Montgomery Planning

OLD COLUMBIA PIKE/PROSPERITY DRIVE IMPROVEMENTS – STEWART LANE TO CHERRY HILL ROAD

Description

The Planning Board will review conceptual design alternatives developed for Old Columbia Pike/Prosperity Drive between Stewart Lane and Cherry Hill Road.

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LOCATION

Old Columbia Pike/Prosperity Drive Improvements Between Stewart Lane and Cherry Hill Road

MASTER PLAN

White Oak Science Gateway Master Plan

AGENCY

Montgomery County Department of Transportation

Summary

- Staff recommends transmittal of comments to the Montgomery County Department of Transportation.
- A mandatory referral hearing will be conducted by the Planning Board once a preferred alternative is selected.
- The Planning Board review of this project is advisory.

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SECTION 1 – COMMENTS

Planning Staff recommends the transmittal of the following comments to the Montgomery County Department of Transportation:

1. Alternative 3 (Two-Lane Bridge open to traffic with Pedestrian and Bicycle Improvements) should be advanced as the preferred alternative into design.
2. Provide a raised crossing for the proposed sidepath at the entrance to Stonehedge Park.
3. If Alternative 2 is selected as the preferred alternative, realign the crossing at Carriage House Drive to be as direct of a connection as possible to the sidepath which crosses the bridge.
4. Do not proceed with the intersection options as presented in the Project Prospectus for either the intersection of Old Columbia Pike/Industrial Parkway or the intersection of Old Columbia Pike/Prosperity Drive/Tech Road.
5. Turning movement restrictions from southbound Prosperity Drive to southbound Tech Road is a connectivity deficiency that results in unwanted cut-through traffic in the Westech Corner development. The intersection of Old Columbia Pike, Prosperity Drive, and Tech Road should allow left turns onto Tech Road and through movements onto Old Columbia Pike. These intersections should be signalized to accommodate these turning movements. The provision of a northbound through movement from Old Columbia Pike to Prosperity Drive should also be considered.
6. Creating separate space for pedestrians and bicyclists across the bridge is a necessary safety feature that must be included in any build alternative.
7. MCDOT must consult with the Maryland Historical Trust to ensure compliance with the Maryland Historical Trust Act of 1985 and Sec. 106 of the National Historic Preservation Act of 1966.
8. Coordinate with Montgomery Parks Department to:
    a. Discuss avoidance and minimization of impacts through the Park Construction Permit review process.
    b. Provide access to Natural Surface Trails.
    c. Provide a pedestrian, equestrian and bicycle trail crossing both at grade and beneath the bridge.
    d. Develop an engineered trail link that would facilitate a future trail connection to the White oak Recreation Center, to be constructed by the Parks Department at a future date.

SECTION 2 – INTRODUCTION

The Montgomery County Department of Transportation (MCDOT) has completed a Project Prospectus (see Attachment A) that marks the completion of Facility Planning Phase 1 for a capital improvement project. This project includes a mix of improvements to address master plan recommendations as well as shorter term improvements:

- Corridor Improvements: Alternatives evaluate providing **master-planned** roadway, pedestrian, and bicycle improvements along the east side of US 29 from Stewart Lane to Cherry Hill Road
- Intersection Improvements: Address **short-term** congestion needs. The project does not propose to construct the master-planned interchange at US 29 / Tech Rd / Industrial Pkwy.

Improvements to address Americans with Disabilities (ADA) Act standards are provided for all options.

SECTION 3 – BACKGROUND

Surrounding Neighborhood

Land use within the project vicinity varies along street segments. On Old Columbia Pike between Stewart Lane and Industrial Parkway, residential uses predominate with townhouses and condominiums. On Old Columbia Pike between Industrial Parkway and Tech Road there is a new shopping center developed recently and a wellness center. On Prosperity Drive between Tech Road and Cherry Hill Road, the predominate use is office and back-office facilities, although there is also the Westech Corner development near Tech Road and a Courtyard hotel near Cherry Hill Road.

White Oak Local Area Transportation Improvement Program (LATIP)

The White Oak Local Area Transportation Improvement Program (LATIP) is one mechanism for funding infrastructure in the White Oak Science Gateway Master Plan area. Following the approval of the White Oak Science Gateway (WOSG) Master Plan, the County Council directed MCDOT to estimate costs for transportation improvements across the entire White Oak Policy Area. The intent was to replace the typical transportation evaluation process with a single fee that would pay for these improvements. Ultimately, the LATIP was established and replaced the Local Area Transportation Review (LATR) for the White Oak Policy Area. LATIP fees are paid by applicants to the Department of Permitting Services (DPS) at the same time and in the same manner as the transportation impact tax for new development in the White Oak policy area.

The Old Columbia Pike / Prosperity Drive Improvements Project is partially funded by the White Oak LATIP, including:

- Bikeways – Old Columbia Pike
- Bikeways – Prosperity Drive
- Intersections – Tech Road at Prosperity Drive/Old Columbia Pike
- Bridge – Old Columbia Pike Bridge Reconstruction

Other longer-range projects included in the LATIP but not part of the proposed project that would provide significant transportation benefits include:

- Intersections - US 29 at Stewart Lane (this might not apply any more since MDOT SHA recently implemented intersection improvements)
- Intersections - US 29 at Industrial Parkway
- Intersections - US 29 at Tech Road

SECTION 4 – PROJECT DESCRIPTION

Existing Conditions

Old Columbia Pike between Stewart Lane and Industrial Parkway is a two-lane street with existing sidewalk or a sidepath, depending on the segment, located on the east side of the street. Between Industrial Parkway and Tech Road, Old Columbia Pike widens to a four-lane cross section, with an existing sidewalk along the east side. Prosperity Drive between Tech Road and Whitehorn Court is two-lane street with a 46-feet-wide total pavement width (on-street parking allowed) with a sidewalk along the east side. Between Whitehorn Court and Cherry Hill Road, Prosperity Drive is two-lanes wide (15-foot-wide per direction) with on-street parking and sidewalks along both sides of the street.

Project Description

The Montgomery County Department of Transportation (MCDOT) proposes to design and construct multiple improvements along a 1.8 mile stretch along Old Columbia Pike between Stewart Lane and Tech Road, and on Prosperity Drive between Tech Road and Cherry Hill Road:

- Construction of a ten-foot wide sidepath along the entire length on the east side of Old Columbia Pike/Prosperity Drive
- Rehabilitation or construction of the existing bridge over Paint Branch
- Intersection improvements at two signalization intersections: 1) Old Columbia Pike at Industrial Parkway, and 2) Old Columbia Pike/Prosperity Drive at Tech Road

The project location map is shown below in Figure 1.

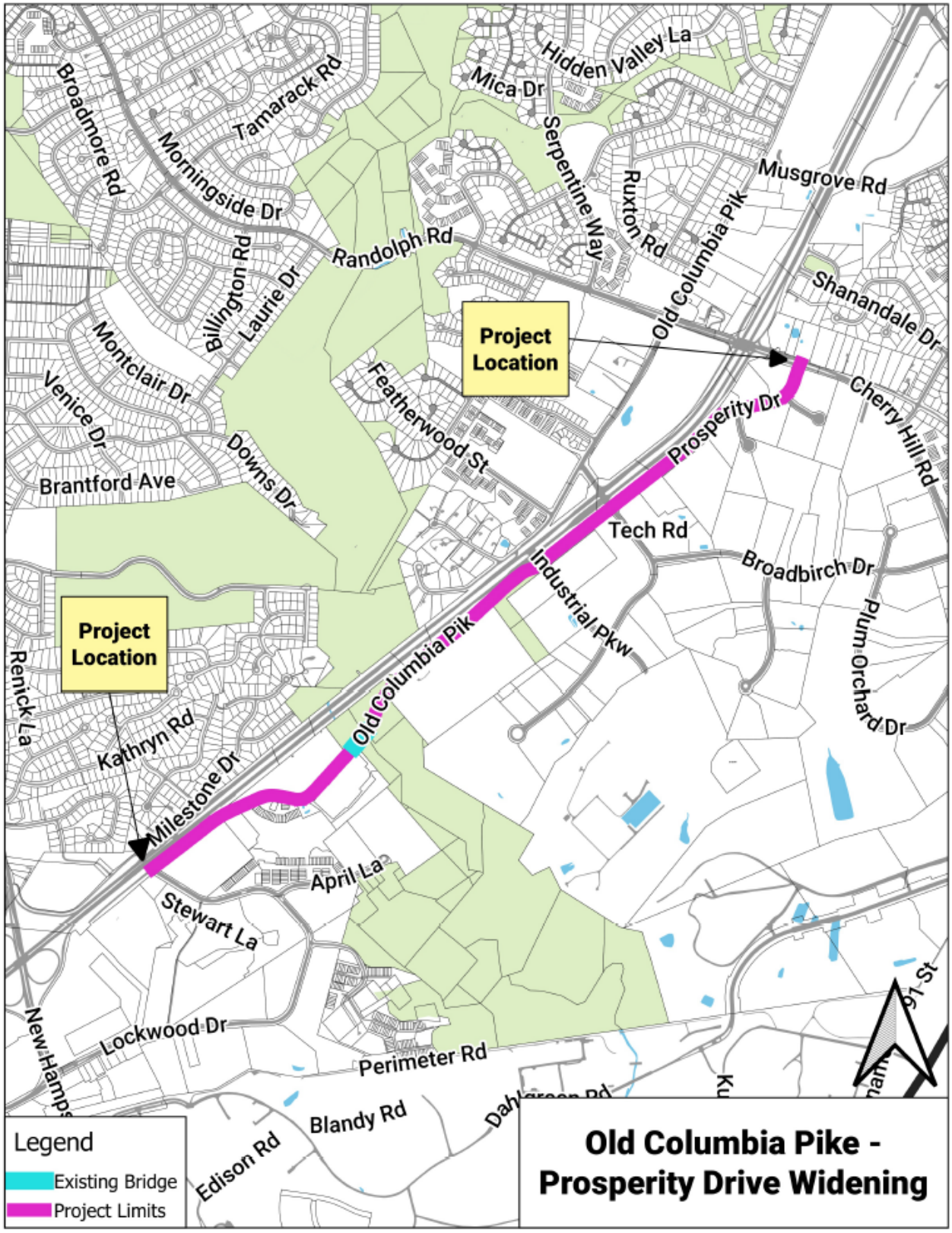

Figure 1: Project Location Map

The existing bridge is currently closed to vehicular traffic, as shown in Figure 2. This bridge is approximately 200 feet long, 27 feet wide. Originally built in 1912, widened in 1930, and then rehabilitated in 1973, this bridge structure is registered with the Maryland Historical Trust (MHT) and eligible for listing in the National Register of Historic Places (NRHP). A view of the bridge from Paint Branch is shown in Figure 3.

