



AK **Associates**

Ali R. Khorasani, P.E.

Traffic, Transportation & Civil Engineering

P.O. Box 804, Spencer, MA 01562, Tel: (508) 560-4041

June 9, 2024

Mr. Michael A. Ferris
120 Turnpike, LLC
118 Turnpike Road, Suite 300
Southborough, MA 01772

RE: Responses to VAI's Comments
Relative to Traffic Study for
Residential Development Project at 120 Turnpike Road

Dear Mr. Ferris:

In response to your request, I am pleased to forward this memorandum that contains my responses to the comments submitted on Monday, June 3, 2024, by the firm of Vanasse & Associates, Inc. (VAI), the peer reviewer for the town of Westborough, Massachusetts. In support of the comprehensive permit application to the town of Southborough, I am submitting the following responses relative to the comments pertaining to the Traffic Impact Study (TIS) dated September 2023 for the above referenced project. It should be noted however, the TIS was prepared following standard traffic engineering practice and was based on engineering principles and judgment, and knowledge of the local roadway network in the town of Southborough.

Comment T1

The data collection effort was completed following accepted standards; however, the adjustments to the raw traffic count data do not follow current guidelines. First, the September traffic counts should not be adjusted downward. It is customary to retain traffic count data that is above-average without reduction and to adjust the data only in the case where the data was collected during a “below-average” month or when evaluating the warrants for the installation of a traffic control signal. Second, MassDOT has provided updated guidance that no longer requires pandemic-related adjustment of traffic counts performed after March 2022 except in locations where the predominant land use consists of offices or similar uses.¹ Given that the predominant land use that is accessed by way of the study area intersection is office uses, that traffic volumes entering and exiting the driveway that serves 118/120 Turnpike Road should be adjusted (increased) to account for the vacancy of the existing office buildings at the time that the traffic counts were performed.

Response

The review Indicates that the traffic data should not be (is not customary) adjusted downward to obtain the average. However, the purpose of the exercise is to obtain an average month. Nonetheless, the difference wouldn't be significant to make any changes in the outcome of the study.

It also states that no adjustment related to the pandemic should be made (volumes shouldn't be increased), while at the same time the review asks for adjustments to reflect empty office spaces. The increases in the pandemic adjustments, when they went into effect, were intended to do just that, that is to account for empty office

spaces as many in the workforce started working from home. In fact, a measurable segment of those who started working from home continue to do so as both employers and employees have become accustomed to this practice. Regardless, higher traffic volumes as a direct result of the COVID-19 pandemic adjustment should result in evaluating the worst-case scenario.

Comment T2

A review of the MassDOT statewide High Crash Location List indicated that the Route 9 intersection with the driveway that serves 118/120 Turnpike Road is not identified as a Highway Safety Improvement Program (HSIP) eligible high crash location. Outside of the immediate intersection, the following intersections that will be impacted by the Project are identified as high crash cluster locations for the 2018-2020 reporting period and HSIP eligible:

- Route 9/Breakneck Hill Road/White Bagley Road*
- Route 9/Woodland Road*
- Route 9/Oak Hill Road/Central Street*

Given that the Route 9/Breakneck Hill Road/White Bagley Road and Route 9/ Oak Hill Road/Central Street intersections are critical to facilitating access to the Project due to the median barrier along Route 9, a review of the motor vehicle crashes that are occurring at these intersections should be undertaken and potential remedial measures identified that are commensurate with the identified impact of the Project at these intersections.

Response

Generally, we concur with the review when assessing the traffic impact of large developments. However, Given the small size of the proposed residential development that only generates 22 trips during morning peak hour and no more than 26 trips during afternoon peak hours, this project will have little or no impact on the intersections listed in the review comment particularly since they are anywhere from 1/3 of a mile to ½ mile away from the proposed site. Also, as stated in the report, traffic peaking characteristics of the residential development are opposite of the rest of the site which is office use. It is therefore unfair and unrealistic to impose the cost and responsibility of assessing and implementing improvements at the above-mentioned intersections on the applicant.

Comment T3

MassDOT's Transportation Impact Assessment (TIA) Guidelines require that the future conditions analysis horizon be established as a 7-year projection from the date of publication of the assessment. As such, the future condition horizon year should be adjusted to 2030. We agree with the 1.0 percent per year compounded annual background traffic growth rate, but note that Route 9 in Southborough is considered an urban (U) roadway and the urban roadway adjustment factors and growth rates should be used.

Response

We are in general agreement with the review. However, since this project does not require *massDOT* approval, a five-year projection into the future should suffice as it is standard practice for projects outside roadways under the *massDOT*

jurisdiction. Also, smaller projects like the proposed residential development are usually built and fully occupied within five years, whereas larger projects could take as long as seven years to be fully developed and operational. It should be noted that the *massDOT* has already indicated that there will be no requirements for access permits.

