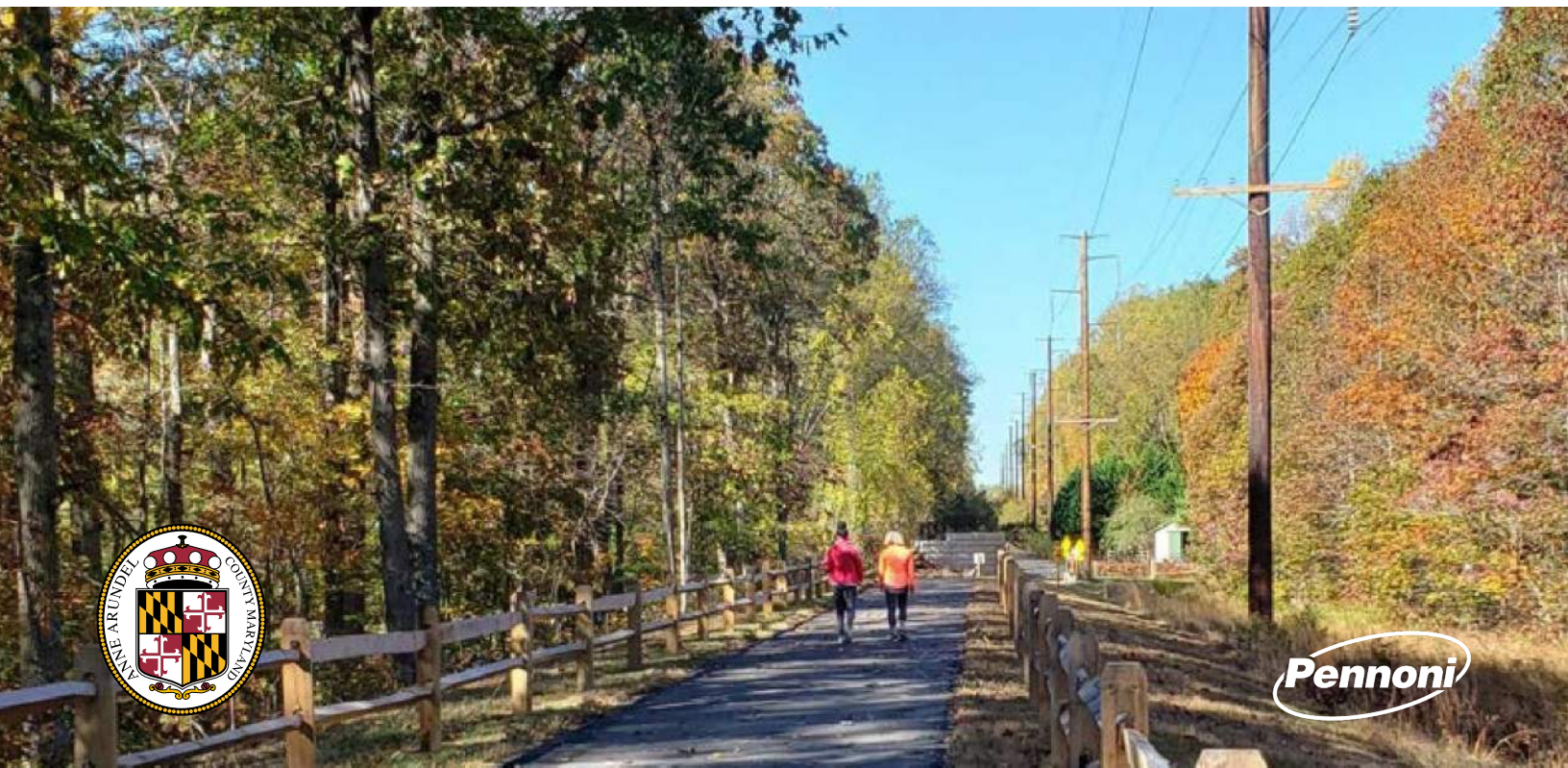


# Anne Arundel County Trail Spurs and Connectors Study

November 2024





# Executive Summary

As Anne Arundel County has grown and developed, the County planned, designed, and constructed a trail network that covers large portions of the County and links together areas of North, East, and West County. This trail network is used by County residents for recreation and as a mode of alternative transportation. The trail network has continued to grow and expand as phases of planned trails are built out. A number of projects to extend this network are currently in the design and construction stages. This network includes the Baltimore and Annapolis (B&A) Trail, BWI Trail, Broadneck Peninsula Trail, South Shore Trail, and the Washington Baltimore & Annapolis (WB&A) Trail. Future trails that are still in the planning stages include the Light Rail Trail, South County Trails, the Patapsco Greenway Trail, and the Marley Neck Trail.

Pennonni was asked by the County to review the trail network for the purpose of expanding access to the County's trail systems by County residents and visitors. The specific goal of this study was to extend or connect existing trails with parks, other trails, schools and community hubs, and other public facilities and commercial centers. The study required that the consult accomplish the following tasks:

1. Review various County plans with an eye towards recommendations for trail expansions and the overall development of the trail system.
2. Conduct a desktop review of the County trail system, including the existing, designed, and planned trails. Include in the desktop review the surrounding neighborhoods and facilities so that potential connections can be identified.
3. Develop and recommend a prioritized list of up to 25 trail connections and/or extensions.
4. Conduct an initial site assessment of the proposed connections/extensions and develop a concept plan and cost estimate for each extension/connection.
5. Provide a written report documenting the findings.

Pennonni has worked through these requirements and developed the prioritized list of trails. Trails were initially prioritized through a GIS analysis that examined the proximity of the potential trail spur to existing County recreation facilities, County schools, other County facilities, and neighborhoods. 24 trail spurs were selected and then concept plans were prepared for these trails. Pennonni visited the 24 sites as part of the concept planning phase to identify potential constraints that might limit trail development, and to consider alternative alignments. Pennonni then finalized the concept plans and prepared cost estimates for the trails.

Based on the concept design, and the cost estimates, the trails were reprioritized to account for items like cost, right-of-way acquisition, and other significant constraints. A final prioritized list of trails is included in the Summary/Conclusions section of this report.

Discussions with the County during the preparation of the study emphasized the recreational aspect of this study. Connections between existing and future trails and County parks and schools are the primary focus of this study. Connections between commercial centers and transportation hubs were not the focus of this study.

## Project Team

Pennonni  
Anne Arundel County Department of Public Works  
Anne Arundel County Department of Recreation and Parks

## Photos

All photos were taken by the authors, unless otherwise noted.

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# 1

## Task 1: Planning Context and Spatial Analysis

### County-wide Planning Context

The following section gives a general overview of the Anne Arundel County-wide plans that provide planning context at the county level and how they relate to the *Trail Spurs and Connectors Study*. During the development of this study, Anne Arundel County-wide plans underwent a comprehensive review for policies and recommendations, particularly with regard to trail spurs. This comprehensive review helped inform both the list of trail spurs that were examined as well as the design of the trail spurs ranking criteria system itself.

#### Land Preservation, Parks, and Recreation Plan (LPPRP)

In 2022, the Anne Arundel County Council adopted the current update to the *Land Preservation, Parks, and Recreation Plan* (LPPRP). This plan acts as a countywide master plan for land preservation, recreational programming, park acquisition, and facility development.

The development of the LPPRP was guided by a comprehensive community engagement process, in which three themes emerged:

1. Waterfront access and environmental programming: Protection of the bay and its shoreline and promoting public access for boating, fishing, swimming, and fun.
2. Connection of parks and local destinations, improve access and convenience.
3. Expansion of public open space inventory.

These three themes guide the LPPRP and its recommendations. These themes also align with the purpose of this study. The *Trail Spurs and Connectors Study* aims to connect Anne Arundel County's local trails with one another and with key community destinations, ultimately increasing park access and expanding public park space, and even potentially providing environmental programming.



#### Anne Arundel County 2022 Land Preservation, Parks & Recreation Plan



COUNTY COUNCIL OF ANNE ARUNDEL COUNTY, MARYLAND  
Ordinance 59-22 - Adopted July 5, 2022

Additionally, this *Trail Spurs and Connectors Study* will be utilizing a technical scoring process that will emulate many of the similar processes that the LPPRP's Proximity Analysis and Equity Analyses incorporated. The Proximity Analysis is a geospatial analysis that reveals gaps in the service area of all parks as well as parks with specific amenities. The intent of the Proximity Analysis is "to generally determine where the public can readily access these amenities and where they cannot" (2022 LPPRP Guidelines). As per the State Guidelines, the



Proximity Analysis utilized a 0.5-mile buffer for suburban County Council Districts 1-6 and a 5-mile buffer for parks in the more rural County Council District 7. This *Trail Spurs and Connectors Study* considers the proximity of nearby destinations, and the ability of the development of trail spurs to increase access to those key destinations, in making its recommendations.

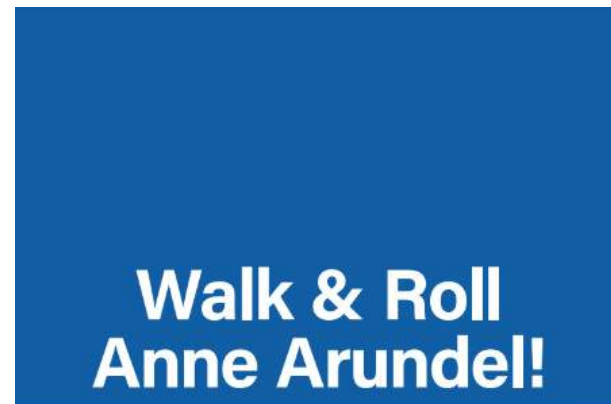
The Equity Analysis combined demographic and environmental health data from a variety of sources and maps onto Maryland census block groups in order to identify disparities in park access and quality. It does this by evaluating the number of children, senior residents, density, race of residents, linguistic isolation, and the average income of the subject park site's Census Tract Block Group. The analysis creates an overall equity score, which is a combined weighted score of all of the input data. The *Trail Spurs and Connectors Study* utilizes the LPPRP's equity score in determining whether development of each trail spur will increase equitable access across County communities, especially historically underserved communities.

### Walk and Roll Anne Arundel!

*Walk and Roll Anne Arundel!* is the 2023 update of the County's Pedestrian and Bicycle Master Plan (PBMP), previously updated in 2013. The overall purpose of the plan is to identify improvements which increase the potential for safe walking and bicycling. Specifically, the goals established in Walk and Roll Anne Arundel! include:

- Prioritizing a safe and comfortable walking and rolling network between essential destinations through the County. Essential destinations are defined as:
  - Job centers
  - Shopping centers
  - Schools (K-12), community colleges, private colleges, and universities

- Hospitals and health care clinics
- Libraries
- Parks
- Residential areas
- Transit stops and stations.
- Ensuring that vulnerable people have access to active transportation infrastructure
- Recommending infrastructure proven to reduce pedestrian crashes
- Identifying policy recommendations to promote the construction of safe, accessible, and direct walking and rolling infrastructure



These goals directly align with the purposes of this study. Many of the metrics that are being considered in the *Trail Spurs and Connectors Study's* evaluation system attempts to fulfill the goals laid out in *Walk*



Source: Anne Arundel County



and *Roll Anne Arundell*, such as weighting those potential trail spurs close to essential destinations, trail spurs that would ensure that vulnerable people have access to active transportation infrastructure, and promotion of infrastructure that would increase pedestrian safety. The development of trail spurs that rank highly in this study's evaluation system would increase access to safe alternatives to driving automobiles and separate cyclists and pedestrians from automobiles, thus decreasing opportunities for conflict between the two groups.

Many of the recommendations in *Walk and Roll Anne Arundell* focuses on on-road bicycle and pedestrian transportation, but the plan also addresses off-road trails and connections to parks, encouraging the integration of parks and open spaces into a larger bicycle and pedestrian accessible network. Moreover, *Walk and Roll Anne Arundell* proposes the development of 248.5 miles of shared-use paths. Shared-use paths are generally paved, off-road facilities designed for travel by a variety of non-motorized users, such as cyclists, pedestrians, skaters, wheelchair users, and other users. Thus, many of the proposals to create shared-use lanes throughout the County have informed this study's examination of the development of trail spurs in the County.



## Plan 2040



*Plan2040* is the County's General Development Plan, guiding the vision for how the county should grow and evolve over the next 20 years. Adopted in 2020, it was the result of extensive community outreach with dozens of public forums and thousands of individual comments, and has three main themes: Green, Smart, and Equitable. *Plan2040* reflects ongoing trends that are reshaping the county, such as increased commuting to Washington, DC and Howard County and fewer trips to Baltimore City, recurring concerns about infrastructure supporting continued population and job growth, and an effort to address racial and socioeconomic inequity and provide economic and social opportunities to all County residents.

*Plan2040* identifies several challenges that may be addressed, including making the area more resilient to climate change, investing in more transportation choices, encouraging transit-oriented development,

and providing better access to the waterfront and park system. It identifies areas that will experience limited development, such as agricultural areas and the peninsulas, as well as targeted locations for redevelopment and revitalization, all of which will require further investments in pedestrian and bicycle infrastructure.

The County adopted these specific goals through *Plan2040* to resolve transportation-related challenges:

- Goal NE3: Expand, enhance, and continue to protect the County's greenways, open space, and rural areas, including the Priority Preservation Area (PPA);
- Goal BE4: Support quality of life and economic vitality in County Peninsula Policy Areas, while preserving environmentally sensitive areas;
- Goal BE7: Promote vibrant, high-quality development in Town Centers that provides opportunities to live, work, learn, and play without daily use of a car;
- Goal BE9: Provide a high-quality mix of employment, residential, commercial and service uses near existing or funded transit stations;
- Goal BE10: Relieve traffic congestion and improve mobility options and safety in the Critical Corridor Policy Areas;



**SEPARATED BIKE LANE**

Source: [www.pedbikeimages.com](http://www.pedbikeimages.com)

- Goal BE15: Provide a well-maintained multimodal transportation network that is safe, efficient, environmentally sensitive, and provides practical and reliable transportation choices and connections for all users;
- Goal BE16: Increase the County's resilience to future changes in climate and reduce emissions of greenhouse gases;
- Goal HC8: Provide a diverse range of accessible public recreational facilities to serve the needs of all County residents; and
- Goal HE1: Promote economic development that supports smart growth and provides opportunities for all County residents.

This set of air quality, environmental, and traffic congestion goals aligns directly with the purpose of this *Trail Spurs and Connectors Study*. With the goal of further developing Anne Arundel County's trail network, this study will facilitate alternatives to motorized transportation. By developing a more comprehensive alternative transportation network, as well as providing vital first and last mile connection to public transit, these trails will be crucial in accomplishing the goals established in *Plan2040*.

*Plan2040* also emphasizes Anne Arundel County residents "desire for more public parks and increased access to recreational trails." By encouraging the development of the County's trail system, the *Trail Spurs and Connectors Study* will help to increase access for County residents to more recreational trails and public parks. The goals and policies that *Plan2040* emphasizes align with the purpose of this study, especially this study's purpose to utilize equity and geography analyses to prioritize the development and connection of trails which can provide better access to County residents and support underserved areas.



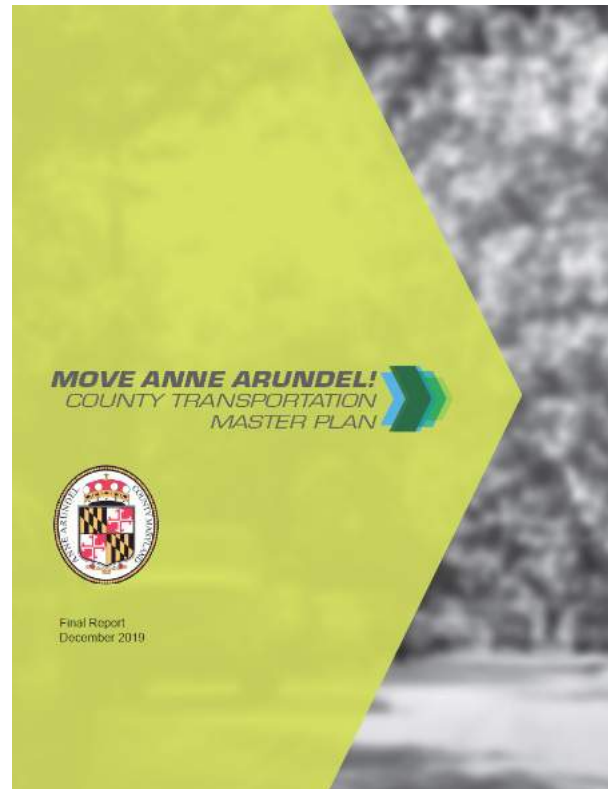
## Move Anne Arundel!

*Move Anne Arundel!*, published in December of 2019, is the County's Transportation Functional Master Plan, intended to guide the County's future transportation policies, strategies, and investments. Move Anne Arundel's recommendations are grouped into five modal themes:

- Making communities more walkable
- Building a low-stress bicycle network
- Upgrading County corridors and strengthening community cores
- Improving regional corridors to make commutes more reliable
- Advancing a new model of transit services

Although the *Move Anne Arundel!* plan does not specifically examine any particular trail spur, its various recommendations under the above five themes do relate to trail spurs by advocating for the improvement of connections and safety to the County's overall mobility network. For example, *Move Anne Arundel!*'s recommendation to complete "last mile" connections from trails to "key community destinations" speaks directly to the need for spur trails to be completed and connected to the larger mobility network to provide vital connection. During the development of the *Trail Spurs and Connectors Study*, *Move Anne Arundel!* was consulted to determine whether any of its specific policy recommendations aligned with the potential development of each of the examined spur trails.

To arrive at a list of priority investments, *Move Anne Arundel!* developed a technical scoring process tied to its vision, goals, and objectives. The recommended investment priorities were based on the judgment of county staff relative to historically available local and state funding projected forward over twenty years from publishing year (2019). During the development of this *Trail Spurs and Connectors Study*, *Move Anne*



*Arundel's* technical scoring process (on following page) was examined to help inform this *Trail Spurs and Connectors Study's* own criteria for developing a technical scoring system to prioritize County spur segments.

## Regional Plans and Small Area Plans (SAPs)

*Plan2040* sets up a process to prepare community-level comprehensive plans for nine regions within Anne Arundel County. The region planning process recognizes the variety of needs in different areas of the County and provides more opportunity for residents to participate in planning for the future of their communities. The region plans will align with the goals and policies of *Plan2040* and build on the small area plans prepared between 1998 to 2004. Each region plan is expected to include action strategies to address elements specific to each region, such as parks and open space, agriculture, sea level rise, mobility, equity, and accessibility. Preparation of the region plans will be staggered over time based on the schedule adopted in *Plan2040*.

Anne Arundel County has begun the process of creating regional plans for nine regions,

but none of the plans are complete as of the writing of this plan. As the region plans are developed, they will include further recommendations for recreation, parks, and trails that will inform future planning in the County. Because the region plans are not yet finished, the recommendations from the previous 16 small area plans were reviewed as part of this study. Many of the SAP recommendations were fulfilled through the 2006, 2013, and 2017 LPPRPs. Almost all of the SAPs called for enhanced recreational opportunities for people of all ages and backgrounds. Many of the SAPs discussed the need for the development of more hiker, biker, and equestrian trails along with the development of parks for active and passive recreational uses. These are all goals that this study aims to accomplish in its purpose.

## Bicycle and Pedestrian Network Projects

Priority bicycle and pedestrian projects build on the tier-based recommendations of the 2013 Pedestrian and Bicycle Master Plan Update; however, only shared use path projects were scored due to uncertainty in the feasibility of certain cycle-track and on street routes.

<b>People Served - 15% of total score</b>			
» Population			
<b>Access to Opportunity - 20% of total score</b>			
» Employment	» K-12	» Higher Education	» Technical Schools
<b>Access to Services - 20% of total score</b>			
» Doctors	» Hospitals	» Social Services	» Groceries
<b>Access to Transit - 15% of total score</b>			
» Bus	» Light Rail	» MARC	» Park & Ride
<b>Access to Retail - 15% of total score</b>			
» Shopping			
<b>Access to Recreation - 15% of total score</b>			
» Parks	» Trails	» Recreational Centers	

TECHNICAL SCORING CHART DEVELOPED FOR THE *MOVE ANNE ARUNDEL!* PLAN

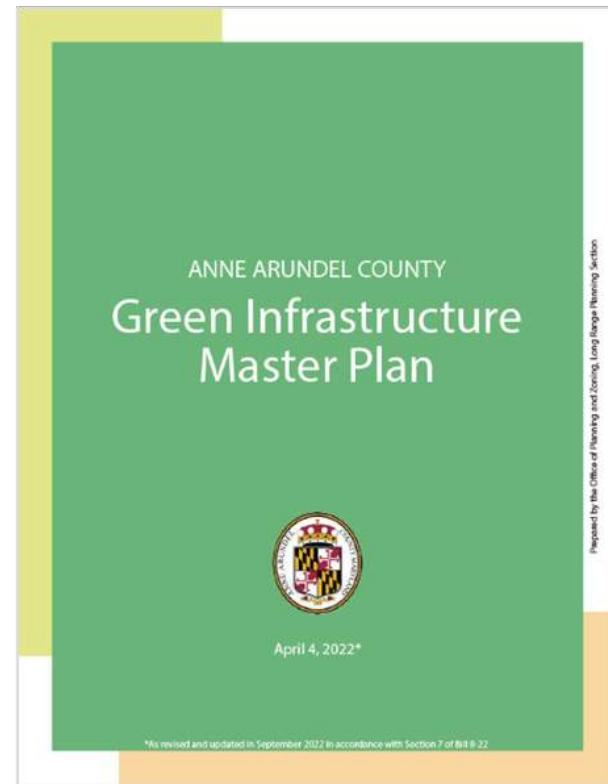


## Green Infrastructure Master Plan

The *Green Infrastructure Plan*, adopted in 2022, updates the *Greenways Master Plan*, originally adopted in 2002, which established the County's Greenways Network and a series of related goals and action items. "Green Infrastructure" is a more inclusive term that includes large natural areas, pocket parks, rain gardens, and other green spaces, and is used to steer this plan since "greenways" are commonly interpreted as linear protected areas, typically along a river.

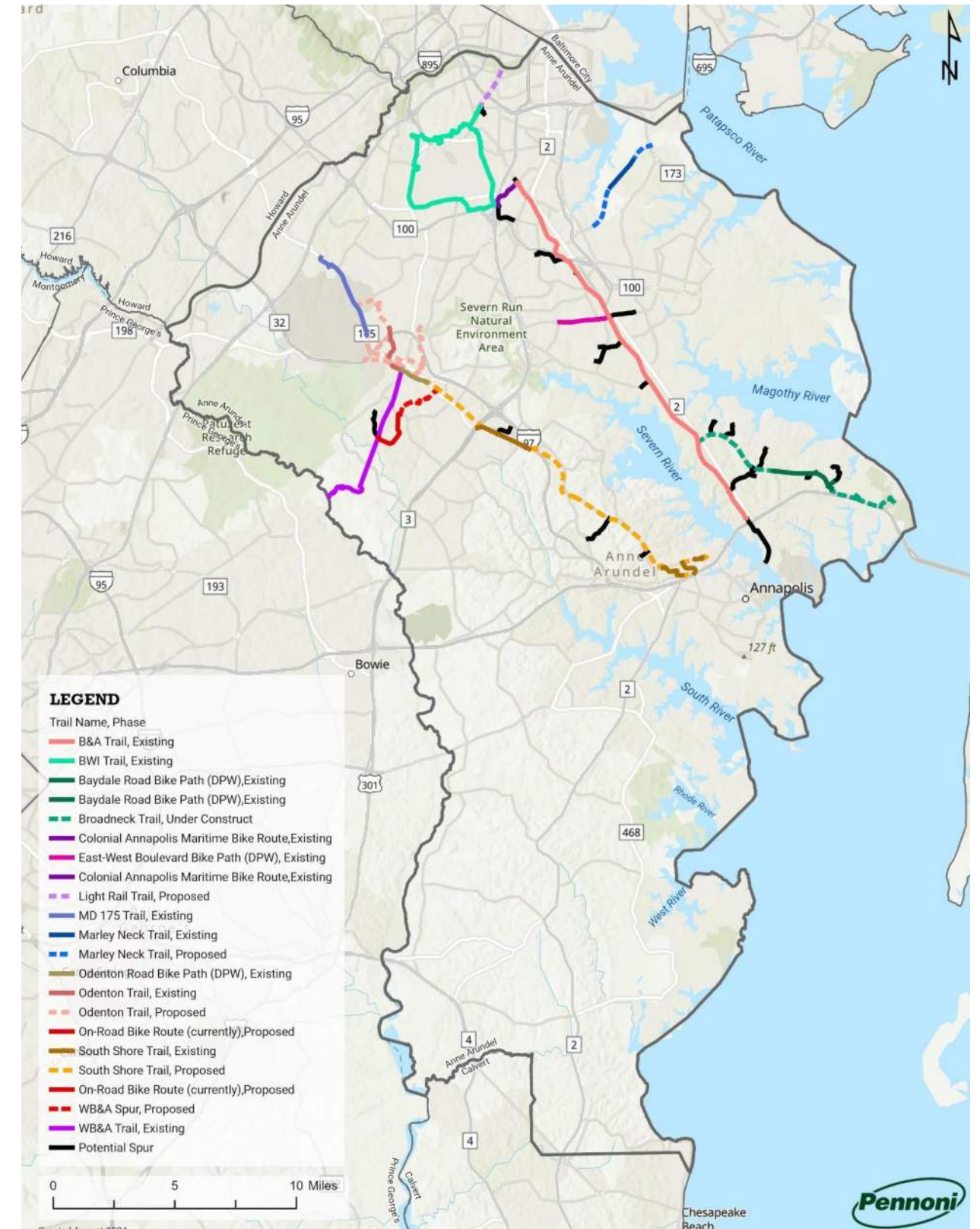
The updated *Green Infrastructure Plan* makes use of data, technology, and analysis to interconnect environmental ecosystems with active and passive recreational sites, corridors, scenic areas, and historic and cultural resources in order to meet challenges related to land use conflicts, and human health and well-being. The lands identified in the Green Infrastructure Network help protect water quality and air quality, provide habitat for plants and wildlife, create opportunities for recreation, and support mitigation of, and adaptation to, climate change.

This study consulted the work of the *Green Infrastructure Plan* and the *Greenways Master Plan* in order to create better opportunities for recreation and increase overall access to trails. The prioritization of the development of examined spur trails in this study considered whether developing a spur trail would increase connectivity to the County's green infrastructure as identified in these plans.



## Existing Trail Network

The following page shows a map identifying the existing trails network.



Map 1. Existing Trails Network

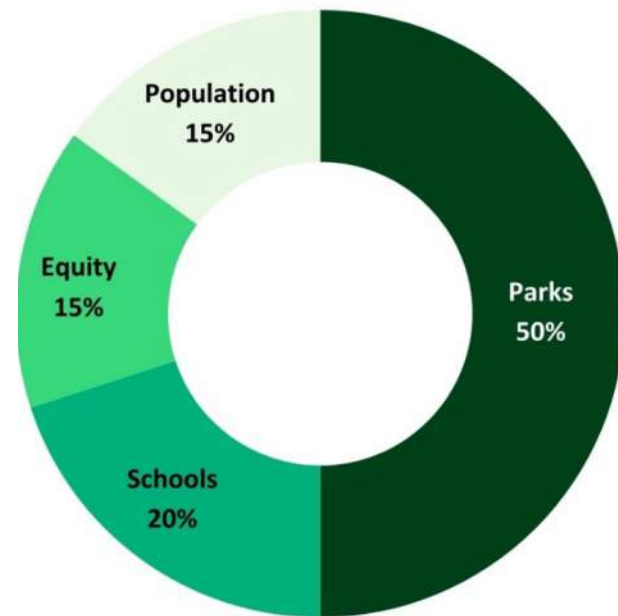


# Spatial and Data Analysis

The next section introduces and discusses the spatial analysis that was conducted to calculate a priority ranking list for each of the trail spurs and connections that were considered in this study. The individual trail spurs and connections under examination were derived from direct recommendations from the County, relevant County-wide plans, existing trail master plans, and plans for County projects that are currently in design. Each trail spur and connection under consideration was assigned a total score based on methodology that was created for this study, and then the trail spurs and connections were ranked according to their total score. This section will conclude by presenting that ranked list.

## Methodology

The ranking criteria system for trail spurs and connections that was developed for this study leans on the technical scoring process used in the 2013 *Pedestrian and Bicycle Master Plan Update*, and later reused in *Move Anne Arundell*, as a foundation. The *Trail Spurs and Connectors Study's* ranking criteria system methodology uses many of the same categories and percentage weights that was previously used. However, the updated methodology used in this study includes Equity as a factor, utilizing the Equity scores from the County's 2022 *Land Preservation, Parks and Recreation Plan*, to ensure that future planning and development of trail spurs and connections meets the County's goals of ensuring equity for all residents.



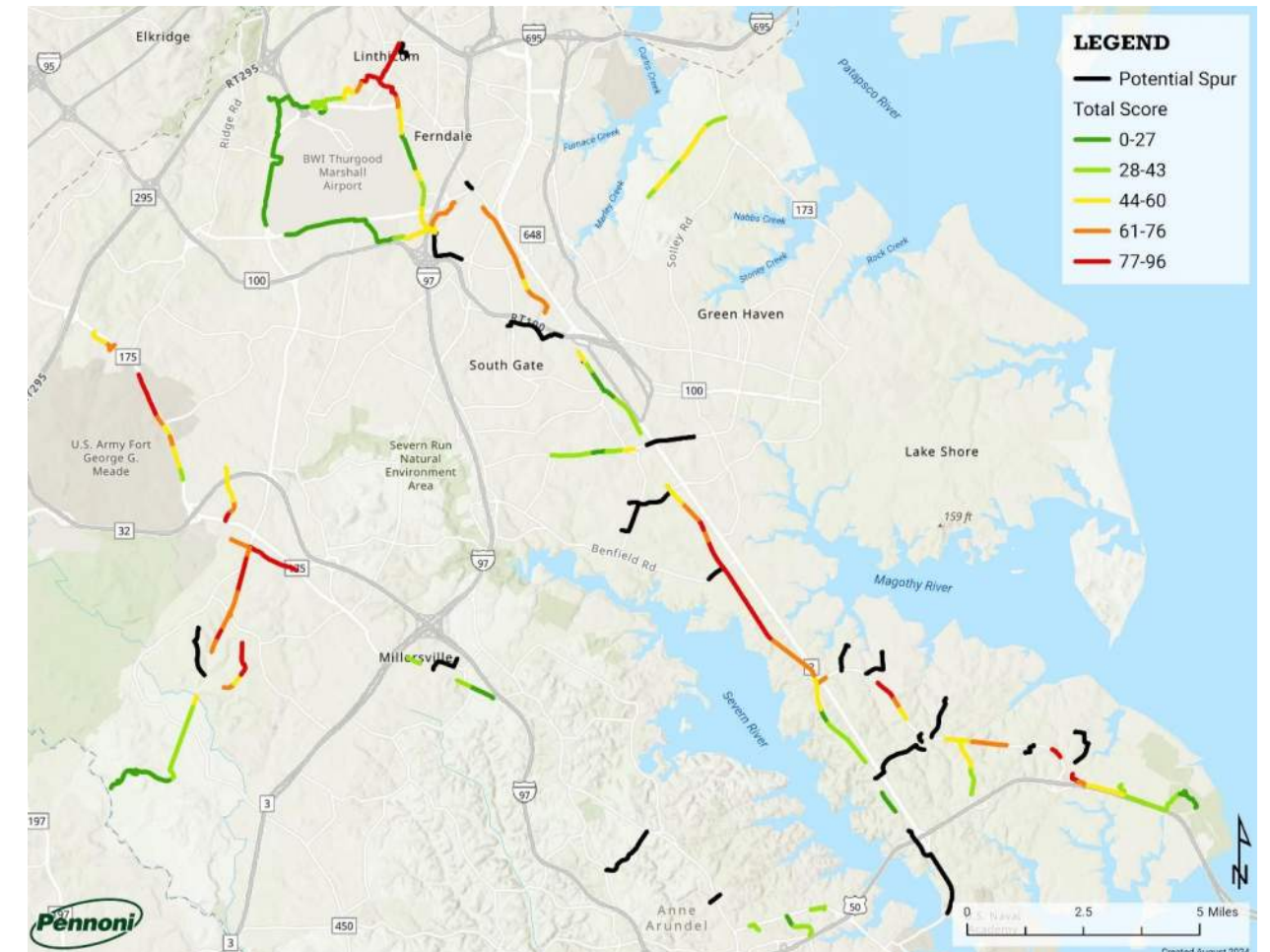
A ½ mile buffer was created around all spurs and connections. Features that fell within this buffer were summarized and those counts were used to calculate the overall score for each spur. An overall score was then calculated for each spur to create a ranked list for future consideration in planning and design.

Following the initial analysis, the trail rankings were adjusted to account for items discovered during the planning stage. The following factors were considered in adjusting the rankings: Right-of-way requirements, Cost, Status of the Mainline

Trail, and Other significant issues. The initial rankings of the spurs were increased based on the these factors. The score of the spurs was increased if any of the factors apply to the project. This had the effect of adjusting the ranking of the trail spurs based on the planning, feasibility analysis, and the ease of construction. These factors are more fully described in later chapters.

The top 22 trail sections are in the following table and map.

## Possible New Connections



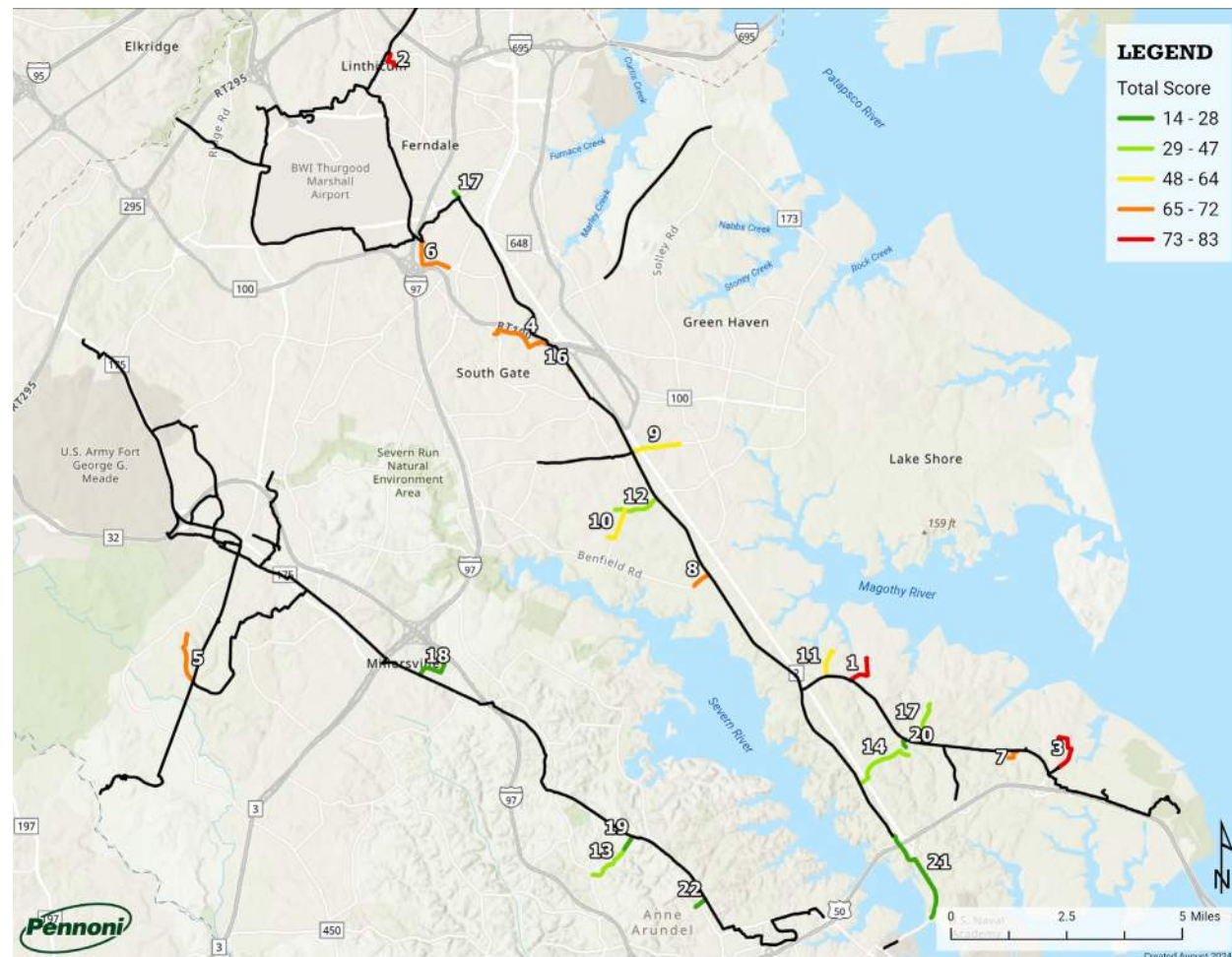
Map 2. Map of whole trail network scored to identify possible new spur connections



Rank	Trail Name	Population (15%)	Equity (15%)	Schools (20%)	Parks (50%)	Total Weighted Score
		Weighted Score	Weighted Score	Weighted Score	Weighted Score	
1	Broadneck Trail to Belvedere Elementary	12	9	12	50	83
2	BWI Trail to Linthicum Elementary/ Park	9	12	20	40	81
3	Broadneck Trail to Cape St Claire Elementary	12	15	12	40	79
4	Baltimore and Annapolis (B&A) Trail to Baltimore Washington Medical Center	15	15	12	30	72
5	West Baltimore and Annapolis (B&A) Trail to Piney Orchard Community Center	15	9	8	40	72
6	BWI Trail to Corkran MS	15	15	12	30	72
7	Broadneck Trail to Windsor Farm Elementary	6	3	20	40	69
8	Baltimore and Annapolis (B&A) Trail to Severna Park HS	6	6	16	40	68
9	Baltimore and Annapolis (B&A) Trail to Lake Waterford Park	6	12	16	30	64
10	Baltimore and Annapolis (B&A) Trail to Severna Park MS (via Kinder Farm Spur)	12	12	12	20	56
11	Broadneck Trail to Twin Oaks Park and Magothy River Middle School	3	12	8	30	53
12	Baltimore and Annapolis (B&A) Trail to Kinder Farm Park	9	6	12	20	47
13	South Shore Trail to Generals Highway Corridor Park (via Waterworks Park spur)	0	3	12	30	45
14	Baltimore and Annapolis (B&A) Trail to Arnold Park	6	3	4	30	43
15	Broadneck Trail to Broadneck Elementary	9	9	4	20	42
16	Baltimore and Annapolis (B&A) Trail to Future Marley Creek Park	3	12	4	10	29
17	Baltimore and Annapolis (B&A) Trail to Cromwell Park & Ride/ Light Rail Station	3	3	12	10	28
18	South Shore Trail to Millersville Elementary and Millersville Park	0	0	8	20	28
19	South Shore Trail to Waterworks Park	0	0	8	20	28
20	Broadneck Trail to Arnold Park	3	0	4	20	27
21	Baltimore and Annapolis (B&A) Trail to Annapolis	3	6	4	10	23
22	South Shore Trail to Rolling Knolls Elementary	0	0	4	10	14

Table 1. Individual Components Scoring breakdown for each Trail Spur





Map 3. Ranked trail spurs displayed on a map of Anne Arundel County.

### Data Sources

To the right is a list of the data sources used for all the individual components of the scoring. Pennoni used the most up-to-date version of the datasets available. Figure 5 shows the weighted scores for each individual components

Data	Source	Year
Population	U.S. Census Bureau	2020
Equity	MD DNR	2023
Schools	Anne Arundel County	2021
Parks	Anne Arundel County	2021

Rank	Trail Spur Name	Total Score
1	Broadneck Trail to Belvedere Elementary Spur	83
2	BWI Trail to Linthicum Elementary/ Park Spur	81
3	Broadneck Trail to Cape St Claire Elementary Spur	79
4	Baltimore and Annapolis (B&A) Trail to Baltimore Washington Medical Center Spur	72
5	Washington, Baltimore, and Annapolis (WB&A) Trail to Piney Orchard Community Center Spur	72
6	BWI Trail to Corkran Middle School Spur	72
7	Broadneck Trail to Windsor Farm Elementary Spur	69
8	Baltimore and Annapolis (B&A) Trail to Severna Park High School Spur	68
9	Baltimore and Annapolis (B&A) Trail to Lake Waterford Park Spur	64
10	Baltimore and Annapolis (B&A) Trail to Severna Park Middle School (via Kinder Farm Spur) Spur	56
11	Broadneck Trail to Twin Oaks Park and Magothy River Middle School Spur	53
12	Baltimore and Annapolis (B&A) Trail to Kinder Farm Park Spur	47
13	South Shore Trail to Generals Highway Corridor Park Spur	45
14	Baltimore and Annapolis (B&A) Trail to Arnold Park Spur	43
15	Broadneck Trail to Broadneck Elementary Spur	42
16	Baltimore and Annapolis (B&A) Trail to Future Marley Creek Park Spur	29
17	Baltimore and Annapolis (B&A) Trail to Cromwell Park & Ride/Light Rail Station Spur	28
18	South Shore Trail to Millersville Elementary and Millersville Park Spur	28
19	South Shore Trail to Waterworks Park Spur	28
20	Broadneck Trail to Arnold Park Spur	27
21	Baltimore and Annapolis (B&A) Trail to Annapolis Spur	23
22	South Shore Trail to Rolling Knolls Elementary Spur	14

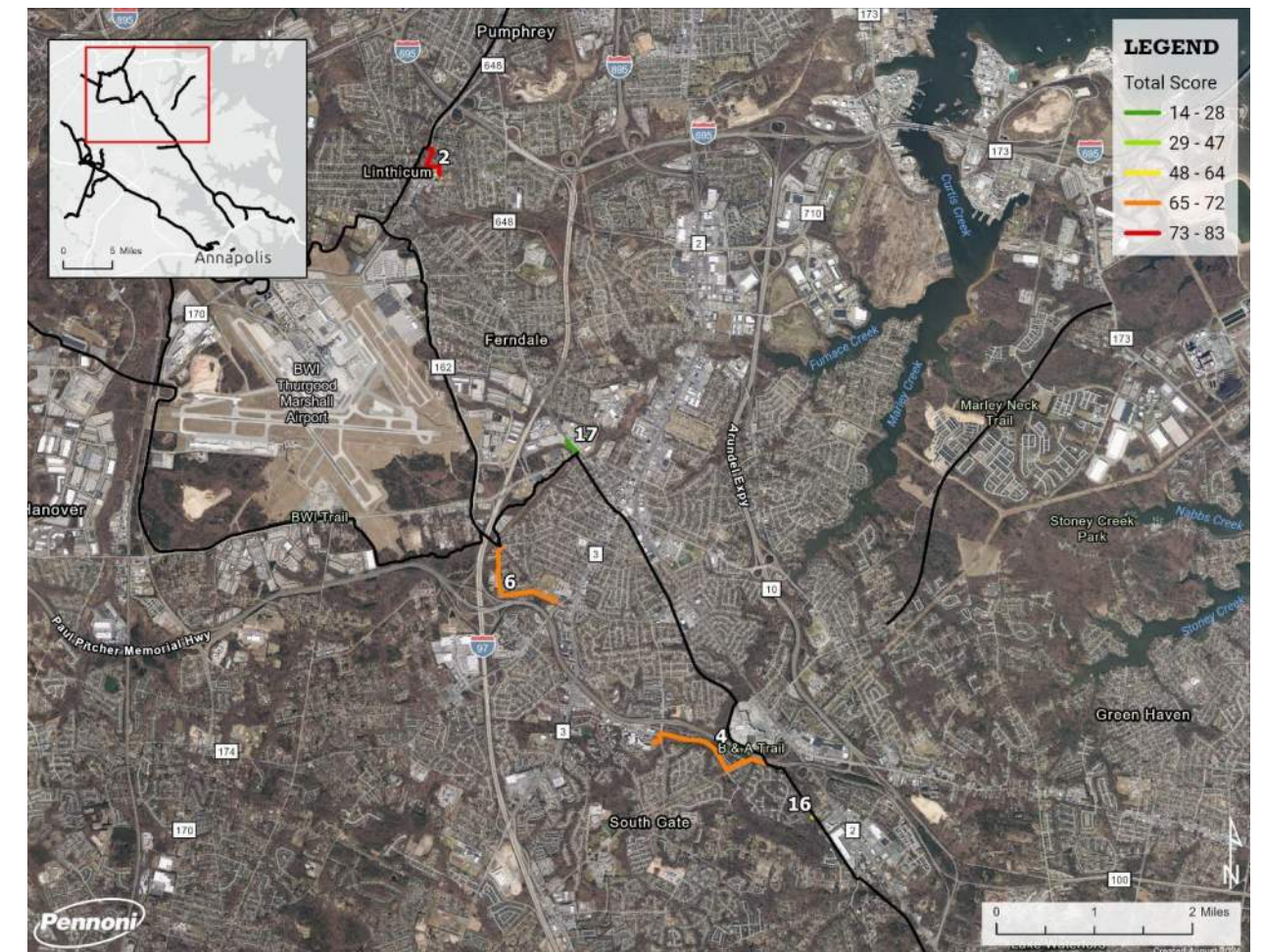
Table 2. Full ranked list of Trail Spurs



Baltimore & Annapolis (B&A) Trail		
Rank	Spur Name	Total Score
4	Baltimore and Annapolis (B&A) Trail to Baltimore Washington Medical Center Spur	72
8	Baltimore and Annapolis (B&A) Trail to Severna Park High School Spur	68
9	Baltimore and Annapolis (B&A) Trail to Lake Waterford Park Spur	64
10	Baltimore and Annapolis (B&A) Trail to Severna Park Middle School (via Kinder Farm Spur) Spur	56
12	Baltimore and Annapolis (B&A) Trail to Kinder Farm Park Spur	47
14	Baltimore and Annapolis (B&A) Trail to Arnold Park Spur	43
16	Baltimore and Annapolis (B&A) Trail to Future Marley Creek Park Spur	29
17	Baltimore and Annapolis (B&A) Trail to Cromwell Park & Ride/Light Rail Station Spur	28
21	Baltimore and Annapolis (B&A) Trail to Annapolis Spur	23
Broadneck Trail		
Rank	Spur Name	Total Score
1	Broadneck Trail to Belvedere Elementary Spur	83
3	Broadneck Trail to Cape St Claire Elementary Spur	79
7	Broadneck Trail to Windsor Farm Elementary Spur	69
11	Broadneck Trail to Twin Oaks Park and Magothy River Middle School Spur	53
15	Broadneck Trail to Broadneck Elementary Spur	42
20	Broadneck Trail to Arnold Park Spur	27
BWI Trail		
Rank	Spur Name	Total Score
2	BWI Trail to Linthicum Elementary/ Park Spur	81
6	BWI Trail to Corkran Middle School Spur	72
South Shore Trail		
Rank	Spur Name	Total Score
13	South Shore Trail to Generals Highway Corridor Park Spur	45
18	South Shore Trail to Millersville Elementary and Millersville Park Spur	28
19	South Shore Trail to Waterworks Park Spur	28
22	South Shore Trail to Rolling Knolls Elementary Spur	14
Washington, Baltimore, and Annapolis (WB&A) Trail		
Rank	Spur Name	Total Score
5	Washington, Baltimore, and Annapolis (WB&A) Trail to Piney Orchard Community Center Spur	72

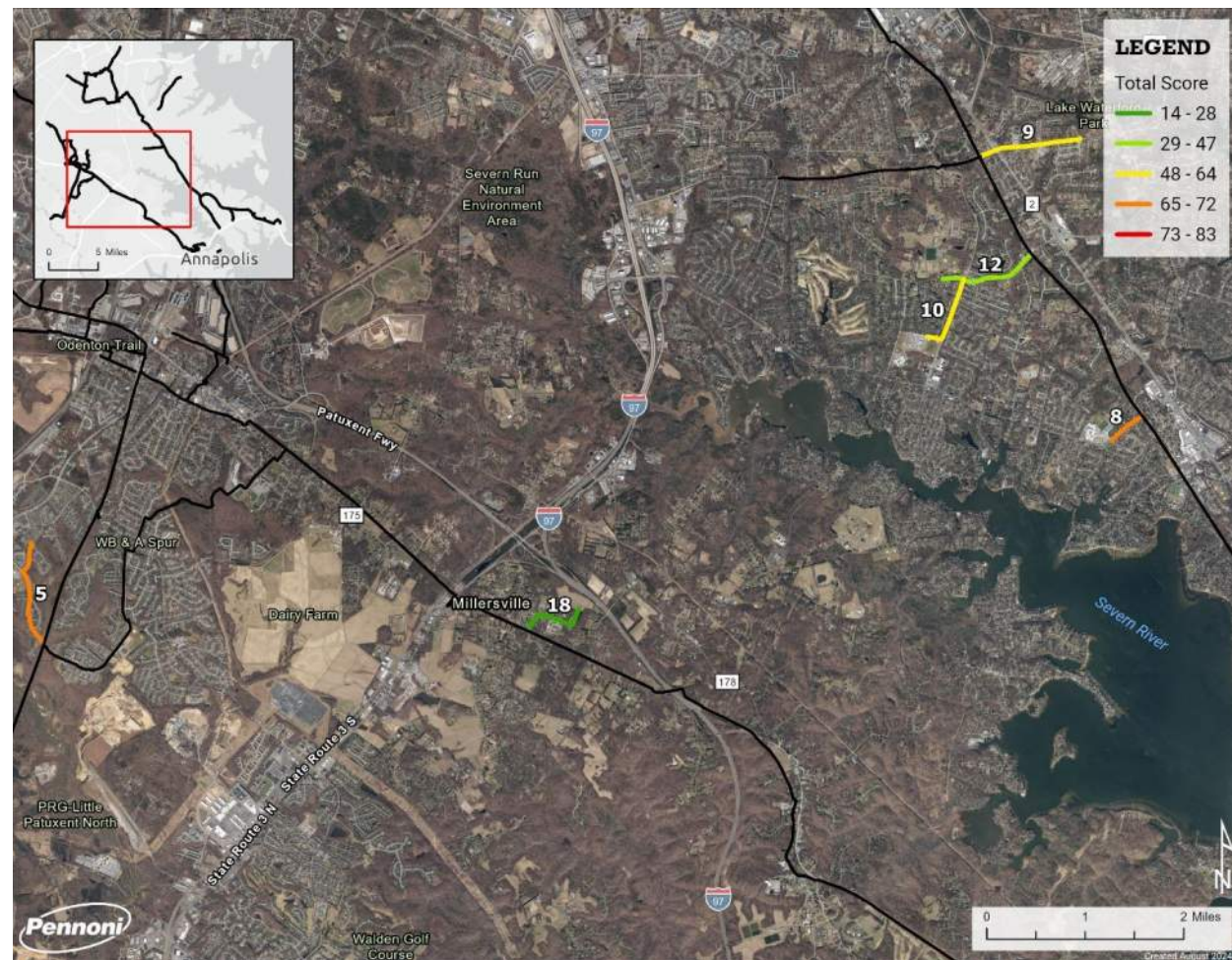
Table 3. Trail Spurs by Major Trails

## Trail Spur Sections

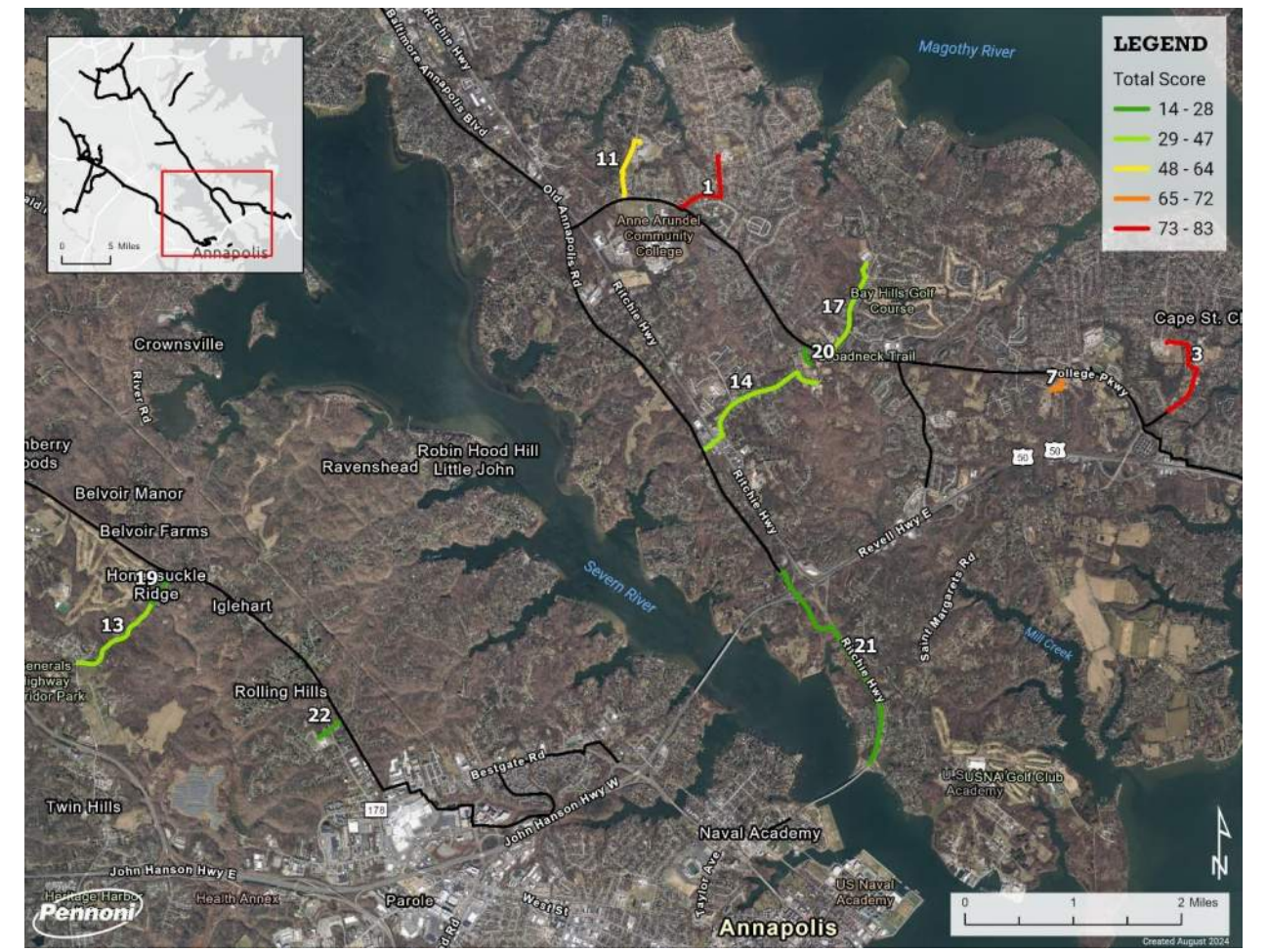


Map 4. Spur Series: North Section





Map 5. Spur Series: Central Section



Map 6. Spur Series: South Section

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# 2

## Task 2: Concept Plans and Individual Trail Analysis & Design



# List of Trail Spurs

Baltimore and Annapolis Trail to Annapolis Spur.....	30
Baltimore and Annapolis Trail to Arnold Park Spur.....	44
Baltimore and Annapolis Trail to Baltimore Washington Medical Center Spur.....	56
Baltimore and Annapolis Trail to Cromwell Park & Ride Light Rail Station Spur.....	68
Baltimore and Annapolis Trail to Future Marley Creek Park Spur.....	72
Baltimore and Annapolis Trail to Kinder Farm Park Spur.....	76
Baltimore and Annapolis Trail to Lake Waterford Park Spur.....	86
Baltimore and Annapolis Trail to Severna Park High School Spur.....	98
Baltimore and Annapolis Trail to Severna Park Middle School Spur (via Kinder Farm Spur).....	102
Broadneck Trail to Arnold Park Spur.....	110
Broadneck Trail to Belvedere Elementary School Spur.....	116
Broadneck Trail to Broadneck Elementary School Spur.....	130
Broadneck Trail to Cape Saint Claire Elementary School Spur.....	138
Broadneck Trail to Twin Oaks and Magothy River Middle School Spur.....	144
Broadneck Trail to Windsor Farm Elementary School Spur.....	150
BWI Trail to Corkran Middle School Spur.....	154
BWI Trail to Linthicum Elementary School and Linthicum Park Spur.....	162
South Shore Trail to Generals Highway Corridor Park Spur.....	168
South Shore Trail to Millersville Elementary and Millersville Park Spur.....	174
South Shore Trail to Rolling Knolls Elementary School Spur.....	180
South Shore Trail to Waterworks Park Spur.....	184
Washington, Baltimore and Annapolis (WB&A) Trail to Piney Orchard Community Center Spur.....	190

# Concept Plans

## Overview

### Basis of Design

The concept plans for the trail spurs are based on the use of current aerial photography from the State of MD and County GIS information. Site visits were made to each of the spurs to conduct an initial assessment of the spur alignment. No topographic or boundary surveys were performed at this time. No wetland or forest stand delineation reports were performed. These studies will have to be completed as part of any detailed design.

The typical section used for these concepts is a 10' wide asphalt trail. In some cases, typically in areas with lower traffic volumes and speeds, or areas where there is an established on road route, on road trails were utilized. Where possible, existing pavements were utilized in order to minimize additional impervious surfaces. This was also done to limit clearing and grading of vegetated areas. In some cases, the existing pavement would be removed and replaced with a trail, as in the case of a curbed roadway with a wide shoulder. In some cases, the roadway would be widened slightly and a guardrail added in order to create the trail. Typical concept sections for the trails are provided in this report. AASHTO recommendations for trails were generally used to develop the concept plans. The concept sections will be refined as the trail spurs progress through final design. Final design will consider such items as retaining walls, tree preservation, street tree planting, etc. Generally where tree planting is provided along trail, clearance of 8'-10' shall be provided between trail and trees.

A concept plan was developed for each of the 24 trail spurs evaluated, and a narrative was prepared that outlines the proposed spur, potential opportunities and constraints associated with the spur, alternative alignments that were considered, and potential impacts created by the spur. Representative photographs have been provided showing the project sites and illustrating some of the constraints. Finally, a cost estimate has been prepared for each spur.

### Basis of Cost Estimates

Cost estimates for the trail concepts were prepared using recent bid prices received by the County for other trails and park projects, and recent trail and project cost estimates. Pennoni also looked at the average cost of several recent trails that we have designed, some of which are under construction, to develop a linear foot cost for comparison purposes. See Appendix A for linear foot costs and calculations.

Various assumptions were made for the hard construction costs on the project since this was a concept planning effort with very little design information available at this stage. The estimates would be finalized as the projects proceeded through a more detailed feasibility study/schematic design and construction documents. Assumptions for the costs are provided in Appendix B.

Cost estimates are provided in Appendix C. Cost estimates include the "hard construction costs" based on the quantities shown in the concepts. The following items were added to the hard costs:

1. Mobilization/General Requirements – use 20 percent of total hard costs.
2. General Contractor Markup – 8 percent of total of General Requirements plus the hard costs.
3. Design Contingency – 30 percent of the total of hard costs plus general requirements plus general contractor markup. This level of contingency is consistent with the concept level of design.

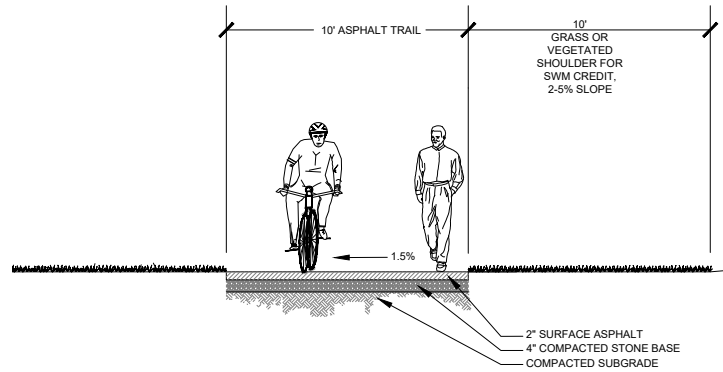
The following items were not included in the costs:

1. Design and Permitting Costs
2. Unforeseen circumstances such as rock, hazardous materials, etc.

Cost estimates were provided for several of the more feasible trail alternates. These include B&A Trail to Kinder Farm Park, Broadneck Trail to Belvedere Elementary, B&A Trail to Annapolis, and BWI Trail to Linthicum Elementary.

