



HOLLENBACH PARK MASTER PLAN

January 2023

ACKNOWLEDGMENTS

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Upper Pottsgrove Township, Montgomery County, Pennsylvania.

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INTRODUCTION AND PLANNING PROCESS

The following Master Plan shall be used to serve as a new vision for the 25-acre Hollenbach Park, providing a diversity of recreational amenities, located within the heart of Upper Pottsgrove Township. The development ideas, contained within the following chapters of this report, serve as a road map for the municipal government and staff to redevelop a park according to the YR 2020 Open Space Plan and the public input that was collected during the planning process.

Hollenbach Park is a 25-acre swath of land that is located at 137- North Hanover Street. The current park facility contains woodlands of varying states of successional growth, two grass surface soccer fields, a small playground area, a few earthen trails with connections to the Fox Run Trail and two stone surface parking areas.

The documentation of the Hollenbach Park Master Plan planning process was categorized into eight reporting sections as follows:

- Background information studies
- Public participation
- Resource analysis
- Park Concept Plans
- Park Master Plan
- Development Costs
- Management and Maintenance
- Development Phasing

Each of the above sections shall describe in detail the steps that the consulting team had undertaken in the development of the Hollenbach Park Master Plan.



Figure 1: Existing park furniture/ soccer fields



Figure 2: Existing playground



Figure 3: Existing Bridge connection to Mocharnuik Meadows Trail



Figure 4: Opportunity to provide better facilities

COMMUNITY BACKGROUND AND MUNICIPAL PARKS

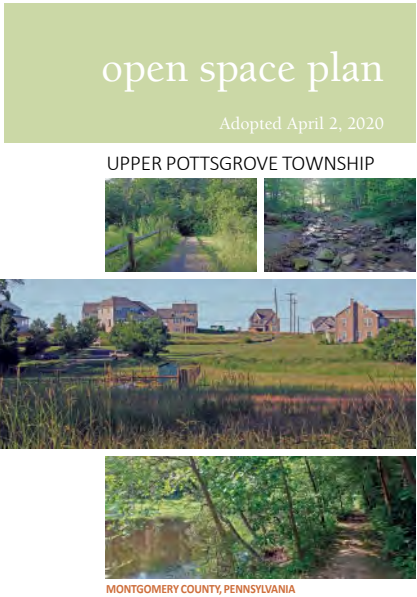
The development of the Open Space Plan update resulted in a wealth of public input that was provided to the Consultant Team for inclusion in the Hollenbach Park Master Plan.

The consultant team utilized the community background data that was established within the recently updated Open Space Plan, adopted April 2, 2020 to develop a list of necessary recreation amenities.

The consultant team also utilized recreation data that was contained within the Tri-County Trails Studies, The Montgomery County Trail Access Awareness and Diversity Plan, the Pottstown Regional Comprehensive Plan (dated 2015) and a list provided by the Pottsgrove School District on March 18, 2021.

A comprehensive study of the municipal park system was unnecessary, due to the availability of the recently updated Open Space Plan. The consultant team identified recreation amenities that were already present within the Community through the use of the current Open Space Plan. The duplication of recreation amenities did not occur, unless the need arose because of the physical distance that exists between recreation facilities, or the need was strong to warrant the duplication of the same recreation amenities within the community. For example, walking trails are a desired recreation amenity that is strongly requested and needed within most, if not all of the parks located within Upper Pottsgrove Township.

The recreation data accumulated from the recently updated Open Space Plan and the documents depicted on the right hand side of this page have been documented and prioritized within the “Design Program”, described in detail on the following page of this report.



Montgomery County

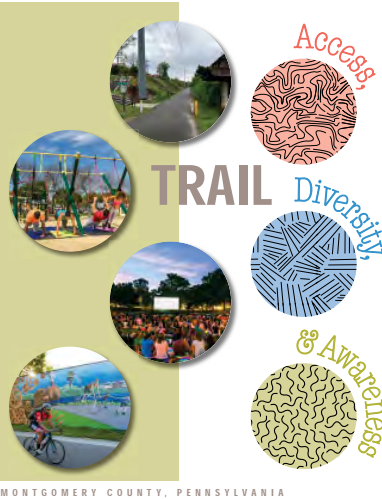


Figure 5-8: Community Background Resources

DESIGN PROGRAM

A summary of collected data from the sources contained on the previous page was consolidated into an overall “Design Program”, prioritizing the recreation items that each of the supplied documents had identified for development at Hollenbach Park and other recreation sites throughout the community. The design program lists all of the recreation amenities that were preferred for inclusion within the Townships park network. The amenities were listed in priority order, based upon the number of times that each amenity was identified in each of the study documents.

Program Elements	OSP	UPOSRB	PSD	MCPC	UPT	TOTAL
Pavilion	✓	✓first aid	✓ w/light	✓2+ fam.	✓	✓✓✓✓✓
Crosswalk connecting to Pottsgrove Middle School	✓	✓	✓		✓	✓✓✓✓✓
Trail connection – kiosk		✓		✓	✓	✓✓✓
Crosswalk connecting to the Fox Run Trail	✓		✓		✓	✓✓✓
Amphitheater	✓			✓enter.	✓	✓✓✓
Disc golf course	✓		✓		✓	✓✓✓
Pickleball courts		✓Ice skate	✓		✓	✓✓✓
Additional trees for shade and screening	✓				✓	✓✓
ADA accessible paths connecting the park's various amenities	✓				✓	✓✓
Dog Park				✓	✓	✓✓
Trail connections to Turnberry		✓	✓			✓✓
Trail connection to Meadow Drive		✓			✓	✓✓
Trail connections to Mocharniuk Meadows		✓	✓			✓✓
Seating for fields (bleachers)				✓	✓	✓✓
Parking lot enhancement			✓drain		✓ Add.	✓✓
Permanent restrooms				✓	✓	✓✓
Trailhead	✓				✓	✓✓
Directional signage	✓				✓	✓✓
Tennis courts	✓					✓
additional jogging / walking trails			✓			✓
Improvement to playground			✓			✓
picnic area			✓			✓
Recreational field surface improvements			✓			✓
Sidewalk access to Mervine Street			✓			✓
Sidewalk access to Meadows's entry			✓			✓
Mocharniuk Meadows maintenance				✓		✓
Loop trail to middle school					✓	✓
Handball court					✓	✓
Playground different ages					✓	✓
Basketball court					✓	✓
Tennis court					✓	✓
Water park					✓	✓
Cat condo area					✓	✓
Animal rescue area					✓	✓
Bird houses					✓	✓
Remote control planes area					✓	✓
Safe Sledding area		✓				✓
Demonstration garden	✓					✓
Exercise stations	✓					✓

OSP: Open Space Plan 2020
 UPT: Upper Pottsgrove Township
 PSD: Pottsgrove School District
 MCPC: Montgomery County Planning Comission
 UPOSRB: Upper Potstgrove Open Space and Recreation Board Meeting

Passive Recreation
Active Recreation
Connections & Access

Figure 9: Design Programming

PUBLIC PARTICIPATION

Public participation is a major factor in the park planning process and has been taken into consideration by the Consulting Team at different stages of the Master Plan process for Hollenbach Park. Several design factors included; review of the public input from past planning documents, 18-months of public Open Space and Recreation Board meetings and input from the Athletic and Community Relations Directors of the Pottstown Area School District. Included below are some of the findings that were revealed to the Consulting Team throughout the early stages of the design process.

Community input from the recently adopted Open Space Plan were utilized in the development of the Park Concept and Master Plans, contained within the later chapters of this report. Listed below are items that the general public felt were important programming and design elements for consideration in the development of Hollenbach Park. Recommendation items are not listed in any order of preference

- Develop a dog park
- Provide seating for fields (bleachers)
- Permanent bathroom facilities are needed
- Include a pavilion large enough for 2+ families.
- Connect to local trails and provide an information kiosk
- Provide an amphitheater for movie/bands

- ADA accessible paths to all amenities are important
- Provide handball/pickleball courts
- Develop a loop trail
- Provide more parking
- Make Mocharniuk Meadows a meadow
- Add more trees
- Add more directional signage
- Provide a Disc Golf Course
- Add a safe cross walk for Fox Hill Trail connection

The close proximity of the public Middle School and High School facilities and the fact that many school students use Hollenbach Park for their recreation needs, the Open Space and Recreation Board felt that it was important to engage the school staff in the master planning process of Hollenbach Park. Listed below are recreation items that the district staff were interested in seeing developed at Hollenbach park.

