



St. Andrews Church Road Corridor Improvement Plan



For: Calvert-St. Mary's Metropolitan Planning Organization
St. Mary's County



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Table 1: Acronyms and Initialisms Glossary

Acronym or Initialism	Meaning
AADT	Average Annual Daily Traffic
APF	Adequate Public Facilities
BMP	Best Management Practice
BRAC	Base Realignment and Closure
CMF	Crash Modification Factor
C-SMMPO	Calvert-St. Mary's Metropolitan Planning Organization
DPW&T	St. Mary's County Department of Public Works and Transportation
FHWA	Federal Highway Administration
HCM	Highway Capacity Manual
LOS	Level of Service
LRTP	Long Range Transportation Plan
LUGM	St. Mary's County Department of Land Use and Growth Management
MDOT-SHA	Maryland Department of Transportation State Highway Administration
SMECO	Southern Maryland Electric Cooperative
STS	St. Mary's Transit System
TDP	Transit Development Plan

Introduction

St. Andrews Church Road (MD 4), located in St. Mary's County, Maryland, runs 6.18 miles connecting MD 5 in Leonardtown, with MD 235 and the commercial areas of California and Lexington Park. Just east of the study area, MD 4 provides access to the Governor Thomas Johnson Bridge, connecting St. Mary's County to Calvert County. The road connects two parts of a region of the county that has grown tremendously over the past twenty years. Base Realignment and Closure (BRAC) activities that began in 1998 and continue today have led to the expansion of the Naval Air Station Patuxent River (NAS Pax River) from 17,500 to nearly 30,000 military, civilian, and contractor personnel on a daily basis. As a result, the U.S. Census Bureau has recognized the Lexington Park-California-Chesapeake Ranch Estates area as an urbanized area since 2010. Population growth has also brought a significant expansion of commercial establishments (big box stores, chain restaurants, office buildings, hotels, etc.) along MD 235.

St. Andrews Church Road (MD 4) is a key transportation corridor in central Saint Mary's County. It connects the communities of Leonardtown and California and provides broader access to points north and south via Point Lookout Road (MD 5) and Three Notch Road (MD 235), facilitating mobility among some of the most rapidly growing areas of Southern Maryland.

Through a grant from the Calvert-St. Mary's County Metropolitan Planning Organization, the Departments of Land Use and Growth Management (LUGM) and Public Works & Transportation (DPWT) initiated this study to identify solutions to traffic operations, safety and multimodal concerns along St. Andrews Church Road (MD 4) between Point Lookout Road (MD 5) and Three Notch Road (MD 235) in Leonardtown and California, respectively.

This final report describes existing conditions and future development in the corridor, identifies concerns raised by the public and agency stakeholders, and presents high-level concepts for several locations along MD 4.

Existing Conditions

Infrastructure

The Maryland Department of Transportation State Highway Administration (MDOT-SHA) classifies St. Andrews Church Road as a minor arterial road from MD 5 to FDR Boulevard with one lane in each direction and a speed limit of 50 mph. The road is generally a 38' open section asphalt roadway with one lane in each direction and shoulders on both sides. At multiple intersections, St. Andrews Church Lane widens to accommodate turn lanes. The public right-of-way ranges from 50 to 60 feet along MD 4. At FDR Boulevard, MD 4 becomes a primary arterial closed section roadway to Three Notch Rd (MD 235). This section is outside of the study area.

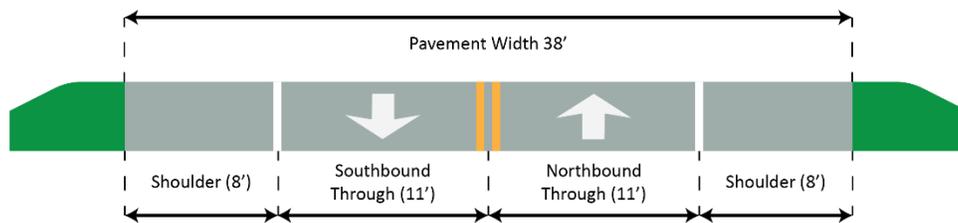


Figure 1. Existing Typical Section

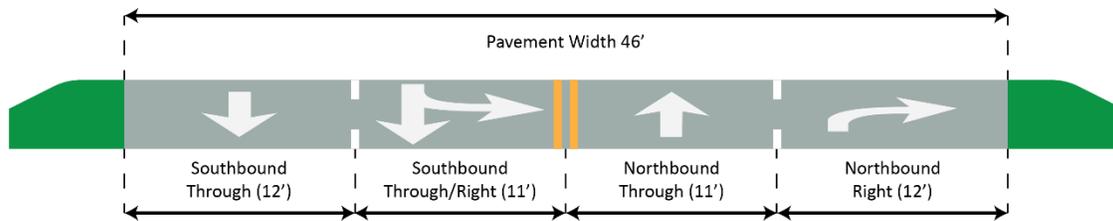


Figure 2. Existing Typical Section with Turn Lanes

Two roads connect from St. Andrews Church Road through to the south, Fairgrounds Road (connecting back to MD 5 south) and Indian Bridge Road connecting back to MD 5 near Great Mills. Two roads effectively connect from St. Andrews Church Road through to the north to MD 245: Brown Road (via Hickory Hill Road) and Blacksmith Shop Road (via Cedar Lane). Wildwood Parkway connects from St. Andrews Church Road to MD 235 approximately two-thirds of one mile north at Wildwood Boulevard.

Transportation Choices

Multimodal transportation choices are minimal to non-existent along St. Andrews Church Road:

- There are no sidewalks or paths within the study area.
- Although 8’ paved shoulders exist along most of the corridor, they are neither marked nor signed for bicycles.
- There is no through bus service along MD 4 between California and Leonardtown.
- There is a park and ride lot with 30 spaces near St Andrews Lane unserved by any transit.

Traffic and Safety

In 1999, Average Annual Daily Traffic (AADT) was 11,850 at MD 5 at the south and 11,775 at MD 4 at the north end of the study area. Twenty years later, AADT has remained relatively constant at MD 5, at 12,050 at, but has grown by 63% to approximately 19,200 approaching MD 235.

From January 2015 through December 2018 there were 132 crashes along St. Andrews Church Road, as shown in

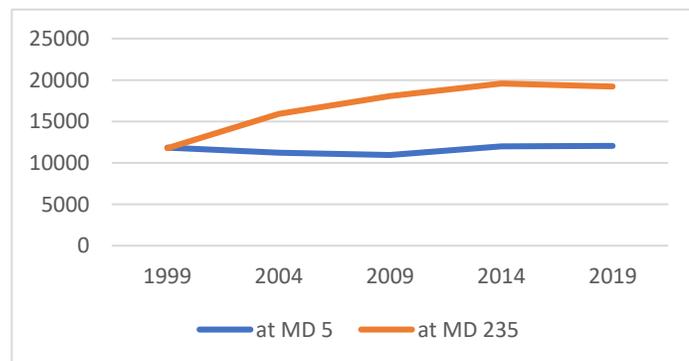


Figure 3. AADT at each end of St. Andrews Church Road

Table 2. Primary crash types include rear-end collisions and left-turn collisions. One fatality was reported during the period near Point Lookout Road (MD 5).

Table 2: Summary of Traffic Crashes Along St. Andrews Church Road		
Intersection	# Crashes	Primary Crash Types
Point Lookout Rd (MD 5)	29	Rear-end, left-turn
Blacksmith Shop Rd	2	Unknown
Wheatley's Apt Way	1	Unknown
Brown Rd	8	Rear-end
Honey Tree Lane	1	Unknown
Fairgrounds Rd	11	Rear-end, same direction, single vehicle.
Sandra Lane	2	Unknown
Indian Bridge Road	16	Head on, rear-end, same direction, single vehicle
Bellwood Lane	2	Unknown
Pops Way	3	Unknown
Old St Andrews Church Rd, NW	9	Rear-end
Old St Andrews Church Rd SE	9	Rear-end, left-turn
Wildwood Parkway	25	Rear-end

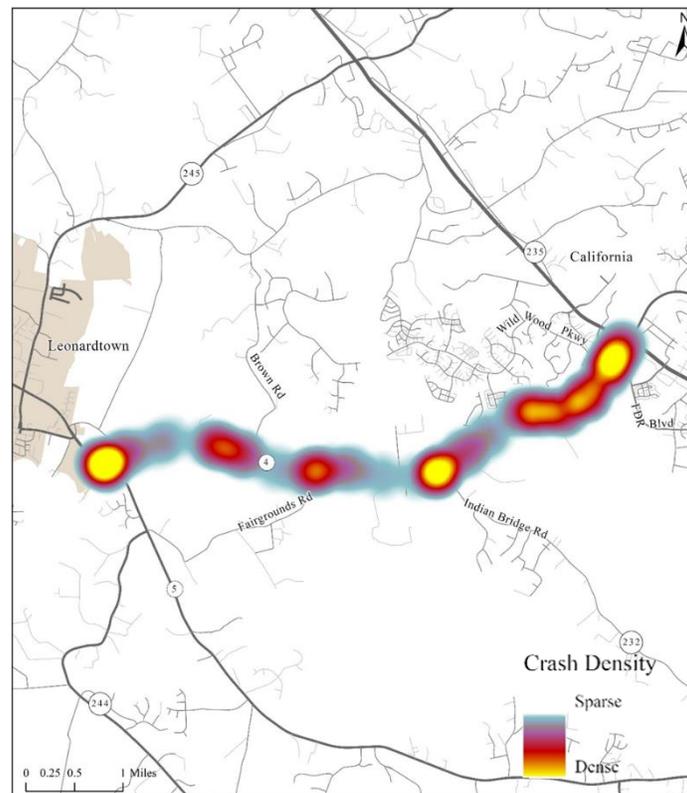


Figure 4. Traffic Crashes along MD 4
Source: Maryland Statewide Vehicle Crashes

Surrounding Land Use

The land use along most of St. Andrews Church Road is agricultural and low-density residential; more than two-thirds of the alignment is wooded. The zoning encourages low density agricultural uses along with some low density residential. Commercial development dominates the area just east of the study area between the intersection of FDR Boulevard and Wildewood Parkway.

Activity generators are the commercial areas along FDR Boulevard and Three Notch Road (hotels, restaurants, shops, big-box stores), apartment buildings, homes along Indian Bridge

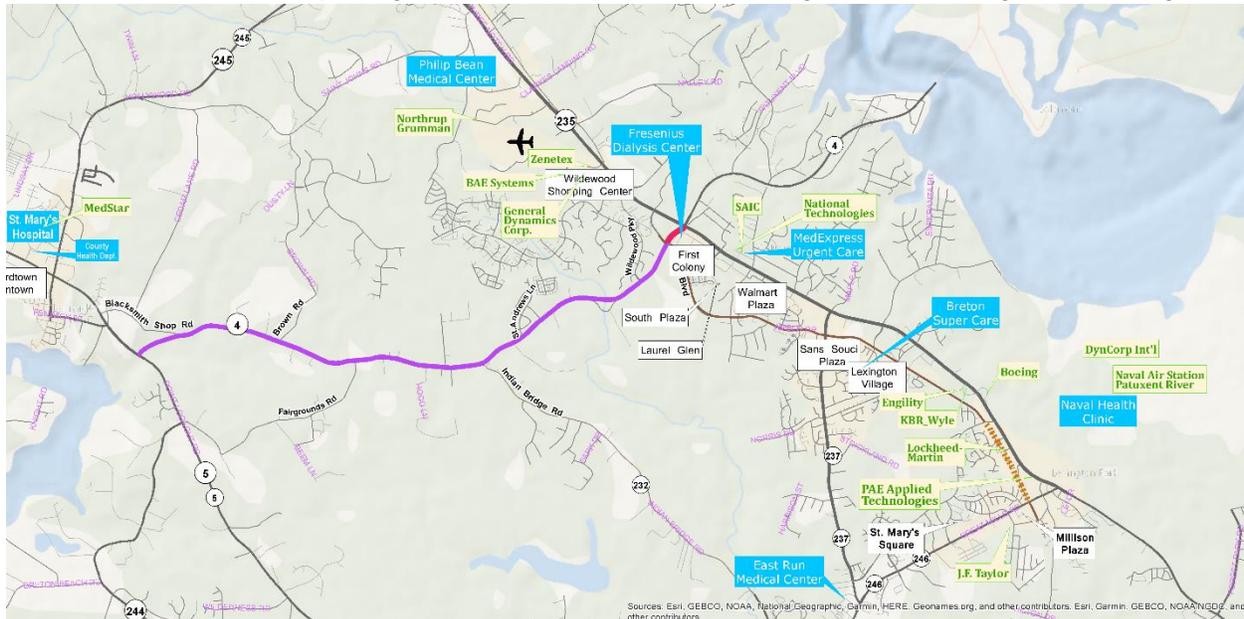


Figure 5. Commercial Development Trip Generators along MD 235/Three Notch Road

Road, and Leonardtown, which contains, schools, churches, residences and government offices. The largest employer in the area is Naval Air Station Patuxent River.

Development Activity

Active development projects along St. Andrews Church Road are minimal:

- › Southpoint Church (43610 St. Andrews Church Road) has permits pending for a 23,366 sq. ft. facility which will include 160 parking spaces.
- › A new building of approximately 2,500 sq. ft. is under construction adjacent to the Ballet Center (44727 St. Andrews Church Road) to house a karate and fitness studio.

There are multiple subdivision plans along St. Andrews Church Road, however it is believed that all have expired.

A site on the south side of St. Andrews Church Road between Old St. Andrews Church Road and Pops Way is one of many under consideration by the Department of Recreation and Parks for an outdoor sports complex to include multiple athletic fields and associated infrastructure capable of supporting league and tournament play for field based sports. If this site is selected, the entrance would be across from St. Andrews Lane. Funding for park planning and design is programmed for FY 2022 with construction to occur in FY 2024.

Environmental Context & Surroundings

The environmental context of the St. Andrews Church Road corridor is as might be expected along a rural roadway:

- › As indicated above, approximately two-thirds of the corridor is wooded. Although none abut St. Andrews Church Road, several thousand acres of protected lands owned by the Maryland Department of Natural Resources are just south of the corridor including St. Mary's River State Park and Salem Forest State Park.
- › Five waterways cross under St. Andrews Church Road in culverts: Glebe Run, two unnamed tributaries to Glebe Run, Gravely Run, St. Mary's River and the western branch of the St. Mary's River. There is no visual indication of any distress on any of these waterways along St. Andrews Church Road.
- › The U.S. Fish and Wildlife Service indicates three species of concern in St. Mary's County: the Northern Long-Eared Bat (threatened), the Northeastern Beach Tiger Beetle (threatened) and the Dwarf Wedgemussel (endangered).
- › Several properties can be found in the National Register of Historic Places or the Maryland Inventory of Historic Properties:
 - St. Andrew's Church (listed on the National Register of Historic Places)¹
 - Glebe School (inventoried, not listed)
 - Residences at 42156, 42238 and 42953 and 43102, St. Andrews Church Road (inventoried, not listed)
 - Tobacco Barn on St. Andrews Church Road (inventoried, not listed)
- › The St. Mary's County landfill (closed) is located on the eastern end of the study area. It is currently being utilized as a homeowner drop-off site for residential bulk waste and recyclables.

Prior Plans & Studies

Over the past twenty years, multiple plans and studies have been conducted that if implemented would affect the St. Andrews Church Road corridor. A brief summary of each is as follows.

St. Mary's County Comprehensive Plan (2010)

The Comprehensive Plan for St. Mary's County adopted in March 2010 discusses zoning and planning changes for St. Mary's County given the population projections for the region including the Calvert-St. Mary's Metropolitan Planning Area. The St. Mary's County Comprehensive Plan sets out a vision for a "well-maintained, multimodal transportation system [that] facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services..." The plan contains a transportation element and references the County's 2006 Transportation Plan. The plan notes that although the car is the primary means of transportation in the county, demand for and use of transit is growing.

With respect to MD 4, the Comprehensive Plan makes two recommendations:

- › Prepare and implement highway access policies for St Andrews Church Rd (MD4) along with MD 5/235 and MD 234.²
- › Develop joint use access driveways (driveway consolidation) for ingress and egress along St Andrews Church Rd.³

¹ NPS Ref Number 73-002171

² St. Mary's County Comprehensive Plan, adopted April 2010, Page 54.

³ St. Mary's County Comprehensive Plan, adopted April 2010, Page 200.

MDOT-SHA Highway Needs Inventory

The Highways Needs Inventory (HNI) is a statewide compilation of major highway deficiencies. It does not represent a commitment to project construction, but it identifies needs and possible roadway improvements based on a technical evaluation of highway conditions and reasonable design standards.

The HNI includes an otherwise undefined “multilane reconstruction” St. Andrews Church Rd. from MD 5 to MD 235 with an estimated cost of \$89,000,000.

MDOT-SHA Improvements: Wildewood Parkway to Old St. Andrews Church Road.

MDOT-SHA plans to widen MD 4 between Wildewood Parkway and Old St. Andrews Church Road. The project includes construction of a dedicated left-turn lane onto Old St. Andrews Church Road from southbound MD 4, and onto Wildewood Parkway from northbound MD 4. Design is underway and the project is scheduled to be advertised for construction in spring 2021.

