



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

MCPB
Item: 13 & 14
Date: 10/4/07

September 28, 2007

MEMORANDUM

TO: Montgomery County Planning Board

VIA: Mary R. Bradford, Director of Parks *MRB*
Michael F. Riley, Acting Deputy Director, Department of Parks *MFR*
Douglas Alexander, Acting Chief, Park Development Division *DA*
Patricia McManus, Design Section Supervisor, Park Development Division *PM*

FROM: Peter Noursi, Engineer, Park Development Division *PN*

SUBJECT: Facility Plan for the Magruder Branch Hiker-Biker Trail Extension from Valley Park Drive to the Damascus Town Center

STAFF RECOMMENDATION

- 1) Approve the Preliminary Forest Conservation Plan with conditions.
- 2) Approve the facility plan Alternative 2a for the extension of the Magruder Branch Hiker-Biker Trail, including cost estimate.
- 3) Determine schedule for design and construction during review of the FY09-14 Capital Improvements Program.

PROJECT DESCRIPTION

Introduction

The existing three-mile long Magruder Branch Hiker-Biker Trail, which was constructed in 1991, extends through the Magruder Branch Stream Valley Park from Damascus Recreational Park to Valley Park Drive. Additional parkland for the northern extension of the trail was subsequently acquired in 1998. The purpose of this project is to prepare a facility plan for the extension of the Magruder Branch Hiker-Biker Trail approximately one mile from the northern terminus of the trail at Valley Park Drive to the Damascus Town Center, in order to complete the trail as recommended in the Countywide Park Trails Plan and the Damascus Master Plan. Attachment A is a vicinity plan for the trail.

The project site is located between Ridge Road to the west and Woodfield Road to the east. The trail will cross Bethesda Church Road, which is a busy two-lane arterial road that bisects the site. Adjacent land uses include Damascus High School, townhouse neighborhoods to the west of the site, a mix of townhouse, single-family residential, apartments and condominiums to the east of the site, a residential recreation and swim club, commercial development to the

north of the site, a cemetery for Damascus United Methodist Church, and a Washington Suburban Sanitary Commission (WSSC) water tank facility. The parkland includes a stream and floodplain, wetlands, groundwater seeps, mature forested areas, steep slopes, as well as portions of the headwaters of the Magruder Branch.

The facility planning study was funded with \$230,000 in the Capital Improvements Program in the Facility Planning: Non-Local Parks PDF. Greenman-Pedersen, Inc. was hired in 2005 to design the facility plan for the trail. The facility plan provides 30% complete construction documents, a determination of the regulatory feasibility of the project, and provides a detailed cost estimate. Refer to Attachment B for the recommended Alternative 2a and Attachment E for the facility plan report.

Facility Planning Process

The facility planning process included the following steps:

1. Review and analyze existing site conditions and project background information.
2. Prepare site survey, including delineation of existing wetlands.
3. Prepare a geotechnical analysis and report to determine feasibility of trail alignments, parking, stream crossings and stormwater management options.
4. Prepare and obtain approval of Natural Resources Inventory/Forest Stand Delineation Summary Map.
5. Prepare preliminary program of requirements.
6. Prepare preliminary trail alignment alternatives and cost estimates.
7. Discuss alternatives with regulatory agencies and present them to the Interagency Wetlands Coordinating Committee.
8. Present program of requirements and design alternatives to the community.
9. Prepare stormwater management concept submission and obtain approval from the Department of Permitting Services.
10. Coordinate technical issues with stakeholder groups and regulatory agencies, including the Montgomery County Department of Public Works and Transportation for road crossings and parking, and the Maryland State Highway Administration for crossings of State roads and use of parking.
11. Finalize program of requirements and develop preferred alternative based on all input received.
12. Prepare forest conservation plan submission and obtain approval.
13. Prepare facility plan report, cost estimate, and operating budget estimates.
14. Present facility plan recommendations and costs to the project staff team for approval.
15. Present facility plan recommendations and costs to the Montgomery County Planning Board for approval.

PLANNING DOCUMENT RECOMMENDATIONS AND STUDIES

Countywide Park Trails Plan

The July 1998 Countywide Park Trails Plan, as amended through 2004, makes the following recommendation in the Trail Planning and Implementation Priorities section on page 55:

In terms of hard surface trails, key projects are the Matthew Henson Greenway trail, Black Hill trail in Black Hill Regional Park, the extension of the Magruder Branch trail to Damascus town center and Muddy Branch hard surface trail.

Damascus Master Plan

The trail extension is recommended in the Damascus Master Plan, approved and adopted in May 2006. The master plan made the following recommendations for the trail on page 72:

The Magruder Branch Hiker-Biker Trail is located in the Magruder Branch Stream Valley Park. This critical element is the only paved trail in the Damascus plan area. This Plan strongly supports the continuation of the trail northward to a northern terminus in the Town Center. Attention must continue to be given to providing safe road crossings for those using the trail at all crossing locations. This Plan particularly notes the need for providing a safer trail crossing at Sweepstakes Road, and ensuring a safe crossing of Bethesda Church Road and Damascus Lane when that segment is developed.

Potential solutions for the very busy Bethesda Church Road crossing could include consideration of improvements including median refuges, pedestrian activated signal control, or grade separated crossings, in addition to more conventional operation approaches involving signing and marking.

The master plan also proposes a new public road to serve businesses in the Town Center. This road is classified as a Business District Road and is called Damascus Lane. The land for Damascus Lane is currently in M-NCPPC ownership and is located at the northern end of the Magruder Branch Stream Valley Park. This land would be transferred to the Montgomery County Department of Public Works and Transportation (DPWT) when the road is built. Damascus Lane would include bike lanes to connect the Magruder Branch Trail west to Ridge Road and east to Woodfield Road. A trail connection north to Main Street would be provided by future mixed-use development of the Town Center. When Damascus Lane is built, a trailhead is proposed on the south side of Damascus Lane at the trail terminus. Attachments C and D are excerpts from the master plan, showing a concept plan for the Town Center development and proposed sections through Damascus Lane. The master plan made the following recommendations for the trailhead on page 19 under the category of Expand and Enhance Community Open Space:

Trailhead for the Magruder Branch Stream Valley Park – Provide an appropriate location along the proposed new street south of Main Street (Damascus Lane) for the trailhead for the Magruder Branch Stream Valley Park to encourage more pedestrian activity in the Town Center.

Countywide Bikeways Functional Master Plan

The trail extension is shown in the Countywide Bikeways Functional Master Plan, approved and adopted in March 2005. The park trail provides connections to proposed on-road Class II or III bikeways on Ridge Road (Rte 27) and Damascus Road (Rte 108), as well as connections to a proposed Class I shared use path on Woodfield Road (Rte 124). These recommendations are shown on pages 61 and 62 of the functional master plan. These recommendations, as well as park trail connections to Class I shared use paths on Bethesda

Church Road and Valley Park Drive, are also included on pages 52 and 53 of the approved and adopted Damascus Master Plan.

Park User Survey

The M-NCPPC conducted surveys of hiker-biker trails throughout the county in 2000. The trail user counts for the Magruder Branch Trail were based on 20 separate hour-long observations and showed a total of 437 users, for an average trail use of 22 users per hour. Approximately half of the users were walkers, a quarter bicyclists, 21% joggers, and the remainder divided between infants in strollers, in-line skaters, and others.

Since the survey was conducted, additional development has occurred in the Damascus area, and trail use numbers should increase proportionally. The connection to the town center should increase use in the future.

PROGRAM OF REQUIREMENTS

The following program of requirements was developed for the trail based on input received from advisory groups, the community and the staff team:

- A trailhead area near the Damascus Town Center;
- Parking opportunities at or near the trailhead;
- An eight-foot wide asphalt trail aligned to minimize environmental impacts, including boardwalks and bridges to span sensitive areas;
- Vehicle access for maintenance and security patrols;
- Pedestrian and bike path connections to adjacent communities;
- Safe road crossings of Bethesda Church Road, Valley Park Drive and Woodfield Road;
- Park and trail signage, including kiosk;
- Seating, bicycle racks, trash receptacles and drinking fountain;
- Naturalized, attractive plantings and reforestation areas as required;
- Stormwater management facilities as required;
- Trail design in compliance with M-NCPPC park design guidelines and standards, as well as other applicable guidelines and standards; and
- Trail design in compliance with Crime Prevention Through Environmental Design (CPTED) guidelines.

FACILITY PLAN STUDY

Existing Environmental Conditions

The study area can be divided into two sections. The northern section refers to the area north of Bethesda Church Road to the Damascus Town Center. The southern section refers to the site south of Bethesda Church Road to Valley Park Drive. The entire study area has been impacted in the past by WSSC sewer line construction, roadways, residential and commercial storm drain construction and outfalls into the park, as well as dumping of refuse. There is no known presence of any federally listed or proposed threatened or endangered species in the study area. Past disturbance has segmented forest stands and allowed invasive species to populate some areas. Storm drain construction from adjacent properties has impacted the stream channel causing erosion and subsequent sediment deposition and stream channel

instability. Both areas are largely forested and include wetlands and areas of the 100-year floodplain.

The quality of natural resources varies from the northern and southern portions of the study area, but in general, the southern portion of the study area offers a greater extent and higher quality of natural resources than the northern portion of the study area. The northern section of the site is relatively flat, includes many small wetland pockets, as well as a large wetland just north of Bethesda Church Road. The southern section of the site has a wider stream valley. A significant wetland area exists on the east side of the stream adjacent to a disturbed corridor along the WSSC right-of-way, and a wetland stormwater management pond is located at Valley Park Drive. Steep slopes occur along both sides of the southern area stream valley and are vegetated with many large specimen trees.

Trail Alignments Considered

Both environmental and site features were analyzed to determine trail alignment alternatives. Avoidance, minimization and mitigation of natural resources were primary considerations, as well as the trail user experience. Since the entire trail corridor is a forested stream valley with areas of steep slopes, impacts to the environment could not be avoided. The alternatives attempted to balance impacts to forest, wetlands and slopes and protect the highest quality areas of natural resources in the corridor. Three alternatives were considered for the southern section of the study area, and one alternative was considered for the northern section of the study area.

The following chart summarizes the alternatives considered for the southern section of the study area.

Alternative	Description	Comments
Alternate 1	From Valley Park Drive, follows the western edge of the site in existing cleared areas on top of the stream valley slope on Damascus High School property. This alternative provides the least disturbance to the forest and stream resources.	<ul style="list-style-type: none"> • Outside of M-NCPPC property • Less desirable trail experience • Requires significant grading for accessibility
Alternate 2	From Valley Park Drive, follows an existing people's choice trail along the western side of the stream. Meanders through woods with desirable views to wetlands and stream. Boardwalks and above ground trail construction techniques would be used to minimize impacts. Crosses the stream and connects to Bethesda Church Road on the east side of the stream valley.	<ul style="list-style-type: none"> • Requires bridge • Minor floodplain fringe impacts • Impacts to mature forest • Less grading than Alternative 1
Alternate 3	From Valley Park Drive, follows an existing people's choice trail along the western side of the stream for a short distance and crosses the stream. Follows wetland edge on east side of stream through wooded and disturbed areas and connects to Bethesda Church Road.	<ul style="list-style-type: none"> • Requires bridge • Minor floodplain fringe impacts • Impacts to mature forest • Wetland crossings with extensive boardwalks needed.

For the northern section of the study area, the proposed alignment begins at Bethesda Church Road on the west side of the Magruder Branch stream. The trail follows an existing people's choice trail that minimizes site impacts. The trail crosses the stream in a location that avoids existing wetlands and stormwater management facilities and then follows the alignment of the cleared WSSC sewer easement. Some boardwalk would be required over pockets of wetlands. The trail will then connect to an existing gravel road in the corridor of the future Damascus Lane, which leads to a public sidewalk on Woodfield Road.

Community Outreach

The project and alternatives were presented to the community in a public meeting on October 27, 2005. Following a brief question and answer period, a breakout session was held to speak one-on-one with community attendees. In general, there was broad support for the trail project. The majority of concerns and questions raised dealt with environmental issues and the safety of road crossings. Specific concerns raised included the safety of the trail crossings at Bethesda Church Road, Valley Park Drive, and the difficulty for pedestrians to cross Woodfield Road using the crosswalk at Main Street. A representative from the Department of Public Works and Transportation attended the meeting to help address questions about the road crossings. There were additional questions about wildlife in the park, parking for the trail, and trail connections to adjacent communities. The general consensus from the community was that Alternative 2 was preferred. A public comment sheet was also distributed. Additionally, information on the project has been posted on the Commission's website.

Staff also participated in several subsequent community meetings as part of the Damascus master plan process to update the community on the project and to obtain input. In these meetings, there was general community support for the trail extension. There was a request for an east-west connection across the trail corridor from the Damascus Gardens apartment complex north of Bethesda Church Road to a shopping center along Ridge Road.

Road Crossings

In response to community concerns, additional study of options for road crossings was conducted in close coordination with staff from the Montgomery County Department of Public Works and Transportation (DPWT) and M-NCPPC Transportation Planning staff. The trail alignment crosses two roads, Valley Park Drive and Bethesda Church Road, both of which are owned and maintained by the DPWT.

Valley Park Drive is classified as a two-lane arterial road. In 2006, DPWT made improvements to Valley Park Drive, which included traffic-calming devices at the existing trail crossing. These improvements were reviewed by M-NCPPC Transportation Planning staff and Park Development Division staff. The road was bumped out, and a pedestrian refuge island was created with crosswalks and warning signs. Several parking spaces were provided for trail users on the north side of the road. At the time this crossing was designed, DPWT determined that the trail use was not heavy enough to warrant a signalized crossing.

The new trail will also cross Bethesda Church Road, which is classified as a two-lane arterial road. Bethesda Church Road includes two travel lanes, a lane of parking on each side of the road and a center turn lane. The speed limit is 35 miles per hour. Along the park frontage, the roadway is curved both horizontally and vertically. The combination of the parked cars and a

horizontal curve makes it difficult for trail users to see on-coming cars and for drivers to see trail users. Three alternatives for the crossing were considered and are summarized below. The at-grade crossing is recommended, based on the likely effectiveness of the solution, the opportunity to add a signal in the future if needed, and based on design and maintenance cost considerations.

Alternative	Description	Comments
At-Grade Crossing	To increase visibility of pedestrians to cars, eliminate parking lanes in the vicinity of the crosswalk for the required stopping sight distance (250 feet) in each direction. Construct a pedestrian refuge median in the turn lane, which will allow pedestrians to cross one lane of traffic at a time. Provide traffic signage to meet standards.	<ul style="list-style-type: none"> • Estimated Cost: \$65,000 • The pavement narrowing and approach signing typically has the effect of reducing speed. • DPWT indicated that the level of trail use did not warrant a signal, but they would re-consider if the future trail use is heavy.
Underpass	A ten-foot high by twelve-foot wide steel arched pipe tunnel would be provided for a length of approximately 100 feet.	<ul style="list-style-type: none"> • Estimated Cost: \$500,000 • Completely separates pedestrians from vehicles • Unless the elevation of the road is raised, silt and debris will be regularly deposited in the tunnel by stormwater flows • Risk of crime and vandalism may be increased, and some trail users may cross the road at grade to avoid tunnel.
Overpass	A bridge would be constructed fifteen feet above the roadway to maintain adequate vehicular clearance. Due to the grades in this area, ramps to the bridge would be 620 feet in length, constructed through a combination of grading, retaining walls and bridging.	<ul style="list-style-type: none"> • Estimated Cost: \$1,000,000 • Completely separates pedestrians from vehicles • Some users may still use at-grade crossing to avoid lengthy ramps.

Parking

Opportunities for parking for trail users exist at Damascus Recreational Park, Valley Park Drive and Bethesda Church Road. There is a public Park and Ride lot, which could be used by trail users, located near Woodfield Road and Main Street. The pedestrian signals at this intersection are of short duration and should be improved. Future opportunities may be available for trailhead parking, as redevelopment occurs in the Town Center.

Agency Coordination and Regulatory Approvals

The following is a summary of agency coordination and regulatory approvals obtained for this project.

- Interagency Wetlands Coordinating Committee – The three alternatives were presented to the Committee on August 31, 2005. The Committee preferred Alternative 2. The U.S. Army Corps of Engineers indicated that a Federal permit would not be required if boardwalk were used in sensitive areas.
- Maryland Department of the Environment (MDE) – A representative from MDE walked the site with the project team on April 19, 2006 and was in agreement with the alignment and mitigating practices proposed to minimize disturbance to the floodplains and wetlands.
- Montgomery County Department of Permitting Services (DPS) - The stormwater management concept plan was approved by DPS on December 29, 2005.
- Montgomery County Department of Public Works and Transportation (DPWT) – On August 24, 2007, DPWT indicated that the existing trail crossing condition at Valley Park Drive is appropriate and no further study is required. With respect to the crossing of Bethesda Church Road, DPWT recommended that their preference would be for pedestrians to cross the road at the nearest controlled intersection. The nearest controlled intersection is Ridge Road, which is 1,300 feet to the west of the park property. DPWT agreed that this is so far away that pedestrians would be unlikely to use it. They indicated that a pedestrian signal is not warranted based on trail use, however this could be re-evaluated in the future. They indicated that the recommended option with a crosswalk, bump-out and refuge island is acceptable.
- Maryland State Highway Administration (MSHA) – A field meeting was held with MSHA on February 22, 2006. Staff expressed the concern that cars were not stopping for pedestrians in the crosswalk across Woodfield Road at the intersection with Main Street and suggested a no turn on red sign. In follow-up correspondence, SHA indicated that they found few pedestrians using this intersection during their traffic counts. They indicated a willingness to re-visit this recommendation if pedestrian use increases. They recommended that the signals could be modified for accessibility and could include audible tones and countdown pedestrian signals.
- M-NCPPC Environmental Planning - The Natural Resources Inventory/Forest Stand Delineation Summary Map (NRI/FSD) was approved on October 16, 2006. During their review of the recommended facility plan prior to submitting the Preliminary Forest Conservation Plan, M-NCPPC staff recommended that the trail alignment south of Bethesda Church Road should be modified to avoid mature oak trees adjacent to the proposed alignment. The plan was modified to create Alternative 2a. This alignment moved the trail west of the stream, which removed a stream crossing but required significant areas of additional boardwalk in sensitive areas.
- Washington Suburban Sanitary Commission (WSSC) – The proposed facility plan trail alignment was submitted to WSSC for their review and approval. WSSC requested a modification to the trail immediately south of Bethesda Church Road and in the area near the connector trail for Damascus Gardens apartments to remove some sections of boardwalk and replace them with at-grade hard-surface trail. WSSC did not want boardwalk, bridges or structures located within their easement because of potential damage from footings to their underground lines and potential restrictions for maintenance access. The plans were modified and re-submitted. On September 5, 2007, WSSC indicated that the revised plans for Alternative 2a addressed their

previous comments. They indicated that two sewer manhole rims may also need to be adjusted.

- Montgomery County Public Schools (MCPS) – Alternative 2a requires a segment of the trail to be built on MCPS property to meet grades at Bethesda Church Road. At the time of this report MCPS staff gave verbal approval for this disturbance, provided that the M-NCPPC obtains an easement for this segment of trail. Staff is following up to obtain written approval.
- M-NCPPC Environmental Planning – A revised Preliminary Forest Conservation Plan for Alternative 2a was submitted to staff showing the revisions requested by WSSC, which included replacement of areas of boardwalk in the WSSC easement with asphalt trail. M-NCPPC Environmental Planning staff requested that subsequent meetings be held with WSSC to include boardwalk in the WSSC easement in areas of the trail that impact wetland buffers. Specific modifications to the plan that should be made during final design prior to submitting the final forest conservation plan include the following: using boardwalk in the WSSC easement south of Bethesda Church Road near the wetland and stream; using boardwalk in the WSSC easement near the trail connector to the Damascus Gardens Apartments in the wetland buffer; and moving the trail alignment slightly higher up a hill north of Bethesda Church Road to ensure that limits of grading are outside of wetland buffers. Attachment F is the Environmental Planning Division's staff report on the Preliminary Forest Conservation Plan.

Recommended Facility Plan Alternative 2a

The recommended facility plan Alternative 2a incorporates design refinements made in response to community, staff and agency comments. The refinements include moving the trail west of the stream south of Bethesda Church Road to avoid mature trees, which created significant additional areas of boardwalk. In the cost estimate, staff has included all areas of boardwalk recommended by the Environmental Planning Section.

Park Development Division staff will follow up on the Environmental Planning Section's concerns by assessing alternatives to adjust the alignment of the trail in two areas within the WSSC easement. Alternatives include using boardwalk and moving the trail alignment further into wetlands or buffers if necessary, in order to leave clear areas outside of wetland buffers for maintenance access by WSSC. Staff will hold follow-up meetings with WSSC and Environmental Planning staff to come to consensus on the plan.

The recommended plan includes the following elements:

- Approximately 2,600 linear feet of eight-foot wide asphalt trail aligned and constructed above grade as necessary to minimize environmental impacts;
- Approximately 1,300 linear feet of ten-foot wide boardwalks to span sensitive areas;
- One steel truss bridge;
- Connections and improvements to sidewalks on Valley Park Drive, Bethesda Church Road, and Woodfield Road;
- Trail connections to Damascus High School, Damascus Gardens apartments, residences on Ridge Manor Drive and the shopping center, and residences on Shelldrake Circle;
- Road crossing improvements on Bethesda Church Road;

- Retaining walls near Bethesda Church Road;
- Traffic signal improvements at Woodfield Road;
- Connections to parking opportunities at the Park & Ride lot, Bethesda Church Road and Valley Park Drive;
- Park and trail signage;
- A trailhead area near the Damascus Town Center that may include seating, bicycle racks, trash receptacles, kiosk, and drinking fountain;
- Stormwater management facilities; and
- Naturalized, attractive plantings of native species.

COST ESTIMATE

The proposed cost for Recommended Facility Plan Alternative 2a, including design, permitting, construction and construction management costs is \$2,304,510. A detailed cost estimate is included in Appendix C of the facility plan report.

An estimate of annual operating budget costs was also prepared by staff. This estimate includes input from the Northern Region Park staff and Central Maintenance staff. The total estimated operating budget for the new trail is \$5,675 per year.

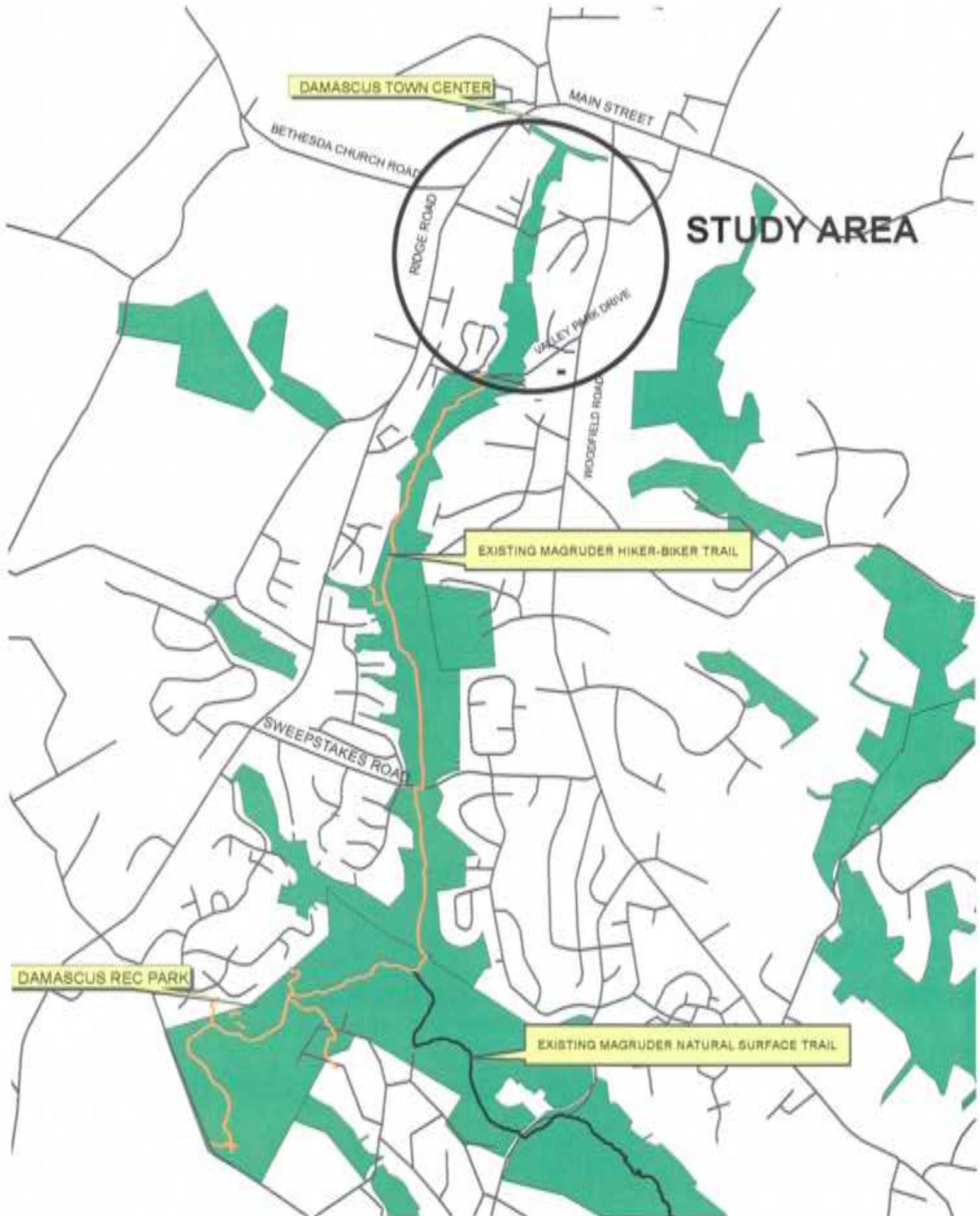
CONCLUSION

Staff recommends approval of the facility plan Alternative 2a. The recommended plan provides an accessible trail with an enjoyable trail experience for the public. The trail provides opportunities for transportation, recreation and enjoying nature. The completion of the Magruder Branch Trail will result in a continuous hiker-biker trail connection through the stream valley from the Damascus Town Center to Damascus Recreational Park. Future trail projects will connect this trail to extensive networks proposed in Germantown and Clarksburg, as envisioned in Countywide plans.

