

Ref: 8670

February 18, 2021

Mr. Peter Bemis
Engineering Design Consultants, Inc.
520 Hartford Turnpike
32 Turnpike Road
Southborough, MA 01772

Re: Response to Comments – February 4, 2021 Holliston Planning Board Meeting
Hopping Brook Business Park Traffic Analyses

Dear Peter:

Vanasse & Associates, Inc. (VAI) has prepared this letter in response to the comments that were voiced during the above-referenced meeting. In general, these comments were related to several areas, including use of specific Institute of Transportation Engineers (ITE) Land Use Code (LUC) data, Trip Projections, Traffic Increases, and Traffic Operations. These broad comment areas are addressed below. Also addressed is the central point that the current proposal results in a reduction of total developed area of the Park from 3,000,000 square feet (sf) to approximately 2,200,000 sf. **Therefore, the final build-out of the Park would represent a reduction in traffic activity of between 67 and 84 percent compared with what is currently approved through MEPA for the Park.**

Use of ITE LUC Data

The use of ITE data for site trip estimation is required by MEPA, MassDOT, and most municipalities. Within the ITE database are several Land Use Codes (LUCs) for warehouse-related and industrial-type uses. Information provided by the Applicant regarding potential tenants for the 800,000 sf building have indicated the use of LUC 150 – Warehouse as being the most appropriate code to use to estimate trips for the building. However, the trips for the building (and the build-out of the Industrial Park) have been developed using several methods, as shown below:

- January 2020 – FDOT/Others Alternative Methodology; 800,000 sf. Prepared by EDC.
- November 2020 – ITE LUC 150, Warehouse; 800,000 sf. Prepared by VAI.

During the meeting, a question was made as to why VAI “changed” the trip generation between “our” January report and the November report. The January 2020 memo was prepared by another consultant. This memo was reviewed by MassDOT, who questioned the trip generation and recommended a new analysis with revised trip generation estimates. Subsequent to this discussion, VAI was retained to prepare this new analysis which was documented in the November 2020 memo. This memo was reviewed and accepted by MassDOT as a replacement analysis for the January 2020 memo and allowed MassDOT to issue a Section 61 Finding for the 800,000 sf building.

With regard to trip generation and traffic analyses, the following is a list of additional scenarios that have been developed and analyzed for the subject 800,000 sf building and the remaining build-out of the Park, consisting of an additional 700,000 sf of space. This space was initially estimated at the same warehouse use but was revised based on comments from the Town Peer Review Consultant, MDM Transportation Consultants, Inc. (“MDM”). Additional analyses were conducted for both the incremental increase due to the 700,000 sf building as well as the cumulative total of 1,500,000 sf:

- January 2021– ITE LUC 150 Warehousing; 700,000 sf
- January 2021 – ITE LUC 130 Industrial Park; 700,000 sf
- January 2021 – ITE LUC 150 Warehousing; 1,500,000 sf
- January 2021 – ITE LUC 130 Industrial Park; 1,500,000 sf

Comments have been made that the use of High-Cube Transload or High-Cube Fulfillment Center land use codes are more appropriate or are a worst-case condition and should therefore be used. However, the Warehouse trip rates used in the analyses result in higher trips than those of the High-Cube Transload warehouse, and higher than one of the High-Cube Fulfillment Center warehouse types. The data on the other Fulfillment Center warehouse type, the High-Cube Fulfillment Center Warehouse – Sort category is based on between two and three studies, which is a very limited database for trip projections and could result in over-estimation of site traffic levels. By contrast, the data on Warehouse consists of between 29 and 47 studies.

MDM requested the analyses noted above as part of a two-phase Sensitivity Analysis and has noted they are satisfied with the results. Since the town’s peer consultant is satisfied with the analysis, this should eliminate the need for additional analyses.

Trip Projections

The Hopping Brook Business Park was originally reviewed through an Environmental Notification Form (ENF) with 3,000,000 sf of development to include office space, research and development (R&D), high technology assembly uses, and approximately 9,684 parking spaces anticipating 36,900 vehicle trips per day in 1982 (EOEA No. 4411 Environmental Notification Form). Changes in trip generation sources and calculations prepared for a Notice of Project Change filed in 2002 indicated a revision in daily trips to 17,904 daily trips.

The Park cannot reach the approved level of 3,000,000 sf based on changing demands for space and is expected to reach a maximum of 2,200,000 sf of mixed-use development. Using the Warehouse trip generation with the remaining build-out of 1,500,000 sf results in a maximum daily trip total of 5,918 trips. This is a reduction of 67 percent (84 percent in comparison with average daily trip of 36,900 vehicles) during an average weekday when compared with the previously projected daily trip totals.