We agree with the review that Route 9 traverses through many urban communities. However, the section in front of the proposed site is not located within urban settings. Also, the use of R3 category roadways has a higher factor than U3 category roadways for seasonal adjustment. Consequently, resulting in higher volumes when compared to the U3 as suggested, thus resulting in evaluating the worst-case scenario. Again, given the small size of the proposed residential development that only generates 22 trips during morning peak hours and no more than 26 trips during afternoon peak hours, the use of either factor will not result in a measurable difference.

Comment T4

The Town of Southborough and MassDOT should be consulted concerning potential future development projects by others that may impact future condition traffic volumes and traffic patterns beyond those accounted for by the general background traffic growth rate and to identify planned roadway improvement projects in the area.

Response

We agree with the general premise of this comment especially when assessing the traffic impact of large developments such as Edgemere Crossing on Route 20 in Shrewsbury. It should however be noted that Route 9 in the vicinity of the proposed site is under *massDOT* control. As stated herein above, the *massDOT* has already responded that no access permits are required for the proposed development as its projected level of traffic volumes do not rise to that agency's standard thresholds. Furthermore, the impact of any future developments ought to be accounted for by both the COVID-19 pandemic adjustment and adjustment from the background traffic growth.

Comment T5

The Build condition traffic volumes should be updated to reflect the changes to the No-Build condition traffic volumes and the 2030 horizon year.

Response

Refer to response above. Also, the year 2030 horizon is not realistic for a project this size which generates insignificant amounts of traffic when compared to the Route 9 traffic volumes. The recommended year 2030 horizon would more appropriately apply to larger developments such as shopping centers and other major traffic generators, but not to the proposed 60-unit apartment building.

Comment T6

The traffic operations analysis should be revised to reflect the comments provided as a part of this assessment pertaining to the Existing, No-Build and Build condition traffic volumes.

Response

Same as above. Such adjustments are considered excessive for the proposed development without any measurable changes and the analyses' results should be very similar.

Comment T7

We would suggest consideration of advancement of the following improvements as a part of the Project, which are commensurate with the predicted impact of the Project on the transportation infrastructure and are focused on safety and encouraging the use of alternative modes of transportation to single-occupancy vehicles:

- 1. Define and implement safety-related improvements at the Route 9/Breakneck Hill Road/White Bagley Road and Route 9/Oak Hill Road/Central Street intersections that should be informed by a review of the MassDOT crash data for the intersections and limited to traffic signal timing adjustments and the installation of signs and pavement markings subject to receipt of all necessary rights, permits and approvals; and*
- 2. Implement a Transportation Demand Management (TDM) program that is inclusive of the following elements:*
 - Assign a transportation coordinator for the Project who may also have other responsibilities to coordinate the TDM program;*
 - Information regarding public transportation services should be made available to residents and include maps, schedules and fare information;*
 - A “welcome packet” should be provided to new residents providing the name and contact information for the transportation coordinator and detailing available public transportation services, bicycle and walking alternatives, and other commuting options;*
 - Work-at-home accommodations should be included within Project, and may take the form of meeting space and a business office in the common area;*
 - Secure bicycle parking should be provided consisting of both weather protected bicycle parking and exterior bicycle racks; and*
 - Consult with the MWRTA to discuss options to establish transit service to the Project.*

Response

1. As stated in response to Comment T2, the intersections cited in the review are located too far away from the proposed development that generates very little traffic, and therefore, should have little or no impact on these intersections. Therefore, it is unfair and unrealistic to impose the responsibility and cost of such improvements on the applicant especially since the proposed project generates inconsequential amounts of traffic.

2. It is acknowledged that some components of the Transportation Demand Management (TDM) program may be beneficial at the proposed residential development site as recommended by the reviewing engineer.

- A transportation coordinator should be considered.
- Although there are no MWRTA bus routes serving the area near the proposed project, information regarding MWRTA routes should be made available for residents who may want to explore the use of mass transit instead of driving their own cars.
- Although there are no bike lanes or bicycling facilities on Route 9 in the vicinity of the proposed site, and it is highly unlikely for bicyclists to ride on Route 9, it is recommended that a bicycle parking facility be provided on site.
- As recommended by the reviewing engineer, it would be advisable to consult with MWRTA to discuss the potential for providing transit service to the site. However, since presently MWRTA does not have a service route in the vicinity of the proposed site, and since the proposed development generates little traffic, it is unlikely MWRTA would consider such a service to be feasible.

In conclusion, although the reviewing engineer's comments are generally accepted standard practice, they are intended for larger projects with much more significant traffic impact. The proposed development is one that will have little or no negative impact on the area roadways as its level of anticipated traffic generation is minimal.

I trust the above responses will suffice. Please feel free to contact me if you have any questions or need additional information.

Sincerely,



Ali R. Khorasani

CC: George Bahnan