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ALLEN & MAJOR ASSOCIATES, INC.

September 6, 2023

Nazih Elkallassi, Chairman Town of Wareham Zoning Board of Appeals 54 Marion Road Wareham, MA 02571 Re: Second Peer Review
Peter Koulouras
Special Permit, Variance, and Site Plan
Review Application
ZBA Case 11-23
3127 Cranberry Highway
Wareham, MA

Dear Mr. Elkallassi and Members of the Zoning Board of Appeals:

In accordance with our contract to conduct a peer review of Peter Koulouras' Special Permit, Variance, and Site Plan Review application associated with the Site Development Plan at 3127 Cranberry Highway 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 ZBA requires.

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

- Proposed Site Development Plan 3127 Cranberry Highway Wareham, Massachusetts prepared for Peter Koulouras prepared by G.A.F. Engineering, Inc. dated May 25, 2023 revised August 30, 2023;
- Site Plan Review Cover letter, Application & certified abutters list prepared by G.A.F. Engineering, Inc. dated May 31, 2023;
- Project Narrative & Impact Statement for Site Development Plan prepared for Peter Koulouras prepared by G.A.F. Engineering, Inc. dated May 25, 2023;
- Stormwater Report for 3127 Cranberry Highway Site Development prepared for Peter Koulouras prepared by G.A.F. Engineering, Inc. dated May 25, 2023;
- Special Permit/Variance Cover letter, Application, deed, certified abutters list and Building Department denial letter prepared by the Law Offices of Bello & Morton, LLC dated February 10, 2023;
- Response letter to initial peer review prepared by G.A.F. Engineering, Inc. dated August 31, 2023.

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

- Town of Wareham By-Laws revised October 25, 2021;
  - o Division IV, Article III Earth Removal Regulations;
  - o 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 12, 2022 with additional Amendments from October 2022 Town Meeting not yet approved by the Attorney General;
  - Article 6: Density and Dimensional Regulations;

- Article 7: Design Standards and Guidelines;
- o Article 9: Parking;
- Article 10: Landscaping;
- o Article 12: Performance Standards;
- o 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.

## Variance Request

The project seeks a variance in accordance with Section 1470, Variances of the Town of Wareham Zoning Bylaws. Variances can be granted "when factors relating to soil conditions, lot shape, or topography of such land creates an impracticality or limits the location or positioning of a new structure or addition on a site or location that previously conformed to zoning requirements. An applicant must demonstrate that a literal enforcement of the By-law would involve substantial hardship, financial or otherwise, to the petitioner or appellant, and that desirable relief may be granted without substantial detriment to the public good and without nullifying or substantially derogating from the intent or purpose of such ordinance or by-law." The application is predicated on being granted a variance for lot frontage and area in order to allow the proposed project to proceed. The subject lot as provided on the application was created through the Approval Not Required process through the Wareham Planning Board in June 2022 as recorded at the Plymouth County Registry of Deeds at Plan Book 66 Page 398. The recorded plan specifically identifies the project locus as "Map 8, Parcel B (not to be considered a separate building lot). The applicant and engineer for both the ANR and this variance request are the same. The application does not provide any justification as to the hardship that exists on a lot that was created within the prior calendar year that was intentionally labeled as non-buildable to now seek a variance on the property negating the premise under which the Planning Board endorsed the plan. Attorney Jillian Morton, esq. described the subject lot as being "unique" in that it is "situated with a major highway on side [Route 6/28] and the railway behind it". This is a description befitting nearly all existing lots/parcels along this corridor including the legally conforming lot that existing prior to the ANR plan.

A&M defers to the Zoning Board of Appeals as to the merits of the application as provided as to whether it meets the statutory requirements of section 1470 for granting in consideration that the "hardship" appears to be self-imposed.

## Wareham By-Laws and Zoning By-Laws

1. The proposed project is located within the Commercial Strip Zoning District and is subject to Article 7: Design Standards and Guideline, subsection 760 Design Standards & Guidelines for Commercial Districts. No architectural plans have been submitted; therefore A&M is unable to review for compliance with subsection 764 Architectural Design Guidelines. The ZBA may consider a condition of approval requiring the architectural design of the building be in compliance with subsection 764 of the Zoning By-Laws.

