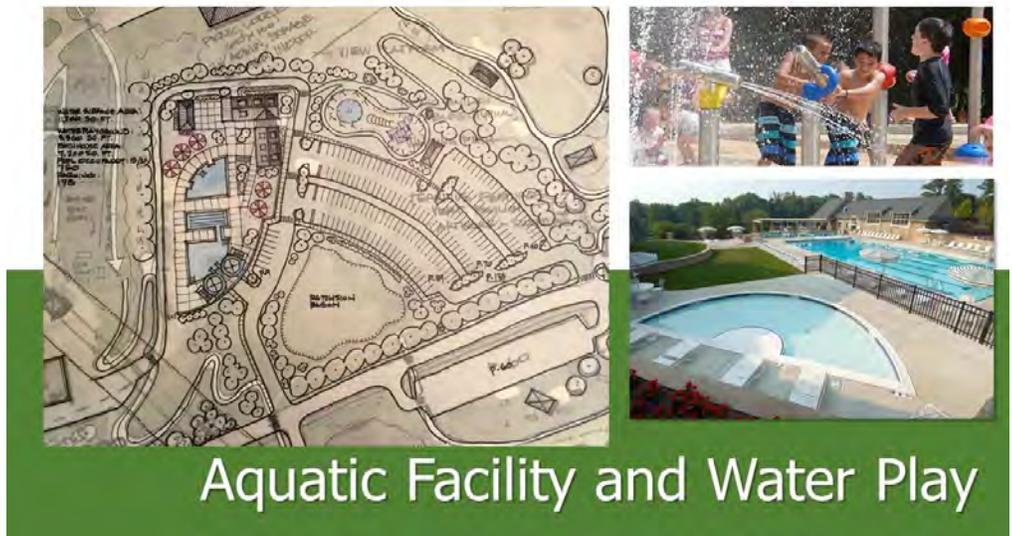


The ninety-acre parcel includes a south slope where the former pool and club house is situated. The access driveway climbs to the hilltop where the electric transmission tower stands. Below the tower are tennis courts and a large green lawn bowl; this is part of the golf course fairway and out of bounds area.

This south facing lawn bowl is planned to house the Aquatic Center since the 10-acre parcel is the warmest side of the ridge and gets the most sun. The aquatic center, building and pool, is planned to be located at the existing tennis court pad; the associated parking, driveways and stormwater basin are planned for the lawn bowl.

The aquatic center provides for two pools, recreation and 4-lane competition/lap pool, concessions, bathhouse, shade pavilions, open lawn space, picnic space and an adjacent spray pad for park use. A detailed aquatic center report can be found in the appendix.

The dog park and adventure play areas are planned as linear, 2-acre sites situated along the valley tributary. Each can be accessed from the Park Loop Road. The dog park can take advantage of the woodland shade or the open lawn space with little need for landscaping.



**PROPOSED OVERALL SITE PLAN
FINAL 4 LANE POOL OPTION**



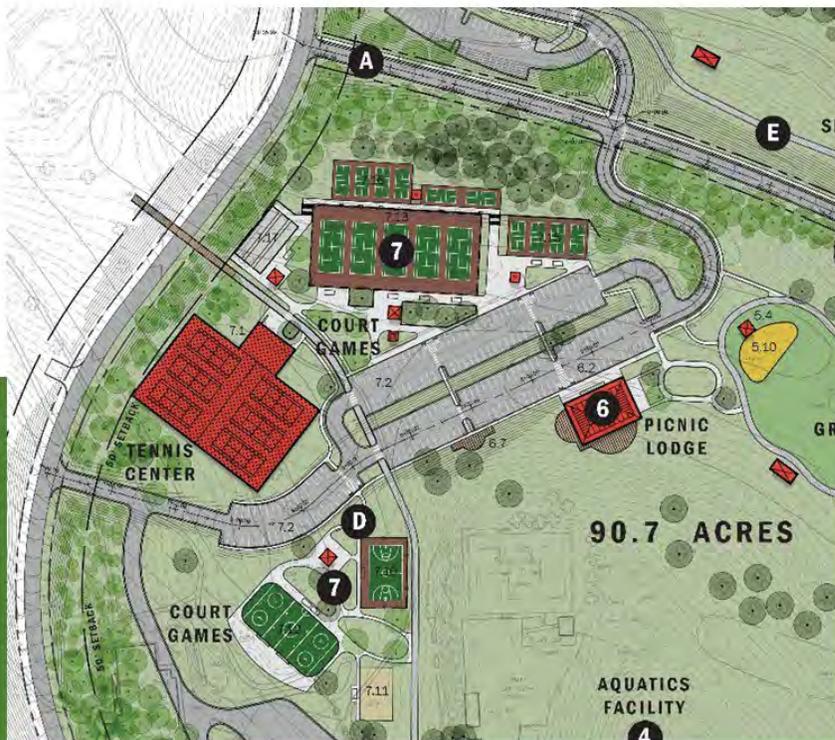
FEATURE LEGEND:

