

NOTICE OF INTENT NARRATIVE FOR 0 CRESCENT AVENUE

EXISTING CONDITIONS

The locus is a 34,004 square foot vacant lot between No. 40 and 44 Crescent Avenue containing an existing maintained lawn. The lot slopes downward from Crescent Avenue (EL 36 +/-) to the top of an onsite coastal bank/revetment (EL 26-32). By definition, the rear property line is mean high water (EL 3.9) per the Scituate Zoning ByLaw. The locus lies in FIRM Zones VE (EL 21) and Zone X. The site does not lie in the Water Resource Protection District. The lower portion of the lot lies within the Flood Plain and Watershed Protection Zoning District (EL 10).

PROPOSED CONDITIONS

It is proposed to construct a single-family dwelling on a reinforced concrete foundation within the existing maintained lawn and within 100' of the top of the coastal bank. The access to the proposed garage will be via the existing curb cut and bituminous concrete driveway from Crescent Avenue. The proposed dwelling will be serviced by town water, sanitary sewer and natural gas all from Crescent Avenue. The applicant is proposing to install a planter strip and post and rail fence along the top of the coastal bank as an added component to insure the future stability of the coastal bank. Additional typical landscaping adjacent to the proposed dwelling, the planting mitigation and the proposed pervious patio at the rear of the dwelling will support the continuous stabilization of the coastal bank. The post and rail fence will serve as both a deterrence to human activity near the coastal bank and protection of the planting area. It is also important to note that whereas the existing ground surface is a maintained lawn, the proposed mitigation will provide a stable surface with rooted plantings where none currently exists.

PERFORMANCE STANDARDS

The primary performance standard is to ensure the stability of the coastal bank for any proposed work within 100 feet of the top of said bank. By installing the planter strip and fence, per plan location and the introduction of pervious patio surface along with erosion control during the construction phase, there will be no anticipated harm to the coastal bank post construction. Existing dwellings in the same general area which front on the ocean serve as a testament and visually exhibit stable coastal bank conditions. The proposed site work and mitigation will help to ensure the future stability of the coastal bank once work is completed.

CONCLUSION

The proposed plantings, pervious surface, and minor grading for this project will result in a buffer zone that will be more conducive to insuring the long-term stability of the existing coastal bank. As such the, proposed project will have no adverse impact on the coastal bank and therefore meets the applicable performance standard of not creating any potential damage which would result in the instability of the existing coastal bank.



Environmental Consulting & Restoration, LLC



WETLAND RESOURCE AREA MEMO

TO: Paul Mirabito, Ross Engineering Company
FROM: Stan Humphries, Coastal Geologist *SMH*
DATE: February 7, 2024
RE: 40 Crescent Avenue, Scituate

Introduction

Per your request, Environmental Consulting & Restoration, LLC (ECR) performed a review of the existing and proposed conditions at 40 Crescent Avenue in Scituate (the Site) as shown on the *Notice of Intent Plan* dated February 5, 2024. The purpose of the review was to confirm wetland resource areas on or near the Site and evaluate the project's compliance with the wetland protection regulations under the state Act and the local Bylaw.

Existing Conditions

The 0.79 acre Site is located on the southeast side of Crescent Ave. and is bordered by single family dwellings to the north, west, and south, and Massachusetts Bay to the east. The undeveloped Site consists of stone revetment, an extensive lawn area, paved driveway serving an adjacent dwelling to the south, three areas with several trees, and a shrub area extending offsite to the southwest (see two Google Earth images). Several ground photos, recently taken, show these characteristics of the existing conditions of an altered Site (see three attached photo pages). The soils in this section of Second Cliff are Paxton sandy loam, 8-15% slope and very stony. The Site slopes towards the south and the drainage is predominantly directed towards the shrub area.

The wetland resource areas are accurately shown on the NOI Plan as Coastal Bank (DEP Policy 92-1), Buffer Zone to Coastal Bank and Land Subject to Coastal Storm Flowage. The Coastal Bank has two orientations: NE/SW parallel to the stone revetment; and, NW/SE along the northerly edge of the shrub area. The bank along these orientations is approximately 120 feet long and 80 feet long, respectively. In addition, the Coastal Bank serves as a vertical buffer to storm waters and does not provide sediment to an adjacent beach, dune or barrier beach. The 50-foot Buffer Strip landward of the Coastal Bank has been a disturbed, continuous and altered area, predominantly lawn, that is a Pre-Existing Condition as defined in Section 10.05 (10)(b)(4) of the local Bylaw regulations. The Land Subject to Coastal Storm Flowage is mapped by FEMA as a Zone X and a Zone VE (el. 21).

