

March 14, 2024

Michael King, Chair  
Town of Wareham  
Planning Board  
54 Marion Road  
Wareham, MA 02571

**Re:** Second Peer Review  
Eversource Wareham Training Facility  
Special Permit/Site Plan Review  
PB Case 22-23  
37 Doty Street  
Wareham, MA

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Dear Chair King and Members of the Planning Board:

In accordance with our contract to conduct a peer review of the Eversource Wareham Training Facility's Special Permit/Site Plan Review at 37 Doty Street in Wareham, Massachusetts, Allen & Major Associates, Inc. (A&M) is pleased to provide the following comments. The comments presented below are based on the review of the design documents provided to A&M by Wareham Planning and Community Development. A&M did not conduct a field assessment of the project but can do so if the Planning Board requires.

In conducting the peer review, A&M reviewed the following documents:

- Plans entitled "Eversource Energy 37 Doty Street Wareham, MA Permitting Plans October 2023 prepared for Eversource Energy prepared by Civil & Environmental Consultants, Inc. dated October 11, 2023, revised March 8, 2024".
- Stormwater Report for Eversource 37 Doty Street Wareham, MA prepared for NStar Electric Company prepared by Civil & Environmental Consultants, Inc. dated October, 2023 revised March 2024.
- Cover Letter prepared by Civil & Environmental Consultants, Inc. dated October 12, 2023.
- Impact Statement prepared by Civil & Environmental Consultants, Inc. dated October, 2023.
- Special Permit/Site Plan Review Application, Checklists, abutters list, denial letter from the building department and Cover Letter/Impact Statement prepared by Civil & Environmental Consultants, Inc. dated October 12, 2023 revised March 8, 2024.
- Response to Planning Board Peer Review letter dated March 7, 2024.

A&M reviewed the information/materials, listed above in conjunction with the applicable requirements of:

- Town of Wareham By-Laws revised October 25, 2021;
  - Division IV, Article III Earth Removal Regulations;
  - Division V, Article XI, Article I Stormwater Management & Article II Illicit Discharge;
  - Division VI, Article I Wareham Wetland Protective By-Law.
- Town of Wareham Zoning By-Laws Revised April 24, 2023
  - Article 6: Density and Dimensional Regulations
  - Article 7: Design Standards and Guidelines
  - Article 9: Parking
  - Article 10: Landscaping

- Article 12: Performance Standards
- Article 15: Site Plan Review
- Massachusetts Stormwater Handbook, Volumes 1 through 3, as applicable under the Massachusetts Wetlands Protection Act (310 CMR 10.00) with focus on the Stormwater Management Standards.
- National Fire Protection Association (NFPA 1) and the Massachusetts Amendments (527 CMR 18) as applicable to site development plans.

The following represents A&M's review comments. A&M may submit additional comments based on supplemental information provided after the initial peer review.

### **Wareham By-Laws and Zoning By-Laws**

1. Issue resolved, no further comment.
2. Zoning By-Law Section 1031 requires "new projects or expansions exceeding 5,000 square feet of non-residential development or more than three multi-family dwelling units, the landscape plan shall be prepared by a registered landscape architect whose seal shall appear on the plan." Landscaping is currently shown on the site plans but has not been prepared by a Landscape Architect. A landscape plan should be provided in accordance with the Zoning By-Law. Please provide a landscape table showing the requirements of the By-Laws and what is being provided associated with the required buffers and parking lots.

**Updated Comment:** The applicant has provided an updated landscaping plan stamped by a registered Landscape Architect. The applicant is seeking to remove the existing landscaped islands within the main parking field to "provide safe access to the site during emergency response functions". The lack of landscaped islands is not in compliance with Section 1060 Parking Lots of the Zoning By-laws. The applicant has not requested a waiver/variance of the Planning Board, so it is unclear how the current application complies with the By-law.

3. Issue resolved, no further comment.
4. Issue resolved, no further comment.

### **Site Plan & Drainage Calculations**

5. Issue resolved, no further comment.
6. Issue resolved, no further comment.
7. The design engineer should review the time of concentration calculation for sheet flow and update the calculations accordingly. The value for the 2-yr event differs from the actual 2-yr rainfall event as noted within the HydroCAD report.

**Updated Comment:** The applicant indicates the 2-year calculation has been revised, however, the HydroCAD worksheets continue to reflect a value of 3.20" of rainfall in the two-year event.

8. According to the project narrative, the design engineer states that the proposed building has an existing roof drain dry well to infiltrate the roof runoff and they are to remain in place, which contradicts the HydroCAD report. The HydroCAD report has the entire roof area directed into the detention basin.