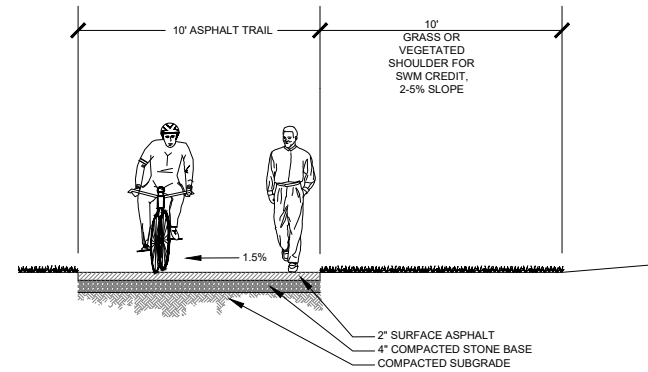
# Typical Trail Sections

## 10' Trail with Grass or Vegetated Shoulder



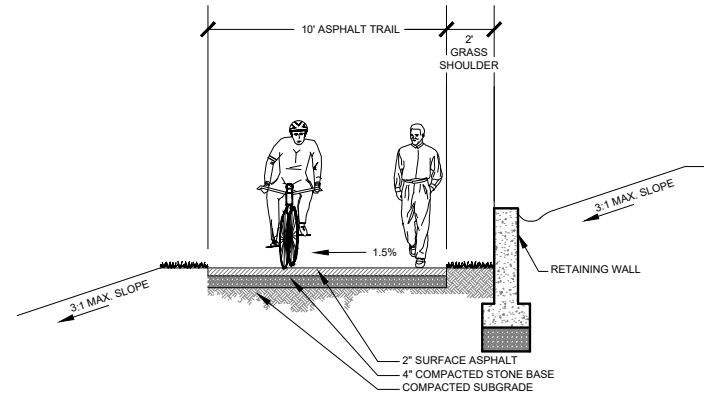
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## 10' Trail with Swale



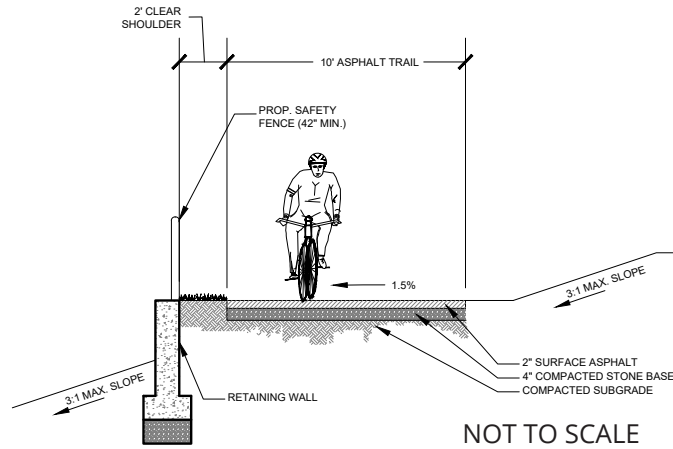
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## 10' Trail 3:1 Slope Below and Retaining Wall Above



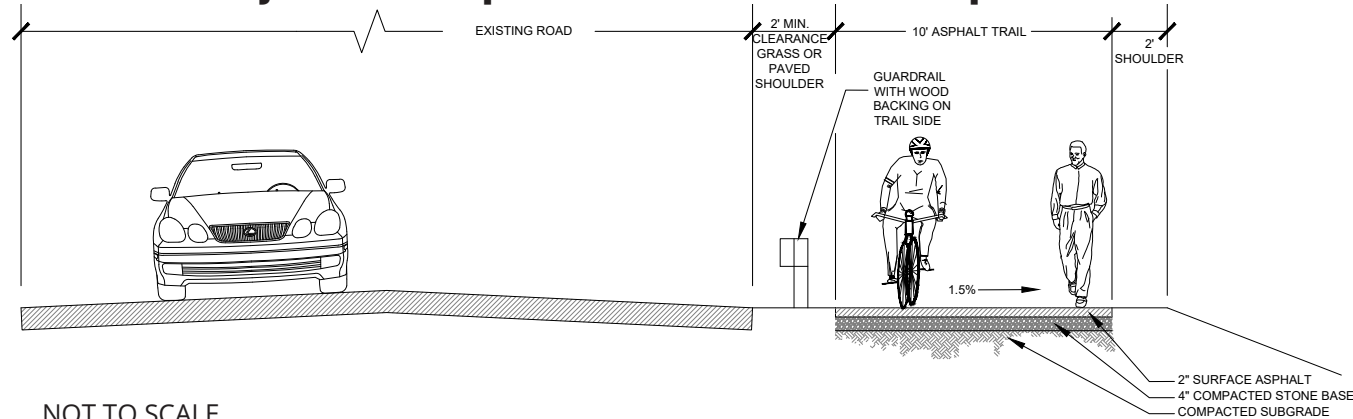
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## 10' Trail with 3:1 Slope Above and Retaining Wall Below



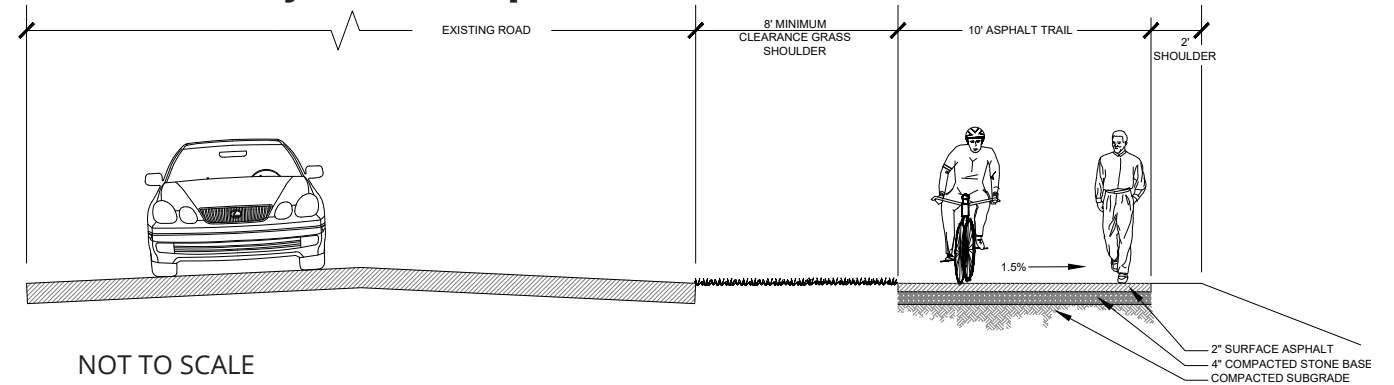
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## 10' Trail Adjacent to Open Section Road with Space Limitations



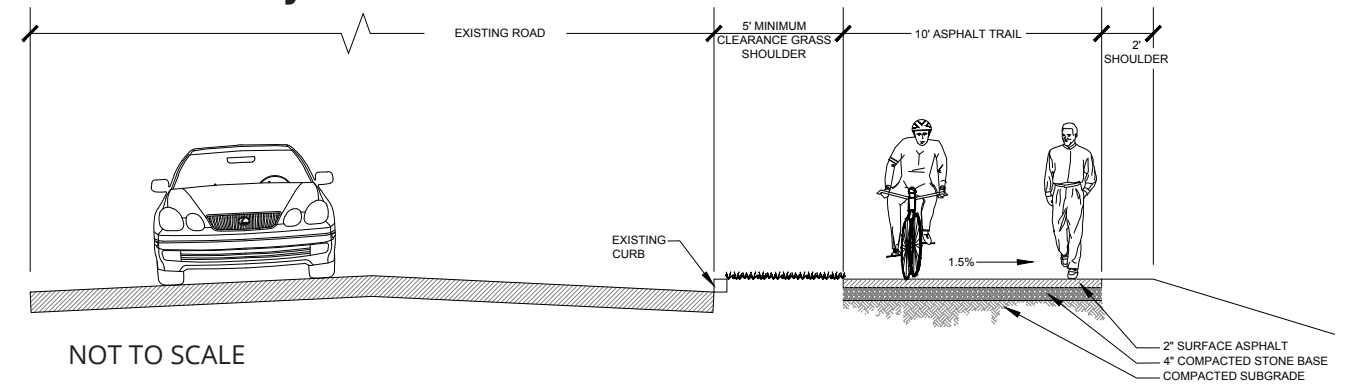
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## 10' Trail Adjacent to Open Section Road



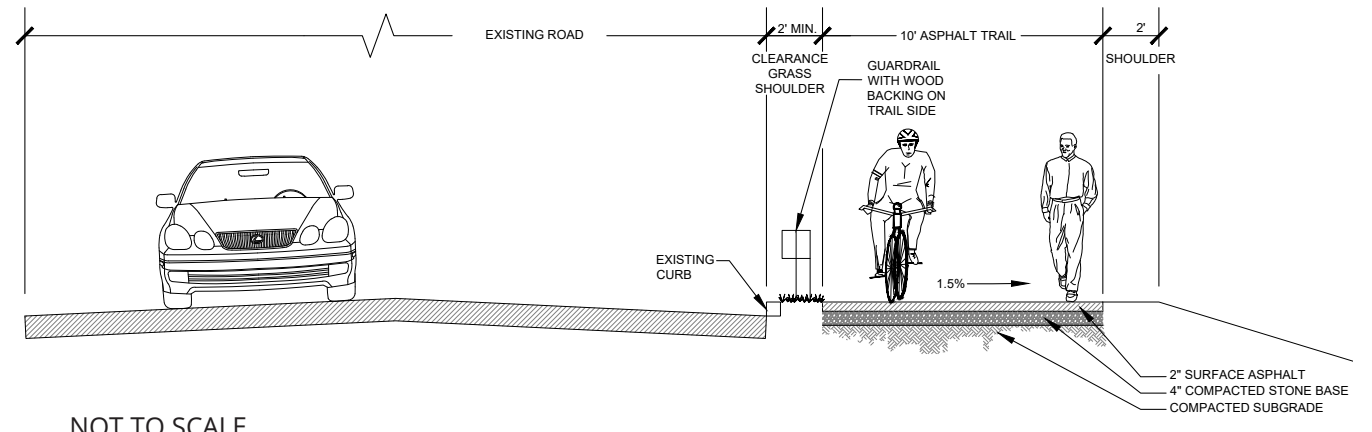
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## 10' Trail Adjacent to Curbed Road



NOT TO SCALE

## 10' Trail Adjacent to Curbed Road with Space Limitations



NOT TO SCALE



## Baltimore and Annapolis Trail to Annapolis Spur

This trail spur connects the Jonas and Anne Catharine Green Park on the Severn River to the parking area at the southern terminus of the Baltimore and Annapolis (B&A) Trail in Annapolis. The new trail portion of this spur is approximately 738 l.f. in length. The spur would also include the existing on road trail along Ritchie Highway, MD Route 450. No trail improvements along MD 450 were considered primarily due to the fact that this road is already an established bike route with some signage and markings. The improvements necessary to extend a dedicated bike trail nearly a mile from Jonas Green Park to the trail parking area would be extensive and would require the acquisition of right-of-way from dozens of properties as well as significant grading and retaining wall construction.

The proposed alignment may conflict with future state plans to shift left hand turning traffic at MD 450 and MD 648. This traffic may be rerouted through the open area planned for the trail and then under MD 450. This needs to be reviewed in more detail at time of final design.

The proposed design must examine the separation of vehicular and trail traffic for the on road portions of the trail. Enhanced signage and striping shall be examined as well as physical barriers.

An alternative alignment was examined for this spur. The alternative would take the trail off the shoulder to separate the trail and the road. This has been shown on the concept plans, and a cost estimate has been provided for this alternate. As noted above, the alternate would require extensive property

acquisition, retaining walls, clearing of forest and Critical Area impacts, significantly increasing the expense of the project. However, adding off road portions to this spur could be done over time as properties are acquired.

### Opportunities

1. Existing established on road alignment along MD 450
2. Crosswalks in place along this route

### Constraints

- A. Steep Slopes
- B. Chesapeake Bay Critical Area
- C. Existing Drainage Impacts
- D. On Road Trail
- E. ROW Acquisition
- F. Coordinate with Existing Driveway

The spur includes a 10' wide asphalt trail on land currently owned by the County. The majority of this spur would consist of the existing on road trail. The proposed trail

construction will have grading impacts as it traverses a slope from MD 450 down to the park. Drainage improvements in the form of a culvert or small bridge will also be needed where the trail crosses an existing drainage swale.

Stormwater management for this spur would likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project will be exempt from forest conservation requirements. It does not appear that there will be any environmental impacts associated with this trail, but the trail will be located in the Chesapeake Bay Critical Area, requiring some additional approvals, as well as additional landscaping. The total estimated cost for this spur is \$229,570.85.



Figure 1. Ritchie Highway/MD 450 Shoulder



Figure 2. Existing Bike Route Signage

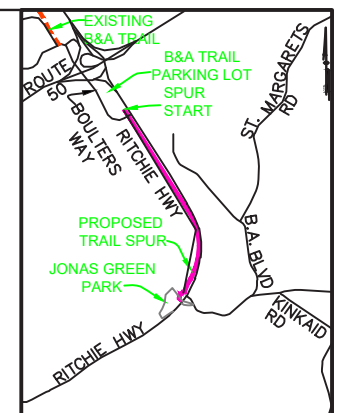
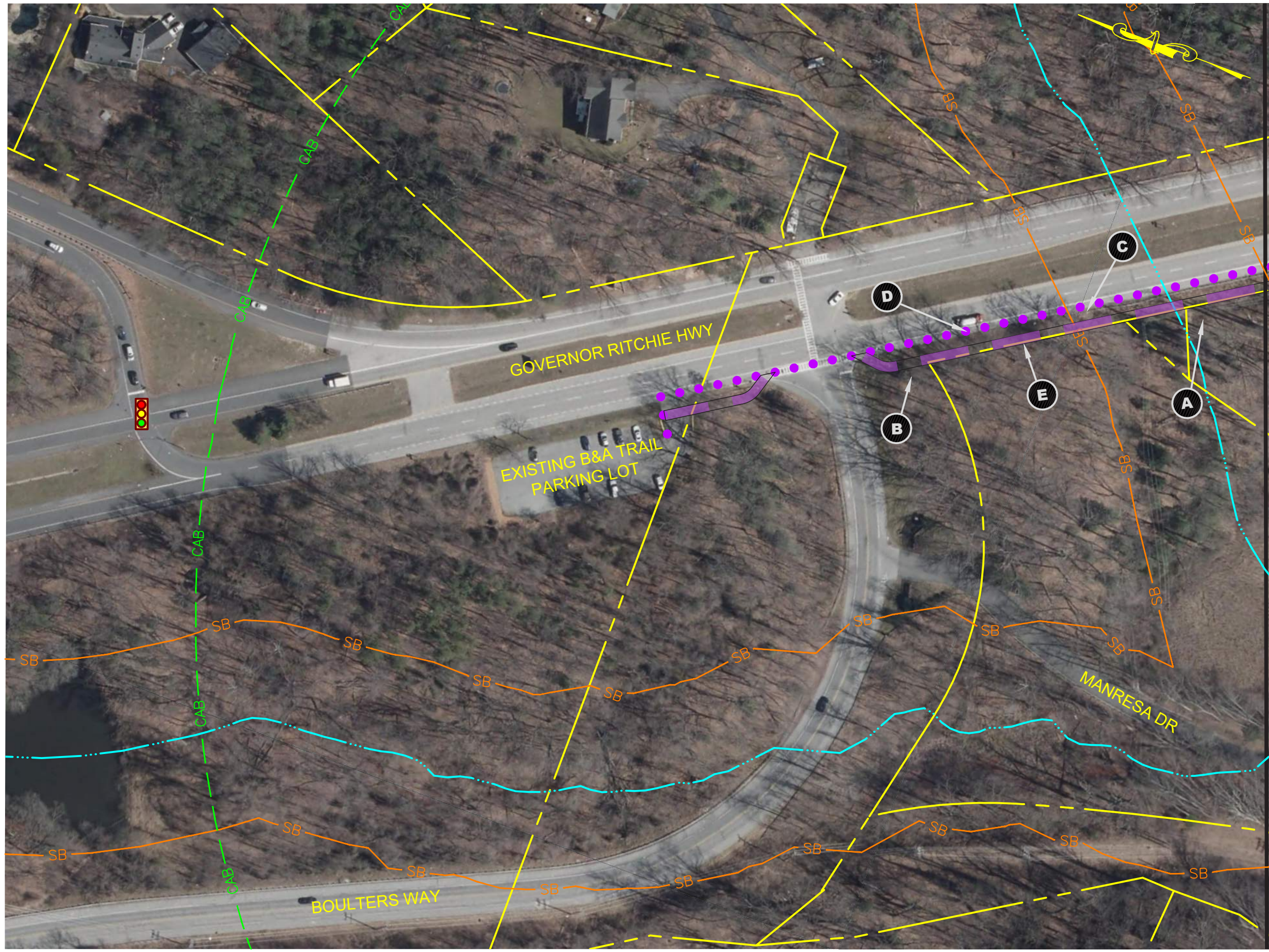


Figure 3. Open Space Along Trail Alignment



Figure 4. Existing Jonas Green Park





VICINITY MAP NOT TO SCALE

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL ---
- PROPOSED ON ROAD TRAIL ...
- PROPOSED TRAIL RAMP
- PROPOSED CROSSWALK |||||
- PROPOSED ALTERNATE TRAIL - - -
- CRITICAL AREA BUFFER --- CAB

SEE SHEET 2

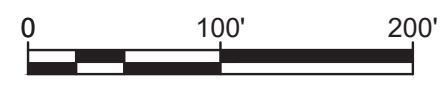
**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. STEEP SLOPES  
 B. CHESAPEAKE BAY CRITICAL AREA  
 C. EXISTING DRAINAGE IMPACTS  
 D. ON ROAD TRAIL  
 E. ROW ACQUISITION  
 F. COORDINATE WITH EXISTING DRIVEWAY



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**B&A TRAIL TO ANNAPOLIS**







**LEGEND**

EXISTING PROPERTY BOUNDARY	
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EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED ON ROAD TRAIL	
PROPOSED TRAIL RAMP	
PROPOSED CROSSWALK	
PROPOSED ALTERNATE TRAIL	
CRITICAL AREA BUFFER	

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  - C. EXISTING DRAINAGE IMPACTS
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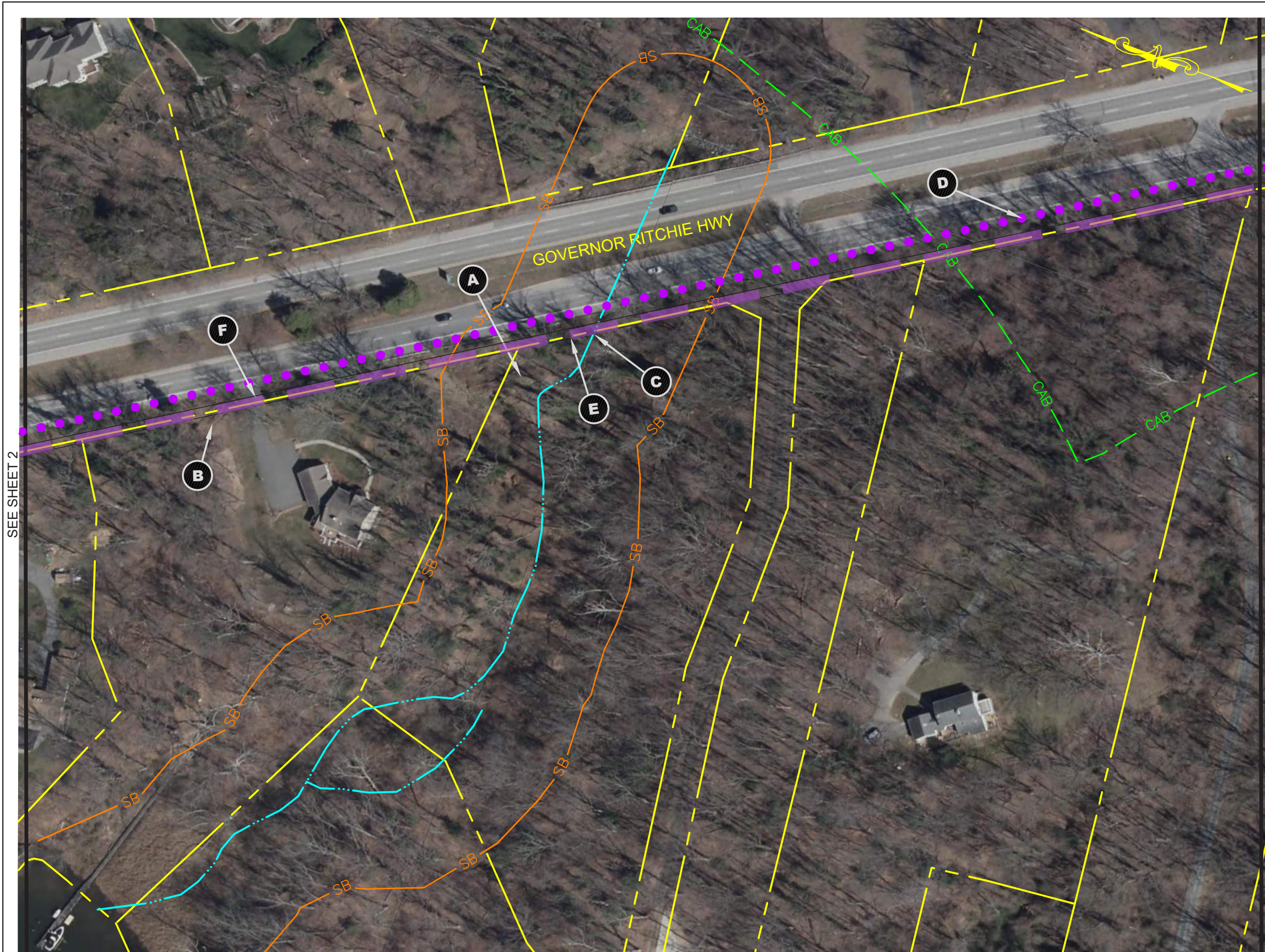
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SEE SHEET 1

SEE SHEET 3

# B&A TRAIL TO ANNAPOLIS





### LEGEND

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
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- PROPOSED CROSSWALK |||||
- PROPOSED ALTERNATE TRAIL ---
- CRITICAL AREA BUFFER - CAB -

SEE SHEET 2

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**CONSTRAINTS**  
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 F. COORDINATE WITH EXISTING DRIVEWAY



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SEE SHEET 4

## B&A TRAIL TO ANNAPOLIS



SEE SHEET 3

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
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**NOTES**

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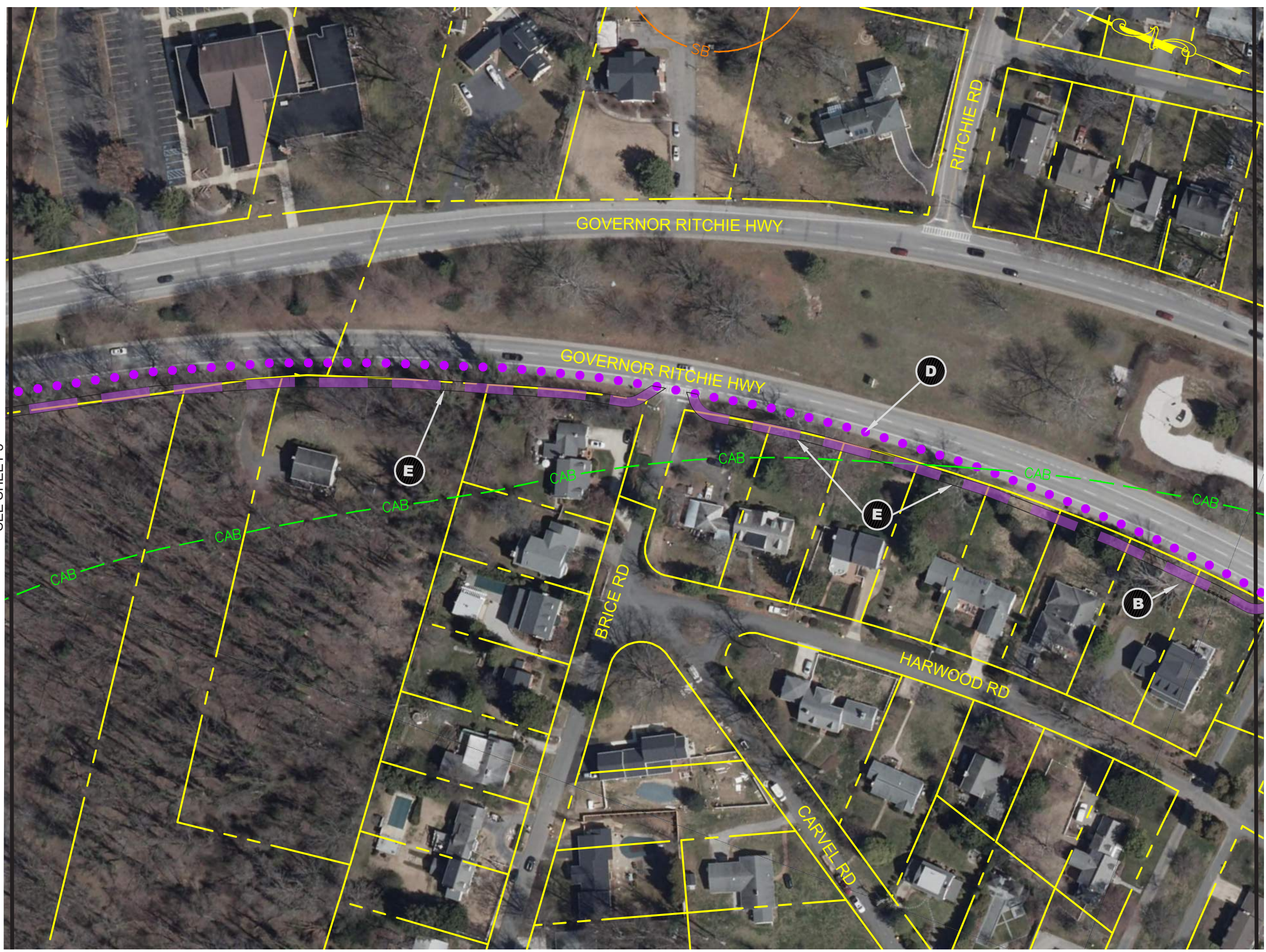
**CONSTRAINTS**

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- B. CHESAPEAKE BAY CRITICAL AREA
- C. EXISTING DRAINAGE IMPACTS
- D. ON ROAD TRAIL
- E. ROW ACQUISITION
- F. COORDINATE WITH EXISTING DRIVEWAY

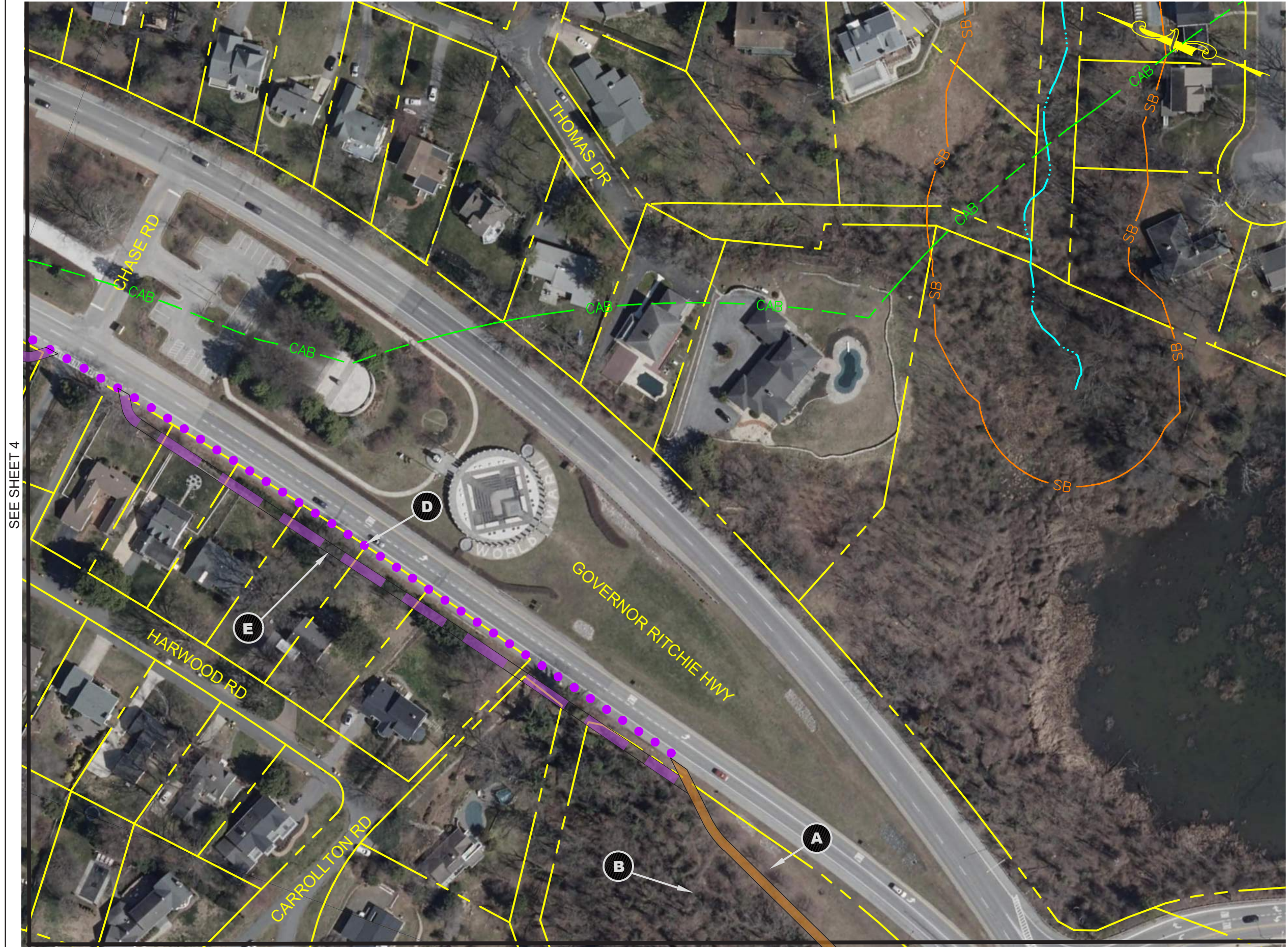


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SEE SHEET 5







**LEGEND**

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CRITICAL AREA BUFFER	

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  - B. CHESAPEAKE BAY CRITICAL AREA
  - C. EXISTING DRAINAGE IMPACTS
  - D. ON ROAD TRAIL
  - E. ROW ACQUISITION
  - F. COORDINATE WITH EXISTING DRIVEWAY



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# B&A TRAIL TO ANNAPOLIS



### LEGEND

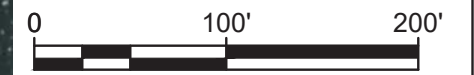
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- PROPOSED TRAIL RAMP 
- PROPOSED CROSSWALK 
- PROPOSED ALTERNATE TRAIL 
- CRITICAL AREA BUFFER 

### NOTES

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- C. EXISTING DRAINAGE IMPACTS
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## B&A TRAIL TO ANNAPOLIS



## Baltimore and Annapolis Trail to Arnold Park Spur

This trail spur connects Arnold Park to the Baltimore and Annapolis (B&A) Trail. A separate spur is also provided between Broadneck Trail and Arnold Park, and is discussed in this study in this chapter. The new trail portion of this spur is approximately 768 l.f. in length. The spur would also include on road improvements along Church Road and Jones Station Road. The spur runs from the existing Baltimore and Annapolis Trail to Arnold Road, across Ritchie Highway, to the intersection of Arnold Road and Church Road/Baltimore-Annapolis Blvd. This initial portion of the spur would be a 10' asphalt trail. The spur then follows Church Road to Jones Station Road, where it continues south for a short distance on Jones Station Road to the pedestrian entrance into Arnold Park. No trail improvements along Church Road

were considered due to the large number of properties that would have to be acquired (over 30 properties), the existing overhead utilities present on the road, the fact that an existing sidewalk already exists along the north side of the road, and the fact that the route between College Parkway and B&A Trail is already an established bike route with some signage, markings, and traffic calming. No alternate alignments were examined for this spur. There were no reasonable off road alternative routes between the B&A trail and Arnold Park, due to property acquisition, extensive residential development in this area, and available crossings of MD Route 2.

The crossing of Ritchie Highway would be similar to what was recently installed further north at Ritchie Highway and Jones Station Road, where a trail spur was constructed to

provide a connection between the Broadneck Trail and the Baltimore and Annapolis Trail. That spur also leads to an on road trail through an existing neighborhood.

### Opportunities

1. Existing established on road alignment
2. Existing connection from Arnold Park to Jones Station Road

### Constraints

- A. Need Easement/ Right-Of-Way
- B. Crossing of a High Volume Road - Signal Improvements
- C. Utility Conflicts
- D. On Road Trail

The spur includes a 10' wide asphalt trail, with multiple crosswalks and associated concrete ramps. Construction of the trail from the B&A trail to Arnold Road will require the acquisition of right-of-way. The existing sidewalk along the north side of Arnold Road will be removed and replaced with a 10'

asphalt trail. In some areas this will be less than 5' from the road. The crossing of Ritchie Highway is already set up for pedestrian crossing, but additional modifications may be required. On road improvements will be needed for Church Road in the form of additional signage, striping and possibly additional traffic calming.

Stormwater management for this spur would likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have significant utility impacts along Arnold Road, east of Ritchie Highway. At least three utility poles would have to be moved for this trail. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project will be exempt from forest conservation requirements. No environmental impacts are associated with this trail. The total estimated cost for this spur is \$595,324.08.



Figure 5. Existing Commercial Center backing to B&A Trail



Figure 6. Arnold Road and Ritchie Highway Intersection



Figure 7. Existing Safeway frontage at Church Road

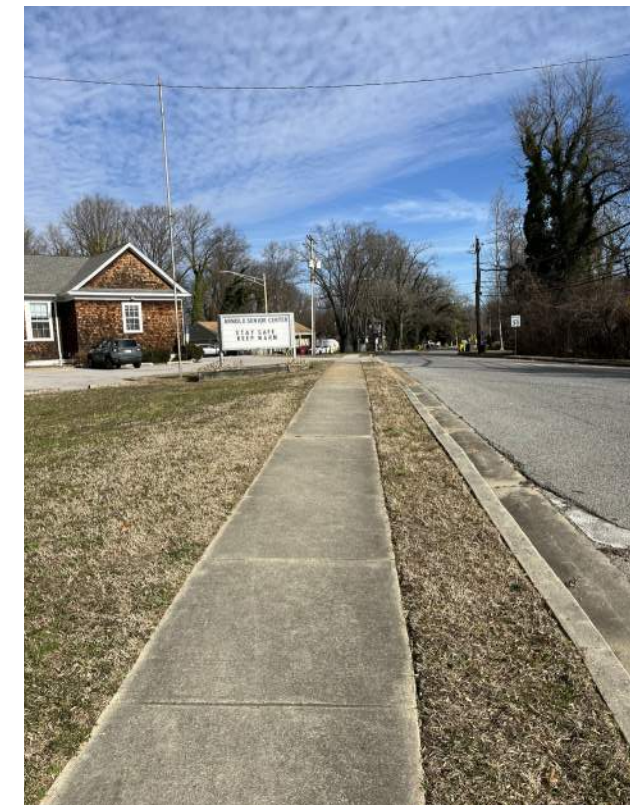
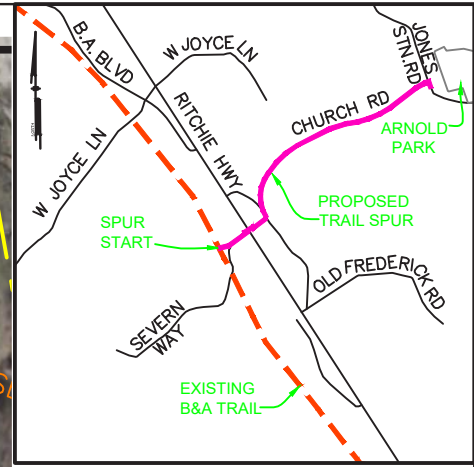
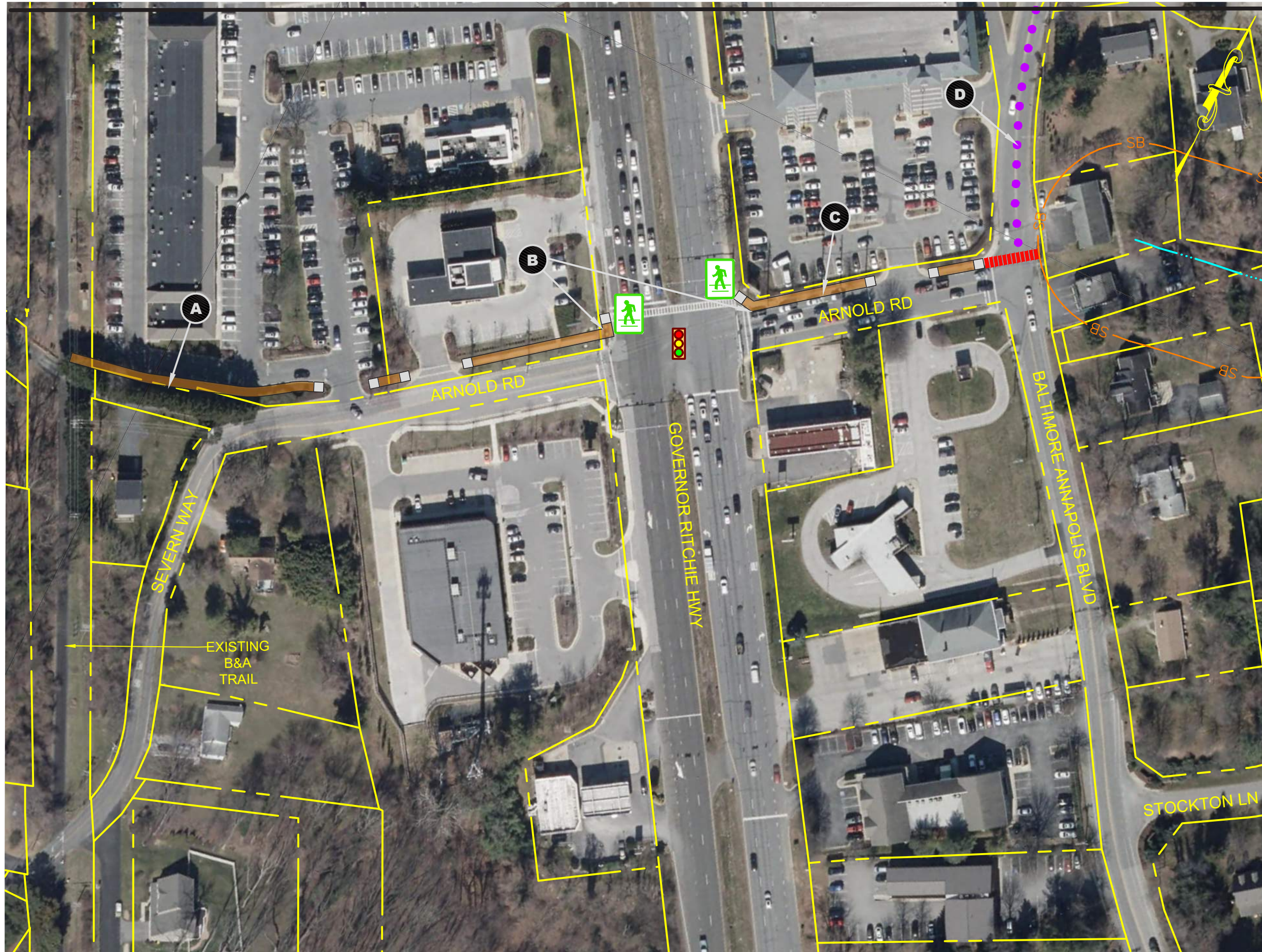


Figure 8. Existing Church Road Sidewalk





VICINITY MAP NOT TO SCALE

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- PROPOSED ON ROAD TRAIL
- PROPOSED RAMP
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

- A. NEED EASEMENT/RIGHT-OF-WAY
- B. CROSSING OF HIGH VOLUME ROAD - SIGNAL IMPROVEMENTS
- C. UTILITY CONFLICTS
- D. ON ROAD TRAIL



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B&A TRAIL TO ARNOLD PARK





**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
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- EXISTING STREAM BUFFER SB
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- PROPOSED TRAIL ---
- PROPOSED ON ROAD TRAIL ●●●●●
- PROPOSED RAMP □
- PROPOSED CROSSWALK |||||
- PROPOSED PEDESTRIAN SIGNAL

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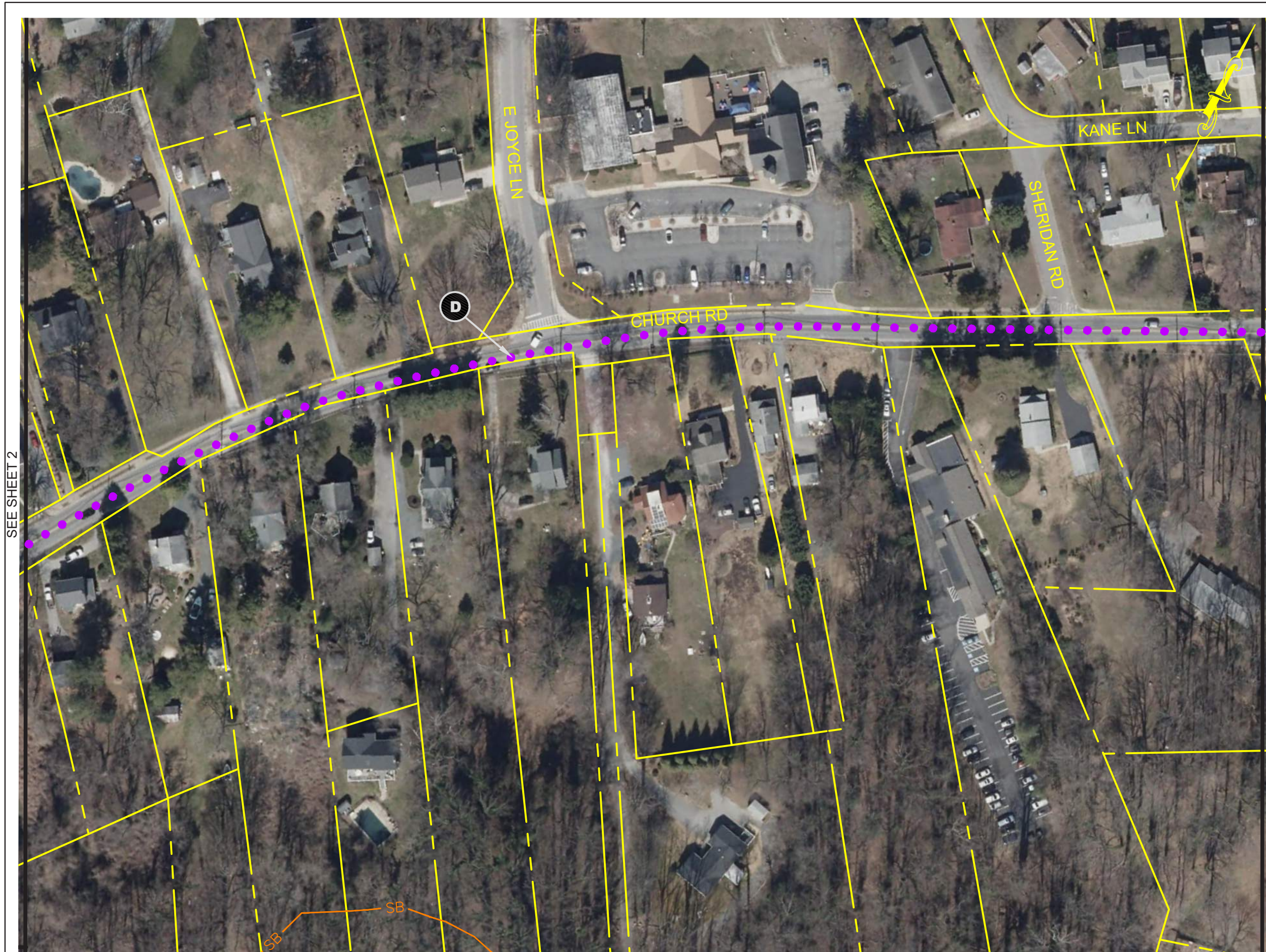
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**B&A TRAIL TO ARNOLD PARK**





### LEGEND

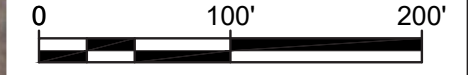
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- PROPOSED RAMP
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

SEE SHEET 2

SEE SHEET 4

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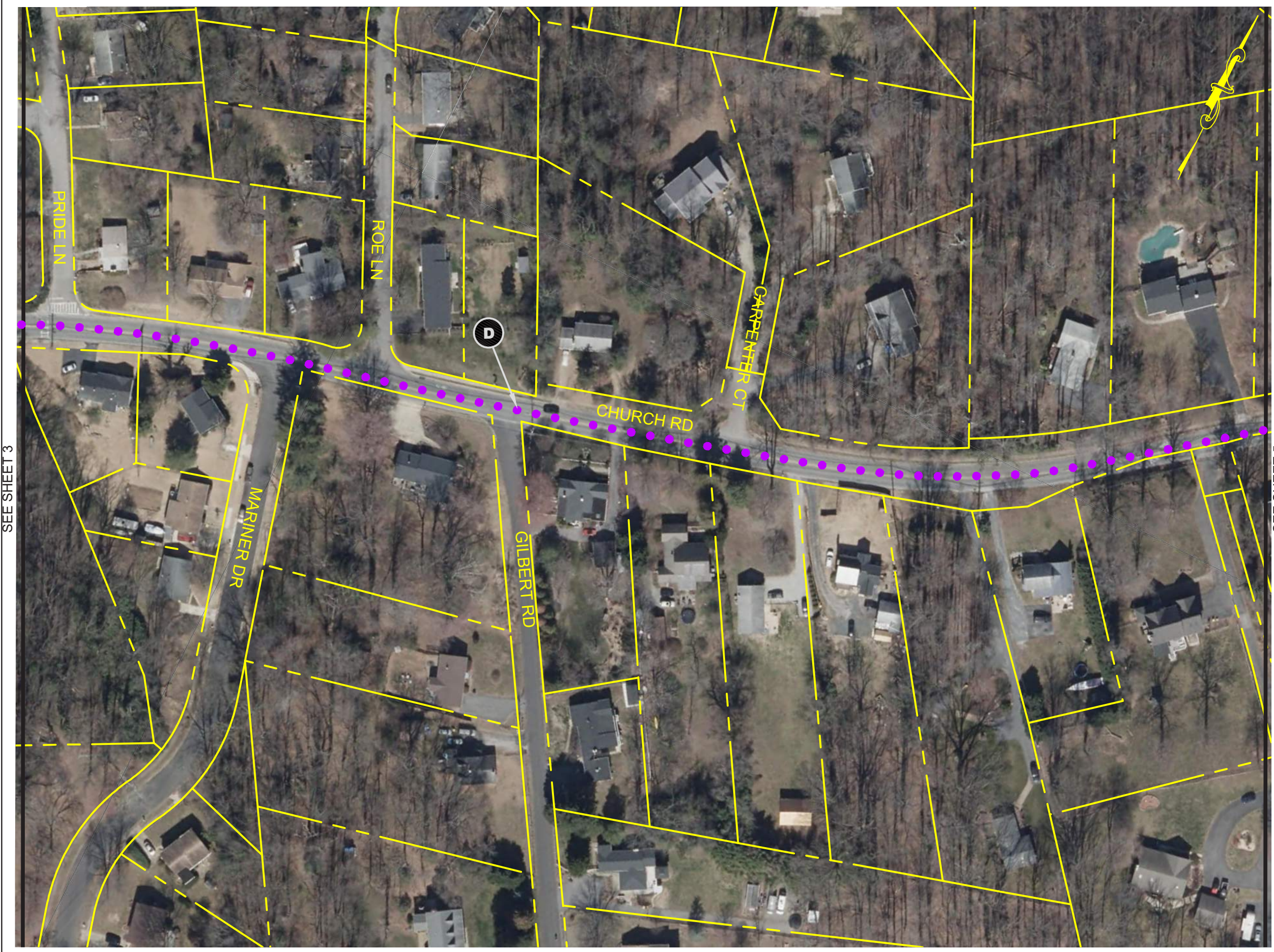
**CONSTRAINTS**  
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 C. UTILITY CONFLICTS  
 D. ON ROAD TRAIL



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## B&A TRAIL TO ARNOLD PARK





### LEGEND

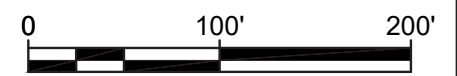
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- PROPOSED TRAIL —
- PROPOSED ON ROAD TRAIL · · · · ·
- PROPOSED RAMP
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

SEE SHEET 3

SEE SHEET 5

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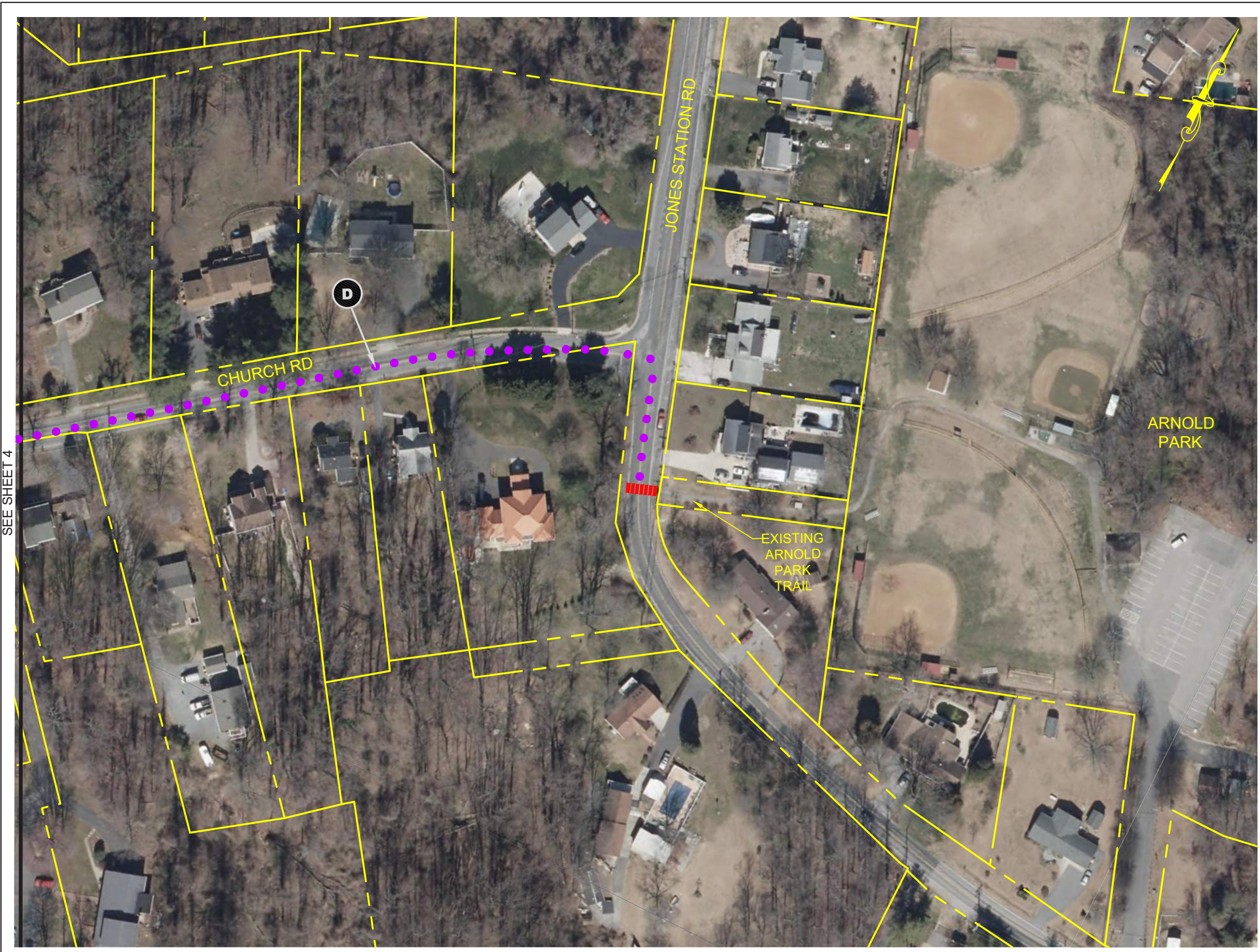
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 C. UTILITY CONFLICTS  
 D. ON ROAD TRAIL



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## B&A TRAIL TO ARNOLD PARK



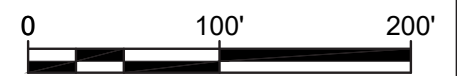


**LEGEND**

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PROPOSED TRAIL	
PROPOSED ON ROAD TRAIL	
PROPOSED RAMP	
PROPOSED CROSSWALK	
PROPOSED PEDESTRIAN SIGNAL	

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  - C. UTILITY CONFLICTS
  - D. ON ROAD TRAIL



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# B&A TRAIL TO ARNOLD PARK



## Baltimore and Annapolis Trail to Baltimore Washington Medical Center Spur

This trail spur connects the Baltimore Washington Medical Center on Hospital Drive to the Baltimore and Annapolis (B&A) Trail in Glen Burnie. The spur is approximately 6,540 l.f. in length, and runs from the Baltimore Washington Medical Center, east along Hospital Drive to Foxspring Drive where it will run along the existing BGE Right-of-Way to the MD State 100 Right-of-Way. It will then run east along the MD State 100 Right-of-Way to connect to the existing B&A Trail near the existing B&A Trail bridge over Route 100. Easements and/or agreements would be needed from BG&E and MDOT, as well as private property owners. The area where the trail would run is generally level, other than the MD State Right-of-Way. No alternate alignments were studied for this spur.

### Opportunities

1. Existing sidewalk alignment to follow along much of this route
2. Occurs largely in open areas, limited clearing and limited forest conservation impacts.
3. Limited utility impacts
4. Existing crosswalks and traffic signal exist at Hospital Drive and Oakwood Road.

### Constraints

- A. Stream Buffer Impacts
- B. Steep Slopes
- C. Need Easement/ Right-Of-Way
- D. Tree Clearing

- E. Existing Retaining Wall
- F. Utility Impacts

The spur will include a 10' wide asphalt trail. Installation of the trail will include the removal of the existing concrete sidewalks and replacement with an asphalt trail. In some areas, this widening may need to happen towards the road due to steep slopes on the other side of the existing sidewalk. Widening of the trail towards the road may also involve the removal and relocation of the curb and gutter closer to the travel lane. There appears to be sufficient roadway width to accommodate this adjustment. The trail where it crosses Marley Creek may need to run along the road as the sidewalk is already against the road and there is an existing guardrail and steep slopes immediately beyond the sidewalk. Alternatively, the

trail could be pushed out onto the slope requiring additional grading and a retaining wall. A timber backed guardrail may also be required in some areas due to the proximity of the road to the trail. New crosswalks will be needed in some road crossings.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts. It is likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project would be exempt from forest conservation requirements. Stream buffer impacts are anticipated with this project. The estimated cost of this project is \$2,021,313.53.



