Vanasse & Associates inc
Transportation Engineers & Planners

35 New England Business Center Drive
Suite 140
Andover, MA 01810

Ref: 8591

June 24, 2020

Ms. Mary F. Savage Dunham, AICP, CFM
Director of Community Planning
Town of Hingham
210 Central Street
Hingham, MA 02043

Re: Supplemental Traffic Engineering Peer Review
Proposed Package Delivery Station – 100 Industrial Park Road
Hingham, Massachusetts

Dear Mary:

Vanasse & Associates, Inc. (VAI) has completed a review of the supplemental materials submitted on behalf of JEB Group LLC (the "Applicant") in support of the proposed renovation of the existing warehouse building located at 100 Industrial Park Road in Hingham, Massachusetts, to accommodate a package delivery station (hereafter referred to as the "Project"). This information was prepared in response to the comments that were raised in our May 11, 2020 review letter and consisted of the following materials:

1. *Traffic Study*, Proposed Delivery Station Building, 100 Industrial Park Road, Hingham, MA; BL Companies; June 2020;
2. *Land Development Plans*, Issued for Town of Hingham Conservation Commission and Planning Board Approval, 100 Industrial Park Road, Hingham, MA; BL Companies; March 6, 2020, last revised June 1, 2020 (the "Site Plans"); and
3. *Response to Traffic Peer Review Comments*, 100 Industrial Park Road, Proposed Shipping Warehouse; BL Companies; June 1, 2020.

Based on our review of supplemental information, we are generally satisfied that the Applicant has addressed the comments that were raised in our May 11, 2020 letter. We have requested that the Applicant review the trip calculations for the Project for consistency with the operational information that is presented in the June 2020 Traffic Study and that they complete minor revisions to the Land Development Plans with regard to signs and the sight triangles. In addition, we have provided suggested conditions of approval for consideration as a part of any approvals that may be granted for the Project.

For reference, listed below are the comments that were raised in our May 11, 2020 letter followed by a summary of the response submitted on behalf of the Applicant, with additional comments indicated in **bolded** text for identification.

February 2020 Traffic Study

Comment T1: *A letter should be provided by the Professional Engineer attesting to their oversight in preparing the February 2020 Traffic Study and providing their Massachusetts Professional Engineer Registration number and discipline.*

Response: The February 2020 and subsequent June 2020 Traffic Study were prepared under the direction of Michael Dion, MA P.E. No. 54469, Civil.

No further response required.

Comment T2: *The Project may require the issuance of a State Highway Access Permit for so called "indirect access" to Route 3 by way of Derby Street and, as such, may be subject to a filing under the Massachusetts Environmental Policy Act (MEPA). The Applicant should provide a review of the MEPA Transportation thresholds as they relate to the Project and consult with the Massachusetts Department of Transportation (MassDOT) to determine if a State Highway Access Permit will be required.*

Response: MassDOT has indicated that a State Highway Access Permit will not be required for the Project and, as such, the Project will not be subject to MEPA.

No further response required.

Comment T3: *At a minimum, the study area should be expanded to include the Derby Street/Old Derby Street intersection given that the traffic signals within the Route 3/Derby Street interchange are coordinated with the traffic signal at the Derby Street/Old Derby Street intersection and proximity of the Old Derby Street intersection to the Route 3 northbound ramps.*

Response: The study area evaluated in the June 2020 Traffic Study has been expanded to include the Derby Street/Old Derby Street and Derby Street/Derby Street Shoppes driveway intersections.

No further response required.

Comment T4: *The description of existing conditions within the study area should be updated to reflect the improvements that have been completed along Derby Street.*

Response: The description of existing conditions has been updated to reflect the current roadway and intersection configuration.

No further response required.

