



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

February 16, 2022

Mr. Christopher Conklin, PE, Director
Montgomery County Department of Transportation
Executive Office Building
101 Monroe Street, 10th Floor
Rockville, Maryland 20850

SUBJECT: Mandatory Referral MR2022012: MacArthur Boulevard Bikeway Segment 3:
Proposed sidepath and shoulder improvements

Dear Mr. Conklin:

At its regularly scheduled meeting on February 3, 2022, the Montgomery County Planning Board approved Mandatory Referral No. 20220012 by a vote of 5:0, for the design of sidepath and shoulder improvements on MacArthur Boulevard between Oberlin Avenue and the DC line, with the following comments:

1. Widen Shoulders and Street Buffer

Widen shoulders to a width of 4 feet to serve as a bikeable shoulder along the whole length of the project and provide an adequate 6-foot-wide minimum street buffer between the road and the sidepath. These changes would result in a cross section that is 3 feet wider.

2. Posted/Target Speed and Related Design Elements

Reduce the MacArthur Blvd posted speed to 25 mph, as it is classified as a Neighborhood Connector under the Planning Board approved Complete Streets Design Guide. In addition, the design elements of the road should be adjusted to this lower speed, including high-visibility and raised crosswalks. This should include the implementation of automated speed enforcement and “slow down” signs, if these actions are deemed necessary to help achieve speed compliance.

3. Pedestrian Refuge – Oberlin Avenue to Clara Barton Parkway Ramp

Provide a pedestrian refuge on the south side of MacArthur Boulevard between Oberlin Avenue and the ramp to Clara Barton Parkway.

4. Sidepath Elevation at Driveways

Where the sidepath crosses driveways, maintain the sidepath’s elevation across the driveway. If necessary, the sidepath should be pulled away from the roadway at driveways.

5. High Visibility Crosswalks

Provide high-visibility raised crosswalks, with median refuge where feasible, for crossing MacArthur Blvd to improve connections with residential communities and/or between bus stop pairs at the following four intersections:

- Mohican Road
- Access to Mohican Swim Club
- Walhonding Road
- Maryland Avenue

6. MacArthur Boulevard/Sangamore Road/Madaket Road intersection

Provide a high-visibility crosswalk on the eastbound leg of MacArthur Boulevard at Sangamore Road/Madaket Road. Also, provide separate accessible ramps on the southeast corner for the crosswalks crossing MacArthur Boulevard and Madaket Road. Pedestrian corner refuge area improvements are also needed on the southeast corner to accommodate current and future use, as this intersection will provide a major connection for bicyclists and pedestrians between the MacArthur Boulevard sidepath, the future American Legion bridge connection, and the Little Falls Stream Valley and Capital Crescent Trails. There is also concern about the multi-stage crossing required for bicyclists and pedestrians to cross on the westbound leg, so modifications to this intersection should be explored by the Montgomery County Department of Transportation in the future.

7. Wayfinding for Connecting Park Trails

Incorporate additional wayfinding signage for trail users, highlighting the connection to both the Little Falls Stream Valley Trail and the Capital Crescent Trail.

8. Environmental Impact – Need for Additional Information

Please provide further information regarding the current approach to limit environmental impacts specifically related to slopes, forest, and endangered species and identify the procedures or measures that will be implemented.

9. Future Coordination for Advanced Design Phases of the Project

The Applicant should continue to coordinate with M-NCPPC staff during the development of 65 percent, Semi-Final, and Final design plans to help this agency continue to monitor the progress of this design project.

10. Connection between Cabin John Local Park and MacArthur Boulevard

While located outside the immediate project area, MCDOT should consider improving connections between the existing Cabin John Trail and the C&O Canal Trail by improving the crossing on MacArthur Boulevard and adding potential connections down to the C&O Canal Trail.

Mr. Christopher Conklin, PE
February 16, 2022
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The Planning Board appreciates the opportunity to review this project and continue coordinating with your staff on this and future projects. If you have questions, please contact Stephen Aldrich at 301-495-4528 or Stephen.Aldrich@montgomeryplanning.org.

Sincerely,



Casey Anderson
Chair

Enclosure:
M-NCPPC Staff Mandatory Referral Staff Report

cc: Stephen Aldrich, Master Planner, M-NCPPC
Jason Sartori, Chief, M-NCPPC
Dan Sheridan, MCDOT
Yasamin Esmaili, MCDOT

CA:SA:aj

**HERITAGE TRIANGLE TRAIL – PHASE 1
DOCTOR BIRD ROAD/NORWOOD ROAD SIDEPATH
MANDATORY REFERRAL NO. 2022024**

Description

Montgomery County Department of Transportation (MCDOT) is proposing to contract a sidepath for pedestrian and bicycle use along two sections of MD 182 – 1,400 feet along Doctor Bird Road starting at its intersection with Olney Sandy Spring Road (MD 108) and 1,700 feet along Norwood Road starting at the Norwood Road intersection with Layhill Road and Ednor Road and running to the north. The project is located in the Olney/Sandy Spring area. The proposed improvements will include construction of a ten-foot-wide sidepath to tie into the existing pedestrian and bicycle network at the project limits.

No. MR2022024

Completed: 10-06-2022

MCPB

Item No. 9

November 3, 2022

Montgomery County




Planning Board

2425 Reedie Drive,

Floor 14

Wheaton, MD 20902

Planning Staff

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	Douglas Stephens, Principal Natural Resources Specialist, Park Planning & Stewardship, Douglas.Stephens@MontgomeryPlanning.org , 301-650-4367
	Jason Sartori, Chief, Countywide Planning & Policy Division, Jason.Sartori@MontgomeryPlanning.org , 301-495-2172

LOCATION

Doctor Bird Road starting at Olney Sandy Spring Road (MD 108) and running south a distance of 1,400 feet, and Norwood Road from Layhill Road/Ednor Road intersection running north a distance of 1,700 feet (adjacent to Woodlawn Manor Cultural Park)

MASTER PLAN

1998 Sandy Spring Ashton Master Plan, 2018 Bicycle Master Plan, 2018 Master Plan of Highways and Transitways

APPLICANT

Montgomery County Department of Transportation

ACCEPTANCE DATE

August 22, 2022

REVIEW BASIS

20-302 of the Land Use Article
(Mandatory Referral)

Summary:

- Montgomery County Department of Transportation to construct sidepath improvements along a 1,400 foot section of Doctor Bird Road starting at Olney-Sandy Spring Road (MD 108) heading to the south and a 1,700 foot-long section of Norwood Road starting at the intersection of Norwood Road with Layhill Road/Ednor Road and heading to the north.
- Forest Conservation exemption #42021057E was confirmed on February 27, 2015 as a linear county road project per Section 22A-5(e).
- Staff recommends approval of the Mandatory Referral with comments. .

