NDC TAKOMA JUNCTION, LLC

July 14, 2021

Ms. Erica Rigby
Acting District Engineer
MDOT State Highway Administration
9300 Kenilworth Avenue
Greenbelt, MD 20770

Re: Takoma Junction Development, Montgomery County, MD
SHA Tracking #19APMO008xx

Dear Ms. Rigby:

This letter responds to your letter of June 16, 2021, in which SHA raised concerns regarding the Site Plan submitted by NDC Takoma Junction, LLC for the Takoma Junction Development located on Carroll Avenue (MD 195) in Takoma Park, Maryland (the "Project"). The Project will be located between the intersection of Philadelphia Avenue and Carroll Avenue ("Intersection 1") and the intersection of Grant Avenue, Ethan Allen Avenue and Carroll Avenue "Intersection 2").

Your specific concerns relate to (1) the layby proposed to be built in the front of the Project to accommodate deliveries to the Project and the neighboring property leased by the Takoma Park – Silver Spring Food Cooperative; (2) the Intersection Sight Distance and Stopping Sight Distance from Intersection 1 to the Access Point to the Project's underground garage; and (3) the Intersection Sight Distance and Stopping Site Distance from Intersection 1 to the layby.

In response to your concerns, the Developer has made the following changes to the Site Plan:

1. The width of the layby has been increased from 12 feet to 14 feet, thereby allowing, in the case of the 140-foot layby, 18-wheeler (and smaller) trucks to enter the lay in one smooth maneuver without the need for further maneuvering. This eliminates your concern about trucks overhanging into the adjacent bike and traffic lane, trucks making multiple maneuvers to park, and the safety of pedestrians.

2. Our consultants have determined that the driver sight line from Intersection 1 to the Project's Access Point and the layby is primarily obstructed by two trees. Two utility poles and a traffic light pole are nearby, but not in the line of sight.

   The Developer commits to request permission from the property owner to remove or trim the trees at the Developer's cost and to pay for appropriate re-plantings. If trimming is an acceptable solution to SHA, the Developer will undertake in writing to be responsible for periodic trimming of the trees. We note that the same sight line issue exists today from

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SUITE 100
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NDC TAKOMA JUNCTION, LLC

Intersection 1 and the entry point to the City's parking lot on Carroll Avenue. We request that SHA assist with the tree removal process to address the existing safety concerns.

After the trees are trimmed or removed, the Project will meet the minimum Stopping Sight Distance of 250 feet.

3. As previously noted, the 335-foot Intersection Sight Distance requirement cannot be met from Philadelphia Avenue because of a partial obstruction caused by an existing private home on the northeast corner of the intersection. And, the requirement cannot be met from Carroll Avenue because of the curve in the roadway and the City's Firehouse. We are requesting a waiver to this requirement due to urban development constraints.

   It is appropriate and standard practice of SHA to grant such a waiver in these circumstances. We note that the same sight line issue exists today from Intersection 1 and the entry point to the City's parking lot on Carroll Avenue.

Attached for your review is the analysis of our consultants, The Traffic Group and AMT.

We look forward to resolving these issues with you.

Very truly yours,

NDC Takoma Junction, LLC
By: The Neighborhood Development
Company, L.L.C.

By: Michaela Kelinsky
Michael Kelinsky
Vice President

Attachment

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July 14, 2021

Ms. Erica Rigby
Acting District Engineer
MDOT SHA, District 3
9300 Kenilworth Avenue
Greenbelt, MD 20770

Attn: Mr. Kwesi Woodroffe

RE: Takoma Junction
MDOT SHA Tracking # 19-AP-MO-008-xx
Our Job No.: 2016-0409

Dear Ms. Rigby:

This letter has been prepared to respond to comments received from the Maryland Department of Transportation State Highway Administration (MDOT SHA) in a letter dated June 16, 2021, in reference to the review of the Concept Plan for the Takoma Junction development.

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

Comment No. 1 – 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.

Response - We are requesting an Urban Area Waiver from meeting AASHTO Guidelines recommended "Intersection Sight Distance" of 335 ft. The intersection does not allow the Project to meet AASHTO guidelines in relation to our Access Point due to the curvature of the roadway between the two intersections, as well as the existing Firehouse and the Healey Building.