Figure 2: Existing Old Columbia Pike Bridge over Paint Branch (Top View)

Figure 3: Old Columbia Pike Bridge over Paint Branch (Side View)

Corridor Alternatives

- Alternative 1: No Build with minimum safety improvements to bridge surface
- Alternative 2: Pedestrian and bicycle improvements with no vehicular traffic on a rehabilitated bridge over Paint Branch.
- Alternative 3: Pedestrian and bicycle improvements with a reconstructed two-lane bridge over Paint Branch
- Alternative 4: Pedestrian and bicycle improvements with a reconstructed four-lane bridge over Paint Branch

ALTERNATIVE 1

Alternative 1, as shown in Figure 4, would maintain existing conditions. Under this alternative, no improvements to the Old Columbia Pike / Prosperity Drive corridor would be constructed and the Paint Branch bridge would remain closed to vehicular traffic and open to pedestrians/bicycles with only minimum safety improvements made to the bridge surface.

Figure 4: Alternative 1 - No Build

ALTERNATIVE 2

Alternative 2, as shown in Figure 5, would maintain Old Columbia Pike/Prosperity Drive's current lane configuration as a two-way (one lane in each direction) roadway. Intersections along the project corridor would be upgraded with ADA compliant crosswalks, improving safety and operations of all modes of traffic.

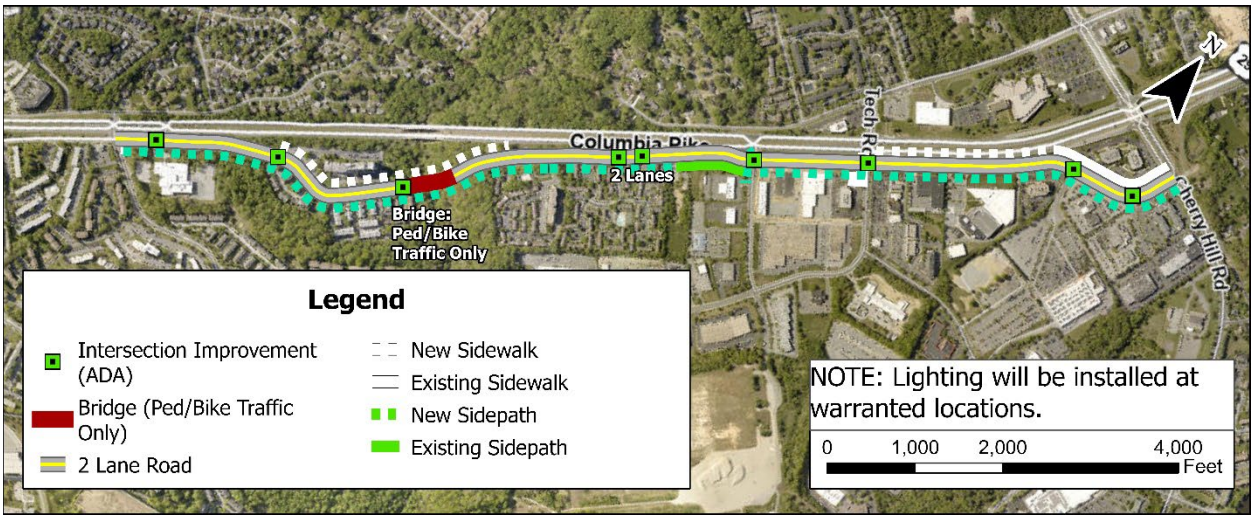

Figure 5: Alternative 2 – Ped and Bike Improvements

Sidewalks and sidepaths would be installed along Old Columbia Pike/Prosperity Drive. The ten-foot-wide sidepath would be constructed along the east side of the road between Stewart Lane and Cherry Hill Road. The minimum street buffer separating the sidepath from the road would be between five and eight-feet-wide. At the bridge, sidepath users would transition to use the roadway pavement as it would remain closed to vehicular traffic. At the southern entrance to the Stonehedge Condominium development (Old Columbia Pike), the sidepath would again transition from the roadway pavement to a separate sidepath on the east side of the road. This sidepath would be constructed up to Cherry Hill Road.

A six-foot-wide sidewalk with a six-foot-wide street buffer would be constructed on the west side of the road between Treetop View Terrace and the bridge. After the bridge, pedestrians would use a six-foot-wide marked area on the roadway pavement up to the southern entrance to the Stonehedge Condominium development (Old Columbia Pike) at which point the sidewalk on the west side of the road would end. Further north between Tech Road and Cherry Hill Road a ten-foot-wide sidewalk would be constructed on the west side of the road and would be buffered from the travel lanes with a six-foot-wide street buffer.

Proposed cross sections are shown below in Figure 6 through Figure 8.

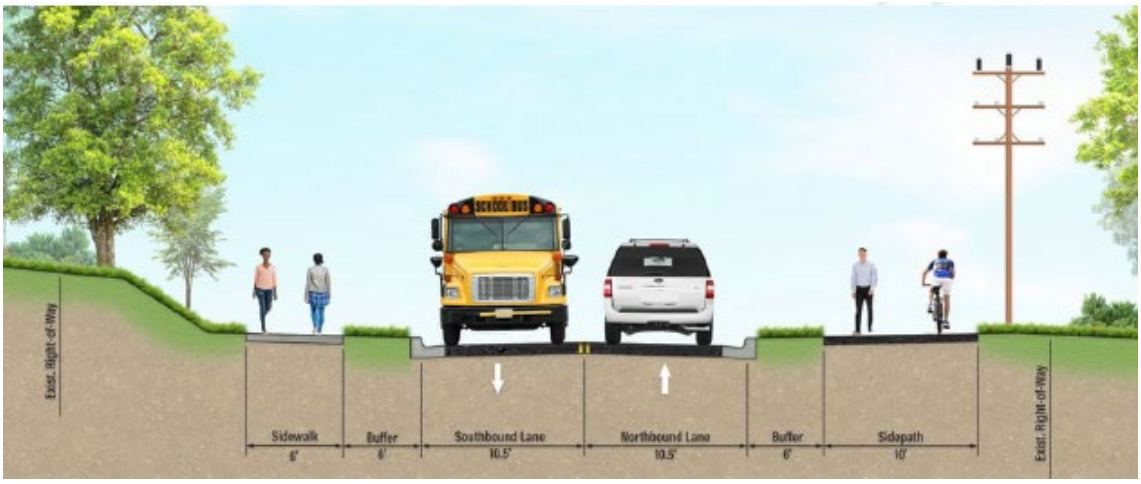

Figure 6: Alternative 2 - Old Columbia Pike Typical Cross Section

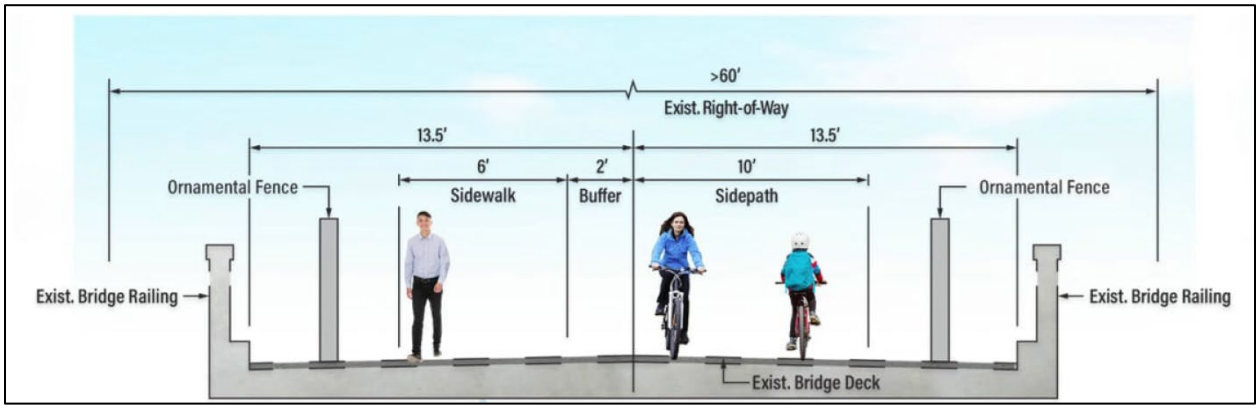

Figure 7: Alternative 2 - Bridge Cross Section

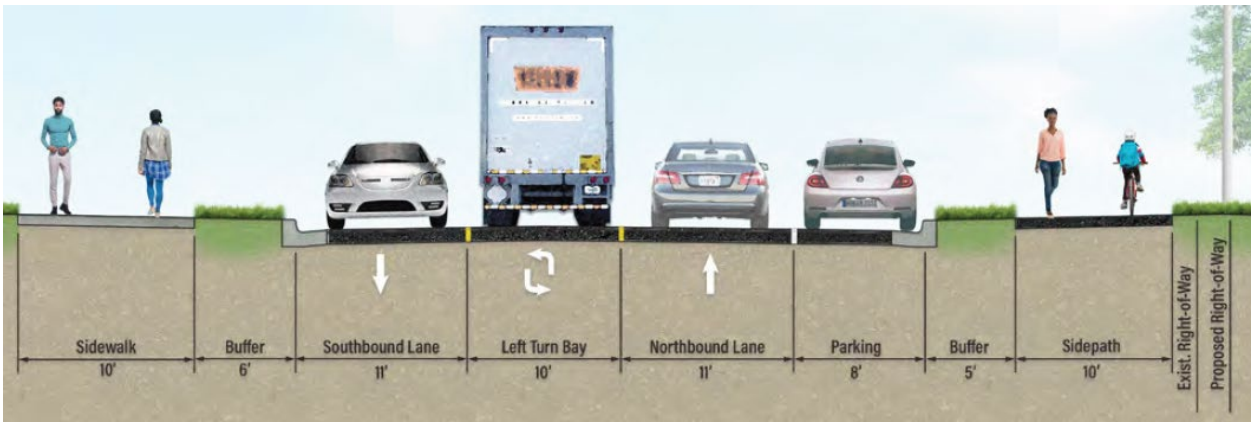

Figure 8: Alternative 2 - Prosperity Drive Typical Cross Section

ALTERNATIVE 3

Alternative 3, as shown in Figure 9, would provide similar sidepath and sidewalk improvements as Alternative 2, but would include replacing the bridge over Paint Branch to provide two travel lanes for vehicular traffic. Therefore, a six-foot-wide sidewalk with a 6-foot-wide street buffer and a 10-foot-wide sidepath with a 6-foot-wide street buffer would be provided along the bridge and up to the southern entrance to the Stonehedge Condominium development. All other pedestrian and bicycle improvements on the corridor would be consistent with Alternative 2. Proposed cross sections are shown below in Figure 10 through Figure 12.