**Updated Comment:** The Design engineer has provided a response indicating that the architectural conditions of Section 764. Architectural Design Guidelines are "recommendations, but not required" (Section 710). A&M is in agreement with this assertion, but the original application included no architectural material which was the substance of the comment. The design engineer has provided an architectural elevation and floor plan in the revised materials that the Zoning Board of Appeals can review against the criteria of Sections 764 and 765 and render a decision accordingly.

- 2. Issue resolved, no further comment.
- 3. The proposed project is proposing a new sign and will be subject to Article 11: Signs. The applicant will be required to submit to the Director of Inspectional Services a completed sign permit application, together with all supporting materials specifically building and sign dimensions, materials of which the sign is comprised, colors, attachment methods and the position of the sign.

**Updated Comment:** The applicant has acknowledged the requirement for a sign permit. Issue resolved, no further comment.

## **Site Plan & Drainage Calculations**

- 4. Issue resolved, no further comment.
- 5. There is existing pavement on the southerly portion of the property that straddles the property line and extends onto lands owned by the Commonwealth of Massachusetts. Is the offsite pavement being removed as part of this application? Please confirm if an easement will be prepared for this work. As described on the record Approval Not Required plan dated June 2022, as prepared by GAF, it also depicts a fence line approximately 40-50 feet beyond the property line and seems to indicate this area was in use by the landowner. Please describe the intent of this area and whether the fence is to remain or be relocated/removed.

**Updated Comment:** The applicant's engineer has indicated that the limit of work under this proposal is as shown on the plans. This will leave remnant paved areas and a fence encroachment on property not owned by the applicant but rather owned by the Commonwealth of Massachusetts. A&M defers to the Zoning Board of Appeals whether it is appropriate to remove these encroachments as part of this project.

- 6. Issue resolved, no further comment.
- 7. Issue resolved, no further comment.
- 8. The design engineer should review the proposed grading. As currently designed the proposed project is directing stormwater off-site to the east and west onto abutting properties. Based on the existing contours and spot grades, no stormwater is being directed off-site. The design engineer should also review the proposed low points being created on the easterly and westerly property line, where water will be ponded and trapped. The design engineer should include all off-site areas and avoid directing runoff off-site onto abutting properties where no runoff is directed under existing conditions.

**Updated Comment:** The design engineer has provided revised plans with additional spot grades to better define the intended path of drainage. Along the easterly property line, under existing conditions runoff flows through the existing spot grade at 40.9 and toward the existing on-property catch basin. Under proposed construction a metal edge is being added as well as the grading of the 41.x spot elevations. This will result in an area of ponding on the abutting property that doesn't currently exist as part of the overland flow of water. On the westerly sideline, the contouring directly adjacent to the

parking spaces drains onto the abutting property and along the property line where it may similarly become trapped at the existing 41 contour along with the effect of the proposed metal edging.

- 9. Issue resolved, no further comment.
- 10. Issue resolved relative to the detailing and information on the edging. Please review stormwater implications in comment 8 above.
- 11. The drainage field has been designed relying on test pits conducted on adjacent sites. No site specific data is provided in support of the soil classification or the estimated seasonal high groundwater table. In order to comply with the Massachusetts Stormwater Standards, one test pit is required for each 5,000 square feet of drainage area provided. The applicant should conduct a test pit to confirm soil conditions. The Zoning Board of Appeals may consider a condition that requires the test pit be performed at the time of general construction. The results of the test pit should be provided for record along with any changes to the site plans, if required. Site plan changes would require a modification of any permit(s) issued by the Board.
  - **Updated Comment:** No test pit data has been provided but given the design engineer's familiarity with the surrounding site and their confidence in the underlying soils, should the Zoning Board of Appeals agree, a condition can be put in place that the soils are verified during the time of construction and a report provided to Board for record. The report would include the location of the test pit, depth of excavation, and confirmation of estimated seasonal high groundwater. Any unanticipated effects of the soil testing would be discussed in the report to the Board. The design engineer has indicated they are amenable to this condition if so chosen by the Board.
- 12. No details on site lighting nor a photometric plan have been provided, A&M is unable to review impacts on surrounding properties or compliance with Zoning §1243 Lighting Standards or §1533 (11).
  - **Updated Comment:** A site lighting layout plan and cut sheets have been provided. Light trespass from the proposed fixture locations is occurring along the east, west, and south property lines and should be revised to be in conformance with lighting standard 1243.2.
- 13. Existing watersheds and drainage calculations should be revised to include off-site areas draining onto the lot towards the existing catch basin, identified as design point #1.
  - **Updated Comment:** A&M acknowledges the design engineer's preference to not include the existing runoff into the stormwater calculations as it results in a more conservative design approach to the proposed conditions of the property only. Further, the design engineer has noted that the proposed metal edging will prohibit runoff from entering the site under proposed conditions. This does not address the effect on the runoff condition under proposed conditions. Both issues are as described under Comment 8 above.
- 14. The design engineer should review the proposed watersheds. Based on the proposed grading the landscape shoulders associated with Watershed 1S do not appear to drain into the pavement as intended. Portions of Watershed 2S do not appear to drain towards the landscape depression along the southerly line.
  - **Updated Comment:** The design engineer has indicated that the landscaped beds are higher than the parking field. Portions of the shoulder are higher, however, along the easterly property line, the limit of drainage area that will drain onto the parking field is approximately at the 44 contour. Along the westerly sideline, the entirety of the landscaped area is directed toward the property line (see Comment

