## CHAPMAN AVENUE AND BOUIC AVENUE INTERSECTION IMPROVEMENT REPORT

Chapman Avenue and Bouic Avenue Intersection

Twinbrook Safe Routes to School and Transit Access Feasibility Studies City of Rockville Contract No. BCS 2017-01H

December 2024

Prepared For:

City of Rockville 111 Maryland Ave, Rockville, Maryland 20850

Prepared By:

Mercado Consultants, Inc. 17830 New Hampshire Avenue Suite 200 Ashton, Maryland 20861 AECOM 4 North Park Drive, Suite 300 Hunt Valley, Maryland 21030

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VICINITY / LOCATION MAP

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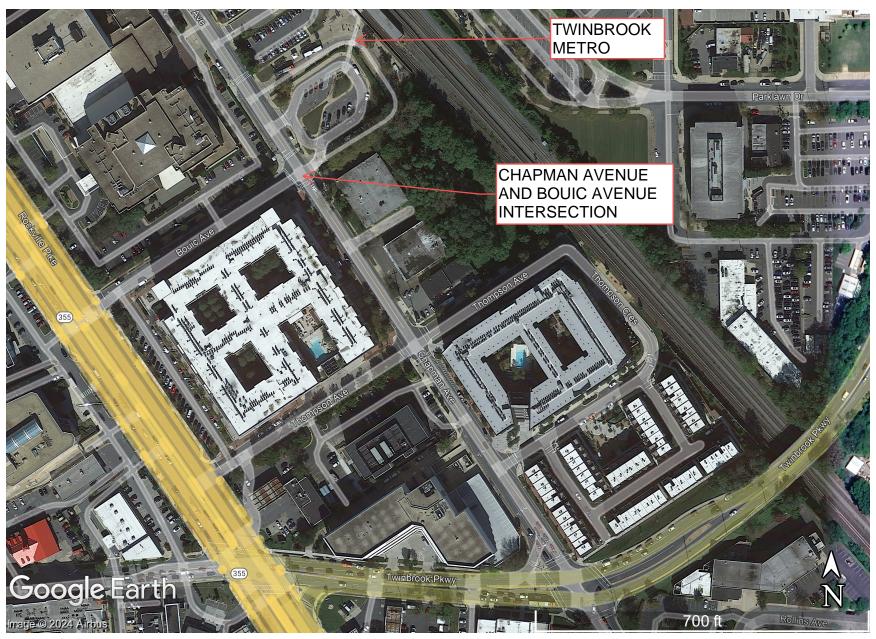
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1. LOCATION MAP



CHAPMAN AVENUE AND BOUIC AVENUE INTERSECTION FIGURE 1: LOCATION MAP

#### I. PROJECT INTRODUCTION

This report has been prepared for the City of Rockville as part of the Vision Zero program, a priority initiative of the Mayor and Council that seeks to eliminate serious injuries and fatalities that result from traffic crashes. This program is multimodal and aims to improve roadway safety for pedestrians, bicyclists, transit users, and motorists. The Twinbrook Safe Routes to School and Transit Access study will identify opportunities to improve intersection safety for all modes of transportation, especially for trips to and from Twinbrook Elementary School and the Twinbrook Metro Station. The intersections studied included:

- 1. Ardennes Avenue and Crawford Drive
- 2. Ardennes Avenue and Halsey Road
- 3. Ardennes Avenue and Halpine Road
- 4. Ardennes Avenue and Ridgway Avenue
- 5. Ardennes Avenue and Wainwright Avenue
- 6. Chapman Avenue and Bouic Avenue
- 7. Chapman Avenue and Twinbrook Parkway
- 8. Lemay Road and Ridgway Avenue

Additionally, as a separate effort, this project evaluated the feasibility of constructing a sidewalk along several street segments in Twinbrook including:

- 1. Brooke Drive between Lewis Avenue and Rockland Avenue
- 2. Crawford Drive between Rockcrest Circle and Hillcrest Park
- 3. Crawford Drive between Atlantic Avenue and Ardennes Avenue
- 4. Halsey Road between Henry Road and Ardennes Avenue
- 5. Lemay Road between Vandegrift Avenue and Ardennes Avenue
- 6. Midway Avenue between Crawford Dive and Stillwell Road
- 7. Wade Avenue between Edmonston Drive and Crawford Drive

This project was funded by a MDOT Transportation Alternatives (TA) Program grant, and the improvements and cost estimate are proposed by the project team consisting of Mercado Consultants and AECOM.

#### II. PROJECT DESCRIPTION

This report discusses the feasibility of improvements at the intersection of Chapman Avenue and Bouic Avenue. Please see Appendix A for the recommended feasible safety upgrades and cost estimate.