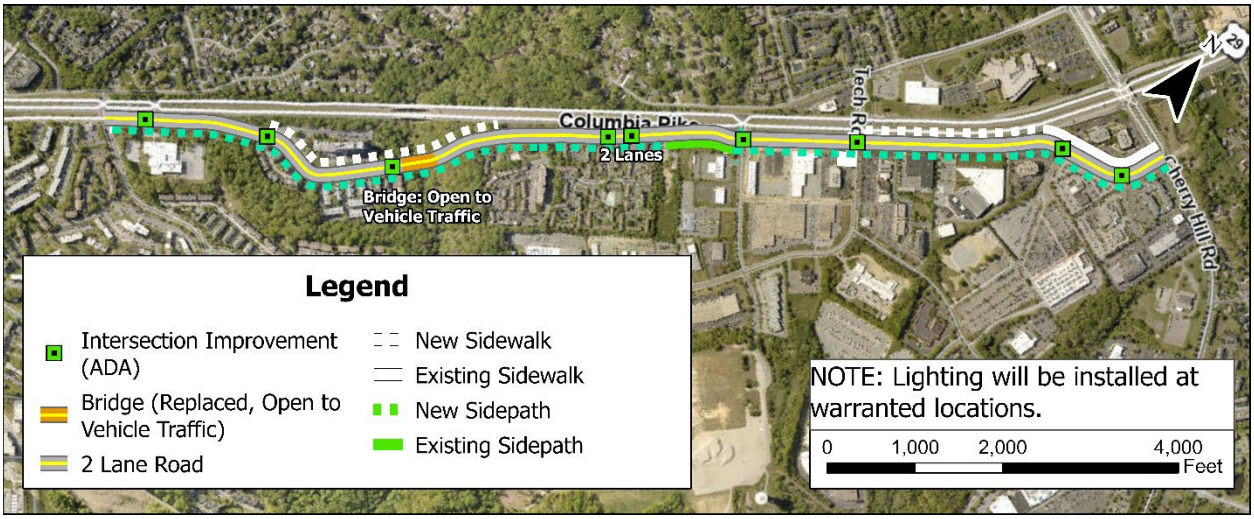

Figure 9: Alternative 3 - Ped and Bike Improvements with Two-Lane Bridge

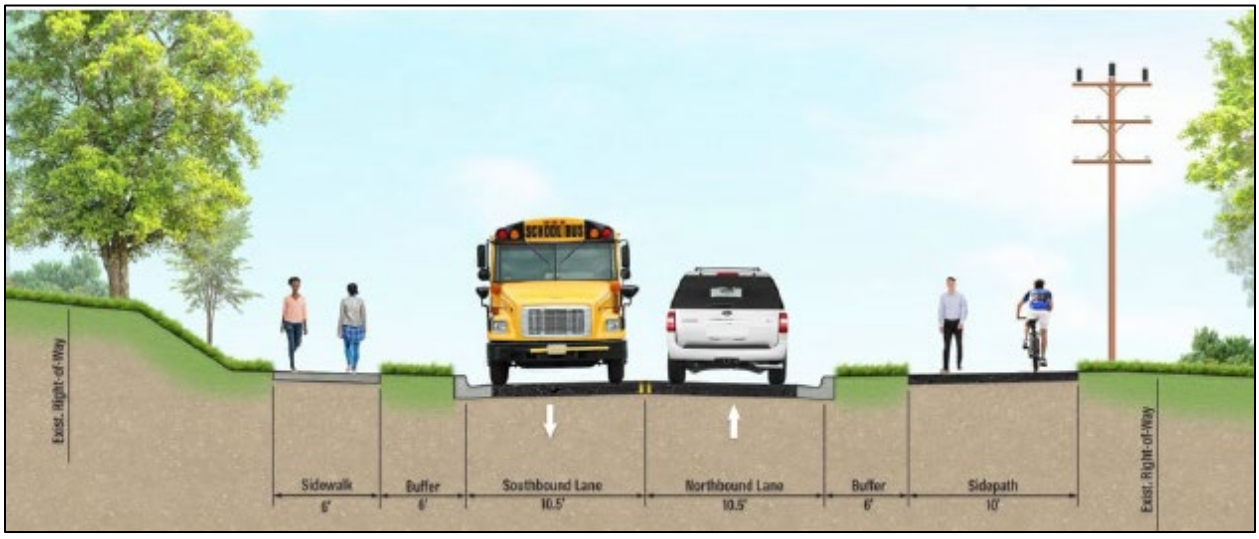

Figure 10: Alternative 3 - Old Columbia Pike Typical Cross Section

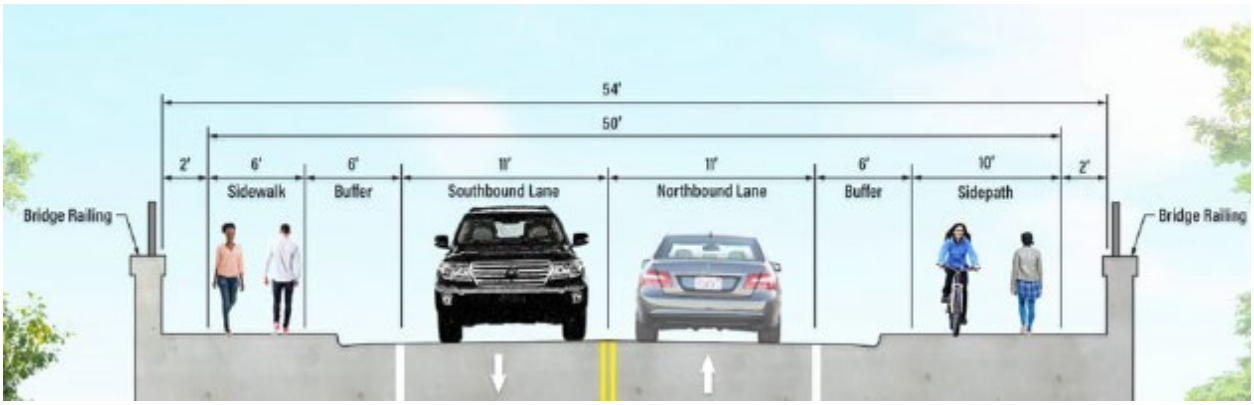

Figure 11: Alternative 3 - Bridge Cross Section

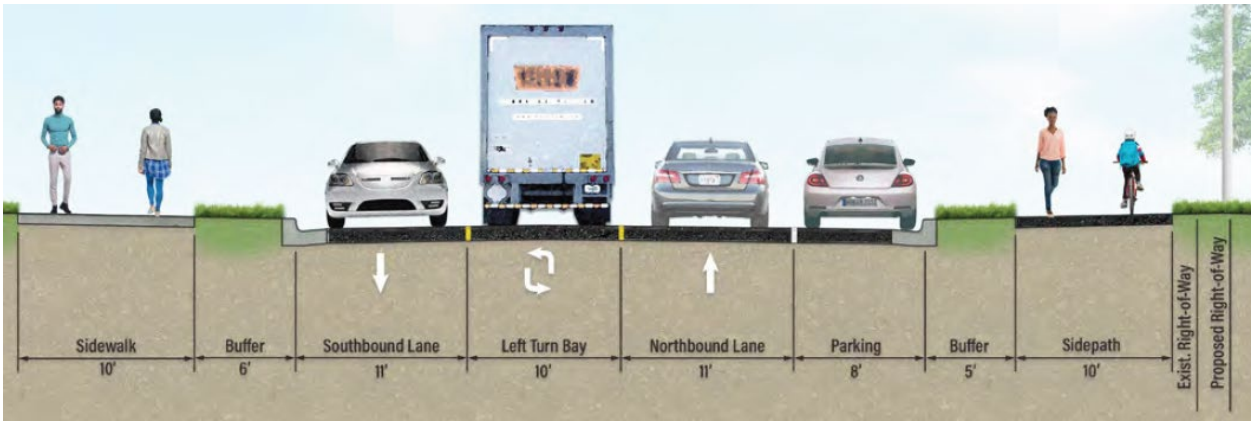

Figure 12: Alternative 3 - Prosperity Drive Typical Cross Section

ALTERNATIVE 4

Alternative 4, as shown in Figure 13, would also provide pedestrian and bicycle improvements similar to Alternatives 2 and 3, but with some key differences since this alternative would widen Old Columbia Pike/Prosperity Drive to five lanes (two lanes in each direction with a center turn lane) along the entire extent and provide a new bridge structure with five-lanes for vehicle traffic.

