

## ***Critical Area Commission***

### **STAFF REPORT**

July 6, 2022

<b>APPLICANT:</b>	Maryland Department of Transportation State Highway Administration
<b>JURISDICTION:</b>	Talbot County
<b>PROPOSAL:</b>	MD 322 at Glenwood Avenue Intersection Improvements
<b>COMMISSION ACTION:</b>	Vote
<b>STAFF RECOMMENDATION:</b>	Approval
<b>STAFF:</b>	Alex DeWeese
<b>APPLICABLE LAW/ REGULATIONS:</b>	COMAR 27.02.05 State Agency Actions Resulting in Development on State-Owned Lands

### **DISCUSSION**

The Maryland Department of Transportation (MDOT) State Highway Administration (SHA) is proposing traffic and safety improvements along Maryland 322 at Glenwood Avenue in Talbot County. The proposed work involves full depth outside widening to provide a dedicated right turn lane, through lane and left turn lane; as well as 10-foot-wide shoulders along MD 322 northbound and southbound at Glenwood Avenue. Additionally, the proposed work includes the installation of stormwater management facilities, drainage improvements, grinding and resurfacing of the existing roadway, and necessary signage and pavement marking upgrades and landscaping. The purpose of the project is to provide additional safety capacity at the intersection. The left turn lane will eliminate queuing of vehicles and buses turning onto Glenwood Avenue, while the wider shoulders are a needed safety feature for cars and bicycles.

Due to the nature of the project, which includes adding a turn lane, this project is not captured under the Memorandum of Understanding (MOU) Exhibit between MDOT SHA and the Critical Area Commission. Therefore, review and approval by the Critical Area Commission is required.

### **Project Impacts and Mitigation**

The project's proposed limit of disturbance (LOD) is 5.07 acres, of which 4.57 acres are within the Critical Area. As a linear highway row-of-way (ROW), the Critical Area portion of the site is designated as Intensely Developed Area (IDA). The site is developed with existing roadways and associated improvements, while the surrounding area is mapped as IDA with a mix of

institutional and residential uses. Impervious surfaces within the LOD will increase from 0.4 acres to 1.54 acres.

Approximately 18,750 square feet of developed woodland will be cleared to accommodate the proposed development, as well as the loss of six individual trees within the Critical Area. A portion of the project is located within the Critical Area Buffer and expanded Buffer for construction of the new turn lanes. Appropriate mitigation is provided as discussed below.

#### Tree Clearing and Buffer Impacts

Per COMAR 27.02.05.03.E(2), roads, bridges and utilities are allowed within the Critical Area Buffer if there is no practicable alternative; and the road, bridge or utility is designed to: provide maximum protection from erosion, avoid or minimize impacts to habitat, and maintain hydrologic processes and water quality. Per the Commission's MOU with SHA, permanent impacts to linear facilities within the right-of-way are mitigated at a ratio of 1:1, and any canopy area cleared is mitigated at an additional ratio of 1:1. There are 11,228 square feet of temporary disturbance in the Buffer; this area will be restored to its original conditions; therefore mitigation is not required. There are also 34,788 square feet of permanent disturbance in the ROW within the Buffer, to be mitigated at a 1:1 ratio. Finally, there will be 18,750 square feet of canopy cleared and six individual trees cleared, to be mitigated at a 1:1 ratio for a total mitigation requirement of 53,538 square feet.

Mitigation for impacts to the Buffer and clearing of developed woodlands and trees will occur within the Critical Area and Critical Area Buffer, within the project vicinity. Some of the plantings will be located outside of the LOD along MD 322 north and south of the intersection improvements. These plantings total 53,538 square feet (1.23 acres) of mitigation credit, as well as six additional trees. Mitigation plantings will consist of a mix of native overstory, understory and shrubs. The contractor will begin a one-year maintenance period upon planting completion, followed by MDOT SHA's monitoring program with regular inspections.