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MANDATORY REFERRAL REVIEW BASIS

This proposal for the construction of pedestrian and bicycle improvements is required to undergo the Mandatory Referral review process under the Montgomery County Planning Department's Uniform Standards for Mandatory Referral Review. State law requires all federal, state, and local governments and public utilities to submit proposed projects for a Mandatory Referral review by the Commission. The law requires the Planning Board to review and approve the proposed location, character, grade and extent of any road, park, public way, or ground, public (including federal) building or structure, or public utility (whether publicly or privately owned) prior to the project being located, constructed, or authorized. This review is typically performed in context with the relevant master plans, guidelines, and policies in effect.

Planning Staff acknowledges that the implementation of master plan transportation recommendations is a challenge faced by the Applicant in developing design plans to convert desired master plan recommendations into engineering design drawings. The design process up to 30/35 percent design typically brings clarity with considerably more detail than considered during a master plan, and issues such as environmental impacts, historic impacts, and construction costs may introduce new factors that need to be weighed in developing a final design solution. It is the intention of the Board that the Mandatory Referral process aids in this process to develop an optimal or at least an improved design solution.

SECTION 1: RECOMMENDATIONS SUMMARY

Planning Staff recommends approval of the Heritage Triangle Trail – Phase 1 Sidepath 35 percent design plans (MR2022024) with the following comments.

1. Construction plans must be submitted to the Parks Department for review as part of the Park Construction Permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies. No work on parkland may occur until an approved Park Construction Permit is issued for the project.
2. The final MOU regarding access and maintenance must be agreed to and finalized between MCDOT and M-NCPPC before the issuance of a Park Construction Permit. MCDOT will be responsible for maintaining the asphalt sidepath facility and the proposed lighting.
3. MCDOT shall continue to coordinate with M-NCPPC on the design of the path and other elements including lighting, user safety elements, stormwater culvert and outfalls, stormwater bioswales, security cameras, double fence design including a mow strip, and natural resource protection and mitigation.
4. Mitigation for impacts to Park trees (with a 6" DBH or greater) damaged or removed, shall either be (1) replacement planting on parkland at a rate of one inch to one inch diameter or (2) a monetary per inch caliper basis at the rate of \$100/diameter inch, to be paid to Montgomery Parks prior to completion of construction.

5. Where the sidepath crosses driveways, maintain the sidepath's elevation across the driveway. Where possible, the sidepath should be pulled away from the roadway at driveways.
6. Given the open section cross section proposed along Norwood Road and the proximity of existing utility poles close to the road's edge on the east side, consideration from a Vision Zero perspective should be given to relocating or undergrounding these utilities in the future.

SECTION 2: PROJECT DESCRIPTION

PROPOSED DESIGN PROJECT

The Montgomery County Department of Transportation (MCDOT) recently completed the 35% design phase of the Heritage Triangle Trail - Phase 1 Doctor Bird / Norwood Road Sidepath Project. The project provides a well-connected pedestrian and bicycle network sidepath along Doctor Bird Road (MD 182) and Norwood Road (MD 182). The project limits, shown below in Figure 1, complete two missing links in the bicycle network and provide a pedestrian and bicycling space where none exists today by adding the following:

- Approximately 1,400 feet of new shared-use path along MD 182 starting at MD 108 (Olney Sandy Spring Road) and traveling south towards Norwood Road.
- Approximately 1,700 feet of new shared-use path along MD 182 starting at the driveway of The Adventure Park at Sandy Spring and traveling south to Ednor Road.
- Lighting, stormwater management facilities, and any required signal/crosswalk improvements at the intersections of MD 108 / MD 182 and Ednor Road / MD 182.

Completing the missing links in the bicycle network will provide a connection between several existing Maryland Heritage Sites along the MD 182 corridor, providing access to residential areas, transit, commercial districts, schools, places of worship, parks, and recreational areas.

PEDESTRIAN AND BICYCLE SAFETY IMPACT

This project is anticipated to significantly improve pedestrian and bicycle safety in the project area. In addition to improvements along Doctor Bird Road and Norwood Road, this project will complete two missing links in the larger bicycle network, providing a safe north/south connection for bicyclists and pedestrians in the Sandy Spring area.

In addition, the grading associated with the sidepath will provide adequate horizontal sight distance for motorists along a roadway where sight distance does not meet current AASHTO requirements. This will allow motorists to see pedestrians and bicyclists using the sidepath, improving safety for all parties.