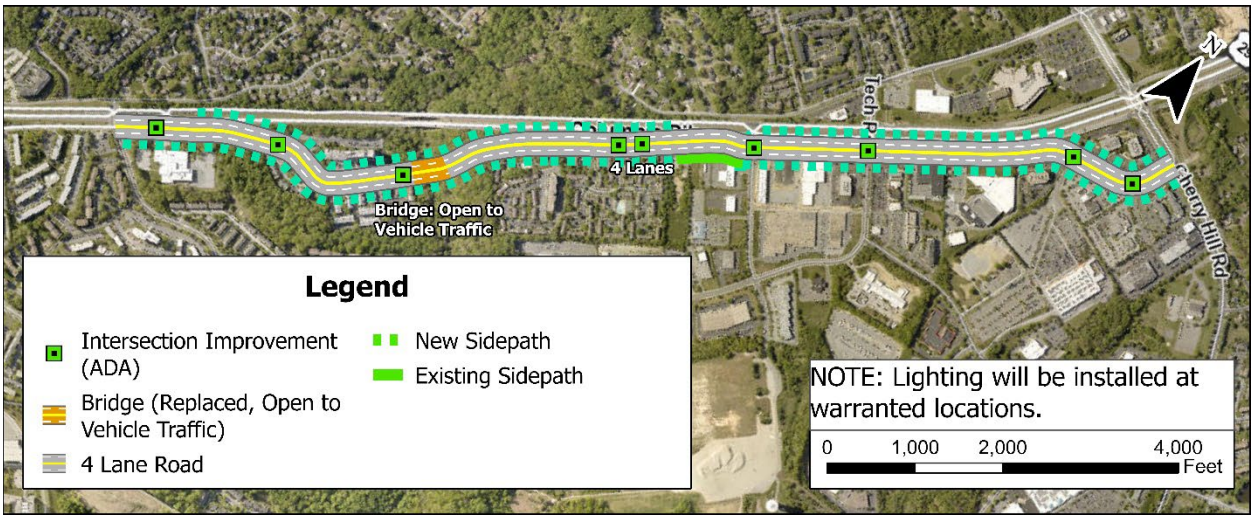

Figure 13: Ped and Bike Improvements with Four-Lane Bridge

Under this alternative, a ten-foot-wide sidepath with an eight-foot-wide street buffer would be provided on both sides of the road along most of the corridor. However, the sidepath on the west side of the road would not extend all the way to the intersection with Stewart Lane and end approximately 700 feet to the north. There would also be a gap in the sidepath between the Stonehedge Park access and Industrial Parkway intersection.

The road would be widened to a five-lane cross section (two lanes in each direction plus a center turn lane) from the intersection with Treetop View Terrace north to Cherry Hill Road The existing bridge over Paint Branch would be reconstructed to provide four to five lanes for vehicular travel and improved pedestrian and bicycle facilities. Proposed cross sections are shown below in Figure 14 through Figure 16.

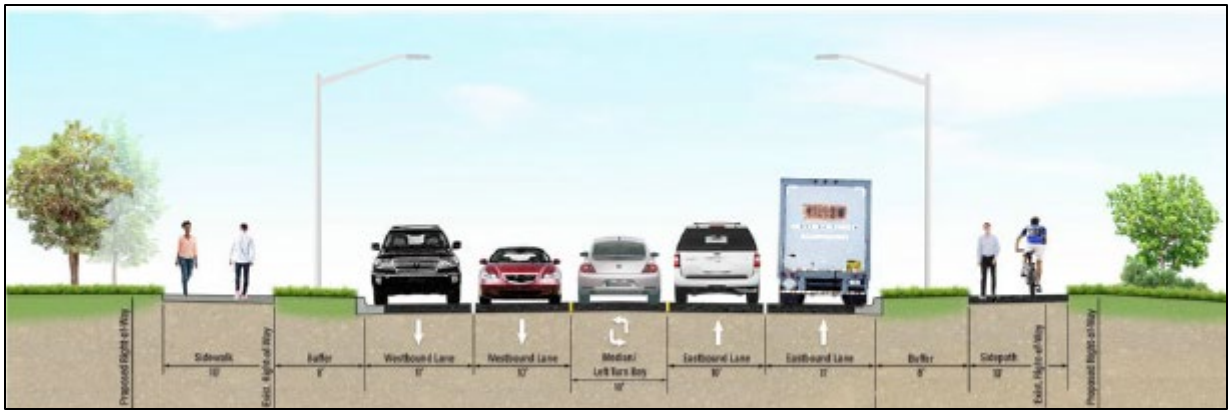

Figure 14: Alternative 4 – Old Columbia Pike Typical Cross Section

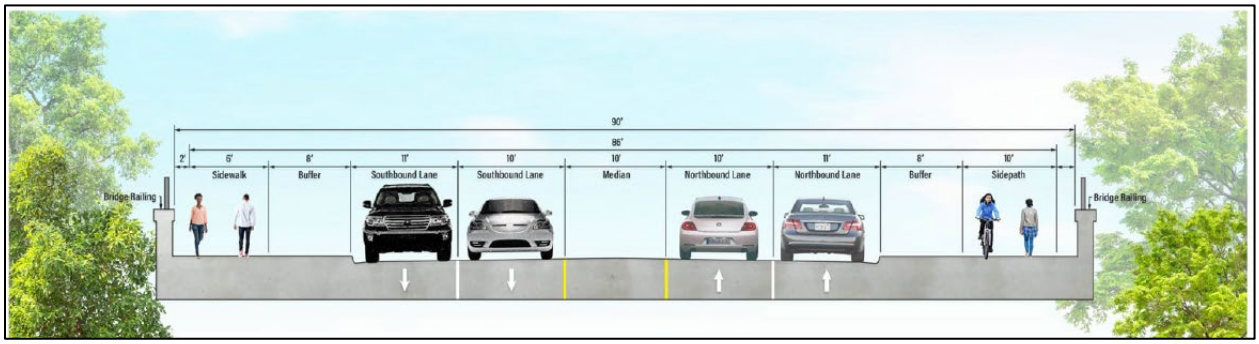

Figure 15: Alternative 4 - Bridge Cross Section

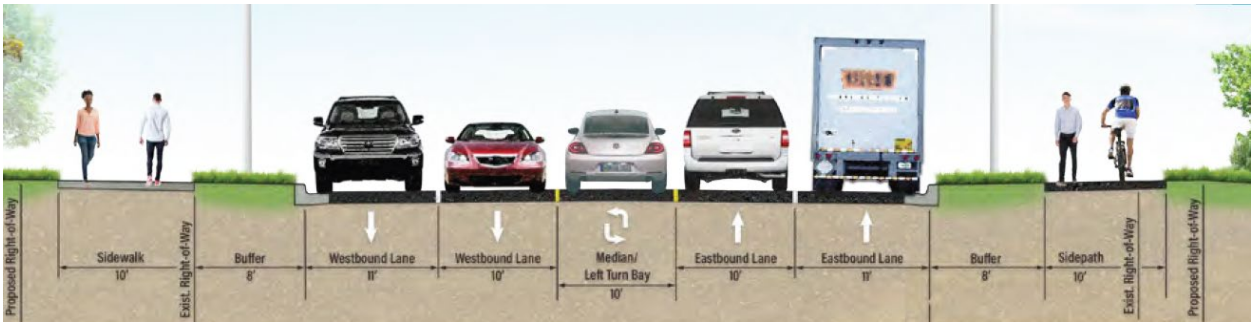

Figure 16: Alternative 4 – Prosperity Drive Typical Cross Section

Intersection Options

For Corridor Alternatives 2 through 4, traffic signals and other intersection improvements would be needed at the following intersections:

- Old Columbia Pike/Industrial Parkway
- Old Columbia Pike/Prosperity Drive/Tech Road

Whereas the Corridor Alternatives are focused on providing the master-planned roadway, pedestrian and bicycle improvements along the east side of US 29 from Stewart Lane to Cherry Hill Road, the intersection improvements are more focused on addressing short-term congestion needs. Achieving the master-planned interchange is beyond the scope of this project. Due to the close spacing of Old Columbia Pike and the southern section of Prosperity Drive to US 29, design solutions are limited.

OLD COLUMBIA PIKE/INDUSTRIAL PARKWAY

Existing deficiencies noted at this intersection include the lack of ADA pedestrian crossings, and the presence of a wide pavement area without clear pavement markings. There is a southbound left/through lane on the southbound Old Columbia Pike approach, however, in the northbound direction a right-turn only lane is provided, prohibiting motor vehicles from turning left toward US 29 or continuing straight along Prosperity Drive.

Figure 17: Existing Intersection of Old Columbia Pike and Industrial Parkway

As corridor alternatives were developed, reconfiguring this intersection was identified to improve operations and safety for all users. This includes:

- Relocating the westbound Industrial Parkway signal from US 29 to east of Old Columbia Pike. Currently, the westbound movement on Old Columbia Pike is stop-controlled. Moving the signal from US 29 to Old Columbia Pike would allow traffic to flow more smoothly.
- Removing one of the two right turn lanes from US 29 northbound to Industrial Parkway and remove some of the extra pavement in that area. Channelizing islands would also be added to the intersection to clearly direct traffic.
- Installing signalized pedestrian crossings, high visibility crosswalk markings, protected intersection design, and pedestrian refuge islands to improve safety for pedestrians crossing at this intersection.

Each Alternative included intersection reconfiguration as shown in Figure 18 through Figure 19.

