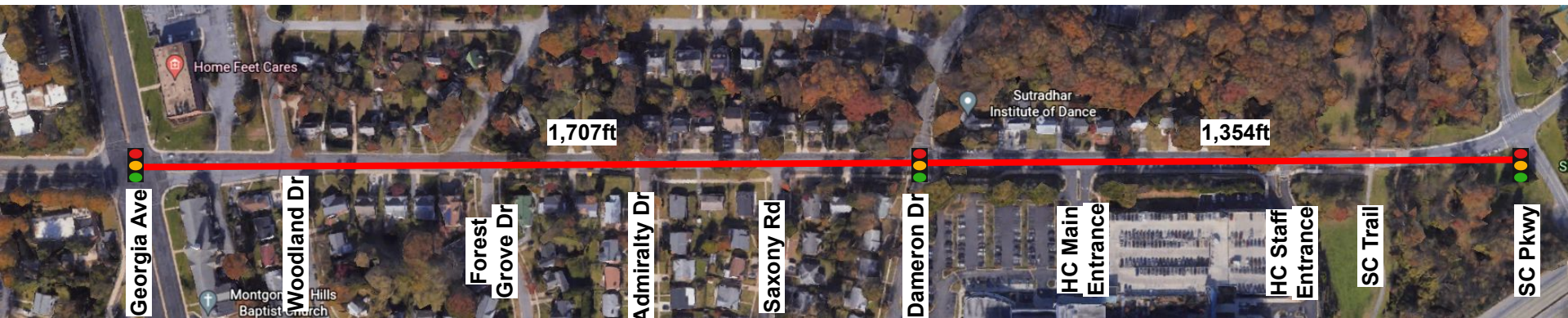


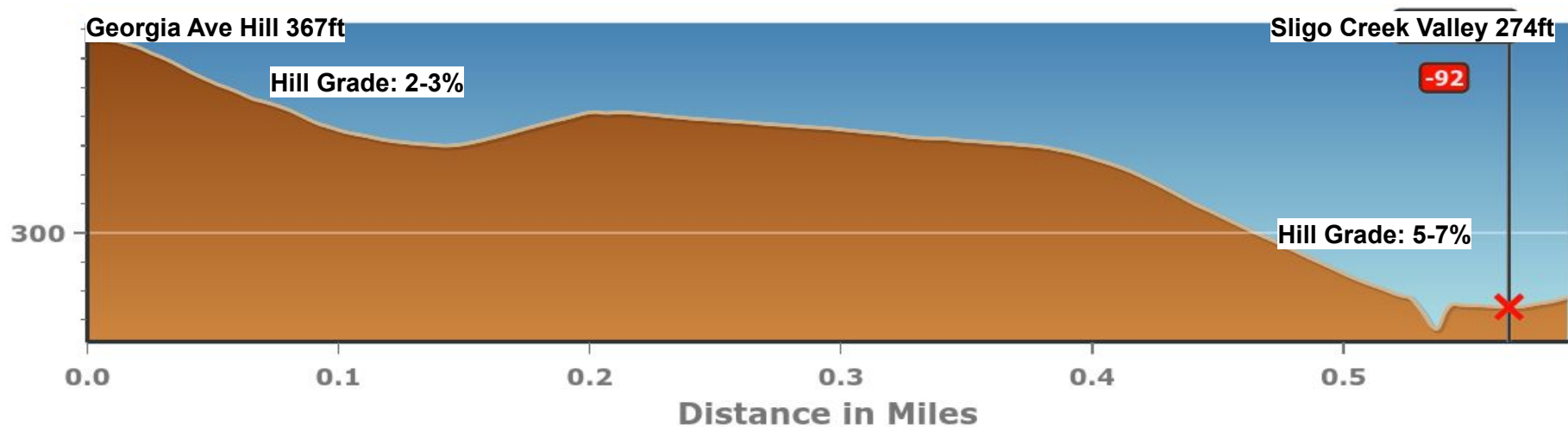
[illegible]



Distance Between Signalized Intersections and Grade Change

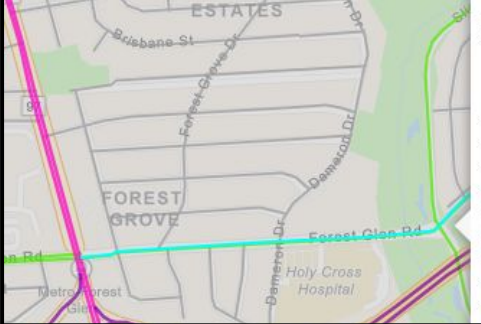


Elevation Profile




Forest Glen Road Roadway Classification

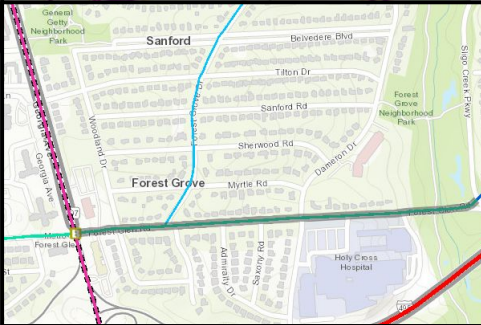
- MDSHA Roadway Classification:
 - Major Collector
- MPOHT Functional Classification:
 - Minor Arterial
 - Target Speed: 25mph
- Forest Glen Sector Plan (2020)
 - Minor Arterial
 - ROW: 80ft
 - 2 Lanes



Functional Classification (CO 697--)



Route: County Route (CO 697--)
Route Name: Forest Glen Rd
Functional Class: Major Collector
Measures (To - From): 0.00 - 1.35
Cardinality: Inventory Direction
Urban Area: Washington, DC--VA--MD
County: Montgomery
Municipality: None
Exit Number: ---
Ramp Number: ---




Forest Glen Rd

From Location: Georgia Ave (MD 97)
To Location: Silgo Creek Pkwy
Current Classification: Minor Arterial

Existing Lanes: 2
Planned Lanes: 2

Transitway: n/a
Right-of-Way (feet): 80
Master Planned Target Speed: 25
Master Plan: Forest Glen Montgomery Hills Sector Plan (2020)

Example of Minor Arterial Road





Forest Glen Road

Forest Glen Sector Plan

- Recommended Bike Network
- Recommended Pedestrian Links



Forest Glen/Montgomery Hills Sector Plan March 2020

Bikeway Recommendations

- "Install a sidepath on the south side of Forest Glen Road, from Georgia Avenue to Brunett Avenue. Forest Glen Road is the most direct route between the Forest Glen Metrorail Station and Holy Cross Hospital, one of the largest employers in the plan area. Currently, the hospital provides a bus circulator to ensure safe access between the two destinations.

Forest Glen/Montgomery Hills Sector Plan

Transportation Appendix - Separation from Pedestrians in Urban Areas

- "Due to the substantial volumes and meandering travel patterns of pedestrians in urban environments, on-road bikeways (such as separated bike lanes, buffered bike lanes, traditional bike lanes) are recommended instead of shared use paths along roadways. In these urban environments, the speed differential between pedestrian and bicycle traffic on public sidewalks often leads to conflicts and a degradation of quality for both parties. As a result, bicyclists are often reluctant to travel in what is perceived as a pedestrian-only space.

Forest Glen Road

Roadway Classification Attributes

- Complete Streets Guide Road Type:
 - Neighborhood Connector
 - Street Zone:
 - Lanes: 2
 - Left Turn Lanes: 10ft
 - TWLTL: 10ft
 - Inside Travel Lane: 10.5ft
 - Outside Travel Lane: 10.5ft
 - Parking: 8ft
 - Bikeway Types / Widths:
 - Sidepath: 10' default: 8' min, **or**
 - Bike Lane: 6ft (min 5ft)
 - Protected Crossing Minimum Spacing:
 - 800ft - 1,200ft
 - Signalized Intersections: 1,300ft
 - Active Zone:
 - Street Buffer: 6ft
 - Sidewalks: 6ft (min 5ft)
 - Sidepaths: 10ft (min 8ft)



Figure 2-48. Neighborhood Connector

- MB** Maintenance Buffer
- SP** Sidepath
- SB** Street Buffer
- TV** Travel Lane
- SW** Sidewalk

Forest Glen Road Traffic: Forest Glen Metro Parkshed:

The majority of driving commuters reside in the neighborhoods to the north and east of the project area many originating from east of Sligo Creek using Forest Glen Rd to access the Metro. Most Metro users walk if they live within $\frac{1}{2}$ mile of station.

Origin of Parking Customers at Forest Glen Station

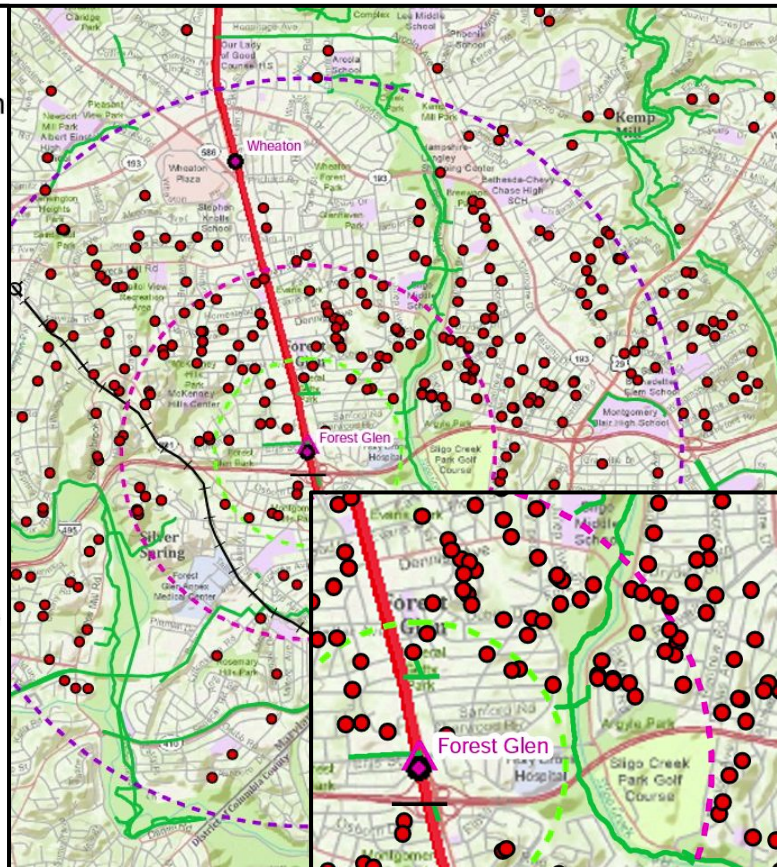
by address of registered
SmarTrip card, May 3, 2011
(81% of cards registered)

Legend

- Forest Glen Station
- Parking Customers
- Half-Mile
- 1 Mile
- 2 Miles
- MARC Station
- Bike Lanes/Paths/Routes



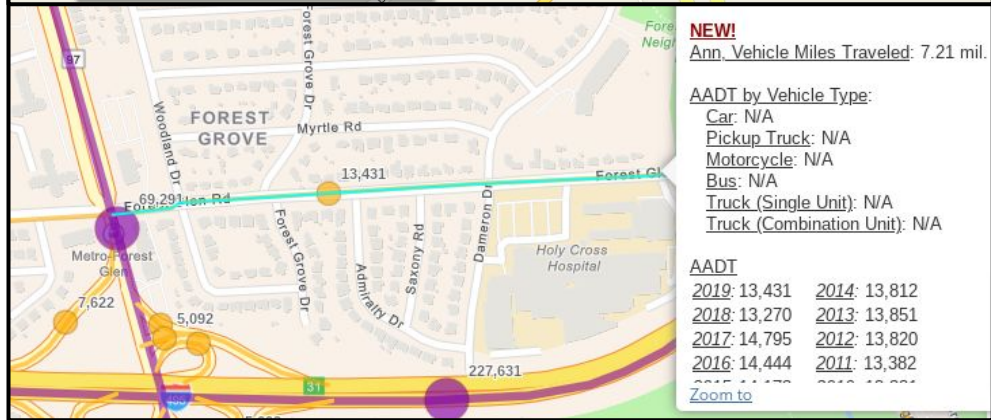
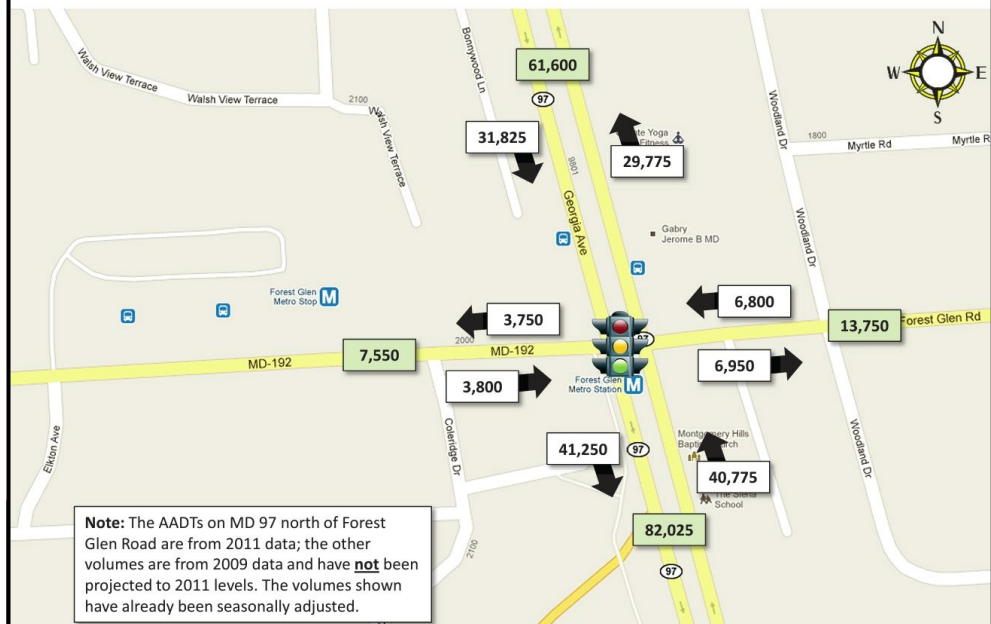
0.5 0.25 0 0.5
Miles



Forest Glen Road Traffic - Georgia Ave and Forest Glen Rd

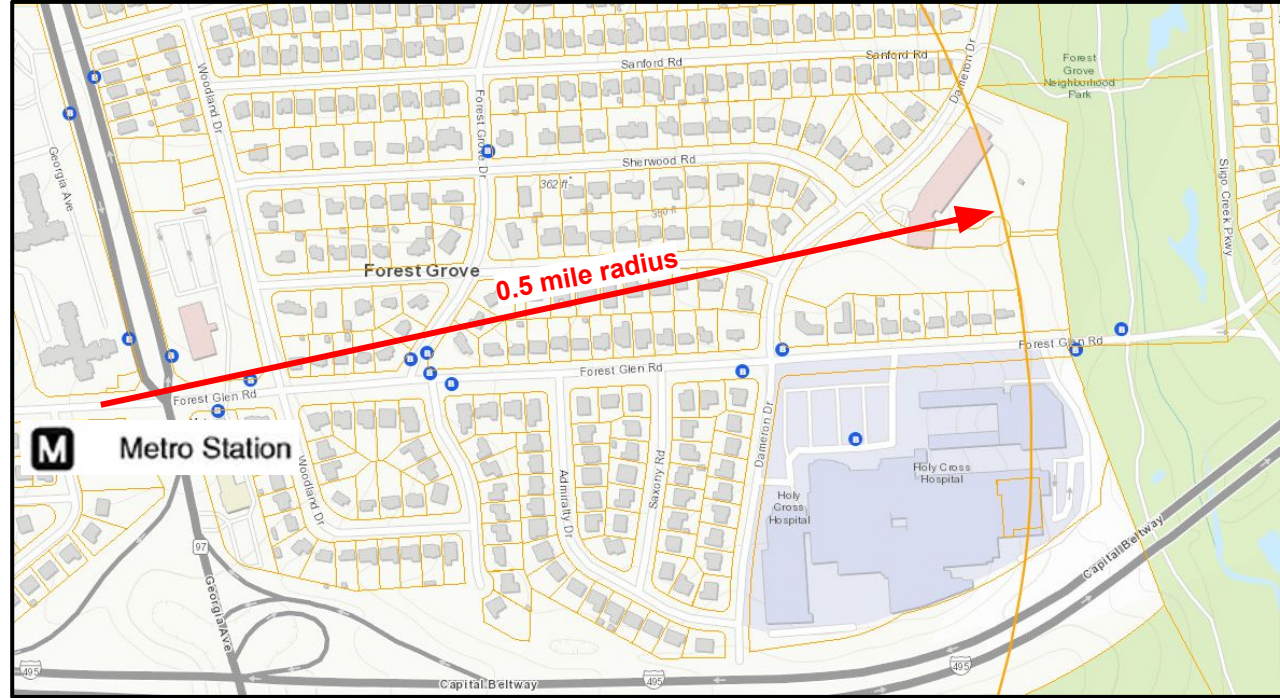
- MDSA Average Annual
Daily Traffic (AADT):
 ○ WB: 49.5%
 ○ EB: 50.5%

Annual Average Daily Traffic (AADT) Volumes: MD 97 (Georgia Avenue) at Forest Glen Road



Forest Glen Road Transportation

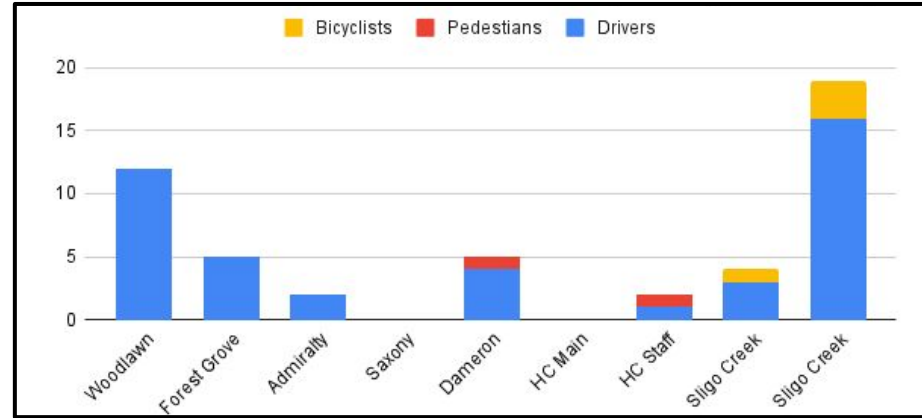
- MCDOT RideOn:
 - 3 bus stop pairs
 - Forest Grove HC Staff Intersection
- WMATA Metro
 - Metro Holy Cross Hospital is within 0.5 mile of Forest Glen Metro



Forest Glen Road Crashes

- Most crashes are west of Admiralty and east of Holy Cross Staff
- exception of Dameron
- Pedestrian and bicyclist crashes are concentrated at Dameron and between Sligo Creek Pkwy and the HC Staff entrance.