Calvert-St. Mary’s County MPO Long Range Transportation Plan

Moving Forward 2045 is the Calvert-St. Mary’s Metropolitan Planning Organization’s (C-SMMPO’s) Long Range Transportation Plan (LRTP) and the listing of all major planned transportation investments for the region over the next 25 years. There are no specific projects recommended for St. Andrews Church Road; however, a second span on the Thomas Johnson Bridge, widening of MD 4 from MD 235 to the bridge, and an MD 4/ MD235 interchange are all listed in the plan⁴ and would have secondary impacts.

⁴ *Moving Forward 2045*, approved March 6, 2020, Sec. 5.3 “Recommended Projects”, p. 81

FDR Boulevard Study and Plans

Plans for a roadway to relieve traffic on MD 235 (Three Notch Rd) and to improve access to NAS Pax River dates to 1985. After years of planning and debate, the project was approved in 2006 and the new roadway was named FDR Boulevard. FDR Boulevard is under construction and when completed, will connect MD 4 to MD 246 (Great Mills Road). FDR Boulevard is being classified as a neighborhood connector roadway with multiple roundabouts, raised medians, pedestrian and bicycle paths and other traffic calming devices.⁵

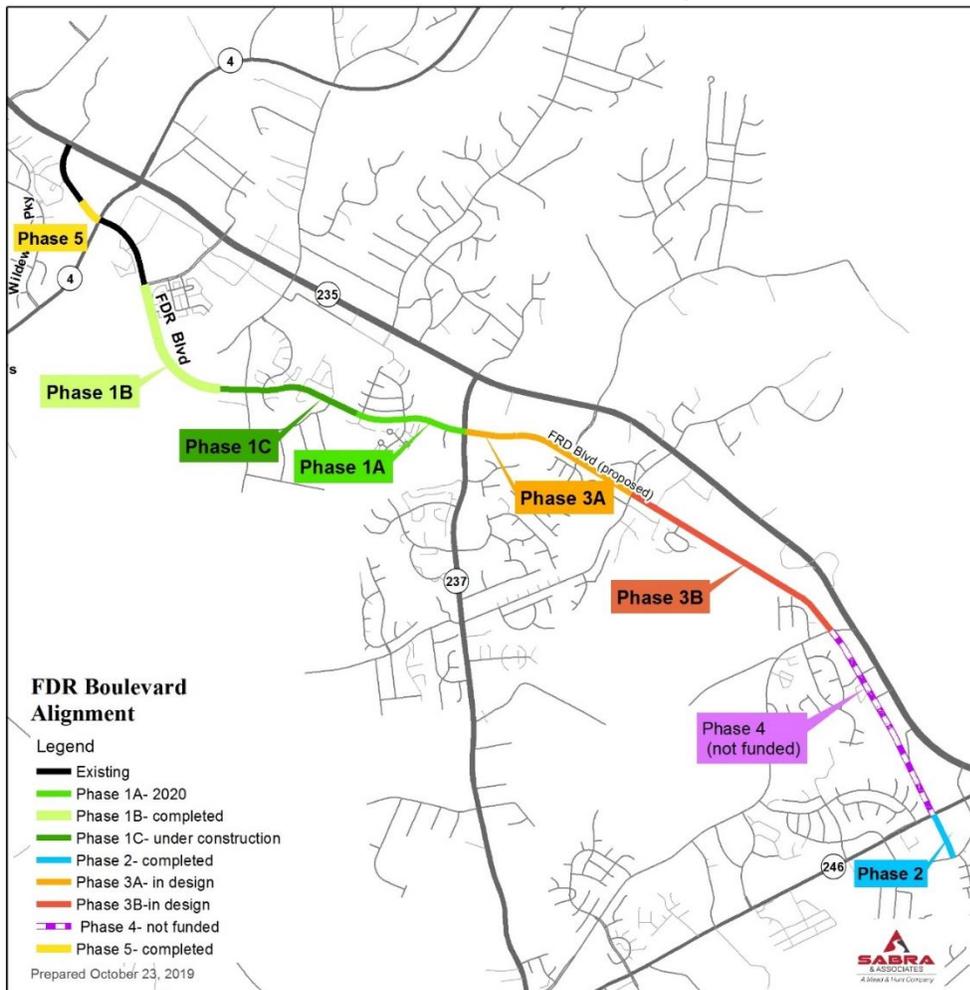


Figure 6. Phasing Plan for FDR Boulevard

The project is divided into multiple phases (see Figure 6). Phases 1 and 5 were recently completed, completing the section from MD 235 to MD 237. Phase 3A is scheduled to begin construction in spring 2020 and be finished by August 2021. Phase 3B is scheduled to begin construction in 2021 and be finished in 2022). The total cost is estimated at \$48,000,000 including all hard and soft costs.

St. Mary’s County Transportation Plan (2006)

The 2006 Countywide Transportation Plan addresses the ensuing 20 years given projected population growth and future travel demands. The goal of the study was to provide an integrated transportation plan that would assist all aspects of transportation including motor vehicles, mass

⁵ Per conversation with Allen Settles, October 24, 2019.

transportation, horse and buggy, bicycles, pedestrians, waterways, and air transportation, while considering the cultural resources throughout the county.⁶ The plan makes recommendations for improvements to roadways to improve traffic operations and circulation. Recommendations which, if implemented, would affect the study area are summarized below:

- › Construct a second span of the Thomas Johnson Bridge and widen MD 4 east of MD 235 from two to four lanes.⁷
- › Extend Lawrence-Hayden Road to MD 4 at Indian Bridge Road intersection, thereby connecting a planned residential area to MD 4.

St. Mary's County Transit Development Plan (2013)

The Transit Development Plan (TDP) serves as a guide for public transportation in St. Mary's County. Written for fiscal years 2014-2018, this plan discusses population projections, population density, land use, travel patterns, level of service, and presents the results of a transit needs analysis, and gives alternatives to meet transportation needs in this rapidly growing county.

The Transit Development Plan recommends changes in fares as well as increases in hours and access to transit services, but no changes specific St. Andrews Church Road.

Agency & Public Concerns

On October 24, 2019, LUGM hosted two meetings to gather comments from agencies and the public regarding St. Andrews Church Road. The issues raised at each meeting were very similar.

Interagency Coordination Meeting

The interagency coordination meeting was attended by representatives of DPW&T, and LUGM, MDOT-SHA's Regional and Intermodal Planning Division, and a representative of NAS Pax River.

The following issues were raised. This list is not exhaustive but captures the most significant concerns:

- › Speeding and traffic safety throughout the corridor resulting in traffic crashes and near misses.
- › Driveways should be consolidated wherever possible. Specific discussion occurred regarding commercial and government properties on the south side of St. Andrews Church Road approaching Wildewood Parkway, and the residential properties on the north side of St. Andrews Church Road just east of Bellwood Lane.
- › The County does not understand why MDOT-SHA rejected a driveway entrance opposite Indian Bridge Road for the Southpoint Church (pending permit approvals), especially in the context of potential extension of Lawrence-Hayden Road to MD 4.
- › There is a need for pedestrian facilities between (approximately) Wildewood Pkwy and FDR.
- › Several major drainageways cross MD 4 particularly west of Indian Bridge Road; however, there is no significant drainage concern.
- › Geometric improvements at Blacksmith Shop Road should be considered – currently, there is limited sight distance and no acceleration lane for right turns onto southbound MD 4.

⁶ St. Mary's County Transportation Plan, 2006, Page 1

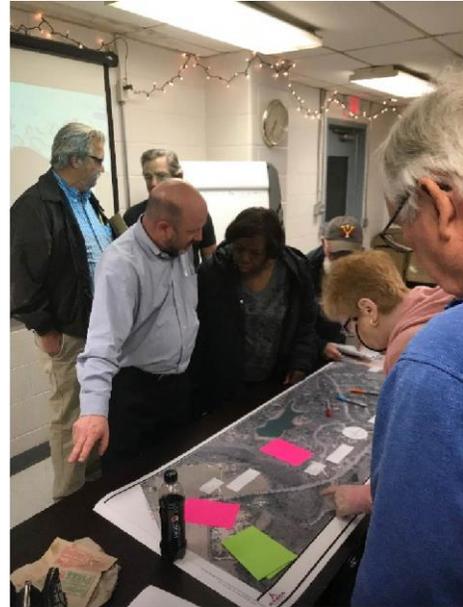
⁷ St. Mary's County Transportation Plan, 2006, Page 15

- › There are no scheduled St. Mary's Transit (STS) routes connecting Leonardtown with California and Lexington Park via MD 4, however, the need for such service is increasing.
- › Three Notch Trail may provide opportunities to improve bicycle and pedestrian connections for MD 4.

Public Meeting

Approximately 25 residents and property owners of the St. Andrews Church Road corridor attended the public session. The following additional issues and concerns were raised:

- › There is a drainage problem on certain properties between Hood Lane and Brown Road and between St. Andrews Lane and Indian Bridge Road.
- › The left turn lane and curb cut opposite St. Andrews Lane are confusing to motorists as there is no road connection there.
- › Roadway lighting is needed at curves and crests.
- › The northbound right-turn lane onto FDR Blvd is too narrow and thus does not allow turning movements outside the flow of through traffic.
- › School buses and trucks entering the roadway cannot safely accelerate into traffic.



MD 4 Focus Areas & Potential Improvements

Based on an understanding of existing conditions, potential future development and comments from agencies and the public, the project team focused the study on the following areas (from south to north):

- › Area 1: Blacksmith Shop Road intersection with St. Andrews Church Road
- › Area 2: Fairgrounds Road intersection with St. Andrews Church Road
- › Area 3: Indian Bridge Road intersection with St. Andrews Church Road
- › Area 4: St. Andrews Lane intersection with St. Andrews Church Road
- › Area 5: MD 4 between Old St. Andrews Lane & Wildewood Parkway
- › Area 6: MD 4 at FDR Boulevard/MD 4 Sidepath

Based on stakeholder concerns, the project team also investigated the intersections of St. Andrews Church Road with Fairgrounds Road and Brown Road. At those locations, the concerns noted by stakeholders were found to be unverifiable or outside the scope of this study. This section will discuss the challenges at each study area, identify recommended improvements to address those challenges, and present cost estimates and preliminary impact evaluations for those recommended improvements.

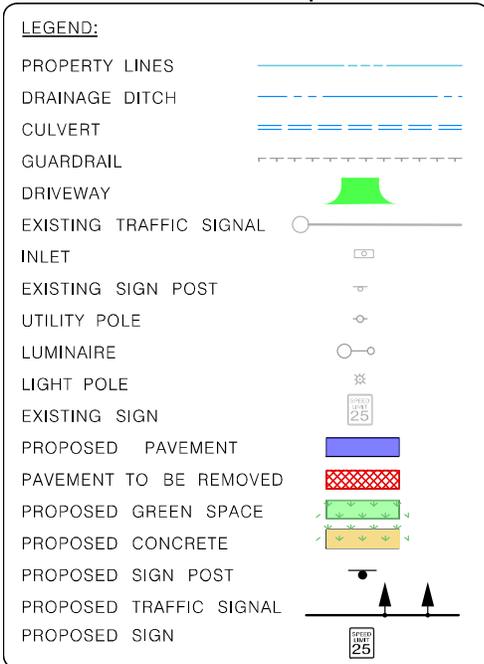


Figure 7. Legend for Proposed Improvement Figures 5 – 7,9,12 – 16

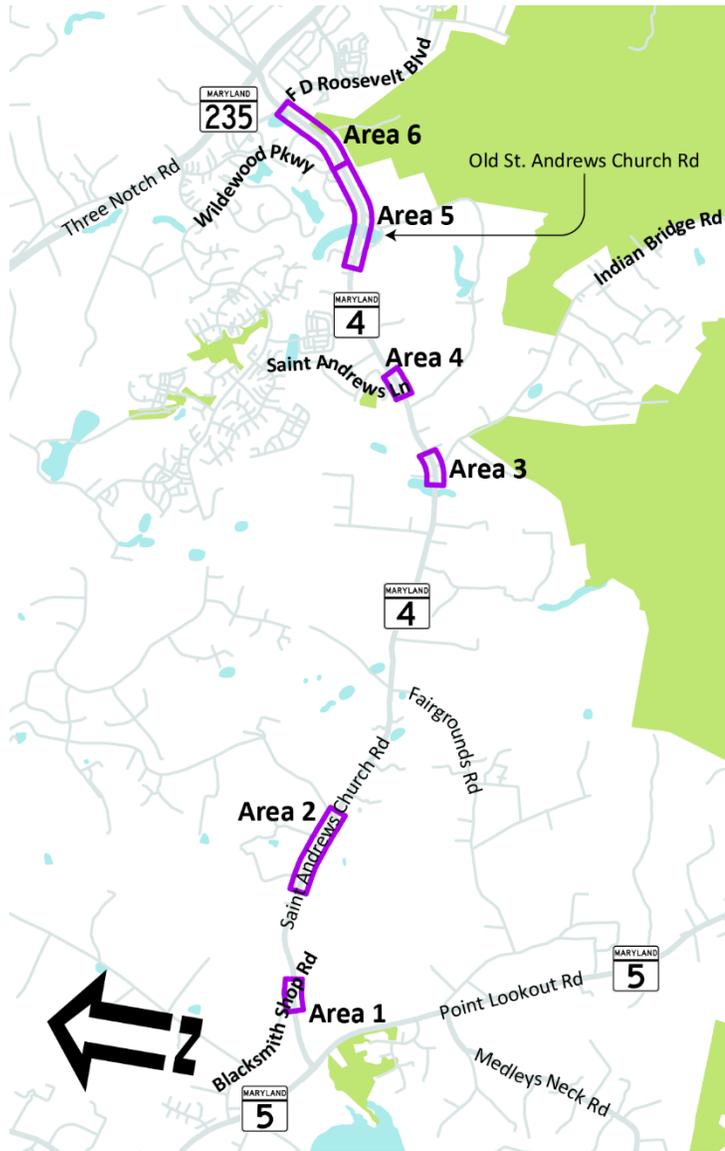


Figure 8. Focus Area Locations

Area #1 – Blacksmith Shop Road

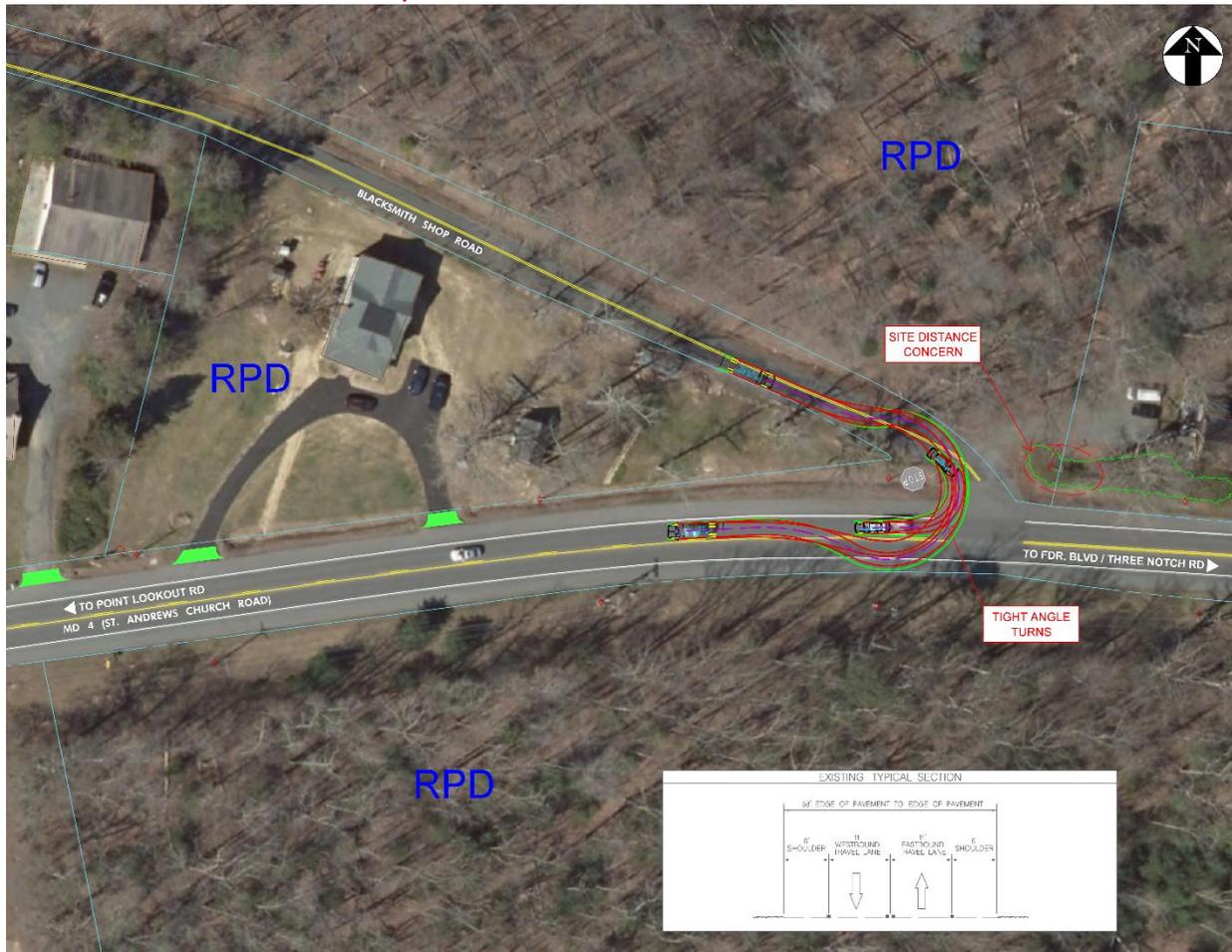


Figure 9. Concerns at Blacksmith Shop Road

Challenges

Concerns were raised regarding the difficult turning movement from Blacksmith Shop Road to northbound St. Andrews Church Road towards FDR Boulevard and MD 235/Three Notch Road. This concern is exacerbated by fast-moving vehicles from the south (from the direction of MD 5/Point Lookout Road) and the lack of an acceleration lane. Sight distance for vehicles turning south on to St. Andrews Church Road (towards MD 5/Point Lookout Road) has also been raised as a concern.