Figure 9. Foxspring Drive looking north on Hospital Drive



Figure 10. Hospital Drive approaching crossing over Marley Creek

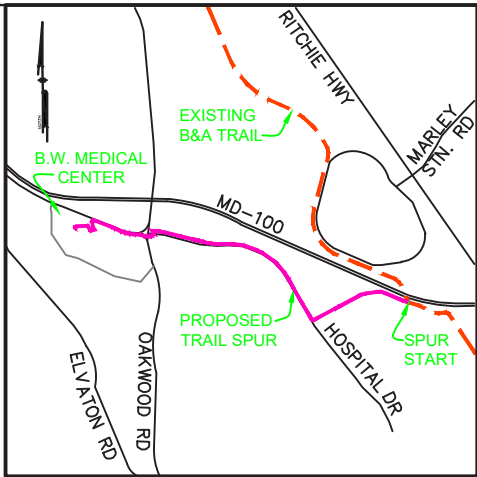
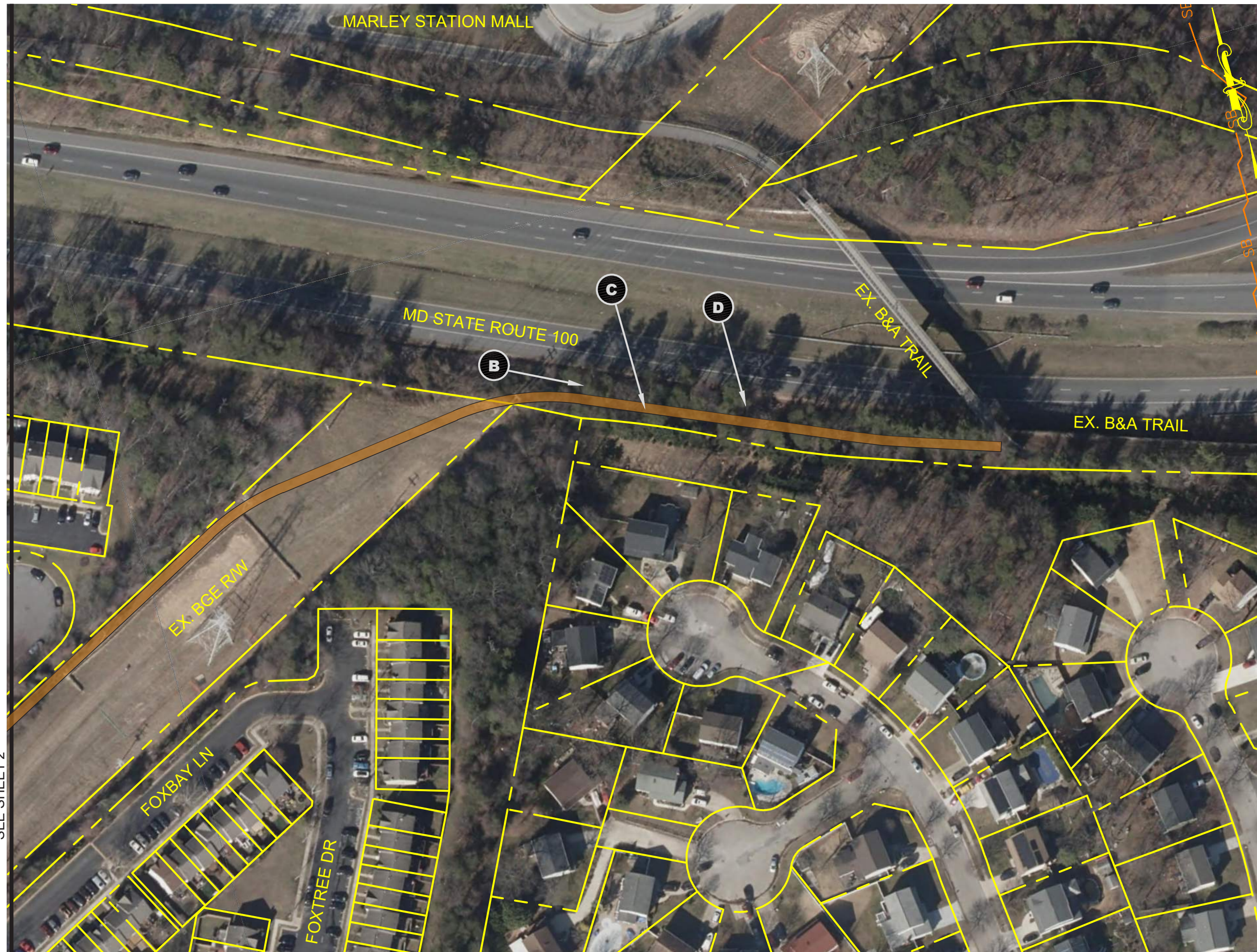


Figure 11. Marley Creek from Hospital Drive looking Northeast



Figure 12. Foxbridge looking Northeast along existing BGE Right-of-Way





VICINITY MAP  
NOT TO SCALE

**LEGEND**

- EXISTING PROPERTY BOUNDARY
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED TIMBER BACKED GUARDRAIL
- PROPOSED CURB
- PROPOSED CROSSWALK

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. STREAM BUFFER IMPACTS
- B. STEEP SLOPES
- C. NEED EASEMENT / RIGHT-OF-WAY
- D. TREE CLEARING
- E. EXISTING RETAINING WALL
- F. UTILITY IMPACTS



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




SEE SHEET 2

**B&A TRAIL TO BALTIMORE WASHINGTON MEDICAL CENTER**



SEE SHEET 3

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL 
- PROPOSED TRAIL 
- PROPOSED RAMP 
- PROPOSED TIMBER BACKED GUARDRAIL 
- PROPOSED CURB ---
- PROPOSED CROSSWALK 

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. STREAM BUFFER IMPACTS
- B. STEEP SLOPES
- C. NEED EASEMENT / RIGHT-OF-WAY
- D. TREE CLEARING
- E. EXISTING RETAINING WALL
- F. UTILITY IMPACTS

SEE SHEET 1



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 Sheet 2 of 5












**B&A TRAIL TO BALTIMORE WASHINGTON MEDICAL CENTER**



SEE SHEET 4

**LEGEND**

- EXISTING PROPERTY BOUNDARY 
- EXISTING STREAM 
- EXISTING STREAM BUFFER 
- EXISTING TRAFFIC SIGNAL 
- PROPOSED TRAIL 
- PROPOSED RAMP 
- PROPOSED TIMBER BACKED GUARDRAIL 
- PROPOSED CURB 
- PROPOSED CROSSWALK 

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

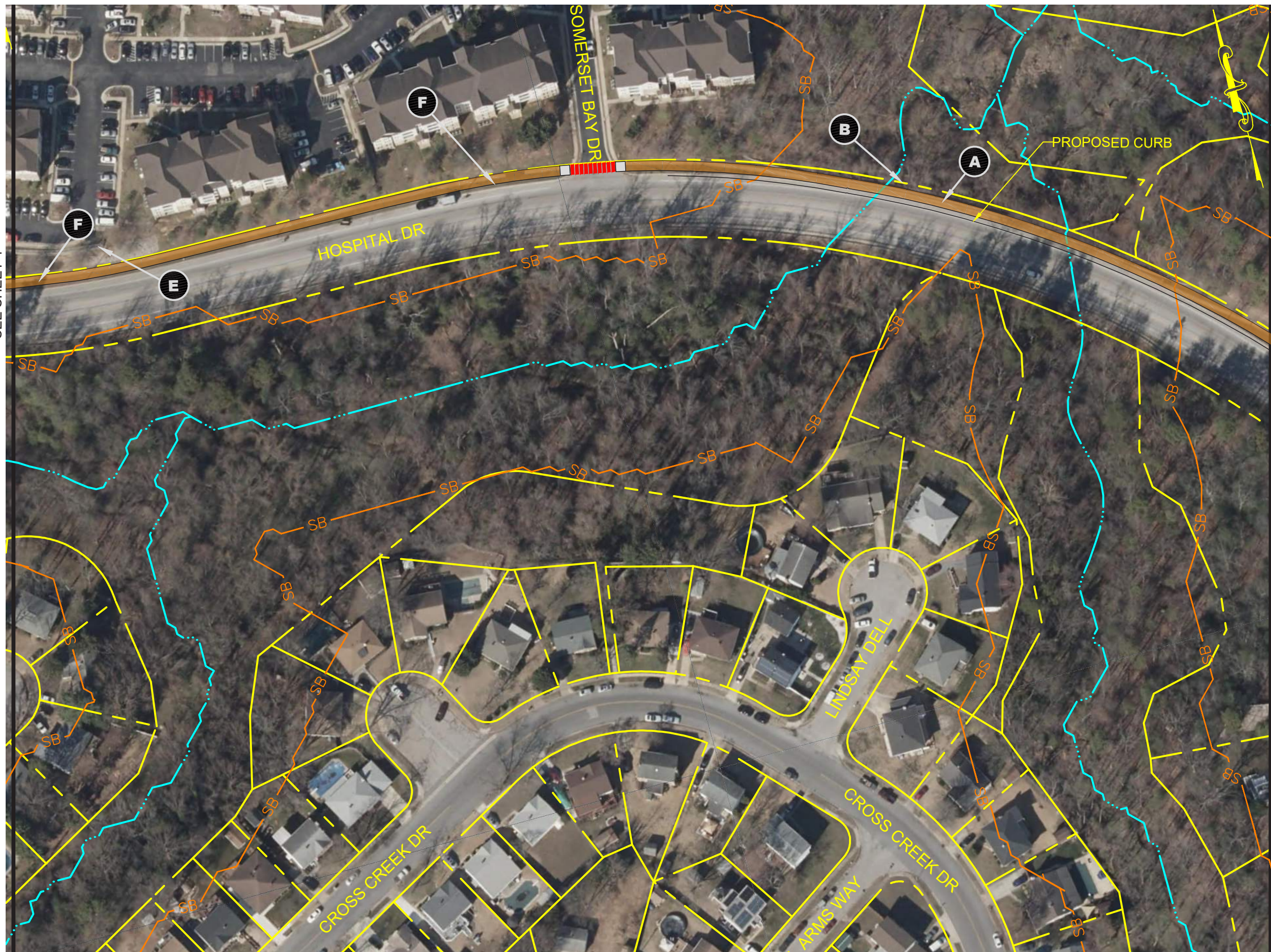
**CONSTRAINTS**

- A. STREAM BUFFER IMPACTS
- B. STEEP SLOPES
- C. NEED EASEMENT / RIGHT-OF-WAY
- D. TREE CLEARING
- E. EXISTING RETAINING WALL
- F. UTILITY IMPACTS



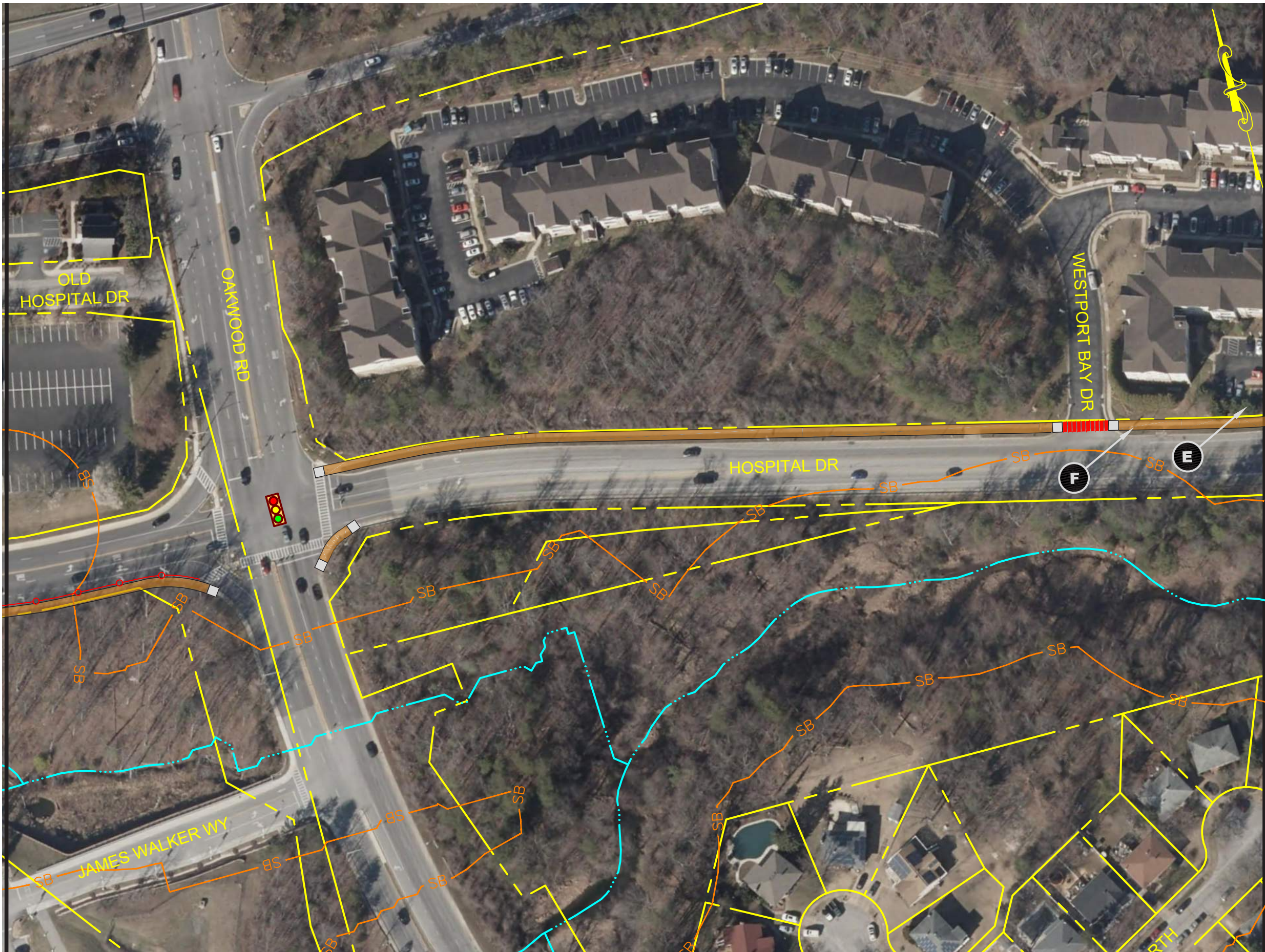
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SEE SHEET 2



**B&A TRAIL TO BALTIMORE WASHINGTON MEDICAL CENTER**





**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED TIMBER BACKED GUARDRAIL	
PROPOSED CURB	
PROPOSED CROSSWALK	

SEE SHEET 3

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

- CONSTRAINTS**
- A. STREAM BUFFER IMPACTS
  - B. STEEP SLOPES
  - C. NEED EASEMENT / RIGHT-OF-WAY
  - D. TREE CLEARING
  - E. EXISTING RETAINING WALL
  - F. UTILITY IMPACTS

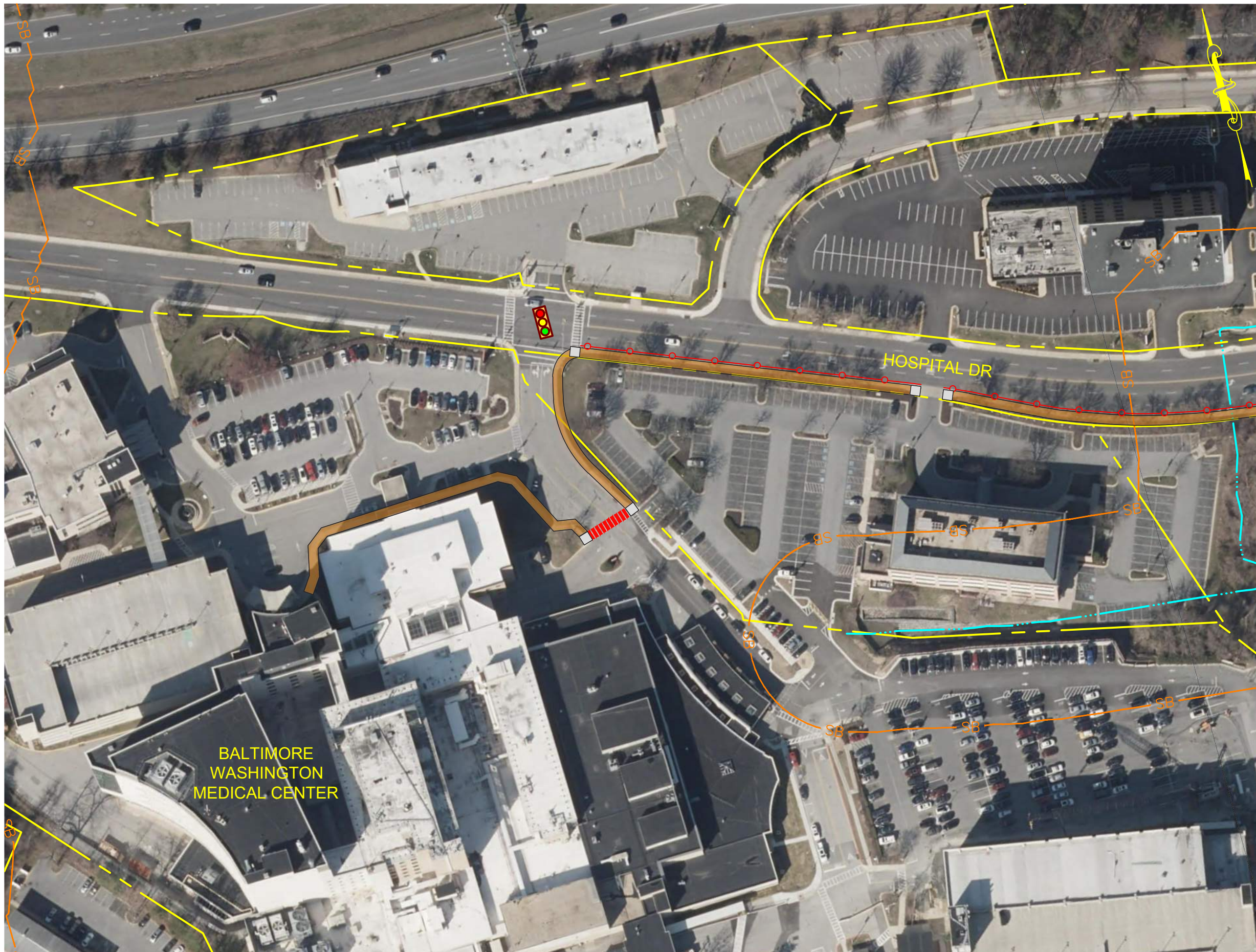


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**B&A TRAIL TO BALTIMORE WASHINGTON MEDICAL CENTER**





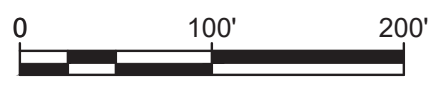
**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED TIMBER BACKED GUARDRAIL	
PROPOSED CURB	
PROPOSED CROSSWALK	

SEE SHEET 4

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

- CONSTRAINTS**
- A. STREAM BUFFER IMPACTS
  - B. STEEP SLOPES
  - C. NEED EASEMENT / RIGHT-OF-WAY
  - D. TREE CLEARING
  - E. EXISTING RETAINING WALL
  - F. UTILITY IMPACTS



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# B&A TRAIL TO BALTIMORE WASHINGTON MEDICAL CENTER



## Baltimore and Annapolis Trail to Cromwell Park & Ride Light Rail Station Spur

This trail spur connects the Cromwell Park & Ride on Baltimore Annapolis Boulevard (MD 648) to the Baltimore and Annapolis (B&A) Trail in Glen Burnie. The spur is approximately 608 l.f. in length, and runs from the Cromwell Park & Ride, southeast along Baltimore Annapolis Boulevard crossing Dorsey Road and running southwest along Dorsey Road to connect to the existing B&A Trail. No alternate alignments were studied for this spur.

### Opportunities

1. Existing sidewalk alignment to follow
2. Occurs in open areas, no clearing and no forest conservation impacts
3. Existing crosswalks and traffic signal exist at Baltimore Annapolis Boulevard and Dorsey Road

### Constraints

- A. Existing traffic signal equipment would need to be relocated to widen the trail
- B. Utility Impacts
- C. Steep Slopes
- D. Easement needed from Mass Transit Administration

The spur includes a 10' wide asphalt trail. The existing sidewalks will be removed to allow the installation of the trail. Due to the proximity of the trail to the sidewalk, a timber backed guardrail would have to be installed along the trail to provide protection for the trail users. The trail construction would stop at the southern side of the Cromwell Station entrance onto Baltimore and Annapolis Blvd; from here trail users would utilize the existing pavement/sidewalks to access the station.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbio retention facilities, or infiltration devices. This alignment would have some utility impacts. It is likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in

which case, the project would be exempt from forest conservation requirements. No environmental impacts are anticipated with this project, but there may be stream buffer impacts requiring a County modification approval. The estimated cost of this project is \$389,775.11.



Figure 13. Exit from Cromwell Station Park & Ride looking Southeast along Dorsey Road. Existing traffic Signal Equipment



Figure 14. Baltimore Annapolis Boulevard with Dorsey Road to the right.

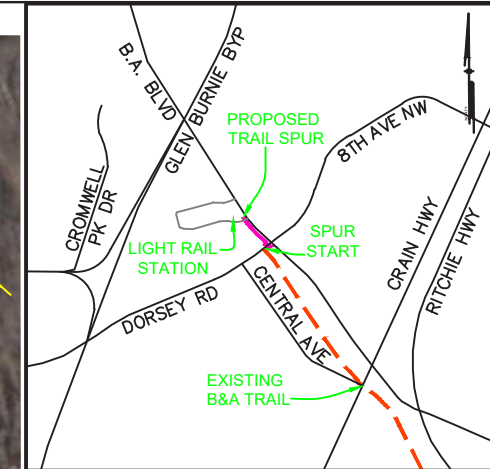
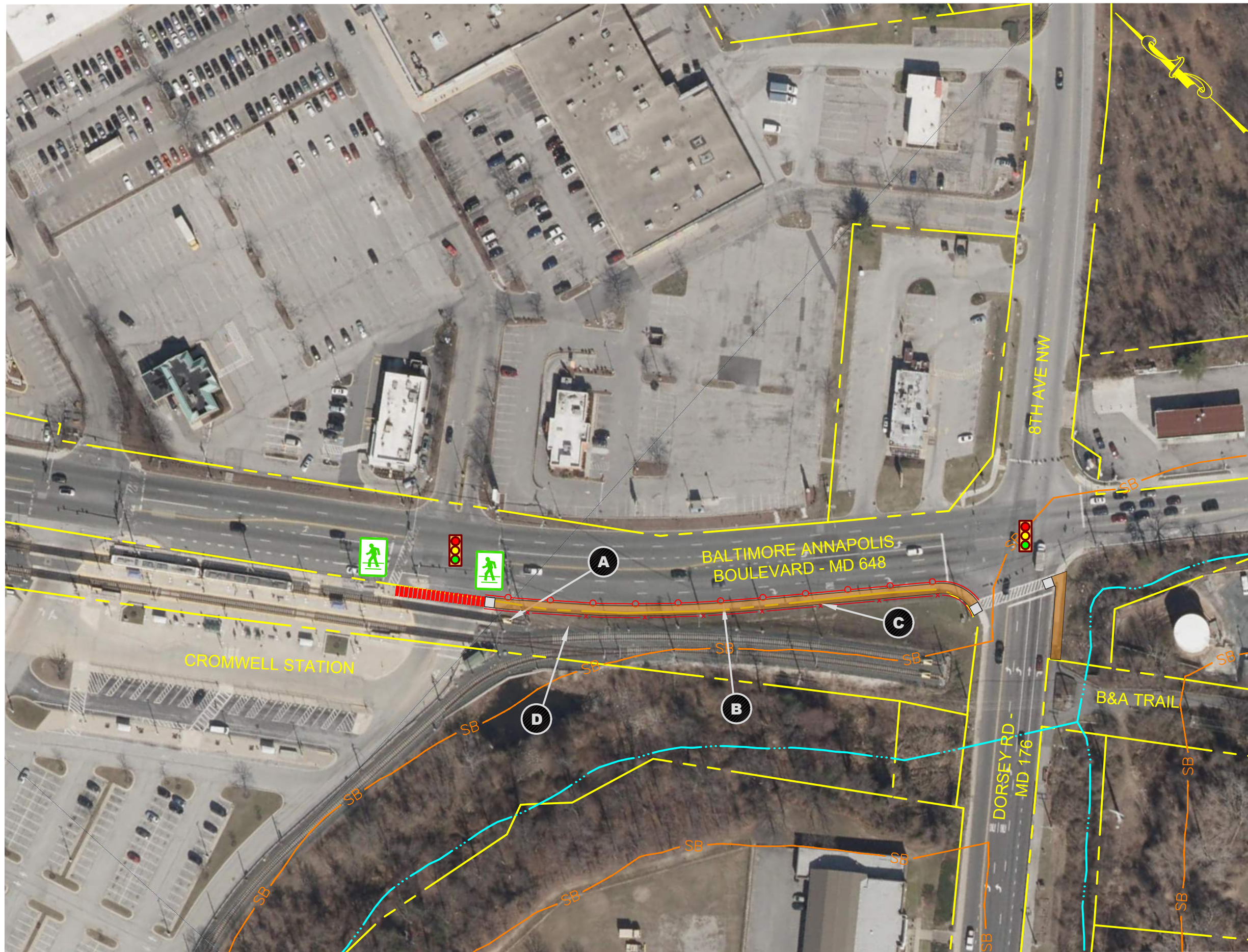


Figure 15. B & A Trail at Dorsey Road



Figure 16. B & A Trail at Dorsey Road





VICINITY MAP NOT TO SCALE

**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED SPLIT RAIL FENCE	
PROPOSED TIMBER BACKED GUARDRAIL	
PROPOSED CROSSWALK	
PROPOSED PEDESTRIAN SIGNAL	

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. EXISTING TRAFFIC SIGNAL EQUIPMENT WOULD NEED TO BE RELOCATED TO WIDEN THE TRAIL  
 B. EXISTING UTILITIES  
 C. SLOPES  
 D. EASEMENT NEEDED FROM MASS TRANSIT ADMINISTRATION



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# B&A TRAIL TO CROMWELL PARK & RIDE / LIGHT RAIL STATION



## Baltimore and Annapolis Trail to Future Marley Creek Park Spur

This trail spur connects the future Marley Creek Park to the Baltimore and Annapolis (B&A) Trail in Glen Burnie. The spur is approximately 1,625 l.f. in length and runs from the future Marley Creek Park at Mall Road to the existing B&A Trail. The future park parcel is owned by Anne Arundel County. No alternate alignments were examined for this spur. The design of this spur should be coordinated with the future park plans

### Opportunities

1. County-owned parcel
2. Limited utility impacts

### Constraints

- A. Tree Clearing
- B. Stream Crossing
- C. Stream and Stream Buffer Impacts

The spur includes a 10' wide asphalt trail. A stream crossing or boardwalk will be required and will involve wetland and/or stream and buffer impacts. As park design for this site progresses, it will need to accommodate the trail design. The concept layout that has been prepared has taken into account the park concept plans prepared by Pennoni for this site under the Unused Parks study.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment should have no utility impacts. It is unlikely that this alignment can be accomplished with less than 20,000 sf of forest clearing; compliance with County forest conservation requirements

will be required, but this should be able to be accomplished by forest retention easements on this parcel. Environmental impacts are anticipated with this project as wetlands are likely present on the park parcel. A stream is present on the parcel. The estimated cost for this project is \$1,147,079.23.



Figure 17. View of B & A Trail from parking lot behind 8028 Ritchie Hwy



Figure 18. Looking northeast along the B & A Trail

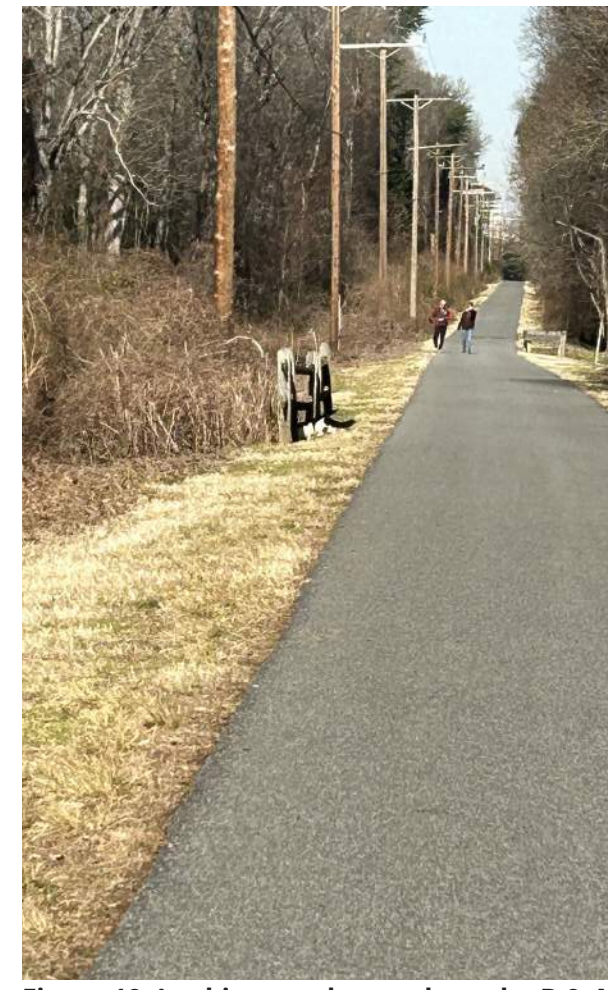


Figure 19. Looking northeast along the B & A Trail with Future Marley Creek Park (left)

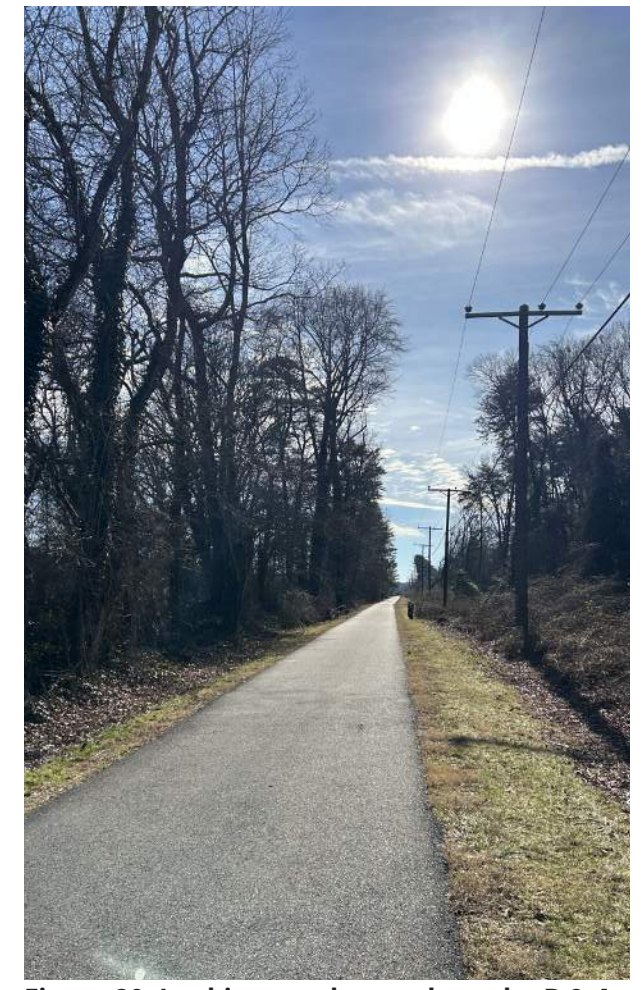
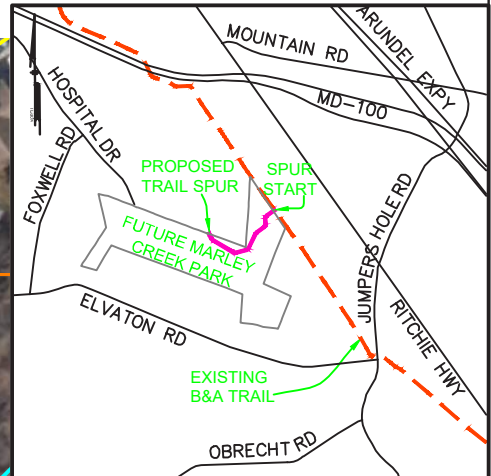
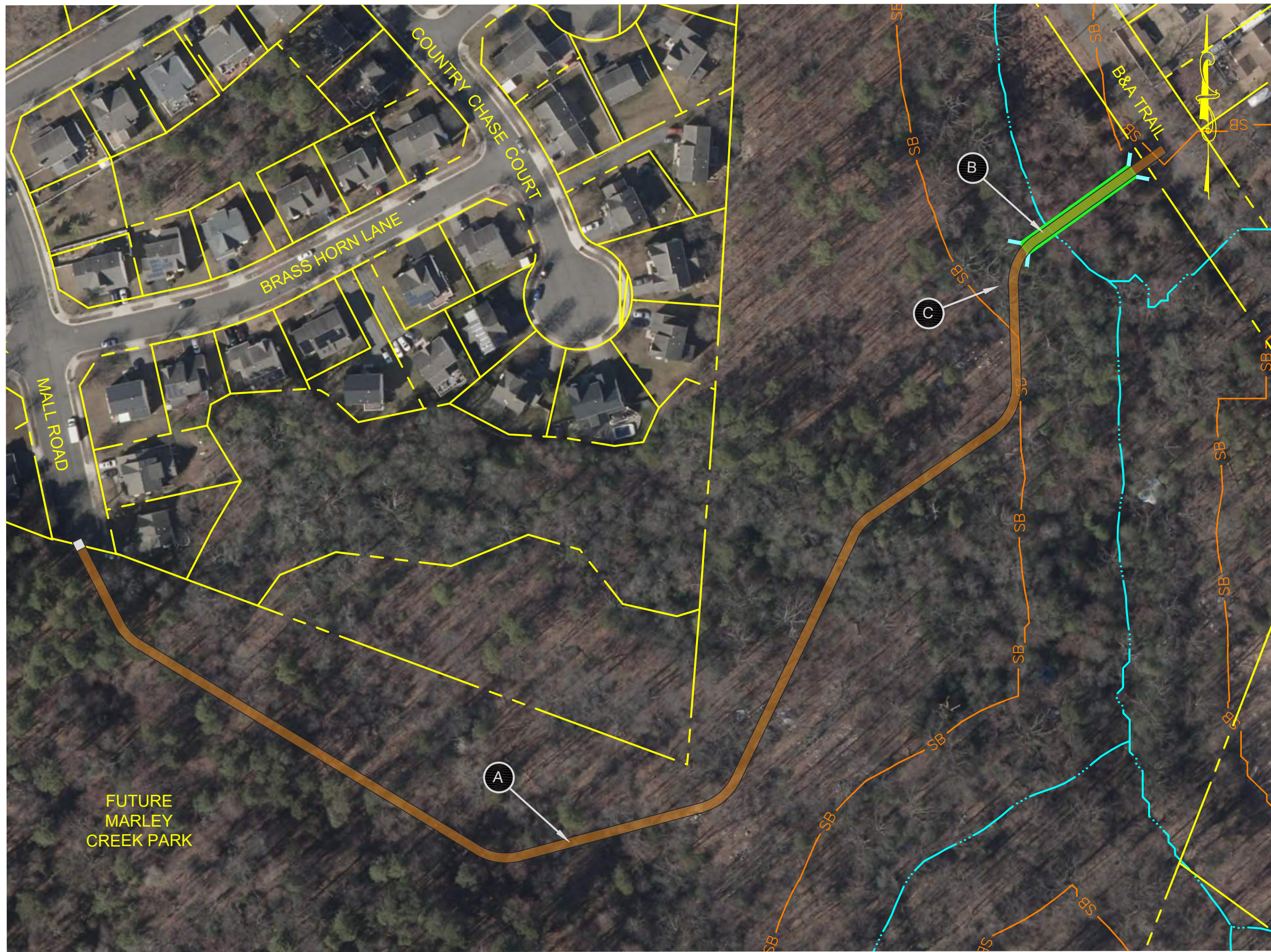


Figure 20. Looking southeast along the B & A Trail with Future Marley Creek Park (right)





VICINITY MAP  
NOT TO SCALE

**LEGEND**

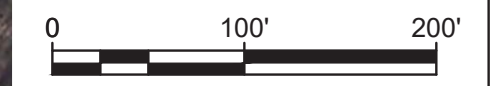
- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL ---
- PROPOSED RAMP □
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK |||||
- PROPOSED BOARDWALK OR PEDESTRIAN BRIDGE

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. TREE CLEARING
- B. STREAM CROSSING
- C. STREAM AND STREAM BUFFER IMPACTS



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**B&A TRAIL TO FUTURE MARLEY CREEK PARK**



## Baltimore and Annapolis Trail to Kinder Farm Park Spur

This trail spur connects Kinder Farm Park to the Baltimore and Annapolis (B&A) Trail running from the B&A trail headquarters west along the south side of Earleigh Heights Connector to Jumpers Hole Road in Severna Park. The spur is approximately 3,143 l.f. in length. The spur crosses Jumpers Hole Road, and Kinder Road, and then runs along Kinder Road to a point where it connects to the existing trails in Kinder Farm Park. Generally, the trail runs in existing County right-of-way.

The alternate spur is approximately 3,455 l.f. in length and runs from the existing trail at Kinder Farm Park to Jumpers Hole Road, then runs along the east side of Jumpers Hole Road north to an HOA open space. From there it would turn east through a forested area in the HOA open space, and then out to Earleigh Heights Connector. The trail

would run along the north side of Earleigh Heights Connector to the existing B&A Trail. This alternate would create a more natural feel for its users but is a less direct route to Kinder Farm Park.

### Opportunities

1. Immediately adjacent to Baltimore Annapolis Trail Park
2. Available County R/W

### Constraints

- A. Open section road, drainage ditch
- B. Existing drainage channel
- C. Need easement from HOA parcel
- D. Need easement from Property Owner
- E. Existing traffic signal equipment

The spur includes a 10' wide asphalt trail, with multiple crosswalks and associated ramps.

From the B&A Trail parking lot to W. Earleigh Heights Road, the trail replaces an existing concrete sidewalk. This section of the trail should be able to be constructed within the existing County right-of-way. From W. Earleigh Heights Road to Pineview Avenue, the trail runs along the existing wide asphalt shoulder. The shoulder can be widened and a timber backed guardrail installed along the shoulder to protect trail users. Utilizing the existing shoulder will limit clearing, environmental impacts, and acquisition of additional right-of-way. Small retaining walls may also be needed to limit grading along a potential wetland area. From Pineview Avenue to Jumpers Hole Road, the existing concrete ditch will be replaced with a storm drain and curb and gutter will be installed to allow the trail to be installed where the existing shoulder is present. An alternate to constructing this entire trail at once would be to add additional signage and striping for bikes along the portions of Earleigh Heights Connector that are open section and have a wide shoulder.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. As Earleigh Heights Connector is an open section road west of W. Earleigh Heights Road, there will be some drainage improvements required, primarily near the intersection of Jones Station Road where an existing concrete ditch would need to be replaced with a closed storm drain system in order to install the trail. This alignment will have some minimal utility impacts. It is very likely that this alignment (although not the alternate) can be accomplished with less than 20,000 sf of forest clearing, in which case, the project should be exempt from forest conservation requirements. The HOA parcel in the alternate scenario appears to be partially encumbered by a forest conservation easement. Some environmental impacts are anticipated with this project. The estimated cost of this spur is \$1,705,371.41.



Figure 21. Earleigh Heights Road sidewalk



Figure 22. Earleigh Heights Road

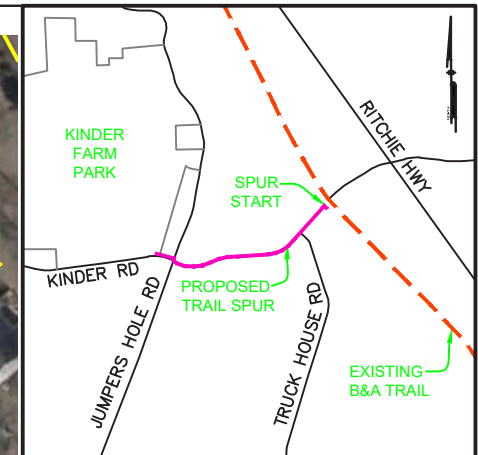


Figure 23. Existing drainage structure on Earleigh Heights Road



Figure 24. Existing open drainage ditch along Earleigh Heights Road





VICINITY MAP NOT TO SCALE

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- WIDEN EXISTING SHOULDER BY 5'
- PROPOSED ALTERNATE TRAIL
- PROPOSED RAMP
- PROPOSED TIMBER BACKED GUARDRAIL
- PROPOSED CURB
- PROPOSED RETAINING WALL
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

- CONSTRAINTS**
- A. OPEN SECTION ROAD, DRAINAGE DITCH
  - B. EXISTING DRAINAGE CHANNEL
  - C. NEED EASEMENT FROM HOA PARCEL
  - D. NEED EASEMENT FROM PROPERTY OWNER
  - E. EXISTING TRAFFIC SIGNAL EQUIPMENT



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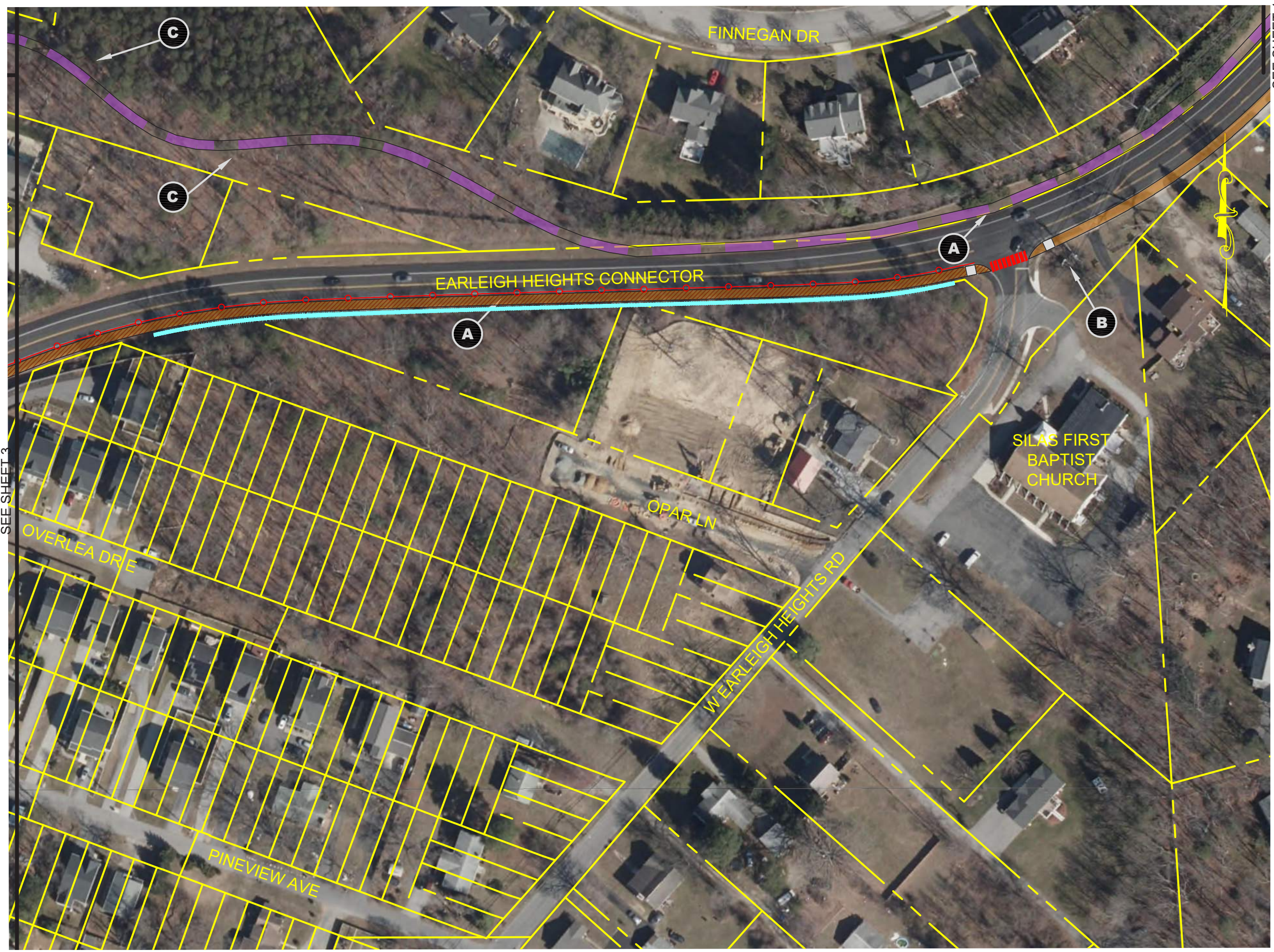


# B&A TRAIL TO KINDER FARM PARK

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS  
 Trail Spurs and Connectors Study

SEE SHEET 2





**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
WIDEN EXISTING SHOULDER BY 5'	
PROPOSED ALTERNATE TRAIL	
PROPOSED RAMP	
PROPOSED TIMBER BACKED GUARDRAIL	
PROPOSED CURB	
PROPOSED RETAINING WALL	
PROPOSED CROSSWALK	
PROPOSED PEDESTRIAN SIGNAL	

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. OPEN SECTION ROAD, DRAINAGE DITCH  
 B. EXISTING DRAINAGE CHANNEL  
 C. NEED EASEMENT FROM HOA PARCEL  
 D. NEED EASEMENT FROM PROPERTY OWNER  
 E. EXISTING TRAFFIC SIGNAL EQUIPMENT

0 100' 200'



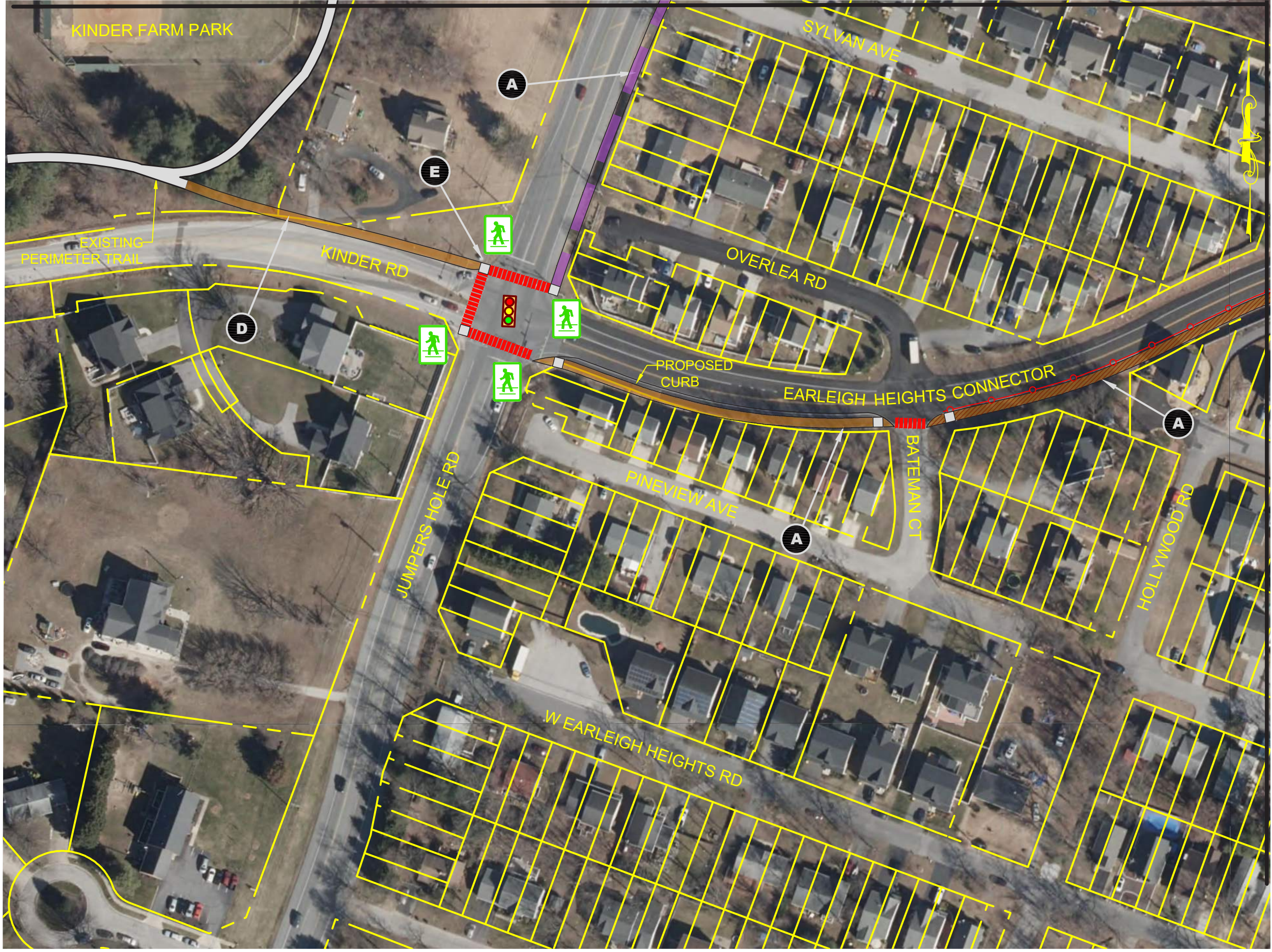
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 Sheet 2 of 4

SEE SHEET 3

SEE SHEET 1



SEE SHEET 4



**LEGEND**

- EXISTING PROPERTY BOUNDARY
- EXISTING STREAM
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- WIDEN EXISTING SHOULDER BY 5'
- PROPOSED ALTERNATE TRAIL
- PROPOSED RAMP
- PROPOSED TIMBER BACKED GUARDRAIL
- PROPOSED CURB
- PROPOSED RETAINING WALL
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

SEE SHEET 2

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

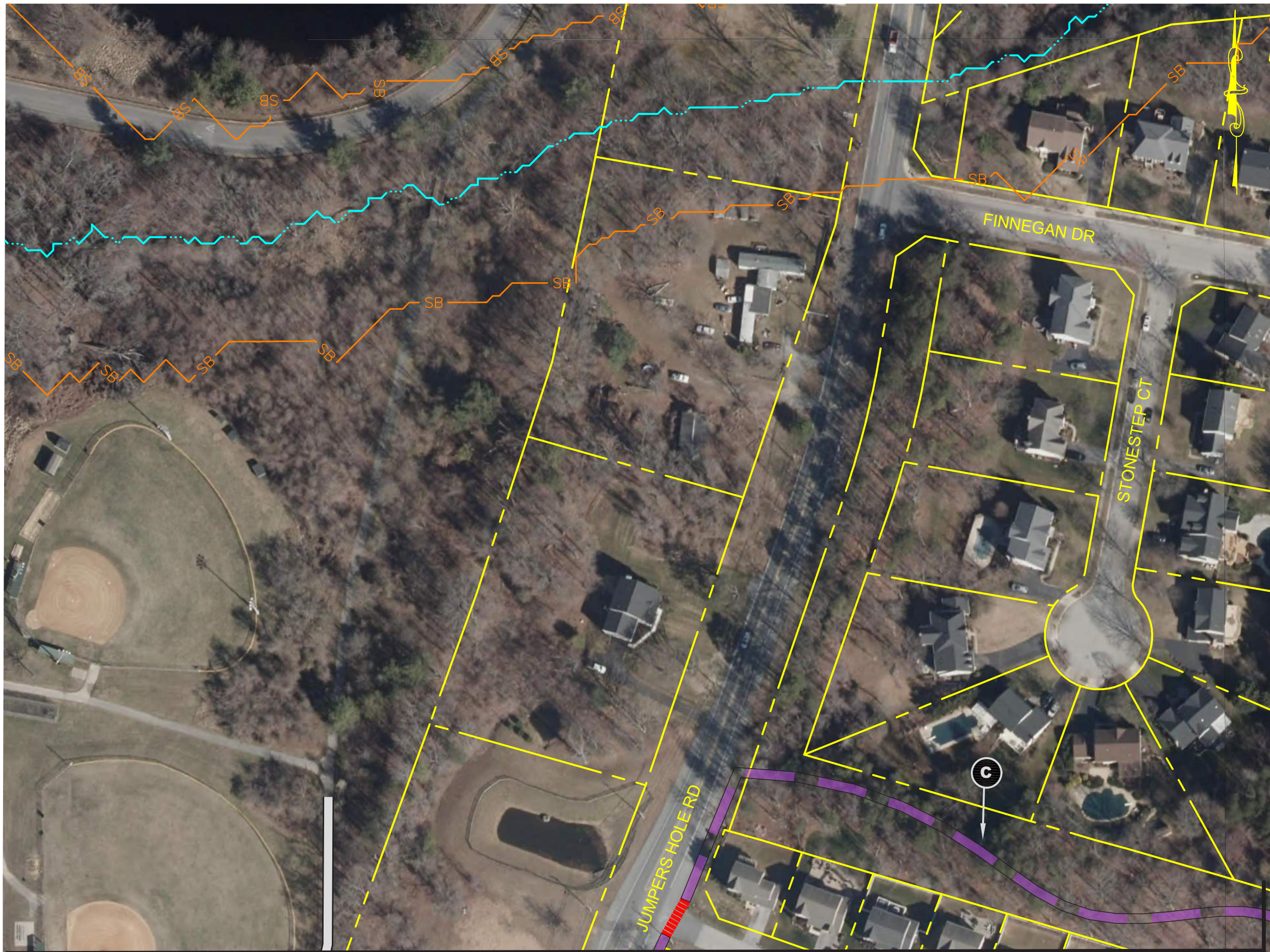
**CONSTRAINTS**  
 A. OPEN SECTION ROAD, DRAINAGE DITCH  
 B. EXISTING DRAINAGE CHANNEL  
 C. NEED EASEMENT FROM HOA PARCEL  
 D. NEED EASEMENT FROM PROPERTY OWNER  
 E. EXISTING TRAFFIC SIGNAL EQUIPMENT



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# B&A TRAIL TO KINDER FARM PARK



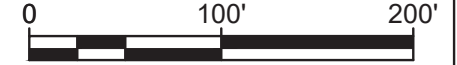


**LEGEND**

- EXISTING PROPERTY BOUNDARY: Yellow dashed line
- EXISTING STREAM: Cyan dashed line
- EXISTING STREAM BUFFER: Orange line with 'SB' labels
- EXISTING TRAFFIC SIGNAL: Red traffic light symbol
- PROPOSED TRAIL: Purple dashed line
- WIDEN EXISTING SHOULDER BY 5': Brown hatched area
- PROPOSED ALTERNATE TRAIL: Purple dashed line with white border
- PROPOSED RAMP: White square
- PROPOSED TIMBER BACKED GUARDRAIL: Red line with circles
- PROPOSED CURB: Solid black line
- PROPOSED RETAINING WALL: Cyan solid line
- PROPOSED CROSSWALK: Red dashed line
- PROPOSED PEDESTRIAN SIGNAL: Green pedestrian symbol

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. OPEN SECTION ROAD, DRAINAGE DITCH  
 B. EXISTING DRAINAGE CHANNEL  
 C. NEED EASEMENT FROM HOA PARCEL  
 D. NEED EASEMENT FROM PROPERTY OWNER  
 E. EXISTING TRAFFIC SIGNAL EQUIPMENT



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**B&A TRAIL TO KINDER FARM PARK**



## Baltimore and Annapolis Trail to Lake Waterford Park Spur

This trail spur connects Lake Waterford Park to the Baltimore and Annapolis (B&A) Trail in Pasadena. The spur is approximately 5,468 l.f. in length, and runs from the existing Lake Waterford Park, west down the north side of Pasadena Road, and then across Ritchie Highway (MD Route 2), where it would continue for a short distance along East West Highway, and then connect to the existing Baltimore and Annapolis Trail on the north side of East West Highway.

An alternate route was examined on the south side of Pasadena Road, where the trail would replace a recently installed concrete sidewalk. However, in addition to right-of-way acquisition, the alignment would have had significant utility impacts along the entire length. Utility impacts can be

minimized on the north side of Pasadena Road. The crossing of the intersection of Ritchie Highway (MD Route 2) was also studied closely. The selected crossing point appears to be the least complicated as it avoids significant drainage structures and streams located at the southwest corner Pasadena Road and Ritchie Highway.

### Constraints

- A. R/W acquisition from property owners will be required
- B. Steep slopes
- C. Potential stream and stream buffer impacts
- D. Potential Utility Impacts

### E. Existing Drainage Impacts

### F. Crossing of high volume roadway – MD Route 2

The spur includes a 10' wide asphalt trail, with multiple crosswalks and associated concrete ramps. The trail will require the acquisition of right-of-way from multiple property owners. The trail will be installed a minimum of 8' from the existing edge of pavement since the northern side of this road is an open section roadway. Some significant grading and retaining walls will be required at several locations along this route due to slopes along the roadway.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbio retention facilities, or infiltration devices. This alignment will have minimal utility impacts, but some significant utility impacts are anticipated at the intersection

of Ritchie Highway and East West Highway. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project will be exempt from forest conservation requirements. Stream and stream buffer impacts are anticipated with this project at several locations. The total estimated cost for this spur is \$2,258,161.03



Figure 25. Lake Waterford Park



Figure 26. Pasadena Road



Figure 27. Existing Sidewalk along Pasadena Road

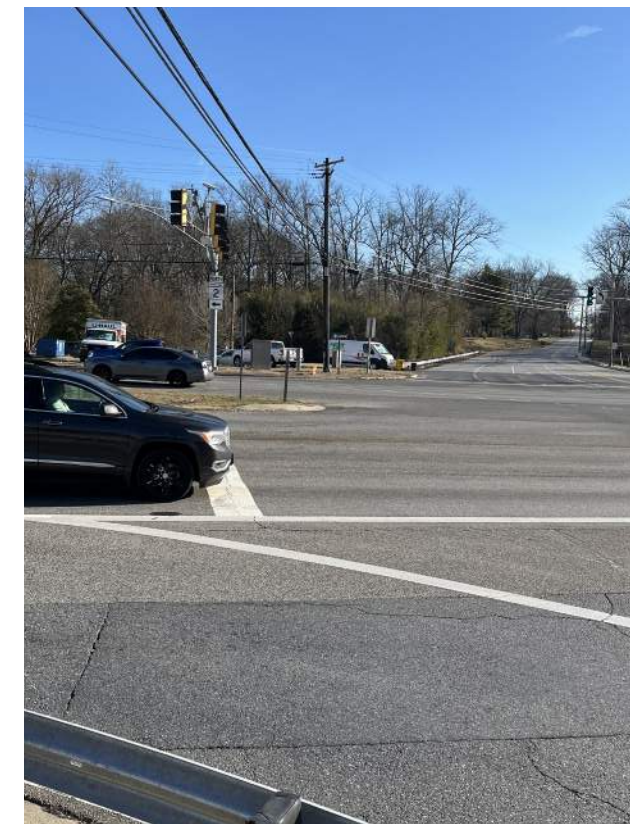
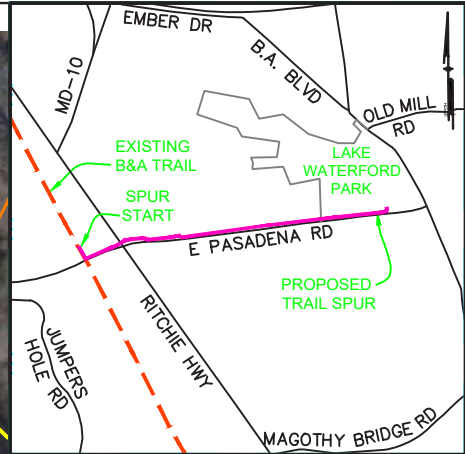


Figure 28. Pasadena Road and Ritchie Highway Intersection





VICINITY MAP  
NOT TO SCALE

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL ---
- PROPOSED RAMP
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

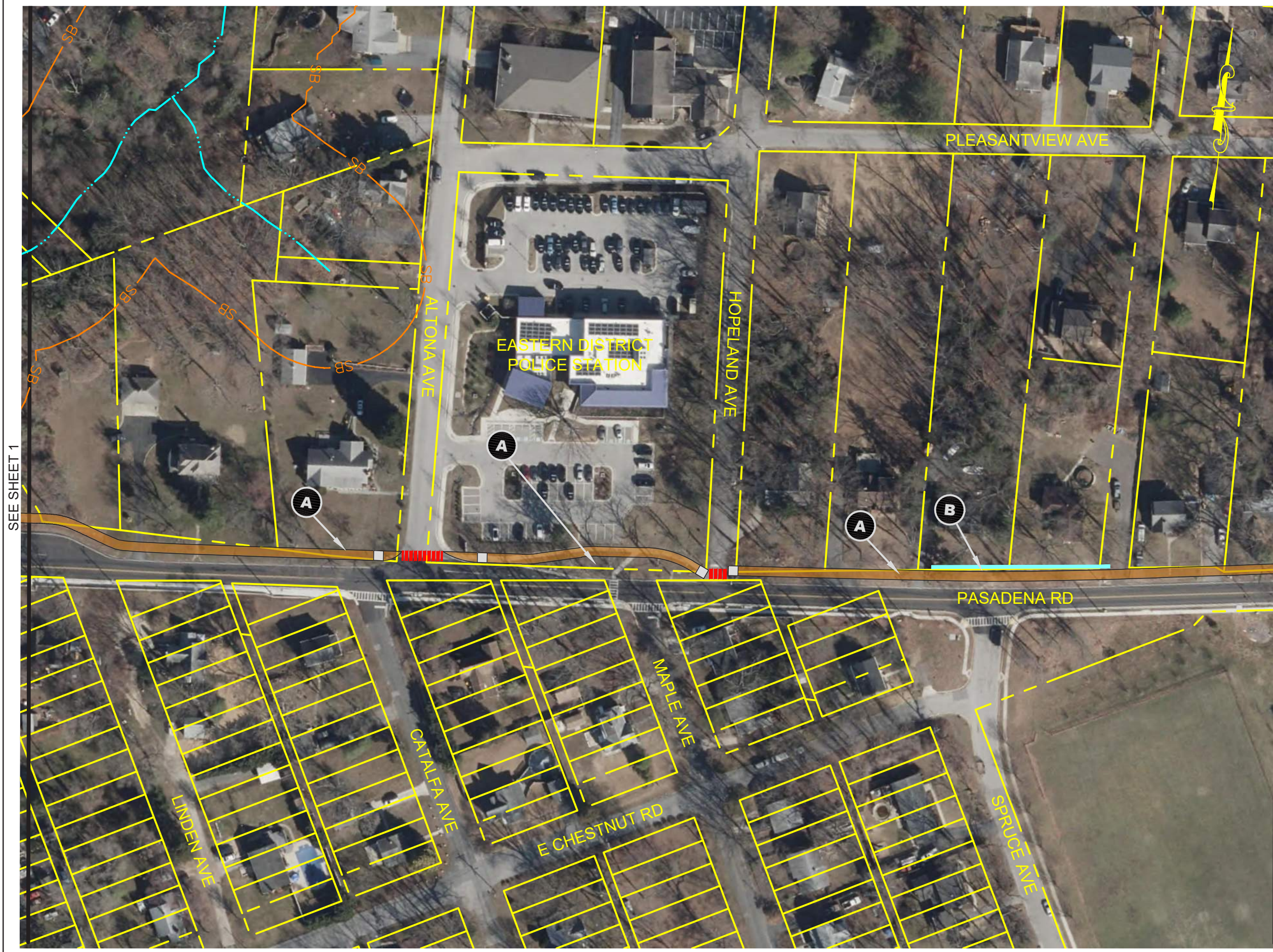
**CONSTRAINTS**  
 A. R/W ACQUISITION FROM PROPERTY OWNERS WILL BE REQUIRED  
 B. STEEP SLOPES  
 C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS  
 D. POTENTIAL UTILITY IMPACTS  
 E. EXISTING DRAINAGE IMPACTS  
 F. CROSSING OF HIGH VOLUME ROADWAY - MD ROUTE 2



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 Sheet 1 of 5

**B&A TRAIL TO LAKE WATERFORD PARK**





**LEGEND**

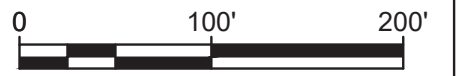
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- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED RETAINING WALL
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. R/W ACQUISITION FROM PROPERTY OWNERS WILL BE REQUIRED
- B. STEEP SLOPES
- C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS
- D. POTENTIAL UTILITY IMPACTS
- E. EXISTING DRAINAGE IMPACTS
- F. CROSSING OF HIGH VOLUME ROADWAY - MD ROUTE 2



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





SEE SHEET 1

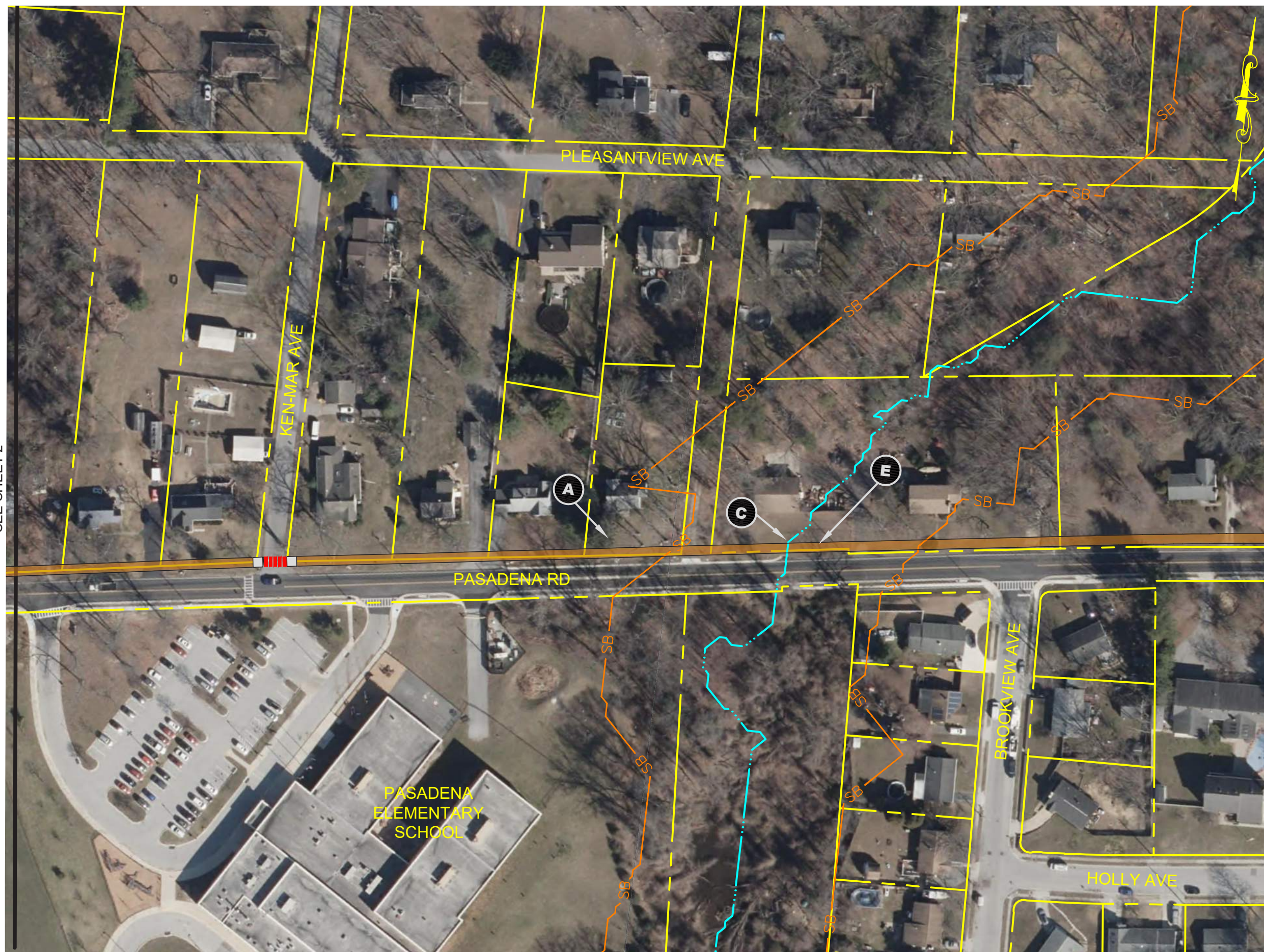
SEE SHEET 3



SEE SHEET 2

LEGEND

- EXISTING PROPERTY BOUNDARY 
- EXISTING STREAM 
- EXISTING STREAM BUFFER 
- EXISTING TRAFFIC SIGNAL 
- PROPOSED TRAIL 
- PROPOSED RAMP 
- PROPOSED RETAINING WALL 
- PROPOSED CROSSWALK 
- PROPOSED PEDESTRIAN SIGNAL 

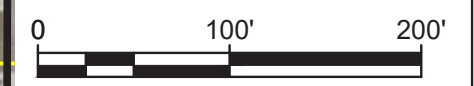


NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

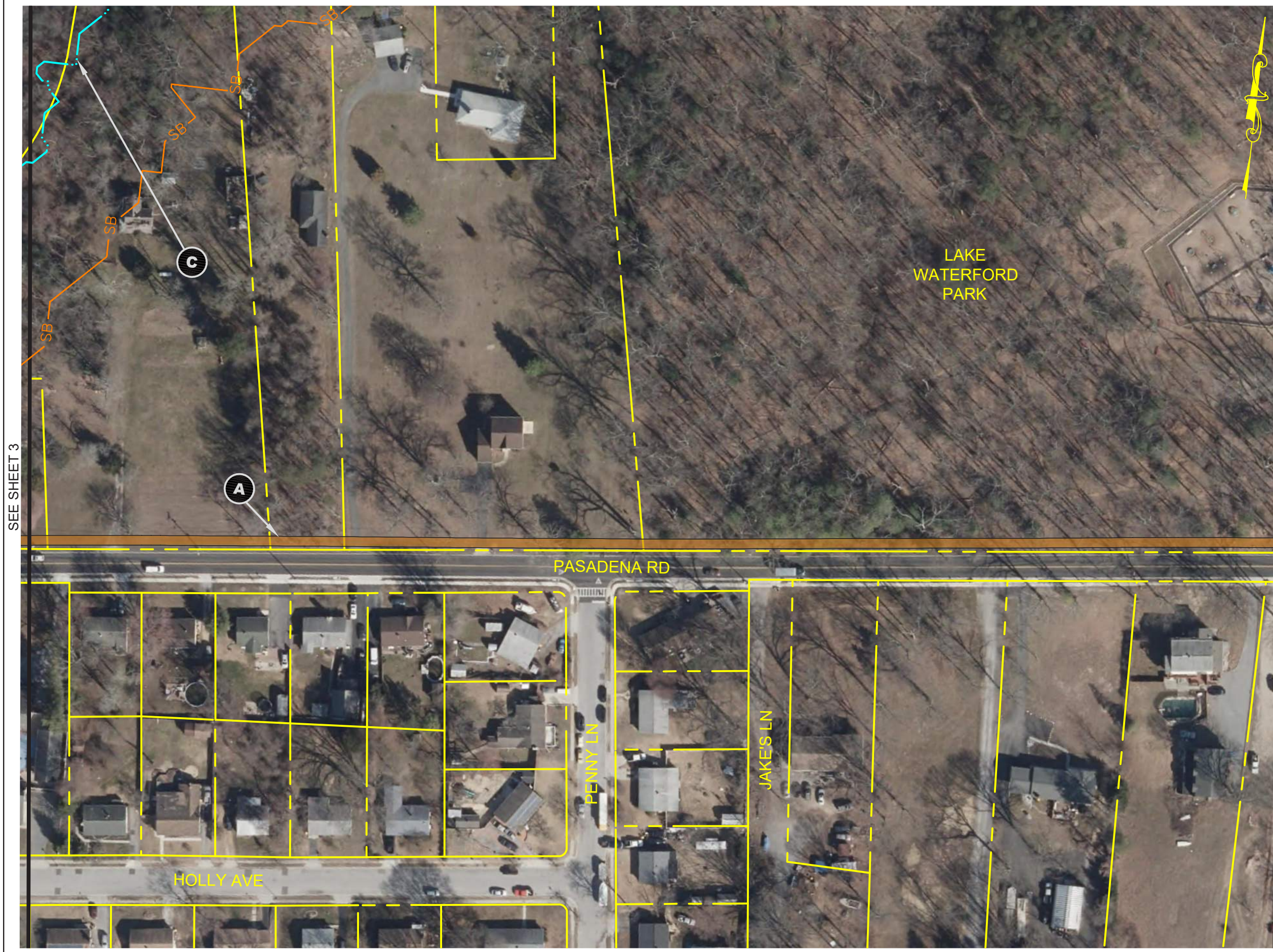
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- B. STEEP SLOPES
- C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS
- D. POTENTIAL UTILITY IMPACTS
- E. EXISTING DRAINAGE IMPACTS
- F. CROSSING OF HIGH VOLUME ROADWAY - MD ROUTE 2



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 Sheet 3 of 5

SEE SHEET 4





**LEGEND**

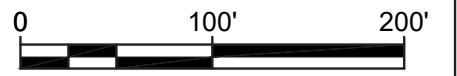
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- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED RETAINING WALL
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. R/W ACQUISITION FROM PROPERTY OWNERS WILL BE REQUIRED
- B. STEEP SLOPES
- C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS
- D. POTENTIAL UTILITY IMPACTS
- E. EXISTING DRAINAGE IMPACTS
- F. CROSSING OF HIGH VOLUME ROADWAY - MD ROUTE 2



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 Sheet 4 of 5

SEE SHEET 3

SEE SHEET 5

**B&A TRAIL TO LAKE WATERFORD PARK**



SEE SHEET 4



**LEGEND**

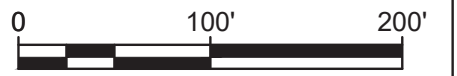
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- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED RETAINING WALL
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. R/W ACQUISITION FROM PROPERTY OWNERS WILL BE REQUIRED
- B. STEEP SLOPES
- C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS
- D. POTENTIAL UTILITY IMPACTS
- E. EXISTING DRAINAGE IMPACTS
- F. CROSSING OF HIGH VOLUME ROADWAY - MD ROUTE 2



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**B&A TRAIL TO LAKE WATERFORD PARK**



## Baltimore and Annapolis Trail to Severna Park High School Spur

This trail spur connects Severna Park High School to the Baltimore and Annapolis (B&A) Trail in Severna Park. The spur is approximately 1,140 l.f. in length, and runs from Severna Park High School, through Cool Pond Park, down Thomas Way, and over to the existing B&A Trail. Cool Pond Park is a County property, but a portion of this property appears to be used by Severna Park High School for the high school softball and baseball fields. It is not clear if there is an existing easement for this use and if permission from the Board of Education would be needed to construct a trail around the existing ball fields. The area where the trail is proposed is generally level, other than the portions between Thomas Way and the B&A Trail. Portions of the trail alignment are located within existing stream buffers.

