

February 26, 2024

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

Re: Second Peer Review
Hidden Trails Definitive Subdivision Plan,
Special Permit for Residential Cluster
Development & Site Plan Review
PB Case 15-23
Off County Road
Wareham, MA

Dear Chair King and Members of the Planning Board:

In accordance with our contract to conduct a peer review of Hidden Trail a Definitive Subdivision, Special Permit for a Cluster Subdivision and Site Plan Review off County Road 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 "Hidden Trails Definitive Subdivision Plan of Land and Special Permit for a Residential Cluster Development off County Road West Wareham, MA prepared for Sarajon Reality, LLC prepared by JC Engineering, Inc. dated September 7, 2023 revised February 9, 2024";
- Drainage Calculations & Supplemental Information for Hidden Trails off County Road W. Wareham, MA prepared for Sarajon Reality, LLC prepared by JC Engineering, Inc. dated September 7, 2023 revised February 9, 2024;
- Special Permit for Cluster Development and Site Plan Review Application Town of Wareham Planning Board for Hidden Trails off County Road W. Wareham, MA prepared for Sarajon Reality, LLC prepared by JC Engineering, Inc. dated September 7, 2023;
- Response to Peer Review Letter to the Planning Board prepared by JC Engineering, Inc. dated February 9, 2024;
- Letter from Lightship Engineering dated February 12, 2024;
- Response to Peer Review Letter to the Conservation Commission prepared by JC Engineering, Inc. dated February 9, 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 4: Overlay Districts
- Article 6: Density and Dimensional Regulations;
- Article 8: Alternative Residential Site Development;
- Article 12: Performance Standards;
- Article 15: Site Plan Review.
- Rules & Regulations Governing the Subdivision of Land Town of Wareham, Massachusetts Planning Board dated March 2013;
- 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. Issue resolved, no further comment.

Site Plan & Drainage Calculations

3. The design engineer has determined six (6) design points for the purpose of drainage calculations to confirm and verify that the proposed project will not increase peak discharge rates and volumes to the design points. The calculations demonstrate an increase to two (2) of the design points. The design points are designated as DP-3 (onsite) and DP-6 (onsite). DP-3 (onsite) is an isolated wetland and DP-6 (onsite) is the pond. A&M understands that both design points are located on the property, but the proposed project is increasing the peak discharge rates and volumes to a design point which is in violation of the Stormwater Standards which requires mitigation of runoff to the nearest property line or jurisdictional resource area as defined under the Wetlands Protection Act. The design engineer should review and reevaluate the proposed stormwater management system to bring the design into compliance with the Stormwater Standards.

Additional Comment: Design Point 4 (Off-Site to Cranberry Bogs) continues to show a slight increase in runoff volume during the 10-year event that should be reviewed.

4. Issue resolved, no further comment.
5. The onsite pond is man-made based on anecdotal records. No information is provided on the pond and its historic use to the extent there may be buried materials and/or contaminants present that may affect the underlying groundwater flow. The pond will be considered jurisdictional under the wetlands protection act and may be discussed further in the Notice of Intent.

Additional Comment: The applicant has provided a summary prepared by Lightship Engineering that notes an environmental assessment is underway. The results of the study should be provided to the Planning Board in conjunction with any applicable reporting conditions under the Massachusetts Contingency Plan (MCP). The applicant further notes that permitting adjacent to the pond is not sought

at this time but may be subject to future permitting efforts. A&M agrees with this statement. Issue resolved, no further comment.

6. Issue resolved, no further comment.
7. Groundwater mounding calculations have been provided, but no supporting or backup information was provided to verify/confirm that values used in the spreadsheet. Please provide backup information specifically on the Horizontal Hydraulic Conductivity, Specific Yield and initial saturated thickness parameters.

Additional Comment: The groundwater mounding calculations have been provided as requested. The design engineer should review the mounding calculation associated with infiltration basin 4 as the calculated mound is 2.67' whereas the separation to the estimated seasonal high water table is 2.4'

8. Issue resolved, no further comment.
9. Issue resolved, no further comment.
10. The design engineer is proposing 2 drywells each for the roof runoff for the back of the houses on lots 27-36. The design engineer should provide a note on the lotting plans as well as the grading and utility plans documenting the design intent so when the lots are sold and being designed by others, the homeowner will be aware of the drywells. The note should also specify the maximum size of roof area accounted for. Please note that these lots will also be required to accommodate a private on-site septic system. The Board may also elect this to be a condition of the covenant to ensure this integral drainage function is not overlooked.

Additional Comment: The applicant has provided the requested note as located on sheet 4 of 25 that describes the requirement for drainage on each lot and supplemental drainage as needed. The note references lot numbers that should be added to the key sheet to avoid any confusion. The location of the note is such that it may be overlooked under future design that the Planning Board may wish to include a condition in any approvals to ensure drainage is accounted for properly. Issue resolved, no further comment.

