

Ref: 7463

January 23, 2025

Ms. Alison Manugian
Community Development Director
Town of Dracut
62 Arlington Street
Dracut, MA 01826

Re: Response to Transportation Peer Review #3
Proposed Multifamily Residential Development – Murphy’s Farm (231 Wheeler Street)
Dracut, Massachusetts

Dear Alison:

Vanasse & Associates, Inc. (VAI) is providing responses to the comments that were raised in the January 13, 2025 *Transportation Peer Review #3* memorandum prepared by VHB concerning their review of the December 23, 2024 *Response to Transportation Peer Review #2* letter (the “December 2024 RTC Letter”) that was prepared by VAI in support of the proposed multifamily residential development to be known as Murphy’s Farm and located at 231 Wheeler Street in Dracut, Massachusetts (hereafter referred to as the “Project”).

VHB’s memorandum has closed-out their questions and comments pertaining to the Transportation Impact Assessment and supplemental analyses that has been prepared in support of the Project, including the analysis of the Project’s impact on the transportation infrastructure and the development of remedial measures to off-set the predicted impacts. As noted by VHB, the Applicant has committed to the implementation of a comprehensive transportation improvement program that includes physical improvements to address existing deficiencies that are unrelated to the Project, as well as measures that will afford safe and efficient access to the Project site.

VHB has requested clarity as to the timing of implementation of the specific improvement measures, particularly those where the Applicant has committed to providing a “fair-share” cost allocation for capacity related enhancements. Listed below is a summary of the transportation-related improvements as identified in VHB’s memorandum followed by clarifying information as to the scope and timing of the improvements. Responses to the “Site Plan Comments” are currently being prepared and will be submitted by the Project’s Civil Engineer under separate cover.

Pedestrian Connectivity

Comment: *The Applicant noted that they will discuss the need for improving existing pedestrian accommodations on Elizabeth Drive and Poppy Lane with the Town of Dracut. VHB recommends that the Applicant coordinate with the Town to improve the connectivity of the sidewalk infrastructure along both roadways. Specifically, connectivity should be provided between the existing asphalt sidewalks on Poppy Lane and Rinzee Road and the existing asphalt sidewalks on Elizabeth Drive and Wilshire Circle. The updated site plans should also clearly show how the on-site pedestrian facilities*

connect with the existing sidewalks on Elizabeth Drive and Poppy Lane. The specific terms of the agreement for implementing the pedestrian improvements should be codified in the Conditions of Approval for the Project.

Response: *The Site Plans will be revised to include the sidewalk connections to Poppy Lane, Rinzee Road and to the existing sidewalks on Elizabeth Drive and Wilshire Circle. The connections and the associated sidewalk improvements will be designed and constructed as a part of the Project commensurate with the construction phase that includes the roadway infrastructure connections to these roadways and subject to receipt of all necessary rights, permits and approvals.*

Route 113 at Wheeler Street Improvements

Comment: *In response to prior comments, the Applicant prepared a collision diagram for the intersection of Route 113 at Wheeler that indicates the predominant types of collisions in the westbound direction on Route 113 are rear-end crashes. The Applicant also conducted a left-turn lane warrant analysis at the intersection for the Route 113 westbound left-turn movement, which indicates that a left-turn lane is warranted under future No-Build and Build conditions. The Applicant stated that they will undertake the following improvements at the intersection, subject to obtaining the necessary rights, permits, and approvals:*

- > Intersection ahead warning signage will be installed on the Route 113 approaches to indicate the presence of Wheeler Street.*
- > Vegetation will be trimmed and/or removed within sight triangle areas of the intersection within the public right of way.*
- > Remove the stop-sign along the Wheeler Street northbound approach that is currently located on a utility pole and install a new sign on a break-away signpost and a new marked stop-line.*
- > Provide a “fair-share” cost contribution for the design and construction of capacity related improvements at the intersection such as the installation of a westbound left-turn lane, widening of Wheeler Street northbound to accommodate left and right-turn lanes, and/or a traffic signal (if warranted). The contribution will be based on the predicted increase in traffic volumes generated by the Project at the intersection over No-Build conditions. The Town of Dracut and City of Methuen should determine if the fair-share cost contribution is acceptable in lieu of the Applicant funding and constructing the improvements.*

Based on the findings of the crash evaluation and the left-turn warrant analysis, VHB recommends that at least an exclusive left-turn lane be installed along Route 113 westbound. The analysis indicates that this movement currently exceeds the volume thresholds to justify an exclusive left-turn lane and that there are existing safety deficiencies that could be exacerbated by adding Project-related traffic to the left turn movement.