- Access point from PG Middle School to Hollenbach Park via a cross walk
- Trail connections to the Turnberry Residential Community along the Fox Hill and Mocharniuk Meadows Trails
- Develop additional jogging / walking trails
- Recreational field surface improvements. Drainage, soil, seasonal seeding programs
- Improvement to the playground / picnic area, possibly provide a pavilion with electric utility service

- The addition of some active recreational opportunities, such as pickleball courts and a Disc Golf course along the southern side of the property
- Stormwater drainage solutions or paving of entryway and possibly all parking areas
- Sidewalk access to Mervine Street

The preliminary Master Plan was presented at one of the Open Space & Recreation Board meetings on August 17, 2022. The official meeting minutes are included in the Appendix of this report. Listed below are some of the recreation elements that were discussed at the meeting.

- Some residents had concerns regarding the safety of pedestrians crossing North Hanover Street
- It was suggested that rain gardens be included within planting islands or directly adjacent to the proposed parking areas
- Several residents discussed the desire to include a dog park facility
- Several attendees were in favor of the proposed Disc Golf Course and had expressed interest in fundraising/assisting with construction
- The need for ADA accessible amenities (bleachers/trails) was discussed
- The need for the development of an all inclusive playground area (beyond simply ADA access) was discussed

RESOURCE ANALYSIS

The development of a park master plan is the result of a comprehensive resource analysis. An on-site review of Hollenbach Park by the Consultant Team and the Open Space & Recreation Board was the first critical step in creating a future vision for the park. This chapter of the master plan includes the resource analysis for Hollenbach Park as mentioned below:

- Existing Features Plan
- Site Analysis
- Annex of adjoining residential property
- Traffic study regarding pedestrian crossing of North Hanover Street
- Conclusion & Recommendations

EXISTING FEATURES

The features contained within the existing park facility are listed below and shown on the Existing Features Plan, located on the following page.

- Woodlands in varying states of successional growth are present on the property
 - Mature woodlands in a state of decline are centrally located with the park
 - Young growth woodlands with trees no larger in caliper than 6-inches comprise the southern extents of the wooded area
- Two natural grass soccer/multi-purpose fields exist along the north limits of the property
- A playground area containing a small multi-purpose

play structure, swings and some pedestrian benches

- A few earthen trails (some poorly defined) with connections to the Fox Run Trail are present on the property
- Two stone surface parking areas
- A large swath of open field is present along the southern boundary
- Two large stormwater detention facilities with some sub-surface drainage piping connecting to the basins. The origins of the piping can be traced to a few on-site storm inlets
- A multitude of steep slopes, some wooded and some turf-grass
- Water saturated soils were observed along one trail, centrally located within the wooded portion of the property



Figure 10: Existing Stone Surface Parking Area / Soccer Fields



Figure 11: Existing Stormwater Detention Facility

SOIL LEGEND

SYMBOL	SOIL	SLOPE	DRAINAGE	LANDFORM
BsB	Brecknock channery silt loam	3-8%	Well drained	Hills
BsC	Brecknock channery silt loam	8-15%	Well drained	Hills, ridges
BsD	Brecknock channery silt loam	15-25%	Well drained	Hills, ridges
BvD	Brecknock channery silt loam	8-25%	Well drained	Hills, ridges
LhB	Lehigh silt loam	3-8%	Moderately well drained	Hillside
LhC	Lehigh silt loam	8-15%	Moderately well drained	Hillside
PkD	Penn-Kiwanee channery silt loam	15-25%	Well drained	Hillside
RhB	Reaville silt loam	3-8%	Moderately well drained	Hillside
RhC	Reaville silt loam	8-15%	Moderately well drained	Hillside
UrxD	Urban land-Penn complex	8-25%	Well drained	Hills
UusD	Urban land-Udorthents, shale and sandstone complex	8-25%	Well drained	Hills

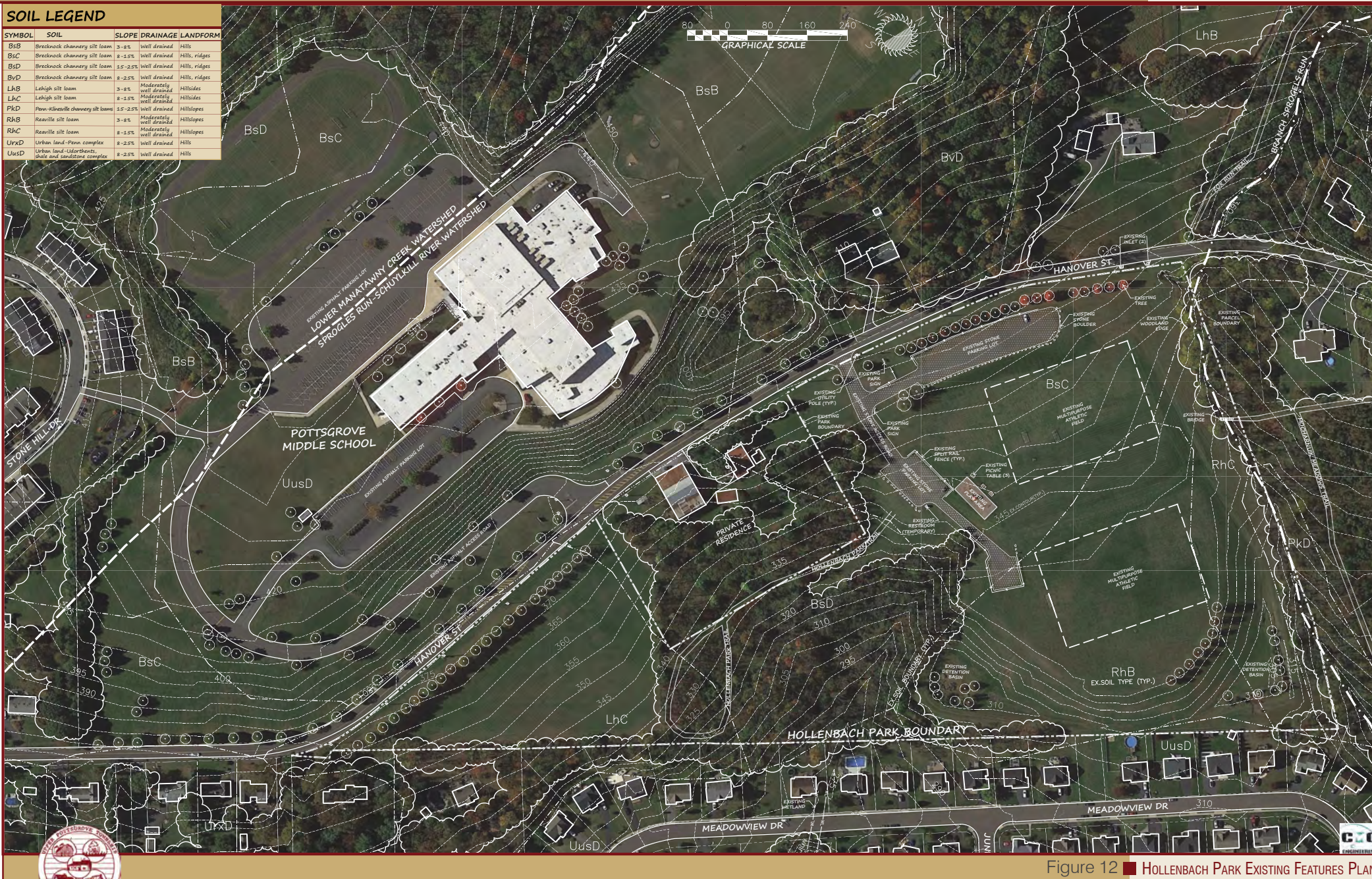


Figure 12 HOLLENBACH PARK EXISTING FEATURES PLAN

SITE ANALYSIS

A Site Analysis was developed by the Consultant Team for the existing park property as a method of determining the development opportunities and constraints associated with the park. Listed below are some of the design considerations, expressed by the Consultant Team (site analysis map is illustrated on the next page of this report)

