

Ref: 7719

November 16, 2018

Mr. Richard L. Seegel, Chair  
Zoning Board of Appeals  
Town of Wellesley  
525 Washington Street  
Wellesley, MA 02482

Re: Response to Transportation Peer Review Commentary  
Proposed Residential Community – 16 Stearns Road  
Wellesley, Massachusetts

Dear Chairman Seegel and Members of the Zoning Board of Appeals:

Vanasse & Associates, Inc. (VAI) is providing responses to the comments that were raised in the October 31, 2018 letter prepared by VHB on behalf of the Zoning Board of Appeals in reference to their review of the June 2018 *Transportation Impact Assessment* (the “June 2018 TIA”) prepared by VAI in support of the proposed residential development to be located at 16 Stearns Road in Wellesley, Massachusetts (hereafter referred to as the “Project”). Responses to the comments pertaining to the Site Plans will be provided by others under separate cover. Listed below are the comments that were identified in the subject letter pertaining to the June 2018 TIA that required a response followed by the requested information.

## 1.0 Introduction

**Comment #1 (PARKING):** *Generally, a parking ratio of 1.5-2.0 is desired for a residential project such as this one. The applicant’s ratio of 2.1 spaces/unit is acceptable. The Applicant should confirm the final number of spaces is consistent with what is shown on the plans.*

**Response:** The revised (October 19, 2018) Site Plans for the Project reflect parking accommodations for 51 vehicles, or a parking ratio of 2.1 spaces per residential unit.

**Comment #2 (STUDY AREA):** *The intersection of Worcester Street (Route 9) at Kingsbury Street/Pedestrian Crossing is part of the same signal system as the two U-turn locations on Worcester Street that are included within the study area. The Applicant should consider the Project’s impacts at this specific location as well.*

**Response:** The Project is expected to add between 5 and 8 additional vehicles crossing the Kingsbury Street pedestrian crossing during the weekday peak hours, or one additional vehicle every 7.5 to 12 minutes, a level of impact that would not result in an increase in motorist delays or vehicle queuing when the pedestrian phase is actuated at the intersection. Further, the predicted increase in traffic at the crossing that will result from the Project when the majority of the pedestrian crossings occur (observed to occur between 2:30 and 2:45 PM) will most likely be closer to one (1) to two (2) vehicles. The

Project is also not expected to result in a material increase in pedestrian actuations of the traffic signal system that would induce additional motorist delay along Route 9.

**Comment #2A (STUDY AREA): Based on a review of MassDOT safety data, this intersection is located within a 2013-2015 HSIP crash cluster along Route 9. VHB recommends that this location be evaluated to confirm that the proposed project does not negatively impact pedestrian & safety operations at this location.**

**Response:** The Kingsbury Street pedestrian signal and the associated crossing were recently reconstructed by MassDOT and included provisions to enhance safety at the crossing. As stated in response to Comment #2, the Project is expected to add between 5 and 8 additional vehicles crossing the Kingsbury Street pedestrian crossing during the weekday peak hours, or one additional vehicle every 7.5 to 12 minutes, with the predicted increases when the majority of the pedestrian crossings occur expected to be closer to one (1) to two (2) vehicles. Such increases would not result in a negative impact on pedestrian access or safety at the intersection.

Observations of pedestrian activity at the intersection indicate that the predominant pedestrian flows are southbound in the morning and northbound in the evening, reflecting the travel route of children to the Wellesley Middle School and the Sprague Elementary School. School children residing at the Project will not need to use the Kingsbury Street pedestrian crossing to access these schools.

## 2.0 Existing Conditions

**Comment #3 (TRAFFIC COUNTS): It appears that no traffic counts were conducted at the intersection of Francis Road at Stearns Road, and that an assumption was made that no existing trips are entering and exiting Stearns Road during the peak periods. Please explain why no counts were conducted at this location and justify the assumption that no existing trips are entering existing to/from Stearns Road during the peak hours.**

**Response:** There are eight (8) homes along Stearns Road, including the home that occupies the Project site, a level of development that would not produce a significant volume of traffic that would warrant a formal analysis. That being said, the combined volume of traffic produced by the homes along both Stearns Road and Francis Road was measured at the intersection of Route 9 at Francis Road.

