

September 12, 2022

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

**RE: TDE Review – Summary of Traffic Engineering Review Findings
Proposed Costco @ Crossgates Mall Road/Rapp Road/Western Ave**

Dear Mr. Kovalchik:

GPI conducted multiple traffic engineering reviews related to the above reference project over the last several months, and we have provided various comment letters (dated 5/27/22, 6/15/22, 8/17/22 & 9/7/22) to the Town detailing our findings and recommendations concerning site access and traffic control. The following is a consolidated summary of our findings:

Rapp Road Entrance

1. The queue and delay changes along Rapp Rd, when comparing the right-in/right-out access concept to a full access driveway concept, are minimal, and the Concept Sketch (attached), provided by JMT on June 21, 2022, sufficiently addresses previous concerns related to sight distance and safety. GPI considers the full access concept provided acceptable.

Gabriel Terrace at Crossgates Mall Rd Intersection

1. With the addition of the Gabriel Terrance connection across from the Dick's Sporting Good entrance to the mall at Crossgates Mall Rd, the intersection will not function acceptably under two-way stop control operations. Traffic signal warrants are satisfied for the build condition, and traffic operations would be acceptable with either traffic signalization or a single lane roundabout present to control traffic.
2. If traffic signalization were progressed at the intersection, lane geometry should be as shown on the concept sketch (attached), provided by JMT on August 23, 2022, with single lane approaches on both side streets and left turn lanes with a positive offset striped median along Crossgates Mall Rd. The traffic signal at this location should be incorporated into a coordinated signal system with adjacent signals along Crossgates Mall Rd. GPI considers this alternative reasonable and acceptable.
3. Although traffic operations would be acceptable with a single-lane roundabout in place at this intersection, this traffic control alternative would have significantly more impacts than a traffic signal. Grade differences would require the removal of about 40 parking spaces from the Mall parking lot, the presence of a roundabout within a coordinated signal system would negatively impact vehicle progression along Crossgates Mall Rd, and construction costs would be more than double compared to a traffic signal. A single-lane roundabout is feasible for traffic control at this location, but the impacts are much greater than for a traffic signal, and the delay reduction is minimal, at a difference of about 2 seconds per vehicle. There may be non-engineering reasons that make construction of a roundabout desirable at this location, but that is outside the scope of our traffic engineering review and would be up to the Town's review board and staff to determine.
4. Operationally, both a traffic signal and a roundabout would result in acceptable traffic operations. However, outside of non-engineering factors, GPI concurs with the study findings that traffic signalization is the most appropriate form of traffic control for safe and efficient operations.

Overall, GPI believes the traffic engineering analysis and recommendations provided by JMT sufficiently address the potential traffic impacts of the proposed Costco site.

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