Recommended Improvement

Two countermeasures were considered for this location: **improve horizontal intersection alignment** from Blackshop Smith Road to St. Andrews Church Road or **create an offset right turn lane** from St. Andrews Church Road to Blackshop Smith Road. The offset right turn lane was determined to be less desirable as the right-of-way line south of Blackshop Smith Road extends nearly to edge of pavement on St. Andrews Church Road. Moreover, the offset right turn lane would not address the turning movement concerns.

Improving the horizontal intersection alignment at Blacksmith Shop Road, as shown in Figure 10, would address both the turning movement and sight distance concerns. The Federal Highway

Administration (FHWA) Crash Modification Factor (CMF) Clearinghouse indicates that in rural areas such as St. Mary’s County, the intersection realignment could reduce angle crashes by 69% on rural two-lane roads and reduce line-of-sight related crashes by 44%. To implement the improvement as shown, approximately 5,000 square feet of right-of-way would be required and it is recommended that one private driveway be closed to better managed access to St. Andrews Church Road. Stormwater management could be performed on-site through removal of the existing roadway pavement and stormwater best management practices (BMPs) installed just south of the new intersection. No other environmental factors are likely to require significant mitigation measures. Relocation of two or three utility poles may be required, but this may be able to be done most cost effectively by rerouting lines to the south side of St. Andrews Church Road.



Figure 10. Proposed Improvements at Blacksmith Shop Road

Cost Estimate and Impact Evaluation

Estimated Cost	Utility Impacts	Environmental Impact	Private Property Impacts
\$60,000 – \$120,000	Potential impact to one utility pole; likely could be avoided	Net reduction of approx. 1,900 sq. ft. of impervious area.	Realignment would require acquisition of more than 5,000 sq ft from one parcel; and reconfigured driveway access to MD 4 from another parcel.

Area #2 – AAA Materials Entrance

Challenges

Residents have expressed concerns that commercial vehicles entering MD 4 move slowly when entering the roadway and cause a hazard to motorists traveling at or above the posted speed.

Recommended Improvement

Recommended improvements in this area have two goals: providing more advance warning that slow-moving commercial vehicles may be entering the roadway and mitigating travel speeds on MD 4 to reduce the speed differential between traveling motorists and entering vehicles.

Measures recommended to provide more advance warning are **installation of additional warning signs** that state “Trucks Entering and Leaving” approximately a quarter of a mile in each direction from the AAA Materials entrance and **relocation of the existing eastbound truck warning sign** to the 70 mile-per-hour stopping sight distance. **Construction of curbed medians** east and west of the entrance would encourage drivers to obey posted speed limits and provide an opportunity to remove impervious surface. A third measure, **reducing the speed limit**, was not recommended, as a short speed limit reduction would be inconsistent with the rest of the roadway and likely be less effective at mitigating travel speeds than installing curbed medians.



Figure 11. Proposed Improvements at AAA Materials Entrance

Cost Estimate and Impact Evaluation

Estimated Cost	Utility Impacts	Environmental Impact	Private Property Impacts
\$100,000 – \$150,000	None	Net reduction of approx. 2,450 sq. ft. of impervious area.	None. Coordination with AAA Materials would be necessary.

Area #3 – Indian Bridge Road

Challenges

Indian Bridge Road at St. Andrews Church Road has had several head-on crashes, angle crashes, and rear-end collisions in the past three years. Residents have expressed concern that high speeds and limited sight distance impair motorist safety in this area and that traffic crash data does not reflect the urgency of the problem, stating that near misses are common and many vehicles run off the road and into their yard without a report being filed.

Recommended Improvement



Figure 12. Proposed Improvements at Indian Bridge Road

Three countermeasures were considered for this location: **improve sight distance by relocating the stop bar on Indian Bridge Road, channelizing right turns and clearing vegetation, and constructing a roundabout to slow traffic through the intersection.** The roundabout was determined to be the less desirable alternative as turning movements are unbalanced and the cost of the improvement would not yield significantly more benefit as a less intensive alternative. Extending the stop bar and channelizing right turns meets the safety need.

The **recommended improvement is to channelize eastbound right turns onto Indian Bridge Road thereby allowing the stop bar to be relocated further north** to improve sight distance for vehicles turning onto MD 4. The existing acceleration lane would be lengthened to allow more space for vehicles to accelerate. Clearing vegetation that obstructs sightlines should be an immediate measures undertaken by St. Mary's County DPW&T. MDOT-SHA has used a similar approach at MD 281 and Muddy Lane in Elkton, Cecil County (as shown in Figure 13), which has a similar horizontal profile and traffic volumes to MD 4 at Indian Bridge Road. The FHWA CMF Clearinghouse indicates that in rural areas such as St. Mary's County, increasing line of sight at the intersection by changing right-turn lane geometry could reduce angle crashes by 25% with an overall crash reduction rate of 15%.



Figure 13. MD 281 at Muddy Creek Road – Cecil County – Before and After

Cost Estimate and Impact Evaluation

No physical construction is required for this improvement and it appears that some of the vegetation clearing would occur within the public right-of-way. The estimated cost of this work is less than \$10,000 and no utility or environmental impacts would occur.

Area #4 – St. Andrews Lane

Challenges

Concern has been expressed that the undeveloped curb cut and associated lane markings opposite St. Andrews Lane are confusing to motorists. Residents also indicate that westbound motorists misunderstand existing lane markings and drift into the westbound turn lane, which serves St. Andrews Lane. There is no present need for the left turn lane, but there is an MDOT-SHA access permit which remains valid and which runs with the land.⁸ This location is one of several sites under consideration for a future park and athletic facility, so if development proceeds, a left turn can be restored in a safer manner.



The proposed development on the south side of MD 4 is not expected to proceed.

Recommended Improvement



Figure 14. Proposed Improvements at St. Andrews Lane

The recommended improvement is to extend the edge line through the unused curb cut and eliminate the associated left turn bay. No physical construction is required for this improvement.

Cost Estimate and Impact Evaluation

<i>Estimated Cost</i>	<i>Utility Impacts</i>	<i>Environmental Impact</i>	<i>Private Property Impacts</i>
Less than \$20,000	None	None	None ²

⁸ LUGM should review the access permit issued by MDOT-SHA to determine if the conditions have been met.

Area #5 – MD 4 between Old St. Andrews Lane & Wildewood Parkway

MD 4 between Old St. Andrews Lane and Wildewood Parkway is presently being redesigned by MDOT-SHA. Widening the road will allow for left turn and bypass lanes as shown in Figure 15 and Figure 16. These improvements are intended to achieve operational benefit, particularly in the 1400 feet between the DPW&T landfill entrance and Ballet Caliente Classical School of Dance at 44727 St. Andrews Church Road, as well as to address safety concerns at the eastern leg of Old St. Andrews Church Road.

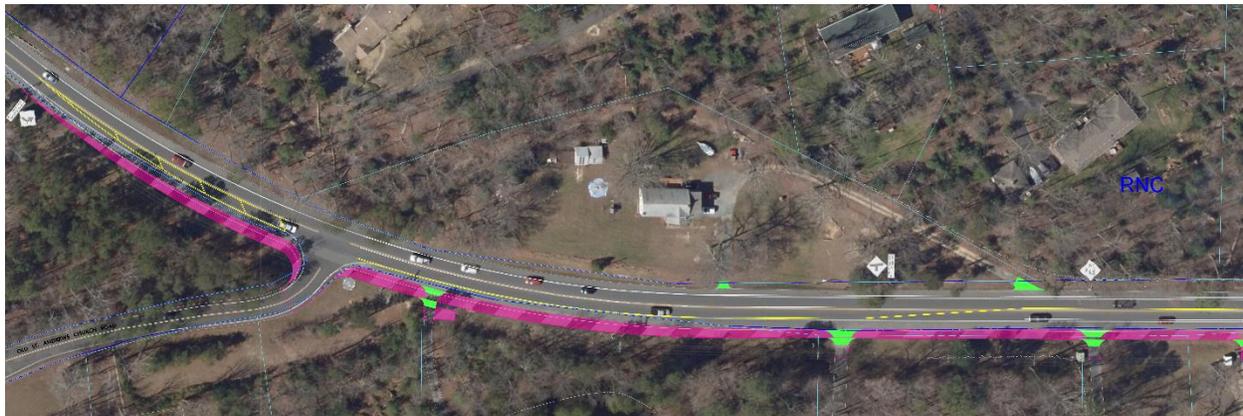


Figure 15. MDOT SHA Proposed Improvements Near Old St. Andrews Church Road



Figure 16. MDOT SHA Proposed Improvements near Wildewood Parkway

Challenges

The MDOT-SHA plan appears to be in conflict with the St. Mary’s County Comprehensive Plan, which calls for “manag[ing] demand for direct access to major roads...designat[ing] St. Andrews Church Road...as a restricted access traffic artery.”⁹ Nevertheless, the County acknowledges that the improvement plan is likely to occur. MDOT-SHA estimates that its project will cost approximately \$3.6 million and take 24 months to complete, inclusive of right-of-way acquisition and utility relocation. Approximately two-thirds of the cost of the planned MDOT-SHA project is to acquire right-of-way and relocate utilities; there may be further expense to widen a culvert just west of Old St. Andrews Church Road.

⁹ St. Mary’s County, Maryland Comprehensive Plan (2010), Goal 11.3.2, Objective A.ii.a

This plan recommends additional improvements in the project area to improve safety (reduce rear-end and left-turn crashes) and which are more consistent with the access management goals of the Comprehensive Plan.

Recommended Improvements at Old St. Andrews Church Road

The County proposed improvements would:

- Convert the northern leg of the Old St. Andrews Church Road intersection to a roundabout in order to reduce speeds entering the more residential portions of MD 4.
- Convert the southern leg of the Old St. Andrews Church Road intersection to right out only onto MD 4, eliminating a blind curve left turn.

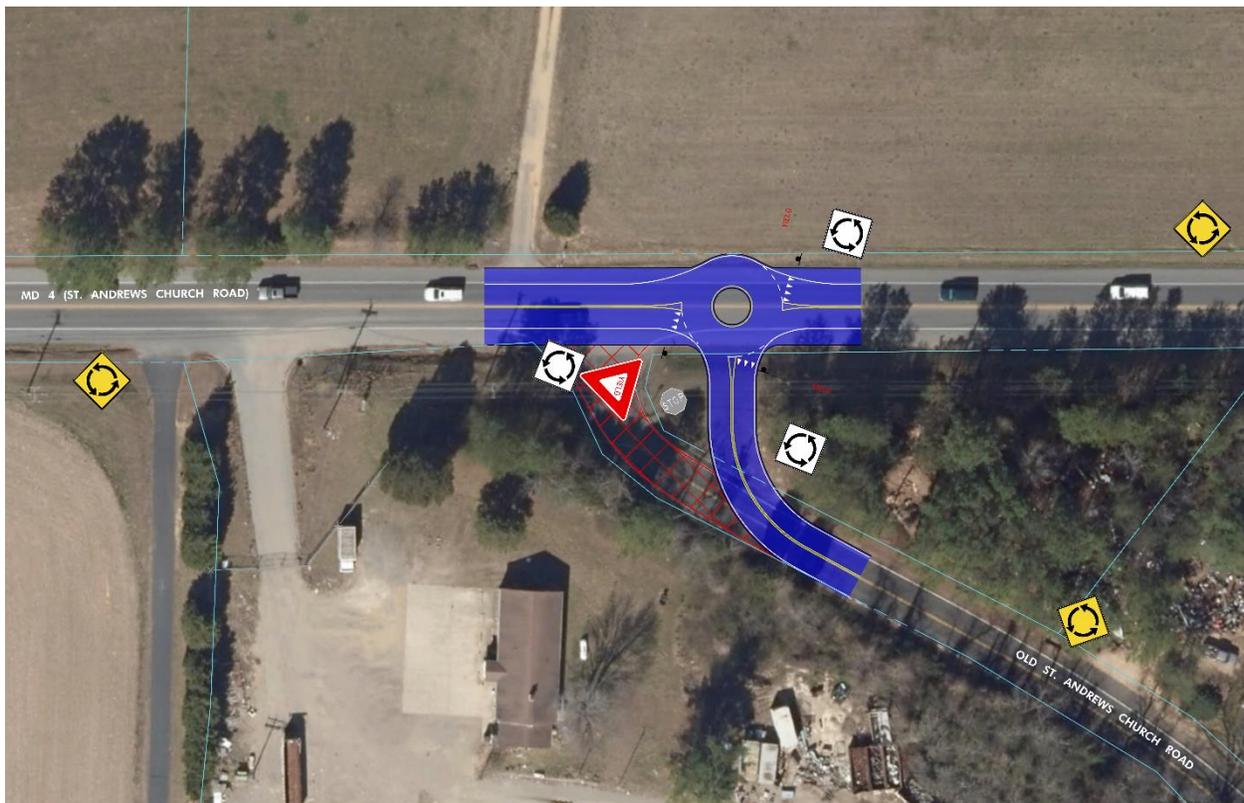


Figure 17. Proposed Improvements at West Leg of Old St. Andrews Church Road

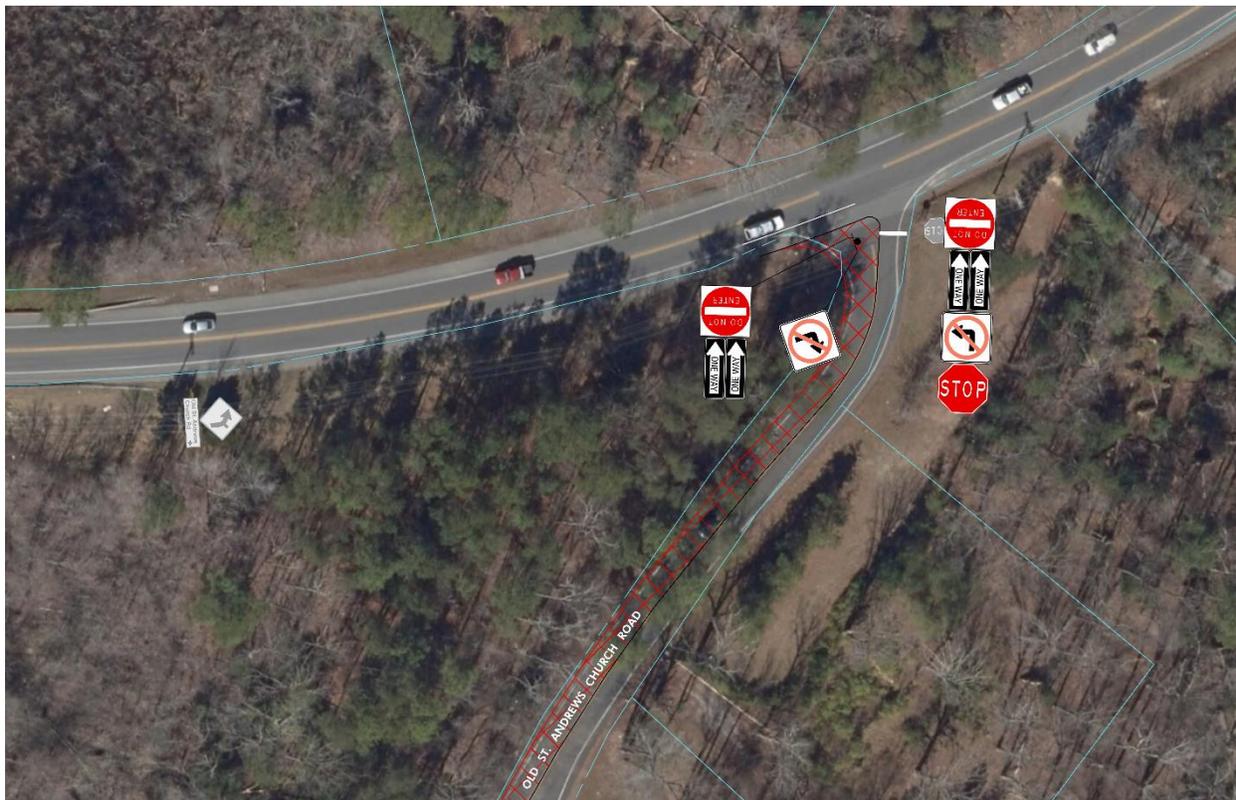


Figure 18. Proposed Improvements at Old St. Andrews Church Road (east leg)

Recommended Improvements Near Wildewood Parkway

The County-proposed improvements would manage access to MD 4, consistent with the St. Mary's County Comprehensive Plan, by:

- Creating a fully signalized intersection at Wildewood Parkway and establishing an interior roadway connecting to the properties listed below
- Eliminating left turns into
 - 44825 St Andrews Church Road (St. Mary's County DPW&T)
 - 44769 St. Andrews Church Road (Body by Design Collision Center)
 - 44727 St. Andrews Church Road (Ballet Caliente Classical School of Dance)

The FHWA CMF Clearinghouse indicates that in rural areas such as St. Mary's County driveway closures and similar strategies to achieve right-in, right-out can reduce crashes by 45%.