District 3 Traffic Comments (By: Alvin Powell):

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.

  Response – Longer Layby: Per Exhibit A, the Developer has increased the depth of the layby from 12' to 14'. This will allow a truck to clear the adjacent bicycle and travel lane in a single move eliminating any concern related to a back-up maneuver to align within the lane, as well as any further safety concerns.

  Shorter Layby: Per Exhibit C, there is no overhang in the adjacent bicycle and travel lane and therefore this option should not have any objections.

- 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.

  Response – The Developer has increased the width of the layby from 12 feet to 14 feet. See attached Exhibit A showing that large semi-trucks can now pull into the layby lane in one maneuver without overhanging and blocking the bike lane or traffic lane. Exhibit B shows the semi-truck backup up slightly to exit the layby lane.

  The Developer has committed to request permission from the property owner to remove the trees at the Developer's cost and to pay for appropriate re-plantings.

  Stopping Sight Distance of 250 ft to the proposed Project Access Point and layby lane for the semi-truck is achievable with the trimming/removal of vegetation.

- 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.

  Response – The shorter layby lane provides more distance between its western boundary and the new bus stop and will not be available for use by large semi-trailer trucks. Tenants in the new Project and the Food Co-op will be notified of this restriction and signage will be installed The Developer will enforce such restrictions. See Exhibit C attached that shows Single Unit Trucks can maneuver in and out of the layby lane without blocking the bike lane or traffic lane.

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.

Response – We are requesting an Urban Area Waiver from meeting AASHTO Guidelines recommended "Intersection Sight Distance" of 335 ft. The intersection does not allow the Project to meet AASHTO guidelines in relation to our access point due to the curvature of the roadway between the two intersections, as well as the existing Fire House and the Healey building.

All trees will be removed or trimmed, providing our Access Point the ability to meet AASHTO minimum "Stopping Sight Distance" guidelines. See Exhibit D.

Please note: the obstructions that exist currently block safe stopping sight distance to existing traffic vehicles queued back from the traffic light at the eastern signal. The minimum safe stopping sight distance of 250 ft can be achieved with the removal or trimming of the trees. See Exhibit D.

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.

Response – Agree. The measurements included in Exhibits A – D hereto are made using the proper methodology.

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.

  Response – A sight distance profile of the proposed line of sight is attached (prepared by AMT). The existing vegetation will be removed/adjusted to remove them as obstructions. As acknowledged in the Prime AE Sight Distance exhibits provided by MDOT SHA, Carroll Avenue roadway does not have a vertical curve alignment issue. However, we can agree a profile could help define the minimum amount of existing vegetation that needs to be trimmed to provide safe stopping sight distance along eastbound Carroll Avenue. The attached profile shows the minimum 250 ft stopping sight distance is achievable with the removal or trimming of trees.

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.

Response – Thank you for the example.

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.

Response – Proposed adjustments discussed above to the existing private property vegetation in order to provide safe stopping sight distance along the state roadway will result in a safe condition for the existing vehicle and approaching vehicles.

We are requesting an Urban Area Waiver from meeting AASHTO Guidelines recommended "Intersection Sight Distance" of 335 ft. The intersection does not allow the Project to meet AASHTO guidelines in relation to our access point due to the curvature of the roadway between the two intersections, as well as the existing Fire House and the Healey building.

We are requesting MDOT SHA approve the proposed access point as it does meet adequate "Stopping Sight Distance" of 250ft. within urban area.

All vegetation and utility impediments will be removed/adjusted providing our access point the ability to meet AASHTO minimum "Stopping Sight Distance" guidelines.

The minimum safe stopping sight distance of 250 ft can be achieved with the removal of the vegetation. See Exhibit D and the AMT profile.

