

June 16, 2021

Mr. Paul Dorr
The Traffic Group, Inc.
9900 Franklin Square Dr. - Suite H
Baltimore, MD 21236

Dear Mr. Dorr:

Thank you for the opportunity to review the concept plan, for the Takoma Junction development – SHA Tracking #19APMO008xx in Montgomery County, Maryland. The Maryland Department of Transportation State Highway Administration (MDOTSHA) review is complete, and we are pleased to respond.

Based on the information provided, please address the following comments in a point-by-point response:

Engineering Systems Team (EST) Comments (By: Urooj Zafar):

The developer has acknowledged that the access point does not meet “Intersection Sight Distance” AASHTO guidelines, due to the existing buildings (the Fire House and the Residential Home on the Northeast corner). They are asking for this condition to be waived due to urban development constraints. At this point, EST would defer to the Access Management Division and senior management to accommodate or refuse the requested waivers, in order to process this access permit request.

District 3 Traffic Comments (By: Alvin Powell):

Comment No. 1

Noted.

Comment No. 2

We offer the following comments in response to responses received.

- Please note continued concerns with regards to trucks parked in the layby overhanging the adjacent bicycle and travel lane. This situation cannot be endorsed. Also note that insufficient stopping sight distance would further exacerbate the related safety deficiencies.

- With regards to trucks requiring multiple maneuvers to park within the layby, please note that there is a proposed transit bus stop at the rear end of the layby. Multiple truck maneuvers within the layby to park, exposes pedestrians and cyclists to the rear blind spot(s) of these vehicles and increases the safety risk, particularly to pedestrians. The increased safety risk within this confined area of the roadway is not supported. It is inconsistent with current pedestrian safety initiatives within the area.
- We have reviewed the proposed shortened layby submitted and have determined that a shorter layby increases the safety risk to roadway users. Use of the shortened layby by larger trucks, whether inadvertent, will leave a longer overhang into the adjacent bicycle and active travel lane. With limited sight distance, the inherent risks are significantly increased.

Please address the noted safety concerns accordingly.

Comment No. 3

Noted.

Comment No. 4

Please note that the safety issues identified in the letter of May 17, 2021, have not been adequately addressed with respect to the measurement and reporting of the proposed sight distances.

Intersection sight distance allows a minor street driver and a major street driver to observe each other's maneuvers or pending maneuvers and respond accordingly. Correspondingly, stopping sight distance allows a driver to see a vehicle stopping or stopped ahead and come to a safe stop. Both elements are critical in providing a safe driving environment and adequate distance must be provided for each to occur. Where adequate intersection sight distance or stopping sight distance is not possible, a list of options relative to the site conditions to maximize the available distances can be reviewed.

AASHTO prescribes the methodology for measurement of sight distances. While the measurement heights and locations change between measuring intersection and stopping sight distances, the general tenets of intersection sight distance measurement and stopping sight distance measurement remain the same. Also of note is that while the measurement of the actual sight distance may deviate from a straight line and follow the roadway geometry, the line of sight/sightline is along a straight line and all obstructions that impact the line of sight should be duly considered and addressed.

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Attached to this letter are markups of previously submitted material which shows obstructions along the line of sight which prevent the reported stopping sight distance from being obtained. This includes trees and utilities. With the issues noted, we are unable to evaluate the proposed sight distance conditions and make a determination on adequacy and what measures may be available or are necessary to improve the available sight distances for the proposed access with the information provided.

As previously requested:

- Sight distance measurements should be repeated following industry standard practices. Where deficiencies are observed, a list of options should be prepared for review and consideration.
- A sight distance profile should be prepared along the measured line of sight. The profile should clearly identify any obstructions including shrubs, trees, structures, utilities and conflicting roadway elements where they occur along the profile. The line of sight traverses the roadway, sidewalk, and an area behind the sidewalk.

We have attached a sample drawing showing a sight distance profile that may be used to prepare the information requested above. Once the requested information has been received, we will be in a position to review the available sight distances, determine adequacy and what mitigation may be needed, and consider what measures that may be available to address the identified safety concerns.

An internal evaluation of the stopping sight distance at the proposed driveway was performed. The results of our analysis are attached. The results show that both intersection and stopping sight distance will not be met at the driveway. Your proposed mitigation may be a deciding factor in our determination of future action on this development.