Comment T5: *The raw traffic counts and back-up data for the seasonal adjustment should be provided for review in order to validate the existing conditions traffic volumes. We note that it is not customary to reduce traffic volumes when the seasonal variation data indicates that traffic volumes during the month in which the traffic counts were performed may be representative of above-average conditions. We would suggest that the raw, unadjusted traffic count data be used and appropriately balanced between the study intersections.*

Response: The raw traffic count data was provided for the study are intersections that were assessed in the February 2020 Traffic Study; however, **complete data was not provided for the additional study area intersections. That being said, we were able to validate the traffic counts at these intersections from data that was collected for the Ocean Honda project.**[1]

The June 2020 Traffic Study includes traffic counts and analyses for a weekday midday peak period (11 AM – 1 PM) given that the Applicant has adjusted the departure time for the package delivery vehicles until after 11 AM in order to minimize impacts during peak traffic volume periods. The Applicant's engineer did not provide an explanation as to how the midday peak-hour traffic volumes were developed at the expanded study area intersections as the studies from which the traffic count data was obtained did not include weekday midday traffic counts; however, we find the data to be reasonable based on a comparative assessment of the peak-hour traffic counts at the Derby Street/Route 3 ramp intersections.

No further response required.

Comment T6: A 48-hour automatic traffic recorder count should be conducted on Industrial Park Road in the vicinity of the Project site to include vehicle travel speed data in order to document existing traffic flow patterns and to allow for an evaluation of sight distances.

Response: Additional traffic count data was not obtained due to the current restrictions on business operations and employment levels associated with the Governor's phased "Reopening Massachusetts" strategy. As such, the Applicant's engineer assumed an 85th percentile travel speed of 10 mph above the posted speed limit for the purpose of evaluating sight distances (discussion follows).

No further response required.

Comment T7: A description of pedestrian and bicycle facilities within the study area should be provided in order to understand the availability of these accommodations and their relationship to the Project site.

Response: A description of pedestrian and bicycles facilities was provided in the June 2020 Traffic Study. A sidewalk is provided along the west side Pond Park Road between Derby Street and the south driveway to 5 Pond Park Road, a distance of approximately 900 linear feet, but does not extend to the Project site. Pond Park Road and Industrial Park Road provide a roadway width of between 25 and 30-feet, which does not afford a consistent width to support bicycle travel.[2]

No further response required.

[1] *Traffic Impact Study*, Honda Dealership, 1 Old Derby Street, Hingham, MA; McMahon Associates, Inc.; February 2020.
[2] A minimum combined travel lane and paved shoulder width of 14-feet is required to support bicycle travel in a shared traveled-way condition.

Comment T8: *A description public transportation services within the study area should be provided in order to understand the availability of these accommodations and their relationship to the Project site.*

Response: A description of public transportation services within the study area was provided as a part of the June 2020 Traffic Study. Regularly scheduled public transportation services are not currently provided within the study area or to the Project site.

No further response required.

Comment T9: *Recognizing that the Derby Street corridor was recently reconstructed as a part of the Derby Street improvement project and included specific traffic control and geometric improvements to address both traffic operations and safety, we would recommend that a safety assessment be completed as a part of a Traffic Monitoring Program for the Project.*

Response: The Applicant's engineer provided motor vehicle crash data for the study area intersections for the period 2016 through 2019. We note that crash data has been validated by MassDOT through 2017, with data for 2018 and 2019 available, but not reviewed. As such, pre-2017 crash data should be used when evaluating crash statistics.

Motor vehicle crash rate calculations were not provided for the study area intersections as required by MassDOT. That being said, the recent improvements that have been completed along the Derby Street corridor and included the study area intersections incorporated specific measures that are intended to enhance safety and reduce the frequency of occurrence of motor vehicle crashes. As such, we have recommended that a safety assessment be included as a part of the Traffic Monitoring Program for the Project (discussion follows).

No further response required.

Comment T10: *The future condition traffic volume projections should be revised to reflect a 2027 horizon year in accordance with MassDOT Transportation Impact Assessment (TIA) Guidelines.*

Response: A future conditions horizon year of 2027 was established and evaluated as a part of the June 2020 Traffic Study.

No further response required.