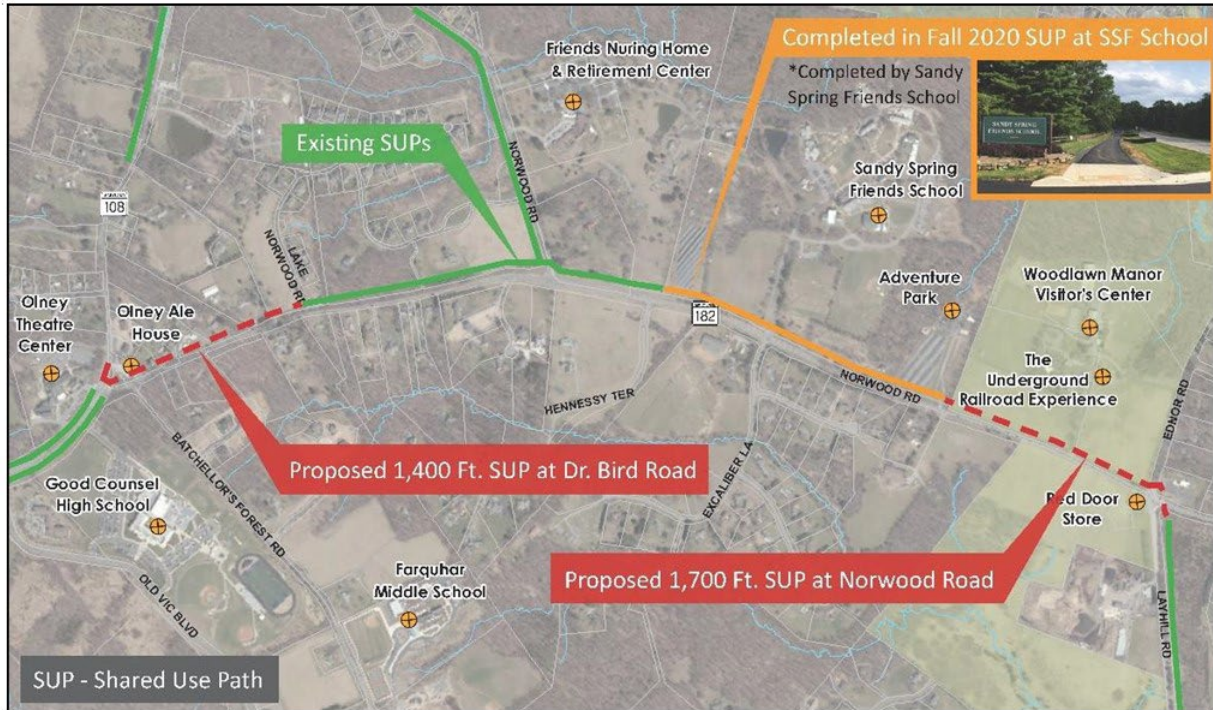


Figure 1 – Vicinity map

Doctor Bird Road - The existing roadway (see Figure 2) has two travel lanes with some shoulder towards the intersection of MD 182 / MD 108, resulting in bicyclists sharing the narrow lanes with vehicles. The proposed sidepath (see Figure 3) will provide an off-road separated bicycle facility to accommodate bicycle users who are not comfortable riding in a shared lane on a narrow roadway. It will also accommodate pedestrians through an area that currently does not have any separated pedestrian space. The path will connect to existing sidepaths at both termination points, improving the overall transportation network.

Norwood Road - The existing roadway (see Figure 4) contains two travel lanes with no existing shoulder, which results in bicyclists sharing narrow lanes with vehicles. The proposed sidepath (see Figure 5) will provide an off-road separated bicycle facility to accommodate bicycle users who are not comfortable riding in a shared lane on a narrow roadway. It will also accommodate pedestrians through an area that currently does not have any separated pedestrian space. The path will connect to existing sidepaths at both termination points, improving the overall transportation network.



Figure 2 – Doctor Bird Road: Existing



Figure 3 – Doctor Bird Road: Proposed



Figure 4 – Norwood Road: Existing



Figure 5 – Norwood Road: Proposed

TYPICAL SECTIONS

Doctor Bird Road – Doctor Bird Road (MD 182) is classified as a two-lane Major Highway in the Master Plan of Highway and Transitways (MPOHT). The existing typical section consists of one eastbound through lane (11' to 12') and one westbound through lane (11'). There is a westbound left-turn lane approaching the intersection of Doctor Bird Road with Olney Sandy Spring Road (MD 108). The immediate area has a rural character.

Under the proposed condition, the existing roadway alignment will be shifted south, near the MD 182 / MD 108 intersection, to provide space for a buffer-separated sidepath on the adjacent westbound lane. The proposed typical section will have a lane configuration identical to existing conditions with one eastbound 11-foot eastbound through lane, one 11-foot westbound through lane, a six-foot grass buffer, and an additional 10-foot sidepath adjacent to the westbound lane. Details are provided below:

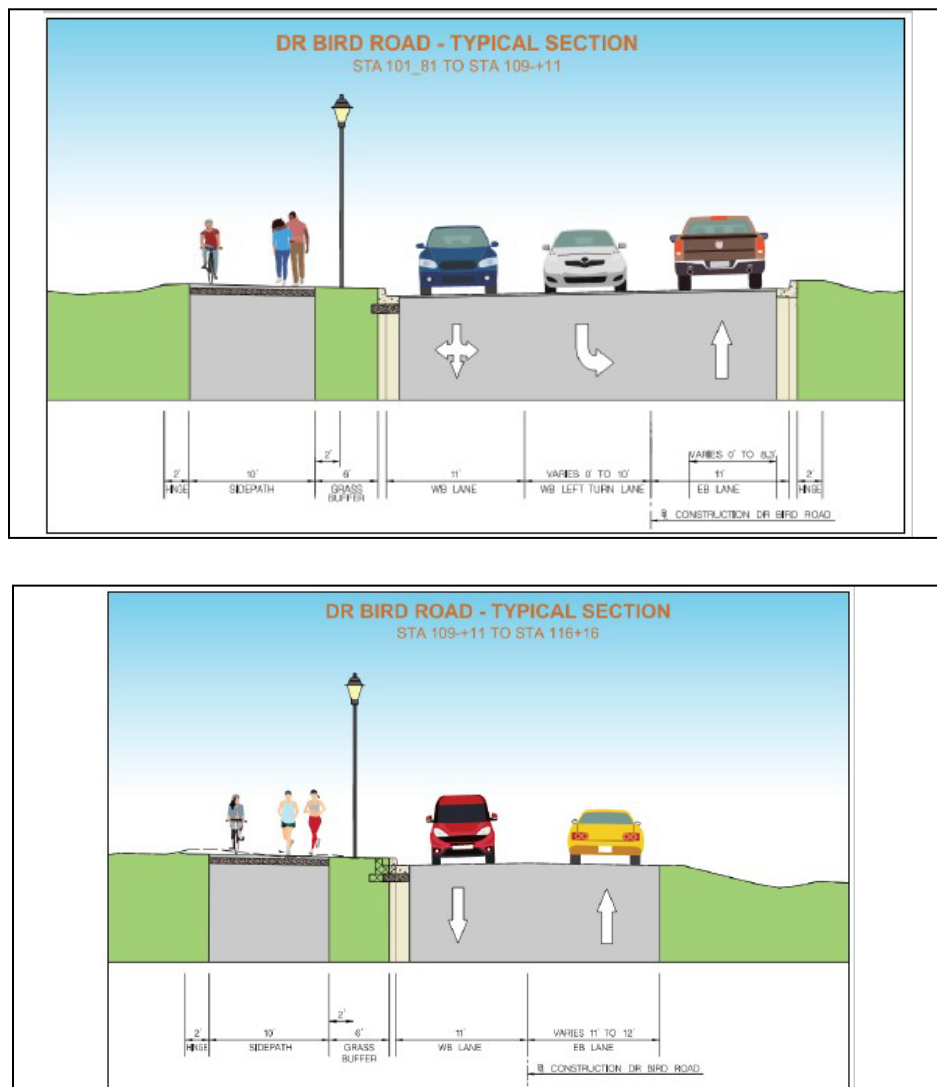


Figure 6 – Doctor Bird Road Proposed Typical Sections

Norwood Road – Norwood Road (MD 182) is classified as a two-lane Major Highway in the MPOHT. The existing typical section consists of one northbound lane (11' to 13') and one southbound lane (10' to 14') without shoulders or safety grading. The immediate area has a rural character.

Under the proposed condition, the existing roadway will not be impacted. The proposed typical section will add a variable width buffered grass shoulder and variable width bio-swale adjacent to the southbound lane as well as a variable width buffered grass shoulder, 10-foot sidepath with buffered grass shoulders on each side, and a variable width drainage ditch adjacent to the northbound lane.