All Crashes, by Intersection, by Road User, 2015-2019

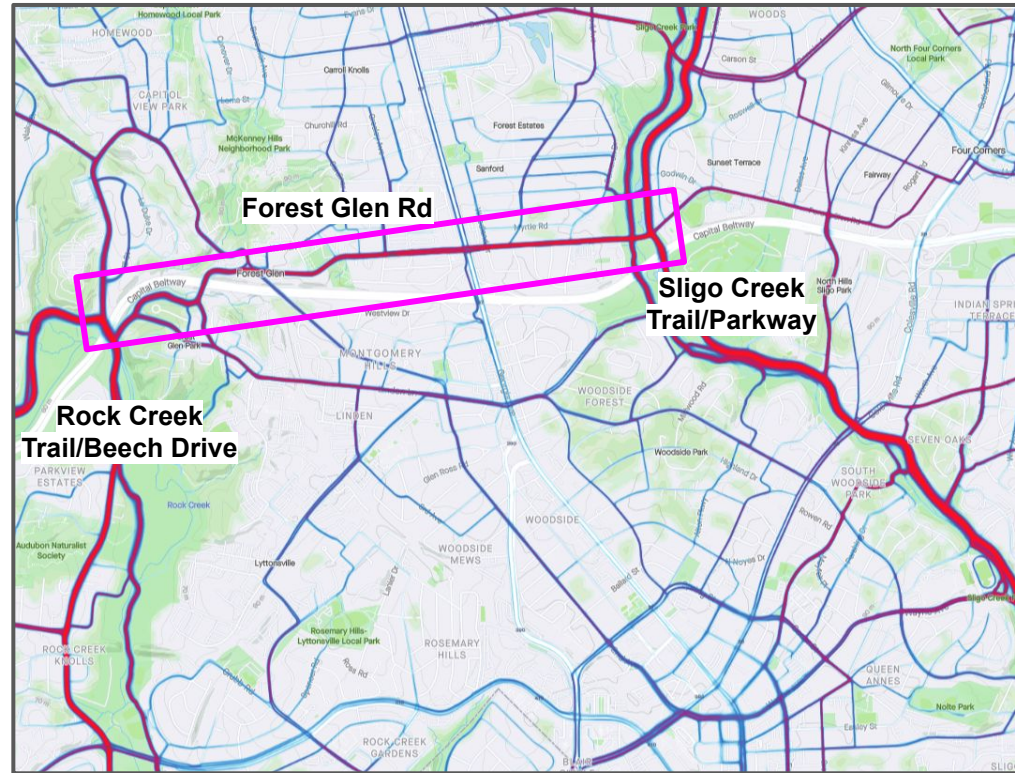


Forest Glen Sector Plan: Severe and Fatal Crashes, 2015-2018



Forest Glen Road Bicyclist Activity

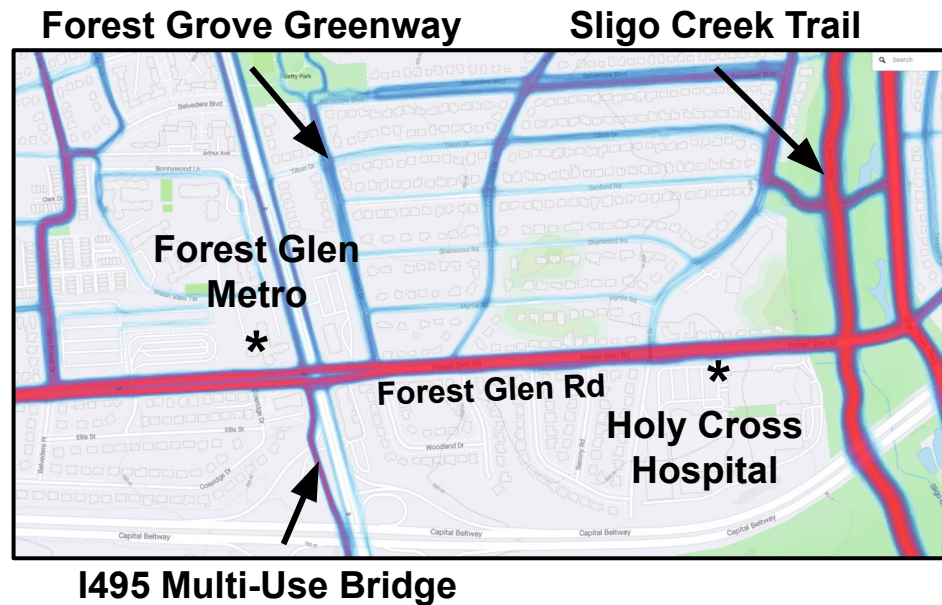
- **Bicycling Activity: (from Strava Heatmap):**
 - Regional Connectivity: Forest Glen is the MOST IMPORTANT east-west roadway for bicycling in Montgomery County south of ICC and Henson Trail connecting Sligo Creek Trail/Parkway to Rock Creek Trail/Beech Drive also serving as an alternative to the closed Purple Line/Capital Crescent Trail between Silver Spring and Bethesda.



Forest Glen Road

Local Pedestrian and Bicycling Activity

- **Bicycling and Pedestrian Activity (from Strava Heatmap):**
 - **Local Connectivity:** With Forest Glen Metro and Holy Cross Hospital (500 beds, 4,000 employees) are within $\frac{1}{2}$ mile walking distance, Forest Glen has high activity from pedestrian commuters as well as bike commuters moving between Four Corners and Forest Glen Metro. Forest Glen is crossed by Forest Grove Dr, a local Greenway bike route to Wheaton to the north and Silver Spring to the south.



Forest Glen Road

Pedestrian Activity

- Forest Glen Rd/Georgia Ave Intersection Pedestrian Activity: east-west
 - 854 pedestrians/day

AM Peak Hour:

- 101:
 - 42 northside
 - 59 southside

PM Peak Hour:

- 150:
 - 79 northside
 - 71 southside

Peak Hour Pedestrian Volumes



Forest Glen Road

Bicycle Level of Stress: Moderately High to High

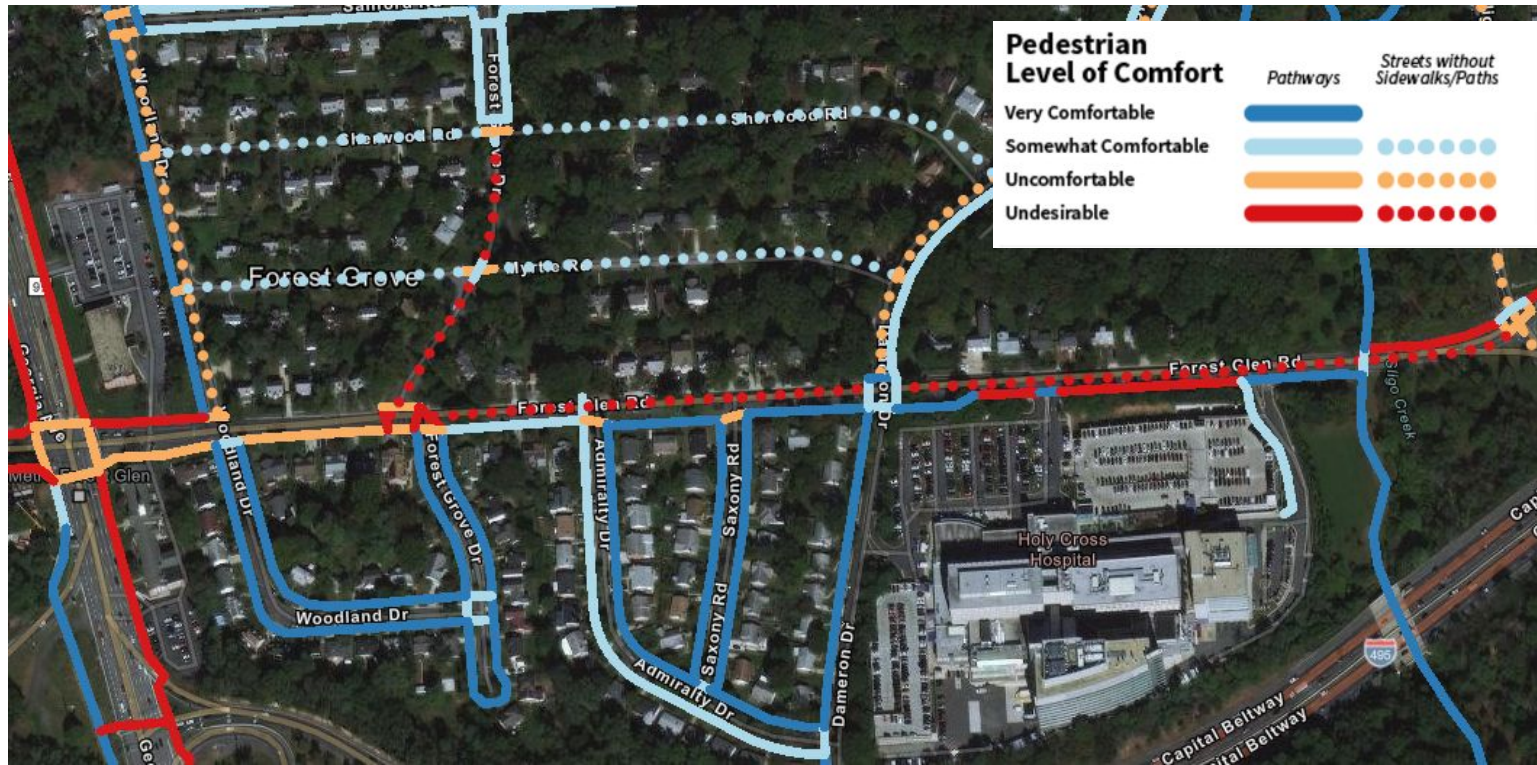


Forest Glen Road

Pedestrian Level of Comfort:

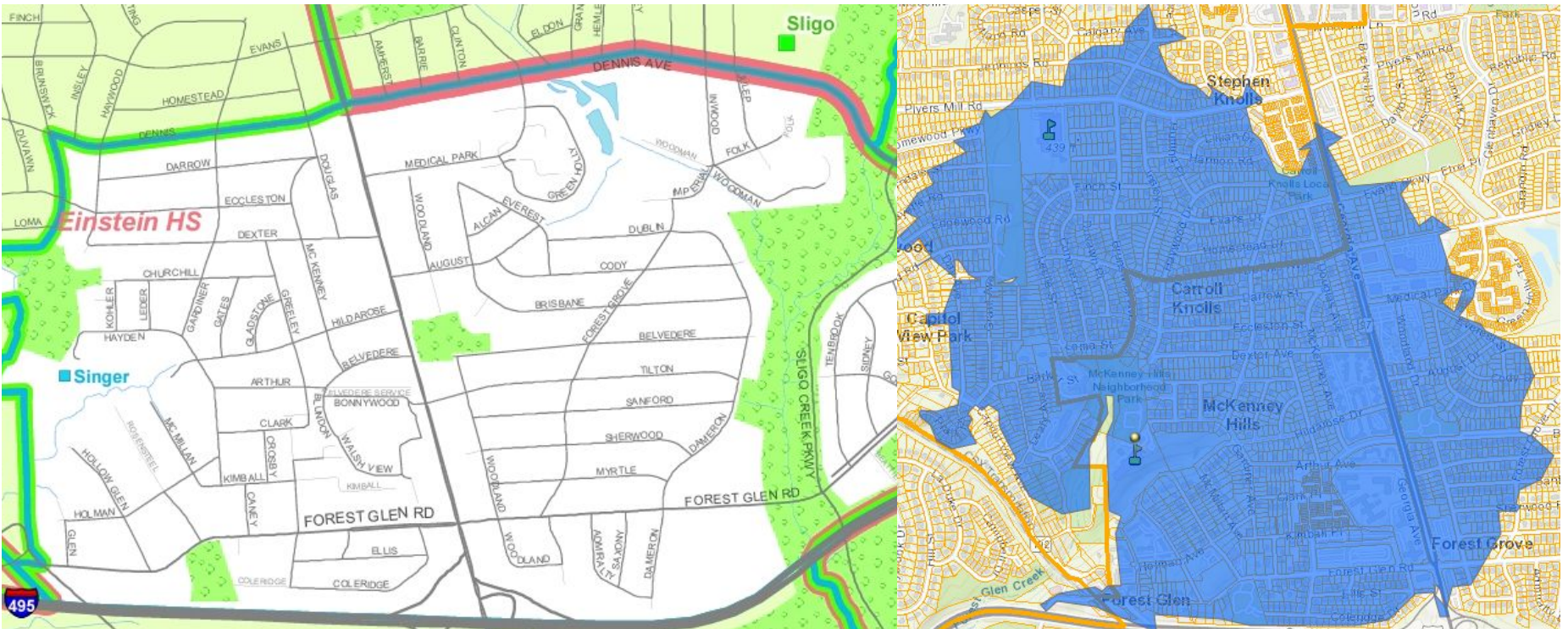
Northside: Undesirable

Southside: Very Comfortable to Undesirable



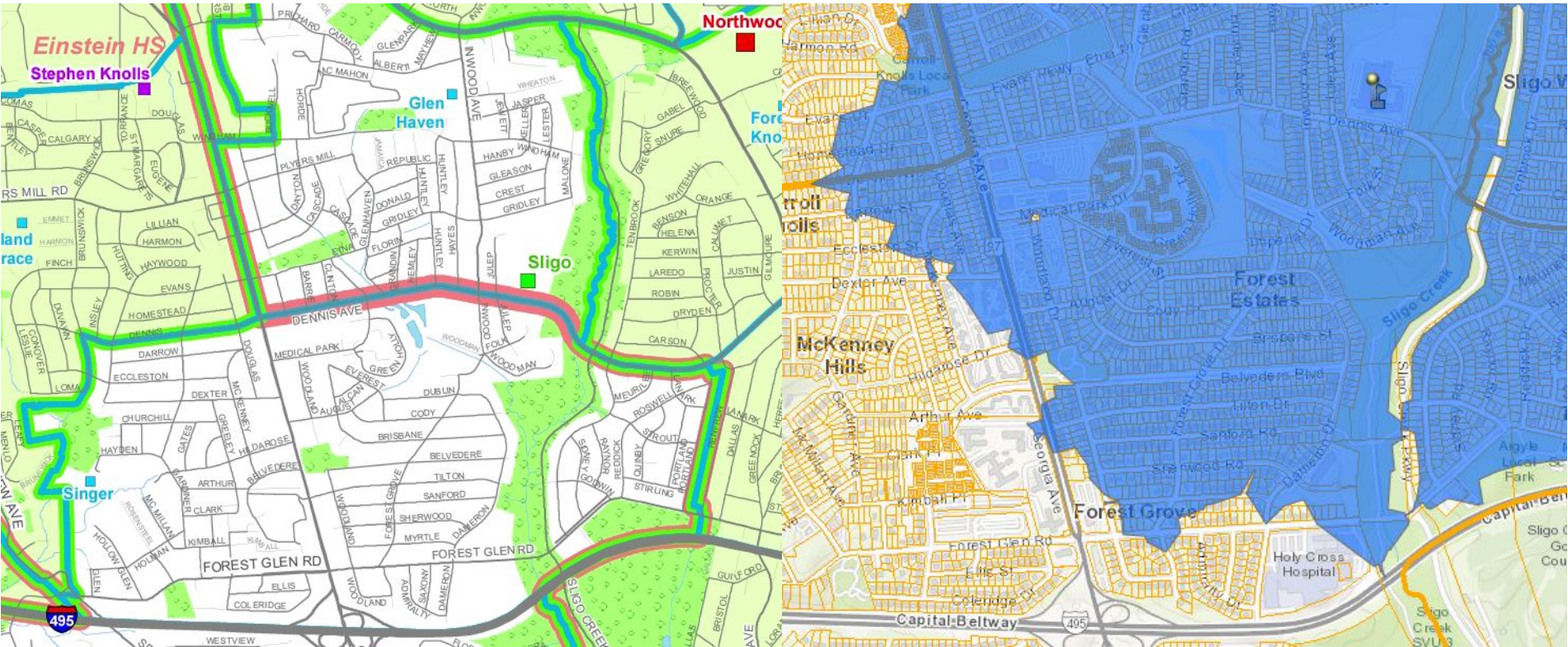
Forest Glen Road School Service Areas

- Flora M. Singer ES - Service Area 1 mile Walkshed



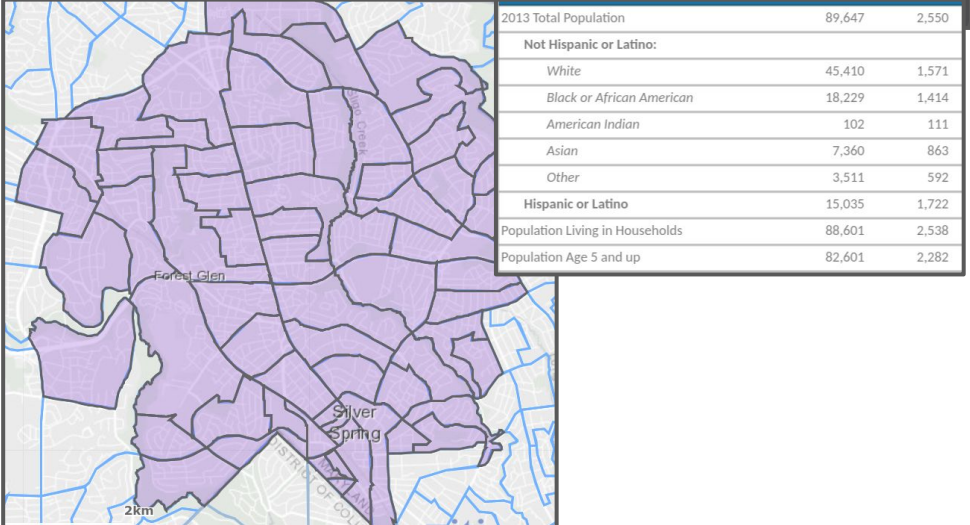
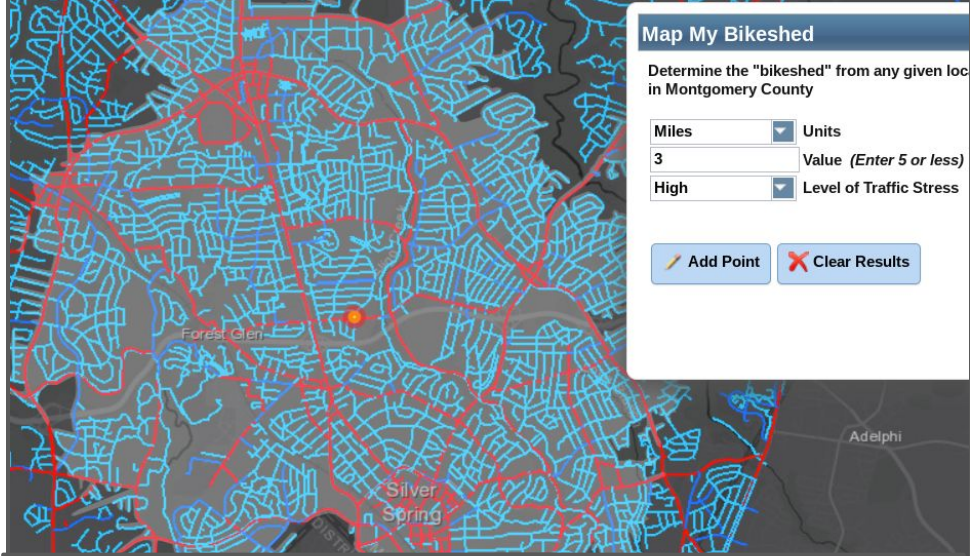
Forest Glen Road School Service Areas

- Sligo MS - Service Area 1 mile Walkshed



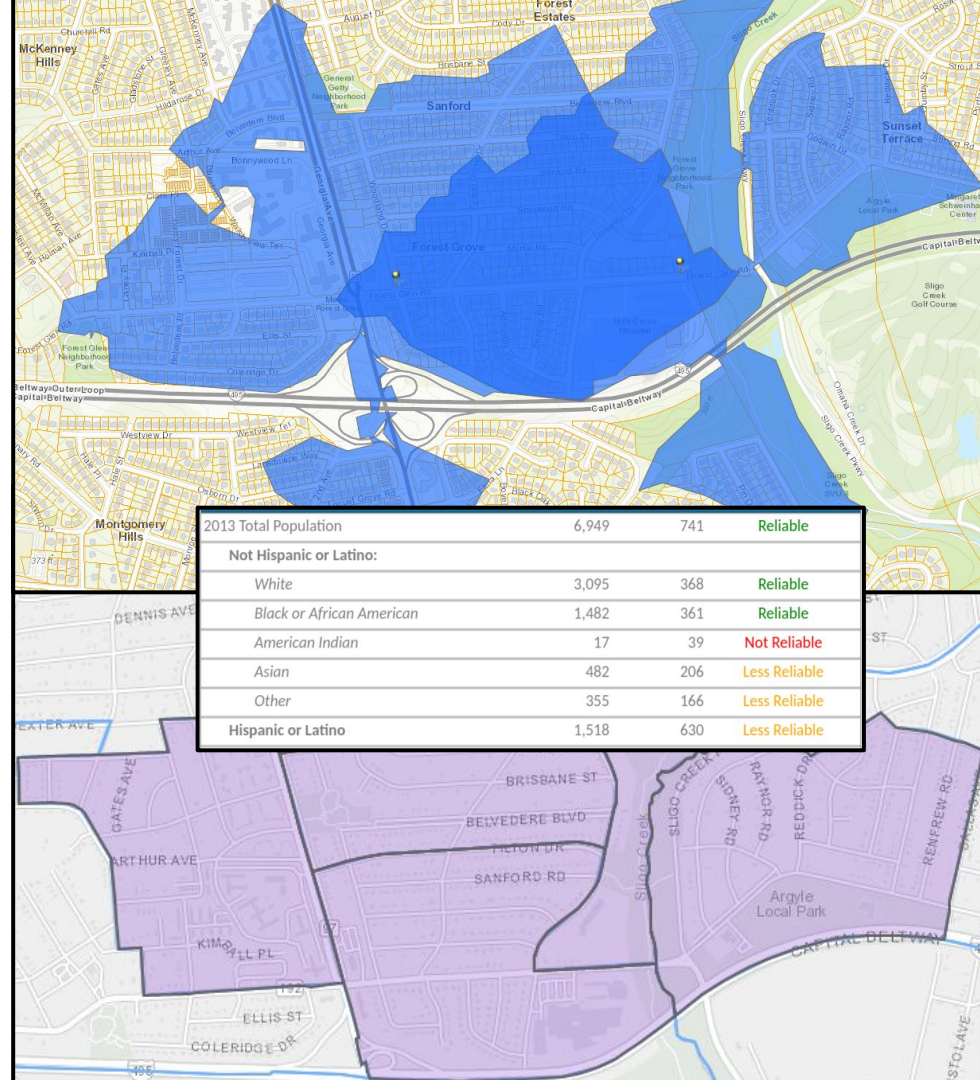
Forest Glen Road Bikeshed

- From Forest Glen, the 3 mile bikeshed includes Wheaton to the north, Connecticut Ave to the west, Silver Spring to the south and Four Corners/Woodmoor neighborhood to the east IF you are willing to endure high stress roadways.
- Bikeshed includes 90,000 residents