- The park is naturally divided into the following three main development areas
 - Active recreation area where the existing soccer fields, playground and parking areas are located. This area is located within the northern portion of the site
 - Passive recreation area where a large mown lawn area exists, This area is located within the southern portion of the site
 - Ecological preservation area where woodlands along with some wet soils and steeper slopes exist, this area is centrally located within the park
- Potential for connection to the existing Fox Run Trail, located along the northern boundary of the property
- Safe pedestrian trail connections across North Hanover Street at multiple locations with a trail connection on the Pottsgrove Middle School Property
- Trail connections to the Turnberry Residential

Community, which adjoins the park property along the eastern property line

- Opportunity to exploit the beautiful long-distance views that are present on the property due to its higher vertical elevation in relation to the surrounding community
- The potential to annex some or all of the residential property that is currently surrounded by park land
- The ability to develop a loop trail throughout the various recreation areas, described above
- The need for improved parking

ANNEX OF ADJOINING RESIDENTIAL PROPERTY

During the community gathering and site analysis phases of this master plan project, it was determined that there was a strong need for additional parkland. The additional land was needed to incorporate many of the suggested recreation amenities identified within the preceding report chapters. Approximately 4-acres of land is currently privately held and located along the western border of the park. The Open Space & Recreation Board negotiated with the adjoining landowner, managing to secure an additional 1.4-acres of land for use in park development. An exhibit, outlining the annexed parcel of land, is shown on this page. The additional 1.4 acres of land becomes an important component in the development of the Disc Golf Course, described later in the report.



Figure 13: Park Land Addition Exhibit

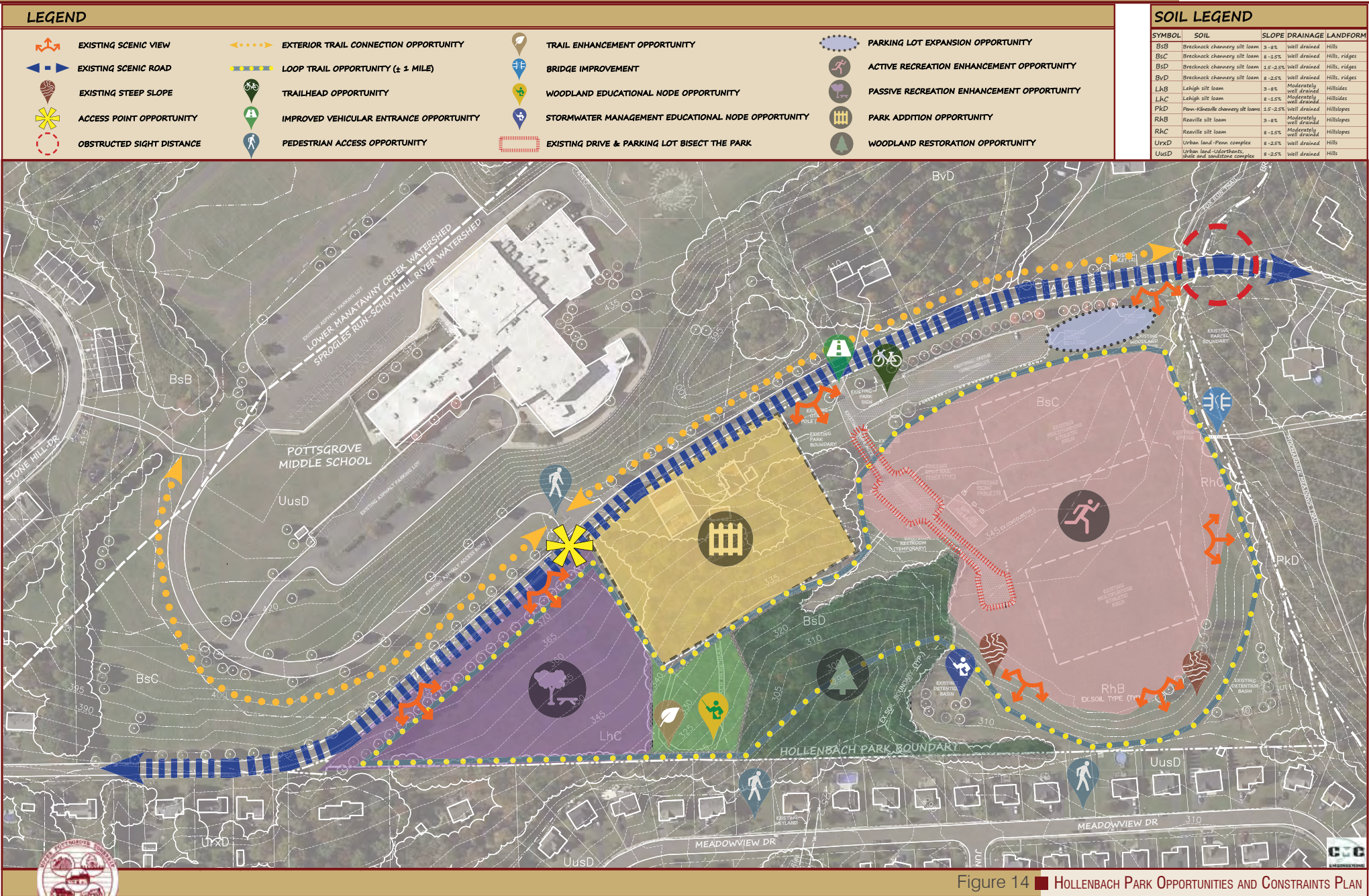


Figure 14 ■ HOLLENBACH PARK OPPORTUNITIES AND CONSTRAINTS PLAN

TRAFFIC STUDY OF NORTH HANOVER STREET

Because of the strong desire by the elected officials, municipal staff and general public to provide safe walking access across North Hanover Street at the Fox Run Trail Crossing, The Open Space & Recreation Board decided to engage the services of a traffic engineer. The traffic engineer was tasked with determining the feasibility of safely crossing North Hanover Street and to recommend improvements that would ensure the public's safety. The crossing was deemed to be safe and the following suggested improvements were identified by the traffic engineer:

- Since N. Hanover Street is a local Street, the township can establish the crosswalk by marking it and increasing the conspicuity of the crosswalk by using more prominent crosswalk markings and adding traffic control devices
- The Township should consider the following traffic control devices for the crosswalk:
 - Mark the crosswalks with a high visibility style marking, PennDOT Type C (blocks, refer to PennDOT Pub 111 for details)
 - Pedestrian warning signs should be added to each crossing. This would include the pedestrian warning sign (W11-2) supplemented with the diagonal downward pointing arrow plaque (W16-7p). The signs should be fluorescent yellow green and installed per

PennDOT standards on the right side of each approach at the crosswalk location

- The Township can consider adding the channel post strip for emphasis (optional treatment)
- The Township can also “double up” the signs—providing a sign on the right and left of each approach
- The Township can also provide advance pedestrian warning signs in advance of the crosswalk. This would include the pedestrian crossing sign (W11-2) supplemented with the ahead plaque (W16-9p) mounted on the right side at least 100 feet (Per MUTCD Table 2C-4) in advance of the crossing. These signs can also be doubled up on both sides of the road (optional) and include the channel post strip. These signs can also be supplemented with “ped xing” pavement markings
- Sign installation standards are contained in PennDOT Publication 111 and the MUTCD. These standards must be followed for appropriate sign installation, heights, offsets, and other details. Since this is a proposed walking trail, the W11-2 pedestrian sign is appropriate. If the trail will be multi-purpose and include bicycles and other modes, the Township should use the trail crossing sign (W11-15)

CONCLUSION AND RECOMMENDATIONS

Upon reviewing the data collected during the community and resource analysis phase of the Master Plan Process, the Open Space and Recreation Board tasked the Consultant Team to consider all of the recreation amenities that were listed within the Design Program Summary, to the extent that they can be accommodated on the site. Priorities were given to a loop trail system with connections to Fox Run and the Middle School Property. Expanding upon the active and passive amenities that are currently offered on the park property, without causing harm to the natural environment or creating undue hardship on the adjoining residential properties, was also a primary design task. Priority was given to the amenities that were identified as the first ten recreation items listed on the Design Program Summary, as follows:

- Pavilion
- Crosswalk connecting to Pottsgrove Middle School
- Trail connection - kiosk
- Crosswalk connecting to the Fox Run Trail
- Amphitheater
- Disc golf course
- Pickleball courts
- Ice skating
- Additional trees for shade and screening
- ADA accessible paths connecting the park's various amenities

CONCEPT PLAN

Based upon the Township's primary programming elements, the consultant team developed two Park Development Sketch Plans for consideration by the Open Space & Recreation Board and the general public at their September 2021 public board meeting. Listed below are the primary design elements of each Sketch Plan.