#### III. <u>DESIGN CRITERIA AND ASSUMPTIONS</u>

The design criteria used for intersection improvements include both intersection and sidewalk aspects. Intersection design criteria come from the AASHTO Geometric Design of Highways and Streets. This reference document outlines specific elements affecting the performance of pedestrians at intersections. The elements outlined include sidewalk and crosswalk width, crossing distances, conflicting traffic volumes, speed and visibility of approaching traffic, turning speeds, permissive right-turn-on-red, permissive left-turn movements, crosswalk lighting, and accessibility for persons with disabilities. Improving these elements was explored within this study.

The Maryland Manual on Uniform Traffic Control Devices (MD MUTCD) was referenced for the proposed signs, placement, pavement markings, and traffic control devices applicable to improving the intersections studied. Specifically, the MD MUTCD was referenced for choosing advanced warning signs and sign placement. This document was also used for proposing crosswalks, upgrading crosswalk style, and pavement markings for the crosswalk and stop bar. The MD MUTCD was also used for verifying warrants for additional proposed traffic controls at the intersections.

The NACTO Urban Street Design Guide was also used as a reference for intersection upgrades. Various design techniques are outlined in this document which improve pedestrian safety and mobility across intersections.

The sidewalk criteria for the intersection came from the ADA Standards for Accessible Design and the recently adopted Public Right-of-Way Accessibility Guidelines. A 5-foot minimum width sidewalk was proposed to meet this standard. The acceptable running slopes on the ramps are 12:1 maximum, and the proposed landing pads are a minimum of 5-foot x 5-foot with a 48:1 maximum cross-slope. The depressed landing pads located at crossings contain a 2-foot-wide minimum detectable warning surface.

The buffer between the proposed sidewalk and back of curb was set to a 2-foot minimum but could vary to avoid tree and utility impacts. Any proposed sidewalk was also set to tie into existing sidewalk where applicable.

It was assumed the proposed sidewalk is entirely within the City of Rockville's right-of-way. Impacted fences, mailboxes, and other resident belongings located within the City of Rockville's right-of-way are to be relocated. Impacted steps or resident walkways are to be reconstructed to tie into the proposed sidewalk. Utility impacts such as inlets, fire hydrants, and utility poles were avoided.

The Fire Department Access Performance-Based Design Guide was also referenced for the intersection upgrades. This guide dictates the roadway clear width to be 20-feet minimum for emergency vehicles. The curb radius recommended at intersections is 25-feet minimum and was used to upgrade curb radii throughout the site.

The design vehicle recommended to be used to confirm turning movements for this intersection is a transport truck (WB-50) and Metro Bus (CITY-BUS) per the direction of the City of Rockville. It is also assumed the intersection will remain an all-way stop-controlled intersection.

#### IV. EXISTING CONDITIONS

Chapman Avenue is an undivided two-way road, classified by the city as a business district road. Bouic Avenue is an undivided two-way road, classified by the city as a business district 2 road. The three-way intersection of Chapman Avenue and Bouic Avenue is stop-controlled in all directions. The west leg of the intersection is the bus loop entrance for the Metrorail station and the Kiss & Ride loading area for motorists. The posted speed through the intersection is 25 MPH. This intersection is located 0.6 miles from Twinbrook Elementary School and 450 feet from the Twinbrook Metro Station.

The approaches to the Chapman Avenue and Bouic Avenue intersection contain pavement markings for lane separation. There are marked lane divisions for each direction, bike lanes, and on-street parking along Chapman Avenue. There are marked lane divisions for each direction, and right and left turn lanes along Bouic Avenue. There are existing crosswalks on all approaches at this intersection. Only the south, west, and east approaches have stop bars, as northbound is a one-way entrance.

The Chapman Avenue and Bouic Avenue intersection has an existing sidewalk in all directions. There is an existing metro sign on the northeast corner, there is an existing utility post on the southeast corner, there is an existing fire hydrant on the southwest corner along Chapman Avenue, and there is an existing inlet on the southwest corner along Bouic Avenue.

The Chapman Avenue and Bouic Avenue intersection is fairly level at the intersection and approaches. There is a slight downward slope leading north along Chapman Avenue. Bouic Avenue meets Chapman Avenue perpendicularly to create this intersection. The existing curb radii at the intersection are greater than the recommended 25-feet.

Please see Appendix B for existing site photos.

#### V. <u>CRASH DATA</u>

There is one police-reported crash at this location during the 2018-2022 study period. Please see Appendix C for Crash Data.

#### VI. <u>ALTERNATIVES CONSIDERED</u>

Various strategies were considered for improving safety at the Chapman Avenue and Bouic Avenue intersection. Curb extensions or bulbouts are one effective traffic calming strategy that was considered for this intersection. This strategy is effective in slowing down traffic as it approaches the intersection because the roadway width is narrowed from its existing varied width to 20-feet. The crosswalk width is also decreased using this strategy. However, this strategy would negatively impact the existing bike lanes along Chapman Avenue, and the existing inlet on the southwest corner. Curb extensions would also interfere with the turning movements for the design vehicles at this intersection.