#### 10% Phosphorus Reduction/Stormwater Management

The proposed project is required to meet the Critical Area Commission's 10% phosphorus reduction requirements. The pollutant reduction requirement is 1.73 pounds of phosphorus per year (lbs P/yr). A total load reduction of 1.95 lbs of P/yr is achieved through the construction of two microbioretention ponds, five grass swales and one bioswale, resulting in an excess of 0.22 lbs P/yr provided.

#### Tidal and Nontidal Wetlands

The proposed project will have temporary and permanent impacts to both tidal and nontidal wetlands as well as tidal waters. The table below summarizes these impacts in square feet. Additional information regarding these impacts is addressed below under "Maryland Department of the Environment (MDE)."

Resource	Temporary Impacts	Permanent Impacts
Nontidal Wetlands	989	0
Nontidal Wetlands Buffer	9,049	131
Nontidal Waters	665	229
Tidal Wetlands	155	0
Tidal Waters	737	1,076

### Permits and Review by Other Agencies

#### Maryland Department of the Environment (MDE)

A Joint Federal/State Application for the Alteration of any Floodplain, Waterway, Tidal or Nontidal Wetland (JPA) was submitted to MDE on July 26, 2019 and amended on September 30. No comments were received during the public notice period. Temporary and permanent impacts to nontidal waters and wetlands, their buffer, and tidal wetlands and waters are anticipated and will require approval by the Board of Public Works. MDOT SHA has requested to pay into the Tidal Wetlands Compensation Fund to fulfill the mitigation requirements. The Tidal Wetlands License Report and Recommendation was referred to BPW on June 15, 2022 and the Letter of Authorization is effective as of June 17, 2022.

In addition, sediment and erosion control authorization and approval of stormwater management plans from SHA's internal review is pending. Approvals are expected by mid-July.

#### Maryland Department of Natural Resources (DNR)

The Department's Wildlife and Heritage Service (WHS) indicated that there are no official State or Federal records for listed plant or animal species existing onsite. A letter from the DNR Environmental Review Program dated June 11, 2021, noted the Use I and Use II stream closure periods.

#### U.S. Fish and Wildlife Service (USFWS)

A Trust Resources List search on the USFWS website, conducted on August 5, 2021, indicated that there is no record of endangered species, refuges, or fish hatcheries within the vicinity of the project.

#### Maryland Historical Trust (MHT)

Per correspondence dated May 9, 2019, and June 2, 2021, the Maryland Historical Trust (MHT) has determined that this project will have no adverse effect on historic properties.

### Climate Resiliency

MDOT SHA completed a climate impact and coastal resiliency analysis for this project, which has an anticipated service life of 25 years. Based on this analysis, the project is not immediately vulnerable to climate impacts. Some portions of the widened roadway and existing roadway footprint will be inundated when sea level rise reaches the 5 to 10 feet level, as per the Coastal Atlas mapping tool; as well as with storm surge from a Category 3 or greater storm. Impacts to wetland adaptation areas are expected due to roadway widening and drainage improvements

along MD 322 southbound, just north of the intersection. SHA determined that the as the project does not involve a “new structure” Coast Smart Construction Program criteria is not applicable.

As per COMAR 27.02.05.03.B(3)(b) and 27.02.05.03.C(1) through (3) state agencies must preserve, protect, and maintain a potential wetland migration area to the maximum extent practicable. If impacts are unavoidable, the State Agency must demonstrate why, assess ecological features on site that could be enhanced, restored, or created to maintain existing wetland functions and provide additional protection against future coastal hazards, and make recommendations regarding the most feasible methods to address the detrimental impact and the enhancement, restoration, and creation of natural features on site. SHA provided the following justification and assessment.

Just north of the MD 322/Glenwood Avenue intersection – along MD 322 SB – impacts to a DNR mapped wetland adaptation area are expected due to roadway widening and drainage improvements. Proposed roadway widening cannot be avoided at this location as additional capacity is needed to address safety issues at the MD 322/Glenwood Avenue intersection. The widening will provide a dedicated left turn lane on MD 322 NB and SB to eliminate queuing caused by vehicles and school buses turning onto Glenwood Avenue, and will include new 10-foot wide shoulders for vehicles turning onto/from MD 322. Please note areas disturbed by fill/grading activities beyond the widening will be stabilized and planted per the project’s Landscape Plans.