ATTACHMENTS

Attachment A: Vicinity Plan
 Attachment B: Recommended Facility Plan Alternative 2a
 Attachment C: Damascus Town Center Concept
 Attachment D: Damascus Lane Concept
 Attachment E: Facility Plan Report
 Attachment F: Staff Report for Preliminary Forest Conservation Plan

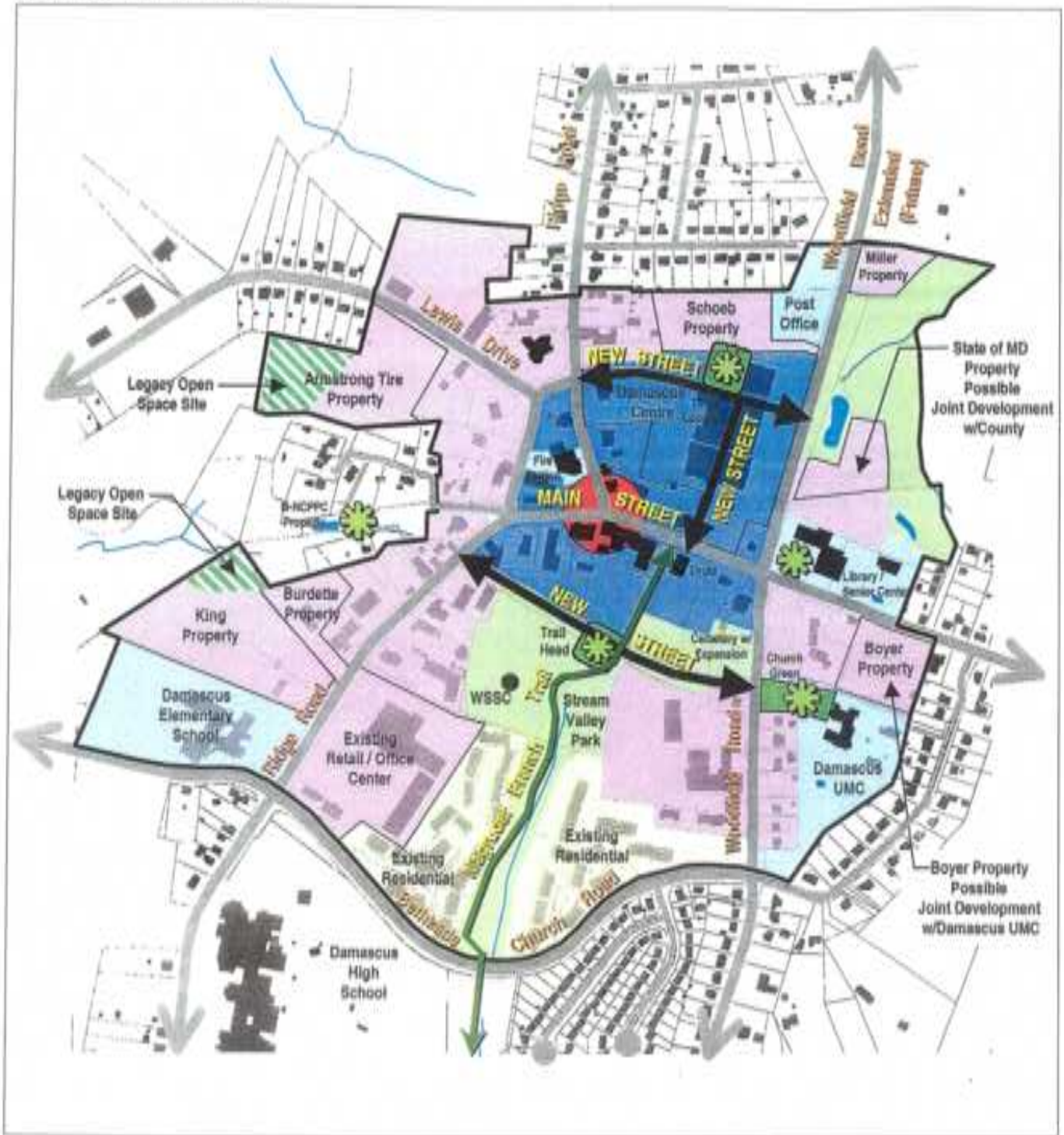
ATTACHMENT A





Recommended Alignment for Magruder Branch Trail

Town Center Framework



Legend:

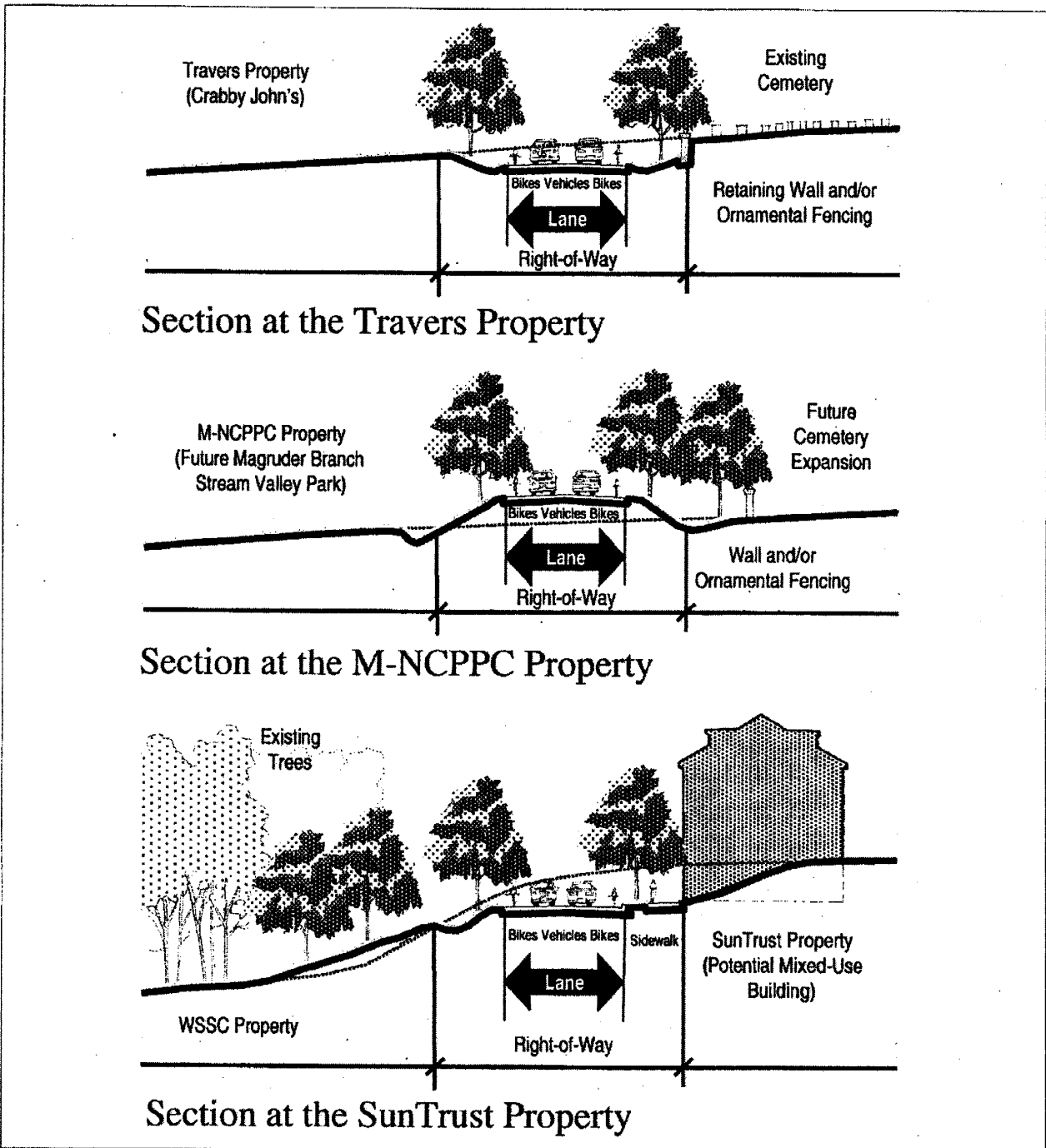
- Mixed-Use (Non-Residential Emphasis)
- Mixed-Use (Residential Emphasis)
- Center of Town
- Existing Residential
- Civic/Institutional
- ★ Park Land, Formal Open Space and Other Open Space
- Potential Legacy Open Space

- Street Network
- Proposed Framework Streets
- Proposed Hiker/Biker Trail
- Existing Buildings



0 300'

Damascus Lane Concept



Not to Scale

ATTACHMENT F

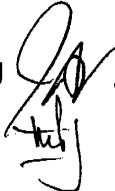
STAFF REPORT FOR
PRELIMINARY FOREST CONSERVATION PLAN




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

MEMORANDUM

TO: Peter Noursi, Park Development Division

VIA: Jorge Valladares, Environmental Planning 

FROM: Michael Zamore, Environmental Planning 

DATE: September 26, 2007

SUBJECT:

1. Preliminary Forest Conservation Plan for Extension of the Magruder Branch Trail, Magruder Branch Stream Valley Park.
2. Facility Plan for Extension of the Magruder Branch Trail, Magruder Branch Stream Valley Park, Damascus Master Plan Area.

STAFF RECOMMENDATIONS

Approval of the Preliminary Forest Conservation Plan, with the following conditions:

1. Parks Development to explore opportunities to realign the trail and decrease the limits of disturbance to reduce impacts to specimen and significant trees and wetlands, at time of Final FCP.
2. Applicant to submit a final forest conservation plan for staff approval prior to DPS approval of the sediment and erosion control permit.
3. Applicant to use extensive boardwalk to minimize soil disturbance and tree loss in sensitive areas of the trail alignment.
4. Applicant to plant native trees within the area cleared to construct the trail. An invasive plant management plan should be submitted with the Final FCP.

Environmental Planning staff recommends **approval** of the Facility Plan for Magruder Branch Trail Extension.

BACKGROUND

This project proposes to complete the Magruder Branch Trail by building the remaining (approximately) one mile of trail from Damascus Recreational Park to Valley Park Drive.

The topography of that section of the Magruder Branch stream valley consists of relatively broad, flat bottomland with moderate to steep hillside slopes. The hillside slopes are covered with a mix of forest, scrub-shrub and herbaceous vegetative habitats while the bottomlands contain extensive areas of wetland and seeps. There are 24 acres of forest, 11.27 acres of floodplain, and 3.5 acres of wetlands. Of this total 2.07 acres (59%) of wetlands and 7.55 acres (67%) of floodplain are forested. The better forests and more extensive wetlands are in the section between Bethesda Church Road and Valley Park Drive.

The bottomlands and stream channel have been impacted by a WSSC sewer line that parallels the stream, flow from stormdrain outfalls, and refuse dumping. This disturbance has segmented the forest and encouraged the spread of non-native invasive plant species such as Multiflora rose and Japanese honeysuckle.

The trail extension is recommended in the Damascus Master Plan, approved and adopted in May 2006. The actual trail alignment, however, has been the subject of many years of discussion and field review because of the sensitive nature of the project area (a steep-sided stream valley with a relatively narrow floodplain). The proposed alignment is the least damaging of the three options studied because it runs largely through an area already disturbed by past activity. However, the trail still needs to be realigned in certain places because of its proximity to the stream (5 to 20 feet in some places), the number of stream crossings (4), location almost entirely within the 100-year floodplain, and proximity to wetlands and wetland buffers.

Compliance with Forest Conservation Law – Chapter 22A

The site has an approved Natural Resources Inventory/Forest Stand Delineation (NRI/FSD) (No. 42006043) issued on December 22, 2006. Environmental Planning staff has reviewed the Preliminary Forest Conservation Plan (FCP) submitted for the project. The 26.7 acre site (within Magruder Branch Stream Valley Park) contains 24 acres of forest, 2.1 acres of which are within the project's LOD. Because the project is limited to 2.1 acres within a much larger forested area, there are no planting requirements associated with the forest conservation plan. However, the construction of the trail will negatively impact trees and the methods to mitigate the impacts to the trees must be documented as part of the final forest conservation plan. The conditions specified may result in some variation in the amount of forest cleared. If the change requires 5000 square feet or more of additional clearing, it must be brought back to the Planning Board for an amendment.

Forest Conservation/Environmental Guidelines

The project is entirely within the Magruder Branch Stream Valley Park. The project is entirely within the stream buffer and mostly within the floodplain. Any alternate location outside the stream buffer would require extensive forest clearing and significant grading. To minimize impacts the project must use extensive boardwalks to cross sensitive areas and minimize tree removal, to comply with the Environmental Guidelines (*Guidelines for*

Environmental Management of Development in Montgomery County). Realigning the trail or using boardwalk at the following locations would help reduce the project's impacts on the natural environment:

STA 8+00 to 10+00. Realign trail to narrow the limits of disturbance and to avoid wetland buffer and two areas of groundwater seepage, or use boardwalk.

STA 18+00 to 22+00. Shift trail west away from the stream and extend boardwalk closer to the Bethesda Church Road embankment. This will reduce the length of retaining wall required, eliminate placing of fill in the 100-year floodplain, minimize impact to the stream, and reduce impact to a seep off Bethesda Church Road.

Bethesda Church Road to STA 27+00. Shift trail out of 25-foot wetland buffer and reduce grading where possible.

STA 29+25 to 31+50. Shift trail west to avoid waters of the US and groundwater seepage at STA 31+00 or use all boardwalk.

We recommend tree planting along the trail alignment because the clearing is entirely within the stream buffer. The clearing is approximately one mile long and 30 to 40 feet wide in some areas with grading. Tree planting will compensate for the construction of a hard surface trail in the buffer and will provide for a more enjoyable experience for the Park user riding or walking through a treed area rather than an open area.

Watershed Protection/Water Quality

The property is in the Magruder Branch subwatershed of the Great Seneca Creek Watershed. The Montgomery County *Countywide Stream Protection Strategy* (CSPS, 2003 Update) lists stream quality conditions and current habitat status as 'good', and habitat stability as 'stable' based on data collected between 1994 and 2000. The project will not affect water quality negatively if the proposed stormwater management safeguards are taken.

MAGRUDER BRANCH HIKER-BIKER TRAIL EXTENSION

Facility Plan Report

October 4, 2007



M-NCPPC



Prepared for:
The Maryland-National Capital Park and Planning Commission

Magruder Branch Hiker Biker Trail Extension

Facility Plan Report

Prepared for:

Maryland-National Capital Park and Planning Commission
Department of Park and Planning
Montgomery County
9500 Brunett Avenue
Silver Spring, Maryland 20901

Prepared by:

Greenman – Pedersen, Inc.
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Annapolis Junction, MD 20701

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Greenman-Pedersen, Inc.

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E. Masterplan Recommendations for the Damascus Town Center

F. Community Correspondence

VI. Technical Appendices for the Project Record (Available Upon Request from the Park Development Division)

G. Approved NRI/FSD Report and Plan

H. Wetland and Waterways Identification and Delineation Report

Executive Summary

The current Magruder Branch Trail extends in a north south direction from the Seneca Creek Greenway Trail to Valley Park Drive, just less than a mile from the Damascus Town Center. From there, a series of footpaths follow Magruder Branch to its headwaters at the Damascus Town Center. Completion of the Magruder Branch Hiker Biker Trail Extension will formalize a people's choice network of trails that currently exist, providing a multi-purpose trail for transportation, recreation, and enjoying nature.

To prepare this facility plan, Maryland-National Capital Park and Planning Commission staff and Greenman-Pedersen, Inc. have undertaken a multi-step process to establish the existing conditions, both natural and man-made, evaluate potential trail alignments through the corridor, present the site analysis and alignment possibilities and solicit input from the public, and prepare 30% construction plans and estimate for review and approval by appropriate local agencies.

The headwaters of Magruder Branch begin just south of the Damascus Town Center. The stream corridor contains a flat, wide floodplain bordered by steep slopes on both sides, with quality forest south of Bethesda Church Road. Wetlands and groundwater seeps exist throughout the stream corridor. The existing path locations, steep slopes, mature forests, and wetlands were the key features that were considered to select the best trail location. At the public meeting, three alignments were presented between Valley Park Drive and Bethesda Church Road. Staff and the public unanimously supported the selected Alternative Two, which is just west of the stream and centrally located in the wooded corridor. Between Bethesda Church Road and the Damascus Town Center, only one feasible location was presented, and this was also unanimously supported. The public's major concern was over the safety of mid-block crossings at Valley Park Drive and at Bethesda Church Road. Department of Public Works and Transportation has recently constructed improvements to Valley Park Drive, which include a pedestrian refuge island and crosswalks to facilitate safe passage. After evaluating crossing alternatives such as signals, overpasses and underpasses, and coordinating with DPWT, the plan recommends a similar improvement at Bethesda Church Road.

The recommended plan provides a good balance between preserving and enhancing the environmental features and providing a multi-purpose trail for all ages and abilities through the stream valley corridor. The plan has the unanimous support of the public and reviewing agencies, and will provide a framework to support the final design.

Facility Plan

I. Project Description

A. Introduction

Since 1982, the Damascus Area Master Plans have recommended a hiker biker trail connecting Damascus Regional Park to the Damascus commercial district. Construction of the initial section, from Damascus Regional Park to Valley Park Road, was completed in 1991. This initial section is approximately 75% of the recommended Magruder Branch Trail. However, the Commission had not acquired the land needed to extend the trail to the Damascus town center. In 1998, Parcel 880 was purchased from the Damascus United Methodist Church. With this property now in public ownership, the Maryland-National Capital Park and Planning Commission (M-NCPPC) seeks to extend the Magruder Branch Trail from Valley Park Drive to the Damascus Town Center, fulfilling the recommendation of the Damascus Area Master Plan.

The objective of this Facility Plan Report is to provide both design and technical support for the trail extension. It is being prepared for the M-MCPPC, by Greenman-Pedersen, Inc. (GPI) to achieve final approval through the Montgomery County Planning Board.

B. Site Location

Damascus is located in the Northern corner of Montgomery County, Maryland. The town is surrounded by agriculture, rural open space, and newer suburban developments.

The proposed M-NCPPC site for the Magruder Branch Trail Extension is located between Main Street in the Damascus Town Center in the North and Valley Park Drive in the South. Bethesda Church Road runs East-West through the center of the site. (See Figure 1) The Magruder Branch Stream runs from the North to the South through the center of the site.

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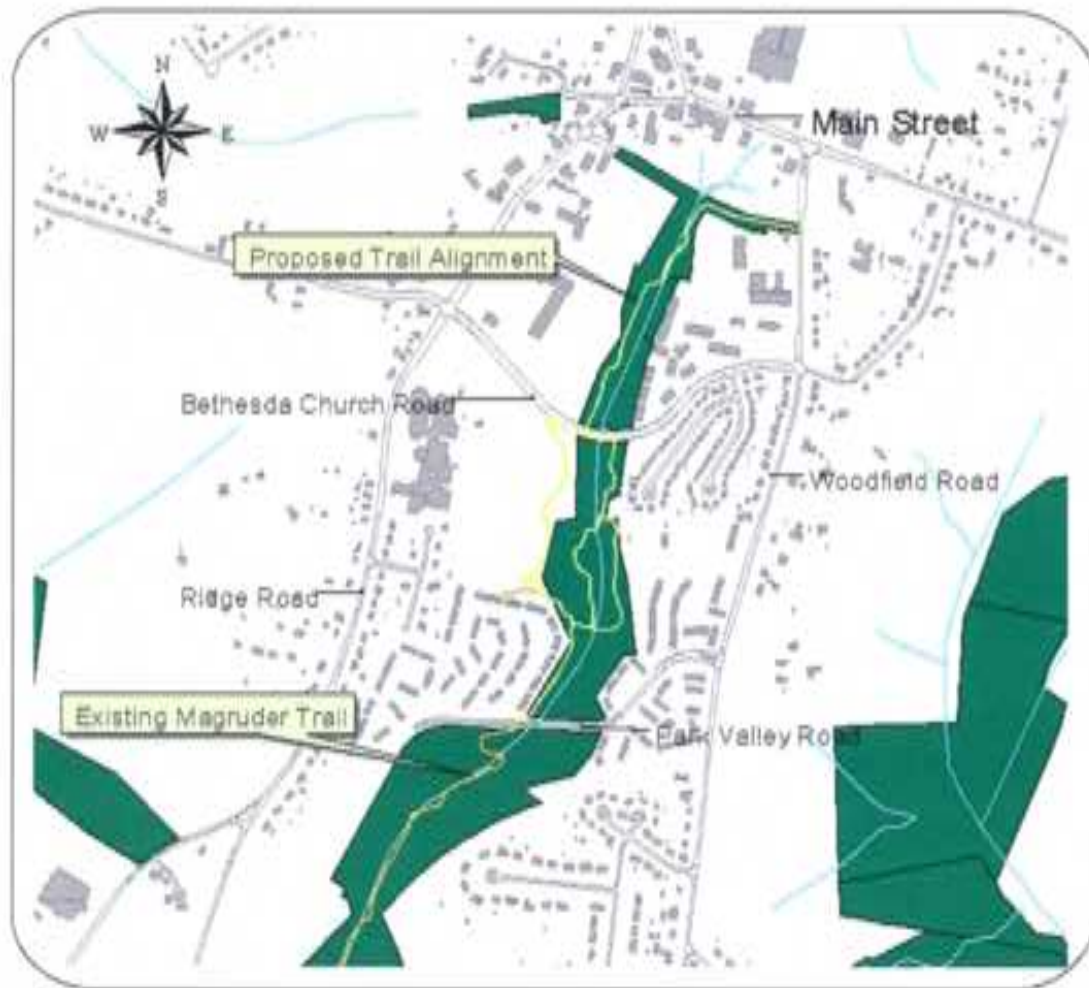


Figure 1 – Location of Magruder Branch Trail Extension

C. Facility Planning Process

Funding for the preparation of the extension of the Magruder Branch Hiker-Biker Trail Facility Plan was included in the FY05-10 Capital Improvements Program. Peter Noursi was project manager from MNCPPC and Kimberly Paniati was project manager from GPI. The staff team was completed with the following persons:

Marian Elsasser	MNCPPC - Park Development
Art Nelligan	MNCPPC - Northern Region
Wendy Hanley	MNCPPC - Northern Region
Jeff Coe	MNCPPC - Park Police
Ki Kim	MNCPPC - County Wide Planning
Malaika Abernathy	MNCPPC - Comm. Based Planning
Miguel Iraola	MNCPPC - Comm. Based Planning
Norma Kawecki	MNCPPC - Park Planning and Stewardship
Carole Bergmann	MNCPPC - Park Planning and Stewardship
James Sorensen	MNCPPC - Park Planning and Stewardship

Doug Redmond	MNCPPC – Park Planning and Stewardship
Michael Zamore	MNCPPC – Environmental Planning
Tine Schneider	MNCPPC – Environmental Planning
Kim Paniati	Greenman-Pedersen, Inc.
Wade Felt	Greenman-Pedersen, Inc.
Liz Marcy	Greenman-Pedersen, Inc.
Carole Perfit	Greenman-Pedersen, Inc.

After reviewing the staff's concerns, a schedule and program of requirements were developed. Data collection, coordinated by GPI, included as-built plans, county GIS information, aerial topography, hydraulics and hydrology, existing site conditions, natural resources, the 100-year floodplain location, and site opportunities and constraints.

The Natural Resource Inventory evaluated and documented the existing natural features of the site. This included, but was not limited to wetland identification, forest stand delineation including specimen tree identification and location, and identifying any rare, threatened and endangered species. Other features surveyed, inventoried and mapped during this process were streams and floodplain location, steep slope analysis, drainage problems and issues, invasive species identification, meadows, disturbed land, dumping grounds, people's choice trails, and any utilities and easements. (See Figure 2)



Figure 2 • Magruder Branch Stream

After the existing site conditions were evaluated and mapped, alternative alignments were proposed. The goal of the alignments was to provide an enjoyable safe trail experience that complies with the Americans with Disabilities Act and protects the environment. These alignments avoided or minimized impacts to natural resources and adjacent properties.

A public meeting was then held to inform the community of the project and alternative alignments, and solicit their input. Public comments were documented and considered in the final design. Following the community input and careful analysis of the alignments, a preferred alignment was selected.

Following the selection of the preferred alternative, the project team prepared 30% plans and completed remaining review agency coordination, including finalizing the Natural Resources Inventory / Forest Stand Delineation (NRI/FSD) Report and plan and Preliminary Forest Conservation Plan. During the completion of the 30% design, there was a slight adjustment in the preferred alignment to preserve forest cover just south of Bethesda Church Road.

II. Needs Assessment

A. Planning Documents and References

1. Land, Preservation, Parks, and Recreation Plan (2005)

The Land, Preservation, Parks and Recreation Plan (LPPRP) reviews goals and objectives of State and local programs for parks and recreation, agriculture, and natural resources. Among the primary objectives for Parkland and Open Space Preservation is to “Provide a coordinated and comprehensive system of parks, recreation, and open space”. Under that subheading, the LPPRP provides the following guidance strategies:

- “Give priority to open space, park and recreation investments in areas with the greatest existing or proposed residential density and in areas with important environmental features.
- Use open space, parks, and recreation facilities to shape and enhance the development and identity of individual neighborhoods, cluster developments, and existing communities.
- “Integrate open space, parks and recreational facilities into urbanized areas to promote public activity and community identity”.
- Plan for and encourage the provision of greenways to connect urban and rural open spaces to provide access to parkland, and to connect major stream valley park areas.

This Facility Plan complies with the goals and objectives of the LPPRP.

2. Damascus Area Master Plan

The Magruder Branch Hiker – Biker trail, extending from Damascus Regional Park to the Damascus Town Center has been in the Damascus Area Master Plan since at least 1982. However, as the Commission had not yet acquired the land necessary to extend the trail to the town center, the trail was only extended from Damascus Regional Park to Valley Park Drive and the completion of the project was delayed until land was acquired. The purchase of the remaining infill for completion of the Magruder Branch trail was completed with the Purchase of Parcel 880 from the Damascus United Methodist Church in 1998. The most recent update of the Damascus Master Plan adopted and approved by the Planning Board in June 2006, “strongly supports the continuation of the trail northward to the Town Center” (page 72).

3. Countywide Park Trails Plan

The Goals and Objectives for Montgomery County in The General Plan include the following objectives and guidelines for parkland acquisition and development:

- Provide a coordinated and comprehensive system of parks, recreation, and open space
- Preserve natural areas and features that are ecologically unusual, environmentally sensitive, or possess outstanding natural beauty
- Conserve county waterways, wetlands, and sensitive parts of stream valleys to minimize flooding, pollution, sedimentation, and damage to the ecology and to preserve natural beauty and open space.

This proposed trail extension is included in the Upcounty Trail Corridor where the plan objective is to provide “a hard surface recreational trail to serve the existing and future residents of Germantown, Clarksburg, and Damascus.” (Damascus Master Plan, 2006,

pg.72) The design will avoid environmentally sensitive areas and construction methods will minimize environmental impacts of a hard surface trail.