Another strategy considered was converting the intersection of Chapman Avenue and Bouic Avenue into a raised intersection. Creating a raised intersection at this location would require relocating the existing stop bars and stop signs to outside of the footprint of the raised intersection. The existing inlet on the southwest corner would also need to be relocated. Drainage at the intersection would need to be further evaluated as the intersection and approaches are mostly flat.

Raised crosswalks with ADA compliant trench drains across Chapman Avenue were also considered. This would provide better pedestrian visibility across the intersection. Chapman Avenue was considered for the raised crosswalks because it leads to Twinbrook Metro. Raised crosswalks would also deter vehicles from speeding through the intersection.

Crosswalk upgrades for all crosswalks to continental style was considered. This strategy provides greater visibility and warning to motorists of the upcoming crosswalk and pedestrians.

A bicycle and pedestrian crossing advanced warning sign was also considered on Bouic Avenue. Chapman Avenue already has existing advance warning signs for the stop sign at this intersection. This would warn motorists of the pedestrian crosswalk and bike lane ahead.

Radii upgrades to 25-feet at this intersection were also considered. Reducing curb radii is another effective strategy that can enhance pedestrian safety by forcing vehicles to slow down for turns.

#### VII. PUBLIC INPUT

The in-person and virtual meeting to discuss proposed intersection improvements for all eight intersections took place on June 26<sup>th</sup> and July 1<sup>st</sup>, 2024. During these meetings improvements across all intersections were discussed and residents overall appeared to be in favor of the proposed improvements. The Twinbrook Community Association submitted formal comments. Please see Appendix D for comments and the project team's response.

#### VIII. <u>RECOMMENDATIONS</u>

The project team recommends upgrading all curb radii to 25-feet as a lower priority project, when budget resources permit. Quadrants with curb radii higher than 25-feet can promote higher turning speeds for motorists.

It is also recommended to upgrade the crosswalk pavement markings to continental style.

Additional signage is also recommended along Bouic Avenue to warn motorists of the upcoming crosswalk.

Lastly, the project team recommends a lighting survey to be conducted in the future for this intersection.

There are also no impacts outside of the City of Rockville's right-of-way for any of the recommended strategies. Easements are required to allow for the construction of a connection to the pre-existing sidewalk.

#### A. IMPACTS:

Utility Impacts: 1
Easements required: 2

#### B. COST ESTIMATE:

Project cost was estimated using the unit cost method plus an overall 40% contingency to reflect the current level of study. Unit costs were gathered for proposed items and quantities were gathered. The unit costs used were derived from similar projects within Montgomery County. The approximate cost for constructing the recommended safety upgrades is \$80,000. Please see Appendix A for cost estimate breakdown.

