

Department of Planning and Zoning

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MEMORANDUM

To: Development Review Board
From: Ryan Morrison, CFM, Associate Planner
Date: February 7, 2017
RE: 17-0669CA/MA; 29 Starr Farm Beach Road

Note: These are staff comments only. Decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

File: ZP17-0669CA/MA

Location: 29 Starr Farm Beach Road

Zone: RLW **Ward:** 4N

Date application accepted: December 21, 2016

Applicant/ Owner: David & Vicky Porteous

Parking District: Neighborhood

Request: Construction of a stone seawall, slope stabilization, and repair of existing metal stairs

Applicable Regulations:

Article 3 (Applications, Permits, and Project Reviews), Article 4 (Zoning Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Review Standards)

Overview:

The applicant is seeking approval to construct a seawall for shoreline and slope stabilization and to repair existing metal stairs. The seawall will be constructed of quarry stone and rip rap along the property's southern half of lakeshore. As the seawall is located partially below the 102' elevation, it is subject to review under the special flood hazard area regulations in addition to dimensional and design review standards. As required, the project is subject to review and approval by the State National Floodplain Insurance Program Coordinator, Rebecca Pfeiffer, at VT DEC. A copy of the application was provided to the Coordinator on December 28, 2016, and a response was received on January 4, 2017 (see email dated January 4, 2017 from Rebecca Pfeiffer). The Coordinator stated that only the standards of Sec. 4.5.4 (f) 8.C (ii)-(iii) & (v) of the Burlington Comprehensive Development Ordinance will apply.

ii. All development shall be designed to minimize flood damage to the proposed development and to public facilities and utilities;

iii. All development shall be designed to provide adequate surface drainage to reduce exposure to flood hazards; and

v. *All necessary permits shall be obtained from those governmental agencies from which approval is required by federal or state law.*

The Coordinator states that if the project is completed as proposed, it would appear to meet these minimum standards. Ms. Pfeiffer recommends that the City request the following from the applicant consultant:

- Confirm the vertical elevation datum used for the site plans (i.e. NGVD 1929 or NAVD 1988); and
- Delineate the boundary of the FEMA Base Flood Elevation (BFE) on the site plan for reference. The BFE for Lake Champlain is 101.6' (NAVD) or 102' (NGVD).

Conditions of approval will reflect the requirements of Sec. 4.5.4 (f), and Ms. Pfeiffer's recommendations.

Given this project's location along the Lake Champlain shoreline, review by the Conservation Board is required. That review occurred on January 23, 2017, and the Board voted unanimously (8-0-0) to support the project as proposed.

There are no previous zoning actions for this property.

Recommendation: Consent approval, as per, and subject to, the following findings and conditions:

I. Findings

Article 3: Applications, Permits and Project Reviews

Part 5: Conditional Use and Major Impact Review

Section 3.5.2 Applicability

(a) Conditional Use Review

Conditional Use Review shall be required for the approval of all development subject to the following provisions of this ordinance:

1. *any use identified under Article 4 and Appendix A – Use Table as a “Conditional Use” Or “CU;”*

Sec. 4.5.4 (c) & (f) each require conditional use review for new construction within their respective overlay zones: the Riparian and Littoral Conservation Zone and the Special Flood Hazard Area. **(Affirmative finding)**

(b) Major Impact Review

In addition, Major Impact Review shall be required for the approval of all development Involving:

6. *Site improvements and land development on parcels that contain designated wetlands as regulated pursuant to Article 4, or natural areas of state or local significance as identified in the municipal development plan.*

The location of the proposed seawall lies within the Lake Champlain shoreline, a natural area of both state and local significance. **(Affirmative finding)**

Section 3.5.6 Review Criteria

(a) Conditional Use Review Standards

Approval shall be granted only if the DRB, after public notice and public hearing, determines that the proposed conditional use and associated development shall not result in an undue adverse effect on each of the following general standards:

1. *Existing or planned public utilities, facilities or services are capable of supporting the proposed use in addition to the existing uses in the area;*
The proposed seawall and repairs to the existing stairs will have no impact on existing or planned public utilities, facilities, or services. **(Affirmative finding)**
2. *The character of the area affected as defined by the purpose or purposes of the zoning district(s) within which the project is located, and specifically stated policies and standards of the Municipal Development Plan;*
The subject property is within the Waterfront Residential Low Density Zone. This zone is typified by single family homes. The existing single family home will remain unchanged. **(Affirmative finding)**
3. *The proposed use will not have nuisance impacts from noise, odor, dust, heat, and vibrations greater than typically generated by other permitted uses in the same zoning district;*
The proposed seawall is not expected to have any nuisance impacts. **(Affirmative finding)**
4. *The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include street designations and capacity; level of service and other performance measures; access to arterial roadways; connectivity; transit availability; parking and access; impacts on pedestrian, bicycle and transit circulation, safety for all modes; and adequate transportation demand management strategies;*
The proposed seawall will have no impacts on traffic or other transportation matters. **(Affirmative finding)**
5. *The utilization of renewable energy resources;*
No part of this request prohibits the use of wind, solar, water, geothermal or other renewable energy resources. **(Affirmative finding)**
and;
6. *Any standards or factors set forth in existing City bylaws and city and state ordinances.*
The city now has full delegation down to the 95.5' elevation. No state shoreland permit is needed. **(Affirmative finding)**