- | | |
|---|---------------------------------------|
| A: MAIN BUILDING | F: WATER SLIDE AND CLIMBING WALL POOL |
| B: CONCESSIONS | G: SPRAY PAD |
| C: RECREATION POOL OPEN SHADE STRUCTURE | H: SPRAY PAD BATH HOUSE |
| D: RECREATION POOL WITH WATER BUCKET | I: FILTER ROOM |
| E: COMPETITION POOL - 4 LANES | |

The picnic space is positioned along the slope at the existing golf tee pads. This layout limits earthwork, preserves large trees and stream impacts, and incorporates the trail system to connect each facility.

The passive activities are placed near the residential borders and facilities that generate more noise are central to the park. The maintenance facility is located the base of the electric transmission tower, which is not a nice location for any other recreation venue. The maintenance garage proposes to renovate

the existing golf starter building and below garages. Additions to the maintenance building would include larger garages and garage doors and using the existing asphalt parking for outdoor storage.



Indoor Courts

- 6 Hard Surface Courts
- Building with Reception, Restrooms, Concessions, Courts, and Storage

Court Plaza

- 3 Shade Shelters
- 2 Warming Huts
- 1 Restroom
- Ped.-Bike Bridge to School

Outdoor Courts

- 5 Tennis Courts
- 4 Pickleball Courts
- 6 Platform Tennis
- 3 Bocce
- Dek Hockey Area- spectator and team bench
- Basketball
- Picnic Space
- Sand Volleyball
- Overlook Patio

Court Games

The tennis center is located along the ridge near the school property. This 7-acre site has the most space for larger building pads, and is easily accessed between school and park. The court layout and large indoor tennis center are positioned to preserve many of the large trees and take advantage of the expansive views from the ridge.

The Park Lodge is also located along this ridge top. The Lodge is planned to be a two-story building overlooking the south valley and aquatic center. Parking is planned to be shared between the Tennis Center, Lodge, and the park open space, called the Great Lawn. The park incorporates 550 spaces into the site, plus 200 additional parking spaces at the Aquatic Center.

The Great Lawn is a 6-acre space for multi-use recreation activities and leisure activities. This lawn can be used for picnics, small and large group gatherings, and just open green space.

The north valley is planned for nature programming and activities, winter play, and hiking and biking trails, with a trail-head and trail connection to the Arrowhead Trail system.

The north valley includes restoration of the stream corridor and the forest edge. Each project will provide benefits to the environment, water quality, habitat, and overall character of the park. The north valley also includes places to play, picnic, ride a bike, walk, and enjoy the outdoors.



The North Valley

Trails are a big part of the park plan. The park includes 1.5 miles of sidewalks that interconnect park facilities, 3.5 miles of shared use trails, and 1.7 miles of mountain bike trails. Every facility is linked together by the trail system. A Peters resident can walk or bike to this park along the Arrowhead Trail, travel miles through the park, go to the school, and return to the trail without crossing a street. The plan incorporates a pedestrian bridge at the ridge top and a tunnel culvert near East McMurray Road to grade separate pedestrians from the new connector road.