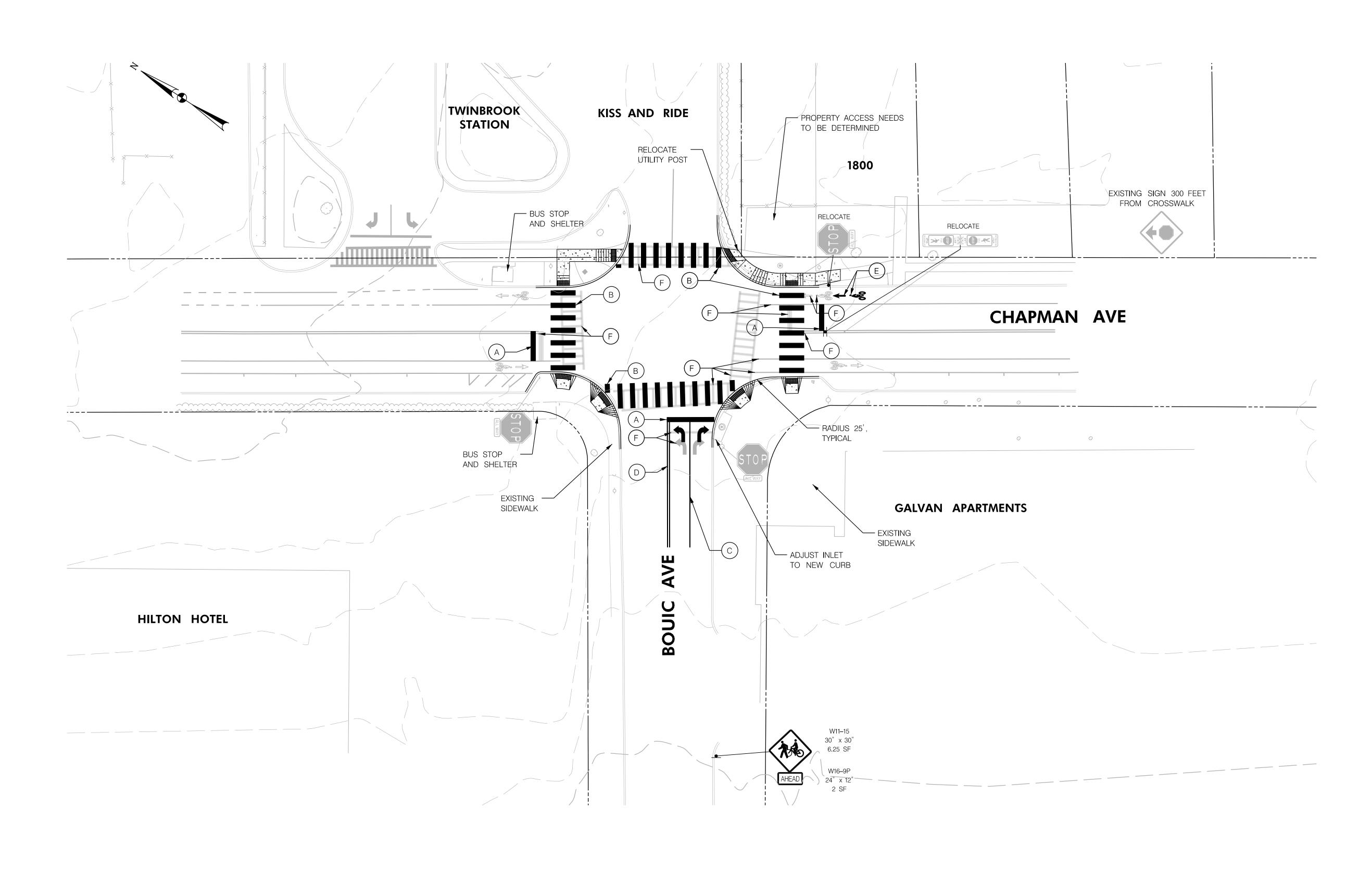
#### IX. <u>SUMMARY</u>

The project team proposes moving forward with several intersection improvement techniques for Chapman Avenue and Bouic Avenue. While feasible, the project team recommends upgrading the curb radii to 25-foot radii for each quadrant as a lower priority project to be carried out in a future fiscal year when budget resources permit.

The project team also recommends crosswalk markings to be upgraded to continental style pavement markings and an advanced warning sign to be installed ahead of the stop sign on Bouic Avenue. These upgrades should improve pedestrian safety across the Chapman Avenue and Bouic Avenue intersection.

# APPENDIX A:

PLAN SHEET(S) AND ESTIMATE









5 INCH CONCRETE SIDEWALK

CEMENT CONCRETE DRIVEWAY

8 INCH ASPHALT DRIVEWAY

CONCRETE REMOVAL

8 INCH PORTLAND

<u>LEGEND</u>

NOTE: 1. TOPOGRAPHY BASED ON MOBILE LIDAR SCAN 2. DESIGN VEHICLE WB-50 IS UNABLE TO MAKE ALL MOVEMENTS WITHOUT ENCROACHING INTO ADJACENT LANES UNDER EXISTING

NEW CURB

---- APPROX. RIGHT OF WAY

PROPOSED SIGN AND POST

EXISTING SIGN TO REMAIN

ADA RAMP

3. DESIGN VEHICLES FOR THIS INTERSECTION ARE A TRANSPORT TRUCK (WB-50) AND BUS (CITY-BUS).

### SIGNING AND PAVEMENT MARKING LEGEND

- 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS
- 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS (SPACING: 20-36 INCH, TYPICAL 36 INCH)
- 5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS
- 5 INCH DOUBLE YELLOW THERMOPLASTIC PAVEMENT MARKINGS
- THERMOPLASTIC PAVEMENT MARKING SYMBOL
- REMOVAL OF EXISTING PAVEMENT MARKINGS

NOTE: 1. ALL SIGNING AND MARKING SHALL BE DONE IN ACCORDANCE WITH THE LATEST VERSION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MD MUTCD), MARYLAND'S STATE HIGHWAY ADMINISTRATION'S BOOK OF

STANDARDS, SPECIFICATIONS, AND GUIDELINES.