8 above). The landscaped beds along the front of the site direct water toward Cranberry Highway and the added French drains. None of this water should be part of watershed 1S and should be reviewed.

15. The design engineer has accounted for 80% TSS removal rate for a proprietary treatment device (First Defense FDHC-3 Unit). No calculations or third-party testing data has been provided to demonstrate this removal rate. Proprietary treatment devices are typically maxed out at 50% unless documentation is provided. The design engineer should update the TSS worksheets accordingly.

**Updated Comment:** TSS removal efficiency guidance is provided by Volume 2 Chapter 4 of the MassDEP Stormwater Handbook. In it, they provide historical context to a testing database as part of the Massachusetts Strategic EnviroTechnology Partnership (MassSTEP) and Technology Acceptance and Reciprocity Partnership (TARP) programs. Both programs are defunct and no longer provide current documentation on removal efficiency. Design engineers are directed to provide supporting information by the program vendor and/or third-party testing. The design engineer has provided the vendor information from Hydro-international supporting the 80% minimum TSS removal rate. The stormwater handbook recommendation to rely upon other testing agencies, in this case, the NJCAT stormwater program, which is part of the TARP program, issued published guidance in 2016 (as the latest available) that the First Defense unit has been certified as follows:

Hydro International received New Jersey Corporation for Advanced Technology (NJCAT) verification of claims for the FDHC in February 2016 (1) based on the New Jersey Department of Environmental Protection Laboratory Protocol to Assess Total Suspended Solids Removal by a Hydrodynamic Sedimentation Manufactured Treatment Device (2) dated January 25, 2013. The report was submitted to NJDEP and the FDHC was subsequently NJDEP certified for use as a 50% TSS removal device on April 4, 2016.

The 50% TSS limitation seems appropriate given the regulatory guidance. The 50% limitation satisfies the pre-treatment requirement of 44% removal prior to infiltration which in turn achieves an 80% TSS removal satisfying the condition. Issue resolved, no further comment.

- 16. The design engineer should revise the TSS calculation worksheet for the Infiltration chambers and provide two (2) sets of TSS calculation worksheets, one to demonstrate the required 44% TSS removal prior to infiltration and another for the overall TSS removal for the entire drainage system. The infiltration system only receives 80% TSS removal with the appropriate pre-treatment, therefore the design engineer cannot take additional credit for the proprietary catch basin in the overall calculation for the entire drainage system. The design engineer should update the TSS worksheets accordingly.
  - **Updated Comment:** The design engineer has provided a written response in support of the pretreatment requirement. It is noted though that updated TSS worksheets were not provided. Issue resolved, no further comment.
- 17. The project exceeds the maximum access road length of 150 feet without provisions for a fire apparatus turn around (NFPA 1 18.2.3.5.4) for dead ends. The Wareham Fire Department is the Authority Having Jurisdiction (AHJ) for fire access roadways. The design engineer should provide a vehicle movement path showing the anticipated circulation on-site. Please provide any correspondence with the Fire Department that approves the circulation path as designed.

**Updated Comment:** The design engineer has provided a response relative to unobstructed access to the building based on limited entry of the emergency apparatus into the site. The design engineer

should continue to work with the Wareham Fire Department and provide an updated statement that the access needs are sufficient for their response vehicles as provided on the site plans. If the Wareham Fire Department is in agreement as the approving authority, the issue is resolved with 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