Forest Glen Road Walkshed

- From Forest Glen Rd the 1/2 mile walkshed includes neighborhoods of:
 - McKinney Hills west of MD97
 - Forest Grove, Forest Estates between MD97 and Sligo Creek Pkwy
 - Sunset Terrace in South Four Corners east of Sligo Creek Pkwy
- Walkshed Population: 7,000 residents

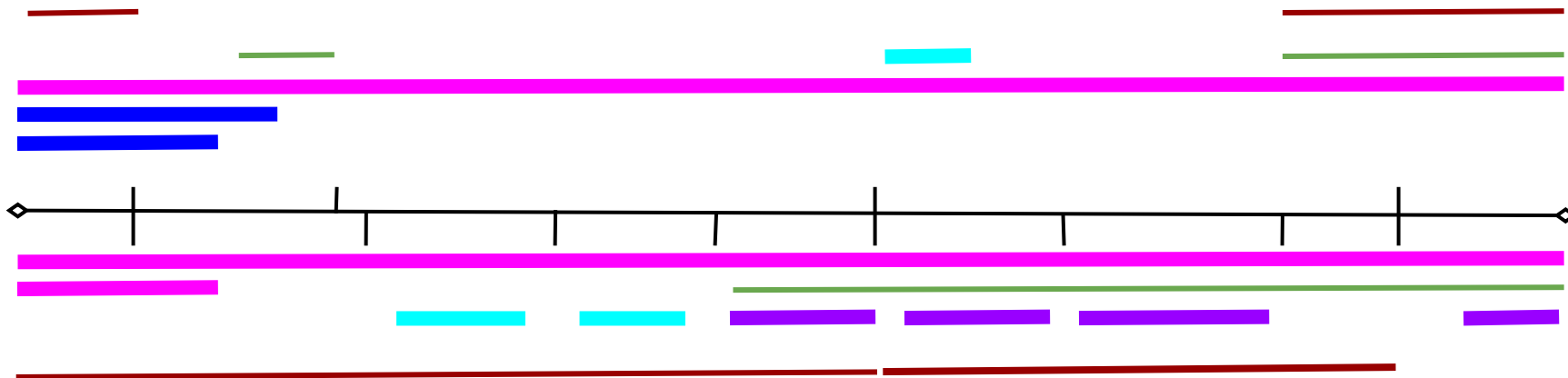


Forest Glen Road Streetscape and Facilities - Current



- Sidewalk
- Bike Lane
- Travel Lane
- LT Lane
- Channelized RT Lane
- On-Street Parking

Westbound/Northside



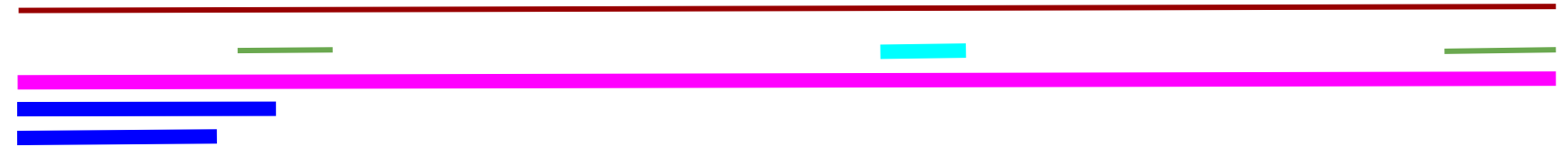
Eastbound/Southside

Forest Glen Road Sidewalk Project - Project Design



Sidewalk
Bike Lane
Travel Lane
LT Lane
Channelized RT Lane
On-Street Parking

Westbound/Northside



Eastbound/Southside



Georgia Ave

Woodland Dr

Forest Grove Dr

Admiralty Dr

Saxony Rd

Dameron Dr

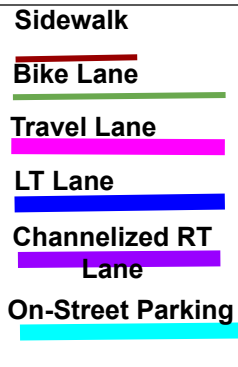
HC Main
Entrance

HC Staff
Entrance

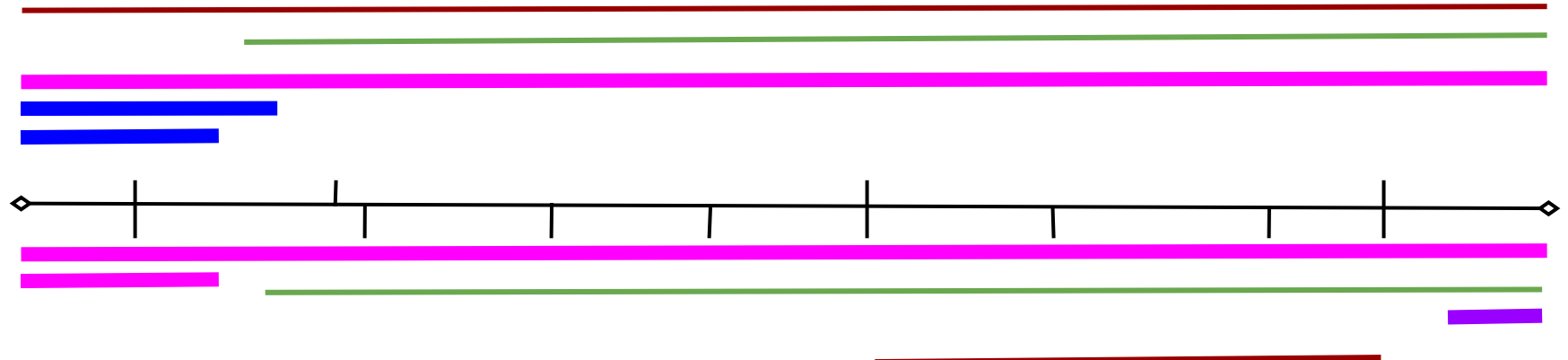
SC Trail

SC Pkwy

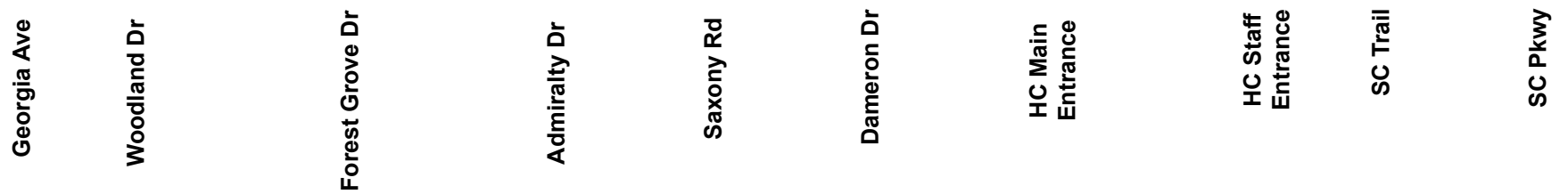
Forest Glen Road Sidewalk Project - Advocate Proposed



Westbound/Northside



Eastbound/Southside



Forest Glen Road Sidewalk Project

Streetscape Changes

Advocate Proposed Streetscape using Complete Streets Guide Priorities in a Constrained ROW

- **SC Bridge Segment:** Widen northside Sidewalk, shifting Travel Lanes and existing Bike 3ft south to transition to HC Bus Stop segment alignment
- **HC Staff Bus Stop Segment:** Wedge street buffer from 5ft northwest side to 0ft northeast side; vary street buffer from 3ft southwest side to 5ft southeast side
- **HC Main to Staff Segment:** Remove EB Right Turn Lane and southside Parking; keep Bike Lanes and add Sidewalk and Street Buffer northside
- **Dameron Dr to HC Main Segment:** Remove EB Right Turn Lane and northside Parking; keep Bike Lanes and add Sidewalk and Street Buffer northside
- **Saxony Rd to Dameron Dr Segment:** Remove EB Right Turn Lane; keep Bike Lanes and add northside Sidewalk and Street Buffer
- **Admiralty Dr to Saxony Rd Segment:** Remove southside Parking; add Bike Lanes and northside Sidewalk and Street Buffer
- **Forest Grove Dr to Admiralty Dr Segment:** Remove southside Parking; add Bike Lanes and northside Sidewalk and Street Buffer

Forest Glen Road Sidewalk Project

Streetscape Changes

Changes to Facilities, by Roadway Segment (width in feet):
Current, Project Design, Advocate Proposed

		North/WB							South/EB						
Project Segments - East to West		Sidewalk/ Sidepath	Street Buffer	Shoulder	Parking	Bike Lane	Right Turn Lane	Travel Lane	Travel Lane	Right Turn Lane	Bike Lane	Parking	Shoulder	Street Buffer	Sidewalk/ Sidepath
SC Bridge Segment	Current	6	0	0	0	5	0	11	11	0	5	0	6	NA	NA
SC Bridge Segment	Project	9	0	0	0	0	0	10.5	10.5	0	0	0	10	NA	NA
SC Bridge Segment	Proposed	9	0	0	0	5	0	10.5	10.5	0	5	0	4	NA	NA
HC Staff Bus Stop Segment	Current	0	0	0	0	5	0	11	11	0	6	0	0	15	8
HC Staff Bus Stop Segment	Project	6	5	0	0	0	0	10.5	10.5	0	0	0	0	14	8
HC Staff Bus Stop Segment (east)	Proposed	6	0	0	0	5	0	10.5	10.5	0	5	0	0	9	8
HC Staff Bus Stop Segment (west)	Proposed	6	5	0	0	5	0	10.5	10.5	0	5	0	0	4	8
HC Main to Staff Entrance Segment	Current	0	0	2	0	0	0	12	12	12	3	0	0	0	9
HC Main to Staff Entrance Segment	Project	6	3	0	0	0	0	10.5	10	10.5	0	0	0	0	9
HC Main to Staff Entrance Segment	Proposed	6	4	0	0	5	0	10.5	10.5	0	5	0	0	0	9
Dameron Dr to HC Main Segment	Current	0	0	0	7	0	0	11	11	12	4	0	0	18	9
Dameron Dr to HC Main Segment	Project	6	0	0	8	0	0	10.5	10	10.5	0	0	0	18	9
Dameron Dr to HC Main Segment	Proposed	8	6	0	0	5	0	10.5	10.5	0	5	0	0	18	9
Saxony Rd to Dameron Dr Segment	Current	0	0	2	0	0	0	13	11	13	4	0	0	4	8
Saxony Rd to Dameron Dr Segment	Project	6	6	0	0	0	0	10.5	10	10.5	0	0	0	4	8
Saxony Rd to Dameron Dr Segment	Proposed	6	6	0	0	5	0	10.5	10.5	0	5	0	0	4	8
Admiralty Dr to Saxony Rd Segment	Current	0	0	4	0	0	0	11	11	0	0	11	0	22	8
Admiralty Dr to Saxony Rd Segment	Project	6	3	0	0	0	0	10.5	10.5	0	0	8	0	21	8
Admiralty Dr to Saxony Rd Segment	Proposed	6	3	0	0	5	0	10.5	10.5	0	5	0	0	19	8
Forest Grove Dr to Admiralty Dr Seg	Current	0	0	3	0	0	0	12	13	0	0	9	0	4	8
Forest Grove Dr to Admiralty Dr Seg	Project	6	3	0	0	0	0	10.5	10.5	0	0	8	0	3	8
Forest Grove Dr to Admiralty Dr Seg	Proposed	6	2	0	0	5	0	10.5	10.5	0	5	0	0	2	8

Forest Glen Road Sidewalk Project

Advocate Streetscape Changes

Net Changes to Facilities (length in linear feet)

	Current		Project Design		
	Northside/WB	Southside/EB	Northside/WB	Southside/EB	Delta
Sidewalks	550	2660	2660	2660	2110
Bike Lanes	500	1610	140	140	-1830
Parking	100	375	100	375	0
Right Turn Lane	0	933	0	933	0

	Current		Advocate Proposed		
	Northside/WB	Southside/EB	Northside/WB	Southside/EB	Delta
Sidewalks	550	2660	2660	2660	2110
Bike Lanes	500	1610	2660	2660	3210
Parking	100	375	0	0	-475
Right Turn Lane	0	933	0	0	-933

Forest Glen Road Sidewalk Project: Forest Grove Dr to Admiralty Dr

Current Alignment and Facilities

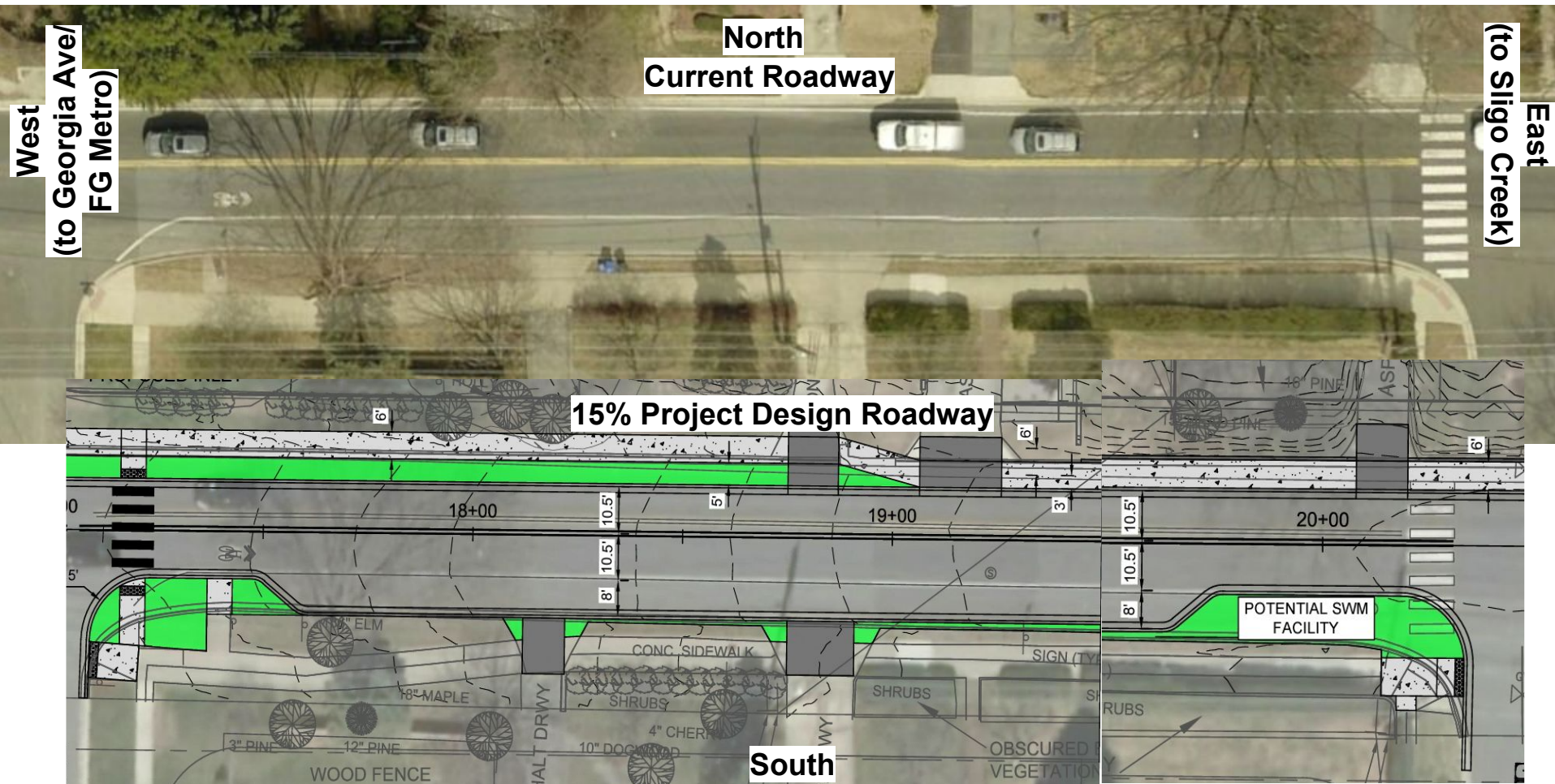


**View from Forest Grove Dr Intersection
to East towards Admiralty Dr Intersection**

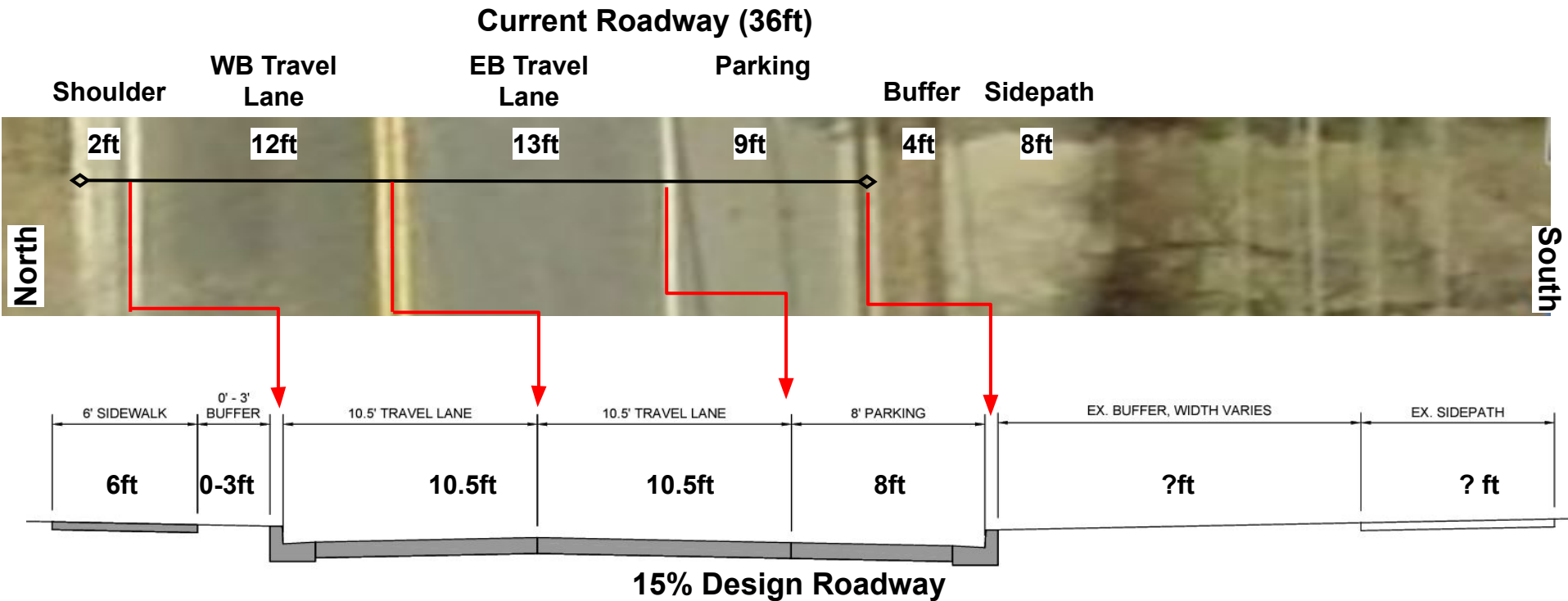


**View from Admiralty Dr Intersection
to West towards Forest Grove Dr Intersection**

Forest Glen Road Sidewalk Project: Forest Grove Dr to Admiralty Dr



Forest Glen Road Sidewalk Project: Forest Grove Dr to Admiralty Dr Take the WB Shoulder (aka Bike Lane)... Keep Parking?



TYPICAL SECTION - CLOSED SECTION WITH PARKING LANE ON SOUTH SIDE

FOREST GROVE DRIVE TO SAXONY ROAD
NOT TO SCALE

Forest Glen Road Sidewalk Project: Forest Grove Dr to Admiralty Dr - Advocate Proposed

An aerial photograph of a road with a proposed sidewalk project overlay. The overlay consists of several colored rectangular blocks representing different sections of the project. From top to bottom, the blocks are: a cyan block labeled '6ft Sidewalk', a dark green block labeled '3ft Street Buffer', a bright green block labeled '5ft Bike Lane', a light gray block labeled '10.5ft Travel Lane', another light gray block labeled '10.5ft Travel Lane', another bright green block labeled '5ft Bike Lane', another dark green block labeled '4ft Street Buffer', and a final cyan block labeled '8ft Sidepath'. The background shows a road with a crosswalk, trees, and a building on the right.

