



**Draft**

**Shared Use Path Feasibility Study  
Report**

MD 450 (Annapolis Road) and MD 202 (Landover Road)

From 46<sup>th</sup> Street To Kilmer Street

Prince George's County

June 2023

Prepared By JMT  
For MDOT SHA

Office of Highway Development

## Executive Summary

This feasibility study is being performed for the MDOT SHA Office of Highway Development for consideration under the Bicycle Retrofit Program (Fund 88). The limits of study extend along MD 450 (Annapolis Road) and MD 202 (Landover Road) from 46<sup>th</sup> Street to Kilmer Street to increase connectivity between the Bladensburg Waterfront, Anacostia River Parks and the surrounding neighborhoods. Within these limits are commercial businesses, residential properties, Bladensburg Elementary School, and International High School at Langley Park. This section of MD 450 and MD 202 is defined as Context Zone C- Suburban Activity Center. Two options will be presented, Alternative 1: Segment 1 and Segment 2.

Alternative 1 will evaluate the installation of a shared use path along MD 450 Eastbound and MD 202 Southbound. The limits of Alternative 1 begin at the intersection of MD 450 and 46<sup>th</sup> Street and end at the intersection of MD 202 and Kilmer Street. The study area has been split into two segments:

- Alternative 1 Segment 1: MD 450 from 46<sup>th</sup> Street to the MD 202 intersection
- Alternative 1 Segment 2: MD 202 from the MD 450 intersection to Kilmer Street

Due to the limited space within the corridor, both segments require impacts to the existing roadway footprint. Segment 1 introduces a lane width reduction from the existing 14-foot lane width to a 12-foot lane width, providing extra width to install a shared use path with a minimum width of 8 feet. Segment 2 utilizes a lane reduction, reducing the existing 3 lane typical section in the Southbound direction to a 2-lane typical section to create the necessary width for a shared use path. The shared use path within Segment 2 is along SB MD 202 from MD 450 to 58<sup>TH</sup> Place and the shifts to NB MD 202 from 58<sup>th</sup> Place to Kilmer Street.

Notable risks include retaining wall construction adjacent to commercial property lines, local utility pole impacts, potential right of way impacts to both commercial and residential properties, and potential underground utility impacts.

An alternative was considered to provide a shared use path along MD 450 Westbound and MD 202 without a lane reduction, however this alternative was dismissed because of significant utility pole, right of way, and existing retaining wall impacts that would deem the project unfeasible.

## Background

The project study area is along MD 450 (Annapolis Road) and MD 202 (Landover Road) from 46<sup>th</sup> Street to Kilmer Street. The length of the study is approximately 2.13 miles (11,200 feet). This Feasibility Study was requested by MDOT SHA Office of Highway Development to improve bicyclist safety, enhance network connectivity, and serve future demand.

## Purpose and Need

The purpose of the proposed shared use path is to provide and enhance pedestrian and bicyclist connectivity along MD 450 and MD 202 from Bladensburg Waterfront Park to the Cheverly neighborhood and the shopping center at Kilmer Street. Improving connectivity within the study limits would improve pedestrian and bicyclist safety. The addition of a new shared use path would provide pedestrians and bicyclists a well-defined and safe route to utilize.

The intent of this study is to provide a bicyclist accommodation solution that meets the Fund 88 MDOT Programmatic Purpose and Need (August 2018) for the least cost. The Programmatic Purpose and Need requires that projects be prioritized based on the criteria that incorporates corridor information related to demand, connectivity and safety.

### Level of Service and Demand

The performance criteria for Fund 88 is determined based on the Level of Service (LOS) of the on-road and off-road bicycle facilities. The FHWA considers “C” to be the minimum acceptable LOS.

The existing bicycle LOS within the study area can only be calculated in Segment 1 along MD 450, since there is a 14-foot outside lane with shared lane markings (“sharrows”) and Segment 2 does not have existing bicycle facilities. For this study the Ride Illinois Pedestrian Level of Service Calculator, developed by the League of Illinois Bicyclists, was used to determine the BLOS. Below is the input data and resultant BLOS for Segment 1:

## MD 450 at Bladensburg Elementary School

### BLOS and PLOS for the following road segment

Lanes per direction:	2
Outside lane width:	14 ft
Paved shoulder/bike lane/ marked parking width:	0 ft
Bidirectional ADT traffic volume:	32992 (veh/day)
Posted speed limit:	30 mph
Heavy vehicle percentage:	2%
FHWA's pavement condition rating:	4
% of segment with occupied parking:	0%
% of segment with sidewalks:	100%
Sidewalk width:	5 ft
Sidewalk buffer/parkway width:	2 ft

	Score	Level-of-service	Compatibility Level
BLOS:	3.92	D (3.51-4.50)	Moderately Low
PLOS:	3.83	D (3.51-4.50)	Moderately Low

The existing BLOS of "D" is not acceptable and is improved upon in this study.

The proposed shared use path is an off-road facility. Therefore, the Shared-Use Path Level of Service Calculator, developed by FHWA, was utilized. This calculator takes the volume of users, types of users, and path width into consideration to determine both the user perception and shared use path LOS. Based on the Shared-Use Path Level of Service Calculator, the following LOS values were determined at two locations along the study corridor:

### MD 450 at Edmonston Road

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split						
			Closest 0.5 ft.	0-No Centerline	Volume	Mode Split (%)*			
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes
MD 450 at Edmonston	10.0	0	18.0	30.0%	60.0%	5.0%	0.0%	5.0%	100.0%

User Perception		Delayed Passings Adjustment				Post-LOS Score	Trail Level of Service	
Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Post-LOS Score	LOS Score	LOS Grade
3.80	B	28.84%	9.19	0.08	0.08	3.73	3.73	B

### MD 202 at 56<sup>th</sup> Avenue

Segment Name	Path Width	Centerline	Volume (users per hour in 1 direction) and Mode Split						
			Closest 0.5 ft.	0-No Centerline	Volume	Mode Split (%)*			
Name	Width (ft)	1=Centerline	One-Way (per hour)	Adult Bicyclists	Pedestrians	Runners	In-Line Skaters	Child Bicyclists	All Modes
MD 202 at 56th Ave	10.0	0	14.0	30.0%	60.0%	5.0%	0.0%	5.0%	100.0%

User Perception		Delayed Passings Adjustment				Partial LOS Score	Trail Level of Service	
		<i>Adj. Factor (subtract from User Percep. score)</i>						
Score	Grade	Percent	# Per Hr	Pre Adj Fac	Fin Adj Fac	Partial LOS Score	LOS Score	LOS Grade
3.82	B	23.29%	5.77	0.05	0.05	3.77	3.77	B

The input volumes are the highest hour volumes from the ITMS traffic counts (see Appendix C), and the Mode Split was determined by the future anticipated use of the facility.

Future demand for bicycle ridership cannot be accurately measured since there are no high-quality bicycle facilities present today in the study area. As a result, potential users shift to other travel modes. Based on the Short-Trip Opportunity Area model within the Statewide Bicycle Master Plan, the study area is identified as a Very High Opportunity area. This signifies an increase in future volumes, and based on the LOS calculator, the following are the volume limits for the range of LOS scores:

LOS A – 0 to 11 users per hour

LOS B – 12 to 34 users per hour

LOS C – 35 to 63 users per hour

LOS D – 64 to 89 users per hour

LOS E – 90 to 114 users per hour

LOS F – Over 114 users per hour

One element not taken into consideration in the LOS calculator is the buffer and landscaping between the curb and the shared use path. In the proposed study design, a buffer was provided in all possible locations, with the largest buffer being 8-foot wide. Any buffer with a minimum width of 5 feet would provide space for trees. These aspects of the proposed study provide additional comfort for future pedestrians and bicyclists.

### Connectivity

One of the primary purposes of Fund 88 is to provide connections between completed segments of the bicycle network. The MD 450 and MD 202 corridor being examined in this study would connect the Cheverly neighborhood with Bladensburg Waterfront Park to the west and Kilmer Street to the east. Within the park is a section of the Anacostia River Trail, which extends from the confluence Anacostia River and the Potomac River to the south and continues north beyond the divergence of the Anacostia River to the Northeast and Northwest branches. The connection to Kilmer Street provides the neighborhood with bicycle access to the shopping center containing a Walgreens, CVS, Aldi, among other shopping destinations.

## Safety

Since 2020, there have been 11 accidents along the study corridor. Pedestrians accounted for 10 crashes, and bicyclists accounted for 1. Of the crashes, 9 involved injuries while 2 involved property damage. Providing an off-road shared use path with a buffer will ensure a safer route for pedestrians and bicyclists.

## Existing Conditions

The following information was gathered through a site visit on January 5, 2023, and desktop research. The project study area is located along MD 450 and MD 202, both classified as Principal Arterial Other, between 46<sup>th</sup> Street and Kilmer Street. The study area is within a Priority Funding Area (PFA). MD 450 has a posted speed of 30 mph, and the posted speed increases to 35 mph east of the MD 450 intersection with MD 202. The study area is located on the National Highway System (NHS).

Pedestrian and bicycle counts were taken at the following locations:

2018 Counts:

- MD 450 at 47<sup>th</sup> Street

2019 Counts:

- MD 450 at MD 202
- MD 202 at 56<sup>th</sup> Avenue

2022 Counts:

- MD 450 at Edmonston Road

This information was taken from the Internet Traffic Monitoring System (I-TMS), where pedestrian and bike counts were broken down into total counts, counts during the AM vehicle peak, and counts during the PM vehicle peak. These counts are provided in [Appendix C](#).

Two existing typical sections are present along the study corridor. The first typical section runs along MD 450 from the western study limit at 46<sup>th</sup> Street to the intersection of MD 450 and MD 202, and the second continues from the intersection to the eastern study limit at Kilmer Street.