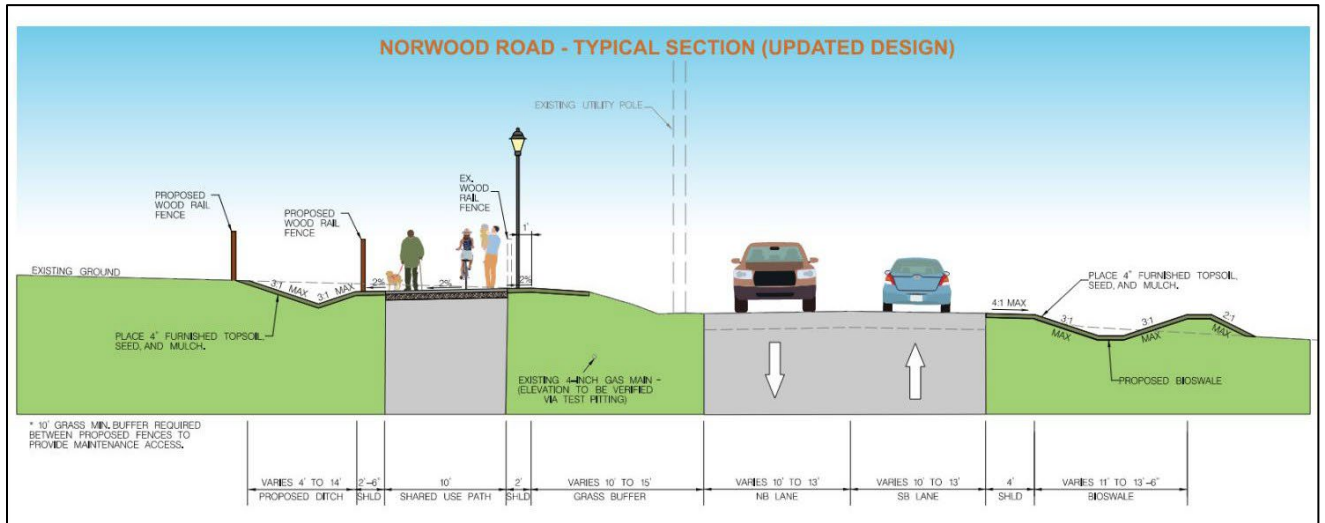


Figure 7 – Norwood Road Proposed Typical Section

STORMWATER MANAGEMENT AND DRAINAGE

The Applicant has provided full stormwater management treatment for this project; however, due to surrounding residential properties, utilities, constrained right-of-way (ROW), and the existence of high-value park properties adjacent to portions of the proposed path, locations to provide stormwater management are limited. Through previous discussions with M-NCPPC Staff, it was decided that stormwater management treatment within their property should be limited to the south side of Norwood Road. This limits the ability to treat the newly proposed path; however, treatment in these facilities has been maximized to the extent possible.

The project provides environmental site design (ESD) to the maximum extent practicable (MEP) within the project area through the provision of one (1) Micro-bioretention Facility along the Doctor Bird portion of the project, and four (4) Bioswale facilities location along the south side of Norwood Road. The one micro-bioretention facility will be built within MDOT SHA ROW and use MDOT SHA details, while the bioswales will be built on parks property and use Montgomery County Stormwater Management details. Though all available space within the project area is utilized to provide as much stormwater management treatment as possible, these 5 facilities still do not treat the full stormwater

management requirement. Therefore, MCDOT will be seeking a waiver for the treatment that cannot be provided.

The proposed work will not impact any stream buffers, floodplains, or wetlands. The project site drains to the Watershed of the Anacostia River (02140205) to the South and the Watershed of Rocky Gorge Dam (02-13-11-07) to the North.

Drainage design within the project area is limited to replacing existing roadside drainage amenities in-kind along Doctor Bird Road. Along Norwood Road, a drainage ditch is proposed and designed between the newly proposed shared-use path and the roadway. This ditch provides conveyance to existing cross-culverts, which will be replaced and upgraded under this task to meet current criteria. The outfalls of these cross culverts are being upgraded with a riprap design to provide a stable outfall for crossflows and the proposed bioswales, which outfall into these areas.

PHASING SCHEDULE

This project represents Phase 1 of the Heritage Triangle Trail, a phased project that will connect four heritage tourism destinations—the Olney Theatre Center, Sandy Spring Museum, Underground Railroad Experience Trail Hike, and Woodlawn Manor Cultural Park—via a sidepath for bicyclists and pedestrians. Approximately one mile of trail exists along the eastern portion of Doctor Bird Road/Norwood Roads. A segment along the Sandy Spring Friends School’s Norwood Road frontage was recently completed in 2020. The current phase closes the gap between the Olney Theatre and the existing trail while establishing a new connection to Woodlawn Manor Cultural Park. An overview map is provided in Figure 8.

Following construction of Phase 1, the team is planning to continue design on the remaining segments of the Heritage Triangle Trail. The goal would be to initiate community outreach and preliminary design work on the remaining segments in 2024.

PUBLIC LAND

The proposed sidepath will be constructed largely within the existing state and county right-of-way; however, some parts of the path along Doctor Bird Road will be installed on private residential property. Additionally, portions of the path along Norwood Road will be installed on Montgomery Parks property. The project team has been coordinating with both groups of stakeholders regarding the project design and will prepare full right-of-way/ easement plats as part of the final design process. Temporary construction easements will be required on both the private residential properties and Montgomery Parks property.