Proposed Conditions

The proposed project involves the construction of a single-family dwelling with a two-car garage; fill and a pervious paver driveway at the front of the dwelling; minor fill with a short retaining wall at the back of the dwelling; and a 10-foot wide planting strip that extends approximately 140 feet along the top of bank. The southeast and southwest rear corners of the dwelling encroach upon the 50-foot Buffer Strip area with the proposed orientation of the dwelling. While a counterclockwise rotation of the dwelling would place the southeast corner outside of the Buffer Strip, I understand that it would be prohibited under Zoning.



Compliance with Wetland Protection Regulations

The proposed project is located within 100 feet of a Coastal Bank. The activities are subject to the *Massachusetts Wetlands Protection Act*, the associated *Massachusetts Wetland Regulations (310 CMR 10.00)*, the *Scituate Wetlands Protection Bylaw (Section 30770)*, and the associated *Scituate Wetland Protection Rules and Regulations (SWR 10.00)*. Specifically, the proposed project is subject to the following performance standards: 310 CMR 10.30(6-8) for Coastal Bank; and to the Bylaw Regulations only under SWR 10.05 for the Buffer Strip. Below, the performance standards are shown in italics to include an analysis of how the proposed project meets those specific standards.

310 CMR 10.30 Coastal Bank

WHEN A COASTAL BANK IS DETERMINED TO BE SIGNIFICANT TO STORM DAMAGE PREVENTION OR FLOOD CONTROL BECAUSE IT IS A VERTICAL BUFFER TO STORM WATERS, 310 CMR 10.30(6) THROUGH (8) SHALL APPLY:

(6) Any project on such a coastal bank or within 100 feet landward of the top of such coastal bank shall have no adverse effects on the stability of the coastal bank.

Sediment and erosion controls will be installed along virtually all sides of this upland Site which also represent the limit of work. The 10-foot wide planting strip will provide pollution attenuation, erosion control and wildlife habitat while reinforcing bank stability below the strip. Installation of an erosion control blanket is recommended in areas of bare soil within the planting strip. These proposed activities will have no adverse effects on the stability of the Coastal Bank.

(7) Bulkheads, revetments, seawalls, groins or other coastal engineering structures may be permitted on such a coastal bank except when such bank is significant to storm damage prevention or flood control because it supplies sediment to coastal beaches, coastal dunes, and barrier beaches.

Not applicable since no coastal engineering structures are proposed.

(8) Notwithstanding the provisions of 310 CMR 10.30(3) through (7), no project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.37.

Not applicable since there are no specified habitat sites of rare vertebrate or invertebrate species on the Site.

SWR 10.05 (10) Buffer Strip

Under this section, three provisions should apply to a determination that a Buffer Strip less than 50-feet is acceptable for this Site, as follows:

- (b)(2) Exceptions to the 50-Foot Buffer Strip.* The site-specific variables that affect the pollutant removal capabilities of the Buffer Strip include a relatively minor slope leading to a naturally shrub vegetated and stable Coastal Bank, permeable Paxson soils, a modest-sized proposed dwelling, and the surrounding pattern of other lawns, driveways and dwellings



Environmental Consulting & Restoration, LLC



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located even closer to the Coastal Bank.