The trail runs along existing Thomas Way for 400 l.f.; no improvements other than signage would be made in this area. Due to the low volume of traffic on this dead end street, having the trail alignment share the roadway is an acceptable solution. Due to the residential nature of this area, it is likely that acquiring Right-of-Way or easements across residents' front yards would be challenging. Therefore the concept includes the on road trail. Signage and other traffic calming devices should be considered as part of the final design to increase the safety of trail users

An alternative to this trail was examined that would run from the B&A trail along either the north or south side of Robinson Road. It was determined that this alignment would be

too difficult to design and construct due to the right-of-way that would be needed and the utilities that would have to be relocated. Right-of-way would be needed from 7-16 property owners, depending on the side of the road that was selected, and utilities would have to be relocated on either side of the road, no matter which side of the road was selected.

### Opportunities

1. Immediately adjacent to existing trail
2. Occurs largely in open areas, limited clearing and limited forest conservation impacts
3. Limited utility impacts

### Constraints

- A. Potential easement needed from Board of Education
- B. On Road Trail
- C. Impacts to Existing Stream Buffer
- D. Directional Signage needed
- E. Relocation of existing ballfield components needed

The spur includes a 10' wide asphalt trail where the trail crosses through the school property. The spur then follows Thomas Way before transitioning back to a 10' wide trail where it connects back to the existing B&A trail. The trail will be lined with a split rail fence to separate it from the existing ballfields and the adjacent houses.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project should be exempt from forest conservation requirements. Stream buffer impacts are anticipated with this project, but it does not appear that any wetland impacts would occur. The estimated cost of this spur is \$513,358.56.



Figure 29. Existing County Open Space between Thomas Way and B & A Trail



Figure 30. Thomas Way

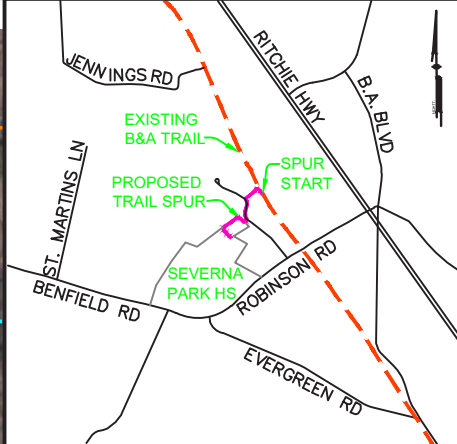
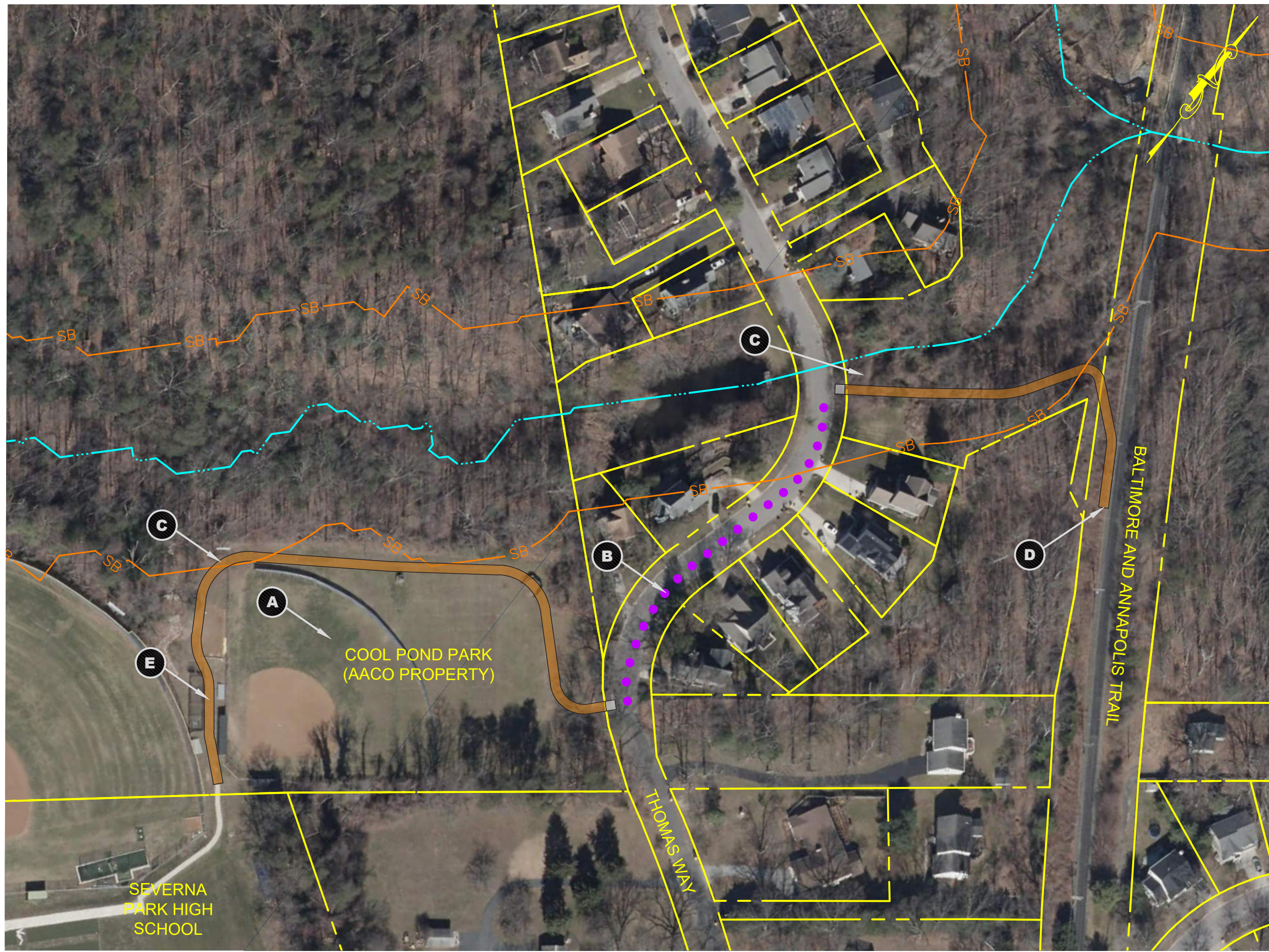


Figure 31. Connection to Severna Park HS Sidewalk and Fields



Figure 32. Existing B & A Trail





VICINITY MAP NOT TO SCALE

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- PROPOSED TRAIL ---
- PROPOSED ON ROAD TRAIL ●●●●●
- PROPOSED RAMP
- PROPOSED CROSSWALK |||||

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. POTENTIAL EASEMENT NEEDED FROM BOARD OF EDUCATION
- B. ON ROAD TRAIL
- C. IMPACTS TO EXISTING STEAM BUFFER
- D. DIRECTIONAL SIGNAGE NEEDED
- E. RELOCATION OF EXISTING BALLFIELD COMPONENTS NEEDED



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**B&A TRAIL TO SEVERNA PARK HIGH SCHOOL**



## Baltimore and Annapolis Trail to Severna Park Middle School Spur (via Kinder Farm Spur)

This trail spur connects Severna Park Middle School to the Baltimore and Annapolis (B&A) Trail via the Kinder Farm spur (see separate spur included in this study) in Severna Park. The spur is approximately 2,275 l.f. in length, and runs from Severna Park Middle School, along the west side of Jumpers Hole Road, to Kinder Farm Park. The Kinder Farm Park spur provides the connection to the B&A Trail, likely along Earleigh Heights Road. The area where the trail will run is in an open area on the west side of Jumpers Hole Road that is existing County right-of-way. Jumpers Hole Road falls into a valley in the middle of this alignment, but the steeper slopes appear to not be much over 5 percent. No alternate alignments were examined for this spur.

### Opportunities

1. Occurs almost exclusively within County R/W
2. Occurs largely in open areas, limited clearing and limited forest conservation impacts.
3. Limited utility impacts

### Constraints

- A. Drainage improvements needed
- B. Steep bank and potential grading impacts
- C. Easement/right-of-way needed
- D. Potential Utility Impacts
- E. Existing Driveway crossing



Figure 33. Jumpers Hole Road shoulder



Figure 34. Open Area Parallel to Jumpers Hole Road



Figure 35. Existing overhead utilities along Jumpers Hole Road



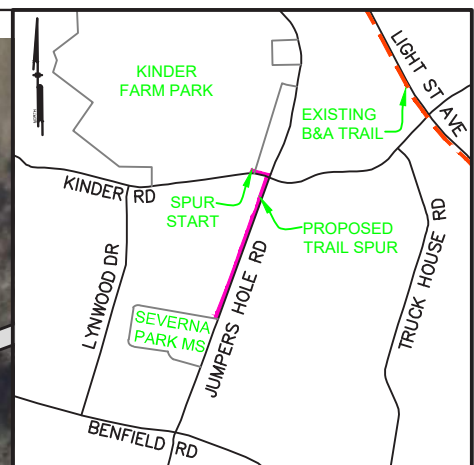
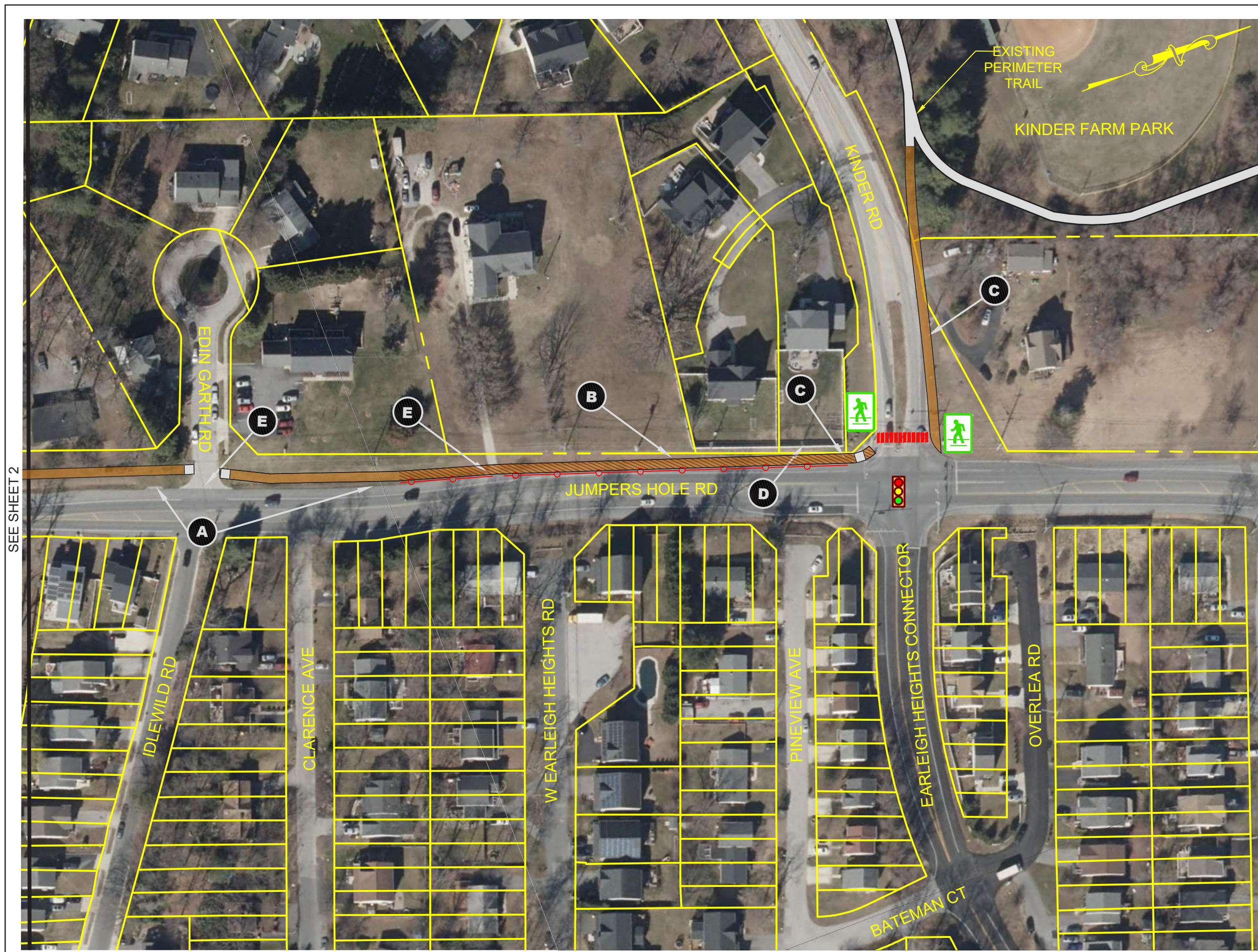
Figure 36. Jumpers Hole Road shoulder

The spur includes a 10' wide asphalt trail running in the open area on the west side of Jumpers Hole Road. Connections to the existing neighborhoods will be provided and a Rapid Rectangular Flashing Beacon (RRFB) pedestrian signal would be provided at Yorkshire Drive to allow trail users to cross Jumpers Hole Road. Pedestrian signals will also be provided at the intersection of Jumpers Hole Road and Earleigh Heights Road/Kinder Road. Some significant grading will be required at the northern end of this trail to accommodate a steep bank along the road. Grading can be reduced with the addition of a timber backed guardrail for approximately 375 l.f. that allows the existing shoulder to be utilized for a portion of the trail.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or

infiltration devices. This alignment has minimal utility impacts as there is sufficient room to accommodate the trail and the existing overhead utilities. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project should be exempt from forest conservation requirements. It does not appear that any environmental impacts would occur with this spur. The estimated cost for this spur is \$1,096,417.30.





VICINITY MAP NOT TO SCALE

LEGEND

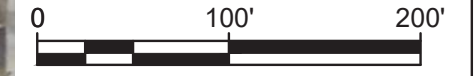
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EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
WIDEN EXISTING SHOULDER BY 5'	
PROPOSED RAMP	
PROPOSED TIMBER BACKED GUARDRAIL	
PROPOSED CROSSWALK	
PROPOSED PEDESTRIAN SIGNAL	

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

- A. DRAINAGE IMPROVEMENTS NEEDED
- B. STEEP BANK AND POTENTIAL GRADING IMPACTS
- C. EASEMENT/RIGHT-OF-WAY NEEDED
- D. POTENTIAL UTILITY IMPACTS
- E. DRIVEWAY CROSSING



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SEE SHEET 2

B&A TRAIL TO SEVERNA PARK MIDDLE SCHOOL VIA KINDER FARM SPUR



SEE SHEET 3

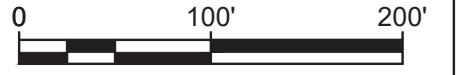
SEE SHEET 1



**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
WIDEN EXISTING SHOULDER BY 5'	
PROPOSED RAMP	
PROPOSED TIMBER BACKED GUARDRAIL	
PROPOSED CROSSWALK	
PROPOSED PEDESTRIAN SIGNAL	

- NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.
- CONSTRAINTS**  
 A. DRAINAGE IMPROVEMENTS NEEDED  
 B. STEEP BANK AND POTENTIAL GRADING IMPACTS  
 C. EASEMENT/RIGHT-OF-WAY NEEDED  
 D. POTENTIAL UTILITY IMPACTS  
 E. DRIVEWAY CROSSING



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 Sheet 2 of 3

**B&A TRAIL TO SEVERNA PARK MIDDLE SCHOOL VIA KINDER FARM SPUR**





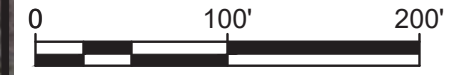
**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
WIDEN EXISTING SHOULDER BY 5'	
PROPOSED RAMP	
PROPOSED TIMBER BACKED GUARDRAIL	
PROPOSED CROSSWALK	
PROPOSED PEDESTRIAN SIGNAL	

SEE SHEET 2

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

- CONSTRAINTS**
- A. DRAINAGE IMPROVEMENTS NEEDED
  - B. STEEP BANK AND POTENTIAL GRADING IMPACTS
  - C. EASEMENT/RIGHT-OF-WAY NEEDED
  - D. POTENTIAL UTILITY IMPACTS
  - E. DRIVEWAY CROSSING



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**B&A TRAIL TO SEVERNA PARK MIDDLE SCHOOL VIA KINDER FARM SPUR**



## Broadneck Trail to Arnold Park Spur

This trail spur connects Arnold Park to the Broadneck Peninsula Trail in Arnold. The spur is approximately 1,075 l.f. in length, and runs from a trail connection within Arnold Park, out of the park north to College Parkway, and then west along College Parkway where it crosses Shore Acres Road. From there the trail crosses College Parkway to connect to the Broadneck Peninsula Trail.

An alternative route for this spur along Jones Station Road and Shore Acres Road was studied. This route is currently an open section road with variable width shoulders. Development of a trail along this route would require the acquisition of right of way from a significant number of property owners, significant road improvements and would impact overhead utilities.

### Constraints

- A. Tree Clearing
- B. Steep Slopes
- C. Crossing of College Parkway
- D. Easement/Right-Of-Way Needed
- E. Existing Ballfields

The spur includes a 10' wide asphalt trail, with two crosswalks and associated concrete ramps. The trail will require the acquisition of right-of-way to get out to College Parkway, and then likely along the south side of College Parkway. Significant grading and clearing will be required where the trail goes out to College Parkway. The crossing of College Parkway will require the addition of pedestrian RRFB signals to alert traffic to the presence of pedestrians. These will be similar to the signals installed at the Broadneck Park entrance.

Stormwater management for this spur would likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbio retention facilities, or

infiltration devices. This alignment will have minimal utility impacts. It is very likely that this alignment will result in more than 20,000 sf of forest clearing; therefore, compliance with the forest conservation requirements will be needed. The total estimated cost for this spur is \$477,219.60.



Figure 37. Jones Station Road



Figure 38. Existing Access to Arnold Park from Jones Station Road

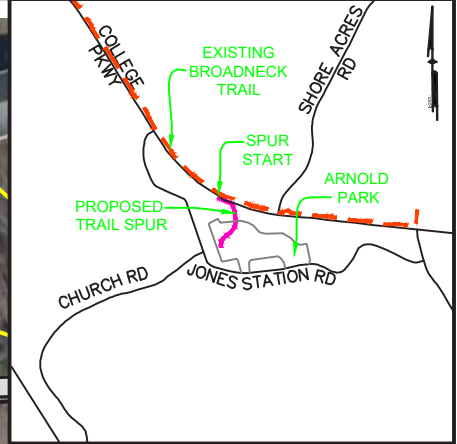
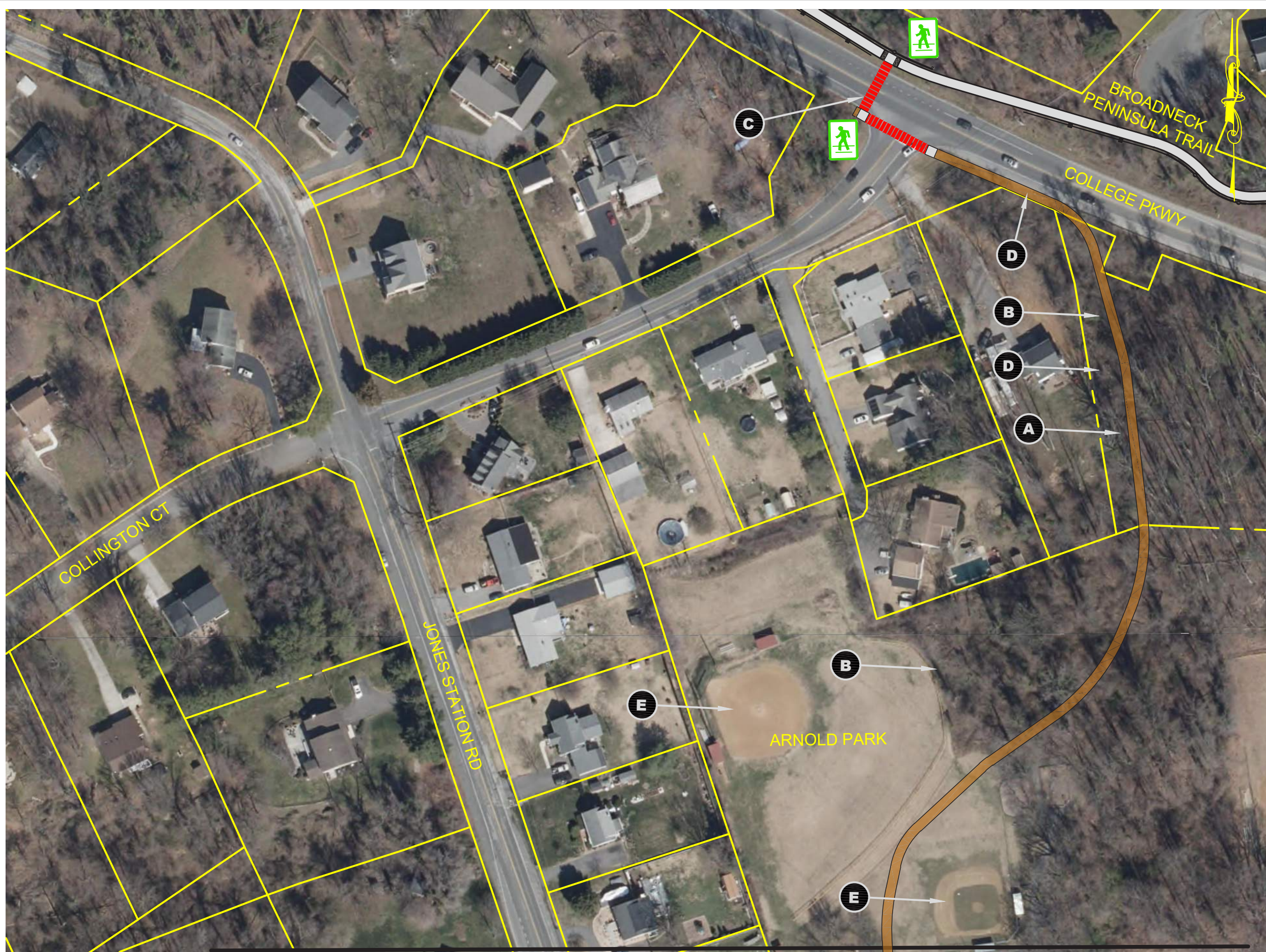


Figure 39. Arnold Park Fields



Figure 40. Existing Woods along Spur Alignment





VICINITY MAP NOT TO SCALE

**LEGEND**

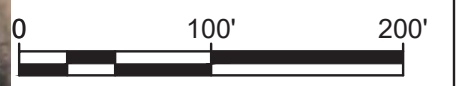
- EXISTING PROPERTY BOUNDARY ---
- BROADNECK TRAIL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. TREE CLEARING
- B. STEEP SLOPES
- C. CROSSING OF COLLEGE PARKWAY
- D. EASEMENT/RIGHT-OF-WAY NEEDED
- E. EXISTING BALLFIELDS



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SEE SHEET 2

**BROADNECK TRAIL TO ARNOLD PARK**



SEE SHEET 1



**LEGEND**

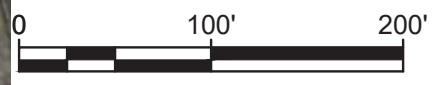
- EXISTING PROPERTY BOUNDARY
- BROADNECK TRAIL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. TREE CLEARING
- B. STEEP SLOPES
- C. CROSSING OF COLLEGE PARKWAY
- D. EASEMENT/RIGHT-OF-WAY NEEDED
- E. EXISTING BALLFIELDS



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# BROADNECK TRAIL TO ARNOLD PARK



## Broadneck Trail to Belvedere Elementary School Spur

This trail spur connects Belvedere Elementary School to the Broadneck Peninsula Trail in Arnold. The spur is approximately 3,645 l.f. in length, and runs from a trail connection at the Anne Arundel County Parks and Recreation parking lot in front of Belvedere Elementary School, south down Mago Vista Drive, and then west to the intersection of College Parkway and Jones Station Road. The trail spur is at least partially located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

An alternative alignment would send the trail east from the intersection of Mago Vista Road and Jones Station Road to the intersection of College Parkway and Jones Station Road. Though this route would connect the trail

to some additional existing neighborhoods, this route is less plausible due to property that would have to be acquired and utility relocations that would be needed.

### Opportunities

1. County owns much of the necessary right-of-way

### Constraints

- A. Right-of-Way is very close to Road in some areas
- B. Steep slopes
- C. Potential Stream and Stream Buffer impacts – Mill Creek
- D. Existing On Street Parking would be Eliminated

- E. Potential Utility Pole Impacts
- F. Existing Drainage Impacts
- G. Permission needed from Board of Education
- H. Chesapeake Bay Critical Area

The spur includes a 10' wide asphalt trail, with five crosswalks and associated concrete ramps. The trail can largely occur within the existing County right-of-way. However, along Mago Vista the trail will eliminate existing on street parking to minimize the need for additional right-of-way acquisition. This could be contentious. The trail will be installed in place of the existing sidewalk, and the existing curb will be removed and reinstalled closer to the travel lane, eliminating the on street parking. Additional right-of-way or easements may be needed in some areas. Significant grading and retaining

walls will need to be installed where the trail crosses Mill Creek.

Stormwater management for this spur would likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have some utility impacts. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project will be exempt from forest conservation requirements. Stream and stream buffer impacts are anticipated with this project where the project crosses Mill Creek at Jones Station Road. The total estimated cost for this spur is \$1,582,541.06.



Figure 41. Existing Mago Vista Road parking



Figure 42. Jones Station Road sidewalk



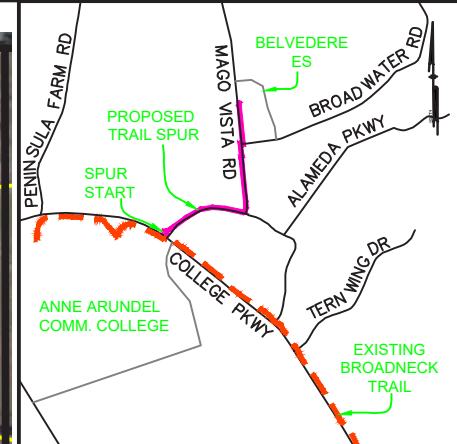
Figure 43. Jones Station Road shoulder



Figure 44. Mago Vista Road sidewalk



SEE SHEET 3



**VICINITY MAP  
NOT TO SCALE**

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- BROADNECK TRAIL ---
- PROPOSED TRAIL ---
- PROPOSED ALTERNATE TRAIL ---
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK
- PROPOSED RAMP
- PROPOSED CURB ---
- CRITICAL AREA BUFFER CAB

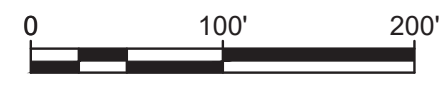
- CONSTRAINTS**
- A. R/W IS VERY CLOSE TO ROAD IN SOME AREAS
  - B. STEEP SLOPES
  - C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS - MILL CREEK
  - D. EXISTING ON STREET PARKING WOULD BE ELIMINATED
  - E. POTENTIAL UTILITY POLE IMPACTS
  - F. EXISTING DRAINAGE IMPACTS
  - G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
  - H. CHESAPEAKE BAY CRITICAL AREA



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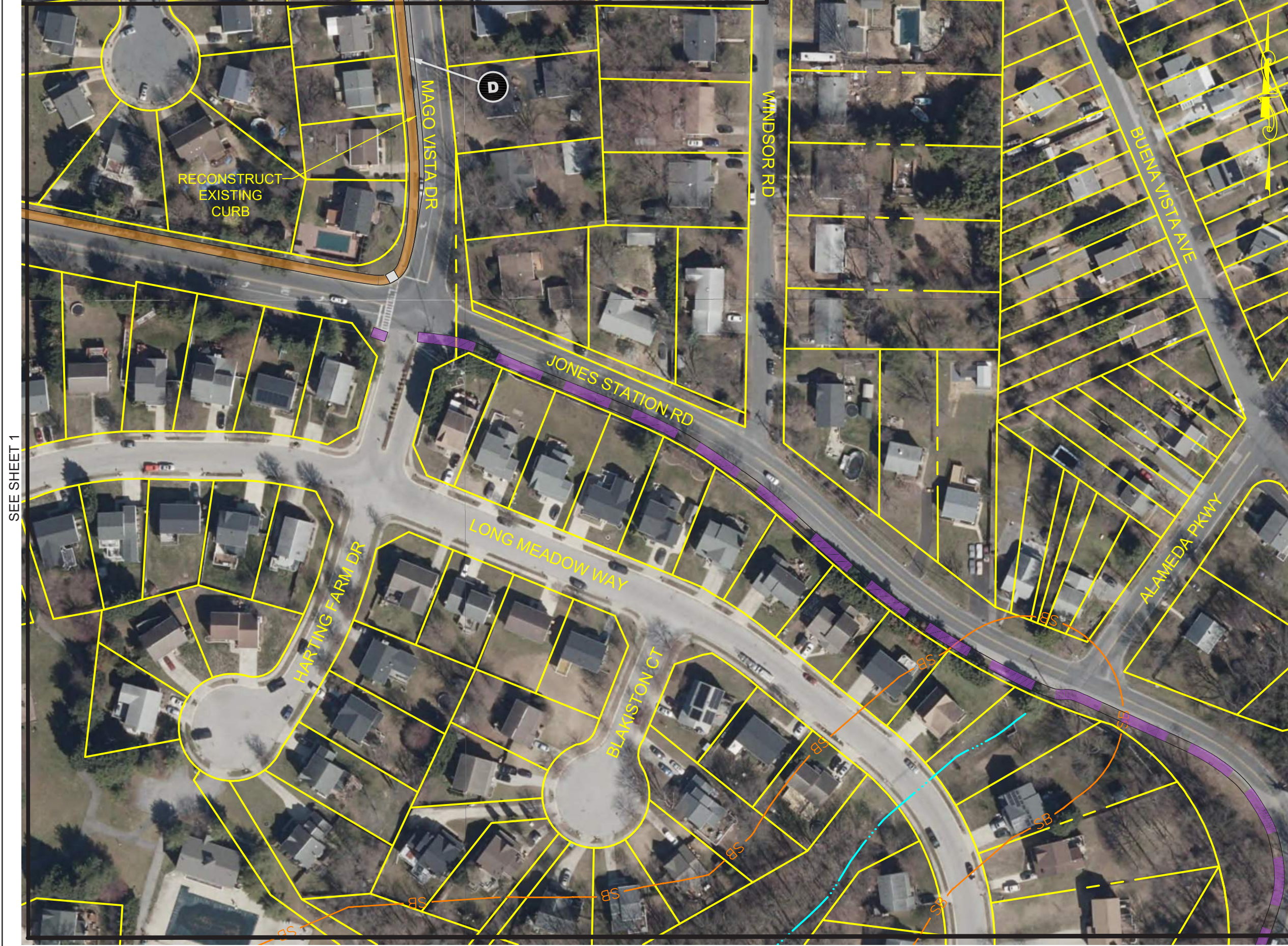
**NOTES**  
1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY STUDY

**BROADNECK TRAIL TO BELVEDERE ELEMENTARY SCHOOL**





SEE SHEET 3

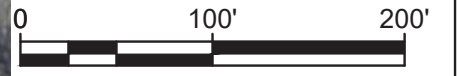


**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- BROADNECK TRAIL ---
- PROPOSED TRAIL ---
- PROPOSED ALTERNATE TRAIL ---
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK
- PROPOSED RAMP
- PROPOSED CURB ---
- CRITICAL AREA BUFFER --- CAB

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

- CONSTRAINTS**
- A. R/W IS VERY CLOSE TO ROAD IN SOME AREAS
  - B. STEEP SLOPES
  - C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS - MILL CREEK
  - D. EXISTING ON STREET PARKING WOULD BE ELIMINATED
  - E. POTENTIAL UTILITY POLE IMPACTS
  - F. EXISTING DRAINAGE IMPACTS
  - G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
  - H. CHESAPEAKE BAY CRITICAL AREA



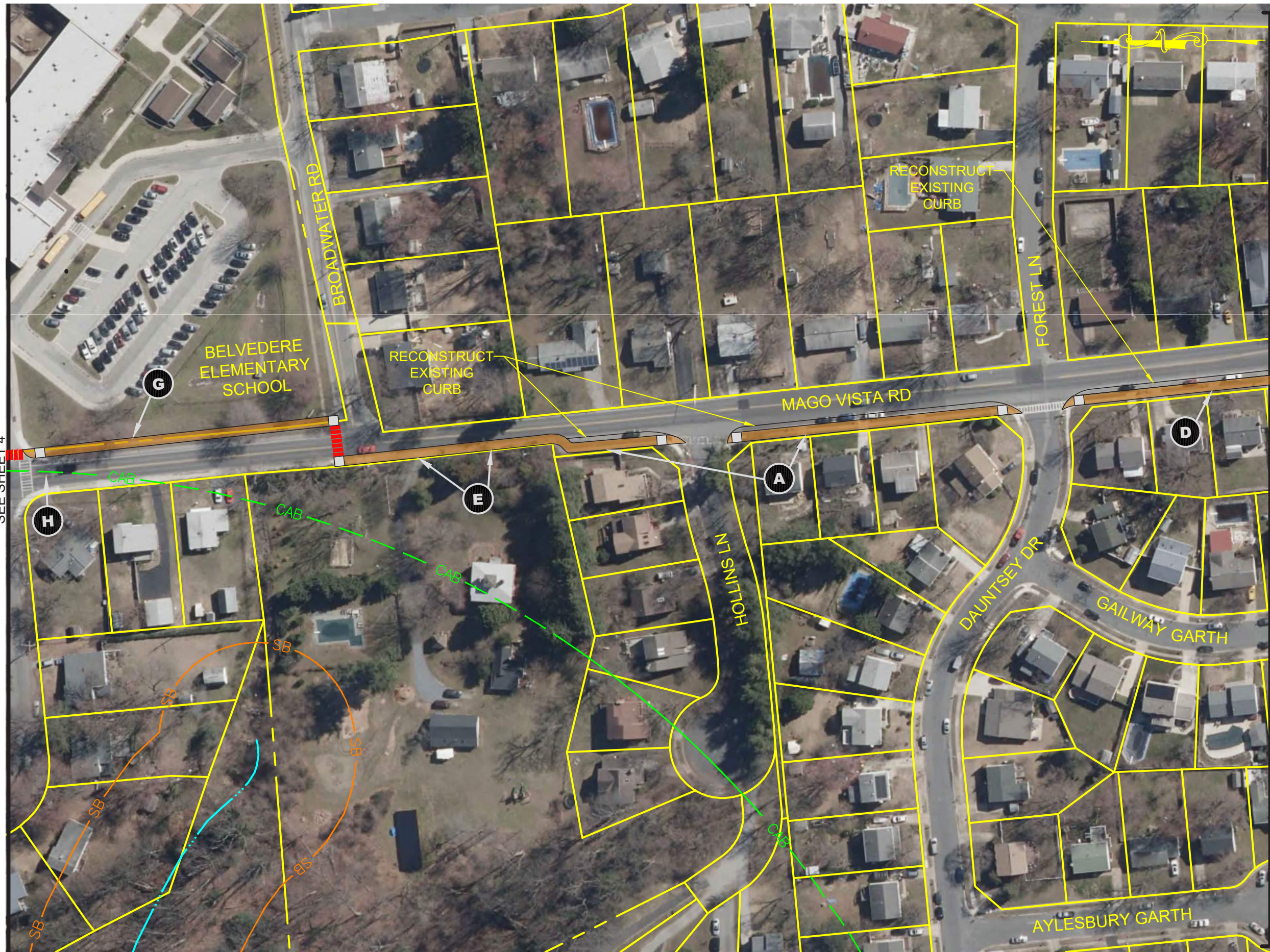
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 Sheet 2 of 6

SEE SHEET 1

SEE SHEET 5

# BROADNECK TRAIL TO BELVEDERE ELEMENTARY SCHOOL



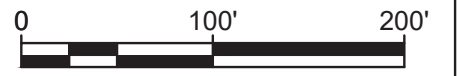


**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- BROADNECK TRAIL
- PROPOSED TRAIL
- PROPOSED ALTERNATE TRAIL
- PROPOSED RETAINING WALL
- PROPOSED CROSSWALK
- PROPOSED RAMP
- PROPOSED CURB
- CRITICAL AREA BUFFER CAB

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

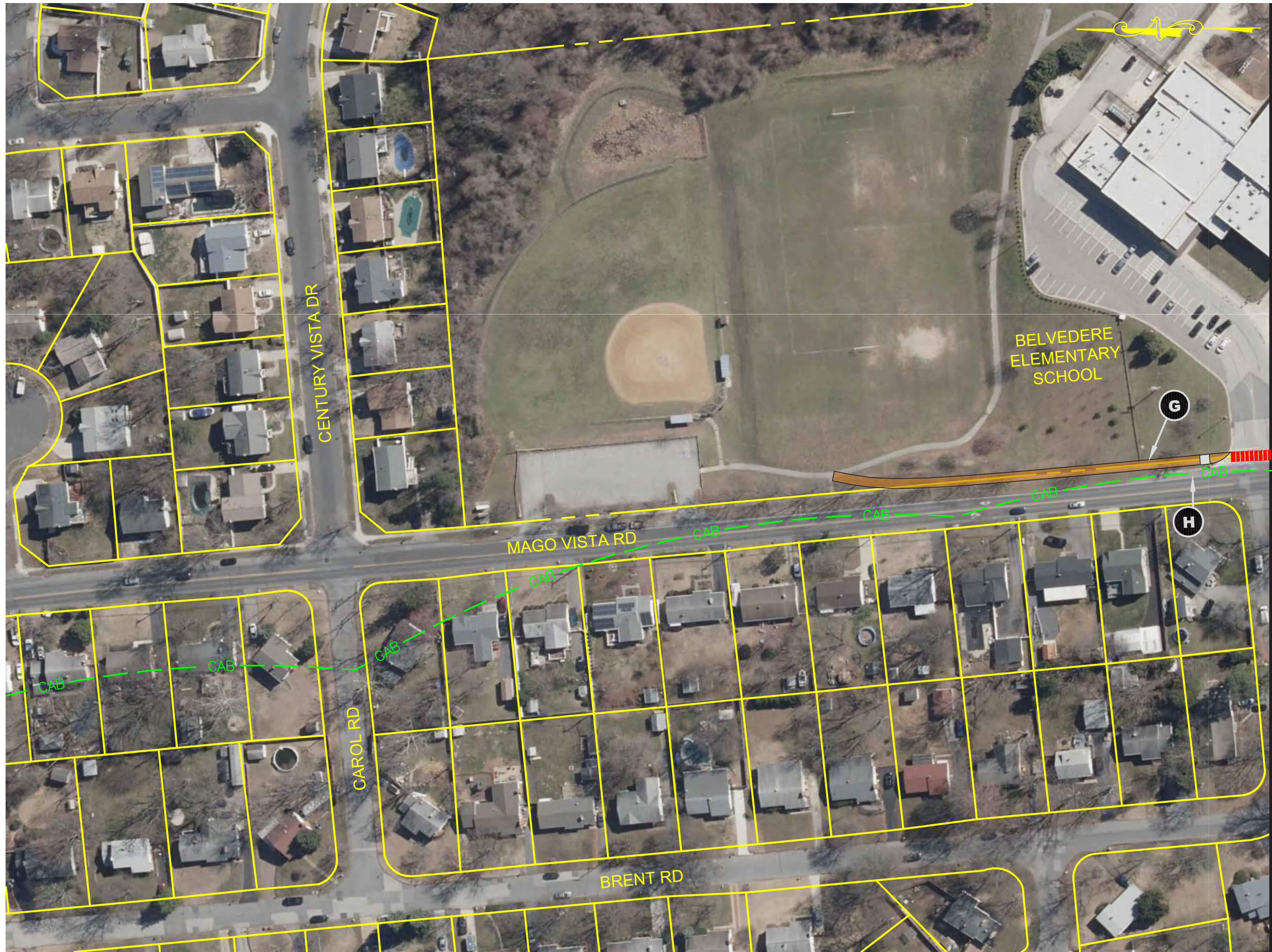
- CONSTRAINTS**
- A. RW IS VERY CLOSE TO ROAD IN SOME AREAS
  - B. STEEP SLOPES
  - C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS - MILL CREEK
  - D. EXISTING ON STREET PARKING WOULD BE ELIMINATED
  - E. POTENTIAL UTILITY POLE IMPACTS
  - F. EXISTING DRAINAGE IMPACTS
  - G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
  - H. CHESAPEAKE BAY CRITICAL AREA



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**BROADNECK TRAIL TO BELVEDERE ELEMENTARY SCHOOL**





### LEGEND

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- BROADNECK TRAIL ---
- PROPOSED TRAIL ---
- PROPOSED ALTERNATE TRAIL ---
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK
- PROPOSED RAMP
- PROPOSED CURB ---
- CRITICAL AREA BUFFER CAB ---

SEE SHEET 3

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

- CONSTRAINTS**
- A. R/W IS VERY CLOSE TO ROAD IN SOME AREAS
  - B. STEEP SLOPES
  - C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS - MILL CREEK
  - D. EXISTING ON STREET PARKING WOULD BE ELIMINATED
  - E. POTENTIAL UTILITY POLE IMPACTS
  - F. EXISTING DRAINAGE IMPACTS
  - G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
  - H. CHESAPEAKE BAY CRITICAL AREA



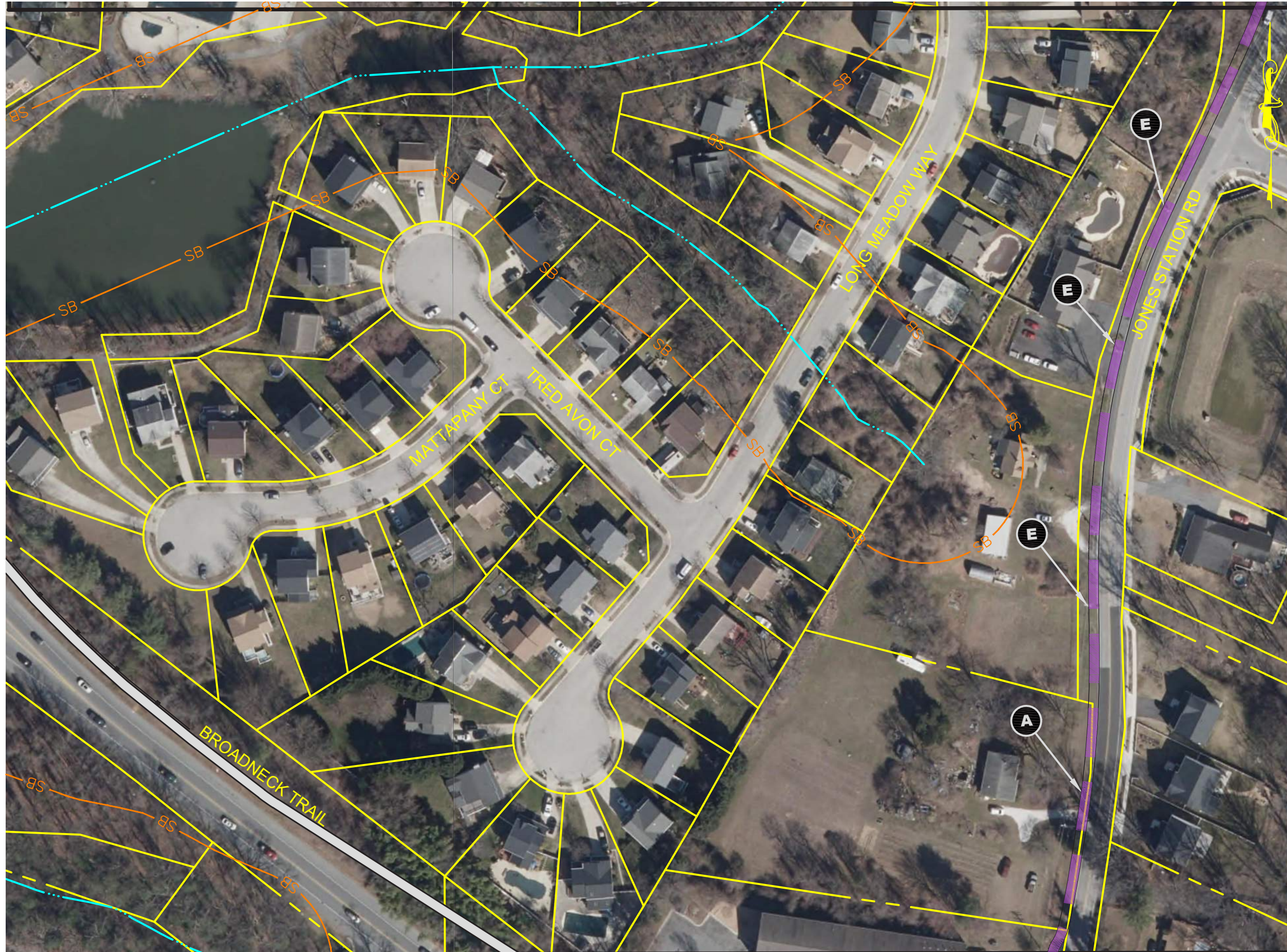
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## BROADNECK TRAIL TO BELVEDERE ELEMENTARY SCHOOL



SEE SHEET 2

SEE SHEET 6

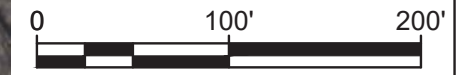


**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- BROADNECK TRAIL
- PROPOSED TRAIL ---
- PROPOSED ALTERNATE TRAIL ---
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK
- PROPOSED RAMP
- PROPOSED CURB ---
- CRITICAL AREA BUFFER CAB

**NOTES**  
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- CONSTRAINTS**
- A. R/W IS VERY CLOSE TO ROAD IN SOME AREAS
  - B. STEEP SLOPES
  - C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS - MILL CREEK
  - D. EXISTING ON STREET PARKING WOULD BE ELIMINATED
  - E. POTENTIAL UTILITY POLE IMPACTS
  - F. EXISTING DRAINAGE IMPACTS
  - G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
  - H. CHESAPEAKE BAY CRITICAL AREA



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**BROADNECK TRAIL TO BELVEDERE ELEMENTARY SCHOOL**



SEE SHEET 5



**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- BROADNECK TRAIL
- PROPOSED TRAIL
- PROPOSED ALTERNATE TRAIL
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK
- PROPOSED RAMP
- PROPOSED CURB
- CRITICAL AREA BUFFER --- CAB ---

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

- CONSTRAINTS**
- A. R/W IS VERY CLOSE TO ROAD IN SOME AREAS
  - B. STEEP SLOPES
  - C. POTENTIAL STREAM AND STREAM BUFFER IMPACTS - MILL CREEK
  - D. EXISTING ON STREET PARKING WOULD BE ELIMINATED
  - E. POTENTIAL UTILITY POLE IMPACTS
  - F. EXISTING DRAINAGE IMPACTS
  - G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
  - H. CHESAPEAKE BAY CRITICAL AREA



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**BROADNECK TRAIL TO BELVEDERE ELEMENTARY SCHOOL**



## Broadneck Trail to Broadneck Elementary School Spur

This trail spur connects Broadneck Elementary School to the Broadneck Peninsula Trail in Arnold. The trail is approximately 3,550 l.f. in length, and runs from the southwestern Broadneck Elementary School parking lot, west along Shore Acres Road, and out to the intersection of College Parkway and Shore Acres Road where it connects to the Broadneck Peninsula Trail, currently under construction.

The trail spur is at least partially located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

### Opportunities

1. Serves as a connector for multiple neighborhoods near Broadneck Elementary
2. Existing pavement in Shore Acres Road

### Constraints

- A. Steep slopes
- B. Storm drain reconfiguration required
- C. Potential utility conflict
- D. R/W is very close to road in some areas
- E. Permission needed from the Board of Education



Figure 45. Existing Utilities to be relocated along Shore Acres Road



Figure 46. Shore Acres Road

The spur includes a 10' wide asphalt trail, with two crosswalks and associated concrete ramps. The trail is largely within the existing County right-of-way, although there are several areas where additional right-of-way may be required. Additionally, permission from the Board of Education would be needed to construct the alternate trail.

In order to avoid existing slopes, reduce clearing, and minimize additional impervious area, this trail will be largely constructed within the existing roadway. There is a significant amount of unused pavement within the shoulder of Shore Acres Road, that when combined with the existing sidewalk, could provide the area needed for the trail.

Utilizing this method of construction will require reconstruction of some of the curb and gutter along this spur, but will result in nearly the same amount of impervious area that exists today, and will significantly reduce



Figure 47. Existing sidewalk along Shore Acres Road

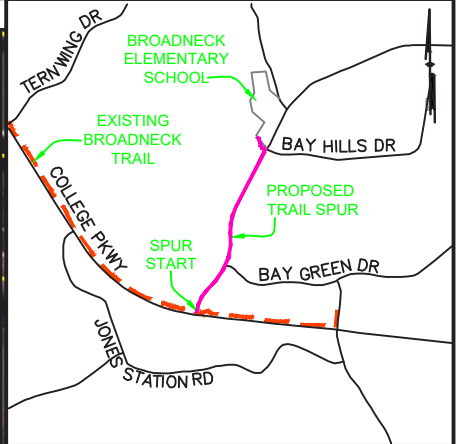
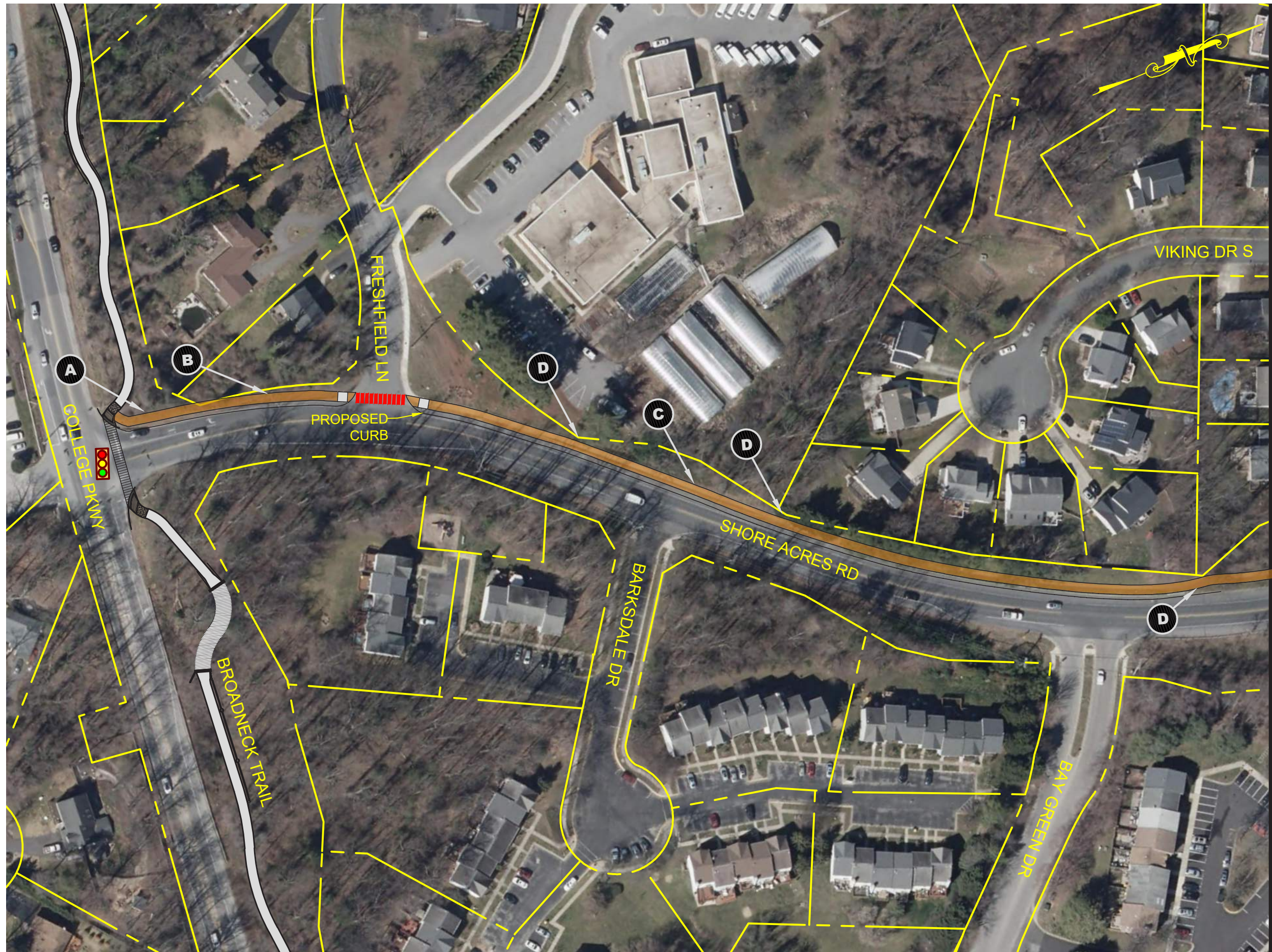
the need for property acquisition, and offsite clearing and grading.