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

Based upon the responses above, we believe SHA's concerns have been addressed sufficiently so that a waiver should be issued and the layby lane should be approved for the below reasons:

1. **Because of the distance between the two signalized intersections and the curvature of the roadway between the two intersections, it is impossible to meet the intersection sight distance requirement, particularly from the west along Carroll Avenue.**

2. **Intersection Sight distance is improved with the removal or trimming of the trees as shown on AMT profile/plan.**

3. **There will be sufficient stopping sight distance once existing vegetation is trimmed and or removed. The minimum safe stopping sight distance of 250 ft can be provided for eastbound vehicles approaching the Project's Access Point and layby lane.**

4. **The wider and longer (140 feet by 14 feet) layby lane provides sufficient depth and length so that a semi-trailer truck can pull into the layby lane in a single maneuver without overhang blocking the bike lane or traffic lane.**

5. **The short layby lane (115 feet by 12 feet) – Large semi-trailer trucks will be prohibited from using the layby lane. The smaller layby lane provides more distance between the new bus stop and western boundary of the layby and the Access Point and the western boundary layby lane area. Stopping sight distance to the smaller layby lane can be achieved by removing vegetation.**

6. **All of Intersection Site Distance and Stopping Site Distance issues raised with respect to the Project exist today with respect to the access point to the current parking lot.**

If you have any questions, please do not hesitate to contact me.

Sincerely,

Paul R. Dorr
Director of Engineering Design

PRD:amr

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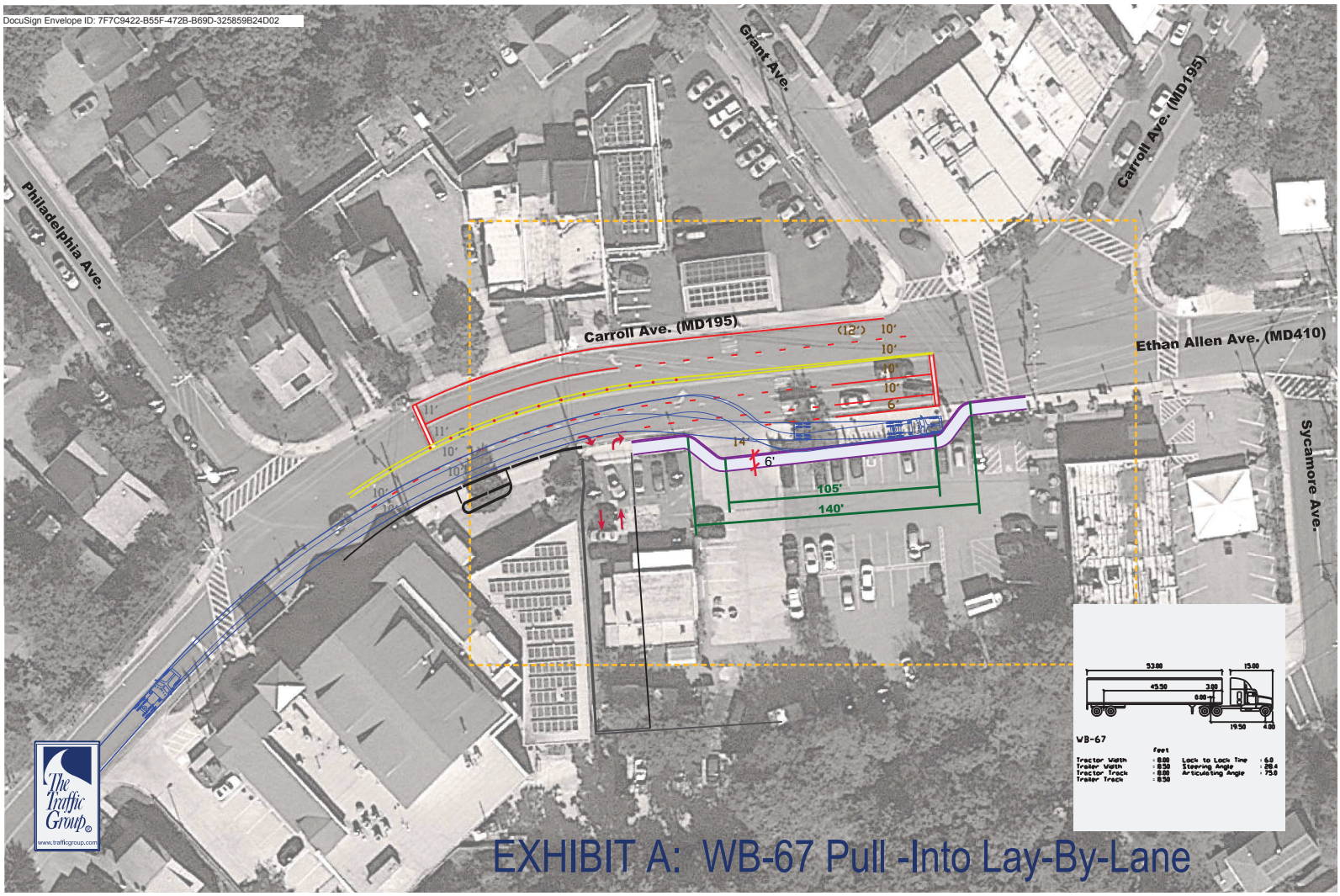

