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Town of Wareham
Zoning Board of Appeals
Memorial Town Hall
54 Marion Road
Wareham, MA 02571

RE: Response Letter to Second Peer Review, Angela Mckeown, ZBA Case #21-23

Dear Board Members,

We have reviewed the letter entitled "Second Peer Review" for Angela Mckeown, ZBA Case #21-23, prepared by Allen & Major Associates, Inc., and dated October 6, 2023. Please see below the comments listed on this letter followed by our responses and a description of plan changes shown below. Items which have been resolved by responding to the initial review have been omitted.

Variance Request

The project seeks a variance and special permit to allow for multiple buildings as shown on the site development drawings in accordance with Sections 1460 and/or 1470 of the Zoning Bylaw. The application is silent on the specific details of the Special Permit and how it comports to the criteria set forth under the Bylaw. A&M recommends the applicant provide an updated statement relative to the application as proposed to document for the Board's record.

See accompanying letter from attorney Jilian Morton.

Wareham By-Laws and Zoning By-Laws

2. The proposed project is located within the Wareham Village 2 Zoning District and is subject to Article 7: Design Standards and Guideline, subsection 730 Wareham Village Districts. The architectural plans provided are dated June 6, 2022, and do not match the dimensions shown on the most recent set of site plans. Updated floor plans should be provided. The architect should provide a statement for the record on how the proposed new duplexes have been designed to conform to the applicable section of the Zoning By-Laws. The ZBA may consider a condition of approval requiring the architectural design of the buildings to be in compliance with subsection 730 of the Zoning By-Laws.

Updated comment: *The applicant indicates that additional architectural information is being prepared but makes no indication on the submission of the materials to the Board for review.*

A&M defers the adequacy of the information previously provided and whether additional detailing is necessary for the Board to render a decision.

Completed architectural plans will be fully reviewed at the time of applying for individual building permits. The current architectural plans depict the style and layout of the proposed dwelling units. Finalized plans will have a very similar floor plan and elevation view with slightly larger room sizes to match the current proposed footprint.

4. 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 and what is being provided.

Updated Comment: *The applicant has provided the additional information as noted. A&M defers to the Board's opinion to the additional landscaping as provided; however it should be noted that relatively minimal new landscaping is provided along the westerly property boundary/right of way that if provided could minimize the project's visual impact to the existing residence at 181 High Street. 171 High Street currently has a fence separating the projects.*

A row of arborvitaes is now proposed along the rear property line to provide additional screening. Prior to construction, the landscape architect shall review the additional landscaping proposed in this area and provide an updated planting schedule accordingly.

Site Plan & Drainage Calculations

9. A majority of the drive aisles, and the primary site driveway, are less than the minimum width of 20-ft required for use as a fire access road in compliance with the NFPA 1 fire code and 527 CMR 18, the Massachusetts amendments. The Wareham Fire Department is the Authority Having Jurisdiction (AHJ) for fire access roadways. Please provide any correspondence with the Fire Department that approves the circulation path as designed. At a minimum, A&M recommends that the internal driveways be widened to the minimum recommended 20 feet.

Updated comment: *The applicant has revised the driveway widths per the Fire Department recommendations. No new drainage calculations were provided to address the increase in impervious surface. A&M is unable to confirm the adequacy of the stormwater systems as proposed.*

A revised drainage report has been prepared and the calculations reflect the updated driveway widths. The size of the infiltration systems has been modified to account for the minor increase in stormwater runoff.

11. The applicant should provide documentation that they have the rights to improve the existing driveway (right of way) as shown, have acquired necessary easements for construction. The new driveway should account for and show the cross connections to the abutting properties.

Updated comment: *The applicant asserts appropriate rights are in place for the work as shown. A&M has no further comment as the responsibility remains with the owner/applicant to confirm adequate rights are in place for the construction as shown on the plans.*

See accompanying memorandum regarding the easement from attorney Jilian Morton.

12. The design engineer should include an erosion control plan as well as a site preparation/demolition plan to clearly demonstrate the work required to construct the project.

Updated comment: *The applicant has provided a site preparation that includes erosion measures. The temporary construction entrance detail should be extended to a minimum length of 50 feet. The site contractor should be required to maintain the erosion barriers at all times during construction and keep on hand additional measures to implement as necessary until the site is stabilized with at least 70% grass coverage or pavement.*

The temporary construction entrance detail has been extended to a length of 50 feet. A note has been added to the existing conditions & site preparation plan in regard to maintaining the erosion control barriers during construction.

15. The design engineer may want to consider changing the configuration of the 12–1000-gallon leaching system to help protect and preserve the existing 36" tree along Main Street.