**Comment #4 (STERNS ROAD): Stearns Road is a narrow public way that dead ends near and in front of the Proposed development. The inability for vehicles (particularly larger sized) to enter, travel to the project site, and reverse direction should be included. As a dead-end roadway, the ability to reverse direction appears to be limited to entering private driveways and/or backing out the entire length of the roadway to Francis Road. The Applicant should provide some commentary on the adequacy of Stearns Road to provide consistent and safe two-way operations for a residential project such as is being proposed and discuss consistency with the Town of Wellesley's roadway/subdivision standards.**

**Response:** The existing width of the traveled-way (paved area) along Stearns Road varies from 21 to 23-feet along its alignment, a width that is sufficient to accommodate two-way travel. We also note that on-street parking is prohibited along both sides Stearns Road. These

existing accommodations are sufficient to support access to the Project site and the existing residences along Stearns Road given the low-volume, low speed environment of the roadway. The driveway that will provide access to the parking garage that will serve the Project has been designed to allow a school bus, fire truck or other vehicle to enter the driveway in order to reverse direction and exit Stearns Road, and represents an improvement over current conditions.

***Comment #5 (TRANSIT): The MWRTA Route 8 has been modified and no longer stops at Linden Square. The closest this route comes to this site is along Route 16.***

**Response:** No response required.

***Comment #6 (STUDY AREA): As explained in Comment #2A, the intersection of Worcester Street at Kingsbury Street/ Pedestrian Crossing is not included in the study area but is located between two of the study area intersections. This location is located within a 2013-2015 HSIP crash cluster, and we recommend including it within the study to ensure that the proposed project does not negatively impact pedestrian operations at this location.***

**Response:** See response to comments #2 and #2A.

### **3.0 Future Conditions**

***Comment #7 (FUTURE TRAFFIC GROWTH): The study indicates that 2017 existing volumes were grown seven-years to year 2025; however, seven years of growth would extend only to 2024.***

**Response:** The June 2018 TIA states that the existing traffic volumes presented therein were projected seven-years from the current year (2018), which would be 2025.

***Comment #8 VHB concurs with the manner in which all the above data is presented. The information is consistent with the recommended practices of the ITE and the resulting automobile trips all appear to be accurately presented.***

**Response:** No response required.

***Comment #9 (EXISTING SITE CREDIT): The study indicates that no credit was taken for the existing single-family residence on the site; however, the Existing Conditions Narrative indicates that the site is currently vacant. Please clarify [if] the site was vacant at the time of that the traffic counts were conducted, in September 2017.***

**Response:** The existing home that occupied the Project site was vacant at the time that the traffic counts that form the basis of the June 2018 TIA were completed (September 2017).

### **4.0 Intersection Capacity Analysis**

***No comments were provided that required a response.***

## 5.0 Sight Distance Evaluation

**Comment #10 (SIGHT DISTANCE):** *The applicant should include a sight distance evaluation for the intersection of Worcester Street (Route 9) at Francis Road, as all of the exiting site generated trips will exit through this location. VHB's field visit indicated that sight lines were limited at this location, requiring vehicles to pull up and almost into the traveled way to be able to see oncoming traffic. Should sight lines be compromised at this location, discussions with MassDOT may be needed and helpful in alleviating this potential safety issue.*

**Response:** Sight distance measurements to and from Francis Road at its intersection with Route 9 were completed following the methodology established by the American Association of State Highway and Transportation Officials (AASHTO)<sup>1</sup> and were assessed based on the posted speed limit along Route 9 (50 mph) given that the measured 85<sup>th</sup> percentile vehicle travel speed along Route 9 as documented in the June 2018 TIA was found to be below the posted speed limit (47 mph in the eastbound direction).

The measured sight line along Route 9 approaching Francis Road was found to be 440-feet, where a minimum line of sight of 425 feet is required for an approach speed of 50 mph. The measured line of sight for a motorist exiting Francis Road and looking to the west was found to be limited to 182-feet by an existing solid vinyl fence that is situated on the northwest corner of the Route 9/Francis Road intersection. An initial review of the layout plan for Route 9 confirms that the subject fence is located on private property and not within the public right-of-way. Sight lines from Francis Road improve to 650+ feet when the motorist is positioned approximately 10-feet from the edge of the traveled-way on Route 9. Given that marked shoulders are provided along Route 9, a motorist exiting Francis Road does have the ability to pull forward to observe approaching vehicles without extending into the curbside travel lane along Route 9. That being said, the Applicant will consult with MassDOT to discuss the installation of an intersection ahead warning sign (graphic symbol) in advance (west) of Francis Road.

