

November 15, 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 Town has expressed concern over the traffic coming from Western Ave onto Rapp Road and needing to merge to a single lane with the distances between the entrances. We recommend JMT look into creating a single receiving lane from Western Ave and creating right turn lanes for the entrances.
4. Striping on Rapp Rd has not been updated in this current set of plans that show the main entrance relocation. Future submissions should show the proposed striping and roadway configuration.
5. 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. The applicant should consider providing an exit only road access to Gabriel Terrace or reconfigure the parking to all a looped internal driveway.

6. 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.
7. 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. This has been discussed with JMT and appears to be a drafting error. There is no intended direct connection to the site. The applicant should consider a stabilized turf emergency access for response vehicles in this location.
8. If space is available, the applicant could consider additional parking on the south side of the site, west of the Gabriel Terrace driveway. This parking would need to be separated from the main driveway to avoid vehicles backing out into the main driveway.
9. The main entrance is currently skewed to the south. Is there a reason for this design function? A perpendicular intersection is recommended.

The following are additional comments discussed with the Town on the main entrance relocation that do not directly pertain to traffic. Also attached to this letter is a site plan prepared by the Planning Board Chairman with comments on the new configuration.

10. The Town has expressed concerns over the narrowing of the pedestrian sidewalk between parking stalls near the main entrance from 10' down to 7'. The Town is recommending an 8'-10' wide raised sidewalk with curb be provided to still maintain ADA access with the anticipated vehicle overhang.
11. The number of EV charging station parking spaces should be increased to more closely match the number of fuel pumps proposed.
12. The location of the Gabriel Terrace driveway entrance should take into consideration future pedestrian/vehicle connectivity to Site 3.
13. No portions of parking stalls are permitted in the front yard setbacks of Western Avenue and Rapp Road. It appears portions of parking stalls are still located in the front setback with Western Avenue.
14. Fence details need to be provided for the area between the 10' wide multi-use trail and the retaining wall along the northwest portion of the parking lot area.
15. A raised landscaped median should be provided in the parking area in front of the building, similar to the raised sidewalk, to discourage high speed travel cutting through the parking lot.
16. Left travel lan thru and dedicated

Please feel free to contact us with any questions.

Regards,

GPI/GREENMAN-PEDERSEN, INC.



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Eliminate "Skewed" Access?

Provide Additional Landscaped Islands to Break up 400' long 13' High Wall?

Provide Fence Detail on Top of Wall.

Provide Curbed Landscaped Green Strip to Prevent High Speed Travel Across Lot.

Landscaping/Screening on top of Wall.

Provide Ped Connection?

Eliminate Dead-End Parking Aisle. Additional Green Space/Snow Storage.

Provide Street Trees along Gabriel Terrace.

Less Obstructed Truck Access?

Consider Moving Multi-Use Path to the East Side of Gabriel? No Logical Terminus Near Western Ave. on West Side.

Shift Access Drive to the North to Accommodate Additional Parking Lot.

Provide Curbed 10' Wide Ped Connection.

Eliminate "Nook" Spaces.

Increase Number of EV Spaces?

Pull Parking out of Front Setback.

Additional Landscaping/Screening.

ALTERNATE ACCESS/PARKING FIELD

Green Space/Snow Storage

Shift Access Drive to the South. Allow for Larger Parking Field Near Building.

