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March 11, 2019

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

SUBJECT: Portland Water District Ultraviolet Disinfection Upgrade
Cape Elizabeth Treatment Plant Amended Site Plan Review

Dear Maureen:

We have received and reviewed a March 1, 2019 submission package for the subject project from Paul Rodriguez, Senior Project Engineer at the Portland Water District. The package included a Proposed Site Plan (Sheet 5 of 24) and two Details plans (Sheets 7 and 9 of 24) along with supporting documentation. The submitted plans were prepared by the firm of Hoyle, Tanner & Associates, Inc. of Yarmouth, Maine and were not dated. Based on our review of submitted material and the project's conformance to the technical requirements of Section 19-7-9, Site Plan Completeness, we offer the following comments:

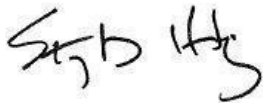
1. The Portland Water District (PWD) is proposing an Ultraviolet Disinfection Upgrade at the Cape Elizabeth Treatment Plant located on Spurwink Avenue. The project will include an open-air structure covering 615 square feet.
2. We understand that the Board will be conducting a completeness review for this project at their upcoming meeting. In our opinion, the submitted materials represent a completed package and the remainder of our comments here are provided to facilitate future reviews of the project. It should be noted that additional submitted information may result in additional review comments.
3. The applicant has submitted a topographic map with one-foot contours on an 11-inch by 17-inch drawing. Given the light line work associated with the existing conditions of the plan and the amount of information provided on the Site Plan, a full-sized drawing would provide a clearer representation of the proposed project. Also, the submitted drawings have all been stamped "DRAFT". These plans should be stamped by a Professional Engineer and dated for future reference.
4. As the project will not impact traffic access or parking at the facility, we support the applicant's request for a waiver of the Traffic Impact Report.
5. The applicant did not request a waiver for the requirement of a formal Stormwater Runoff Plan. However, we would support a waiver request given the limited site disturbance represented by the proposed project and that the site's drainage flow patterns and

surface water runoff characteristics will not be altered by the proposed improvements or the installation of the new underdrains.

6. The application states that proposed work will be completed entirely within the chain link fence perimeter and that the elevations of the underdrain and the underdrain outfall location will be determined in the field. Given the relatively flat terrain of the project area and the elevations presented on the Proposed Site Plan drawing, it appears likely that the underdrain will need to be installed under the fence and outfall beyond its limits. The designer should establish underdrain elevations and determine an appropriate location to outlet the underdrain pipe. Although a rip rap apron will not need to be substantial to dissipate the anticipated flow, a detail should be added to the plans for a rip rap apron or some other suitable means to protect the outlet area of the new underdrain pipe from erosion.
7. The applicant has indicated that several options of filter barriers, such as siltation fence or a sediment sock, that can be used by the contractor to control sedimentation from the site and protect the tidal resources of the nearby Spurwink River. The location and installation limits of the filter barrier should be shown on the plan view drawing. Also, the designer should consider the inclusion of an erosion control mix berm which is often the contractor's preferred filter barrier option. Conversely, the straw bale option should be removed from the plan options as the Maine DEP now discourages the use of hay bales as a filter barrier material.

We trust that the above 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: Bob Malley, Public Works Director