



Level II Site Plan Application City of Portland, Maine

for

**Shoreline Stabilization, Deck Pier Protection, and Boat Ramp Replacement
Trefethen Evergreen Improvement Association
10 Trefethen Avenue
Peaks Island
Portland, Maine**

February 7, 2018

Applicant

Trefethen Evergreen Improvement Association
PO Box 87
Peaks Island, Maine 04108

Prepared By

Walsh Engineering Associates, Inc.
1 Karen Drive, Suite 2A
Westbrook, Maine 04092



February 6, 2018

City of Portland Planning Board
c/o Ms. Barbara Barhydt
Portland City Hall
389 Congress Street
Portland, Maine 04101

**RE: Level II Site Plan Application
Shoreline Stabilization, Deck Post
10 Trefethen Avenue, Peaks Island
Tx Map 90, Block L, Lot 6
Tax Map 90 Block K, Lot 3**

Dear Ms. Barhydt:

On behalf of the Trefethen Evergreen Improvement Association (TEIA), we are pleased to submit the enclosed Level II Site Plan Application for shoreline stabilization at 10 Trefethen Avenue on Peaks Island. The applicant is seeking to stabilize the existing eroded shoreline in front of the memorial garden on their property and partially within the Trefethen Avenue right-of-way, install additional stone protection around the deck piers on the west side of the building, and replace the existing boat ramp.

Existing Conditions and Existing Zoning

The project area consists of a portion of two parcels located at 10 Trefethen Avenue is identified as Tax Map 90, Block L, Lot 6 and Map 90 Block K, Lot 3 on the City of Portland Assessor's Map and a portion of the Trefethen Avenue right-of-way. The parcels contains an area of approximately 2.5± acres to the Highest Annual Tide (H.A.T). The parcels are divided by the Trefethen Avenue ROW, which is an accepted street by the City of Portland and are located in the I-B Island Business and the Shoreland Zone overlay districts.

The Trefethen Evergreen Improvement Association has owned the parcel since 1922. The property consists of a clubhouse with a wrap-around deck, a concrete boat ramp, and a memorial garden surrounded by lawn. A portion of the memorial garden was installed at the western end of the Trefethen Avenue ROW.

The deck is supported by piers resting in the intertidal area. Existing riprap is located under the deck. These piers are exposed on the south and west sides and are subject to damage during large storm events. Additional protection of the piers is necessary to prevent damage.

The concrete carry-in boat ramp is significantly deteriorated and has reached the end of its usable life span. Replacement of the boat ramp is necessary.

The existing Howie Kosel Memorial Garden was reportedly installed by TEIA in 1995 after receiving approval from the City council for its location within the Trefethen Avenue ROW. The garden and surrounding area has been maintained by TEIA since it was installed.

The shoreline along the western side of the memorial garden at the end of the Trefethen Avenue ROW has experienced significant erosion and scouring due to tidal action. A small amount of undersized riprap is located along the shoreline. Stabilization of the shoreline in this area with larger stones is necessary to help prevent further erosion.

Approximately 62 square feet of Asiatic Bittersweet (invasive species) is located at the top of the eroded bank within the ROW.

The H.A.T. for this part of Casco Bay is elevation 7.4 (NGVD29).

Proposed Development

The Applicant is proposing the following site improvements at the subject property:

Protection of Deck Piers

The Applicant is proposing to install additional large boulders (5'± dia.) on the south and west sides of the deck piers to act as armor against smaller stones that are thrust against the posts as a result of wave action during large storm events. Additional smaller stones (2'± dia.) will be placed behind the large boulders to provide additional armor on the back side of the piers.

Replacement of Boat Ramp

The Applicant is proposing to replace the deteriorated cast-in-place concrete boat ramp with pre-cast reinforced concrete boat ramp slabs. The slabs will be leveled on crushed stone and surrounded with large boulders on either side to prevent washouts.

