



January 15, 2020  
17320-01

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

**Subject: Edgcomb Way at 75 Ocean House Road Improvements  
Private Road and Resource Protection Permit Review**

Dear Maureen:

We have received and reviewed a submission package dated January 2, 2020 for the subject project. The package included a December 22, 2019 cover letter from applicant Jay Cox, an eight (8) page plan primarily prepared by the firm of Land Design Solutions most recently dated January 2, 2020 with a December 5, 2017 sealed Boundary Survey plan as prepared by Statewide Surveys, Inc. The submission package also included supporting documentation. Based on our review of the submitted material and the project's conformance to the technical requirements of Section 19-7-9 Private Road Completeness and Sec. 19-8-3, Resource Protection Permit Completeness, we offer the following comments:

1. The applicant is requesting a review of an extension to a previously approved proposed private road and private accessway, Edgcomb Way, to create future frontage for a possible lot building area which would be located on the westerly portion of the previously approved Lot 2 land area that was approved as part of the Planning Board's approval of the 75 Ocean House Road Private Accessway/Private Road. The separation of Lot 2 to create a new lot is not proposed at this time nor are two potential additional lots that could be created on the north side of the private road extension on land that is owned by an abutter.

In addition to the road extension request, the applicant is also requesting the approval of a Resource Protection permit which would allow for an RP-2 wetland impact fill of 3,988 square feet as a result of the roadway extension. A new "T-style" turnaround would be created at the end of the roadway extension. This turnaround replaces a previously proposed turnaround near the easterly building envelop of Lot which was included in the original Private Accessway/Private Road approval.

2. We understand that the Board will be conducting a completeness review for this project at their upcoming meeting. We note one potential aspect of the submission package that might be considered incomplete. The new water line and the underground utilities of electrical, cable television, telephone, and data are all shown being connected to existing utilities in Ocean House Road (Route 77) and then extended into the new roadway. These utilities are then truncated and the design of these utilities are not completely shown in correlation with the remainder of the roadway extension. While we do not believe it would be difficult to complete the utility design, the complete extent of these utilities and any related ancillary items such as transformers, valves, and service connections to possible lots are not depicted at this time.

3. With the possible exception of the complete depiction of the utilities as discussed in the previous comment, we believe that the submitted materials represent a completed package and the remainder of our comments here are provided here to facilitate future reviews of the project. It should be noted that additional submitted information may result in additional review comments.
4. The applicant is requesting the following waivers:
  - a. For the Private Road requirement of a 50-foot right-of-way, the applicant is proposing a 35-foot wide right of way to match the previous approval's 35-foot wide right-of-way. The applicant has submitted a legal opinion and draft easement agreements to be entered in with two abutters which would allow for the construction of the road in the proposed right of way. We have historically not supported other right of way width reduction requests in the past, but understand that the Planning Board as the decision-making body has the prerogative to do so on a case-by-case basis.
  - b. For the Private Road requirement of a 22-foot wide road to an 18-foot wide paved travel way to match the width of the previous approval's roadway width. As with the right of way width waiver request, we would typically not support the request for a waiver reducing the roadway width. Recognizing that the Board has routinely approved of such waivers, however, we would again defer to the Planning Board regarding this waiver request.
5. It appears that technically the applicant should also be asking for an additional component of the right of way waiver as the T-style turnaround right of way depicted on the Amended Plan of Edgcomb Way drawing varies from the Chapter 16 Appendix D - Alternate 2 turnaround right of way dimensions. Specifically, it appears that a 45-foot side width right of way on the plan would not meet the 50-foot dimension of the Alternate 2 turnaround and the 120-foot end width right of way dimension of Alternate 2 is being met in total length, but is proposed to be offset rather than centered on the road centerline extension.
6. In discussions with the Town of Cape Elizabeth Fire Chief at the Staff Review Meeting on January 13, 2020, the Chief was supportive of the elimination of the previously approved turnaround near the end of the previously approved private road and the creation of a more appropriately placed T-style turnaround at the end of the proposed private road extension.
7. The submission package written materials indicate that 2-foot wide gravel shoulders are proposed to be alongside the proposed roadway and will be surfaced with grass. The Private Road Section, Detail 2 on Sheet L-2, indicates that the shoulders will be only 1-foot in width. In discussions with the Town of Cape Elizabeth Fire Chief at the Staff Review Meeting on January 13, 2020, the Chief stated that the 2-foot wide shoulders are necessary for the Fire Department's use. Therefore, the shoulder width should be increased to 2-feet on the Private Road Section detail.
8. The design indicates a 2-inch water line will be extended from Route 77 to serve the future lots along the roadway. With the potential for three or four possible lots to connect to this water line, it would seem that the 2-inch line may be undersized to meet the future water demand.

The applicant should review this size with the Portland Water District to confirm the 2-inch diameter pipe use or arrive at a suitably sized water pipe to serve the potential future lot needs.