6ft Sidewalk

3ft Street Buffer

5ft Bike Lane

10.5ft Travel Lane

10.5ft Travel Lane

5ft Bike Lane

4ft Street Buffer

8ft Sidepath

Forest Glen Road Sidewalk Project: Admiralty Dr to Saxony Rd

Current Alignment and Facilities

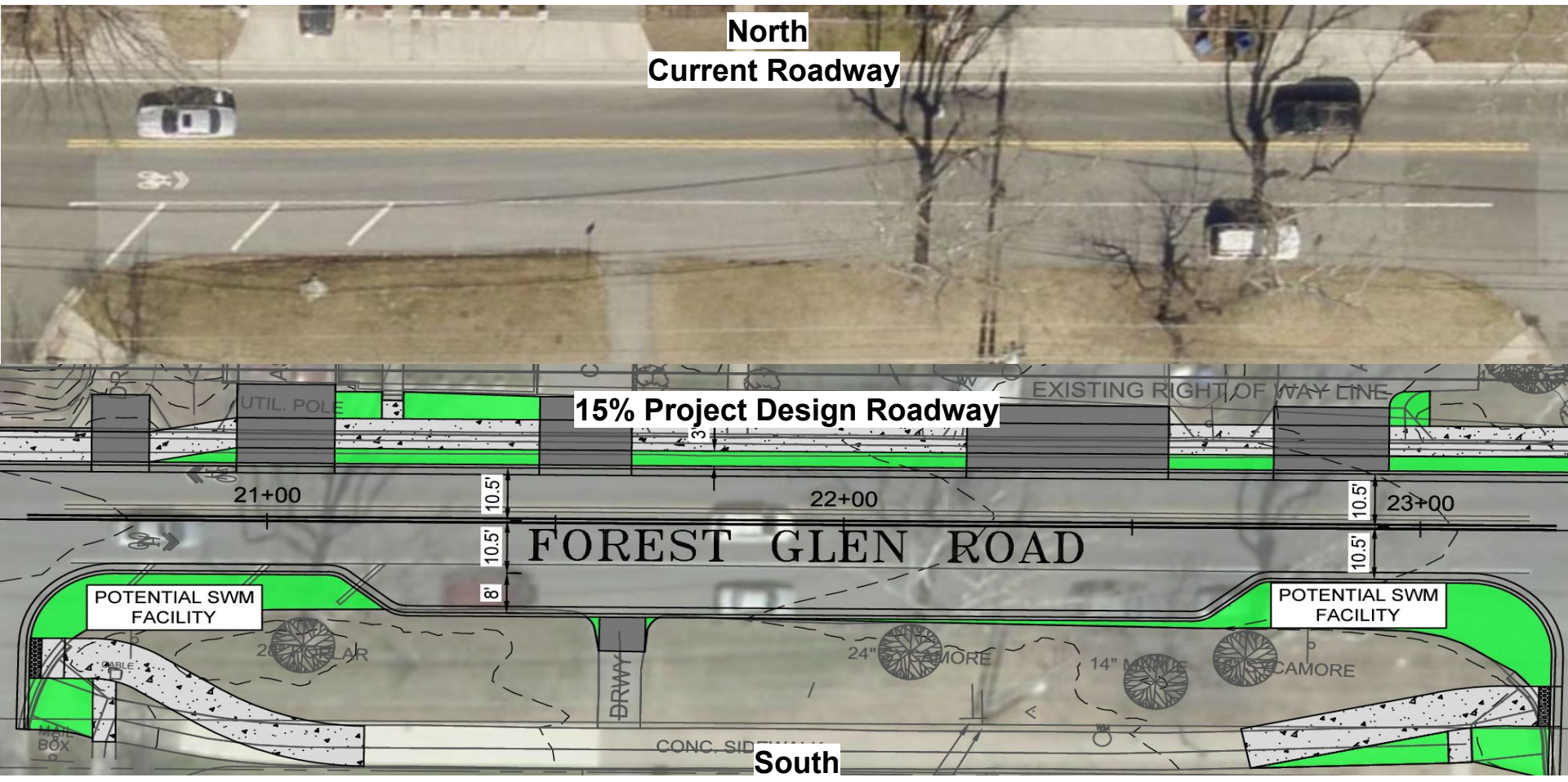


**View from Admiralty Dr Intersection
to East towards Saxony Dr Intersection**



**View from Saxony Rd Intersection
to West towards Admiralty Dr Intersection**

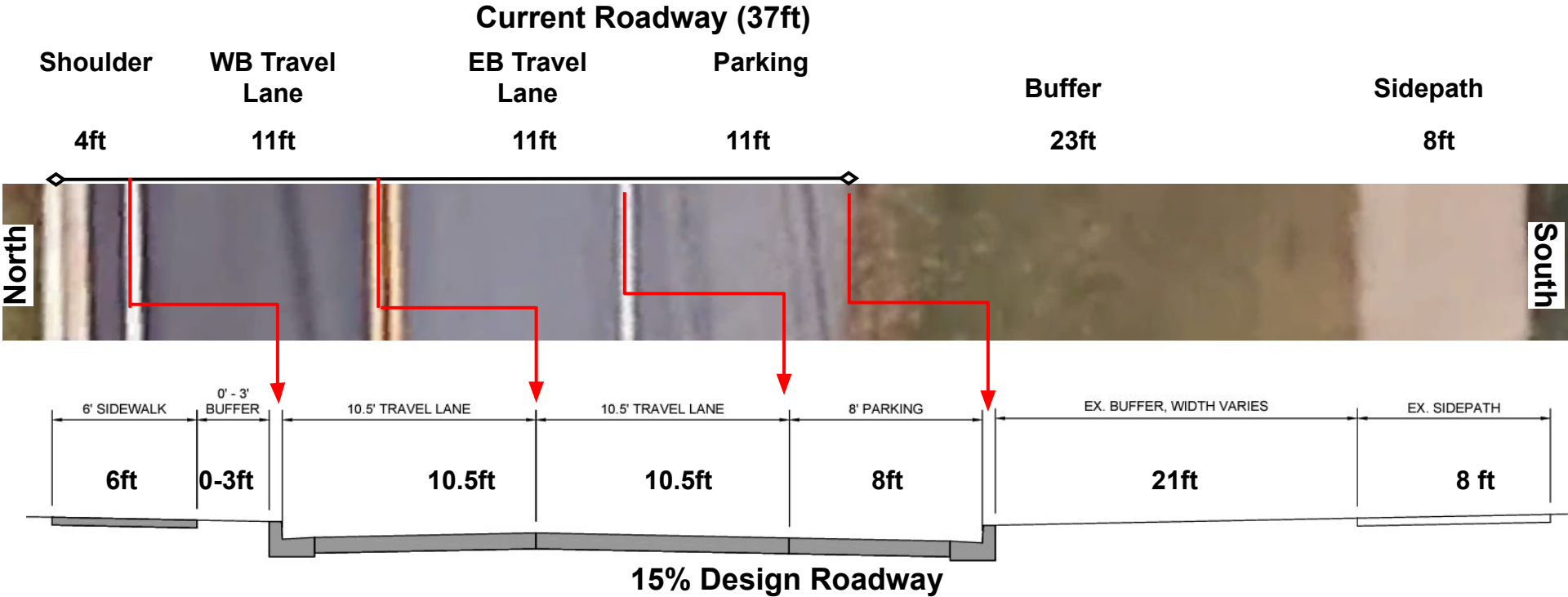
Forest Glen Road Sidewalk Project: Admiralty Dr to Saxony Rd



Forest Glen Road Sidewalk Project:

Admiralty Dr to Saxony Rd

Take the WB Shoulder (aka Bike Lane)... Keep Parking?



TYPICAL SECTION - CLOSED SECTION WITH PARKING LANE ON SOUTH SIDE

FOREST GROVE DRIVE TO SAXONY ROAD
NOT TO SCALE

Forest Glen Road Sidewalk Project: Admiralty Dr to Saxony Rd - Advocate Proposed

An aerial photograph of a residential street, Forest Glen Road, showing a proposed sidewalk project. The road is paved with asphalt and has a concrete curb on the left. The proposed sidewalk layout is overlaid on the image, showing a 6ft sidewalk, a 3ft street buffer, a 5ft bike lane, two 10.5ft travel lanes, another 5ft bike lane, a 23ft street buffer, and an 8ft sidepath.

6ft Sidewalk

3ft Street Buffer

5ft Bike Lane

10.5ft Travel Lane

10.5ft Travel Lane

5ft Bike Lane

23ft Street Buffer

8ft Sidepath

Forest Glen Road Sidewalk Project: Saxony Rd to Dameron Dr

Current Alignment and Facilities

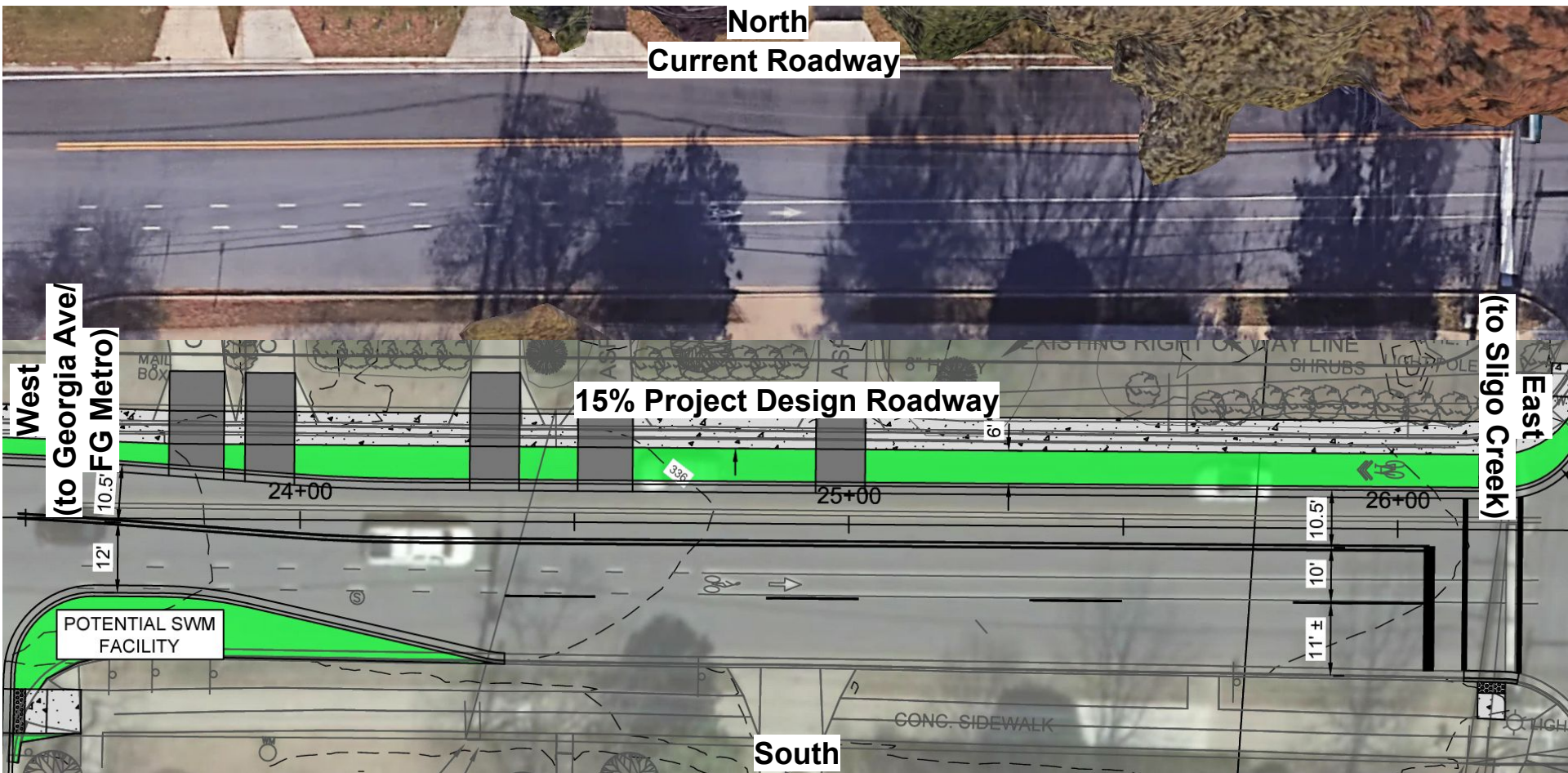


**View from Saxony Rd Intersection
to East towards Dameron Dr Intersection**



**View from Dameron Dr Intersection
to West towards Saxony Rd Intersection**

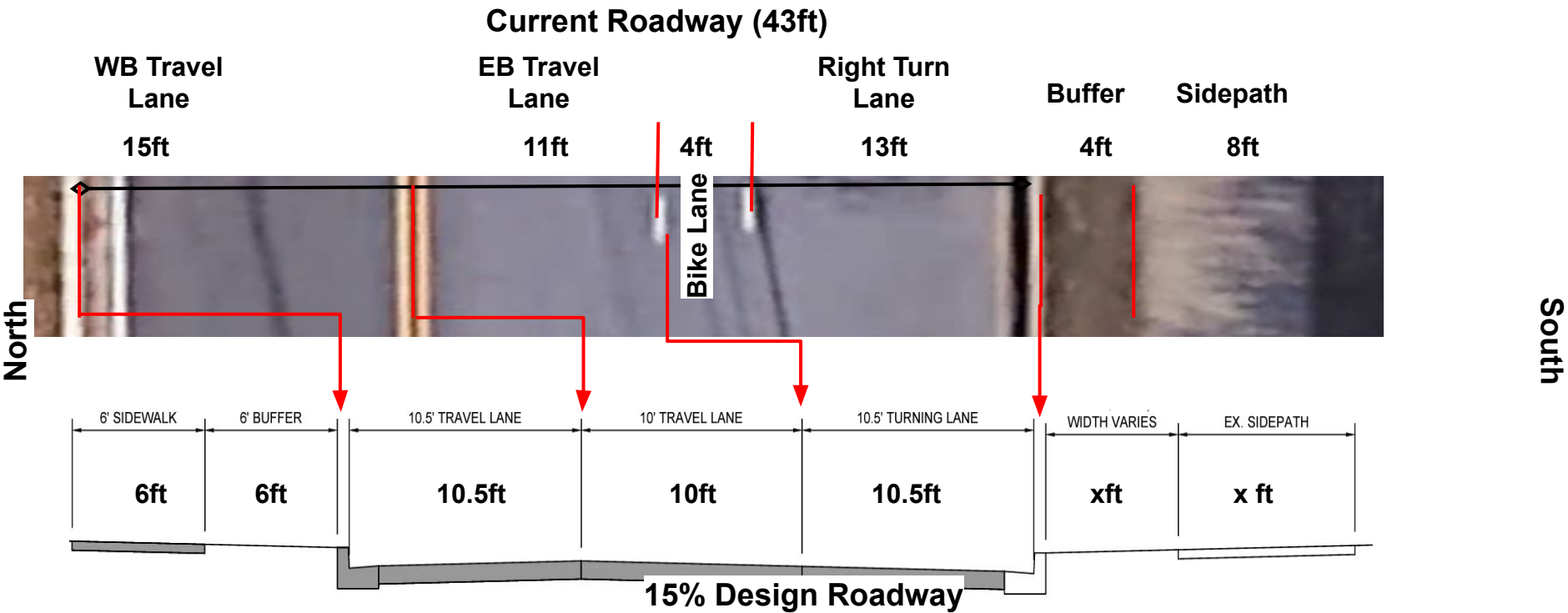
Forest Glen Road Sidewalk Project: Saxony Rd to Dameron Dr



Forest Glen Road Sidewalk Project:

Saxony Rd to Dameron Dr

Take the Bike Lane... Keep Right Turn?



TYPICAL SECTION - CLOSED SECTION WITH TURNING LANE

SAXONY ROAD TO DAMERON DRIVE

NOT TO SCALE

Saxony Rd to Dameron Dr - Advocate Proposed

6ft Sidewalk

6ft Street Buffer

5ft Bike Lane

10.5ft Travel Lane

10.5ft Travel Lane

5ft Bike Lane

4ft Street Buffer

8ft Sidepath

Forest Glen Road Sidewalk Project: Dameron Dr to HC Main Intersection

Current Alignment and Facilities



**View from Dameron Dr Intersection
to East towards HC Main Intersection**

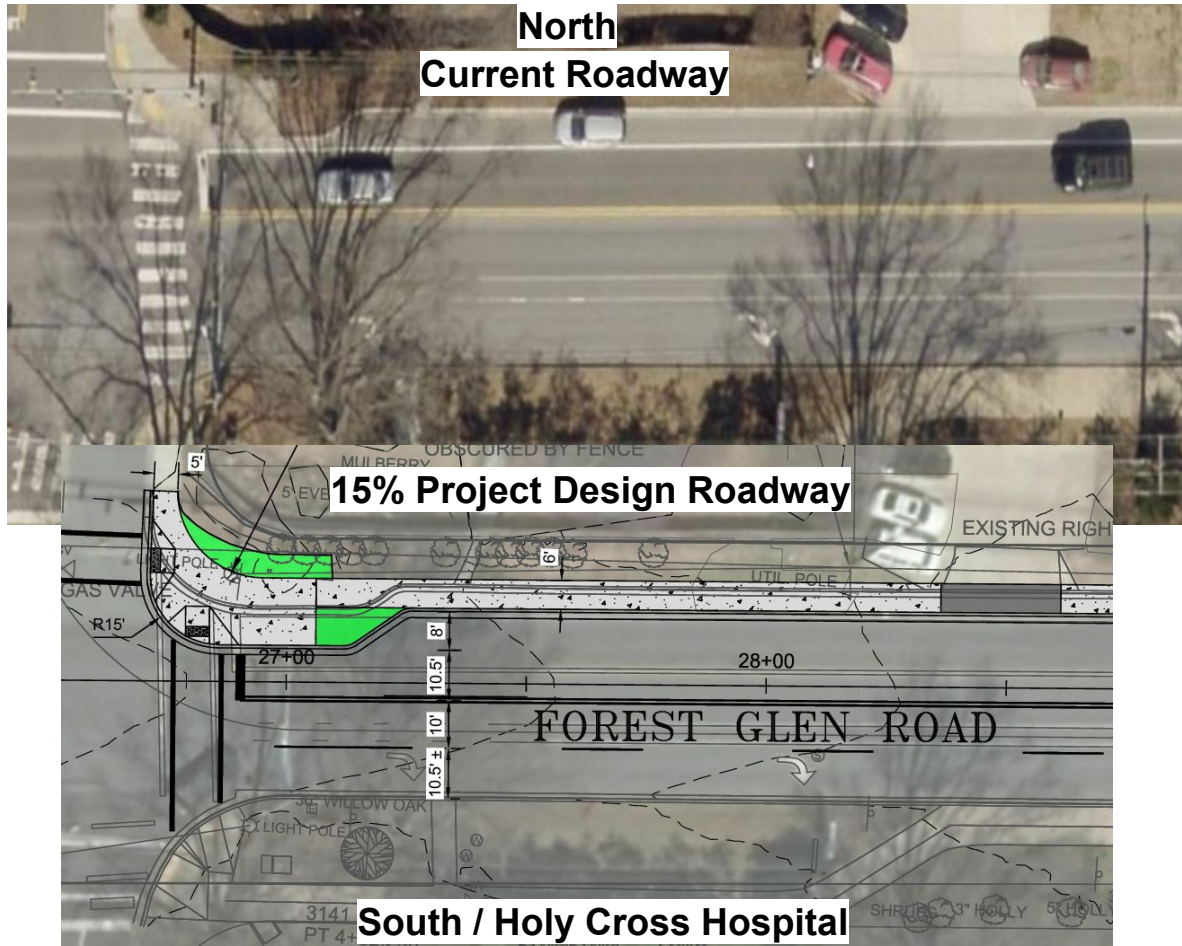


**View from HC Main Intersection
to West towards Dameron Dr Intersection**

Dameron Dr to HC Main Intersection

**West
(to Georgia Ave/
FG Metro)**

**East
(to Sligo Creek)**

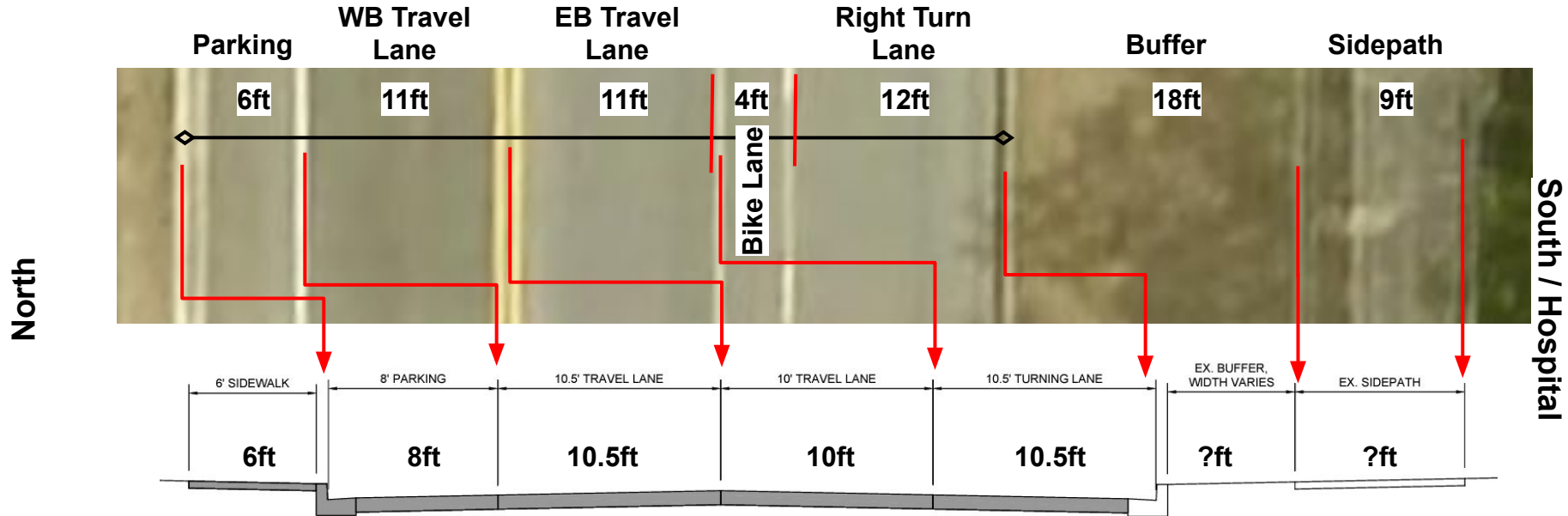


South / Holy Cross Hospital

Forest Glen Road Sidewalk Project: Dameron Dr to HC Main Intersection

Take the Bike Lane... Keep the Parking and Right Turn?

