

December 15, 2022

Freetown Planning Board
3 North Main Street
Assonet, MA 02702

RE: Proposed Industrial Warehouse Development – 31 Innovation Way
Map 236 Lot 6
Peer Review Letter 3

Dear Board Members,

This letter is to advise that we have reviewed the revised submission for a Proposed Industrial Warehouse Development, located at 31 Innovation Way, prepared by MBL Land Development & Permitting Corp. (“MBL”) and TEC, Inc. (“TEC”) on behalf of the Applicant, V.M.D Companies, LLC (“VMD”). The submission includes the following documents:

- Letter entitled “Response to 31 Innovation Way (Map 236 – Lot 6) Peer Review”, prepared by MBL, dated November 21, 2022.
- Plans entitled “Site Plans, 0 Innovation Way,” prepared by MBL, revised through November 21, 2022;
- Report entitled “Drainage Analysis,” prepared by MBL, revised November 21, 2022;
- Report entitled “Stormwater Pollution Prevention Plan,” prepared by MBL, dated November 9, 2022;
- Document entitled “Site Plan Review Decision”, prepared by the Town of Freetown Planning Board, dated October 27, 2022; and
- Memorandum entitled “31 Innovation Way Traffic Peer Review: Review of Response to Comments”, prepared by Environmental Partners, dated November 9, 2022.

The property associated with this project is located in both Freetown and Fall River; however, our review is limited to the project’s impacts to the Town of Freetown. Per Town of Freetown request, these documents have been reviewed for conformance with the 2008 Massachusetts Stormwater Handbook, Rules and Regulations of the Planning Board as Site Plan Review Authority (Section II, parts B & C), Town of Freetown General and Zoning By-laws (Article 11), as well as best engineering practices. Within the Zoning By-Laws, our review focuses on Sections 11.23 (Site Plan Review) and 11.31 (Off-Street Parking and Loading Regulations).

We have also reviewed the traffic impact assessment (TIA) including traffic count data, traffic count adjustments/growth and methodologies, crash data, trip generation and distribution, intersection capacity analysis, traffic-related site plan review, pedestrian accommodations, and best engineering practices. Refer to Environmental Partners' memorandum dated November 9, 2022 for a review of responses to the traffic peer review comments.

Project Description

The site is located along the eastern side of Innovation Way in Freetown and Fall River, and is referenced as Freetown Assessors ID 236-006.01 and Lots 185 and 189 on Assessors Map W-19 in Fall River. The site contains a total of area of 122.37 acres, and is currently undeveloped consisting of woods and bordering vegetated wetlands.

The proposed site development consists of the construction of four industrial warehouse buildings with associated site access, parking, loading, utilities and a stormwater management system. Three of the proposed buildings, referenced as Buildings 1, 2 and 4, are located within the City of Fall River and one building, referenced as Building 3, is located within the Town of Freetown. In total 598 parking spaces and 134 loading spaces are proposed in Fall River and 177 parking spaces and 42 loading docks are proposed in Freetown. Access/egress to the Project will be provided via nine (9) new driveways along the easterly side of Innovation Way, which is currently under the jurisdiction of the Massachusetts Department of Transportation ("MassDOT").

Site/Civil Comments

Our comments note missing items and noncompliance with various standards as outlined below.

Stormwater Management Standards

1. The proposed project site is located within both Freetown and Fall River. It should be noted that a portion of the stormwater runoff generated by the project within the limits of Freetown is routed across the municipal boundary into Fall River. Stormwater runoff generated by the entirety of the Building 3 roof and portions of the impervious surfaces west of Building 3 is routed to stormwater best management practices (BMPs) on the Fall River side of the project site via closed drainage piping. BMPs and stormwater infrastructure located outside of Freetown are not included in this review. Therefore, this review cannot confirm the project's full compliance with the Massachusetts Stormwater Management Standards. Only the stormwater infrastructure and BMPs located within the limits of Freetown (Stormcapture System C, and Focal Point Bioretention System B) are reviewed below for conformance with the Massachusetts Stormwater Management Standards.