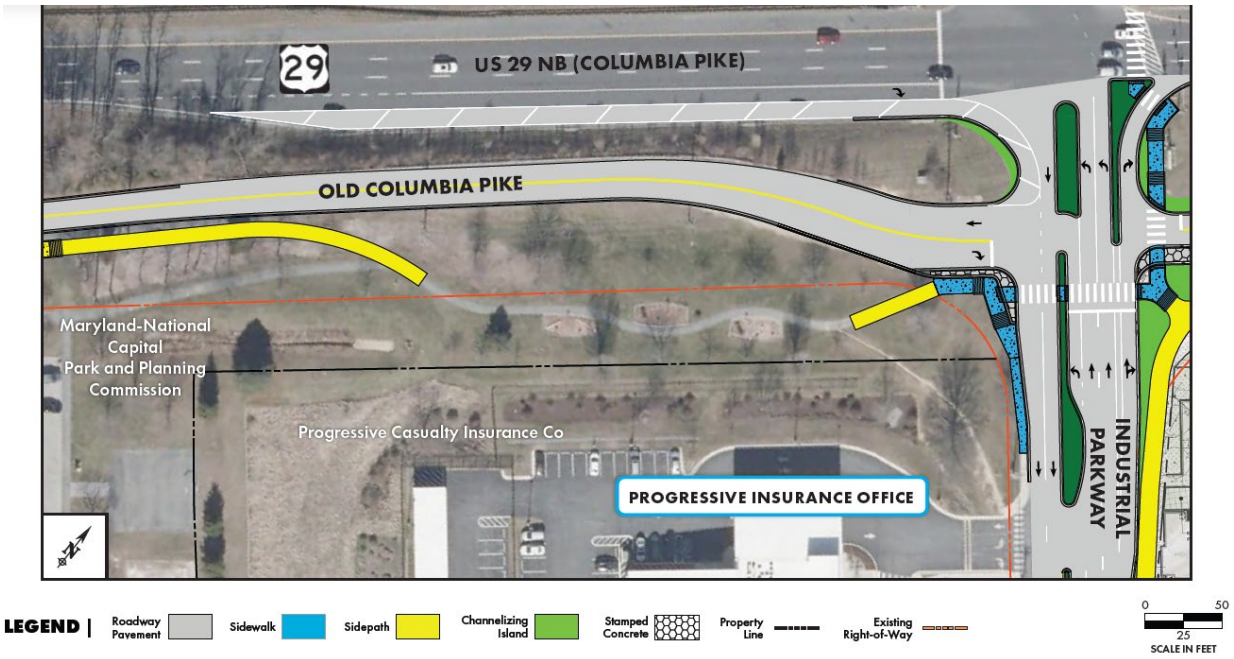

Figure 18: Old Columbia Pike & Industrial Parkway Intersection (Alternatives 2 and 3)

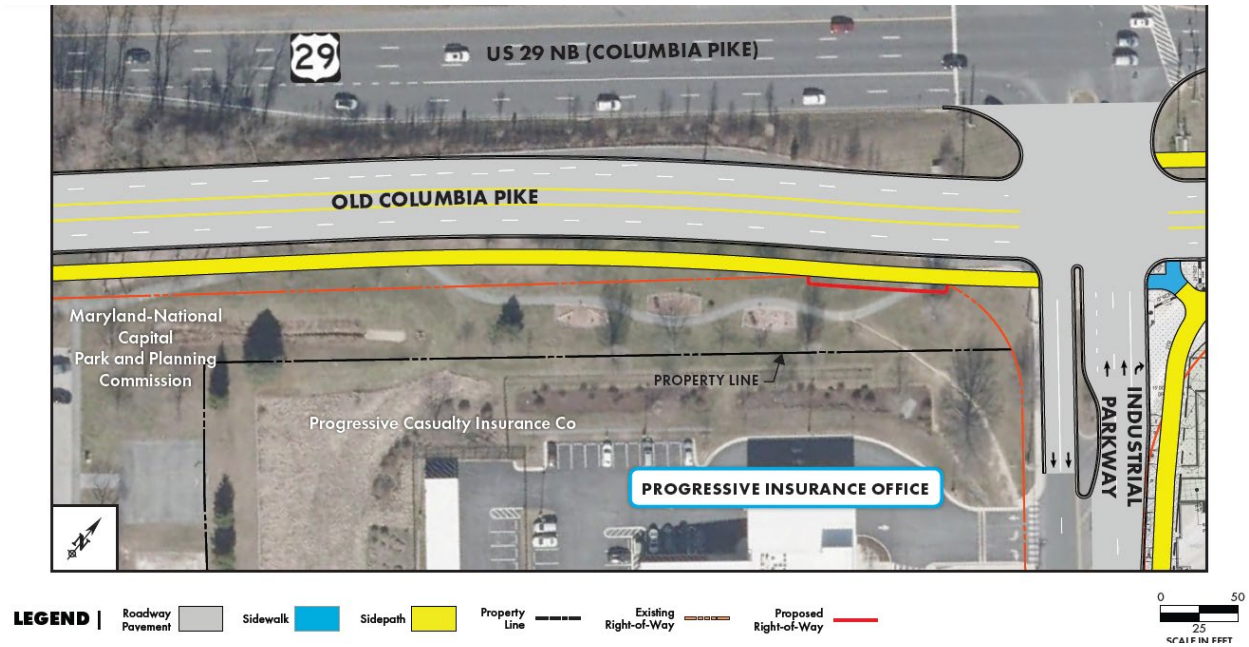

Figure 19: Old Columbia Pike & Industrial Parkway Intersection (Alternative 4)

OLD COLUMBIA PIKE/PROSPERITY DRIVE/TECH ROAD

Currently, the intersection of Old Columbia Pike/Prosperity Drive/Tech Road is a three-way stop-controlled intersection. During peak periods, stopped vehicles from the Tech Road approach to Columbia Pike (US 29) backup through this intersection. The southbound Prosperity Drive approach to Tech Road is restricted to right turns only. The existing intersection layout is displayed in Figure 20.

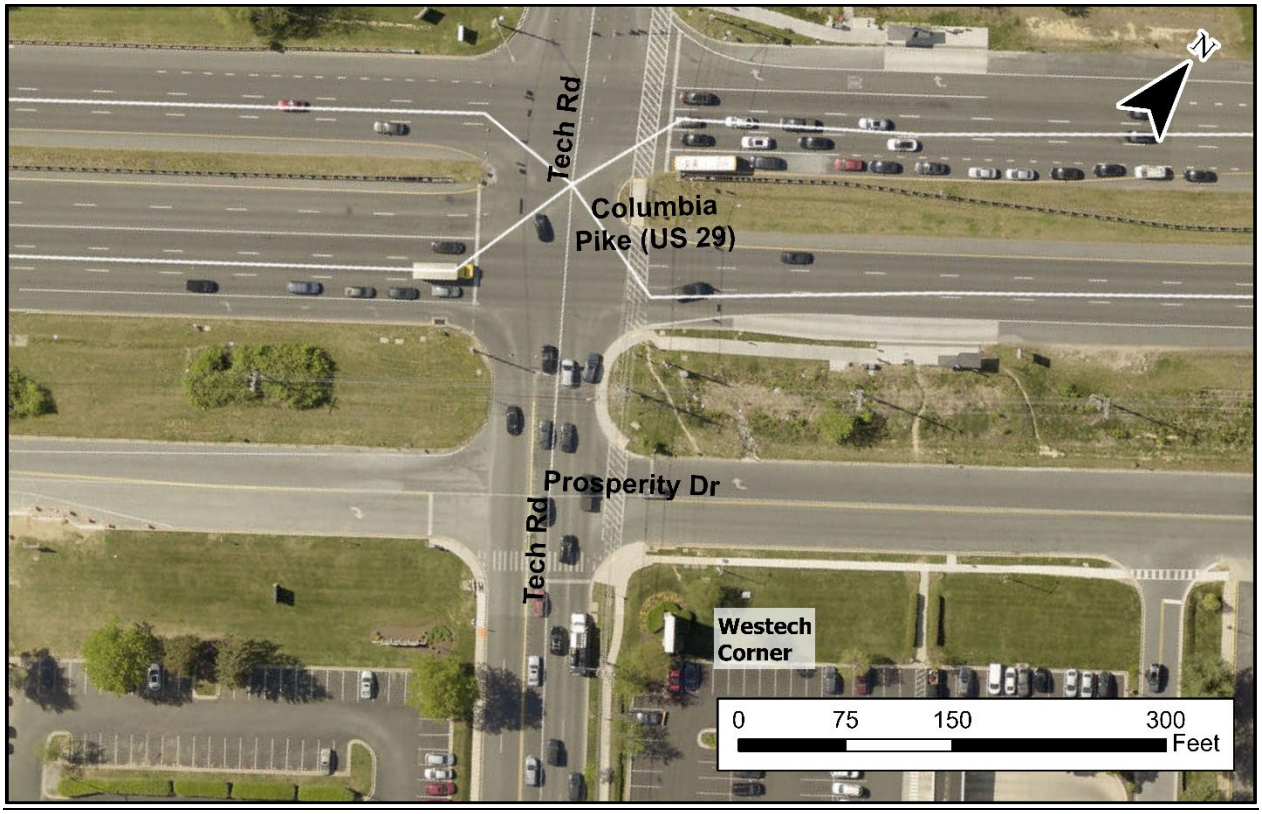

Figure 20: Existing Intersection of Old Columbia Pike, Prosperity Drive, and Tech Road

Reconfiguring the intersection Old Columbia Pike/Tech Road to improve traffic operations is also recommended in the Project Prospectus. This includes the following improvements:

- Relocating westbound Tech Road signal from US 29 to east of Old Columbia Pike
- Installing signalized pedestrian crossings, high visibility crosswalk markings, protected intersection design, and pedestrian refuge islands to improve safety for pedestrians crossing at this intersection.
- Installing pavement marking to reduce two receiving lanes to one receiving lane along eastbound Tech Road, west of the Tech Road and Prosperity Drive intersection.

Each Alternative included intersection reconfiguration as shown in Figure 21 through Figure 22.