Current Roadway (44ft)



TYPICAL SECTION - CLOSED SECTION WITH PARKING LANE ON NORTH SIDE
DAMERON DRIVE TO HOSPITAL ENTRANCE
NOT TO SCALE

15% Design Roadway

Forest Glen Road Sidewalk Project:

Dameron Dr to HC Main Intersection - Advocate Proposed

An aerial photograph of a road intersection. A proposed sidewalk layout is overlaid on the image. The layout consists of several colored rectangular segments: cyan for 9ft sidepaths, dark green for 6ft and 18ft street buffers, bright green for 5ft bike lanes, and light gray for 10.5ft travel lanes. The road is labeled 'FOREST GLEN RD' on the left side.

9ft Sidepath

6ft Street Buffer

5ft Bike Lane

10.5ft Travel Lane

10.5ft Travel Lane

5ft Bike Lane

18ft Street Buffer

9ft Sidepath

Forest Glen Road Sidewalk Project:

HC Main to Staff Entrances

Current Alignment and Facilities



**View from HC Main Intersection
to East towards HC Staff Intersection**



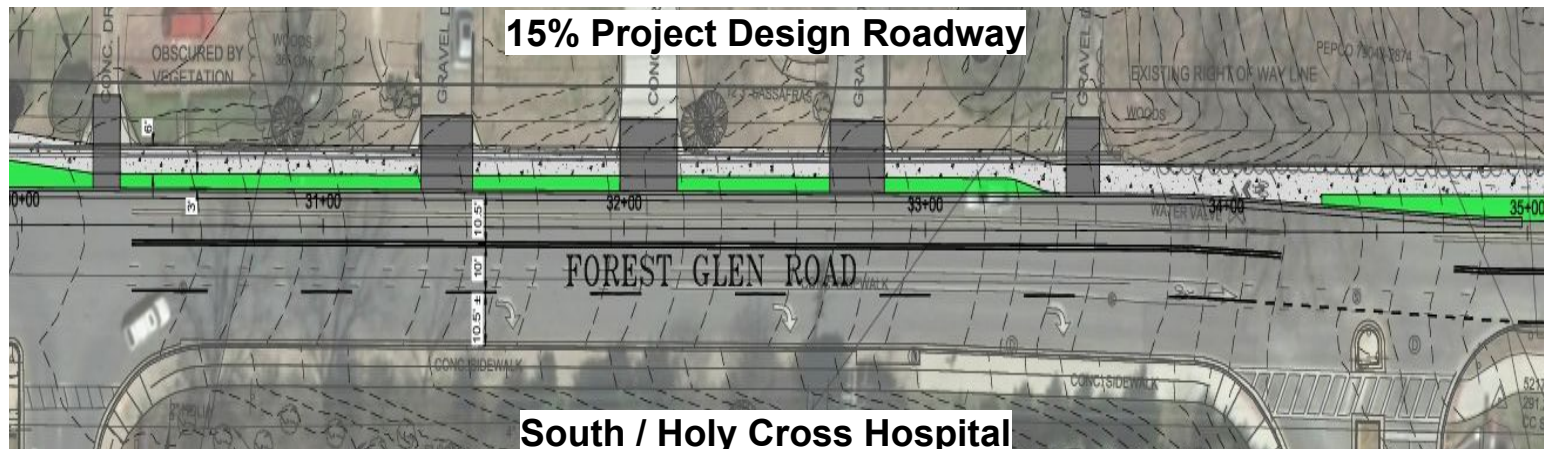
**View from HC Staff Intersection
to West towards HC Main Intersection**

Forest Glen Road Sidewalk Project: HC Main Intersection to HC Staff Intersection

West
(to Georgia Ave/
FG Metro)



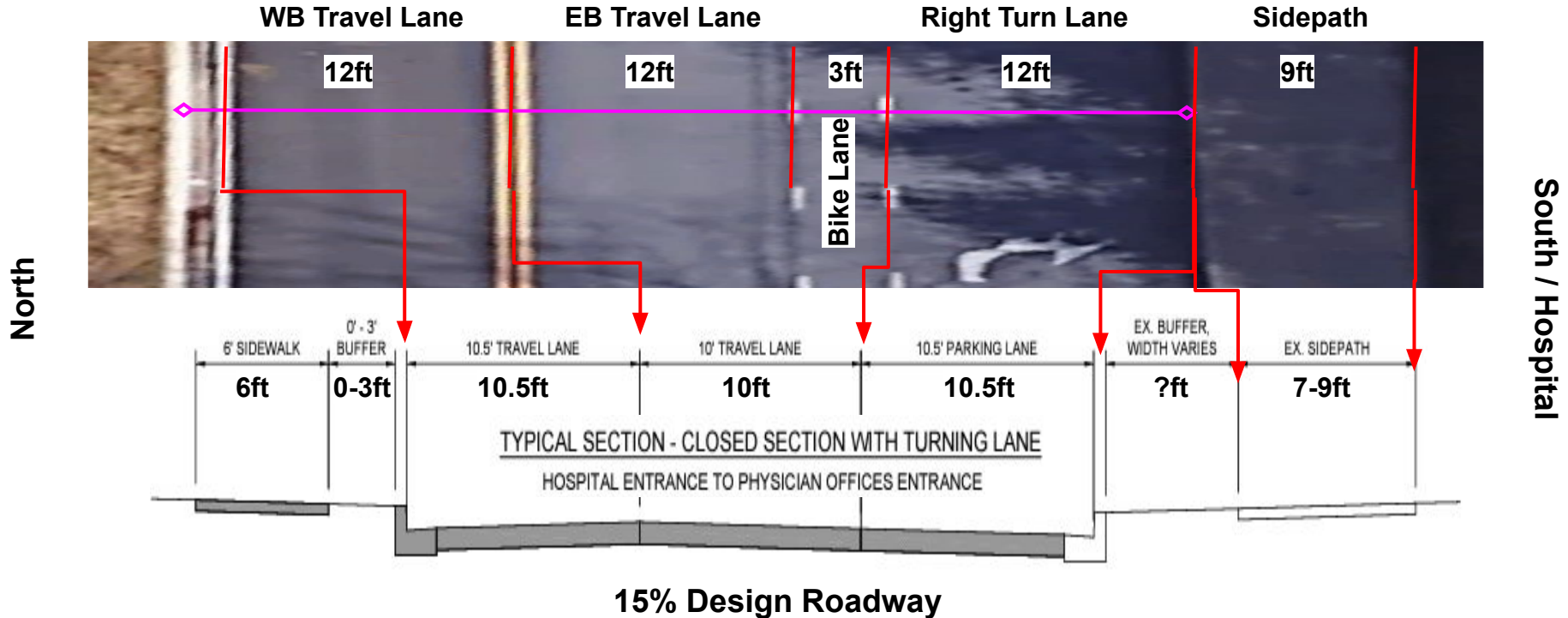
East
(to Sligo Creek)



Forest Glen Road Sidewalk Project: HC Main Entrance

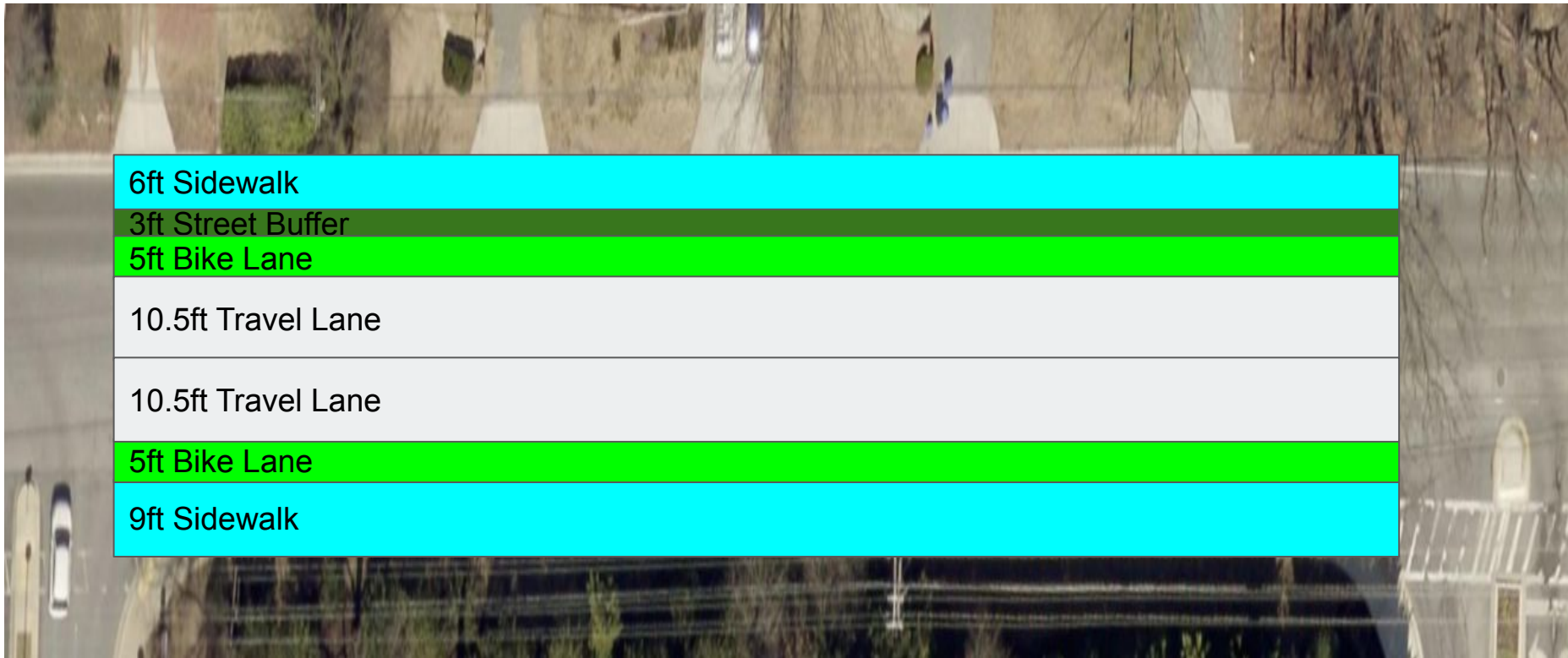
Take the Bike Lane... Keep the Right Turn Lane?

Current Roadway (48ft)



Forest Glen Road Sidewalk Project:

HC Main Intersection to HC Staff Intersection - Advocate Proposed



6ft Sidewalk

3ft Street Buffer

5ft Bike Lane

10.5ft Travel Lane

10.5ft Travel Lane

5ft Bike Lane

9ft Sidewalk

Forest Glen Road Sidewalk Project:

HC Sligo Creek Bus Stop

Current Alignment and Facilities

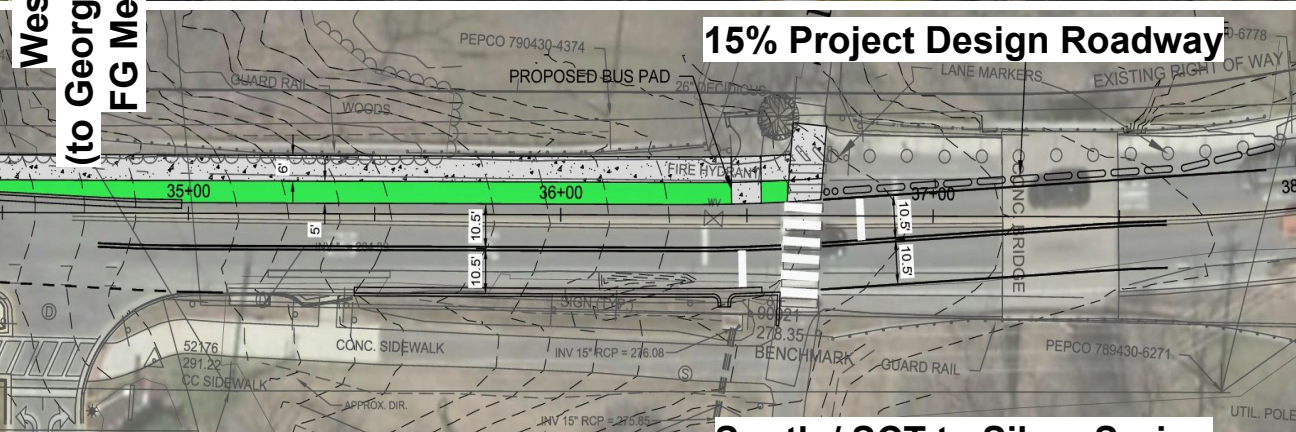


**View from HC Staff Intersection
to East towards HC Bus Stop**



**View from Sligo Creek Bridge
to West towards HC Staff Intersection**

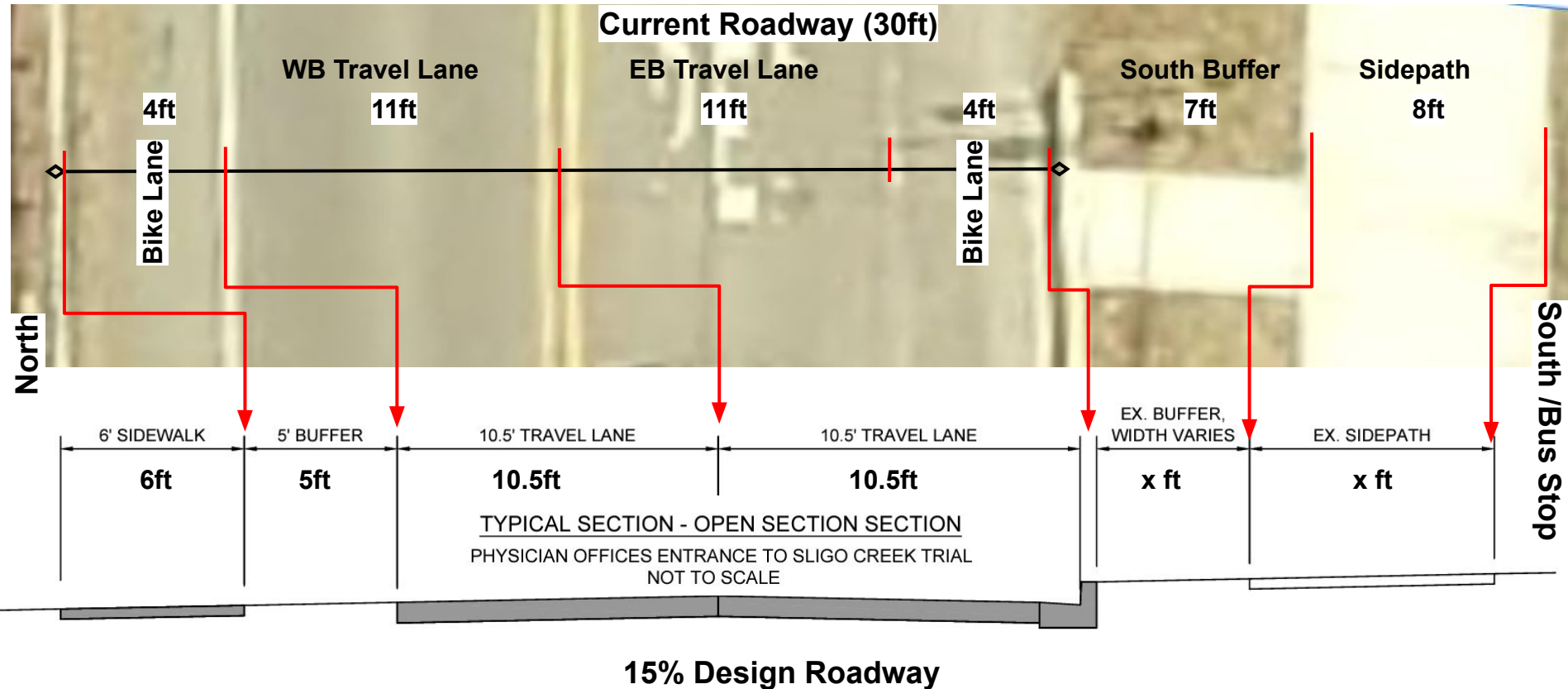
Forest Glen Road Sidewalk Project: HC Staff Intersection to SCP



Forest Glen Road Sidewalk Project:

HC Sligo Creek Bus Stop

Take Two (2) Bike Lanes... For Buffer??



Forest Glen Road Sidewalk Project: HC Bus Stop to SC Trail - Advocate Proposed

6ft Sidewalk

5ft Bike Lane

10.5ft WB Travel Lane

10.5ft EB Travel Lane

5ft Bike Lane

3-5ft Street Buffer

8ft Sidepath

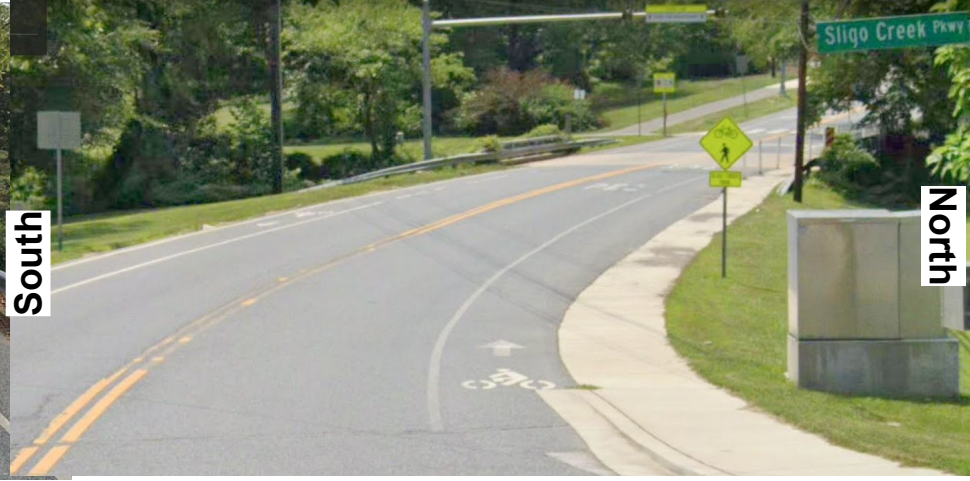


Forest Glen Road Sidewalk Project: Sligo Creek Bridge

Current Alignment and Facilities

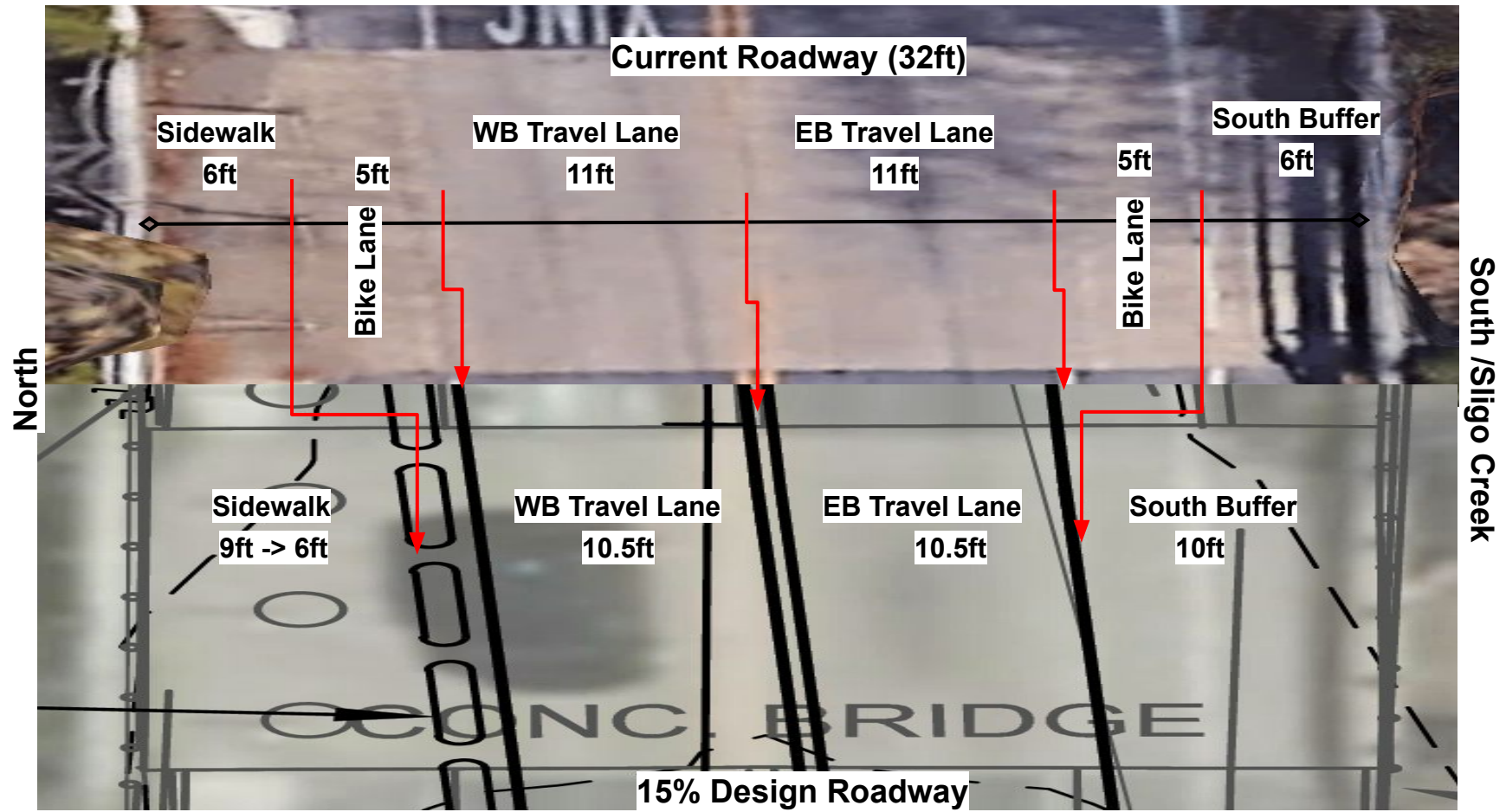


**View from Sligo Creek Trail
to East towards Sligo Creek Parkway**



**View from Sligo Creek Parkway Intersection
to West towards Sligo Creek Trail**

Forest Glen Road Sidewalk Project: Sligo Creek Bridge: Take Two (2) Bike Lanes... For Buffer??



