

October 3, 2022

TOHLB 22225

Township of Hillsborough  
Planning Board  
379 South Branch Road  
Hillsborough, NJ 08844

**RE: Supplemental Traffic Impact Assessment Review  
Homestead Rd. LLC  
189 & 203 Homestead Road  
Hillsborough, NJ  
Block 200.10, Lots 32 &33  
Application #: 21-PB-25-MS/MSP**

Dear Board Members:

We offer this supplemental review of the traffic impact assessment for the above referenced site in conjunction with our receipt of a traffic impact analysis (TIA) report prepared by Kenneth J. Hausman, PE, dated October 6, 2022 and received by our office on September 20, 2022.

The subject site consists of two parcels identified as Lot 32 and 33 in Block 200.10 in the Township of Hillsborough. The applicant proposes to demolish the existing buildings to construct two (2) warehouse buildings consisting of 368,995 and 168,304 square feet each. The 368,995 square foot warehouse will have 188 parking spaces, 75 trailer parking spaces, and 58 loading docks. The 168,304 square foot warehouse includes 96 parking spaces, 62 trailer parking spaces, and 29 loading docks.

The document "Traffic Impact Analysis for 201 Homestead Road Proposed Warehouse, Township of Hillsborough" was prepared by Dolan & Dean (dated December 22,2021) and submitted to the Planning Board as part development application. The 2021 Traffic Impact Analysis (TIA) was reviewed and found to be inconsistent with the submitted site plans in the following ways:

- TIA includes 6,000 SF office building
- Incorrect number of warehouse parking spaces (284 on plan, 289 in TIA)
- Incorrect number of truck parking spaces (137 on plan, 219 in TIA)

In addition, upon review of the trip generation calculations comments were generated requiring the Applicant to provide testimony regarding the anticipated operation of the site including anticipated tenants, hours of operation, and utilization of provided trailer parking and loading docks. The TIA estimated trip generation for the warehouses based on the *ITE Trip Generation Manual* and utilizing trip rates for Land Use 150 – Warehousing. The description of this land use is that it is "...primarily devoted to the storage of materials but may also include office and maintenance areas." The number of loading docks and truck parking spaces provided at each of the buildings is in excess of the Township requirements

and not consistent with those anticipated for buildings of their size exhibiting trip generation rates consistent with the ITE Land Use 150.

A review of the TIA prepared by Kenneth J. Hausman, PE similarly noted that the proposed warehouse did not reflect the characteristics consistent with Land Use-150 and that additional information regarding the proposed use of the site is needed to correctly evaluate the impacts on the local roadway network.

The applicant shall provide testimony regarding key issues such as the operation of the site and utilization of the loading docks and truck parking spaces, vehicle and truck trip generation, site trip distribution, and Level of Service and queueing at site driveways and study intersections.

### **Types of Warehouses**

A traditional warehouse is used for storing products/goods for longer periods, while distribution warehouses and fulfillment centers store products for relatively lesser periods and experience much greater instances loading and unloading, especially at fulfillment centers, which deliver goods direct to customers. The 11<sup>th</sup> Edition of the *ITE Trip Generation Manual* has six categories of warehouse designation and they are:

- 150 – Warehousing
  - Primarily devoted to the storage of materials but may also include office and maintenance areas.”
- 151 - Mini Warehouse
  - Typically, 00a building in which several storage units or vaults are rented for the storage of goods (“self-storage” facilities)
- 154 - High Cube Transload and Short-Term Warehouse
  - A transload facility typically has short storage duration, high throughput, and its operations are high efficiency. A short-term warehouse is a distribution facility often with custom/special features built into the structure for the movement of large volumes of freight with only short-term storage of products. These facilities tend to ship from retail to business, and to fulfillment centers, and typically do not deliver to end-users.
- 155 – High Cube Fulfillment Warehouse
  - Fulfillment centers are a type of distribution center that pick and pack items from shelves for individual delivery to “fulfill” online orders. They focus on quickly delivering goods to individual customers. A last-mile fulfillment facility is a smaller fulfillment facility serving the final leg of delivery and serve consumers, either individual households or the retail stores they shop at. They typically receive, pick, pack, kit, label, and deliver products to people’s doorstep in delivery vans. They are situated closer to consumer markets so individual items can be delivered quickly to people’s doorsteps.
- 156 – High Cube Parcel Hub Warehouse
  - A high-cube parcel hub warehouses typically serves as a regional and local freight-

forwarder facility for time sensitive shipments via airfreight and ground carriers. Some limited assembly and repackaging may occur within the facility.

- 157 – High Cube Cold Storage warehouse
  - Used primarily for the storage and/or consolidation of manufactured goods (and to a lesser extent, raw materials) prior to their distribution to retail locations or other warehouses and have substantial temperature-controlled environments for frozen food and other perishable products

Each of the warehouse types carries out a somewhat distinct activity and exhibit unique vehicle and truck trip generation rates and distribution characteristics. The testimony provided by the applicant will determine if the proposed warehouses are consistent with the standard warehouse definitions and/or whether site specific trip generation will have to be developed to reflect the proposed uses.

### **Mitigation**

Upon the initial review of the site application, it was recommended that Homestead Road be widened to provide an 18' half width along the frontage of the site with appropriate pavement transitions at the eastern end and western end up to the Route 206 Bypass overpass. In addition, the TIA identified a Level of Service (LOS)F on the westbound left turn from Homestead Road at the Route 206 traffic signal during the Build condition that be mitigated with a timing change.

The LOS F was identified as an existing condition that is worsened with the addition of site trips. The traffic signal is owned and maintained by the New Jersey Department of Transportation and any changes at the traffic signal will have to be approved by their Traffic division.

Upon the applicant providing the required testimony regarding the anticipated site operation and the determining the appropriate site trip generation, mitigation of the increased delay at the signalized intersection will have to be revisited and coordinated through NJDOT. In addition to the increased delay, the applicant will be required to evaluate the impact of the truck traffic on queueing at the intersection, particularly on the westbound approach of Homestead Road.

Please contact this office with any questions or comments.

Very truly yours,

**PENNONI ASSOCIATES, INC.**



Drew M. Di Sessa, P.E., P.P., C.M.E  
Board Engineer

DD/ss

cc: David K. Maski, PP, AICP, Township Planning Director  
Debora Padgett – Planning Board Clerk