4. Countywide Bikeways Functional Master Plan

This project is incorporated in the Countywide Bikeways Functional Master Plan. Additionally, it complies with the following priorities identified in the Functional Master Plan:

- “Bikeways Connecting to Transit (DPWT Park and Ride Lot at the corner of Woodsfield Rd. and Main Street)”
 - “Bikeways Connecting to Municipalities, Central Business Districts and Town Centers” (Damascus town center connection)
 - “Bikeways Connecting to Major County Park Trail Corridors” (Connection to existing Magruder Branch Trail)
 - “On-going Implementation - Local/Neighborhood Bike Routes”
- (Countywide Bikeways Functional Master Plan, March 2005, pg. 8)

5. Other References

A number of publications were used as references on design guidelines for issues such as trail width, horizontal curves, vertical grades and curves and intersection safety elements. These publications are the *M-NCPPC Montgomery County Trail Implementation Guide (Draft)*, *ASSHTO Guide for the Development of Bicycle Facilities (November 2002)*, *MUTCD 2000 – Part 9 “Traffic Controls for Bicycle Facilities,”* *SHA Guidelines Related to Traffic Control Devices for Bicycles on Roadways in Maryland (April 2, 2003)*, *SHA ADA guidelines (November 20, 2002)*, and the *SHA Accessibility Policy & Guidelines for Pedestrian Facilities along State Highways*.

B. Park User Survey

The M-NCPPC conducted surveys of Hiker Biker Trail use throughout the county in 2000. The trail user counts for Magruder Branch Trail were based on 20 separate hour-long observations and showed a total of 437 users, for an average trail use of 22 users per hour. Approximately half the users were walkers, a quarter bicyclists, 21% joggers, and the remainder divided between infants in strollers, in-line skaters, and others.

Since the survey was conducted in 2000, significant development has occurred in the Damascus area, and trail use numbers are expected to have increased accordingly.

III. Program of Requirements

A. Demographics and Area Facilities

The Damascus town center, at the north end of the project site, includes a mix of uses including two small shopping centers, a main street, and some office and light industrial uses. The land use immediately adjacent to the town center is primarily moderate density residential and institutional. The residential development includes townhouses to the west and east of the stream valley, and single family, apartments and condominiums on the east side.

The Damascus Master Plan places a strong emphasis on strengthening the identity of the town center. One major element in building this framework is to increase vehicular and pedestrian interconnectivity and create new green spaces to serve as thresholds for access to neighborhoods, trails and pathways.

This emphasis on the sense of a strong community is supported by the area residents. The population in the Damascus area is ethnically homogenous and stable with a stronger percentage of middle income households. The population growth is slower than the County's overall growth rate.

B. Project Requirements

The facility plan's overall objective is to develop an attractive, accessible, and environmentally sensitive connection between the existing Magruder Branch Trail and the Damascus Town Center, its trailhead, and associated recreational and storm water management facilities.

The trail is planned to include the following specific features:

- An attractive trailhead area
- Parking opportunities at or near the trailhead
- A trail alignment minimizing environmental and tree loss impacts
- Meet the recreation facility guidelines of the Americans with Disabilities Act (ADA), American Association of State Highway and Transportation Officials (AASHTO) and M-NCPPC requirements
- Opportunities for connector trails to adjacent communities
- Suitable stream crossing points
- Stormwater management facilities as required
- Safe road crossing of Bethesda Church Road and Valley Park Road

IV. The Facility Plan

A. Existing Conditions

1. Surrounding Land Uses

The project site is in Northern Montgomery County near the town of Damascus. Damascus is a small town with community oriented services and low to moderate density residential neighborhoods. It is surrounded by agricultural and rural open space. The site's northern boundary is the Damascus Town Center, zoned TCZ-1, Mixed-Use. To the northwest is the Washington Suburban Sanitary Commission (WSSC) Water Tank facility and residential properties. The east side of the northern section has residential properties and a few commercial sites. The southwest is bordered by Damascus High School and residential properties. Along the southeast side are more residential properties and the Damascus Recreation and Swim Club. (See Figure 3)



Figure 3 - Magruder Branch Trail Extension project site.

2. Existing Magruder Branch Trail

The Magruder Branch Hiker-Biker Trail is the only paved regional trail within the Damascus planning area. The existing portion of the trail runs along Magruder Branch stream beginning at Damascus Recreational Park on Kings Valley Road. The hiker-biker trail follows a northern route for 4.2 miles. In addition, there are 3.3 miles of natural surface trail. The trail terminus is located at Valley Park Drive. The majority of the existing trail is relatively flat, following the Magruder Branch stream valley, with the exception of steep portions at Kings Valley Road and Valley Park Drive. From Kings Valley Road, the trail runs south to meet the Lower Magruder Trail which ties into the Seneca Creek Greenway Trail. (See Figure 4) The Damascus Recreational Park, located at Kings Valley Road, has ample parking, rest rooms, and drinking water. This trail provides many enjoyable trail experiences, including open fields, wetlands and lush woodlands.



Figure 4 - The Existing Magruder Branch Trail

The Valley Park Drive trail terminus has grass paver parking and a crossing island. (See Figure 5) Constructed in 2006, it connects to the north to an existing asphalt path that follows the stream valley edge for 800 ft. before turning west up to a residential area and Damascus High School.



Figure 5 - Valley Park Drive crossing

3. Project Site Conditions

The land surrounding Magruder Branch is zoned R-200 with a Park Land, Open Space land use. The Magruder Branch Trail extension site, from Valley Park Drive to the Damascus town center can be divided into two sections. (See Figure 3) The Northern section refers to the area north of Bethesda Church Road to the Damascus Town Center. The Southern section of the site is south of Bethesda Church Road to Valley Park Drive.

The Northern section of the Magruder Branch Trail extension is largely forested. A sewer easement runs the entire length. This section has many small wetland pockets and stream headcuts and contains an area of 100 year flood plain. Stormwater management and storm drainage facilities from adjacent properties drain into the Magruder Branch Stream. This area is fairly flat and there is large wetland just north of Bethesda Church Road.

The majority of the Southern section is also forested. The wider stream valley in this area contains a 100-year floodplain. A significant wetland area exists on the east side of this section adjacent to a disturbed corridor along the WSSC right of way. A wetland storm water management pond is located at Valley Park Drive. Steep slopes along both sides of the stream valley are vegetated with many large specimen trees.

4. Environmental Analysis

In July of 2005, GPI completed preliminary mapping and conducted field investigations of the site in order to document forested habitats within the project boundaries as required by *Trees Technical Manual, Guidance for the Implementation of Montgomery County's Forest Conservation Law*, July 1992 pursuant to the Montgomery County forest conservation law and Maryland Forest Conservation Act of 1990.

These field investigations found topography consisting of relatively flat bottomland and moderate to steep hillside slopes covered with forested, scrub-shrub, and herbaceous

vegetative habitats. Magruder Branch, a tributary to Great Seneca Creek, flows in a north to south direction and is the only defined perennial waterway within the project area.

Eleven forest stands were identified and delineated along with thirty-nine Specimen Tree Candidates. A majority of the project area has been impacted in the past by sewer line, roadway, residential, stormdrain construction, and refuse dumping operations. According to the US Fish and Wildlife Service, there is no known presence of any species federally listed or proposed for listing as endangered or threatened. None were observed during field work at the site.

The disturbance has segmented the forest stands and allowed invasive species to populate many areas as a result of overstory cover removal and disturbed soil conditions. Stormdrain construction from adjacent residential neighborhoods and commercial properties has impacted the stream channel causing erosion and subsequent sediment deposition and stream channel instability. The quality of the natural resources varies from the northern and southern portions of the project. Overall, the southern portion offers a greater extent and higher quality of natural resources than the northern portion of the project study area.

The Montgomery County Soils Survey (1988) indicates that this area of the county is dominated by the soil type called Blocktown-Brinklow-Linganore. These soil types are gently sloping to steep, well drained, shallow and moderately deep, and are loamy throughout. They are usually found in uplands. About 10 percent of Montgomery County's soils are this type.

The results of these studies are The Natural Resources Inventory and Forest Stand Delineation Report (NRI/FSD) and the Wetlands and Waterways Identification and Delineation Report (WETI&D) for Magruder Branch Trail. The NRI/FSD was submitted for approval to the M-NCPPC on April 17, 2006. A copy is included in Appendix E. The WETI&D, included in Appendix F, was submitted for review in concert with the NRI/FSD.

B. Design Considerations

1. Regulatory and Utility Requirements / Interagency Coordination

The following is a summary of the coordination made with local agencies, both County and State, during the facility plan process.

- a. **Department of Permitting Services (DPS)** – Stormwater Management Concept GPI prepared and submitted a stormwater management concept plan, report, and application for review and approval by Montgomery County DPS. DPS approved the concept of December 29, 2005. A copy of the approval letter is included in Appendix A.
- b. **Interagency Wetland Coordinating Committee** - The three alternative alignments for this project were presented to the Interagency Wetland Coordinating Committee on August 31, 2005. The presentation reviewed the cost benefit analysis of the different alignments to the Committee. The committee supported the alignment and preferred alternate two and determined that no Army Corps of Engineering permit would be required if boardwalk is used in sensitive area. Bob Cooper, of the

Maryland Department of Natural Resources (DNR), stated that DNR would review boardwalks on a case by case basis and confirmed his decision in a subsequent field walk of the site on April 19, 2006.

- c. ***Maryland Department of the Environment*** - On April 19, 2006, Bob Cooper of Maryland Department of Natural Resources (DNR) walked the site with the project team and was in agreement with the alignment and the mitigating practices suggested to minimize disturbance to the floodplain and wetlands.
- d. ***M-NCPPC – Natural Resources Inventory/Forest Stand Delineation*** - The initial NRI/FSD was submitted on August 22, 2005. It was reviewed by Amy Lidsey, of the Environmental Planning Division. The approved NRI/FSD was accepted on 10/16/2006 and is included in the appendix.
- e. ***M-NCPPC –Preliminary Forest Conservation Plan*** – This Preliminary Forest Conservation Plan of this Facility Plan and been reviewed and approved by Michael Zamore, and Tina Schneider of the Environmental Planning Division. Minor realignments to the trail were made per their review.
- f. ***M-NCPPC – PDCO Coordination*** – Per Department of Parks procedures, the Facility Plan was coordinated using our PDCO process. The PDCO group, includes representatives from the following Parks divisions: Natural Resources, Park Development, Park Police, Northern Area, Park Planning and Stewardship as well the Community –Based Planning, the Countywide Planning, and the Environmental Planning Divisions from the Department of Planning. These meetings were held both on site and in the office. The dates and purpose of the meetings for the project team include:
 - Kickoff Meeting: March 18, 2005
 - Present Alternate Alignments & Solicit Input: August 23, 2005
 - Review Preliminary Facility Plan Report and Estimate: January 30, 2006
 - Meeting for final approval of Facility Plan: September 11, 2007
- g. ***Department of Public Works and Transportation*** - The Montgomery County Department of Public Works and Transportation (DPWT) was contacted about the Bethesda Church Road Crossing. A memo was prepared for their review presenting options for the mid-block crossings on Bethesda Church Road and Valley Park Drive. An email response from DPWT is included in Appendix A.
- h. ***State Highway Administration*** – The Maryland State highway Administration was contacted about the connection to the park and ride lot off Woodfield Road. Representatives from MNCPPC, Montgomery County DPWT, and GPI met with Stephanie Yanovitz of SHA's staff to review the existing sidewalk and crossing location which provide access to the park and ride lot from the trail, as well as some concerns raised during the public meeting by residents about improvements to make a safer crossing or the MD 124 at the MD108 intersection. An email response from SHA is included in Appendix A.

2. Trail Experience and Opportunities for Connectors

The trail will be used for different purposes: commuting, exercise, enjoying nature and walking with young children or the family dog. Many Damascus community facilities surround this area and the trail can be used to reach them. Shops and restaurants in the town center and shopping area, Damascus High School and associated athletic fields can be connected to neighborhoods and the Damascus Swimming Club. Future redevelopment in the Damascus Town Center will provide opportunities to connect the trail directly to the town center. The trail will provide safe access between these locations and to the hiker-biker trail system that now terminates at Valley Park Drive.

3. Americans with Disabilities Act

A major consideration for trail design is selecting an alignment in compliance with the Americans with Disabilities Act using the guidelines provided in the *Final Report of the Regulatory Negotiation Committee on Accessibility Guidelines for Outdoor Developed Area (1999)*. (Available online at <http://www.access-board.gov/outdoor/outdoor-rec-rpt.htm>). Key requirements for accommodating all abilities and skill levels include:

- Maximum grade of 10% for distance of 30 feet
- Maximum grade of 8% for distance of 200 feet
- Maximum grade of 5% for any distance
- ADA Compatible ramps at all roadway crossings, including detectable warning surfaces

Trail designed will also be in accordance with the *Trail Implementation Guide, Trail Facility Planning, Design, Construction and Mitigation for Montgomery County Trails, Manual on Uniform Traffic Control Devices for Streets and Highways, Part 9 Traffic Controls for Bicycle Facilities*, and *AASHTO*. The trail entrance signage will indicate that the trail meets ADA standards for accessibility.

4. Crime Prevention Through Environmental Design

Crime Prevention Through Environmental Design (CPTED) is defined as "the proper design and effective use of the built environment that can lead to a reduction in the fear and incidence of crime and an improvement in the quality of life." Reducing the opportunities for crime with signage, ADA accessibility, and sight distances are techniques considered when designing hiker/biker trails through the woods.

The proposed trail alignment for the Magruder Branch Trail Extension was developed utilizing the five basic CPTED principles: Territoriality, Surveillance, Activity Support, Access Control, and Maintenance. At each entrance to the trail network there will be Trail Identification Signage. It will clearly indicate the name of the trail and the uses permitted. Visibility along the trail will be adequate to give the user a long enough site distance to feel secure. This trail site is surrounded by residential neighborhoods, Damascus High School and the Town Center. There is tremendous local support for the trail and it is expected to be heavily used. A trail is safer and more secure when more people are present. Ongoing trail maintenance will include minor pruning of the existing understory and dead tree limbs that interfere with sightlines and trash removal. This will maintain good visibility and encourage use.

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5. Environmental

Both environmental and site features were analyzed to establish the trail alignment. The alignment selection process included three stages in consideration of the environmental constraints: avoidance, minimization, and, mitigation.

Avoidance: Avoiding valuable natural resources is one of the most important considerations. The natural resources of this site that were avoided include hillside ground water seep wetlands, streams, floodplains and wetlands, forested habitats, specimen trees and their critical root zones, and steep slopes.

Minimization: Once all possible environmentally sensitive features were avoided, we evaluated construction techniques to minimize impacts to the natural resources.



Figure 7 - A boardwalk is a design technique used for minimization of impacts through the woods.

Minimization techniques that will be used include boardwalks near seeps and crossing wetlands (See Figure 7), pedestrian bridges across the stream, and tree protection methods (such as root pruning, tree pruning, no grubbing, and installation of tree protection devices). Boardwalks are proposed for 750 linear feet of the project. No bridge crossings are proposed.

Another technique for tree preservation and minimization is constructing above grade trails. An above grade trail performs the same function as a hard surface trail, except the trail is constructed above the existing ground surface; therefore, the existing ground is not excavated and critical roots are impacted to a lesser degree

by the disturbance. (See Figure 8) Above grade trails are recommended for most of the area without boardwalk.

Mitigation: Various mitigation measures are proposed to enhance natural resources. These measures include storm drain outfall stabilization, wetland restoration and enhancement, tree for tree replacement, planting native species, removing invasive species, vertical mulching and root aeration.



Figure 8 - Above grade cross section is a minimization technique used to protect critical root zones.

C. Proposed Trail Alternatives

1. Trail Alignments

Evaluating and mapping the site's existing conditions and natural resources led to the development of three alternate trail alignments for the facility plan. (See Figure 9)

For evaluation purposes the trail was divided into two sections, the Southern Section and the Northern Section, with Bethesda Church Road forming the dividing line.



Figure 9 - Aerial photograph of the entire Magnifier Branch Trail Extension from Valley Park Drive to Woodfield Road showing three alternate trail alignments in the Southern Section of the parkland. The trail alignment is shown in green and the property boundary is in blue. The Southern Section is from Valley Park Drive to Bethesda Church Road. The Northern Section is from Bethesda Church Road to Woodfield Road.

a. Southern Section – Valley Park Drive to Bethesda Church Road



Figure 10 - Aerial photography from Valley Park Drive to Bethesda Church Road referred to as the Southern Section of the trail. The alternate alignments through this area are shown in green.

Figure ten presents the proposed alignments of the Southern Section. The proposed alignment begins at the road crossing at Valley Park Drive. The existing asphalt path adjacent to Valley Park Drive will be improved to meet ADA accessibility.

Between the entrance to the woods and Bethesda Church Road, three different alignments were considered (Alternates One, Two, and Three). Each alternate alignment is located on a different section of the stream valley with both advantages and disadvantages to the site. (See Figure 11)



Figure 11 - A Cross Section through the Southern Section of the park from the Damascus High School to the Damascus Recreation and Swim Club showing all three alternate alignments.

ALTERNATE ONE



Figure 12 - Aerial photography from Valley Park Drive to Bethesda Church Road highlighting in red Alternate One on the western side of the site.

Alternate One trail option, (see Figure 12), follows along the western edge of the site on top of the stream valley steep slope, adjacent to the Damascus High School. It follows the existing asphalt path behind residential properties and travels along edge of the tree line, eventually meeting Bethesda Church Road on the western side of the site.

This trail option is mostly outside of Montgomery County Parkland property. In order to accommodate ADA accessibility, major grading is required. This option has limited forest and stream valley impacts, using the existing cleared area; however, it creates a less desirable trail experience with no contact with the stream valley. It may also create a conflict with school activities.

The following Figure 13 shows the presented Alternate One with the existing natural resources mapped. The advantages and disadvantages were presented and then discussed with the community. Alternate One was not a preference in the community vote.



Figure 13 - Alternate One along the existing woods edge off Park property

Alternate One Advantages:

1. Limited forest and stream valley impacts
2. Uses existing cleared area

Alternate One Disadvantages:

1. Board of Education property
2. Most impact to adjacent properties
3. Less desirable trail experience
4. Major grading for ADA accessibility

ALTERNATE TWO



Figure 14 - Aerial photography from Valley Park Drive to Bethesda Church Road highlighting in red Alternate Two that travels along the stream valley.

The Alternate Two trail option follows an existing people's choice trail into the woods for about 300 linear feet along the western side of the stream. This option meanders through the woods with views of the wetlands and stream. (See Figure 14) There are many large specimen trees through the woods with an open understory allowing trail construction to have minimal impacts to the existing woods. Minimization tactics such as boardwalks and above ground trails are required to protect the specimen trees and their critical root zones. This option will cross the stream with a pedestrian bridge connecting to the eastern side of the stream valley. The trail will follow the stream valley connecting to Bethesda Church Road on the east side of the stream. This option will have a desirable trail experience through the stream valley and have the least amount of grading required for ADA accessibility.

The following Figure 15 shows Alternate Two with the existing natural resources mapped. The advantages and disadvantages were presented and discussed to the community. The community voted Alternate Two as their preferred option.



Figure 15 - Alternate Two along the center of the park property.

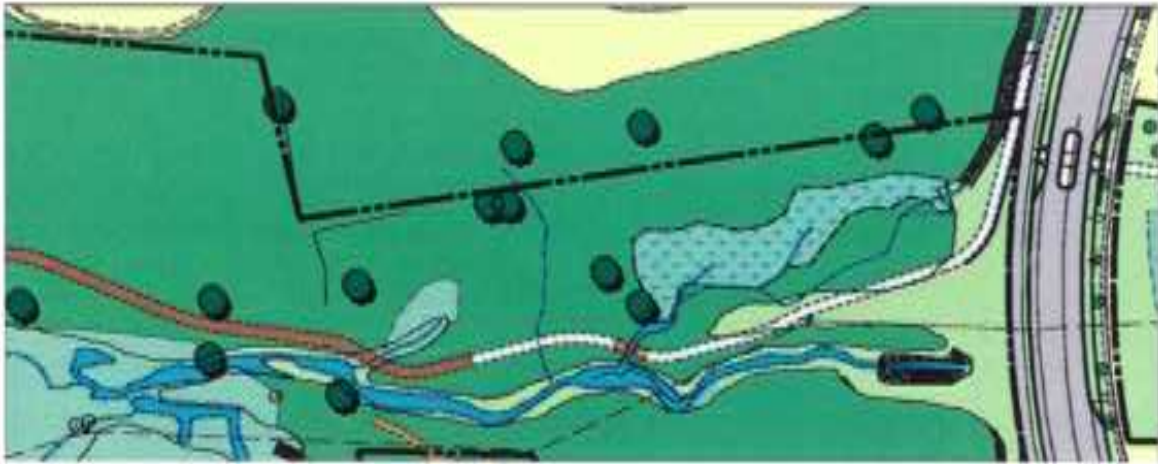
Alternate 2a - Modifications at Bethesda Church Road

Figure 21 – Trail alignment south of Bethesda Church Road

In 2006 during the review of the Preliminary Forest Conservation Plan, MNCPPC staff recommended that the trail alignment in the area just downstream (south) of Bethesda Church Road be modified to avoid disturbing the roots of the stand of Oak Trees that were adjacent to the proposed trail alignment. This recommendation moved the trail alignment completely to the west of the stream, and removed two stream crossings. It also required the trail to traverse through 450' of sensitive areas, which would require additional boardwalk. This recommendation was incorporated into the plan.

Alternate Two Advantages:

1. Less grading for ADA accessibility
2. Most desirable trail experience
3. Uses existing people's choice trail

Alternate Two Disadvantages:

1. Minor floodplain fringe impacts
2. Bridge crossing of Magruder Branch
3. Impacts to mature forest with good understory

ALTERNATE THREE



Figure 16 - Aerial photography from Valley Park Drive to Bethesda Church Road highlighting in red Alternate Three that travels along the Eastern side of the stream valley. This option was not preferred by the community.

Alternate Three trail option, (see Figure 16), follows the existing people's choice trail into the woods for about 200 linear feet and immediately crosses the stream with a pedestrian bridge. The eastern side of the stream has many wetlands and thick woods with mature understory that would require clearing for the trail. This option follows the wetland edge and extensive boardwalk is required to minimize impacts to the wetlands and keep the trail on park property. The trail would meander along the eastern side of the stream eventually connecting to Bethesda Church Road on the eastern side.

The following Figure 17 shows Alternate Three with the existing natural resources mapped. The advantages and disadvantages were presented and discussed to the community. Alternate Three was not a preference in the community vote.



Figure 17 - Alternate Three along the east side of park property.

Alternate Three Advantages:

1. Uses existing people's choice stream crossing location
2. Uses previously disturbed areas
3. Moderately desirable trail experience

Alternate Three Disadvantages:

1. Impacts to Mature forest with good understory
2. Minor floodplain fringe impacts
3. Wetland crossings and extensive boardwalks needed

b. Northern Section – Bethesda Church Road to Woodfield Road

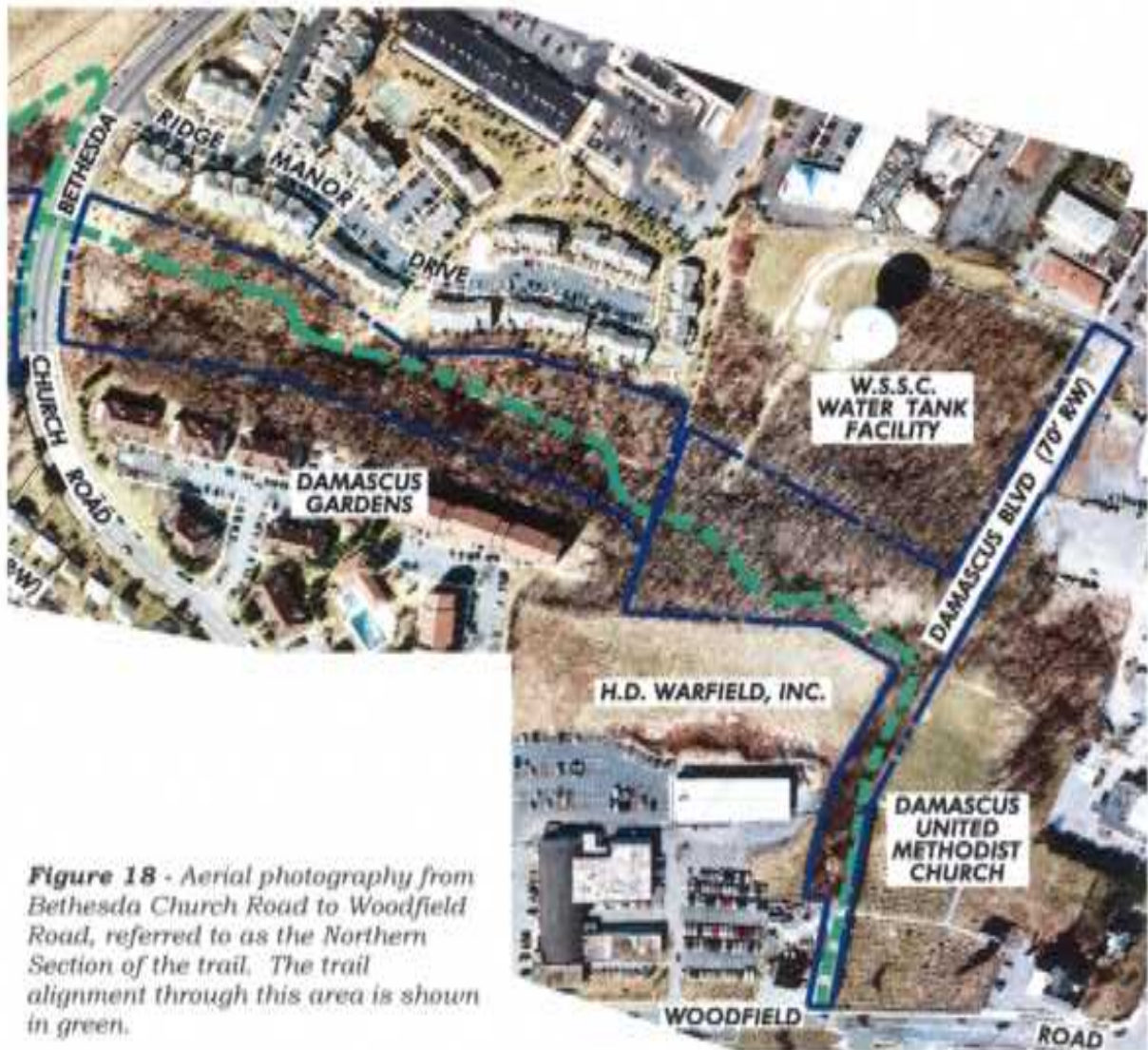


Figure 18 - Aerial photography from Bethesda Church Road to Woodfield Road, referred to as the Northern Section of the trail. The trail alignment through this area is shown in green.

