

CMA ENGINEERS, INC. CIVIL | ENVIRONMENTAL | STRUCTURAL

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October 23, 2023

Maxim Zakian, Town Planner Town of Kittery 200 Rogers Road Kittery, Maine 03904

RE: Town of Kittery, Planning Board Services
Bartlett Road Conservation Subdivision Review #2
77 Bartlett Road, Tax Map 62, Lot 26
CMA #591.161

Dear Max:

CMA Engineers has received the following information for Assignment #161, review #2 of the Bartlett Subdivision at 77 Bartlett Road (Tax Map 62, Lot 26).

- 1) Drawings titled Subdivision Plans, Bartlett Road Subdivision, Bartlet Road, Kittery, Maine, Dated May 18, 2023, by Terradyn Consultants, LLC of Portland, ME revised 10/10/2023.
- 2) Stormwater Management Report prepared by Terradyn Consultants LLC and dated October 2023.
- 3) Response to Peer Review Comments letter dated 10/10/2023.

We have reviewed the information submitted for conformance with the Kittery Land Use and Development Code (LUDC) and general engineering practices and offer the comments below that correspond directly to the Town's Ordinances.

The project is proposed as a 9-lot conservation subdivision with access off Bartlett Road. The project is located in the residential-rural district (R-RL) zone with a small area in the resource protection overlay zone. The proposed development is located on a 19.3-acre lot and includes single family residences (including one existing home) and a roadway ending in a cul-de-sac. Lots are proposed between 21,000 square feet and 29,000 square feet. 13 acres are proposed to be preserved as open space. The lots will be served by individual septic systems and wells. There are wetlands, potential vernal pools, and a cemetery on the property. There are no wetland impacts associated with the project. Stormwater treatment is accomplished through the use of vegetated swales, a level spreader, and a forested wetland buffer.

16.5 General Development Requirements

16.5.9 Conservation of Wetlands Including Vernal Pools

The vernal pools on site are not significant per a letter from Maine Department of Environmental Protection dated July 5, 2023. There are no proposed alterations to the wetlands on site. A portion of the cul-de-sac is constructed within the wetland buffer. We note that if the cul-de-sac were shifted west then the setback to the wetland could be increased.

The applicant has indicated that shifting the roadway "would negatively impact the viability of Lots 6 and 7." Our initial comment remains.

16.8 Subdivision Review

16.8.10 Performance Standards and Approval Criteria

16.8.10.D. Sewage Disposal

16.8.10.D.2.(a) The developer Will need to submit plans for the subsurface wastewater disposal systems.

16.8.10.D.2.(d)[1]. Test pits on Lots 3,4,6 and 7, have limiting factors within 24". Reserve disposal locations should be shown on each lot.

The applicant has indicated that subsurface wastewater disposal system design will be coming under separate cover.

16.8.10.E. Stormwater and Surface Drainage

The applicant is proposing to manage stormwater through the use of open drainage swales. Stormwater from the cul-de-sac is directed to a stone berm level lip spreader that discharges to a forested stormwater buffer adjacent within a wetland buffer. Peak flows are reduced slightly post-construction.

- 1. Using reaches to model overland flow is correct, but in the submitted design, the only reduction in peak rates of runoff is offered through reaches over existing land. If these existing reaches are to be used to simulate overland flow in the post-development condition, they need to be modeled in the pre-development condition as well. A full cul-de-sac with driveways and houses cannot be constructed without any stormwater attenuation or treatment. Since land disturbance will be over 1 acre, MDEP Chapter 500 design standards apply.
- 2. Please provide additional information on the culvert sizing calculation. The culvert should be designed to handle a 25-year storm event, but it is unclear what parameters were used in its design.

We have the following comments on the plans:

Existing Conditions Plan:

- 1. There are items in the legend that do not apply to the plan set. **These items should be removed.**
- 2. The plan should be stamped by the wetland delineation professional. We reiterate this comment.

Sheet C-3.1 Plan & Profile:

- 1. Test pits on Lots 3,4,6 and 7, have limiting factors within 24". A second disposal location should be shown on each lot. The applicant has indicated additional information on wastewater disposal will be provided under separate cover.
- 2. Proposed well locations and radii should be shown on the plan. The applicant has indicated additional information on wastewater disposal and well locations will be provided under separate cover.



Should you have any questions, please do not hesitate to call.

Very truly yours,

CMA ENGINEERS, INC.

Jodie Bray Strickland, P.E. Senior Project Engineer

cc: Michael Tedema-Wielandt, P.E., Terradyn Consultants, LLC