Stormwater management for this trail would be accomplished by small microbioretention facilities or swales alongside the trail, and non-rooftop disconnect credits where possible. Drainage improvements along Shore Acres Road would be required in some areas to accommodate the trail. Generally utility conflicts are minimal, but there is a BGE transformer near College Parkway that would need to be relocated or worked around. Clearing for this project would likely be less than 20,000 sf so no additional forest conservation would be required. No environmental impacts are anticipated with this project. The estimated cost of this spur is \$1,249,152.84.



Figure 48. Shore Acres Road shoulder





VICINITY MAP  
NOT TO SCALE

LEGEND

- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING PROPERTY BOUNDARY
- EXISTING TRAFFIC SIGNAL
- BROADNECK TRAIL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED CURB
- PROPOSED CROSSWALK

SEE SHEET 2

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

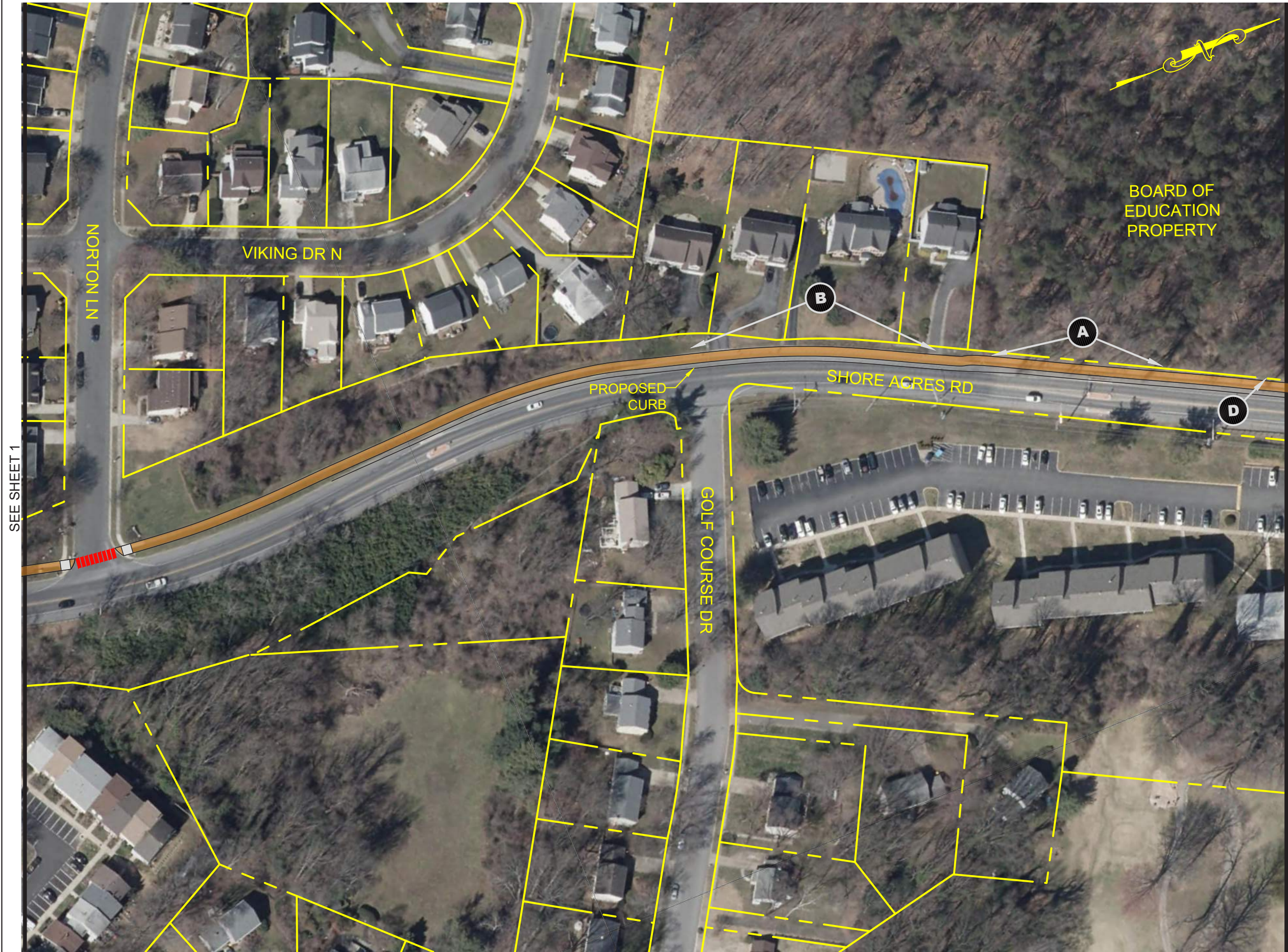
- A. STEEP SLOPES
- B. STORM DRAIN RECONFIGURATION REQUIRED
- C. POTENTIAL UTILITY CONFLICT
- D. R/W IS VERY CLOSE TO ROAD IN SOME AREAS
- E. PERMISSION NEEDED FROM THE BOARD OF EDUCATION



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 Sheet 1 of 3

# BROADNECK TRAIL TO BROADNECK ELEMENTARY SCHOOL



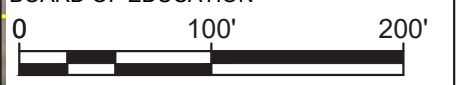


### LEGEND

- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED CROSSWALK
- EXISTING TRAFFIC SIGNAL
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING PROPERTY BOUNDARY
- BROADNECK TRAIL
- PROPOSED CURB

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. STEEP SLOPES  
 B. STORM DRAIN RECONFIGURATION REQUIRED  
 C. POTENTIAL UTILITY CONFLICT  
 D. R/W IS VERY CLOSE TO ROAD IN SOME AREAS  
 E. PERMISSION NEEDED FROM THE BOARD OF EDUCATION












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## BROADNECK TRAIL TO BROADNECK ELEMENTARY SCHOOL





**LEGEND**

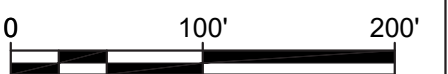
- PROPOSED TRAIL 
- PROPOSED RAMP 
- PROPOSED CROSSWALK 
- EXISTING TRAFFIC SIGNAL 
- EXISTING STREAM 
- EXISTING STREAM BUFFER 
- EXISTING PROPERTY BOUNDARY 
- BROADNECK TRAIL 
- PROPOSED CURB 

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. STEEP SLOPES
- B. STORM DRAIN RECONFIGURATION REQUIRED
- C. POTENTIAL UTILITY CONFLICT
- D. R/W IS VERY CLOSE TO ROAD IN SOME AREAS
- E. PERMISSION NEEDED FROM THE BOARD OF EDUCATION



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**BROADNECK TRAIL TO BROADNECK ELEMENTARY SCHOOL**



## Broadneck Trail to Cape Saint Claire Elementary School Spur

This trail spur connects Cape Saint Claire Elementary School on Blue Ridge Road to the Broadneck Peninsula Trail in Annapolis. The spur is approximately 2,234 l.f. in length, and runs from Cape Saint Claire Elementary School, through Goshen Farm, down Radoff Road, and out to Cape Saint Claire Road, where it connects to the existing Broadneck Peninsula Trail that runs on the west side of Cape St. Claire Road. Both properties are owned by the Board of Education, and the Goshen Farm Preservation Society has a lease on the southern property. Easements and/or agreements would be needed from these groups. The area where the trail would run is generally level, other than portions of the existing driveway to Goshen Farm. Portions of the trail alignment are located in the Chesapeake Bay Critical Area. This trail spur is located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

An alternative alignment of this spur was briefly examined. The alternate would run from the intersection of Cape St. Claire Road and Hilltop Drive, where the Broadneck Peninsula Trail terminates, up Hilltop Drive to Blue Ridge Drive, and then along Blue Ridge Drive to the elementary school. This alternate would involve numerous property acquisitions (approximately 13 properties), as well as overhead utility impacts, and is not a practical alternative when compared to the spur that has been proposed. Most of the properties impacted by this alternate are small residential lots, with limited front yards, where a loss of property would be a significant impact.

### Opportunities

1. Immediately adjacent to Goshen Farm
2. Already existing trail and driveway alignment to follow
3. Occurs largely in open areas, limited

clearing and limited forest conservation impacts.

### 4. Limited utility impacts

#### Constraints

- A. Steep slopes
- B. R/W belongs to Board of Education and Goshen Farm; easement will be needed
- C. Existing Goshen Farm gate is a possible obstruction
- D. Directional signage needed
- E. Will need a barrier at entrance to limit vehicular access
- F. Regrading of driveway will be needed to maintain 5 percent slope
- G. Permission needed from the Board of Education
- H. Chesapeake Bay Critical Area

The spur includes a 10' wide asphalt trail where the trail crosses through the school property and into Goshen Farm, and then transitions to a 12' wide asphalt driveway where it follows the current Goshen Farm

driveway (Radoff Road). The trail and driveway share the same space. Due to the volume of traffic on this driveway, it is not anticipated that a shared driveway/trail will be an issue. The spur follows the historical Goshen Farm/Radoff property driveway where it cross the elementary school athletic fields. The trail is lined with shade tree plantings and a split rail fence. Breaks occur periodically in the fence to allow access to both sides of the trail.

Stormwater management for this spur is likely going to be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project would be exempt from forest conservation requirements. No environmental impacts are anticipated with this project. The total estimated cost of this spur is \$737,201.09.



Figure 49. Blue Ridge Drive at Spur terminus



Figure 50. Cape St. Claire Elementary Fields



Figure 51. Existing Trail on Goshen Farm

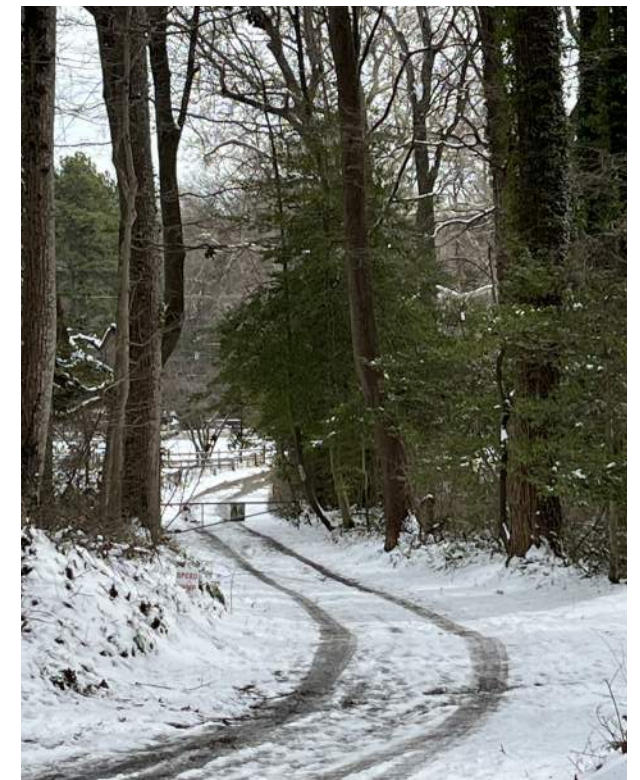
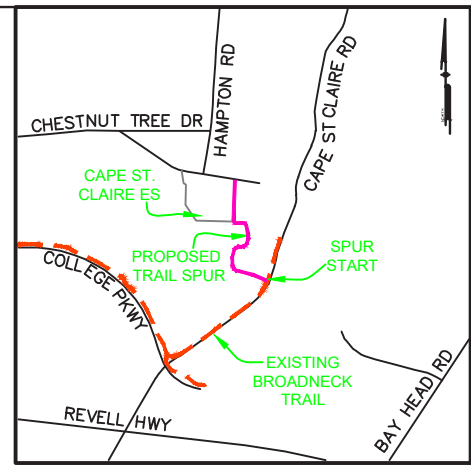


Figure 52. Existing Goshen Farm Driveway





VICINITY MAP NOT TO SCALE

LEGEND

- EXISTING PROPERTY BOUNDARY ---
- PROPOSED TRAIL ---
- PROPOSED RAMP
- PROPOSED 12' ASPHALT TRAIL/ DRIVEWAY ---
- PROPOSED SPLIT RAIL FENCE -x-
- PROPOSED TREE ●
- CRITICAL AREA BUFFER - - - CAB
- PROPOSED ALTERNATE TRAIL - - -

SEE SHEET 2

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

- A. STEEP SLOPES
- B. R/W BELONGS TO BOARD OF EDUCATION AND GOSHEN FARM; EASEMENT WILL BE NEEDED
- C. EXISTING GOSHEN FARM GATE IS A POSSIBLE OBSTRUCTION
- D. DIRECTIONAL SIGNAGE NEEDED
- E. WILL NEED A BARRIER AT ENTRANCE TO LIMIT VEHICULAR ACCESS
- F. REGRADING OF DRIVEWAY WILL BE NEEDED TO MAINTAIN 5% SLOPE
- G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
- H. CHESAPEAKE BAY CRITICAL AREA



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BROADNECK TRAIL TO CAPE ST CLAIRE ELEMENTARY SCHOOL





SEE SHEET 1

PROP. 10' ASPHALT TRAIL

PROPOSED TREES AND SPLIT RAIL FENCING

CAPE SAINT CLARE ELEMENTARY SCHOOL

BLUE RIDGE DRIVE

HILLTOP DR

G

E

D

LEGEND

- EXISTING PROPERTY BOUNDARY
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED 12' ASPHALT TRAIL/ DRIVEWAY
- PROPOSED SPLIT RAIL FENCE
- PROPOSED TREE
- CRITICAL AREA - CAB BUFFER
- PROPOSED ALTERNATE TRAIL

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

- A. STEEP SLOPES
- B. R/W BELONGS TO BOARD OF EDUCATION AND GOSHEN FARM; EASEMENT WILL BE NEEDED
- C. EXISTING GOSHEN FARM GATE IS A POSSIBLE OBSTRUCTION
- D. DIRECTIONAL SIGNAGE NEEDED
- E. WILL NEED A BARRIER AT ENTRANCE TO LIMIT VEHICULAR ACCESS
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- G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
- H. CHESAPEAKE BAY CRITICAL AREA



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BROADNECK TRAIL TO CAPE ST CLARE ELEMENTARY SCHOOL



## Broadneck Trail to Twin Oaks and Magothy River Middle School Spur

This trail spur connects Magothy River Middle School and Twin Oaks Park to the Broadneck Peninsula Trail in Arnold. The spur is approximately 1,430 l.f. in length, and runs from the front parking lot of Magothy River Middle School, south along Peninsula Farm Road, and out to the intersection of College Parkway and Peninsula Farm Road where it connects to the existing Broadneck Peninsula Trail. The trail runs on the east side of Peninsula Farm Road and crosses the road at the entrance to the school to make the connection to Twin Oaks Park. The properties affected are owned by a private commercial entity and the Anne Arundel County Public Schools (AACPS). Easements or right-of-way are needed from the property owner and coordination with AACPS will be required.

An alternate located on the west side of Peninsula Farm Road north of Cresston Road was examined. This would connect directly to Twin Oaks Park, but would potentially involve coordinating an easement over an existing residential driveway that appears to be located in the County right-of-way. The driveway runs parallel to Peninsula Farm Road north of Cresston Road and appears to serve 150 and 152 Cresston Road. 150 Cresston Road also appears to have a separate driveways off of Cresston Road. Due to the potential driveway conflict and the need to cross Peninsula Farm Road multiple times, this alternate was not examined further.



Figure 53. Twin Oaks Park Entrance



Figure 54. Magothy River MS Entrance

### Opportunities

1. County owns majority of necessary right-of-way
2. Immediately adjacent to county park

### Constraints

- A. Steep slopes/ existing swale/ drainage issues
- B. Culvert needed at entrance ditch
- C. Potential conflict with fire hydrant at entrance
- D. Potential easement for existing homeowner's driveway
- E. Need R/W from property owners
- F. Potential utility and utility pole conflict
- G. Permission needed from the Board of Education
- H. Chesapeake Bay Critical Area

The spur includes a 10' wide asphalt trail, with a crosswalk and associated concrete ramps. A culvert will be required on the school property to cross an existing drainage ditch. The trail follows the edge of the existing athletic fields on the property and involves the addition of split rail fence to separate the trail from the athletic fields.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts; most utilities should be able to be avoided. This alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project should be exempt from forest conservation requirements. No environmental impacts are anticipated with this project. The estimated cost of this spur is \$550,230.41.



Figure 55. Peninsula Farm Road shoulder

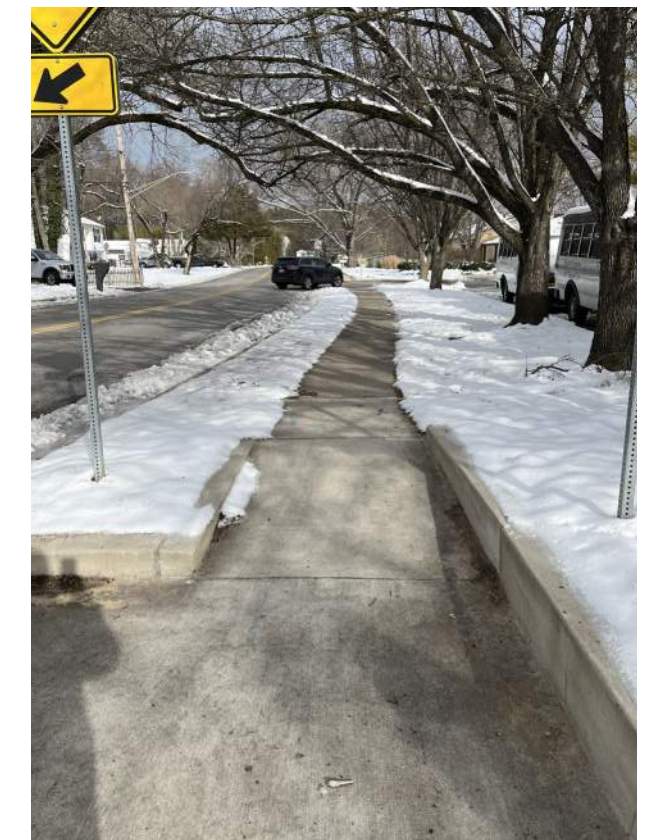
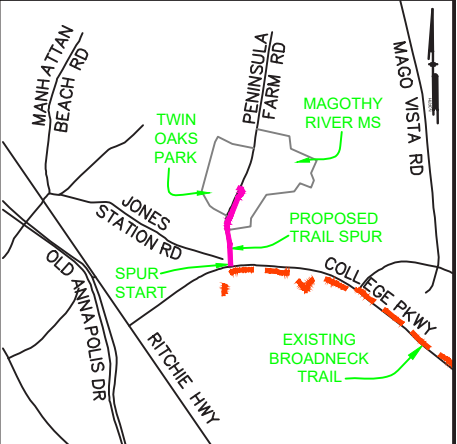


Figure 56. Existing sidewalk to be removed and replaced with Trail





VICINITY MAP NOT TO SCALE

LEGEND

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED SPLIT RAIL FENCE	
PROPOSED TREE	
PROPOSED CROSSWALK	
CRITICAL AREA BUFFER	

SEE SHEET 2

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

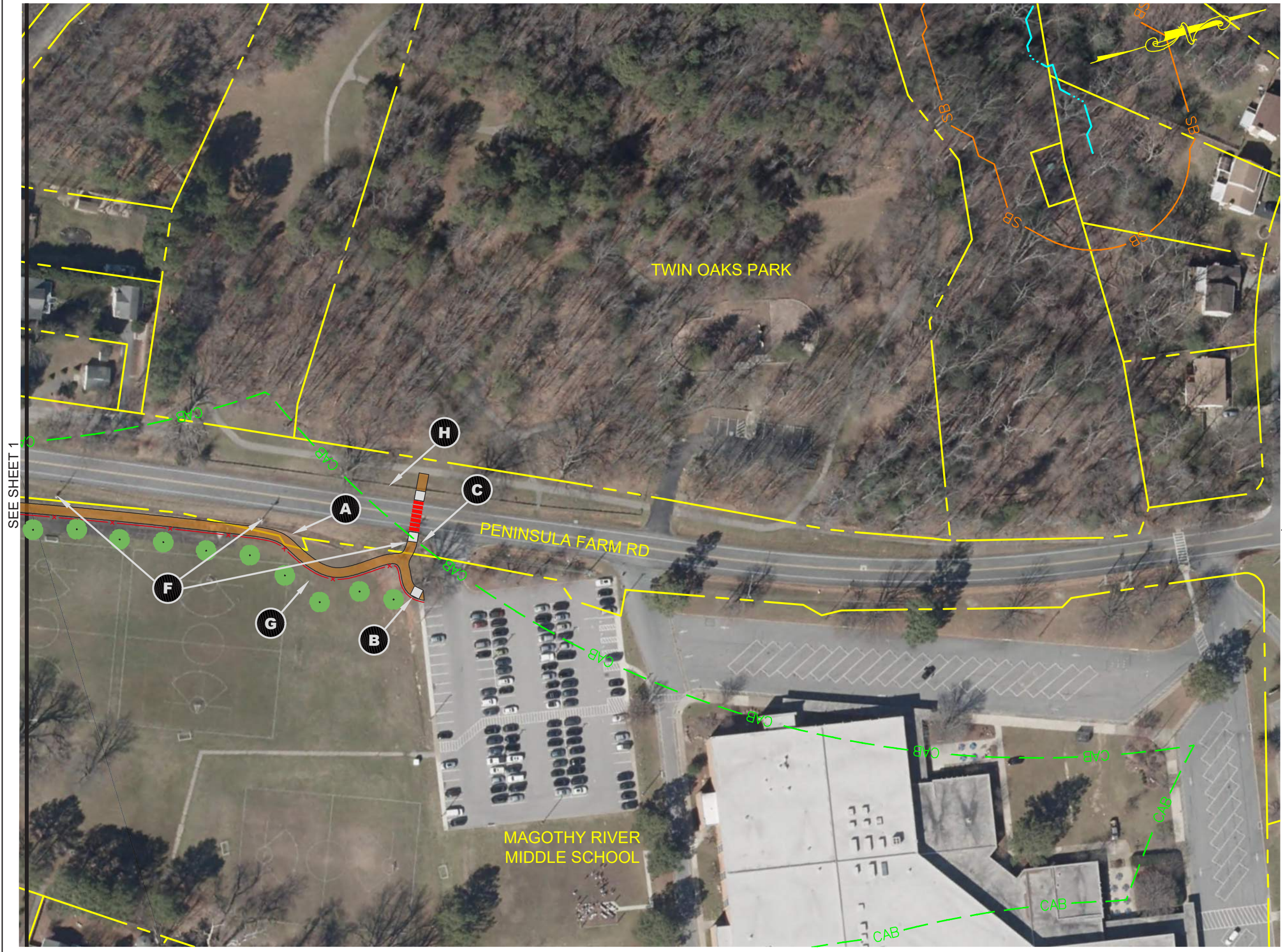
- A. STEEP SLOPES/ EXISTING SWALE/ DRAINAGE ISSUES
- B. CULVERT NEEDED AT ENTRANCE DITCH
- C. POTENTIAL CONFLICT AT FIRE HYDRANT AT ENTRANCE
- D. POTENTIAL EASEMENT FOR EXISTING HOMEOWNERS DRIVEWAY
- E. NEED R/W FROM PROPERTY OWNERS
- F. POTENTIAL UTILITY AND UTILITY POLE CONFLICT
- G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
- H. CHESAPEAKE BAY CRITICAL AREA



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BROADNECK TRAIL TO TWIN OAKS PARK AND MAGOTHY RIVER MIDDLE SCHOOL



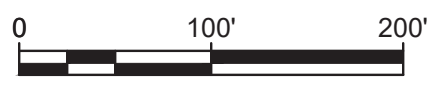


**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED SPLIT RAIL FENCE	
PROPOSED TREE	
PROPOSED CROSSWALK	
CRITICAL AREA BUFFER	

**NOTES**  
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- CONSTRAINTS**
- A. STEEP SLOPES/ EXISTING SWALE/ DRAINAGE ISSUES
  - B. CULVERT NEEDED AT ENTRANCE DITCH
  - C. POTENTIAL CONFLICT AT FIRE HYDRANT AT ENTRANCE
  - D. POTENTIAL EASEMENT FOR EXISTING HOMEOWNERS DRIVEWAY
  - E. NEED R/W FROM PROPERTY OWNERS
  - F. POTENTIAL UTILITY AND UTILITY POLE CONFLICT
  - G. PERMISSION NEEDED FROM THE BOARD OF EDUCATION
  - H. CHESAPEAKE BAY CRITICAL AREA



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**BROADNECK TRAIL TO TWIN OAKS PARK AND MAGOTHY RIVER MIDDLE SCHOOL**



## Broadneck Trail to Windsor Farm Elementary School Spur

This trail spur connects Windsor Farm Elementary School to Broadneck Park and the Broadneck Peninsula Trail in Annapolis. The spur is approximately 1,200 l.f. in length, and runs from the intersection of the Windsor Farm Elementary School access road and Broadneck Road, east along Broadneck Road, through the Andy Smith Equestrian Center portion of Broadneck Park, and out to the intersection of Broadneck Park Road and College Parkway, across from Green Holly Drive, where it connects to the existing Broadneck Peninsula Trail located on the north side of College Parkway. No alternate alignments were studied for this spur. This trail spur is located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

### Opportunities

1. County owns necessary right-of-way
2. Immediately adjacent/within county park
3. No forest conservation impacts

### Constraints

- A. Steep slopes
- B. Potential stream and stream buffer impacts - tributary of Whitehall Creek
- C. Impacts to horse pastures
- D. Several crosswalks and pedestrian signals required
- E. Sidewalk reconfiguration

- F. Impact to Driveway access to caretaker cottage
- G. Potential conflict with Traffic Signal Pole
- H. Potential Utility pole conflict
- I. Potential Culvert
- J. Permission needed from the Board of Education

The spur will include a 10' wide asphalt trail, with two crosswalks and associated concrete ramps. The crosswalk at College Parkway and Broadneck Park Road will require a new pedestrian signal which will be connected to the existing signals at this intersection. The crosswalk at the entrance to Windsor Farm Elementary School will include a Rapid Rectangular Flashing Beacon (RRFB) similar to what has been installed at the eastern entrance of Broadneck Park off of College Parkway. The spur will run alongside the

existing driveway to the caretaker's house on Broadneck Park and can share this driveway. Coordination and signage will be needed to minimize conflicts.

Stormwater management will be provided for this spur, likely in the form of a small microbioretention facility or a trailside swale. No forest clearing is anticipated with this spur, and the project will therefore be exempt from forest conservation requirements. Tree planting alongside the trail will be included in the scope. The estimated cost of this spur is \$469,452.67.



Figure 57. Broadneck Park entrance at College Pkwy and Green Holly Dr



Figure 58. Existing access to caretaker's cottage

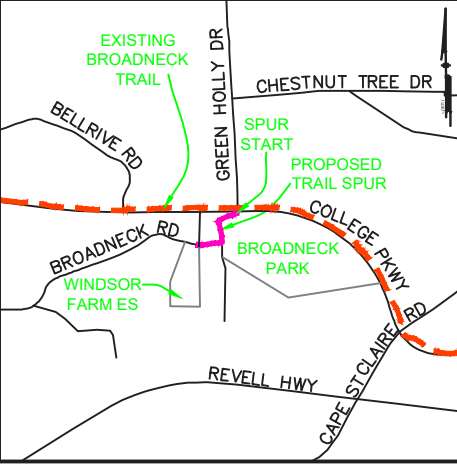


Figure 59. Existing shoulder along Broadneck Road



Figure 60. Broadneck Road Crossing





VICINITY MAP NOT TO SCALE

**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED TREE	
PROPOSED CROSSWALK	
PROPOSED PEDESTRIAN SIGNAL	

- CONSTRAINTS**
- A. STEEP SLOPES
  - B. POTENTIAL STREAM AND STREAM BUFFER IMPACTS - TRIBUTARY OF WHITEHALL CREEK
  - C. IMPACTS TO HORSE PASTURES
  - D. SEVERAL CROSSWALKS AND PEDESTRIAN SIGNALS REQUIRED
  - E. SIDEWALK RECONFIGURATION
  - F. IMPACT TO DRIVEWAY ACCESS TO CARETAKER COTTAGE
  - G. POTENTIAL CONFLICT WITH TRAFFIC SIGNAL POLE
  - H. POTENTIAL UTILITY POLE CONFLICT
  - I. POTENTIAL CULVERT
  - J. PERMISSION NEEDED FROM THE BOARD OF EDUCATION



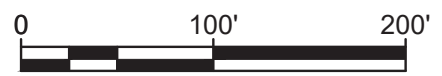
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**NOTES**  
1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND AND COUNTY STUDY

**BROADNECK TRAIL TO WINDSOR FARM ELEMENTARY**





## BWI Trail to Corkran Middle School Spur

This trail spur connects the BWI Trail and the John Overstreet Connector Trail to Corkran Middle School in Glen Burnie. The trail is approximately 2,800 l.f. in length, and runs from the intersection of Stewart Ave and Old Stage Road, where the BWI Trail and the John Overstreet Connector Trail meet, west through a forested area in between several neighborhoods, and then out to the rear of Corkran Middle School in the athletic field area. No alternate alignments were studied for this spur. This trail spur is located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

### Opportunities

1. Serves as a connector for multiple neighborhoods around Corkran Middle School

### Constraints

- A. Existing open ditch drainage system
- B. Potential opposition from homeowners that back to trail
- C. Forest clearing

The spur includes a 10' wide asphalt trail, with two crosswalks and associated concrete ramps. The spur runs in an abandoned 80' +/- right-of-way behind existing homes. The right-of-way appears to be owned either by MDOT or the County. Most of the homes appear to have existing fencing at the rear of their lots, isolating this area. It is possible that there may be some opposition to a trail running behind the rear of these lots.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment should have minimal utility impacts. This alignment would likely involve significant forest impacts.

No environmental impacts are anticipated with this project. Drainage improvements will be required at the spur's intersection with Old Stage Road as an existing ditch will need to be reconfigured to accommodate the trail. The estimated cost of this trail is \$917,339.90.



Figure 61. Existing open and wooded areas along trail alignment



Figure 62. Existing drainage structures to be modified

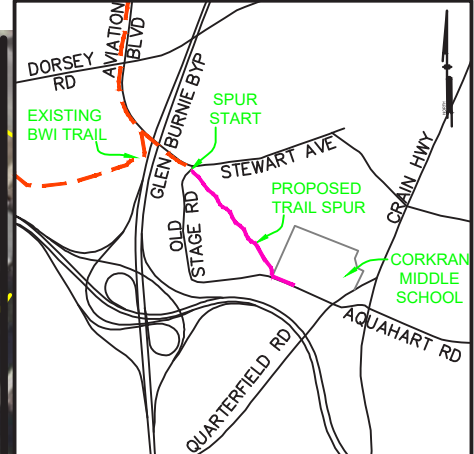


Figure 63. Existing wooded area along trail alignment



Figure 64. Existing connector to BWI Trail





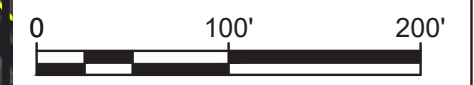
VICINITY MAP NOT TO SCALE

LEGEND

- EXISTING PROPERTY BOUNDARY
- EXISTING STREAM
- EXISTING STREAM BUFFER
- EXISTING TRAFFIC SIGNAL
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED SPLIT RAIL FENCE
- PROPOSED CROSSWALK

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. EXISTING OPEN DITCH DRAINAGE SYSTEM  
 B. POTENTIAL OPPOSITION FROM HOMEOWNERS THAT BACK TO TRAIL  
 C. FOREST CLEARING



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BWI TRAIL TO CORKRAN MIDDLE SCHOOL





**LEGEND**

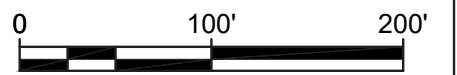
EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
EXISTING TRAFFIC SIGNAL	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED SPLIT RAIL FENCE	
PROPOSED CROSSWALK	

SEE SHEET 1

SEE SHEET 3

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. EXISTING OPEN DITCH DRAINAGE SYSTEM  
 B. POTENTIAL OPPOSITION FROM HOMEOWNERS THAT BACK TO TRAIL  
 C. FOREST CLEARING



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**BWI TRAIL TO CORKRAN MIDDLE SCHOOL**





SEE SHEET 2

### LEGEND

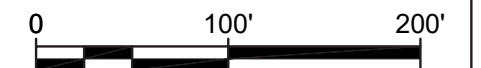
- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL 
- PROPOSED TRAIL ---
- PROPOSED RAMP □
- PROPOSED SPLIT RAIL FENCE x
- PROPOSED CROSSWALK 

### NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

### CONSTRAINTS

- A. EXISTING OPEN DITCH DRAINAGE SYSTEM
- B. POTENTIAL OPPOSITION FROM HOMEOWNERS THAT BACK TO TRAIL
- C. FOREST CLEARING



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## BWI TRAIL TO CORKRAN MIDDLE SCHOOL



## BWI Trail to Linthicum Elementary School and Linthicum Park Spur

This trail spur connects Linthicum Elementary School and Linthicum Park to the BWI Trail in Linthicum. The spur is approximately 1,752 l.f. in length, and runs from Linthicum Elementary School, west along School Lane across South Camp Meade Road (MD 170) where it will run north to W Maple Road. It will then run west along the W Maple Road across the railroad crossing to the existing BWI Trail. This trail spur is located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

An alternate to this spur is proposed that would follow South Camp Meade Road south along the east side of the road and cross at the existing light and crosswalk at Benton Avenue. There is an existing sidewalk and

ramp system connecting to the Linthicum Light Rail Station through the Royal Farms property. The connection crosses the Light Rail tracks and connects across the BWI Trail to the neighborhood to the west of the station. An easement would be needed to widen the alternate trail in this area.

### Opportunities

1. Existing sidewalk alignment to follow along most of the proposed route
2. Existing crosswalk exists at School Lane and South Camp Meade Road

### Constraints

- A. Need multiple easements/rights-of-ways
- B. Multiple utility pole relocations

- C. Railroad crossing
- D. Permission needed from the Board of Education

The spur includes a 10' wide asphalt trail. The existing sidewalks will be removed and replaced with an asphalt trail. There is no existing sidewalk along the south side of W Maple Road. A major constraint is the railroad crossing on W Maple Road. This will require special design considerations and widening of the existing railroad crossing. There are also utility poles along W Maple Road which would need to be relocated to add a 10' wide trail. Easements would be needed from multiple property owners to widen the existing narrow sidewalk along South Camp Meade Road. The existing sidewalk along South Camp Meade Road has multiple utility poles in the middle of the existing sidewalk. To widen the sidewalk along South Camp

Meade Road, small retaining walls may also be necessary along some properties.

Stormwater management for this spur would likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have utility impacts, requiring pole relocations. It is likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project would be exempt from forest conservation requirements. No environmental impacts are anticipated with this project. The estimated cost of this spur is \$872,549.50.



Figure 65. Intersection of W Maple Road and S Camp Meade Road



Figure 66. Existing sidewalk along S Camp Meade Road



Figure 67. Looking east at railroad crossing along W Maple Road

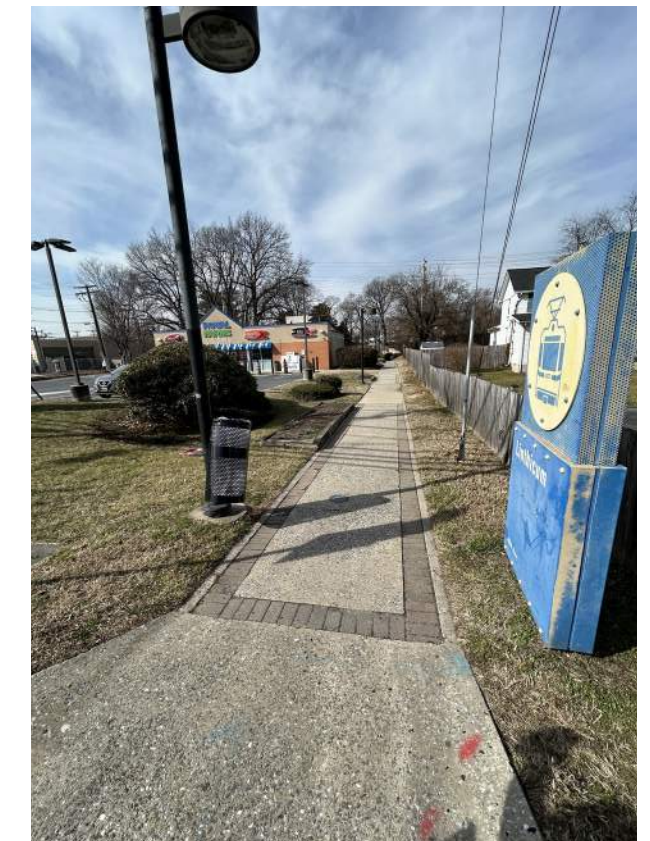
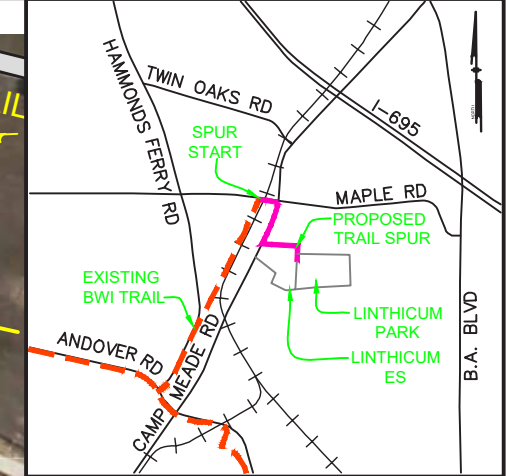


Figure 68. Existing connection to the Linthicum Light Rail Station through the Royal Farms property





VICINITY MAP NOT TO SCALE

LEGEND

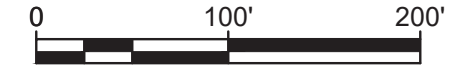
- EXISTING PROPERTY BOUNDARY
- EXISTING TRAFFIC SIGNAL
- BWI TRAIL
- PROPOSED ALTERNATE TRAIL
- PROPOSED ALTERNATE TRAIL
- PROPOSED RAMP
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

- A. NEED EASEMENT/RIGHT-OF-WAY
- B. UTILITY POLE RELOCATIONS
- C. RAILROAD CROSSING
- D. PERMISSION NEEDED FROM THE BOARD OF EDUCATION











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SEE SHEET 2

BWI TRAIL TO LINTHICUM ELEMENTARY/PARK



### LEGEND

- EXISTING PROPERTY BOUNDARY 
- EXISTING TRAFFIC SIGNAL 
- BWI TRAIL 
- PROPOSED TRAIL 
- PROPOSED ALTERNATE TRAIL 
- PROPOSED RAMP 
- PROPOSED CROSSWALK 
- PROPOSED PEDESTRIAN SIGNAL 

### NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

### CONSTRAINTS

- A. NEED EASEMENT/RIGHT-OF-WAY
- B. UTILITY POLE RELOCATIONS
- C. RAILROAD CROSSING
- D. PERMISSION NEEDED FROM THE BOARD OF EDUCATION



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SEE SHEET 1



## BWI TRAIL TO LINTHICUM ELEMENTARY/PARK



## South Shore Trail to Generals Highway Corridor Park Spur

This trail spur connects the Generals Highway Corridor Park to the South Shore Trail, Phase IV in Annapolis. The spur is approximately 2,765 l.f. in length, and runs from a trail that is currently proposed along Crownsville Road along the frontage of the Indian Creek School property. The trail would continue down the east side of Crownsville Road, cross Honeysuckle Lane, continue further down the east side of Crownsville Road and cross Crownsville Road at the park entrance. The trail would then run into the park to connect with the existing trail network present in the park. No alternate alignments were studied for this spur.

### Constraints

- A. Easement / right-of-way needed from owners
- B. Tree clearing required
- C. Steep slopes
- D. Existing drainage impacts
- E. Potential Utility conflict
- F. Possible Sight distance Limitation

The spur includes a 10' wide asphalt trail, with several crosswalks and associated concrete ramps. The trail alignment will require that the County acquire additional right-of-way. Significant grading and retaining walls will need to be installed where the trail runs along the frontage of the Summerhill Park community. Drainage modification will also need to be made here. The trail will be setback a minimum of 8' from the edge of the existing road since this is an open section roadway.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts. It is very likely that this alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project will be exempt from forest conservation requirements. No

environmental impacts are anticipated with this spur. The total estimated cost for this spur is \$1,313,604.86.



Figure 69. Generals Highway Corridor park entrance



Figure 70. Crownsville Road drainage ditch

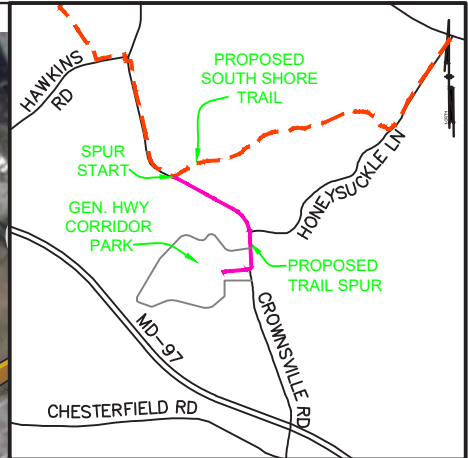


Figure 71. Crownsville Road shoulder



Figure 72. Crownsville Road shoulder



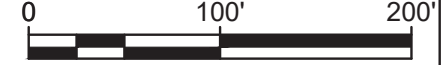


VICINITY MAP NOT TO SCALE

LEGEND

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- PRELIMINARY ALIGNMENT OF SOUTH SHORE TRAIL PHASE IVB ---
- PROPOSED TRAIL ---
- PROPOSED RAMP
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK |||||
- PROPOSED PEDESTRIAN SIGNAL 🚶

- CONSTRAINTS**
- A. EASEMENT / RIGHT-OF-WAY NEEDED FROM PROPERTY OWNER
  - B. TREE CLEARING REQUIRED
  - C. STEEP SLOPES
  - D. DRAINAGE ISSUES
  - E. POTENTIAL UTILITY CONFLICT
  - F. POSSIBLE SIGHT DISTANCE LIMITATION



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**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS DATA.

# SOUTH SHORE TRAIL TO GENERALS HIGHWAY CORRIDOR PARK



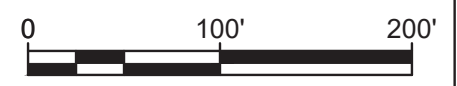


### LEGEND

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- PRELIMINARY ALIGNMENT OF SOUTH SHORE TRAIL PHASE IVB ---
- PROPOSED TRAIL ---
- PROPOSED RAMP
- PROPOSED RETAINING WALL ---
- PROPOSED CROSSWALK |||||
- PROPOSED PEDESTRIAN SIGNAL 🚶

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**  
 A. EASEMENT / RIGHT-OF-WAY NEEDED FROM PROPERTY OWNER  
 B. TREE CLEARING REQUIRED  
 C. STEEP SLOPES  
 D. DRAINAGE ISSUES  
 E. POTENTIAL UTILITY CONFLICT  
 F. POSSIBLE SIGHT DISTANCE LIMITATION



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SEE SHEET 1

## SOUTH SHORE TRAIL TO GENERALS HIGHWAY CORRIDOR PARK



## South Shore Trail to Millersville Elementary and Millersville Park Spur

This trail spur connects Millersville Park and Millersville Elementary to the South Shore Trail in Millersville. The spur is approximately 1,360 l.f. in length and runs from the Millersville Park property on the north side of Millersville Road, where it would cross the road and run west to the Millersville Elementary School property where it will run to the back of the school property to the South Shore Trail. No alternate alignments were studied for this spur. The trail spur is located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

### Opportunities

- A. County-owned/Board of Education owned parcels

### Constraints

- A. Existing forest conservation easement
- B. Steep slopes
- C. Tree clearing
- D. Easement needed from the Board of Education
- E. Crossing of High Volume Road
- F. Existing SWM/Storm Drain
- G. Existing Retaining Wall

H. Utility impacts

I. Permission needed from the Board of Education

The spur includes a 10' wide asphalt trail and one crosswalk. Steep slopes exist along the South Shore Trail at the back of the school property and significant grading will be required to make the transition from the existing trail down to the school property. Forest conservation easements also exist on the school property and may be impacted. An easement from the Board of Education would be needed on the school property. Existing SWM facilities may also be impacted on the school property. Millersville Road is classified as a Minor Arterial and is quite narrow east of the school driveway with limited sight distance. Millersville Road also rises slightly near the proposed road crossing which will probably require pedestrian crossing signals

and signs. A Rapid Rectangular Flashing Beacon (RRFB) signal can be used here. Fencing to separate the school from the trail should also be considered.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbio retention facilities, or infiltration devices. This alignment would have minimal utility impacts. It is likely that this alignment will require more than 20,000 sf of forest clearing, in which case, the project will be required to comply with forest conservation requirements. Additional study and design will be needed to minimize these impacts. The estimated cost of this spur is \$754,527.57.



Figure 73. Looking east along Millersville Road from Millersville Elementary School's parking lot



Figure 74. Existing SWM device at northeastern area of school field



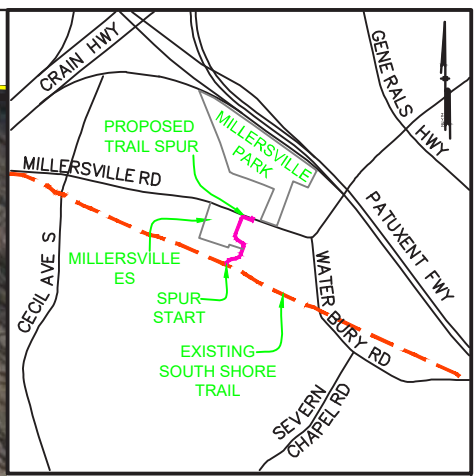
Figure 75. Looking south along SWM device through school field towards South Shore Trail



Figure 76. Steep area with Forest Conservation Easement at southeast end. South Shore Trail beyond steep area



SEE SHEET 2



VICINITY MAP NOT TO SCALE

LEGEND

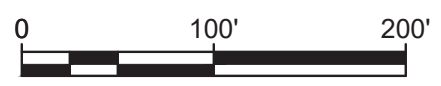
- EXISTING PROPERTY BOUNDARY ---
- PROPOSED TRAIL —
- PROPOSED RAMP
- PROPOSED SPLIT RAIL FENCE -x-
- PROPOSED CROSSWALK |||||
- PROPOSED PEDESTRIAN SIGNAL ▲

NOTES

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

CONSTRAINTS

- A. EXISTING FOREST CONSERVATION EASEMENT
- B. STEEP SLOPES
- C. TREE CLEARING
- D. NEED EASEMENT FROM BOARD OF EDUCATION
- E. CROSSING OF HIGH VOLUME ROAD
- F. EXISTING SWM/STORM DRAIN
- G. EXISTING RETAINING WALL
- H. UTILITY IMPACTS
- I. PERMISSION NEEDED FROM BOARD OF EDUCATION

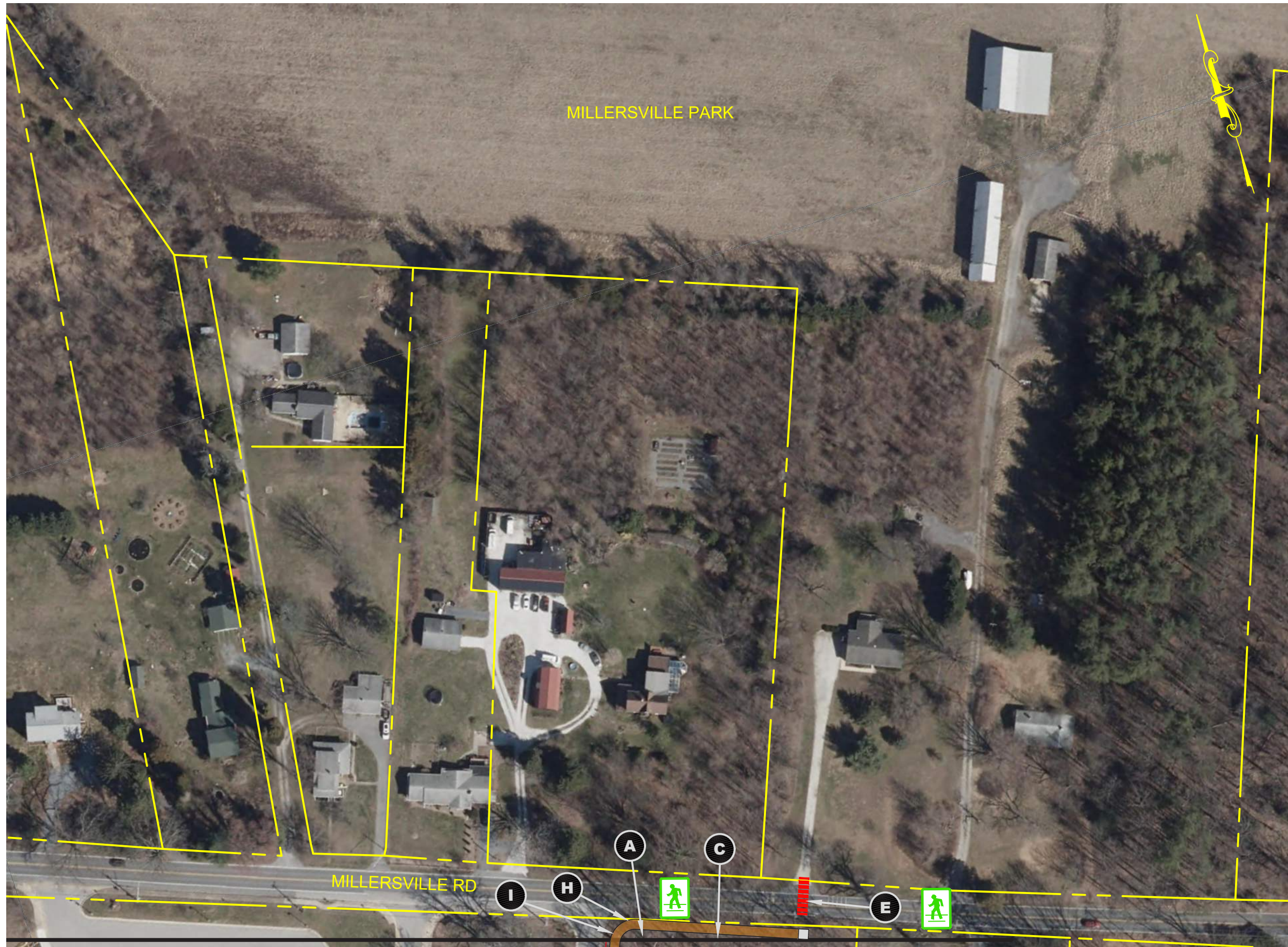


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# SOUTH SHORE TRAIL TO MILLERSVILLE ELEMENTARY SCHOOL AND MILLERSVILLE PARK

Trail Spurs and Connectors Study





**LEGEND**

- EXISTING PROPERTY BOUNDARY
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED SPLIT RAIL FENCE
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. EXISTING FOREST CONSERVATION EASEMENT
- B. STEEP SLOPES
- C. TREE CLEARING
- D. NEED EASEMENT FROM BOARD OF EDUCATION
- E. CROSSING OF HIGH VOLUME ROAD
- F. EXISTING SWM/STORM DRAIN
- G. EXISTING RETAINING WALL
- H. UTILITY IMPACTS
- I. PERMISSION NEEDED FROM BOARD OF EDUCATION



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SEE SHEET 1

**SOUTH SHORE TRAIL TO MILLERSVILLE ELEMENTARY SCHOOL AND MILLERSVILLE PARK**

Trail Spurs and Connectors Study



## South Shore Trail to Rolling Knolls Elementary School Spur

This trail spur connects the Rolling Knolls Elementary School to the South Shore Trail, Phase III in Annapolis. The spur is approximately 1,080 l.f. in length, and runs from the rear of the elementary school at the fire access road off of MD 178 General's Highway, north along General's Highway to the intersection of Epping Forest Road, where it crosses Generals Highway, and then east along Epping Forest Road, where it connects to the proposed South Shore Trail. The trail involves the acquisition of easements or right-of-way from the Board of Education, and the commercial property at the corner of Epping Forest Road and General's Highway. No alternate alignments were studied for this trail spur. This trail spur is located on Anne Arundel County Public Schools (AACPS) property and will require coordination with AACPS.

### Opportunities

1. County owns majority of necessary right-of-way
2. Very close to planned South Shore Trail, Phase III
3. Limited forest clearing

### Constraints

- A. Potential Stream and Buffer Impacts
- B. Easement/Right-Of-Way needed
- C. Clearing required
- D. Drainage issues
- E. Signal Modifications / Crossing of MD 178
- F. Potential Utility Impacts

### G. Fence Impacts

### H. Permission needed from the Board of Education

The spur includes a 10' wide asphalt trail, with a crosswalk and associated concrete ramps. Storm drainage improvements will be needed on both sides of the intersection of Epping Forest Road and General's Highway. The relocation of the fence along the athletic fields of the elementary school will also likely be needed in order to avoid utility impacts. Additional fencing may also be needed to separate the trail from the school fields where the trail turns into the school property and follows the existing fire access road. Pedestrian signal improvements will be required at the existing traffic signal on Generals Highway.

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain

gardens, microbioretention facilities, or infiltration devices. This alignment has minimal utility impacts; most utilities should be able to be avoided. This alignment can be accomplished with less than 20,000 sf of forest clearing, in which case, the project should be exempt from forest conservation requirements. Stream buffer impacts are anticipated with this project, and depending on the final design of storm drainage improvements some stream or wetland impacts may be needed. The estimated cost of this trail is \$602,289.04



Figure 77. Existing BGE Power Line and future South Shore Trail Phase 3 Alignment



Figure 78. Epping Forest Road shoulder

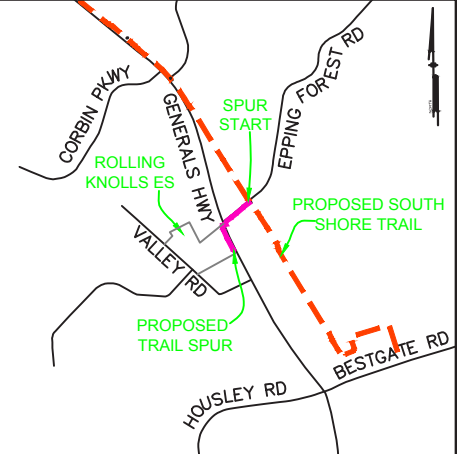
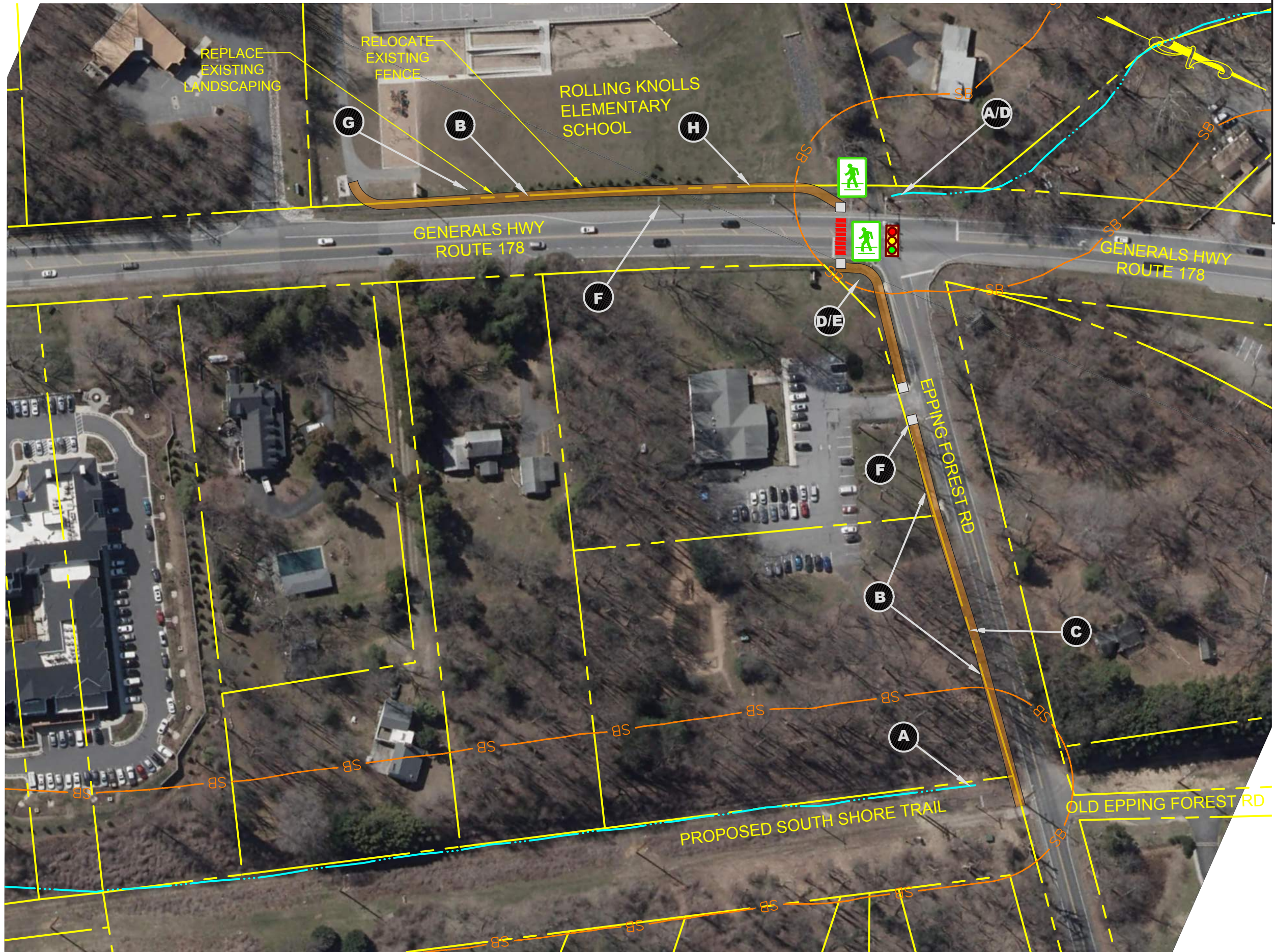


Figure 79. Generals Highway shoulder



Figure 80. Drainage structures at Generals Highway and Epping Forest Road





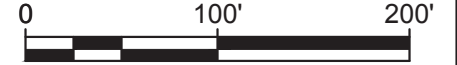
VICINITY MAP NOT TO SCALE

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- EXISTING TRAFFIC SIGNAL
- SOUTH SHORE TRAIL ---
- PROPOSED TRAIL ---
- PROPOSED RAMP
- PROPOSED CROSSWALK
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

- CONSTRAINTS**
- A. POTENTIAL STREAM AND BUFFER IMPACTS
  - B. EASEMENT/RIGHT-OF-WAY NEEDED
  - C. CLEARING REQUIRED
  - D. DRAINAGE ISSUES
  - E. SIGNAL MODIFICATIONS/CROSSING OF MD 178
  - F. POTENTIAL UTILITY IMPACTS
  - G. FENCE IMPACTS
  - H. PERMISSION NEEDED FROM THE BOARD OF EDUCATION



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# SOUTH SHORE TRAIL TO ROLLING KNOLLS ELEMENTARY



## South Shore Trail to Waterworks Park Spur

This trail spur connects the City of Annapolis Waterworks Park property to the South Shore Trail, Phase IV in Annapolis. The spur is approximately 1,986 l.f. in length, and runs from a trail that is currently proposed on the County owned Eisenhower Golf Course and the Indian Creek School property. The trail runs across private property to Honeysuckle Lane and then onto property owned by the City of Annapolis, where the existing Waterworks Park trails terminate. This spur also includes the construction of a 30 space parking lot on the Waterworks Park property. The parking would be utilized by both Waterworks Park users and South

Shore Trail users. No alternate alignments were studied for this trail spur.