Forest Glen Road Sidewalk Project: Sligo Creek Bridge - Advocate Proposed

8ft Sidewalk

5ft Bike Lane

10.5ft Travel Lane

10.5ft Travel Lane

5ft Bike Lane

3ft Shoulder



Forest Glen Road Sidewalk Project

Streetscape Changes

Southside and Northside: Saxony to Dameron

- 4ft sidewalk (southside only)
- Open culverts
- 6-8ft shoulders, on-street parking, limited driveways
- Right Turn Lane (southside only)

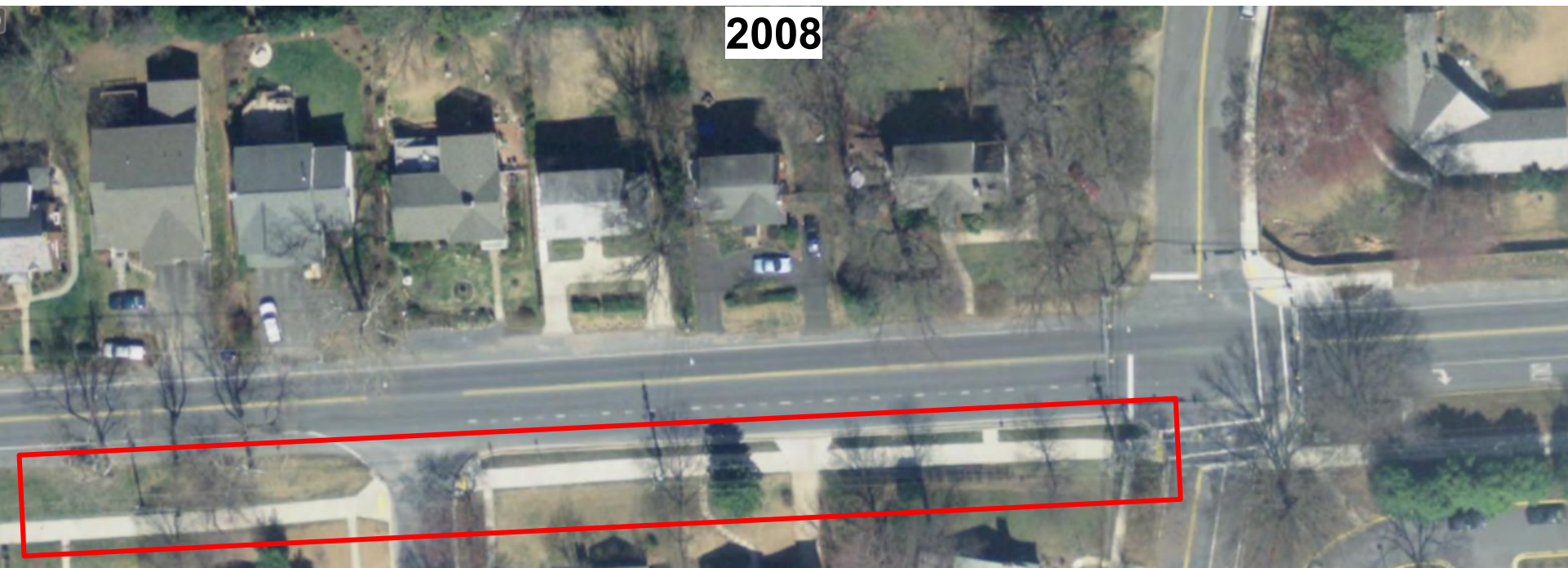


Forest Glen Road Sidewalk Project

Streetscape Changes

Southside: Saxony to Dameron

- Sidewalk widened
- Curb added
- Shoulder removed



Forest Glen Road Sidewalk Project

Streetscape Changes

Northside: Saxony to Dameron

- Driveway entrances widened and lengthened
- Curb added
- Shoulder removed, on-street parking eliminated
- Lanes shifted northward

Eastbound:

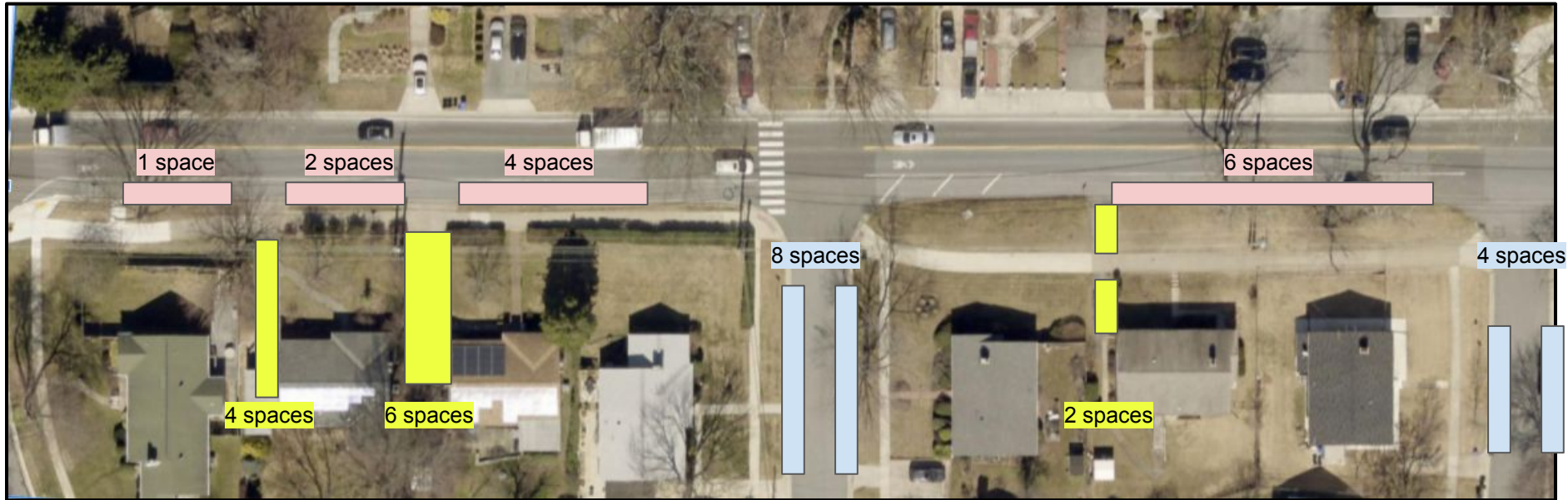
- Bike Lane added






Forest Glen Road Sidewalk Project

Southside On-Street Parking

- * Of 13 on-street parking spaces, typically 11-12 spaces are unoccupied
- * Of 12 off-street parking (within 250ft), typically 10 are unoccupied



	Southside On-Street Forest Glen Rd
	Southside Off-Street Forest Glen Rd
	Southside Driveways on Forest Glen Rd

Forest Glen Road Sidewalk Project

Southside On-Street Parking

Repurposing on-street parking for bike lanes will have little impact on vehicle owners as nearby parking utilization rates are low (<24%) and off-street parking parking on Admiralty and Saxony (within 250ft) underutilized

	On-Street Parking	Utilization of On-Street Parking	Off-Street Parking (within 250ft)	Utilization of Off-Street Parking (within 250ft)	Utilization of Off- and On-Street Parking	Utilization if only Off-Street Parking is available
# total spaces	13		12			
	# Occupied	% Occupied	# Occupied	% Occupied	% Occupied	% Occupied
2021	3	23.1%	3	25.0%	24.0%	50.0%
2021	1	7.7%	4	33.3%	20.0%	41.7%
2020	1	7.7%	2	16.7%	12.0%	25.0%
2019	0	0.0%	2	16.7%	8.0%	16.7%
2017	4	30.8%	1	8.3%	20.0%	41.7%
2015	1	7.7%	0	0.0%	4.0%	8.3%
2014	1	7.7%	0	0.0%	4.0%	8.3%
2012	1	7.7%	4	33.3%	20.0%	41.7%
Average	1.5	11.5%	2	16.7%	14.0%	29.2%

Forest Glen Road Sidewalk Project

Northside On-Street Parking

- There are currently 5 permit spaces on northside Forest Glen RD
- There are 33 permit parking spots within 500ft walking distance:
 - Dameron Dr (East Side): 20 spots
 - Dameron Dr (West Side): 3 spots
 - Myrtle Rd (North Side): 5 spots
 - Myrtle Rd (South Side): 5 spots
- Planning Board Historic Imagery shows an average 2-3 vehicles parked on Forest Glen Rd spots, with surplus on-site parking and permit street parking on Dameron and Myrtle to accommodate church parking in every case.

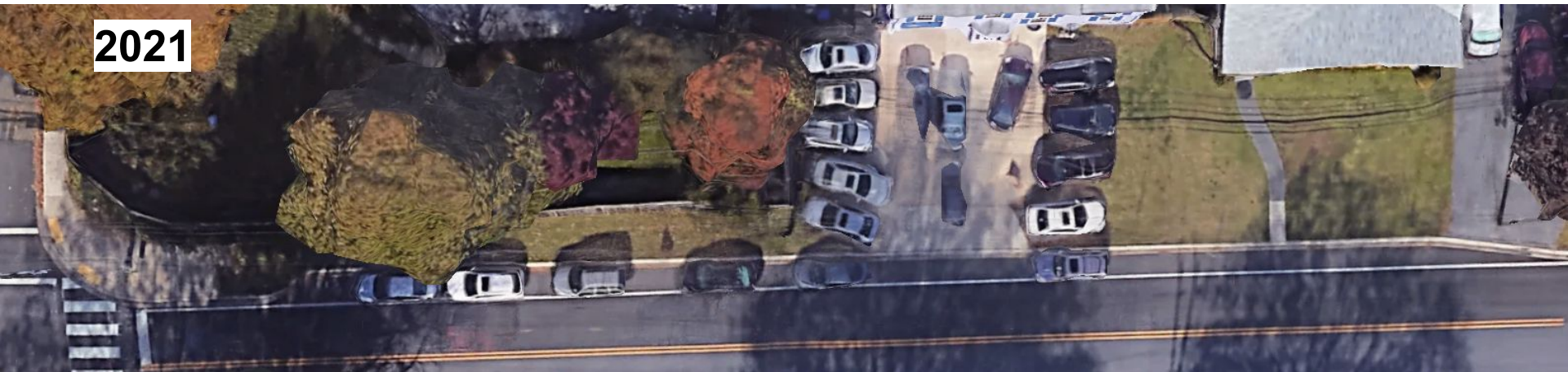
Parking History, 2012-2021

	Forest Glen Rd		Dameron Dr			
	Legal (5, 100ft)	Illegal	On-Site (12)	Nearest (5, 110ft)	FG-HC Resource Center (15, 315ft)	
2021	1	0	5	2	12	12
2021	5	1	12	4	15	-5
2020	0	0	2	0	15	15
2019	0	0	4	2	15	11
2017	0	0	5	2	14	11
2015	0	0	6	3	11	12
2014	5	3	12	3	8	1
2012	3	3	9	5	5	7

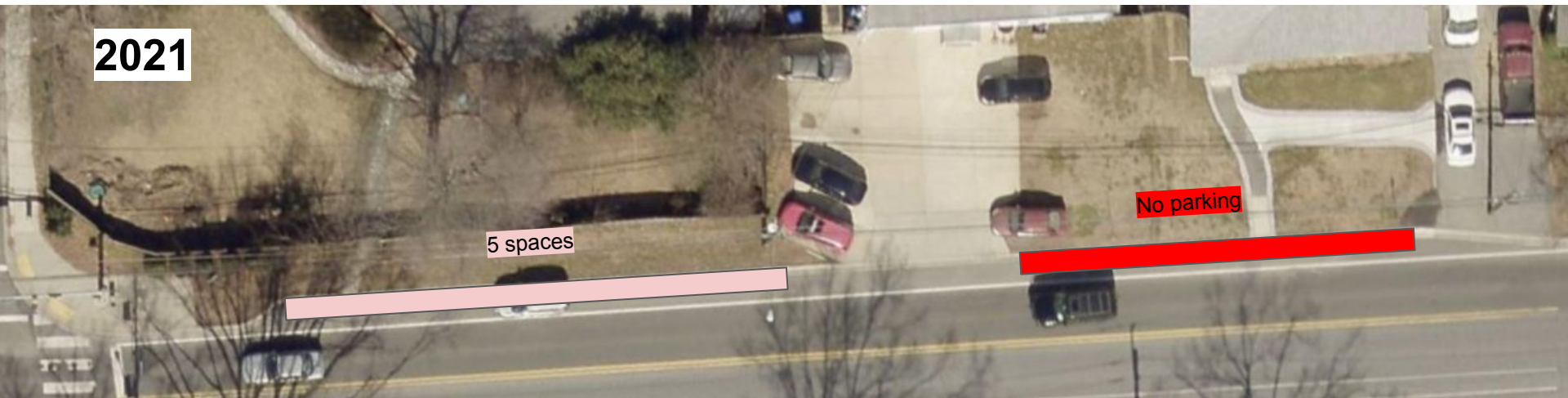


Northside On-Street Parking

2021

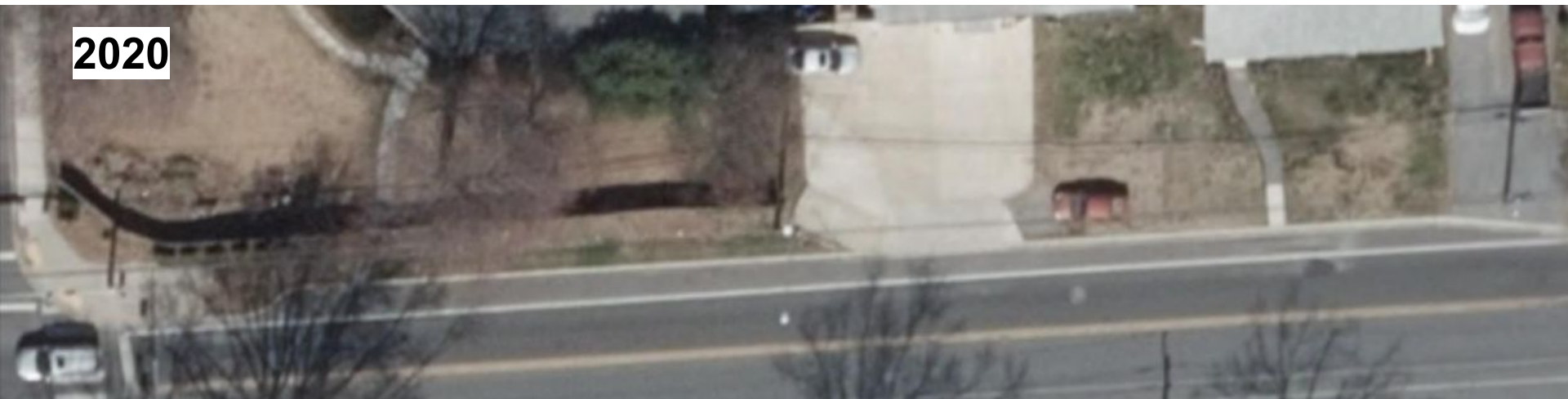


2021

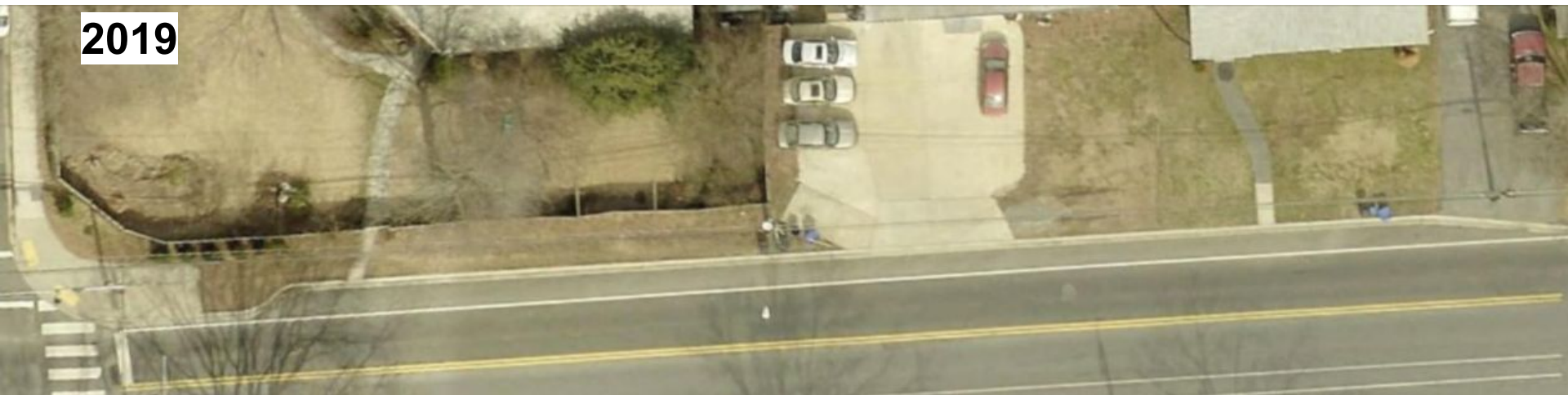


Northside On-Street Parking

2020



2019



Northside On-Street Parking

2017



2015



Northside On-Street Parking

2014



2012



9.3 Project Development Process

MONTGOMERY COUNTY COMPLETE STREETS

Public Sector Road Projects



Review and Briefings

ITERATIVE PROCESS

Facility Planning / 35% Design at DOT

- Review from the Montgomery County Council Transportation, Infrastructure, Energy and Environment (T&E) Committee
- Briefing with the Montgomery County Planning Board
- Identify stakeholders and review agencies
- Collect background traffic and environmental data
- Public outreach, in the form of community meetings and written feedback
- Develop concept plans, DOT selects a preferred option to move forward
- Detailed surveying and site investigation (soil conditions, environmental impacts, noise impacts)
- Detailed engineering (horizontal and vertical alignment, right-of-way requirements, structures, intersection design, Stormwater Management Concept approval)
- Construction sequencing, costs, and scheduling
- 35% design is enough detail to provide an accurate cost estimate and schedule and allows the project to receive final design and construction funding**

Project Prioritization

*“Most new projects included in the Capital Improvement Program are likely found in master plans and countywide guidance such as this Complete Streets guide. Public resources to implement new projects is limited, given the ongoing costs of planned retrofits, reconstruction, and maintenance activities. Therefore, it is necessary to develop a means of prioritizing how projects would be implemented over time. With Vision Zero a foundational goal of this guide, **prioritization should consider the needs of the most vulnerable road users first.**”*

Approval Process

- Mandatory referral review by the Montgomery County Planning Board
- Review by County Council T&E Committee
- Approval by DOT Director

DOT Budget Request

- Office of Management and Budget (OMB) reviews the project
- The County Executive includes the project in their proposed Capital Improvements Plan, which is updated annually and covers a 6-year period
- The County Council reviews the CIP budget
- Public outreach, in the form of County Executive town hall meetings, County Council public hearings, and written feedback
- County Council approves the CIP budget

Final Design

- Local, state, and federal agency review and permits
- Right-of-way acquired (required for construction to start unless County Council authorizes direct takings)
- Update to construction costs at Council

Construction

- DOT selects a contractor
- Project is built, which can take anywhere from several months to several years depending on project size
- Ongoing evaluation throughout the project for quality control and to ensure adherence to the county's design standards
- DOT and DPS conduct final inspection
- Project opens to the public

Complete Streets Design Guide

A.2 Street Design in Constrained Rights of Way Priorities

LEGEND

H = highest priority

M = medium priority

L = lowest priority

+Priorities apply only to streets where Dedicated Transitways are identified in a Master Plan.

