

Proposed Facility Improvements – Fairbrook Park

Site Analysis and Design Considerations

As noted in the park facility inventory, Fairbrook Park is a 29-acre park located on the south side of Whitehall Road between Tadpole Road and the Fairbrook Subdivision. A primary feature of this park is its topography, which slopes from its high point in the southeast down to the low-lying sports fields along Tadpole Road. This change in grade is particularly noticeable in the middle section of the park, where the existing trail network exceeds ADA compliance for slope.

The lower section of the park is home to local soccer programs, but site drainage frequently poses a problem in the spring and fall when snow melt and rainfall flow downhill into the sports fields and limit their availability for use. The upper section of the park is relatively open, sunny, and flat which makes it a good location for playground space, picnic pavilions, paved court games, and walking trails. This is also a good location for several stormwater BMPs to pick up storm runoff at the source and treat it in a variety of “green infrastructure” systems as it travels downhill.

Existing woodlands around the north, west and south edges of the park, along with sporadic clusters of trees in the middle, provide an opportunity to connect a “green corridor” of native landscape plants through the “No Mow” zone, however invasive plant species need to be addressed to prevent their spread through the rest of the site.

Facilities Analysis

The proposed master site plan aims to preserve this site as a large community park providing the Township and its visitors options for enjoying the park’s diverse ecosystems along with a mixture of passive and active recreation amenities. The master site plan retains all existing soccer fields but removes both underutilized ball fields, ball field mix material, and backstop fencing to provide more room for soccer and stormwater management on the fields. To further support local sports organizations that use this park, a permanent locking shed is proposed near the main parking lot.

The existing trail system is proposed to be expanded with new sections that provide a continuous loop around the park’s lower sports fields, through the middle section of the park where slopes are more challenging, and around the expanded court games and playgrounds proposed for the park’s upper area. The existing basketball court will remain, and two (2) new double Pickleball courts will be added near it, along with a ball return wall. Outdoor exercise stations are proposed along portions of the trails and in a dedicated area near the games courts is included to provide more opportunities for individual (rather than team) physical fitness. All of these will be connected to each other and to the rest of the park with paved, accessible trail sections.

The middle section of the park will continue to serve a variety of passive recreation and nature-based activities, including expansion of the small playground to include more ADA accessible and sensory play equipment, adding a small outdoor stage/amphitheater, and creating a “Quiet Zone” in nearby woodland pockets. The existing “No Mow” zone is proposed to grow into a larger Native Pollinator Meadow with trails, a reconnected native woodland and shrubland corridor, and Meadow-to-Forest-Succession study zone.

Existing, older playground equipment in the upper portion of the park is proposed to be replaced with new, ADA accessible and adaptive equipment, along with a separate Tot Lot for children ages 2-5 years old. Shade structures are shown at both play areas, along with bicycle parking, a small picnic grove with ADA picnic benches, and an optional second pavilion.

The existing parking lot in the upper portion of the park is currently not paved; it has a gravel surface. The master site plan proposes that at minimum, one (1) ADA parking space with access aisle be paved in the corner of the parking lot closest to the trails, pavilions, and playground. Ideally, the entire parking lot should be paved, with the inclusion of ADA parking spaces and access aisles.

LEGEND

- Existing Trails
- Proposed Trails
- Existing Tree Canopy To Remain
- Proposed Picnic Grove
- Proposed Shrubland
- Proposed Sports Court
- Proposed Playground & Butterfly Garden/Children's Tea Garden
- Proposed Extension Of Existing Playground
- Proposed Outdoor Exercise Station
- Proposed Low Mow Area
- Proposed Meadow Area
- Proposed Planting Area
- Proposed Stormwater Management Area
- Proposed Native Shade Tree
- Existing Property Line
- 100 Year Floodplain Delineation
- Proposed Invasive Species/Vista Control Zone

GENERAL NOTES:

- 1.) If Major Park Redevelopment Occurs In The Future, Restore The Historic Stream Channel And Floodplain To The Property.
- 2.) Remove Old, Rusted Signs From Park Property Edges.
- 3.) Install Proposed Trail Sections Away From Black Walnut Trees On Site.
- 4.) Install New Trash And Recycling Stations In Locations Shown On Plan.