MD 450 consists of two through lanes in both the eastbound and westbound directions and a center left turn lane. The interior lanes are 12 feet wide, and the outside lanes are 14 feet wide with shared use lane markings. There are no shoulders or parking lanes along this segment and transit vehicles use the outside lanes to load/unload passengers. The roadway utilizes a closed drainage system with curb and gutter running along the entire segment. There is existing sidewalk on both sides of the roadway. The majority of existing sidewalk is flush with the back of existing curb, however there are sections of sidewalk along this segment that include a grass strip buffer. The properties along this segment are mostly commercial, including the Bladensburg Elementary School.

MD 202 consists of three 12-foot through lanes in both the southbound and northbound directions, divided by a varying width (4' minimum) concrete and brick raised median. There are no shoulders or parking lanes along this segment and transit vehicles use the outside lanes to load/unload passengers. The roadway utilizes a closed drainage system with curb and gutter running along the entire segment. There is existing sidewalk on both sides of the roadway, with the exception of northbound MD 202 from the Baltimore Washington Parkway ramps to just west of Neighbor Lane. The majority of existing sidewalk is flush with the back of existing curb, however there are sections of sidewalk along this segment that include a grass strip buffer. Retaining walls exist along the northbound side of the roadway abutting both commercial and residential properties. The properties along this segment are a combination of residential and commercial properties.

There are several locations within the study area where the existing sidewalk is significantly damaged.

The combination of commercial and residential properties throughout the study area results in multiple pedestrian traffic generators within a half-mile radius of the study limits. Within this radius, there are:

- Bladensburg Waterfront Park
- Bladensburg Shopping Center
- Bladensburg Elementary School
- International High School at Langley Park
- Varnum Park
- Bladensburg High School
- Cheverly Nature Park
- Gladys Noon Spellman Elementary School
- Kilmer Park and Arboretum
- Kilmer Street Shopping Center

There are 13 bus stops located in the study area along MD 450 Eastbound and MD 202 Southbound. Additionally, there is one marked midblock crossing at MD 202 and 55<sup>th</sup> Avenue. This midblock crossing is not signalized.

There are multiple safety devices within the study limits. The breakdown of Countdown Pedestrian Signals (CPS), Accessible Pedestrian Signals (APS), and Crosswalk Markings at each intersection is shown below:

Existing Safety Devices				
Intersection (with MD 450)	Legs With CPS	Legs With APS	Legs With Crosswalk Markings	Total Legs in Intersection
48 <sup>th</sup> Street	4	4	4	4
Edmonston Road	3	3	3	3
Bladensburg Elementary School	3	3	3	4
MD 202	2	2	2	3
<b>Total</b>	<b>12</b>	<b>12</b>	<b>12</b>	<b>14</b>

Existing Safety Devices				
Intersection (with MD 202)	Legs With CPS	Legs With APS	Legs With Crosswalk Markings	Total Legs in Intersection
57 <sup>th</sup> Avenue	4	4	4	4
Baltimore Washington Parkway Ramps (West side of bridge)	1	1	1	3
Baltimore Washington Parkway Ramps (East side of bridge)	1	1	1	3
Cheverly Avenue	1	0	1	3
Neighbor Lane	4	4	4	4
Kilmer Street	4	4	4	4
<b>Total</b>	<b>15</b>	<b>15</b>	<b>15</b>	<b>21</b>

## Environmental Compliance and Permitting

There are no anticipated environmental impacts within the study area needing permitting. Additional investigation in future design will be needed to confirm this.

## Wetlands and Waterways

The Anacostia River runs North to South to the west of the study area. It is classified as a R2UBH Riverine per the National Wetlands Inventory. A portion of the proposed shared use path at the western study limit falls within the 1% Annual Chance Flood Hazard area and 0.2% Annual Chance Flood Hazard area based on FEMA Flood Insurance Rate Map number 24033C0129E. Additional analysis will be required to determine impacts to the floodplain and required permitting.

## Stormwater Management and Drainage

MD 450 and MD 202 are curbed, and closed drainage roadways for the entire project limits. Closed drainage is provided on the outer edge of pavement via COG and COS inlets. Segment 2 has a raised median. There is no drainage within the median, with the roadway sloped towards the outside edge.

The proposed study alternative impacts the existing drainage system and existing pavement. Segment 1 proposes an outside lane width reduction from 14 feet to 12 feet along MD 450 Eastbound. Moving the curb and gutter results in the need for 15 new inlets in this segment, along with the necessary pipes to connect back to the main system. Segment 2 proposes a full lane reduction from three 12-foot lanes to two 12-foot lanes along MD 202 Southbound. As in Segment 1, the shift of the curb results in the need for 15 new inlets with necessary piping in Segment 2.

The proposed alternative assumes no changes to existing drainage patterns, nor changes to drainage at all points of interest.

Two stormwater facilities were identified in the vicinity of the proposed improvements. The first facility is an open channel system owned by CSX and runs along the CSX railroad just south of MD 450 between 46<sup>th</sup> and 47<sup>th</sup> Streets (SWMFAC #160617). The second is a filtering system also owned by CSX and continues South of the first (SWMFAC #160618).

There are limited areas to provide storm water management (SWM) within project limits. The project will explore all available options to provide stormwater quantity management [ESD<sub>v</sub>, Q<sub>p10</sub>/Q<sub>p100</sub>, etc.] at each point of investigation (Poi) / line of investigation (Loi). After all options within the project limit are exhausted and environmental site design (ESD) to maximum extent practicable (MEP) has been implemented, variances/waivers will be requested for Poi/Loi where quantity requirements are not met. The project will also explore options within the project limit

to provide water quality treatment. Any remaining water quality treatment that cannot be achieved within the project limit will be satisfied offsite as compensatory treatment.

Option	New Pavement	Redevelopment	Pavement Removal	Impervious Area Requiring Treatment
Alternative1, Segment 1	13,600 SF	24,000 SF	6,200 SF	22,500 SF; 0.52AC
Alternative 1, Segment 2	450 SF	71,000 SF	33,000 SF	19,450 SF; 0.45AC

Note that the above values were determined using GIS data and aerial imagery.

## Utilities

Utility poles are present throughout the entire study area. They are located along MD 450 Westbound in Segment 1 and move to the opposite side of the roadway and follow MD 202 Eastbound in Segment 2. Most of the poles appear to be within MDOT SHA Right of Way and are located within 10 feet of the back of curb. During the field visit, multiple sewer manholes, hand boxes, water, sewer lines, overhead electric, fiber lines, and other utilities were identified within the study area. A utility designation quality level B will be necessary to locate any underground utilities.

In Segment 1 just west of the MD 450 and MD 202 intersection, there are 6 smaller utility poles that will potentially be impacted.

## Right of Way

Based on preliminary Right of Way (ROW) information, the existing MDOT SHA ROW varies in width as follows.

Location	ROW Width (FT)
MD 450 from 46 <sup>th</sup> Street to MD 202	Approx. 75-90
MD 202 from MD 450 to Baltimore Washington Parkway	Approx. 80-95
MD 202 from Baltimore Washington Parkway to Kilmer Street	Approx. 120-200

Locations where the proposed design extends beyond the existing back of sidewalk, and potentially impacts right of way are as follows:

1. MD 450 EB at Bladensburg Elementary School
2. MD 450 EB between Bladensburg Elementary School Entrance and 52<sup>nd</sup> Street
3. MD 450 EB between 53<sup>rd</sup> Street and 53<sup>rd</sup> Place

Further investigation will need to occur in preliminary engineering to determine all right of way impacts.

## Proposed Designs

### Alternative 1 Segment 1:

The proposed design replaces all existing sidewalk along MD 450 Eastbound and MD 202 Southbound with a shared use path by reducing the outside travel lane by 2 feet, going from 14 feet to 12 feet. Due to commercial properties adjacent to MD 450, the lane width reduction allows for a minimum 8-foot width shared use path, and 10-foot shared use path in less restricted areas. The shared use path is proposed to be 8 feet wide between 47<sup>th</sup> Street and 48<sup>th</sup> Street, and east of 53<sup>rd</sup> Place. As noted in the stormwater management section, new inlets will be required along the proposed curb and gutter and will connect to the main drainage system. Additionally, all existing driveway connections and bus stops will be replaced. Retaining walls are proposed due to commercial parking lots and steep slopes adjacent to the shared use path. There are existing steps leading to residential properties that will be impacted and need to be replaced/relocated in the segment of MD 450 between 52<sup>nd</sup> Street and 53<sup>rd</sup> Street.

A majority of the shared use path in Segment 1 is adjacent to the proposed back of curb. However, where there is available space, a buffer of up to 8 feet is provided to allow for tree planting and additional bicyclist and pedestrian comfort.

Maintenance of traffic for Segment 1 will involve at a minimum an outside lane closure during construction.

The estimate for Alternative 1 Segment 1 is estimated to cost \$3.4M. As this project resides in a priority funding area, this project is subject to a 75/25 construction cost sharing between MDOT SHA and Prince George's County respectively.

### Alternative 1 Segment 2:

Segment 2 utilizes a lane reduction from 3 lanes to 2 lanes along MD 202 SB in order to provide a 10-foot shared use path with a grass buffer varying from 4 feet to 8 feet wide throughout the entire segment. As in Segment 1, the lane reduction results in a need for new inlets to replace impacted existing inlets, as well as the replacement of all driveway connections and bus stops. There are no proposed retaining walls or utility pole impacts anticipated in Segment 2.

Maintenance of traffic for Segment 2 will involve the permanent closure of the outside lane, along with reduced lane widths of the remaining two lanes. The existing middle lane will need to be closed as necessary to complete construction.

The estimate for Alternative 1 Segment 2 is estimated to cost \$4.1M. As this project resides in a priority funding area, this project is subject to a 75/25 construction cost sharing between MDOT SHA and Prince George's County respectively.