With regards to the proposed drainage improvements, only minor temporary impacts to existing nontidal and tidal vegetated wetlands are expected to occur within a DNR mapped wetland adaptation area, along MD 322 SB just north of the MD 322/Glenwood Avenue intersection. Proposed drainage work at this location includes extension of a 48-inch diameter pipe and installation of an adjacent/parallel 54-inch diameter pipe to reduce flooding on upstream properties. Please note impacts to nontidal and tidal wetlands at the outfall are associated with temporary E&SC measures resulting in 449 square feet of temporary nontidal wetland impact and 155 SF of temporary tidal wetland impact. There will be no loss of existing wetland habitat at this location. Temporarily impacted nontidal and tidal wetlands will be restored with Wet Meadow seed per the project’s Landscape Plans. Please note there will be minor permanent tidal open water impact at the outfall of the pipes due to the extension and required riprap outfall protection. This impact is being mitigated via payment into MDE’s Wetlands Compensation Fund.

## **Public Notice**

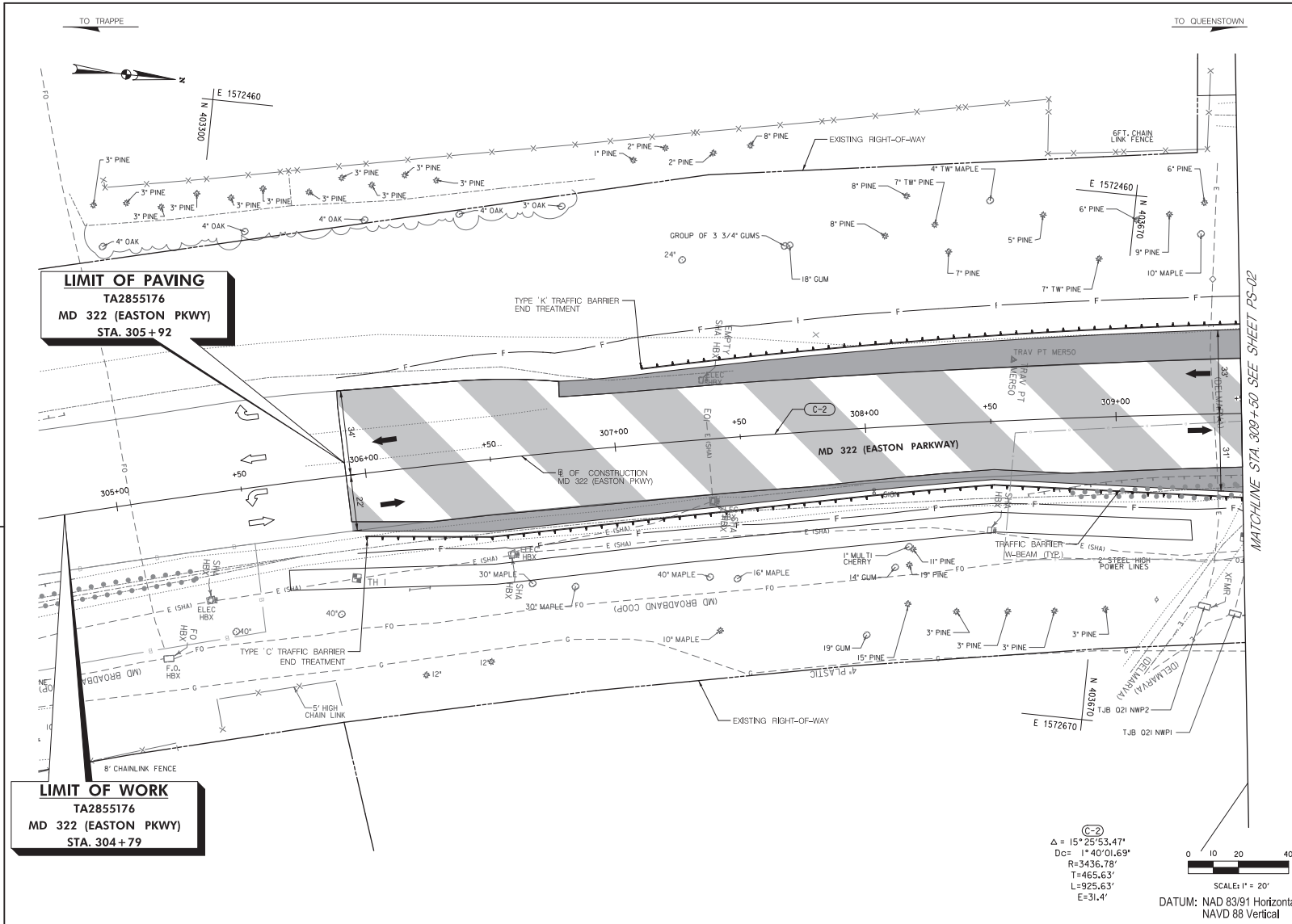
In accordance with the provisions of COMAR 27.03.01.03, multiple signs were posted at the project site and notice of the project was posted in *The Star Democrat* newspaper on June 8, 2022. As of the writing of this staff report, no public comments have been received. Any comments received will be noted at the Commission meeting.