GRAPHIC SCALE
60' 30' 0' 60'
SCALE: 1" = 60'

Client: _____

Revisions		
No.	Description	Date
1	Board of Supervisors Comments	2/21/23
2	Board of Supervisors Comments	3/7/23

Designed By: **TS**
Drawn By: **JDYC**
HIRG Project Number: **P000769.0432**
Date: **01.11.2023**
Scale: **1" = 60'**

Conceptual Master Site Plan



CALC'D BY: TAS
 CALC'D DATE: 1/20/2023
 CHK'D BY: _____
 CHK'D DATE: _____

Design - Engineer's Project Cost Opinion
 for
FERGUSON TOWNSHIP FAIRBROOK PARK
MASTER SITE PLAN PROJECT
R000769.0432

ITEM DESCRIPTION	Quantity	Unit	Unit Price	Total
A. Demolition / Site Preparation				
Miscellaneous Demolition	1	LS	\$23,000.00	\$23,000.00
			TOTAL	\$23,000.00
B. Parking Lot Improvements				
Bituminous Pavement - Porous System	1000	SY	\$45.00	\$45,000.00
Concrete Parking Space Curb Stops	25	EA	\$500.00	\$12,500.00
Pavement Markings, 4" Blue, Thermoplastic	1	LS	\$3,000.00	\$3,000.00
ADA Parking Post-Mounted Sign, Type B	2	EA	\$500.00	\$1,000.00
			TOTAL	\$61,500.00
C. Bituminous Pavement and Trails				
8' Wide Trail - New Trail Extensions	2600	SY	\$50.00	\$130,000.00
ADA Companion Seating Areas (30"x42" Asphalt)	8	SY	\$35.00	\$280.00
Bicycle Parking Areas	16	SY	\$35.00	\$560.00
			TOTAL	\$130,840.00
D. Permanent and Temporary Restrooms				
Temporary Restroom Allowance (ADA Accessible)	1	LS	\$2,500.00	\$2,500.00
			TOTAL	\$2,500.00
E. Existing Sports Fields Improvements				
Earthwork Allowance - Minor Regrading	1	LS	\$5,000.00	\$5,000.00
Lawn Seeding - Hydroseed	90000	SF	\$0.15	\$13,500.00
Restriping Soccer Fields - Allowance	1	LS	\$750.00	\$750.00
Freestanding Bleachers (5-Row System w/ Picket Guards and 2 UA Seating Pockets)	3	EA	\$35,000.00	\$105,000.00
Freestanding Bleachers Shipping & Installation	1	LS	\$31,500.00	\$31,500.00
			TOTAL	\$155,750.00