## Conclusions and Recommendations

### Benefits:

- Improves bicyclist and pedestrian safety by moving bicyclists off the roadway and providing buffer between existing curb and shared use path.
- Provides bicycle facilities where there are none today.
- Increases connectivity between the Anacostia River Trail, commercial destinations, and the surrounding neighborhoods.
- Most of the proposed shared use path will be within existing ROW.
- Minimal utility relocation is anticipated.
- Lane width reduction and lane reduction "road diet" will calm existing traffic, increasing safety.

### Concerns:

- There is minimal opportunity to provide SWM Management within the study area to compensate for additional and redeveloped impervious surface.
- Proposed retaining walls are required to avoid significant right-of-way impacts.
- Impacts to existing utilities including impacts to existing utility poles and potential utility impacts in the area where the existing storm drain system will need to be replaced.

### Recommendation:

There is a need for shared use path connectivity between the Cheverly neighborhood and the surrounding destinations. The lack of adequate existing facilities creates safety concerns and forces potential bicyclists to use an alternative mode of transportation. The proposed alternative is recommended as it creates a safe bicycle and pedestrian environment with minimal impacts on the surrounding community, while providing an enhanced off-road experience.

## Appendices

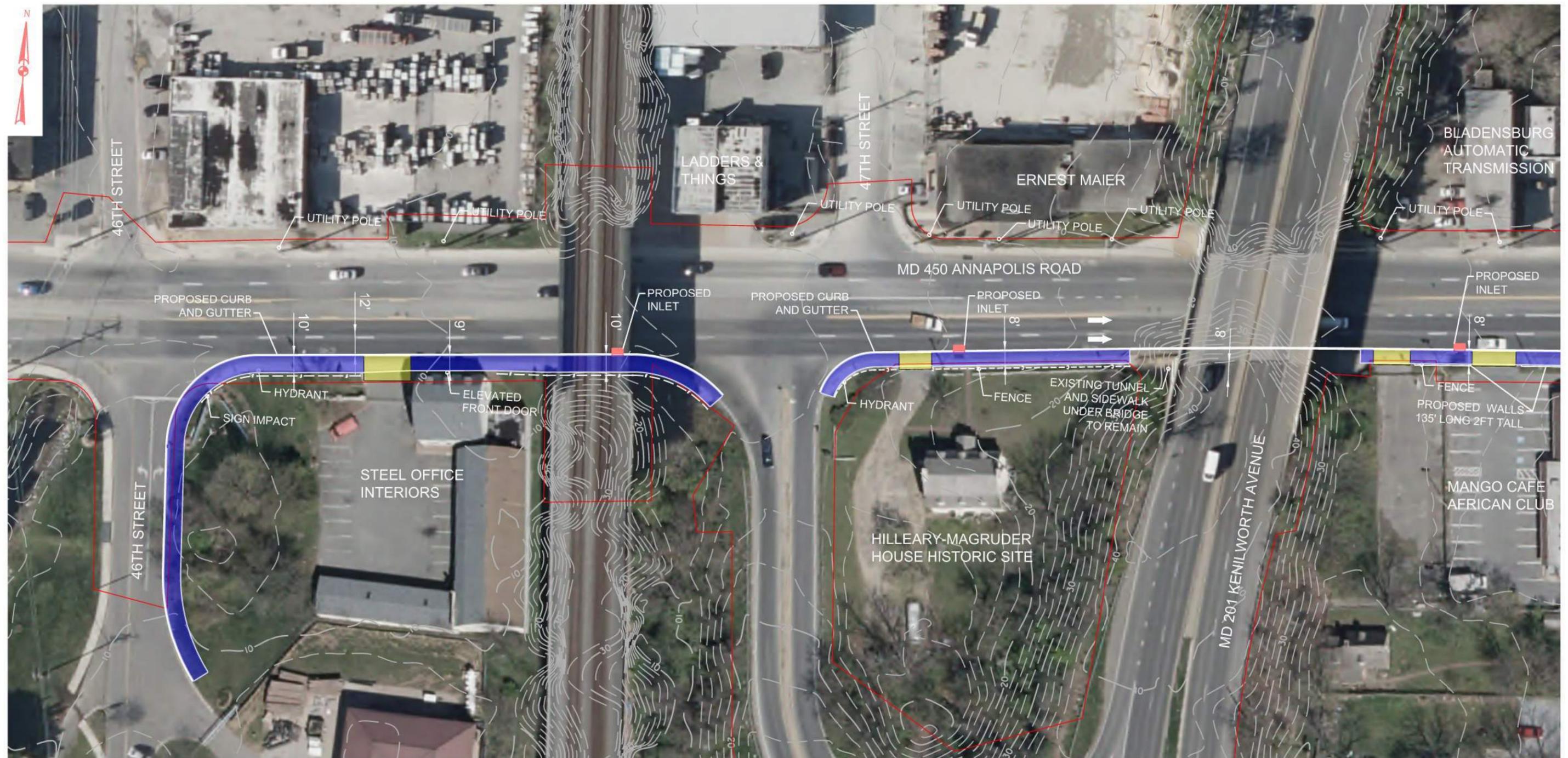
Appendix A: Proposed Sidewalk Alternative 1: Segment 1 & Segment 2 (13 Plan Sheets)

Appendix B: Cost Estimates

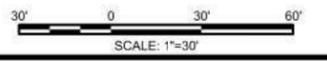
Appendix C: Pedestrian Counts

Appendix D: Photos of Existing Conditions

Appendix A: Proposed Sidewalk Alternative 1 Segment 1



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



HIGHWAY DESIGN DIVISION



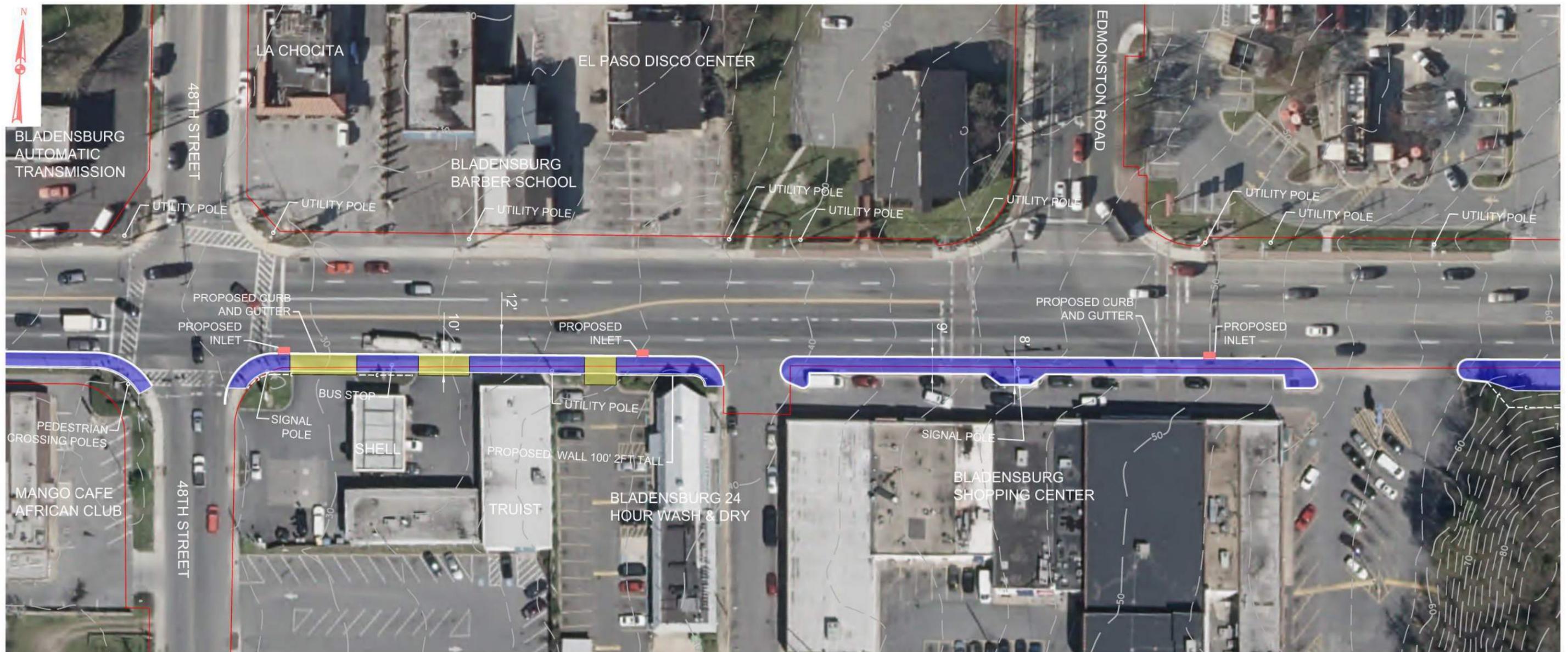
MD 450 / MD 202  
SHARED USE PATH  
FEASIBILITY STUDY

STATE HIGHWAY  
ADMINISTRATION

SCALE _____ ADVERTISED DATE _____ CONTRACT NO. <u>BGS 2015-05J</u>	
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>
DRAWN BY _____	LOGMILE _____
CHECKED BY _____	HORIZONTAL SCALE _____
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____
DRAWING NO. _____	OF _____ SHEET NO. <u>1</u> OF <u>13</u>