- 2. ALL PAVEMENT MARKING SHALL BE DONE USING THERMOPLASTIC MATERIALS. 3. STOP LINES SHALL BE 24 INCH WIDE USING THERMOPLASTIC MATERIAL. THE SPACING BETWEEN THE STOP LINE AND THE CROSSWALK MARKING SHALL BE 4 FEET AT A MINIMUM.
- 4. SIGN HEIGHT SHALL BE MINIMUM 7 FEET FROM THE BOTTOM OF THE SIGN FACE TO THE GROUND.
- 5. FOR SIGN POST, USE EITHER 2# GALVANIZED U CHANNEL POSTS OR GALVANIZED BREAKAWAY TUBULAR STEEL SIGN POSTS BASED ON THE MD SHA
- STANDARD MD-802.04 6. THESE IMPROVEMENTS SHOULD BE COORDINATED WITH THE COMMUNITY
- PLANNING AND DEVELOPMENT SERVICES AND WMATA BEFORE IMPLEMENTATION.

DRAF



TWINBROOK SAFE ROUTES TO SCHOOL AND TRANSIT ACCESS FEASIBILITY STUDIES

DATE SUBMITTED: SHEET 12/2024 1 "=20 '

CONTRACT NO. BCS 2017-01H

City of Rockville, Maryland



#### **Engineer's Cost Estimate**

Contract No. BCS 2017-01H
Twinbrook Safe Routes to School and
Transit Access Feasibility Studies
Chapman Avenue and Bouic Avenue Intersection
December 16, 2024

ITEM NO.	CATEGORY CODE	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
	CATEGORY 1					
		MAINTENANCE OF TRAFFIC REMOVAL OF EXISTING PAVEMENT LINE MARKINGS, ANY WIDTH REMOVAL OF EXISTING PAVEMENT MARKING SYMBOLS	LS LF SF	1 862 37	\$20,000.00 \$1.00 \$15.00	20,000.00 862.00 555.00
				CATE	GORY 1 TOTAL	\$21,417.00
	CATEGORY 2					
		CLASS 1 EXCAVATION	CY	26	\$60.00	\$1,560.00
				CATE	GORY 2 TOTAL	\$1,560.00
	CATEGORY 3					
				CATE	GORY 3 TOTAL	\$0.00
	CATEGORY 4					
				CATE	GORY 4 TOTAL	\$0.00
	CATEGORY 5	i e e e e e e e e e e e e e e e e e e e				
		5 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS 5 INCH YELLOW THERMOPLASTIC PAVEMENT MARKINGS 24 INCH WHITE THERMOPLASTIC PAVEMENT MARKINGS THERMOPLASTIC PAVEMENT MARKING SYMBOLS	LF LF LF SF	52 102 360 37	\$3.00 \$3.00 \$5.00 \$10.00	\$156.00 \$306.00 \$1,800.00 \$370.00
				CATE	GORY 5 TOTAL	\$2,476.00
	CATEGORY 6	3				
		5 INCH CONCRETE FOR SIDEWALK TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	CY LF	10 235	\$650.00 \$60.00	\$6,500.00 \$14,100.00
				CATE	GORY 6 TOTAL	\$20,600.00
	CATEGORY 7					
				CATE	GORY 7 TOTAL	\$0.00
	CATEGORY 8					
		RELOCATE UTILITY SHEET ALUMINUM SIGN RELOCATE SIGN	EA SF SF	1 9 13	\$10,000.00 \$45.00 \$30.00	10,000.00 405.00 390.00
				CATE	GORY 8 TOTAL	\$10,795.00
					SUBTOTAL	\$56,848.00
				40%	CONTINGENCY	\$22,739.20
					TOTAL	\$79,587.20

# **APPENDIX B:**

SITE PHOTOS



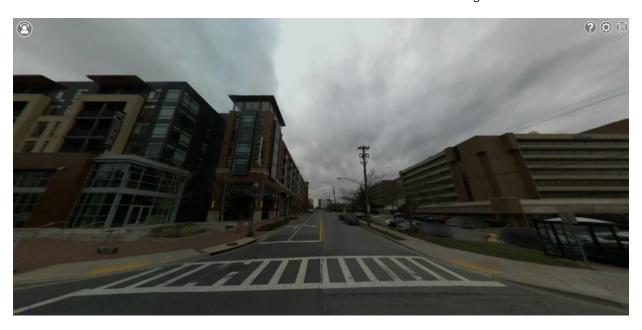
Ardennes Avenue and Bouic Avenue Intersection – Looking North