VHB notes that the intersection of Route 113 at Wheeler Street is located within the City of Methuen and is under MassDOT jurisdiction. Any improvements at the intersection will be subject to their review and approval. Additionally, the Applicant should review the findings of the analysis with the City of Methuen and MassDOT to

seek their input relative to next steps and report back to the Town of Dracut on the feedback that is received.

Response:

The Applicant has identified a comprehensive list of improvements that will be undertaken to address the predominant crash pattern at the intersection, which can be attributed to the sight line restrictions on the Route 113 westbound approach to Wheeler Street. The addition of a left-turn lane, while desirable to improve traffic flow and capacity, is secondary to the sight line improvements. The Applicant is committed to implementing the safety improvements as identified by VHB that entail vegetation maintenance, signs and pavement markings prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals.

In addition and consistent with the goal of advancing a longer-term improvement for the intersection, the Applicant will coordinate with the Town of Dracut, the City of Methuen and MassDOT to prepare and apply for a MassWorks or HousingWorks grant to facilitate the completion of geometric improvements at the intersection. This work effort will entail the preparation of an Intersection Improvement Study (IIS) with supporting analyses, a conceptual improvement plan and preliminary construction cost estimate to support the funding request. The IIS will be prepared and submitted to the Town of Dracut and the City of Methuen within 6-months of the filing of the Comprehensive Permit Decision approving the Project.

Wheeler Road at Wilshire Circle and Paddock Lane Improvements

Comment:

The Applicant should design and construct the following improvements prior to the issuance of a Certificate of Occupancy for the Project, as outlined in the response letter:

- > Install new 12-inch wide, high-visibility stop-lines on the Wilshire Circle and Paddock Lane approaches*
- > Replace and relocate the stop sign on the Wilshire Circle approach adjacent to the stop line*
- > Install a stop sign on the Paddock Lane approach adjacent to the stop line*
- > Install intersection ahead signs on the Wheeler Road eastbound approach to the intersection*

Response:

The Applicant will design and construct the identified improvements prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals.

Wheeler Road at Wilshire Circle (East Location) Improvements

Comment:

The Applicant should design and construct the following improvements prior to the issuance of a Certificate of Occupancy for the Project, as outlined in the response letter:



- > *Install a new 12-inch wide, high-visibility stop-line on the Wilshire Circle approach*

The Applicant should also coordinate with the Town of Dracut and the adjacent property owners to establish sight line easements to allow for the maintenance of adequate sight lines at the intersection.

Response:

The Applicant will design and construct the identified improvement prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals, and will coordinate with the Town of Dracut and the adjacent property owners to establish sight line easements to allow for the maintenance of adequate sight lines at the intersection.

Wheeler Street at Rinzee Road Improvements

Comment:

The Applicant should design and construct the following improvements prior to the issuance of a Certificate of Occupancy for the Project, as outlined in the response letter:

- > *Install a new stop sign and a new 12-inch wide, high-visibility stop-line on the Rinzee Road approach*

The Applicant should also coordinate with the Town of Dracut, the City of Methuen, and adjacent property owners at the intersection to establish sight line easements to allow for the maintenance of adequate sight lines at the intersection.

Response:

The Applicant will design and construct the identified improvement prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals, and will coordinate with the Town of Dracut the City of Methuen, and the adjacent property owners to establish sight line easements to allow for the maintenance of adequate sight lines at the intersection.

Wilshire Circle at Elizabeth Drive Improvements

Comment:

The Applicant should design and construct the following improvements prior to the issuance of a Certificate of Occupancy for the Project, as outlined in the response letter:

- > *Install a new stop sign and a new 12-inch wide, high-visibility stop-line on the Elizabeth Drive approach*

As noted above, the Applicant should also coordinate with the Town to provide pedestrian connectivity between the sidewalks along Elizabeth Drive and Wilshire Circle.

Response:

The Applicant will design and construct the identified improvement prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals, and will coordinate with the Town to provide pedestrian connectivity between the sidewalks along Elizabeth Drive



and Wilshire Circle. These connections will be shown on the Site Plans for the Project.

