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June 4, 2020

Mary Savage-Dunham, Community Planning Director
Planning Board
Town of Hingham
210 Central Street
Hingham, MA 02043-0239

Re: 100 Industrial Park Road
Proposed Shipping Warehouse

Dear Ms. Savage-Dunham:

We are in receipt of the Traffic Peer Review comments from Vanasse & Associates, Inc. (VAI) dated May 11, 2020 and the Hingham Police Department dated May 18, 2020, regarding the project noted above. Our responses are indicated below in ***bold italic*** text and are as follows:

FEBRUARY 2020 TRAFFIC STUDY

Comment T1

- A letter should be provided by the Professional Engineer attesting to their oversight in preparing the document and providing their Massachusetts Professional Engineer Registration number and discipline.

  Response: Comment incorporated. The study has been signed and sealed by Michael Dion, P.E., License Number 54469.

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: The proposed development does not meet the transportation thresholds for Massachusetts Environmental Policy Act. BL Companies has coordinated with the

Massachusetts Department of Transportation and does not need a State Highway Access Permit.

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: Comment incorporated. The intersections of Derby Street at Old Derby Street and Derby Street at the Derby Shoppes Drive have been added to the traffic study.

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: Comment incorporated. The existing condition writeup has been updated to reflect post construction conditions along Derby Street.

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: Comment incorporated. The raw traffic counts have been added to the appendix of the report.

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: Due to the current COVID-19 pandemic, accurate speed data cannot be collected. As a compromise to evaluate sight distances, the Intersection Sight Distance will be evaluated using the posted speed limit plus 10 mph to simulate the 85th percentile speed.

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: Comment incorporated. Description of pedestrian and bicycle facilities within the study area have been included in the existing condition writeup.

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: Comment incorporated. Description of public transit in the vicinity of the site has been added to the existing conditions section of the report.

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: Comment noted.

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: Comment incorporated. The traffic study has been updated to reflect a 2027 horizon year.

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 volume should include trips associated with: i) re-occupancy 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: After discussion with VAI on May 14, 2020, via conference call, it was decided that the Honda dealership was not included in the traffic counts collected in September 2019 and were added to the background traffic volumes. Discussion of the other sites mentioned in this comment will be added to the Project Traffic Conditions of the report.

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: Comment incorporated. Backup data for trip generation has been provided in the Appendix of the traffic study.

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: Comment incorporated. The trip distribution has been changed to reflect the distribution of delivery vans and their employees. The majority of traffic during the hours of analysis are delivery vans and their employees. Truck traffic during the peak hour is minimal with a maximum of two (2) experienced in the AM Peak Hour, zero (0) in the Mid-Day Peak Hour, and one (1) in the PM Peak Hour.

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: Comment incorporated. The Build Scenarios have been updated to reflect these scenarios.

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: Comment incorporated. Peak hours have been adjusted to reflect the data that was collected in the field.

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) 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: Comment incorporated. Intersection sight distance has been added to the site plans. Stopping sight distance has been calculated for all three approaches to the Site Driveway.

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:

  <u>Safety:</u>

  (See Traffic Monitoring)
  <u>Traffic Operations:</u>
  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

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: Comment noted. The applicant will provide whatever information is considered necessary as a condition of approval for Site Plan Approval and a Special Permit A3 (Parking Determination) for this 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: The requested vehicle turning movements have been provided on the Truck Turning Plans, sheets TT-1, 2 and 3.

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: Additional "One-Way" and "Do Not Enter" signs have been added to the one-way drives on the Site Signage and Pavement Marking Plan, sheet SP-3.

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: STOP Sign Control and marked STOP-lines are provided on all driveway exits on site. In addition, a STOP sign and a marked STOP-line are now placed on the Commercial Road approach to Industrial Park Road. These added features are shown on the Site Plan, sheets SP-0 through SP-3.

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).

Response: This note was added to the Site Signage and Pavement Marking Plan, sheet SP-3.

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 site triangles for the project site driveways have been added to the Overall Site Plan, sheet SP-0. The specified note has been added to the Site Signage and Pavement Marking Plan, sheet SP-3.