The Northern alignment of the Magruder Branch Trail Extension begins at the road crossing at Bethesda Church Road on the west side of the Magruder Branch Stream. The connection of Southern and Northern sections will require a road crossing at Bethesda Church Road. For further discussion of road crossing alternatives see the following section. The best option for the trail north of this intersection is an existing people's choice trail. It would minimize the impacts to the site. The trail alignment will cross the stream at the most desirable location avoiding existing wetlands and storm water management facilities. An existing WSSC sewer easement runs the entire length of the southern section of the site. This area has been continuously mowed and disturbed and a prominent people's choice trail extends along this sewer easement. It has an existing open tree line and is the most desirable location for the trail. The proposed trail alignment will avoid utility conflicts and wetland pockets with minimization techniques such as boardwalk and a clear offset to the sewer pipe.

and manholes. Following the sewer easement, the trail will connect to an existing unpaved road along the cemetery property in the east. The elevation of the unpaved road is 20 ft. above the easement and will need to be graded to comply with ADA accessibility guidelines. From the unpaved road, the trail will connect to the existing sidewalk on Woodfield Road. The sidewalk will need to be widened and improved to accommodate both the trail users and pedestrians. This will complete the connection to Main Street and the existing crosswalk at the intersection of Woodfield Road and Main Street. Parking for the Magruder Branch Trail Extension is provided at the park and ride lot on the east side of Woodfield Road.

2. Road Crossings

The alignment crosses two roads, Valley Park Drive and Bethesda Church Road. These roads are both owned and maintained by Montgomery County DPW&T. These crossings are the most significant safety issue along the trail.

a. Road Crossing at Valley Park Drive

Along with improvements to Valley Park Drive, DPW&T constructed a refuge island in 2006 for the existing mid-block cross walk of the trail at Valley Park Drive. (See Figure 5 for as-built photo.) This is an acceptable and sufficient crossing.



Figure 19 – Plans for the roadway crossing at Valley Park Drive constructed by DPW &T with a refuge island for safety.

b. Road Crossing at Bethesda Church Road

A roadway crossing at Bethesda Church Road will be required to connect the southern section of the trail to the northern section. Bethesda Church Road is 50 feet wide, with two travel lanes, two parking lanes, and a center turn lane. The speed limit is 35 mile per hour. There are no driveways in the vicinity of the midblock crossing and parking restrictions exist on the north side of the road. The roadway is curved both horizontally and vertically along the park frontage. The combination of the parked cars on the south side and a horizontal curve makes it difficult for trail users to see on-coming cars and for drivers to see trail users.

The safest crossing location is at an intersection with a signal or stop sign. The closest stop controlled intersections are at Maryland Route 27 to the west (1300 feet) and Maryland Route 124 to the east (1400 feet). It is not reasonable to expect a trail user to travel that distance to cross at a stop controlled intersection. Therefore, a mid-block crossing is proposed.

A midblock crossing can be either at-grade on the existing roadway, or in some instances an overpass or underpass is provided. The following discussion details the issues associated with each of these options, and Appendix B contains additional analysis and data.

At-Grade Crossing. For a mid block crossing, the primary safety issue evaluation is to determine if adequate sight distance exists. The "stopping sight distance" is the distance it takes for a driver to notice a problem, realize stopping is necessary, and come to a complete stop. The required stopping sight distance at this location is 250 feet, based on AASHTO standards, a posted speed of 35 miles per hour and a primary roadway classification. An 85 percentile speed for this vicinity was not obtained but field observations indicate that cars regularly exceed the speed limit. When cars are parked in the vicinity of the crosswalk, the required sight distance is not available. To address that issue, a "bump out" of the existing curb is proposed to eliminate the parking lanes for a distance of 250 feet in each direction from the crosswalk, as shown conceptually in the aerial photo below. To further increase safety, a median at the turn lane should be constructed to provide a "refuge" space, allowing trail users to cross one direction of traffic at a time. The pavement narrowing and approach signing at the horizontal typically has the effect of reducing speed in the vicinity of the crosswalk. (See Figure 20) A similar traffic calming device was used at Valley Park Road. The consistent use of traffic calming features should educate area drivers of the existence of the trail crossing.



Figure 20 - Proposed at-grade mid-block crossing of Bethesda Church Road with curb bump-outs and a median refuge island.

Underpass: An underpass would allow trail users to cross beneath Bethesda Church Road in a tunnel that would be adjacent to the existing culvert. The tunnel would be about 100 feet long, constructed with a steel arched pipe approximately 10 feet high by 12 feet wide. Due to the locations of existing utilities and the grade adjacent to the road, the best location for the tunnel is west of the existing storm drain. If a tunnel is constructed, the trail location would be adjusted to the north and avoid the bridge crossing of Magruder Branch. Additional considerations with an underpass are the potential to expose trail users to crime and providing a location for undesirable loitering. It will also be in the floodplain and require frequent maintenance to keep the asphalt free of debris. The cost is estimated at \$500,000.

Overpass: Constructing an overpass would allow trail users to avoid conflicts with vehicles. However, the existing roadway is constructed on a 15 foot high embankment, and the trail must have a clearance of 15 feet above the existing roadway. To maintain a 5% slope for a height of 30 feet would require a ramp 360 feet long on the south side. The ramp would be about half that length to the north, because the existing grades along the trail alignment are higher, resulting in an overall length of about 620 feet. This would be constructed through a combination of grading, retaining walls, and bridging. Research of existing overpasses has shown that trail users frequently avoid overpasses because they perceive the risk of the at-grade crossing to be less than the extra time and effort to utilize the overpass. The cost for this option would exceed a million dollars.

In summary, based on an evaluation of the options, an at-grade crossing with bump-outs and a pedestrian refuge island is recommended for this crossing. This is safer than a simple crosswalk. The overpass will be extremely expensive, and based on the traffic characteristics of Bethesda Church Road, it is likely that many trail users would create a “people’s choice trail” and cross the road to avoid the grades and length of the overpass.

3. Connector Trails

The Magruder Branch Hiker Biker Trail ties into communities at Valley Park Drive, Bethesda Church Road, Woodfield Road, and on Main Street. A connection is currently existing to the peoples choice trail north of Bethesda Church Road from Ridge Manor Drive, and serves to provide access to the Weiss Supermarket and the surrounding commercial area to people living in the apartments on the east side of Magruder Branch Stream Valley Park. Staff called the building manager of the apartments and received confirmation that the owners would like a connection to be made between their development and the trail. This is included in the recommended facility plan.

Additional outreach was made during the public meeting. MNCPPC staff told attendees that specific communities could request that connectors be built into their subdivisions, however, per established MNCPPC policy, those communities would need to write a letter requesting the connection. This is an established procedure that minimizes conflicts with communities by allowing them to decide whether to connect to main-line trails. No requests were made for connections by any communities. However, additional money has been

allocated in the Final Design and Construction Cost Estimate in case such a request is made in the future.

4. Stormwater Management Concept

A stormwater management concept plan was submitted November 28, 2005, and approved December 29, 2005. (See Appendix A) The selected trail alignments will include the construction of 0.8 miles of eight feet wide asphalt trail through the Magruder Branch stream valley. The proposed construction of the trail is generally at-grade, and there will not be any swales or other concentrations of flow associated with the trail construction. The proposed SWM features will include the following:

Sheet Flow to Buffer: GPI is proposing "sheet flow to buffer" treatment for the entire length of the trail. There is a greater than 50' wide average buffer from the trail to any concentrated storm drain flow paths, such as Magruder Branch. This buffer consists of an existing natural forest covered in leaf litter, forest understory, and mature trees. It is not mowed, except in the DPWT right of way at the Valley Park Drive and Bethesda Church Road crossings where concrete sidewalk already exists.

Infiltration Pool: This detail was developed by M-NCPPC and Montgomery County DPS staff to enhance the environment along the trail. It was constructed at the Crystal Rock Trail in Black Hill Regional Park in 2004 and has functioned successfully. The concept is to provide detention/storage for water quality and groundwater recharge by creating small sump areas that are well planted with native species and provide short term ponding. They mimic "vernal" pools in nature that are extremely important for amphibious breeding.

Eliminate Existing Erosion: There are several closed storm drain systems that outfall into the Magruder Branch stream valley and are currently causing significant erosion. They include:

- outfall from Shell Drake Circle
- outfall from Ridge Manor Drive
- outfall from WSSC water tank facility
- outfall from Damascus Town Center area

MNCPPC proposes to eliminate these erosion areas at storm drain outfalls with stilling basins. A severe gully, created by surface runoff at a WSSC facility, will be eliminated by directing the concentrated flow to an existing closed drainage system and stabilizing the eroded gully.

5. Parking and Site Amenities

The Magruder Branch Trail Extension will have site amenities along its route. Proposed amenities are included in the planning and final cost estimate. (See Appendix D) Five benches will be provided at locations to be determined at final design. (See Figure 22) A drinking fountain will be located where there is an existing water line for the easiest connection available. A trail head will be located in the Northern Section in close proximity to the town center.



Figure 22 – Benches will be proposed along the trail.

The trail head will have signage for information and trail orientation. Future planning for the Town Center will provide a connection to the trail as proposed in the Master Plan.

D. Community Outreach

A public meeting was held on October 27, 2005 at the Damascus Public Library. The proposed hiker/biker trail was presented with the three alternate alignments shown. (See illustrative map on following page.) Following a brief question and answer period, a breakout session was held to speak one on one with the community attendees. A record of comments and questions raised was recorded and is included in this report, along with responses to all questions. (See Appendix C) The majority of the questions dealt with safety and environmental issues. During the breakout session, a running tally of alternate alignment preferences was gathered, and it was voted by a show of hands from the community attendees that Alternate Two was preferred.



Recommended Alignment for Magruder Branch Trail

E. Recommendations

1. Final Site Plan

The preceding illustrative rendering shows the preferred trail alignment. The selected alternative maintains the “people’s choice” trails currently being used throughout the corridor, and utilizes construction techniques to that will help preserve the natural resources. Generally, the alignment is through the middle of the wooded corridor, providing the trail user with the opportunity to enjoy the adjacent forest, stream and wetland communities in the area. Additionally, GPI has prepared design drawings to a 30% completion level, and a copy of the plan is on file at MNCPPC. The trail alignment is the same as was presented to the community, except for 450 feet south of Bethesda Church Road, where a shift was made to address tree impacts concerns raised by MNCPPC staff during the NRI/FSD review.

2. Trail Access Points

The Park and Ride lot located on the east side of Woodfield Road will be the main parking lot for users of the trail extension. Additionally, on-street parking on Bethesda Church Road and limited spaces on Valley Park Drive will supplement the main lot. Many trail users will come from neighborhoods surrounding the trail, therefore, it is understood that this parking will satisfy trail needs. In conjunction with redevelopment in the town center, future planning will consider a small parking lot near the trail head to accommodate accessible parking.

F. Cost Estimate Summary

The cost for these improvements includes the asphalt trail, boardwalk, bridges, road crossing improvements, drainage, stormwater management, and other associated elements. A design and construction cost estimate of \$2,304,510 is estimated for the preferred alternative. A detailed breakdown of the cost estimate is included in Appendix D.

V. Appendices

- A. Facility Plan
- B. Question Answer Record from Public Meeting
- C. Construction Cost Estimate
- D. Interagency Correspondence and Approvals
 - 1. Department of Permitting Services, SWM Concept Approval
 - 2. Montgomery County Department of Public Works Letter
 - 3. State Highway Administration Letter
 - 4. Natural Resources Inventory / Forest Stand Delineation Approval
 - 5. WSSC Correspondence
 - 6. Pedestrian/Bike/ADA Analysis Sheet
- E. Masterplan recommendations for the Damascus Town Center
- F. Community Correspondence

APPENDIX A

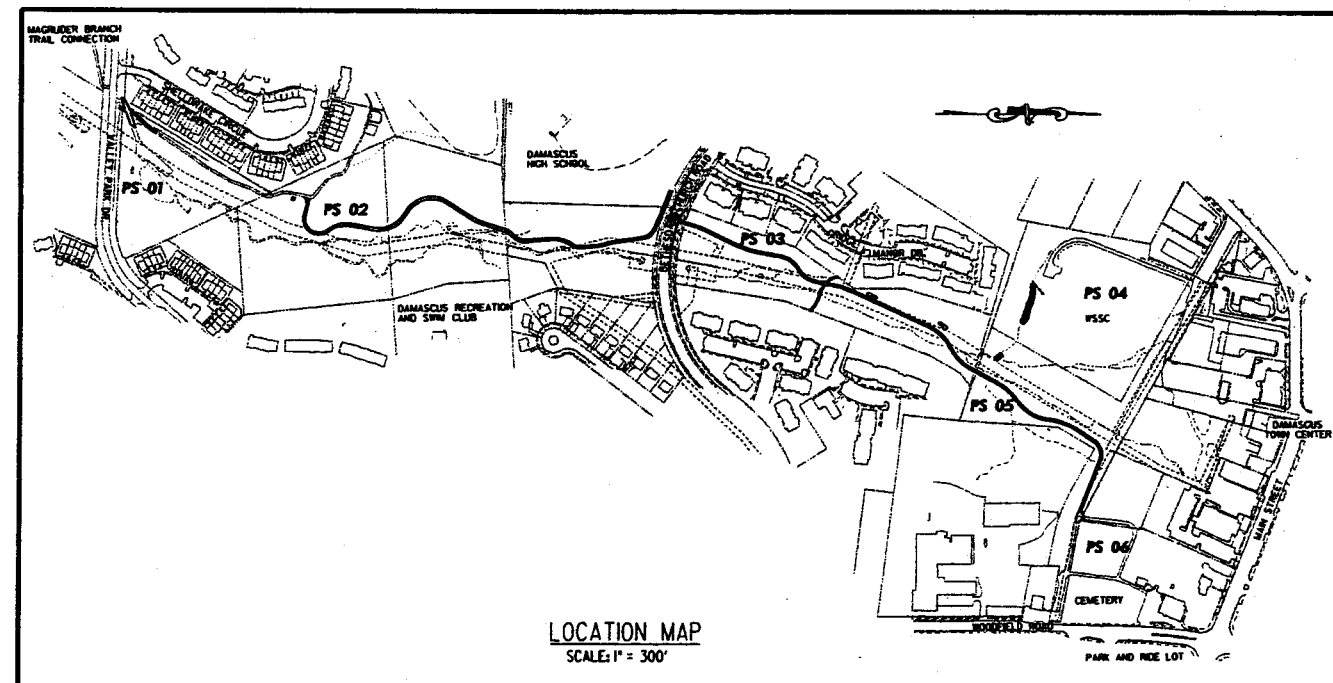
FACILITY PLAN

FROM VALLEY PARK ROAD TO DAMACUS TOWN CENTER
MONTGOMERY COUNTY, MARYLAND

SHEET INDEX			
TITLE	SHEET NAME	SHEET	REV.
TITLE SHEET	TID	1	
SITE PLANS	PSOI TO PS06	2-7	
DETAILS AND TYPICAL SECTIONS	DTOI	8	

1. ALL DISTURBED AREAS MUST BE TOPSOLED PER M-NCPPC SPECIFICATIONS AND THE MONTGOMERY COUNTY "STANDARDS AND SPECIFICATIONS FOR TOP SOIL," PRIOR TO FINAL VEGETATIVE STABILIZATION.
2. 100 YR FLOOD PLAIN LINES SHOWN BASED UPON GP10FLOOD STUDY, 2000 ACDE "ANACOSTIA RIVER AND TRIBUTARIES, DISTRICT OF COLUMBIA AND MARYLAND, NORTHWEST BRANCH WATERSHED, MONTGOMERY COUNTY, FINAL ECOSYSTEM RESTORATION REPORT & INTEGRATED ENVIRONMENTAL ASSESSMENT."
3. INFORMATION CONCERNING UNDERGROUND UTILITIES WAS OBTAINED FROM AVAILABLE RECORDS. IT SHALL BE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION AND ELEVATIONS OF THE MAINS BY DIGGING TEST PITS AT ALL UTILITY CROSSINGS FOR ALL PROPOSED WORK UTILITY FOOTERS ETC. WELL IN ADVANCE OF TRENCHING. CONTRACTOR SHALL MAINTAIN MINIMUM CLEARANCES OF 5 FT. HORIZONTALLY AND 1 FT. VERTICALLY FROM WATER AND SEWER LINES.
4. CONTRACTOR TO EXERCISE EXTREME CAUTION WHILE WORKING OVER EXISTING UTILITIES INCLUDING BUT NOT LIMITED TO STORMDRAIN, WATER, SANITARY, GAS, TELEPHONE, CABLE, ELECTRIC ETC. ANY EXISTING DAMAGE SHALL BE DOCUMENTED WITH PHOTOGRAPHIC EVIDENCE AND BROUGHT TO THE ATTENTION OF M-NCPPC CONSTRUCTION MANAGER PRIOR TO COMMENCING ANY WORK.
5. ANY UTILITY DAMAGED DURING CONSTRUCTION WILL BE REPAIRED ON AN EMERGENCY BASIS AT CONTRACTOR'S COST. ALL REPAIRS WILL BE PERFORMED AND COORDINATED AS PER THE LATEST SPECIFICATIONS OF CONCERNED UTILITY COMPANY AND AN APPROVAL WILL BE OBTAINED FROM UTILITY COMPANY BY CONTRACTOR.
6. NO CLEARING, GRUBBING OR GRADING MAY COMMENCE FOR THE PROJECT UNTIL THE LIMITS OF DISTURBANCE IS STAKED IN THE FIELD AND APPROVED BY THE M-NCPPC CONSTRUCTION MANAGER AND MCDPS SEDIMENT CONTROL INSPECTOR. BARE MINIMUM CLEARING NECESSARY TO INSTALL SILT FENCE AND TREE PROTECTION FENCE ALLOWED IN THE FIRST STAGE. AFTER APPROVAL BY M-NCPPC & MCDPE REMAINING CLEARING CAN OCCUR. NO CLEARING WILL BE ALLOWED BEYOND THE PROJECT LIMITS. ANY ITEMS DISTURBED BEYOND THE PROJECT LIMITS WILL BE REPLACED AT THE CONTRACTOR'S OWN EXPENSE.
7. STREETS SHALL BE MAINTAINED PER MCDPS REGULATIONS IN A CLEAN, MUD AND DUST FREE CONDITION AT ALL TIMES. ADEQUATE MEANS SHALL BE PROVIDED TO CLEAN TRUCKS AND OTHER EQUIPMENT USING OTHER STREETS.
8. STABILIZE ALL DISTURBED AREA AT THE END OF EACH WORKING DAY.
9. CONTRACTOR TO STAKEOUT ALIGNMENT OF TRAIL AND ATTEND FIELD WALK WITH M-NCPPC CONSTRUCTION MANAGER. M-NCPPC RESERVES THE RIGHT TO REVISE TRAIL ALIGNMENT IF FOUND NECESSARY.

1. ALL EROSION AND SEDIMENT CONTROL SHALL BE IN ACCORDANCE WITH MARYLAND STANDARDS AND SPECIFICATIONS 1994 OR LATEST, MARYLAND DEPARTMENT OF THE ENVIRONMENT SPECIFICATIONS.
2. ALL WORK SHALL BE IN ACCORDANCE WITH HIGHWAY DESIGN DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, 1991 OR LATEST.
3. ALL WORK SHALL BE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE 318-89 OR LATEST MANUAL.
4. ALL WORK SHALL BE IN ACCORDANCE WITH LATEST AMERICAN SOCIETY OF TESTING MATERIALS MANUAL.
5. ALL WORK SHALL BE IN ACCORDANCE WITH MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2000 EDITION OR LATEST AND MONTGOMERY COUNTY WORKZONE TEMPORARY TRAFFIC CONTROL STANDARDS, 2004 OR LATEST.
6. CONSTRUCTION WITHIN MSHA RIGHT-OF-WAY SHALL BE PERFORMED ACCORDING TO MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS 2001 OR LATEST.
7. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST MDCPPC STANDARDS AND SPECIFICATIONS.



LOCATION MAP
SCALE: 1" = 300'

MISS UTILITY

CALL "MISS UTILITY" 1-800-257-7777 FOR UTILITY LOCATION AT LEAST 72 HOURS PRIOR TO THE START OF WORK. THE EXCAVATOR MUST NOTIFY ALL PUBLIC COMPANIES WITH UNDERGROUND FACILITIES IN THE AREA OF PROPOSED EXCAVATION AND HAVE THOSE FACILITIES LOCATED BY UTILITY COMPANIES PRIOR TO COMMENCING EXCAVATION.

GPI **GREENMAN-PEDERSEN, INC.**
ENGINEER, ARCHITECT, PLANNING, CONSTRUCTION SERVICES & INSPECTION
10877 GULFPORT RD. ANNAPOLIS JUNCTION, MD. 20701
BASIL (301) 470-2772 BALT. (410) 888-3055
FAX: (301) 910-2649 www.gpiinc.com

CONTRACTOR TO SUBMIT A LIST OF ALL CONSTRUCTION EQUIPMENT TO BE USED ON THIS PROJECT AND OBTAIN APPROVAL FROM M-NCPPC AND ALL UNDERGROUND UTILITY COMPANIES.

OWNER/APPLICANT
M-NCPPC
9500 BRUNETT AVENUE
SILVER SPRING, MD 20901
ATTN: MARIAN ELSASSER
PHONE: 301-495-3587

**MONTGOMERY COUNTY DEPARTMENT OF
PERMITTING SERVICES APPROVED FOR:**

Stormwater Management:

Journal Pre-proof

Reviewed	Doc
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Approved	By
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NOTE:
MICROS APPROVAL DOES NOT NEGATE
THE NEED OF A MICROS ACCESS PERMIT.

Administrative Requirements:

Highly effective, long-term protection

Reviewed _____ Date _____

1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 26

SEDIMENT CONTROL PERMIT No.

WORK'S APPROVAL OF THIS PLAN WILL EXPIRE FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT

project:

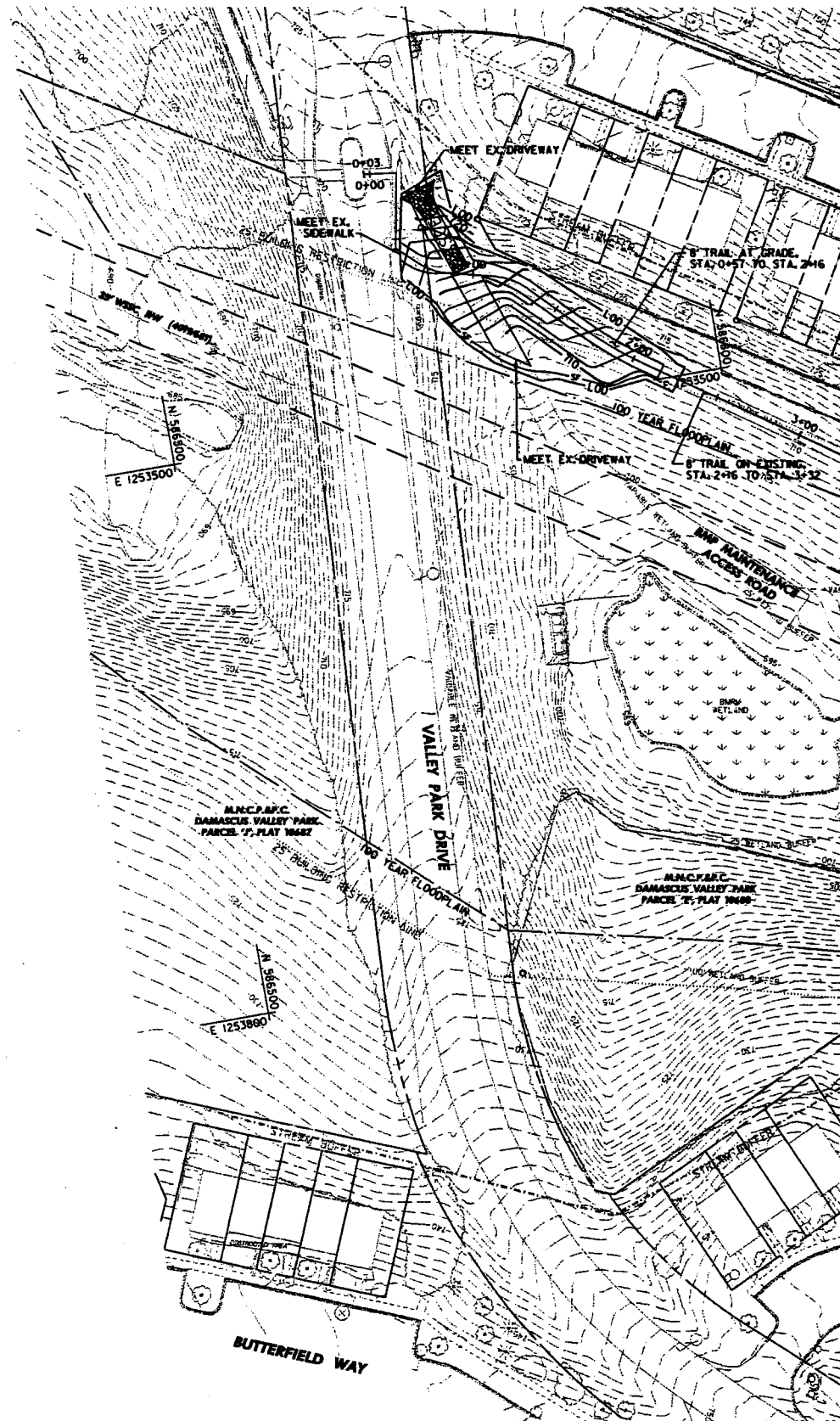
MAGRUDER BRANCH TRAIL EXTENSION

TITLE SHEET

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sheet: 1 of 8

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MATCH LINE - SITE PLAN SHEET 2

SCALE: 1" = 40'

GPI GREENMAN-PEDERSEN, INC.
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10811 CALIFORNIA RD., ANNAPOLIS, MARYLAND 20701
BETHESDA, MD 20814-4772 BALTIMORE, MD 21206-3005
FAX: (410) 420-2549 www.gpi.net

design	review and approval	review and approval
landscape architect	park planning and development	deputy director of parks
architect	central maintenance	park police
engineer	region	
drawn by	natural resources	



The Maryland-National Capital
Park and Planning Commission
9500 Brunett Avenue
Silver Spring, Maryland 20901
Montgomery County Department of Parks
(301) 495-2535