(b) Major Impact Review Standards

Before a major impact development may receive approval, the DRB must be satisfied, based on documentation provided by appropriate city agencies, experts, interested parties and/or the applicant that the proposed development shall:

1. *Not result in undue water, air or noise pollution;*

The proposed seawall and stair repairs should not result in undue water, air or noise pollution. **(Affirmative finding)**

2. *Have sufficient water available for its needs;*

The proposed use will not require water availability. **(Affirmative finding)**

3. *Not unreasonably burden the city's present or future water supply or distribution system;*

The proposal will not place any burden on the current or future water supply or distribution system. **(Affirmative finding)**

4. *Not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;*

The seawall proposal is to control/prevent erosion of a shoreline slope on a residential property. **(Affirmative finding)**

5. *Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;*

There are no existing or proposed travelways through the subject property. The proposal will not create congestion or unsafe conditions. **(Affirmative finding)**

6. *Not cause an unreasonable burden on the city's ability to provide educational services;*

The proposed seawall will place no burden on educational services. **(Affirmative finding)**

7. *Not place an unreasonable burden on the city's ability to provide municipal services;*

No burden will be placed on municipal services. **(Affirmative finding)**

8. *Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;*

No adverse effects will be placed on the Lake Champlain shoreline. The seawall will protect a shoreline slope from erosion. **(Affirmative finding)**

9. *Not have an undue adverse effect on the city's present or future growth patterns nor on the city's investment in public services and facilities;*

Lake Champlain borders the subject property to the west. No city growth will occur westward of the subject property. **(Affirmative finding)**

10. *Be in substantial conformance with the city's municipal development plan and all incorporated plans;*

The proposed seawall is accessory to the existing single family residence, a permitted use in the underlying zone. **(Affirmative finding)**

11. *Not have an undue adverse impact on the present or projected housing needs of the city in terms of amount, type, affordability and location;*

The seawall will have no impact whatsoever on the housing needs of the city.

(Affirmative finding)

and

12. *Not have an undue adverse impact on the present or projected park and recreation needs of the city.*

No part of the proposal will impact park and recreation needs of the city. **(Affirmative finding)**

(c) Conditions of Approval

In addition to imposing conditions of approval necessary to satisfy the General Standards specified in (a) or (b) above, the DRB may also impose additional conditions of approval relative to any of the following:

1. *Mitigation measures, including but not limited to screening, landscaping, where necessary to reduce noise and glare and to maintain the property in a character in keeping with the surrounding area;*

The project will not create a situation where noise and glare will occur. The seawall will be in character with the waterfront development that exists in the surrounding area.

(Affirmative finding)

2. *Time limits for construction.*

The applicant will have one year from the date of final decision to commence with the project, and one year after that to complete the project. If additional time is needed, the applicant may request a one-year extension from the DRB. **(Affirmative finding)**

3. *Hours of operation and/or construction to reduce the impact on surrounding properties.*

The applicant has not proposed construction times. Staff recommends limiting construction times to 7AM – 5PM, Monday – Friday, and Saturdays per DRB allowance. Sunday construction will be prohibited. **(Affirmative finding as conditioned)**

4. *That any future enlargement or alteration of the use return for review to the DRB to permit the specifying of new conditions,*

Should the applicant wish to enlarge or alter the seawall and/or staircase, it will be subject to DRB review. **(Affirmative finding as conditioned)**

and

5. *Such additional reasonable performance standards, conditions and safeguards as it may deem necessary to implement the purposes of this chapter and the zoning regulations.*

See Sec. 4.5.4 (c) & (f) below. **(Affirmative finding)**

Article 4: Zoning Maps and Districts

Section 4.4.5 Residential Districts

(a) Purpose

(2) Waterfront Residential Low Density (WRL)

The subject property is located in the WRL zone. This zone is intended primarily for low density residential development in the form of single detached dwellings and duplexes with consideration given to design review. The existing single family residence will remain unchanged. **(Affirmative finding)**

(b) Dimensional Standards & Density

As a result of this proposal, lot coverage will total 20%, well below the maximum allowance of 35% in the WRL zoning district.