## **STAFF RECOMMENDATION**

Staff recommends approval of the proposed project with the following condition:

1. Prior to the start of construction or within 30 days, whichever comes first, MDOT SHA shall submit a copy of all final plans, permits, and approvals, including stormwater management plans and MDE stormwater and erosion and sediment control authorizations, to Commission staff.





QUANTITY NOTES		
<b>FINE MILLING ASPHALT PAVEMENT 1 INCH TO 2.5 INCH DEPTH</b>		
STATION	SY	REMARKS
MD 322 STA 305+92 TO STA 309+50	1,811	
<b>REMOVAL AND DISPOSAL OF EXISTING TRAFFIC BARRIER W BEAM</b>		
STATION	LF	REMARKS
MD 322 STA 308+64, 30' RT TO STA 309+50, 25' RT	86	
<b>TRAFFIC BARRIER W BEAM USING 6 FOOT POST</b>		
STATION	LF	REMARKS
MD 322 STA 306+47, 35' RT TO STA 309+50, 34' RT	301	
MD 322 STA 307+13, 30' LT TO STA 309+50, 36' LT	239	
<b>TYPE K TRAFFIC BARRIER END TREATMENT</b>		
STATION	EA	REMARKS
MD 322 STA 307+13, 30' LT	1	
<b>TYPE C TRAFFIC BARRIER END TREATMENT</b>		
STATION	EA	REMARKS
MD 322 STA 305+97, 25' RT	1	

**McCormick  
Taylor**  
509 South Exeter Street  
4th Floor  
Baltimore, Maryland 21202  
(410) 662-7400

ROADWAY LEGEND		
	CONCRETE SIDEWALK	
	FINE MILLING AND RESURFACING	
	ASPHALT TRAIL	
	FULL DEPTH PAVEMENT	
	PAVEMENT REMOVAL	
	EXISTING RIGHT-OF-WAY	