MBL Response 11/21/2022: No Comment, No Response Required

EP Response 12/15/2022: Item closed. The Applicant has revised the stormwater design to include two infiltration basins which receive runoff from the Freetown portion of the project. It should be noted, that Infiltration Basin B is located primarily within Fall River. Only the stormwater infrastructure and BMPs located within the limits of Freetown (Stormtrap System C, and Infiltration Basin C) are reviewed below for conformance with the Massachusetts Stormwater Management Standards.

2. Standard 2 – The Applicant indicates that the proposed design will not result in additional off-site flooding and post-construction peak discharge rates will not exceed pre-construction rates. We have the following comments on the calculations that may impact the peak rates of runoff:

- a. The Test Pit 105 log indicates that estimated seasonal high groundwater (ESHGW) is at elevation 222.40. However, the proposed finished grade elevation of the vegetative filter strip at this location is approximately 218, well below the ESHGW elevation. Groundwater could break through the vegetative filter strip and enter Focal Point Bioretention System B, significantly impacting the performance of the proposed stormwater management system. The Applicant's stormwater design should address the potential for elevated groundwater conditions in this area.

MBL Response 11/21/2022: MBL updated the drainage design in this area and performed additional Test pit in this area. MBL and the applicant are working with a Geotech to address the groundwater with cut and the removal of ledge. The proposed Focal Point Bioretention System B was removed from the design and is now an infiltration basin design.

***EP Response 12/15/2022: Item open.** The Applicant completed three additional test pits in the vicinity of Infiltration Basin C. The Test Pit logs for TP-105, TP-203, TP-204, and TP-205 indicate that ESHGW ranges from 3'-4" to 4'-8" below existing grade along the slope behind Building 3 to the wetland resource area. The construction of Infiltration Basin C will require cutting into existing grade by approximately 5 to 6 feet along the western edge of the basin; this may result in groundwater breakthrough. The Applicant's stormwater design should address the potential for elevated groundwater conditions in this area.

- b. Test Pit 105 is the only test pit near Focal Point Bioretention System B. A test pit should be performed within the footprint of proposed Focal Point Bioretention System B in order to confirm soil characteristics and ESHGW elevations.

MBL Response 11/21/2022: MBL updated the drainage design in this area and performed additional Test pits in this area. See revised plan set that identifies the new drainage design and the ESHGW are also shown on the plans as requested.

EP Response 12/15/2022: Item closed.

- c. We recommend the Applicant explore adding an emergency overflow outlet from the proposed Stormcapture System C. If subsurface stormwater infiltration chamber systems are not properly maintained, and do not include an emergency outlet pipe, surcharging of upstream structures can result.

MBL Response 11/21/2022: MBL updated the plans to add an overflow outlet from System C. See sheet C-6.3.

EP Response 12/15/2022: Item closed.

- d. Based on our calculations, Subcatchment PR-11 appears to occupy a total area of approximately 40,000 square feet, as opposed to the 79,103 square feet listed on Figure 8 in the Drainage Analysis.

MBL Response 11/21/2022: This Subcatchment included an area in front of Building 2 within the Fall River which give it an area of 79,103 sf. MBL updated the Proposed HydroCAD model to divide these areas based on the street layout. See the revised drainage report, which is dated 11/21/2022.

EP Response 12/15/2022: Item closed.

- e. Subcatchment PR-36 shown on Figure 8 in the Drainage Analysis appears to have been omitted from the HydroCAD model. However, the total area for the pre-development limit of analysis and post-development limit of analysis in HydroCAD match. We suspect the areas for some of the subcatchments included in the post-development model are inaccurate.

MBL Response 11/21/2022: MBL revised the Figure 8 based on some drainage redesign. This subcatchment was added to offsite east area in HydroCAD, see revised drainage report, which is dated 11/21/2022.

EP Response 12/15/2022: Item closed.

- f. Pond 57P in the HydroCAD model has one 12" culvert as an outlet device; however, Sheet C-6.2 shows two 12" culverts discharging from the detention system. The Applicant should address this discrepancy.

MBL Response 11/21/2022: MBL revised the drainage design in this area and eliminated this detention system. See the revised plan set for updated drainage design. Also, see the revised drainage report, which is dated 11/21/2022.