The design engineer should review the input areas contributing to Watershed A1: Flow to existing Detention Basin and revise the report and calculations accordingly.

**Updated Comment:** The applicant indicates the roof area has been removed from the calculations. The watershed plans should be amended to note this to avoid confusion. However, this issue is resolved, no further comment.

9. Issue resolved, no further comment.

10. Issue resolved, no further comment.

11. Issue resolved, no further comment.

12. The design engineer is providing a sediment forebay, but no calculations have been provided. The design engineer should provide the required calculations for the sizing of the sediment forebay in accordance with the Stormwater Handbook and applicable details on the plans.

**Updated Comment:** The sediment forebay calculations have been provided as requested, however no details on the forebay construction are included on the plans.

13. The design engineer is stating 70% TSS removal in the worksheet for an extended dry detention basin. The Massachusetts Stormwater Handbook allows 50% TSS removal when combined with a sediment forebay. The TSS worksheet should be updated accordingly to reflect the reported values in the handbook or provide documentation justifying the higher TSS removal rate.

**Updated Comment:** The applicant has changed the designation of the existing detention basins to a "wet basin" to obtain the required TSS and phosphorous removal credits, but no details are provided to support the designation change at that the basin qualifies as a wet basin in accordance with the MassDEP handbook including permanent plunge pool depths, runoff volume, etc. This information is required in order to support the change in designation.

14. Issue resolved, no further comment.

15. Issue resolved, no further comment.

16. Erosion & Sedimentation Control/Demolition Plan

- a. No work is shown on this plan. The plan should be updated to show the proposed erosion control measures being installed to protect the existing drainage system, downgradient properties and the wetland resource areas.
- b. The plan should identify the areas being demolished, cleared, removal of topsoil, etc.
- c. Two existing catch basins, located on the westerly side of the building will be located within the proposed material logistics storage and meter training area. Are these catch basins to remain or to be removed and how will they be protected during construction if to remain?

**Updated comment:** The applicant has provided an erosion control plan as noted. The plan depicts installation of a stone construction entrance over the existing pavement. Is the intent to remove the

existing driveway to install this? The existing pavement should be retained, and the applicant would be responsible for sediment tracking and cleaning of Doty Street as required. The plan notes the abandonment of the three catch basins noted in comment 16c. but do not depict where the stormwater runoff currently collected by these basins is intended to flow. The parking lot is to be milled, regraded, and repaved, but flow along the westerly side of the building would flow toward the proposed curb line and then need to flow northerly and then further easterly until it is captured.

#### 17. Site Layout

- a. The site layout plan illustrates several new utility poles with camera and lights to be installed in close proximity to the perimeter. What are the purpose of the lights and what are the hours of operation? A photometric plan should be provided to confirm and verify that light spillover has been minimized.

**Updated Comment:** A photometric plan has been provided. The plan depicts some light trespass onto Doty Street. The updated information does not provide any additional information on the use or operating hours of these lights.

#### 18. Grading/Drainage Plan

- a. The extended detention basin as designed does not meet the Massachusetts Stormwater Handbook Standards and should be updated to include the following:
  - i. Provide calculations demonstrating that the required water quality volume meets the 24-hr time to allow solids to settle.
  - ii. A 15-ft wide access road is required around the basin providing access to the forebay and the outlet control structure.
  - iii. No emergency spillway has been provided.
- b. Several drainage pipes are shown discharging into the grassed water quality swale and do not have any rip rap dissipation pads. The plans should be updated to provide appropriately sized pads at each outfall based on the maximum anticipated velocity. The design engineer should provide appropriate calculations to support the design.

**Updated Comment:** The updated report has changed the classification of the existing stormwater basin without support information (see comment above). The access to the basin for routine maintenance is available through a limited area on the north side of the basin. The remainder is hindered by the chain link fencing around the truck training area. If the applicant's intent for maintenance is to remove the chain link fence for access, it should be noted in the Operation and Maintenance plan. Please clarify. The plan has been revised to include rip-rap at the pipe entry points, but no calculations have been provided to support the areas shown.

#### 19. Detail Sheets

- a. No detail is provided on the extended detention basin. Detail should be provided showing the minimum side slope, finish treatment of side slope and bottom area, access road, etc.
- b. A spillway detail is provided on Sheet C801, but A&M is unable to find where the detail is being used. Please identify the spillway location and provide the elevation of the spillway crest.

**Updated Comment:** The basin bottom and one linear side is proposed for regrading. Without a detail, there is no way to confirm the finished condition and may lead to constructability issues. By having a

confirmed construction intent, it removes any variability that may occur during routine inspections during construction.