### Constraints

- A. Easement / right-of-way needed from Property Owner
- B. Steep slopes
- C. Significant Tree clearing required
- D. Limited Sight distance

The spur includes a 10' wide asphalt trail, with a crosswalk and associated concrete ramps. The trail alignment will require that the County acquire right-of-way, and agreements from the City of Annapolis. Significant grading and/or retaining walls will be required due to the existing topography

Stormwater management for this spur will likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts. This

alignment will result in more than 20,000 sf of forest clearing, and the project will be required to comply with forest conservation requirements. No environmental impacts are anticipated with this spur. The total estimated cost for this spur is \$1,401,905.23.



Figure 81. Existing Honeysuckle Road



Figure 82. Existing Honeysuckle Road

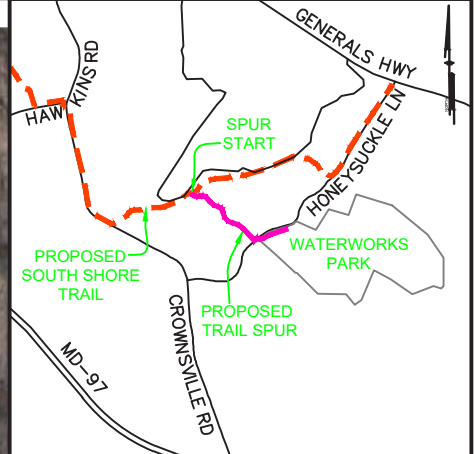
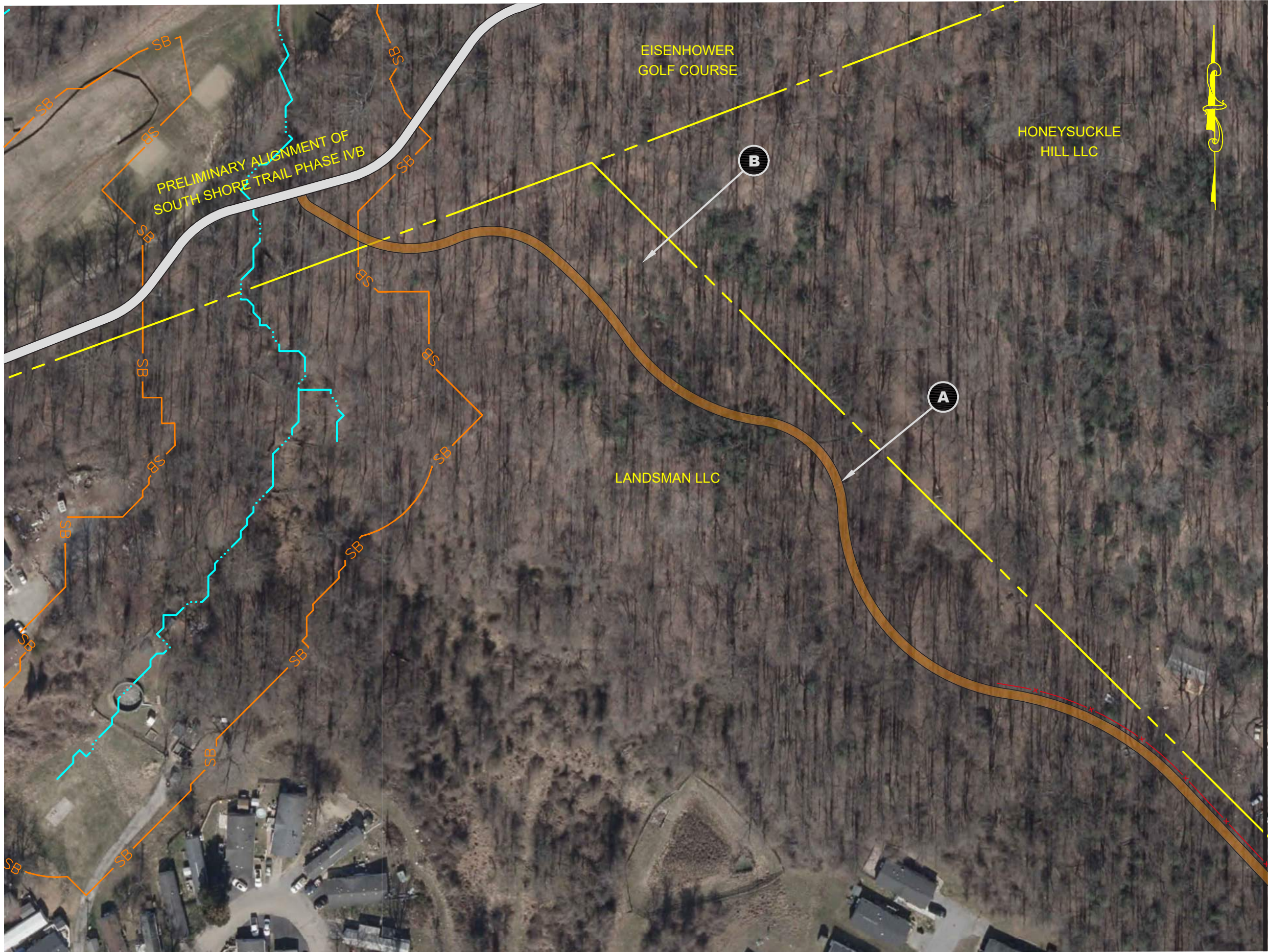


Figure 83. Existing Honeysuckle Road



Figure 84. Existing Waterworks Park Trailhead



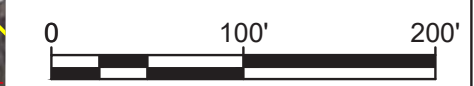


VICINITY MAP NOT TO SCALE

**LEGEND**

EXISTING PROPERTY BOUNDARY	
EXISTING STREAM	
EXISTING STREAM BUFFER	
PRELIMINARY ALIGNMENT OF SOUTH SHORE TRAIL PHASE IVB	
PROPOSED TRAIL	
PROPOSED RAMP	
PROPOSED SPLIT RAIL FENCE	
PROPOSED PEDESTRIAN SIGNAL	

- CONSTRAINTS**
- A. EASEMENT/RIGHT-OF-WAY NEEDED FROM PROPERTY OWNER
  - B. STEEP SLOPES
  - C. SIGNIFICANT TREE CLEARING REQUIRED
  - D. LIMITED SIGHT DISTANCE

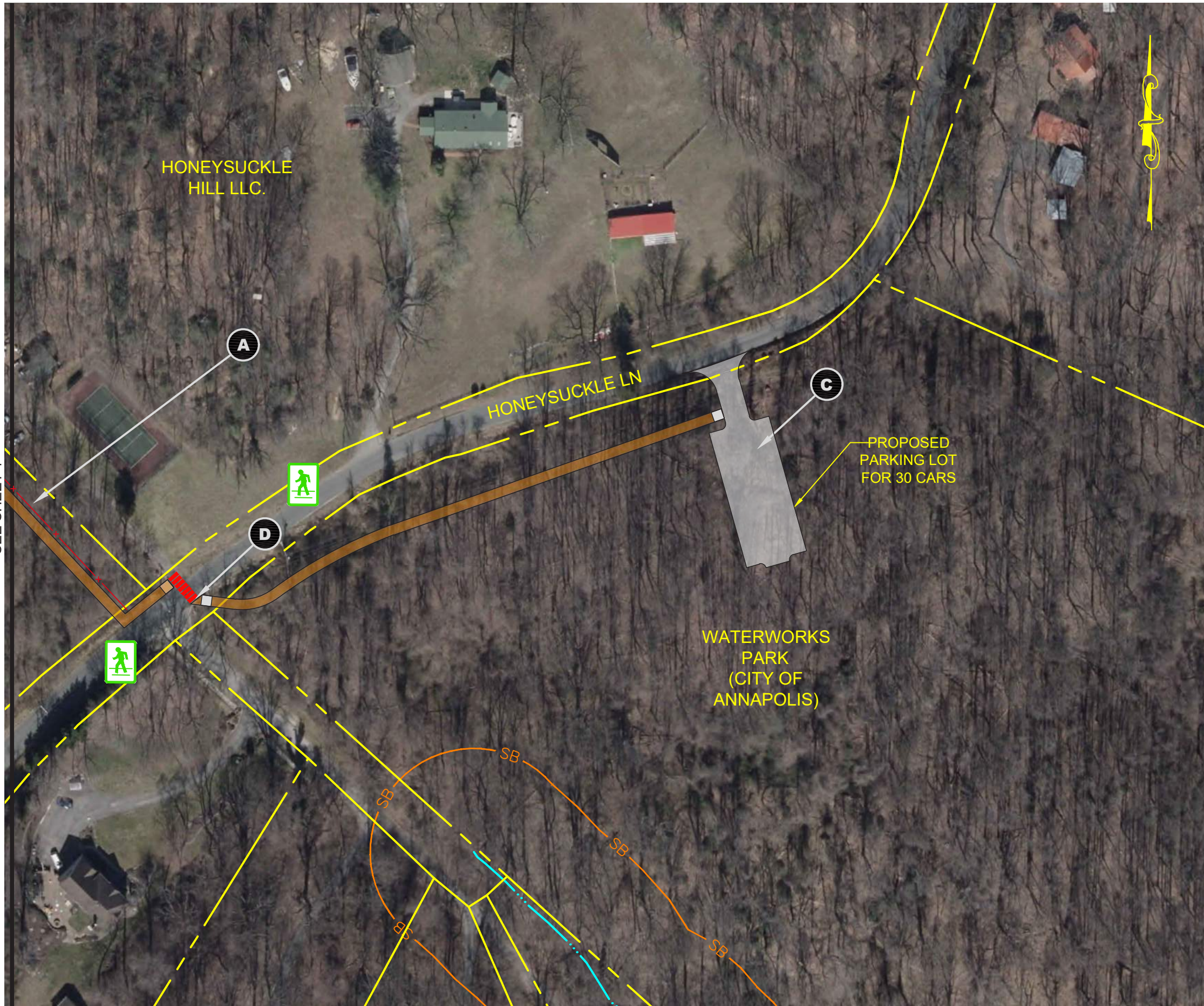


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**NOTES**  
 1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS. Trail Spurs and Connectors Study

**SOUTH SHORE TRAIL TO WATERWORKS PARK**





**LEGEND**

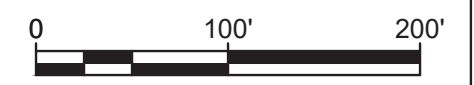
- EXISTING PROPERTY BOUNDARY
- EXISTING STREAM
- EXISTING STREAM BUFFER
- PRELIMINARY ALIGNMENT OF SOUTH SHORE TRAIL PHASE IVB
- PROPOSED TRAIL
- PROPOSED RAMP
- PROPOSED SPLIT RAIL FENCE
- PROPOSED PEDESTRIAN SIGNAL

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. EASEMENT/RIGHT-OF-WAY NEEDED FROM PROPERTY OWNER
- B. STEEP SLOPES
- C. SIGNIFICANT TREE CLEARING REQUIRED
- D. LIMITED SIGHT DISTANCE



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**SOUTH SHORE TRAIL TO WATERWORKS PARK**



## Washington, Baltimore and Annapolis (WB&A) Trail to Piney Orchard Community Center Spur

This trail spur connects the Piney Orchard Community Center on Stream Valley Drive to the Washington, Baltimore and Annapolis (WB&A) Trail in Odenton. The spur is approximately 2,066 l.f. in length, and runs from an existing trail/sidewalk that parallels Stream Valley Drive east through the woods to the existing WB&A Trail. The County owns one of the parcels that would be utilized for the trail. A private developer owns the other parcel, which is likely an HOA open space parcel for the Piney Orchard PUD. No alternate alignments were studied for this trail spur. There is an existing trail along the east side of Stream Valley Drive that connects to an existing trail on the west side

of Strawberry Lake Way that runs south to the WB & A Trail. However, this trail lacks recreation elements and is almost a mile long, significantly longer than the proposed spur.

### Opportunities

1. County owns much of the necessary right-of-way

### Constraints

- A. Needed Easement from Constellation Holdings
- B. Steep slopes
- C. Tree Clearing

D. Stream Crossing

E. Stream and Stream Buffer impacts

The spur includes a 10' wide asphalt trail. The trail can largely occur within the existing County right-of-way, but an easement would be required from the HOA open space parcel owned by Constellation Holdings. Significant grading and retaining walls will be required due to the topography. Bridges or boardwalks will be needed where the trail crosses the existing stream valley areas.

Stormwater management for this spur would likely be comprised of non rooftop disconnect credits as well as small rain gardens, microbioretention facilities, or infiltration devices. This alignment will have minimal utility impacts. This alignment will require

more than 20,000 sf of forest clearing; the project will be required to comply with forest conservation requirements. Stream and stream buffer impacts and wetland impacts are anticipated with this project. Additional study and design will be needed to minimize these impacts. The total estimated cost for this spur is \$1,475,109.79.



Figure 85. Existing trail along Stream Valley Drive Northeast of Piney Orchard Community Center and steep slope down to proposed trail connection



Figure 86. Looking west from West stream up the valley



Figure 87. Looking East across stream. WB&A Trail at top of Hill.

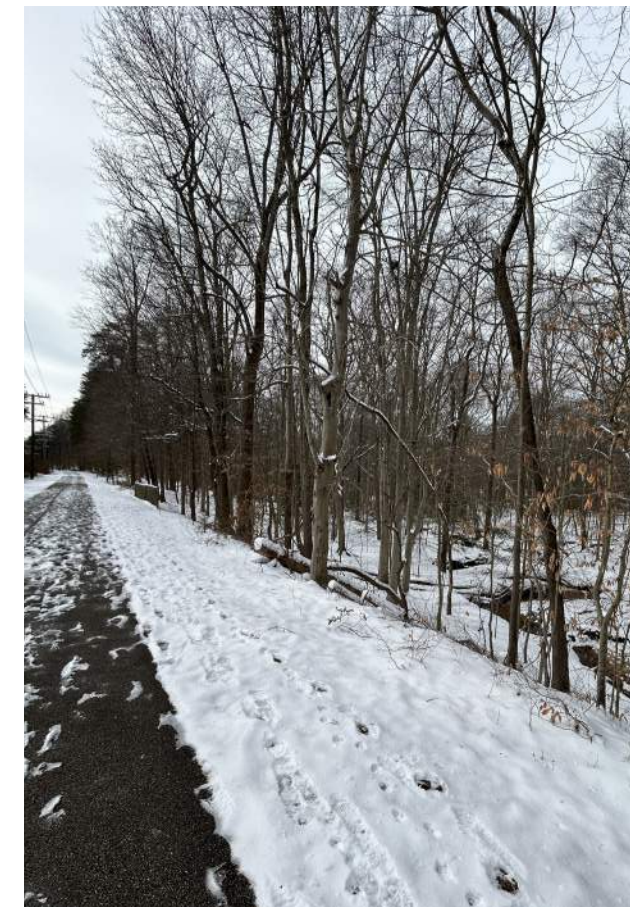
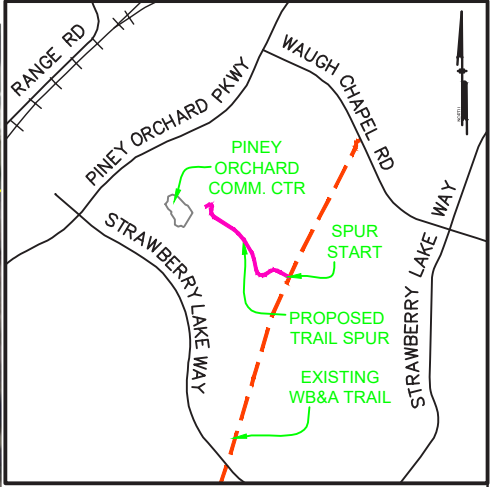
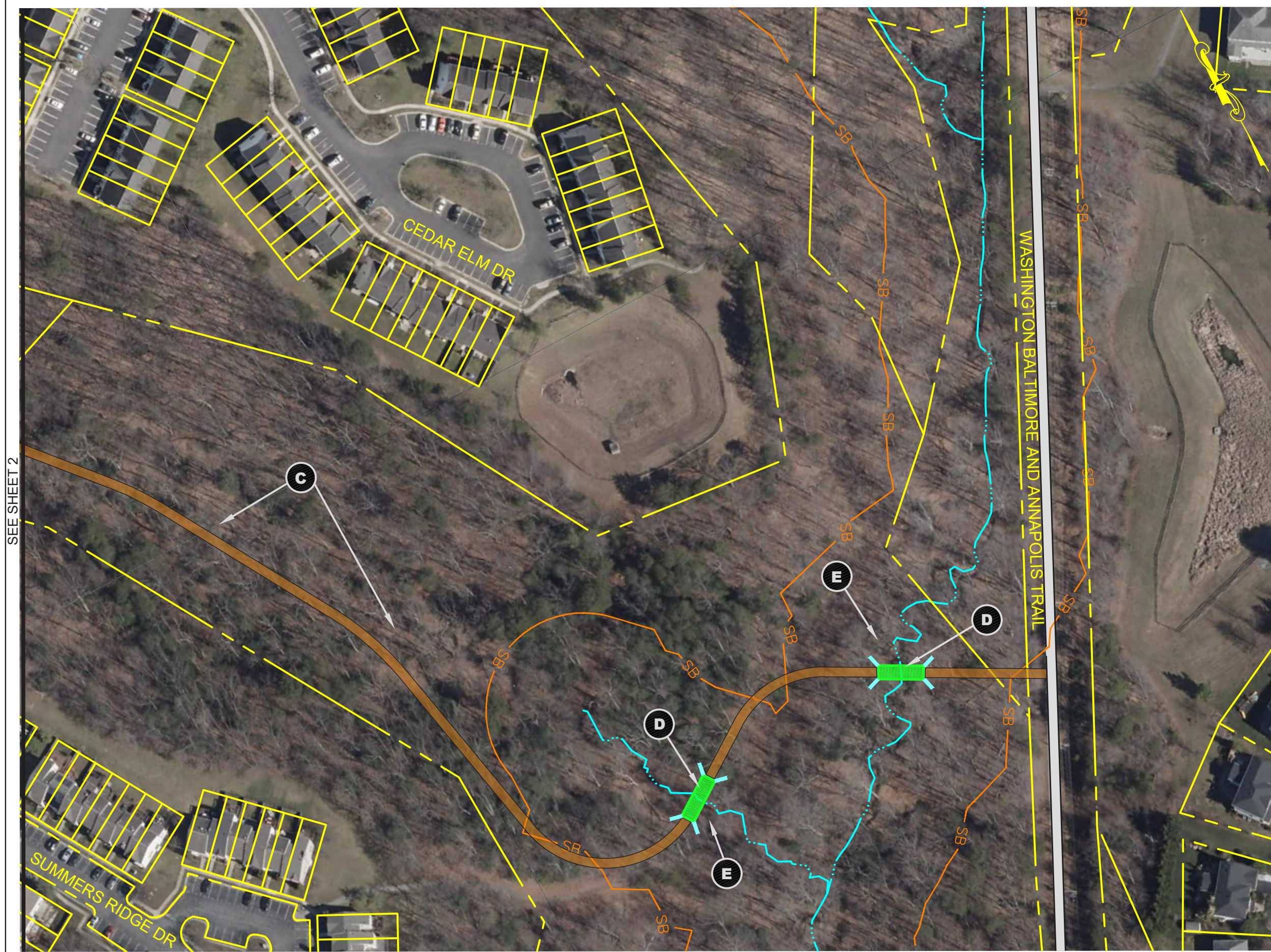


Figure 88. Existing WB&A Trail looking south. Stream to right shown on plan.





VICINITY MAP  
NOT TO SCALE

**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- WASHINGTON BALTIMORE AND ANNAPOLIS TRAIL ---
- PROPOSED TRAIL ---
- PROPOSED RETAINING WALL ---
- PROPOSED BOARDWALK OR PEDESTRIAN BRIDGE ▨

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. NEED EASEMENT FROM CONSTELLATION HOLDINGS
- B. STEEP SLOPES
- C. TREE CLEARING
- D. STREAM CROSSING
- E. STREAM AND STREAM BUFFER IMPACTS



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 Sheet 1 of 2

SEE SHEET 2

**WB&A TRAIL TO PINEY ORCHARD COMMUNITY CENTER**





**LEGEND**

- EXISTING PROPERTY BOUNDARY ---
- EXISTING STREAM ---
- EXISTING STREAM BUFFER SB
- WASHINGTON BALTIMORE AND ANNAPOLIS TRAIL ---
- PROPOSED TRAIL ---
- PROPOSED RETAINING WALL ---
- PROPOSED BOARDWALK OR PEDESTRIAN BRIDGE ---

SEE SHEET 1

**NOTES**

1. BASE MAPS BASED ON AVAILABLE AERIAL PHOTOGRAPHY FROM THE STATE OF MARYLAND (2020) AND COUNTY GIS.

**CONSTRAINTS**

- A. NEED EASEMENT FROM CONSTELLATION HOLDINGS
- B. STEEP SLOPES
- C. TREE CLEARING
- D. STREAM CROSSING
- E. STREAM AND STREAM BUFFER IMPACTS



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Sheet 2 of 2

**WB&A TRAIL TO PINEY ORCHARD COMMUNITY CENTER**



# 3

## Summary and Conclusion

### Summary

The County's mainline trail system is an incredible piece of the County recreation infrastructure, connecting large areas of the County and providing County residents many different recreation opportunities, as well as providing a form of alternative transportation. The mainline trail system is like a backbone in the body, critical to the overall structure and function of the person. But the backbone and other large bones only provide an overall framework and structure; other bones, smaller and perhaps less critical to the overall function of the body are needed to make the whole person. Similarly, the mainline trails can only do so much. They are critical, but they can't typically make the smaller connections that really flesh out a trail system. The proposed spurs begin to do that. Instead of connecting areas of the County to each other, they begin to connect places to each other – places where people live, work and play.

As requested in the RFP, Pennoni has reviewed and analyzed the County trail system at a countywide scale and developed a prioritized list of 24 potential trail spurs. We then prepared concept plans and preliminary cost estimates for the 24 spurs. Constraints to the development of the spurs have been examined and alternative alignments for some of the spurs have been considered. The spurs cover various parts of the northern, eastern, and western sections of the County. Spurs range in length from 600 feet to over 2.5 miles. Spurs include traditional 10' asphalt trails as well as on road improvements for some situations.

Following the planning stage, the trail rankings have been adjusted to account for factors encountered during the planning. The following factors were considered in adjusting the rankings: right-of-way requirements, cost, status of the mainline trail, and other significant issues. The initial

rankings of the spurs will be increased based on these factors. These factors are more fully described below.

**A. Right of Way Required** – Trail spur will be weighted based on what right-of-way or easements may be required based on the concept design.

**0** = no right-of-way needed, no adjustment to the ranking

**+1** = right-of-way needed from a public entity, i.e. Board of Education. It is assumed that the process for acquiring right-of-way from another public agency is simpler and less costly than acquiring right-of-way from a private entity.

**+2** = right-of-way needed from a private property owner

**B. Cost** – What is the cost of the project? The thinking is that smaller, less expensive projects will be able to be funded and constructed sooner, allowing the County to build out the trail system sooner.

**0** = under \$1 million

**+1** = \$1-1.5 million

**+2** = over \$1.5 million

**C. Status of Mainline Trail** – What is the status of the trail that will be connected to? Is it already built or under construction or still in the design or planning stages?

**0** = existing or under construction

**+1** = under design

**+2** = planned, but not designed

**D. Other Significant issues** – Are there other significant issues that are anticipated as far as potential opposition from surrounding communities, utility relocations, environmental permitting, etc. that could delay or otherwise impact the project?

**0** = no significant issues

**+1** = some significant issues

**+2** = major hurdles to overcome



## Trail Spurs Ranking

Trail	Initial Score	Length (lf)	Estimated Cost	Right-of-Way Factor	Cost Factor	Status of Mainline Trail Factor	Other Factor	Ranking Adjustment	Final Score	Council District
Broadneck Trail to Cape St Claire Elementary Spur	3	2234	\$ 737,201.09	1	0	0	0	4	1	5
BWI to Linthicum ES Spur	2	1752	\$ 872,549.50	2	0	0	1	5	2	1
Broadneck Trail to Belvedere Elementary Spur	1	3635	\$ 1,582,541.06	2	2	0	2	7	3	5
Broadneck Trail to Windsor Farm Elementary Spur	8	1156	\$ 469,452.67	0	0	0	0	8	4	5
B&A Trail to Baltimore Washington Medical Center Spur	5	6104	\$ 2,021,313.53	2	2	0	0	9	5	2
BWI Trail to Corkran MS Spur	7	2832	\$ 917,339.90	1	0	0	1	9	6	2
B&A Trail to Severna Park HS Spur	9	1140	\$ 513,358.56	0	0	0	0	9	7	5
WB&A Trail to Piney Orchard Community Center Spur	6	2066	\$ 1,475,109.79	2	1	0	1	10	8	4
Broadneck Trail to Twin Oaks Park and Magothy River Middle School Spur	12	1485	\$ 550,230.41	2	0	0	0	14	9	5
B&A Trail to Lake Waterford Park Spur	10	5468	\$ 2,258,161.03	2	2	0	1	15	10	3
B&A Trail to Severna Park MS Spur (via Kinder Farm Spur)	10	2575	\$ 1,096,417.30	2	1	2	0	15	11	5
South Shore Trail to Generals Highway Corridor Park Spur	15	2765	\$ 1,313,604.86	2	1	1	0	19	12	6
B&A Trail to Arnold Park Spur	16	768	\$ 595,324.08	2	0	0	1	19	13	5
Broadneck Trail to Broadneck Elementary Spur	17	3635	\$ 1,249,152.84	0	2	0	0	19	14	5
B&A Trail to Future Marley Creek Park Spur	18	1625	\$ 1,147,079.23	0	1	0	1	20	15	2
B&A Trail to Cromwell Park & Ride/ Light Rail Station Spur	19	608	\$ 389,775.11	1	0	0	0	20	16	1
B&A Trail to Kinder Farm Park Spur	14	3143	\$ 1,705,371.41	2	2	2	1	21	17	5
South Shore Trail to Millersville Elementary and Millersville Park Spur	20	1360	\$ 754,527.57	1	0	0	0	21	18	6
B&A to Annapolis Spur	23	738	\$ 229,570.85	0	0	0	0	23	19	5
Broadneck Trail to Arnold Park Spur	22	1075	\$ 477,219.60	2	0	0	0	24	20	5
South Shore Trail to Waterworks Park Spur	21	1986	\$ 1,401,905.23	2	1	1	0	25	21	6
South Shore Trail to Rolling Knolls Elementary Spur	24	1080	\$ 602,289.04	2	0	1	0	27	22	6

Notes:

1. Adjustment Factors are assigned a score of 0-2 based on parameters outlined on page 189
2. The items included in the "Other Factor" column are as follows:
  - a. Broadneck to Belvedere ES - potential community opposition for the removal of on street parking
  - b. BWI to Linthicum ES - coordination with railroad crossing
  - c. WB&A to Piney Orchard Community Center - potential environmental permits
  - d. BWI to Corkran MS - potential neighborhood opposition for trail located behind existing homes
  - e. B&A to Lake Waterford Park - crossing of Ritchie Highway
  - f. B&A to Kinder Farm Park - potential environmental permits
  - g. B&A to Arnold Park - crossing of Ritchie Highway, major utility relocations
  - h. B&A to Marley Creek park - potential environmental permits



# 4 Appendices

The final prioritized list is provided below:

Trail	Initial Score	Final Score
Broadneck Trail to Cape St Claire Elementary Spur	3	1
BWI to Linthicum ES Spur	2	2
Broadneck Trail to Belvedere Elementary Spur	1	3
Broadneck Trail to Windsor Farm Elementary Spur	8	4
B&A Trail to Baltimore Washington Medical Center Spur	5	5
BWI Trail to Corkran MS Spur	7	6
B&A Trail to Severna Park HS Spur	9	7
WB&A Trail to Piney Orchard Community Center Spur	6	8
Broadneck Trail to Twin Oaks Park and Magothy River Middle School Spur	12	9
B&A Trail to Lake Waterford Park Spur	10	10
B&A Trail to Severna Park MS Spur (via Kinder Farm Spur)	10	11
South Shore Trail to Generals Highway Corridor Park Spur	15	12
B&A Trail to Arnold Park Spur	16	13
Broadneck Trail to Broadneck Elementary Spur	17	14
B&A Trail to Future Marley Creek Park Spur	18	15
B&A Trail to Cromwell Park & Ride/ Light Rail Station Spur	19	16
B&A Trail to Kinder Farm Park Spur	14	17
South Shore Trail to Millersville Elementary and Millersville Park Spur	20	18
B&A to Annapolis Spur	23	19
Broadneck Trail to Arnold Park Spur	22	20
South Shore Trail to Waterworks Park Spur	21	21
South Shore Trail to Rolling Knolls Elementary Spur	24	22

This study will serve as a road map for future trail development in the County and the methodologies contained herein can be reapplied in the future to continue to expand and “flesh out” the County trail system. This study includes nearly 12.5 miles of trails in 24 spurs that will allow County residents expanded opportunities for recreation and increase connectivity throughout the County.



# Appendix A

## Linear Foot Trail Costs

Average linear foot costs for Broadneck Trail Phase III, South Shore Trail Phase II, and South Shore Trail Phase IV without any bridges or boardwalks included.

South Shore Phase II

Total - \$6,286,548 (base bid received from Mulford Construction, Inc.)

- Minus bridge and BW - \$6,286,548 - \$581,630 = \$5,704,918
- Linear Foot - 9799'
- Cost / LF = \$582/l.f.

South Shore Phase IV (original design)

- Total - \$9,862,733 (estimate by Phoenix Engineering at Schematic Design - June 2021)
- Minus bridge and BW - \$9,862,733 - \$1,470,541 = \$8,392,192
- Linear Foot - 20,473'
- Cost / LF = \$410/l.f.

Broadneck Phase III

- Total - \$6,676,745 (base bid received from Urban Zink, Inc.)
- Minus bridge and BW - \$6,676,745 - \$1,680,063 = \$4,996,682
- Linear Foot - 14,243'
- Cost / LF = \$351/l.f.

# Appendix B

## Assumptions for Hard Construction Costs

1. Clearing/Demo - \$6,000/ac
  - A. Assumes light tree and brush clearing, and demo
  - B. no building demo
  - C. based on approximate LOD, trail length x 40'
2. Sediment Control - \$25/l.f. of approximately 60% of the LOD
  - A. Assumes limited linear controls on the downhill side of a project.
  - B. This would be increased on a case by case basis especially for larger projects and stream/wetland crossings
3. Grading - assume between \$1,000 and \$1,500 per 1,000 sf (msf) of LOD
  - A. This number will vary in the range noted above depending on steepness of topography
  - B. South Shore Trail Phase II - \$356,519 / 404 msf = 882/1000 sf
  - C. South Shore Trail Phase IV - \$1,418,184/603 msf = \$2351/1000 sf
  - D. Broadneck Phase II - \$1,119,429/509 msf = \$2,200/1000 sf
4. 10' asphalt Trail - assume \$40/l.f.
  - A. 2.5" asphalt
  - B. 4" stone
5. 10' concrete trail - assume \$10/sf, but see ramps below
6. Curb and Gutter - \$15/l.f.
7. Retaining walls - assume \$104/sf
  - A. Average cost of South Shore Phase 2 bids for retaining wall A was approximately \$103/sf
8. Boardwalk
  - A. Assume \$180/sf for long boardwalk - over 100'
  - B. Assume \$400/sf for boardwalks less than 50' (based on south shore phase 2 bids)
  - C. Assume timber boardwalk structure with 14' clear precast concrete deck and stringers, and wood handrails



# Appendix C

## Cost Estimates

V 1.0



### COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
B&A Trail to Annapolis

Computed: PJS

Checked by:

- 9. Crosswalks
  - A. Assume \$3/l.f. of striping
  - B. Assume continental style crosswalks
- 10. Ramps – assume \$1500/each
- 11. Traffic signal
  - A. Assume \$250k per signal
  - B. Assume \$50k for pedestrian signals
  - C. Assume \$10k/existing signal for signal modifications
  - D. Assume \$7k for Rapid Rectangular Flashing Beacon (RRFB)
- 12. Stormwater – assume \$22/sf of facility
  - A. Each 20,000 sf drainage area will have approximately one 1,200-2,400 sf SWM facility
- 13. Storm drainage – assume \$120/l.f. for each 50 l.f.
  - A. Each 50 l.f. includes one inlet and 50 l.f. of 15” HDPE storm drain
- 14. Utility relocation
  - A. Poles – assume \$10k/pole
  - B. Fire hydrants – \$6k
- 15. Landscaping
  - A. Assume \$250/shade tree
  - B. Assume shade trees at 50 o.c.
- 16. Forest Conservation
  - A. Assume \$1.75/sf of forest conservation required.
- 17. Timber backed Guardrail – use \$90/l.f.
- 18. Signs – use \$200/sign
- 19. Fencing
  - A. Assume \$15/l.f. for split rail
  - B. \$55/ 54” chain-link fence
  - C. \$68/l.f. for 8’ fence

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	0.66	\$6,000.00	\$3,960.00
	Sediment Control	LF	1,000	\$25.00	\$25,000.00
	Grading	MSF	29	\$1,200.00	\$34,800.00
	10' Asphalt Trail and Stone Base	LF	740	\$40.00	\$29,600.00
	Concrete ADA Ramps	EA	1	\$1,500.00	\$1,500.00
	Stormwater Management	SF	1,200	\$22.00	\$26,400.00
	Storm Drainage	LF	100	\$120.00	\$12,000.00
	Signage	EA	15	\$200.00	\$3,000.00
	<i>Subtotal</i>				\$136,260.00
	Mobilization (20%)				\$27,252.00
	Contractor Profit (8%)				\$13,080.96
	Design Contingency (30%)				\$52,977.89
	<b>Total</b>				<b>\$229,570.85</b>
	<b>Linear Foot of Trail</b>				<b>738</b>
	<b>Cost per Linear Foot</b>				<b>\$311.07</b>

**Notes:**

1. Does not include design and permitting costs.
2. Assumes two small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Cost per lf does not include on road trail from B&A parking to WWII Memorial. No additional improvements are proposed from B&A parking to WWII Memorial on the west side of MD 450.
4. Does not include property acquisition costs.
5. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 9/13/2024

Description: Preliminary Trail Costs  
B&A Trail to Annapolis ALTERNATE

Computed: PJS

Checked by: ALC

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	5.55	\$6,000.00	\$33,300.00
	Sediment Control	LF	7,000	\$25.00	\$175,000.00
	Grading	MSF	242	\$1,300.00	\$314,600.00
	10' Asphalt Trail and Stone Base	LF	6,048	\$40.00	\$241,920.00
	Concrete ADA Ramps	EA	11	\$1,500.00	\$16,500.00
	Stormwater Management	SF	13,200	\$22.00	\$290,400.00
	Storm Drainage	LF	1,100	\$120.00	\$132,000.00
	Signage	EA	20	\$200.00	\$4,000.00
	Retaining Walls	SF	10,700	\$104.00	\$1,112,800.00
	Chainlink Fencing	LF	1,200	\$55.00	\$66,000.00
	Critical Area Mitigation	SF	326,700	\$1.75	\$571,725.00
	Crosswalks	LF	750	\$3.00	\$2,250.00
	<i>Subtotal</i>				\$2,960,495.00
	Mobilization (20%)				\$592,099.00
	Contractor Profit (8%)				\$284,207.52
	Design Contingency (30%)				\$1,151,040.46
	<b>Total</b>				<b>\$4,987,841.98</b>
	<b>Linear Foot of Trail</b>				<b>6,048</b>
	<b>Cost per Linear Foot</b>				<b>\$824.71</b>

Notes:

- Does not include design and permitting costs.
- Assumes eleven small microbio retention/infiltration areas for SWM.
- Does not include property acquisition costs.
- Assumes clearing outside of the Critical Area can be limited to less than 20,000 sf. No forest conservation mitigation required.
- Critical Area mitigation assumes mitigation in the amount of 1.5 x the area cleared, and assumes clearing of approximately 5 acres. Mitigation is assumed to be replanting.
- Assumes no utility relocations

B&A Trail to Annapolis ALTERNATE TRAIL



V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
B&A Trail to Arnold Park

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	0.70	\$6,000.00	\$4,200.00
	Sediment Control	LF	900	\$25.00	\$22,500.00
	Sidewalk Removal	CY	27	\$135.00	\$3,645.00
	Grading	MSF	30	\$1,000.00	\$30,000.00
	10' Asphalt Trail and Stone Base	LF	768	\$10.00	\$7,680.00
	Concrete ADA Ramps	EA	9	\$1,500.00	\$13,500.00
	Stormwater Management	SF	2,400	\$22.00	\$52,800.00
	Storm Drainage	LF	200	\$120.00	\$24,000.00
	Utility Pole Relocation	EA	3	\$30,000.00	\$90,000.00
	Signage	EA	10	\$200.00	\$2,000.00
	Crosswalks	LF	475	\$3.00	\$1,425.00
	Pedestrian Signals	LS	2	\$50,000.00	\$100,000.00
	Bike Symbol Marking on Church Road	EA	8	\$200.00	\$1,600.00
	<i>Subtotal</i>				\$353,350.00
	Mobilization (20%)				\$70,670.00
	Contractor Markup (8%)				\$33,921.60
	Design Contingency (30%)				\$137,382.48
	<b>Total</b>				<b>\$595,324.08</b>
	<b>Linear Foot of Trail</b>				<b>768</b>
	<b>Cost per Linear Foot</b>				<b>\$775.16</b>

Notes:

- Does not include design and permitting costs.
- Assumes two small microbio retention/infiltration areas and non rooftop disconnect for SWM.
- Does not include property acquisition costs.
- Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.
- Assumes limited signage and striping improvements along Church Road and no actual trail construction along Church Road.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 B&A Trail to Baltimore Washington Medical

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	5.60	\$6,000.00	\$33,600.00
	Sediment Control	LF	7,000	\$25.00	\$175,000.00
	Sidewalk Removal	CY	265	\$135.00	\$35,775.00
	Grading	MSF	244	\$1,200.00	\$292,800.00
	10' Asphalt Trail and Stone Base	LF	6,104	\$40.00	\$244,160.00
	Curb and Gutter	LF	720	\$15.00	\$10,800.00
	Concrete ADA Ramps	EA	18	\$1,500.00	\$27,000.00
	Timber Backed Guardrail	LF	845	\$90.00	\$76,050.00
	Stormwater Management	SF	8,400	\$22.00	\$184,800.00
	Storm Drainage	LF	700	\$120.00	\$84,000.00
	Signage	EA	10	\$200.00	\$2,000.00
	Crosswalks	LF	750	\$3.00	\$2,250.00
	Signal Modifications	LS	1	\$10,000.00	\$10,000.00
	Landscaping	EA	86	\$250.00	\$21,500.00
	<i>Subtotal</i>				\$1,199,735.00
	Mobilization (20%)				\$239,947.00
	Contractor Profit (8%)				\$115,174.56
	Design Contingency (30%)				\$466,456.97
	<b>Total</b>				<b>\$2,021,313.53</b>
	<b>Linear Foot of Trail</b>				<b>6,104</b>
	<b>Cost per Linear Foot</b>				<b>\$331.15</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes seven small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.
4. Assumes timber backed guardrail along Hospital Drive for 845 lf due to proximity of trail to roadway.
5. Does not include property acquisition costs.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 B&A Trail to Cromwell Park & Ride Light Rail

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	0.56	\$6,000.00	\$3,360.00
	Sediment Control	LF	700	\$25.00	\$17,500.00
	Sidewalk Removal	CY	38	\$135.00	\$5,130.00
	Grading	MSF	24	\$1,000.00	\$24,000.00
	10' Asphalt Trail and Stone Base	LF	608	\$40.00	\$24,320.00
	Concrete ADA Ramps	EA	3	\$1,500.00	\$4,500.00
	Split Rail Fence	LF	520	\$15.00	\$7,800.00
	Timber Backed Guardrail	LF	500	\$90.00	\$45,000.00
	Stormwater Management	SF	1,200	\$22.00	\$26,400.00
	Storm Drainage	LF	100	\$120.00	\$12,000.00
	Signage	EA	3	\$200.00	\$600.00
	Crosswalks	LF	246	\$3.00	\$738.00
	Pedestrian Signals	LS	1	\$50,000.00	\$50,000.00
	Modify Ex. Pedestrian Signals	LS	1	\$10,000.00	\$10,000.00
	<i>Subtotal</i>				\$231,348.00
	Mobilization (20%)				\$46,269.60
	Contractor OH & Markup (8%)				\$22,209.41
	Design Contingency (30%)				\$89,948.10
	<b>Total</b>				<b>\$389,775.11</b>
	<b>Linear Foot of Trail</b>				<b>608</b>
	<b>Cost per Linear Foot</b>				<b>\$641.08</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes two small microbio retention/infiltration areas and non rooftop disconnect for SWM.
5. Assumes segmental block wall.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 B&A Trail to Future Marley Creek Park

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	1.49	\$6,000.00	\$8,940.00
	Sediment Control	LF	1,900	\$25.00	\$47,500.00
	Grading	MSF	65	\$1,100.00	\$71,500.00
	10' Asphalt Trail and Stone Base	LF	1,490	\$40.00	\$59,600.00
	Pedestrian Bridge/Boardwalk	SF	1,890	\$180.00	\$340,200.00
	Concrete ADA Ramps	EA	1	\$1,500.00	\$1,500.00
	Stormwater Management	SF	3,600	\$22.00	\$79,200.00
	Storm Drainage	LF	600	\$120.00	\$72,000.00
	Signage	EA	2	\$200.00	\$400.00
	<i>Subtotal</i>				\$680,840.00
	Mobilization (20%)				\$136,168.00
	Contractor Markup (8%)				\$65,360.64
	Design Contingency (30%)				\$264,710.59
	<b>Total</b>				<b>\$1,147,079.23</b>
	<b>Linear Foot of Trail</b>				<b>1,625</b>
	<b>Cost per Linear Foot</b>				<b>\$705.89</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes three small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.
4. Assumes that forest conservation requirements will be addressed by the creation of forest retention easements on the existing property.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 B&A Trail to Kinder Farm Park

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	2.88	\$6,000.00	\$17,280.00
	Sediment Control	LF	4,000	\$25.00	\$100,000.00
	Sidewalk Removal	CY	53	\$135.00	\$7,155.00
	Grading	MSF	126	\$1,100.00	\$138,600.00
	5' Asphalt Trail and Stone Base	LF	1,370	\$20.00	\$27,400.00
	10' Asphalt Trail and Stone Base	LF	1,775	\$40.00	\$71,000.00
	Concrete ADA Ramps	EA	11	\$1,500.00	\$16,500.00
	Timber Backed Guardrail	LF	1,370	\$90.00	\$123,300.00
	Curb and Gutter	LF	365	\$15.00	\$5,475.00
	Stormwater Management	SF	4,800	\$22.00	\$105,600.00
	Storm Drainage	LF	800	\$120.00	\$96,000.00
	Retaining Walls	SF	2,400	\$104.00	\$249,600.00
	Signage	EA	8	\$200.00	\$1,600.00
	Crosswalks	LF	900	\$3.00	\$2,700.00
	Pedestrian Signals	LS	1	\$50,000.00	\$50,000.00
	<i>Subtotal</i>				\$1,012,210.00
	Mobilization (20%)				\$202,442.00
	Contractor Markup (8%)				\$97,172.16
	Design Contingency (30%)				\$393,547.25
	<b>Total</b>				<b>\$1,705,371.41</b>
	<b>Linear Foot of Trail</b>				<b>3,143</b>
	<b>Cost per Linear Foot</b>				<b>\$542.59</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes four small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Assumes approximately 800' of 3' tall segmental block wall.
4. Does not include property acquisition costs.
5. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 9/4/2024

Description: Preliminary Trail Costs  
B&A Trail to Kinder Farm Park ALTERNATE

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	3.47	\$6,000.00	\$20,820.00
	Sediment Control	LF	5,000	\$25.00	\$125,000.00
	Grading	MSF	151	\$1,300.00	\$196,300.00
	10' Asphalt Trail and Stone Base	LF	3,780	\$40.00	\$151,200.00
	Concrete ADA Ramps	EA	4	\$1,500.00	\$6,000.00
	Timber Backed Guardrail	LF	2,200	\$90.00	\$198,000.00
	Curb and Gutter	LF	2,100	\$15.00	\$31,500.00
	Stormwater Management	SF	8,400	\$22.00	\$184,800.00
	Storm Drainage	LF	1,200	\$120.00	\$144,000.00
	Signage	EA	5	\$200.00	\$1,000.00
	Crosswalks	LF	350	\$3.00	\$1,050.00
	Pedestrian Signals	LS	1	\$50,000.00	\$50,000.00
	Forest Conservation	SF	44,000	\$1.75	\$77,000.00
	<i>Subtotal</i>				\$1,186,670.00
	Mobilization (20%)				\$237,334.00
	Contractor Markup (8%)				\$113,920.32
	Design Contingency (30%)				\$461,377.30
	<b>Total</b>				<b>\$1,999,301.62</b>
	<b>Linear Foot of Trail</b>				<b>3,780</b>
	<b>Cost per Linear Foot</b>				<b>\$528.92</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes seven small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Assumes approximately 800' of 3' tall segmental block wall.
4. Does not include property acquisition costs.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
B&A Trail to Lake Waterford Park

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	5.02	\$6,000.00	\$30,120.00
	Sediment Control	LF	3,000	\$25.00	\$75,000.00
	Grading	MSF	219	\$1,300.00	\$284,700.00
	10' Asphalt Trail and Stone Base	LF	5,468	\$40.00	\$218,720.00
	Concrete ADA Ramps	EA	13	\$1,500.00	\$19,500.00
	Stormwater Management	SF	12,000	\$22.00	\$264,000.00
	Storm Drainage	LF	1,100	\$120.00	\$132,000.00
	Retaining Walls	SF	1,850	\$104.00	\$192,400.00
	Signage	EA	7	\$200.00	\$1,400.00
	Crosswalks	LF	708	\$3.00	\$2,124.00
	Pedestrian Signals	LS	2	\$50,000.00	\$100,000.00
	Chainlink Fence	LF	370	\$55.00	\$20,350.00
	<i>Subtotal</i>				\$1,340,314.00
	Mobilization (20%)				\$268,062.80
	Contractor OH & Markup (8%)				\$128,670.14
	Design Contingency (30%)				\$521,114.08
	<b>Total</b>				<b>\$2,258,161.03</b>
	<b>Linear Foot of Trail</b>				<b>5,468</b>
	<b>Cost per Linear Foot</b>				<b>\$412.98</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes ten small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Assumes approximately 370' of 5' tall segmental block wall.
4. Does not include property acquisition costs.





COST ESTIMATE

Project: Trail Spurs Study Sheet No. 1  
 Project No.: AACOX23001 Date: 3/4/2024  
 Description: Preliminary Trail Costs Computed: PJS  
 B&A Trail to Severna Park HS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	1.05	\$6,000.00	\$6,300.00
	Sediment Control	LF	1,500	\$25.00	\$37,500.00
	Grading	MSF	46	\$1,200.00	\$55,200.00
	10' Asphalt Trail and Stone Base	LF	1,140	\$40.00	\$45,600.00
	Concrete ADA Ramps	EA	2	\$1,500.00	\$3,000.00
	Stormwater Management	SF	2,400	\$22.00	\$52,800.00
	Storm Drainage	LF	200	\$120.00	\$24,000.00
	Retaining Walls	SF	600	\$104.00	\$62,400.00
	Signage	EA	4	\$200.00	\$800.00
	Split Rail Fencing	LF	1,140	\$15.00	\$17,100.00
	<i>Subtotal</i>				\$304,700.00
	Mobilization (20%)				\$60,940.00
	Contractor Markup (8%)				\$29,251.20
	Design Contingency (30%)				\$118,467.36
	<b>Total</b>				<b>\$513,358.56</b>
	<b>Linear Foot of Trail</b>				<b>1,140</b>
	<b>Cost per Linear Foot</b>				<b>\$450.31</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes two small microbioretention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.
4. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.
5. Assumes approximately 200' of 3' tall retaining wall.



COST ESTIMATE

Project: Trail Spurs Study Sheet No. 1  
 Project No.: AACOX23001 Date: 3/4/2024  
 Description: Preliminary Trail Costs Computed: PJS  
 B&A Trail to Severna Park Middle School via Kinder Farm Park

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	2.36	\$6,000.00	\$14,160.00
	Sediment Control	LF	3,000	\$25.00	\$75,000.00
	Grading	MSF	103	\$1,200.00	\$123,600.00
	5' Asphalt Trail and Stone Base	LF	375	\$20.00	\$7,500.00
	10' Asphalt Trail and Stone Base	LF	2,200	\$40.00	\$88,000.00
	Concrete ADA Ramps	EA	4	\$1,500.00	\$6,000.00
	Timber Backed Guardrail	LF	375	\$90.00	\$33,750.00
	Stormwater Management	SF	6,000	\$22.00	\$132,000.00
	Storm Drainage	LF	1,000	\$120.00	\$120,000.00
	Signage	EA	2	\$200.00	\$400.00
	Crosswalks	LF	120	\$3.00	\$360.00
	Pedestrian Signals	LS	1	\$50,000.00	\$50,000.00
	<i>Subtotal</i>				\$650,770.00
	Mobilization (20%)				\$130,154.00
	Contractor Profit (8%)				\$62,473.92
	Design Contingency (30%)				\$253,019.38
	<b>Total</b>				<b>\$1,096,417.30</b>
	<b>Linear Foot of Trail</b>				<b>2,575</b>
	<b>Cost per Linear Foot</b>				<b>\$425.79</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes five small microbioretention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.
4. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.
5. Assumes widening of existing shoulder for approximately 375' immediately south of Kinder Road intersection.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 Broadneck Trail to Arnold Park

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	0.98	\$6,000.00	\$5,880.00
	Sediment Control	LF	1,500	\$25.00	\$37,500.00
	Grading	MSF	43	\$1,400.00	\$60,200.00
	10' Asphalt Trail and Stone Base	LF	1,075	\$40.00	\$43,000.00
	Concrete ADA Ramps	EA	3	\$1,500.00	\$4,500.00
	Stormwater Management	SF	2,400	\$22.00	\$52,800.00
	Storm Drainage	LF	200	\$120.00	\$24,000.00
	Forest Conservation	SF	23,000	\$1.75	\$40,250.00
	Signage	EA	2	\$200.00	\$400.00
	Crosswalks	LF	240	\$3.00	\$720.00
	Pedestrian Signals (RRFB)	LS	2	\$7,000.00	\$14,000.00
	<i>Subtotal</i>				\$283,250.00
	Mobilization (20%)				\$56,650.00
	Contractor Markup (8%)				\$27,192.00
	Design Contingency (30%)				\$110,127.60
	<b>Total</b>				<b>\$477,219.60</b>
	<b>Linear Foot of Trail</b>				<b>1,075</b>
	<b>Cost per Linear Foot</b>				<b>\$443.93</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes two small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 Broadneck Trail to Belvedere ES

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	3.00	\$6,000.00	\$18,000.00
	Sediment Control	LF	5,000	\$25.00	\$125,000.00
	Sidewalk Removal	CY	178	\$135.00	\$24,030.00
	Grading	MSF	110	\$1,500.00	\$165,000.00
	10' Asphalt Trail and Stone Base	LF	3,635	\$40.00	\$145,400.00
	Concrete ADA Ramps	EA	13	\$1,500.00	\$19,500.00
	Curb and Gutter	LF	1,100	\$15.00	\$16,500.00
	Stormwater Management	SF	4,800	\$22.00	\$105,600.00
	Storm Drainage	LF	600	\$120.00	\$72,000.00
	Retaining Walls	SF	1,850	\$104.00	\$192,400.00
	Signage	EA	6	\$200.00	\$1,200.00
	Crosswalks	LF	450	\$3.00	\$1,350.00
	Utility Pole Relocation	EA	3	\$10,000.00	\$30,000.00
	Fire Hydrant Relocation	EA	1	\$6,000.00	\$6,000.00
	Chainlink Fencing	LF	315	\$55.00	\$17,325.00
	<i>Subtotal</i>				\$939,305.00
	Mobilization (20%)				\$187,861.00
	Contractor Profit (8%)				\$90,173.28
	Design Contingency (30%)				\$365,201.78
	<b>Total</b>				<b>\$1,582,541.06</b>
	<b>Linear Foot of Trail</b>				<b>3,635</b>
	<b>Cost per Linear Foot</b>				<b>\$435.36</b>

Notes:

1. Does not include design and permitting costs.
2. Estimate does not include alternate alignment.
3. Assumes four small microbio retention/infiltration areas and non rooftop disconnect for SWM.
4. Assumes segmental block wall, approximately 6' tall, and 310' long.
5. Does not include property acquisition costs.
6. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 Broadneck Trail to Belvedere ES ALTERNATE

Sheet No. 1  
 Date: 10/8/2024  
 Computed: ALC  
 Checked by: PJS

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	4.06	\$6,000.00	\$24,360.00
	Sediment Control	LF	6,000	\$25.00	\$150,000.00
	Sidewalk Removal	CY	154	\$135.00	\$20,790.00
	Grading	MSF	177	\$1,300.00	\$230,100.00
	10' Asphalt Trail and Stone Base	LF	4,444	\$40.00	\$177,760.00
	Concrete ADA Ramps	EA	15	\$1,500.00	\$22,500.00
	Curb and Gutter	LF	872	\$15.00	\$13,080.00
	Stormwater Management	SF	9,600	\$22.00	\$211,200.00
	Storm Drainage	LF	1,500	\$120.00	\$180,000.00
	Signage	EA	6	\$200.00	\$1,200.00
	Crosswalks	LF	360	\$3.00	\$1,080.00
	Utility Pole Relocation	EA	4	\$10,000.00	\$40,000.00
	<i>Subtotal</i>				\$1,072,070.00
	Mobilization (20%)				\$214,414.00
	Contractor Profit (8%)				\$102,918.72
	Design Contingency (30%)				\$416,820.82
	<b>Total</b>				<b>\$1,806,223.54</b>
	<b>Linear Foot of Trail</b>				<b>4,444</b>
	<b>Cost per Linear Foot</b>				<b>\$406.44</b>

Notes:  
 1. Does not include design and permitting costs.  
 2. Assumes eight small microbio retention/infiltration areas and non rooftop disconnect for SWM.  
 3. Does not include property acquisition costs.  
 4. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 Broadneck Trail to Broadneck ES

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS  
 Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	3.25	\$6,000.00	\$19,500.00
	Sediment Control	LF	5,000	\$25.00	\$125,000.00
	Sidewalk and Pavement Removal	CY	400	\$135.00	\$54,000.00
	Grading	MSF	142	\$1,200.00	\$170,400.00
	10' Asphalt Trail and Stone Base	LF	3,551	\$40.00	\$142,040.00
	Concrete ADA Ramps	EA	5	\$1,500.00	\$7,500.00
	Curb and Gutter	LF	2,835	\$15.00	\$42,525.00
	Stormwater Management	SF	3,600	\$22.00	\$79,200.00
	Storm Drainage	LF	570	\$120.00	\$68,400.00
	Signage	EA	8	\$200.00	\$1,600.00
	Crosswalks	LF	420	\$3.00	\$1,260.00
	Utility Relocation (Transformer)	LS	1	\$30,000.00	\$30,000.00
	<i>Subtotal</i>				\$741,425.00
	Mobilization (20%)				\$148,285.00
	Contractor Markup (8%)				\$71,176.80
	Design Contingency (30%)				\$288,266.04
	<b>Total</b>				<b>\$1,249,152.84</b>
	<b>Linear Foot of Trail</b>				<b>3,551</b>
	<b>Cost per Linear Foot</b>				<b>\$351.77</b>

Notes:  
 1. Does not include design and permitting costs.  
 2. Estimate does not include alternate alignment.  
 3. Assumes three small microbio retention/infiltration areas and non rooftop disconnect for SWM.  
 4. Does not include property acquisition costs.  
 5. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 Broadneck Trail to Cape St. Claire ES

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	2	\$6,000.00	\$12,300.00
	Sediment Control	LF	3,800	\$25.00	\$95,000.00
	Grading	MSF	89	\$1,100.00	\$97,900.00
	10' Asphalt Trail and Stone Base	LF	1,596	\$40.00	\$63,840.00
	12' Asphalt Driveway (no Stone base)	LF	638	\$40.00	\$25,520.00
	Stormwater Management	SF	3,600	\$22.00	\$79,200.00
	Storm Drainage	LF	300	\$120.00	\$36,000.00
	Landscaping	EA	30	\$250.00	\$7,500.00
	Split Rail Fencing	LF	1,300	\$15.00	\$19,500.00
	Signage	EA	4	\$200.00	\$800.00
	<i>Subtotal</i>				\$437,560.00
	Mobilization (20%)				\$87,512.00
	Contractor Markup (8%)				\$42,005.76
	Design Contingency (30%)				\$170,123.33
	<b>Total</b>				<b>\$737,201.09</b>
	<b>Linear Foot of Trail</b>				<b>2,234</b>
	<b>Cost per Linear Foot</b>				<b>\$329.99</b>

Notes:

1. Does not include design and permitting costs.
2. Does not include property acquisition costs.
3. Assumes existing gravel driveway will serve as base for new trail/driveway.
4. Assumes three small microbioretention/infiltration areas and non rooftop disconnect for SWM.
5. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.
6. Assumes new shade trees and fencing where trail passes through elementary school.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 Broadneck Trail to Magothy MS

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	1.63	\$6,000.00	\$9,780.00
	Sediment Control	LF	1,800	\$25.00	\$45,000.00
	Sidewalk Removal	CY	23	\$135.00	\$3,105.00
	Grading	MSF	60	\$1,000.00	\$60,000.00
	10' Asphalt Trail and Stone Base	LF	1,485	\$40.00	\$59,400.00
	Concrete ADA Ramps	EA	10	\$1,500.00	\$15,000.00
	Stormwater Management	SF	3,600	\$22.00	\$79,200.00
	Storm Drainage	LF	300	\$120.00	\$36,000.00
	Signage	EA	4	\$200.00	\$800.00
	Crosswalks	LF	100	\$3.00	\$300.00
	Shade Trees	EA	18	\$250.00	\$4,500.00
	Split Rail Fencing	LF	900	\$15.00	\$13,500.00
	<i>Subtotal</i>				\$326,585.00
	Mobilization (20%)				\$65,317.00
	Contractor Markup (8%)				\$31,352.16
	Design Contingency (30%)				\$126,976.25
	<b>Total</b>				<b>\$550,230.41</b>
	<b>Linear Foot of Trail</b>				<b>1,485</b>
	<b>Cost per Linear Foot</b>				<b>\$370.53</b>

Notes:

1. Does not include design and permitting costs.
2. Estimate does not include alternate alignment.
3. Assumes three small microbioretention/infiltration areas and non rooftop disconnect for SWM.
4. Assumes split rail fence and proposed shade trees along middle school fields.
5. Does not include property acquisition costs.
6. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
Broadneck Trail to Windsor Farm ES

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	0.8	\$6,000.00	\$4,800.00
	Sediment Control	LF	2,370	\$25.00	\$59,250.00
	Grading	MSF	35	\$1,300.00	\$45,500.00
	10' Asphalt Trail and Stone Base	LF	1,156	\$40.00	\$46,240.00
	Concrete ADA Ramps	EA	2	\$1,500.00	\$3,000.00
	Stormwater Management	SF	2,400	\$22.00	\$52,800.00
	Storm Drainage	LF	200	\$120.00	\$24,000.00
	Landscaping	EA	30	\$250.00	\$7,500.00
	Pedestrian Signals (RRFB)	EA	2	\$7,000.00	\$14,000.00
	Signal Modification at College Parkway	LS	1	\$10,000.00	\$10,000.00
	Utility Pole Relocation	EA	1	\$10,000.00	\$10,000.00
	Signage	EA	4	\$200.00	\$800.00
	Crosswalks	LF	250	\$3.00	\$750.00
	<i>Subtotal</i>				\$278,640.00
	Mobilization (20%)				\$55,728.00
	Contractor Markup (8%)				\$26,749.44
	Design Contingency (30%)				\$108,335.23
	<b>Total</b>				<b>\$469,452.67</b>
	<b>Linear Foot of Trail</b>				<b>1,156</b>
	<b>Cost per Linear Foot</b>				<b>\$406.10</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes two small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.
4. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
BWI Trail to Corkran MS

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	2.6	\$6,000.00	\$15,600.00
	Sediment Control	LF	3,100	\$25.00	\$77,500.00
	Grading	MSF	113	\$1,000.00	\$113,000.00
	10' Asphalt Trail and Stone Base	LF	2,832	\$40.00	\$113,280.00
	Concrete ADA Ramps	EA	3	\$1,500.00	\$4,500.00
	Stormwater Management	SF	2,400	\$22.00	\$52,800.00
	Storm Drainage	LF	300	\$120.00	\$36,000.00
	Forest Conservation	SF	35,000	\$1.75	\$61,250.00
	Signage	EA	4	\$200.00	\$800.00
	Crosswalks	LF	250	\$3.00	\$750.00
	Split Rail fencing	LF	4,600	\$15.00	\$69,000.00
	<i>Subtotal</i>				\$544,480.00
	Mobilization (20%)				\$108,896.00
	Contractor OH & Markup (8%)				\$52,270.08
	Design Contingency (30%)				\$211,693.82
	<b>Total</b>				<b>\$917,339.90</b>
	<b>Linear Foot of Trail</b>				<b>2,832</b>
	<b>Cost per Linear Foot</b>				<b>\$323.92</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes two small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.
4. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.