EP Response 12/15/2022: Item closed.

3. Standard 3 – The Applicant indicates that the proposed design will collect stormwater runoff and recharge it back into the ground on-site. We have the following comments on the calculations that may impact groundwater recharge:

- a. The infiltration rate used in the HydroCAD model for the Stormcapture System C was 2.41 in/hr, which is the infiltration rate associated with Loamy Sand. However, the test pit log for test pit 115 indicates that the soil texture at the elevation where infiltration will occur (bottom of stone elevation 219.25) is Sandy Loam. The infiltration rate associated with Sandy Loam per the Massachusetts Stormwater Management Standards is 1.02 in/hr.

MBL Response 11/21/2022: MBL added a note to grading and drainage plans, as well as details that the A and B soil layers will be removed prior to installation, resulting in the sandy loam is the proper rate. See revised plan set.

EP Response 12/15/2022: Item closed.

4. Standard 4 – The Applicant indicates that the proposed design will remove 90% TSS prior to discharge. We have the following comments on the calculations that may impact TSS removal and provided water quality volume:
- a. The Massachusetts Stormwater Management Standards state that the required water quality volume is the runoff volume that requires TSS treatment. For Subcatchment PR-30 containing the vegetated filter strip, the required water quality volume is 11,041 cubic feet as noted in Appendix D of the Drainage Analysis. The summary for the vegetated filter strip in the HydroCAD analysis (Pond 56P) indicates that the provided water quality volume of the vegetated filter strip is 4,482 cubic feet. The water quality volume of 11,041 cubic feet must be met by the vegetated filter strip in order to qualify for TSS removal credit.
MBL Response 11/21/2022: MBL revised the drainage design in this area and eliminated the filter strip. See the revised plan set for the updated drainage design that now provides an infiltration basin.
EP Response 12/15/2022: Item closed.
 - b. Per Volume 2 Chapter 2 of the Massachusetts Stormwater Handbook, the flow length of impervious surfaces upstream of the vegetated filter strips must be limited to 75 feet long in order to receive TSS removal credit. The proposed flow length upstream of the vegetated filter strip is approximately 180 feet long.
MBL Response 11/21/2022: MBL revised the drainage design in this area and eliminated the filter strip. See the revised plan set for the updated drainage design that now provides an infiltration basin.
EP Response 12/15/2022: Item closed.
 - c. Per Volume 2 Chapter 2 of the Massachusetts Stormwater Handbook, vegetated filter strips must be constructed at least 2 feet above the ESHGW elevation. The test pit log for test pit 105 observed mottling at 222.40, and the proposed finished grade of the filter strip at this location is approximately 218.
MBL Response 11/21/2022: MBL revised the drainage design in this area and eliminated the filter strip. See the revised plan set for the updated drainage design that now provides an infiltration basin.
EP Response 12/15/2022: Item closed.
5. Standard 8 – We have the following comments regarding construction period pollution prevention and erosion and sedimentation control:
- a. Projects that disturb one acre of land or more are required to obtain coverage under the NPDES Construction General Permit issued by EPA and prepare a Stormwater Pollution Prevention Plan (SWPPP). It is recommended the Planning Board require

the submittal and approval of the final SWPPP as a condition of approval. We recommend the final SWPPP be submitted to the Planning Board one month prior to the beginning of construction to allow the Board to review and comment on the SWPPP. We also recommend the Board require, as a condition of any approval, that SWPPP inspections be performed consistent with the requirements of the NPDES Construction General Permit and that copies of all SWPPP reports be submitted to the Town of Freetown.

MBL Response 11/21/2022: MBL and Applicant have already submitted a draft copy of SWPPP report for the entire project to the Freetown Planning Board, as part of conditional approval.

EP Response 12/15/2022: Item closed.

- b. The existing site is currently wooded. Construction will require significant clearing, resulting in significant construction period erosion and sedimentation. Sheet C-8.2 should include construction period BMPs, such as temporary diversion swales and sediment traps, properly designed and sized per the Massachusetts Stormwater Handbook and the Erosion and Sedimentation Control Guidelines: A Guide for Planner, Designers, and Municipal Officials. If necessary, future construction period observations for the development could be coordinated with the City of Fall River.

