

September 14, 2016 16373

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

## Town of Cape Elizabeth Recycling Center Upgrade - Site Plan Review

Dear Maureen:

We have received and reviewed a submission package from Woodard & Curran dated September 2, 2016 for the subject project. The package included the supporting documentation for the Site Plan Application and a fourteen page drawing set of the project plans all dated September 2, 2016. We are familiar with the site through past projects at the Public Works Department facility. Based on our review of submitted material and the project's conformance to the technical requirements of Section 19-9, Site Plan Review, we offer the following comments:

- 1. The Town of Cape Elizabeth is proposing to upgrade its existing transfer station. Five parallel travel lanes are proposed along the existing interior loop road. The applicant is proposing to remove the existing compactor within a nearby building and install multiple compactors between the travel lanes. The applicant is proposing to realign parking spaces, install islands to better define traffic patterns, and to convert the existing compactor building into a universal waste storage building. An Underdrained Soil Filter is being proposed to treat stormwater runoff resulting from the additional 9,100 square feet of new impervious area.
- 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 to facilitate future reviews of the project. It should be noted that additional submitted information may result in additional review comments.
- 3. The designer commented that construction of the Underdrained Soil Filter will impact less than 900 square feet of an existing manmade wetland. The wetland should be depicted on the Existing Conditions Plan and the area of impact should be shown on the Grading, Drainage and Erosion Control Plan. While the designer has stated that the impact does not trigger a Department of Environmental Protection (DEP) Natural Resource Protection Act permit, the designer should contact the Army Corps to determine if a federal permit or notification is required.
- 4. The applicant has also applied for a minor revision to the existing Maine DEP transfer station license and will need that approval in place before proceeding with construction.
- 5. The applicant has requested the following waivers:

- a. The name and address of the owner and site plan applicant, together with the names of the owners of all contiguous land and or property directly across the street and within 200-feet of the property.
- b. Lot line dimensions.
- c. Location of all buildings and structures, streets, easements, driveways, entrances, and exists on the site and within 100-feet thereof.
- d. Building setback, sideline, and rear yard distances.
- e. All existing physical features on the site and within 200-feet.
- f. Utilization of the wetland delineation plan completed by Oest Associates, Inc. in 1999.

Since proposed upgrades are limited to a previously developed 7-acre area footprint, located well within the interior of the existing Town-owned parcel, and over 100-feet from a public road and abutting properties, we support the requested waivers 3(a) through 3(e) from an engineering standpoint. We also support the designers rationale that no significant construction activities or site modifications have been completed since the wetlands were last delineated and agree that the use of the Wetland Delineation Plan from 1999 is acceptable 3(f).

- 6. CB1 and CB2 should be called out as Type F Catch Basins to be consistent with the detail as provided.
- 7. Sewer pipe P-3 has a proposed slope of greater than 9% which is a relatively steep pipe installation grade. The designer may wish to review the inlet and/or outlet elevation should be adjusted to allow for a less steep slope.
- 8. Due to lack of existing contours, it is unclear how proposed grading in the southwest parking area tie back into existing grades and whether or not stormwater flow from the existing woodland area will flow across the proposed parking lot addition and into the subcatchment of the proposed Underdrained Soil Filter. The designer should provide a clarification of this area's characteristics.
- 9. The designer should ensure that well-drained soils are used in the berm area between the forebay and the Underdrained Soil Filter to avoid unfavorable long term ponding conditions within the sediment forebay.
- 10. The rim elevation of the Outlet Control Structure is higher than the top elevation of the soil filter berm. The rim elevation should be adjusted so that stormwater will not compromise the integrity of the berm and will discharge through the Outlet Control Structure.
- 11. The material specification of geotextile fabric for the Grassed Underdrained Soil Filter should be labeled on the detail on Sheet C-301 to ensure that the proper fabric type is installed.
- 12. For consistency and to avoid confusion, we believe that the "Area Drain Detail" on Sheet C-301 should be labeled as the Outlet Control Structure Detail" for the Underdrained Soil Filter.
- 13. We agree that formal pre- and post-development drainage calculations are not necessary for this project as less than 10,000 square feet of impervious area is being proposed. To show that the soil filter is properly sized to handle stormwater runoff from the site, however, the designer should model the function of the Underdrained Soil Filter and provide a hydrograph analysis.

- 14. We believe the "line and dot" symbol downgradient from the proposed lane and parking areas is silt fence or erosion control mix berm. This symbol should be labeled and/or added to the legend. Erosion control is also needed downgradient from the Grassed Underdrained Soil Filter. Due to the nearby access drive location, staked wattles may need to be considered.
- 15. A Bentonite Clay Dam Detail is shown on Sheet C-300. The designer should note where the clay dam will be utilized.
- 16. For clarity during construction, MDOT Specifications "703.06(a)" and "703.06(b)" should be added to the sidewalk and parking lot details for Type A and Type D gravels, respectively.

Sebago Technics and the applicant, the Town of Cape Elizabeth, have a continuing business relationship and Sebago has reviewed this submission under its ongoing engineering review capacity for the Planning Board. 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:cca/llg

cc: Bob Malley, Public Works Director Megan McDevitt, Woodard and Curran