The County proposal could reduce the need for right-of-way acquisition, stormwater management facilities and utility relocation relative to the proposed MDOT-SHA improvement. Broadly speaking, a cooperative agreement could advance this project whereby:

- MDOT-SHA would:
 - Construct mainline elements of MD 4, including roadway widening, signal upgrade at Wildewood Parkway and roundabout at Old St. Andrews Church Road (Figure 17)
 - Locate and construct any stormwater management facilities at a mutually agreeable location on County property

- Ensure that roadway improvements along St. Andrews Church Road do not conflict with proposed access management improvements (e.g. ensure that utilities are relocated such that they will not have to be relocated again when the County improvements are constructed)
- St. Mary’s County would construct the interior roadway (extension of Wildewood Parkway)
- The property owner(s) would dedicate the land necessary for the interior roadway as part of the entitlement process for an upcoming development project on the parcels adjacent to 44727 St. Andrews Church Road

Figure 19 shows one possible alignment of a consolidated access roadway; see Appendix F for an alternative proposed by the adjacent property owner.

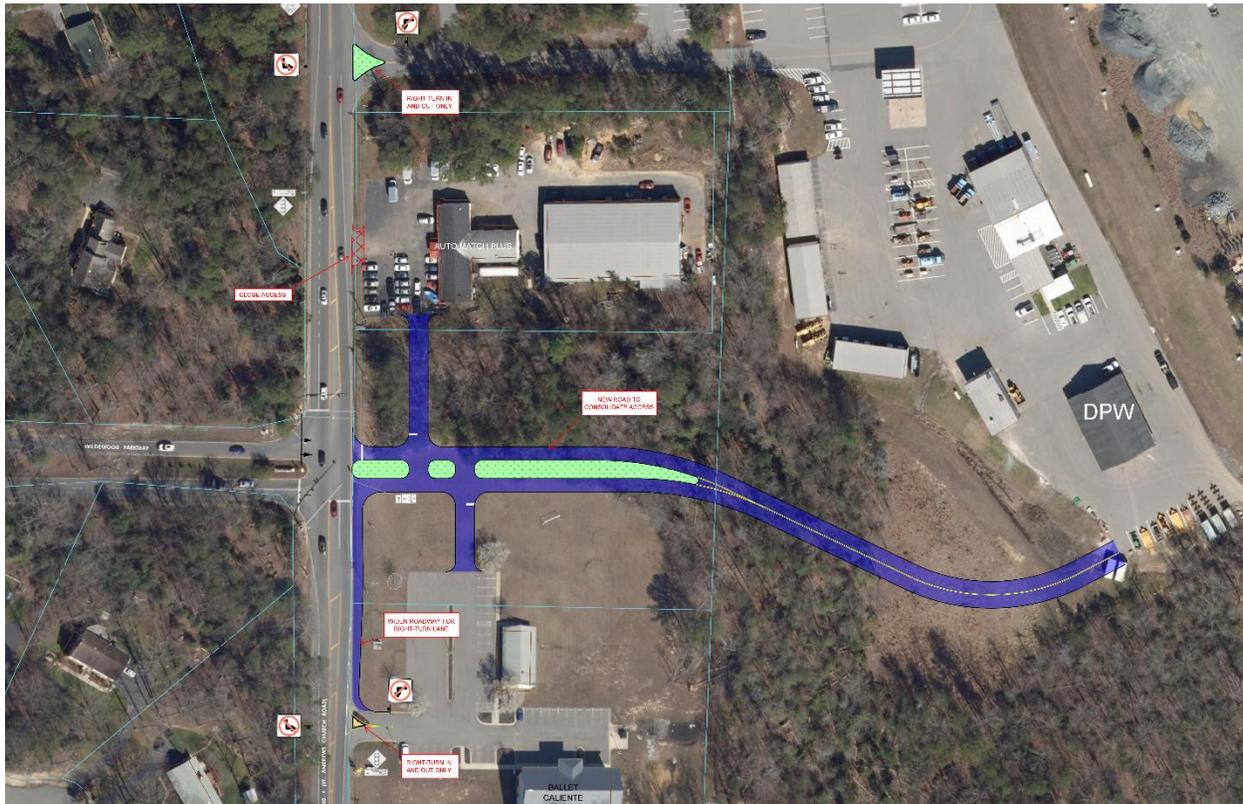


Figure 19. Proposed Improvements at Wildewood Parkway

Cost Estimate and Impact Evaluation

Estimated Cost	Utility Impacts	Environmental Impact	Private Property Impacts
\$500,000 – \$750,000 ¹⁰	Storm drainage, traffic signal modification, street lighting	0.61 acres of additional impervious surface. Reduction of 0.6 acres of wooded area.	3 private properties, 2 County-owned properties.

¹⁰ Assumes that right-of-way is dedicated to MDOT-SHA or to the County.

Area #6 – MD 4 at FDR Boulevard/MD 4 Sidepath

Challenges

With the construction of the new segment of FDR Blvd, the south approach of MD 4 was modified from a through lane and exclusive right lane to include an exclusive left turn lane, a through lane, and a shared through-right lane (see Figure 20). The intersection is signalized and operates as an actuated-uncoordinated (“free”) signal. Exclusive left-turn phasing is provided for left-turns from MD 4 (St. Andrews Church Road) and split phasing is provided for FDR Blvd. Currently, the overall intersection operates at Level of Service (LOS) C and D during the AM and PM peak, respectively, which meets MDOT-SHA guidelines (Overall LOS D or better). The eastbound MD 4 through-right lanes operate at LOS C and D as well, with 95th percentile queue lengths of 325 feet during both peak hours.¹¹ These eastbound queue lengths are contained within the 2-lane section of MD 4 (St. Andrews Church Road), which widens from one lane to two lanes approximately 700’ prior to the intersection with FDR Blvd.

There is public concern that these changes have affected operation of the eastbound right turns from St. Andrews Church Road to FDR Boulevard. Dimensions indicate that the lanes meet design standards; however, observations confirm that vehicles have difficulty making the right turn due to queuing. Residents have also expressed an interest in adding safe pedestrian facilities along St. Andrews Church Road between the residential and commercial areas east of Wildewood Parkway and FDR Blvd. Worn paths exist along the south side of MD 4 indicating that some pedestrian activity occurs in the area.

Stakeholders also reported that vehicles who have just exited the St. Mary’s Marketplace shopping center by turning right on southbound MD 4 often make U turns at FDR Blvd to access MD 235. This can lead to a conflict with vehicles turning right from FDR Blvd onto northbound MD 4, who have a green right arrow at the same time southbound vehicles have a green left arrow. Turning movement counts confirmed that this is the only movement with significant numbers of U turns; 17 U turns per hour from the north approach were observed during the PM peak hour.

Operations of the signalized intersection of MD 4 and FDR Blvd were modeled using traffic modeling and simulation software (Synchro & SimTraffic) and analyzed using Highway Capacity Manual (HCM) methodology for the AM and PM peak hour.

¹¹ Operations of the signalized intersection of MD 4 and FDR Blvd were modeled using traffic modeling and simulation software (Synchro & SimTraffic) and analyzed using Highway Capacity Manual (HCM) methodology for the AM and PM peak hour.

Recommended Improvements

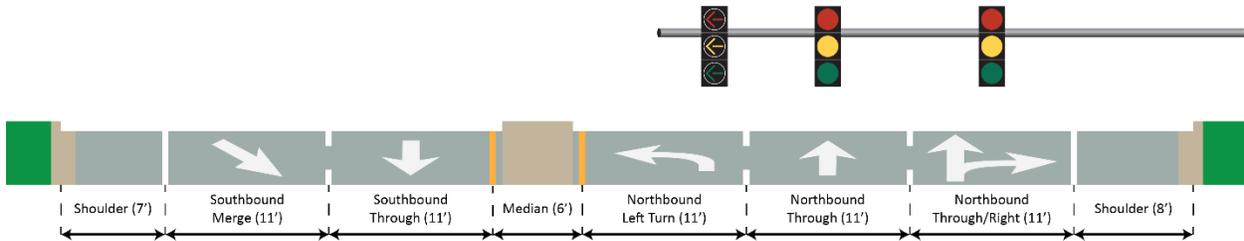


Figure 20. Existing Typical Section, St. Andrews Church Rd south of FDR Blvd

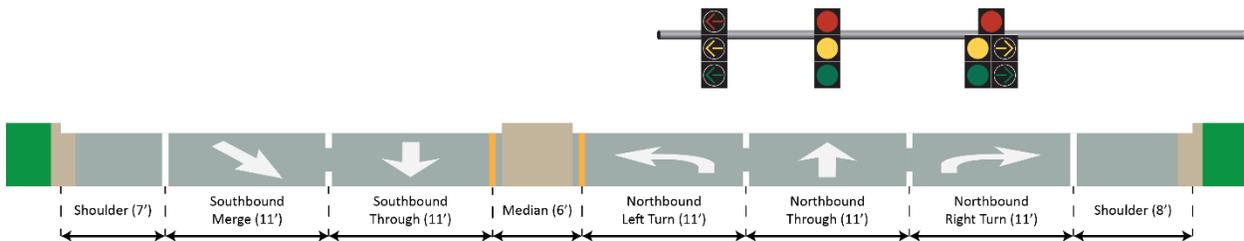


Figure 21. Proposed Typical Section, St. Andrews Church Rd south of FDR Blvd

Although operations fall within the MDOT-SHA traffic operations standards, the operation of the eastbound right turn movement was analyzed in more detail and alternatives were identified including lane configuration modifications, channelization, and widening. Of the three alternatives analyzed, restriping the eastbound approach as a dedicated through lane and exclusive right turn lane (see Figure 21) would be the most cost-effective alternative while minimizing eastbound right-turn delay. This reconfiguration would match the lane configuration for the south approach prior to construction of the 4th leg and should also be implemented with an overlap phase for optimal results. If this alternative were implemented, northbound through queues may increase by up to 100 feet (4 vehicles), and negligible changes would be expected for overall intersection operation.

The potential U turn/right turn conflict may be mitigated by installing an R10-16(1) “U-Turn Yield to Right Turn” sign near the southbound left-turn signal face.

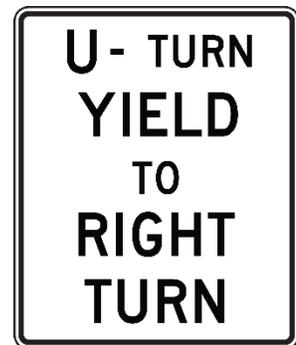


Figure 22. R10-16(1) sign

MD 4 Sidepath – Wildewood Parkway to FDR Boulevard

The second recommended improvement in this area would create a sidepath along the south side of MD 4 between FDR Boulevard and Wildewood Parkway. The 8 – 10’ sidepath would accommodate pedestrians and cyclists, connecting residents of the Wildewood community to the Three Notch Trail and shopping areas. Some grading and drainage improvements may be necessary to accommodate the sidepath but impacts to utilities can likely be avoided by weaving the sidepath through the wide right-of-way.

Cost Estimate and Impact Evaluation

Estimated Cost	Utility Impacts	Environmental Impact	Private Property Impacts
\$400,000 – \$600,000	None anticipated	0.61 acres of additional impervious surface. Reduction of 0.2 acres of wooded area.	Up to 5 private properties and 2 public properties.



Figure 23. Proposed Improvements at Wildewood Parkway and Proposed Pathway (west)



Figure 24. Proposed Pathway (east)

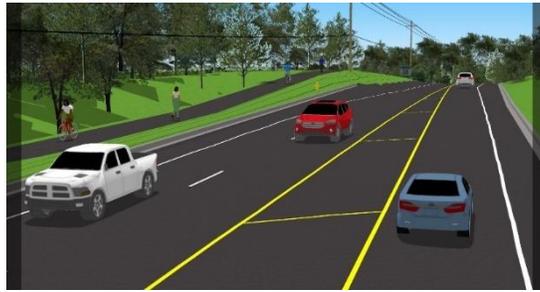


Figure 25. Concept Illustrations of Proposed Pathway

Mid-County Connector (Lawrence-Hayden Road)

The 2006 County Transportation Plan called for an extension of Saint John's Road/Lawrence-Hayden Road to MD 4 as a major collector road of approximately 1.25 miles, intersecting MD 4 at the Indian Bridge Road intersection. This roadway would provide additional access from MD 4 to MD 235, and serve residential development expected in the mid-County area. The project should proceed primarily as an Adequate Public Facilities (APF) project with the County taking the lead on project planning, design and right-of-way coordination now. When future development begins in the corridor, APF fees and/or developer responsibility agreements should be used as a primary funding source for the road.

Design Requirements and Potential Alignment

The road would be constructed in the area shown in Figure 27 and designated as a collector roadway with a design speed of 40 mph (posted speed would more likely be 35 mph). One 12' travel lane and an 8' shoulder in each direction are proposed. Turn lanes or roundabouts would be built at appropriate locations. A 4' roadside flat bottom ditch is proposed for drainage. Shoulders should be marked as buffered bike lanes to support a continuous loop through the Wildewood community and onto MD 4.

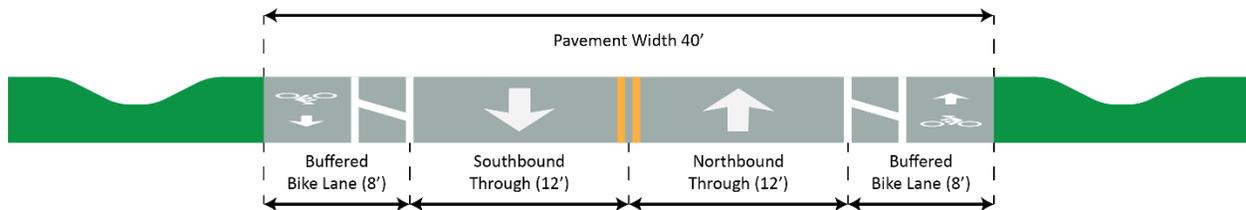


Figure 26. Mid-County Connector Proposed Typical Section

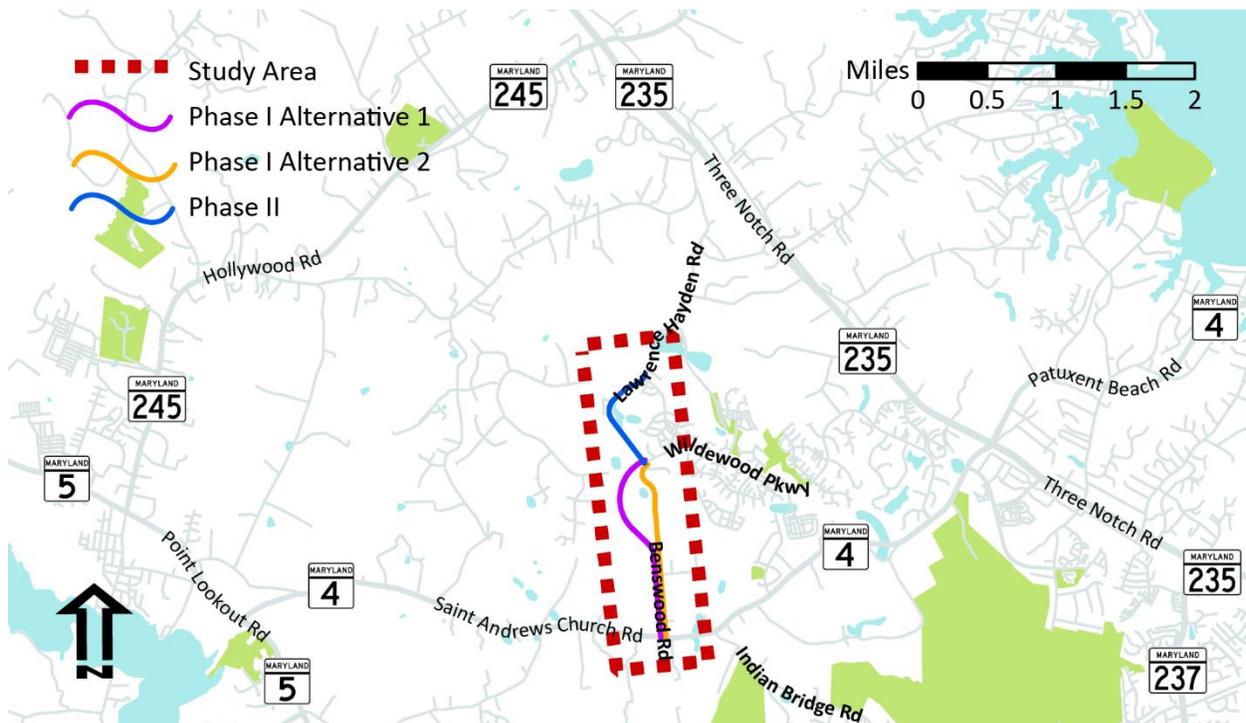


Figure 27. Mid-County Connector Location

Phase 1 North Alternatives

- **Alternative 1** runs directly north from the end of Benswood Road where 4/10ths of a mile or right-of-way has been dedicated to the County roughly to the Southern Maryland Electric Cooperative (SMECO) utility corridor. The northernmost portion of the dedicated right-of-way is within sensitive environmental areas.
- **Alternative 2** would also continue north from Benswood would but then swing west of a wetland area and cross the Western Branch of the St. Mary's River at a more direct angle as shown in Figure 29.