Appendix A: Proposed Sidewalk Alternative 1 Segment 1



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY

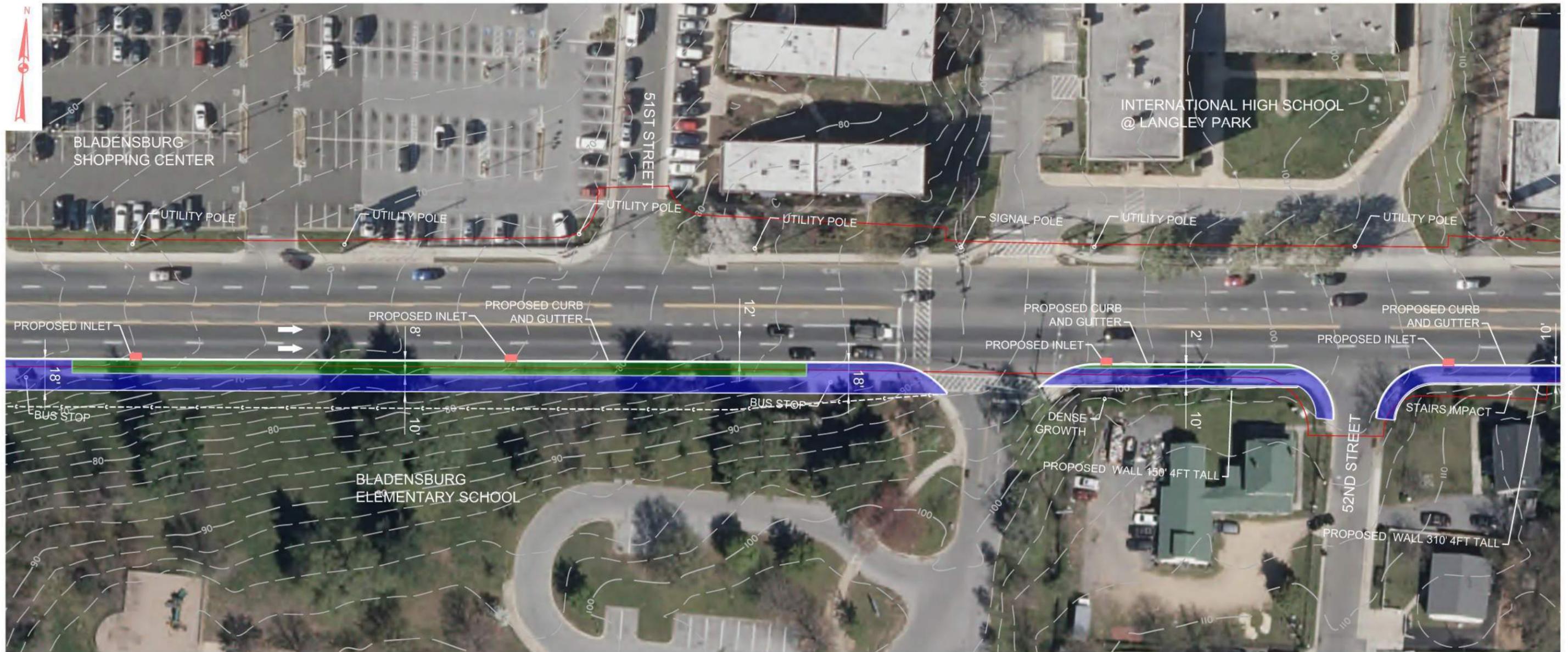


<b>MDOT</b> MARYLAND DEPARTMENT OF TRANSPORTATION		HIGHWAY DESIGN DIVISION	
STATE HIGHWAY ADMINISTRATION		MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY	
SCALE _____ ADVERTISED DATE _____		CONTRACT NO. BCS 2015-05J	
DESIGNED BY _____	COUNTY PRINCE GEORGE'S		
DRAWN BY _____	LOGMILE _____		
CHECKED BY _____	HORIZONTAL SCALE _____		
MDE/PRD <00-AA-0000>	VERTICAL SCALE _____		
DRAWING NO. _____	OF _____	SHEET NO. 2	OF 13



BY: max

Appendix A: Proposed Sidewalk Alternative 1 Segment 1



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



 <b>MARYLAND DEPARTMENT OF TRANSPORTATION</b> STATE HIGHWAY ADMINISTRATION		HIGHWAY DESIGN DIVISION  MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY
SCALE: _____ ADVERTISED DATE: _____ CONTRACT NO.: BCS 2015-05J		
DESIGNED BY: _____ COUNTY: PRINCE GEORGE'S		
DRAWN BY: _____ LOGMILE: _____		
CHECKED BY: _____ HORIZONTAL SCALE: _____		
MDE/PRD: <00-AA-0000> VERTICAL SCALE: _____		
DRAWING NO. _____ OF _____ SHEET NO. 3 OF 13		



BY: max

Appendix A: Proposed Sidewalk Alternative 1 Segment 1



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



 MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION		HIGHWAY DESIGN DIVISION  MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY
SCALE _____ ADVERTISED DATE _____ CONTRACT NO. <u>BCS 2015-05J</u>		
DESIGNED BY _____ COUNTY <u>PRINCE GEORGE'S</u>	DRAWN BY _____ LOGMILE _____	
CHECKED BY _____ HORIZONTAL SCALE _____	MDE/PRD <u>&lt;00-AA-0000&gt;</u> VERTICAL SCALE _____	
DRAWING NO. _____ OF _____	SHEET NO. <u>4</u> OF <u>13</u>	



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Appendix A: Proposed Sidewalk Alternative 1 Segment 1



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



		HIGHWAY DESIGN DIVISION MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY
SCALE _____ ADVERTISED DATE _____ CONTRACT NO. <u>BCS 2015-05J</u>		
DESIGNED BY _____ COUNTY <u>PRINCE GEORGE'S</u>	DRAWN BY _____ LOGMILE _____	
CHECKED BY _____ HORIZONTAL SCALE _____	MDE/PRD <u>&lt;00-AA-0000&gt;</u> VERTICAL SCALE _____	
DRAWING NO. _____ OF _____ SHEET NO. <u>5</u> OF <u>13</u>		



BY: max

Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



 MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION		HIGHWAY DESIGN DIVISION  MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY
SCALE _____ ADVERTISED DATE _____ CONTRACT NO. <u>BCS 2015-05J</u>		
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>	
DRAWN BY _____	LOGMILE _____	
CHECKED BY _____	HORIZONTAL SCALE _____	
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____	
DRAWING NO. _____	OF _____	SHEET NO. <u>6</u> OF <u>13</u>



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Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



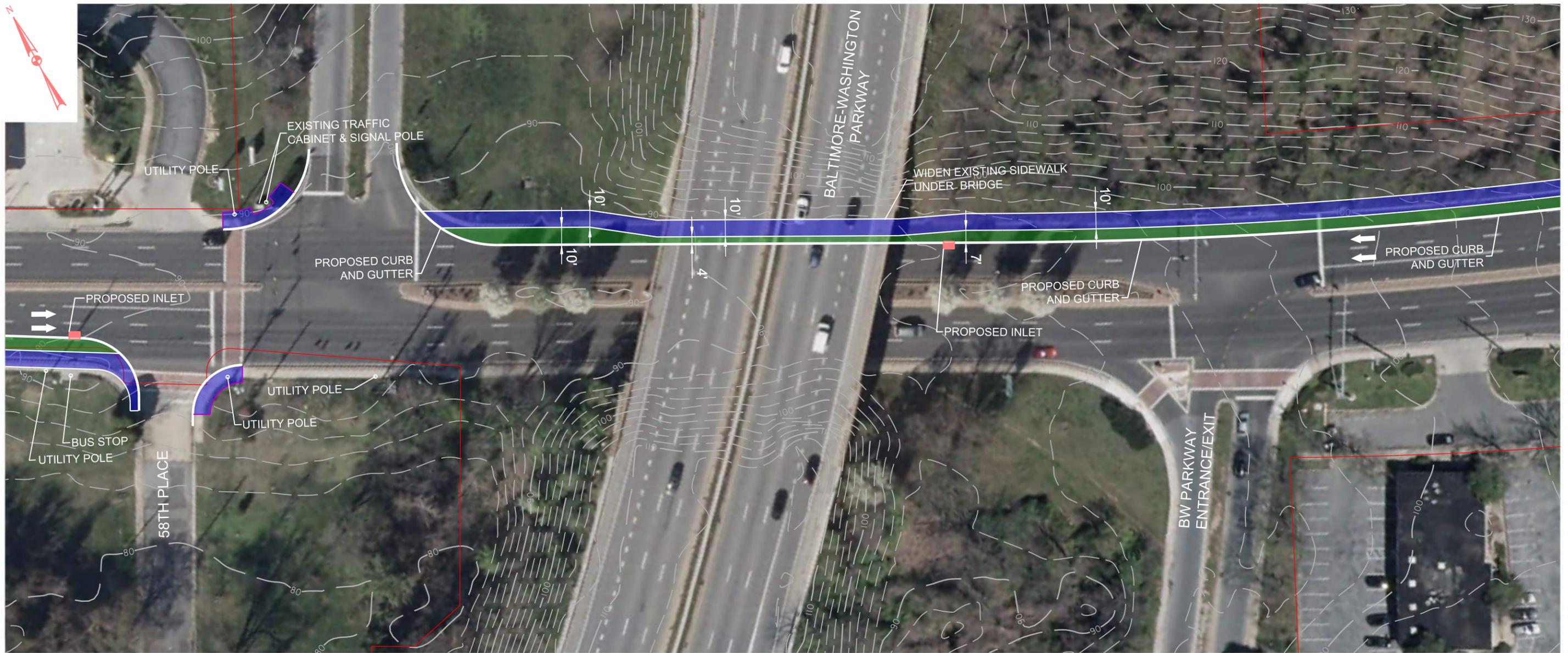
 MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION		HIGHWAY DESIGN DIVISION  MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY
SCALE _____ ADVERTISED DATE _____ CONTRACT NO. <u>BCS 2015-05J</u>		
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>	
DRAWN BY _____	LOGMILE _____	
CHECKED BY _____	HORIZONTAL SCALE _____	
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____	
DRAWING NO. _____	OF _____	SHEET NO. <u>7</u> OF <u>13</u>



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Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



 <b>MARYLAND DEPARTMENT OF TRANSPORTATION</b> STATE HIGHWAY ADMINISTRATION		HIGHWAY DESIGN DIVISION  MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY
SCALE _____	ADVERTISED DATE _____	CONTRACT NO. <u>BCS 2015-05J</u>
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>	
DRAWN BY _____	LOGMILE _____	
CHECKED BY _____	HORIZONTAL SCALE _____	
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____	
DRAWING NO. _____	OF _____	SHEET NO. <u>8</u> OF <u>13</u>