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EXHIBIT A: WB-67 Pull -Into Lay-By-Lane

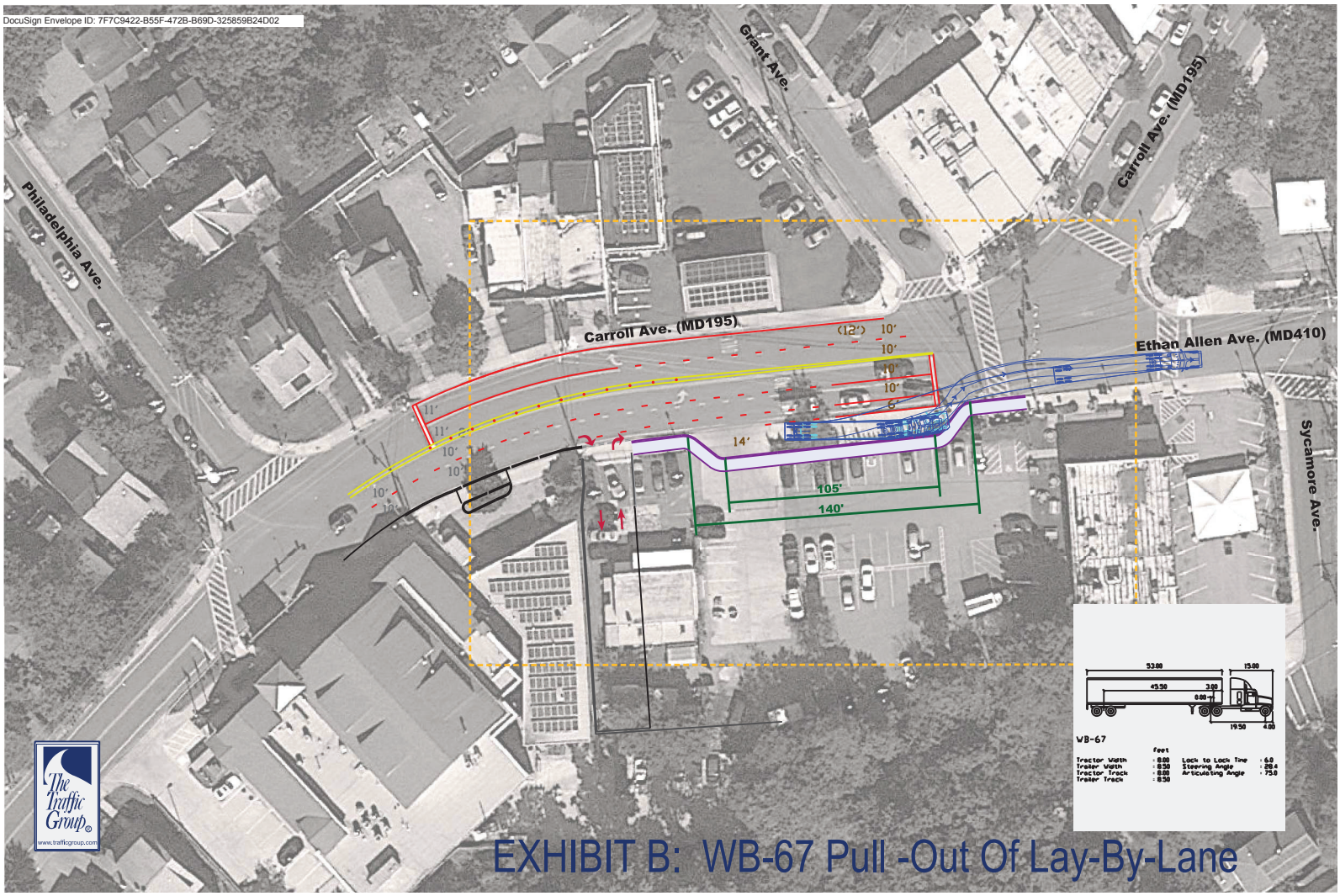

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EXHIBIT B: WB-67 Pull -Out Of Lay-By-Lane