• **Phase 1 North, Alternative 1** **Phase 1 North, Alternative 2**



Figure 29. Phase 1 North Alternatives for the Mid-County Connector

Phase 2

North of Wildewood Parkway, no right of way has been dedicated or reserved for this roadway; however, prior subdivision plans assumed that a road would be extended north from Wildewood Parkway. With further study and development coordination, the County should note this reservation in the land records as shown in Figure 30.

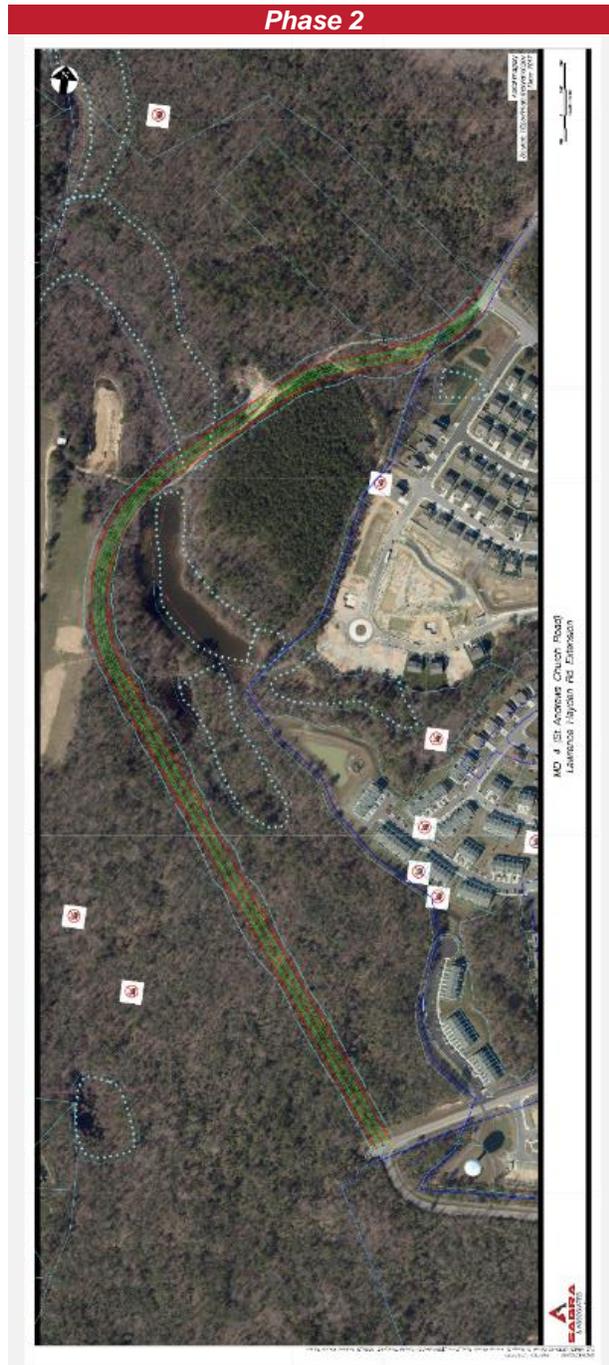


Figure 30. Phase 2 Concept Alignment

Additional study is warranted for this project, which is estimated to cost between \$11 – \$13 million (2020 dollars) over the two phases.

Cost Estimate and Impact Evaluation

<i>Alt</i>	<i>Estimated Cost</i>	<i>Forest Impacts</i>	<i>Stream/Wetland Impacts</i>	<i>Private Property Impacts</i>
Phase 1 South, Alternative 1 (Indian Bridge Road extension)	\$3.3 - \$4.1 million	7.4 acres	0 acres	8.1 acres across 5 parcels
Phase 1 South, Alternative 2 (Benswood Road)	\$1.1 - \$1.4 million	1.8	0 acres	1.8 across 1 parcel
Phase I North, Alt 1	\$6.9 – \$7.1 million	12.2 acres	0 acres	7.3 acres across 2 of parcels
Phase I North, Alt 2	\$6.5 – \$6.9 million	9.7 acres	2 acres	5.2 acres across 2 parcels
Phase II	\$3.7 – \$4.1 million	9.8 acres	.14 acres	5.64 acres across 1 parcel

Additional Issues for Consideration and Review

It is recommended that the following issues of concern raised by agencies and the public be referred to the appropriate public agency for review:

- **Intersection of MD 4 (St. Andrews Church Road) with MD 5 (Point Lookout Road).** Increased traffic in the area has led to degraded operations at the intersection. In addition, this location has been noted as in need of bicycle accommodations and wayfinding. Therefore, MDOT SHA should consider studying this intersection for improvement in the future.
- **Speed limit study, active warning and enforcement.** Speeding (or apparent speeding) of traffic is a significant concern for residents. While 50 mph may be appropriate for a rural roadway, there are sections of St. Andrews Church Road which change in character to be more residential. The St. Mary’s County Sheriff’s Office should consider these areas for speed enforcement. MDOT-SHA should consider lowering the speed limit in certain areas and adding appropriate traffic calming measures, especially near curves and crests.
- **Nuisance runoff.** As described above, residents indicate a drainage problem between Hood Lane and Brown Road and between St. Andrews Lane and Indian Bridge Road. A brief visual inspection does not indicate that the drainage concern is related to waterways crossing St. Andrews Church Road but may be related to the roadway crown or from nearby development. MDOT-SHA and the St. Mary’s County DPW&T should investigate these issues.

- **Roadway lighting.** Residents have expressed concern that roadway lighting is inadequate and may contribute to traffic crashes near curves and crests. A brief visual inspection identifies roadway lighting to be present at the intersections of MD 4 with Indian Bridge Road, Fairgrounds Road, and Wildewood Parkway within the study area. MDOT-SHA should conduct appropriate lighting studies and consider improvement if warranted.

Conclusion & Prioritization

Based on its review of roadway conditions, traffic and safety data, context, and stakeholder concerns, the project team recommends the following improvements for St. Andrews Church Road:

High Priority Improvements, Low/No Cost, Easy to Implement by MDOT-SHA

Relocate the stop bar and channelize right turns with an extended merge lane at the Indian Bridge Road intersection. This would address sight distance concerns at the intersection.

Adjust the pavement markings and signalization at the intersection of St. Andrews Church Road and FDR Boulevard. While the existing conditions comply with design and operational standards, providing an exclusive right turn with an overlapping right-turn arrow would restore the traffic pattern to which the public is accustomed while having minimal impact on other approaches to the intersection.

Eliminate the left-turn bay and close the eastbound edge line at St. Andrews Lane. This will reduce confusion for southbound motorists and thus reduce a potential safety hazard.

Convert the southern leg of the Old St. Andrews Church Road intersection to right out only onto MD 4. This would eliminate a blind curve left turn.

High Priority Improvements, Moderate Cost, State Coordination Required

Construct a new four-way intersection at MD 4 and Wildewood Parkway. This would allow for construction of an access road to St. Mary's County DPW&T, Ballet Caliente, and any other future development in this area, and thus better manage access to MD 4 in the area.

Construct an 8- to 10-foot wide shared-use pathway along the south side of St. Andrews Church Road from Wildewood Parkway to the existing pathway at FDR Boulevard. This would provide a pedestrian and bicycle connection from Wildewood Parkway to the commercial areas along FDR Blvd and Three Notch Road.

Secondary Improvements

Advance planning and right-of-way coordination for the mid-County Connector using the Benswood Road alignment and Alternative 2 central section alignment which will improve mobility with the least impact to existing properties and environmental features.

Improve the horizontal alignment at Blacksmith Shop Road. This would address both turning movement and sight distance concerns at the intersection.

Upgrade warning signage and provide landscaped medians at the AAA Materials entrance. This would provide more advance warning that slow-moving commercial vehicles may be entering the roadway and help to mitigate travel speeds on MD 4 to reduce the speed differential between travelling motorists and entering vehicles

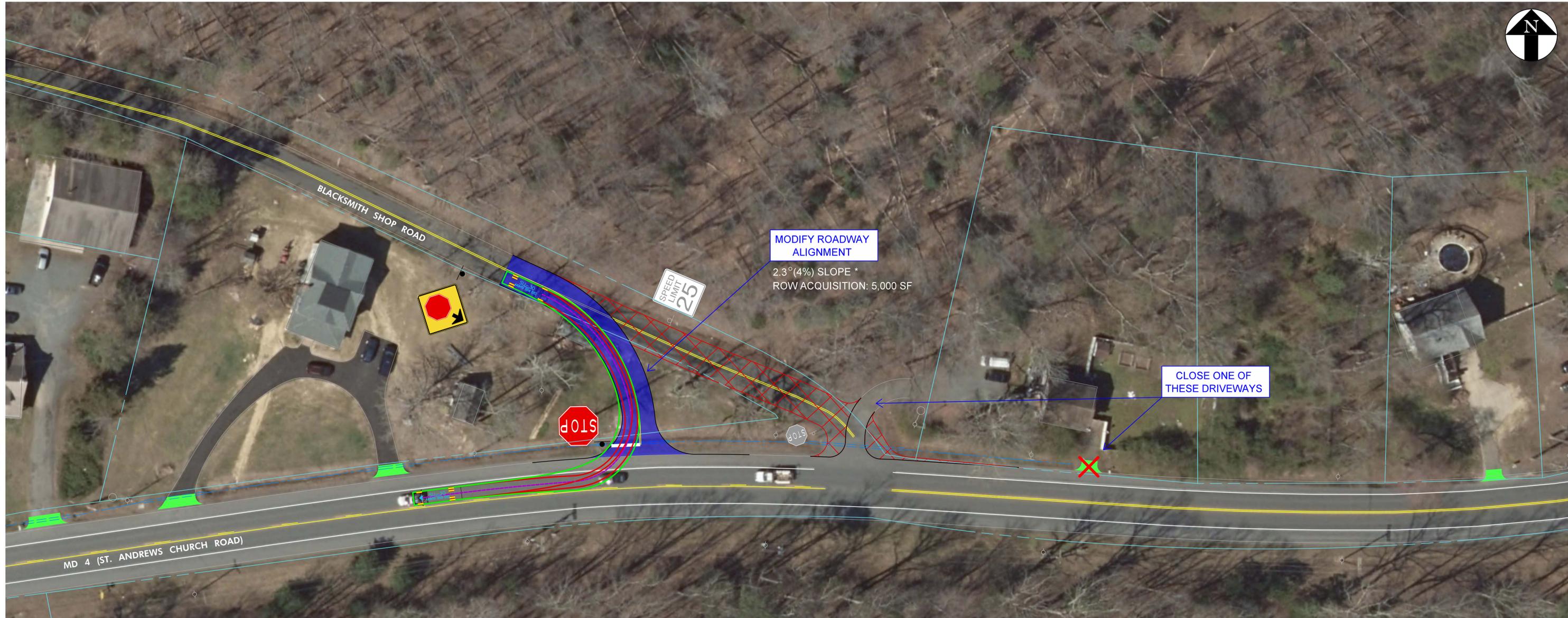
Convert the northern leg of the Old St. Andrews Church Road intersection to a roundabout. This would help to reduce speeds entering the more residential portions of MD 4.

Together, these improvements would improve traffic operations, safety, and multimodal transportation options along the St. Andrews Church Road Corridor.

Appendices

Appendix A: Detailed Concept Drawings for MD 4 Areas 1 – 6

Pages 32 - 40



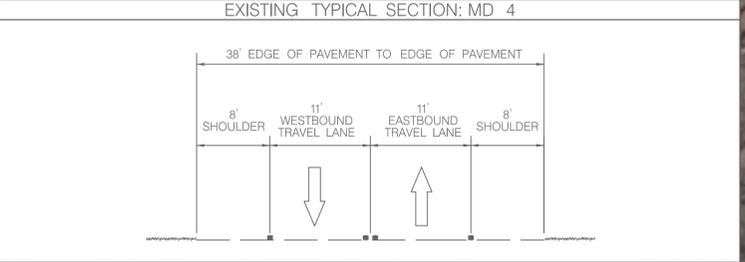
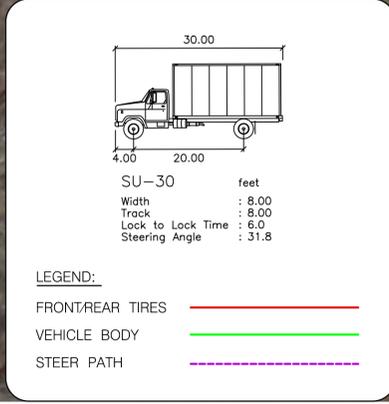
MODIFY ROADWAY ALIGNMENT

2.3° (4%) SLOPE *
ROW ACQUISITION: 5,000 SF

CLOSE ONE OF THESE DRIVEWAYS

LEGEND:

PROPERTY LINES	---
DRAINAGE DITCH	---
CULVERT	---
GUARDRAIL	---
DRIVEWAY	---
EXISTING TRAFFIC SIGNAL	○
INLET	□
EXISTING SIGN POST	○
UTILITY POLE	○
LUMINAIRE	○
LIGHT POLE	○
EXISTING SIGN	○
PROPOSED PAVEMENT	■
PAVEMENT TO BE REMOVED	■
PROPOSED GREEN SPACE	■
PROPOSED CONCRETE	■
PROPOSED SIGN POST	○
PROPOSED TRAFFIC SIGNAL	○
PROPOSED SIGN	○

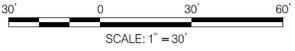


* MAX. GRADES OF 7-8% ARE REPRESENTATIVE OF CURRENT DESIGN PRACTISE FOR 30 MPH DESIGN SPEED (SOURCE: AASHTO GREEN BOOK 2011)

Aerial Imagery
Source: <https://map.maryland.gov>
Date: 2017



MD 4 (St. Andrews Church Road) at Blacksmith Shop Road Proposed Improvements



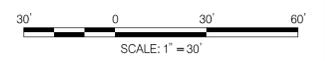
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CULVERT	--- (dashed blue)
GUARDRAIL	--- (dashed blue)
DRIVEWAY	--- (dashed blue)
EXISTING TRAFFIC SIGNAL	--- (dashed blue)
INLET	--- (dashed blue)
EXISTING SIGN POST	--- (dashed blue)
UTILITY POLE	--- (dashed blue)
LUMINAIRE	--- (dashed blue)
LIGHT POLE	--- (dashed blue)
EXISTING SIGN	--- (dashed blue)
PROPOSED PAVEMENT	--- (dashed blue)
PAVEMENT TO BE REMOVED	--- (dashed blue)
PROPOSED GREEN SPACE	--- (dashed blue)
PROPOSED CONCRETE	--- (dashed blue)
PROPOSED SIGN POST	--- (dashed blue)
PROPOSED TRAFFIC SIGNAL	--- (dashed blue)
PROPOSED SIGN	--- (dashed blue)