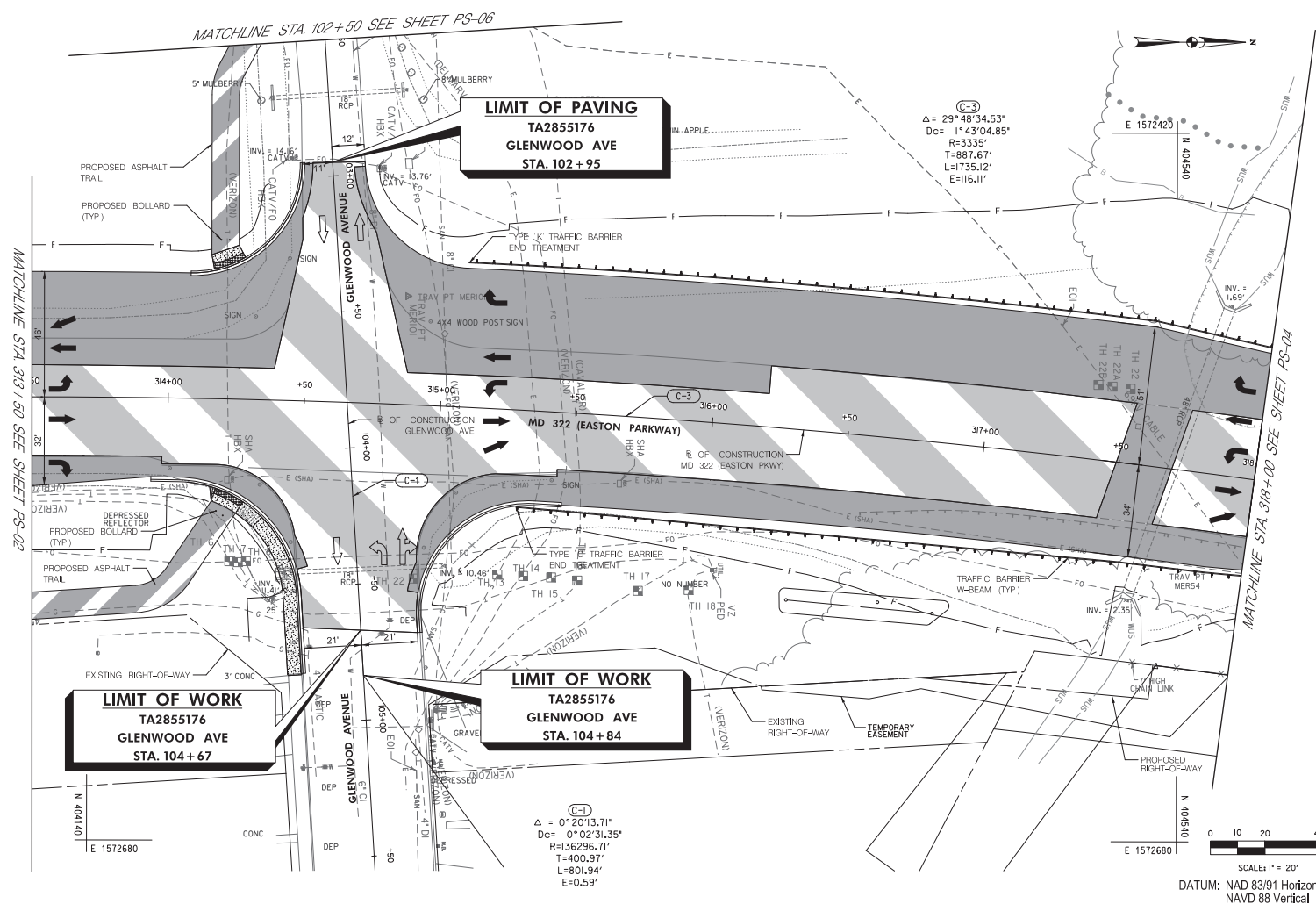
R / W PLAT NUMBER

CROSS REFERENCE	SHEET NO.
INDEX OF SHEETS	1
GENERAL NOTES / ADDENDUM SHEET	2
GENERAL NOTES SHEETS	3
PAVEMENT DETAIL SHEET	4
GEOMETRIC DATA SHEET	5
INTERSECTION DETAIL SHEET	6
ROADWAY PLAN SHEETS	7-10
ROADWAY PROFILE SHEETS	11-14
STORM WATER SCHEDULES	15-18
STORM WATER MANAGEMENT SHEETS	19-22
STORM AND FLOOD CONTROL SHEETS	23-26
TRAFFIC BARRIERS / PLAN SHEETS	27-30
LANDSCAPE PLAN SHEETS	31-34

