M-NCPPC

MONTGOMERY COUNTY DEPARTMENT OF PARK AND PLANNING

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

9500 Brunett Avenue Silver Spring, Maryland 20901

Agenda Date: September 11, 2003

Agenda Item #: **4** September 5, 2003

TO:

Montgomery County Planning Board

VIA:

Lester L. Straw, Superintendent Ararks

Michael F. Riley, Chief, Park Development Division (PDD),

FROM:

Ali Khan, Engineer, PDD

SUBJECT:

Facility Plan for the Extension of the Black Hill Hiker-Biker Trail in Black Hill

Regional Park

I. STAFF RECOMMENDATION

Staff recommends that the Planning Board:

- 1. Approve the facility plan for the extension of the Black Hill Hiker-Biker Trail in Black Hill Regional Park as the basis for design and construction;
- 2. Approve initiation of final design, construction documents, and permitting; and
- 3. Include a request for construction funding in the FY 05-10 Capital Improvement Program.

II PROJECT DESCRIPTION

A. Introduction

The proposed trail project is located in the northeast section of Black Hill Regional Park eastwards of Lake Ridge Drive which is the main means of vehicular access to the park from Old Baltimore Road. The proposed trail runs from the vicinity of Picnic Lane to the vicinity of the cul-de-sac of Spinning Wheel Drive in the Waters Landing development shown in Figure 1. At the southern terminus, it connects to the western Black Hill Hiker-Biker Trail to make a complete loop in the developed section of the park. The northern terminus connects to the existing eastern Black Hill Hiker-Biker Trail and to the existing WSSC boardwalk that will eventually connect to Crystal Rock Drive. The proposed 8- feet wide asphalt trail approximately

5580 linear feet in length. The proposed trail will provide an important link to the network of hard surface trails within the park and provides access to the park users from the Germantown area. This project was also part of the original plan for the park and has been in the Capital Improvements Program. A vehicular access from the Germantown area was shown in the Germantown Master Plan and the facility plan for implementation of this additional point of vehicular access to the park from the Germantown (Crystal Rock Drive) was not approved by the Board on May 9, 2002 due to community opposition, environmental impacts, and high construction costs. The Park Master Plan was subsequently revised to provide a hard surface trail access to the park from Germantown.

On April 24, 2003 the Board approved the facility plan for renovation of existing eastern Black Hill Hiker-Biker trail which runs from Wisteria Drive to Spinning Wheel Drive and connects to the Crystal Rock Trail and the proposed trail to Picnic Lane.

B. Project Funding

Funding for the design phase of this project is currently funded and appropriated in M-NCPPC PDF No. 768673; Trails Hard Surface Design and Construction. Funding for the design phase was included in the original contract with Frederick Ward Associates Inc. for Facility Planning and Design of Spinning Wheel Trail.

Funding of the construction of the trail will be requested in separate PDF for the FY05-10 CIP. As per the recommendations of this Facility Plan, the estimated cost of construction will be one million and six hundred and fifty thousand dollars. A cost breakdown is provided in the Facility Plan Report.

C. Community Outreach

Staff conducted a public meeting on November 20, 2002 and made a presentation on the facility plan of the proposed trail. Adjoining property owners, civic associations and the Northern Area Advisory Board were invited to the meeting. The alignment and design criteria were presented to the public and oral and written comments were solicited. In addition to the staff and consultant, eight members of the community attended the meeting. Public comments and opinions expressed at the public meeting were mostly in favor of the project.

D. Planning Background

- 1) The 2002 Master Plan of Black Hill Regional Master Plan
- 2) The Clarksburg Greenway Implementation Study
- 3) The 1998 Countywide Park Trails Plan
- 4) The 1997 Clarksburg Master Plan

On May 2, 2002 the Planning Board approved the Master Plan for Black Hill Regional Park. The Master Plan contains a recommendation to pave the existing natural surface trail between Spinning Wheel Drive and Parking Lot #6, adjacent to Picnic Lane. The Black Hill Regional Park Master Plan recommends the following:

Pave the existing natural surface trail between Spinning Wheel Drive and Parking Lot #6. This trail connects the existing paved trails in the picnic area to the paved portion of Black Hill Trail, which runs along the eastern shore of the lake. Improving this trail to a hard surface trail will allow for easier access to the Black Hill trail from the visitors center area, and will improve bicycle and pedestrian access to the park for Waters Landing area residents. This project was part of the original plan for the park, and has been in the approved Capital Improvements Program for several years.

Additionally, all of the above plans envision a hard surface trail network that links the residents of Germantown and Clarksburg to Black Hill Regional Park. As shown in Figure 1, proposed future trail connections north to Clarksburg, east to Germantown and south to Boyds will make the beauty of Black Hill Regional Park accessible to thousands of residents by foot or by bike.

III. FACILITY PLAN

The facility planning process was started in October 2001 by hiring the services of the consultant, Frederick Ward Associates, Inc. to provide the necessary engineering and design to construct the project. Since that time, the consultant has provided topographic and environmental surveys, conducted site meetings with staff and agencies to develop alignment alternatives, and developed the facility plan (Attachment A). A number of alternate alignments were presented to the community and staff for ADA and to minimize environmental, historical and archeological impacts. The final alignment was chosen to balance accessibility, trail safety and user experience. Subsequent to Board comment, approval and necessary revisions, the consultant will provide detailed engineering and design, obtain agency approvals and permits, and prepare construction documents for bidding and construction of the project.