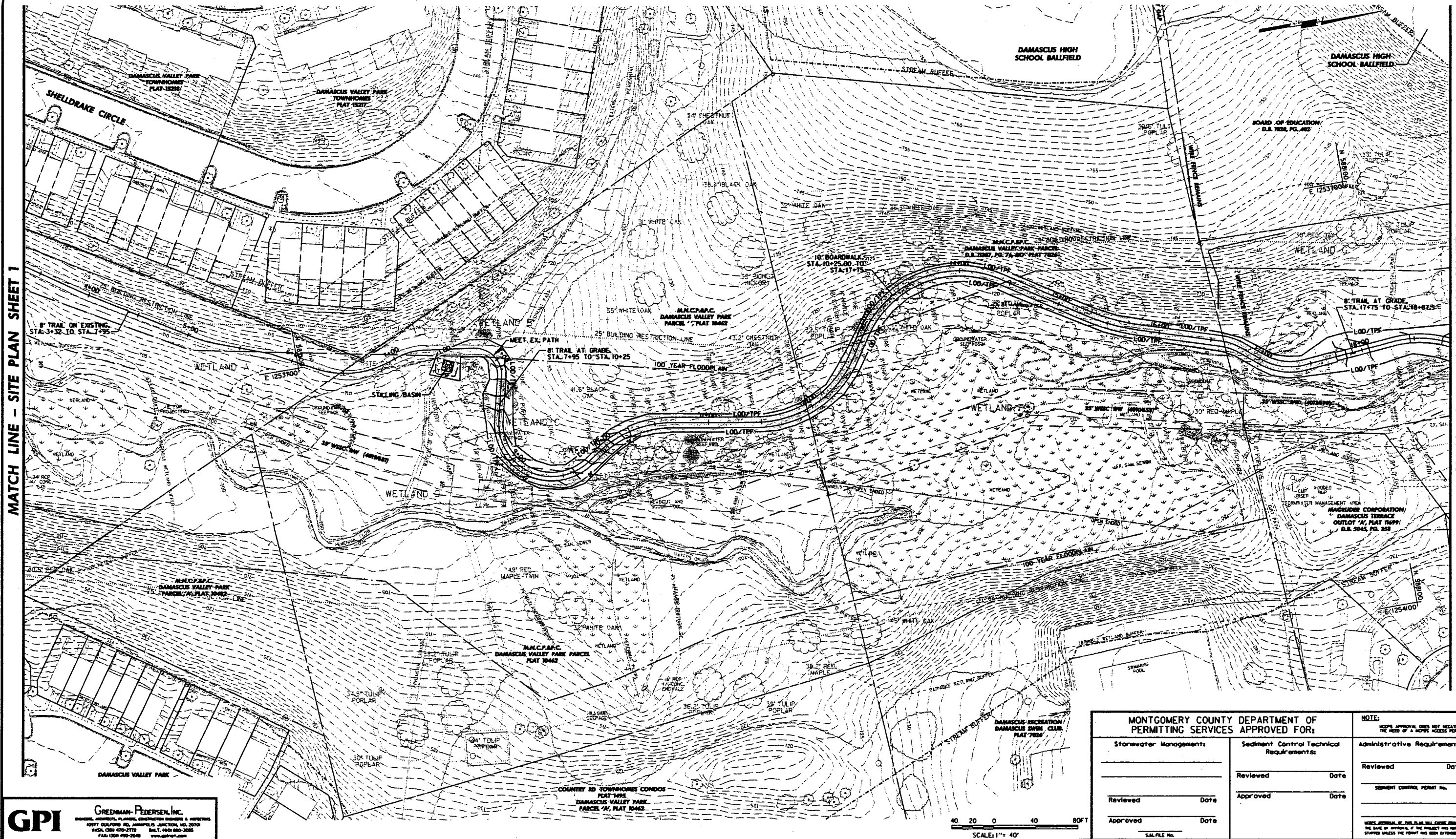
revisions:		
rev. no.	date	description

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:			NOTE: MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVES THE NEED FOR A MONITOR ACCESS POINT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:	
Reviewed	Reviewed	Reviewed	Date
Approved	Approved	Sediment Control Permit No.	

project: **MAGRUDER BRANCH TRAIL EXTENSION**
SITE PLAN SHEET 1
scale: AS SHOWN
sheet: 2 of 8

MATCH LINE - SITE PLAN SHEET 1

MATCH LINE - SITE PLAN SHEET 3



GPI GREENMAN-PEDERSEN, INC.
ARCHITECTS, PLANNERS, ENGINEERS & DESIGNERS
10717 GOLFVIEW RD., ANNAPOLIS, MD 20701
TEL: 410-470-2772 FAX: 410-470-3005
WWW.GPI-PA.COM

design
landscape architect _____ date _____
architect _____ date _____
engineer _____ date _____
drawn by _____ date _____

review and approval
park planning and development _____ date _____
central maintenance _____ date _____
region _____ date _____
natural resources _____ date _____

review and approval
deputy director of parks _____ date _____
park police _____ date _____
_____ date _____
_____ date _____



The Maryland-National Capital
Park and Planning Commission
9500 Brunett Avenue
Silver Spring, Maryland 20901
Montgomery County Department of Parks
(301) 495-2535

revisions:		
rev. no.	date	description

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE:
Stormwater Management:	Sediment Control Technical Requirements:	ADMINISTRATIVE REQUIREMENTS:
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	SEDMENT CONTROL PERMIT NO. _____
SCALE: 1" = 40'		PROJECT: PS02

MAGRUDER BRANCH TRAIL EXTENSION
SITE PLAN SHEET 2

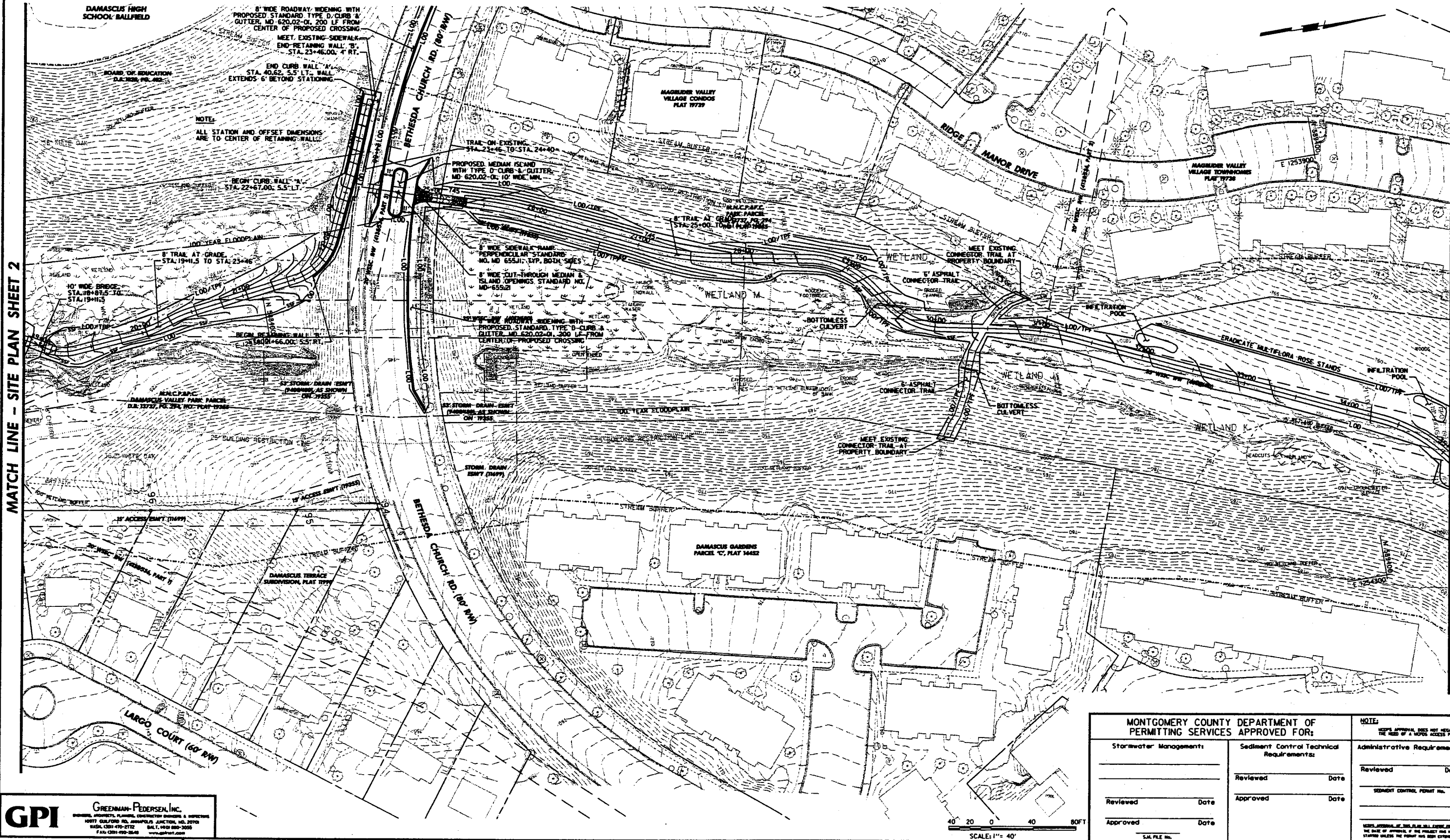
scale: AS SHOWN

sheet: 3 of 8

MATCH LINE - SITE PLAN SHEET 2

MATCH LINE - SITE PLAN SHEET 4

MATCH LINE - SITE PLAN SHEET 5



GPI GREENMAN-PEDERSEN, INC.
ENGINEERS, ARCHITECTS, PLANNERS, CONSTRUCTORS & INSPECTORS
10977 GULFORD RD. ANNAPOLIS, MD 20710
BETHESDA, MD 20814-4722 BALTIMORE, MD 21206-3005
FAX: (410) 420-2549 www.gpi.net

design	review and approval	review and approval
landscape architect	park planning and development	deputy director of parks
architect	central maintenance	park police
engineer	region	
drawn by	natural resources	



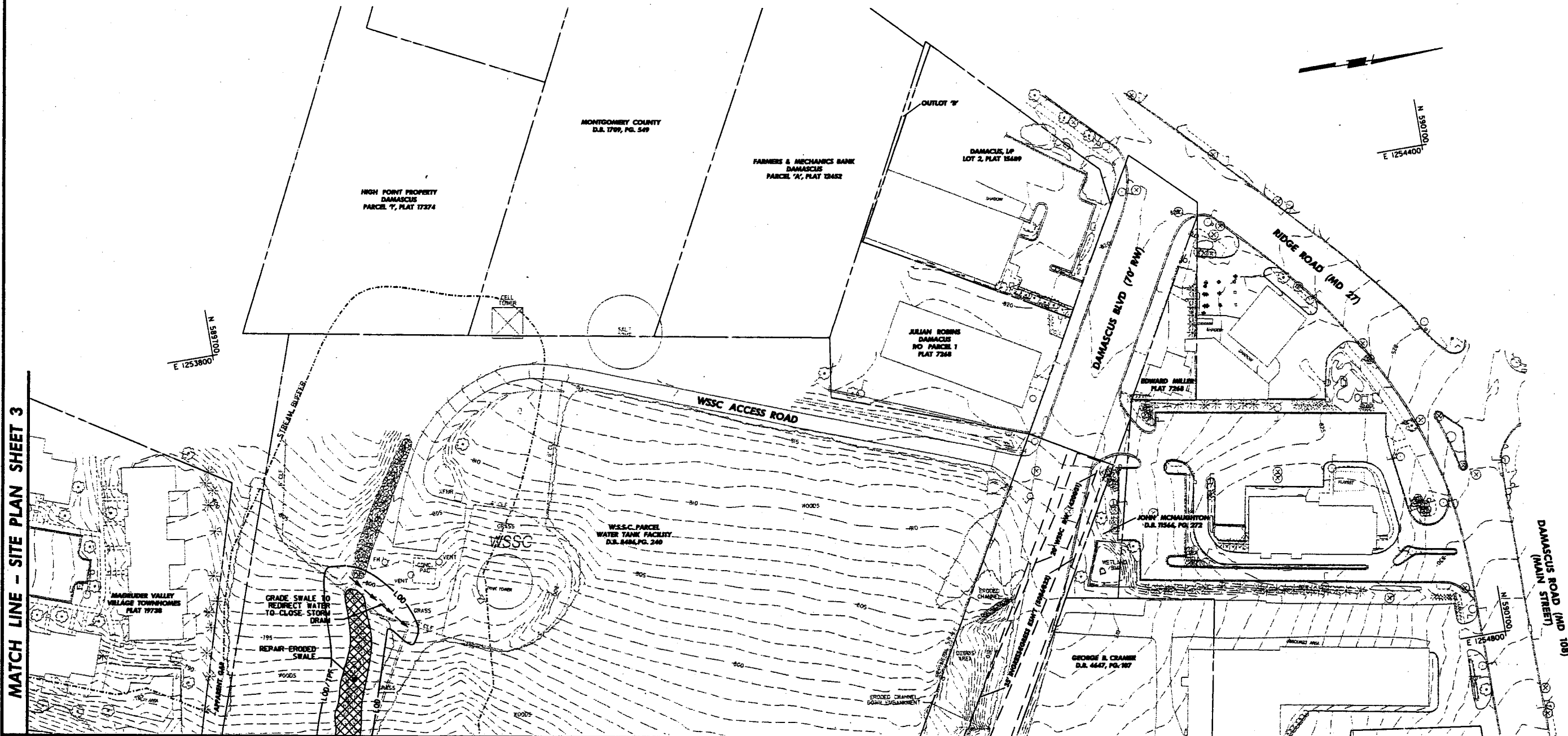
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Silver Spring, Maryland 20901
Montgomery County Department of Parks
(301) 495-2535

revisions:		
rev. no.	date	description

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: NEEDS APPROVAL, DOES NOT RESOLVE THE NEED OF A REVIEW ACCESS POINT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	SEDIMENT CONTROL PERMIT NO. _____
S.A.I. FILE NO. _____		NEEDS APPROVAL, DOES NOT RESOLVE THE NEED OF A REVIEW ACCESS POINT.

project:	PS03
MAGRUDER BRANCH TRAIL EXTENSION	
SITE PLAN SHEET 3	
scale: AS SHOWN	sheet: 4 of 8

MATCH LINE - SITE PLAN SHEET 3




MATCH LINE - SITE PLAN SHEET 5

GPI GREENMAN-PEDERSEN, INC.
ARCHITECTS, PLANNERS, CONSTRUCTION MANAGERS & INSPECTORS
1077 GUYMON RD., ANNAPOLIS, MD 20701
TEL: 410-291-1111 FAX: 410-291-1112
WWW.GPI-PA.COM

design	
landscape architect	date
architect	date
engineer	date
drawn by	date

review and approval	
park planning and development	date
central maintenance	date
region	date
natural resources	date

review and approval	
deputy director of parks	date
park police	date
	date
	date

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Silver Spring, Maryland 20901
Montgomery County Department of Parks
(301) 495-2535

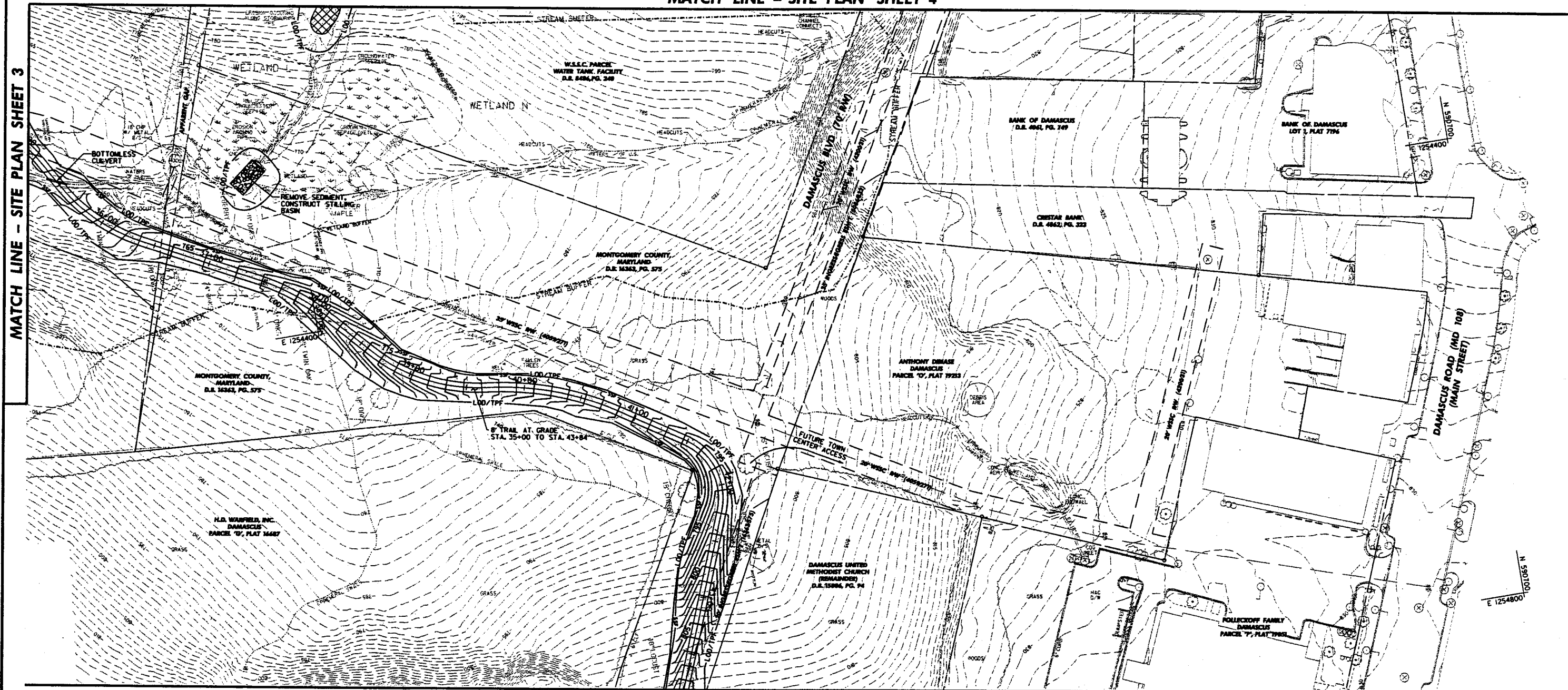
revisions:		
rev. no.	date	description

project:	

MAGRUDER BRANCH TRAIL EXTENSION
SITE PLAN SHEET 4
scale: AS SHOWN
sheet: 5 of 8

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MCPD APPROVAL DOES NOT IMPLY THE NEED OF A MCDPS ACCESS PERMIT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	SEEDMENT CONTROL PERMIT NO. _____
S.M. FILE NO. _____		NOTE: APPROVAL OF THIS PLAN SHALL CONSTITUTE THE STATE OF APPROVAL OF THE PROJECT HAS NOT STARTED UNLESS THE PROJECT HAS BEEN EXTENDED

MATCH LINE - SITE PLAN SHEET 4



MATCH LINE - SITE PLAN SHEET 6

GPI GREENMAN-PEDERSEN, INC.
ENGINEER, ARCHITECT, PLANNER, CONSTRUCTION ENGINEER & INSPECTOR
10677 GULFORD RD. ANNAPOLIS JUNCTION, MD. 20701
BASH, CHD 470-2772 BALT. 410N 880-3055
FAX CHD 490-2549 www.gpi.net

design		review and approval		review and approval	
landscape architect	date	park planning and development	date	deputy director of parks	date
architect	date	central maintenance	date	park police	date
engineer	date	region	date		date
drawn by	date	natural resources	date		date



**The Maryland-National Capital
Park and Planning Commission**

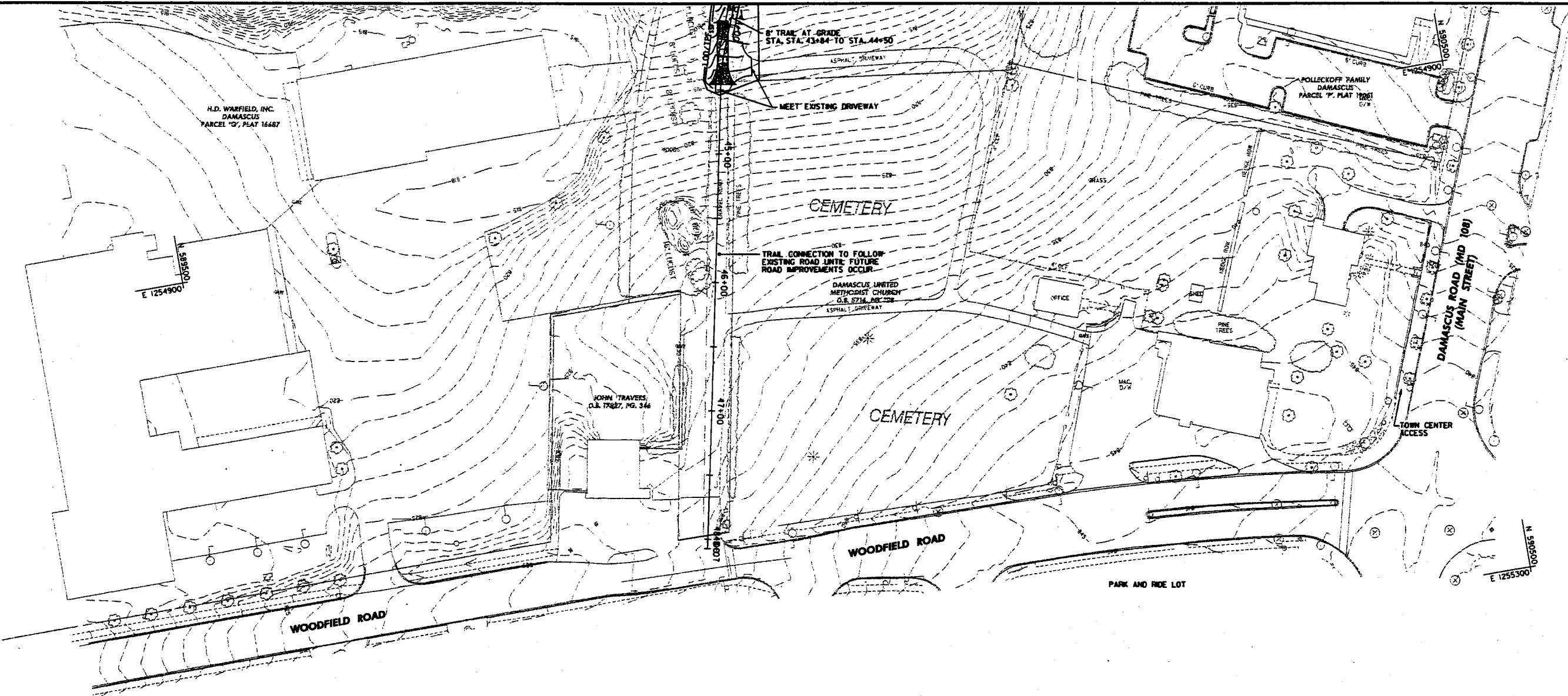
**9500 Brunett Avenue
Silver Spring, Maryland 20901
Montgomery County Department of Parks
(301) 495-2535**

revisions:		
rev. no.	date	description

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MICROPS APPROVAL DOES NOT NEGATE THE NEED OF A MICROPS ACCESS PERMIT.
Stormwater Management: Reviewed _____ Date _____ Approved _____ Date _____ S.M. FILE NO. _____	Sediment Control Technical Requirements: Reviewed _____ Date _____ Approved _____ Date _____	Administrative Requirements: Reviewed _____ Date _____ SEDIMENT CONTROL PERMIT NO. _____ WORK APPROVAL OF THIS PLAN WILL EXPIRE FIVE (5) YEARS FROM THE DATE OF APPROVAL. IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED.

project:	PS05
MAGRUDER BRANCH TRAIL EXTENSION SITE PLAN SHEET 5	
scale: AS SHOWN	sheet: 6 of 8