SKETCH PLAN OPTION 1:

- Three tournament sized soccer fields
- New concession stand with recreation pavilion and adjoining fitness area
- Two pickleball courts
- One basketball court
- Approximately 1-mile loop walking trail
- Amphitheater
- Large playground area with an adjoining pavilion
- Improved/expanded parking areas
- Cross-country tournament trails
- Trail connections to Fox Run, Pottsgrove Middle School and Turnburry Residential Community

SKETCH PLAN OPTION 2:

- Annex 1.4 acres of adjoining residential property
- Two new tournament sized soccer fields
- Centrally located concession stand, pavilion, inclusive playground, fitness facility, pickleball and basketball courts

- One mile walking loop trail
- 9-hole disc golf course
- Cross-country tournament trails
- Amphitheater
- Large playground area with an adjoining pavilion
- Improved/expanded parking areas
- Trail connections to Fox Run, Pottsgrove Middle School and Turnburry Residential Community
- Improved screen plantings and site landscaping
- Wildflower meadow area
- Forrest restoration areas
- Improved signage/trail kiosk
- Walking trail along the western side of North Hanover Street



Figure 15: Sketch Plan 1

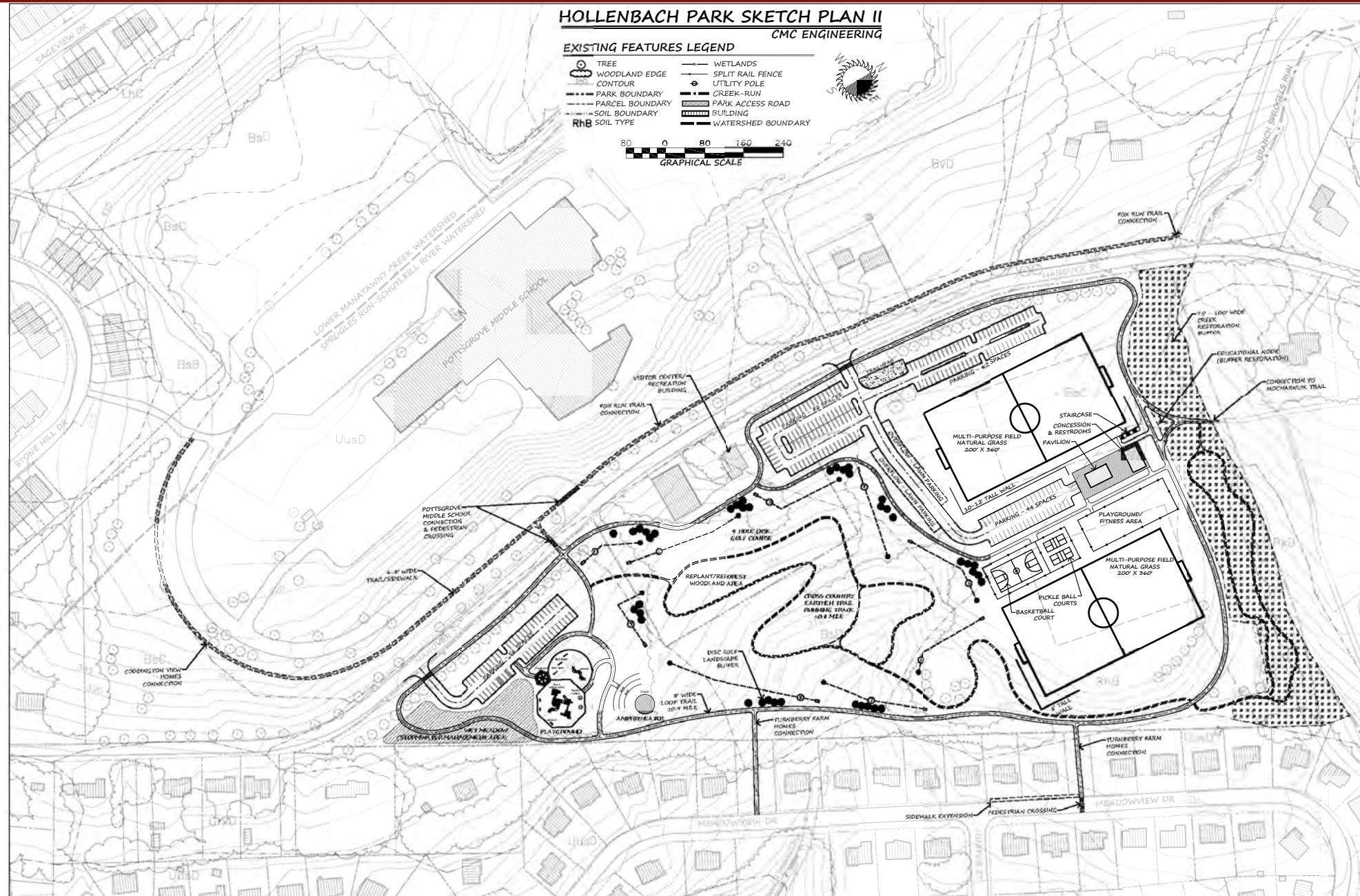


Figure 16: Sketch Plan 2

PRELIMINARY MASTER PLAN

After reviewing the alternate Sketch Plans and receiving public input on the differing designs, the Open Space and Recreation Board selected varying elements from each of the supplied sketches for inclusion in a Preliminary Master Plan. The primary design elements of the Preliminary Master Plan are identified below.

- Annex 1.4 acres of adjoining residential property
- Two new tournament sized soccer fields
- Centrally located concession stand, pavilion, inclusive playground, fitness facility, pickleball and basketball courts
- A second 100-person pavilion
- One mile walking loop trail
- 18-hole tournament level disc golf course according to the Professional Disc Golf Associations (PDGA) design guidelines. The proposed disc golf course has been designed to meet the requirement of White tees - 900 level skill rating category , Minimum P56 - Average (3650 FT. & 10 Acre). The statistic of the proposed course and the acreage guide chart are shown on Appendix B)
- Improved/expanded parking areas
- Trail connections to Fox Run and Pottsgrove Middle School
- Forest restoration areas
- Improved screen plantings and site landscaping
- Wildflower meadow area
 - Improved signage/trail kiosk
- Walking trail along the western side of North Hanover Street

FINAL MASTER PLAN

A Final Master Plan was developed upon receipt of comments from the public presentation of the Preliminary Master Plan. The following design changes were incorporated into the Final Master Plan:

- Amend the loop-trail layout to ensure that none of the vertical slopes exceed 5-percent
- Refine the design of the disc golf course to include additional vegetation in areas where errant discs could impact other park users or vehicles driving by the property
- Include all-inclusive recreation amenities within the proposed playground area, identified in more detail below

When developing the proposed playground for Hollenbach Park, consideration should be given to address children's disabilities beyond the ADA Accessibility Guidelines. A playground that has no boundaries, providing recreation amenities for children with Autistic Spectrum Disorders, Developmental Delays, Sensory Processing Disorders, etc., should be considered for inclusion in the playground design. According to the Centers for Disease Control, 1 in 68 children is diagnosed with an Autistic Spectrum Disorder (ASD) in the United States. A recent government survey has seen an increase in the number of children diagnosed with ASD to 1 in 40. The increasing trend of children diagnosed with developmental disabilities has created a recreation need that is not currently being addressed by the

playground facilities that are developed in today's park facilities. The following items should be given consideration when designing the proposed playground facility:

- Bankshot Basketball Equipment –a non-aggressive and entirely inclusionary form of basketball where participants play alongside, not against, each other. A great sporting challenge for children diagnosed with ASD
- Sensory friendly play spaces for children diagnosed with Sensory Processing Disorders. Provide play spaces that are somewhat isolated from other active and noisy playground elements and spaces. Incorporate flowing water and other natural elements to engage children with sensory disorders.
- Adaptive play spaces for children diagnosed with developmental delays
- Provide Nature-inspired play spaces where children and caregivers with vision loss and mobility limitations would maneuver throughout the space and access its features. Incorporate flowers and amenities with bold to address the needs of users with vision loss and other disabilities
- Special needs children and their caregivers may require the assistance of service animals. Play space users and their service animals will benefit from safe and shady places where service animals can wait and have a clear view of their handlers when they are not assisting them.