Comment T11: *The Town of Hingham Director of Community Planning and the Town of Weymouth Planning & Community Development Department should be contacted in order to obtain a list of specific development projects by others that are expected to be complete with 7-year planning horizon. At a minimum the future condition traffic volumes should include trips associated with: i) reoccupancy of vacant space located within South Shore Park; ii) the expansion of the Derby Street Shoppes; and iii) trips attributable to the Union Point (Southfield) mixed-use development. In addition, a review the build-out analysis contained in the South Hingham Transportation Master Plan should be completed.*

Response: The Applicant's engineer consulted with the Towns of Hingham and Weymouth to obtain information on specific development projects by others to be included in the future condition traffic volumes. Based on these discussions, traffic volumes associated with the

expansion of the Derby Street Shoppes and the Ocean Honda project (withdrawn without prejudice) were included in the 2027 traffic volume projections. In addition, a compounded annual background traffic growth rate of 1.0 percent per year was used to account for general traffic growth.

In addition, the Applicant's engineer reviewed the Union Point (Southfields) and South Shore Park projects, and the South Hingham Study Group Report. Traffic volumes associated with these developments were determined to be reflected in the background traffic growth rate or were not included since a formal development proposal has not been advanced at this time.

No further response required.

Comment T12: Back-up data should be provided for the trip-generation calculations including a breakdown of vehicle arrival/departure volumes over the day to substantiate the peak-hour trip estimates.

Response: The Applicant provided a detailed breakdown of the trips expected to be generated by the Project over a 24-hour period. The traffic characteristics of the Project were derived using the following updated operational assumptions:

- 139 associates/managers on-site over the course of the day.
- 287 delivery service partner (DSP) and 67 flex drivers will be used for deliveries.
- 14 tractor semi-trailer combinations per day expected generally between 10 PM and 8 AM.
- DSP drivers (287) arrive in personal vehicles starting at 9:45 AM and are assigned an on-site delivery van. The delivery vans be loaded and leave the facility at a rate of 48 vans every 20 minutes and will return between 7:30 and 9:30 PM, with drivers then leaving in their personal vehicle.
- Flex drivers (67) will arrive on-site in their personal vehicle between 4:00 and 6:00 PM. The flex driver vehicles are loaded within the facility then depart in 15 minute intervals for the day to make deliveries.

Based on the employment and operational characteristics of the tenant, the Applicant defined the peak-hour traffic characteristics of the Project as follows:

100 INDUSTRIAL PARK ROAD DELIVERY STATION
TRIP-GENERATION SUMMARY[a]

Time Period	Vehicle Trips				
	Associates/ Managers/ DSP Drivers	**DSP Vans**	**Flex**	**Trucks**	**Total**
Average Weekday:					
Entering	330	191	67	14	602
Exiting	330	191	67	14	602
Total	660	382	134	28	1,204
Weekday Morning Peak-Hour:					
Entering	0	0	0	1	1
Exiting	0	0	0	1	1
Total	0	0	0	2	2
Weekday Mid-Day Peak-Hour:					
Entering	19	0	0	0	19
Exiting	0	95	0	0	95
Total	19	95	0	0	114
Weekday Evening Peak-Hour:					
Entering	0	0	67	1	68
Exiting	0	0	24	0	24
Total	0	0	91	1	92

The detailed breakdown of trips does not appear to be consistent with the updated operational information that was provided in the June 2020 Traffic Study. Specifically, trips associated with the DSP vans and their drivers appear to be understated which impacts both the daily and peak-hour traffic volume projections. The trip data provided by the Applicant reflects 191 DSP vans and their associated drivers vs. 287 as indicated in the operations information. Using the updated operational data, we would expect the average weekday traffic volume to be 1,588 vehicle trips (vs. 1,204 vehicle trips).

The discrepancy in the number of DSP vehicles may not impact the peak-hour trip projections as the additional trips may be dispersed over a longer period; however, the Applicant's engineer should review and revise the trip estimates and associated analyses for the Project as appropriate, or provide an explanation for the discrepancy.