MBL Response 11/21/2022: MBL prepared a detailed erosion control plan that outlines the temporary diversion of waste, sediment traps, and check dams.

EP Response 12/15/2022: Item closed.

6. Standard 9 – We recommend that yearly Operation and Maintenance reports be provided to the Town. The EPA, through the Small Municipal Separate Storm Sewer System (MS4) permit, is requiring that ongoing maintenance of private stormwater management systems be performed regularly and documented.

MBL Response 11/21/2022: The Applicant agreed to provide the town with yearly maintenance reports for Proposed Building 3 stormwater system.

EP Response 12/15/2022: Item closed.

[Additional Stormwater Management Standard Comments 12/15/2022](#)

7. Per Volume 2, Chapter 2 of the Massachusetts Stormwater Handbook, infiltration basins should be provided with a minimum of 1 foot of freeboard over the 100-year design storm peak water surface elevation as the basin provides peak rate attenuation in addition to exfiltration. The HydroCAD calculations indicate the 100-year design storm peak water surface elevation for Infiltration Basin C is 216.43 and the top of the basin is 216.80.

Rules and Regulations of the Planning Board as Site Plan Review Authority (Section II, parts B & C)

1. Section II. B. 3. n. – The Applicant has requested a waiver from providing estimated water and sewer usage calculations. Because the Applicant states that Building 3 will be served directly by City of Fall River water and sewer, the Town of Freetown may not need this information.

MBL Response 11/21/2022: A Waiver was granted by Freetown Planning Board. See the attached Planning Board Decision, dated 10/27/2022.

EP Response 12/15/2022: Item closed.

2. Section II. B. 3. n. – The Applicant has requested a waiver from providing plans and profiles for all proposed drainage and sewer systems. At a minimum, we recommend the Applicant provide a profile of the proposed sewer from SMH-5 to the connection to the existing sewer main in Innovation Way. We defer to the Planning Board whether profiles are required for other utilities (such as drainage), which do not connect to infrastructure in the Town's right-of-way.

MBL Response 11/21/2022: A Waiver was granted by Freetown Planning Board. See the attached Planning Board Decision, dated 10/27/2022.

EP Response 12/15/2022: Item closed.

3. Section II. B. 3. r. – Parking lots should be 1-1/2" Type I-1 top bituminous concrete over 2-1/2" Type I-1 binder bituminous concrete over 12" of bank run gravel conforming to Massachusetts Highway Spec. M1.03.0 Type b. The Applicant should revise the construction detail on Sheet C-9.0 to comply with this regulation.

MBL Response 11/21/2022: MBL updated the pavement detail to conform with MassDOT Specifications within the SHLO. MBL also updated the pavement structure based on Geotech report recommendation of the site. MBL also provided an updated detail of pavement section on page C-9.0.

***EP Response 12/15/2022: Item open.** The Applicant proposes the use of "Standard" pavement consisting of 1 ½" surface course over 2" binder course and 12" gravel base course for parking areas and "Heavy Duty" pavement consisting of 1 ½" surface course over 2 ½" binder course and 18" gravel base course for area accessible to trailer trucks. We recommend requiring a minimum binder course thickness of 2 ½" for a total pavement thickness of 4" for all paved areas, in accordance with the regulation.

4. Section II. B. 3. t. – The Applicant should add the note "The Contractor shall give seven (7) days' notice to pertinent Town Departments before commencing work in the field" to Sheet C-2.0.

MBL Response 11/21/2022: MBL added notes, as requested. See sheet C-2.0.

EP Response 12/15/2022: Item closed.

5. Section II. B. 4. – The Applicant has requested a waiver from providing impact statements. The only impact statement we received as part of the application materials was the “Traffic Impact Statement” memorandum by TEC. See “Traffic Comments” section below. We suggest the Applicant provide a brief description of impacts to Freetown under each category.

MBL Response 11/21/2022: A Waiver was granted by Freetown Planning Board. See the attached Planning Board Decision, dated 10/27/2022.