Figure 17 ■ HOLLENBACH PARK MASTERPLAN

Park Management and Maintenance

Routine scheduled maintenance of any park property is the basis for establishing a safe and secure facility for all park users. A park that is well maintained and visually safe will attract more visitors from the community and the outlying areas. A heavily used park is one that typically experiences less vandalism and is safer to use. The network of existing parks, contained within Upper Pottsgrove Township, are currently maintained by the municipal public works staff. The implementation of the recreation amenities, included within the Hollenbach Park Master Plan, will not require the township to add more staff members or sub-contract the maintenance to private companies. Partnerships with organizations that will use the proposed athletic fields or disc golf course would help lessen some of the workload, but a large percentage of the facility maintenance will still be undertaken by the municipal staff.

The chart, included with this section of the report, is a maintenance budget associated with Hollenbach Park, once the improvements are fully implemented. The hourly estimated rate for an Upper Pottsgrove Township maintenance laborer is \$53, including benefits and payroll taxes. Material costs are listed at the current wholesale purchase price.

Based upon the facility and maintenance analysis, a total of 720 hours in labor will be required to maintain

a fully constructed Hollenbach Park. The total annual cost to maintain the newly developed Hollenbach Park is estimated to be \$45,635.

Maintenance Task	Item	Hours per Task	Frequency x Hours	Hourly Rate	Total Cost
Grass Cutting (Including Soccer Fields)					
Grass cutting & trimming (includes 1 AC of fairways)	10.5 AC	8.00	30 x 8 = 240	\$53	\$12,720.00
Total					\$12,720.00
Litter Control					
Pick up Labor	1	2.00	36 x 2 = 72	\$53	\$3,816.00
Transfers labor	1	1.00	36 x 1 = 36	\$53	\$1,908.00
Total					\$5,724.00
Disc Golf Field					
Repair/Regrade					
Labor	1	8.00	2 X 4 = 16	\$53	\$848.00
Total					\$848.00
Aerate/Seed Fairways & Greens - August					
Labor	1	16.00	1 X 16 = 16	\$53	\$848.00
Material - Seed (1lb per 1,000 sq./ft.)	50lb per appl.		(1) 50lb bag	\$195	\$195.00
Total					\$1,043.00
Fertilize Fairways - Twice a year					
Labor	1	4.00	2 X 4 = 8	\$53	\$424.00
Material - Fertilizer (1lb per 1,000 sq./ft.)	50lbs per appl.		(1) 50lb bag	\$75	\$75.00
Total					\$499.00
Prune trees/remove vines/dead material (twice a year)					
Labor (4-person crew)	1 AC	8.00	2 x 8 x 4 people = 64	\$53	\$3,392.00
Total					\$3,392.00
Soccer Fields					
Repair/Regrade					
Labor	1	4.00	6 X 4 = 24	\$53	\$1,272.00
Total					\$1,272.00

Figure 18 - Park Maintenance Budget (Continued on next page)

<i>Maintenance Task</i>	<i>Item</i>	<i>Hours per Task</i>	<i>Frequency x Hours</i>	<i>Hourly Rate</i>	<i>Total Cost</i>
Aerate/Seed - May & August					
Labor	1	16.00	2 X 16 = 32	\$53	\$1,696.00
Material - Seed (1lb per 1,000 sq./ft.)	150lbs per appl.		(3) 50lb bags	\$195	\$585.00
Total					\$2,281.00
Fertilize Fields - Every 4-6 Weeks, April through October					
Labor	3.5 acres	4.00	7 X 4 = 28	\$53	\$1,485.00
Material - Fertilizer (1lb per 1,000 sq./ft.)	150lbs per appl.	1.00	(3) 50lb bags	\$75	\$225.00
Total					\$1,710.00
Tree and Shrub Care					
Seasonal	1	1% of planting budget			\$1,744.00
Trails (Stonedust)					
Annual Prep Labor (seasonal edging)	1.25 miles	8.00	1 x 8 = 8	\$53	\$424.00
Routine Labor (raking/add material)	1.25 miles	40.00	1 x 40 = 40	\$53	\$2,120.00
Quarry Fines	15 tons		15 tons	\$45	\$675.00
Total					\$3,219.00
Stone Paved Surfaces (Parking Lot)					
Inspection, raking and repair	4 lots	16.00	2 x 16 = 32	\$53	\$1,696.00
Material (3/4" Clean Stone)	20 tons		20 tons	\$30	\$600.00
Total					\$2,296.00
Playground					
Inspections	1	4.00	4 x 4 = 16	\$53	\$848.00
Repair & Preparation	1	10.00	2 x 10 = 20	\$53	\$1,060.00
Material (Woodcarpet)	75 cubic yards		75 cubic yards	\$45	\$3,375.00
Total					\$5,283.00
Basketball & Pickleball Courts					
Winterizing	3 courts	4.00	1 x 4 = 4	\$53	\$212.00
Sweeping, Cleaning, and patching	3 courts	4.00	4 x 4 = 16	\$53	\$848.00
Total					\$1,060.00
Bridge					
Inspection & Repairs	1	1.00	2 x 1 = 2	\$53	\$106.00
Total					\$106.00
Pavilions, Concession Stand & Site Furnishings					
Routine Maintenance	1	4.00	4 x 4 = 16	\$53	\$848.00
Total					\$848.00
Detention Basins/Inlets					
Inspect outlet structures	4 basins	1.00	10 x 1 = 10	\$53	\$530.00
Remove debris as needed	4 basins	2.00	10 x 2 = 20	\$53	\$1,060.00
Total					\$1,590.00
TOTAL ANNUAL EXPENSE:					\$45,635.00
TOTAL LABOR HOURS:					720

Figure 18 - Park Maintenance Budget

ESTIMATED CONSTRUCTION COST

Probable constructions costs have been developed as a component of the phased implementation of the proposed improvements. All of the provided costs are estimated, based upon prevailing wage bid pricing for similar projects that have been developed by the Consulting Team for each proposed improvement item. The bid pricing utilized is from the year 2022 and escalation of pricing has not been applied for within each consecutive phase of work, detailed within the last section of this report. A 15% contingency is included along with a 10% design and engineering fee. The cost estimates are shown on the following charts. The estimated total construction cost, excluding any listed alternate items is \$6,297,445.