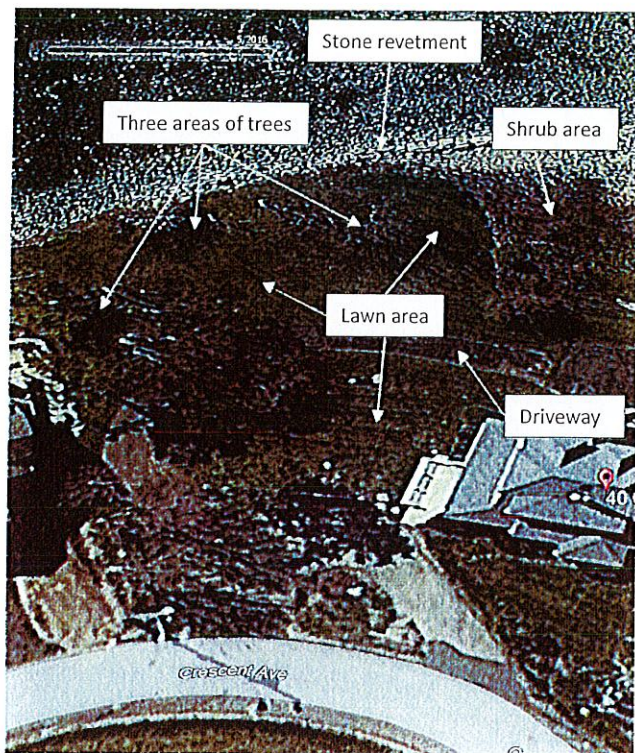
(b)(3) Enhancement of the Buffer Strip. The proposed 10-foot wide planting strip will be sufficient to perform the desired resource protection functions and enhance the existing lawn area.

(b)(4) Pre-Existing Conditions in the Buffer Strip. As demonstrated with the Google Earth image dated in May 2016, an extensive lawn area existed prior to the September 2016 amendment to the regulations and, therefore, the Commission should be requested to allow or condition the project which encroaches on the 50-foot Buffer Strip.

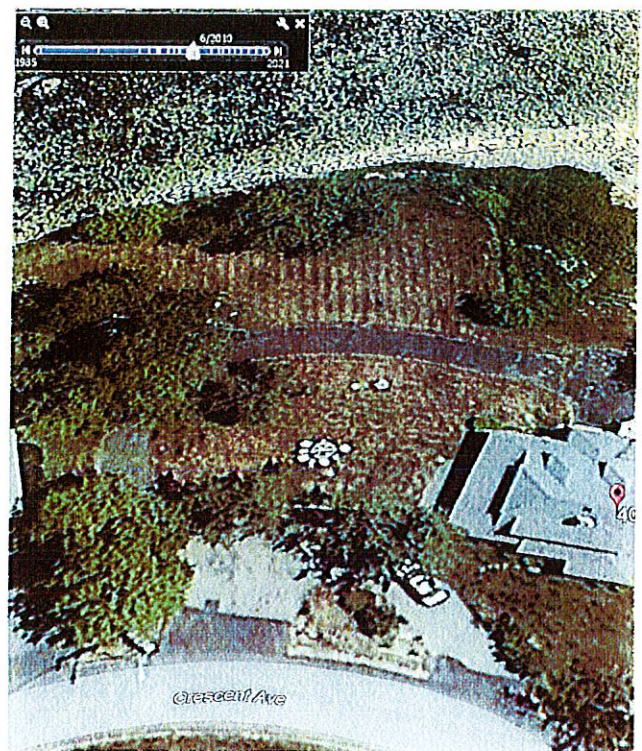
Summary

A single-family dwelling project is being proposed on an undeveloped lot in a developed neighborhood on Second Cliff. The entire project will be located in the Buffer Zone to a Coastal Bank and outside of Land Subject to Coastal Storm Flowage. There will be no short- or long-term adverse effects to the stability of the Coastal Bank, mostly located further than 50-feet seaward of the proposed dwelling. Pre-existing conditions of the Site provide an opportunity for an exception to the 50-Foot Buffer Strip while allowing a 10-foot wide, 140 foot long planting strip to perform the desired resource protection functions and enhance the existing lawn area.

Upon review of this Wetland Resource Area Memo, please contact me at (617) 543-1654 or stan@ecrwetlands.com with any questions or requests for additional information.



May 2016



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Google Earth images show the altered and disturbed conditions that existed prior to September 21, 2016 when the Scituate Wetland Protection Regulations were amended. The natural shrub area located in the southeast corner of the lot provides the only undisturbed, unaltered portion of a 50-foot Buffer Strip in the area.



Looking east at the entrance to the Site.



Looking east at a portion of an existing driveway, lawn and several trees.



Looking south at the driveway leading to the adjacent dwelling and more lawn area.




Looking east at the shrub area located along the Coastal Bank oriented NW/SE.

Untitled Map

Write a description for your map.

Legend

 40 Crescent Ave



200 ft

Google Earth

Image © 2023 TerraMetrics