EP Response 12/15/2022: Item closed.

6. Section II. C. 2. – Sidewalks should be separated from the roadway edge by a vegetated border area of at least 5 feet to increase pedestrian safety. The current proposed sidewalk along Innovation Way is directly adjacent to the roadway, without a vegetated border area. See Capacity and Queue Analysis Comment 19 below under “Traffic Comments” for a recommendation to replace the proposed sidewalk with a shared-use path to accommodate both pedestrians and bicycles.

TEC Response 10/13/2022: *Within the Town of Freetown, Innovation Way lies under the exclusive jurisdiction of the Massachusetts Department of Transportation (MassDOT). The Applicant has already received comments back from MassDOT’s District 5 office on the Applicant’s detailed plan submittal. The Applicant has introduced a 5-foot vegetated buffer between the curb line and the sidewalk as recommended. MassDOT did not request a shared use path layout. The scope of the planned sidewalk improvements are consistent with what MassDOT and the Town of Freetown recently approved for the Neon Marketplace project across Innovation Way.*

EP Response 11/09/2022: EP acknowledges that Innovation Way is under MassDOT jurisdiction within the Town of Freetown, and that the 5-foot vegetated border has already been sent to MassDOT for review and has received no additional comments. No further action; **Comment 6 closed.**

7. Section II. C. 3. – The design should demonstrate that the project will not result in significant increase in the rate and volume of stormwater runoff over natural or existing conditions. The Drainage Analysis does not analyze pre-development and post-development changes in volumes of stormwater leaving the site, and the Applicant has requested a waiver from this Section. Given the proposed routing of stormwater into Fall River, a detailed analysis of volumes may not be necessary for this Freetown Planning Board application. Comments on rate of runoff are provided in a previous section.

MBL Response 11/21/2022: A Waiver was granted by Freetown Planning Board. See the attached Planning Board Decision, dated 10/27/2022.

EP Response 12/15/2022: Item closed.

Town of Freetown General and Zoning By-Laws (Article 11)

1. The project's Form SPR – Application for Site Plan Review indicates the project is located in the General Use District. Among other restrictions, the By-Laws limit building heights in the General Use District to 3 floors or 40 feet in height (Article 11.17), which is less than the proposed 48-foot Building 3. However, based on a review of the latest Freetown zoning map and based on the zone reference in the Freetown Zoning Table on Sheet C-4, the property may also be located in the Science and Technology Overlay District (STOD), which provides more flexibility. The Applicant should clarify whether this project is filed under the STOD regulations (Article 11.30).

MBL Response 11/21/2022: Property is located with science and technology zoning overlay district, STOD. The Planning Board determined that the proposed project is allowable within the STOD.

EP Response 12/15/2022: Item closed.

2. Article 11.23 H. Circulation – Site plans should provide clearly marked, safe circulation patterns for both vehicles and pedestrians. Sheet C-11.2 shows the WB-67 semi truck extending into the opposite side of the double yellow line in the right-of-way in order to turn left into the site. The Applicant should consider increasing the curb radii such that the truck is not required to cross the double yellow line on Innovation Way to enter the site properly.

TEC Response 10/13/2022: *The site designer, MBL, has adjusted the corner curb radii and the truck turning exhibits to meet MassDOT's design criteria as found in their Project Development and Design Guide, Exhibit 6-15. These will be provided within MBL's next site plan submission.*

***EP Response 11/09/2022:** EP will review the truck-turning movements on the updated site plan once available.

MBL Response 11/21/2022: MBL updated truck turning plan as requested, please see revised plan set.

EP Response 12/15/2022: Item closed.

3. Article 11.23 H. Parking – Parking areas should be located to the rear or side of buildings. Parking is proposed in front of Building 3.

MBL Response 11/21/2022: A Waiver was granted by Freetown Planning Board. See the attached Planning Board Decision, dated 10/27/2022.

***EP Response 12/15/2022: Item open.** The waiver request was not included in the Applicant's "Waiver Request Letter, Innovation Way" dated July 25, 2022 to the Planning Board and therefore was not included as an approved waiver on the Planning Board's Site Plan Review Decision dated October 27, 2022. We defer to the Planning Board as to how they would like to handle this parking area requirement.