Aerial Imagery
 Source: <https://map.maryland.gov>
 Date: 2017



MD 4 (St. Andrews Church Road) at Indian Bridge Road
 Proposed Improvements



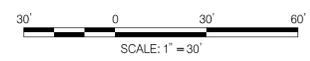
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INLET	
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LUMINAIRE	
LIGHT POLE	
EXISTING SIGN	
PROPOSED PAVEMENT	
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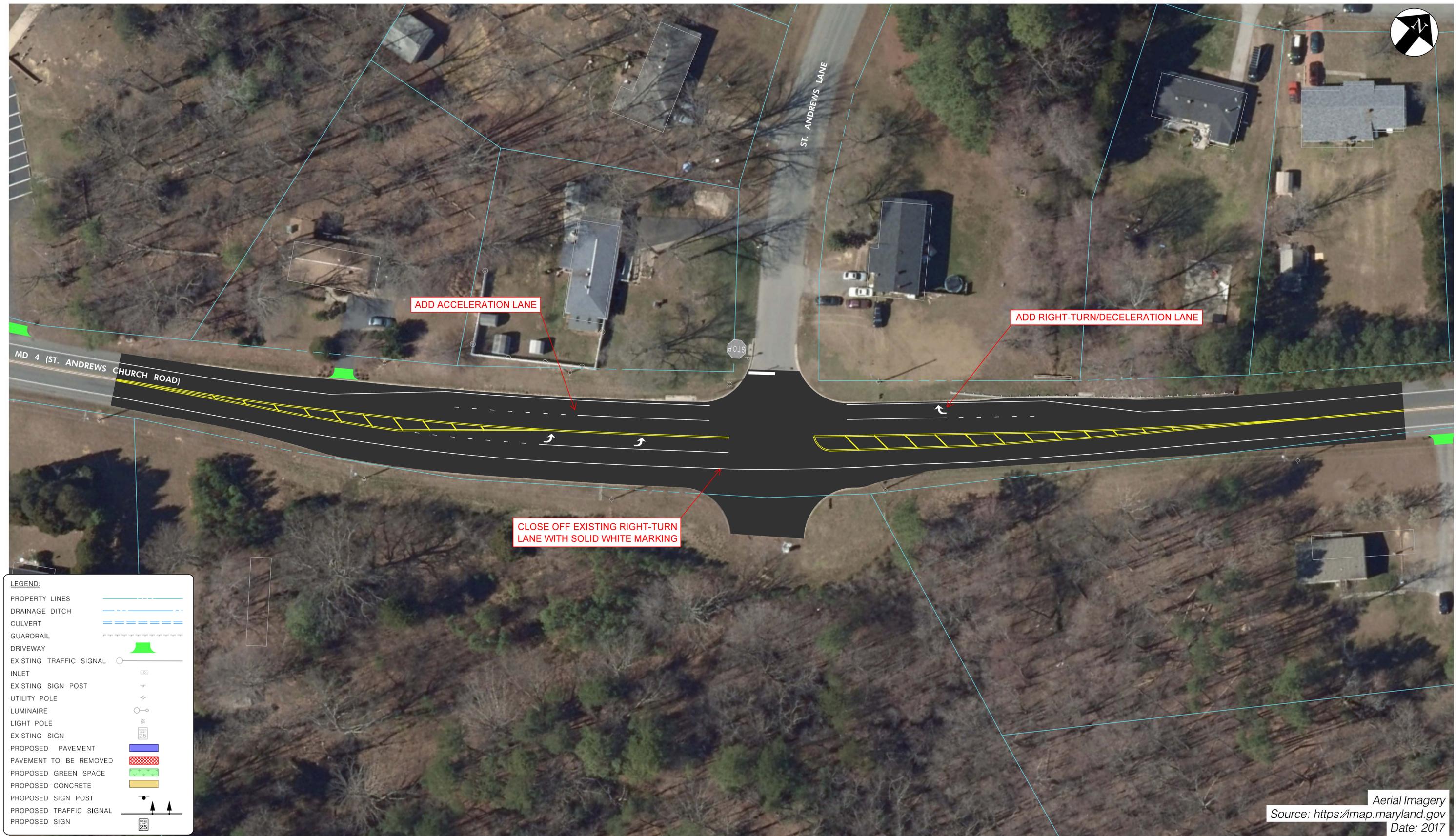
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MD 4 (St. Andrews Church Road) at Indian Bridge Road
 Proposed Improvements



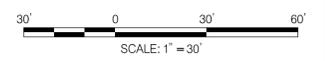
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INLET	
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LUMINAIRE	
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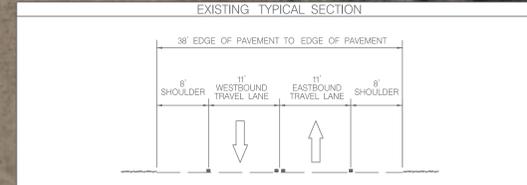


MD 4 (St. Andrews Church Road) at St. Andrews Lane
 Proposed Improvements



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 - LIGHT POLE
 - EXISTING SIGN
 - PROPOSED PAVEMENT
 - PAVEMENT TO BE REMOVED
 - PROPOSED GREEN SPACE
 - PROPOSED CONCRETE
 - PROPOSED SIGN POST
 - PROPOSED TRAFFIC SIGNAL
 - PROPOSED SIGN

MD 4 (St. Andrews Church Road) at Old St. Andrews Church Road
 Proposed Improvements

Aerial Imagery
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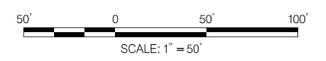




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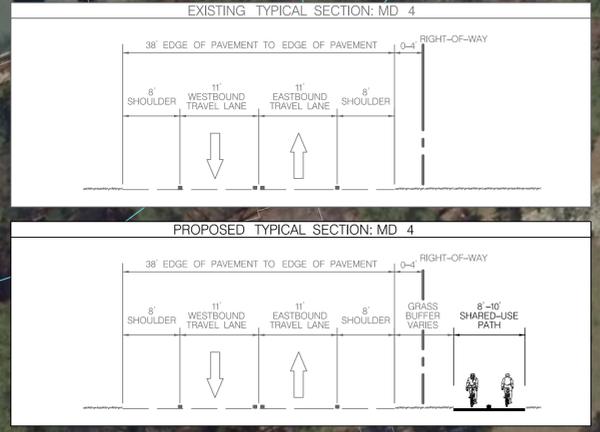
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MD 4 (St. Andrews Church Road) at Wildewood Parkway
 Proposed Improvements



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 - GUARDRAIL
 - DRIVEWAY
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 - INLET
 - EXISTING SIGN POST
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 - LUMINAIRE
 - LIGHT POLE
 - EXISTING SIGN
 - PROPOSED PAVEMENT
 - PAVEMENT TO BE REMOVED
 - PROPOSED GREEN SPACE
 - PROPOSED CONCRETE
 - PROPOSED SIGN POST
 - PROPOSED TRAFFIC SIGNAL
 - PROPOSED SIGN

TERMINATING PATH HERE PROVIDES ACCESS TO SHOULDER

CROSSWALK PROVIDES BIKE ACCESS FROM SHARED-USE PATH TO WB MD 4 SHOULDER AND THE WILDEWOOD PKWY BIKE PATH/LANE*

SHARED-USE PATH ALIGNMENT TBD

*5' BIKE LANE SB WILDEWOOD PKWY TERMINATES 500' NORTH OF MD 4 INTERSECTION (WILDEWOOD PKWY AT ROLLING OAK LN.)

8'-10' WIDE SHARED-USE PATH

8'-10' WIDE SHARED-USE PATH

3'-4' RETAINING WALL

MATCHLINE SEE SHEET 8B

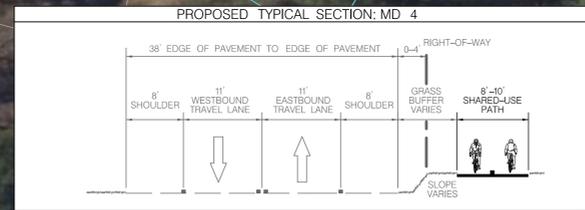
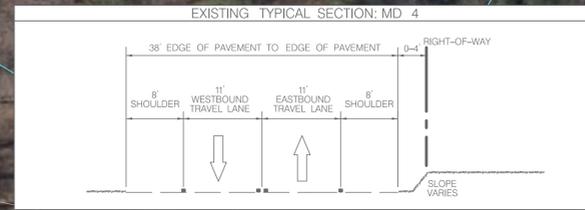
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MD 4 (St. Andrews Church Road) between Wildewood Parkway and FDR Boulevard
Shared-Use Path





MATCHLINE SEE SHEET 8A

ST. ANDREWS LANDFILL

3'-4' RETAINING WALL

8'-10' WIDE SHARED-USE PATH

PROPOSED SHARED-USE PATH TIES INTO EXISTING TRAIL

- LEGEND:**
- PROPERTY LINES
 - DRAINAGE DITCH
 - CULVERT
 - GUARDRAIL
 - DRIVEWAY
 - EXISTING TRAFFIC SIGNAL
 - INLET
 - EXISTING SIGN POST
 - UTILITY POLE
 - LUMINAIRE
 - LIGHT POLE
 - EXISTING SIGN
 - PROPOSED PAVEMENT
 - PAVEMENT TO BE REMOVED
 - PROPOSED GREEN SPACE
 - PROPOSED CONCRETE
 - PROPOSED SIGN POST
 - PROPOSED TRAFFIC SIGNAL
 - PROPOSED SIGN

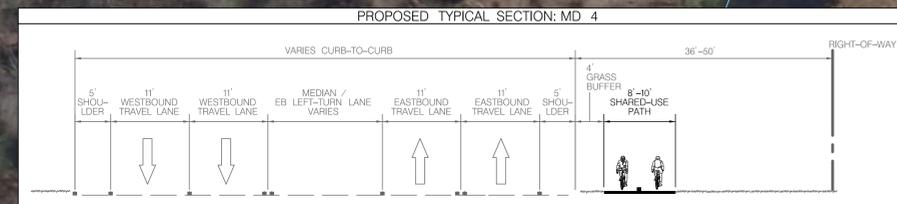
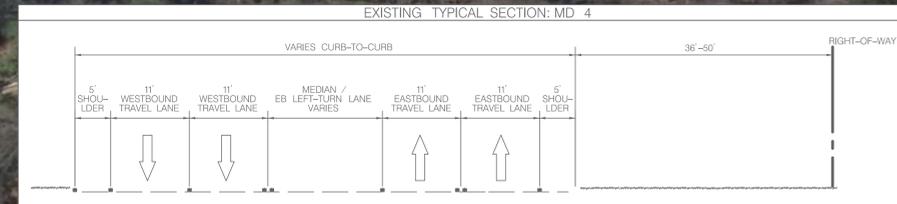
WALDEN BEHAVIORAL HEALTH SERVICES

ST. MARY'S COUNTY CHURCH OF CHRIST

MD 4 (ST. ANDREWS CHURCH ROAD)

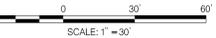
F.D.R. BOULEVARD

SHOPPING CENTER



Aerial Imagery
Source: <https://imap.maryland.gov>
Date: 2017

MD 4 (St. Andrews Church Road) between Wildewood Parkway and FDR Boulevard
Shared-Use Path



OPERATOR02430 - PLOTTED: Monday, January 27, 2020 AT 12:28 PM
FILE NAME: \\2019\43 Colvert, St. Marys St. Andrew Church Road_Prime_52K.dwg\MD4_FocusArea_Concepts.dgn



Appendix B: Traffic Counts at MD 4/FDR Boulevard

Sabra & Associates

7055 Samuel Morse Dr. Ste. 100

Columbia, Maryland 21045

443-741-3500

Weather:
Counted By:
Town:
Country

File Name : st andrew's church rd at fdr boulevard
Site Code : 00000000
Start Date : 1/29/2020
Page No : 1

Groups Printed- VEHS&PEDS

Start Time	MD 4 From North					FDR BLVD From East					MD 4 From South					FDR BLVD From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	22	70	1	0	93	48	3	14	0	65	4	136	81	0	221	6	21	11	0	38	417
07:15 AM	26	79	0	0	105	42	7	28	0	77	6	134	120	1	261	9	38	16	0	63	506
07:30 AM	27	108	1	0	136	42	6	22	0	70	17	151	107	0	275	2	33	18	0	53	534
07:45 AM	18	105	0	0	123	51	3	20	0	74	10	129	101	0	240	16	33	11	0	60	497
Total	93	362	2	0	457	183	19	84	0	286	37	550	409	1	997	33	125	56	0	214	1954
08:00 AM	16	89	1	0	106	47	5	27	0	79	13	144	79	0	236	7	7	6	0	20	441
08:15 AM	13	71	1	0	85	58	9	31	0	98	8	98	62	0	168	4	10	5	0	19	370
08:30 AM	12	69	1	0	82	38	5	24	0	67	12	106	58	0	176	3	9	9	0	21	346
08:45 AM	33	79	2	0	114	34	7	12	0	53	14	99	49	0	162	7	4	5	0	16	345
Total	74	308	5	0	387	177	26	94	0	297	47	447	248	0	742	21	30	25	0	76	1502
*** BREAK ***																					
04:00 PM	35	146	7	0	188	103	24	25	0	152	13	101	59	0	173	11	13	15	0	39	552
04:15 PM	20	139	7	0	166	105	33	49	0	187	19	109	73	0	201	17	10	35	0	62	616
04:30 PM	21	122	4	0	147	130	28	35	0	193	10	90	63	0	163	13	15	35	0	63	566
04:45 PM	26	131	11	0	168	128	28	34	0	190	13	98	77	0	188	9	15	36	0	60	606
Total	102	538	29	0	669	466	113	143	0	722	55	398	272	0	725	50	53	121	0	224	2340
05:00 PM	28	139	7	0	174	119	19	44	0	182	9	101	51	1	162	9	25	26	0	60	578
05:15 PM	36	134	6	0	176	110	35	35	0	180	16	96	86	0	198	11	22	34	0	67	621
05:30 PM	29	138	7	0	174	115	22	38	0	175	8	101	50	0	159	14	10	21	0	45	553
05:45 PM	28	128	4	0	160	99	22	35	0	156	15	75	58	0	148	9	19	27	0	55	519
Total	121	539	24	0	684	443	98	152	0	693	48	373	245	1	667	43	76	108	0	227	2271
Grand Total	390	1747	60	0	2197	1269	256	473	0	1998	187	1768	1174	2	3131	147	284	310	0	741	8067
Apprch %	17.8	79.5	2.7	0		63.5	12.8	23.7	0		6	56.5	37.5	0.1		19.8	38.3	41.8	0		
Total %	4.8	21.7	0.7	0	27.2	15.7	3.2	5.9	0	24.8	2.3	21.9	14.6	0	38.8	1.8	3.5	3.8	0	9.2	

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7055 Samuel Morse Dr. Ste. 100

Columbia, Maryland 21045

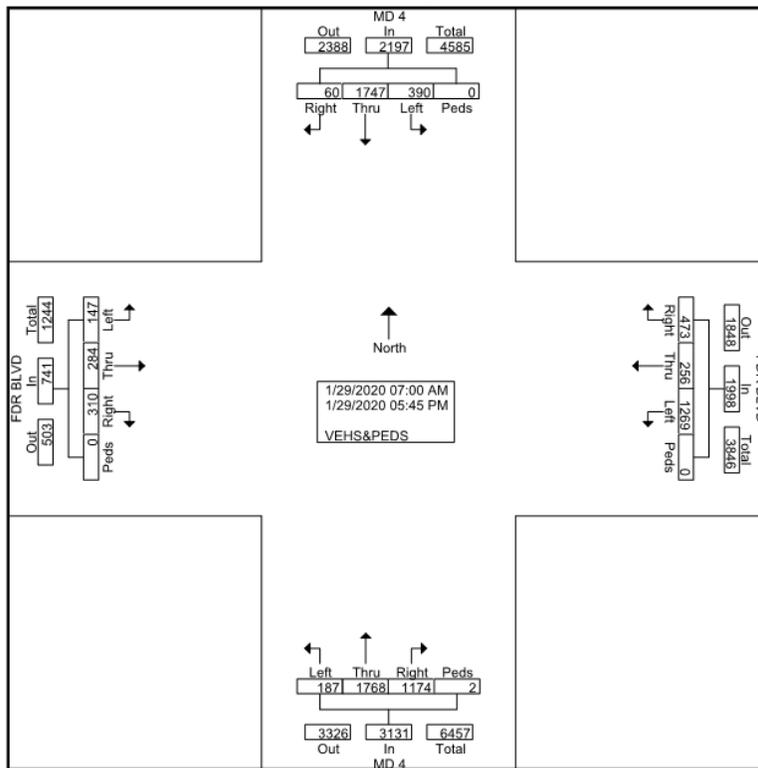
443-741-3500

File Name : st andrew's church rd at fdr boulevard

Site Code : 00000000

Start Date : 1/29/2020

Page No : 2



Sabra & Associates

7055 Samuel Morse Dr. Ste. 100

Columbia, Maryland 21045

443-741-3500

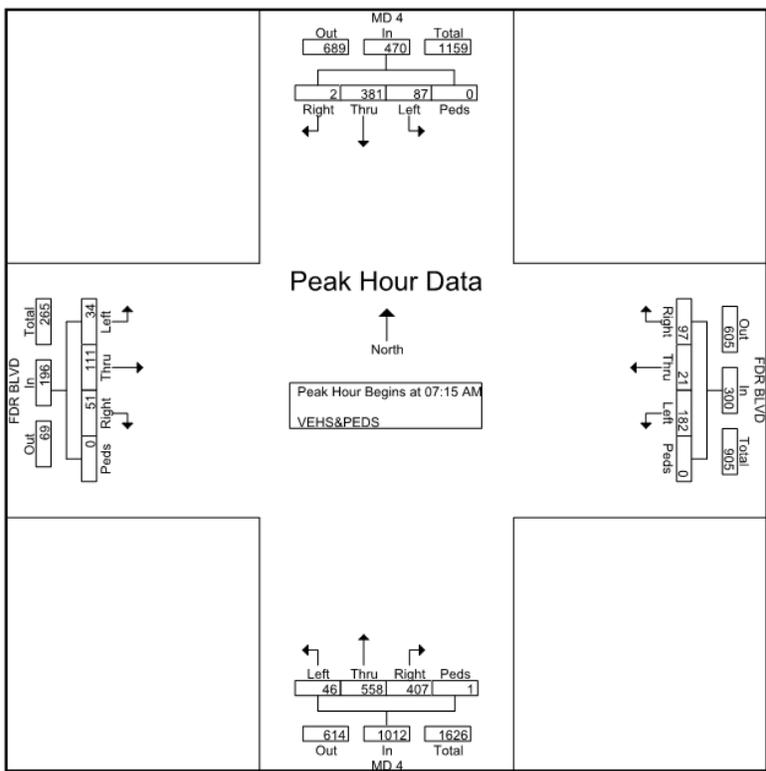
File Name : st andrew's church rd at fdr boulevard