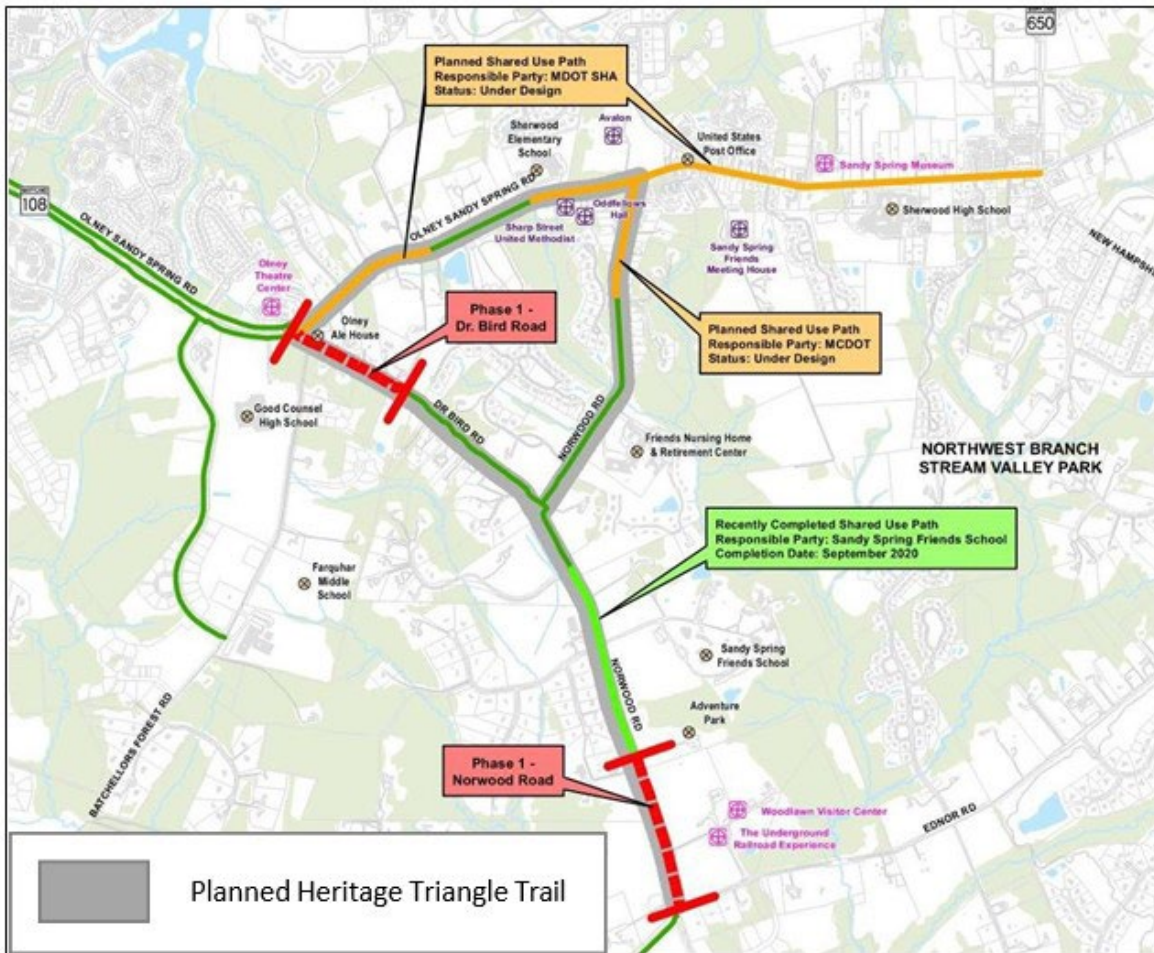


Figure 8 – Heritage Triangle Trail Overview Map

FUNDING

The design and construction of the project is currently funded by MCDOT with a contribution of \$100,000 from the Maryland Heritage Areas Authority Grant Program.

LIGHTING

The initial design plans for this project included pedestrian lighting along all sections of the newly installed sidepath. During the project’s stakeholder outreach, Parks identified several concerns with the installation of lighting along the Norwood Road section. Over the course of several months, MCDOT held several meetings with Parks and several associated stakeholders to review and resolve the lighting concerns identified. Following several discussions, all parties agreed that lighting fixtures would be acceptable along Norwood Road under the following established criteria:

- Lighting Fixtures – MCDOT agreed to select a colonial post lighting fixture that met Parks’ requirements for light transmission (dark sky compliant, shielding, low wattage LED bulbs)
- Lighting Maintenance – MCDOT agreed to maintain the lighting fixtures
- Lighting Continuity – MCDOT agreed to coordinate the future lighting of currently un-lit portions of the surrounding sidepaths that are a part of the proposed Heritage Triangle Trail system (Sandy Spring Friends School Path and the sidepath directly north of this newly constructed path)
- Trail Counters – MCDOT agreed to install bicycle/pedestrian trail counters along the sidepath

MCDOT reviewed several proposed fixtures with Parks and it was agreed that the MCDOT standard colonial post fixture would be acceptable. Regarding the lighting continuity issue, MCDOT and Parks agreed to the following conditions per an email from Montgomery Parks in Spring 2022:

“The installation of lighting on parkland along Norwood Road is contingent upon lighting the adjacent path sections, North Path and Sandy Spring Friends School, concurrently. If lighting the adjacent path sections (North Path and Sandy Spring Friends School) is not to be included in HTT Phase 1, then conduit only will be approved for the parkland section at this time, with delayed approval for light fixtures when funds are procured for the adjacent path lighting to be installed concurrently. Parks’ goal is to provide lighting uniformity along the route that doesn’t lead trail users to unsafe dark zone.”

MCDOT AGREES TO THESE CONDITIONS AND CONFIRMED THAT THE LIGHTING FOR THE CURRENTLY UN-LIT AREAS WILL BE INSTALLED UNDER A SEPARATE CONTRACT SUBJECT TO THE APPROPRIATION OF FUNDS. ALL FUTURE LIGHTING PLANNED IS SUBJECT TO APPROPRIATION. MEMORANDUM OF UNDERSTANDING

In addition to the lighting coordination described in the previous section, MCDOT and Montgomery Parks conducted extensive coordination regarding the proposed project design and the division of maintenance responsibilities for the new project facilities. Because a significant portion of the planned sidepath, drainage facilities, and stormwater management facilities fall on parks property, the team initiated preliminary development on how the assets would be maintained following the completion of construction. Below is an outline of the preliminary responsibilities as discussed by the team:

- **Sidepath Facility – MCDOT:** MCDOT will be responsible for maintaining the asphalt sidepath facility. This will include repairs to the asphalt surface and any additional maintenance required.
- **Vegetation and Fences – Parks:** Montgomery Parks will maintain the lawns, trees, and fences/railings located along the path on Parks property.
- **Drainage Facility – Parks:** Montgomery Parks will maintain the drainage swales installed on Parks property. This will include mowing, weeding, trash removal, and any other associated maintenance for the swales. MCDOT shall be responsible for structural maintenance (inlets, pipes, endwalls, and headwalls).

- **Stormwater Management Facility – Parks:** Montgomery Parks will maintain the stormwater management facilities on Parks property. This includes managing the vegetation in the bioswale, removing trash/debris, and inspecting and maintaining outfalls to ensure they are not blocked. The Department of Environmental Permitting (DEP) will be responsible for structural maintenance per the existing agreement between Parks and DEP (Chapter 19, Article II).
- **Path Lighting – MCDOT:** Currently MCDOT and Montgomery Parks are coordinating regarding project lighting. MCDOT will maintain the lighting if standard Montgomery County light posts and fixtures are installed. MCDOT and the project team are currently researching and investigating ways to amend the contract and maintain lighting if timers are included.
- **Security System – Parks:** Montgomery Parks to own and maintain security cameras installed along the sidepath.

All parties reviewed and acknowledged that this outline should be considered a starting point for the detailed MOU that will be developed to document the final maintenance responsibilities. MCDOT will continue to coordinate with Montgomery Parks and all associated stakeholders to develop, review, and finalize a maintenance MOU for this project.

