

August 23, 2022

Devens Enterprise Commission
Mr. Neil Angus, AICP CEP, LEED AP
Environmental Planner
33 Andrews Parkway
Devens, MA 01434

RE: Nitsch Project #9419.52
King Street Properties
Bio-Manufacturing Campus
57 & 75 Jackson Road
Devens, MA

Dear Mr. Angus:

Nitsch Engineering is submitting this follow-up to the response to comments letter pertaining to the Transportation Impact and Access Study (TIR) completed by Vanasse Hangen Brustlin, Inc. (VHB) in July 2022. We have listed the responses that the Applicant provided with further information if required.

1. ***Please better describe the proposed number of parking spaces for this development.***

- Applicant Response: Noted. The report will be updated to better detail the parking space allocation for the two (2) sites as described below and illustrated on the site plan submission.

In summary, the “Base” Parking Plan for the 57 Jackson Road (including amenity) site will consist of 85 spaces, while the 75 Jackson Road site will consist of 400 spaces for a total of 485 spaces. This “Base” Plan will include all surface parking on the site. This will result in a 1.13/1,000-sf parking ratio on the combined 57 and 75 Jackson Road sites.

The “Garage Alternate” Plan offers a structured parking option that would provide a structure located entirely on the 75 Jackson Road site. The structure would provide 512 parking spaces (and would displace 112 surface parking spaces outlined in the “Base” alternative). In total, the “Garage Alternate” Plan would provide 85 parking spaces on the 57 Jackson Road site (consistent with the “Base” Plan) and 800 parking spaces on the 75 Jackson Road site (288 surface spaces and 512 structured spaces). This would result in a 2.07/1,000-sf parking ratio on the combined 57 and 75 Jackson Road sites.

- ***Peer Reviewer Follow-Up: Comment resolved.***

2. ***Please correct the fifth sentence in the description of the intersection of Jackson Road at Patton Road/Lake George Street on page 8 by replacing “Patton Road southbound approach” with “Jackson Road southbound.”***

- Applicant Response: Noted. The report has been updated.

- ***Peer Reviewer Follow-Up: Comment resolved.***

3. ***The Vehicular Crash History section on page 14 states that “...reported vehicular crash data for the study-area intersections was obtained from the Massachusetts Department of Transportation (MassDOT) for the years 2015 through 2019.” However, reviewing the Crash Summary table shows the crashes from 2014 to 2018. Please verify the correct years used.***

- Applicant Response: The table had incorrect year labels. Labels have been updated to reflect 2015-2019 crashes. No change in crash analysis was required.

- ***Peer Reviewer Follow-Up: Comment resolved.***

4. **Please explain why the peak hour of adjacent street traffic was used for the morning and evening peak hours, rather than the peak hour of the generator. Using the peak hour of the generator would result in significantly higher numbers of trips and a more conservative analysis. We recommend updating the trip generation using the peak hour of the generator.**

- Applicant Response: The previous three (3) traffic studies for this development have used the peak hour of the adjacent street approach as did the master planning elements for the campus. To be consistent with previous submissions, the same approach was used for these developments.

In recognizing that there may be more traffic generated by the site during off-peak commuter hours, and in order to provide accountability for the overall development, the Traffic Study notes that traffic monitoring for each of the various phases and driveways will take place following occupancy to confirm the traffic generation estimates provided in the Traffic Study/Studies. If needed, additional adjustments to signal timings and phasings, the TDM Plan, and other elements will be made if the projections are found to be inconsistent with the actual traffic generation of the facility/facilities. These monitoring efforts will be conducted as each of the various components of the overall development are occupied.

- **Peer Reviewer Follow-Up: Comment resolved. However, we recommend that the post-construction traffic monitoring be included as a condition by the DEC.**

5. **A review of the Appendices showed that the Applicant used the default value of 0.92 as peak hour factor (PHF) for the analysis, but no heavy vehicle percentages (HV%) were provided. Nitsch Engineering recommends revising the analysis to include the correct PHF and HV%.**

- Applicant Response: 0.92 PHF was only used for future conditions (2029 No-Build and Build). This is consistent with MassDOT Traffic Impact Assessment guidelines and reflects the general growth of traffic and peak spreading that typically takes place over time.

Similarly, a 2% heavy vehicle percentage was used as the default for the new driveways. A sensitivity analysis was run for the secondary driveway (trucks only) which assumed an overly conservative assessment of up to 100% heavy vehicles entering/exiting the driveway. The average vehicle delay increased 2 seconds for both entering/exiting vehicles while queues had no change. Additionally, a conservative 10% heavy vehicle factor was analyzed at the primary driveway for entering and exiting movements. Similarly, the average vehicle delay increased 2 seconds for both entering/exiting vehicles beyond what was presented in the original study. Overall, there are negligible impacts when considering heavy vehicles at the site driveways.

In order to be responsive to the comment, VHB will adjust the final Traffic Study's assumption to adjust the truck percentages to be in-line with those noted in the actual existing condition traffic counts. In most cases, this will reflect an increase from the 2% heavy vehicle percentages used in the future conditions to 4% on mainline roadways within Devens and, based on the information above, will not materially impact the findings of the study results.

- **Peer Reviewer Follow-Up: Comment resolved.**

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We are available to discuss this review in person with the Applicant. If the Commission has any questions, please call.

Very truly yours,

Nitsch Engineering, Inc.

A handwritten signature in blue ink, appearing to read "Nick H. Havan". The signature is stylized and includes a date "8/23/22" written in the upper right portion of the signature.

Nick H. Havan, PE, PTOE, ENV SP
Senior Transportation Engineer

NHH/ajc

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