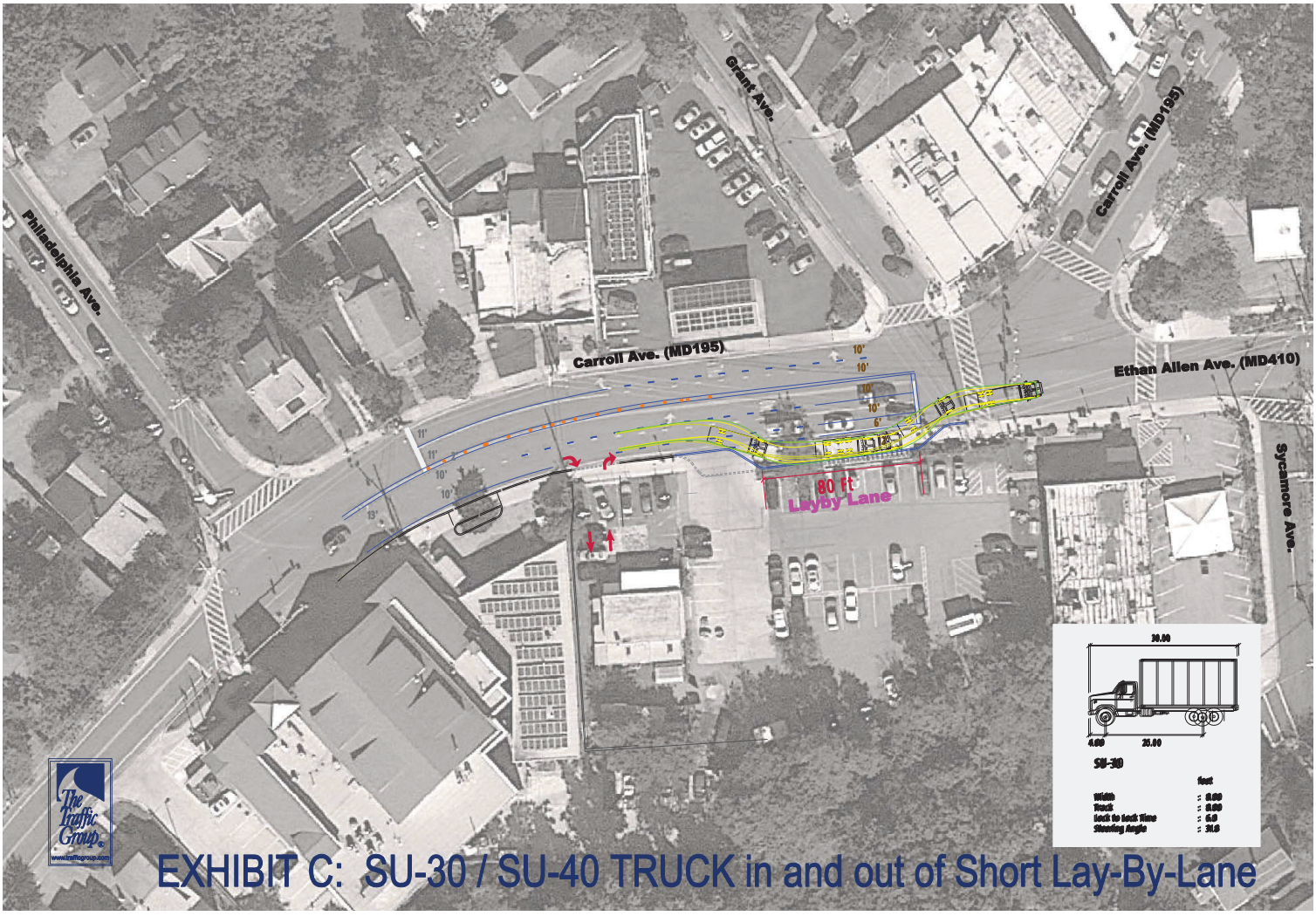


EXHIBIT C: SU-30 / SU-40 TRUCK in and out of Short Lay-By-Lane