IMPACTS TO MONTGOMERY PARKS PROPERTIES

This project will have an impact on the Woodlawn Manor Park and MCDOT has been coordinating closely with M-NCPPC, Montgomery County Parks, and the Park Police to incorporate these stakeholders' concerns into its preliminary design. During early coordination with Parks, MCDOT redesigned the preliminary stormwater management system to shift the facilities to the west side of Norwood Road and significantly limit the property impacts to Woodlawn Manor Park. Other than the impacts to Woodlawn Manor Park, there are no additional impacts to M-NCPPC property.

PUBLIC OUTREACH

A newsletter was mailed to residents within the vicinity of the project in February 2021. A virtual public meeting was held on February 25, 2021. A link to the project website is below:

<https://www.montgomerycountymd.gov/dot-dte/projects/heritageTTph1/index.html>

The project team is continuing to coordinate with all project stakeholders as the design is finalized.

SECTION 3: 35% DESIGN PLANS FINDINGS AND ANALYSIS

The primary purpose of the proposed facility is to improve connectivity and safety for both pedestrians and bicyclists along Doctor Bird and Norwood Roads. Providing a ten-foot-wide sidepath facility parallel to Doctor Bird and Norwood Road in two distinct segments will fill in missing sidepath segments and improve the safety for users along the corridor and reduce the potential for crashes by minimizing conflict points with vehicles. The facility will improve the level of comfort for users of all ages and abilities by providing a dedicated facility with horizontal separation from the roadway in the form of a proposed grass buffer with a minimum width of five feet (primarily six feet wide or better) between the roadway and the proposed facility. The proposed facility will connect to existing shared use facilities on Olney Sandy Spring Road (MD 108) to the north and Layhill Road to the south.

DESIGN ELEMENTS - TRANSPORTATION

ROADWAY DESIGN

Doctor Bird Road and Norwood are considered to be Country Connectors with a 40-mph target speed under the Planning Board-approved Complete Streets Design Guide (CSDG). The road currently has a 35-mph posted speed along its length.

SHOULDER DESIGN

Doctor Bird Road and Norwood Road do not currently have paved shoulders, and short portions of the corridor are curbed (typically near new intersections and recently approved driveways). Along Norwood Road, the design will be adding a four-foot grass shoulder on the west side between the roadway and a drainage swale. If a shoulder is provided on a Country Connector, six feet is the minimum shoulder width identified in the CSDG. There is some concern with the east side of Norwood Road and the proximity of utility poles very close to the road edge. This is more of a Vision Zero concern along this corridor than the lack of shoulders. The project will not significantly change shoulder conditions along the east side of the road in this section.

BUFFER DESIGN

The buffers proposed in this design are primarily six feet or wider for the majority of the project limits. This is consistent with the minimum buffer width identified in the CSDG.

ENVIRONMENTAL REVIEW

ENVIRONMENTAL GUIDELINES

The project area does not contain any environmental buffers, streams, other sensitive features. The project area does contain 0.07 acres of forest. The project is within the Northwest Branch watershed

and partially within the Hawlings River Watershed, both of which have a Use Class IV¹ (recreational trout waters) designation.

The project proposes 0.07 acres of forest removal and has no impacts on a stream valley buffer, wetlands, or the 100-Year-Floodplain. The environmental impacts are necessary and unavoidable to achieve the design standards of creating the new pathway, and those impacts have been minimized to the greatest extent possible.

FOREST CONSERVATION

The project is exempt from submission of a forest conservation plan. A forest conservation exemption (#42021057E) was granted under the provisions of Section 22A-5(e) as “a state or county highway project.” The exemption was confirmed on February 27, 2015.

While the project is exempt, the Applicant is still required under section 22A-9 of the County Code to:

- a) Minimize forest cutting, clearing, and loss of specimen trees to the extent possible while balancing other design, construction, and environmental standards. The constructing agency must make a reasonable effort to minimize the cutting or clearing of trees and other woody plants.
- b) If the forest to be cut or cleared for a county highway project equals or exceeds 20,000 square feet, the constructing agency must reforest a suitable area at the rate of one acre of reforestation for each acre of forest cleared.
- c) Mitigation for loss of specimen or champion trees. Mitigation amounts are based on the size and character of the tree.

The Applicant has minimized the limits of disturbance, minimizing the amount of forest clearing and impacts to large and specimen trees. However, the project still has impacts to forest and specimen trees. The Applicant has provided a plan to highlight forest loss/mitigation, tree save, and specimen tree mitigation.

Forest loss/mitigation

Even with minimizing the limits of disturbance and altering some design aspects there are some necessary and unavoidable impacts to forest. The project proposes to remove 0.07 acres (~3,050 square feet) of forest which is below the forest clearing threshold of .46 acres (20,000 square feet) allowed under the exemption. Therefore, the Applicant is not required to provide reforestation.

¹ Environmental Guidelines: Guidelines for Environmental Management of Development in Montgomery County, 2021, page 58.

Tree Save

The Applicant has submitted a tree save plan in conjunction with the Mandatory Referral process to show how the impacts have been minimized and what stress reduction methods are being used to further minimize impacts on trees. Three specimen trees are being removed by this project.

PARKLAND IMPACTS

The proposed sidepath project along Norwood Road (MD182) will impact approximately 64,590 SF square feet of parkland at the frontage of Woodlawn Manor Cultural Park on the east side of Norwood Road. In addition, there are approximately 22,180 SF of proposed parkland impacts, at the Red Door Store Cultural Park on the west side of Norwood Road to accommodate stormwater management swales (Figure 9). There are no parkland impacts associated with the approximately 1,400-foot-long section along Doctor Bird Road starting at MD 108 (Olney Sandy Spring Road) and traveling south towards Norwood Road.

Woodlawn Manor Cultural Park is an 80-acre park dedicated to the preservation and interpretation of cultural resources. Woodlawn Manor is part of the National Park Service's National Underground Railroad Network to Freedom and is an active educational site serving thousands of children and families each year. The two main functions of Woodlawn Manor include the museum and Park Police operations:

- 1) The museum located in the \$3.5 million renovated barn project, historic house, and Underground Railroad Experience Trail functions to tell the story of the Underground Railroad, Quakers, enslaved and Free African Americans of Sandy Spring and Montgomery County.
- 2) Park Police Special Operations have their headquarters at the park, where they prepare for emergency operations as well as stable and pasture their horses in barns and within electrified fencing.

The park is located in the Northwest Branch watershed and in the North Olney Manor Management Region.