4. Article 11.31 F. – The “Parking Calculation Table – Building 3” provided on Sheet C-5.2 appears to calculate parking based on Fall River requirements, rather than Freetown requirements, and the Applicant has requested a waiver to provide only 170 spaces. Please refer to Site Plan Comment 21 below under “Traffic Comments” for additional information on required parking.

MBL Response 11/21/2022: MBL updated required calculations for parking to confer with the Town of Freetown Zoning Bylaws. A Waiver was granted by Freetown Planning Board to allow a reduced number of parking spaces. See the attached Planning Board Decision, dated 10/27/2022.

EP Response 12/15/2022: Item closed.

General Comments

1. The existing topography information does not extend to the limits of the property boundary on Sheet C-6.2. Existing contours should be shown to the property lines on Sheet C-6.2, as they are on Sheet C-3.3, so that the viability of the proposed grading design can be reviewed.

MBL Response 11/21/2022: MBL updated plans to show contours past the property line on sheet C-6.2. Please see the revised plan set for updated information.

EP Response 12/15/2022: Item closed.

2. Sheet C-8.2 should include existing and proposed contours so that locations of proposed erosion controls can be reviewed.

MBL Response 11/21/2022: MBL added the requested information to the proposed sheets. Please see revised plan set of plans.

EP Response 12/15/2022: Item closed.

3. We recommend that all slopes 2:1 or steeper be stabilized. There are 2:1 slopes along the northern portion of the site without stabilizing rip rap.

MBL Response 11/21/2022: MBL updated all 2:1 slopes with rip rap. Please see the revised plan set of plans.

***EP Response 12/15/2022: Item open.** The Applicant should provide standard details for site stabilization including areas to be restored with loam and seed, slope stabilization blankets, and riprap slopes.

4. Water main – The Applicant proposes a new 12” water main to provide water and fire protection service to the proposed building. Unless otherwise dictated by fire department requirements, we recommend the hydrant tee be placed as close to the end of the 12” main as possible (i.e. near the proposed 4” and 10” connections) to facilitate future flushing of the 12” water main. In addition, a proposed water gate valve located near SMH-5 should be

located on the water main. Lastly, the proposed water and sewer utilities should ideally have sufficient separation; otherwise, concrete encasement may be required.

MBL Response 11/21/2022: MBL updated the plans moving Fire Hydrant closer to the end of the line. MBL also provided a 10-ft separation minimum of the water and sewer except at crossings where concrete encasement will be required.

EP Response 12/15/2022: Item closed.

Traffic Comments

While EP reviewed the methodologies outlined in the TIA for the entire development, as per request by the Town of Freetown, we only reviewed the impacts on the intersections located within Freetown. The following is a summary of the more significant comments; minor comments that are not anticipated to affect the impact on the project, the conclusions, or the recommendations are not included for brevity.

Traffic Impact Assessment (TIA)

The following TIA comments were closed as a part of EP's Traffic Peer Review Memorandum dated November 9, 2022:

- Existing Conditions Comments #1 through 4;
- Safety Analysis Comments #5 through 7;
- Future Conditions Comments #10 through 12; and
- Capacity and Queue Analysis Comments #13 through 17 and #19.

The outstanding comments are included below with their original comment number.

Existing Conditions – No outstanding comments

Safety Analysis

Comment 8: The TIA stated the Applicant is committed to provide adequate sight distances to satisfy the American Association of State Highway and Transportation Officials (AASHTO) requirements for a speed of 40-mph. Consistent with standard methodology, EP recommends using the 85th percentile speed to calculate the required sight distance. Based on the collected speed data, the 85th percentile speed along Innovation Way was approximately 40 mph and 45 mph on the southbound and northbound directions, respectively.