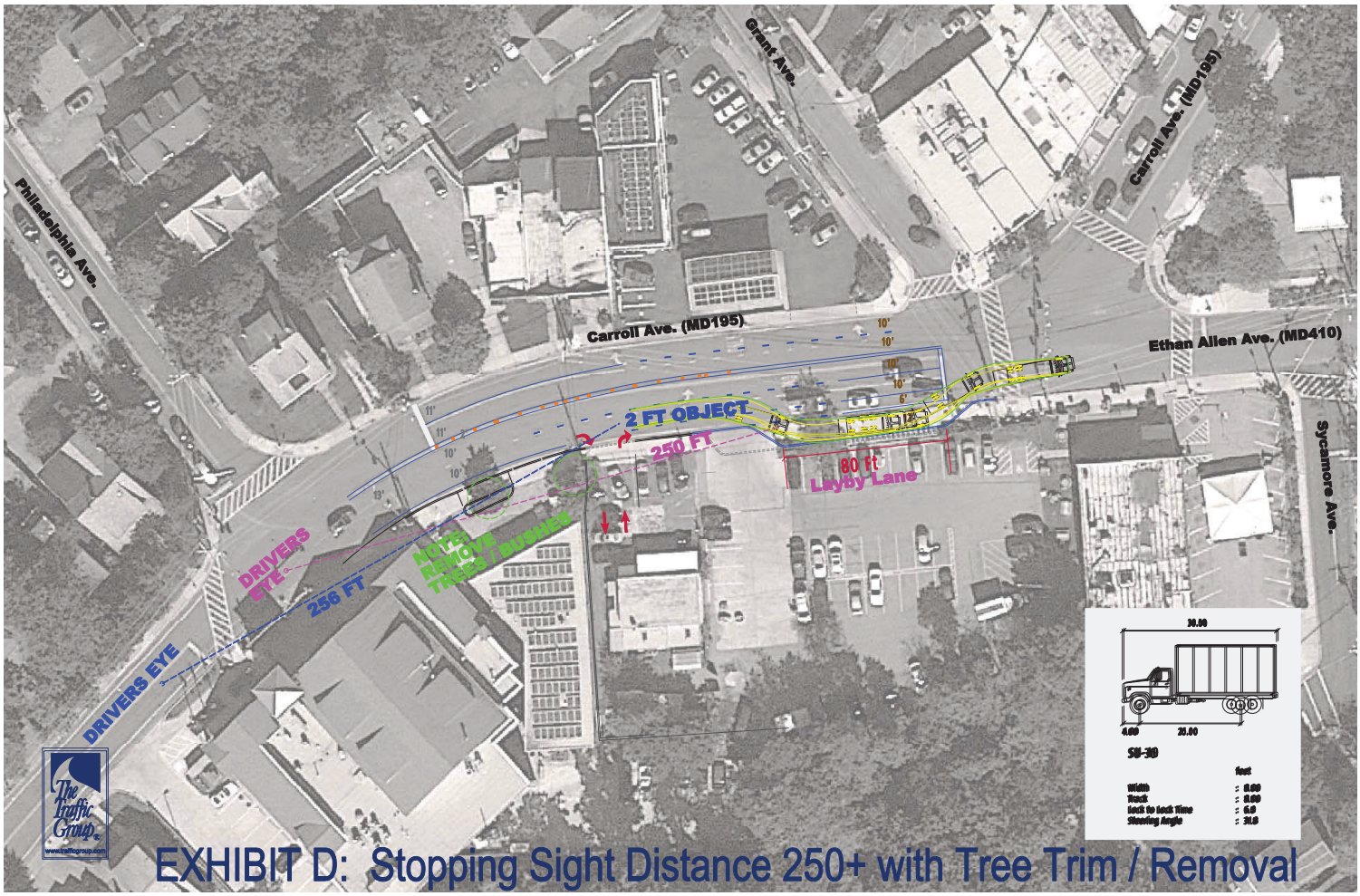
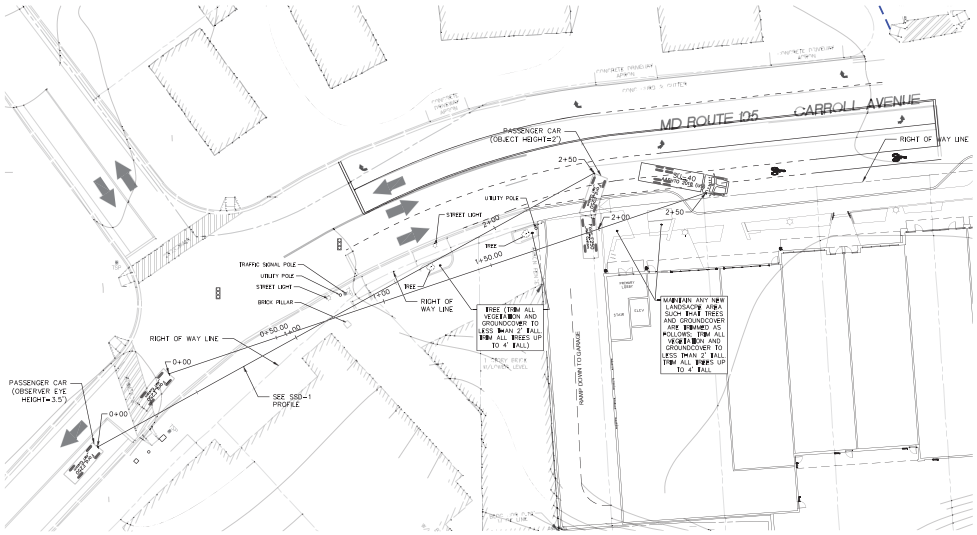
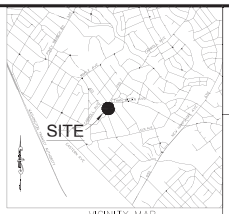