Shoreline Stabilization

The Applicant proposes to stabilize the shoreline south of the memorial garden by installing a rip-rap boulder revetment. The rip-rap boulder revetment consists of large boulders (4'± dia.) placed on top of the existing ledge beach. Certain boulders may have to be pinned to the ledge to prevent sliding depending on the slope. The top of the stones will be set at approximately elevation 10' (NGVD29). The area above the wall will be sloped to meet the existing top of embankment grade and will be planted with both native shrubs (to replace invasive Asiatic Bittersweet) and lawn grass (to replace existing lawn).

In summary, the proposed plan calls for the following:

1. Installation of 60 linear feet of rip-rap revetment shoreline stabilization;
2. Minimize disturbance in the areas below HAT to be less than 500 square feet;
3. Stabilize all disturbed areas.

Level II Site Plan Review Criteria

Level II Site Plans are subject to the review criteria outlined in Section 14-526 of the City of Portland Land Use Ordinance. Each of these review standards is discussed below:

a. Transportation Standards

These review standards are not applicable as this project will not have an impact on existing transportation infrastructure.

b. Environmental Quality Standards

Preservation of Significant Natural Resources: Significant Natural Resources will not be disturbed as part of this shoreline stabilization project.

Landscaping and Landscape Preservation: No trees will be removed. The 62 square feet of invasive Asiatic Bittersweet will be replaced with 11 Sweet Fern (*comptonia peregrina*) shrubs.

Water Quality, Stormwater Management and Erosion Control: The proposed shoreline stabilization measures will not result in any additional impervious area to the site.

All construction activities will be in accordance with the attached Construction Management Plan and the attached Erosion and Sediment Control Plan.

c. Public Infrastructure and Community Safety Standards

Existing utilities (water, sanitary sewer, natural gas and overhead electric/telephone) will not be impacted by the proposed site improvements.

The proposed site plan is consistent with City public safety standards, Section 3 of the City of Portland Technical Manual.

d. Site Design Standards

Massing, Ventilation and Wind Impact: Not applicable.

Shadows: Not applicable.

Snow and Ice Loading: Not applicable.

View Corridors: Not applicable.

Historic Resources: The proposed shoreline stabilization does not affect designated landmarks nor is it within designated historic districts or historic landscape districts.

Exterior Lighting: Not applicable.

Noise and Vibration: Not applicable.

Signage and Wayfinding: Not applicable.

Zoning Related Design Standards: Not applicable.

e. Evidence of Financial and Technical Capability

Financial Capability

The Applicant proposes to complete the project by self-funding. See attached statement from People's United Bank stating the Applicant has sufficient financial capacity to undertake the project.

Technical Ability

The applicant has retained Walsh Engineering Associates Inc. to provide technical design and permitting services through the site plan review process. Walsh Engineering Associates, Inc. has extensive experience in designing shoreline stabilization and coastal projects in Maine.

f. Evidence of Right, Title or Interest

Attached is a copy of the deed for 10 Trefethen Avenue, which conveys the parcel to Trefethen Evergreen Improvement Association (Cumberland County Registry of Deeds Book 1123, Page 89).

Construction cost for the proposed site alterations is estimated to be \$30,000±. The applicant hopes to commence construction in the spring of 2018 with completion set for summer 2018.

Waiver Requests

A partial boundary and topographic survey of the property is provided with this application covering the entire project area and surrounding vicinity. The applicant respectfully requests a waiver from the boundary survey requirements per section 13.4.1 of the Technical Manual because:

1. The proposed project is on an already improved lot of record
2. The project comprises less than 1 acre of said improved lot of record.

Other Permits

The proposed project also requires an Individual Natural Resources Protection Act (NRPA) permit from the Maine Department of Environmental Protection, a permit from the Army Corps of Engineers (ACOE), and a Marine Construction permit from the City of Portland Harbor Master. The NRPA, ACOE, and Marine Construction permit applications are being submitted concurrently with this application.

The application materials and plan sets have been submitted electronically. I trust you will find the information sufficient for review. We look forward to working with the Planning Staff to make this project successful.

Respectfully,

A handwritten signature in black ink that reads "Silas Canavan". The signature is written in a cursive, flowing style.

Silas Canavan, PE
Walsh Engineering Associates, Inc.

Enc: Application materials (submitted electronically)
Plan Set (submitted electronically)

cc: Paul Castle, Trefethen Evergreen Improvement Association