20. The site currently has mature vegetated areas adjacent to Doty Street and Route 58 and based on the site layout plan a majority of this vegetation is being removed to accommodate the proposed training areas. The applicant is proposing to install new landscape along the frontage as shown on Sheet C700. To the extent the existing vegetation can be maintained, is there an opportunity to review the dimensions of the training areas and determine if they can be lessened to preserve the mature vegetated areas. As previous mentioned above, the limits of clearing should be added to the demolition plan.

**Updated Comment:** The limits of clearing have not been provided on the revised drawings. The plan also denotes "existing trees to be protected during construction" (Sheet C700) but do not indicate any particular trees or methods of adequate protection. A&M defers to the Planning Board on the adequacy of the existing trees and the amount of tree removal requested.

21. The site relies on multiple stormwater management areas to function. The applicant should provide a statement for record that the existing systems have been inspected and maintained in accordance with the Stormwater Handbook before receiving additional flows as a result of the increased impervious. Any structures requiring cleaning, should be cleaned and documented prior to receiving additional stormwater runoff. These will include the catch basins, dry well systems, detention basin, and basin inlets and outlets.

**Updated Comment:** A&M has no issue with the intended inspection to be conducted prior to construction. Should the Planning Board act on the application, A&M suggests a condition be added to require this work to be performed and the results provided to the Planning Office.

22. The abutter list provided with the application appears incomplete as it only encompasses lot A1. Lot B1 contains portions of the building and stormwater management areas that would require inclusion in the list.

**Updated Comment:** The abutter's list should be provided for record. If the abutters for Lot B1 are the same as A1, then no further action may be required. The applicant should provide this information for record, otherwise it presumes the Planning Department/Board would be required to verify the applicant's assertion.

23. Neither the plans or narratives identify the potential uses for the series of concrete pads on the easterly training site. Their use should be identified to the extent it may have impact to the adjacent resource areas or stormwater basins. Potential impact could include use of hazardous material that would drain into the catch basin and flow through the system.

**Updated Comment:** The applicant has provided a detail of the concrete pads satisfying the original comment. The plans or narrative do not describe the proposed activities and A&M defers to the Planning Board if additional detail is required to satisfy any concerns.

24. Issue resolved, no further comment.

#### **Additional Comments**

25. The drainage report narrative and HydroCAD calculations have been revised but contain discrepancies that need to be reviewed, revised and/or clarified.

- a. Section 2.1 Descriptions of Runoff Controls identifies proprietary separators for the project. The project narrative proposes StormTech units which differ than the ones specified on the plans. The water quality calculations provided do not support Stormtech units. The design engineer should clarify the design intent and revise accordingly.
  - b. The design engineer has reclassified the detention basin as a wet basin. The design engineer should provide the appropriate calculation in accordance with the Massachusetts Stormwater Handbook for a wet basin.
  - c. The proposed project is showing an increase of 2.0 cfs at the design point for the 100-yr storm event. An exceedance during the 100-year storm event is allowable if the applicant is able to confirm that no downstream flooding will occur. The applicant has provided this statement, but no documentation that indicates downstream will not occur.
26. The design engineer should review the time of concentration for Subcatchment A1: Flow to resized detention basin on the post drainage calculations and drainage area map. The design engineer states 50-ft of sheet flow on grass, but according to the plan, there is only 25-30 feet of grass before it flows onto the pavement. It also appears that the design engineer is utilizing the same flow path from existing conditions. The parking area is being regraded and the flow path has changed and should follow the new contours.
27. The resized detention basin does not meet the required 1-ft of freeboard. The 100-yr elevation in the basin is 34.76 and the HydroCAD stops at elevation 34.80. The plans call for the top of the basin to be at elevation 35. The design engineer should review and revise the basin accordingly.
28. The TSS removal worksheet associated with BMP Treatment Train 2 calls for a Stormceptor 450i and the wet basin with a sediment forebay. A&M is unable to find the location of the Stormceptor 450i on the plans. The design engineer should identify the water quality structure on the plans and provide the appropriate details.
29. The plans identify four (4) water quality structures as Stormceptor 900. The detail sizing report provided in the report shows the flows to WQU-1 and provides sizing worksheets for a Stormceptor 900 and a Stormceptor 450i. The design engineer should provide sizing worksheets associated with each water quality structure and for the ease of review the units on the plans should match the labeling on the sizing report.

### **Relationship to other permits**

**Updated Comment:** Issue resolved, no further comment.

In order to track any changes made to the proposed project, A&M recommends the applicant/engineer provide a written response to the items identified above and/or supplemental information necessary to review the application.

Very Truly Yours,

**ALLEN & MAJOR ASSOCIATES, INC.**

Philip Cordeiro, PE  
Branch Manager