ROADWAY PLAN SHEET	
SCALE: 1" = 20'	ADVERTISED DATE: TBD CONTRACT NO.: TA2855176
DESIGNED BY: DPK	COUNTY: TALBOT COUNTY
DRAWN BY: WJW	LOG/MILE: -
CHECKED BY: RJM	HORIZONTAL SCALE: N/A
F.A.P. NO.: N/A	VERTICAL SCALE: N/A
DRAWING NO.: PS-01	OF PS-08 SHEET NO.: 9 OF 88

DISTRICT 2 PROJECT DEVELOPMENT  
**MDOT** MARYLAND DEPARTMENT OF TRANSPORTATION  
**CONSTRUCTION** MD 322 (EASTON PARKWAY) AT GLENWOOD AVENUE INTERSECTION IMPROVEMENTS  
STATE HIGHWAY ADMINISTRATION





STANDARD TYPE C COMBINATION CURB AND GUTTER 12 INCH GUTTER PAN 8 INCH MINIMUM DEPTH			
STATION	LF	REMARKS	
MD 322 STA 313+90, 30' RT TO STA 314+53, 100' RT	106		
MD 322 STA 314+08, 46' LT TO STA 314+47, 87' LT	64		
MD 322 STA 314+96, 83' RT TO STA 315+46, 34' RT	82		

FINE MILLING ASPHALT PAVEMENT 1 INCH DEPTH			
STATION	SY	REMARKS	
MD 322 STA 313+50 TO STA 318+00	2,402		

REMOVAL AND DISPOSAL OF EXISTING TRAFFIC BARRIER W BEAM			
STATION	LF	REMARKS	
MD 322 STA 316+57, 28' RT TO STA 318+00, 25' RT	143		

TRAFFIC BARRIER W BEAM USING 6 FOOT POST			
STATION	LF	REMARKS	
MD 322 STA 315+08, 53' LT TO STA 318+00, 49' LT	297		
MD 322 STA 315+80, 37' RT TO STA 318+00, 35' RT	218		

TYPE K TRAFFIC BARRIER END TREATMENT			
STATION	EA	REMARKS	
MD 322 STA 315+08, 53' LT	1		

TYPE C TRAFFIC BARRIER END TREATMENT			
STATION	EA	REMARKS	
MD 322 STA 315+30, 35' RT TO STA 315+80, 37' RT	1		

TYPE C TRAFFIC BARRIER END TREATMENT			
STATION	EA	REMARKS	
MD 322 STA 315+30, 35' RT TO STA 315+80, 37' RT	1		

5 INCH CONCRETE SIDEWALK			
STATION	SF	REMARKS	
MD 322 STA 314+15, 53' LT TO STA 314+27, 54' LT	38		
MD 322 STA 314+16, 32' RT TO STA 314+52, 100' RT	376		

ASPHALT TRAIL			
STATION	TON	REMARKS	
MD 322 STA 313+50, 72' RT TO STA 314+26, 42' RT	25		
MD 322 STA 314+15, 53' LT TO STA 314+34, 167' LT	22		

DETECTABLE WARNING SURFACE FOR CURB RAMPS			
STATION	SF	REMARKS	
MD 322 STA 314+21, 50' LT	24		
MD 322 STA 314+24, 36' RT	22		