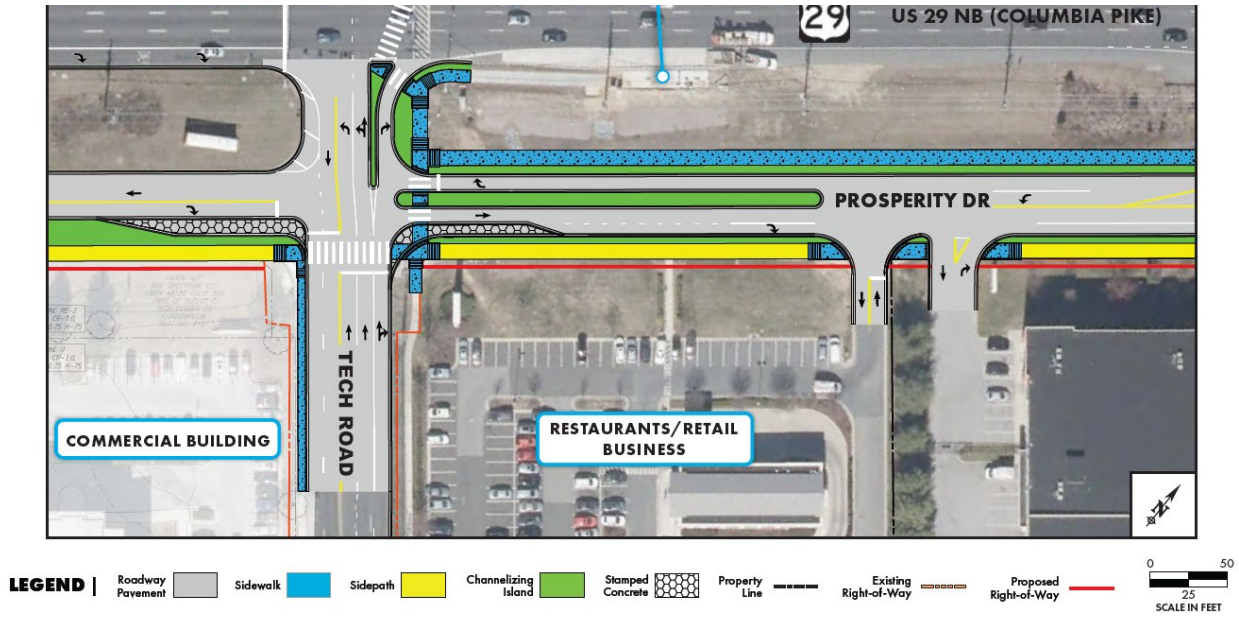

Figure 21: Prosperity Drive & Tech Road Intersection (Alternatives 2 and 3)

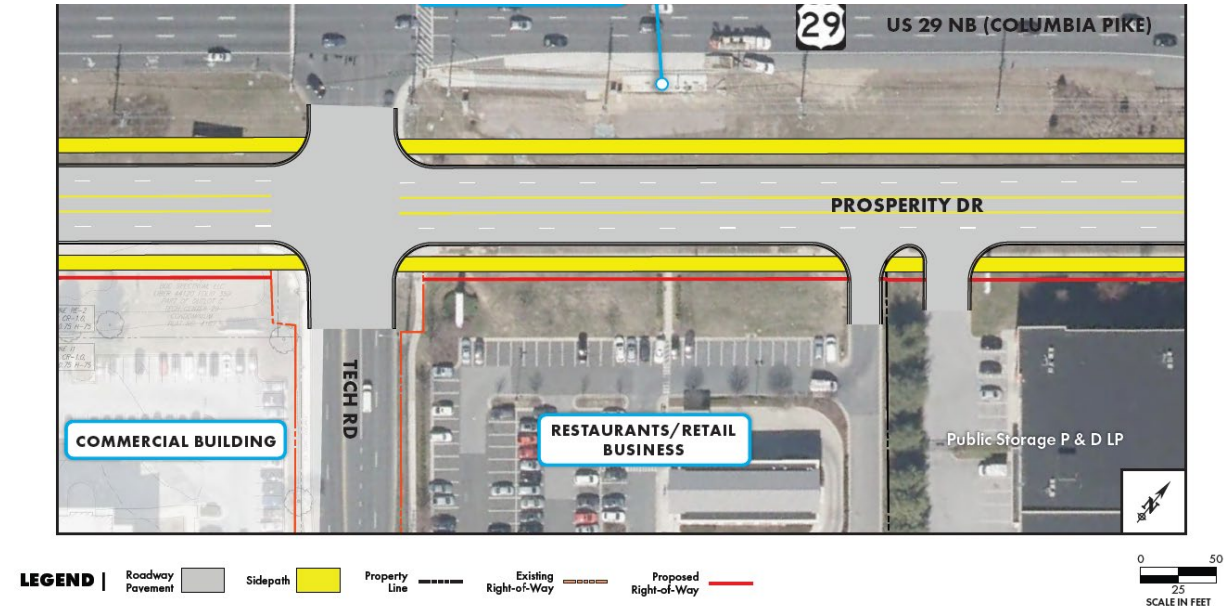

Figure 22: Prosperity Drive & Tech Road Intersection (Alternative 4)

Corridor Alternatives Overview

The estimated cost and impacts of the four alternatives as prepared by MCDOT is shown below in Table 1.

Table 1: Comparison of Corridor Alternatives

Corridor Alternatives	Alternative 1 No Build	Alternative 2 Improves Intersections, Adds Sidewalk & Sidepath	Alternative 3 Alternative 2 Improvements + Bridge Open to Traffic (2 lanes)	Alternative 4 Improves Intersections, Adds Sidepaths and Widens to Four Lanes, Bridge Open to Traffic (4 lanes)
Key Features	Remains as is, only minimum safety improvements to bridge surface	Upgrade intersections to be ADA compliant; Improve pedestrian/ bicycle connectivity	New bridge with 2 lanes of traffic	New bridge with 4 lanes of traffic
Forest Impact (acres)	None	0.5	2.0	5.5
Right of Way Impact (acres)	None	1	1	4
Estimated Cost*	$160,000	$30 million	$45.4 million	$81 million

* Includes right of way and construction cost, including bridge maintenance or construction costs

SECTION 5 – ANALYSIS AND FINDINGS

Master Plan Consistency

This section of the report compares the project to recommendations in applicable master plans, including the 2014 *White Oak Science Gateway Master Plan*, 2018 *Master Plan of Highways and Transitways* and the 2018 *Bicycle Master Plan*, and *Thrive Montgomery 2050*.

STREETS

The *Master Plan of Highways and Transitways* (https://mcatlas.org/mpoht/) recommends the following streets in the study area (Table 2):

Table 2: Master Plan of Highways and Transitways Recommendations

Street	To	From	Existing Lanes	Planned Lanes	Street Classification
Old Columbia Pike	Stewart Lane	White Oak Town Center Boundary	2	4	Town Center Boulevard
Old Columbia Pike	White Oak Town Center Boundary	White Oak Science Gateway Downtown Boundary	2	4	Boulevard*
Old Columbia Pike	White Oak Science Gateway Downtown Boundary	Industrial Parkway	2	4	Downtown Boulevard
Old Columbia Pike	Industrial Parkway	Tech Road	4	4	Downtown Boulevard
Prosperity Drive	Tech Road	Cherry Hill Road	2	4	Downtown Boulevard

* This segment is now under review by the Planning Board as part of the MPOHT 2024 Technical Update. The street classification has been recommended to change to Downtown Boulevard.

Interchange improvements are master planned on US 29 at Stewart Lane and Industrial Parkway. Bus rapid transit stations are master planned at the following locations:

- Stewart Lane at April Lane (south of project limits)
- Columbia Pike (US 29 at Tech Road)

Only Alternative 4 is fully consistent with the *Master Plan of Highways and Transitways*, because it provides four travel lanes along the length of Old Columbia Pike and Prosperity Drive.

ACTIVE TRANSPORTATION

The 2018 *Bicycle Master Plan* recommends a sidepath on the east side of Old Columbia Pike/Prosperity Drive between Stewart Lane and Cherry Hill Road, as shown on Figure 23 below from the Approved Bicycle Network Map https://mcatlas.org/bikeplan/.

The proposed project is fully consistent with the *Bicycle Master Plan*.

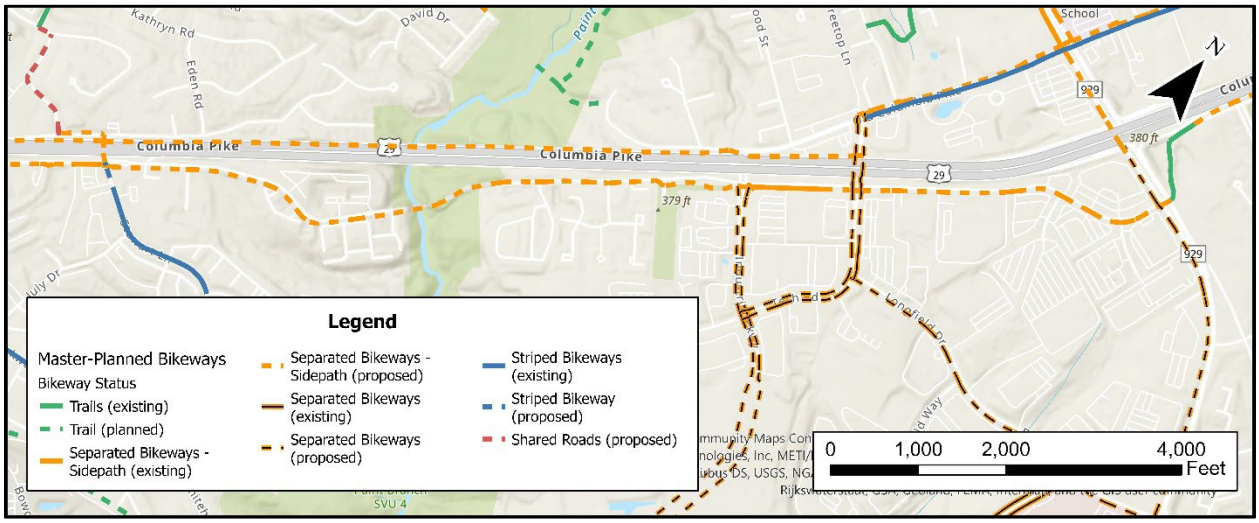

Figure 23: Bicycle Master Plan Recommendations

AREA MASTER PLAN – WHITE OAK SCIENCE GATEWAY

The 2014 *White Oak Science Gateway Master Plan* recommends that the Old Columbia Pike bridge over the Paint Branch stream valley be rebuilt and reopened to vehicular traffic. Only Alternatives 3 and 4 are consistent with this recommendation.

The 2014 *White Oak Science Gateway Master Plan* also recommends a four-lane roadway between Industrial Parkway and Stewart Lane. Subsequently, *Thrive Montgomery 2050* provides clear guidance to "Stop proposing new 4+ lane roads in master plans." *Thrive Montgomery 2050* also includes a policy to "Give a lower priority to construction of new 4+ lane roads, grade-separated interchanges, or major road widenings." Although Alternative 4 is consistent with the 2014 *White Oak Science Gateway Master Plan* recommendation, prioritizing construction of Alternative 4 is inconsistent with the *Thrive Montgomery 2050* regarding major road widenings, while Alternatives 2 and 3 are consistent with the Thrive policy.