* Because a sidepath is the default bicycle/pedestrian facility, the Bikeway may often be accounted for as part of the Sidewalk / Sidepath.

	Downtown Boulevard	Downtown Street	Boulevard	Town Center Boulevard	Town Center Street	Neighborhood Connector	Neighborhood Street	Neighborhood Yield Street	Industrial Street	Country Connector	Country Road	Major Highway
Median	M	L	M	M	L	L	L	N/A	L	L	L	H
Travel Lane Width	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
On-Street Parking	L	M	L	M	L	L	L	H	M	N/A	N/A	N/A
Dedicated Transitway+	M	M	M	M	M	N/A	N/A	N/A	M	N/A	N/A	M
Shoulder	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	M	H	H
Street Buffer	H	H	H	H	H	H	M	M	M	H	M	H
Bikeway	H	H	H	H	H	M	M	N/A	M	M*	M*	M*
Ped / Bike Buffer	M	M	M	M	M	M	M	N/A	M	M	N/A	H*
Sidewalk / Sidepath	H	H	H	H	H	H	H	H	H	H*	H*	M*
Frontage Zone	M	M	L	M	M	N/A	N/A	N/A	L	N/A	N/A	N/A
Maintenance Buffer	N/A	N/A	L	N/A	N/A	L	L	L	L	L	L	N/A

Figure A-2. Priorities in constrained rights of way

Complete Streets Guide - Active Zone

LEGEND

- Required
- ▲ Recommended (Context-Sensitive)
- Optional (Context-Sensitive)
- ✕ Not Permitted or N/A
- * Unless determined otherwise by Planning Board

		Downtown Boulevard	Downtown Street	Boulevard	Town Center Boulevard	Town Center Street	Neighborhood Connector	Neighborhood Street	Neighborhood Yield Street	Industrial Street	Country Connector	Country Road	Major Highway	Page Reference
ACTIVE ZONE	Trees/Landscaping in buffer	■	■	■	■	■	■	■	■	▲	▲	▲	▲	166
	Green Infrastructure/ Rain Gardens	■	■	■	■	■	■	■	■	▲	▲	▲	▲	171
	Seating	■	■	○	■	■	○	○	○	○	○	✕	✕	67
	Bicycle Parking	■	■	○	■	■	○	○	○	▲	○	✕	✕	68
	Recycling/ Trash Receptacles	▲	▲	○	▲	▲	○	○	○	▲	○	✕	✕	73
	Plazas/Parklets	▲	▲	○	○	▲	○	○	○	○	○	✕	✕	99
	Bikeshare Stations/ Dockless Parking Hubs	■	■	○	▲	▲	○	○	○	○	○	✕	✕	69
	Pedestrian-Scale Lighting	■	■	■	■	■	▲	▲	▲	○	○	○	○	86
	Pedestrian/ Bicycle Wayfinding	▲	▲	▲	▲	▲	▲	○	○	▲	○	○	○	77
	Sidewalk-Level Driveways	■	■	■	■	■	■	■	■	■	■	■	✕	85

Figure 3-3. Design elements in the Active Zone

Complete Streets Guide - Street Zone

LEGEND

- Required
- ▲ Recommended (Context-Sensitive)
- Optional (Context-Sensitive)
- ✕ Not Permitted or N/A
- * Unless determined otherwise by Planning Board

	Downtown Boulevard	Downtown Street	Boulevard	Town Center Boulevard	Town Center Street	Neighborhood Connector	Neighborhood Street	Neighborhood Yield Street	Industrial Street	Country Connector	Country Road	Major Highway	Page Reference
STREET ZONE	Green Infrastructure In Median (when median is present)	▲	▲	▲	▲	▲	▲	✕	▲	▲	▲	▲	171
	Street Trees/ Landscaping In Median (when median is present)	■	■	■	■	■	■	✕	■	■	■	■	166
	Minimize/Consolidate Driveways	■	■	■	■	▲	○	○	■	▲	▲	○	119
	Undergrounding Utilities (Master Plan recommendations supersede this guidance)	■	■	○	■*	■*	○	○	○	○	○	○	108
	Transit Shelters (where transit routes are present and boarding thresholds are met)	▲	▲	■	▲	▲	○	○	▲	▲	▲	○	82
	Loading/Pick-Up and Drop-Off Zones	▲	▲	○	▲	▲	○	○	○	○	○	✕	100
	Accessible Parking	▲	▲	○	○	▲	○	○	○	✕	✕	✕	97
	Carshare Parking	▲	▲	○	▲	▲	○	○	○	✕	✕	✕	101
	E/V Charging Stations	▲	▲	○	○	▲	○	○	○	✕	✕	✕	98

Figure 4-3. Guidance for elements in the Street Zone

Complete Streets Guide - Street Design Feature Priorities

LEGEND															Page Reference
■ Required	✕ Not Permitted or N/A	Downtown Boulevard	Downtown Street	Boulevard	Town Center Boulevard	Town Center Street	Neighborhood Connector	Neighborhood Street	Neighborhood Yield Street	Industrial Street	Country Connector	Country Road	Major Highway		
▲ Recommended (Context-Sensitive)	* Unless determined otherwise by Planning Board														
○ Optional (Context-Sensitive)															
ACTIVE ZONE	Trees/Landscaping In Buffer	■	■	■	■	■	■	■	■	▲	▲	▲	▲	166	
	Green Infrastructure/Rain Gardens	■	■	■	■	■	■	■	■	▲	▲	▲	▲	171	
	Seating	■	■	○	■	■	○	○	○	○	○	✕	✕	67	
	Bicycle Parking	■	■	○	■	■	○	○	○	▲	○	✕	✕	68	
	Recycling/Trash Receptacles	▲	▲	○	▲	▲	○	○	○	▲	○	✕	✕	73	
	Plazas/Parklets	▲	▲	○	○	▲	○	○	○	○	○	✕	✕	99	
	Bikeshare Stations/Dockless Parking Hubs (if in bikeshare/dockless service area)	■	■	○	▲	▲	○	○	○	○	○	✕	✕	69	
	Pedestrian-Scale Lighting	■	■	■	■	■	▲	▲	▲	○	○	○	○	86	
	Pedestrian/Bicycle Wayfinding	▲	▲	▲	▲	▲	▲	○	○	▲	○	○	○	77	
Sidewalk-Level Driveways	■	■	■	■	■	■	■	■	■	■	■	✕	85		
INTERSECTIONS	Roundabouts (Modern or Mini)	○ (Engineering judgement needed – see Chapter 6: Intersections for details)													132
	Crossing Islands	▲	▲	▲	▲	▲	▲	○	○	▲	○	○	▲	152	
	Pedestrian Signals (when traffic signals are present) or Beacons	■	■	■	■	■	■	■	■	■	■	▲	■	149	
	Pedestrian Recall on Signals	▲	▲	▲	▲	○	○	○	○	○	✕	✕	✕	155	
	Pedestrian Lighting (unless pedestrians are prohibited, e.g., some Major Highways)	■	■	■	■	■	■	■	■	■	■	■	■	86	
	Protected Intersections, Bike Boxes, or Two-Stage Queue Boxes	(Required at all Intersections with existing or planned separated bike lanes, sidepaths, buffered bike lanes or conventional bike lanes.)													136
SPEED MANAGEMENT	Bicycle Markings/Facilities (when bikeways are present)	■	■	■	■	■	■	■	■	■	■	■	■	138	
	Lane Diet	▲ (narrowing lanes down to default dimensions for street type)													211
	Road Diet (if volumes meet thresholds for road diet)	○	○	○	○	○	✕	✕	✕	○	○	○	○	210	
	Speed Humps/Cushions	○	○	✕	○	○	○	○	○	○	○	✕	✕	212	
	Speed Tables/Raised Crosswalks	○	▲	✕	○	▲	○	○	○	○	✕	✕	✕	213	
	Raised Intersections	○	▲	✕	○	▲	○	○	○	○	✕	✕	✕	213	
	Curb Extensions/Bulb Outs	▲	▲	▲	▲	▲	▲	○	○	▲	○	○	○	213	
	Neckdowns/Chokers	▲	▲	▲	▲	▲	▲	▲	▲	▲	○	○	○	214	
	Traffic Diversers	✕	✕	✕	✕	✕	✕	○	○	○	✕	✕	✕	209	
	Chicanes/Roadway Curvature	▲	○	○	▲	○	○	○	○	○	○	○	✕	214	
STREET ZONE	Textured Paving Treatment	○	○	○	○	○	○	○	○	○	✕	✕	✕	216	
	Green Infrastructure In Median (when median is present)	■	▲	▲	▲	▲	▲	▲	✕	▲	▲	▲	▲	171	
	Street Trees/Landscaping In Median (when median is present)	■	■	■	■	■	■	■	✕	■	■	■	■	166	
	Minimize/Consolidate Driveways	■	■	■	■	■	▲	○	○	■	▲	▲	○	119	
	Undergrounding Utilities (Master Plan recommendations supersede this guidance)	■	■	○	■*	■*	○	○	○	○	○	○	○	108	
	Transit Shelters (where transit routes are present and boarding thresholds are met)	▲	▲	▲	▲	▲	▲	○	○	▲	▲	▲	○	82	
	Loading/Pick-up and Drop-off Zones	▲	▲	○	▲	▲	○	○	○	○	○	○	✕	100	
	Accessible Parking	▲	▲	○	○	▲	○	○	○	○	✕	✕	✕	97	
	Carshare Parking	▲	▲	○	▲	▲	○	○	○	○	✕	✕	✕	101	
E/V Charging Stations	▲	▲	○	○	▲	○	○	○	○	✕	✕	✕	98		

Figure A-3. Street design features

Figure A-3. Street design features

Complete Streets Guide - Bike Lane

Figure 5-26. Guidance on appropriate bikeway by street type

Street Type	Street Buffer*	Ped / Bike Buffers	Default Bikeway Types and Widths*
Downtown Boulevard	8' default, 6' min	6' default, 2' min	Two-Way SBL on both sides of street. (each SBL: 11' default; 8' min)
Downtown Street	6'; 11' if this space is shared with on-street parking	6' default, 2' min	One-way SBL: 6.5' default; 5' min
Boulevard	8' default, 6' min	6' default, 2' min	Sidepaths on both sides of the street. (each sidepath: 11' default; 8' min)
Town Center Boulevard	8' default, 6' min	6' default, 2' min	Two-Way SBL on both sides of street. (each SBL: 11' default; 8' min)
Town Center Street	6'	6' default, 2' min	One-way SBL: 6.5' default; 5' min
Neighborhood Connector	6'	6' default, 2' min	Sidepath on one side of the street: 10' default; 8' min, or Bike Lanes: 6' default, 5' min

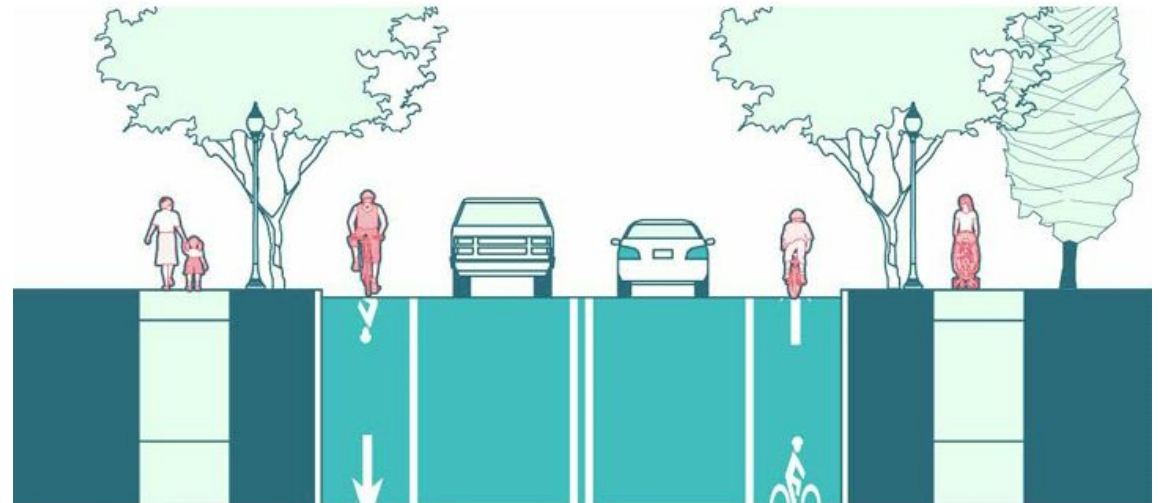


Figure 5-16. Conventional Bike Lane: Neighborhood Connector

Forest Glen Connectivity Limitations - Metro and Neighborhood Access

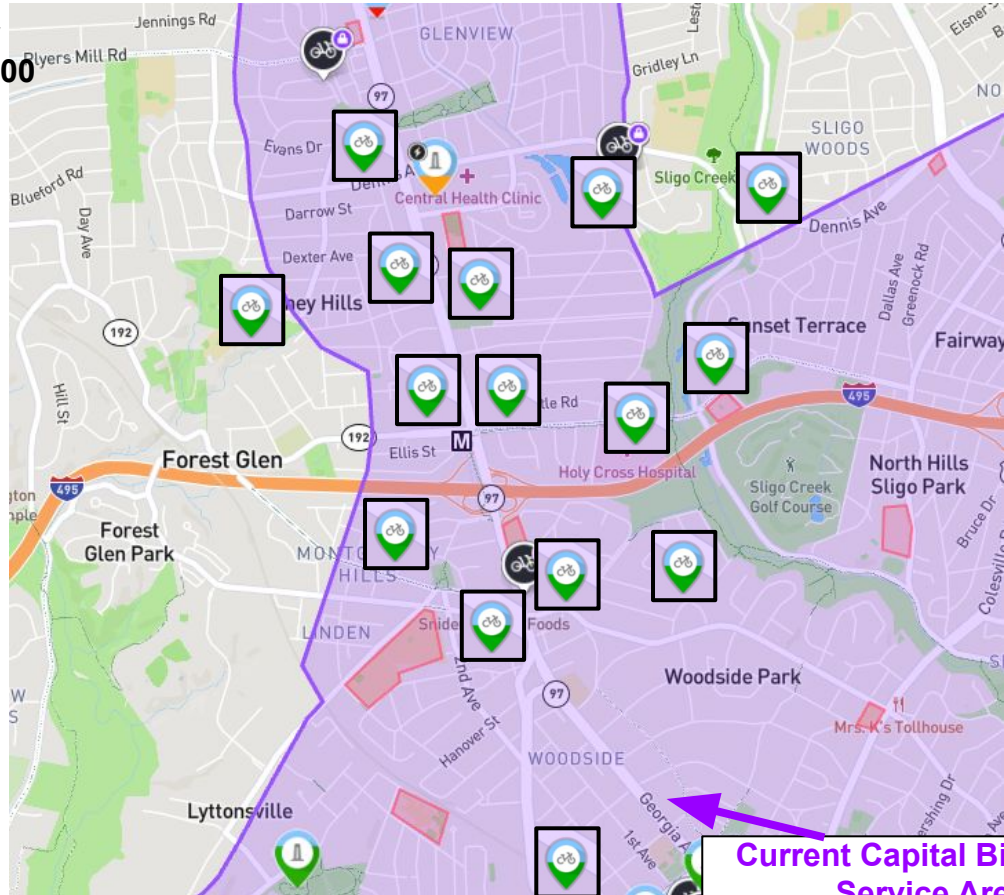
Expand Capital Bikeshare by infilling nodes between Wheaton and Silver Spring to include Forest Glen Metro, Sligo Creek Trail, and Immediate Neighborhoods.



FG Sector Plan - Provide expanded corridor accessibility within 3 mile from serving 90,000 residents.

Recommended new nodes:

- **Metro:**
 - Forest Glen Metro
- **Neighborhoods:**
 - Sunset Terrace
 - Montgomery Hills
 - McKinney Hills
 - Forest Grove
 - Sligo Woods
- **Shopping Centers**
 - Montgomery Hills
- **BRT Stops**
 - Dexter Ave
- **POIs:**
 - General Getty Park
 - Holy Cross Hospital
- **Sligo Creek Trail:**
 - Dennis
 - Forest Glen



**Current Capital Bikeshare
Service Area**

Forest Glen Road Sidewalk Project

Project Web Page:

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

Reference Maps and Notes:

<https://docs.google.com/presentation/d/1m98xexw2hj8pDUoWZDnniA3FZN5WrApgb-XUZBt4Co0/edit?usp=sharing>

Key Design Issues:

- The Project design removes almost 2,000 ft of Bike Lanes which were built over 10 years ago.
- These Bike Lanes provide primary local connectivity to Forest Glen Metro and regionally between Sligo Creek Trail/Parkway to Rock Creek Trail/Beech Drive
- Assuming bicyclists will stop using Forest Glen Rd and merge onto the southside sidepath is probably wrong; however, those bicyclists that use the sidepath will add conflicts with pedestrians on this heavily used sidepath where there are no conflicts today. This design will also increase conflicts between bicyclists and drivers as bicyclists cross travel lanes to continue to/from Sligo Creek Parkway and Forest Glen Metro from the sidepath.
- It is unreasonable to expect cyclists to cross over the busy road from the north side to use the sidepath on the south side at the Sligo Creek Trail. Therefore, it is expected that most westbound cyclists will continue to bike in the north side traffic lane, even at their peril, even if the bike lane is removed. The design puts bicyclists at greater exposure risk as lanes are narrowed to 10-10.5ft width decreasing the small buffer they use today.
- Lane narrowing without a Bike Lane will be MORE dangerous for the westbound hill climb (5-7% grade) east of Holy Cross main entrance, where bicyclists will be going 5-8mph, drivers will get frustrated (speed limit is 30mph) and attempt to pass, crossing the double yellow lane divider, risking a crash with on-coming eastbound traffic and cutting off or hitting the bicyclist when passing drivers realize they are putting themselves at risk.

Design Objects Inappropriately Prioritized and/or Lack Full Roadway User Scope Consideration

- Per feedback received during the public meeting on June 10, 2021, no one is asking to remove bike lanes, and especially, all residents agreed that on-street parking was not desired.
- Project design needs to consider ALL road users, not just northside pedestrians.
- Design do not support county Vision Zero, needlessly increasing conflicts between drivers and bicyclists, as well as bicyclists and pedestrians.
- Design prioritizes 475ft of on-street parking and 1,000ft of channelized right turn lanes, apparently to optimize free-flowing through traffic, over bicyclist and pedestrian safety.
- Project Design is in conflict with [Montgomery County Complete Streets Guide \(CSG\)](#):
 - CSG prioritizes Bikeways over On-Street Parking in a constrained Right of Way (Figure A-2)
 - CSG policy is to “reduce the speed of turning vehicles to increase the safety of all users at intersections”
 - Channelized right turn lanes “are not recommended for Complete Street intersections and removal of existing channelized right turn lanes should be pursued during road reconstruction projects in locations where pedestrians are permitted.”
- Design does not support the [Master Plan of Highways and Transitways \(MPOHT\)](#) target speed of 25mph for roadway (current Posted Speed Limit is 30mph) for Forest Glen Rd by keeping channelized right turn lanes.

Project Design Continuity with Adjacent Roadways

- **Project design does not identify boundary connectivity for Sligo Creek Park Facilities**
 - East side of the project at the Sligo Creek Trail needs connectivity through to Sligo Creek Parkway and South Four Corners communities. Design should identify pedestrian and bicyclist gaps into and through Sligo Creek Stream Valley and coordinate coincident facility improvements Montgomery Parks Vision Zero planners. This is critical as the northside sidepath over the Sligo Creek Bridge is the only way to access Sligo Creek Parkway for Open Streets with no southside sidewalk.
- **Project design does not incorporate [Forest Glen Sector Plan \(2020\)](#) recommendations:**
 - **Forest Glen Passageway:** Building a designated pick-up/drop-off area completely contained on the Forest Glen Medical Center site. This facility will complement future access to the Forest Glen Metro station by way of the planned bicycle and pedestrian passageway project which will be constructed under Georgia Avenue at Forest Glen Road.
 - Creation of a **Civic Green Urban Park** at Forest Glen Medical Center
 - Enhanced north-south connectivity by building the **Woodland Drive Extended** which will connect Forest Glen Road to Dennis Avenue.
 - **Separation from Pedestrians in Urban Areas:** Due to the substantial volumes and meandering travel patterns of pedestrians in urban environments, on-road bikeways (such as separated bike lanes, buffered bike lanes, traditional bike lanes) are recommended instead of shared use paths along roadways. In these urban environments, the speed differential between pedestrian and bicycle traffic on public sidewalks often leads to conflicts and a degradation of quality for both parties. As a result, bicyclists are often reluctant to travel in what is perceived as a pedestrian-only space.
 - **Bike share:** Stations should also be timed to open with bikeway recommendations identified in the Sector Plan. Bike share stations should be located so that they can provide access to key destinations within the Plan area which include but are not limited to:
 - Forest Glen Metrorail Station
 - Holy Cross Hospital
 - Forest Glen and Montgomery Hills shopping destinations
 - Multi-unit residential sites
 - General Getty Park
 - Sligo Creek Trailheads
 - Planned BRT Stations

Recommended Design Objective Priorities

In re-allocating roadway right of way space to add the northside sidewalk, the project design should follow Complete Streets Design Guide by prioritizing bike lanes over on-street parking and channelized right turn lanes.