MATCH LINE - SITE PLAN SHEET 5



GPI GREENMAN-PEDERSEN, INC.
LANDSCAPE ARCHITECTS, PLANNERS, CONSTRUCTION SUPERVISORS & INSPECTORS
10977 CLIFTON RD. ANNAPOLIS JUNCTION, MD 20701
BAGL 410-2712 BAL 410-880-3025 FAX 410-2549 www.gpi.net

design	
landscape architect	date
architect	date
engineer	date
drawn by	date

review and approval	
park planning and development	date
central maintenance	date
region	date
natural resources	date

review and approval	
deputy director of parks	date
park police	date
	date
	date



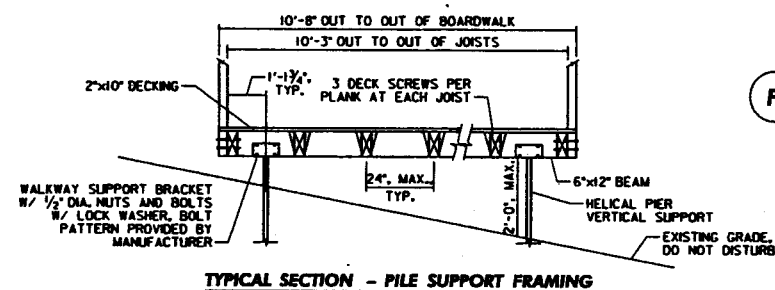
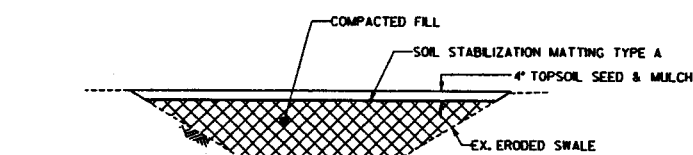
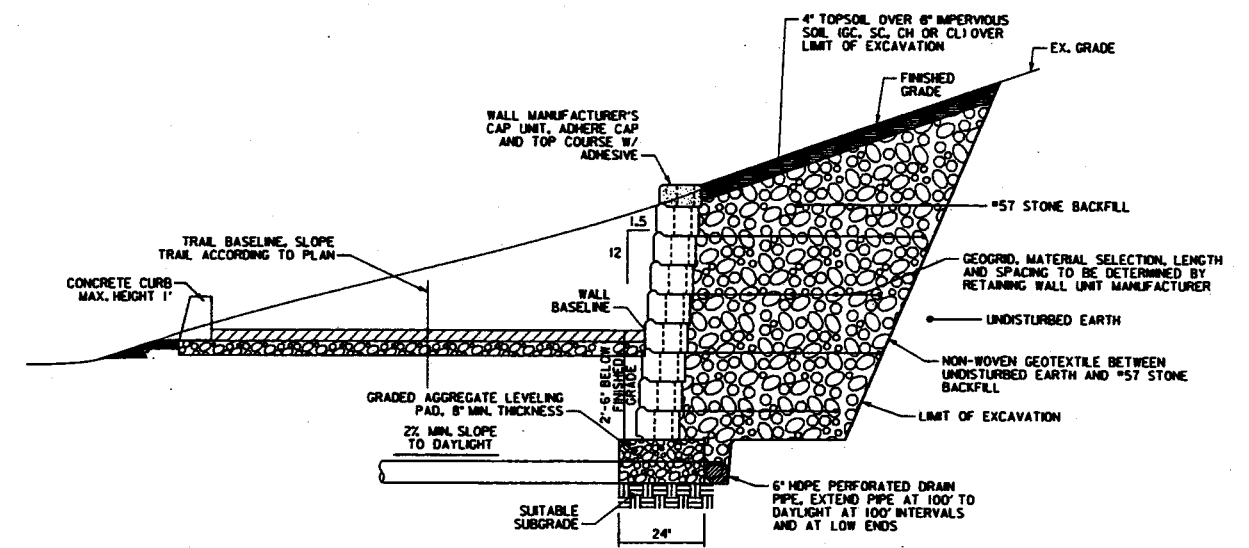
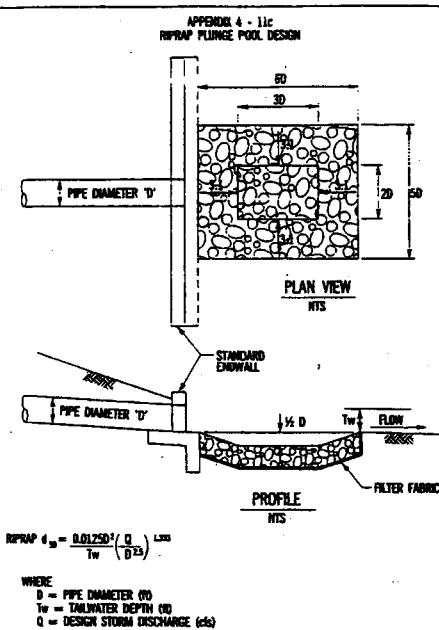
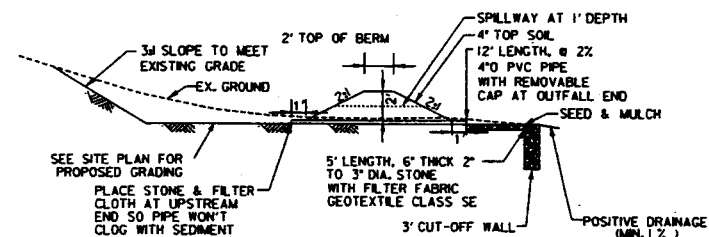
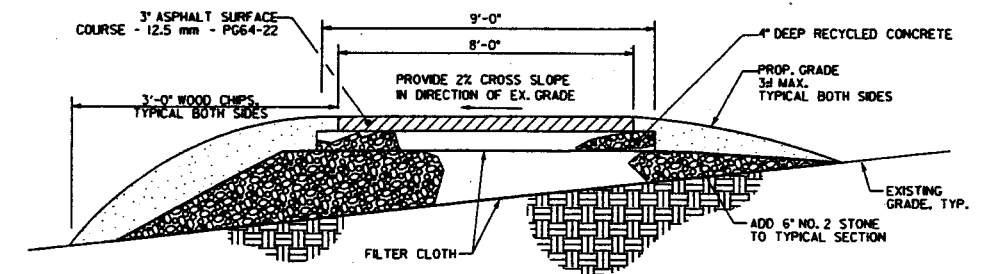
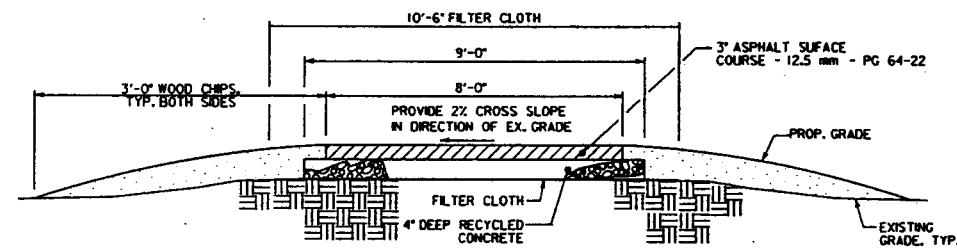
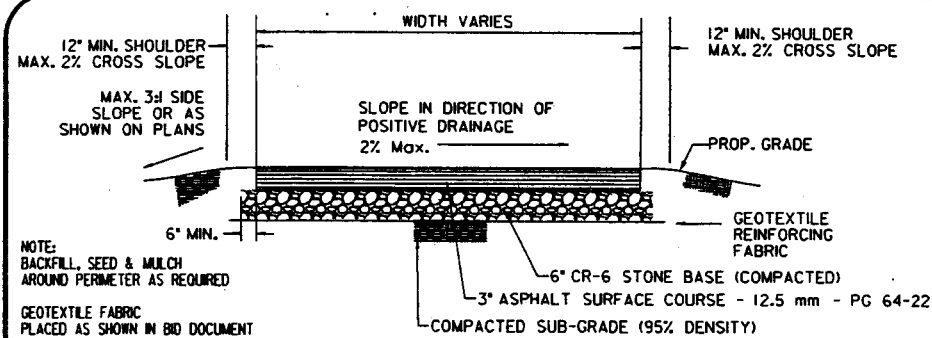
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Silver Spring, Maryland 20901
Montgomery County Department of Parks
(301) 495-2535

revisions:		
rev. no.	date	description

MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES APPROVED FOR:		NOTE: MCP'S APPROVAL DOES NOT NEGATE THE NEED OF A MOPPS ACCESS PERMIT.
Stormwater Management:	Sediment Control Technical Requirements:	Administrative Requirements:
Reviewed _____ Date _____	Reviewed _____ Date _____	Reviewed _____ Date _____
Approved _____ Date _____	Approved _____ Date _____	SEDIMENT CONTROL PERMIT NO. _____
S.M. FILE NO. _____		NOTES: APPROVAL OF THIS PLAN SHALL CONFER FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED

project:	PS06
MAGRUDER BRANCH TRAIL EXTENSION	
SITE PLAN SHEET 6	
scale: AS SHOWN	sheet: 7 of 8



GPI GREENMAN-PEDERSEN, INC.
ENGINEERS, ARCHITECTS, PLANNERS, CONSTRUCTION MANAGERS & INSPECTORS
10577 CULFORD RD., ARMAPOLIS JUNCTION, MD 20708
BASIL (301) 470-2772 BALT. (410) 880-3095
FAX: (301) 490-2569 www.gpi.net

design	review and approval	review and approval
landscape architect _____ date _____	park planning and development _____ date _____	deputy director of parks _____ date _____
architect _____ date _____	central maintenance _____ date _____	park police _____ date _____
engineer _____ date _____	region _____ date _____	_____ date _____
drawn by _____ date _____	natural resources _____ date _____	_____ date _____

**The Maryland-National Capital
Park and Planning Commission**

**9500 Brunett Avenue
Silver Spring, Maryland 20901
Montgomery County Department of Parks
(301) 495-2535**

revisions:		
rev. no.	date	description

project:

MAGRUDER BRANCH TRAIL EXTENSION TYPICAL SECTIONS & CONSTRUCTION DETAILS

scale: AS SHOWN

sheet: 8 of 8

MONTGOMERY COUNTY PERMITTING SERVICES		DEPARTMENT OF APPROVED FOR:		NOTE: MCOFS APPROVAL DOES NOT NEGATE THE NEED OF A MCOFS ACCESS PERMIT.
Stormwater Management: Reviewed _____ Date _____ Approved _____ Date _____		Sediment Control Technical Requirements: Reviewed _____ Date _____ Approved _____ Date _____		Administrative Requirements: Reviewed _____ Date _____ SEDIMENT CONTROL PERMIT No. _____ MCOFS APPROVAL OF THIS PLAN WILL EXPIRE FROM THE DATE OF APPROVAL IF THE PROJECT HAS NOT STARTED UNLESS THE PERMIT HAS BEEN EXTENDED
S.M.F.E. No. _____				

APPENDIX B

**QUESTION AND ANSWER RECORD
FROM PUBLIC MEETING**



JAN 9 5 2006

DEPARTMENT OF PERMITTING SERVICES

Douglas M. Duncan
County Executive

Robert C. Hubbard
Director

December 29, 2005

Mr. Peter Noursi
Maryland National Capital
Park and Planning Commission
9500 Brunett Avenue
Silver Spring, MD 20901-3226

Re: Stormwater Management **CONCEPT** Request
for Magruder Branch Trail
Preliminary Plan #: N/A
SM File #: 222211
Tract Size/Zone: 26.7ac./Park Land
Total Concept Area: 1.9ac.
Watershed: Great Seneca Creek

Dear Mr. Noursi:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above mentioned site is **acceptable**. The stormwater management concept consists of on-site water quality control and recharge via multiple methods. The types include "sheet flow to the buffer", vernal pools, and repairing existing sources of erosion. Channel protection volume is not required because the one-year post development peak discharge is less than or equal to 2.0 cfs.

The following **conditions** will need to be addressed **during** the detailed sediment control/stormwater management plan stage:

1. Prior to permanent vegetative stabilization, all disturbed areas must be topsoiled per the latest Montgomery County Standards and Specifications for Topsoiling.
2. A detailed review of the stormwater management computations will occur at the time of detailed plan review.
3. An engineered sediment control plan must be submitted for this development.
4. A 100 year Flood Plain District permit may be required. Confirmation will occur at design.
5. All applicable non-tidal wetland permits will be required at the design stage.

This list may not be all-inclusive and may change based on available information at the time.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable



Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Blair Lough at 240-777-6335.

Sincerely,



Richard R. Brush, Manager
Water Resources Section
Division of Land Development Services

RRB:dm bli

cc: C. Conlon
S. Federline
SM File # 222211

QN -Not Required; Acres: 1.9ac
QL - on-site; Acres: 1.9ac
Recharge is provided

DRAFT

MEETING NOTES

PROJECT: Magruder Branch Trail Extension

MEETING DATE: October 27, 2005

ATTENDING TEAM MEMBERS:	Malaika Abernathy, MNCPPC	Art Nelligan, MNCPPC
	Jeff Coe, MNCPPC	Peter Noursi, MNCPPC
	Marian Elsasser, MNCPPC	Kim Paniati, GPI
	Wendy Hanley, MNCPPC	Bill Park, GPI
	Michael Horrigan, MNCPPC	Gordon Rosenthal, MNCPPC
	Liz Marcy, GPI	Bob Simpson, DPWT
	Patricia McManus, MNCPPC	

SUBJECT: Public Meeting #1

The MNCPPC and their consultant, Greenman Pedersen, Inc., (GPI) presented the project to the community. The project manager, Peter Noursi, introduced the project, described the Facility Planning process, and introduced the attending team members. The consultant gave a PowerPoint presentation describing the site conditions, design considerations, and the three options for the trail alignment. After the presentation, there was question and answer period and then people were given the opportunity to visit three stations that were set up to provide greater detail about the alternative alignments, environmental considerations, and street crossings.

The group then reconvened and was informed of the next steps in the Facility Planning process: The next opportunity for public comment will come when the Facility Plan report is presented before the Planning Board. Comments from today's meeting will be included in the Facility Plan report. Additional written comments sent to the MNCPPC would also be placed in the packet for the Planning Board's consideration.

There were no individuals opposed to the project in Principal. All present preferred alignment Number 2, or had no preference for the alignment.

The following questions and comments were raised during the question and answer period, and in the break out groups. Responses are indicated in *Italics*:

<p>a. The road crossing at Bethesda Church Road is dangerous. Has the MNCPPC considered a tunnel or overpass, or can a signal-activated stoplight be placed at the crossing? A speed study should be conducted and those speeds used for analysis, instead of the posted design speed.</p>	<p><i>The proposed crossing, provides a pedestrian island in the median of the road, and uses “bump outs” to limit parking in the vicinity of the crossing. This gives greater site distance for pedestrians and drivers, and the bump out give a signal to the driver to slow down. An overpass is not feasible due to the elevation difference between the stream valley and the elevation of a bridge. A tunnel was considered, but the road crossing was preferred because the tunnel would also have separate safety issues that would need to be addressed. It is highly doubtful that this crossing would warrant a signal-activated stoplight. Signal-activated stoplights have state mandated requirements that the state would only consider following the completion of the trail. (After the meeting, we said we would include cost in the facility plan, but make a staff recommendation for at-grade.)</i></p>
<p>b. The road crossing at Valley Park Drive is dangerous, and will become more dangerous once the road is completed to Route 27. How is the MNCPPC addressing this matter?</p>	<p><i>DPWT has already prepared plans for improving the crossing by providing a pedestrian island in the median of the road. This is being done separate from the trail extension project.</i></p>
<p>c. Where will trail users be able to park?</p>	<p><i>At Damascus Regional Park and at the Park and Ride Lot at the intersection of 124 and Main Street.</i></p>
<p>d. The road crossing at the Park and Ride lot needs to be improved. Crossing Route 124 is dangerous. A no right turn on red sign from Main Street would make that road crossing safer for pedestrians/bikes.</p>	<p><i>This comment was forwarded to SHA. Darrel Mobley (301-513-7359) responded in an email that SHA sent a Traffic Engineer (Mr. Jeffrey Wentz) to observe the intersection. He concluded that the conditions for a “No Right Turn on Red” sign do not exist, because minimal pedestrian activity occurred at the intersection during a 12 hour observation period. As pedestrian activity increases, they can revisit the matter and adjust their recommendations appropriately. Mr. Mobley did recommend that Countdown Pedestrian Signals (CPS) and Accessible Pedestrian Signals be considered for the intersection by the SHA Office of Traffic and Safety.</i></p>
<p>e. Wildlife crosses Valley Park Drive in the mornings. With the increased park the wildlife will be in danger when crossing the</p>	<p><i>While park staff recognizes the conflict between road traffic and wildlife, this issue is beyond the scope of this project. More information on</i></p>

road, and will pose a danger to vehicles using the road.	<i>wildlife issues can be obtain from the Commission's biologist, Rob Gibbs at 301-949-2909.</i>
f. Traffic studies, and traffic counts should be taken during times of peak traffic, i.e., at the beginning or end of a school day.	<i>Traffic Counts were taken during peak periods 6:30 to 9:00 am and 4:00 to 7:00 pm.</i>
g. In order to minimize safety issues, the MNCPPC may want to consider placing video surveillance cameras along the length of the proposed trail extension.	<i>Park police have not considered placing video cameras along Hiker Biker trails. To do so would require Planning Board Approval.</i>
h. We had read that there would be tree plantings in the Magruder Stream Valley Park. Is this part of the same project? Regardless, would we be reforesting areas affected by this project?	<i>Staff was not aware of tree planting occurring in Magruder Stream Valley Park near Sweepstakes Road, but reforestation would be done as part of this project.</i>
i. Several individuals wanted to know the process for requesting connections to the trail. They were concerned that the adjacent homeowners associations along the trail would not be aware that they needed to let MNCPPC know they desire this connection. Marian said something would be mailed to them.	<i>Communities should make their requests in writing to the MNCPPC. This reduces possible conflicts that may rise if the MNCPPC were to unilaterally decide to connect to a community that may not want access. All requests will be included in the Facility Plan.</i>
j. What type of wildlife lives in the park? (Marian said we need to request email from you or she for Rob Gibbs, who may be able to provide info on stream life.)	<i>More information regarding wildlife can be obtain from the Commission's biologist, Rob Gibbs at 301-949-2909.</i>
k. Are there any Rare, Threatened or Endangered Species in the Park?	<i>GPI looked for evidence of RTE when performing field work, and corresponded with state and federal agencies to see if there is any documentation of RTE's in this project vicinity.</i>
l. What is a specimen tree?	<i>Depending on the species, a specimen tree is a larger tree with a diameter, at breast height, of 24 or 30" or more. More information is available at the Commission's web site at www.mc-mncppc.org.</i>
m. Can an area along the existing phase of Magruder (north of the Sweepstakes road crossing?) be planted – he read in the gazette that some tree replanting would occur here	<i>This is not part of the Facility Plan. The public should directly contact the Park Manager in such manners. The person asking the question was given the number of the Park Manager.</i>
n. When will this project be built?	<i>The project will be recommended for funding approval in 09-014 budget</i>

APPENDIX C

CONSTRUCTION COST ESTIMATE

9/19/2007
FACILITY PLANNING COST ESTIMATE
MAGRUDER BRANCH TRAIL EXTENSION

CIP CATEGORY	ITEM NO.	ITEM	QUANTITY	UNIT	UNIT COST	TOTAL COST
S		SITE PREPARATION & DEMOLITION			SUBTOTAL	\$184,440.00
		Mobilization	100%	LS	\$80,000.00	\$80,000.00
		Tree Protection Fencing	3860	LF	\$4.00	\$15,440.00
		Root Pruning	2500	LF	\$5.00	\$12,500.00
		Clearing & Grubbing / Tree Removal	2.1	AC	\$15,000.00	\$31,500.00
		Removal & Disposal of Materials (define)	0			\$0.00
		Construction Stakeout	100%	LS	\$25,000.00	\$25,000.00
		Maintenance of Traffic (for work on Bethesda church)	100%	LS	\$20,000.00	\$20,000.00
		Geotechnical Investigation (assume part of design)	0			\$0.00
SI		SEDIMENTATION & EROSION CONTROL			SUBTOTAL	\$56,000.00
		Silt Fence	1250	LF	\$3.00	\$3,750.00
		Super Silt Fence	1250	LF	\$9.00	\$11,250.00
		Stabilized Construction Entrance	5	EA	\$2,000.00	\$10,000.00
		Clear Water Diversion Fence	150	LF	\$10.00	\$1,500.00
		Curb Inlet Protection	6	EA	\$500.00	\$3,000.00
		Sediment Trap (define type)	0	EA		\$0.00
		Vehicle Wash Station	1	EA	\$2,000.00	\$2,000.00
		Other measures	100%	LS	\$15,000.00	\$15,000.00
		Temporary Seeding	2000	SY	\$1.00	\$2,000.00
		Erosion Control Fabric (to stabilize steep slope areas)	1500	SY	\$5.00	\$7,500.00
		Sedimentation & Erosion Control (% of construction)	0			\$0.00
SI		EARTHWORK			SUBTOTAL	\$91,000.00
		Strip & stockpile topsoil (define depth)				\$0.00
		Excavation/Cut	2200	CY	\$35.00	\$77,000.00
		Excavation/Fill	400	CY	\$35.00	\$14,000.00
		Fine Grading	0			\$0.00
		Spread stockpiled topsoil (define depth)	0			\$0.00
		Spread imported topsoil (define depth)	0			\$0.00
SI/U?		STORMWATER MANAGEMENT			SUBTOTAL	\$86,733.33
		Maintenance of Existing Facilities	0			\$0.00
		Bioretention Facilities	0			\$0.00
		Water Quality Structure (infiltration pool)	2	EA	\$15,000.00	\$30,000.00
		Infiltration Trench	0			\$0.00
		Pond Construction	0			\$0.00
		Underground Detention	0			\$0.00
		Pipes (3 bottomless or buried invert culverts)	72	LF	\$200.00	\$14,400.00
		Structures (end sections)	6	EA	\$1,500.00	\$9,000.00
		Class I Riprap with Filter Cloth (2 stilling basins, 2 outfalls, 3 culverts)	267	SY	\$125.00	\$33,333.33
U		UTILITIES			SUBTOTAL	\$18,000.00
		Relocate utilities (utility poles, lines, etc.)	0			\$0.00
		Offsite utility service (confirm location & capacity)	0			\$0.00
		Telecommunications	0			\$0.00
		Electric Service (line, conduit, transformers, etc.)	0			\$0.00
		Water Service (lines, meters, fittings & valves, etc.)	0			\$0.00
		Sanitary Service (adjust ex. Manhole)	2	EA	\$500.00	\$1,000.00
		WSSC Inspection fees	1	LS	\$2,000.00	\$2,000.00
		Utility fees, applications, inspections, permits (WSSC, PEPCO, Verizon, etc.)				\$0.00
		Signal Modifications at Woodfield Road	100%	LS	\$15,000.00	\$15,000.00

SI	VEHICULAR PAVEMENT				SUBTOTAL	\$68,450.00
	Roads (define details)	0				\$0.00
	Accel/Decel Lanes	0				\$0.00
	Remove ex. curb and asphal for bump out	800	SY	\$10.00		\$8,000.00
	Curb & Gutter at Bethesda Church Rd (concrete)	670	LF	\$35.00		\$23,450.00
	Wheel Stops (recycled)	0	EA	\$180.00		\$0.00
	Pavement Marking and Striping (thermoplastic)	3000	LF	\$12.00		\$36,000.00
	Vehicle Guardrails					\$0.00
	Traffic Signage					\$0.00
	Parking Signage (including handicap signage and Handicap signage on bethesda church)	4	EA	\$250.00		\$1,000.00
SI	PEDESTRIAN PAVEMENT & HARDSCAPE				SUBTOTAL	\$898,816.00
	Asphalt Trail or Path (8' wide, 3" surface course, 6" aggregate)	2565	SY	\$32.00		\$82,090.67
	Asphalt Trail or Path (6' wide, 3" surface course, 4" aggregate) (connector path to neighborhoods)	97	SY	\$28.00		\$2,725.33
	Concrete Sidewalk (5" thick, widen 5' along bethesda church)	2000	SF	\$9.00		\$18,000.00
	Concrete Sidewalk (5" thick, 6' wide along woodfield road)	3000	SF	\$9.00		\$27,000.00
	Special Pavement (brick, bluestone, etc.)	0				\$0.00
	Edging (define type)	0				\$0.00
	Boardwalk (10' wide, wooden with helical piers and railings)	750	LF	\$460.00		\$345,000.00
	Boardwalk (10' wide, wd. w/ hel. piers and railings) for env. Requirements	550	LF	\$460.00		\$253,000.00
	Bridges (steel prefabricated truss, 10' wide, 25' long)	1	EA	\$58,000.00		\$58,000.00
	Steps (define type)	0				\$0.00
	Ramps (concrete with detectable warning surface)	5	EA	\$1,200.00		\$6,000.00
	Handrails (pipe)	0	LF	\$50.00		\$0.00
	Guardrails (remove and reset along bethesda church road)	150	LF	\$30.00		\$4,500.00
	Wood Guard Rail along Trail	500	LF	\$55.00		\$27,500.00
	Walls (MSE block walls at Bethesda Church Road)	100%	LS	\$75,000.00		\$75,000.00
C	RECREATION FACILITIES				SUBTOTAL	\$0.00
	Tennis Court (define what this includes)	0				\$0.00
	Basketball Court (define what this includes)	0				\$0.00
	Multi-Use Court (define what this includes)	0				\$0.00
	Playground (define - equipment, surface, drainage, edging)	0				\$0.00
	Soccer Field (define what this includes)	0				\$0.00
	Baseball Field (define what this includes)	0				\$0.00
	Softball Field (define what this includes)	0				\$0.00
	Multi-Use Field (define what this includes)	0				\$0.00
C	STRUCTURES				SUBTOTAL	\$0.00
	Gazebo or Pavilion	0				\$0.00
	Trellis (define)	0				\$0.00
	Restroom (define, include utilities)	0				\$0.00
	Other Structures	0				\$0.00
SI	SITE AMENITIES & FURNISHINGS				SUBTOTAL	\$53,500.00
	Lighting (define - luminaire, assembly, etc.)	0				\$0.00
	Benches (5' wood on asphalt pad)	5	EA	\$1,500.00		\$7,500.00
	Bicycle Rack (define type)	2	EA	\$2,000.00		\$4,000.00
	Trash Receptacles (define type)	3	EA	\$500.00		\$1,500.00
	Drinking Fountain (includes water line, meter costs)	1	EA	\$30,000.00		\$30,000.00
	Picnic Tables (define type)	0				\$0.00
	Other Special Features	0				\$0.00
	Park Sign	1	EA	\$1,000.00		\$1,000.00
	Trail Signs	1	LS	\$5,000.00		\$5,000.00
	3 Panel Kiosk	1	EA	\$3,000.00		\$3,000.00
	Single Panel Map	1	EA	\$1,500.00		\$1,500.00

SI	LANDSCAPING			SUBTOTAL	\$59,500.00
	Soil Testing	0			\$0.00
	Soil Preparation & Amendments	0			\$0.00
	Mulching (beds, define depth)	0			\$0.00
	Reforestation Trees/Whips (define size)	0			\$0.00
	Shade Trees (3-3.5" cal)	50	EA	\$400.00	\$20,000.00
	Ornamental Trees (2-2.5 cal)	25	EA	\$300.00	\$7,500.00
	Evergreen Trees (2-2.5" cal)	25	EA	\$300.00	\$7,500.00
	Shrubs (30-36" height)	100	EA	\$50.00	\$5,000.00
	Groundcovers/Perennials/Grasses (1 gal)	100	EA	\$10.00	\$1,000.00
	Sod	0	SF		\$0.00
	Lawn Seed	3500	SY	\$1.00	\$3,500.00
	Meadow (define - seeding or plugs)	0			\$0.00
	Erosion Control Fabric (define)	0			\$0.00
	Maintenance (watering, aftercare, etc.- if not included in installed cost and warranty)	0			\$0.00
	Erradicate Multiflora Rose Stands	1	LS	\$15,000.00	\$15,000.00
	AS-BUILT DRAWINGS (For SWM, underground utilities, bridge footings)			SUBTOTAL	\$15,000.00
	As Built Drawings	1	LS	\$15,000.00	\$15,000.00
SI	SUBTOTALS AND CONTINGENCIES				
	CONSTRUCTION SUBTOTAL				\$1,531,439.33
	CONSTRUCTION CONTINGENCY (20% of Construction Subtotal)				\$306,287.87
	CONSTRUCTION TOTAL				\$1,837,727.20
	LAND COSTS (Utility/Trail/Grading Easements, Purchase)		LS		\$0.00
	DESIGN CONTRACT WITH CONTINGENCY (17% of Construction Total, depending on project)				\$312,413.62
	STAFF CHARGEBACKS FOR DESIGN (20% of Design Contract with Contingency)				\$62,482.72
	CONSTRUCTION MANAGEMENT & INSPECTIONS (5% of Construction Total)				\$91,886.36
	TOTAL PROJECT COST				\$2,304,509.91

ADDITIONAL CHECKLIST ITEMS

- | | | |
|---|---|---|
| 1 | Are there unique environmental factors, such as special protection areas, rubble, dump sites? | dumping area on slope behind town center, generally outside LOD |
| 2 | Is there an approved NRI/FSD? | YES |
| 3 | Is there an approved preliminary FCP? | YES |
| 4 | Is there an approved SWM concept plan? | YES |
| 5 | What types of local, state & federal permits are required? | MDE, DPS, DPW&T, SHA |

Estimated Budget Projections

WorkDetailID: 27 Work Detail: This project will add 1.1 mile of paved trail to the 3.1 mile path that begins in Damascus Recreational Park on Kings Valley Road, and travels north to Valley Park Drive. This extension will extend the trail to Damascus Town Center.