BY: Anmashaun

Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



 <b>MARYLAND DEPARTMENT OF TRANSPORTATION</b> STATE HIGHWAY ADMINISTRATION	HIGHWAY DESIGN DIVISION
	MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY

SCALE _____	ADVERTISED DATE _____	CONTRACT NO. <u>BCS 2015-05J</u>
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>	
DRAWN BY _____	LOGMILE _____	
CHECKED BY _____	HORIZONTAL SCALE _____	
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____	
DRAWING NO. _____	OF _____	SHEET NO. <u>9</u> OF <u>13</u>

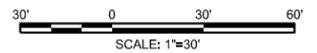
www.jmt.com  
40 Wight Avenue  
Hunt Valley, MD 21030  
410-329-3100

BY: Anmashaun

Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



HIGHWAY DESIGN DIVISION

MD 450 / MD 202  
SHARED USE PATH  
FEASIBILITY STUDY

SCALE \_\_\_\_\_ ADVERTISED DATE \_\_\_\_\_ CONTRACT NO. BCS 2015-05J

DESIGNED BY \_\_\_\_\_ COUNTY PRINCE GEORGE'S  
 DRAWN BY \_\_\_\_\_ LOGMILE \_\_\_\_\_  
 CHECKED BY \_\_\_\_\_ HORIZONTAL SCALE \_\_\_\_\_  
 MDE/PRD <00-AA-0000> VERTICAL SCALE \_\_\_\_\_

DRAWING NO. \_\_\_\_\_ OF \_\_\_\_\_ SHEET NO. 10 OF 13

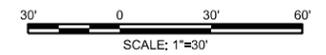


BY: Anmashaun

Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY

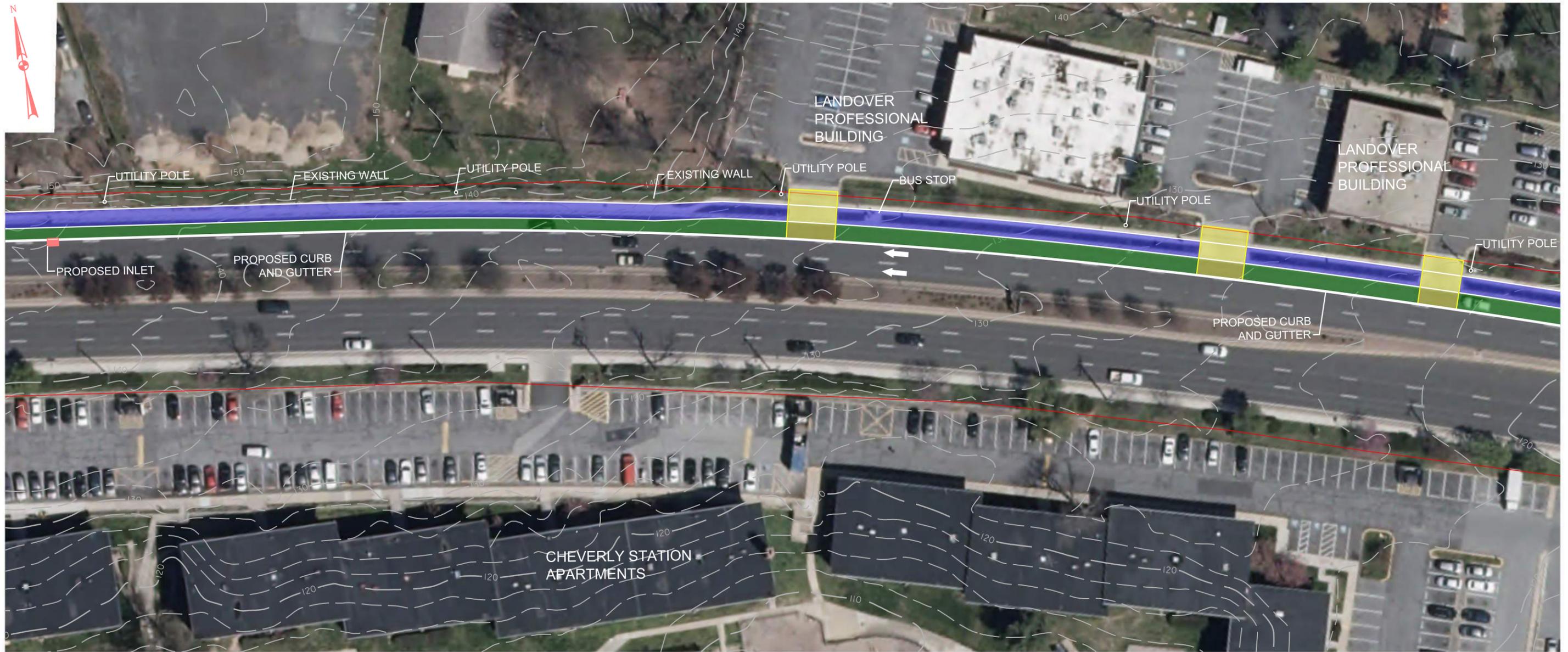


	HIGHWAY DESIGN DIVISION
	MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY

SCALE _____	ADVERTISED DATE _____	CONTRACT NO. <u>BCS 2015-05J</u>
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>	
DRAWN BY _____	LOGMILE _____	
CHECKED BY _____	HORIZONTAL SCALE _____	
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____	
DRAWING NO. _____	OF _____	SHEET NO. <u>11</u> OF <u>13</u>

BY: Anmashaun -

Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



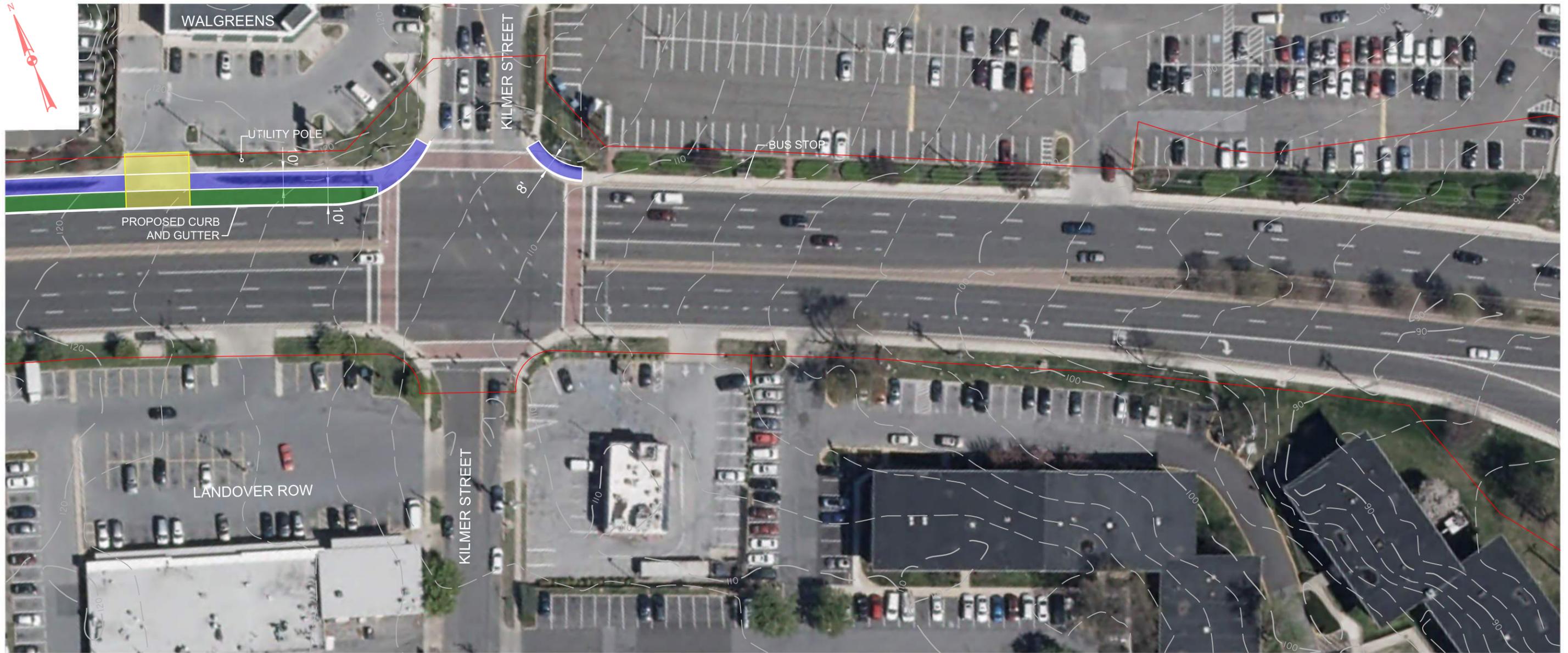
 MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION	HIGHWAY DESIGN DIVISION
	MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY

SCALE _____	ADVERTISED DATE _____	CONTRACT NO. <u>BCS 2015-05J</u>
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>	
DRAWN BY _____	LOGMILE _____	
CHECKED BY _____	HORIZONTAL SCALE _____	
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____	
DRAWING NO. _____	OF _____	SHEET NO. <u>12</u> OF <u>13</u>

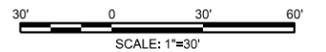


BY: Anmashaun

Appendix A: Proposed Sidewalk Alternative 1 Segment 2



- PROPOSED BUFFER
- PROPOSED SIDEWALK
- PROPOSED DRIVEWAY
- EXISTING RIGHT OF WAY



		HIGHWAY DESIGN DIVISION  MD 450 / MD 202 SHARED USE PATH FEASIBILITY STUDY
SCALE _____ ADVERTISED DATE _____ CONTRACT NO. <u>BCS 2015-05J</u>		
DESIGNED BY _____	COUNTY <u>PRINCE GEORGE'S</u>	
DRAWN BY _____	LOGMILE _____	
CHECKED BY _____	HORIZONTAL SCALE _____	
MDE/PRD <u>&lt;00-AA-0000&gt;</u>	VERTICAL SCALE _____	
DRAWING NO. _____	OF _____	SHEET NO. <u>13</u> OF <u>13</u>