F. New Sports Amenities				
Bocce Court	1	EA	\$30,000.00	\$30,000.00
			TOTAL	\$30,000.00
G. Playground #1 Expansion				
ADA Inclusive Equipment Allowance (2-5 yr olds)	1	LS	\$37,500.00	\$37,500.00
Burke Inclusive 2-Bay Swing	1	EA	\$12,500.00	\$12,500.00
Burke Inclusive Playsemble	1	EA	\$30,000.00	\$30,000.00
Bulk Earthwork Allowance	1	LS	\$10,500.00	\$10,500.00
Supply, Level and Compact Stone Sub-Base	1	LS	\$28,500.00	\$28,500.00
Playbound Poured-In-Place Rubber Safety Surface	1	LS	\$102,500.00	\$102,500.00
Stormwater BMP Infiltration Bed	315	CY	\$140.00	\$44,100.00
ADA Equipment Shipping & Installation Allowance	1	LS	\$24,000.00	\$24,000.00
			TOTAL	\$289,600.00
H. Playground #2 Improvements				
Burke Inclusive 5-12 YR Play Structure	1	EA	\$222,500.00	\$222,500.00
Burke Inclusive 2-Bay Swing	1	EA	\$12,500.00	\$12,500.00
Burke Inclusive Playsemble	1	EA	\$30,000.00	\$30,000.00
ADA Inclusive Equipment Allowance (2-5 yr olds)	1	EA	\$37,500.00	\$37,500.00
Burke Inclusive 2-Bay Swing	1	EA	\$12,500.00	\$12,500.00
Bulk Earthwork Allowance	1	LS	\$5,000.00	\$5,000.00
Supply, Level and Compact Stone Sub-Base	1	LS	\$28,500.00	\$28,500.00
Playbound Poured-In-Place Rubber Safety Surface	1	LS	\$102,500.00	\$102,500.00
Stormwater BMP Infiltration Bed	315	CY	\$140.00	\$44,100.00
Play Equipment Shipping & Installation (30%)	1	LS	\$84,000.00	\$84,000.00
			TOTAL	\$579,100.00
I. Site Amenities				
Benches (Wood & Metal)	8	EA	\$1,500.00	\$12,000.00
Adult Exercise Stations Allowance	5	EA	\$6,000.00	\$30,000.00
Delivery and Installation of Exercise Stations	1	LS	\$10,500.00	\$10,500.00
Bike Racks (Metal)	4	EA	\$750.00	\$3,000.00
Pet Waste Station	1	EA	\$400.00	\$400.00
Litter Receptacles (Wood & Metal)	4	EA	\$1,400.00	\$5,600.00
			TOTAL	\$61,500.00
J. Pavilions and Structures				
Picnic Pavilion (16' x 24' Timber & Metal PreFab)	1	LS	\$35,000.00	\$35,000.00
Pavilion Surface (Concrete)	384	SF	\$15.00	\$5,760.00
Shade Sail Allowance (2 Shade Sails)	4	EA	\$30,000.00	\$120,000.00
Shade Sail Shipping and Installation (30%)	1	LS	\$36,000.00	\$36,000.00
Outdoor Classroom / Amphitheater Allowance	1	LS	\$75,000.00	\$75,000.00
			TOTAL	\$271,760.00

K. Landscaping				
Native Shade Trees (2-2.5" cal. B&B)	11	EA	\$350.00	\$3,850.00
Native Flowering Trees (8-10' ht. B&B)	18	EA	\$275.00	\$4,950.00
Native Shrublands (3-4' ht., 7 gal Shrubs)	350	EA	\$120.00	\$42,000.00
Native Pollinator Meadow Seeding	4000	SY	\$1.30	\$5,200.00
Native Meadow-to-Forest Seed Mix	3200	SY	\$2.50	\$8,000.00
Native Rain Garden Seed Mix (20 lbs/acre)	5	LBS	\$40.00	\$200.00
Low-Mow Planting Area (7 lbs/1000 sq.ft.)	168	LBS	\$5.95	\$999.60
Picnic Grove (Native Trees 2-2.5" cal. B&B, 25' o.c.)	8	EA	\$350.00	\$2,800.00
Buffer Plantings at Pickleball Court Allowance	1	LS	\$18,200.00	\$18,200.00
Children's Garden Allowance (Shrubs, Plugs)	1	LS	\$12,000.00	\$12,000.00
Invasive Species Management Allowance	1	LS	\$5,500.00	\$5,500.00
			TOTAL	\$103,699.60
L. Stormwater Drainage Improvements				
Rain Garden Allowance	1100	CY	\$36.00	\$39,600.00
Vegetated Bioswale	385	LF	\$104.00	\$40,040.00
Geotextile Fabric	125	SY	\$6.00	\$800.00
FRENCH DRAIN	1	LS	\$35,000.00	\$35,000.00
EROSION & SEDIMENTATION CONTROL	1	LS	\$6,000.00	\$6,000.00
			TOTAL	\$121,440.00
			SUBTOTAL	\$1,830,689.60
			10% Contingency	\$183,068.96
			Construction Phase Engineering (10%)	\$201,375.86
			TOTAL	\$2,215,134.42

Note: This estimate is based on 2022 construction estimates assuming all construction to be publicly bid. This estimate does not include fees associated with permitting, survey, or geotechnical services.