**MARYLAND DEPARTMENT  
OF TRANSPORTATION**

STATE HIGHWAY  
ADMINISTRATION

DISTRICT 2 PROJECT DEVELOPMENT

MD 322 (EASTON PARKWAY) AT  
GLENWOOD AVENUE  
INTERSECTION IMPROVEMENTS

**MCCORMICK  
TAYLOR**  
509 South Exeter Street  
4th Floor  
Baltimore, Maryland 21202  
(410) 662-7400

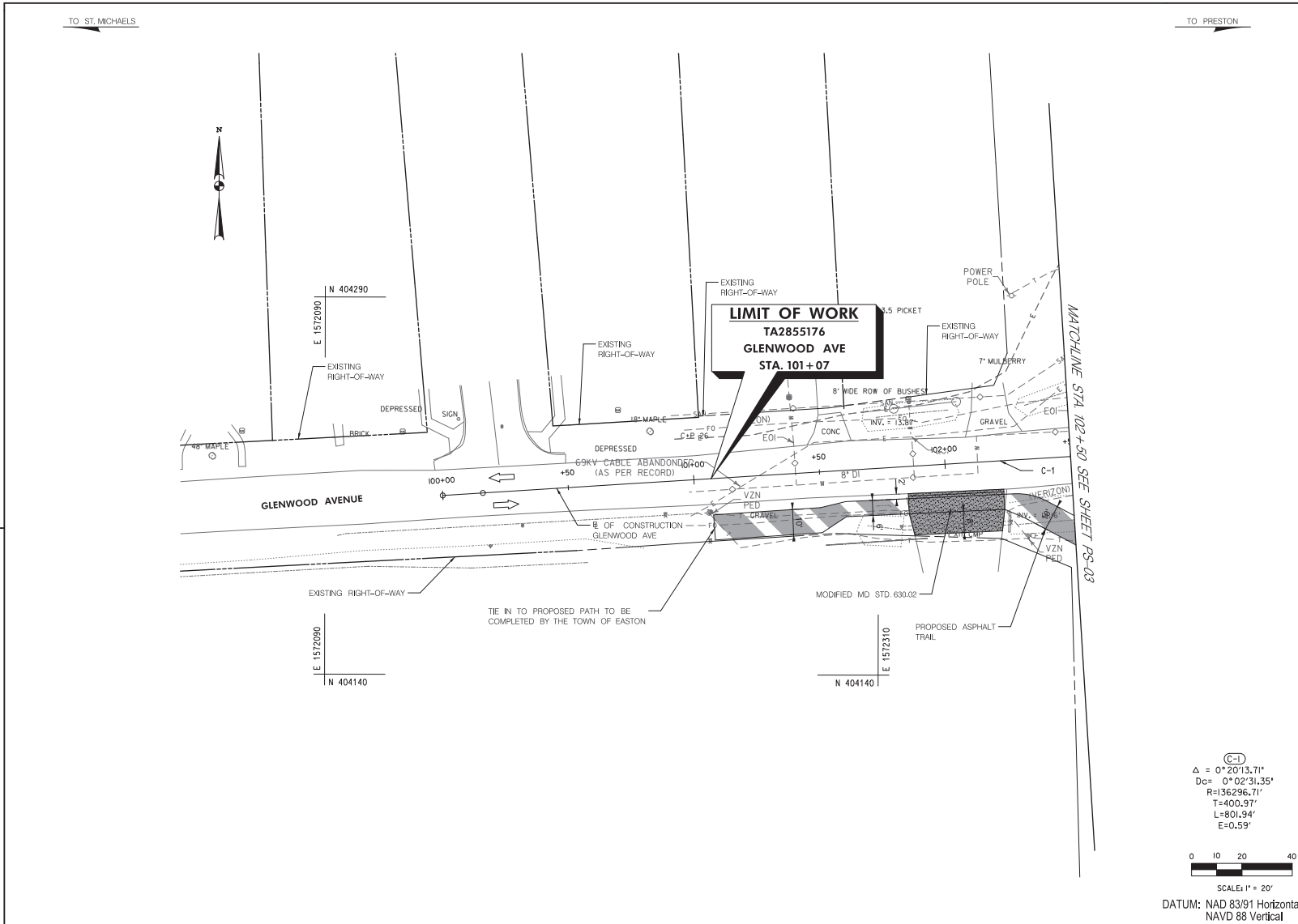
ROADWAY LEGEND			R / W PLAT NUMBER	CROSS REFERENCE	REVISIONS	ROADWAY PLAN SHEET
	CONCRETE SIDEWALK		FULL DEPTH PAVEMENT		PROPOSED TRAFFIC FLOW ARROW	SCALE: 1" = 20'    ADVISED DATE: TBD    CONTRACT NO.: TA2855176  DESIGNED BY: <u>DPK</u> COUNTY: <u>TALBOT COUNTY</u> DRAWN BY: <u>WAW</u> LOGSHEET: <u>-</u> CHECKED BY: <u>BJM</u> HORIZONTAL SCALE: <u>N/A</u> F.A.P. NO.: <u>N/A</u> VERTICAL SCALE: <u>N/A</u>  DRAWING NO. <u>PS-03</u> OF <u>PS-06</u> SHEET NO. <u>11</u> OF <u>86</u>
	FINE MILLING AND RESURFACING		PAVEMENT REMOVAL		EXISTING TRAFFIC FLOW ARROW	
	ASPHALT TRAIL		EXISTING RIGHT-OF-WAY		PROPOSED TRAFFIC BARRIER	
				ITEM SHEET NO.		
				INDEX OF SHEETS ..... 1 GENERAL NOTES (ADMINISTRATIVE SHEET) ..... 2 SPECIAL SECTIONS SHEETS ..... 3-4 PAVEMENT DETAIL SHEET ..... 5 GEOMETRY SHEET ..... 6 INTERSECTION DETAIL SHEET ..... 7 RAINFALL PROFILE SHEET ..... 8 MAINTENANCE OF TRAFFIC PLAN SHEETS ..... 9-10 STORM DRAIN SCHEDULES ..... 11-12 STORM WATER MANAGEMENT SHEETS ..... 13-18 EROSION AND SEDIMENT CONTROL SHEETS ..... 19-20 TRAFFIC SIGNALIZATION PLAN SHEETS ..... 21-25 BRIDGE AND PAVEMENT MARKING SHEETS ..... 26-30 LANDSCAPE PLAN SHEETS ..... 31-35		