MCDOT Heritage Triangle Trail-Phase 1 at Woodlawn Manor Cultural Park



Map created on 7-21-22 by Resource Analysis,
Park Planning and Stewardship Division, for
Planning Purposes Only

0 250 500 Feet



Figure 9 – Project Impacts to Parkland

Montgomery Parks supports the project's goal to improve pedestrian and cyclist connectivity to these important cultural resources and is working with MCDOT to reduce the impacts to parkland where feasible and provide appropriate mitigation for unavoidable impacts. The 10-foot-wide sidepath connector proposed on the east side of Norwood Road along Woodlawn Manor Cultural Park, includes a variable 10- to 15-foot-wide grass buffer between the path and the roadway (see Figure 7). The pasture will be reduced by 22 to 30 feet along the approximately 1,600-foot length on park property.

LIGHTING

Montgomery Parks supports pedestrian lighting (as described in Section 2) for the Heritage Triangle Trail as long as all sections of the path are lit to prevent a discontinuity of lighting along the trail. MCDOT will be responsible for the maintenance of the lighting posts and fixtures. Since there is currently no existing path lighting on the sections adjacent to park property Parks is requiring that conduit only be installed until lighting for the adjacent trail sections is funded. Additional coordination on lighting and minimizing impacts from lighting in this section will be required and included in the Memorandum of Understanding (MOU) and Park Construction Permit.

CULTURAL RESOURCES

Due to the historical context of this site, MCDOT has been in coordination with the Maryland Historical Trust, the Maryland State Historic Preservation Office (MHT) and Parks' Cultural Resources Staff. An archeological investigation was performed along the length of the project. Along the Norwood Road section, five shovel test pits identified a very low-density field scatter of seven artifacts, broadly dating from the late 18th to early 20th century. MHT determined that no additional Phase 2 archaeological investigations will be required and that the project will have no adverse effect on historic properties. MCDOT is continuing to coordinate with MHT and the Montgomery Planning's Historic Preservation (HP) staff and is pursuing Historic Area Work Permits for Woodlawn Manor and the Red Door Store. The MHT advised that "MCDOT should exercise caution during design and construction of the undertaking to ensure that project construction activities, equipment, and staging areas avoid any disturbance to the Woodlawn Manor property outside the Area of Potential Effects (APE)." Additionally, any archeological findings uncovered during construction shall be shared with Parks Cultural Resources Staff.

NATURAL RESOURCES

The proposed trail runs across the road frontage and the Woodlawn site and will impact landscape plantings including trees and shrubs. Nine red cedars (not specimen trees) on parkland at the intersection of Ednor Road and Norwood Road will be removed as part of the project (see Figure 10). At the entrance to Woodlawn Manor two large shrubs and one bur oak (not a specimen tree) will need to be removed to improve sightlines (see Figure 11). Parks and MCDOT will work collaboratively to fulfill Parks tree mitigation requirements through either the planting of new trees, mitigation fee payment, or other natural resource mitigation. Parks Urban Forester will provide guidance during the

Park Construction Permit review to avoid and minimize impacts to the critical root zones to the large oaks lining the entrance to the park.

On the west side of Norwood Road, is the Red Door Store Cultural Park, an approximately 80-acre park which houses the Red Door Store, a distinctive historical example of a mid-19th century rural crossroads store. In 2018, architectural, engineering and market studies were undertaken to better understand the level of effort required to rehabilitate and activate the structure. The Red Door Store Cultural Park contains an approximately 58-acre meadow management site. Meadow areas at the site are primarily composed of old field non-native species, with some native grasses and wildflowers



Figure 10 - Red Cedars to be removed adjacent to Woodlawn Manor Cultural Park

present. Active management currently includes annual mowing to keep the site open and dominated by herbaceous species. It is currently identified as an important area for open habitat species within the Montgomery Parks system. The meadow and adjacent forested area slope down to Batchellor's Run, a restored tributary of Northwest Branch.



Figure 11 – Entrance to Woodlawn Manor Cultural Park

STORMWATER MANAGEMENT

Four bioswales are proposed along the west side of Norwood Road within the Red Door Store Cultural Park to provide required stormwater management for the project. Parks has committed to maintaining the stormwater facilities built by MCDOT on parkland per the agreement with the Montgomery County Department of Environmental Protection. Two SHA culverts will be replaced under Norwood Rd which currently do not function causing flooding on the roadway. Both culverts outfall into the meadow area on the west side of Norwood Rd. Parks will require MCDOT to construct stable and environmentally sensitive outfall structures that avoid erosion and channelization in the meadow.

SAFETY AND SECURITY

Montgomery Parks looks forward to the improved pedestrian and cycling access to Woodlawn Cultural Park, however the new path does present new challenges for safety and security. Figure 12 shows the proposed shared-use path plan view at the entrance to Woodlawn Manor. Parks Staff have noted concerns with the vehicular traffic utilizing this entrance as a cut-through and additional measures should be taken to improve the safety of the path crossing including better signage to reduce thru traffic, a marked crossing and detectable warning strips for pedestrian and cyclists, and other appropriate measures identified during detailed design. The existing signage at the entrance to Woodlawn will need to be relocated and replaced at the direction of Parks Staff.

Along the length of the east side of the path, at the request of Park Police, a double fence separated by a 10-foot width is proposed to separate the equestrian pasture from the path for the safety of both the

horses and path users. The fence must match the existing fence in design and materials. In addition, due to increased access and activity that the path will provide around the Park Police headquarters and equestrian facilities MCDOT will also provide four security cameras along the frontage of the Woodlawn Property. Finally, MCDOT will provide a trail counter along this section of the path to Parks' specification to allow for user data tracking and analysis.