Comments were made regarding the trip increases due to the Project, and how traffic was a “95 percent” increase at full buildout. This increase is correct, but only on Hopping Brook Road. In addition, the Park is more than doubling from its current size of 720,000 sf to a buildout level of 2,200,000 sf. On a size basis, the Park is increasing approximately 200 percent, yet traffic is only increasing 95 percent. This is due to the warehouse uses expected with the remaining 1,500,000 sf, which generate traffic at a less intensive level than the current mix of office, R&D, and other commercial uses in the Park. This also indicates that traffic levels at the previously identified 17,904 daily trip level will not be reached at the Park.



Traffic Increases

The 95 percent increase in daily traffic on Hopping Brook Road occurs because all of the Business Park traffic uses Hopping Brook Road, which functions as a driveway to the Park. Comments related to this increase being somehow out of proportion or excessively high do not reflect the reality of the Park size more than doubling. These comments also do not consider the previous estimates of the daily traffic volume on Hopping Brook Road, which at 17,904 daily trips would be an increase of nearly 500 percent over the existing volume. ***To be clear, the final build-out of the Park as contemplated represents a reduction in traffic activity of between 67 and 84 percent compared with what is currently approved through MEPA for the Park.***

In terms of increases on Washington Street, percentage changes due to the Project are considerably different. Washington Street east of Hopping Brook Road was observed to carry approximately 16,100 daily vehicles. Based on the proportion of volumes entering and exiting Hopping Brook Road to and from the west on Washington Street, it is likely that the daily traffic volume on Washington Street west of the intersection is higher than the number noted above for east of the intersection. Volumes were extrapolated to reach the value of 17,600 daily vehicles west of the intersection.

Table 1 below provides the results of calculations using the traffic volumes east of the intersection with the project trip distribution identifying trip increases on a volume and percentage basis.

Table 1
TRAFFIC VOLUME INCREASES – WASHINGTON STREET

Scenario	Total Daily Traffic Generation ^a (vpd) ^b	Increase to Washington Street ^c (West/East, vpd)	Increase to Washington Street ^d (West/East, percent)
800,000 sf Warehouse	1,310	917/393	5.2/2.4
1,500,000 sf Warehouse	2,462	1,723/739	9.8/4.6
1,500,000 sf Industrial Park	5,056	3,539/1,517	20.1/9.4

^aBased on previously provided daily trip calculations in November 2020 and January 28, 2021 documents provided by VAI.

^bVehicles per day.

^cBased on trip distribution previously identified and applied to daily trips for west/east of Hopping Brook Road.

^dBased on existing traffic level of 16,100 vpd on Washington Street east of intersection from ATR and extrapolated value of 17,600 vpd on Washington Street west of intersection.

Table 1 indicates that increases to Washington Street are expected to be much lower on a percentage basis than those increases to Hopping Brook Road. Increases on a percentage basis are in the single digits with the 800,000 sf warehouse parcel, remain in the single digits with the full buildout of 1,500,000 sf of warehouse, and only become greater for the highest Sensitivity Analysis case requested by MDM of 1,500,000 sf of Industrial Park. To be clear, the Applicant is only proposing warehouse uses for the remaining 1,500,000 sf left to be built out.



Traffic Operations

Comments were raised regarding traffic operations on Washington Street and other locations, including Cortland Street, South Street, Route 126, Highland Street, and west towards I-495. Comments included concerns with exiting driveways and Hopping Brook Road to Washington Street, based on the current conditions and traffic volumes.

It is important to note that, subject to receiving approvals from the town and MassDOT, the 800,000 sf warehouse building will be installing a traffic signal at the Hopping Brook Road/Washington Street intersection. Associated widening will also be provided to install a left-turn lane into Hopping Brook Road as well as separate left- and right-turn lanes on Hopping Brook Road. The presence of the traffic signal will introduce gaps into the traffic stream on Washington Street which will decrease the random arrivals of traffic flow and make entry into and exit from the Washington Street traffic flow easier than the current condition.

In terms of questions regarding impacts from the Project at other locations, this will be analyzed as the design process moves forward. There is a requirement from MassDOT and MEPA that an expanded traffic study will be required for the Notice of Project Change (NPC), itself which is required prior to issuance of an Access Permit from MassDOT. Indications from MassDOT and MEPA are that the updated NPC is expected to have the same scope of study as the initial NPC in 2002, which reviewed impacts at 12 intersections in Holliston and Milford. Questions regarding the impacts at other locations will be answered at that time.

Conclusions

This letter provides responses to the broad comment areas voiced by the public in the Planning Board meeting of February 4, 2021. The information contained herein documents the extensive analyses that have been prepared for both the 800,000 sf warehouse proposal and the full build-out of the Hopping Brook Business Park. These analyses have satisfied both MEPA and MassDOT officials, and also the Town's peer consultant. This letter also reiterates that the final build-out of the Park as contemplated represents a reduction in traffic activity of between 67 and 84 percent compared with what is currently approved through MEPA for the Park. Should you have any questions on the above information, feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read 'Scott W. Thornton', is written over a light blue circular stamp.

Scott W. Thornton, P.E.
Principal

Cc: File