BY: Anmashaun

**MAJOR COST ESTIMATE: MD 450 / MD 202 from 46th Street to Kilmer Street**

DATE: 6/21/2023  
 JOB DESCRP: MD 450/MD 202 from 46th Street to Kilmer Street  
 ALTERNATE 1 SEGMENT 1: MD 450 FROM 46TH STREET TO MD 202  
 IMPROV TYPE: SHARED USE PATH CONSTRUCTION  
 TYPICAL SEC: 5-Lane Undivided with Center Left Turn Lane  
 PREPARED BY: JMT

PROJECT #: BCS 2015-05J  
 COUNTY: PRINCE GEORGE'S  
 PRJ LENGTH: 2.13 Miles  
 DIVISION: MDOT SHA- OFFICE OF HIGHWAY DEVELOPMENT

1	<b>PRELIMINARY</b>		[CAT 1]				<b>415,000.00</b>
	TYPE B ENGINEERS OFFICE	1	LS	20,000.00		20,000.00	
	MAINTENANCE OF TRAFFIC	1	LS	145,000.00		145,000.00	8% of Cat. 2-8
	CONSTRUCTION STAKEOUT	1	LS	45,000.00		45,000.00	2% of Cat. 1-8
	MOBILIZATION	1	LS	200,000.00		200,000.00	10% of Cat. 1-8
	CLEARING AND GRUBBING	1.0	AC	5,000.00		5,000.00	
2	<b>GRADING</b>						<b>66,900.00</b>
	Removal of Existing Pavement	240	CY	60.00		14,400.00	
	Class I Excavation	1,500	CY	35.00		52,500.00	
3	<b>DRAINAGE</b>						<b>225,000.00</b>
	Inlets	15	EA	5000		75000	
4	<b>STRUCTURES</b>						<b>298,000.00</b>
	Retaining Walls	2980	SF	100		298000	
5	<b>PAVING</b>						<b>137,572.08</b>
	HOT MIX ASPHALT SUPERPAVE 12.5MM FOR SURFACE	56	TON	85.00		4,738.75	
	8 INCH PCC FOR COMPOSITE PAVEMENT	496	SY	150.00		74,333.33	
	8 INCH PCC FOR DERIVEWAY	390	SY	150.00		58,500.00	
6	<b>SHOULDER</b>						<b>498,500.00</b>
	Concrete Curb and Gutter	4,500	LF	35.00		157,500.00	
	5" Concrete Sidewalk	34,100	SF	10.00		341,000.00	
7	<b>LANDSCAPING</b>						<b>125,900.00</b>
	Furnish and Install Topsoil	700	SY	5.00		3,500	
	Turfgrass Establishment	700	SY	2.00		1,400	
8	<b>TRAFFIC</b>						<b>455,000.00</b>
	Remove and Relocate Utility Poles	6	EA.	50000		300,000	
	<b>SUBTOTAL OF CATEGORIES 2,4, 5,6</b>						<b>1,000,972.08</b>
	<b>SUBTOTAL ROADWAY COST</b>						<b>2,221,872.08</b>
	CONTINGENCY [ % ]				40%		<b>888,748.83</b>
	<b>SUBTOTAL- NEAT CONSTRUCTION</b>						<b>\$3,111,000.00</b>
	<b>OVERHEAD AND ADMIN</b>				14.4%		<b>\$447,984.00</b>
	<b>TOTAL PROJECT COST</b>						<b>\$3,558,984.00</b>
	<b>SHA SHARE- PROJECT COST</b>				75%		<b>\$2,669,238.00</b>
	<b>COUNTY SHARE- PROJECT COST</b>				25%		<b>\$889,746.00</b>

**Notes:**

1. Cost estimate does not include Right-of-Way costs or utility costs other than those listed.

## MAJOR COST ESTIMATE: MD 450 / MD 202 from 46th Street to Kilmer Street

**DATE:** 6/21/2023  
**JOB DESCRP:** MD 450/MD 202 from 46th Street to Kilmer Street  
 ALTERNATE 1 SEGMENT 2: MD 202 FROM MD 450 TO KILMER STREET  
**IMPROV TYPE:** SHARED USE PATH CONSTRUCTION  
**TYPICAL SEC:** 6-Lane Divided with Raised Median  
**PREPARED BY:** JMT

**PROJECT #:** BCS 2015-05J  
**COUNTY:** PRINCE GEORGE'S  
**PRJ LENGTH:** 2.13 Miles  
**DIVISION:** MDOT SHA- OFFICE OF HIGHWAY DEVELOPMENT

1	<b>PRELIMINARY</b>		[CAT 1]				<b>530,000.00</b>
	TYPE B ENGINEERS OFFICE	1	LS	20,000.00		20,000.00	
	MAINTENANCE OF TRAFFIC	1	LS	180,000.00		180,000.00	8% of Cat. 2-8
	CONSTRUCTION STAKEOUT	1	LS	60,000.00		60,000.00	2% of Cat. 1-8
	MOBILIZATION	1	LS	255,000.00		255,000.00	10% of Cat. 1-8
	CLEARING AND GRUBBING	3.0	AC	5,000.00		15,000.00	
2	<b>GRADING</b>						<b>244,500.00</b>
	Removal of Existing Pavement	3,200	CY	60.00		192,000.00	
	Class I Excavation	1,500	CY	35.00		52,500.00	
3	<b>DRAINAGE</b>						<b>285,000.00</b>
	Inlets	11	EA	5000		55000	
4	<b>STRUCTURES</b>						<b>82,500.00</b>
	Retaining Walls	825	SF	100		82500	
5	<b>PAVING</b>						<b>412,650.00</b>
	HOT MIX ASPHALT SUPERPAVE 12.5MM FOR SURFACE	90	TON	85.00		7,650.00	
	8 INCH PCC FOR COMPOSITE PAVEMENT	800	SY	150.00		120,000.00	
	8 INCH PCC FOR DERIVEWAY	1,900	SY	150.00		285,000.00	
6	<b>SHOULDER</b>						<b>798,500.00</b>
	Concrete Curb and Gutter	7,100	LF	35.00		248,500.00	
	5" Concrete Sidewalk	55,000	SF	10.00		550,000.00	
7	<b>LANDSCAPING</b>						<b>210,900.00</b>
	Furnish and Install Topsoil	3,700	SY	5.00		18,500	
	Turfgrass Establishment	3,700	SY	2.00		7,400	
8	<b>TRAFFIC</b>						<b>230,000.000</b>
	Remove and Relocate Utility Poles	0	EA.	50000		0	
	<b>SUBTOTAL OF CATEGORIES 2,4, 5,6</b>						<b>1,538,150.00</b>
	<b>SUBTOTAL ROADWAY COST</b>						<b>2,794,050.00</b>
	<b>CONTINGENCY [ % ]</b>				40%		<b>1,117,620.00</b>
	<b>SUBTOTAL- NEAT CONSTRUCTION</b>						<b>\$3,912,000.00</b>
	<b>OVERHEAD AND ADMIN</b>				14.4%		<b>\$563,328.00</b>
	<b>TOTAL PROJECT COST</b>						<b>\$4,475,328.00</b>
	<b>SHA SHARE- PROJECT COST</b>					75%	<b>\$3,356,496.00</b>
	<b>COUNTY SHARE- PROJECT COST</b>					25%	<b>\$1,118,832.00</b>

**Notes:**

1. Cost estimate does not include Right-of-Way costs or utility costs other than those listed.





Appendix C: Pedestrian Counts  
MD 202 at MD 450

Maryland Department of Transportation  
State Highway Administration  
Data Services Division  
Turning Movement Summary Report

Station ID: S1998160266 County: Prince Georges Comments:  
 Date: 10/22/2019 12:00:00 AM Town: none  
 Location: MD 202 at MD 450 Weather: Raining  
 Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	2777	C	0.72	12:00PM-19:00PM	17:00	18:00	3364	B	0.69

MD 450

MD 202

MD 450

From North

From South

From East

From West

Begin Hour	From North			From South			From East			From West		
	School Children	Pedestrians	Bicycles									
00:00	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	5	0	0	0	0	0	3	0	0	4	0
07:00	0	3	0	0	0	0	0	2	0	0	2	0
08:00	2	4	0	0	0	0	2	4	0	2	6	0
09:00	6	3	0	0	0	0	0	2	0	1	3	0
10:00	1	2	0	0	0	0	0	2	0	0	0	0
11:00	0	5	0	0	0	0	0	9	0	0	1	0
12:00	0	3	0	0	0	0	0	1	0	1	7	0
13:00	0	4	0	0	0	0	0	0	0	0	8	0
14:00	0	9	0	0	0	0	5	3	0	0	1	0
15:00	0	9	0	0	0	0	4	2	0	7	9	0
16:00	9	1	0	0	0	0	3	2	0	6	2	0
17:00	0	6	0	0	0	0	0	6	0	1	5	0
18:00	0	3	0	0	0	0	1	4	0	2	3	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0
<b>TOTAL</b>	<b>18</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>15</b>	<b>40</b>	<b>0</b>	<b>20</b>	<b>51</b>	<b>0</b>
<b>AMPEAK</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>6</b>	<b>0</b>
<b>PMPEAK</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>
<b>DAYPEAK</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>1</b>	<b>5</b>	<b>0</b>



Appendix C: Pedestrian Counts  
MD 202 at 56<sup>th</sup> Avenue

Maryland Department of Transportation  
State Highway Administration  
Data Services Division  
Turning Movement Summary Report

