



June 15, 2016
16239

Maureen O'Meara, Town Planner
Town of Cape Elizabeth
320 Ocean House Road
P.O. Box 6260
Cape Elizabeth, Maine 04107

RE: Old Mill Road - Minor Subdivision Review

Dear Maureen:

We have received and reviewed a submission package dated May 27, 2016 for the subject project. The package included a May 27, 2016 cover letter addressed to the Planning Board Members from John Mitchell of Mitchell & Associates of Portland, Maine along with supporting documentation, a five sheet drawing set of May 27, 2016 project plans as prepared by Mitchell & Associates, and a December 17, 2015 "Plan of the Land" Plan drawing as prepared by Owen Haskell, Inc. of South Portland. Based on our review of submitted material and the project's conformance to the technical requirements of Section 16-2-3, Minor Subdivision Completeness, we offer the following comments:

General Engineering Comments:

1. The applicant is seeking minor subdivision approval to create a four-lot subdivision and improving an existing roadway, Old Mill Road, which is located off from Old Ocean House Road. This subdivision is being created from an existing 23.98-acre parcel. Two new house lots will be created and the subdivision will include another lot which currently has been developed with a home on a residential lot. The fourth lot will be common land alongside Alewife Brook and this lot will be jointly owned by the subdivision's residential lot owners. Public water will be provided by a new 8-inch diameter water main with a hydrant. Wastewater services will be provided by on-site septic systems for each lot and proposed overhead and then underground electric, telephone, and cable television services will be provided from the extension of existing utilities within the Old Ocean House Road right of way.
2. We understand that the Board will be conducting a completeness review for this project at their upcoming meeting. In our opinion, the submitted materials represent a completed package and the remainder of our comments here are included to facilitate future design submittals and peer reviews of the project. It should be noted that additional submitted information may result in additional review comments.
3. In the May 27th cover letter, the developer and designer outlines requests for several waivers. Included in the waiver requests is a modification to the road width standard which Planning Board will need to assess given the circumstances of this subdivision.

There is also a waiver request regarding the roadway alignment and desire to allow the centerline of the improved Old Mill Road to deviate from the centerline of the Old Mill Road right way. This request is being made to avoid ledge removal during construction. Given that Old Mill Road is being improved from its existing condition/location and that the waiver would also allow the preservation

of mature trees while still keeping the earthwork activities within the limits of the right of way, we support this waiver request.

Another waiver request has been made to allow from the reduction in the Plan Scale from 1-inch = 40-feet to 1-inch = 80-feet so that the entire subdivision property can be shown on one drawing. As the plans are reasonably clear and the notes on the plan are readily legible, we would also support this waiver provided that the road stationing was revised to a larger and more easily legible font size. The proposed rain garden shown on this plan should also be labeled.

4. Drawing 1.0 indicates the monumentation as proposed by the applicant for the Old Mill Road right of way. Some of the points are proposed to be granite monuments and some of the points are proposed to be iron pins. In keeping with the Ordinance requirements, the Public Works Director should be consulted to determine if the proposed monumentation is appropriate.
5. Note #18 on Drawing L 1.0 discusses tree removal restriction outside the building envelope for Lots 1 and 2. We believe that the lot references should be Lot 2 and Lot 3.
6. The vertical datum of NGVD 1929 should be added to the notes on Sheet L 1.0.
7. The finalized version of Drawing L 1.0 should be stamped and signed by a Professional Land Surveyor. Likewise, the finalized versions of drawings depicting grading, utilities, and stormwater design elements should be stamped by a Professional Engineer. The December 17, 2015 "Plan of the Land" Plan drawing as prepared by Owen Haskell, Inc. should also be stamped and signed by a Professional Land Surveyor in the next submission.
8. On Sheet L 3.0, the beginning and end stations of the Old Mill Road improvements should be clearly called out. The vertical datum of NGVD 1929 should also be noted on the plan.
9. The Stormwater Management Report for the project was prepared by Stephen Bradstreet, P.E. of Ransom Consulting, Inc. and discusses a net impervious surface increase of an estimated 237 square feet with the proposed improvements to Old Mill Road. The two new lots will sheet flow runoff across the common land parcel and into Alewife Brook and the Atlantic Ocean. Given the minimal construction activity associated with the project, we agree that no formal stormwater calculations need to be provided for this project.

The stormwater design includes a new rain garden to be constructed on the south side of the road at approximately Station 4+75. This rain garden will capture runoff during the first 0.5 to 1.0 inch of storm events and act to treat the runoff prior to discharge across Lot 3. We agree with the designer's assertions that this approach will improve the water quality of runoff from a 400 linear foot portion of Old Mill Road, meld well aesthetically with the surrounding subdivision areas, and not extensively impact mature trees near the rain garden. As the flow from the rain garden discharges across Lot 3, an agreement should be in place to allow surface runoff from Old Mill Road to discharge across Lot 3.

10. The project design for Old Mill Road includes new 12-inch diameter driveway culverts for abutting Staley Lot, Lot 2, Lot 3, and the turnaround area. The designer should check the elevations of these new culverts as it appears that the culverts for the Staley lot and the turnaround will have less than a foot of cover which is undesirable. Altering the elevations and the ditch grading near these culverts appears to be necessary.
11. The application submittal also included a Traffic Assessment as prepared by Randy Dunton, P.E. of the firm of Gorrill-Palmer. This assessment included information on the minimal traffic generation

of the two new lots and documentation confirming that no high crash locations are associated with the project.

The available sight distances were also evaluated which indicate that acceptable sight distances are available for Old Mill Road onto Old Ocean House Road and for the proposed house lot driveways onto Old Mill Road. A caveat was added that the Town should remove vegetation to the "best practical extent" behind a stone wall in the Old Ocean House Road right of way to improve sight distance on the south side of the intersection. Notes should be added to the plans indicating the site distances as measured and specifying the area of the vegetation removal. We also question whether the Town should be responsible for maintaining the vegetation removal in this area or whether the long term vegetation control should become the responsibility of the Homeowners Association.

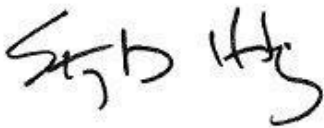
Another point made in the Traffic Assessment was that vegetation that has the potential to block sight distance at the two new lots' driveways should be trimmed to a maximum two feet in height and be maintained in that condition. Notes regarding this suggestion should also be added to the plans.

12. The improvements to Old Mill Road include 2-foot wide gravel based shoulders with a grass surface. The depth of loam should be added to the Typical Road Section on Sheet L 4.0.
13. The rain garden has been shown to cover 35 square feet with a six to eight inch ponding depth capacity. The designer should consider as to whether the downgradient berm needs additional fabric stabilization or any other measures to ensure that the berm is not compromised prior to the establishment of acceptable grass growth.
14. An underground conduit trench detail should be added to Drawing L 4.0
15. A Silt Fence detail is shown on Sheet L 4.1. Many contractors now utilize erosion control berms as the erosion control barriers for projects. The designer should consider adding an erosion control mix berm detail as an alternate to the Silt Fence barrier.

We trust that these comments will assist the Board during their deliberations on this project. Should there be any questions or comments regarding our review, please do not hesitate to contact us.

Sincerely,

SEBAGO TECHNICS, INC.



Stephen D. Harding, P.E.
Town Engineer

SDH:llg

cc: John Mitchell, Mitchell & Associates
Bob Malley, Cape Elizabeth Public Works Director
Caitlyn Abbott, Sebago Technics