For the reasons stated above, the network cannot support the proposed layby at this location, therefore it cannot be approved as proposed.

Further plan submittals should reflect the above comments. Please upload the plans and all supporting documentation in PDF format, including a point-by-point response to reflect the comments noted above directly to our online database. For electronic submissions create an account with our new online system <https://mdotsha.force.com/accesspermit>. Please reference the SHA tracking number on future submissions. Please keep in mind that you can view the reviewer and project status via the SHA Access Management web page at <http://www.roads.maryland.gov/pages/amd.aspx>.

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If you have any questions or require additional information please contact Mr. Kwesi Woodroffe at 301-513-7347, by using our toll free number (in Maryland only) at 1-800-749-0737 (x7347), or via email at kwoodroffe@sha.state.md.us or shaamdpermits@sha.state.md.us.

Sincerely,



for Erica Rigby,
District Engineer, SHA

ER/ts

Attachments – Sight Distance Evaluation (MD 195 at site driveway)
Sight Distance Power Point mark-up
Sight Distance profile (sample)

cc: Mr. Glen Cook, Traffic Group
Ms. Jingjing Liu, NDC
Ms. Suzanne Ludlow, City of Takoma Park
Ms. Katie Mencarini, Montgomery Planning
Mr. Alvin Powell, SHA – District Traffic
Mr. Kwesi Woodroffe, SHA – Access Management



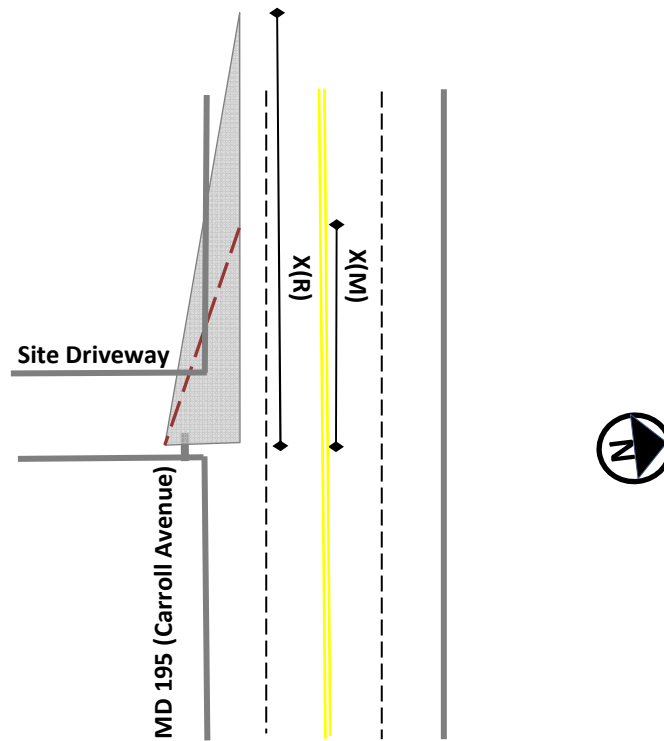
DATE: 6/3/2021	SHEET NO: 1 of 4
PREPARED BY: SH	REV BY/DATE:
CHECKED BY: AP	REV CHK BY/DATE:
SUBJECT: Intersection Sight Distance Observations Right Turn Maneuver (Eastbound)	

MD 195 (Carroll Avenue) at Site Driveway

Date	6/3/2021
Time of Day	Morning
Posted Speed Limit or 85% for Major Roadway (X(R))	35 SL + 10
Traffic Controls Present	Stop
Intersection Maneuver	Right Turn
Weather	Partly Cloudy
Horizontal Curve	Yes
Vertical Curve	No

Major Roadway Width	48 ft.
No. of Lanes	4
Minor Roadway Width	25 ft.
No. of Lanes	2

Y Stopping Distance	
X(R) Recommended	335 ft
X(M) Measured	150 ft



Notes:

Measured intersection sight distance is less than recommended intersection sight distance.
Posted Speed Limit: 25 mph
Prevailing/Design Speed: 35 mph
AASHTO Greenbook, Sight Distance - Case B2: Right Turn from Stop