Given the potential variability in the arrival and departure patterns and overall traffic volumes associated with the Project, a Traffic Monitoring Program should be considered as a part of any conditions of approval that may be granted for the Project.

Comment T13: The trip distribution pattern for the Project should be reviewed and revised considering the following: Journey-to-Work data obtained from the U.S. Census for persons employed within the Town of Hingham; market area and travel routes for local deliveries and the origin of the tractor semi-trailer deliveries (to/from Route 3); the transportation system serving the project site; and existing traffic patterns. Separate trip patterns for each of the functional areas of the Project should be provided if appropriate.

Response: The trip-distribution pattern for the Project was refined based on a review of U.S. Census data and the expected delivery area that will be served by the Project. The refined trip-distribution pattern is as follows:

Roadway	***Direction To/From***	***Percent To/From***
Route 3	North	25
Route 3	South	15
Derby Street	East	15
Derby Street	West	45
TOTAL:		100

No further response required.

Comment T14: The traffic operations analysis should be revised and expanded to reflect the comments herein and to include analyses of the following conditions in accordance with MassDOT guidelines: 2019 Existing, 2027 No-Build (without the Project), 2027 Build (with the Project) and 2027 Build with Mitigation (with the Project and any improvements that may be necessary to off-set the impact of the Project).

Response: Traffic operations analyses were provided for 2027 No-Build (without the Project) and 2027 Build (with the Project) conditions; an analysis of 2019 Existing conditions was not provided as requested, but is not necessary to ascertain the impact of the Project. The analysis has indicated that the addition of Project-related traffic to the study area intersections will result in a relatively minor increase in motorist delays (approximately 4.0 seconds) and vehicle queuing (up to two (2) vehicles) over anticipated future conditions without the Project.

Scheduling the arrival and departure of DSP drivers and vans to occur outside of the weekday morning and evening peak hours will allow for efficient use of the available roadway capacity that has been created by the recently completed improvements along Derby Street and will serve to reduce the overall impact of the Project on the transportation infrastructure.

The traffic operations analysis should be revised as necessary to address any change in the peak-hour traffic volumes for the Project.

Comment T15: The peak-hour factors that are used in the analysis should be based on those reflected in the traffic counts and not a uniform value of 0.92 or 1.00 unless substantiated. Further, the existing peak-hour factors are likely to be lower than the default factors that were used, particularly at the Project site driveway intersections given the operation of the Project where both delivery and employee vehicle arrivals and departures will be concentrated and not dispersed over the peak hour (releasing 20 DSP vans from the facility simultaneously will lower the peak-hour factor resulting in increased delays and residual vehicle queuing that is not reflected in the current analysis).

Response: The peak-hour factors have been revised to reflect the measured values. **An adjustment to the peak-hour factors at the Derby Street/Pond Park Road intersection was not completed to reflect the concentration in traffic that may occur when DSP vans are released from the Project (48 vans every 20 minutes during the midday peak-hour). This can be addressed through the recommended Traffic Operations improvements (discussion follows).**

No further response required.

Comment T16: A sight distance assessment should be performed for the Project site driveways along both Industrial Park Road and Commerce Road and at the Industrial Park Road/ Commerce Road intersection following the methodology defined by the American Association of State Highway and Transportation Officials (AASHTO)[3] and using the measured 85th percentile vehicle travel speed along Industrial Park Road and Commerce Road or the posted speed limit, whichever is higher. Both the Stopping Sight Distance (SSD) along Industrial Park Road and Commerce Road approaching the intersections and the Intersection Sight Distance (ISD) for a motorist exiting the minor (stop controlled) approach should be provided and compared to the AASHTO recommended values. To the extent that the sight lines do not meet the recommended minimum value, the Applicant should identify the corrective measures that will be undertaken and include the necessary modifications on the Site Plans.