**Comment #11 (SIGHT DISTANCE):** *We are in general agreement with the methodology that was used to develop the analysis and the findings. While there is expected to be only minimal traffic at the project frontage given the nature of where the site is located along Stearns Road, the applicant should still practice good engineering judgment and illustrate sight triangle areas for the Project site driveways on the Site Plans along with a note to indicate: "Signs, landscaping and other features located within sight triangle areas shall be designed, installed and maintained so as not to exceed 2.5-feet in height. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed."*

**Response:** The sight triangle areas and the requested note will be added to the Site Plans.

<sup>1</sup>*A Policy on Geometric Design of Highway and Streets, 7<sup>th</sup> Edition; American Association of State Highway and Transportation Officials (AASHTO); Washington D.C.; 2018.*

## 6.0 Conclusions & Recommendations

### Project Access

**Comment #12 (PARKING):** *The engineering plans indicate that the circular drive aisle is just 20-feet wide, with perpendicular “head in” parking spaces. Ease of access to these spaces should be demonstrated using turning movement software (AutoTurn ©) or similar.*

**Response:** The circular drive will be increased in width to 24-feet in order to facilitate parking maneuvers in this area.

**Comment #13 (SIGNAGE):** *The Applicant should add a similar note to the site plans that all signs and pavements markings within the Site should conform to the MUTCD.*

**Response:** The requested note will be added to the Site Plans.

**Comment #14 (SIDEWALKS):** *The Applicant should confirm with the School District that the small connection to the Sprague School will be completed on the Town of Wellesley side of the property line.*

**Response:** The Applicant is continuing to discuss formalization of the connection to the Sprague School with the Town and the School Department; however, we note that there is an existing path to the school that follows the same alignment.

**Comment #15 (PICK UP/DROP OFF LOCATIONS):** *The Applicant should provide an update to the Board on the discussions with the Town’s School Department on the placement of a school bus (and other transit services). Stearns Road is not wide enough for a school bus to travel down and pick up students, so a provision of an adequate pick up location should be illustrated and confirmed with the school bus department.*

**Response:** To the extent that children will be bused from the Project site, the driveway that will provide access to the parking garage that will serve the Project has been designed to allow a school bus, fire truck or other vehicle to enter the driveway in order to reverse direction and exit Stearns Road. Alternatively, children will walk to the bus stop that accommodates children that reside along Stearns Road and Francis Street that are transported by bus.

**Comment #16 (SIGHT DISTANCE):** *See comment #10.*

**Response:** See response to comment #10.

**Comment #17 (ELECTRIC VEHICLE CHARGING STATION):** *The Applicant should provide an update to the Board on the number and location of any electric vehicle charging stations within the garage.*

**Response:** The number and location of the electric vehicle charging stations is being advanced as a part of the pending revisions to the Site Plans.

## Transportation Demand Management

**Comment #18 (TDM RECOMMENDATIONS):** *A number of the TDM recommendations require the owner to become a member of MassRIDES. We recommend including the requirement to become a member as part of the TDM plan.*

**Response:** The Applicant will accept a condition requiring that the owner or property manager become a MassRIDES partner.

**Comment #19 (TDM RECOMMENDATIONS):** *There are a number of recommendations in the TDM section (and throughout the Study in general). Should the Board elect to consider applying conditions to the Project's approval, the recommendations outlined within the TDM section (and elsewhere) should be memorialized.*

**Response:** The Applicant will accept a condition requiring advancement/implementation of the recommendations that are presented in the June 2018 TIA.

**Comment #20 (BICYCLE PARKING ACCESS):** *The TDM section of the study indicates that secure bicycle parking will be provided within the building; however, the architectural plans do not indicate where this parking area will be located. The Applicant should identify where bicyclists can find secure, weather protected bicycle parking spaces.*

**Response:** The number and location of bicycle parking spaces that are to be provided within the parking garage is being refined as a part of the revisions to the Site Plans.

We trust that this information is responsive to the comments that were raised in the October 31, 2018 letter from VHB concerning their review of the June 2018 TIA prepared in support of the Project. If you should have any questions or would like to discuss our responses in more detail, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.



Jeffrey S. Dirk, P.E., PTOE, FITE  
Principal

*Professional Engineer in CT, MA, ME, NH, RI and VA*

JSD/jsd

cc: R. Nagi, P.E. – VHB (via email)  
J. Derenzo – J. Derenzo Properties, LLC (via email)  
G. Engler – SEB, LLC (via email)  
File