Station ID: S2001160096 County: Prince Georges Comments:  
 Date: 6/25/2019 12:00:00 AM Town: none  
 Location: MD 202 at 56TH AVE Weather: Sunny  
 Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	2017	A	0.37	12:00PM-19:00PM	16:00	17:00	2551	A	0.47

56th Ave

Quincy St

MD 202

MD 202

From North

From South

From East

From West

Begin Hour	From North			From South			From East			From West		
	School Children	Pedestrians	Bicycles									
00:00	0	0	0	0	1	0	0	0	0	0	0	0
01:00	0	0	0	0	1	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	2	0	0	0	1	0	0	1
05:00	0	2	0	0	4	0	0	1	0	0	2	0
06:00	0	4	0	0	0	0	0	1	0	0	1	0
07:00	0	1	0	0	3	0	0	0	0	0	0	0
08:00	0	0	0	0	6	1	0	1	0	0	1	0
09:00	0	3	0	0	10	0	0	1	0	0	0	0
10:00	0	1	0	0	8	0	0	0	1	0	1	0
11:00	0	3	0	0	2	0	0	2	0	0	1	0
12:00	0	3	0	0	6	0	0	2	0	0	3	0
13:00	0	1	0	0	5	0	0	0	0	0	1	0
14:00	0	6	0	0	8	1	0	1	1	0	1	0
15:00	0	5	0	0	4	0	0	0	0	0	1	0
16:00	0	5	0	0	6	0	0	3	0	0	2	2
17:00	0	0	0	0	14	0	0	1	0	0	3	0
18:00	0	3	0	0	8	1	0	1	0	0	1	0
19:00	0	3	0	0	6	0	0	2	0	0	3	0
20:00	0	0	0	0	10	0	0	2	0	0	1	0
21:00	0	0	0	0	10	0	0	1	0	0	0	0
22:00	0	0	0	0	6	1	0	2	0	0	1	0
23:00	0	0	0	0	0	0	0	0	0	0	2	0
<b>TOTAL</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>4</b>	<b>0</b>	<b>21</b>	<b>3</b>	<b>0</b>	<b>25</b>	<b>3</b>
<b>AMPEAK</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>PMPEAK</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>
<b>DAYPEAK</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>2</b>



# Appendix C: Pedestrian Counts MD 450 at Edmonston Road

## Maryland Department of Transportation State Highway Administration Data Services Division Turning Movement Summary Report

Station ID: S1999160238 County: Prince Georges Comments:  
 Date: 7/27/2022 12:00:00 AM Town: none  
 Location: MD 450 at MD 769B (Edmonston Rd) Weather:  
 Interval: 60 Min

PEAK	AM PERIOD	Start	End	Volume	LOS	V/C	PM PERIOD	Start	End	Volume	LOS	V/C
Hours	6:00AM-12:00PM	08:00	09:00	2630	A	0.62	12:00PM-19:00PM	16:00	17:00	3344	B	0.66

MD 769B

MD 450

MD 450

From North

From South

From East

From West

Begin Hour	From North			From South			From East			From West		
	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles	School Children	Pedestrians	Bicycles
00:00	0	0	0	0	0	0	0	2	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	1	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	5	1	0	0	0
07:00	0	0	0	0	0	0	0	6	0	0	0	1
08:00	0	0	1	0	0	0	0	4	0	0	1	0
09:00	0	0	0	0	0	0	0	12	1	0	0	0
10:00	0	0	0	0	0	0	0	8	1	0	0	0
11:00	0	0	1	0	0	0	0	14	1	0	1	1
12:00	0	1	0	0	0	0	0	10	1	0	0	0
13:00	0	0	0	0	0	0	0	6	1	0	1	0
14:00	0	0	0	0	0	0	0	3	0	0	0	0
15:00	0	0	0	0	0	0	0	18	0	0	1	1
16:00	0	1	0	0	0	0	0	17	0	0	1	1
17:00	0	1	2	0	0	0	0	13	0	0	4	2
18:00	0	0	3	0	0	0	0	13	1	0	2	0
19:00	0	0	0	0	0	0	0	13	0	0	1	0
20:00	0	1	0	0	0	0	0	8	0	0	0	1
21:00	0	0	0	0	0	0	0	5	4	0	0	0
22:00	0	3	0	0	0	0	0	1	1	0	1	1
23:00	0	1	0	0	0	0	0	1	0	0	0	0
<b>TOTAL</b>	<b>0</b>	<b>8</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>159</b>	<b>13</b>	<b>0</b>	<b>13</b>	<b>8</b>
<b>AMPEAK</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>
<b>PMPEAK</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>
<b>DAYPEAK</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>17</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>

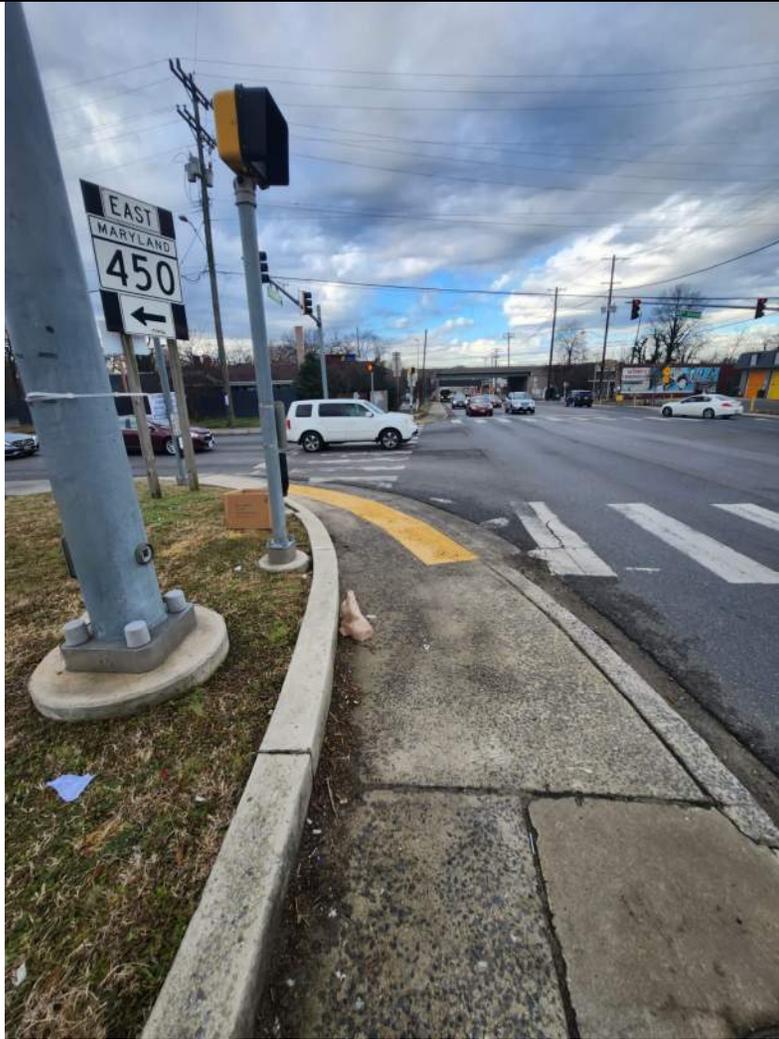
Appendix D: Photos of Existing Conditions



MD 450 Eastbound Looking West to 46<sup>th</sup> Street  
Historic Building



MD 450 Eastbound Looking East at MD 201 Bridge  
Existing Sidewalk in Tunnel to Remain



MD 450 Eastbound Looking West at Intersection with 48<sup>th</sup> Street



MD 450 Eastbound Looking West towards 48<sup>th</sup> Street Intersection



MD 450 Eastbound Looking West at Edmonston Road



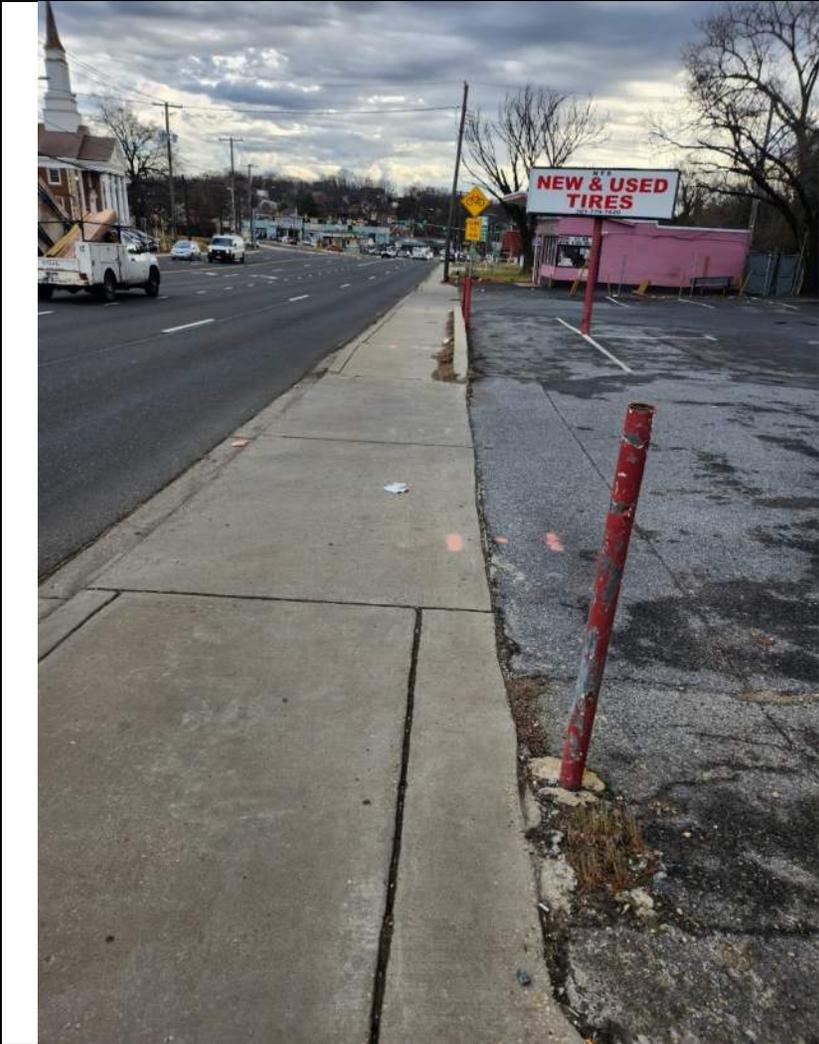
MD 450 Eastbound at Bladensburg Elementary School