Response: A sight distance assessment was completed for the Project site driveway intersections and the Industrial Park Road/Commerce Road intersection using a 30 mph approach speed, which was identified as being 10 mph above the posted speed limit in the vicinity of the Project site (20 mph). Based on the sight distance evaluation, the Applicant's engineer determined that the stopping sight distance approaching the Project site driveway intersections meets or exceeds the recommended minimum distance (200 feet at 30 mph); however, the sight distance for a vehicle exiting the Industrial Park Road Project site driveway looking to the north (left-turn exit maneuver) and for a vehicle exiting the north Commerce Road Project site driveway looking to the south (right-turn exit maneuver) were found to be below the recommended minimum distance. As such, the Applicant's engineer recommended that vehicles exiting the Industrial Park Road Project site driveway should be restricted by signs to right-turn only operation and that intersection ahead warning signs be installed on Commerce Road approaching the Project site driveway.

[3] *A Policy on Geometric Design of Highway and Streets*, 7th Edition; American Association of State Highway and Transportation Officials (AASHTO); Washington D.C.; 2018.

Industrial Park Road does not have a posted speed limit; the 20 mph speed sign is in reference to a school zone and applies to school hours only, which are defined on the sign as 7:00 – 10:00 AM and 2:00 - 4:30 PM. As such, the statutory or "prima facie" speed limit is 30 mph.[4] As such, sight lines along Industrial Park Road should be assessed based on an approach speed of 40 mph, which would require a minimum line of sight of 305 feet. This change would not impact the general findings of the sight distance assessment or the recommendations with regard to prohibiting left-turn movements exiting the Industrial Park Road Project site driveway. In addition, trees and vegetation located along both sides of Industrial Park Road approaching the Project site driveway and Commerce Road should be selectively trimmed or removed and maintained in order to maximize sight lines for exiting vehicles. This should be a condition of any approvals that may be granted for the Project.

The 30 mph approach speed that was used on Commerce Road is appropriate given that the roadway ends at the south Project site driveway. The Applicant has relocated the northernmost Commerce Road driveway to the south to improve the sight lines to and from Industrial Park Road. We would recommend that trees and vegetation located along the Project site frontage on Commerce Road within the sight triangle areas of the Project site driveways also be trimmed or removed and maintained. This should be a condition of any approvals that may be granted for the Project.

Comment T17: In advance of receipt of the information that has been requested as a part of this review, we would suggest that consideration be given to the following measures as a part of any subsequent submissions:

Safety:

(See Traffic Monitoring)

Traffic Operations:

Within 90-days after receipt of a Certificate of Occupancy for the Project and subject to receipt of all necessary rights permits and approvals, design and implement an optimal traffic signal timing and phasing plan for the Derby Street coordinated traffic signal system to include the following intersections:

1. *Industrial Park Road*
2. *Route 3 southbound ramps*
3. *Route 3 northbound ramps*
4. *Old Derby Street*
5. *Derby Street Shoppes*
6. *Cushing Street*

[4]The statutory or "prima facie" speed is defined in M.G.L. c. 90 § 17, as the speed which would be deemed reasonable and proper to operate a motor vehicle.

Transportation Demand Management:

Implement a comprehensive Transportation Demand Management (TDM) plan consisting of the following elements:

- *Assign a transportation coordinator to coordinate the TDM program;*
- *Post information regarding commuting options in a central location and/or otherwise make available to employees of the project;*
- *Implement a rideshare matching program for employees facilitated by the transportation coordinator to encourage carpooling;*
- *Provide a "welcome packet" to employees detailing available commuter options, the contact information for the transportation coordinator and information for employees to enroll in the rideshare program;*
- *Provide specific amenities to discourage off-site trips, including a break-room equipped with a microwave and refrigerator; offering direct deposit of paychecks; coordinating with a dry-cleaning service for on-site pick-up and delivery; allowing telecommuting or flexible work schedules; and other such measures to reduce overall traffic volumes and travel during peak traffic volume periods;*
- *Incorporate pedestrian accommodations within the Project site; and*
- *Provide secure bicycle parking at an appropriate location within the Project site.*

Traffic Monitoring:

Implement a traffic monitoring program consisting of the following information:

- *Performing a 7-day, week-long automatic traffic recorder counts on the Project site driveways to include vehicle classification;*
- *Performing manual turning movement counts and vehicle classification counts at the Project site driveway intersections with Industrial Park Road and Commercial Road during the weekday morning (6:00 to 9:00 AM), weekday midday (11:00 AM to 1:00 PM) and weekday evening (4:00 to 6:00 PM) peak periods; and*
- *Obtaining motor vehicle crash data for the most recent one-year period from the Hingham Police Department for the Project site driveway intersections with Industrial Park Road and Commercial Road and at the following locations:*

  1. *Industrial Park Road/Commercial Road*
  2. *Derby Street/Industrial Park Road*
  3. *Derby Street/Route 3 Southbound Ramps*
  4. *Derby Street/Route 3 Northbound Ramps*
  5. *Derby Street/Old Derby Street*

The monitoring program should commence within 90 days of the issuance of a Certificate of Occupancy for the Project and be repeated within 1-year thereafter. The results of the traffic monitoring program shall be summarized in a report or technical memorandum provided to the Director of Community Planning and the Building Commissioner within one-month of the completion of the data collection effort and should include the following information and analyses:

- *Comparison of the measured traffic volumes (trucks and passenger vehicles) to the traffic volume projections for the Project as presented in the February 2020 Traffic Study and as may be subsequently modified;*
- *An evaluation of motor vehicle crash rates at the monitored intersections; and*
- *Traffic operations analysis for the monitored intersections.*

To the extent that the measured traffic volumes for the Project exceed the projected traffic volumes by more than 10 percent (i.e., 110 percent of the projected traffic volumes) and/or the calculated motor vehicle crash rates exceed the MassDOT average crash rates for similar intersections, corrective actions to reduce the unmitigated impact of the Project should be proposed and implemented. The corrective actions should be documented in the traffic monitoring report and undertaken by the Applicant subject to receipt of all necessary rights permits and approvals.

Response: The Applicant stated that they will accept a condition consistent with the above recommendations.

No further response required. These recommendations should be included as a part of any conditions of approval that may be granted for the Project.

Site Plans

Comment S1: *A truck turning analysis should be performed using the AutoTurn® software package for the following design vehicles: Hingham Fire Department design vehicle, a single-unit truck (SU-30 design vehicle) and a large tractor semi-trailer combination (WB-67 design vehicle); and should include the Industrial Park Road/Commercial Road intersection. The turning analysis should demonstrate that the design vehicles can access the appropriate areas within the Project site and circulate in an unimpeded manner without intrusion into parking spaces. The fire truck turning analysis should confirm that all elements of the design vehicle are retained within the traveled-way and do not overhang the curbline or cross into parking spaces.*

Response: Truck turning diagrams were provided for the requested design vehicles and illustrate that that the subject vehicles can access and circulate within the Project site in an unimpeded manner.

The truck turning analysis has indicated that on-street parking will need to be prohibited along both sides of Commerce Road in order for trucks to access the Project site. Google© Street View images from 2019 show vehicles parked along Commerce Road opposite the Project site. "No Parking" signs should be installed

along both sides of Commerce Road to ensure that emergency vehicles and delivery trucks can access the Project site. These signs should be added to the final Site Plans.

Comment S2: *"One-Way" and "Do Not Enter" signs and supplemental pavement markings should be provided for all one-way drives and aisles within the Project site, including at the Project site driveway intersection with Industrial Park Road;*

Response: The requested signs have been added to the Site Plans.

No further response required.