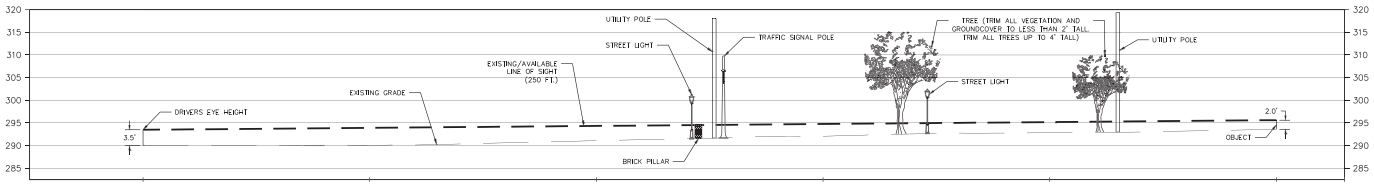
EXHIBIT D: Stopping Sight Distance 250+ with Tree Trim / Removal

E-FILE STAMP





VICINITY MAP
SCALE: 1"=2000'



SSD 1
SCALE: HORZ 1"=10'
VERT 1"=10'

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TAKOMA JUNCTION
13TH ELECTION DISTRICT
CITY OF TACOMA PARK
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DATE	REVISION

STOPPING SIGHT DISTANCE

DESIGNED	AMC
CHECKED	BCJ
SCALE	AS SHOWN
FILE NO.	114-123
DATE	JULY 2021