COST ESTIMATE

Project: Trail Spurs Study Sheet No. 1  
 Project No.: AACOX23001 Date: 9/13/2024  
 Description: Preliminary Trail Costs Computed: PJS  
 BWI Trail to Linthicum Elementary and Park

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	1.61	\$6,000.00	\$9,660.00
	Sediment Control	LF	2,000	\$25.00	\$50,000.00
	Sidewalk Removal	CY	73	\$135.00	\$9,855.00
	Grading	MSF	70	\$1,000.00	\$70,000.00
	10' Asphalt Trail and Stone Base	LF	1,752	\$40.00	\$70,080.00
	Concrete ADA Ramps	EA	9	\$1,500.00	\$13,500.00
	Stormwater Management	SF	4,800	\$22.00	\$105,600.00
	Storm Drainage	LF	400	\$120.00	\$48,000.00
	Signage	EA	6	\$200.00	\$1,200.00
	Pedestrian Signals	LS	2	\$50,000.00	\$100,000.00
	Utility Pole Relocation	EA	4	\$10,000.00	\$40,000.00
	<i>Subtotal</i>				\$517,895.00
	Mobilization (20%)				\$103,579.00
	Contractor Markup (8%)				\$49,717.92
	Design Contingency (30%)				\$201,357.58
	<b>Total</b>				<b>\$872,549.50</b>
	<b>Linear Foot of Trail</b>				<b>1,752</b>
	<b>Cost per Linear Foot</b>				<b>\$498.03</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes four small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include anything extraordinary for the rail road crossing, just signage and a concrete ramp.
4. Does not include property acquisition costs.
5. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.



COST ESTIMATE

Project: Trail Spurs Study Sheet No. 1  
 Project No.: AACOX23001 Date: 10/8/2024  
 Description: Preliminary Trail Costs Computed: ALC  
 BWI Trail to Linthicum Elementary and Park ALTERNATE

Checked by: PJS

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	1.32	\$6,000.00	\$7,920.00
	Sediment Control	LF	2,000	\$25.00	\$50,000.00
	Sidewalk Removal	CY	72	\$135.00	\$9,720.00
	Grading	MSF	58	\$1,000.00	\$58,000.00
	10' Asphalt Trail and Stone Base	LF	1,440	\$40.00	\$57,600.00
	Concrete ADA Ramps	EA	7	\$1,500.00	\$10,500.00
	Stormwater Management	SF	2,400	\$22.00	\$52,800.00
	Storm Drainage	LF	200	\$120.00	\$24,000.00
	Signage	EA	5	\$200.00	\$1,000.00
	Pedestrian Signals	LS	1	\$50,000.00	\$50,000.00
	<i>Subtotal</i>				\$321,540.00
	Mobilization (20%)				\$64,308.00
	Contractor Markup (8%)				\$30,867.84
	Design Contingency (30%)				\$125,014.75
	<b>Total</b>				<b>\$541,730.59</b>
	<b>Linear Foot of Trail</b>				<b>1,752</b>
	<b>Cost per Linear Foot</b>				<b>\$309.21</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes four small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.
4. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
South Shore Trail to Generals Highway  
Corridor Park

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	2.54	\$6,000.00	\$15,240.00
	Sediment Control	LF	3,000	\$25.00	\$75,000.00
	Grading	MSF	111	\$1,500.00	\$166,500.00
	10' Asphalt Trail and Stone Base	LF	2,765	\$40.00	\$110,600.00
	Concrete ADA Ramps	EA	4	\$1,500.00	\$6,000.00
	Stormwater Management	SF	6,000	\$22.00	\$132,000.00
	Storm Drainage	LF	600	\$120.00	\$72,000.00
	Retaining Walls	SF	1,800	\$104.00	\$187,200.00
	Signage	EA	3	\$200.00	\$600.00
	Crosswalks	LF	180	\$3.00	\$540.00
	Pedestrian Signals (RRFB)	LS	2	\$7,000.00	\$14,000.00
	<i>Subtotal</i>				\$779,680.00
	Mobilization (20%)				\$155,936.00
	Contractor Markup (8%)				\$74,849.28
	Design Contingency (30%)				\$303,139.58
	<b>Total</b>				<b>\$1,313,604.86</b>
	<b>Linear Foot of Trail</b>				<b>2,765</b>
	<b>Cost per Linear Foot</b>				<b>\$475.08</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes five small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Assumes Pedestrian Rapid Rectangular Flashing Beacon (RRFB) Signal.
4. Assumes approximately 300' of 5' tall retaining wall.
5. Does not include property acquisition costs.
6. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
South Shore Trail to Millersville  
Elementary School/Millersville Park

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	2.37	\$6,000.00	\$14,220.00
	Sediment Control	LF	1,600	\$25.00	\$40,000.00
	Grading	MSF	55	\$1,500.00	\$82,500.00
	10' Asphalt Trail and Stone Base	LF	1,360	\$40.00	\$54,400.00
	Concrete ADA Ramps	EA	1	\$1,500.00	\$1,500.00
	Stormwater Management	SF	4,800	\$22.00	\$105,600.00
	Storm Drainage	LF	400	\$120.00	\$48,000.00
	Split Rail Fence	LF	1,020	\$15.00	\$15,300.00
	Signage	EA	10	\$200.00	\$2,000.00
	Crosswalks	LF	108	\$3.00	\$324.00
	Pedestrian Signals (RRFB)	LS	2	\$7,000.00	\$14,000.00
	Forest Conservation	SF	40,000	\$1.75	\$70,000.00
	<i>Subtotal</i>				\$447,844.00
	Mobilization (20%)				\$89,568.80
	Contractor Markup (8%)				\$42,993.02
	Design Contingency (30%)				\$174,121.75
	<b>Total</b>				<b>\$754,527.57</b>
	<b>Linear Foot of Trail</b>				<b>1,360</b>
	<b>Cost per Linear Foot</b>				<b>\$554.80</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes five small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Assumes Pedestrian Rapid Rectangular Flashing Beacon (RRFB) Signal.
4. Does not include property acquisition costs.





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COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
South Shore Trail to Rolling Knolls ES

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	1.0	\$6,000.00	\$6,000.00
	Sediment Control	LF	1,300	\$25.00	\$32,500.00
	Grading	MSF	43	\$1,000.00	\$43,000.00
	10' Asphalt Trail and Stone Base	LF	1,080	\$40.00	\$43,200.00
	Concrete ADA Ramps	EA	4	\$1,500.00	\$6,000.00
	Stormwater Management	SF	2,400	\$22.00	\$52,800.00
	Storm Drainage	LF	400	\$120.00	\$48,000.00
	Landscaping Trees	EA	50	\$250.00	\$12,500.00
	Signage	EA	4	\$200.00	\$800.00
	Crosswalks	LF	108	\$3.00	\$324.00
	8' Chainlink Fencing	LF	770	\$68.00	\$52,360.00
	Pedestrian Signal	LS	1	\$50,000.00	\$50,000.00
	Signal Modifications	LS	1	\$10,000.00	\$10,000.00
	<i>Subtotal</i>				\$357,484.00
	Mobilization (20%)				\$71,496.80
	Contractor Markup (8%)				\$34,318.46
	Design Contingency (30%)				\$138,989.78
	<b>Total</b>				<b>\$602,289.04</b>
	<b>Linear Foot of Trail</b>				<b>1,080</b>
	<b>Cost per Linear Foot</b>				<b>\$557.68</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes two small microbioretention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.
4. Assumes that clearing will be less than 20,000 sf and that project will be exempt from forest conservation requirements.



V 1.0

COST ESTIMATE

Project: Trail Spurs Study

Sheet No. 1

Project No.: AACOX23001

Date: 3/4/2024

Description: Preliminary Trail Costs  
South Shore Trail to Waterworks Park

Computed: PJS

Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	2.65	\$6,000.00	\$15,900.00
	Sediment Control	LF	2,100	\$25.00	\$52,500.00
	Grading	MSF	116	\$1,400.00	\$162,400.00
	10' Asphalt Trail and Stone Base	LF	1,986	\$40.00	\$79,440.00
	Concrete ADA Ramps	EA	2	\$1,500.00	\$3,000.00
	Stormwater Management	SF	7,200	\$22.00	\$158,400.00
	Storm Drainage	LF	400	\$120.00	\$48,000.00
	Forest Conservation	SF	92,800	\$1.75	\$162,400.00
	Signage	EA	4	\$200.00	\$800.00
	Pedestrian Signals (RRFB)	LS	2	\$7,000.00	\$14,000.00
	Asphalt Parking Lot	SY	1,060	\$120.00	\$127,200.00
	Parking Lot Striping	LF	550	\$1.00	\$550.00
	Split Rail Fence	LF	500	\$15.00	\$7,500.00
	<i>Subtotal</i>				\$832,090.00
	Mobilization (20%)				\$166,418.00
	Contractor Markup (8%)				\$79,880.64
	Design Contingency (30%)				\$323,516.59
	<b>Total</b>				<b>\$1,401,905.23</b>
	<b>Linear Foot of Trail</b>				<b>1,986</b>
	<b>Cost per Linear Foot</b>				<b>\$705.89</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes six small microbioretention/infiltration areas and non rooftop disconnect for SWM.
3. Does not include property acquisition costs.





V 1.0

COST ESTIMATE

Project: Trail Spurs Study  
 Project No.: AACOX23001  
 Description: Preliminary Trail Costs  
 WB&A Trail to Piney Orchard Community Center

Sheet No. 1  
 Date: 3/4/2024  
 Computed: PJS  
 Checked by:

Item No.	Item	Unit	Approx. Quantity	Unit Price (\$)	Total Price (\$)
	Clearing/Demo	AC	1.9	\$6,000.00	\$11,400.00
	Sediment Control	LF	2,500	\$25.00	\$62,500.00
	Grading	MSF	83	\$1,300.00	\$107,900.00
	10' Asphalt Trail and Stone Base	LF	2,066	\$40.00	\$82,640.00
	Pedestrian Bridge/Boardwalk	SF	1,000	\$400.00	\$400,000.00
	Stormwater Management	SF	3,600	\$22.00	\$79,200.00
	Storm Drainage	LF	300	\$120.00	\$36,000.00
	Forest Conservation	SF	40,000	\$1.75	\$70,000.00
	Signage	EA	2	\$200.00	\$400.00
	Split Rail Fence	LF	1,700	\$15.00	\$25,500.00
	<i>Subtotal</i>				\$875,540.00
	Mobilization (20%)				\$175,108.00
	Contractor OH & Markup (8%)				\$84,051.84
	Design Contingency (30%)				\$340,409.95
	<b>Total</b>				<b>\$1,475,109.79</b>
	<b>Linear Foot of Trail</b>				<b>2,066</b>
	<b>Cost per Linear Foot</b>				<b>\$713.99</b>

Notes:

1. Does not include design and permitting costs.
2. Assumes three small microbio retention/infiltration areas and non rooftop disconnect for SWM.
3. Assumes that there are existing forest conservation easements that will need to be modified.
4. Does not include property acquisition costs.

# Appendix D

## Survey Comments

# TRAIL SPURS & CONNECTORS SURVEY

**TELL US WHAT YOU THINK**  
[aarecparks.org/trailspurs](http://aarecparks.org/trailspurs)

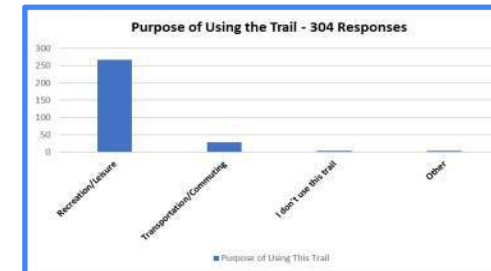




# List of Trail Spurs

- Baltimore and Annapolis (B&A) Trail to Annapolis Spur
- Baltimore and Annapolis (B&A) Trail to Arnold Park Spur
- Baltimore and Annapolis (B&A) Trail to Baltimore Washington Medical Center Spur
- Baltimore and Annapolis (B&A) Trail to Cromwell Park & Ride Light Rail Station Spur
- Baltimore and Annapolis (B&A) Trail to Future Marley Creek Park Spur
- Baltimore and Annapolis (B&A) Trail to Kinder Farm Park Spur
- Baltimore and Annapolis (B&A) Trail to Lake Waterford Park Spur
- Baltimore and Annapolis (B&A) Trail to Severna Park High School Spur
- Baltimore and Annapolis (B&A) Trail to Severna Park Middle School via Kinder Farm Spur
- Broadneck Trail to Arnold Park Spur
- Broadneck Trail to Belvedere Elementary School Spur
- Broadneck Trail to Broadneck Elementary School Spur
- Broadneck Trail to Cape St. Claire Elementary School Spur
- Broadneck Trail to Magothy River Middle School Spur
- Broadneck Trail to Windsor Farm Elementary School Spur
- BWI Trail to Corkran Middle School Spur
- BWI Trail to Linthicum Elementary School and Linthicum Park Spur
- South Shore Trail to Dairy Farm Spur
- South Shore Trail to Generals Highway Corridor Park Spur
- South Shore Trail to Millersville Elementary School and Millersville Park Spur
- South Shore Trail to Rolling Knolls Elementary School Spur
- South Shore Trail to Waterworks Park Spur
- South Shore Trail to Waugh Chapel Village Center Spur
- Washington, Baltimore and Annapolis (WB&A) Trail to Piney Orchard Community Center Spur

# Trail Spurs - B & A Trail



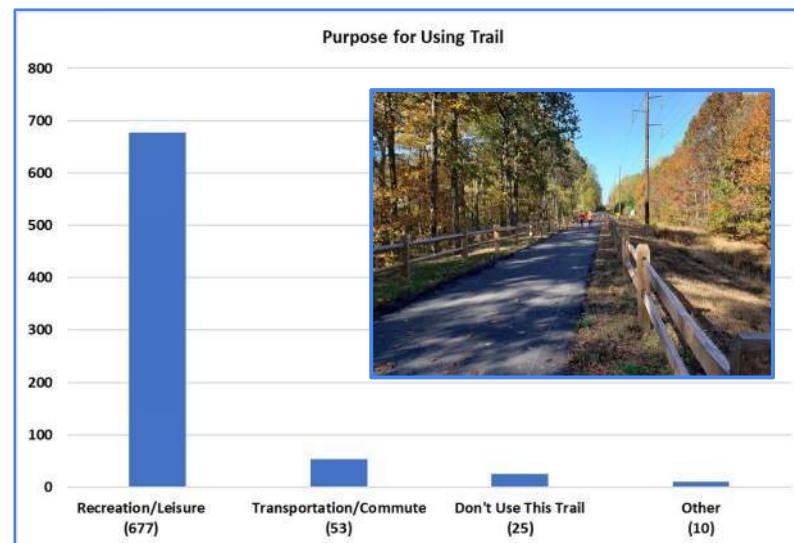
# of people in Household	Count
1	22
2	119
3	54
4	71
5 or more	38



# of people in household under 18	Count
None	178
1	36
2	65
3	17
4 or more	8



# 765 Total Survey Responses (all spurs)



# Trail Spurs - B & A Trail (comments)

- I support a spur to Annapolis from B&A - especially a safe trail at the Naval Academy.
- The more spurs the better as they generate interest in using the trail for transportation and recreation. Adding lighting along the trail as it is a cycling transportation SPINE for the area would also make it safer for users, especially riders like my young adult disabled daughter who uses it to commute to work, but feels unsafe using it when it's dark (and technically closed). She doesn't work daylight hours only as a full time grocery store clerk and wants mobility independence.
- #1 would be awesome to be able to connect to Annapolis.
- I would definitely use #2, 6, 8, and 9.
- I would like to see a safer crossing option from the Arnold connector to BNA Trail at Jones station. Crossing at Rt 2 can be very dangerous for pedestrians and bikers. Cars do not yield getting on Rt 2 Northbound at the 7-11 and Giant intersection.
- I have witnessed several near accidents as drivers often run the red light posing a hazard to pedestrian and biker crossings
- Intersection at Crane Highway is confusing.
- A spur to Annapolis makes the most sense since the trail has seemed incomplete since it opened in 1992/3 ending at Route 50. I would be interested in the path the trail spur would take to reach Severna Park HS - via the Cool Pond/Jennings property, or simply along Robinson Road? I'm also interested in the Marley Creek Park spur because I was unaware of a planned Marley Creek Park
- I would find #6 to Kinder Farm Park and #7 to Lake Waterford useful.
- This looks like a great plan! I think adding access to local parks and schools will really improve the value of the trails and their safety.
- I think the Arnold Park #2 connection is critical to link the B&A and Broadneck Peninsula trail. It is a major thoroughway for the Bay Hills/Cape St Claire neighborhoods. Enhancing the safety of this thoroughway by making it a more defined trail will help more people travel between the trails enhancing the Anne Arundel County trail network.
- I filled this out for the WB&A and I meant to fill it out here. Please build the trail into the City of Annapolis. A spur to Greenbury Point and also build it to the Navy Stadium and down to where the WEE passes the Annapolis Police Department.
- Please connect to Annapolis!
- Concerned about safety as there have been issues on the trail around the Glen Burnie section
- SerÁa genial contar contar con mÁs alternativas de movilidad
- My wife and I use potential spur #1 at present to get to downtown Annapolis from Pasadena. Would appreciate an official trail spur. Potential spur #18 would likely get good use from us as well. We're certainly "for" any and all trail spurs!
- I love the idea of a better path from the "trailhead" parking lot down the highway and over into Annapolis. (Naval Academy)
- I wish the trail broke off into other trails that led to local parks and businesses
- I do not want to go through a neighborhood to get from B&A to Kinder
- I strongly support the proposed Earleigh Heights connector route. I strongly oppose the alternate route which involves removing trees in Brightingham's HOA owned land.
- In favor of the Earleigh Heights Connector to Jumper's Hole path.
- This is a great trail. I park at Glen Burnie's Sawmill Creek Park and ride to work in Annapolis
- For me, the most important spurs are the ones leading areas of interest or parks. Kinder park especially and Annapolis spurs would be the most important to me
- It would be nice to have a spur to Kinder Farm Park.
- A safe and comfortable connection from the B&A Trail to Annapolis should be the highest priority for the County if the goal is to increase access and ridership. Given the ample amount of space on MD 450 and Boulders Way, it is surprising to me that we haven't seen any improvement here. It just seems like an obvious opportunity to expand access and reduce the need to drive to the trailhead. Currently I can't bike safely with my daughter to the trailhead.
- Spur #1 is a top priority, for both safety (keeping pedestrians/bikes off roads) and inclusivity reasons. Park connections (#2, #5, #6, #7) are desirable to add as resources allow. If there is significant use of the trail for commuting, #3, #4, #8 and #9 should take priority over the park spurs.



## Trail Spurs - B & A Trail (comments)

- To Annapolis and Kinder Park
- The B&A Trail needs to be extended all the way to the USNA Bridge into Annapolis. The proposed trail in the study is proposing continuing using the painted shoulder as the trail. This section of road is 50mph, a painted shoulder offers no protection along this very fast road. The trail extension needs to be protected with concrete barriers or separated completely from the 50mph traffic.
- Strongly support the spurs- we see a lot of people going from Kinder and the middle school to the B&A.
- Expand connections to make it easier to connect and utilize other trails
- Connections to Kinder Farm, SPMS, SPHS, Annapolis, Cromwell Station are particularly meaningful to me, but I would love all other increases in the trail network, too.
- Please finish bridge connector over river off of Conway Road. It has been too long a project, with concerns of covid, and funding.
- Spur #1 to the B&A is absolutely essential. I love this trail, but it is simply unsafe as it currently requires me to run or bike on and across a road where cars are moving at high speed. It concerns me every single time I go out there. Having a protected / separate trail run directly to parking would be such a better option.
- Thank you for prioritizing building so many wonderful trails in Anne Arundel - this is a HUGE piece of what makes it worth living here!
- I strongly support the proposed trail spur between the Baltimore Washington Medical Center and B&A trail. This proposed spur would provide much quicker access to the trail from my neighborhood. I also strongly support the proposed connection to the Cromwell Light Rail station, trail connections to transit play a key role in last mile connections.
- Encourage AA Co to expand bike trails as much as possible!
- I would use spur to kinder park. Also nice to go all the way to Annapolis
- Continuing the trail all the way to Annapolis would be great! Connecting trail to Howard County trails would also be excellent!
- I am very interested in the "Baltimore and Annapolis Trail to Kinder Farm Park Spur." Access to the B&A Trail along Earleigh Heights Connector would be beneficial to my autistic son, who has used his bike on the B&A Trail to get to work. (Extending the spur east towards Route 2 would be an added bonus, since that would allow access to/from the MTA bus stop.)
- The final part of the spur to Arnold Park runs on Jones Station Rd. This is not safe for walkers since there is walking path/shoulder area marked along the road and it is heavily trafficked. Even this short distance is dangerous. Traffic calming must be installed since most drivers do not stop at the existing stop signs. Please consider doing a traffic study to determine the number of cars here, to help evaluate the safety of pedestrians.
- I think adding all of those spurs would be great addition to the cycling network for the county. The spur to the BW Medical Campus would give employees an alternative to driving to work and spur to Arnold Park I would recommend to extend all of the future segment Broadneck Peninsula Trail.
- The trail is great. I would like spurs to access more businesses on Ritchie Hwy- but since very few businesses offer bike parking it won't really matter.
- It would be irresponsible to cut down trees to pave a connecting trail to Kinder Farm Park when the shoulder along Earleigh Heights Connector has so much space available. AND the current plan includes using the shoulder for a large portion AND modifying the traffic light already.
- Living on Sylvan Ave I am extremely opposed to the idea of disturbing conservation land for a trail.
- I am strongly in favor of the B&A to Kinder Farm spur along Earleigh Heights Connector and the Severna Park Middle Spur. They'll make existing parkland more accessible to the community. The spur for SPMS will also help make it safer and easier for more students to get to school by walking or biking.
- I am strongly opposed to the alternate spur for the B&A to Kinder route, running through the forested HOA property. It would require deforestation and would negatively impact the surrounding houses
- While I support expanding the trail network I don't believe the option for spur #6 through the wooded area is the best option. It would remove much needed trees and cover for wildlife and cause unnecessary damage to the fragile ecosystem. The option utilizing the already established bike lane along the Earleigh Heights connector would provide much less impact and tie nicely into the proposed plan to add a bike lane along Jumpers Hole road.
- I'm strongly in favor of the Earleigh Heights Connector route for the B&A to Kinder Farm Spur, but strongly opposed to the route that uses the HOA forested space between sylvan avenue and brittingham.
- The neighborhood children all play in this area and there is a ton of wildlife there currently.
- I live in the Hunter's Pointe community, which has 77 houses with a lot of kids. If we could get a spur to the B&A Trail, or a spur/sidewalk from Deer Creek Run to the Jones Station Road park near Peninsula Farm Road, that would allow us access to the B&A Trail by allowing us to get safely across Ritchie Highway at the light on Jones Station Road.

## Trail Spurs - B & A Trail (comments)

- These will offer variety to many people for walks, rides and runs, which will make the use of the trails even better. Mileage measurements of the spurs only (to add to the trail distances) would be helpful for us runners.
- I love using the trail every morning to take my dogs for a walk. We all need the exercise. In the Spring, summer and fall I occasionally take a long walk on the trail with my husband, minus the dogs. Just to enjoy the view, get exercise, people watch and animal watch. Love the trees and vegetation on the way and like to sometimes take pictures. So relaxing and pleasant. Very grateful to have the trail. Thank you.
- At this point I primarily walk but if there were safe bike trails on Mago Vista Rd Jones St Rd and Church Rd, I would ride my bike more. I sometimes ride my bike in that area to AACC but the roads can be busy.
- I'm very concerned about the amount of ivy I see on the trees near the trail. The trees are being choked and the ivy needs to be removed much more aggressively. I recommend a concerted citizen volunteer activity as well as specific budget for this
- Potential spurs 1, 2, 6 and 7 - Connectors to Annapolis and the 3 parks would be a wonderful addition, enhancing and expanding recreation options!
- Would be great to have a spur to annapolis
- #2 (coupled with #10) would give better Annapolis access to Broadneck Peninsula.
- #3 would give better access to the medical center from the trail.
- #4... why isn't this already a thing?
- #1 I'd love to see a way to get to & from Annapolis without having to dodge cars across the highway, but there is access, so the others I've noted seem like a higher priority."
- Any additions to this beautiful trail would be great.
- Spur to Annapolis would be great
- Could we make it wider in Several Park and mark pedestrian lanes and bike lanes? I love the coffee shop. How can we encourage more of this?
- Love the trail and the rangers are outstanding
- Glen Burnie area has a tendency to have an unsafe feeling and needs more lighting and security outlets.
- Would love an expansion of the trail for the community. Specifically #4 - To Cromwell Park & Ride / Light Rail Station.
- Always welcome additions to the trail. Each of the spurs would be used, I believe, given the heavy traffic I see while on it. It's become a major point to activities in the area.
- Would love to have this trail connect to Annapolis so we don't have to ride on the shoulder of 450.
- "These are the 3 spurs that are the most useful to our family:
- Some of those mentioned maybe destinations, some are likely not. Lake Waterford is a destination but mostly for racket sports, picnics, bball, not something someone would ride or walk to. Kinder is a good destination. We need another spur that helps make the trip across Rt 2 at Whites Rd onto 648. I know that is State owned and operated but it has gotten more and more dangerous over the past 20 years and a cyclist was killed there about 10-12 years ago at 648 and Berrywood Dr.
- This trail would be greatly improved for the residents south of the Severn if it were extended through Annapolis.
- I have some concerns about safety.
- Build them all please! Do number 7 first.
- This particular trail spur is my favorite as I can walk a short distance and then do some shopping or eat at a wonderful restaurant. It's not just a walk€! There's a purpose in using it
- I am particularly interested in seeing the #1 To Annapolis spur completed. Our family loves to bike but the lack of safe bike access to the southern end of the trail from our Annapolis home limits our use of the network. We are excited to use it more when the spur is added.
- I don't use this trail due to safety concerns. I surely do not want spur #3 and #5 to cut through the Foxchase neighborhood... there are enough problems with the existing trail due to homelessness, juvenile activity and criminals using the trail as a conduit for crime.
- To short

## Trail Spurs - B & A Trail (comments)

- To lake Waterford would be great. I also like kinder farm idea.
- I would like to see spurs that reach parks. #2, 6, & 7. It would also be nice to see water bottle filler stations along the entire trail
- Love having access to such great trails near my house.
- We love the B&A trail and would love connections to Kinder and Lake Waterford. Kinder already has a connection from the East West trail though A connection to the Cromwell light rail station is a great idea
- It is wonderful, thanks for making cycling safer in anne Arundel county.
- Love the trail. A spur to light rail would be nice. That opens up trips to downtown B'more 'honsdøy"
- Do NOT cut through the HOA protected land of Brittingham.
- Strongly support connecting Kinder trail to the B&A trail however I support this connection via the Earleigh heights to jumpers proposal only. First this would be a natural place alongside the existing roadway to make this connection. I do not believe the same is true with the other proposed connection in bn Brittingham and Sylvan. To add a connection would invite the public to traverse in basically the yards of homeowners.
- Kinder Park access should be along Earleigh Heights NOT through the backyards between two neighborhoods (Sylvan and Brittingham). Kids play back there and right now it is a safe haven to both neighborhoods. I strongly oppose our HOA giving any rights to this development. Pls keep it along Earleigh Heights and continue to Kinder via Kinder Rd. There is already a dirt path neighbors use connecting to the trail in Kinder by the baseball fields.
- There is already several connectors from B&A trail to Kinder Farm Park. Why would you waste money making another one? There needs to be a sidewalk on Jumpers Hole for students to get safely from Chartridge and other neighborhoods within walking distance to the middle school. Several people without transportation use jumpers hole road to get to the Safeway shopping center.
- #1 - To Annapolis
- #8 - To Severna Park HS
- #9 - To Severna Park MS via Kinder Farm Park spur
- Safety of the kids being able to get to/from school events safely would be most important to us.
- I so enjoy this trail, but I am looking forward to the Broadneck trail that I can access easily from my home.
- STRONGLY OPPOSED TO the alternate path that would go through the forested green space between the homes on Stonestep/Finnegan and Sylvan Avenue."
- In favor of Earleigh Heights path proposal and strongly opposed to the Sylvan/ Finnegan/Stonestep alternate path proposal.
- Strongly against running the trail through brittingham and strongly for running the trail on the early heights connector
- There are two paths proposed. One path follows Earleigh Heights Connector to Jumper's Hole. The alternate path goes through the forested green space between the homes on Stonestep/Finnegan and Sylvan Avenue. I am responding that I am strongly in favor of the Earleigh Heights Connector route. I am strongly opposed alternate route that uses Stonestep/Finnegan and Sylvan Avenue.
- The more the merrier in my opinion. More accessibility from neighborhoods that lead to schools and parks will promote walking to places nearby that you may have typically driven to.
- I access the trail north of the EH Ranger Station by about 1.5 miles north. I find very easy access to KFP via the connector along EW Blvd to the back entrance of KFP. I have never encountered a problem with recreational access this way nor gave their been volume issues making it a safety issue. Regarding the proposed routes, the one through HOA forested space does not preserve green space; it destroys forested areas and creates an egress for trash into wetlands and streams along that path.
- We are strongly in favor of the path that follows Earleigh Heights Connector to Jumper's Hole. The alternate path goes through the forested green space between the homes on Stonestep/Finnegan and Sylvan Avenue is highly unfavorable
- There is already a spur from the B&A trail to kinder farm park via East West Blvd, why would a second spur be necessary?
- Love it! However, need more benches between covered bridge and maintenance building. Perhaps near Robinson? There are plenty of benches near cross roads and populated areas but there are none where the walker,runner may need them. Not all people using the trail stop at the populated areas and just need to rest a bit. I walk 3 to 4 miles daily and at the age of 80, I sometimes need to sit down and it's not in populated areas. Also water and bathrooms?

## Trail Spurs - B & A Trail (comments)

- Would be highly appreciative of the earleigh heights connector spirit to kinder farm park. Strongly oppose the one that cuts through Finegan dr.
- Need safer exit from parking area off rt450 to start of bike real
- You have to make it go OVER the Bridge! and fix 450 on the other side. Take out the sidewalk, and make a MULTI-USE PATH. There is easily enough room on BOTH SIDES of 450. Take out the sidewalk, and make a MULTI-USE PATH."
- These are all great ideas. I actually do use it a lot already to get to Kinder Farm, but it would be nice to have a more official path.
- I live in Annapolis so I have to drive to this trail today. It would be nice to add safe option for link from Annapolis to the trail.
- Need safe lanes to bike to annapolis.
- #6 is unnecessary and not needed because of the existing spur from the trail to Kinder Farm via the path on East West blvd. Which is less than a mile away
- We favor the Earleigh heights connector route to Kinder and strongly oppose the alternative route using the HOA forested space
- We enjoy using the B&A Trail - there is access from our neighborhood - Brittingham. We take it to Severna Park library, coffee shops and other activities there. We also walk to Bruster's for ice cream across from EHVFD. We believe the new trail spur should follow Earleigh Heights Connector Road, not go through the woods - for safety reasons and direct path. It seems more logical, especially if sidewalks go in on Jumpers Hole Road and why destroy more wooded areas? Thank you.
- We do not want a spud going through our community (#6). People can already access via east west connector
- I strongly oppose placing the connector through the Brittingham community, especially since there is already a connector from East West highway. Brittingham lost valuable land when Earleigh Heights road was changed in the 90s so it seems that this community has already done its part for the county. Additionally, I really do not want strangers walking through my yard and behind my house at all hours. This is a bad and unnecessary plan.
- It is not always clear where the trail goes â€" signage would be helpful to be able to follow the entire trail. Having more trash cans and dog way stations at regular intervals along the trail would be extremely helpful. Water fountains for people and dogs would also be helpful.
- The more trails the better, we have great trails in AA and I use so many of them on a regular basis with my family.
- We live along the trail, and use equally for biking and walking. I used to use it for commuting before retiring. This trail is one of the biggest assets of the county and I'm thrilled that it's well maintained and being expanded.
- #3, this is closest to my house and would allow myself and my kids a way to get to the trail without having to drive. Also on the weekends and evenings a lot, over 50 cyclists, will be on the street riding to the side of this trail by bruster's. I think it would be helpful for bikers too so they don't have to take to the streets.
- #6 & #7, we frequent these parks with our kids and would love an option to keep walking at both
- #5 this seems needed to connect and keep the trail going
- Great trail and adds a lot to the communities it passes thru. Trail is well taken care of most of the time. Winter can be a challenge.
- see other BWI trail spurs comments, same comments. make spurs, make comments, make them cheaply, spend less time on 'design' OR make roads safer for bikes, we HAVE to. The cars and trucks are poisoning and smashing us.
- The Annapolis "Trail spur" takes a rider off the road and ends 500 feet later at Jonas Green Park?? This is completely pointless. This is NOT a "B&A Trail to Annapolis
- Nice trail but don't go to the Glen Burnie end often, in my opinion it's less safe
- Earleigh Heights to Jumpers Hole to Kinder Farm Park route is a safer trail rather than through the woods of communities
- Well kept



## Trail Spurs - B & A Trail (comments)

- My family would do biking if it connected to Annapolis. But there is no safe connection from west Annapolis
- #1 would be huge for locals and visitors alike. Annapolis, more specifically downtown Annapolis, lacks walkable/bikeable areas and paths to connect them. Connecting the B&A trail somehow to downtown Annapolis would do wonders for the area and community.
- use couple times a year
- Definitely need a spur to Kinder Farm Park - it's the most visited park in the county! Currently quite difficult to access the trail from the park.
- Spurs 1 and 2 please. I also bike ride on this trail.
- The B&A Trail is a wonderful resource and I fully support any efforts to expand it so more residents can enjoy it.
- I hope they can extend dedicated trail into Annapolis and connect other end to Patapsco Park trail and Baltimore City.
- We need biking/walking trails that are separated from public roads. For example, it is too dangerous to bike from the end of the B&A trail to Annapolis using the roadway.
- I use it often. You are spending \$\$\$ on the college parkway extension though. Would have been nice for a bridge over Ritchie Hwy rather than all the brickwork you're doing.
- Annapolis connection is currently more challenging on the Annapolis side of the 450 bridge. Adding a trail on that segment would greatly increase safety.
- I use the B&A for walking, running and biking and it's a great resource. What limits further usage for my family is conflict with cars.
- Trail spurs need to be separated from vehicles. The Kinder Farm Park spur along Earleigh Heights Rd is always missing the flex posts due to how regularly people speed and knock them out.
- Connecting Lake Waterford and Kinder Farm with safe, separated spurs that kids could use to reach the parks would be brilliant for connecting neighborhoods
- I love the B&A trail and use it every week. I would love to see a spur to Annapolis and to Kinder farm park to create more opportunities for running, walking, and biking routes.
- Kinder Spur is unsafe. Vehicle speed is HUGE issue and the plastic posts keep getting knocked down and not replaced.
- I think it's great to increase easy and safe pedestrian access to the existing trail. The southern trailhead distance from
- Parking is still problematic due to safety and distance. Runners and kids in particular are very exposed. It would be great to go THROUGH the green area behind the parking and build a separated trail direct to the trailhead. You'd only need one additional crossing at the 50 on ramp.
- The section along route 2 to Jonas creek park is too dangerously close to speedy traffic. Protective barriers are needed to make this safe for use.
- We use the trail for running, biking and walking. We use it for exercise and for traveling to the grocery store, coffee shop and library.
- Much needed
- The B&A is a great connecting trail, but could be better utilized by making biking access safer to other points of interest, i.e. Annapolis.
- Annapolis and BW Med Center
- I frequently travel to the DC / Maryland area and always bring my bike. I love to use the Trails as a way to get exercise and enjoy an area. Safety is my main priority! Trails for bikes and walkers need to be separated from roadways. Cars do not pay attention to bikes and frequently drift into Trails that are not separated.
- The B&A Extension to the USNA Bridge is very important to me and my family. The road on there is 50mph and there is no protection from the cars. This needs to be a protected and separated Trail. Having the trail run along the painted shoulder is not acceptable for a road with 50mph speed limit. Please build this extension but please build it with proper protection from the road.
- Need to have separate & safe trails, not just a bike lane on a roadway
- It would be nice to have a safer route into Annapolis. I get yelled at, harassed and aggressive drivers lose their mind if they get "stuck" behind me or near me while I'm on the current route roads where technically I'm allowed to be. I follow the rules and am respectful. But it is terrifying some days. I ride about 2 thousand miles a year with a combo of trails and roads. This small section is probably the worst I ride.

## Trail Spurs - B & A Trail (comments)

- Love love love this trail!
- #1 proposal above is misleading—it doesn't go to Annapolis proper, just to a small fishing pier. Safe access to downtown from south of the USNA bridge is what is sorely needed. Everyone knows this.
- Most cyclists would sacrifice every other plan on this list, if it meant gaining that one accomplishment.
- These need to be separate from roads. A spur to Annapolis is really needed.
- Conducting this trail to Annapolis will greatly increase access to residence of the Broadneck peninsula.
- The current conditions of being forced to use MD 450 are unsafe and just waiting for an accident to occur. Having a pedestrian protected route is much needed.
- I would like the B&A Trail to extend into downtown Annapolis so I'm in favor of extension #1 but there has to be a divider between the vehicles and trail users on the Naval Academy bridge because I'm not ok with just a painted line or floppy cone between me a car going 40 mph.
- I bike on the B&A trail with friends several times a week, before that I ran on it for years. My kids and wife have joined me walking/running/biking/skating. These trails are some of the best assets the county has, and I really appreciate how well they are cared for and continuously improved. To me, the most valuable spur would be #1, as we commonly go into Annapolis from the south end of the trail. #s 2&10 would be next, as an alternate connection b/t the B&A and the new Broadneck Peninsula Tr
- Love this trail, though it is crowded in the Severna Park section. I appreciate the updated pedestrian warning at Robinson Road - the traffic lights were a nightmare, because no one could figure them out.
- Connecting the base of the trail to Annapolis at the USNA bridge is one of the most useful and important safety upgrades possible.
- Safer crossings of busy streets - specifically at Evergreen Rd and Earleigh Heights. Evergreen Rd is tricky because cars are turning from B&A into the crosswalk and Earleigh Heights is dangerous because the existing crosswalks do not service the amenities just off the trail. In this instance people cross at what they believe is the shortest distance. Without the crosswalks aligned to how people are crossing the streets, the drivers are confused and create a risky environment.
- Primarily recreation but secondary transportation. More spurs make the system more usable
- Concern over cyclists' behaviors and particularly speed in approaching others using the trail. I prefer to use the trail on weekdays when less crowded. I also use the trail for walking. I tend to enter the trail from Arnold Station Shopping Center. I ride my bike from home and must cross Ritchie Highway. Disappointed w/ route to Annapolis as it us on the busy highway. Can't wait to use Broadneck trail and WB&A trail.
- A safe connection to Annapolis is essential. This should be a divided/separated path, that protects users from 450 traffic. To impoverished use connectors to the High school, medical center and Cromwell station also make sense. For the students living along the trail the connector could really reduce traffic. To Cromwell this could expand people's ability to commute multi modal.
- Definitely Annapolis spur is my #2. Would also like a bridge to cross Ritchie hwy from the main trail to the Arnold trail by rte aid or AaCc.
- My household would benefit most from Spur 1 and 2. Additionally helpful would be 6 and 8.
- I'd like to see save access from the south end of the B&A trail to Annapolis.
- Would really like a safe connection to Annapolis, especially on the hill between the naval academy bridge and gate 8.
- guide for trail markers (website?)
- I would think that 2 or 1 would be good options.
- This is a great trail with very active use.
- Please build the spur to Arnold Park. Biggest issue is there is a lack of options for safely crossing Route 2 ... there should be pedestrian bridges in Severna Park and Arnold to allow foot/bike traffic to safely cross Route 2;
- 1 of the listed spurs, the Arnold Park, Lake Waterford Park, and Kinder Park ones look most promising
- I also run and bike on the B&A trail

## Trail Spurs - B & A Trail (comments)

- Why not go big, and extend connections much further? For example, a paved bike shoulder exists along Magothy Bridge/Earleigh Heights, all the way to MD 100. Continue up Magothy Bridge/Hog Neck to Ft Smallwood Rd and all the way to Ft Smallwood park (wide shoulder exists). Also, explore potential for a trail on Pasadena Peninsula, from Woods Rd to Downs Park. The county can use the land they already own, 3 Sisters Road behind Lake Shore Elementary, and existing rights of way through Boulevard Pa
- No particular concerns. We live on Fort Meade, and tend to drive our car to existing trailheads/access parking lots.
- More spurs is better
- Please make sure the trails are not including highway shoulders. The trail needs separate and protected pathways a2ay from motor vehicles. It's done this way in Colorado. Hopefully a safe connection may be made into downtown Annapolis.
- I would be interested in the Arnold Park spur
- Connections around the Annapolis Mall or Housley Road entrance of Waterworks Park.
- Spur 1 to Annapolis should be the priority.
- Well maintained and
- Love the trail. I think the trail is getting dangerous is several areas where tree roots have cause large turned up cracks. Also, over the last couple of years there has been a noticeable increase in electric bikes. They speed up and down hills, are significantly heavier than regular bikes and are really going to hurt someone if hit. I see all types of motorized electric devices on the trails. Should they be allowed?
- Spurs to Belvedere ES and Magothy middle school would make walking to school so much safer for kids.
- The only issue for me is the E bikes going 35 mph.
- We greatly look forward to #2
- We desperately need a trail option on peninsula farm road near the middle schools.
- I enjoy the trail but I think it could be improved with some security and better signage around road crossings. Many times cars don't stop at crosswalks. I also see drug users around the Cromwell light rail light station part of the spur that has a lot of overgrown weeds.
- This is a project that would provide safe routes for kids especially who already use these roads but are not safe in doing so. Thanks- I think this will be well used by all demographics.
- Would love #1! Second choices are #6 and #7
- Variety, as long as it's safe, is always welcome!
- Love the potential new spurs. The more the better! Keep expanding!
- Spur #1 Annapolis is the one I would use
- As soon as the trail is implemented, I hope my son can go to middle school by bike. Even WF ES could be served better but nearby neighbourhoods are not able to have access to the school by bike.
- People from whispering woods and CapeTown should go a longer route to access WF ES by bike, while the school could have a bike trail from Bay Dale Dr through Broadneck rd.
- I would absolutely love to see a spur to # 1, 6 & 7
- I use the trail for biking exercise and running of errands. I am interested in spurs that will connect bay hills with the B&A trail
- I would like to see a spur to Broadneck to sandy point connected and open soon. I really enjoy the B&A trail.
- I really enjoy this trail and ride it often. Connecting to Broadneck to Sandy point and Annapolis would be fantastic.
- Would LOVE to see this happen
- Option 1 into Annapolis looks like a good idea
- Trail is a great asset to county. I ride it 2-3 times a week year-round

## Trail Spurs - B & A Trail (comments)

- Establishing multiple bicycle/walking trails is important in all future transportation plans.
- I try to use adjacent community roads because there are too many bikes on the trail.
- I would love if the county could consider adding dirt or pebble trails next to the asphalt trail to allow for people to run on a healthier surface. There are so many benefits to running on permeable surfaces, and it would really be wonderful to have this feature.
- The trails are nice, however, have become unsafe in areas for crime and assault. I do not want easier access to my neighborhood for strangers.
- I love all the suggestions for the B&A Trail. My husband has been using the trail more for commuting and taking our children to Kinder Farm. Having the additional spurs will make it easier to commute via bike. My favorite suggestions are: #6 - To Kinder Farm Park, #7 - To Lake Waterford Park, #8 - To Severna Park HS, #9 - To Severna Park MS via Kinder Farm Park spur- as they would benefit our family the most.
- I would love to have a spur to Annapolis, #1.
- Pasadena peninsula would really benefit from a trail! Strongly encourage the lake Waterford trail spur, please consider this!
- Please make #1 Annapolis spur
- I'd love to see it go to Annapolis, kinder farm park, and SP high school and middle school.
- By opening up more trail access then how much more access are you giving to the criminal element and how much more escape routes are your providing for the criminal element.
- We the people who use the trails and live near the trails consider those factors also. Law enforcement is here to enforce the law not to protect the individual citizen as stated by numerous law enforcement agencies around the country. How do you propose the individual citizen protect themselves while on the trail?
- Very interested in the Kinder Farm park spur! It would make a great family bike ride from where we live in Linthicum, just off the BWI trail north Linthicum light rail spur.
- Please extend B&A Trail from Bowie/ Crofton to Annapolis with a separate path protected from motor vehicle traffic.
- I would definitely use the Annapolis spur.
- I commute between Severna Park and downtown Annapolis. The trail is great for that purpose, the streets between the Naval Academy bridge and city dock area bother some people but I don't mind riding on the road.
- All of these look like nice improvements. For my trail use, I would prioritize the implementation of connectors 1, 3 and 6.
- A spur to Annapolis would increase safety as current use is along heavily trafficked roads with varying shoulder conditions.
- too many bicyclists using trail as a tour de france race
- I live on Church Rd, where a potential spur is planned (2). I support this spur; however, I believe the county should obtain easements from property owners on Church Rd so that a dedicated bike lane is created that has a barrier separating bikes from cars. Many bikes pass my house - last Saturday a peloton of 50+ bikes passed. I would join, but I am afraid to ride my bike on Church Rd due to the speed and close proximity of cars. This is also why I don't use the trail. I don't have safe access
- I support any extensions that include getting g to places of business or mass transportation. While I use the trail for recreation I see many benefiting from being able to get to jobs and public transit.
- Regarding a spur to Kinder Farm Park - there is an existing path to Kinder Farm. I would prefer to see the current path improves instead of a new one.
- Need more water fountains along the trail ?
- Do not see many trail police along the trail.
- It's incredibly frustrating that there are wonderful trails like the B&A trail and others under development for most of the county, but those of us in the southern part of the county have to drive to them.
- We don't have any long, safe bike trails.
- To Annapolis would be the most used option. Kinder farm park #2
- Please identify more places for trail users to park vehicles for access to the trail and any spurs.
- All look good but how about a connector to the Broadneck trail?



## Trail Spurs - B & A Trail (comments)

- I am in favor of #1 to connect to Annapolis, as well as 6&7 to Kinder Farm and Lake Waterford park which would be a great option for kids.
- More spurs will help with interest and longer running miles. I use the trail 3-4 times a week
- Well maintained
- The b&a trail should have a running/biking trail along WB&a road, which has tons of bikers and runners on weekends coming up to the BWI loop
- For spur 1, a grade separated trail from the parking lot to the B&A trail end would be incredible. Due to the high vehicle speeds on 450 & Boulders Way, the current bike path is not safe to use for walking/running.
- This looks really expensive. So many suggested improvements. There needs to be a system to prioritize
- My family and I use primarily the B&A trail for walking as well as biking. We like the fact that it is safe for kids to walk, run and bike.
- I ride the B&A Trail 2-3 times a week, mostly from my house in the Bendale Community (off of Benfield) to the B&A trail all the way to the end (at Boulter's Way) and back. I would really appreciate spurs to Kinder Farm Park, Severna Park HS and SPMS.
- Please include safer access to the trail for those living east of Ritchie Hwy.
- The proposed #7 spur to Lake Waterford is a nice idea, but there are also many residents in Severna Park, especially in the area between Robinson Rd and Cypress Crk Rd, who need safer approaches and crossing of Ritchie.
- Connecting to Baltimore and DC eventually would be ideal
- It will be great to have this connect to more commonly used spaces.
- We love the B&A, and would support all potential spurs / connectors but feel #1, #2, and #7 will be the most beneficial for trail users.
- Spur #1 is important to me.
- We support spurs 6, 7, 9, and 8
- Love the trail wished it started at the marine corps stadium
- Most interested in #1, 6, 7, 8, 9
- This will increase crime
- Annapolis spur would help to get to USNA and downtown - I'd use it for a work commute!
- I would like to see rangers on this trail on a regular basis for safety of those who use it. I do not feel safe riding my bike on this trail north of Jumpers Hole Road and especially past Marley Station Mall, and I am a male. I ride trails in Charles County and Queens Anne County and feel totally safe riding those trails. Why not have rangers patrolling the B&A on electric bicycles like they do in Charles County? I use this trail 3+ times a week for cardio.
- Would love to have more safe trails to get around Annapolis
- Any non-road trail in or going into Annapolis will be well-used and amazing.
- Focus should be on accessing high use locations in the county.
- More please!
- I use BNA trail recreationally & for transportation to various retailers. To observe plants & wildlife throughout seasons is special.
- I strongly recommend a trail spur to the Future Marley Creek Park. With a trail spur only, there is no need to exploit sensitive & biodiverse forest/headwater of Marley Creek by punching through Hospital Dr., making a parking lot for vehicles in the the forest which would disrupt trees and wildlife. Do not open up Hospital Dr. for access. Use B&A Trail spur.
- Would love to see a more official connection to Annapolis if possible (#1). Also, if #2 (Arnold Park) and #10 on the Breakneck Trail could happen together to create a connection between the B&A Trail and the Breakneck Trail, that would be great.
- Would love to see 1&2 done !!

## Trail Spurs - B & A Trail (comments)

- I appreciate the re-pavement a few years back. Would appreciate keeping the water fountains active longer (April to November?).
- Would like spurs to Annapolis and Kinder Farm park
- I think it's a very good start. I would love to see more connections, potentially connecting WB&A trail to Annapolis. This is a fantastic start :D
- I have walked along the B&A trail many times and have started biking on it recently. It is very nice and on a nice day you will see many people use it. Expanding it would be fantastic to help community residents have alternative ways to commute besides car/bus and also allowing expanded recreation. #1, 4, 6, 7, and 9 trail spurs would be most beneficial.
- Love the trails!!
- The trail is excellent and get used more than most people would ever imagine. I run regularly in the early morning hours of 6am - 8am. I'm often on the trail in the afternoons riding my bike. It's a great place for the family to get some exercise and spend time in the outdoors. Connecting it to Sandy Point and Annapolis should be a priority and not take 10 years to get it done.
- Love it! Join with other trails please.
- Spur #1 Feedback: 1. Correct the map and the terminology to distinguish "Trail" from Bike Lane or Bike Shoulder. The existing lane along 450 is not a "Trail". 2. The spur shown to Jonas Green only serves southbound users. If you provide this, you must also provide a northbound route. This probably needs to go under 450, past Severn Inn and up to 450 to meet the northbound bike lane. 3. Rename this the "Jonas Green Park Spur". It is very misleading to call in "Annapolis Spur"
- Arnold Park Spur: 1. Acknowledge the in-process Rt 2 project that includes a connection to the B&A Trail from Rt 2. 2. For this and ALL spurs use the county GIS Bike Layer which shows the existing bike lane on B&A Blvd and the existing sharrow on Church Rd
- Cromwell Station: 1. Show the existing Overstreet Connector Trail which connects to the BWI Trail to further strengthen the case for this important connector to transit. It is important to see how these spurs connect to the overall trail network, not just a single trail.
- Marley Creek Park Spur. Isn't there already a connector to this neighborhood at Foxwell Bend Rd? That already provides connectivity into this neighborhood. All spurs proposals should show and acknowledge existing alternative low-stress routes
- Kinder Farm Park Spur 1. Acknowledge the existing connectors via the trail along East West Blvd and thru Brittingham at 2 locations 2. Acknowledge the planned trail along Jumpers Hole Rd Benfield to KFP. The key need in this area is a shared-use path along Earleigh Heights Rd to the Ranger Station which will provide another connection from KFP and also from the new trail on JHR
- Lake Waterford Acknowledge Pasadena ES and the Police Station as important destinations along this route
- The study should acknowledge the Anne Arundel Trail Network which is the vision for connecting all of the major trails to one another, to destinations and neighborhoods and to our neighboring trail networks to our north west and south. Visit [www.annearundeltrailnetwork.org](http://www.annearundeltrailnetwork.org)
- I use the B&A Trail for running AND biking.
- Would love to see the connection to Annapolis (#1)
- Would love it to connect to City Dock area without via Rt 450 due to safety concerns. However I am not sure how that can be accomplished due to routing complications.
- Hi, Any access to the proposed Marley Creek Park should be a spur off of the B&A trail..There is already ample parking for the trail and would eliminate any traffic congestion on Hospital Drive and Mall Rd. Thanks....

## Trail Spurs - B & A Trail (comments)

- Expand, provide some parking opportunities and garbage bins.
- There is already a spur to Kinder Park via E/W Hwy. a spur to Annapolis that doesn't require getting the road would be great or €; connect the B&A to the trail along College Parkway then down to Sandy Point SP would be great!
- Connecting to Annapolis would be wonderful!
- I enjoy walking and running but I don't feel safe walking, running or biking across 450 to access the trail. I would use the trail much more if I could access it safely, and would also bring guests and grandkids.
- #1 #2 would love to see.
- I used to make use of the B&A Trail to commute to Baltimore. This trail is a hidden gem. I support any effort to expand it.
- I also use this trail for walking and running
- The trails are great and I love the expansions on College Pkwy which is near my home but I have walked or cycled on them all.
- Comments for Marley Creek Park spur: I live in the Fox Chase (FC) community. A paved access point into FC already exists ~1/4 mile north of the proposed spur entrance. MCP has recently been designated a nature park with minimal forest disturbance planned. The proposed spur is not needed. A 10' paved trail would violate both the integrity of the nature park and the basis of numerous existing environmental plans protecting forests, wildlife and wetlands in AACo (LPPRP; Plan 2040; updated GMP).
- I think a spur to Kinder Farm park would be useful
- Down to Annapolis would be the highest priority. I think the MS is a good idea. I think the HS would be redundant given its proximity already.
- Finishing the trail to Annapolis, #1 would be ideal. Safe trails are very important and any connections to make safe ways to get to them are encouraged.
- Wide pathway allows for a good balance between recreational bikers and walkers. Speed limits and safety warnings seem effective in curtailing dangerous run-ins. Anticipate that connectors/spurs will maintain this balance and take into consideration increased traffic during heavy use periods.
- I'd love to see the trail head toward the Glen Burnie areas. I feel like there's enough money spent in Arnold, Severna Park, Annapolis, etc.
- I would love to see a spur connect to lake Waterford. Additionally, one near the end in Glen Burnie that would make connection to the BWI train easier. Finally, extending the trail to Annapolis would be great.
- I love the idea of connecting to the high school, the middle school and Kinder Park in SP
- The STOP signs, while necessary, have been congested (especially on weekends). I have also been passed by a racing group of bikers (in their racing gear) going quite fast. They alerted me they were coming up on my left, but when the last of the 4 went by and there were 2 more trying to catch up to them very shortly after - they were all going >15mph and there were people walking children and elderly walkers on the trail ahead. Frightening!!!
- A wonderful resource for our community. Please extend it to Annapolis. The current South terminus is unworkable. Extensive removal of invasive vines is needed.
- Safe access to Annapolis from B&A trail, separate from cars, would be great.
- Although I do not use the B&A trail to commute, I think it is a great idea to add the spurs.
- I do worry about crime and the potential to see it increased.
- Would definitely use spurs 1 and 2
- Love all the proposed spurs, especially 9, 6, 8, 1 and 4. Isn't spur 9 already under design as part of the Jumpers Hole Rd improvements between Benfield Rd and Kinder Rd?
- I love the B&A trail and the ideas for the spurs. However, if the people in the impacted communities are against the spurs, I would be against them too. Thank you.
- Connection to Annapolis would be useful.

## Trail Spurs - B & A Trail (comments)

- Would really like the B&A trail would connect with the Arnold trail. All of the spurs look good.
- I live in Eastport and love to ride on the B&A Trail. It would be great to have a safer alternative to access the Trail than riding from the Navy Bridge up Gov Ritchie to Boulders Way, so I am all in favor of the Annapolis Spur #1.
- I love the B&A trail as a way to more safely enjoy running in the area. I think many people run from the B&A trail to Kinder Park. It would be great to see that reinforced.
- "Very supportive of the spur to Annapolis. I would bike into town rather than drive.
- Arnold Park spur would also be nice.
- I would not prioritize the Kinder spur over any of the others, it's already pretty easy to get to Kinder from the B&A Trail."
- Even though I don't have children, I really like the idea of making spurs to schools to encourage children to walk and bike.
- Would like to see an Annapolis Spur. Also, parking should be made available at Jonas Green Park for the trail. There are several sections of the trail that cannot be accessed by parking, such as the parking lot near Montessori International Children's House - it's treacherous. Please create the spur and have parking at Jonas Green.
- Please connect to Annapolis so we don't have to drive and park to use the trail.
- I support spur 1 to extend the trail south to Annapolis
- The more the trails can be connected, the more accessible they become and the healthier the community will be when using the trails both recreationally and for transportation to get to and from work.
- I live in a neighborhood off of B&A road, on the other side of Ritchie highway from the trail, and use it often for running and bike commuting. Whole I can find a path through neighborhoods to get to the trail, it would be more accessible to use some of the widened roadway along Magothy Bridge road for a bike trail to connect it to more neighborhoods in SP and Pasadena.
- Would be great to have a dedicated and safe connection to College Pkwy Arnold and Annapolis
- Very nice trail. A spur to Annapolis sounds nice.
- As a member of the Fox Chase neighborhood, I emphatically support the proposed spurs that would run through our neighborhood. I love the trail and am thrilled to see my tax dollars go towards further improvements. I am excited to see the completion of the South Shore Trail in the coming years and hope to see it connect to the B&A.
- I strongly oppose a connector behind my house to kinder park. I do support one along earleigh heights rd
- Do not feel safe to use trails!
- Spur #6 and 7 I think are great ideas and I would like to use them.
- Would love for spur #1 into Annapolis to be added! How wonderful would it be to safely be able to bike into Annapolis on the trail!
- Keep expanding these trails. I feel much safer using these and your designs have been great!
- Another public restroom on the B&A, please. The only one is at B&A HQ with small parking lots that fill early. Overstreet/Sawmill Park isn't "on" the B&A and Jonas Green Park doesn't feel safe along MD 2. The spur I want most is: #1-To Annapolis, with a protected 2-way bike lane. Paint and flexible plastic bollards don't slow a car down, but concrete wheel stops, curbs or (half or full height) jersey walls will slow down a car and offer more safety to hikers & bikers.
- I would love to see connections to the other trails in the area to enhance my ride experience and view the beauty and nature this county has to offer.
- Extending the spur of East West Blvd to Burns Crossing would be nice
- It would be great for this trail to connect to the other major trails, which would provide a greater opportunity to bike ride longer distances and have a more enjoyable experience.
- a bridge over Rte. 2 to connect the trail to the trail that runs along College Parkway would be nice...
- The #6 and #9 spurs would be helpful to Carrollton Manor -- the B&A trail is an amazing resource, if it was easier to access from Benfield Road near Severna Park Middle School that would be a great help!
- To first Annapolis and second Arnold would be wonderful! Don't need one to Kinder Park, it's already accessible by a paved trail through the back entrance.
- Continuing the trail to Annapolis would allow us to safely bike to the city and enjoy lunch there before biking back. Good for local businesses.