Comment S3: *Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line provided. In addition, a STOP-sign and marked STOP-line should be provided on the Commercial Road approach to Industrial Park Road.*

Response: The requested signs and pavement markings have been added to the Site Plan. **The following corrections should be made on the final Site Plans:**

- **Sheet SP-3 should indicate "Install R3-2 Sign (No Left Turn) (Typ.)" (Keynote Legend "Z") on Industrial Park Road opposite the Project site driveway as required by the *Manual on Uniform Traffic Control Devices* (MUTCD).[5]**
- **Sheet SP-3 should indicate "Install S-1 Sign" (Keynote Legend "E") on the Commerce Road approach to Industrial Park Road.**
- **Sheet SP-3 should indicate "Install S-7 Sign" (Keynote Legend "J") along the one-way exit to Industrial Park Road opposite the two (2) connections to the parking field.**
- **Sheet SP-3 Keynote Legend "AB" should reflect a speed advisory of 20 mph as recommended in the June 2020 Traffic Study.**

Comment S4: *A note should be added stating: "All Signs and pavement markings to be installed within the Project site shall conform to the applicable specifications of the Manual on Uniform Traffic Control Devices (MUTCD).[6]"*

Response: The requested note has been added to Sheet SP-3.

No further response required.

Comment S5: *The sight triangle areas for the Project site driveway intersections should be shown 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 distances have been added to Sheet SP-0 and the requested note has been added to Sheet SP-3.

[5]*Manual on Uniform Traffic Control Devices* (MUTCD); Federal Highway Administration; Washington, DC; 2009.
[6]Ibid.

While the sight distances are helpful, the sight distance triangles were not shown. The sight distance triangles are based on the minimum recommended sight distances for the appropriate approach speeds approaching the driveways, or 305 feet for Industrial Park Road (40 mph) and 200 feet for Commerce Road (30 mph). We would recommend that a separate plan sheet be provided for the sight triangles and that the requested note be included on the plan sheet showing the sight triangles. An example sight triangle plan is attached for reference by the Applicant's engineer.

Comment S6: *Sidewalks and crosswalks should be provided that link the parking lots to the proposed building. The pedestrian path should be direct and minimize the number of crossings that are required. All pedestrian crossings should include crosswalks with Americans with Disabilities Act (ADA) compliant wheelchair ramps.*

Response: Sidewalks and crosswalks with ADA compliant crossings have been added to the Site Plans that connect the employee parking area to the proposed building.

No further response required.

Comment S7: *Secure, weather protected bicycle parking should be provided for employees and shown on the Site Plans.*

Response: A bicycle rack has been added outside of the building office entrance.

Weather protected bicycle parking should also be provided within the building and shown on the final Site Plans.

Comment S8: *Consider the use of speed humps (elongated speed bumps) vs. speed bumps within the Project site as speed bumps have the potential to create inherent operational and safety impacts and may not be allowed by the Hingham Fire Department due to the impact on emergency vehicles and response times.*

Response: The "speed bumps" have been replaced by "speed humps" or raised crosswalks.

No further response required.

Parking

Comment P1: *The Applicant should provide a breakdown of the parking demands within the Project site by functional use (i.e., associates/managers, visitors, DSP vans and drivers, etc.) in order to demonstrate that the number of parking spaces that are proposed is sufficient to meet the predicted parking demands. By way of example, if there are 118 employees on-site and 336 DSP drivers arrive, 454 parking spaces would be used.*

Response: The Applicant has indicated that the maximum number vehicles parked within the Project site will be 415 and will occur at 6:00 AM when there is an overlap between the largest over-night shift and the arrival of managers and associates for the 2nd shift. The remaining 46 parking spaces (out of the 461 total parking spaces that are to be provided) will be vacated by DSP vans that will be within the facility being loaded at that time. As such, this analysis has indicated that there will be sufficient parking during the peak parking

demand period to accommodate the predicted demand, with a reserve of 46 parking spaces to accommodate parking demand fluctuations.

No further response required.

Comment P2: *We support the requested waiver from the dimensional requirements of Section V-A, Off-Street Parking Requirements, of the Town of Hingham Zoning By-Law as they relate to Aisle Width and Standard Parking Spaces as the dimensions that are proposed for the "van spaces" exceed the requirements of the Zoning By-Law and are required to accommodate the turning and maneuvering requirements of the "van" design vehicle.*

Response: **No response required.**

This concludes our review of the materials that have been submitted to date in support of the Project. If you should have any questions regarding our review, please feel free to contact me.