Park/Location Site: Magruder Branch Trail

PDF Name: Magruder Branch Trail

Estimated FY of OBI: 14

Contact: Peter Noursi

Contact Phone: () 495-2465

<u>Cost Element</u>	<u>Item Description:</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>BSY</u>
Energy	Utility costs						\$1,600	
Staff Costs and Work Year	INSPECTION						\$75	
Staff Costs and Work Year	Seasonal Maintenance Worker						\$100	
Staff Costs and Work Year	Park Maintenance Worker III						\$3,300	
Supplies and Materials Costs (Maintenance)	Boards and Railing						\$600	

0.065

	2009	2010	2011	2012	2013	2014	BSY
Work Detail: 26 - River Road Shale Barrens - 68.25 acre addition, entirely forested, no buildings. May have natural surface trails, gravel parking, kiosk,							
<i>Totals by Work Detail 26:</i>							
Totals for Central Maintenance	\$7,169	\$4,169	\$4,169	\$4,169	\$4,169	\$4,169	\$1,000
• Staff Costs and Work Year	\$2,575	\$2,575	\$2,575	\$2,575	\$2,575	\$2,575	
• Energy	\$75	\$75	\$75	\$75	\$75	\$75	
Totals for Horticultural Services	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	\$2,500	
• Supplies and Materials Costs (Maintenance)	\$594	\$594	\$594	\$594	\$594	\$594	
• Staff Costs and Work Year	\$23	\$23	\$23	\$23	\$23	\$23	
	\$571	\$571	\$571	\$571	\$571	\$571	
Totals for Northern Region	\$4,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
• Other Services and Charges (Maintenance)	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	
• Staff Costs and Work Year	\$3,000						

* Totals by PDF - Magruder Branch Trail:							
<i>Work Detail: 27 - This project will add 1.1 mile of paved trail to the 3.1 mile path that begins in Damascus Recreational Park on Kings Valley Road, and</i>							
<i>Totals by Work Detail 27:</i>							
Totals for Central Maintenance	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$5,675
• Staff Costs and Work Year	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	
• Energy							\$75
Totals for Northern Region	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$1,600	\$4,000
• Supplies and Materials Costs (Maintenance)							\$600
• Staff Costs and Work Year							\$3,400

Totals by PDF - Minor New Construction LP:							
<i>Work Detail: 29 - Expand parking lot from 20 to 40 spaces.</i>							
<i>Totals by Work Detail 29:</i>							
Totals for Central Maintenance	\$3,827	\$4,614	\$4,614	\$4,614	\$4,614	\$4,614	
• Staff Costs and Work Year	\$1,600	\$2,387	\$2,387	\$2,387	\$2,387	\$2,387	
• Energy	\$1,600	\$75	\$75	\$75	\$75	\$75	
Totals for Southern Region	\$1,600	\$2,312	\$2,312	\$2,312	\$2,312	\$2,312	\$2,312
• Supplies and Materials Costs (Maintenance)		\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	
• Other Services and Charges (Maintenance)		\$300	\$300	\$300	\$300	\$300	
• Staff Costs and Work Year		\$512	\$512	\$512	\$512	\$512	

APPENDIX D

**INTERAGENCY CORRESPONDENCE AND
APPROVALS**

1. Department of Permitting Services, SWM Concept Approval
2. Montgomery County Department Of Public Works
3. State Highway Administration
4. Natural Resources Inventory / Forest Stand Delineation
Approval
5. WSSC
6. Pedestrian/Bike/ADA Analysis Sheet

Magruder Branch Trail Extension
Midblock Crossings at Valley Park Drive and Bethesda Church Road
2/13/06
Prepared by: GPI

The trail alignment crosses two roads Valley Park Drive and Bethesda Church Road, both owned and maintained by Montgomery County DPW&T. These crossings are the most significant safety issue along the trail because of the potential for a trail user to be struck by a vehicle while crossing the road. The MNCPPC has performed counts of trail users on the existing portion of the trail at Sweepstakes Road in 2000, and found an average of 22 users per hour. A similar trail in the downcounty area (Sligo Creek) had 86 users per hour. As this area continues to develop and the remainder of the trail is completed, trail usership is expected to increase.

Following is an evaluation of the crossing at each location for review and comment by MNCPPC and DPW&T.

Road Crossing at Valley Park Drive:

Along with improvements to Valley Park Drive, DPW&T is currently constructing a refuge island for the existing mid-block crosswalk of the trail at Valley Park Drive. GPI has not explored any other alternatives at this location.



Figure 1 - A roadway crossing at Valley Park Drive is currently under construction by DPW &T with a proposed refuge island for safety. This view shows the design superimposed on an aerial photo of the vicinity.

Road Crossing at Bethesda Church Road:

A roadway crossing at Bethesda Church Road will be required to connect the southern section of the trail to the northern section. Bethesda Church Road is 50 feet wide, with two travel lanes, two parking lanes, and a center turn lane with a 35 mile per hour speed limit. There are no driveways in the vicinity of the midblock crossing. Cars from Damascus High School are routinely parked along the entire parkland frontage, although parking restrictions are posted on the north side of the road. The roadway is curved both horizontally and vertically along the park frontage. The combination of the parked cars and horizontal curve makes it difficult for trail users to see oncoming cars and for drivers to see the trail users.

The safest crossing location is at an intersection with a signal or stop sign. The closest stop controlled intersections are at Maryland Route 27 to the west (1300 feet) and Maryland Route 124 to the east (1400 feet). It is not reasonable to expect a trail user to travel that far out of the way to cross at a stop controlled intersection. Therefore, we are proposing a mid-block crossing.

The midblock crossing can be either at-grade on the existing roadway, or in some instances an overpass or underpass is provided. Following is detailed discussion of the issues associated with each of these options, along with a summary table of the key considerations.

At-Grade Crossing: For a mid block crossing, the primary safety issue to evaluate is whether the location has adequate sight distance. The “stopping sight distance” is the distance it takes for a driver to notice a problem, realize stopping is necessary, and come to a complete stop. The required stopping sight distance at this location is 250 feet, based on AASHTO standards, a posted speed of 35 miles per hour and a roadway classification of primary. GPI has not obtained an 85 percentile speed for this vicinity, but our field observation is that cars regularly exceed the speed limit. When cars are parked in the vicinity of the crosswalk, the required sight distance is not available. To address that issue, we propose to “bump out” the existing curb to eliminate the parking lanes for a distance of 250 feet in each direction from the crosswalk, as shown conceptually in the aerial photo below. To further increase safety, we propose to construct a median at the turn lane which will provide a “refuge” space, allowing trail users to cross one direction of traffic at a time. (See Figure 2 below) The pavement narrowing and approach signing at the horizontal typically has the effect of reducing speed in the vicinity of the crosswalk.

Another way to evaluate this issue is to calculate how long it will take for a trail user to cross the road. An average pedestrian speed is 3 feet per second, in accordance with the MUTCD. If the refuge island is constructed, the time needed for a trail user to cross to the refuge island would be:

$$12\text{ft} / 3 \text{ ft/s} = 4 \text{ seconds}$$

The following equation computes the distance a motorist traveling the speed limit will advance in the time it takes a trail user to cross one lane of traffic.

$$((35 \text{ mph} \times 5280) / 3600 \text{ sec/hr}) \times 4 \text{ sec} = 205 \text{ feet}$$

If the motorist exceeds the speed limit by 10 miles per hour, this distance will be:

$$((45 \text{ mph} \times 5280) / 3600 \text{ sec/hr}) \times 4 \text{ sec} = 264 \text{ feet}$$

If the length of the proposed curb bulb out is extended by 14 feet and the refuge island is constructed, then adequate sight distance will exist when motorist exceed the speed limit by 10 miles per hour.



Figure 2 - Proposed at-grade mid-block crossing of Bethesda Church Road with curb bump-outs and a median refuge island. The curb bump-outs will extend for 250 feet in both directions to ensure parked cars can not encroach on sight distance.

Underpass: An underpass would allow trail users to cross beneath Bethesda Church Road in a tunnel about 100 feet long, constructed with a steel arched pipe approximately 10 feet high by 12 feet wide. Due to the locations of existing utilities and the grade adjacent to the road, the best location for the tunnel is to the west of the existing storm drain. If a tunnel is constructed, we would adjust the trail location to the north and avoid the bridge crossing of Magruder Branch. Unless the road surface elevation is raised, this tunnel will not be much higher than the culvert, which may result in maintenance to remove the silt and debris deposited by stormwater flows.

Overpass: Constructing an overpass would allow trail users to avoid conflicts with vehicles. However, the existing roadway is constructed on a 15 foot high embankment, and the trail must have a clearance of 15 feet above the existing roadway. To maintain a 5% slope for a height of 30 feet will require a ramp 360 feet long on the south side. The ramp will be about half that length to the north, because the existing grades along the trail alignment are higher, resulting in an overall length of about 620 feet, which would be constructed through a combination of grading, retaining walls, and bridging. Research of existing overpasses has shown that trail users frequently avoid overpasses because they perceive the risk of the at-grade crossing to be less than the extra time and effort to utilize the overpass.

In summary, based on our evaluation of the options, we would recommend the mid-block, at grade crossing with bump-outs and a pedestrian refuge island for this crossing. This is safer than a simple crosswalk. The underpass will be long (100 feet), potentially expose trail users to crime and may provide a location for undesirable loitering. It will also be in the floodplain and require frequent maintenance to keep the asphalt free of debris. The overpass will be extremely expensive, and based on the traffic characteristics of Bethesda Church Road, it is likely that many trail users would create a “people’s choice trail” and cross the road to avoid the grades and length of the overpass.

Table 1. Comparison of Options for Magruder Branch Trail Mid Block Crossing at Bethesda Church Road

Option	Crosswalk	Crosswalk (Bumpout & Refuge Island)	Underpass	Overpass
Cost	\$3,000	\$65,000	\$500,000	\$1,000,000
Safety	Signage to meet AASHTO/MUTCD standards will be provided; Sight distance will be difficult to enforce with only signed parking restrictions	Signage to meet AASHTO/MUTCD standards will be provided; Sight distance of 250 feet provided by creating bump outs Pedestrian refuge island	Eliminates risk of collision with vehicle Increases risk of crime & vandalism Users may choose to cross at grade and avoid the tunnel	Some users may still use at-grade crossing to avoid lengthy ramping Maintenance would be required
Environmental Impacts	None	None	Temporary nontidal wetland and floodplain disturbance; Could eliminate the need for a stream crossing, but result in increased nontidal wetland disturbance	Nontidal wetland, forest and floodplain disturbance
Maintenance			Will be in floodplain	
Permitting			Would require MDE /ACOE authorization	

Noursi, Peter

From: Simpson, Bob [Bob.Simpson@montgomerycountymd.gov]
Sent: Friday, August 24, 2007 7:34 PM
To: Kimberly Paniati
Cc: Noursi, Peter
Subject: RE: Magruder Trail

Dear Kim,

Thanks for the opportunity to review and comment on the Magruder Branch Trail Extension Midblock Crossing Evaluation. With regard to the crossing of Valley Park Drive, DPWT concurs that the existing condition is appropriate and no further evaluation is necessary.

With regard to the crossing of Bethesda Church Road DPWT has the following comments –

- although the Intersection crossing is our first preference, we concur with the evaluation's findings that the closest controlled intersections are at such a distance away that most trail users would not readily use them, and would try to cross in the mid-block area.
- of the four mid-block options (Crosswalk Only, Crosswalk with Bump-outs and Refuge island, Overpass, or Underpass) we believe the stated preferred option of crosswalk with bump-out and refuge island is acceptable as the planning concept to be carried forward to design. The design will need to be closely coordinated with DPWT and the Department of Permitting Services (DPS) to ensure that it meets all safety, operations, and maintenance requirements.
- construction of the crossing, including the refuge island, by MNCPPC will of course have to be done under DPS permit
- the issue of a pedestrian signal was briefly evaluated and found not to be warranted based on initial trail use forecasts. However, it was also noted that future user volumes may necessitate a re-evaluation, and could possibly warrant a signal. Therefore, M-NCPCC will need to enter into an agreement with DPWT at the time of construction of this mid-block crossing that MNCPPC will be responsible for funding a proportionate share of the cost of any future signal installation necessitated by this trail crossing.

In conclusion, we concur that the mid-block Crosswalk with Bump-outs and Refuge is the appropriate option to consider for design, with final design to be reviewed and approved at the time of final trail design. Please advise if you have any questions regarding these comments. Your continuing coordination is appreciated.

Sincerely,
Bob Simpson

-----Original Message-----

From: Kimberly Paniati [mailto:kpaniati@gpinet.com]
Sent: Monday, April 30, 2007 11:54 AM
To: Simpson, Bob
Cc: 'Noursi, Peter'
Subject: Magruder Trail

Hi, Bob,

How are you? It's been awhile since you've heard anything about Magruder, it got sidetracked on a minor alignment change south of Bethesda Church Road (due to mncppc tree issues), but we are now finalizing the facility plan and getting ready for the planning board presentation. I need some input from you about the Bethesda Church Road crossing. To refresh your memory, here's what happened on that issue to date:

1. Prior to public meeting, GPI had contacted Ki Kim about crossing and he was in agreement with concept of pedestrian refuge island here
2. Public meeting – residents raised many questions about safety of this crossing, expressed desire to explore underpass, overpass, signalization

3. Following the meeting, MNCPPC held meeting with you, Ki Kim & others to explore this issue – you recommended GPI do a study of the options for this crossing
4. GPI prepared a study (attached). We also met with Ki Kim and SHA representative (stephanie Yanovitz) in the field and reviewed the at-grade crossing location. They were both in general agreement with the pedestrian refuge island as proposed.

Peter Noursi believes he sent this memo for your comment awhile back, but we do not have any record of a response. Can you take a look and let us know if you can send something in writing stating that DPW supports an at-grade crossing at this time, with final design to be reviewed and approved at the time of final trail design. We are trying to finalize our report in the next few weeks, so anything you can do to expedite a response would be appreciated. Please let me know if you need more info.

Kim Paniati
Project Manager
Greenman-Pedersen, Inc.
10977 Guilford Road
Annapolis Junction, MD 20701
301-470-2772 410-880-3055 fax 301-490-2649

Noursi, Peter

From: Darrell Mobley [DMobley@sha.state.md.us]
Sent: Friday, May 05, 2006 9:59 AM
To: Noursi, Peter
Cc: Marian.Elsasser@mncppc-md.org; kpaniati@gpinet.com
Subject: MD 124 (Woodfield Road) at MD 108 (Main Street)

Dear Mr. Noursi:

This is in further response to your email regarding citizen concerns raised during a public meeting conducted for the Magruder Branch Hiker Biker Trail in Montgomery County. Please let me assure you that safety is of paramount importance to the State Highway Administration.

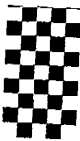
My traffic engineering staff has completed their evaluation, and we would like to share the findings with you. During the field visit with you on February 22, 2006, we observed the MD 108 (Main Street) eastbound right turns to MD 124 (Woodfield Road) southbound. The concern was that cars were not stopping for pedestrians in the crosswalk across MD 124. We noted that a green right turn arrow exists for the vehicular movement from MD 108 eastbound to MD 124 southbound. During the day heavy right turns from MD 108 are present as well as a concurrent MD 124 northbound left turn movement. Both turns are made from exclusive turn lanes during an exclusive signal phase at the intersection. While these vehicles are turning, pedestrians do not have a walk indication. The clearing of most of the vehicles during this phase reduces the number of vehicle and pedestrian conflicts that arise on a solid green and thus a walk indication.

We evaluated the suggestion of a No Turn on Red sign, but we cannot comply with the request. During our observations few pedestrians were observed using this crossing during a 12-hour count. As more pedestrian activity develops with the opening of the proposed Magruder Branch Hiker Biker Trail we can revisit operations. In the meantime, we have recommended that Countdown Pedestrian Signals (CPS) and Accessible Pedestrian Signals (APS) be considered by our Office of Traffic and Safety. The real time information and audible tones can provide an enhancement to pedestrian operations at the intersection.

Thank you again for sharing the public's concerns with us. If you have any further questions or comments, please do not hesitate to contact me or my Assistant District Engineer for Traffic, Mr. Jeffrey Wentz, at 301-513-7359 or 800-749-0737.

Sincerely,

Darrell B. Mobley
District Engineer



**MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION
NATURAL RESOURCES INVENTORY/FOREST STAND DELINEATION
COMMENTS**

TO: Bill Park NRI/FSD # 4-06043
Greenman-Pedersen Date Recd 8/22/2005
Name of Plan Magruder Branch Trail
Phone 410 880-3055 Fax 301 490-2649

The subject Natural Resources Inventory/Forest Stand Delineation Plan has been reviewed by the Environmental Planning Division to determine if it meets the requirements of Chapter 22A of the Montgomery County Code (Forest Conservation Law). The following determination has been made:

SUBMISSION ADEQUACY

X Adequate as submitted (NRI/FSD plan and supporting information is in Environmental Planning Division file.)

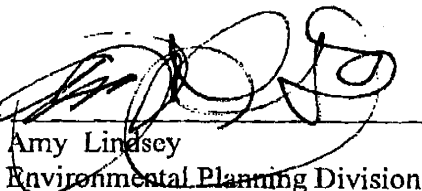
RECOMMENDATIONS:

X Approval. Forest Conservation Plan may be submitted. Approval may be subject to confirmation of floodplain and wetlands delineation at later planning stages. If DPS determines a floodplain is present, or if wetland-permitting agencies determine wetlands are present, the environmental buffer areas on the plan will have to be enlarged to incorporate those additional environmentally sensitive areas.

Please send a mylar for signature (I already have the two clean copies for signature)

Note: When the NRI/FSD is approved and stamped by MNCPPC, please submit a copy of the approved plan as a PDF named Approved NRI/FSD. The NRI/FSD plan drawings are to be grouped and saved in numerical order within one file. All PDFs are to have a graphic scale.

SIGNATURE


Amy Lindsey
Environmental Planning Division

301 495-2189

DATE: 10/16/2006

Reminder: Address your submissions/revisions to the Reviewer who completed the Comments sheet.
Put the Plan numbers on your cover/transmittal sheets.

Post-it* Fax Note	7671	Date	10/16	# of pages	1
To	Bill Magruder	From	Amy Lindsey		
Co./Dept.	Greenman-Pedersen	Co.			
Phone	410 880 3055	Phone #	301 495 2189		
Fax #	301 490 2649	Fax #			



WASHINGTON SUBURBAN SANITARY COMMISSION

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Carla Reid Joyner

May 7, 2007

RECEIVED

MAY 10 2007

ANNAPOLIS JCT, MD

Ms. Carol Prefit
Greenman-Pedersen, Inc.
10977 Guilford Road
Annapolis Junction, MD 20701

Re: RMS File No. 07RMS6751A
Magruder Branch Trail Extension

Dear Ms. Prefit:

Thank you for your submittals of April 11, 18, and 19, 2007, requesting our review of the proposed Magruder Branch Trail project and associated encroachments into WSSC's right-of-way. After reviewing the submitted plans and WSSC records we have the following comments that need to be addressed before the proposed construction activities can be approved by this office.

- WSSC has an existing 35-ft wide right-of-way and trunk sewer ranging in diameter from 15 inches to 21 inches (WSSC contract no. 70-4159A) within the project area that need to be protected. Please provide a list of any heavy construction equipment to be used on this project in order to evaluate possible load impacts to the existing sewer.
- The construction of boardwalks within WSSC right-of-way will not be permitted as these restrict access and use of WSSC's right-of-way for maintenance and repair activities.
- The bridge crossing and retaining wall shown on plan sheet 3 also restrict access and use of the right-of-way. The bridge structure is not permitted within WSSC's right-of-way. Consider revising the trail alignment to the east of WSSC's right-of-way to avoid crossing the sewer.
- The non-boardwalk trail segments encroaching within WSSC's right-of-way are permissible. Please be advised however, that from time-to-time WSSC will need to perform maintenance or repairs to existing underground utilities. This includes vehicular access and excavating within the right-of-way that could damage and/or restrict use of the trail. It is advisable to relocate the trail alignment outside of WSSC's right-of-way to avoid such future conflicts.



Ms. Carol Prefit
RMS File No. 07RMS6751A
May 7, 2007
Page 2

If you have any questions, please don't hesitate to contact me. I can be reached at (301) 206-8737 or by e-mail at fjames@wsscwater.com.

Sincerely,

A handwritten signature in cursive script that reads "Felicia L. B. James".

Felicia L. B. James, P.E.
Relocations Unit Project Manager
Infrastructure Systems Group



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Andrew D. Brunhart

DEPUTY GENERAL MANAGER
Carla Reid Joyner

September 5, 2007

Ms. Carol Perfit
Greenman-Pedersen, Inc.
10977 Guilford Road
Annapolis Junction, MD 20701

Re: RMS File No. 07RMS6751A
Magruder Branch Trail Extension

Dear Ms. Perfit:

Thank you for meeting with me on September 4th, to discuss changes that have been made to the Magruder Branch Trail Extension Facility Plans in response to our comment letter of May 7, 2007. The revised plans have addressed our previous comments. Based on our review of the August 29, 2007, plans and WSSC records, there are two sewer manholes that may need to be adjusted due to the proposed trail construction as described below.

- Sewer manhole 092-M (MH-43 on contract no. 70-4159A) is located near station 20+50 on the path alignment. The manhole rim may need to be adjusted so that the rim elevation is one foot above the surrounding ground.
- Sewer manhole 121-M (MH-46 on contract no. 70-4159A) is located near station 37+30 on the path alignment. The manhole rim should be approximately one foot above the current grade. If the path is to be located to coincide with the manhole, the path grade should be adjusted to match the manhole rim elevation or the manhole rim should be lowered to match the proposed path grade. It is recommended, however, to adjust the path location so that the manhole falls outside of the paved path area.

Since this work is necessitated by the proposed project, all costs must be borne by the applicant, M-NCPPC. The work is to be completed by M-NCPPC's contractor under the supervision of WSSC. M-NCPPC will also be required to pay the cost of WSSC inspection. Please submit final drawings to this office for our review. At that time, the Systems Inspection Fee will be determined and an Agreement letter for the adjustment to WSSC facilities will be drafted. Once the Agreement letter is signed, the inspection fee submitted, and any outstanding comments address, an approval letter will be issued. Construction within WSSC's easement may not commence until approval is granted by WSSC.



Ms. Carol Perfit
RMS File No. 07RMS6751A
September 5, 2007
Page 2

If you have any questions, please don't hesitate to contact me. I can be reached at (301) 206-8737 or by e-mail at fjames@wsscwater.com.

Sincerely,

A handwritten signature in black ink, reading "Felicia L. B. James". The signature is written in a cursive style with a large, stylized "F" and "J".

Felicia L. B. James, P.E.
Relocations Unit Project Manager
Infrastructure Systems Group

Pedestrian/Bike/ADA Analysis Sheet

September 14, 2007

Analysis of the Capital Projects should address impacts to pedestrian's activity as a result of the project. Please fill out the following form and retain in your files for each PDF.

Project Name: Magruder Branch Hiker Biker Trail Extension CIP#: 500801

1. Connectivity:

List any destinations within approximately 2 miles such as schools, parks, commercial/retail, employment centers and/or public facilities that this project may provide access to. List any other important destination that may pertain to the project.

- Damascus Town Center
 - Damascus Center Shopping Center
 - Damascus Park
 - Damascus Senior Center
 - Damascus Library
 - Damascus Park and Ride Lot
 - Ridgeview Shopping Center
- Damascus HS
- John T. Baker MS
- Damascus ES
- Clear Spring ES
- Woodfield ES
- Lois P. Rockwell ES
- Moyer Road Park
- Damascus Rec. Park
- John Haines Park
- Oak Ridge Conservation Park
- Seneca Springs Park
- Great Seneca Stream Valley Park

2. Master Plan Issues:

List the master plan, page # and recommendations for sidewalks, bikeways or other related issues such as streetscape requirements that impact the project. Include recommended road right-of-way, number of lanes, etc.

Damascus Master Plan (Approved and Adopted, June 2006)

Pedestrian/Bike/ADA Review Sheet, Cont'd. – Page 2

- Pg. 12: Town Center Framework map clearly identifies the Magruder Branch Trail Extension as an integral part of the vision for a viable and accessible Damascus Town Center.
- Pg 16 and 17: Magruder Branch Stream Valley Park Trail: Completes the trail into the Town Center and provide a trailhead. This extension will allow safe access to the Town Center.

3. Existing Conditions:

Analyze existing crosswalks, sidewalks; curb ramps, street lighting, pedestrian signals and bus stops (and any others). List missing items and deficiencies such as poles or other obstructions in the sidewalk space, trees blocking illumination, and need for streetlights. Check for pedestrian/bike accident histories. Determine if bus stops will be properly located after the project is completed (contact Transit Division Planner for assistance). List any other deficiency/problem.

The purpose of project is to extend the existing Magruder Branch Hiker Biker Trail to the Damascus Town Center. At present the trail extends from Damascus Regional Park to just north of Valley Park Drive, providing recreational value, and some connectivity between communities. The area of the proposed trail extension is wooded, and grassed. An area of existing trail just north of Valley Park Drive will be improved to meet ADA requirements.

4. Recommended improvements :

Identify pedestrian improvements that are part of a project. The improvements should enhance/improve existing conditions or provide reasonable pedestrian/bicycle accessibility and meet ADA guidelines. The project will carry out the proposed improvements if funded. How are the existing conditions incorporated into the project to ensure pedestrian safety in the area surrounding the project?

The purpose of the project is to provide pedestrian connectivity.

5. Additional Cost/Impacts/Issues:

List any extraordinary costs or impacts to the project created by the provision of pedestrian, bicycle or ADA accessibility (if any). Discuss how the projects will either retain the existing safety level or to what extent we expect safety to improve and why?

Pedestrian/Bike/ADA Review Sheet, Cont'd. – Page 3

The existing topographic conditions result in substantial amount of total project cost, especially in the ramp up to Bethesda Church Road and the ADA improvements being made adjacent to Valley Park Drive.