TEC Response 10/13/2022: *TEC's data collection vendor documented the speeds along Innovation Way as 40 mph southbound and 44 mph northbound in the vicinity of the project site. The site designer, MBL, will be including the sight lines on the site plan in the next submittal. TEC verified that the Freetown driveway can accommodate sight line triangles of 500 feet in each direction exiting the proposed driveway, which is based on the AASHTO intersection sight distance criteria for 45 mph. The vantage point for the driveway movement is within the State's right-of-way. The Applicant does not propose plantings or other sight distance obstructions in this area.*

***EP Response 11/09/2022:** EP will review the sight lines on the updated site plan once available.

MBL Response 11/21/2022: [No written response provided]

EP Response 12/15/2022: Item closed.

Comment 9: We request that the Applicant provide sight triangles for the proposed driveways on the Site plans to indicate areas where all objects and vegetation should be removed and/or maintained below a height of 2.5 feet.

TEC Response 10/13/2022: *The site designer, MBL, will provide the corresponding sight lines on the updated site plan drawings as requested. The Building 3 employee driveway location, which is on the outside of a horizontal curve will have sight lines in excess of 500 feet in both directions.*

***EP Response 11/09/2022:** EP will review the sight lines on the updated site plan once available.

MBL Response 11/21/2022: [No written response provided]

EP Response 12/15/2022: Item closed.

Future Conditions – no outstanding comments

Capacity and Queue Analysis

Comment 18: As summarized by TEC, based on the provided analysis, it appears the traffic operations are acceptable at the intersections located within Freetown, with the exception of the Gas Station driveway. However, based on the inconsistencies outlined herein, EP cannot corroborate the findings at this time.

TEC Response 10/13/2022: *Upon review of the above comments, all locations within the Town of Freetown are not expected to experience any measurable increase in traffic impact. Innovation Way was constructed by MassDOT with considerably higher traffic volumes projected for formerly proposed office-related uses and addition reserve capacity is available for other future development. The unsignalized driveway operations in the area will remain under capacity despite the introduction of new 'through' traffic from the subject project. MassDOT has not requested any further evaluation of the private driveways are part of the Applicant's application for an access permit.*

EP Response 11/09/2022: The revised analysis shows some degradation in LOS between the 2029 No-Build and 2029 Build conditions, with some movements expected to operate at an unacceptable LOS E with a noteworthy increase in delay. EP notes, however, that the movements with poor operations are located along the Amazon and Gas Station driveways, and the movements along Innovation Way and at the other intersections are expected to operate at an acceptable LOS D or better. While EP concurs that operations are anticipated to remain below capacity, we recommend considering minor improvements, such as signal timing adjustments where applicable, to mitigate the impacts of the proposed site.

MBL Response 11/21/2022: TEC and The Applicant note that signal testing and adjustments at the intersection are under MassDOT jurisdiction and will perform additional testing if only requested by MassDOT but not volunteer anything otherwise.

EP Response 12/15/2022: Item closed. While we recognize changes to the signal timings are ultimately under MassDOT jurisdiction, we maintain that the relatively minor mitigation measure could improve operations and reduce impacts from the site-generated traffic. We continue to recommend coordination with MassDOT; however, no we request no further review, and no additional coordination is needed from the Town.

Site Plan

Comment 20: According to the Town of Freetown zoning by-laws, parking stalls shall be 10-feet wide. Parking dimensions shown on the Site plan are 9-feet wide. The Site plan should be revised to conform to the minimum parking space dimensions required by the zoning by-laws.

MBL Response 11/21/2022: A Waiver was granted by Freetown Planning Board to allow for 9-foot wide parking stalls. See the attached Planning Board Decision, dated 10/27/2022.

EP Response 12/15/2022: Item closed.

Comment 21: For a wholesale, warehouse, or storage establishment, the Town of Freetown zoning by-laws requires one parking space for every 1,000 sf of gross floor space. For Building 3, with a gross area floor of approximately 203,000 sf and falling within the Town of Freetown in its entirety, a total of approximately 203 parking spaces is required. The total number of employee parking spaces provided for this building is 170.

The Applicant has requested a waiver from the Freetown parking requirement, stating that the proposed 170 spaces is similar to the rest of the development which follows the City of Fall River regulations. A review of the City of Fall River parking regulations is beyond the scope of this review.