Sincerely,

VANASSE & ASSOCIATES, INC.

Jeffrey S. Dirk

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

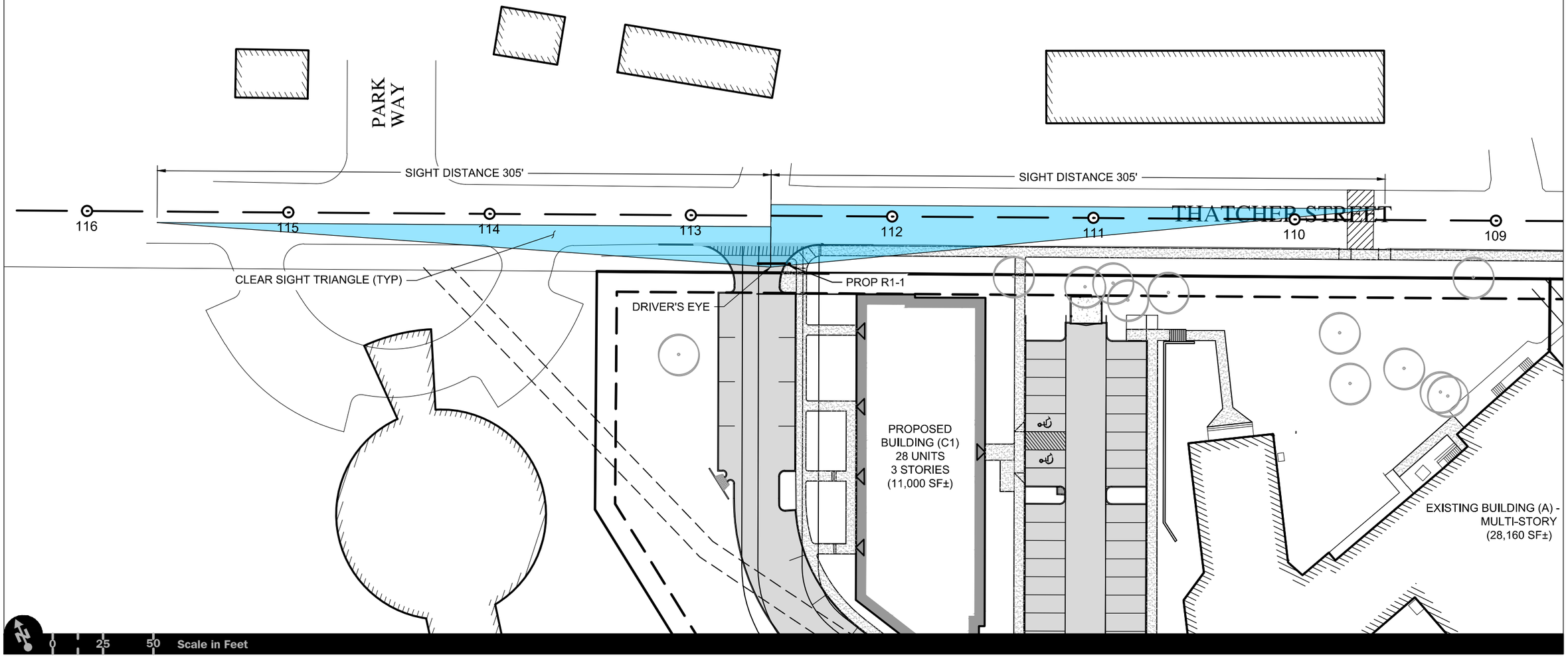
Professional Engineer in CT, MA, ME, NH, RI and VA

JSD/jsd

Attachment

THATCHER STREET
DESIGN SPEED: 40 MPH

REQUIRED SIGHT DISTANCE
(STOPPING SIGHT DISTANCE): 305'



Vanasse & Associates inc

Thatcher Street at West Road
Sight Distance Study
Fig. 1