Resources:

'Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities', 1992

Architectural and Transportation Barriers Compliance Board, ADA, Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA);

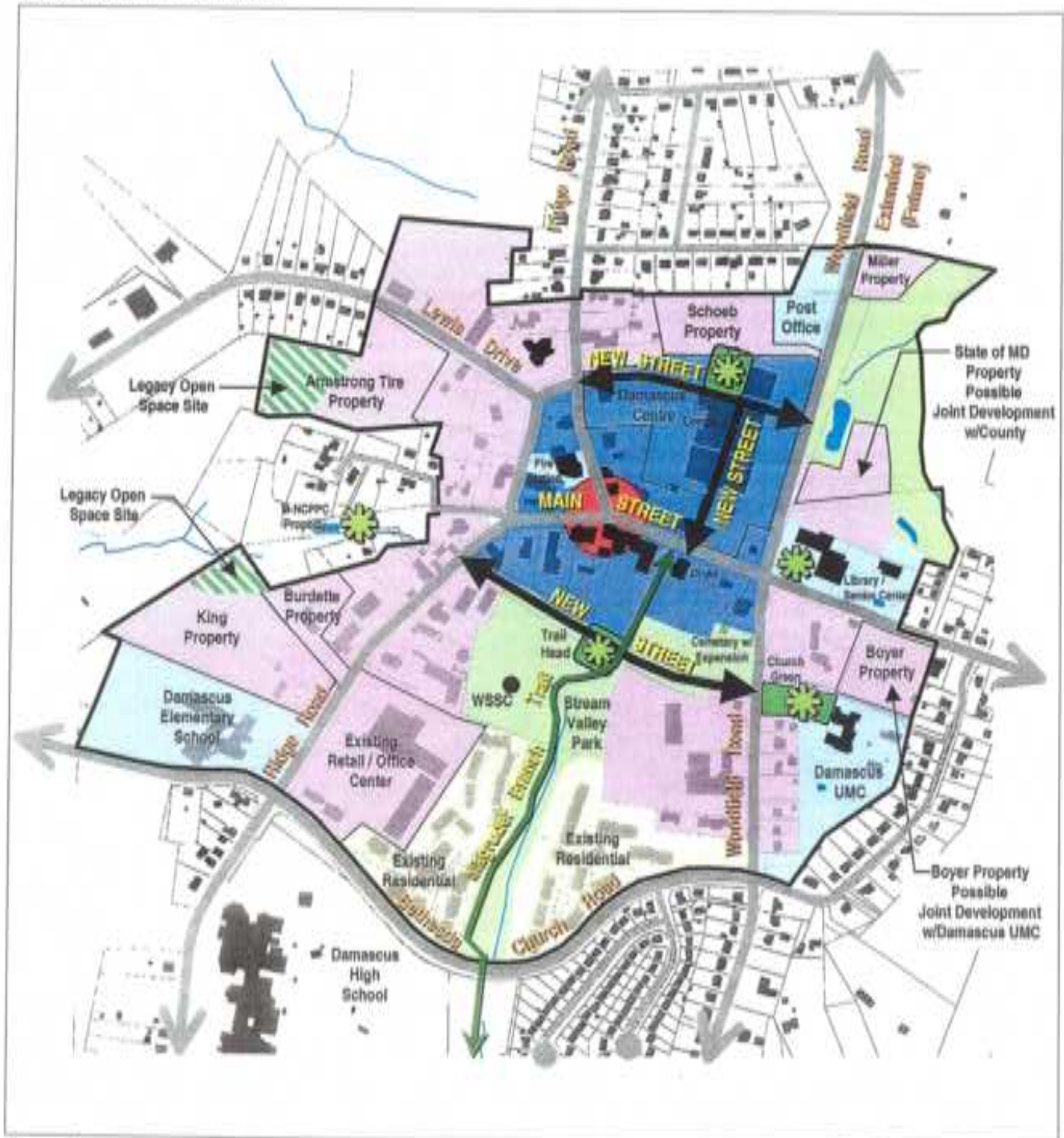
Accessibility Guidelines; 'Proposed Rule', 1999

American Association of State Highway and Transportation Officials (AASHTO), 'Guide for the Development of Bicycle Facilities', 1999

APPENDIX E

**MASTERPLAN RECOMMENDATIONS
FOR THE DAMASCUS TOWN CENTER**

Town Center Framework



Legend:

- Mixed-Use (Non-Residential Emphasis)
- Mixed-Use (Residential Emphasis)
- Center of Town
- Existing Residential
- Civic/Institutional
- Park Land, Formal Open Space and Other Open Space
- Potential Legacy Open Space

- Street Network
- Proposed Framework Streets
- Proposed Hiker/Biker Trail
- Existing Buildings



0 300'

- **Main Street Redesign Potential** – Through traffic that uses Main Street to get from Ridge Road to Woodfield Road is anticipated to significantly decrease after Woodfield Road Extended (A-12) is completed. Decreased traffic congestion should result in a more pedestrian friendly environment along the segment of Main Street from Ridge Road to Woodfield Road. Main Street can be greatly enhanced through redesign if through traffic is reduced as anticipated. If redesign is considered, desirable features include more on-street parking, streetscape treatments, and a dedicated center turning lane. The best combination of features should be determined through a facility planning study or in a redevelopment review process.
- **Streetscape Treatment** – Enhance the streets in the Town Center with street trees, uniform lighting treatment and special paving. A continued commitment to the implementation of the Damascus streetscape treatment should be extended to all streets within the Town Center. New treatments should be explored as new street types and street amenities are created and implemented.

Expand and Enhance Mobility and Connectivity

Pedestrian and bicycle connectivity are critical for Damascus. Although adequate sidewalks exist within the core and all destinations in the Town Center area are within a ten-minute walking distance (one half mile), pedestrian activity is minimal. One reason is the limited sidewalk connections to the surrounding neighborhoods and schools adjacent to the Town Center. The primary street framework lacks a secondary street network to serve local businesses and patrons. Because of the limited sidewalks and bicycle lanes, vehicular travel on major roadways serves as the primary means of mobility within the Town Center.

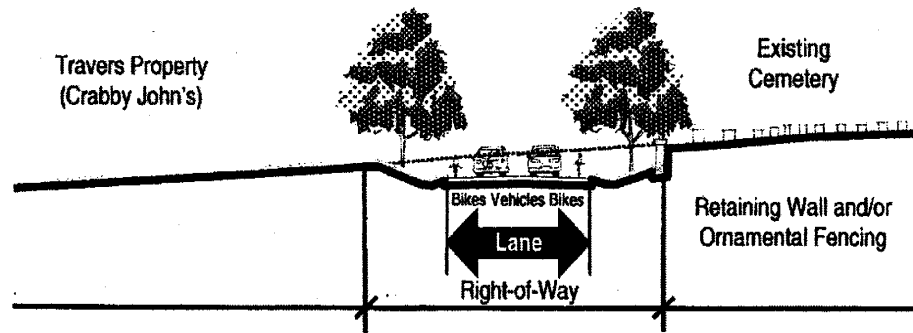
This Plan recommends modifications to create new access points and to provide a more grid-like street pattern. Interconnected streets that provide intuitive circulation alternatives for pedestrians and motorists are needed. Recommendations to achieve these goals include:

- **New Streets** – Add new streets parallel to Main Street from Ridge Road to Woodfield Road. A road connection through the Damascus Centre site on the north will provide additional access to that site and the Post Office, enhancing retail potential and improving mobility options for residents.

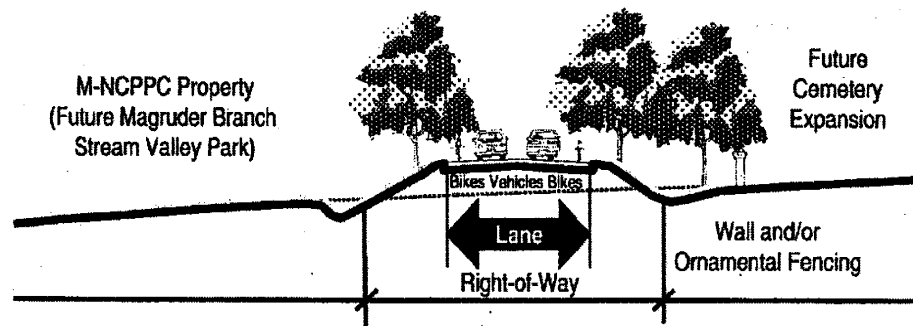
Completing the stub street behind the buildings on the south side of Main Street (Damascus Lane) will provide access to these under-utilized areas. The street is envisioned as a small local road or “lane”, and will also provide access to a “trailhead” for the Magruder Branch Stream Valley Park. The street (discussed further in the Transportation Chapter and the Parkland section of the Community Facilities Chapter) should integrate a bikeway and sidewalks, and be designed as a narrow local street due to environmental and topographic constraints (see Damascus Lane Concept map).

- **Sidewalk Widths** – The optimum sidewalk width for major business streets in the Town Center with street facing buildings is 15 feet. This will give pedestrians an environment that is safe, pleasant and interesting.
- **Pedestrian Crosswalks** – Provide clearly marked and distinctively designed crosswalks at all intersections for pedestrian safety.
- **Sidewalk Connections** – Provide an extended sidewalk system to encourage more pedestrians from adjacent neighborhoods to walk into the Town Center.
- **Magruder Branch Stream Valley Park Trail** – Complete the trail into the Town Center and provide a trailhead. This extension will allow safe access to the Town Center.

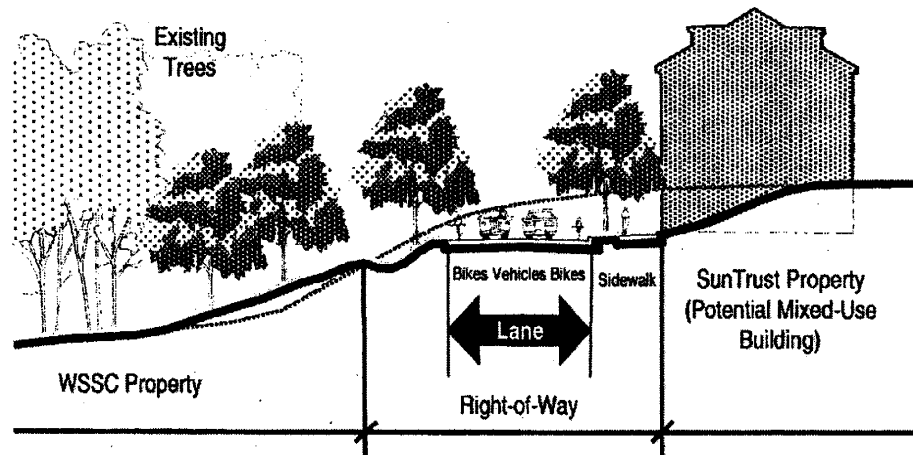
Damascus Lane Concept



Section at the Travers Property



Section at the M-NCPPC Property



Section at the SunTrust Property

Not to Scale

APPENDIX F

COMMUNITY CORRESPONDENCE

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

PUBLIC MEETING NOTICE



EXTENSION OF MAGRUDER BRANCH HIKER/BIKER TRAIL PROPOSED

The Maryland-National Capital Park and Planning Commission invites the public to review and provide feedback on a proposal to extend the Magruder Branch Hiker/Biker Trail from Valley Park Drive to the Damascus Town Center.

The current Magruder Branch Trail, opened in 1993, is a 3.1 mile paved path that begins in Damascus Recreational Park on Kings Valley Road and travels north to Valley Park Drive. The proposed extension will add another 1.1 miles of trail that would extend to the Damascus Town Center.

The meeting will be held on Thursday, October 27 from 7 p.m. to 9 p.m. at the Damascus Public Library located at 9701 Main Street in Damascus.

During the meeting, the public will have an opportunity to offer their thoughts and ideas about preliminary trail alignment options, based on existing environmental constraints and site conditions. Input from this meeting will be used to refine and finalize the trail plan.

The public will have another opportunity to comment on the project when the proposal and cost estimate are presented to the Montgomery County Planning Board for its consideration.

To submit written comments or receive additional information, please contact:

Peter Noursi, Project Manager
M-NCPPC, Parkside Headquarters
9500 Brunett Avenue
Silver Spring, Maryland 20901
Phone: 301-495-2465
Email: peter.noursi@mncppc-mc.org

The Maryland-National Capital Park and Planning Commission encourages the participation of individuals with disabilities in its programs and its facilities, which are accessible. For special needs, such as sign language interpretation, large print materials, listening devices, etc., contact Marion Joyce, at (301) 495-4600.



PROPOSED TRAIL ALIGNMENT OPTIONS
MAGRUDER BRANCH HIKER-BIKER TRAIL



The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Park and Planning
9500 Brunett Avenue
Silver Spring, MD 20901

Summary of Responses to the Questionnaire

<i>Are you in favor of the project?</i>	
Yes	7
No	-

<i>Which Alternate do you prefer? *</i>	
1	
2	5
3	
* Two responders did not specify which alignment they preferred.	

<i>Will you use the hiker biker trail?</i>	
Yes	6
No	1

<i>Do you think parking needs to be provided?</i>	
Yes	6
No	1

PUBLIC QUESTIONNAIRE

Magruder Branch Trail Extension: Valley Park Road to Woodfield Road

Public Meeting: Hiker/Biker Trail Alignment & Alternatives

October 27, 2005

1. Are you in favor of the Magruder Branch Trail Extension Project as a whole?

YES. I think it's a great idea and
will really help the community.

2. As the Alternate Alignments have been presented to you tonight, which alignment do you prefer? Please Circle One:

Alternate 1

Alternate 2

Alternate 3

2nd choice

3. Will you use the Hiker/Biker Trail? Please Circle One: YES NO

What will you use the trail for?

Recreation and to allow kids a safe way
to bike into town

4. As a potential Hiker/Biker Trail user, do you see a need for parking?

yes.

5. Any Additional Comments?

Safety. I'd like to let my kids
have the freedom to use the
trail on their own. Road crossings are
ESSENTIAL !!!

Please fold and return to address on the back

Place
Stamp
Here

Montgomery County Department of Park and Planning
Attention: Peter Noursi
9500 Brunett Ave.
Silver Spring, MD 20901

PUBLIC QUESTIONNAIRE

Magruder Branch Trail Extension - Valley Park Road to Woodfield Road

Public Meeting: Hiker/Biker Trail Alignment & Alternatives

October 27, 2005

1. Are you in favor of the Magruder Branch Trail Extension Project as a whole?

Yes - should be contributing to all ages.

2. As the Alternate Alignments have been presented to you tonight, which alignment do you prefer? Please Circle One:

Alternate 1

Alternate 2

Alternate 3

3. Will you use the Hiker/Biker Trail? Please Circle One: YES ☒ NO

What will you use the trail for?

4. As a potential Hiker/Biker Trail user, do you see a need for parking? *Not me others certainly will! BUT*

5. Any Additional Comments?

*Policing of motorized bikes
Connectors @ bottom of Valley Pl. Terrace for Plan 2*

Please fold and return to address on the back

Place
Stamp
Here

Montgomery County Department of Park and Planning
Attention: Peter Noursi
9500 Brunett Ave.
Silver Spring, MD 20901

PUBLIC QUESTIONNAIRE

Magruder Branch Trail Extension - Valley Park Road to Woodfield Road

Public Meeting: Hiker/Biker Trail Alignment & Alternatives

October 27, 2005

1. Are you in favor of the Magruder Branch Trail Extension Project as a whole?

Yes

2. As the Alternate Alignments have been presented to you tonight, which alignment do you prefer? Please Circle One:

Alternate 1

Alternate 2

Alternate 3

3. Will you use the Hiker/Biker Trail? Please Circle One: YES NO

What will you use the trail for?

Walking

4. As a potential Hiker/Biker Trail user, do you see a need for parking?

No - will use existing commuter lot on regional park

5. Any Additional Comments?

Trail extension is good idea.

Very good presentation.

Please fold and return to address on the back

Place
Stamp
Here

Montgomery County Department of Park and Planning
Attention: Peter Noursi
9500 Brunett Ave.
Silver Spring, MD 20901

PUBLIC QUESTIONNAIRE

Magruder Branch Trail Extension: Valley Park Road to Woodfield Road

Public Meeting: Hiker/Biker Trail Alignment & Alternatives

October 27, 2005

1. Are you in favor of the Magruder Branch Trail Extension Project as a whole?

yes

2. As the Alternate Alignments have been presented to you tonight, which alignment do you prefer? Please Circle One:

Alternate 1

Alternate 2

Alternate 3

3. Will you use the Hiker/Biker Trail? Please Circle One: YES NO

What will you use the trail for?

walking

4. As a potential Hiker/Biker Trail user, do you see a need for parking?

yes

5. Any Additional Comments?

As an early proponent of the
trail and friend of the community's
designer Robert Ramsey - I
am in favor of the trail.

Please fold and return to address on the back

Place
Stamp
Here

Montgomery County Department of Park and Planning
Attention: Peter Noursi
9500 Brunett Ave.
Silver Spring, MD 20901

PUBLIC QUESTIONNAIRE

Magruder Branch Trail Extension: Valley Park Road to Woodfield Road

Public Meeting: Hiker/Biker Trail Alignment & Alternatives

October 27, 2005

1. Are you in favor of the Magruder Branch Trail Extension Project as a whole?

yes

2. As the Alternate Alignments have been presented to you tonight, which alignment do you prefer? Please Circle One:

Alternate 1

Alternate 2

Alternate 3

3. Will you use the Hiker/Biker Trail?

Please Circle One:

YES

NO

What will you use the trail for?

4. As a potential Hiker/Biker Trail user, do you see a need for parking?

yes

5. Any Additional Comments?

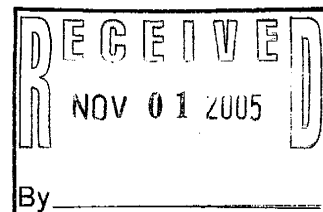
Need sidewalks along Sweepstakes
West of Gabano Way, and on
RT 124 from Sweepstakes to Log House.

Please fold and return to address on the back

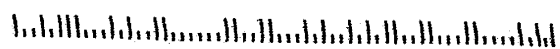
Z Mr. Thomas C. Zellers
9616 Harvest Knolls Way
Gaithersburg, MD 20882-3011



Montgomery County Department of Park and Planning
Attention: Peter Noursi
9500 Brunett Ave.
Silver Spring, MD 20901



20901+3226



PUBLIC QUESTIONNAIRE

Magruder Branch Trail Extension: Valley Park Road to Woodfield Road

Public Meeting: Hiker/Biker Trail Alignment & Alternatives

October 27, 2005

1. Are you in favor of the Magruder Branch Trail Extension Project as a whole?

YES

2. As the Alternate Alignments have been presented to you tonight, which alignment do you prefer? Please Circle One:

Alternate 1

Alternate 2

Alternate 3

3. Will you use the Hiker/Biker Trail? Please Circle One: YES NO
What will you use the trail for?

4. As a potential Hiker/Biker Trail user, do you see a need for parking?

YES

at DAMASCUS BUS

5. Any Additional Comments?

① SUGGEST THAT THE TRAIL BE CARED UNDER

BOWMAN CHURCH ROAD

OR HAVE AN AT GRADE CROSSING CONTROLLING

WITH A POSSIBLE CONTROLLED CLOSURE

② INSTALL VIDEO SURVEILLANCE CAMERAS TO SCAN FROM

Please fold and return to address on the back

(MOTION PICTURES) FOR SAFETY & SECURITY

William P. Schork
10101-B RIDGEMANOR RD
DAMASCUS, MD 20872

Place
Stamp
Here

Montgomery County Department of Park and Planning
Attention: Peter Noursi
9500 Brunett Ave.
Silver Spring, MD 20901

PUBLIC QUESTIONNAIRE

Magruder Branch Trail Extension: Valley Park Road to Woodfield Road

Public Meeting: Hiker/Biker Trail Alignment & Alternatives

October 27, 2005

1. Are you in favor of the Magruder Branch Trail Extension Project as a whole?

Yes

2. As the Alternate Alignments have been presented to you tonight, which alignment do you prefer? Please Circle One:

Alternate 1

Alternate 2

Alternate 3

3. Will you use the Hiker/Biker Trail? Please Circle One: YES NO
What will you use the trail for?

Walking

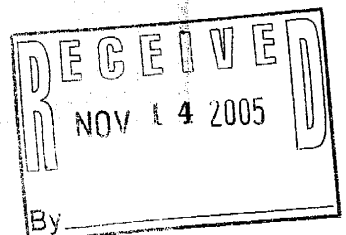
4. As a potential Hiker/Biker Trail user, do you see a need for parking?

Yes - Have to drive to use the trails

5. Any Additional Comments?

*My concern is crossing the major roads
I think we need speed bumps on the
roads near the trail including the cross over
on Sweepstakes road.*

Please fold and return to address on the back





Louis & Alvina Soule, Jr.
9815 Log House Ct.
Gaithersburg, MD 20882



Montgomery County Department of Park and Planning
Attention: Peter Noursi
9500 Brunett Ave.
Silver Spring, MD 20901

20901+3226



Noursi, Peter

From: Tim O'Brien [mdtimo@yahoo.com]
Sent: Sunday, July 23, 2006 2:38 PM
To: Noursi, Peter
Subject: Magruder Branch Hiker-Biker Trail Extension

Peter Noursi,

The current Magruder Branch Hiker-Biker Trail is sufficient. Having ridden on the path today one can readily detour from Valley Park Drive to the bike patch on 27-Ridge Road to get all the way to downtown Damascus. An extension to the trail to pave it all the way to Bethesda Church road is unnecessary. With little inconvenience I was able to ride from Damascus Recreational Park to downtown Damascus.

Tim O'Brien
301-482-1159
24201 Bush Hill Road
Gaithersburg MD 20882

Do You Yahoo!?
Tired of spam? Yahoo! Mail has the best spam protection around
<http://mail.yahoo.com>

Noursi, Peter

From: OnyxSax@aol.com
Sent: Tuesday, October 25, 2005 10:17 PM
To: Noursi, Peter
Subject: Magruder Branch Extension

Dear Mr. Noursi,

I will be unable to attend the October 27th meeting regarding extending the Magruder Branch Trail to Damascus Town Center and I wanted to pass my comments along to you.

I think extending the Magruder Branch Trail is an outstanding idea. Currently, the Magruder Branch Trail is a very scenic trail. By extending it to the Damascus Town Center, it would also become a very practical trail. Residents of the communities that flank the trail would now be able to use it to go to any of the stores or shops in the Damascus Town Center without having to face the dangers of traffic on Routes 27 or 124. In a time when escalating gasoline prices have many considering alternatives to using their automobile, extending the Magruder Branch trail from its current unceremonious terminus at Valley Park Drive to the Damascus Town Center would give the residents of these communities a real and practical alternative to using their car.

The one item that must be considered is that opening the trail to more traffic also would increase the need to keep these trails safe. As a cyclist and frequent user of the Magruder Branch Trail, I can honestly say that the trail is fairly underutilized. I believe that opening the Magruder Branch Trail will significantly increase the traffic on the trail. I would recommend a regular Park Police patrol to make sure the trail remains safe for all users.

If you would like to contact me for further elaboration of any of my comments, please do not hesitate to contact me at OnyxSax@aol.com or at (301) 482-2360. Thank you for your time and consideration.

Sincerely,

David Cohen
24051 Newbury Road
Gaithersburg, MD 20882

12/7/2006

Noursi, Peter

From: Raymond Lerner [rayplerner@hotmail.com]
Sent: Saturday, February 11, 2006 1:22 PM
To: Noursi, Peter
Cc: rayplerner@hotmail.com
Subject: What's happening? - The Magruder Trail Crossing at Sweepstakes Road

Dear Mr. Noursi,
Is anything going to occur before this coming summer?

Ray Lerner

>From: "Noursi, Peter" <Peter.Noursi@mncppc-mc.org>
>To: "Raymond Lerner" <rayplerner@hotmail.com>
>Subject: RE: RE: An accident waiting to happen - The Magruder Trail
>Crossing at Sweepstakes Road
>Date: Thu, 27 Oct 2005 16:49:11 -0400
>
>Dear Mr. Lerner:
>
>Thank you for your email regarding the safety of the pedestrian crossing
>for the proposed extension of the Magruder Branch Trail across Bethesda
>Church Road.
>
>Safety is a significant factor in the design of new trails, and of all our
>park facilities. Our consultant has considered different scenarios for the
>crossing at Bethesda Church Road, and, at this point, is suggesting that we
>"choke down" the cross section of the road to a two lane road, with no
>parking, as it approaches the crossing. In addition, a pedestrian and bike
>refuge in the middle of the road will be provided. This would increase
>site distance for pedestrians when they cross the road, and approaching
>cars will be alerted by the narrowed road cross section, and pedestrian
>refuge in the center of the road.
>
>The consultant will be presenting this idea in greater detail at tonight's
>Public Meeting.
>
>Please feel free to contact me at this email if you would like additional
>information regarding this project.
>
>Peter Noursi,
>Project Manager,
>301-495-2465
>
>
>-----Original Message-----
>From: Raymond Lerner [mailto:rayplerner@hotmail.com]
>Sent: Friday, October 21, 2005 10:14 PM
>To: Noursi, Peter
>Cc: rayplerner@hotmail.com
>Subject: FW: RE: An accident waiting to happen - The Magruder Trail
>Crossing at Sweepstakes Road
>
>
>Mr. Noursi,
>
>My concerns are with the safety of the pedestrian crossings. I
>have provided some simple suggestions to Mr. Campanides, and I hope you can
>involve him in providing safe crossings at Valley Park Drive and especially
>Bethesda Church Road. Thank you.
>
>

> Ray Lerner

>

>

> >From: "Campanides, Peter" <Peter.Campanides@montgomerycountymd.gov>

> >To: "Raymond Lerner" <rayplerner@hotmail.com>

> >Subject: RE: An accident waiting to happen - The Magruder Trail Crossing

> at

> >Sweepstakes Road

> >Date: Fri, 16 Sep 2005 11:12:31 -0400

> >

> >Dear Mr. Lerner:

> >

> >Thank you for your recent e-mail regarding safety concerns along

> >Sweepstakes Rd. I will have this location evaluated for safety

> >improvements. Any signage or pavement markings that need to be

> >upgraded, modified, and/or relocated should be completed in two months.

> >However, due to the back log of requests, foliage removal will take

> >additional time to complete.

> >

> >If you have any other questions or concerns, please feel free to contact

> >me.

> >

> >Sincerely,

> >

> >Peter Campanides

> >Signing & Marking Team Leader

> >Montgomery Co. Traffic Operations Section

> >

> >-----Original Message-----

> >From: Raymond Lerner [mailto:rayplerner@hotmail.com]

> >Sent: Friday, September 02, 2005 8:04 PM

> >To: Campanides, Peter

> >Cc: rayplerner@hotmail.com

> >Subject: An accident waiting to happen - The Magruder Trail Crossing at

> >Sweepstakes Road

> >

> > I enjoy using the Magruder trail in Damascus except for one thing

> >-

> >the road crossing at Sweepstakes Road. Vehicles come down the hill from

> >the

> >east virtually oblivious of the possible presence of pedestrians at this

> >

> >crossing. Also pedestrians have very little notice of oncoming vehicles

> >since the road is curved.

> > Because these vehicles are coming down the hill they are usually

> >at a

> >higher than acceptable rate of speed. This problem is compounded by

> >underbrush that blocks whatever view a driver or a pedestrian would have

> >

> >through the trees. Finally, there is a road sign warning of the

> >pedestrian

> >crossing, but its location is much too close to this crossing. It

> >provides

> >too short a notice.

> > I think the safety of this crossing could be greatly improved by

> >moving

> >the warning sign further up the hill, cleaning out the underbrush, and

> >providing a marked cross-walk that is further up the hill to the west

> >and

> >aligned with the continuation of the Magruder Trail on the south side of

> >

> >Sweepstakes Road.

> > MNCPPC is aware of the danger of this crossing. They have

> >explicitly

> >marked their map of this trail highlighting their concern at this

> >crossing.

> >Their involvement may be necessary for implementing improvements. I am

> >sure
> >that they would want to improve the safety of the trail.
> > Thank you for your help.
> >
> >
> >
> >
> >
> > Raymond P. Lerner
> >
> >
> > 24304 Hipsley Mill Road
> >
> >
> > Laytonsville, MD 20882
> >
>
>

Noursi, Peter

From: pumpjm@aol.com
Sent: Wednesday, September 26, 2007 10:41 AM
To: Noursi, Peter
Subject: Magruder Branch Trail Extension

I am unable to attend the meeting, but am very much in favor of extending the trail. I ride my bike and walk it at least 3 times a week.

Joe Mallon
25904 LaSalle ct
Damascus Md. 20872
301 253-1533

Email and AIM finally together. You've gotta check out free [AOL Mail!](#)