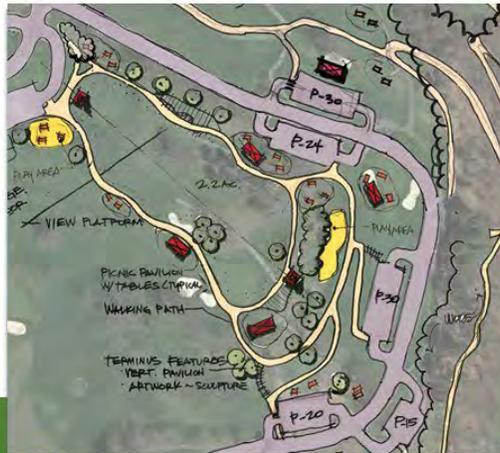


- Mountain Bike Trail (Typ)
- Shared Use Trail-Stone (Typ)
- Shared Use Trail-Asphalt (Typ)
- Sidewalk (Typ)

Trail Legend

- Sidewalk- 1.5 miles of 5' concrete walk
- Shared Use Trail- 2.3 miles of 8' Asphalt
- Shared Use Trail- 1.2 miles of 8' Crushed Stone
- Mountain Bike Trail- 1.75 miles of Single Track Earth

Trails, Sidewalks & Bike Routes



The Great Lawn

- 2.2 Acres
- Pedestrian walking loop (1/4 Mile)
- Pavilions with Picnic Areas
- Play Areas
- Viewing Platforms
- Terminus features at each end of the lawn (vertical spire pavilion or art sculptures)
- Unprogrammed play activities
- Preserve existing large trees
- Disc Golf at perimeter

Parking

- Parking Spaces with adjacent parking at Lodge



The Great Lawn



Nature Center

- Nature Center building for educational classes
- 3 Pavilions with Picnic Areas
- Garden space
- Nature Play (separated toddler play space)
- Stream Rehabilitation
- Storm Water Pond
- Forest Restoration

Biking

- Mountain Biking, Bike Agility Course
- Trailhead for Arrowhead Trail

Winterfest

- Winter pavilion with fireplace
- Sledding slopes
- Ice Skating

Parking

- 112 Parking Spaces



Nature Play Features

Nature Play Biking Winterfest



Bicycle Agility Course



Nature Play

The completed park master site development plan includes park facilities and infrastructure totaling over \$21,000,000. This includes roads, utilities and stormwater controls, an indoor tennis center, an outdoor aquatic center, a two-story picnic lodge, miles of trail, play areas, environmental restoration projects, picnic pavilions, open space, and more. The budget also includes soft costs for design & engineering, permitting, and construction inspection services bringing the build-out total to over \$28,000,000.

The priority park improvements include the following projects:

Recommended Priority Projects:

• Park Loop Road	\$1,140,000
• Utility Infrastructure and SWM	\$250,000- \$650,000
• Walking Trails	\$170,000-\$400,000
• Connection to Arrowhead Trail	\$90,000 plus Trailhead at \$15,000
• Picnic Spaces and Pavilions	\$100,000- \$335,600 @South Valley-\$600,000
• The Great Lawn	\$500,000- 1,135,000
• Outdoor Courts	\$1,600,000 (full build for indoor facility-\$4,103,200)
• Picnic Lodge	\$1,576,200
• Dog Park	\$300,000- \$492,400
• Nature Play	\$150,000- \$331,800

Based on the feedback at the public meetings and response from residents, the township is encouraged to begin final design and permitting for priority projects. Since the school project is beginning soon, the next steps for the township to pursue are below in the Action List:

Action List for Committee:

1. Protect the Park's Topsoil and the Root Zones from Compaction During Construction (and During School Construction)
2. Complete the Connector Road Project
3. Finalize the YMCA Coordination
4. Begin Fund Raising for Priority Projects
5. Begin Design and Engineering for the Park 'Loop' Access Road
6. Begin Design for Park Priority Projects #1, #2, #3...

Project Committee Action List