Parking utilization of the 17 Forest Glen Rd on-street spaces is very low. All households on Forest Glen Road adjacent to on-street parking have private driveways. Replacement on-street parking for the 17 spaces to be repurposed are consistently available on nearby side roads (Admiralty Dr, Saxony Rd, and Dameron Dr) within 250-500ft.

There are currently over 1,000ft of continuous right turn lane (RTL) between the Holy Cross Hospital Staff Entrance to the Saxony Dr. intersection. The only apparent purpose of this extensive channelized turn lane is to enable the free flow of eastbound through traffic. Driver access to Holy Cross Hospital is good with west side access through Dameron Dr, Main Entrance access 350ft east of Dameron Dr, and staff and direct access to the Emergency Room on the east side of the facility. Right-turning traffic from eastbound Forest Glen Rd has significant vehicle storage space (100-250ft) in Holy Cross Hospital parking lanes if backup queues occur entering from the Dameron Dr or Main Entrances; the eastside staff/Emergency Room entrance has over 300ft unobstructed on-site roadway.

Protected Bike Lanes are preferred, but “standard” Bike Lanes are a design option for Neighborhood Connector Roadways according to the Complete Streets Design Guide (CSDG). Standard Bike Lanes offer less protection than Protected Bike Lanes, crash history indicates low the risk of bicyclist/driver injury crashes and 5ft standard Bike Lanes are an improvement over the current 3ft Bike Lanes. Lowering the Posted Speed Limit from 30mph to 25mph will further reduce risk of crash severity risk. Therefore, continuous standard Bike Lanes will provide connectivity with good safety if the [Master Plan of Highways and Transitways \(MPOHT\)](#) 25mph target speed is incorporated into the project design.

Specific Project Design Recommended Changes

- **SC Bridge Segment:** Widen northside Sidewalk, shifting Travel Lanes and existing Bike Lanes south in preparation for transition to HC Bus Stop segment alignment
- **HC Staff Bus Stop Segment:** Wedge street buffer from 5ft northwest side to 0ft northeast side; vary street buffer from 3ft southwest side to 5ft southeast side
- **HC Main to Staff Segment:** Remove EB Right Turn Lane and southside Parking; keep Bike Lanes and add Sidewalk and Street Buffer northside
- **Dameron Dr to HC Main Segment:** Remove EB Right Turn Lane and northside Parking; keep Bike Lanes and add Sidewalk and Street Buffer northside
- **Saxony Rd to Dameron Dr Segment:** Remove EB Right Turn Lane; keep Bike Lanes and add northside Sidewalk and Street Buffer
- **Admiralty Dr to Saxony Rd Segment:** Remove southside Parking; add Bike Lanes and northside Sidewalk and Street Buffer
- **Forest Grove Dr to Admiralty Dr Segment:** Remove southside Parking; add Bike Lanes and northside Sidewalk and Street Buffer

Summary Streetscape Changes:

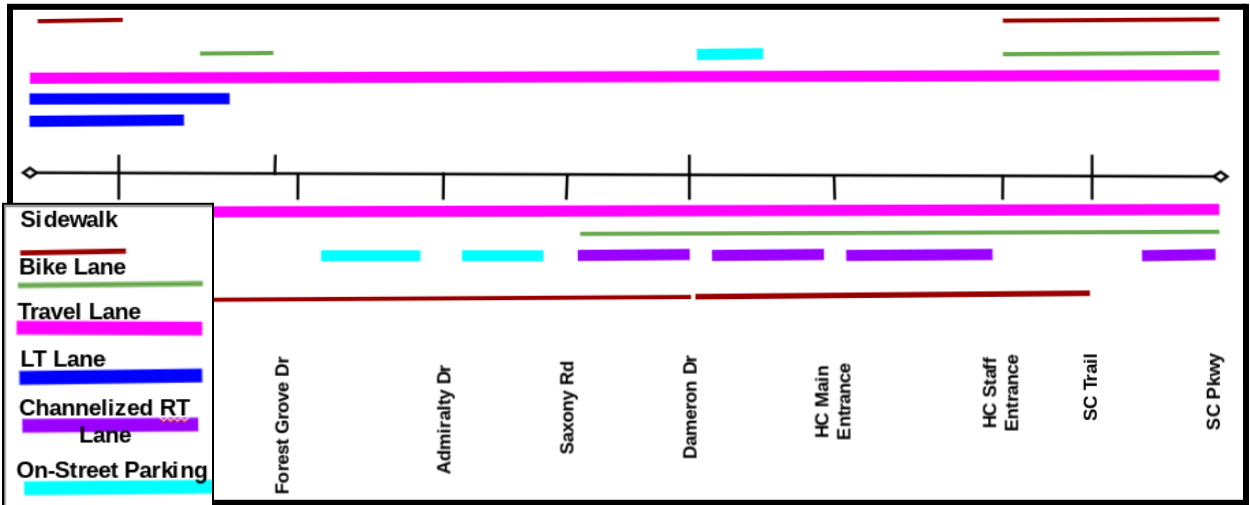
Streetscape Changes: Current to **Project Design**

	Current		Project Design		
	Northside/WB	Southside/EB	Northside/WB	Southside/EB	Delta
Sidewalks	550	2660	2660	2660	2110
Bike Lanes	500	1610	140	140	-1830
Parking	100	375	100	375	0
Right Turn Lane	0	933	0	933	0

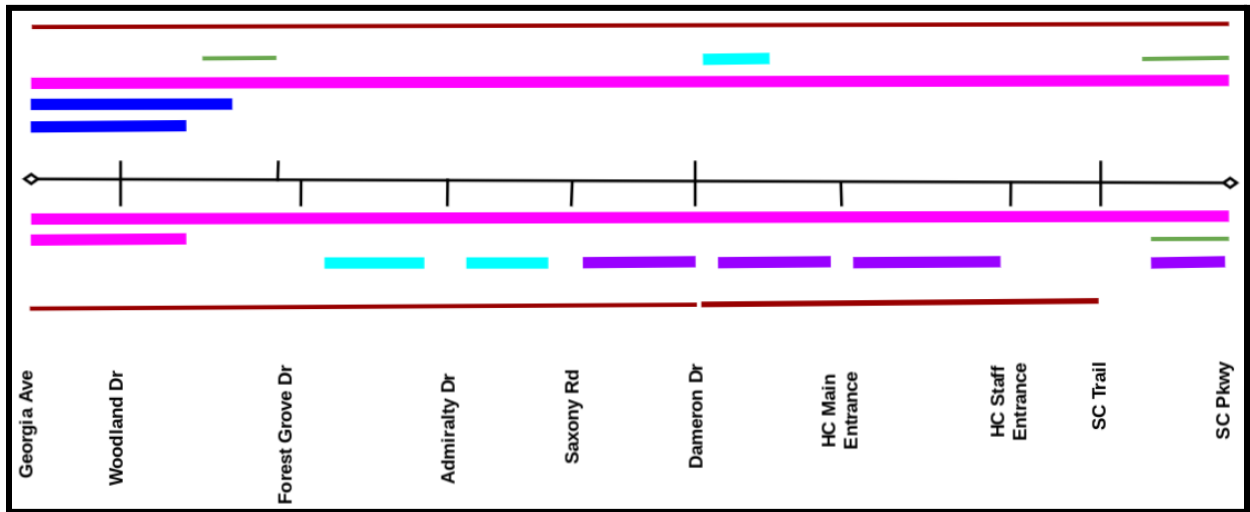
Streetscape Changes: Current to **Advocate Proposed**

	Current		Advocate Proposed		
	Northside/WB	Southside/EB	Northside/WB	Southside/EB	Delta
Sidewalks	550	2660	2660	2660	2110
Bike Lanes	500	1610	2660	2660	3210
Parking	100	375	0	0	-475
Right Turn Lane	0	933	0	0	-933

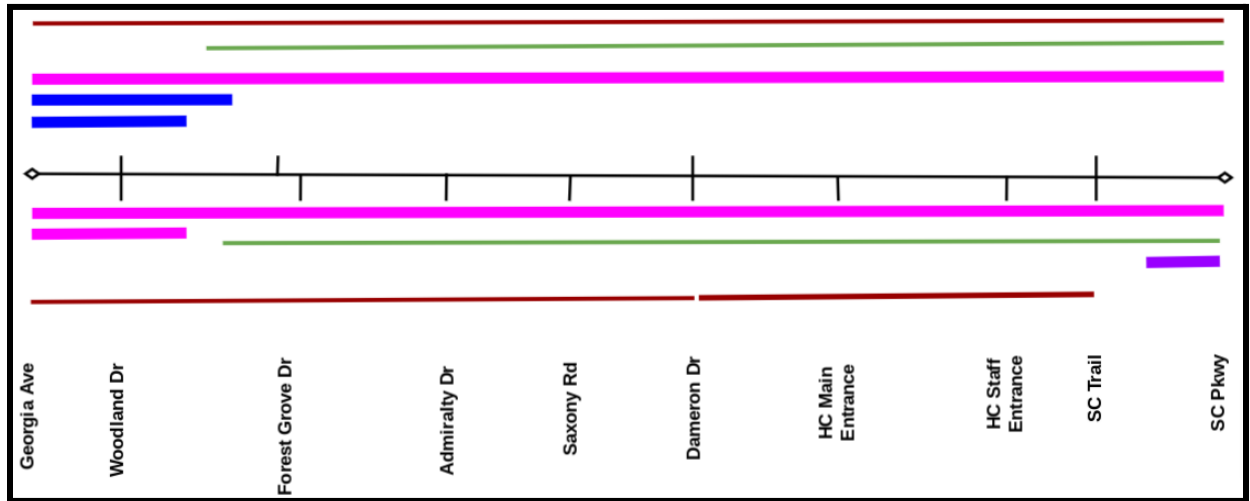
Forest Glen Road **Current** Streetscape and Facilities



Forest Glen Road Sidewalk **Project Design** Streetscape and Facilities



Forest Glen Road Sidewalk **Avocate Proposed** Streetscape and Facilities



Detailed Project Design Concerns:

Specific Project Design Concerns by Roadway Segment

Forest Grove Dr to Admiralty Dr (380ft)

To build the northside 6ft sidewalk and provide a 0-3ft buffer, the curb is moved 6-9ft southward. Travel lane width is reduced to 10.5ft. 2ft WB buffer is removed. Southside parking width is reduced from 10ft to 8ft.

Impacts:

- With no buffer, westbound bicyclists will be forced into WB travel lane slowing traffic for long distances. Drivers will get frustrated and attempt to pass bicyclists crossing the double yellow line. This will be a risky movement in moderate traffic risking a head-on crash or an aborted “pull-in” hitting or cutting off the bicyclist.
- 9ft southside parking serves as a narrow space for EB bicyclists to travel (although in the “door zone”). Narrowing parking and travel lanes will force EB bicyclists into EB travel lanes increasing driver-bicyclist conflicts.
- Bicyclists may attempt to use the south sidepath but crowded conditions will cause conflicts with pedestrians walking to/from Holy Cross Hospital and Forest Glen Metro.

Recommendation: Remove southside Parking; add Bike Lanes and northside Sidewalk and limited Street Buffer; narrow southside Street Buffer from 4ft to 2ft.

Admiralty Dr to Saxony Rd (290ft)

To build the northside 6ft sidewalk and provide a 0-3ft buffer, the curb is moved 6-9ft southward. Travel lane width is reduced to 10.5ft. 3ft WB buffer is removed. Southside parking width is reduced from 10ft to 8ft. Southside curb moved 9-12ft southward.

Impact:

- With no buffer, westbound bicyclists will be forced into WB travel lane slowing traffic for long distances. Drivers will get frustrated and attempt to pass bicyclists crossing the double yellow line. This will be a risky movement in moderate traffic risking a head-on crash or an aborted “pull-in” hitting or cutting off the bicyclist.
- 11ft parking serves as a narrow space for EB bicyclists to travel (although in the “door zone”). Narrowing parking and travel lanes will force EB bicyclists into EB travel lanes increasing driver-bicyclist conflicts. Bicyclists may attempt to use the south sidepath but crowded conditions will cause conflicts with pedestrians walking to/from Holy Cross Hospital.

Recommendation: Remove southside Parking and northside shoulder; add Bike Lanes and northside Sidewalk, if northside Road Buffer is needed, move roadway southward reducing 22ft southside street buffer to 19ft street buffer (which will not be expensive since there is not currently a curb on the southside).

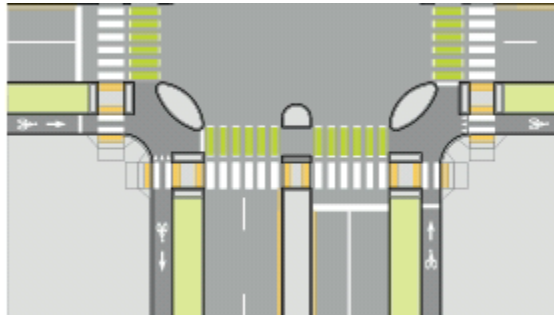
Saxony Rd to Dameron Dr

To build northside 6ft sidewalk and provide a 6ft buffer, the curb is moved 12ft southward. Travel lanes and right turn lane width are reduced to 10ft to 10.5ft. EB Bike Lane is removed. Southside curb was kept close to the current location.

Impacts:

- With no buffer, westbound bicyclists will be forced into WB travel lane slowing traffic for long distances. Drivers will get frustrated and attempt to pass bicyclists crossing the double yellow line. This will be a risky movement in moderate traffic risking a head-on crash or an aborted “pull-in” hitting or cutting off the bicyclist.
- A similar dangerous condition of lack of buffer for eastbound bicyclists. Bicyclists may attempt to use the south sidepath but crowded conditions will cause conflicts with pedestrians walking to/from Holy Cross Hospital.
- Bicyclists electing to stay to the right in the channelized right turn lane will have greater conflicts with right turning traffic onto SB Dameron especially when bicyclists continue eastbound.

Recommendation: Remove EB Right Turn Lane; keep EB Bike Lane, add WB Bike Lane and add northside Sidewalk and Street Buffer. Consider protected intersection at Dameron Dr, reference [CSDG Figure 6-19](#).

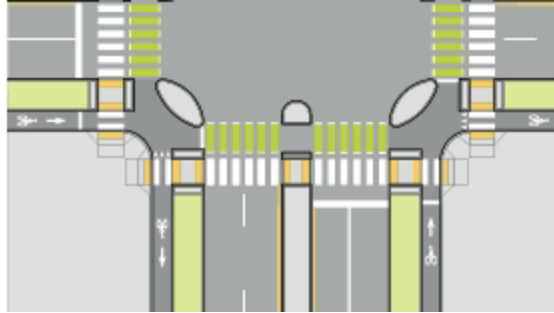
**Dameron Dr to HC Main Intersection**

To build northside 6ft sidewalk, curb is moved 6ft southward. Existing parking is kept but moved 6ft south and widened 2ft (to a total width 8ft). Travel lanes and right turn lane width is reduced to 10ft to 10.5ft. EB Bike Lane is removed. Southside curb is moved southward 1-2ft narrowing southside buffer.

Impacts:

- With no buffer, westbound bicyclists will be forced into WB travel lane slowing traffic for long distances. Drivers will get frustrated and attempt to pass bicyclists crossing the double yellow line. This will be a risky movement in moderate traffic risking a head-on crash or an aborted “pull-in” hitting or cutting off the bicyclist.
- A similar dangerous condition of lack of buffer for eastbound bicyclists. Bicyclists may stay near the right side of EB travel lane or the right side of the Right Turn Lane causing conflicts with right turning traffic into HC Hospital and with traffic exiting hospital.
- Bicyclists may attempt to use the south sidepath but crowded conditions will cause conflicts with pedestrians walking to/from Holy Cross Hospital.

Recommendation: Remove EB Right Turn Lane and northside Parking; keep Bike Lanes and add Sidewalk and Street Buffer northside. Consider protected intersection at the hospital main entrance, reference [CSDG Figure 6-19](#).



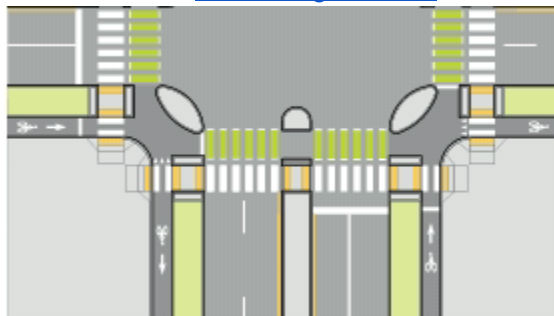
HC Main to Staff Entrances

Design does not change curb to curb width nor does it appear to change the south sidepath of bus stop access. Design shifts roadway 9ft southward to accommodate 6ft sidewalk and 3ft Road Buffer by removing EB Bike Lane, narrowing travel lanes and EB Right Turn Lane.

Impact: Westbound bicyclists climbing from Sligo Creek Stream Valley will be required:

- Share lane with WB travel lane drivers, slowing traffic flow and creating new conflicts with drivers, or,
- Merge northside 5ft sidewalk which is not to standard as a multi-use path creating new conflicts with pedestrians, or,
- A similar dangerous condition of lack of buffer for eastbound bicyclists. Bicyclists may stay near the right side of EB travel lane or the right side of the Right Turn Lane causing conflicts with right turning traffic into HC Hospital and with traffic exiting hospital.
- Bicyclists may attempt to use the south sidepath but crowded conditions will cause conflicts with pedestrians walking to/from Holy Cross Hospital.

Recommendation: Remove EB Right Turn Lane; keep EB Bike Lane and add WB Bike Lane, add northside Sidewalk and add Street Buffer. Removing the block-long RTL, causing right turning drivers to begin their from the travel lane which will reduce the peak speed of the corridor as required by MPOHT target speed (25mph), slowing the entry speed into right turns, and slow speeds through the turn reducing crash severity. Consider protected intersection at the hospital staff entrance, reference [CSDG Figure 6-19](#).



HC Staff Entrance and Bus Stop to Sligo Cross Trail

Design removes both EB and WB Bike Banes and replaces these facilities with a north 6ft sidewalk and 5ft buffer. Design shifts roadway 11ft southward.

Impact:

- Westbound bicyclists climbing from Sligo Creek Stream Valley will be required:
 - Bicyclists will be slowing significantly to 5-7mph due to 5-7% grade hill climb; drivers behind bicyclists in WB Travel Lane will be required to queue, slowing traffic flow and creating new conflicts with drivers attempting to pass using narrow Travel Lane, or,
 - Alternatively, bicyclists may merge northside 6ft sidewalk which is not to standard as a multi-use path creating new conflicts with pedestrians, or,
 - Westbound bicyclists may follow project design to merge onto southside sidepath after making dangerous right/left/right turning movement creating numerous conflicts with Sligo Creek Trail and Holy Cross sidepath pedestrians.
 - This design introduces new and dangerous conflicts with drivers at the Sligo Creek Trail intersection which do not exist today. WB bicyclists will have difficulty looking over their shoulder to see WB drivers because their bikes will be facing westward, 180 degrees in the opposite direction of where they need to be looking. Bicyclists may be tempted to keep their momentum for the climb up the hill and not stop with tragic results. Rolling through the intersection is an unsafe and inadvisable bicyclist behavior, but one that is predictable with this dangerous design at an uncontrolled intersection.

Recommendation: Wedge street buffer from 5ft northwest side to 0ft northeast side; vary street buffer from 3ft southwest side to 5ft southeast side, move southside curb 9ft southward southwest side, straighten sidepath from sidewalk to trail junction.

Sligo Creek Bridge

Design removes both WB Bike Lane and EB Bike Lane and replaces them with a sidepath on the northside and travel lane shoulder southside.

Impact:

- Westbound bicyclists moving rapidly from descent into Sligo Creek Stream Valley will be required to:
 - Merge into WB travel lane creating new conflicts with drivers, or,
 - Merge into northside 5ft sidewalk which is not to standard as a multi-use path creating new conflicts with pedestrians
- Westbound bicyclists staying in travel lanes will be exposed to traffic conflicts due to removal of current Bike Lane.
- Eastbound bicyclists on southside sidepath (per design) will be required to merge onto EB travel lanes at relatively slow speeds relative to drivers who are accelerating into stream valley and focused on “making” the green light at Sligo Creek Parkway intersection creating new and dangerous conflicts. All the bicyclist crashes in the past 5 years on the project area occurred between the SC trail intersection and the SC Parkway intersection. The project design exacerbates bicyclist crash exposure.

Recommendation: Widen northside Sidewalk, shifting Travel Lanes existing Bike Lanes southward to transition to HC Bus Stop segment alignment