Site Code : 00000000

Start Date : 1/29/2020

Page No : 3

Start Time	MD 4 From North					FDR BLVD From East					MD 4 From South					FDR BLVD From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	26	79	0	0	105	42	7	28	0	77	6	134	120	1	261	9	38	16	0	63	506
07:30 AM	27	108	1	0	136	42	6	22	0	70	17	151	107	0	275	2	33	18	0	53	534
07:45 AM	18	105	0	0	123	51	3	20	0	74	10	129	101	0	240	16	33	11	0	60	497
08:00 AM	16	89	1	0	106	47	5	27	0	79	13	144	79	0	236	7	7	6	0	20	441
Total Volume	87	381	2	0	470	182	21	97	0	300	46	558	407	1	1012	34	111	51	0	196	1978
% App. Total	18.5	81.1	0.4	0		60.7	7	32.3	0		4.5	55.1	40.2	0.1		17.3	56.6	26	0		
PHF	.806	.882	.500	.000	.864	.892	.750	.866	.000	.949	.676	.924	.848	.250	.920	.531	.730	.708	.000	.778	.926



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Columbia, Maryland 21045

443-741-3500

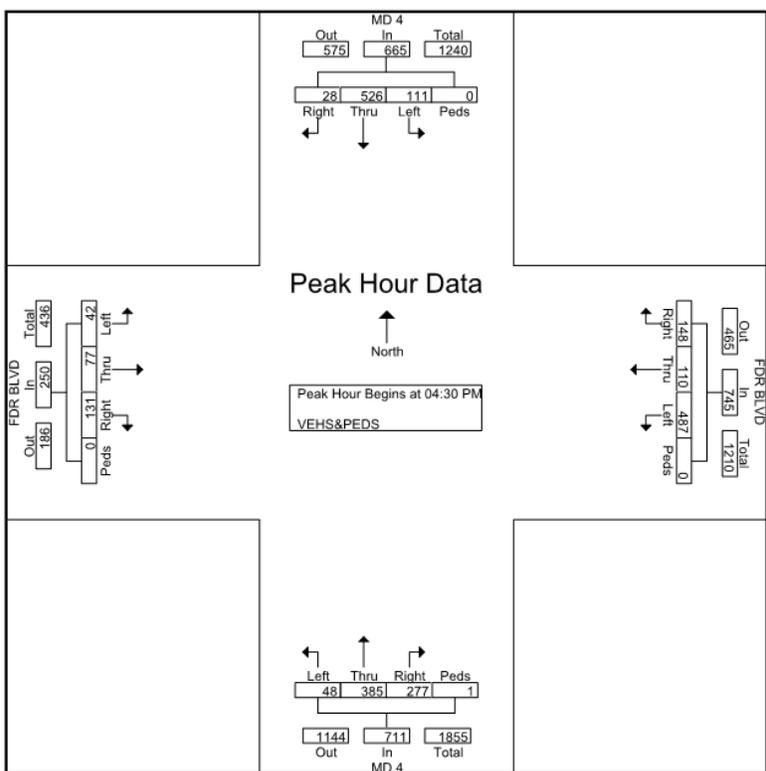
File Name : st andrew's church rd at fdr boulevard

Site Code : 00000000

Start Date : 1/29/2020

Page No : 4

Start Time	MD 4 From North					FDR BLVD From East					MD 4 From South					FDR BLVD From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	21	122	4	0	147	130	28	35	0	193	10	90	63	0	163	13	15	35	0	63	566
04:45 PM	26	131	11	0	168	128	28	34	0	190	13	98	77	0	188	9	15	36	0	60	606
05:00 PM	28	139	7	0	174	119	19	44	0	182	9	101	51	1	162	9	25	26	0	60	578
05:15 PM	36	134	6	0	176	110	35	35	0	180	16	96	86	0	198	11	22	34	0	67	621
Total Volume	111	526	28	0	665	487	110	148	0	745	48	385	277	1	711	42	77	131	0	250	2371
% App. Total	16.7	79.1	4.2	0		65.4	14.8	19.9	0		6.8	54.1	39	0.1		16.8	30.8	52.4	0		
PHF	.771	.946	.636	.000	.945	.937	.786	.841	.000	.965	.750	.953	.805	.250	.898	.808	.770	.910	.000	.933	.955



Sabra & Associates

7055 Samuel Morse Dr. Ste. 100

Columbia, Maryland 21045

443-741-3500

Weather:
Counted By:
Town:
Country

File Name : st andrew's church rd at fdr boulevard
Site Code : 00000000
Start Date : 1/29/2020
Page No : 1

Groups Printed- U TURNS

Start Time	MD 4 From North					FDR BLVD From East					MD 4 From South					FDR BLVD From West					Int. Total
	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	Left	Thru	Right	Peds	App. Total	
07:00 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4
07:15 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:30 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
07:45 AM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Total	16	0	0	0	16	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	17
08:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:30 AM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
*** BREAK ***																					
Total	4	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
*** BREAK ***																					
04:00 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
04:15 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
04:30 PM	7	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
04:45 PM	5	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	17	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
05:00 PM	6	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
05:15 PM	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Total	12	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Grand Total	49	0	0	0	49	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	50
Apprch %	100	0	0	0		0	0	0	0		0	0	0	0		100	0	0	0		
Total %	98	0	0	0	98	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	

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7055 Samuel Morse Dr. Ste. 100

Columbia, Maryland 21045

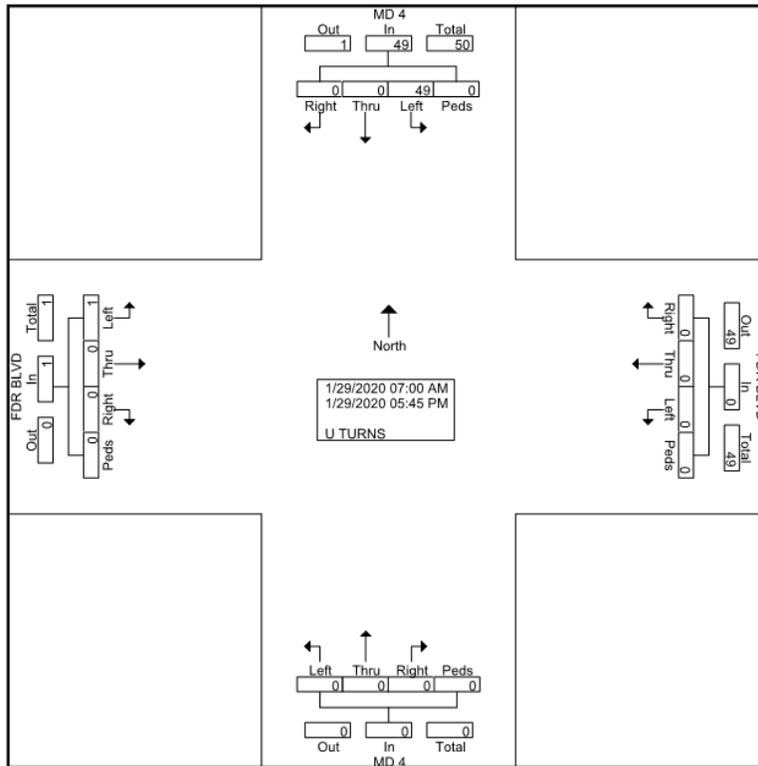
443-741-3500

File Name : st andrew's church rd at fdr boulevard

Site Code : 00000000

Start Date : 1/29/2020

Page No : 2



Appendix C: Traffic Analysis Outputs

Synchro Results Summary Table

Node	Intersection	Approach	Movement	Existing NBR			Exclusive EBR			Channelized EBR			Exclusive EBR 2 Thru Lanes		
				Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C	Delay	LOS	V/C
1	FDR Blvd & St Andrews Church Rd	Eastbound	Overall	Signal											
				35.6 (44.3)	D (D)	0.64 (0.73)	34.0 (41.4)	C (D)	0.66 (0.73)	31.8 (45.8)	C (D)	0.69 (0.75)	28.9 (39.9)	C (D)	0.57 (0.73)
				30.2 (40.9)	C (D)	0.68 (0.62)	27.0 (32.0)	C (C)	0.73 (0.68)	21.8 (41.1)	C (D)	0.75 (0.76)	24.2 (27.7)	C (C)	0.53 (0.54)
			60.3 (63.7)	E (E)	0.55 (0.54)	61.5 (63.5)	E (E)	0.55 (0.54)	56.6 (60.5)	E (E)	0.45 (0.46)	44.5 (63.0)	D (E)	0.46 (0.54)	
			28.3 (39.0)	C (D)	0.68 (0.62)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	
			through-right	- (-)	- (-)	33.1 (43.4)	C (D)	0.73 (0.68)	34.8 (44.1)	C (D)	0.75 (0.68)	27.9 (34.8)	C (C)	0.53 (0.37)	
			through	- (-)	- (-)	14.4 (12.6)	B (B)	0.35 (0.22)	0.5 (0.3)	A (A)	0.30 (0.22)	16.8 (12.7)	B (B)	0.41 (0.22)	
			right	- (-)	- (-)	29.8 (43.9)	C (D)	0.62 (0.76)	31.4 (46.5)	C (D)	0.61 (0.77)	29.8 (44.0)	C (D)	0.61 (0.77)	
			Overall	28.9 (43.1)	C (D)	0.62 (0.75)	29.8 (43.9)	C (D)	0.62 (0.76)	31.4 (46.5)	C (D)	0.61 (0.77)	29.8 (44.0)	C (D)	0.61 (0.77)
			left	56.5 (61.2)	E (E)	0.62 (0.69)	57.1 (61.2)	E (E)	0.62 (0.69)	56.7 (63.8)	E (E)	0.61 (0.70)	40.5 (59.9)	D (E)	0.53 (0.69)
			through	20.4 (39.0)	C (D)	0.46 (0.75)	21.4 (40.1)	C (D)	0.47 (0.76)	23.7 (42.8)	C (D)	0.49 (0.77)	26.6 (40.6)	C (D)	0.61 (0.77)
			right	14.9 (23.8)	B (C)	0.00 (0.03)	15.7 (24.3)	B (C)	0.00 (0.03)	17.3 (25.7)	B (C)	0.00 (0.03)	18.4 (24.4)	B (C)	0.00 (0.03)
		Overall	49.7 (43.9)	D (D)	0.59 (0.73)	47.4 (42.6)	D (D)	0.53 (0.71)	50.0 (46.5)	D (D)	0.59 (0.75)	33.9 (41.7)	C (D)	0.45 (0.71)	
		Westbound	Overall	56.4 (49.3)	E (D)	0.59 (0.73)	53.2 (47.9)	D (D)	0.53 (0.71)	56.7 (52.4)	E (D)	0.59 (0.75)	38.5 (46.8)	D (D)	0.45 (0.71)
				55.9 (49.0)	E (D)	0.58 (0.72)	53.0 (47.5)	D (D)	0.52 (0.71)	56.2 (51.9)	E (D)	0.58 (0.74)	38.4 (46.6)	D (D)	0.44 (0.70)
				36.2 (24.3)	D (C)	0.06 (0.13)	35.4 (23.8)	D (C)	0.06 (0.13)	36.4 (25.7)	D (C)	0.06 (0.13)	24.3 (23.2)	C (C)	0.06 (0.13)
			Overall	53.7 (57.9)	D (E)	0.57 (0.45)	54.6 (57.7)	D (E)	0.57 (0.45)	50.5 (54.0)	D (D)	0.63 (0.55)	39.9 (57.1)	D (E)	0.48 (0.45)
			left	51.8 (57.8)	D (E)	0.33 (0.35)	52.5 (57.6)	D (E)	0.33 (0.35)	49.7 (57.1)	D (E)	0.28 (0.30)	38.9 (57.0)	D (E)	0.28 (0.35)
			left-through-right	54.2 (58.0)	D (E)	0.57 (0.45)	55.1 (57.7)	E (E)	0.57 (0.45)	- (-)	- (-)	40.1 (57.2)	D (E)	0.48 (0.45)	
		Northbound	Overall	56.4 (61.0)	E (E)	0.63 (0.55)	56.4 (61.0)	E (E)	0.63 (0.55)	56.4 (61.0)	E (E)	0.63 (0.55)	56.4 (61.0)	E (E)	0.63 (0.55)
				38.9 (47.9)	D (D)	0.05 (0.25)	38.9 (47.9)	D (D)	0.05 (0.25)	38.9 (47.9)	D (D)	0.05 (0.25)	38.9 (47.9)	D (D)	0.05 (0.25)
				left	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	
			Overall	51.8 (57.8)	D (E)	0.33 (0.35)	52.5 (57.6)	D (E)	0.33 (0.35)	49.7 (57.1)	D (E)	0.28 (0.30)	38.9 (57.0)	D (E)	0.28 (0.35)
			left-through-right	54.2 (58.0)	D (E)	0.57 (0.45)	55.1 (57.7)	E (E)	0.57 (0.45)	- (-)	- (-)	40.1 (57.2)	D (E)	0.48 (0.45)	
right	- (-)		- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)			
Southbound	Overall	56.4 (61.0)	E (E)	0.63 (0.55)	56.4 (61.0)	E (E)	0.63 (0.55)	56.4 (61.0)	E (E)	0.63 (0.55)	56.4 (61.0)	E (E)	0.63 (0.55)		
		38.9 (47.9)	D (D)	0.05 (0.25)	38.9 (47.9)	D (D)	0.05 (0.25)	38.9 (47.9)	D (D)	0.05 (0.25)	38.9 (47.9)	D (D)	0.05 (0.25)		
		left	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)			
	Overall	51.8 (57.8)	D (E)	0.33 (0.35)	52.5 (57.6)	D (E)	0.33 (0.35)	49.7 (57.1)	D (E)	0.28 (0.30)	38.9 (57.0)	D (E)	0.28 (0.35)		
	left-through-right	54.2 (58.0)	D (E)	0.57 (0.45)	55.1 (57.7)	E (E)	0.57 (0.45)	- (-)	- (-)	40.1 (57.2)	D (E)	0.48 (0.45)			
	right	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)			

SimTraffic Queues Summary Table

		Existing		Exclusive EBR		Channelized EBR		Excl EBR 2 Thru Lanes	
		AM	PM	AM	PM	AM	PM	AM	PM
EB	Left	100	(100)	125	(100)	175	(125)	75	(75)
	Thru	250	(250)	425	(350)	425	(350)	250	(175)
	Thru-Right	325	(325)	-	(-)	-	(-)	-	(-)
	Right	-	(-)	100	(100)	0	(175)	150	(125)
WB	Left	125	(200)	150	(200)	125	(175)	125	(175)
	Thru	250	(450)	250	(425)	275	(450)	250	(475)
	Right	25	(50)	25	(50)	25	(50)	25	(75)
NB	Left	150	(525)	150	(400)	150	(375)	150	(325)
	Left-Thru	125	(525)	125	(400)	125	(350)	100	(325)
	Right	75	(375)	75	(225)	100	(200)	50	(75)
SB	Left	50	(50)	50	(50)	75	(75)	50	(25)
	Left-Thru	100	(125)	100	(100)	-	(-)	100	(75)
	Thru	-	(-)	-	(-)	125	(125)	-	(-)
	Thru-Right	125	(150)	100	(125)	-	(-)	100	(100)
	Right	-	(-)	-	(-)	50	(75)	-	(-)

Appendix D: Detailed Concept Drawings for the Mid-County Connector

Pages 49 – 57

PERATOR02421 - PLOTTED: 3/3/2020
FILE NAME: \\2019\43_Colvert, St. Marys St, Andrew Church Road_Prime_452K.dwg\Civil\Model Files\mhd-0000_Indian Bridge Road_Extension.dgn



LEGEND

PROPERTY LINE	—
LAND USE CODE	—
NO TRUCK SIGN	⊗

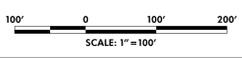
LAND USE CODE

C1	COMMUNITY COMMERCIAL DISTRICT
C2	COMMERCIAL MIDDLE USE DISTRICT
R1	RESIDENTIAL SINGLE-FAMILY DISTRICT
R2	RESIDENTIAL LOW-DENSITY TRANSITIONAL DISTRICT
R3	RESIDENTIAL MEDIUM-DENSITY DISTRICT
R4	RESIDENTIAL MEDIUM-DENSITY CONSERVATION DISTRICT
R5	RESIDENTIAL MEDIUM-DENSITY CONSERVATION DISTRICT
R6	RESIDENTIAL MEDIUM-DENSITY CONSERVATION DISTRICT



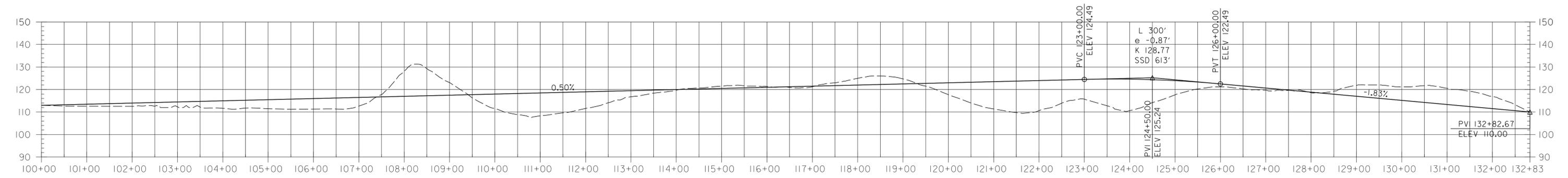
Indian Bridge Road Extension

Aerial Imagery
Source: <https://map.maryland.gov>



OPERATOR02421 - PLOTTED: 3/4/2020
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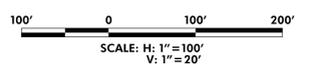
Indian Bridge Road Ext



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Scaled 5.0000 Times Ver.
 Scaled 1.0000 Times Hor.