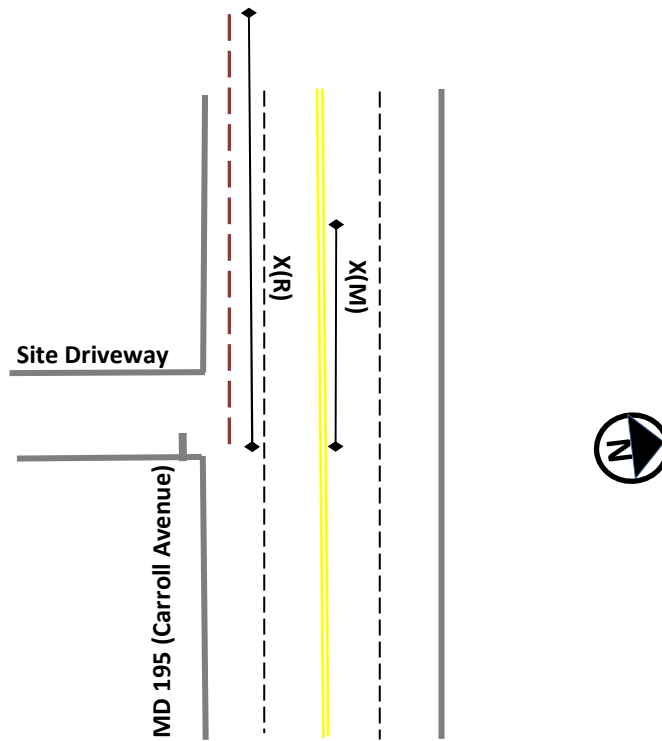
DATE: 6/3/2021	SHEET NO: 2 of 4
PREPARED BY: SH	REV BY/DATE:
CHECKED BY: AP	REV CHK BY/DATE:
SUBJECT: Stopping Sight Distance Observations Right Turn Maneuver (Eastbound)	

MD 195 (Carroll Avenue) at Site Driveway

Date	6/3/2021
Time of Day	Morning
Posted Speed Limit or 85% for Major Roadway (X(R))	35 SL + 10
Traffic Controls Present	Stop
Intersection Maneuver	Right Turn
Weather	Partly Cloudy
Horizontal Curve	Yes
Vertical Curve	No

Major Roadway Width	48 ft.
No. of Lanes	4
Minor Roadway Width	25 ft.
No. of Lanes	2

Y Stopping Distance	
X(R) Recommended	250 ft
X(M) Measured	172 ft



Notes:

Measured stopping sight distance is less than recommended stopping sight distance.
Posted Speed Limit: 25 mph
Prevailing/Design Speed: 35 mph
AASHTO Greenbook, Sight Distance - Case B2: Right Turn from Stop



Picture 1 – Intersection Sight Triangle from Proposed Driveway Blocked by Vegetation on Adjacent Lot



Picture 2 – Intersection Sight Triangle Opposite View Blocked by Vegetation on Adjacent Lot