The seawall is located within the 75' lakeshore setback; however, walls (i.e. retaining walls and seawalls) are specifically allowed to encroach into setbacks per Sec. 5.2.5, *Setbacks*, (b) *Exceptions to Yard Setback Requirements*.

The seawall is well under the maximum allowable height of 35'. **(Affirmative finding)**

(c) Permitted and Conditional Uses

The seawall is accessory to the single family use. **(Affirmative finding)**

(d) District Specific Regulations

1. *Setbacks*

Not applicable.

2. *Height*

Not applicable.

3. *Lot Coverage*

Not applicable.

4. *Accessory Residential Structures and Uses*

Not applicable.

5. *Residential Density*

Not applicable.

6. *Uses*

Not applicable.

7. *Residential Development Bonuses*

Not applicable.

Section 4.5.4 Natural Resource Protection Overlay District:

(c) District Specific Regulations: Riparian and Littoral Conservation Zone

(4) Requirements

1. *Any land disturbing activities (i.e., vegetation has been removed, or the landscape has*

been graded or filled resulting in bare soil surfaces) shall include a stormwater management, erosion prevention and sediment control plan pursuant to the requirements of Sec. 5.5.3 to be reviewed by the conservation board and approved by the city engineer.

In making determinations and decisions required herein, the city engineer shall consider the requirements of the most recent State of Vermont Stormwater Management Rules and Guidance document. The city engineer shall require the best practicable means be used to manage stormwater, prevent erosion, and control sedimentation. The city engineer is hereby authorized to develop performance standards to ensure conformance with these state stormwater management rules;

The project will result in 370 sf of land disturbance. Due to the size and location of the seawall, a stormwater management plan is not necessary. The applicant has, however, submitted an erosion prevention and sediment control (EPSC) plan, which was reviewed and approved by the stormwater program manager on January 20, 2017. The Conservation Board also reviewed the EPSC as part of their overall project review, held January 23, 2017. The Board voted unanimously to support the project. **(Affirmative finding)**

2. *Agricultural and silvicultural activities shall follow Best Management Practices for the Protection of Water Quality;*

Not applicable.

3. *Installation of any seawalls, rip-rap or other shoreland retention structures shall be submitted for review by the conservation board who shall consult with the city engineer prior to issuance of a recommendation to the DRB; and*

As noted above, the Conservation Board reviewed the application on January 23, 2017, and voted unanimously (8-0-0) in support of the project as proposed. The wall will be reviewed by the city engineer or designee prior to construction via the building permit process. **(Affirmative finding)**

4. *No new stormwater outfall shall directly discharge into any surface water without approval and implementation of a stormwater management plan approved by the city engineer.*

No new stormwater outfall is included in this proposal. **(Affirmative finding)**

(f) District Specific Regulations: Special Flood Hazard Area:

(7) Special Review Criteria

- A. *The danger to life and property due to increased flood heights or velocities caused by encroachments;*

The seawall will be placed within the lakeshore flood hazard area. Lakeshore flood dynamics are unlike those of river flood dynamics. The water does not flow at perceptible speeds and is not subject to constriction. Placement of the seawall within the lakeshore flood zone will have no impact on flood heights or velocities. **(Affirmative finding)**

- B. *The danger that material may be swept on to other lands or down stream to the injury of others;*

The new seawall will be constructed of quarry stone, with an 18" deep keyway into the beach. Type I stone rip-rap (18" min.) will locate behind, and above, the quarry stone

wall. There is little danger that the structure will be swept away by flood waters.
(Affirmative finding)

C. The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination and unsanitary conditions;

Not applicable.

D. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners;

The seawall is a protective measure against flood damage to the property. The potential for flood damage to the seawall itself is minimal. **(Affirmative finding)**

E. The importance of the services provided by the proposed facility to the community;

The seawall is of little importance to the Burlington community; however, it will provide substantial protection to the private property that it will be located on. **(Affirmative finding)**

F. The availability of alternative locations not subject to flooding for the proposed use;

The point of the seawall is to protect the property from flood damage. Its placement within the flood zone is key to this function. Its location within the floodplain is acceptable.
(Affirmative finding)

G. The compatibility of the proposed use with existing development and development anticipated in the foreseeable future;

Seawalls are commonplace along Burlington's lakeshore. **(Affirmative finding)**

H. The relationship of the proposed use to the municipal development plan;

The Municipal Development Plan does not address seawalls. It does speak to the development pattern of single family homes and duplexes in the RL and WRL zones. The subject property contains a single family residence. Insofar as homes along the lakeshore commonly have seawalls, the proposal can be found in compliance with the MDP.
(Affirmative finding)

I. The safety of access to the property in times of flood or ordinary and emergency vehicles;

The new seawall will have no effect on the safety of access to the property during times of flood. **(Affirmative finding)**

J. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site; and

The maximum regulatory flood elevation along the lakeshore is 102' above sea level. The seawall will have no impact on flood heights, velocity, duration, rate of rise, or sediment transport. **(Affirmative finding)**

K. Conformance with all other applicable requirements of this ordinance.

See Articles 4, 5, and 6 of these findings.