Base Items			
Item	Qty/ Unit	Unit Price	Total Price
Mobilization, Permits, Demolition, Removal and Erosion Control:			
1 Mobilization and permits	1 LS	\$3,500	\$3,500
2 Demolition, removal, clearing and grubbing	1 LS	\$5,000	\$5,000
3 Demolition, removal of invasive species	1 LS	\$10,000	\$10,000
Sub-total:			\$18,500
Park Improvements:			
<u>Parking lots (with 36 & 62 spaces capacity) and driveway (ending at the center parking lot)</u>			
4 Erosion and sediment control measures	1 LS	\$4,000	\$4,000
5 Rough grading and excavation	7231 CY	\$28	\$202,468
6 Fine grading and lawn seeding	0.4 AC	\$30,000	\$12,000
7 Concrete (precast) retaining wall	2,550 FF	\$55	\$140,250
8 Stone parking area & driveway	43,122 SF	\$2.00	\$86,244
9 Fence - chain link (wall)	150 LF	\$40	\$6,000
10 Pole lights (safety and security only)	5 EA	\$5,500	\$27,500
11 Bumper block (parking lot)	98 EA	\$150	\$14,700
12 Signage (park entrance)	1 EA	\$1,000	\$1,000
Sub-total:			\$494,162
<u>Multi-purpose field (165ft X 360ft)</u>			
13 Erosion and sediment control measures	1 LS	\$5,500	\$5,500
14 Rough grading and excavation	9433 CY	\$28	\$264,124
15 Fine grading and lawn seeding	0.7 AC	\$30,000	\$21,000
16 Field (grass)	1.5 AC	\$35,000	\$52,500
17 Bleacher (3 row, 27' long, 54 seat)	2 EA	\$8,000	\$16,000
18 Soccer goals	2 EA	\$14,000	\$28,000
Sub-total:			\$387,124
<u>Center parking lot, pavilion/concession, basketball and pickleball courts, playground</u>			
19 Erosion and sediment control measures	1 LS	\$5,000	\$5,000
20 Rough grading and excavation	9400 CY	\$28	\$263,200
21 Fine grading and lawn seeding	0.3 AC	\$30,000	\$9,000
22 Asphalt paving (basketball & pickleball court)	13,327 SF	\$10	\$133,270
23 Concrete paving (pavilions)	5,880 SF	\$20	\$117,600
24 Concrete stair and handrails	1 LS	\$9,000	\$9,000
25 Concrete (precast) retaining wall	6,950 FF	\$55	\$382,250
26 Stone parking area & driveway	1,291 SF	\$2.00	\$2,582
27 Woodchips surface (All-inclusive playground)	404 CY	\$40	\$16,160
28 Fence - split rail (playground)	456 LF	\$30	\$13,680
29 Fence - chain link (wall)	571 LF	\$40	\$22,840
30 Fence - chain link (basketball & pickleball court)	588 LF	\$40	\$23,520
31 Pavilion (30ft. X 50ft.)	1 LS	\$170,000	\$170,000
32 Pavilion - Concession/ restrooms (30ft. X 50ft.)	1 LS	\$280,000	\$280,000
33 Color coating & line striping (basketball & pickleball court)	6,550 SF	\$5	\$32,750
34 Equipment (basketball court)	1 LS	\$18,000	\$18,000
35 Equipment (pickleball court)	1 LS	\$15,000	\$15,000

Figure 19 - Project Cost Estimate

Base Items			
Item	Qty/ Unit	Unit Price	Total Price
36 Equipment (All-inclusive playground)	1 LS	\$250,000	\$250,000
37 Pole lights (safety and security only)	2 EA	\$5,500	\$11,000
38 Drinking fountain	2 EA	\$15,000	\$30,000
39 Bumper block (parking lot)	44 EA	\$150	\$6,600
40 Benches (Classic Recycled Plastic, surface mount)	10 EA	\$2,000	\$20,000
41 Picnic tables (6' long recycled plastic, surface mount)	6 EA	\$2,700	\$16,200
42 Signage (playground and basketball/pickleball courts rules)	2 EA	\$350	\$700
43 Signage (handicap parking/van-accessible sign w/bollard)	5 EA	\$1,100	\$5,500
44 Trash receptacles (recycled plastic, w/ hinged door)	4 EA	\$1,300	\$5,200
Sub-total:			\$1,859,052
<u>Multi-purpose field (240ft X 360ft.)</u>			
45 Erosion and sediment control measures	1 LS	\$5,000	\$5,000
46 Rough grading and excavation	9300 CY	\$28	\$260,400
47 Fine grading and lawn seeding	0.58 AC	\$30,000	\$17,400
48 Field (grass)	2.0 AC	\$35,000	\$70,000
49 Concrete (precast) retaining wall	4,780 FF	\$55	\$262,900
50 Fence - chain link (wall)	583 LF	\$40	\$23,320
51 Bleacher (3 row, 27' long, 54 seat)	2 EA	\$8,000	\$16,000
52 Soccer goals	2 EA	\$14,000	\$28,000
53 Stormwater management facility (sub-surface basin)	1 LS	\$200,000	\$200,000
Sub-total:			\$883,020
<u>Disc golf course</u>			
54 Erosion and sediment control measures	1 LS	\$15,000	\$15,000
55 Tree Clearing (Disc Golf Area- 30 tree per acre)	2 AC	\$35,000	\$70,000
56 Rough grading and excavation	1000 CY	\$28	\$28,000
57 Fine grading and lawn seeding	1.5 AC	\$30,000	\$45,000
58 Disc Golf (baskets)	18 EA	\$1,350	\$24,300
59 Disc Golf (tee boxes)	18 EA	\$800	\$14,400
60 Signage (Course rule)	1 EA	\$500	\$500
61 Signage (Tee)	18 EA	\$350	\$6,300
62 Benches (Classic Recycled Plastic, surface mount)	6 EA	\$2,000	\$12,000
			\$215,500
<u>Pedestrian Trail</u>			
63 Erosion and sediment control measures	1 LS	\$12,000	\$12,000
64 Rough grading and excavation	1100 CY	\$28	\$30,800
65 Fine grading and lawn seeding	1 AC	\$30,000	\$30,000
66 Stone dust trail paving	50,846 SF	\$3	\$152,538
67 Wood pedestrian bridge (50ft. X 8ft.)	1 LS	\$225,000	\$225,000
68 Wood pedestrian bridge (25ft. X 6ft.)	1 LS	\$95,000	\$95,000
69 Benches (Classic Recycled Plastic, surface mount)	5 EA	\$2,000	\$10,000
Sub-total:			\$555,338

Base Items			
Item	Qty/ Unit	Unit Price	Total Price
<u>Parking lot (60 spaces capacity), pavilion, trail connection</u>			
70 Erosion and sediment control measures	1 LS	\$3,500	\$3,500
71 Rough grading and excavation	730 CY	\$28	\$20,440
72 Fine grading and lawn seeding	0.2 AC	\$30,000	\$6,000
73 Concrete paving	2,376 SF	\$20	\$47,520
74 Stone parking area & driveway	19,700 SF	\$2.00	\$39,400
75 Stone dust trail paving	700 SF	\$3	\$2,100
76 Pavilion (30ft. X 60ft.)	1 LS	\$185,000	\$185,000
77 Pole lights (safety and security only)	2 EA	\$5,500	\$11,000
78 Picnic tables (6' long recycled plastic, surface mount)	10 EA	\$2,700	\$27,000
79 Bumper block (parking lot)	60 EA	\$150	\$9,000
80 Signage (handicap parking/van-accessible sign w/bollard)	3 EA	\$1,100	\$3,300
81 Trash receptacles (recycled plastic, w/ hinged door)	2 EA	\$1,300	\$2,600
Sub-total:			\$356,860
<u>Site Utility:</u>			
82 Electrical connections and lighting controls	1 LS	\$30,000	\$30,000
83 Water, sanitary sewer	1 LS	\$64,000	\$64,000
Sub-total:			\$94,000
<u>Landscaping and Restoration:</u>			
84 Trees (deciduous shade/flowering & evergreen)	236 EA	\$650	\$153,400
85 Woodland/ creek buffer restoration(1 gal.container plantings)	6 AC	\$3,500	\$21,000
Sub-total:			\$174,400
TOTAL BASE COST			\$5,037,956
15% Contingency			\$755,693
10% Design & Engineering			\$503,796
TOTAL BASE PROJECT COST			\$6,297,445
<u>Alternate Design Options:</u>			
Item	Qty/ Unit	Unit Price	Total Price
1 Asphalt paving (parking lot w/ line painting)	74,409 SF	\$10	\$744,090
2 Asphalt paving (pedestrian paths)	50,846 SF	\$6	\$305,076
3 Rubber safety surface (All-inclusive playground)	10,912 SF	\$30	\$327,360
TOTAL ALTERNATE COST			\$1,376,526
TOTAL PROJECT COST			\$7,673,971

Figure 19 - Project Cost Estimate

Figure 19 - Project Cost Estimate

DEVELOPMENT AND PHASING

The establishment of construction improvement phases are an important step toward ensuring the success of any Park Improvement Project. Identifying a clear and well-established phasing program will assist the Township in securing financial assistance from Federal, State and/or local grants and/or soliciting support from non-profit agencies and the local school district. Listed below are construction phases that were established so that specific grants and/or private funds can be targeted to aid in the construction of the proposed amenities.