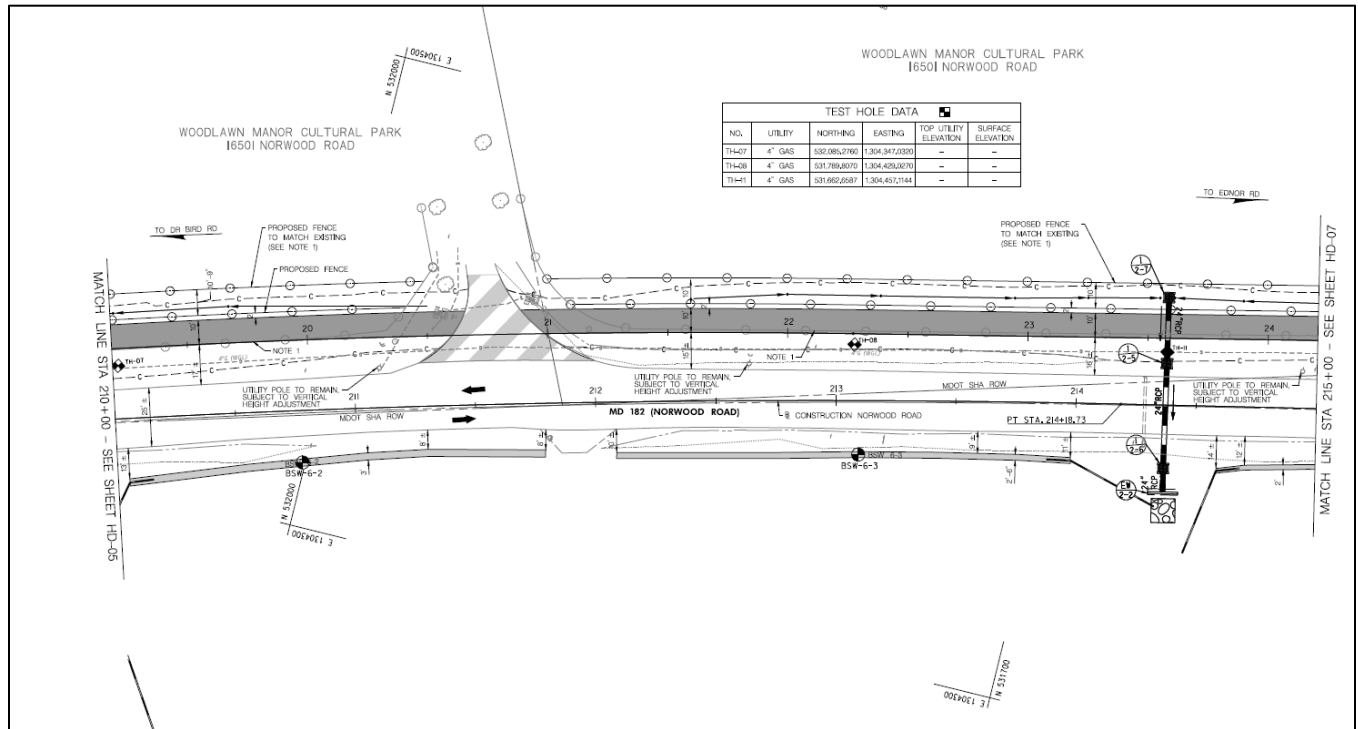


Figure 12 – Plan view of the proposed Sidepath at the Entrance of Woodlawn Manor Cultural Park

PARK CONSTRUCTION PERMIT AND MOU

Parks and MCDOT have agreed that Parks will maintain ownership over the land and no easements will be granted. A Memorandum of Understanding (MOU) will outline the long-term maintenance agreements for each agency.

MCDOT will be required to obtain a Park Construction Permit from Montgomery County Department of Parks prior to commencement of any construction activities on parkland. Plans submitted for Park Construction Permit review must include existing topography, utilities, and identify and locate all trees (with size and species) larger than 6” diameter at breast height (DBH) and greater within 100 feet of the proposed limit of disturbance on park property. Mitigation for impacts to Park trees (with a 6” DBH or greater) damaged or removed, shall either be (1) replacement planting on parkland at a rate of one inch to one inch diameter or (2) a monetary per inch caliper basis at the rate of \$100/diameter inch, to be paid to Montgomery Parks prior to completion of construction. Tree impacts will be determined by an M-NCPPC forester prior to construction based on the Final Design. During Park

Construction Permit Review, Parks Staff will work with MCDOT to minimize impacts to parkland to the greatest extent possible and avoid all critical resources identified.

HISTORIC PRESERVATION

MCDOT's consultant completed detailed cultural resources analysis and submitted a Phase 1 Cultural Resources Report to the Maryland Historic Trust (MHT) in June 2021. MHT responded in August 2021 and determined that no additional Phase 2 archaeological investigations will be required and that the project will have no adverse effect on historic properties. The Applicant is continuing to coordinate with MHT and Montgomery Planning's Historic Preservation (HP) staff as the design progresses forward. Per coordination with HP staff, the Applicant has initiated the submission of draft Historic Area Work Permits (HAWP) via the online portal for the Red Door Store and Woodlawn properties.

The Doctor Bird/Norwood Road sidepath project is adjacent to several sites on the Master Plan for Historic Preservation including Woodlawn (28/14), the Holland Store and House/Red Door Store (23-119), and the Doctor Bird House (23/121). The project limits of disturbance will not encroach on the Doctor Bird House master plan site; but impacts both the Woodlawn and the Holland Store and House/Red Door Store sites, so a HAWP is required before the work begins.

Historic Preservation Staff supports the project and is not concerned about the potential impacts the work will have on the designated sites. The sidepath, lighting, and relocated fencing adjacent to Woodlawn will not significantly impact the historic character of the site's environmental setting. Additionally, HP Staff finds the re-grading necessary for the bioswale and culverts installed on the Holland Store and House/Red Door Store site will only minimally impact the visual character of the site.

A Phase 1 archaeological survey was completed under the MHT's oversight. MHT determined that no further archaeology in the project area was warranted.

Historic Preservation Staff encourages the Applicant to apply for a HAWP around the 70% design phase or at their earliest convenience.

MASTER PLAN CONFORMANCE

The Heritage Triangle Trail – Phase 1 Sidepath is subject to three master plans: the 1998 Ashton Sandy Spring Master Plan, the 2018 Bicycle Master Plan and the 2018 Master Plan of Highways and Transitways.

The 2018 Bicycle Master Plan includes the following recommendation for MacArthur Boulevard:

BIKEWAY	FROM	TO	FACILITY TYPE	BIKEWAY TYPE
Doctor Bird Road (MD 182)	Olney Sandy Spring Road (MD 108)	Norwood Road	Separated Bikeway	Sidepath
Norwood Road (MD 182)	Doctor Bird Road (MD 182)	Layhill Road/Ednor Road	Separated Bikeway	Sidepath

The 2018 Master Plan of Highways and Transitways and the 1998 Ashton Sandy Spring Master Plan classifies Doctor Bird Road/Norwood Road (MD 182) from Olney Sandy Spring Road to Layhill Road/Ednor Road as a two-lane major highway with a master plan right-of-way of 120 feet. Per the Complete Streets Design Guide, these roads would be classified as a Country Connector.

The project is in conformance with the three plans it is subject to: the 1998 Ashton Sandy Spring Master Plan, the 2018 Bicycle Master Plan and the 2018 Master Plan of Highways and Transitways.

SECTION 4: COMMUNITY OUTREACH

A newsletter was mailed to residents within the vicinity of the project in February 2021. A virtual public meeting was held on February 25, 2021. A link to the project website is below:

<https://www.montgomerycountymd.gov/dot-dte/projects/heritageTTph1/index.html>

The project team is continuing to coordinate with all project stakeholders as the design is finalized.

SECTION 5: CONCLUSION

Based on information provided by the Applicant, Planning Staff recommends approval of the Mandatory Referral with comments listed on pages 3 and 4 of this report to be transmitted to the Montgomery County Department of Transportation. The Applicant is requested to reply in writing to the Planning Board, addressing all comments.

ATTACHMENTS

Attachment A: 35 Percent Design Plans