Article 5: Citywide General Regulations

Section 5.2.3 Lot Coverage Requirements

See Sec. 4.4.5 (b) above.

Section 5.2.4 Buildable Area Calculation

Not applicable.

Section 5.2.5 Setbacks

See Sec. 4.4.5 (b) above.

Section 5.2.6 Building Height Limits

See Sec. 4.4.5 (b) above.

Section 5.2.7 Density and Intensity of Development Calculations

Not applicable.

Section 5.5.1 Nuisance Regulations

Nothing in the proposal appears to result in creating a nuisance under this criterion. **(Affirmative finding)**

Section 5.5.3 Stormwater and Erosion Control

The applicant has submitted an erosion prevention and sedimentation control plan for the project. The applicant has stated that the site contractor will install EPSC measures to keep things onsite. Both the stormwater program manager and the Conservation Board reviewed the EPSC plan and have approved it for the project. Due to the size and location of the project, a stormwater plan is not necessary. **(Affirmative finding)**

Article 6: Development Review Standards

Part 1: Land Division Design Standards

Not applicable.

Part 2: Site Plan Design Standards

Sec. 6.2.2 Review Standards

a) Protection of Important Natural Features

The subject property is located along the Lake Champlain shoreline. The shoreline is identified as a significant natural area. Much of the property is affected by the Natural Resource Protection Overlay District, specifically the riparian and littoral conservation zone, which stretches inland 250' from the 95.5' lakeshore elevation. As required, an erosion control plan was reviewed and approved by the stormwater program manager. The Conservation Board reviewed this project on January 27. The Board voted unanimously to support the project as proposed. **(Affirmative finding)**

b) Topographical Alterations

A fairly steep bank separates the lake from the house site and lawn area. There will be some excavation of the slope, enough to accommodate the new seawall and rip rap. Additionally, a site plan identifies that a large tree trunk will be removed.

- c) *Protection of Important Public Views*
Not applicable.
- d) *Protection of Important Cultural Resources*
Not applicable.
- e) *Supporting the Use of Renewable Energy Resources*
Not applicable.
- f) *Brownfield Sites*
Not applicable.
- g) *Provide for Nature's Events*
See Sec. 5.5.3.
- h) *Building Location and Orientation*
Not applicable
- i) *Vehicular Access*
Not applicable.
- j) *Pedestrian Access*
Not applicable.
- k) *Accessibility for the Handicapped*
Not applicable.
- l) *Parking and Circulation*
Not applicable.
- m) *Landscaping and Fences*
No new landscaping is included in this proposal.
- n) *Public Plazas and Open Space*
Not applicable.
- o) *Outdoor Lighting*
Not applicable.
- p) *Integrate Infrastructure into the Design*
Not applicable.

Part 3: Architectural Design Standards

Sec. 6.3.2 Review Standards

Not applicable.

II. Conditions of Approval

1. **Prior to release of the zoning permit**, the applicant shall confirm the vertical elevation datum used for the site plans (i.e. NGVD 1929 or NAVD 1988)
2. **Prior to release of the zoning permit**, the applicant shall delineate the boundary of the FEMA Base Flood Elevation (BFE) on the site plan for reference. The BFE for Lake Champlain is 101.6' (NAVD) or 102' (NGVD).
3. All development shall be designed to minimize flood damage to the proposed development and to public facilities and utilities.
4. All development shall be designed to provide adequate surface drainage to reduce exposure to flood hazards.

5. All necessary permits shall be obtained from those governmental agencies from which approval is required by federal or state law.
6. The project shall be done in accordance with the EPSC plan, approved January 20, 2017.
7. Construction hours shall be limited to Monday – Friday from 7:00 AM – 5:00 PM. Saturday construction may be allowed upon request to the Development Review Board. No work on Sunday
8. Any proposed alteration or enlargement of seawall and/or the staircase will be subject to DRB review and approval.
9. The applicant/property owner is responsible for obtaining all necessary Zoning Permits and Building Permits through the Department of Public Works as well as other permit(s) as may be required.
10. Standard Permit Conditions 1-15.