Picture 3 – Intersection Sight Triangle from Advance Position



Picture 4 – Stopping Sight Distance Limited by Utilities and Vegetation

Drivers Eye 3.5 FT to 2 FT Object

Drivers Eye 3.5 FT to 2 FT Object

EXISTING
BUILDING BLOCKS
SIGHT DISTANCE

Driveway and vehicle not visible from location reported

**Line of Sight obstructed
by utilities and trees.
See photograph.**

EXISTING
FIRE HOUSE BLOCKS
SIGHT DISTANCE

Figure 1. Sight Line Obstructions



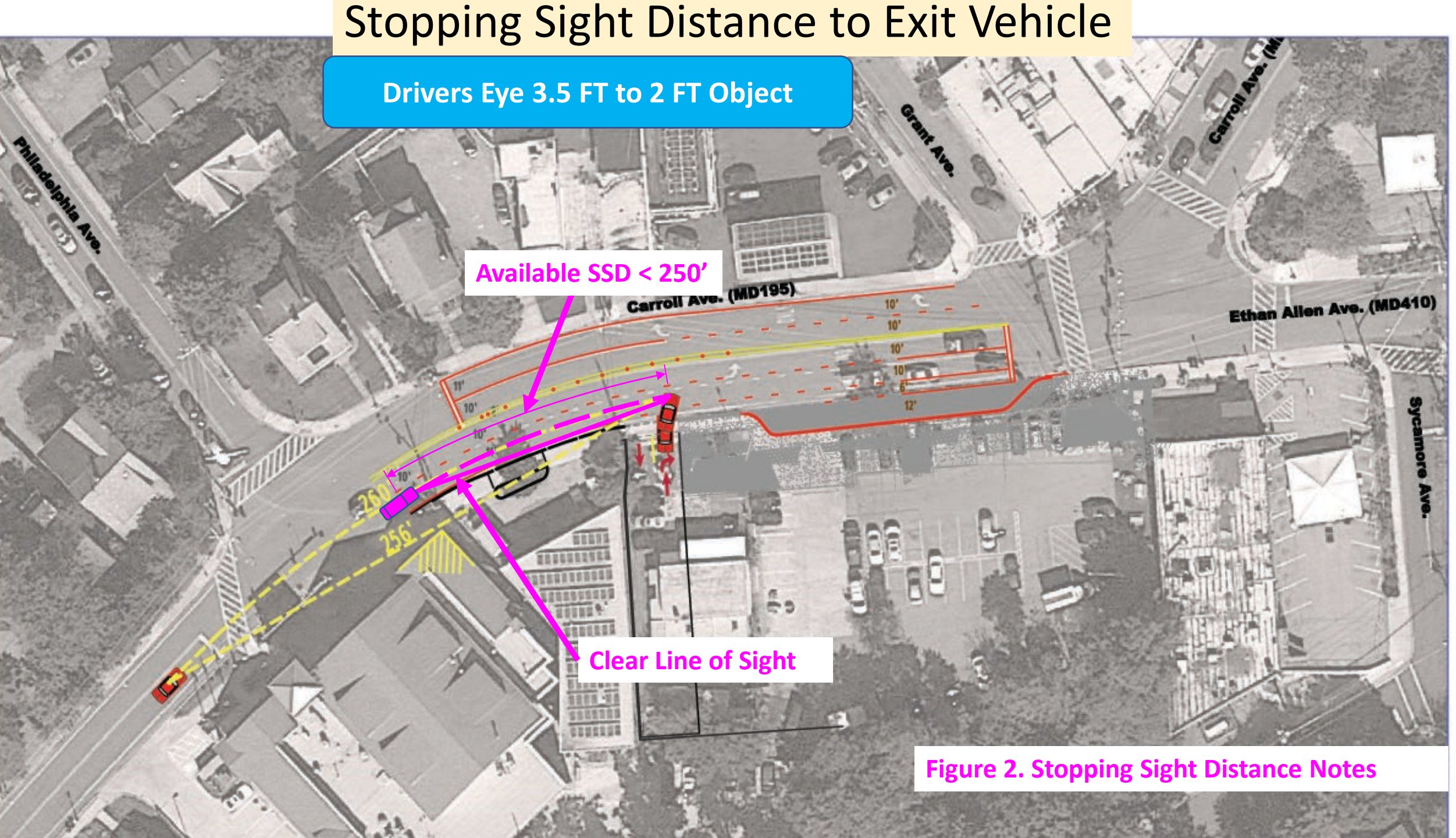
Stopping Sight Distance to Exit Vehicle

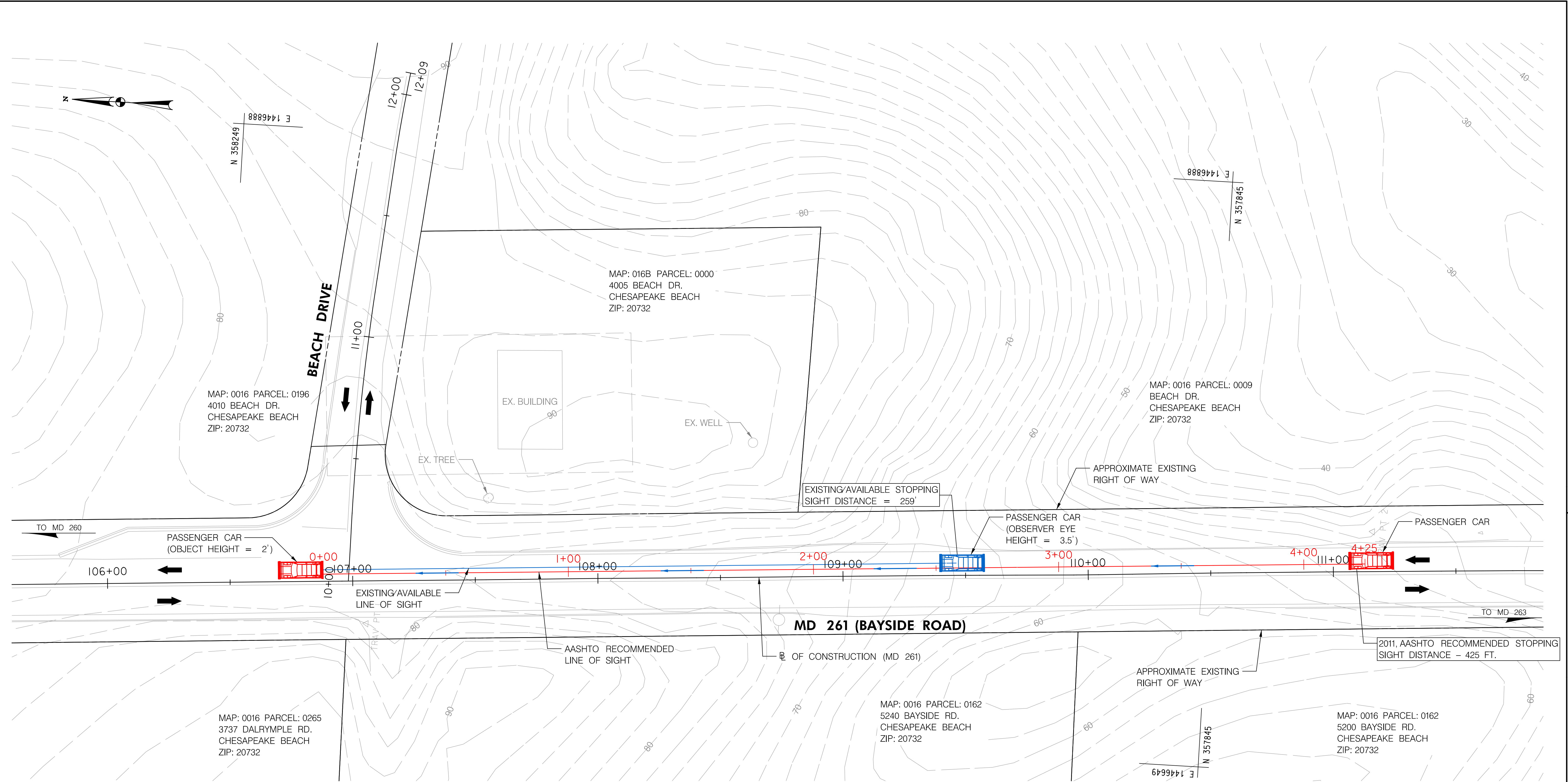
Drivers Eye 3.5 FT to 2 FT Object

Available SSD < 250'

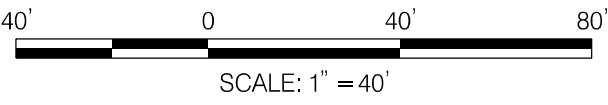
Clear Line of Sight

Figure 2. Stopping Sight Distance Notes





STOPPING SIGHT DISTANCE
(MD 261 – NORTHBOUND)



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SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
DISTRICT 5