9. The 3,988 square feet of proposed wetland impact is below the Maine Department of Environmental Protection's 4,300 square foot exemption for Natural Resource Protection Act (NRPA) permitting. The U.S. Army Corps of Engineers also regulates wetland impacts and does not use the 4,300 square foot exemption standard. Therefore, a permit from the U.S. Army Corps of Engineers will be required for this project.
10. The road name of Edgecomb Way should be referenced on the design plans.
11. The stormwater design features cross sloping the extended roadway surface toward the south as sheet flow into an existing wetland area which will then drain to a proposed culvert under the turnaround area and then off-site onto a receiving swale. In accordance with U.S. Army Corps policy, the culvert is proposed to be an oversized 36-inch pipe with the bottom foot of the culvert buried and filled with earthen material to promote wildlife travel through the pipe. The submitted drainage calculations for the 2-year and 25-year storm events indicate a minor increase in the estimated peak flow of runoff off-site as the over-sized culvert will not detain the surface flow it receives and should readily convey flow.

As the project is a new private road, the standards in the Private Access Standards in Section 19-7-9 require meeting the road standards in under the Chapter 16 Subdivision Regulations for a subdivision application. In the Subdivision Review Standards for stormwater, Section 16-3-1 (n), *"any subdivision involving more than ten thousand (10,000) square feet of impervious surface, paving, clearing or vegetative alteration, the provisions and improvements for the control of storm water runoff shall be governed by the provisions of the Town of Cape Elizabeth Storm Water and Non-Storm Water Control Ordinance Chapter 18..."*. The stormwater language of the former Chapter 18 has now been included in Town Ordinance Chapter 25 Storm Water so the standards of Chapter 25 would be required to be met. As it appears that the 10,000 square foot disturbance threshold will be exceeded, the project must meet the Chapter 25 requirements.

Under Chapter 25 Section 25-1-4. Storm Water Runoff System Design, Review Standard c.4 for Downstream Impacts requires that *"when post-development flows exceed pre-development flows, the development shall demonstrate that either (1) storm water runoff will be stored on-site and released at a rate not to exceed pre-development flows or (2) that the storm water runoff system has sufficient capacity to carry the increased flow without adverse impacts"*. While we believe that discharging a majority of the roadway runoff into the wetland as sheet flow to promote infiltration meets the Infiltration Standard c.3 in that *"The storm water runoff system shall maximize to the greatest extent practical the amount of storm water infiltrating on the site during storm events..."*, we do not have enough information on the downstream system to confirm that it has sufficient capacity to carry the increased flow without adverse impacts.

The applicant should assess the downstream capacity in the area between the site and the culvert crossing downstream at Spurwink Avenue. This culvert conveys tributary flow to Trout Brook as part of the Trout Brook Watershed and was assessed in 2019 as part of the Town-wide Culvert Study as one of the Town's sixteen priority culverts. In that study, the Town Engineer and the Cape Elizabeth Public Works Director assessed the condition of this relatively new

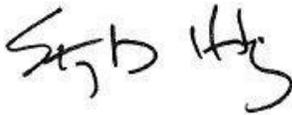
culvert and determined that it has ample capacity so the increase in flow from the proposed Edgecomb Way roadway would not be problematic once the flow reaches this culvert.

12. A stormwater maintenance plan will also need to be developed under Review Standard c.7 and it is possible that the project may also need to meet the Town's Chapter 25 Post Construction Stormwater Management Plan requirements. We suggest that the applicant contact the Town's Stormwater Compliance Consultant, Kristie Rabasca of Integrated Environmental Engineering, to determine the applicability of the post construction requirements to this project and for compliance with this program if it is applicable.
13. The submitted stormwater discussion included a summary of the calculations with no supporting calculations. Two copies of the supporting calculations should be submitted as part of the next submission. In addition to the reported 2-year and 25-year storm events, the Resource Protection Submission Standards also include the 100-year storm event as a required part of the stormwater analysis. The project's proposed impervious surface area should also be included in the report and on the plans.
14. The designer should consider rip rap outlet and inlet treatment to minimize the potential for erosion and to minimize vegetation growth immediately adjacent to the culvert's ends which could adversely impact that capacity of the culvert.
15. The proposed plan indicates several new granite monuments to be installed at angle points along the road right-of-way. The Ordinance allows for the Public Works Director to reduce the number of granite monuments to instead have iron pins installed. We encourage the applicant to review the number of proposed monuments with the Public Works Director, Bob Malley, to arrive at a reasonable quantity of granite monuments.

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:sdh

cc: Jay Cox, Applicant  
Bob Malley, Public Works Cape Elizabeth Director  
Peter Gleeson, Cape Elizabeth Fire Chief  
Kristie Rabasca, Integrated Environmental Engineering