Phase 1 is divided into five distinct categories, affording the Township the ability to develop the amenities that have an immediate need within the community while keeping the construction costs manageable. Each sub-category of Phase 1 is as follows:

- Phase 1a: Construct the +/- 1-mile loop trail (\$525,494)
- Phase 1b: Construct the 60-space stone parking lot (\$356,860)
- Phase 1c: Provide connection to Middle School (\$33,544)
- Phase 1d: Construct 96-person pavilion (\$185,000)
- Phase 1e: Install all landscaping (\$174,400)

Total construction cost of Phase 1 Improvements: **\$1,275,298**

Phase 2 involves the construction of the proposed Disc Golf Course and all associated site related improvements. Total construction cost of Phase 2 Improvements: **\$219,200.00**

Phase 3 involves the re-orientation of the proposed soccer fields while improving vehicular access to the property. The “upper level” soccer field (located closest to N. Hanover Street) would be constructed according to the dimensions shown along with associated amenities (bleachers, ADA accessible trail, etc.). Total construction cost of Phase 3 improvements: **\$390,824.00**

Like Phase 1, Phase 4 is divided into distinct improvement categories for the same reasons identified above. Phase 4 Improvements are as follows:

- Phase 4a: Construct the “lower level” soccer field and associated retaining walls to the dimensions shown. Extend the walking trail to Mocharniuk Meadows trail (\$886,720)
- Phase 4b: Grade the land area located between the soccer fields to proper elevations. Construct the 44-space parking lot with entrance / exit to Hanover Street (\$816,402)

Total construction cost of Phase 4 Improvements: **\$1,703,122**

Phase 5 is divided into distinct improvement categories involving the following items:

- Phase 5a: Construct pickleball courts, basketball courts, and playground/fitness areas (\$533,732)
- Phase 5b: Construct concession / restroom buildings, including all sub-surface utilities (water, sewer and elec.) (\$421,600)
- Phase 5c: Construct 62 & 36 space parking lots. Complete walking trail (\$494,162)

Total construction cost of Phase 5 Improvements: **\$1,449,494**

The above costs exclude design/engineering fees, contingency fees and any of the alternate items listed in the Park Development Cost Estimate, shown previously in this report. Mobilization and permit fees were distributed equally between the initial stage of each phase.

HOLLENBACH
PARK
MASTER PLAN



DESIGN WISH LIST

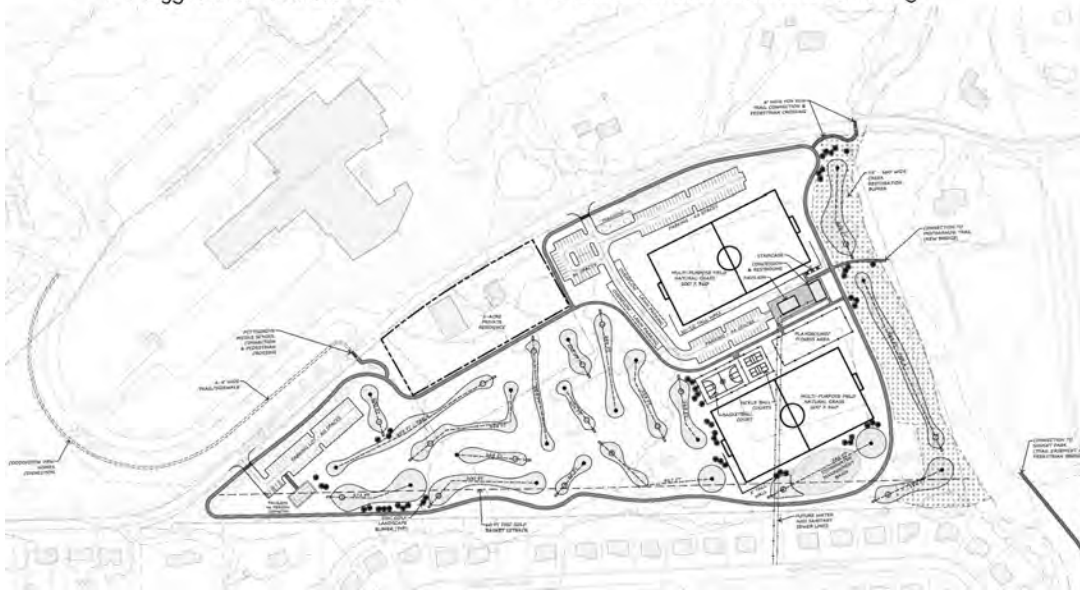
Program Elements	OSP	UPOSRB	PSD	MCPC	UPT	TOTAL
Pavilion	✓	✓ first aid	✓ w/light	✓ 2.5m.	✓	✓✓✓✓✓
Crosswalk connecting to Pottsgrove Middle School	✓	✓	✓		✓	✓✓✓✓
Trail connection - kiosk		✓		✓	✓	✓✓✓
Crosswalk connecting to the Fox Run Trail	✓		✓		✓	✓✓✓
Amphitheater	✓			✓ 1000'	✓	✓✓✓
Disc golf course	✓		✓		✓	✓✓✓
Kickball courts		✓ 1/2 sq ft	✓		✓	✓✓✓
Additional trees for shade and screening	✓				✓	✓✓
ADA accessible paths connecting the park's various amenities	✓				✓	✓✓
Dog Park				✓	✓	✓✓
Trail connections to Turnberry		✓	✓			✓✓
Trail connection to Meadow Drive		✓			✓	✓✓
Trail connections to Muchanuk Meadows		✓	✓			✓✓
Seating for fields (bleachers)				✓	✓	✓✓
Parking lot enhancement			✓ drain		✓ Add.	✓✓
Permanent restrooms				✓	✓	✓✓
Trailhead	✓				✓	✓✓
Directional signage	✓				✓	✓✓
Tennis courts	✓					✓
Additional jogging / walking trails			✓			✓
Improvement to playground			✓			✓
mini area			✓			✓
Recreational field surface improvements			✓			✓
Sidewalk access to Mervine Street			✓			✓
Sidewalk access to Meadow's entry			✓			✓
Muchanuk Meadows maintenance				✓		✓
Loop trail to middle school					✓	✓
Handball court					✓	✓
Playground different ages					✓	✓
Basketball court					✓	✓
Tennis court					✓	✓
water park					✓	✓
Get ready area					✓	✓
Animal rescue area					✓	✓
Bird houses					✓	✓
Remote control planes area					✓	✓
Safe Sliding area		✓				✓
Demonstration garden	✓					✓
Exercise stations	✓					✓

OSP: Open Space Plan 2020
 UPT: Upper Merion Township
 PSD: Pottsgrove School District
 MCPC: Montgomery County Planning Commission
 UPOSRB: Upper Pottsgrove Open Space and Recreation Board Meeting

Passive Recreation
 Active Recreation
 Connections & Access

FINAL SKETCH PLAN

- ±1 Mile of Loop Trail
- 2 Soccer/multi-purpose Fields
- 1 Basketball Court
- 2 Pickleball Courts
- 1 Playground/ Fitness Area
- 1 Trailhead
- 18-hole Disc Golf Course
- 2 Pavilions (one with 96-person capacity)
- 202 Parking Spaces (+40 Overflow spaces)
- Concession and Restroom Building



NEXT STEPS

- Refine the concept plan based upon tonight's feedback
- Develop a Master Plan with implementation/phasing options
- Develop detailed construction costs for each improvement item
- Develop long term maintenance requirements and outline staffing needs
- Present Master Plan documents to the Board of Commissioners
- Finalize the Master Plan report for adoption consideration by the Board of Commissioners