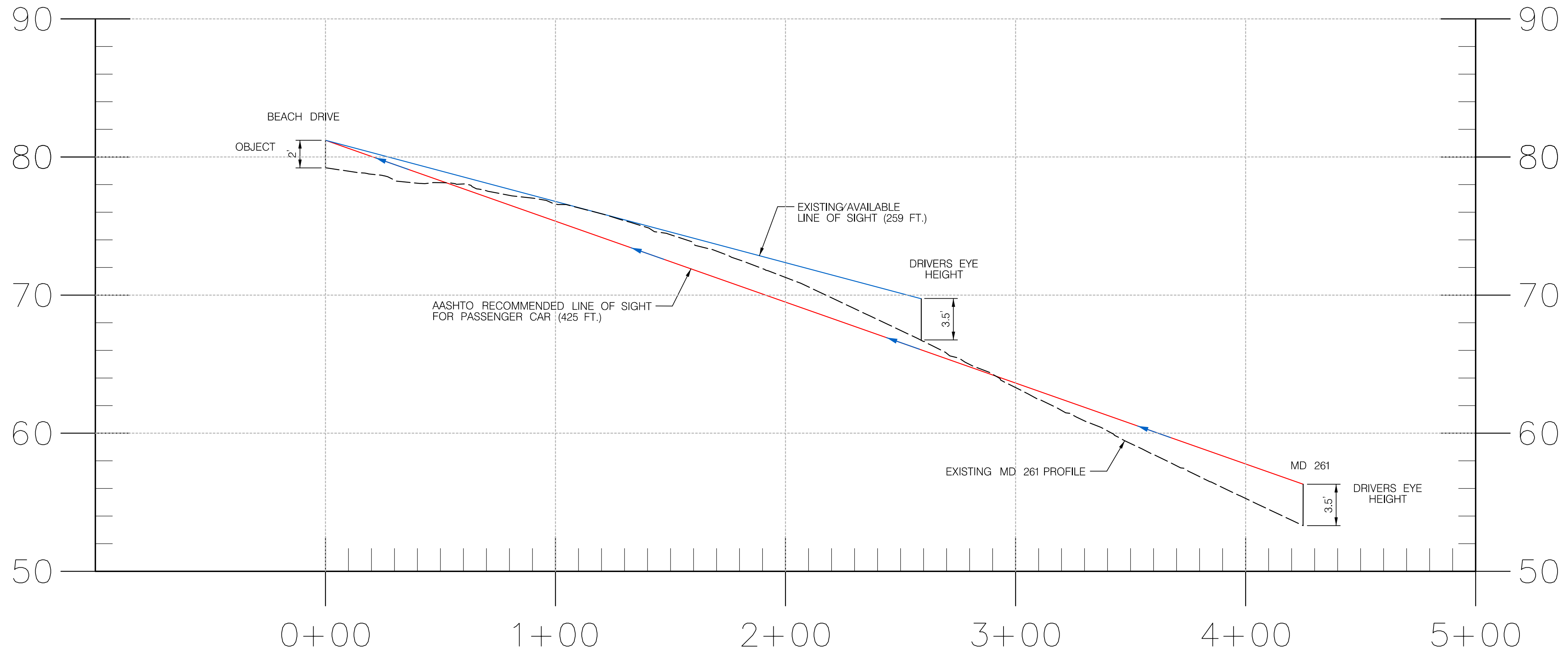
MD 261 (BAYSIDE ROAD) AT BEACH DRIVE
SIGHT DISTANCE IMPROVEMENT STUDY

STOPPING SIGHT DISTANCE

SCALE 1" = 40' DATE MARCH 2016 CONTRACT NO.

DESIGNED BY	AP	COUNTY	CALVERT
DRAWN BY	AM	LOGMILE	-
CHECKED BY	KM	HORIZONTAL SCALE	
MDE/PRD		VERTICAL SCALE	

DRAWING NO. - OF SHEET NO. F6 OF 8



PROFILE: LINE OF SIGHT
(MD 261 - NORTHBOUND)



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SHA		STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION DISTRICT 5	
MD 261 (BAYSIDE ROAD) AT BEACH DRIVE SIGHT DISTANCE IMPROVEMENT STUDY			
STOPPING SIGHT DISTANCE			
SCALE <u>AS SHOWN</u> DATE <u>MARCH 2016</u> CONTRACT NO. <u> </u>			
DESIGNED BY <u>AP</u>	COUNTY <u>CALVERT</u>		
DRAWN BY <u>AM</u>	LOGMILE <u>-</u>		
CHECKED BY <u>KM</u>	HORIZONTAL SCALE <u>1" = 60'</u>		
MDE/PRD <u> </u>	VERTICAL SCALE <u>1" = 10'</u>		
DRAWING NO. <u>-</u>	OF <u>OF</u>	SHEET NO. <u>F7</u>	OF <u>8</u>