Ardennes Avenue and Bouic Avenue Intersection – Looking South



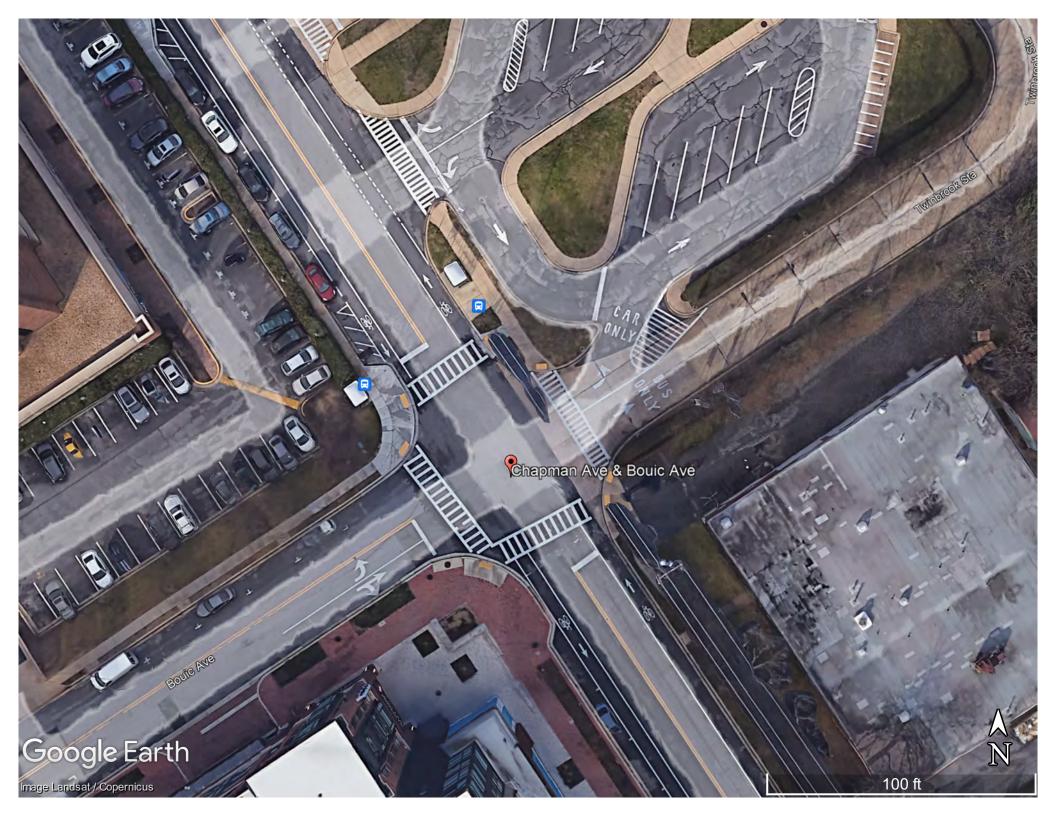
Ardennes Avenue and Bouic Avenue Intersection – Looking East



Ardennes Avenue and Bouic Avenue Intersection – Looking West

### **APPENDIX C:**

CRASH DATA REPORT



Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Study Worksheet Output rev. 10/2017-1

Location: CHAPMAN AVE @ BOUIC AVE

Logmiles: 0 At 0.16 Radius: 250 ft.

Robert Booker

04/18/2024

Name:

Date:

County: Montgomery, D3 Period: January 01, 2018 To December 31, 2022 Note:

YEAR >>	2018	2019	2020	2021	2022	Total
Fatal	0	0	0	0	0	0
No. Killed	0	0	0	0	0	0
Injury	0	0	0	0	1	1
No. Injured	0	0	0	0	1	1
Prop. Damage	0	0	0	0	0	0
Total Crashes	0	0	0	0	1	1
Severity Index	0	0	0	0	4	Avg 1
Opposite Dir.	0	0	0	0	0	0
Rear End	0	0	0	0	0	0
Sideswipe	0	0	0	0	0	0
Left Turn	0	0	0	0	0	0
Angle	0	0	0	0	0	0
Pedestrian	0	0	0	0	1	1
Parked Veh.	0	0	0	0	0	0
Fixed Object	0	0	0	0	0	0
Other	0	0	0	0	0	0
U-Turn	0	0	0	0	0	0
Backing	0	0	0	0	0	0
Animal	0	0	0	0	0	0
Railroad	0	0	0	0	0	0
Fire / Expl.	0	0	0	0	0	0
Overturn	0	0	0	0	0	0
Truck Related	0	0	0	0	0	0
11 uch Keiateu	· · · · · · · · · · · · · · · · · · ·	0	<u> </u>	· ·		<u> </u>
Night Time	0	0	0	0	0	0
Wet Surface	0	0	0	0	0	0
Alcohol	0	0	0	0	0	0
Intersection	0	0	0	0	1	1
Total Vehicles	0	0	0	0	1	1
Ī	0	0	0	0	0	0
Total Trucks			0.0	0.0	0.0	0.0

Maryland State Highway Administration

Office of Traffic and Safety - Traffic Development and Support

SHA ADC Summary Output rev. 10/2017-1

Location: CHAPMAN AVE @ BOUIC AVE Logmiles:

Robert Booker 04/18/2024

0 At 0.16 Radius: 250 ft.

Name:

Date:

County: Montgomery, D3 Period: January 1, 2018 To December 31, 2022 Note: **SEVERITY** FATAL **INJURY** P-DAMAGE TOTAL DAY OF THE WEEK Accidents SUN MON TUE WED THU FRI UNK 1 1 SAT Veh Occ AVG Severity Index: 1 Pedestrian 1 MONTH OF THE YEAR CONDITION DRIVER PED UNK JAN **FEB** MAR APR MAY JUN JUL AUG SEP OCT NOV DEC Normal: 1 1 Alcohol: Other: TIME 12 03 05 09 10 11 UNK VEHICLES INVOLVED PER ACCIDENT 01 02 04 06 07 08 TOTAL AM: 1 3 UNK PM: 1 1 VEHICLE TYPE SURFACE **MOVEMENTS** Motorcycle/Moped Tractor Trailer Wet NORTH SOUTH **EAST** WEST 1 Passenger Vehicle Passenger Bus 1 Dry LF ST RT LF ST RT LF STRT LF ST RT Sport Utility Veh School Bus Sno/Ice Pick-Up Truck Emergency Veh Mud OTHER MOVEMENTS Trucks (2+3 axles) 1 Other Types Other PROBABLE CAUSES COLLISION TYPES TOTAL FATAL INJURY PROP Influence of Drugs Improper Lane Change Opposite Dir Related: Influence of Alcohol Improper Backing UnRelated: Influence of Medication Improper Passing Rear End Related: UnRelated: Influence of Combined Subst. Improper Signal Sideswipe Related: Physical/Mental Difficulty Improper Parking UnRelated: Fell Asleep/Fainted, etc. Passenger Interfere/Obstruct. Left Turn Related: Fail to give full Attention Illegally in Roadway UnRelated: Lic. Restr. Non-compliance Bicycle Violation Angle Related: Fail to Drive in Single Lane Clothing Not Visible UnRelated: Improper Right Turn on Red Sleet, Hail, Freezing Rain Pedestrian Related: 1 Fail to Yield Right-of-way Severe Crosswinds UnRelated: Fail to Obey Stop Sign Rain, Snow Parked Vehicle Related: UnRelated: Fail to Obey Traffic Signal Animal Other Collision Related: Fail to Obey Other Control Vision Obstruction UnRelated: Vehicle Defect Fail to Keep Right of Center F Bridge 01 Fail to Stop for School Bus Wet I Building 02 Wrong Way on One Way Icy or Snow Covered Χ Culvert/Ditch 03 Exceeded Speed Limit Debris or Obstruction Е Curb 04 Operator Using Cell Phone Ruts, Holes or Bumps Guardrail/Barrier 05 Stopping in Lane Roadway Road Under Construction Embankment 06 Too Fast for Conditions Traffic Control Device Inop. O Fence 07 Followed too Closely Shoulders Low, Soft or High В Light Pole 08 Improper Turn Other or Unknown J Sign Pole 09 WEATHER ILLUMINATION TOTALS Е Other Pole 10 1 Clear / Cloudy 18-22 1 Day C Tree/Shrubbery 11 Foggy Dawn/Dusk T 12 Contr. Barrier Raining Dark - Lights On Snow / Sleet Dark - No Lights S Crash Attenuator 13 Other Other

Other Fixed Object

Maryland State Highway Administration Name: Robert Booker
Office of Traffic and Safety - Traffic Development and Support Date: 04/18/2024

SHA ADC History Output rev. 10/2023-1 - Combined Year Listing

Location: CHAPMAN AVE @ BOUIC AVE Logmiles: 0 At 0.16 Radius: 250 ft.

County: Montgomery, D3 Period: January 01, 2018 To December 31, 2022 Note:

	Movement											
MilePt	Int Rel	Date	Severity	Time	Light	Surface	Alc Rel	FixObj	Collision	V1	V2	Probable Cause
MU650												
0.16	50 🗆	01272022	1 Injured	04P	Day	Dry			PED	SS		Fail to yield right-of-way

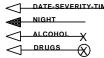
Fixed Object: 01 = Bridge 02 = Building 03 = Culvert/Ditch 04 = Curb 05 = Guardrail/Barrier 06 = Embankment 07 = Fence 08 = Light Pole 09 = Sign Post 10 = Other Pole 11 = Tree/Shrubbery 12 = Construction Barrier 13 = Crash Attenuator

DEPARTMENT
HIGHWAY

#### Office of Traffic & Safety Traffic Development & Support Division

Location:	Chapman Ave @ Bouic Ave						
County:	MONTGOMER	RY					
Study Period: _	01/01/2018 to	12/31/2022					
Analyst: Robert L	Booker. Jr.	Date:	04/18/2024				