Disc Golf Course Acreage Guide

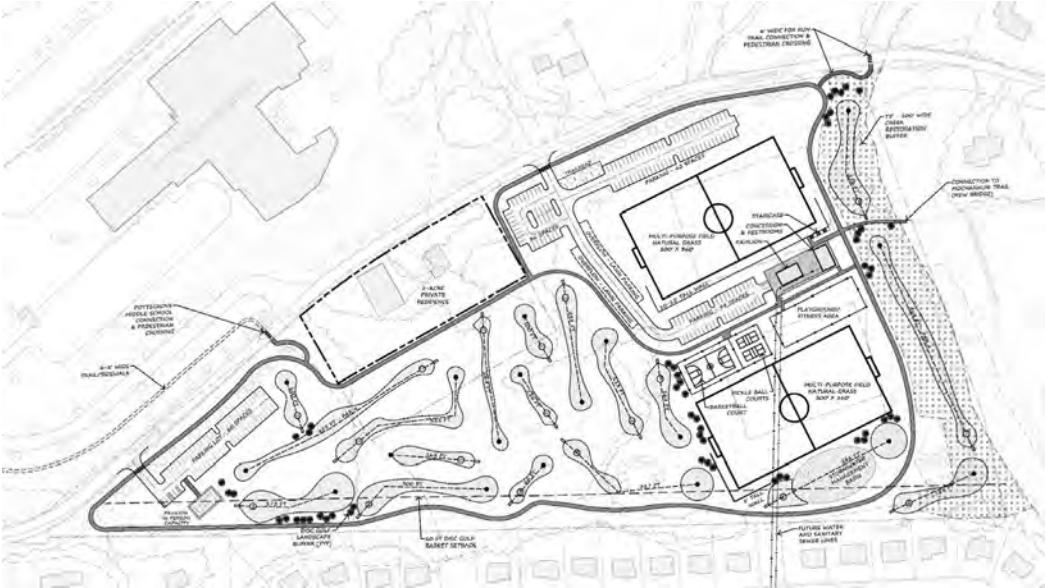
Player Skill Level	Foliage Density	Minimum (P56)*		Average (P61)		Championship (P67)	
		16-Par 3, 2-Par 4		12-P3, 5-P4, 1-P5		8-P3, 7-P4, 3-P5	
		Feet	Acres	Feet	Acres	Feet	Acres
Gold Tees 1000 Rating	Scattered	6900	26	8450	32	10350	39
	Average	6400	18	7750	22	9350	27
	Corridor	5900	14	7150	16	8650	20
Blue Tees 950 Rating	Scattered	5500	21	6900	26	8600	33
	Average	5000	14	6250	18	7750	22
	Corridor	4500	10	5650	13	7050	16
White Tees 900 Rating	Scattered	4150	16	5475	21	7025	27
	Average	3650	10	4875	14	6325	18
	Corridor	3550	8	4575	11	5825	13
Red Tees <850 Rating	Scattered	3200	12	4450	17	5950	23
	Average	3100	9	4100	12	5300	15
	Corridor	2600	6	3525	8	4675	11

* (P56) = estimated course par for that player level

Source: Professional Disc Golf Association Website

18-HOLE DISC GOLF COURSE STATISTICS

- White tees - 900 level skill rating
- 3,864 linear feet in approximately 9 acres
- 16-par 3, 2-par 4 (455/463 linear feet)
- Primarily corridor style foliage density
- Minimum 45-foot setbacks from paths, baskets & tees
- Minimum 60-foot setback from property line
- Minimum 150-foot setback from buildings



Source: Township Board Meeting Presentation (08/02/2022)

■ APPENDIX C - Open Space & Recreation Board Meetings Minutes (August 17, 2022.)

Minutes of the Upper Pottsgrove Township Open Space and Recreation Board

August 17, 2022

A special meeting of the Open Space and Recreation Board was held on Wednesday, August 17, 2022. Those present were Greg Churach, Charles Note, Dennis Elliot, Sherry Paup, and Gary Novack. Also present was Township Manager, Michelle Reddick and Planning & Zoning Administrative Assistant, Sherri Griffith. Commissioner, Cathy Paretti was present in the audience along with 14 other people.

PLEDGE OF ALLEGIANCE – Those assembled pledged allegiance to the flag.

NEW BUSINESS

A. None

OLD BUSINESS

- A. Hollenbach Master Plan Draft Presentation:** Al Gryga from CMC Engineering provided a slide showing a wish list of items for the park facility. The feedback came from PGSD, MCPC on Open Space plan. We're trying to stick with the top 10 on the list. Trails with connections are one of the top 10. We discussed expansion of the park to add things that we're proposing. Originally, we were proposing to purchase the whole residence, which is right under 4 acres, but the homeowner wasn't interested in selling the whole portion but is willing to sell 1.4 acres. We've had several sketches since March, and he provided the latest one. On this sketch we kept the 2 soccer fields but made them 200 x 300. In this sketch we also have basketball court, 2 pickleball courts, playground, 18-hole disc golf course, 1 mile loop trail, pavilions, concession stand/restroom building and parking. The pavilion will have its own parking. We're trying to minimize the amount of trees taken down so they can be utilized for the disc golf course.

The next steps: We'll refine the concept plan based upon tonight's feedback, develop a master plan with implementation/phasing options, develop details construction costs for each improvement item, develop long term maintenance requirements and outline staffing needs, present master plan documents to the Board of Commissioners, finalize the master plan report for adoption consideration by the Board of Commissioners.

B. Accept public comments on Hollenbach Master Plan:

1. Patti Grimm, township resident – What's the total budget for this project? There's no budget at this time. Are there going to speed bumps? G. Churach got traffic engineer involved & gave us material that would need to be done for the safety on the crossing. Will there be electric? Yes, there will be electric, water and sewer.
2. Jim Capinski, township resident – What's the maximum for parking spaces? Just shy of 200 spaces. Will it be macadam or gravel? Most likely gravel, because of cost. Detention bases? 2 onsite plus 1 additional. Flight zone? Maybe, but shouldn't affect anything.
3. Dave Hollenbach, township resident – Access to pavilion & parking near a bad bend and bad stoop? We're about 150' away from bend and we are trying to stay away from bend and school entrance. Potential wetland in parking lot? We'll need to do stormwater management either way.
4. Jim Capinski – Is there any discussion or provision on putting a cell tower in the park? No, nothing about a cell tower.
5. Steve Anspach, township resident – In order to have multiple purpose fields do you need to move them? Yes, we do. G. Churach mentioned we wanted to keep disruption to a minimum. Originally, we wanted 3 fields but we didn't want to destroy everything that was

Minutes of the Upper Pottsgrove Township Open Space and Recreation Board

August 17, 2022

already there so we can move them instead of gut them and put them back. Al said he's able to get 2, 200 x 300 fields. Is there any more discussion about a dog park? No, the dog park didn't meet the top 10 list.

6. Annique Ruiz-Brown, township resident – Does the public have access to the documents? G. Churach said once it's adopted it will be public. Al mentioned keeping one on hand for anyone to come see it. What made you guys decide on disc golf? G. Churach – when we had an open house here 3 years ago, we developed a wish list and disc golf showed up on every parks wish list. We asked CMC where the best place in the township for it to be put and it became Hollenbach and that's why it's going there. Is there going to be any shady areas? Yes, were not showing it on this concept plan and ideally, we'd like to add some trees. Will the soccer field bleachers be ADA accessible? Yes, you're required to have ADA accessible once you get into land development. Ages for playground? Ages 3-15 years old. Is it going to be ADA accessible? At this point we are just identifying the area where the playground will be not so much what it's going to be equipped with.
7. Patti Grimm – Is this going to be a dust to dawn park? Yes, just like all of our parks.
8. Annique Ruiz-Brown – What happens if a partner is not able to fund all elements on the list? It depends, we had a list of 30 items, only top 10 made the list so it would be the township's best interest analyze those items. What's the next plan? Take comments this evening and revise this plan so we can turn it into a final plan.
9. Jim Capinski – Any discussing on bridging for the kids to walk the park? We have talked about that but it's very expensive.
10. Annique Ruiz-Brown – Any way to guarantee to have inclusive playground items? We can work with the board with that. What can we do if we have questions? Come to the open space meeting.
11. Dave Hollenbach – What's the accessibility to Fox Hill? The traffic engineer didn't think we needed any signalization. I think it's a great idea for the golf course for that area.
12. Eric Guest, Phat Cats Disc Golf – In the future as far as funding is concerned, he would be happy to help. He can advise as the plan for the course starts being developed as he will be able to help and guide on the good and bad ideas.
13. Ashley Strouse, volunteer to help clean grounds for disc golf course.
14. Patti Grimm – When is your Open Space Meeting? 1st Tuesday of the month @ 7 pm.

BOARD COMMENTS – None

ADJOURNMENT – Meeting was adjourned at 7:32 pm.

Respectfully submitted,
Sherri Griffith
Planning & Zoning Administrator