A. Existing Conditions

The Black Hill Trail under study currently exists as a natural surface trail that runs from Picnic Lane to Spinning Wheel Drive, connecting with existing paved trails on each end. The existing trail is easily accessed from several locations including Lake Ridge Drive, and is convenient to parking and traverses easy to difficult terrain. Access from Spinning Wheel Drive is by way of an existing paved trail which continues west along the shore of Lake Seneca. At the end of this trail is the terminus of a new boardwalk trail, constructed by WSSC, which provides pedestrian access from Crystal Rock Drive. The southern section of the trail starts at Picnic Lane and an existing parking area and is in a densely wooded area, moderately steep in sections and relatively narrow. The central section of the trail is relatively level and wide, opens into light woods and has a stony trail base. The northern section is again in dense woods and more narrow than the

center section, has a very stony base with rock outcroppings and has moderate to steep slopes connecting to the existing steel bridge on Little Seneca Creek. In the vicinity and at places close to the trail are numerous stone foundations of the homes of workers who tended the historic Waters Mill site. Between the bridge crossing over Little Seneca Creek and the trail connection to Spinning Wheel Drive are the ruins of Waters Mill, headrace and bridge, which are identified as archeological sites.

B. Proposed Trail

The proposed paved trail consists of 5580 linear feet of 8-feet wide section, with an additional length of 520 linear feet also of 8-feet wide, in two sections for access from Lake Ridge Drive for a total of 6100 linear feet. The pavement would be the M-NCPPC standard 3" thick asphalt on 4" of stone base. In the Waters Mill site area a natural soil binder that has an appearance of soil is proposed that will provide a durable, hard surface, while preserving the character of the historic site. The primary criteria for the design of the trail was to follow the Americans with Disabilities Act (ADA) guidelines for outdoor recreational areas. The alignment of the natural surface trail could not be followed in its entirety due to ADA guidelines, rock outcrops and historic building foundations in close proximity to the trail. A completely new alignment in the northern section of the trail and across the steep slope on the west side of Little Seneca Creek is proposed to provide an ADA accessible trail and avoid impacts to historical features. The section of the trail from Picnic Lane to STA 19+00 was aligned adjacent and parallel to Picnic Lane and Lake Ridge Drive and is ADA compliant. The existing natural surface trail would remain in use as a natural surface trail.

The trail from STA 19+00 to STA 32+00 follows the existing natural surface trail except where it is realigned to avoid rock outcrops. Minor alignment and grade changes are also proposed to avoid tree impacts. The trail slope varies from flat to 7%. Wheelchair rest pads are proposed at the required intervals.

The trail from STA 32+00 to STA 48+00 follows a completely new alignment through wooded area. This was done to avoid the historical foundations and the steep slope of the existing natural surface trail. This realignment brings the trail from the ridge down to the level of Little Seneca Creek. The slope varies from flat to 12.5%. Wheelchair rest pads are proposed at the required intervals.

The trail from STA 48+00 to the end at STA 54+00 completes the trail length. It follows the alignment of the existing trail except from STA 50+50 to STA 52+00, where the trail would be realigned to avoid the rocky outcrop and provide ADA compliance. Wheelchair rest pads are proposed at regular intervals.

In addition to the main stem of the trail, two connector trails are proposed that will connect the main trail to access points along Lake Ridge Drive. The western access is 510 linear feet and connects the main trail to a parking lot near the picnic pavilions. This access is ADA compliant. The eastern access is 530 linear feet and connects the main trail to the park office at Lake Ridge Drive. This trail access is not ADA compliant.

ENVIRONMENTAL STUDIES

A. Environmental Features

Field surveys were conducted to determine the location of non-tidal wetlands, waters of the U.S. and specimen trees. These natural features as well as steep slopes are identified in the Natural Resources Inventory/Forest Stand Delineation Plan (NRI/FSD). Non-tidal wetlands were found only in the vicinity of Seneca Creek at the northern end of the alignment. These wetlands and the buffers are not impacted by the proposed alignment of the trail. Waters of the U.S. were found at the edges of Seneca Creek and at a drainage swale on the south end of the trail. A steel bridge is proposed on this swale and the abutment will be constructed to avoid any impact to the swale.

Impacts to trees will be limited as much as possible by aligning the trail around specimen trees, root pruning techniques and construction of retaining walls and by limiting construction vehicle impacts by fencing critical areas.

B. Historical Features

The main historical feature of the trail is the Waters Mill and its outbuildings. The location of the mill is at the northern terminus of the trail near Spinning Wheel Drive. An historical marker is posted at the existing trail. In addition to the millhouse foundation are the headrace, headrace bridge, the miller's house foundation, and other foundations thought to be the homes of the workers or mill support structures.

C. Stormwater Management

Stormwater management is proposed without significant impacts to the natural features of the park. Water quality is proposed by providing infiltration trenches or pits in areas of concentration of flow. In areas where the shallow bedrock does not permit infiltration trenches, vernal pools are proposed.

CONCLUSION

Staff recommends approval of the facility plan, initiation of final design, and inclusion of the project in the Capital Improvement Program.

IV. COST ESTIMATE

Design			-				
Contract with contingency				-	-		
Subtotal	0\$	\$0	\$0	\$0	\$0	0\$	\$0
Construction Management & Inspections							
Staff chargebacks all phases		\$75	\$50				
Subtotal	\$0	\$75	\$50	\$0	\$0	05	\$0
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Construction (includes contingency)							
Construction		\$1,000	\$526				
Subtotal	\$0	\$1,000	\$526	\$0	\$0	\$0	\$0
		-		-			
TOTAL PROJECT COST	\$	\$1,075	\$576	\$0	80	80	0\$

ATTACHMENTS ٧.

- 1.
- Consultant's report Black Hill Regional Park Trail Plan. 2.