Based on our calculations using the Institute of Transportation Engineers (ITE) Parking Generation Manual application, approximately 188 spaces are recommended for Building 3 based on an average rate. We recommend increasing the number of parking spaces to satisfy ITE recommendations and to improve conformance with the Town of Freetown requirements. If the Applicant maintains the request for only 170 parking spaces, the Applicant should provide additional justification for this lower number of spaces.

MBL Response 11/21/2022: MBL updated the required calculations for parking to confer with the Town of Freetown Zoning Bylaws. A Waiver was granted by Freetown Planning Board, to allow a reduced number of parking spaces. See the attached Planning Board Decision, dated 10/27/2022.

EP Response 12/15/2022: Item closed.

Comment 22: Site plans show a pedestrian curb ramp on the southern side of Building 3 employee driveway, at which location no crosswalk is shown. We recommend adding a crosswalk and receiving ramp on the north side of the driveway for a future sidewalk connection.

MBL Response 11/21/2022: MassDOT has no plans to add a sidewalk to the rest of the SHLO on this side, the curb ramp allows a person to exit the sidewalk. A crosswalk across 4 lanes of traffic with no signal due to low demand would be more dangerous to both the pedestrian and vehicle traffic in the roadway.

***EP Response 12/15/2022: Item open.** To clarify, the recommendation to add a crosswalk and receiving ramp was intended for the opposite (north) side of the driveway (along the east side of Innovation Way), not across Innovation Way (on the west side of the roadway). As currently proposed, the ramp on the south side of the driveway leads pedestrians into an unmarked crossing with no destination.

We recommend providing a crosswalk across the driveway along the east side of Innovation way and providing a receiving ramp on the north side of the driveway, which allows for connection to a potential future extension of the sidewalk along Innovation Way. Alternatively, the section of sidewalk north of the sidewalk access to Building 3 as well as the pedestrian ramp at the driveway could be removed.

Comment 23: The site plans show pedestrian access to Building 3 by way of the employee driveway only. For pedestrians traveling to/from the south, this route is not direct and would be better served by providing a connection to Building 3 from the truck driveway located just over the Fall River Town Line.

MBL Response 11/21/2022: MBL updated plans to include this recommended walkway. Please see the revised plan set.

EP Response 12/15/2022: Item closed.

Comment 24: Site plans show a crosswalk across Building 3 employee parking lot at a skewed angle. We recommend revising the parking lot layout to align the crosswalk perpendicular to vehicular travel way and minimize the crosswalk distance. Regardless of the crosswalk angle, the crosswalk pavement markings should be revised so the markings align parallel to the vehicular travel way.

MBL Response 11/21/2022: MBL updated the crosswalk based on the recommendation. Please see the revised plan set.

***EP Response 12/15/2022: Item open.** The revised crosswalk is still at an angle that is not perpendicular to the vehicular travel way. We recommend shifting the entire row of parking spaces slightly further north to allow enough width for the crosswalk to be perpendicular. It also appears that by adjusting the parking space layout, the pedestrian ramps near the accessible parking spaces need to be shifted slightly, such that the level landings are centered with the hatching at each location.

Comment 25: Fire truck turning templates should be provided for the Building 3 employee driveway to verify emergency access.

MBL Response 11/21/2022: MBL updated the plan set to include firetruck turning in the parking lot and access drives.

***EP Response 12/15/2022: Item open.** The provided fire truck turning templates show the truck path encroaching into the parking spaces, restricting the fire truck movement and access during the times when the 4-5 parking spaces adjacent to the crosswalk are occupied. It appears there are several additional feet within the driveway (north of the truck path as shown), which may allow enough maneuverability to allow a fire truck traveling northbound on Innovation Way to make the turning maneuver without encroaching on the parking spaces. Otherwise, we recommend widening the driveway as necessary to allow for this movement. Additionally, we recommend showing the fire truck turning templates around the northeast corner of the building.

Our review is based on the information that has been provided. As noted above, additional review will be required to verify comments have been incorporated into the revised submission.

We appreciate the opportunity to be able to assist you with this important project. Please feel free to contact me at (617) 657-0273 or ask@envpartners.com with any questions or comments.

Very Truly Yours,



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