The 2014 *White Oak Science Gateway Master Plan* was evaluated for transportation adequacy assuming its recommended four-lane roadway between Industrial Parkway and Stewart Lane; however, detailed results for traffic volumes on this portion of Old Columbia Pike were not included in the 2014 *White Oak Science Gateway Master Plan* or its Transportation Appendix. Staff reviewed available forecasted vehicular traffic volumes to assess the potential effects on transportation

adequacy of the two-lane roadway in Alternative 4. MCDOT's Project Prospectus Appendix F – Traffic Study estimates the same year 2045 peak hour volumes across the Old Columbia Pike bridge for both Alternatives 3 and 4, ranging between 103 and 224 trips depending on time period and direction. These volumes are well within the capacity of a two-lane roadway.

Transportation Best Practices

The proposed project has been evaluated to assess its compliance with the guidance in the Complete Streets Design Guide, including:

- Widths for lanes, sidewalks, bikeways and street buffers
- Target speeds
- Protected crossing spacing

ALTERNATIVE 1

This no-build alternative is not consistent with the Complete Streets Design Guide and does not provide improvements that would help achieve the target speed or add protected crossings.

ALTERNATIVE 2

The proposed ten-foot-wide sidepath located on the east side of the road and eight-foot-wide street buffer is consistent with the Complete Streets Design Guide. The proposed ten-foot-wide sidewalk with six-foot-wide buffer on the west side of the road between Tech Road and Cherry Hill Road is also consistent with the Complete Streets Design Guide. However, there are several gaps in the proposed sidewalk along the west side of the road. Additionally, the six-foot-wide sidewalk with six-foot-wide street buffer is not consistent with a Town Center Boulevard Street type. The sidewalk should be a minimum of eight-feet-wide.

This alternative does not propose any roadway widening and includes improvements such as medians and signalization at the intersections with Tech Road and Industrial Parkway which would help reduce traffic speeds. The signalization of these intersections will also add new protected crossings. The bridge remains closed to vehicular traffic.

ALTERNATIVE 3

Like Alternative 2, the proposed ten-foot wide sidepath located on the east side of the road and eight-foot-wide street buffer is consistent with the Complete Streets Design Guide. The proposed ten-foot-wide sidewalk with six-foot-wide buffer on the west side of the road between Industrial Parkway and Cherry Hill Road is also consistent with the Complete Streets Design Guide. However, there are several gaps in the proposed sidewalk along the west side of the road. Additionally, the six-foot-wide sidewalk with six-foot-wide street buffer is not consistent with a Town Center Boulevard Street type. The sidewalk should be a minimum of eight-feet-wide.

This alternative also does not propose any roadway widening and includes improvements such as medians and signalization at the intersections with Tech Road and Industrial Parkway which would help reduce traffic speeds. The signalization of these intersections will also add new protected crossings. The major difference between Alternatives 2 and 3 is the operation of the bridge. In Alternative 3, the bridge is open to vehicular traffic.

ALTERNATIVE 4

The proposed ten-foot wide sidepaths with eight-foot-wide streets buffers on both sides of the road is consistent with the Complete Streets Design Guide and provides the most consistent pedestrian and bicycle improvements on both sides of the road.

Widening the roadway to four travel lanes is not outright inconsistent with a Downtown or Town Center Boulevard Street type. However, the Complete Streets Design Guide does state that two-way left-Turn lanes are not appropriate along either street type.

While the intersections with Tech Road and Industrial Parkway would still be signalized, there are no other treatments proposed to slow traffic and the number of lanes and presence of a center turn lane may results in higher vehicle speeds above the target speed of 25mph.

RECOMMENDATIONS

Alternative 3 (Two-Lane Bridge open to traffic with Pedestrian and Bicycle Improvements) should be advanced as the preferred alternative into design. While the master plan vision is for a four-lane cross section, planning staff do not believe that this cross section is realistic or feasible for this project. Alternative 4 has significantly higher impacts to parkland and has a much higher cost that compared to Alternative 3 and guidance in *Thrive Montgomery 2050*, which was approved after the *White Oak Science Gateway Master Plan*, now discourages new four-lane roads. Additionally, this option meets all applicable recommendations for walkways and bikeways in the *Bicycle Master Plan* and the Complete Streets Design Guide.

Provide a raised crossing for the proposed sidepath at the entrance to Stonehedge Park. Raised crossings can be used to reduce motor vehicle operating speeds and encourage stopping at locations where pedestrians and/or bicyclists regularly cross the road. The Complete Streets Design Guide notes that this treatment is helpful in locations near pedestrian generators such as schools, parks, libraries, and recreation centers.

If Alternative 2 is selected as the preferred alternative, realign the crossing at Carriage House Drive to be as direct of a connection as possible to the sidepath which crosses the bridge. The current jog shown would be difficult for cyclists traveling downhill at higher speeds to navigate. A potential realignment can be seen in Figure 24.

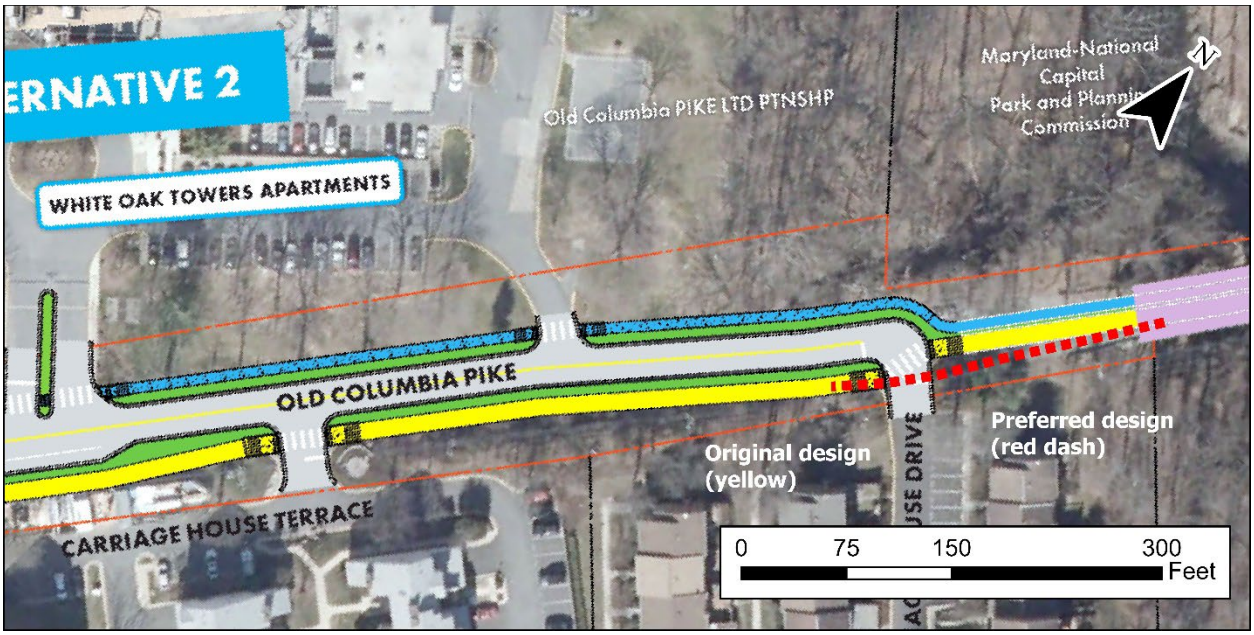

Figure 24: Sidepath realignment at Carriage House Drive

Intersection Design

Do not proceed with the intersection options as presented in the Project Prospectus for either the intersection of Old Columbia Pike/Industrial Parkway or the intersection of Old Columbia Pike/Prosperity Drive/Tech Road. While Staff is open to relocating the stop bars and extending signalized control from US 29 to include the Old Columbia Pike/Prosperity Drive intersection on either Industrial Parkway or Tech Road, or both, improving existing access and providing additional connectivity is more critical and should be prioritized.

INDUSTRIAL ROAD INTERSECTION

In general, Staff feels that this existing intersection geometry at the Old Columbia Pike and Industrial Parkway intersection is adequate, but potentially needs enhancement on the northbound Old Columbia Pike approach with the addition of a channelized right-turn lane. The addition of a porkchop island, as shown below in Figure 25, helps define this movement and prevent vehicles from using the median opening (which is provided for southbound traffic only).

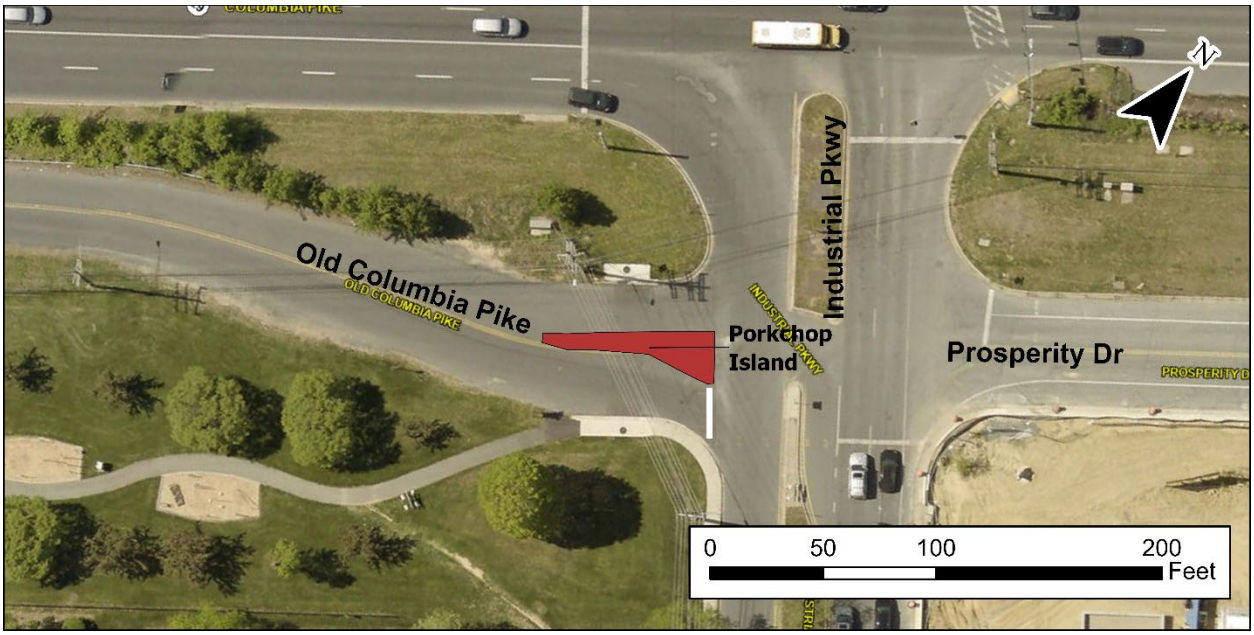

Figure 25: Pork chop island at Old Columbia Pike and Industrial Parkway

TECH ROAD INTERSECTION

Turning movement restrictions from southbound Prosperity Drive to southbound Tech Road is a connectivity deficiency that results in unwanted cut-through traffic in the Westech Corner development. The intersection of Old Columbia Pike, Prosperity Drive, and Tech Road should allow left turns onto Tech Road and through movements onto Old Columbia Pike. These intersections should be signalized to accommodate these turning movements. The provision of a northbound through movement from Old Columbia Pike to Prosperity Drive should also be considered.