Updated comment: *The applicant has revised the drainage as suggested. A&M recommends that all efforts be made to minimize construction work within the drip line/root area of the tree for increased survivability as noted by the additional tree protection labeling.*

All efforts will be made to minimize construction work within the area of the existing 36" tree. The footprint of the infiltration system in this location has again been adjusted to provide additional separation from the above referenced tree. Protective fencing is proposed to be placed around the base of every existing tree to remain prior to construction.

22. Since the infiltration rate of 2.41 in/hr used in the design is greater than 2.4 in/hr, the design engineer is required to demonstrate that the treatment BMPs achieve 44% TSS prior to discharging into the infiltration BMP, per the Massachusetts Stormwater Handbook. The proposed project is only proposing a deep sump hooded catch basin, which only achieves 25% TSS removal. Please provide additional treatment BMPs to meet and comply with the required 44% TSS Removal.

Updated comment: *The TSS treatment train has been adjusted with the additional oil/grit separators. A&M has no further issue. However, please note that the oil/grit chamber provides the pretreatment that allow the infiltration systems to achieve 80%. The 25% of the oil and grit*

should therefore not be included in the overall treatment train. This does not affect the design but should be noted for future applications.

The TSS removal calculations have been updated to exclude the treatment from the oil/grit chambers from the overall system treatment.

24. The existing and proposed drainage calculations as presented in the report do not account for the existing and proposed driveway to High Street. The driveway cover type is being changed from dirt to pavement, therefore causing an increase in runoff towards High Street. Off-site areas contributing to the watersheds under existing and proposed conditions should be included in the analysis. The design engineer should review and update the calculations accordingly and provide mitigation if necessary to meet pre-development conditions.

Updated comment: *The applicant has revised the watersheds accordingly and provided additional site drainage mitigation. The two smaller infiltration systems bottom of stone are set at elevation 22.50. The nearest adjacent test pits were excavated to a depth of 21.50. This assumes the water table will exist at 21.50 without further excavation. The soils should be verified to a depth in support of the proposed stormwater system. The Board may allow a condition that a verification of the onsite soils be performed during construction. The applicant will need to illustrate that the water table is at elevation 20.50 or lower to meet the MassDEP stormwater standards. Additionally, with less than four feet of separation to the water table, a groundwater mounding analysis is required. The mounding analysis should be included in a condition of approval.*

A note has been added to the grading & drainage plan that states the site contractor will need to excavate to a depth of 4 feet below all infiltration systems in their respective locations. The engineer shall be present during this excavation to verify soil conditions are consistent with the test pits and to ensure groundwater is not encountered. If discrepancies from the assumed conditions are found, the engineer will need to provide an alternative solution and/or a mounding analysis.

27. The 100-year storm event for the proposed drainage calculations were not provided, unable to review and verify if the proposed drainage system will function as design. The design engineer should review the capacity of the large subsurface system (Pond 1P: Leaching Chamber), because during the 25-year event reaches an elevation of 20.96, which is within 0.5" of capacity. The two smaller infiltration systems also near capacity during the 25 year storm event. The engineer should describe the conditions anticipated during a 100 year event if runoff is not captured and handled by the stormwater systems as shown.

Updated comment: *The applicant has provided the 100 year calculations as requested. IN reviewing the updated calculations for the primary infiltration system, the HydroCAD includes a primary overflow horizontal weir/grate at elevation 22.50. The plans do not depict this overflow. Please clarify its location and function. The release of the water may affect the overall watershed discharge form the site. Please also note that the rim elevation of DMH 1 appears incorrect.*

The overflow from the primary infiltration system is modeled using the horizontal weir/grate. For modeling purposes, we used elevation 22.50, which is the top of the infiltration system. The actual overflow would take place at the rim of the catch basin at elevation 29.50 and contribute to the off-site runoff directed towards Main Street. We ignored the storage within the drainage components from elevation 22.50 to 29.50 to calculate the anticipated overflow volumes. The overflow from the primary infiltration system combined with the runoff directed towards Main Street is still less than the pre-development runoff. The rim elevation of DMH 1 has been corrected.

29. The applicant provides a statement regarding illicit discharges, however a signed statement by the responsible party is not provided and should be included for record.

***Updated comment:** A signed illicit discharge statement should be provided for record prior to construction.*

The illicit discharge statement will be signed prior to construction.

33. There is no fencing proposed behind units #1 and #2 to screen abutting property. A landscaped buffer or screen fence should be provided in this location (Section 1052).

***Updated comment:** A&M defers the adequacy of the landscaping/screening in this location to the Board. See also comment 4 above. The Board may wish to consider requiring placement of a fence or vegetated landscaping at the limit of the 20' right of way.*

See response to comment 4 above.

Respectfully yours,

Samuel J. Iamele, EIT, CSE
Project Engineer

Cc: File; Client