BY: srtraynor -

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TO ST. MICHAELS

TO PRESTON

QUANTITY NOTES

ASPHALT TRAIL		
STATION	TON	REMARKS
GLENWOOD STA 101+07, RT TO STA 101+85, RT	19	
GLENWOOD STA. 102+23, RT TO STA 102+50, RT	9	










8 INCH PORTLAND CEMENT CONCRETE PAVEMENT FOR DRIVEWAY MIX 9		
STATION	SY	REMARKS
GLENWOOD STA 101+85, RT TO STA. 102+23, RT	72	

(C-1)  
 $\Delta = 0^{\circ}20'13.71''$   
 $D_c = 0^{\circ}02'31.35''$   
 $R = 136296.71'$   
 $T = 400.97'$   
 $L = 801.94'$   
 $E = 0.59'$

0 10 20 40  
SCALE: 1" = 20'

DATUM: NAD 83/91 Horizontal  
NAVD 88 Vertical

**McCORMICK TAYLOR**  
509 South Exeter Street  
4th Floor  
Baltimore, Maryland 21202  
(410) 662-7400

ROADWAY LEGEND			
	CONCRETE SIDEWALK		
	FINE MILLING AND RESURFACING		
	ASPHALT TRAIL		

ITEM	SHEET NO.
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ROADWAY PROFILE SHEETS	11
MAINTENANCE OF TRAFFIC PLAN SHEETS	12
STORM DRAIN SCHEDULES	13
STORM DRAIN MANAGEMENT SHEETS	14
STORM DRAIN DETAIL SHEETS	15
TRAFFIC SIGNALIZATION SHEETS	16
TRAFFIC SIGNAL DETAIL SHEETS	17
LANDSCAPE PLAN SHEETS	18

ROADWAY PLAN SHEET		
SCALE: 1" = 20'	ADVERTISED DATE: TBD	CONTRACT NO.: TA2855176
DESIGNED BY: DPK	COUNTY: TALBOT COUNTY	
DRAWN BY: WJW	LOG/MILE: -	
CHECKED BY: RJM	HORIZONTAL SCALE: N/A	
F.A.P. NO.: N/A	VERTICAL SCALE: N/A	
DRAWING NO.: PS-06	OF PS-06	SHEET NO. 14 OF 86

BY: srfaynor

PLOTTED: Wednesday, March 10, 2022 AT 10:24 PM  
FILE: \\server\Projects\001\001\_MG\_MCHP\_Summary\01\_MG2020\Glenwood Ave\301\_CADD\Plan\_Sets\Roadway\ps-06.dgn