11. Issue resolved, no further comment.
12. Issue resolved, no further comment.
13. Issue resolved, no further comment.
14. Issue resolved, no further comment.
15. Issue resolved, no further comment.
16. Issue resolved, no further comment.
17. Issue resolved, no further comment.
18. Issue resolved, no further comment.
19. Issue resolved, no further comment.
20. The plans should be updated to show the location of street trees. (Subdivision Rules & Regulations, Section IV, §B.26)

Additional Comment: The applicant has provided the street trees as requested. The Subdivision Rules do not list street tree species and size, however, the applicant may wish to add these to the plans. The

Planning Board may wish to consider this as a clerical condition to any approvals issued. Issue resolved, no further comment.

21. Issue resolved, no further comment.
22. Issue resolved, no further comment.
23. Catch basins shall be spaced along both sides of a street at approximately 400-foot intervals and located at all low points and corners at street intersections. (Subdivision Rules & Regulations, Section VI, §A) The following areas should be reviewed:
 - a. Street Intersection of Road A and County Road;
 - b. Street Intersection of Road A and Road B;
 - c. Street Intersection of Road C and Road D;
 - d. Street Intersection of Road B and Road C;
 - e. Issued resolved, no further comment.
 - f. Issue resolved, no further comment.

Additional Comment: A&M acknowledges the applicant's response on the positioning of catch basins noted in comments a through d above. The designer has positioned the catch basins in locations that are viable and should be installed accordingly with appropriate oversight during construction. However, the Subdivision regulations do note the requirement for catch basins at each intersection. The applicant should consider including this as a waiver for the Planning Board to consider. The drainage as proposed is functionality equivalent to structures that could have been installed at each intersection. A&M defers to the Planning Board, no further comment.

24. Issue resolved, no further comment.
25. Issue resolved, no further comment.
26. Issue resolved, no further comment.
27. Issue resolved, no further comment.
28. Issue resolved, no further comment.
29. Issue resolved, no further comment.
30. The project will require a Stormwater Pollution Prevention Plan during the construction period to control sediment, ground erosion, and wind-blown erosion. The SWPPP should be maintained onsite at all times and reports made available to the Town if desired by the Planning Board.

Additional Comment: The Planning Board may wish to consider a condition requiring a submission of the SWPPP for record at the time of submission to the EPA under the NPDES program and that all inspection reports can be made available to both the Planning Board and Conservation Commission as required.

31. Issue resolved, no further comment.
32. Issue resolved, no further comment.

Additional Comments

33. The applicant is proposing the same model water quality treatment unit for the project (CDS 2015-4). From previous experience, the CDS units have specific flow rates required for each model. The applicant should confirm that the appropriate structure is being utilized onsite as opposed to the blanket use of a singular model where the water quality flow rate may not be acceptable to the manufacturer. This is noted on DMHs 12 and 22.
34. There is no easement provided for the relocated and existing gravel cart paths that would span proposed lots 27 through 32, 35, and parcel 59.

Statement on Waivers

A&M offers the following comments on the requested waivers for consideration by the Planning Board.

1. A waiver from installing street lights (Section VI.D).

This waiver has been removed and is no longer applicable.

2. A waiver from installing sidewalks on both sides of roads a, b, and c, which are considered residential standard streets. Also, a waiver to allow the sidewalk to be within 3 feet of the roadway edge for portions of the roadway (Section VI.G).

This waiver has been removed and is no longer applicable.

3. A waiver from installing concrete curbing on both sides of the road. Concrete curbing is proposed only in the location where the sidewalk is adjacent to roadway. For the remainder of the streets, a cape cod berm is proposed along both sides of the road. (Section VI.H).

Cape cod berm curb is less durable than concrete curbing and is susceptible to damage during plowing. Section VI.H allows for the use of berm curbing where grades, curves or traffic justify their installation. The information provided offers no justification of bituminous curbing. A&M would recommend the applicant justify the request to aid the Board in consideration.

Additional Comment: The applicant denotes this waiver has been removed and they intend to utilize concrete curb adjacent to sidewalks and bituminous throughout. Section VI.H. allows bituminous curb when "in the judgement of the Planning Board, because of grades, curves or traffic, their installation is warranted." While a waiver for bituminous is not required, A&M defers to the Board's opinion on the use of this curb type throughout the subdivision.

4. A waiver from installing fire alarms (Section VI.K).

This waiver should be reviewed in concert with feedback from the Wareham Fire Department upon review of the subdivision plans to determine if granting relief is acceptable to the health and safety of the residents.

Additional Comment: The fire chief has issued an opinion on a letter dated December 5, 2024 that the use of fire alarms is antiquated and not required in support of this waiver.

Relationship to other permits

The applicant is also required to submit a Notice of Intent to the Wareham Conservation Commission for work within 100 feet of a resource area protected under the Wetlands Protection Act. Under the Wetlands Protection Act, additional comments may apply.

As part of the conservation process, the wetland lines shown on the proposed plans requires verification. The date of the wetland line is noted from August 2007 and has since expired. Verification of the line occurs simultaneously during the Notice of Intent. The final resource area evaluation may result in additional changes pertinent to the Planning Board's review of the application.

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