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: The parking lot design currently compartmentalizes vehicle locations by use. These include associate/manager spaces in the North West section of parking, a small section of parking for initial van personnel who are a part of the first wave of delivery drivers located next to the Southern portion of the building, and finally all other spaces will be housing the vans over-night or a van driver's personnel vehicle swapped for a delivery van during the day.

  The only spaces where significant foot traffic is expected is in the associate spaces located in the North West. Associates will park their personnel vehicle, proceed down the vehicle aisle, and then utilize the central cross walk to the entrance of the building located in the North West of the building. The proposed walkways will be ADA compliant with ADA ramps, striped crosswalks, and concrete surfaces. In addition to the proposed improvements, Associates wear safety vests when operating onsite to improve visibility awareness. Additionally, shift structures are designed so the majority of van traffic is occurring outside of high pedestrian traffic times (when associates are coming in to work and leaving work).

  Approximate shift structures generally abide by the following format for onsite associates:
  - ***1st Shift: 2:00 AM to 12:30 PM (The significantly largest shift)***
  - ***2nd Shift: 6:00 AM to 2:30 PM***
  - ***3rd Shift: 1:30 PM to 10:00 PM***
  - ***DSP Drivers: Begin arriving on site at approximately 9:50 AM.***

- ***Last Wave of Deliver Vans is expected to depart the facility at approximately 11:50 AM.***
- ***Flex Drivers (Amazon contracted personnel utilizing their personal vehicle to delivery packages) will operate between 4:30 and 6:00.***
- ***DSP Drivers: Begin returning to the delivery station at approximately 7:10 PM.***
- ***Line Hauls arrive overnight into the early hours but have direct access to the dock doors with a curb cut directly off of commerce road.***

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 on the Site Plan, sheets SP-0 and SP-1.

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 on site are now changed to speed humps on the Site Plan sheets SP-0, SP-1, SP-2, and SP-3.

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: Parking demands are based off of the peak capacity requirement for the site. Using an available capacity of 415 spaces, (not including the 46 vacant van personal vehicle spaces as these are intended to facilitate the first wave of vans launching at approximately 9:50 AM) the point at which all 415 parking spaces would be occupied is at 6:00 AM. This is because the largest night sortation shift (which runs from approximately 2:00 AM to 12:30 PM), and the next largest shift of DSP managers, Amazon managers, and Amazon associates (2nd shift which runs from approximately 6:00 AM to 2:30 PM) would overlap beginning at the 6:00 AM hour. During peak capacity, it's estimated all 131 associate and manager spaces would be occupied by the overlapping shift, and all van parking spaces would be occupied by the vans until DSP drivers start arriving at approximately 9:20 AM to start exchanging their personal vehicles for vans.

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: Acknowledged

HINGHAM POLICE DEPARTMENT (CHIEF GLENN A. OLSSON)

1. The town of Hingham continues to work with developers in and along the corridor that wish to develop some of the few remaining large tracks of land in the area. With that thought in mind I believe that additional traffic in the area will result in increased accident and public safety calls for service. History of a busier Industrial park also reminds me that I investigated many accidents on that 90-degree corner.

Response: Intersection sight distance and stopping sight distance at the driveways and they meet the 30 MPH requirements. A driveway was relocated away from the intersection to capture the sight distance and improve safety and signage has been added.

2. I have also reviewed both traffic reports and support many of the questions presented in the Vanessa & Associate Inc. report. I believe there is more data that need to be reviewed and seasonal data in regard to Derby Shops, the increase in package deliveries during holiday season as well continues growth south among Rt.3 generates additional traffic in the area.

   Response: Even with traffic increases due to capacity requirements during the "peak" or holiday season, vans will still wave launch outside of the peak traffic frames. Instead, additional van capacity will be scheduled to depart the facility either before or after these peak traffic time frames. For example, instead of departing all vans after approximately 9:50AM, some vans would depart prior to the peak AM traffic hour of 7:00 to 9:00AM and the end of the departure schedule would be extended to accommodate the need for additional van capacity, while still simultaneously reducing the impact on traffic.

We trust our responses address the concerns that were posed. Should you require additional information, please feel free to contact me at 203-608-2438.

Sincerely,

Kevin Hixson
Senior Project Manager