MD 450 Eastbound East of Bladensburg Elementary Looking East



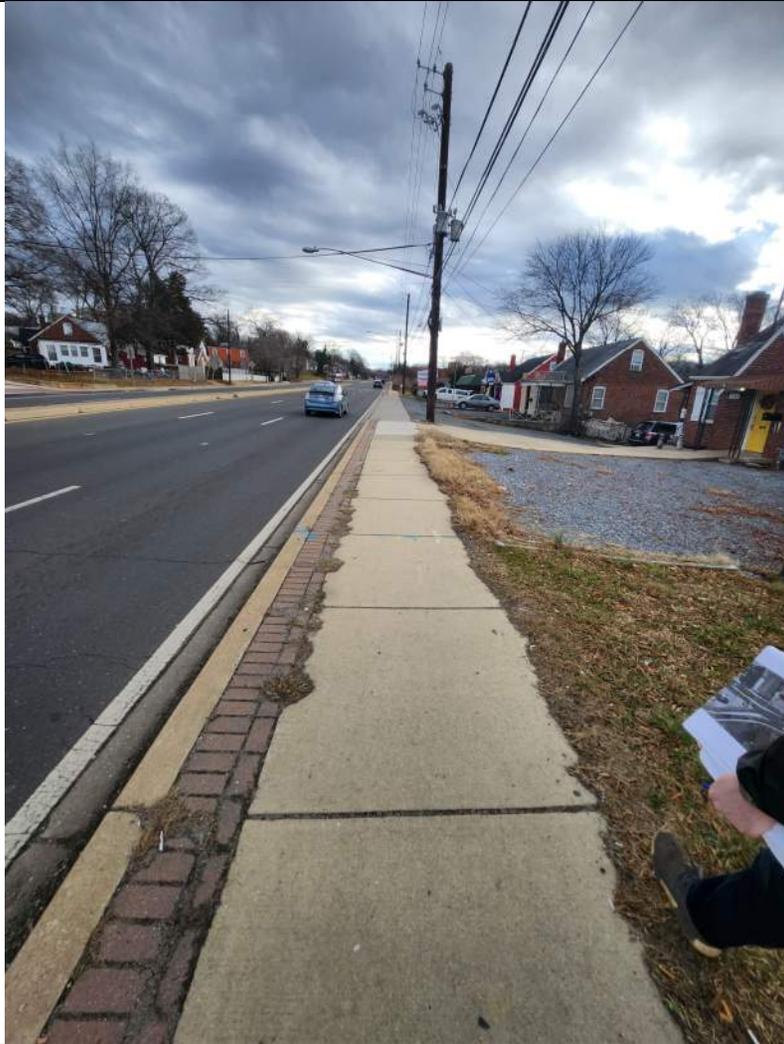
MD 450 Eastbound Looking East at 53<sup>rd</sup> Place



MD 450 Eastbound Looking East at 54<sup>th</sup> Street



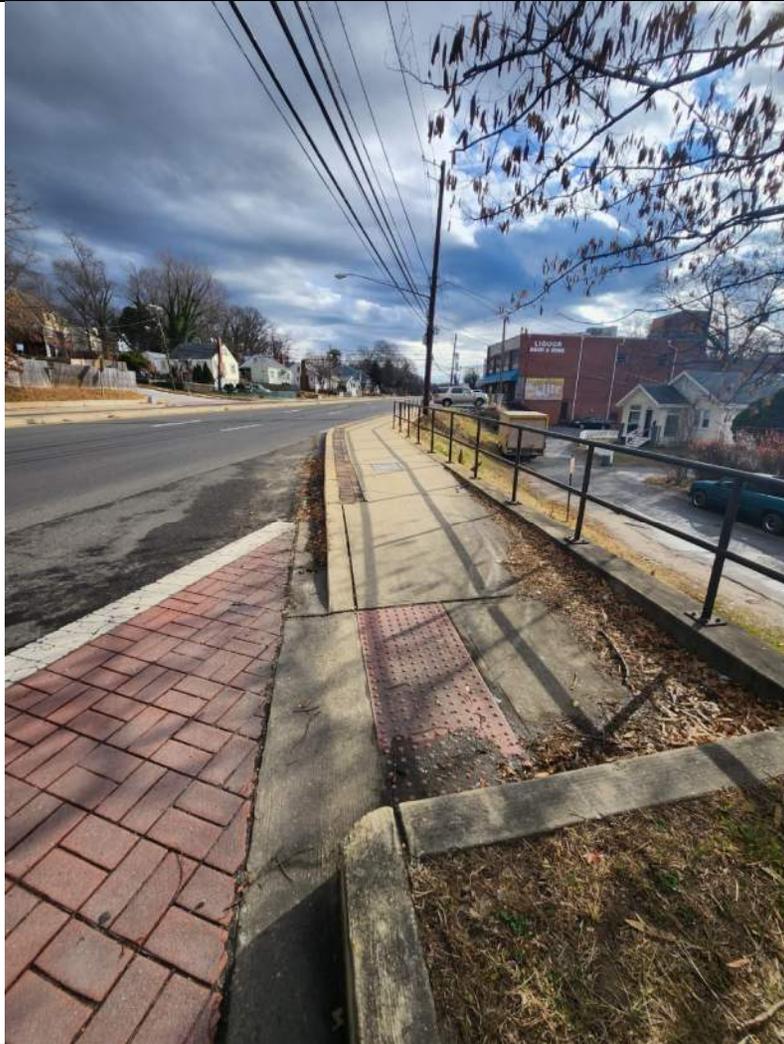
MD 450 Eastbound Looking East at MD 202 Intersection



MD 202 Southbound Looking South at 55<sup>th</sup> Avenue



MD 202 Southbound Near 55<sup>th</sup> Avenue  
Damaged Sidewalk



MD 202 Southbound Looking South at Quincy Street



MD 202 Southbound Near Quincy Street  
Damaged Sidewalk



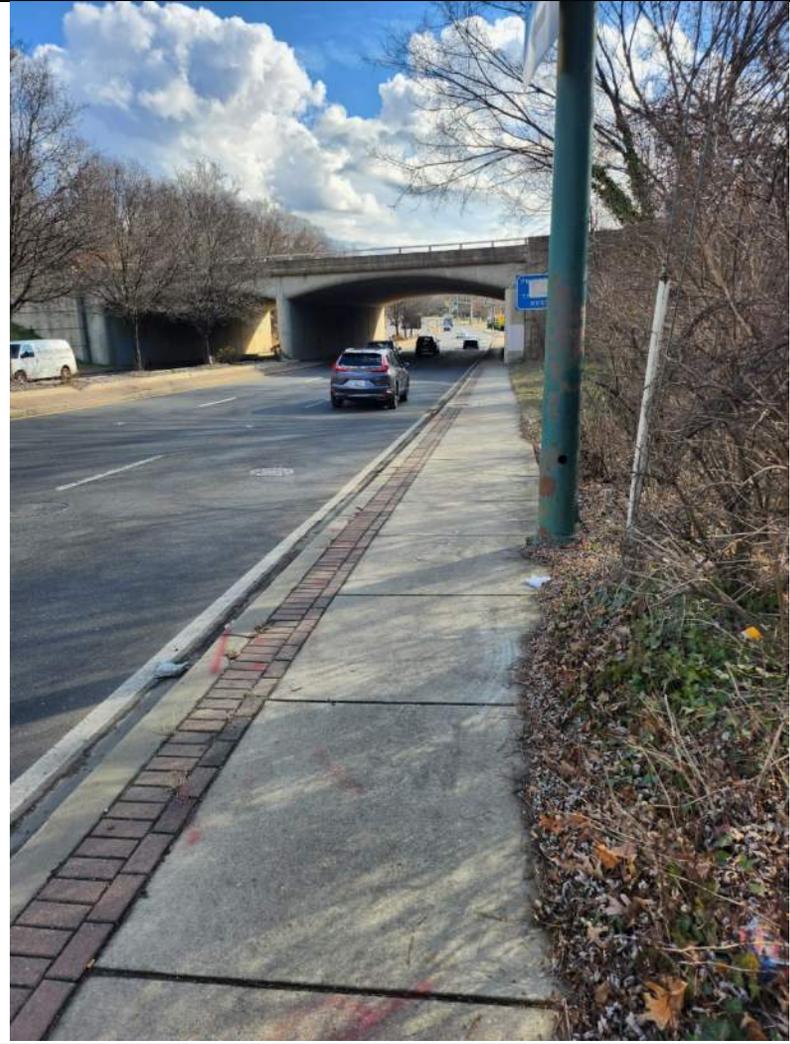
MD 202 Southbound Looking South at 56<sup>th</sup> Place  
Damaged Sidewalk



MD 202 Southbound Looking South at 57<sup>th</sup> Avenue



MD 202 Southbound Looking South near 57<sup>th</sup> Avenue  
Damaged Sidewalk



MD 202 Southbound Looking South at Baltimore Washington  
Parkway Bridge



MD 202 Southbound Looking South between Cheverly Avenue and Neighbor Lane



MD 202 Southbound Looking South at 63<sup>rd</sup> Avenue



MD 202 Northbound Looking North  
West of Kilmer Street



MD 202 Northbound Looking North at Neighbor Lane



MD 202 Northbound Looking North at 57<sup>th</sup> Avenue



MD 450 Westbound Looking West  
Across from Bladensburg Elementary School