# Trail Spurs - Broadneck Trail



# of people in Household	Count
1	11
2	39
3	17
4	35
5 or more	17



# of people in household under 18	Count
None	63
1	15
2	29
3	6
4 or more	6



# Trail Spurs - Broadneck Trail (comments)

- Can a pedestrian span be built with a bike lane to connect the Broadneck peninsula trail to the cross island trail from Sandy point?
- I don't think spurs to schools are necessary especially elementary. You don't want to invite strangers with easy access. This is more of a locals trail. Just want to see it finished.
- They're great!
- "A great addition. Can't wait for the completion of phase III"
- It will eliminate some hairy sections of College Parkway where the lanes change."
- The more trails the better.
- The trail is nice, but it has one large hill. It is hard to get up at times it would be nice to have it spur going to arnold parklo 8
- The more the merrier. The spurs and connectors provide safe passage to people who use the trails and don't necessarily want to have to drive to them in Order to use them. It may promote walking as an alternative to driving to certain places, which can in turn alleviate some traffic congestion that occurs on some local roads during things like school pickup and drop off
- "I live in the first house on Bay Head Rd. Hence the trail will continue down the side of our house. Clearing started recently on the section on East College Pkwy. I am appalled and mortified by the excessive removal of trees, bushes, and other smaller plant life. Zero buffer has been left between our house and East college and Rte 50. Nothing minimalist about the destruction of any natural buffer. Now we expect workers to hit our sewer line and we'll be ready to move! Two thumbs down."
- Comment on Broadneck- While additional spurs may be useful in walking / biking in the area it is hard to support any given the extremely lengthy time it is taking for the main trail along College parkway to be completed. Has been 2 years? Please focus on finishing the main trail along College parkway and study pedestrian use - then ask us for feedback. I have concerns about the intersection of Bay Dale and College Pkwy. I think a no turn on right should be considered to protect pedestrians
- "Needs to connect to High School
- Bike lane on St Margarets across 50"
- Very excited about all of this!
- A spur to Arnold Park along with the spur from the B&A trail to Arnold would be great.
- I would like to see a spur to Belvedere elementary to connect this trail to Mago Vista. I'm excited for when this trail is complete and connects sandy point to b&a trail.
- I'm so pleased by the Broadneck Trail's development and extension giving us an alternative to riding or running on the dangerous College Parkway shoulders, helping us connect between B&A Trail to Cape St. Claire and even Sandy Point and across 50 into South Annapolis. To me the most useful spur would be #10 as it could connect to the #2 spur of B&A to help create another connection between the two trails. That said, priority should be given to spurs that connect biggest neighborhoods to trail
- As a resident of Mago Vista, Spur 11 to Belvedere ES would be extremely helpful on safely reaching the main trail. Spur 11 and 14 will be also beneficial to help my children reach the middle schools when they reach that age in a few years.
- #11 would be a great addition.
- "We live the trail and it gives kids great ability to ride and have fun as well as go to high school and shopping centers safely!
- Adding the trail to magothy river school would be a huge improvement for convenience and safety"
- We love having the Broadneck Trail! Please continue it to Windsor Farm Elementary School so we can have a safe way to walk to and from school.
- 10 and 14
- I think the spurs are good ideas
- Remote for me
- "I don't use the existing trail as much as I thought I would primarily because the grade is too taxing.
- As I watch the extremely slow construction of the current project that is almost on my doorstep I think my existing route along Jones Station will be easier than zig-zagging across College Parkway by the college. Again, the grade seems too steep in some places."

# Trail Spurs - Broadneck Trail (comments)

- Spurs to all the schools will be fantastic for helping youth bike more.
- I think Trail Spur 10 is critical to connect the trail systems. While living in Bay Hills I never felt comfortable crossing College Parkway with my daughter to connect to the B&A trail. Commuting to work, I would cross and take Church Rd to get to B&A. Trail Spur 10 would make that link (Bay Hills to Church Rd) feel much safer. I would not go up to AACCC to cross when commuting to Annapolis. It would add ~3-4 miles to my 9 mile commute. Church Rd is a major thoroughway for the Broadneck Peninsula.
- I think Trail Spur 10, through Arnold Park is vital to connect Broadneck Peninsula Trail and B&A trail. The proposed route looks good, however, is there an option to go around the east side of Childs Landscape Contractors Inc? A trail that would go along the edge of their property and 342 Candle Ridge Dr. With a crossing at the light to Broadneck Peninsula Trail?
- I feel that the potential trail spur #11 to Belvedere ES is very important and critical to the Mago Vista community. The option "Broadneck Trail to Belvedere Elementary School" on page 116 of the AACCC Trail Spurs and Connectors Study would be the best and safest option. The sidewalk currently on Jones Station Road is very narrow and the traffic on Jones Station Road is very heavy. By improving the trail from Broadneck Trail to Mago Vista Drive would be such a great improvement for the community.
- I don't use it because it is incomplete and doesn't connect to places I'd like to go. Looking forward to its completion. The more spurs the better to open access and increase use as a transportation as well as recreation trail.
- I think all of the spurs would be useful and I would expect to use them all.
- Going to all the schools is a great idea to allow and encourage younger kids a safe way to bike or walk to school.
- can't wait for it to be finished. It currently is hard to get to the high school from AACCC.
- PAVE IT FASTER. The new parts
- "Excellent, especially when it is completed by end of 2024 so as to enable linkage between B&A Trail and Sandy Point State Park.
- #12, the connection to Broadneck Elementary School is an essential future link to enable children to walk safely from the BP Trail to the School. Until such spur is constructed, they will be tempted to walk through a busy intersection on the road itself."
- Somehow Connecting the trail to local neighborhoods using crosswalks so that it's easier to access the trail. And also adding new bird houses / bird house boxes for the local birds along the new trail.
- I am trying find out the route the trail will run. Is the trail crossing over collage parkway? If so where and why? Crossing over collage parkway is a dangerous request for people to do. Speeding is not battled by the local law enforcement on a regular basis (no fault to them due to manpower) speed cameras would help. I have ask and requested for an update but for almost 6 months no one has returned my emails
- Walking access to Arnold Park could be made via Bonito Court. The map shows the park extends to the road area. This would be a much shorter and safer path, requiring less clearing of forest and construction of a walking path mostly at the edge of the existing ballfields. It would also make sense to create a PAVED circular walking path within the park for seniors & mom with strollers to exercise. The park now has little use other than team sports leagues.
- All spurs look good!
- The spurs are a great idea; they will provide wonderful variety. However, the completion of the trail in the areas still under construction should be a priority.
- Would be nice if spur #14 was developed; there is currently no sidewalk on a stretch of Peninsula Farm Road to the school
- Coupled with completion of the current work, #10 would give safer access to the Arnold ES side of College Parkway from the Broadneck ES side.
- To Arnold Park or Belvedere ES would be great.
- I'm looking forward to this trail connecting with the B&A trail
- Please connect this trail to the local schools to make it safer for families to access the playgrounds and playing fields safely!
- My son, who doesn't drive, mentions he looks forward to having the option to use the trail to get to AACCC in the future as he is considering taking classes there.
- Connections to schools are important. Please consider emphasizing the spur to the middle schools.

# Trail Spurs - Broadneck Trail (comments)

- I wish there was more native flower gardens and dog waste disposal areas
- I would like to see the spur to Twin Oaks Park/Magothy River Middle School much closer to the top of the list than #12. With students walking/riding as far as a mile and a half one way to Severn Middle School (Magothy Middle School is all bused) the community would like to see that Peninsula Farm Road is safer for EVERYONE. I fully support walking to school and believe that every child should be able to get to school SAFELY. Plus, with less cars to drop off students it reduces carbon footprint.
- It is absurd that there is no sidewalk option on peninsula farm road for middle schoolers walking to Severn river middle. There is only one crossing guard and they are expected to either walk on the shoulder or in a drainage ditch. The trail option around the back of the school takes longer and they have to walk through the dumpster area of magothy river middle.
- Walkers to the middle school need a paved path that is safe for them to get to school!
- Keep expanding the trail. The more the better!
- We would love to use it to reach the middle and elementary school. WF ES could be served better with other surroundings trails but the school is not well served for bike access....
- I do not support a trail going through Goshen Farm.
- Although I am not interested in the Spurs on this survey, I am hoping that there will be a very safe way to connect to the Baltimore Annapolis trail.
- I don't use the trail often. I will use it when it is connected to the B&A trail
- Not at all good for Goshen Farm as this historic farm will suffer if large pathways are installed.
- Putting the Cape St. Claire Trail Spur thru Goshen Farm would not be in alignment with Goshen Farm Preservation Society view of maintaining historic feel of Goshen Farm.
- Very busy road indeed
- I was disappointed that there was no plan to connect communities along St. Margarets road to the Broadneck Trail. Crossing over Route 50 either by Old Mill Bottom or St. Margarets is very tricky and dangerous. It would be nice to see a plan to connect residents of these communities to the trail safely so that they can enjoy the trail system.
- I will use it for biking once it is completed
- I do not think the spur to CSC is necessary. It would run through Goshen Farm which at this point is not managed by parks and recs but by volunteers. Hilltop drive is right there and connects to the trail at CSC Rd and has a sidewalk.
- The spur to Cape Elementary should not run across the middle of the school fields, which will put it in tension with school activities, and it should not run down the Goshen Farm driveway, which is the only vehicular access to the farm. A better choice would be to improve Cape St. Claire Road and Chestnut Tree Dr and especially the intersection there.
- I think the trail is great and extends out a great distance, it's easily accessible from several points in the broadneck area and is mostly flat.
- so excited about this trail. cannot wait until it is complete and I can access the B&A trail in a safer manner. I live 2 miles from sandy point. College parkway can be very dangerous to commute on by bike.
- Formalizing and integrating alternative transportation methods to schools and parks should be a high priority!
- We love the Broadneck trail! Whenever we're out walking along it, we see plenty of other people using it too. The new spurs are also an interesting idea and would surely get used as well.
- Definitely Arnold park spur. Because it will provide to residents with a pedestrian path to church road and the possibility to walk or bike safely to the Arnold downtown area (Safeway, mcDonalds, laundromat, bella italia, etc)
- I hope to use this trail and frequently, once it is complete, for exercise, transportation, and birdwatching. Please identify more places to park for access to the trail. Is there not to be a connection to the trail from the Freshfields Farm development, once it is built?
- Students walking to the middle school would greatly benefit from trail spurs to Belvedere Elementary and Magothy. Both those areas are spotty with safe walking paths to get students to and from school at Severn River Middle.
- "Spurs to the middle school on Peninsula Farm Road would be a positive.
- Spur to Arnold Park."



## Trail Spurs - Broadneck Trail (comments)

- Some concerns regarding how close to road trail would be on Shore Acres road. Having the alternate through the woods would be nice as it drops in the lower parking lot of Broadneck Elementary
- I really really enjoy the opportunity to use this trail. I use it frequently and can not wait to have it completed. It will be great to have it cover more area.
- I'm deeply concerned about the spur going through the Broadneck Equestrian Center. First this may violate the conditions of the Andy Smith gift by reducing the size of the horse farm. The trail will also cut the farm in half. There's a big difference between a little gravel road and a wide paved path. This will also make the horses more vulnerable to abuse. I also live on Broadneck Rd and had a cow die from eating trash thrown in our field.
- I would especially be in favor of #15 to Windsor Farm because there are some spots without sidewalks to get there. Also 10 and 13 would be great for the running community as well.
- Would like to see a spur leading to Arnold Park
- I think that connecting to the schools is a great idea.
- I run and walk on trail and looking forward to its completed trail to AACCC.
- Bikers are a hazard to safety on the b&a trail. We need more police enforcement
- This trail development plan has been a true tragedy in terms of "preservation", the amount of trees and natural habitats that have been destroyed is quite sickening. There seems to be no regard in at least trying to preserve any woodlands as AAC claims to do. If anyone were to take a look at the bulldozers on Old Cape St Claire road, you would see the devastation, it is 2024 and we couldn't at least try to build the trail into the habitats. AAC and MD should be better than this.
- "Would love a spur to Arnold Park (#10). Both Shore Acres and Jones Station are not safe for my kids to bike on to get to that field.
- Also a spur to the middle schools is vital to get kids to bike to school more and reduce pressure on busses."
- Would love to see spurs to Arnold Park, Windsor Farm ES and the middle schools. I live near WFES. Broadneck park is so close but we can't access it safely because there is no path through the Equestrian center and Broadneck Road has no shoulder to the back entrance.
- See above
- We need a way for those that live off of college parkway on the college side of the street to be able to get to the trail. The way college parkway is set up it is very dangerous crossing college parkway and there are not enough crosswalks to make it safe.
- #10 RRFB is not adequate for crossing College Pkwy. It would be better to cross where there is full signalization. This proposal also requires a crossing of Shore Acres - another safety risk
- #11 1. The map on p. 116 does not show connection to the Broadneck Trail where it crosses College Pkwy at the new signal. 2. Are there alternatives through neighborhood streets then use existing ROW such as near the Longmeadow Way cul de sac?
- #12 Add crossings of Shore Acres such as at Bay Green and Golf Course so the neighborhoods on the east side can access to the new trail
- #14 Acknowledge the existing connector to the school from Juliet Ct as a current alternate on relatively low stress neighborhood streets
- Very concerned about the proposed Spur through Goshen Farm. Only access for vehicles is proposed for the Spur, effectively cutting entrance and egress to the historic Farm buildings and property. Goshen Farm, chartered in 1663, is the only surviving Colonial-era, undeveloped farmstead on the Broadneck Peninsula. The property is administered as an educational center for all schools and ages, managed as an agricultural property, and is a meeting site for community organizations. Leave the Farm!
- "Having survived several near misses on College Parkway and along 50 riding to Sandy Point we are really jazzed about the completion of these segments. Like the B&A please post signage about headphones, speed, dog walking with retractable leashes, couples and groups walking side by side blocking the entire width of the trail etc. We can't wait."
- Some of the trails are quite loud by the road, so more vegetation or barrier between trail and road would be nice. I am a bit worried about the trail that will be extended to sandy point area and the noise from 50. Can you put up a sound wall or something similar? That highway is so loud.
- I would be using this trail almost daily for exercise (walk, run, bike) and errands up and down College Parkway. But since it has been years since the trail was planned/funded and it is still apparently nowhere near completion - I cannot use it. I would prefer that all efforts go to completing projects in a more timely manner instead of planning endless additions.

## Trail Spurs - Broadneck Trail (comments)

- Would be nice to connect with B&A trail. Going to Windsor Farm ES direction not helpful to the majority of people.
- I think all plans should eventually be completed. I live in the Broadneck Peninsula and we need to have safe walking and biking paths. I grew up in New York and our entire town had sidewalks so this was very hard to get used to here.
- I use the B&A trail often and ideally an overpass over Ritchie hwy connecting the Broadneck trail would be tremendous. We look forward to the current construction project to be completed. that will be a great connector!
- Hunters point neighborhood is right next to the trail and has zero sidewalk to connect. The bus stop sidewalk just stops. It makes it really unsafe for the people trying to get to the trail because cars do not obey that the shoulder is not a lane for turning onto Ritchie. I've had to push our stroller through the thick grass or run in the street to get back on a safe area.
- At Hunters Pointe we need a small run of sidewalk to connect us to the bus stop and the future broadneck trail. Currently Hunters Pointe is an isolated neighborhood that doesn't have a connection anywhere. To get to a paved path we must walk on the main road of college parkway which is dangerous
- A sidewalk from the Hunters Pointe neighborhood to a connection on the trail would be extremely beneficial for the safety of our residents who need to walk to the middle schools or to AACCC.
- If we had a spur or at least a sidewalk to the Hunter's Pointe community, it would serve a lot of families with kids. We just need a spur from Peninsula Farm Road to Deer Creek Run. It would also allow for a safe way to access Jones Station Road to be able to safely get to the B&A Trail as well.

## Trail Spurs - Broadneck Trail (comments)

- Please add the Belvedere spur as it will serve hundreds of homes and the marina and point restaurant
- Convenient, safe, beautiful.
- Spur to Cape Saint Claire ES would be great. This is a pick up point for HS students getting bussed to Magnet HS and would allow the teens to safely walk or ride bikes to their bus stop.
- Better access to the schools will make it safer for students who walk there now, or ride their bikes.
- The trail will soon include the Revell Downs community on College Parkway. I will definitely use for walking and biking.
- Thank you for doing this wonderful work! It is appreciated. This helps our teens who aren't of driving age yet get to places.
- Electric assist bikes getting very popular!! Keep that in mind! Seniors and others.
- These trail spurs would help encourage some students to ride a bike safely to school which is great! My kids are in their 30s now but I (and they) would have loved all these bike trails if they were available years ago.
- I wanted to mention we use this trail for biking or walking, every day we are home! Love this, and great expenditure of public funds.
- I am not in favor of the Broadneck Trail spur that would be going through Goshen Farm. This potential spur would go through the athletic fields of Cape St. Claire Elementary School into Goshen Farm's wooded area and then down the Goshen Farm Driveway. People other than Members of GFPS would be walking through the "trails" on the property (and anywhere else on the property) and going down our driveway - the only way to access Goshen Farm by vehicles. GFPS is Leased from AACPS.
- Even though I don't have children at home any longer, I like the idea of spurs to schools to make it easier and safer for kids to walk and bike.
- Great addition to the community. A safe way to bike without having to worry about distracted car drivers. Bike to the Cape for minor errands and to Goshen Farm, which if beautiful. Can't wait to be able to bike down and around the Community College.
- I hope it will connect to the B&A trail
- Spurs should connect to schools for safety.
- A connector to Severn River/Magothy River Middle Schools would be excellent. The Hunter's Point community off of College Parkway would also love to be connected to the trail via a sidewalk. This would allow our neighborhood middle schoolers to safely be walkers! This would also allow safer access for our Anne Arundel Community College students!
- I would like a sidewalk connecting Hunters Pointe to the trail. It would help with children walking to the middle schools and the community college as well as make the trail accessible for our neighborhood.
- A sidewalk leading to the hunter's pointe community at the corner of college parkway and Ritchie highway would greatly improve safety and access for walkers/bikers accessing the trail & community college. This would be especially important for a trail spur to Magothy River Middle School as many more students would be able to walk/ride bikes to/from school
- It would be easy for my kids to safely walk or ride their bikes to school and college.
- Should connect this to the B&A bike trail.
- Biggest waste of taxpayers money ever!!!! Total destruction of trees and wildlife forest/home of many animals in Arnold, which was completely unnecessary!!!! Don't use this trail or any trail in Anne Arundel County and never will! Completely unnecessary Projects!!! You need to worry about your citizens and their basic needs in this county like affordable housing and lower taxes!!!! There's people that can't afford their medicine and can't afford to eat!!!!
- A spur connecting to the Hunters Point community located on College Parkway in Arnold would allow inhabitants (adults and children) of the neighborhood safe access to the trail
- Would be great if the trail connected to Hunters Pointe neighborhood so that kids can safely walk from the neighborhood to Magothy River Middle School.
- The right of way and sidewalks along #11 (Belvedere elementary) are not sufficient for the walking traffic and busy road to the school. Watch the flow at 0745 or 2:35 around the school. I think a spur for the newest trail connecting to belvedere would not only be a wonderful connection point to Mago vistas beautiful park, but help alleviate a major safety issue for pedestrians, runners and bikers along the road.

## Trail Spurs - BWI Trail



# of people in household under 18	Count
None	44
1	6
2	9
3	2
4 or more	0

# of people in Household	Count
1	8
2	29
3	9
4	10
5 or more	5





## Trail Spurs - BWI Trail (comments)

- Please include Trail Spur 17! Ideally, it would be wonderful to extend the trail to the North Linthicum Light Rail station.
- Both spurs will be great! Especially to the ES park.
- The BWI Trail is ideal as-is, particularly the area from the Benson-Hammond House past the Linthicum-Ferndale Athletic fields.
- I know this isn't one of your suggestions, but a spur down the BW&A road as an official bike path toward Odenton would be heavenly.
- I ride the loop especially when the duration of daylight is limited during colder months. I can safely ride it in dusk or darkness.
- This is another great trail!
- #16 #17 could provide for needed parking
- Connecting BWI loop to Howard County and Baltimore City trails should be a priority in my opinion.
- I think both spurs listed would be great connections to the cycling network in the county. I agree with the priority given for each.
- Connecting the Trail to Linthicum Elementary and Benton Park would be a great addition.
- The bridges need resurfacing. Tree roots have lifted portions of the trail. Two areas sand washes across the trail. I love the layout of the trail and wish it was connected to Odenton.
- kinder is a gem and the staff is great but along the paved trail could use a little brush removal. The surface of the trail is getting a little lumpy. However we are lucky to have the resource!
- To Linthicum ES/Park would be beneficial for those who live in Linthicum Oaks community
- As long as it's clear how the trails are connected to the BWI trail with some good signs please add spurs.
- "spurs good, put spurs, spend less, do more, make them quickly, make them useable, but make them, get people off the roads, make biking safe.
- Why are there 2 trail spurs surveys??"
- I know a lot of people work off of Elkridge Landing Rd as well, so it might be nice to have a spur there.
- Also run on this
- We usually park at the school on Andover.
- I'm riding for fitness, so trails like the BWI trail that are longer and allow for longer durations away from traffic are key!
- recommend spur 16 for safer access
- None of the proposed spurs would be useful to us. I would prefer longer connections to Baltimore or Howard County.
- I purposely make a few trips each year to the BWI trail, airplane over look is a great too. I think the spurs are a good idea.
- This is a trail we don't use as often. It is not the easiest for us to use. It is quite hilly, and often too crowded on the weekends when we have time to access.
- More spurs is better
- It is a great trail for hill training. You have shade and sun to experience.
- Thumbs up!
- Keep expanding the trail. The more the better!
- Once the trail is better connected with Arnold, we will be able to use it leaving directly by our house by bike, otherwise we need to get the bike on the car to access the BWI trail.
- Both spur connections would be useful.
- Very nice trail.
- The BWI Trail is very good for biking and walking to keep fit. I only live two miles from this trail which makes it very convenient for my household.

## Trail Spurs - BWI Trail (comments)

- A great trail that needs more bathrooms
- I only use this once or twice a year. It is a great trail.
- Safe for road bike exercise
- Providing alternative transportation facilities connecting parks and schools should be a high priority!
- I see kids using the B&A trail to get to Glen Burnie and Severna Park schools. So a spur from BWI trail to Corkran and Linthicum would benefit safer travels for school kids.
- I would use the #17 trail spur if it is added, but the area is already fairly walkable.
- Would be great if it were longer and connected to other trails.
- The Linthicum ES spur would make it safer to reach the BWI trail. Would not need to drive and park at Lindale MS for safe trail access.
- It would be great to join the BWI trail by walking or biking from Dorsey Road if Dorsey Road had a sidewalk on a least one side of the road.
- I bike the BWI loop about once a week bc it's near my office where I work. would love spurs to Linthicum ES and Corkran MS.
- Primarily we walk a portion when we visit the Dixon Observation area
- It would be great if the BWI trail was connected along Andover Road to West Nursery Road and the many businesses located there - it could help make the BWI Trail a bike commuter route. Alternatively, or in addition, the BWI Trail could be connected along Elkridge Landing Road to West Nursery Road for the same reason.
- Support more spurs and expansions of trails like this
- Would appreciate it if you could smooth out the root protrusions -- as a cyclist it makes for rough riding (& creates certain hazards). Also, while you did replace some of the bridge planking, maintenance is not keeping up with wear. Otherwise, I enjoy the trail, the views & the ride.
- Keep it around the airport... don't bring it thru neighborhoods
- #16 Are there places to add connectors from the neighborhoods on either side of the proposed trail to the proposed trail? This provides a benefit to the neighborhoods
- #17 Acknowledge the programmed extension of the BWI Spur from Maple to Nursery Rd Light Rail which is already in design and funded for construction.
- I use the BWI Loop Trail for running and biking, as well as for recreation and for commuting.
- Fully endorse the expansion
- I have walked and biked here with friends. So glad this area has a trail.
- I would be happy to see a connector toward Corkran Middle School.
- I walk on the trail that goes past the Linthicum light rail stop across from Linthicum Elementary school. I have witnessed people doing drugs and loitering. I do not think this is appropriate especially in a neighborhood and near a school. I worry this could worsen since their is limited patrolling of these areas
- Love the BWI trail for biking exercise
- I love this trail and the ideas for the spurs. However, if the people impacted by the spurs are against them, I would be against them too. Thank you.
- A ndice
- "The proposed spurs wouldn't really affect my current use of the trail.
- I support the proposed spurs if they would allow more children to safely bike to school."
- In my opinion and observation the BWI trail and its spurs and proposed spurs are venues of crime to the Linthicum Heights and Linthicum community.
- This trail is amazing. It's hard to believe you are close to an airport!
- It would be great for this trail to connect to the other major trails, which would provide a greater opportunity to bike ride longer distances and have a more enjoyable experience.
- Love it.

## Trail Spurs - South Shore Trail



# of people in Household	Count
1	10
2	70
3	37
4	45
5 or more	22



# of people in household under 18	Count
None	98
1	32
2	37
3	15
4 or more	2

## Trail Spurs - South Shore Trail (comments)

- Although it is located at the junction of Rtes 3, Rte 32 and Rte 97... it is situated between neighborhoods and streams... it is pleasant and well maintained and I would love to see more spurs added to it especially near Waugh Chapel and the Dairy Farm. And to Rolling Knolls Elementary as well as Annapolis Waterworks.
- Would love to see the trail system further expanded! It's gotten very dangerous running on the roads with people on their cellphones instead of eyes on the road. Also some road medians have shrunk due to re-painting (Burns crossing road) cutting off access to trails from communities.
- 18, 19 and 23 are my wish list. Currently riding to Waugh Chapel via shoulder of Rt 3 is possible but unpleasant.
- Please build the connection to Annapolis ASAP and a spur connecting the South Shore Trail to Water Works Park Trails.
- My wife and I love the trail and looking forward to the opening of the Patuxent River Bridge. Also looking forward to using the sections northwest of MD301 once finished.
- A path to Waugh Chapel shopping would make this an even more powerful trail to use. I look forward to riding it more when it connects to Odenton and the other trail network. for exercise and transportation. Spurs would expand its usefulness.
- I use this trail out and back from Waterbury Rd as part of my daily 16-22 mi bike loop from Woodlore to Indian Landing Rd, Rt 3 and back along Rt 178. Any additional miles on this trail would be great. can't wait until the planned spurs are completed.
- We would welcome any of the spurs mentioned with the exception of the connection to the Waugh Chapel Shopping Center. We feel this may attract an element of potential crime in our neighborhoods.
- This is a great trail connecting Odenton to other areas so that you don't have to use a car 100 percent of the time. Our family lives on each end of this trail, and I see grandchildren being able to bike it to come visit us.
- When the South shore trail is finished, trail spur #23 to Waugh Chapel is absolutely essential - this opens the trails to people in Crofton in a way that doesn't exist at this time - I am constantly driving to get to trail heads, and would love to cut a bunch of time off that drive.
- How is the South Shore trail on the map as continuous between Odenton and Parole? - Only a small section completed in actuality - I assume the funding has been approved and the build is in process?
- To #21, Rolling Knolls ES. We do not have access to any trails without first climbing in the car to get to one.
- Would love a spur to dairy farm rd. Would give me direct access. As alternate Waugh chaa as pel village dpu
- Please make these trails equestrian and horse friendly! Recreational horseback riding generates \$621M annually in the state of Maryland, and we suffer from a lack of horse-friendly parks and public spaces. Please make this trail, and the other planned trails, accessible for equestrian use by including non-paved bridle paths, mounting blocks, horse right of way signs, and hitching posts. These planned trails could set an example for other states to adopt true multi-use trails for all.
- I think all of the potential spurs would be great additions to the cycling network of Anne Arundel and would rank the spur to Waugh Chapel as the highest priority because it would help connect residents in Crofton to the South Shore trail and a grocery store to the trail. These benefits would help decrease the need to use a car day to day.
- My biggest concern about the South Shore Trail is how the trail will cross route 3 and how the trail will cross over 97 over to Generals Highway.
- "1. Provide spurs to connect Crownsville communities to the trail, specifically Herald Harbor and Arden, where most of Crownsville's population is concentrated. Crownsville residents deserve to have access to a trail that runs through Crownsville.
- 2. This plan is not ambitious enough. Build it all. EVERYTHING should be connected with safe walking & biking trails, not just a few short spurs to a few amenities. Everywhere you can access by car should be accessible by foot/bike. EVERYTHING."
- Our family loves to walk on this trail. It is beautiful and safe.
- "I highly recommend a spur to Millersville ES and the new rec fields planned on the north side of Millersville Road, across from the ES.
- A spur to Waugh Chapel Village Center would be a welcome addition."
- A spur to dairy farm would be great and a spur to Waugh Chapel Village would be wonderful. I can then walk to do most of my errands and get some good exercise!



## Trail Spurs - South Shore Trail (comments)

- I would be most interested in the Dairy Farm spur or to General Highway Corridor Park, but I would be very careful with the problems it could cause with traffic flow, depending how the trail crosses roadways.
- Views of wildlife along this Trail are sensational. You should do whatever you can to continue to encourage Turtles and nesting Birds
- Would be awesome if it connected to waterworks park! I hike that park frequently.
- I prefer the trail spur to provide more opportunities to walk in peace, quiet and nature, since this is where I walk my dogs after the work day with my family - it's a nice place to unwind and relax.
- Ideally, the spur would go to Dairy Farm and not to Waugh Chapel.
- It would be great to have this trail expanded!
- Any and all of the potential spurs would be great. If completed I would bicycle to Annapolis would like to see this trail connection with Odenton. It would be amazing to have a loop that goes from BWI to Odenton to Annapolis and back to BWI.
- Post bike etiquette including speed and clarify if motorized bikes are permitted. Should be done along the route not at just beginning or end
- Checkout signage in Falmouth MA seashore trail. They do it right
- <https://www.alltrails.com/trail/us/massachusetts/shining-sea-bikeway#:~:text=Experience%20this%2010.7%2Dmile%20point,h%2013%20min%20to%20complete.>
- Correct trail identified in prior email
- Didn't know about the dairy farm spur and the connection to Waugh Chapel. In a few decades when it's almost finished I will definitely attempt to use it.
- Please extend it soon, I would love to use it instead of a car. Not sure what the use of extending it to elementary schools would be these days as it seems most parents don't let their kids walk.
- Would love a trail spur from south shore through Bacon Ridge to St. Stephen's church. But to Millersville elementary or Waugh Chapel would be nice as well.
- I personally think the spurs can wait until after the mainline South Shore Trail is complete. Odenton to Annapolis via trail would be an absolute game-changer.
- Might be nice to connect to Waugh Chapel Village to stop for ice cream or lunch.
- I would love to see the spurs built, particularly the connection to Water Works. But this seems premature since the trail barely exists! Let's build the trail before discussing spurs.
- NEED A CROSSING OVER ROUTE 3.
- Really would like this complete, at least all the way to Odenton from Route 3.
- Please connect Waugh Chapel shopping center to this trail so that we don't have to drive every time we want to run/walk on this trail.
- Would love if it connected to B&A or at least went to Annapolis
- The South Shore Trail is a great resource for the local community. It would be even more valuable if it linked into the other trail network, or other communities. Spurs 18 and 23 would do this best
- Love using the trail and am most excited to see the potential connection to Dairy Farm Road (#18) and to Annapolis Waterworks park (#22).
- Prefer #18 & 23
- I think trails to Dairy Farm and the Waugh Chapel Village Center would be amazing. I would like to see it connect to the new park planned at Odenton library.
- Can Kathy Anne be used as the connection to avoid removing trees. This would require a short sidewalk.
- I love the idea of a spur at Dairy Farm Rd, but more importantly, there needs to be a spur and crosswalk across Rte 175 to get to Arundel High and Middle from the bike trail. So many students would be able to use this rather than needing a bus.
- I would be delighted to be able to use it to get to Annapolis on a bike. The ability isn't there now. But that would be AMAZING.
- Love this trail and would like to see more like it in the area.
- I'm curious as to why resources are being spent on adding spurs versus working on the original plan of connecting all the individual trails together. Where can I find the answer.
- For spurs, I would vote for #19 Generals Highway Corridor and #22 Waterworks. Both of these areas have something to do once you take the spur (parks, other hiking trails) versus a spur to a dead end with nothing remarkable to see or do there.

## Trail Spurs - South Shore Trail (comments)

- Connecting this to the Odenton trail would be a great enhancement and enable more access to Annapolis without needing a car
- Access to WW park currently is limited - would be great to have acres to this valuable outdoor space via bicycle. Likewise with Dairy Farm. Pls consider these spurs!
- There is no way to go West from Annapolis without going on road, which I don't mind, but it prevents many many people from being able to use a bike for more than recreation, which it is, but it can be so much more.
- Can I help you export a proper PDF, not in spreads, so it can be read properly, or printed?
- I would really, really like to have a spur to Dairy Farm. I know the crossing over Rt 3 is complex, but whenever that gets done, it will be a major lifesaver. I mostly use the trail as it is along Odenton Rd, and I look forward to seeing it develop.
- These are most interesting to me: #21 - To Rolling Knolls ES #22 - To Waterworks Park
- We are excited for the trail to continue down to Annapolis. Connecting to Waugh Chapel and other places would be great as well.
- I love this trail, especially for running or biking or scootering with my small children because it is very protected from traffic. I would love to see this trail expanded and also for more safety measures to be put in place (like stop signs or speed bumps) where the trail crosses roads.
- I would love if the South Shore Trail could expand to #23 (Waugh Chapel Rd). The frequently used shopping center and surrounding homes would be able to access the trail so beneficial. The homes in this immediate area do not have access to a trail. By expanding #23 we would be able to use our bikes without having to put them in a vehicle. The family and recreational time would be priceless. Please expand to Waugh Chapel!!
- I can see no safe way of you bringing the trail west across Route 3 at grade. Are you planning a bridge over the highway? A tunnel underneath?
- And I'm quite confused where you would put a spur north of the trail that connects to the elementary school and the proposed park. How would people cross Millersville Road to get to the park?
- Also run on this trail. Look forward to the spur to Dairy farm and the next phase of the trail to Burns Crossing rd.
- I would love to bike on it if it were longer than 3 miles.
- I would LOVE to see trail connections to Waterworks, Generals Highway Corridor Park, Crownsville Hospital Memorial Park, and Bacon Ridge.
- Current trail is great for a walk and gets lots of use; however, it's too short for biking. Connecting to the Odenton trail would be awesome for biking. How to safely cross route 3 seems problematic and would need a culvert/tunnel or a bridge as adding crossings at street level would be too dangerous and would add to the already overwhelmed traffic congestion for this area.
- #22 for MTB
- Would be great to have access to all trails systems in area through bikes/running instead of cars
- I believe all spurs will add great value to the current trail system. Safe corridors for biking/walking/exercising are critical to human health.
- The South Shore Trail will become a major connectivity route for hikers and mountain bikers that utilize the natural surface trail systems at Annapolis Waterworks Park, Bacon Ridge, Generals Highway Corridor Park and eventually Crownsville Hospital Memorial Park and Saltworks. The County should prioritize spurs with connectivity to these resources, using similar connectivity in neighboring counties such as Howard County and Montgomery County as a model.
- Would love to see a spur to #19
- Great idea!
- Spurs 19 and 20 would be the most likely for us to use
- Expansion of trail access and connectivity is vital for the health of these communities.
- Would love to see a connection to Waugh Chapel, one of the biggest centers in the area. Bacon Ridge, waterworks too. This would open up a lot of options for people to get out of their car and move around by foot or bike.

## Trail Spurs - South Shore Trail (comments)

- As a frequent user of both Waterworks and Bacon Ridge, I strongly support trail connections to Waterworks, Generals Highway Corridor Park, Crownsville Hospital Memorial Park, and Bacon Ridge.
- I would love to see trail connections to Waterworks, Generals Highway Corridor Park, Crownsville Hospital Memorial Park, and Bacon Ridge.
- Great idea!
- Connecting to Water Works Park would be great. Anything on the south side would be ideal as we don't have much choice in South County.
- "I love the south shore trail. I would love to have it linked to other trails in our county. Residential and Commercial Development and expanding highways are chewing up open space and the lush green landscape that made Maryland special.
- To connect trails in the county will allow residents to enjoy the spaces, hike or bike for longer distances and create a long lasting treasure for generations to come.
- Please add to the trail! Hopefully in a wa that adds to or connects to coating paved or natural trails. The existing g trail is frankly odd and not cohesive to others nearby trails.
- The South Shore Trail greatly increases my satisfaction about living in Anne Arundel County. It is vital to my mental well-being and to my children's to have peaceful, outdoor, forested space to spend time in. I have a deep love for these trails and am excited about all future extensions.
- They would be great
- It would be nice to have a spur connecting Bacon Ridge and Waterworks trails. It is currently very dangerous on the road. These mountain bike trails are the most important park features in the county to me and even influenced me moving here. Please continue to support these trails and my safety!
- All of these spurs would create new access points to enjoy the trail from.
- I visit Anne Arundel County regularly to mountain bike and spend money in restaurants and coffee shops after my ride. I would love to see a spur connecting to Waterworks Park, Bacon Ridge, and Generals Highway Corridor. This will greatly increase safety for cyclists and make Anne Arundel County and even bigger destination for outdoor recreation.
- I support the addition of any trail improvements that enable more opportunities for recreation and transportation in the area.
- Would love to see spur to Waugh Chapel, and to Waterworks. The more you connect, the more people will use it. Connecting the trail to businesses will open up the potential uses of this trail beyond recreation. What the trail is really missing is a pedestrian bridge over 301.
- I live outside Anne Arundel County but it has become a biking destination for many who enjoy and contribute to trail building at Bacon Ridge and Waterworks. Connecting these trails will open up whole new possibilities and contribute to Anne Arundel County's growing reputation as a destination for people from around the region to recreate.
- This trail is a very nice walk. The only suggestion I would have is to add more garbage cans along the path. I see one on the path and at the start of the trail. Visitors often walk their dogs and do not pick up their dogs poop. Perhaps adding a few more garbage cans would eliminate this problem?
- Ok to extend trail system and connect more cities
- Typically I don't use this trail but looks like great options to say off if riads
- spur 18 recommended due to connecting two parts of trail creating a lot of options for trail access and use
- Have heard multiple comments about break ins at the parking, which is concerning. Any possibility of cameras?
- I like the idea of the spurs. I wish more walking trails were put in place in Crofton.
- Trail connections to Waterworks, Generals Highway Corridor Park, Crownsville Hospital Memorial Park, and Bacon Ridge would be an excellent addition. The trails we have are great and I see a lot of people out using them when I'm out there. I'd love to be able to ride from waterworks to Bacon ridge without having to ride down the narrow and windy road that connects them.

## Trail Spurs - South Shore Trail (comments)

- Please consider connections to Bacon Ridge and Water Works bike trails.
- Can't wait for this trail to be reality. Really like the connection to waterworks
- Needs to connect to other trails and shopping centers.
- We use the trail every day. Longer walks and runs are definitely desired.
- The South Shore Trail isn't even open, it's been 20 years. What is the holdup from the county with this lagging? What are you people getting paid for?
- Connections to waterworks and Bacon Ridge mountain bike trails would be a great amenity
- Good thinking to remove the traffic off the roads.
- Gorgeous trail, but relatively short
- I love this trail and it would be amazing to have it extended! I often have to walk it out and back twice to get my miles in.
- More bike trails the better
- Please make it electric wheelchair accessible as there are not many sidewalks or trails to use safely as a caregiver of someone in a wheelchair.
- South Shore is an amazing local paved. My kids love to bike it and I enjoy the 3.25 mile run back and forth. The potential spurs are exciting to see. Can't wait!
- More spurs is better
- Better connectivity from Bacon Ridge to Waterworks would greatly benefit users of the system that are particularly interested in endurance sports.
- I would love to see trail connections to Waterworks, Generals Highway Corridor Park, Crownsville Hospital Memorial Park, and Bacon Ridge.
- Much needed!
- We would love to have Waterworks and Bacon Ridge connected to avoid the roads when mountain biking. We can ride or walk to the South Shore Trail, and would love to have it connect to the other points.
- love the trail. walk it, run it, bike it, rollerblade too. Would love more connectivity and greater distances to travel without being on a road. Ideally we could get around the county on bike and never ride on a road!
- My family and friends use the trails often for recreation and fun!
- #23 should be the priority
- The more connections the better! It would be great to be able to bike to Waugh Chapel center but a connector to Waterworks for hiking/running would also be wonderful
- Creating a safe connection between Waterworks and Bacon Ridge is my highest priority, as well as improved access to Waterworks from Annapolis downtown. Increased cyclist/pedestrian safety and access along the General's Hwy corridor is also very important. Would love to see improved access to the B&A trail at the top and bottom of the Severn River. Thanks!
- Would love the ability to connect Bacon Ridge south trailhead and Water Works north trail head in a more safe manner. Hawkins, Crownsville and Honeysuckle Rd. are not ideal for cyclists. Very avid mountain bike and a member of the Annapolis Bicycle Racing Team. We love the trail systems here and would love to see them grow in a way that provides safety for all using them; walkers, runners, bikers, commuters, etc.
- Better connection to waterworks park is needed.
- I recently moved to Crownsville from Montgomery County with my family of four. I along with my family love biking at Bacon Ridge and Waterworks. One thing that is missing compared to Montgomery County are connections between these trails. In Montgomery County the dirt trails are connected so it is safe to ride between them and you can go hundreds of miles! My teenage daughters need to go on the road to do this in Anne Arundel and it is unsafe! Please connect Bacon Ridge and Waterworks!!!
- I would love to see greater connectivity via any or all of the proposed spurs!
- Would love to see an expansion of this trail!



## Trail Spurs - South Shore Trail (comments)

- if this trail could be connected to BWI and Arnold, it could be a full loop. It is not very accessible for us by bike, unless we transport the bikes by car there.
- When will the trail be extended along Generals Hwy to the Eisenhower golf course?
- 18 looks like it's be useful once the South Shore trail is finished. 23 would be a nice way to get to the Crofton Bike Doctor
- Anxious for this to be completed. Spurs to Waterworks, Corridor Park and Waugh Chapel Village. Seems like good ideas
- We cannot wait for the planned expansion of the south shore trail! When will it be constructed???
- More connections would expand access to recreation, help improve the usefulness of trails for transportation. Better access and more connections to and between Waterworks/Bacon Ridge would make these amazing recreational trails more fun by providing options for longer rides.
- #22 spur best
- The roads are too dangerous for bikes in this area, so more trails are needed.
- Prioritize completing the trail please. Connector to Waugh Chapel would make the trail accessible to many more people and be greatly appreciated and used.
- Connecting to Generals Highway Corridor Park to WaterWorks would be ideal for safety factors. Currently traveling along narrow roads with little or no shoulder.
- #23 & #18
- We love this trail and love the thought of expansion.
- Is this trail even completed? Seems a bit premature to be talking about spurs!
- Would love to see expansion as quickly as possible. Would be great to connect to other parts of the county and lengthen the trail immediately. For biking the trail is not long enough currently.
- I live near Corridor Park and would use the trail to access the park by bike.
- This is the closest trail to my home and I would love for it to be expanded, especially towards Dairy Farm.
- Hope I see the completed trail in my lifetime
- Would love any of these. Use this trail several times a week and cannot wait for it to be extended!!
- Would love a spur to the new planned millersville soccer fields!
- Would love to be able to safely cross route 3 from Millersville Road parking area. Love the trail otherwise.
- Walking access to waugh chapel village center would remove many car trips.
- The potential spurs make would it easier to bike to the South Shore Trail from my house, which is not possible to do safely at present.
- Excellent trail-I use 1-2x/week connecting to a spur would be wonderful.It is unclear how the SStrail would cross Rt3 to get to Dairy Farm? Concerned w/current schematic-IMO, people would cross
- Annapolis Rd/Rt175 at the Gambrills Rd intersection vs walking along a very busy Rt175 & cross at the establish light at the intersection of Rt 175 & Dairy Farm, only to double back along Rt 175 to get to Dairy Lane.Cars routinely pass on the right with the backup of cars waiting to turn onto Gambrills Rd.
- Public access to the Dairy Farm would be fantastic
- I would love to see them all but would use the Waugh chapel spur the most.
- I use the entire trail for daily exercise in newish there was one closer to my home.
- Cannot wait for this trail to be expanded. It's awesome for strollers.
- Interested in 19, 20, 21, and 22 spurs. Not interested in the #23 waugh chapel village spur because it runs under transmission lines and introduces people shopping at retail and restaurants into a new environmental area with limited maintenance and oversight. Usually that results in new litter, vandalism, etc. to the area.
- I do not currently use this trail, but it could provide a safe bicycle commute option, which would be spectacular.

## Trail Spurs - South Shore Trail (comments)

- -this will require extensive grading which will include extensive retaining wall installation.
- -this will require removing trees in an area that is supposed to be dedicated to tree con"
- I would love to see it extended toward Waugh chapel and Crofton
- Please connect to Four Seasons neighborhood in Gambrills
- I would love to see connections to Millersville ES and Waugh Chapel Village Center. Where in the Village Center would it connect? That is a large place!
- Currently funny use this trail but would if it had other connectors like dairy farm or waugh chapel
- Would love 18 & 23
- 3 constraints are very concerning. Clearing of a Forest Conservation easement, Stormwater Management, and the road crossing with sight distance issues.Why do we even have Forest Conservation easements if they are negotiable? Clearing is against every green environmentally conscious program we have in the county.These are large old trees.There are already huge storm water problems in this area. Ask those impacted by the Phase 1 trail construction. Impact on Arundel Station and Waterbury.
- I rank spurs #22 and #23 as most desirable, #22 for bikers/hikers and #23 for everyone.
- There are invasive plants pulling trees down.
- Wonderfully kept trail! The invasive plants will for sure damage the beauty of the tree lined trail. I hope you can assist in cutting these back soon.
- Interested in anything that extends South Shore Trail. For spurs: most interested in the connections to Dairy Farm (#18) and through Dairy Farm (#23)
- I don't use this trail yet because it hasn't been built. However, is there any way to speed the process up so those of us in Annapolis can have another trail to access without driving? I would love to be able to ride this trail and alternate with the B&A trail. Even better would be if there is a way to connect the northern part of this trail to the BWI Trail in some way, creating a large loop from Annapolis!

## Trail Spurs - South Shore Trail (comments)

- Please bring the trail closer to Crofton. If possible, connect to the neighborhoods on the east side of route 3 so that bikers/walkers don't have to cross route 3 to access the trail system.
- Looking forward to completing the link from MD 3 to the Odenton Circle (& how you're going to manage the crossing of MD 3...).
- Looks great. More spurs the better.
- Connecting south shore to WBA and other trails could turn them from recreational to commuter trails. Trail system needs to be interconnected and give access to retail and service areas.
- I live near generals hwy close to the new firehouse and I want easy and safe access to the trails. People drive fast and there's nowhere safe to walk or bike
- #19 Propose a connection to the Renaissance Fair as well
- Consider connectors to Brightview Annapolis and other residential areas along the S Shore Trail
- Would like to see trail connect to B&A trail and Annapolis
- "Excited! B&A is like Bay Bridge traffic. Weekends are out as it's too crowded.
- Can't wait for another trail to be completed. We'll be able to intersect with our kids and grandkids on this trail without getting in a car. Keep up the good work. It would be nice if one could cross 665 on foot or on a bike and connect with this trail. There is/was a bridge plan in a small area plan to get from Admiral Cochrane, Womack or Sprull Rd. That would get people to shopping and entertainment car less!
- Need to install pet stations so people can get bags and have place to dispose of pet waste. Otherwise people don't pick up
- Please look to connect the paved bike trails to the natural surface trails at Bacon Ridge and Waterworks
- I think it is a great investment in the future of our community.
- great idea
- Safe trails are very important and any connections to make safe ways to get to them are encouraged.
- Please try to reduce invasive species overgrowth on the trail, including vines that kill trees (ivy, etc), bamboo, multiflora rose, and hogweed.
- Beautiful trail, thank you for considering adding the spurs.
- A spur to Millersville Elementary School should be a top priority. The crossing of Rt. 3 in a safe manner when the extension of the South Shore Trail is complete will be critical. Keep safety of bike riders and walkers safe!
- It would be great to be able to bike from Annapolis to Odenton without having to go on the roads
- Fully support the proposed expansions.
- Water Works would be great for those that prefer nature trails and General Corridor park would be fun for families. Although, General Corridor park is a pain with permit requirements and facility agreements (for example the volleyball) that prevent it from feeling like a community park. It would be good to see the permit requirements only pertaining to when leagues are actually using the facilities. Bike use for the trail would be great to allow families to enjoy the popular Crownsville hobby.
- Please provide the families and students of Rolling Knolls a spur to easily access this trail. There's parking at the school and it could be used by the faculty staff and students as well.
- Please complete the planned South Shore Trail. It would be used extensively
- I would love to see this trail link up to the abandon (privately owned but not used) railroad tracks running behind Odenton library, the new Odenton Park (when that gets built) and the Odenton MARC train station/town center.
- I am against this spur.
- plenty of existing parking at rt 3 end, no need to use parking at the proposed Millersville Park.
- -is there a demonstrable need to access the SS trail from this park as there will be trails in the park.
- -this will require crossing a county road that has and will experience heavier traffic.

## Trail Spurs - WB & A Trail



# of people in household under 18	Count
None	56
1	12
2	20
3	7
4 or more	2

# of people in Household	Count
1	6
2	39
3	19
4	22
5 or more	11



## Trail Spurs - WB & A Trail (comments)

- Anyway to get a connection over towards the Crofton area? ---- I have to drive to even use this trail. Before all the land is developed between the trail and Crofton, can the county claim a right of way?
- Absolutely love this trail - please expand it!
- Please continue the trail into Annapolis and also over to Greenbury Point!
- Great trail. Looking forward to any and all expansion!
- I use this trail frequently. When it connects to the South Shore trail that would be heavenly. A spur to the Piney Orchard community center would also be a nice addition to make it more useful, especially as a transportation route.
- Finish the bridge and repave the trail by bridge and get it open
- It has taken way too long to get the bridge over the Patuxent built.
- I LOVE the WB&A - I use it for running and biking. It definitely needs to be extended farther and the bridge being installed over the river/stream (at the north end) that is still currently in progress needs to be finished.
- This would give better access to parking
- Finishing the bridge to connect to the PG county portion of the trail should be a priority
- I want to be able to use the WB&A trail for horseback riding with a connection at Dairy Farm. It would be amazing if this trail was horse friendly!
- 1. Add a pedestrian push button with lights for the section that crosses Conway road.
- 2. Please connect and expand as much as possible."
- Add a pedestrian crossing that includes lights/flashers at the Patuxent Road and Bragers road crossing.
- Connect to as many locations (parks, shopping, etc) as possible, including /especially easier pedestrian access to the Patuxent ponds park and trails.
- Well maintained, as a dog walker I find trash cans to be few and far between
- This trail is such a gem in an otherwise congested area. It provides a safe place to walk/run/bike in a beautiful, natural space.
- Finishing the bridge across the patuxent river should be a top priority.
- We use the trail for exercise, but because of my wife's hip problem the trail has to be as flat as possible. She also lived through a revolution, so walking past the gun range in PG county is out of the question (a bit of PTSD).
- The proposed spur is very appealing
- I feel like a spur to piney orchard would not be the best investment. There are already lots of trails in that area. I'd rather see the Dairy Farm spur or something off of the South Shore.
- Looking forward to the opening of the bridge over Patuxent River.
- When will the bridge be completed from Odenton to Bowie side of the Patuxent? Inquiring minds would like to know. Thanks
- I want to see the trail connection with BWI trail and with PG county over the river. There are some places where sand washes over the trail and the bridge transition should be smoother.
- I would like to see a spur that connects to Fort Meade
- I use the trail for walking and running too. Checkboxes would be a better input type for those questions. Can't wait for the Patuxent bridge to finished!
- In my opinion there needs to be a restroom somewhere near or along the trail. I'm not sure that's feasible though. The potential spur would definitely be useful to Piney Orchard despite the relatively robust trail system in the neighborhood. Also please complete the bridge soon, people have been waiting decades to connect the trail to Prince George's County.
- Connecting the trail to the forest preserve on the other side of the MARC train line to allow safe passage (i.e. to avoid using 32 and 198) would be great. There is an unused road that goes under the MARC rail line now and connects to the forest preserve, but there is a gate there that is always locked.
- Great trail, happy to see potential for expansion.

## Trail Spurs - WB & A Trail (comments)

- I'd like to thank the county for repairing the asphalt on the Odenton portion of the trail. I called last year and reported areas that needed repair. Those areas and several other areas are now re-paved. The only spit that was missed is at the Two Rivers end just past the end of Bragers Road. About 30' past where the wooden post is there is a depression that needs repaired. Also the cutting and pruning is much better this year. Great job!
- Interesting that you did not ask about the number of people over 65. This is the County's fastest growing group.
- I'm a resident of Piney Orchard and I also sometimes use the trail to commute to Fort Meade. I personally know how to get from the trail to the Piney Orchard community center (and Food Lion, etc.) via sidewalk, so I don't think this would be a useful addition, but maybe others don't know.
- Love this outdoor access!
- Would love to see an easy connection to the Piney Orchard Community Center. Also eagerly awaiting the completion of the trail bridge over the Patuxent River.
- Connecting this trail to the east to other existing trails would be a great improvement
- Thank you for having the bicycle repair station at Patuxent Road
- More things that connect in this area are great, especially if there's going to be a school added in this area.
- I live in Piney Orchard and love the idea of extending the trail to the Piney Orchard Community Center!
- Is this a question specifically or only about the #24 Piney orchard?
- It would be great to have a spur from the WB&A trail to the greater part of Piney Orchard. Currently, I have to jump onto Waugh Chapel and make a left across traffic which can be a little touch and go at times. It would be nice to have a more official pathway.
- I love, love, love the WB&A trail though. I use it to commute to work by bike, and I additionally use it a lot to run on or walk on for recreation. It connects my house to multiple grocery stores, work, the MARC station, etc etc.
- Use several times a week
- we do not need a spur for our usage
- Also bike here. Looking forward to the bridge being completed.
- Connect this to the south shore trail!!!!
- Great idea
- I'm riding for fitness, so trails like the WB&A trail that are longer and allow for longer durations away from traffic are key!
- fully support WB&A Trail development including spur 24
- Why is the bridge between Odenton and Bowie taking so long? The county has put up the elementary school down the street faster.
- I look forward to the bridge being completed that will connect the trail with the Bowie MD trail.
- Can you fix the metal plates on the trail at the largest bridge there are screw holes but no screw? Really loud going over with bike and scares people.
- Also signs to stay to RT and pass on left.
- And one more thing can you get someone to cut down that low tree on path on I believe it's W chapel Road right before the crosswalk. There's a really low tree someone's gonna whack their head on it.
- Thank you BY'S
- A friend of mine lives close by this trail. The spurs will be useful. We go running and walking on the trail together. Also looking forward to the bridge to Bowie
- Good basic multi-use trail. We often use it for quick weekday rides. Actually road 8 miles on it today 29 April 2024
- More spurs is better
- We drive to trails and bike. We've ridden both PG and AACO sectors. 5.7 miles

## Trail Spurs - WB & A Trail (comments)

- Another part of great trails to train on.
- Spur to the CC in Piney Orchard would be great and used by many.
- Longer trail, and connect to other trails would be great.
- Need a short spur between WB&A trail and Conway, leading to the emergency access road to Catbriar/Meander Bend. I would like to push a stroller on pavement or gravel instead of through the drainage ditch.
- Need noise suppression on the expansion joints over the Patuxent river. Metal strips on both sides of the bridge are EXTREMELY loud when bicycles cross. Rubber gasket?
- Patuxent Road crossing needs activated flashing crossing signs like exist on Waugh Chapel. Drivers speed and do not look.
- I would love to see the trail expand further West towards DC.
- I could use this trail if it was connected to the BWI trail. It could be a nice loop if it would be connected also through the Severn River Bridge.
- Wish there were easier access to this trail
- Please finish connection to Prince George's WB&A Trail
- "The trail is used often for walking to & from work or businesses nearby.
- Sometimes, 2 times a year, motor bikes are run along the trail for several minutes."
- This potential trail spur could benefit the entire community, considering it will end at the Piney Orchard Community Center. Please consider this new option for the local residents that walk, run, and bike this trail.
- Spur #23 priority please
- I guess extending to the Community Center opens the possibility of "stopping for refreshments/lunch as part of an outing???"
- Any additional paved or hard packed dirt trails would be great
- Extension further north or south would be the preferred option rather than the one proposed spur.
- Would love a longer trail!
- WOULD VERY MUCH LIKE THAT WB&A BRIDGE OVER THE PATUXENT TO BE FINISHED BY NOW!!!!
- Piney orchard community center is already easily accessible from Strawberry Lake Way, the Patuxent river bridge would be much higher priority to make bike commuting a reality.
- Awhile back, there was a survey for the extension of the trail going North towards BWI via WB&A Blvd. This spur/extension would be of most value to me and fellow neighbors in Severn who currently bike on roadways like WB&A which is not wide nor safe considering the speeds of the traffic and intersections along the road.
- I use the trail for biking and running. I think the more connectivity the better. I am looking forward to the bridge being completed.
- I like them. Especially trail spurs #18 and #23.
- We love the trail system and appreciate that it's wide enough to accommodate strollers, bikes, and dogs! We also love the connectivity between our neighborhood and others including Two Rivers, and the shopping center with Mama Roma's, etc Would love to the trail to connect to Crofton too/Waugh Chapel if possible!
- I'm anxious for it to expand to other trails.
- Have enjoyed this trail for years. Have loved each extension & look forward to completing the bridge / connector to the WB&A Trail into PGCCO. (Hope I don't regret that...)
- I think this would be a fantastic addition to the WB&A trail. I cannot wait for this extension as well as phase 5 to be completed so Odenton can join the East Coast Greenway :)
- I would use them all. My wife and I also horseback ride on the WB&A trail in OG county and look forward to the completion of the bridge
- Running and biking
- Please finish the bridge! Many people bike for exercise, and fear riding on roads.
- I've always enjoyed using this trail!!! I love walking the trails at kinder farm with my family and bringing our bikes in case we want to bike ride. We've been taking my daughter to the trails since she was tiny.

## Trail Spurs - WB & A Trail (comments)

- isn't enough distance to warrant the drive. Combine the two it will be great.
- I am a huge supporter of creating longer and more connected trails. I look forward to the day that the trails across America get fully connected.
- The proposed spur to connect the Piney Orchard Community Center to the WB&A is unnecessary and disturbs a thoroughfare used by wildlife in the community. Piney Orchard has numerous walking paths and sidewalks that can easily connect someone to the trail at Waugh Chapel Road or Strawberry Lake. The community doesn't need more impervious surfaces or the removal of 20k sq ft of trees. Use the 1.5 million dollars to restore the stream in that area, damaged by existing runoff from homes and roads.
- First, I would note that I use the WB&A somewhat equally for walking, running, and biking. This was not possible to indicate with the form.
- I wholeheartedly support the proposed spur to connect to the Piney Orchard Community Center.
- It would be incredibly valuable to connect the WB&A trail to the BWI loop. Are there any plans to do this?
- I'm not a fan of the proposed spur. The cost is an estimated \$1.5m and it would remove 20k square feet of trees, which is not worth this one spur. There are many ways in which the community center can be accessed from the trail, thus this spur is unnecessary.
- would be nice to have them all connected for various paths, different challenges for all walks of life. It could potentially add safe transportation options for those walking, biking etc to work.
- Request expedite the bridge that will connect to WBA across Patuxent river.
- Would definitely use this trail.
- We are highly anticipating the bridge over the Patuxent River to be completed.
- Better signage is needed for the Odenton Babbington Green. This site does not have a sign identifying this ""Green"". Better signage for bikers to continue on the trail to the Marc train parking area is needed. It looks like the trail just ends at Odenton Babbington Green yet there is on road biking to the train.
- Open and build connector by two rivers to make a longer and practical for biking
- The cost of the project, the projected disruption to trees, nature, and wildlife simply are not worth this project. There are alternate route from the WB&A trail already built out that could be better utilized to connect to the community center. Additionally, the community center rarely (if ever) is the starting point for a run and is well-connected via asphalt running paths to the WB&A trail already, negating the need to uproot 20k square feet of trees and spend \$1.5 million.
- I use these trails almost daily. Additions to the WB&A trail would greatly enhance their use.
- She's 10 now! We also enjoy the trail around the airport!
- There are numerous ways to get to the community center from the WB&A trail without having to tear down trees, disrupt our neighborhood with construction, and waste \$1.5 million dollars. This is unnecessary.
- We currently live in a townhome in the autumn woods community of piney orchard with our backyard facing the WB&A trail. I do feel like just a simple trail/bridge connecting our already existing trail through the woods to the WB&A trail would be great. We are unable to get to the WB&A trail from our current neighborhood trail because of the stream running through, it creates a steep divot.
- Very nice. Mainly I would just like to see the bridge completed, linking it up to the other trail.
- I think spurs are a great idea, especially linking to community places, schools and places to rest, get a snack/water. The WB&A trail is nice and wide, heavily used and crossings are well marked.
- There needs to be a trail connecting to Crofton. Crofton and Gambrells are the largest growing areas of the county. There needs to be better recreational opportunities for us.
- It would be great for this trail to connect to the other major trails, which would provide a greater opportunity to bike ride longer distances and have a more enjoyable experience.
- Have never used it but would.
- You have quite a growing problem with a particularly invasive species of plant, namely bamboo along the trail in MANY different places. From personal experience I can tell you that half measures will not control this plant. Even persistent and thorough cutting of this species will do nothing to stop the root system from destroying the asphalt trail. It must be professionally exterminated and the root system poisoned. Then a weekly follow up for sprouts is necessary for up to two years.