Indian Bridge Road Extension
 Profile





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LEGEND:

- PROPERTY LINES
- LAND USE ZONE
- ST. MARY'S TRANSIT ROUTE
- ST. MARY'S TRANSIT STOP
- DRIVEWAY

LAND USE CODES:

- CC COMMUNITY COMMERCIAL DISTRICT
- CMX CORRIDOR MIXED USE DISTRICT
- RL RESIDENTIAL LOW-DENSITY DISTRICT
- RL-T RESIDENTIAL LOW-DENSITY TRANSITIONAL DISTRICT
- RMX RESIDENTIAL MIXED USE DISTRICT
- RNC RESIDENTIAL NEIGHBORHOOD CONSERVATION DISTRICT
- RPD RURAL PRESERVATION DISTRICT



MD 4 (St. Andrews Church Road)
Alternative 1



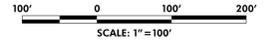
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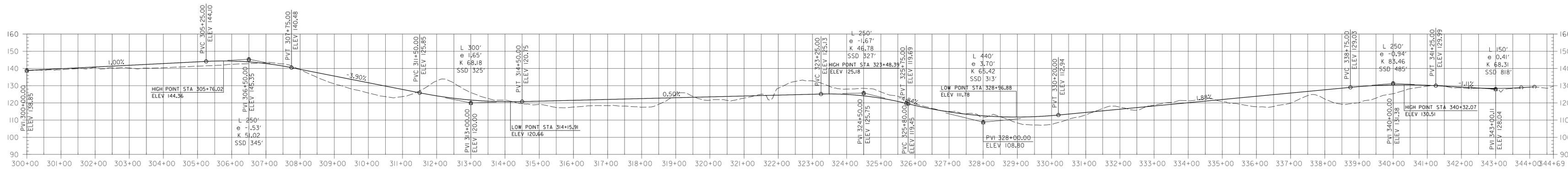
MD 4 (St. Andrews Church Road)
Lawrence Hayden Rd Extension

Aerial Imagery
Source: <https://map.maryland.gov>
Date: 2017



OPERATOR: 02/24/21 - PLOTTED: 1/28/2020
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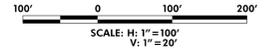
Lawrence Hayden Rd Ext



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Scaled 5.0000 Times Ver.		
Scaled 1.0000 Times Hor.		



Lawrence Hayden Rd Extension Profile



Appendix E: Meeting Summaries

Agency Stakeholders Kickoff Meeting: October 24, 2019

Attendees

See below.

Introduction

Kwasi Bosompem introduced the project and its relationship to the metropolitan planning organization, (C-SMMPO), and provided a brief overview of the scope of work. He indicated that this meeting provided an opportunity to focus the scope of work and adjust it to meet needs as identified by agency partners and the public.

John Deatrick provided an overview of issues giving rise to this study including traffic safety, speed, lack of pedestrian and bicycle facilities (where appropriate), traffic capacity, environmental improvement opportunities. He noted that the County Commissioner's policy approach in the area is to retain the rural character. He indicated that there are several pending development sites along MD 4 as well as the growth in Leonardtown which will impact traffic volume along MD 4. John also indicated that there is a planned improvement by SHA along MD 4 from Wildwoode Parkway to Old St. Andrews Church Road; however, **neither LUGM nor DPWT is aware of the improvement.**

MDOT SHA plans to widen MD 4 between Wildewood Parkway and Old St. Andrews Church Road. The project includes construction of a dedicated left-turn lane onto Old St. Andrews Church Road from southbound MD 4, and onto Wildewood Parkway from northbound MD 4. Design is underway and the project is scheduled to be advertised for construction in spring 2021.¹²

Discussion of Issues and Opportunities

A group discussion ensued, and the following issues were raised. This list is not exhaustive but captures the most significant concerns:

- No scheduled STS routes connecting Leonardtown w/ California/Lexington Park via MD 4
- Three Notch Trail may provide opportunities to improve bike/ped connections for MD 4
- There is a need for ped facilities between (approx.) Wildewood Pkwy and FDR.
- N/B right-turn lane needed for FDR Blvd
- Several major drainageways cross MD 4 particularly west of Indian Bridge Road; however, there is no significant drainage concern.
- Geometric improvements at Blackshop Smith Road should be considered – limited sight distance, no acceleration lane for right turns on to S/B MD 4.
- Opportunities for driveway consolidation/access management throughout the corridor. Greatest opportunity is near Wildewood Parkway (DPWT offices, Ballet Centre, etc.)

¹² MDOT Fall Tour Press Release, Oct 22, 2019

- Increasing freight traffic using MD 4 as a cut through from Virginia via Nice Bridge MD 301 to MD 235.

Follow-Up Items

Several additional studies, data points, etc. were identified during the meeting which will be instructive in this study:

- SHA improvement concept plan for MD 4 south of Wildwoode Parkway.
- Any access permits recently issued by SHA for MD 4 or pending approval
- Site plan for church, ballet center and any other active development project along MD 4; any approved, pending or defunct subdivision plans.
- Any traffic impact studies for projects above.
- Plans for Three Notch Trail
- Bus Stop Assessment
- Naval Air Station Mobility Plan
- Updated Transit Development Plan

Don Mills indicated that DPWT could assist with traffic counts from County roads to MD 4 as well as with spot studies. Jamie will follow-up.

Work Plan/Schedule

Jamie outlined that based on this discussion, he will prepare a revised scope of work and schedule. Broadly speaking, November and December will be used to document existing conditions, prioritize issues and opportunities and beginning to develop high-level concepts for improvements.

January and February will be used to review and further develop concepts, receive agency and public feedback, with a goal of completing the study by end of March 2020.

Stakeholder Meeting: February 18, 2020

The following are notes summarizing the St. Andrews Church Road Improvement Study stakeholder meeting held at St. Mary's County Department of Public Works and Transportation on February 18, 2020.

In Attendance

- › William Hunt, St. Mary's County Department of Land Use and Growth Management
- › Kwasi Bosompem, St. Mary's County Department of Land Use and Growth Management
- › Ben Cohen, St. Mary's County Department of Land Use and Growth Management
- › John Deatrick, St. Mary's County Department of Public Works and Transportation
- › Donald Mills, St. Mary's County Department of Public Works and Transportation
- › Jacque Fournier, St. Mary's County Department of Public Works and Transportation
- › Sabrina Hecht, Naval Air Station Patuxent River
- › Richard Tarr, St. Mary's County Department of Public Works and Transportation
- › Sean Varsalona, Regional Planner, MDOT SHA
- › David Schlie, Assistant Regional Planner, MDOT SHA
- › Jamie Kendrick, Sabra & Associates
- › Albert Guiney Engel, Sabra & Associates

Introduction

The purpose of the meeting was to review the draft Technical Memo #2 and MD 4/FDR Blvd sketch analysis provided by Sabra & Associates on February 14, 2020, as well as to prepare for the public meeting to be held that evening about the project.

Mr. Cohen began the meeting by thanking those in attendance and providing a brief history of the project, and then asked Mr. Kendrick to present the study findings. Mr. Kendrick began by acknowledging that he had only recently become aware that new traffic counts had been performed.

Areas of Discussion

St. Andrews Church Road/FDR Boulevard Intersection

Mr. Kendrick presented the findings of a sketch analysis of the intersection, specifically whether an exclusive right turn lane on the south approach was necessary and could be provided. The sketch analysis found that the intersection currently meets SHA level of service standards, but that an exclusive right turn lane could be restored with minimal impact on queueing or other approaches simply by remarking the current shared thru/right as an exclusive right.

Discussion then progressed to U turns at the intersection, especially on the north approach, where vehicles that had just exited the MarketPlace shopping center by turning right on southbound MD 4 often make U turns to return northbound. It was stated that this creates a conflict with vehicles turning right from FDR drive onto northbound MD 4, who have a green right arrow at the same time southbound vehicles have a green left arrow. (Following the meeting, SAI reviewed turning movement counts and confirmed an unusually large number of U turns at the intersection and will note mitigation strategies in the final report.)

Wildewood Parkway to FDR Drive

Mr. Kendrick reviewed the proposed access management plan for St. Andrews Church Rd. He noted that the St. Mary's County comprehensive plan did not support widening of St. Andrews Church Rd, and that it was his view that the access management improvements proposed by the study would address the issues without needing to widen the roadway.

DPW&T has requested MDOT SHA's review of the concept as an alternative to the current center left turn lane proposal being advanced by MDOT SHA; DPW&T has also offered that stormwater could be directed to one of several St. Mary's County properties along the roadway rather than providing a roadside bio retention basin in order to minimize impacts to adjacent landowners' properties. There has been no response from District 5.

Mr. Mills responded that he liked the access management proposal and had discussed it with the affected property owner—who has future development plans for the property—and the owner was supportive. He added that he was agnostic on the widening of MD 4, but that whatever was done should not conflict with the proposed shared access between DPW&T and adjacent properties.

MD 4 Sidepath

Mr. Kendrick reviewed the proposed MD 4 sidepath between Wildewood Parkway and FDR Blvd. This area is the only location of apparent need for pedestrian facilities in the corridor as there are no other significant trip generators along MD 4. Jacque Fournier indicated that there is a worn path in the grass along this part of MD 4; Sabrina Hecht indicated that there is demand for safe bicycle facilities by the workforce as NAS Patuxent River. Stakeholders agreed that this project was worthwhile and should be pursued for the MD Bikeways Program.

ACTION ITEM: SAI will develop a letter of intent for the bikeways program and share with John Deatrick by Wednesday, February 19.

Old St. Andrews Church Road

Mr. Mills stated that he had discussed a roundabout at the north intersection of Old St. Andrews Church Road and MD 4 with MDOT-SHA at the most recent quarterly meeting and MDOT-SHA was not interested in the idea. He then stated that traffic counts would show that a large majority of vehicles exiting Old St. Andrews Church Road used the east side and asked why the study proposed a roundabout on the west side. Mr. Kendrick responded that for a roundabout in this context, traffic counts are less important than sight distance, constructability, and how the roundabout will contribute to speed management. Moving the roundabout to the west side intersection has fewer constructability issues and would not interfere with the pending MDOT SHA project.

Mid-County Connector (Lawrence Hayden Road Extended)

This proposal, instead of tying into the intersection with Indian Bridge Road as proposed in the 2006 Transportation Plan, would tie into an existing right-of-way along Benswood Road, and Mr. Kendrick stated that while a four-way intersection at Indian Bridge Road would technically be better, it would not be worth the extra expense of acquiring multiple homes.

ACTION ITEM: It was agreed that the SAI would provide an alignment that would meet Indian Bridge Road at MD 4 to show the impacts, but not do much more work to develop this proposal.

AAA Materials Entrance/Brown Road

Mr. Kendrick presented the proposal to reduce speed differential by mitigating speeds with a median, was asked whether there was room to provide a left-turn lane so that trucks turning left into AAA Materials would be able to wait without creating a risk of a rear-end collision, and agreed to look into it. Nearby, Brown Road—with steep embankments and a lack of shoulders—was discussed, and it was reported that although nothing showed up in crash reports, crushed guardrail in the area was evidence of past crashes.

ACTION ITEM: SAI toured the Brown Road location and did not identify any deficiencies warranting inclusion in the study.

Blacksmith Shop Road

The proposed solution was to square off the intersection. Two concerns were expressed about the proposal: its constructability (there is an elevation change across where the proposed bend in the roadway would be) and sight distance at the new location (rather than meeting MD 4 about 2.5 feet below the top of a vertical curve, as it does now, Blacksmith Shop Road would be 6 feet below the top).

ACTION ITEM: Other proposals were floated, such as making Blacksmith Shop Road one-way in or right-in only, and Sabra agreed to look again at the constructability and sight distance issues at the intersection.

MD 4(St. Andrews Church Road)/MD 5 (Point Lookout Road) Intersection

The stakeholders were interested in discussing the MD 4/MD 5 intersection. Mr. Kendrick noted a prior decision to withhold this intersection from the study as it is a much larger challenge. Mr. Deatrick stated that the intersection is a major bottleneck for bicyclists, and it would be a major improvement for bicyclists to be able to traverse the intersection. Mr. Mills then stated that the County was in the midst of developing projects for the priority letter, trying to find segments of MD 5 that would reach the \$5M threshold for scoring under Chapter 30. At present, the proposal was to submit MD 5 from MD 245, past St. Mary's Ryken High School and MD 4, as far as Leonardtown High School, a segment that would include the MD 4/MD 5 intersection. North of that segment, MD 5 from MD 243 to MD 245 is already an on-the-books project within the MDOT-SHA CTP.

ACTION ITEM: In the final report, SAI will note the intersection as requiring more in-depth investigation.

Conclusion

Mr. Bosompem concluded the meeting with a discussion about remaining items to be added to the draft report. Specifically, he asked that the report match its challenge descriptions and proposed solutions with the categories of recommendations discussed within Sabra's response

to the original request for proposals, with notations if a certain category of recommendation was not applicable at a given location (e.g. pedestrian facilities were only applicable east of Wildewood Parkway, and stormwater concerns were only applicable between Hood Lane and Brown Road and between St. Andrews Lane and Indian Bridge Road), with the goal of developing an overall corridor development plan.

It is the County's goal to wrap up the project by mid-March with a presentation to the County Commissioners in April.

Appendix F: Patriot Pointe LLC Comments

Pages 64 – 67

March 18, 2020

Mr. Ben Cohen, Planner III
Department of Land Use and Growth Management
P.O. Box 653
23150 Leonard Hall Drive
Leonardtown, MD 20650

RE: St. Andrews Church Road Improvement Study

Dear Mr. Cohen,

This letter is in response to the public meeting held February 18, 2020 regarding the St. Andrews Church Road Improvement Study and the County's request for citizen review and comment.

Patriot Pointe LLC owns the St. Andrews Corporate Center located at 44727, 44731 and 44751 St. Andrews Church Road. Our properties are subject of the recommended improvements to the Wildewood Parkway intersection as shown in Figure 14 of the Study. Our properties are identified on Tax Map 34, Parcel 610, Lots 1 and 2 of the St. Andrews Corporate Center (SACC).

As affected landowners to the Study recommendations, Patriot Pointe LLC offers the following comments and alternative recommendations:

1. Patriot Pointe LLC agrees with the need for a fully signalized intersection at Wildewood Parkway and that MDOT-SHA should construct the proposed intersection improvements, including the mainline elements of MD Rt 4, travel lanes associated with the intersection upgrades, and entrance into our interior roadway.
2. Patriot Pointe LLC does not support the suggested extension of Wildewood Parkway through the middle of Lot 2. This proposal would be cost prohibitive to construct and diminish the property value and development potential of our center. However, we would support a 30' interior roadway if it were relocated to straddle the property lines of the Collision Ctr and Lot 2 of SACC, as shown on our enclosed Alternative Plan exhibit. Our proposal would include a cooperative agreement with affected landowners to share the cost of providing an interior roadway to serve St. Mary's County DPW&T, Body by Design Collision Center and Ballet Caliente Classical School of Dance. We believe our proposed shared 30' interior road design would maintain the cohesive development buildout we have planned for Lots 1 and 2 and is more proportionate and adequate to serve the three properties. As part of this cooperative agreement, we would also request the County provide all or part of SWM facilities and forest conservation easement areas necessary for the construction of the internal roadway and future development of Lot 2.

In summary, we believe our Wildewood Parkway Alternative Plan addresses safety and traffic management concerns for this intersection, dedicates the land needed to provide access to all three landowners, limits right-in only access to SACC and DPW&T, equitably shares costs and impacts for the internal road and reduces the impacts to build out of Lots 1 and 2 of SACC.

We thank you for your consideration and allowing us to be a part of this process. If you have any questions, you may contact our consultant, Laura Clarke of Clarke Consulting at Leclarke54@gmail.com or 301-997-6878.

Full disclosure: Given world events and the tight deadline of this project, this suggested alternative plan has not yet been discussed with any other property owners. However, we understand the benefits to Patriot Pointe LLC and are willing to negotiate who is ultimately responsible for the proposed improvements.

Sincerely,

Patriot Point LLC

A handwritten signature in black ink, appearing to read "David Dunaway", with a long, sweeping horizontal flourish extending to the right.

David Dunaway

Wildewood Parkway Alternative Plan



Provided By: Patriot Pointe LLC