



3618148405

August 13, 2014

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

SUBJECT: Cardinal Lane Private Road and RPP Application Review

Dear Maureen:

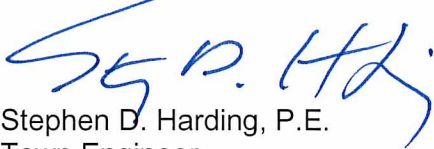
We have received and reviewed a submission package dated July 31, 2014 for the subject project. The package included a July 31, 2014 cover letter addressed to you from John Mitchell of Mitchell & Associates from Portland, Maine along with supporting stormwater related documentation and a six page drawing set of the project plans all dated July 31, 2014. The revisions included in this submission package have addressed many of our previous comments. Based on our review of submitted material and the project's conformance to the technical requirements of Section 19-7-9, Private Road Completeness, and Section 19-8-3, Resource Protection Regulations Completeness of the Zoning Ordinance, we offer the following comments:

1. The applicant is proposing to extend the existing segment of Cardinal Lane by 400 linear feet to accommodate the addition of a new lot. The new lot, Lot 4, will be approximately 80,000 square feet and will be accessed by the proposed turnaround at the end of Cardinal Lane. As stated in the Resource Protection Permit project narrative 4,220 square feet of wetland will be impacted under the current road layout.
2. The location of the 2-inch force main along with any appurtenant structures should be added to the profile view shown on the Road Profile and Site Details Plan, Sheet 6. Also we are confused by the Manhole: Force Main Cleanout Detail (#6) on the Erosion & Sediment Control Plan and Site Details, Sheet 5. The pipe size exiting the structure is indicated to be a 4-inch diameter which is inconsistent with the other pipe size designations of 2-inches for the force main. Also, we are unsure that this structure as indicated would allow the line to remain sealed and provide the necessary condition to move materials through the line. The designer should review this cleanout detail for functionality and provide any necessary revisions to its intent.
3. Also on the Manhole: Force Main Cleanout Detail (#6), the frame and grate are specified to be an Etheridge Foundry model. Etheridge Foundry is no longer in business so the designer will need to specify another company's model for this item.
4. The Rip Rap Channel Detail (#10) on the Erosion & Sediment Control Plan and Site Details, Sheet 5, does not indicate the d50 of the stone to be used.

5. The designer has submitted pre- and post-stormwater development condition drainage calculations which indicate a projected increase in stormwater peak rates of runoff to the receiving wetland. The designer has indicated that in his opinion the increase will be mitigated through the function of the receiving wetland and that no downstream impacts will result from the runoff generated by this relatively small drainage area. We have reviewed this situation with the Public Works Director, Bob Malley, and determined that no historical flooding conditions have been associated with the down gradient receiving culvert which drains into a tidally influenced marsh. Based on our review of the stormwater information provided and our understanding of the historical function of the eventual receiving culvert, we concur with the designer and believe that the increase in runoff will not result in downstream impacts.

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,
AMEC Environment & Infrastructure, Inc.



Stephen D. Harding, P.E.
Town Engineer

SDH:lap

cc: Bob Malley, Public Works Director
Benjamin McDougal, Code Enforcement Officer
Caitlyn Abbott, AMEC

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