

August 15, 2023

Via Hand Delivery and Electronic Mail

Planning Board Town of Sutton 4 Uxbridge Road Sutton, MA 01590

Attention: Jennifer S. Hager, Planning & Economic Development Director

RE: Traffic Memorandum Proposed High Speed Diesel Addition Modification to Site Plan Review & Special Permits 27 Worcester Providence Turnpike, Sutton, MA

Dear Members of the Board:

On behalf of the Applicant, Global Montello Group Corp, Bohler Engineering MA, LLC has prepared the following Traffic Memorandum in conjunction with the proposed project located at 27 Worcester Providence Turnpike and further defined as Map 5, Lots 18 on the Town of Sutton Tax Assessor's maps. The site, which is approximately 9.98± acres, is located on the northeastern side of Worcester Providence Turnpike. The parcel is currently developed with a convenience store and Dunkin' Donuts with drive through window and gasoline pumps. The existing development was previously approved by the Planning Board for Site Plan Review, a Special Permit in compliance with the Drive Through Restaurant Window Bylaw, and a Special Permit for compliance with the Route 146 Overlay District Regulations on March 15, 2006 (record decisions are included as part of the Modification Application package). Uses on parcels abutting the property are primarily single-family homes and vacant land, with commercial uses along the Route 146 nearby.

The Applicant proposes to expand the existing development with new high speed diesel fueling positions to the northeast of the existing development. Existing access and egress drives from and onto Worcester Providence Turnpike will be maintained

The northbound and southbound sides of Worcester Providence Turnpike along the frontage of the subject site have a posted speed limit of 50 miles per hour, contain two travel lanes in each direction with striped shoulders, and are separated by concrete barrier. Based upon research utilizing the Massachusetts Department of Transportation (MassDOT) Transportation Data Management System, the Annual Average Daily Totals (AADT) along Worcester Providence Turnpike is approximately 9,294 vehicles.

As part of this analysis, anticipated traffic generated by the proposed use has been estimated. This estimate was completed by comparing the proposed site with existing facilities of the same use. In order to complete this estimate, a trip rate was calculated utilizing data and procedures from the Institute of Transportation Engineers (ITE) Trip Generation Manual, Tenth Edition. The proposed use falls under the ITE land use category Gasoline / Service Station with Convenience Market (LUC Code 945), which was used in this analysis for determining peak hour directional distribution.

Based upon the ITE information described above, traffic generated by the proposed project was estimated during the AM and PM peak hours for the proposed facility. This information is summarized in the table below:



Table 1. Trip Generation Estimate

ITE Code	Description	Fueling Positions	Weekday Peak Hour 7-9 AM (Enter/Exit)		Weekday Peak Hour 4-6 PM (Enter/Exit)	
945	Gas w/ C-store	3	12	5	14	16
Totals			17		30	

As outlined in the table above, the proposed use is expected to generate a total of 17 trips in the AM peak hour and 30 trips in the PM peak hour upon completion of construction. ITE recommends that traffic impact studies be performed whenever an increase in trips in any peak hour is greater than 100 trips per hour since this is the point where a change in roadway capacity may be found and mitigation may or may not be needed. Based upon the minimal changes in traffic volume it is anticipated that the proposed expansion of this facility will not have a negative impact on the surrounding street network nor merit a full traffic impact study.

Should you have any questions or need additional information, please do not hesitate to contact me at 508-480-9900.

Sincerely,

BOHLER ENGINEERING

Drew Garvin