Currently, the only alternative for this southbound traffic to access Tech Road and the Viva White Oak development is to cut through the rear service road of the Westech Corner retail development, turn right onto Broadbirch Drive, followed by a left turn onto Tech Road. This informal bypass route is shown in Figure 26.

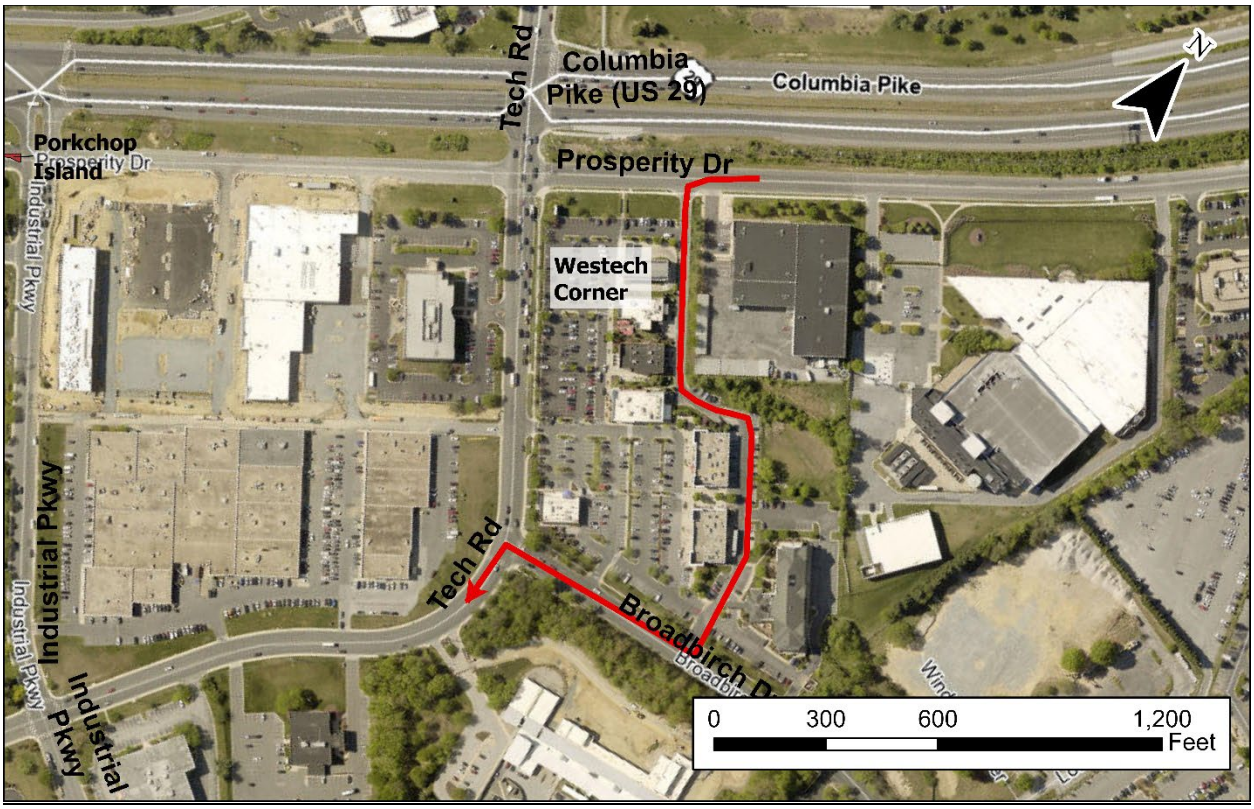

Figure 26: Existing informal bypass route for southbound Prosperity Drive

Bridge Alternatives

Creating separate space for pedestrians and bicyclists across the bridge is a necessary safety feature that must be included in any build alternative. The steep hills and grades on each side of the bridge will lead to bicyclists travelling fast across the bridge to maintain speed for the uphill portion. Keeping pedestrians separate will help to significantly reduce conflicts with bikes and vehicles. We have concerns about how bicyclists and pedestrians would be separated if the bridge is opened to vehicular traffic and the sidepath and buffer are reduced in width.

Historic Preservation

All four alternatives proposed for the Old Columbia Pike/Prosperity Drive Improvement Project will impact the two-lane bridge over Paint Branch. This three-span concrete bridge, identified as Bridge No. 15035, was constructed in 1912, and widened in 1930. In 2005, the Maryland Historical Trust evaluated this bridge. It determined it is eligible for listing on the National Register of Historic Places under criteria C, for its distinctive design and construction characteristics. Bridge No. 15035 is not designated on the Master Plan for Historic Preservation or the Locational Atlas and Index of Sites in Montgomery County.

MCDOT must consult with the Maryland Historical Trust to ensure compliance with the Maryland Historical Trust Act of 1985 and Sec. 106 of the National Historic Preservation Act of 1966. No further local historic preservation review is required.

Park Impacts

Potential Parks impacted would include Stonehedge Local Park and Paint Branch SVU4. Paint Branch SVU4 contains an area designated as a Biodiversity Area due to significant bedrock outcrops, steep slopes, and interior and high-quality forest. Stonehedge Local Park is a 4.4-acre park that has two playgrounds, exercise equipment, a basketball court, and a multiuse field.

Montgomery Parks supports improved pedestrian and cyclist transportation in this area which would increase safe access to the park system. However, any proposed right-of-way expansion would affect existing park resources and would be constrained by stream buffers, steep slopes, floodplains, and mature forest. Water quality within Paint Branch is important and any improvements would need to provide increased stormwater management to treat runoff, however, the topography and environmental constraints would make design and incorporation of these features difficult. Alternatives 3 and 4 would widen the ROW considerably within Paint Branch SVU4 and Stonehedge Local Park affecting natural resources within Paint Branch and recreational resources within Stonehedge Local Park. These proposed impacts would require significant resource mitigation and the proposed deigns may prove to be unbuildable due to the environmental constraints.

Parks in the vicinity of the project area can be seen in Figure 27.

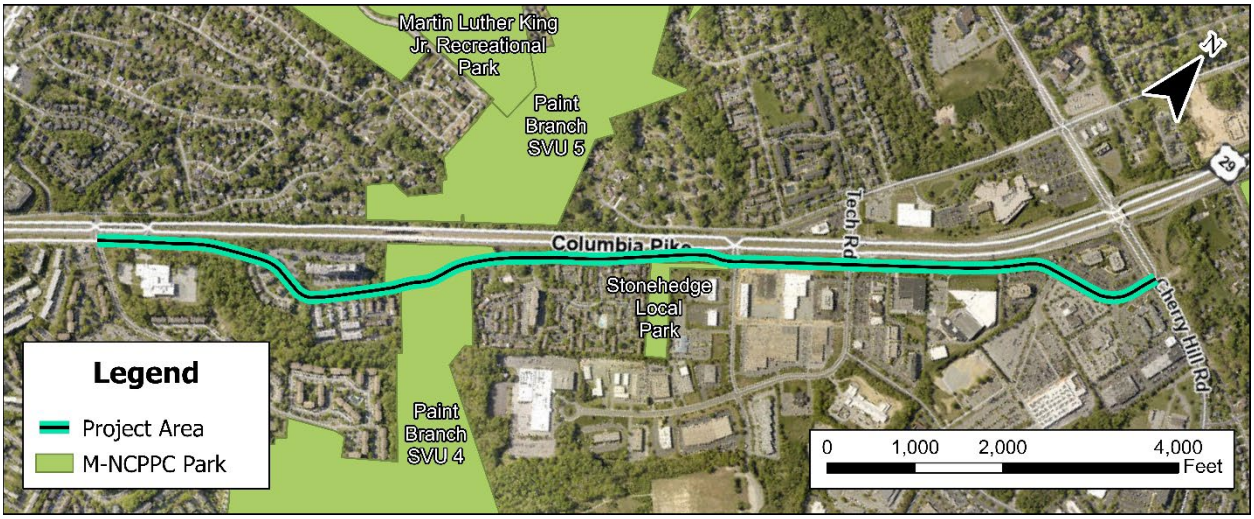

Figure 27: Parks in vicinity of project area

Coordinate with Montgomery Parks Department to:

- **Discuss avoidance and minimization of impacts through the Park Construction Permit review process.**

- **Provide access to Natural Surface Trails.**
- **Provide a pedestrian, equestrian and bicycle trail crossing both at grade and beneath the bridge.**
- **Develop an engineered trail link that would facilitate a future trail connection to the White oak Recreation Center, to be constructed by the Parks Department at a future date.**

SECTION 6 – COMMUNITY OUTREACH

For this project, MCDOT held a virtual public meeting on March 16, 2023, and a hybrid public meeting on November 14, 2023. Meeting recordings and concept alternatives can be accessed at: https://www.montgomerycountymd.gov/dot-dte/projects/OldColumbiaPike/index.html

SECTION 7 – ATTACHMENTS

Attachment A: Old Columbia Pike/Prosperity Drive Improvements: Draft Project Prospectus.

Attachment B: Analysis of Corridor Alternatives Table.