

November 1, 2022

SENT VIA E-MAIL

Kenneth Kovalchik
Town Planner
Town of Guilderland
P.O. Box 339
Guilderland, NY 12084-0339

**RE: TDE Review – Traffic Analysis Review:
Relocated Costco Main Entrance off Rapp Road**

Dear Mr. Kovalchik,

GPI has received the following documents provided by JMT of New York, Inc.:

- Traffic analysis letter for Relocated Full Access Driveway on Rapp Road, dated October 26, 2022
- Final Concept Plan SK-11 for the Costco Site, dated September 22, 2022

GPI has completed our review of the materials submitted and offer the following technical comments and recommendations:

1. Contrary to what is mentioned in the JMT memo, queuing southbound along Rapp Rd from Western Avenue, appears to be upwards of 440 feet. The memo, mentions a maximum queue length of 300 feet, but that doesn't account for the 140 feet that extends past the Costco's southern driveway. Moving the driveway 150 feet south, as they propose, reduces southbound queue capacity by about 12 vehicles (150' over two lanes), and brings the driveway right to the edge of the design queue for the Western Ave signal. We do not feel that this provides enough space for a vehicle to leave the Costco site and safely transition to the Rapp Rd lanes before encountering the back of queue. If the driveway remains full access, we cannot recommend moving the driveway to the proposed location because of this safety concern. If relocating this driveway is required, we recommend converting it to "right out" only and that left turns out of the site be prohibited at this location.
2. A review of sight distance shows that the new driveway location would have slightly more sight distance than the previous location looking north, though we feel it would be more in the 450 foot range instead of the 500 foot noted in the memo, as parked cars in the lot immediately north of the driveway may block visibility beyond that point. Either way, sight distance should not be an issue.
3. The new site layout adds a 40 space parking area adjacent to Gabriel Terrace where there is only a single point of access. If an emergency occurs, such as building fire or vehicle incident near the entrance to this area, this single egress point could be problematic.
4. The number of parking spaces changes from 722 to 778, but since site trip generation is based on the square footage of the store, not the number of parking spaces, this modification should not impact traffic operations.
5. This new layout appears to allow traffic in and out of the site along Lawton Terrace, which we believe is a change from previously submitted plans. Is this what is proposed, and if so, the applicant should provide analysis concerning how this would change traffic operations.

Please feel free to contact us with any questions.

Regards,

GPI/GREENMAN-PEDERSEN, INC.



Ryan Trunko, PE
Project Manager
80 Wolf Road, Suite 300, Albany, NY 12205
518-898-9551 | rtrunko@gpinet.com

GPI/GREENMAN-PEDERSEN, INC.



Michael R. Wieszchowski, P.E., PTOE
Vice President | Director of Traffic Engineering