STATE HIGHWAY ADMINISTRATION Crash Ana		Crash Analysis Safety Team	Study Period:01/01/2018 to 12/31/2022				
ADMINISTRATION			Analyst: _Robert L. Booker, Jr.		04/18/2024		
BOUIC AVE	CHAPMAN AVE	— → → → → → → → → → → → → → → → → → → →		CHAPMAN AVE			
DATE-SEVERITY-TIN	IE-SURECE	SEVERITY 00 Not Applicable	00 Light Compart Dala B - Bioyolo		U - TURN		



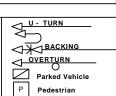
SEVERITY
F - Fatalities
I - Injured
P - Property Damage
Only
SURFACE
D - Dry Surface
W - Wet Surface
I - Icy Surface
S - Snowy Surface

00 - Not Applicable
01 - Bridge or Overpass
02 - Building
03 - Culvert or Ditch
04 - Curb
05 - Guardrail or Barrier
06 - Embankment
07 - Fence
08 - Light Support Pole
09 - Sign Support Pole
10 - Other Pole
11 - Tree Shrubbery
12 - Construction Barrier
13 - Crash Attenuator
88 - Other
99 - Unknown

B - Bicycle
P - Other Pedalcycle
C - Other Conveyance
T - Railway Train
A - Animal
O - Other Object
S - Spilled Cargo
J - Jackknife

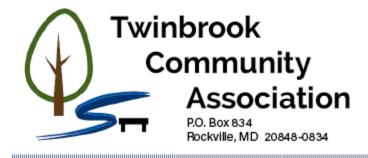
U - Units Separated N - Other Non collision D - Off Road R - Downhill Runaway F - Explosion or Fire ? - Unknown

template 12-14-23



### **APPENDIX D:**

RESIDENT COMMENTS AND RESPONSES



#### TCA Support for Safe Routes to School

July 5, 2024

City of Rockville 111 Maryland Avenue Rockville, MD 20850

Dear Bryan Barnett-Woods,

On behalf of the Twinbrook Community Association, I am writing to express our strong support for the city's "Safe Routes to School" project. We commend your efforts to enhance pedestrian safety at targeted intersections in Twinbrook, which will greatly benefit our community's residents, particularly our children.

We are pleased to see the city taking proactive steps to improve road safety and encourage walking and cycling to school.

While we fully support the current plans, we would like to respectfully suggest a few additional considerations that we believe would further enhance the project's impact:

- 1. Mini Traffic Circle: We propose the installation of a mini traffic circle at the intersection of Halpine Road and Ardennes Avenue. This would help calm traffic and improve safety at this busy intersection, which is frequently used by students. If possible, the mini circle should incorporate landscaping (e.g. potted plants/trees and/or public art).
- 2. Pedestrian-Level Lighting Assessment: We request a comprehensive assessment of pedestrian-level lighting at all intersections being studied under this project. Adequate lighting is crucial for pedestrian visibility and safety, especially during early morning and evening hours when many students are traveling to and from school-related activities. This would serve as an additional benefit for low-wage workers traveling during off-peak work hours.
- 3. Slip Lane Elimination: We strongly advocate for the elimination of the slip lane on the northwest corner of Twinbrook Parkway and Chapman Avenue. Removing this slip lane would significantly improve pedestrian safety by reducing vehicle speeds and decreasing the number of pedestrian vehicle conflict points.

The Twinbrook Community Association is committed to working collaboratively with the City of Rockville to ensure the success of this important project. We would be happy to provide any additional input or assistance as needed.

Thank you for your consideration of these suggestions and for your ongoing commitment to improving pedestrian safety in our community. We look forward to seeing the positive impact of the "Safe Routes to School" project in Twinbrook.

Sincerely,

Mary A. van Balgooy

Hary A van Bogoog

President, Twinbrook Community Association

In response to the Twinbrook Community Associate comments please see below

- A mini-traffic circle is only recommended for intersections without stop-control. The intersection of Halpine Road and Ardennes Avenue is an all-way stop control intersection, and has a stop sign on each leg of the intersection. Motorists are required to make a complete stop at this intersection. Staff has reached out to Rockville City Police Department to provide additional traffic enforcement at this intersection.
- 2. The Transportation Alternatives project did not include an assessment of lighting conditions. Most of the streetlights in Twinbrook are owned and maintained by Pepco. Staff will separately request Pepco to evaluate lighting levels at each intersection.
- 3. A comprehensive traffic study was not included to evaluate whether the northeast slip lane could be removed. However, the post for the existing signals is installed on the northeast corner refuge island and would require relocation to the new corner if the slip lane were removed. This would be too expensive to implement without being a separate CIP item. Additionally, this intersection is currently subject to an adequacy evaluation and improvements per a county development. Staff is coordinating with MNCPPC regarding this project.