Rinzee Road at Poppy Lane Improvements

Comment: *The Applicant should design and construct the following improvements prior to the issuance of a Certificate of Occupancy for the Project, as outlined in the response letter:*

- > *Install a new stop sign and a new 12-inch wide, high-visibility stop-line on the Rinzee Road approach to Wheeler Road*
- > *Install a new stop sign and a new 12-inch wide, high-visibility stop-line on the Rinzee Road approach to Poppy Lane*

As noted above, the Applicant should also coordinate with the Town to provide pedestrian connectivity between the sidewalks along Rinzee Road and Poppy Lane.

Response: **The Applicant will design and construct the identified improvements prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals, and will coordinate with the Town to provide pedestrian connectivity to Rinzee Road at Poppy Lane. These connections will be shown on the Site Plans for the Project.**

Wheeler Street at Wheeler Road Improvements

Comment: *The Applicant should coordinate with the Town to trim and/or remove vegetation within the sight triangle areas at the intersection to provide the required stopping sight distances along Wheeler Street. The Applicant should also coordinate with the Town to determine the need for regrading the embankment along the west side of Wheeler Street north of Wheeler Road. The specific improvements to address sight line deficiencies at the intersection should be codified into the Conditions of Approval for the Project.*

Response: **The Applicant will coordinate with the Town to trim and/or remove vegetation within the sight triangle areas at the intersection to provide the required stopping sight distances along Wheeler Street and to determine the need for regrading of the embankment along the west side of Wheeler Street north of Wheeler Road. These improvements will be completed prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals.**

Route 110 at Wheeler Street

Comment: *The Applicant should design and construct the following improvements prior to the issuance of a Certificate of Occupancy for the Project, as outlined in the updated Traffic Impact Assessment:*



- > *Reapply the pavement markings for the stop line on the Wheeler Street approach, the crosswalk across Wheeler Street, and the centerline pavement markings along the Wheeler Street approach for a distance of 100 feet*

The Applicant conducted a traffic signal warrants analysis (TSWA) at the intersection of Route 110 at Wheeler Street and indicated that based on existing traffic volumes, a traffic signal may be warranted. Traffic volumes collected in October 2024 meet the thresholds for Warrants 1, 2, and 3 (the eight-hour, four-hour, and peak-hour traffic volume warrants). The Applicant noted that they are willing to provide a fair-share contribution based on the overall Project-related increase in traffic volumes for funding the design and construction of a traffic signal at this location, should MassDOT determine that a traffic signal is needed at this location. VHB also notes that this intersection is located within a larger reconstruction project along Route 110 that is being undertaken by MassDOT and there are no plans for signalization as part of this project. VHB recommends that future traffic volumes and the need for a traffic signal at this intersection be reviewed as part of a post-construction traffic monitoring program.

Response:

The Applicant will design and construct the identified improvements prior to the issuance of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights, permits and approvals. Given that this intersection is included as a part of MassDOT's Route 110 reconstruction project, the Applicant will monitor traffic volumes and operating conditions at this intersection as a part of the Post-Occupancy monitoring program in-lieu of the "fair-share" monetary contribution.

Post-Construction Traffic Monitoring Program

Comment:

The Applicant committed to conducting a post-development traffic monitoring study six months after the Project reaches 50 percent occupancy and three months after 100 percent occupancy. VHB recommends that the scope and timing of the post-construction monitoring study be developed in consultation with the Planning Department prior to initiating the study such that any operational or safety/circulation issues that may be evident after the Project opens could be incorporated into the scope of the study.

Response:

The Applicant agrees to undertake a Post-Occupancy Traffic Monitoring Program for the Project commencing at 50 percent occupancy and again three months after 100 percent occupancy. The scope of the monitoring program will be provided to the Town of Dracut Community Development Director for review and approval prior the commencement of the data collection effort that forms the basis of the Post-Occupancy Traffic Monitoring Program. The results of the Post-Occupancy Traffic Monitoring Program will be submitted to the Community Development Director within three months of the data collection effort. The purpose of the Post-Occupancy Traffic Monitoring Program is to document the measured traffic volumes and travel patterns associated with the Project as constructed to the data that formed the basis of the Transportation Impact Assessment and subsequent supporting documents, and to define the change in traffic volumes and traffic operations at the Route 110/Wheeler Street and Route 113/Wheeler Street intersections.



Ms. Alison Manugian

January 23, 2025

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We trust that this information is responsive to the comments that were identified in the January 13, 2025 memorandum prepared by VHB concerning their latest review 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.

A handwritten signature in black ink that reads "Jeffrey S. Dirk".

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

Managing Partner

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

JSD/jsd