

PROJECT NARRATIVE

Revised 9-18-25

33 Cliff Road

Hingham, MA

1.0 Project Summary

The project proponent proposes to raze and rebuild a single family dwelling and construct the associated driveway, utilities, stormwater controls, grading and landscaping at 33 Cliff Road, Hingham, MA. The property is shown as Hingham Assessor's Parcel 22-0-6 and is approximately 19,712 s.f. in size. The property has frontage on Cliff Road to the west, is abutted by developed residentially zoned properties to the south and east, and by the Weir River to the north.

33 Cliff Road is currently developed with a single family dwelling constructed circa 1925 and associated concrete patios, ledge outcrops, woodland and lawn areas. The existing house footprint is 1,250 s.f. in size. The property slopes to the north towards an on-site salt marsh associated with the Weir River. The existing dwelling will be demolished and removed from the site prior to any new construction.

The proposed dwelling is 1,645 s.f. in size and will be constructed on a concrete foundation. The project will maintain existing drainage patterns and will provide supplemental stormwater control measures, specifically a crushed stone trench and a shallow grassed depression. The proposed driveway will be paved and will be cross-pitched to direct its runoff towards the crushed stone trench. There is a pervious patio proposed adjacent to the new dwelling and will be constructed with ¼" spacing filled with gator nitro sand and crushed stone beneath it. This patio will include retaining walls along its perimeter, which are proposed to be less than 4' in height. A deck is proposed off the new dwelling which will be constructed on wooden posts connected to the existing ledge below. The proposed deck is pervious and allows water to drain through it.

The construction of the proposed dwelling will require the removal of existing ledge. Material will be removed by blasting to minimize the time required to remove the ledge. All required permits will be obtained for ledge removal. A pre-blast survey of the abutting properties will be performed prior to the work, as is required by the Hingham Fire Department.

Three existing trees are proposed to be removed, being two 36" oaks and one 8" maple. These trees will be replaced with three heritage river birch, three serviceberry, one red maple, and four eastern red cedar trees as well as various shrubs shown on the Landscape Plan (prepared by others).

The subject resource areas at this site are buffer zones associated with a salt marsh and coastal beach, 200' riverfront area to the Weir River, and land subject to coastal storm flowage. There is also coastal bank located on-site, but the project area is not within its buffer zones.

The site does not contain any areas designated as estimated or priority endangered species habitat or certified vernal pools.

2.0 Wetland Resource Areas & Impacts

Salt Marsh (310 CMR 10.32)

Salt marshes are significant to protection of marine fisheries, wildlife habitat, and where there are shellfish, to protection of land containing shellfish, and prevention of pollution and are likely to be significant to storm damage prevention and ground water supply. Vegetation, soils and hydrologic indicators were used to establish the salt marsh boundary. Wetland delineation flags were placed in the field along the upland limits of the salt marsh by Environmental Consulting & Restoration, LLC on November 29, 2024.

The proposed work lies partially within the 100' buffer to the salt marsh, but no work is proposed within the 50' buffer zone, except for a mitigation area and grading associated with a drainage system. There are no stormwater systems on-site currently, so this will be an improvement. These stormwater control devices will help to promote groundwater recharge, total suspended solids removal, and mitigate rates and volumes of stormwater runoff. The site currently contains a fair amount of trash / debris and is generally unkept. This project will clean up the site and help to protect the on-site resource areas. There is a proposed alteration area, consisting of 1,739 s.f., within the 100' buffer zone, which will be mitigated at a 1:1 ratio with a planted area. The proposed work will have no adverse impact on marine fisheries, wildlife habitat, pollution prevention, storm damage prevention or the groundwater supply.

Coastal Beach (310 CMR 10.27)

Coastal beaches are significant to storm damage prevention, flood control and the protection of wildlife habitat. Vegetation, soils and hydrologic indicators were used to establish the coastal beach limits. Wetland delineation flags were placed in the field along the upland limits of the coastal beach by Environmental Consulting & Restoration, LLC on November 29, 2024.

The proposed work lies partially within the 100' buffer to the coastal beach, but no work is proposed within the 50' buffer zone, except for a mitigation area and grading associated with a drainage system. There are no stormwater systems on-site currently, so this will be an improvement. These stormwater control devices will help to promote groundwater recharge, total suspended solids removal, and mitigate rates and volumes of stormwater runoff. The site currently contains a fair amount of trash / debris and is generally unkept. This project will clean up the site and help to protect the on-site resource areas. There is a proposed alteration area, consisting of 1,739 s.f., within the 100' buffer zone, which will be mitigated at a 1:1 ratio with a planted area. The proposed work will have no adverse impact on storm damage prevention, flood control or wildlife habitat.

Coastal Banks (310 CMR 10.30)

Coastal Banks are likely to be significant to storm damage prevention and flood control. Coastal banks provide a buffer to upland areas from storm waves are significant to storm damage prevention and flood control.

The coastal bank only extends across a portion of the subject property and its limits were determined using MassDEP Policy 92-1. There is no proposed alteration to the coastal bank and the proposed project will have no impact on storm damage prevention or flood control.

Land Subject to Coastal Storm Flowage

The property lies within the FEMA Flood Zone “X” and “AE” (El. 10) as shown on FEMA Flood Insurance Rate Map Panel 25023C 0038K dated 07/3/2024.

All proposed work is located outside of the flood zone except for a planted mitigation area and removal of an impervious shed. The work within the flood zone will be an improvement the existing conditions.

Riverfront Area (310 CMR 10.58)

Riverfront areas are defined by section 310 CMR 10.58. Riverfront areas are likely to be significant to protect the private or public water supply; to protect groundwater; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect the fisheries.

All proposed work lies within previously disturbed, currently maintained areas that will be stabilized post-construction.

Riverfront Area Performance Standard Analysis:

Standards in Italics, Analysis in bold.

310 CMR 10.58(5)(a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. When a lot is previously developed but no portion of the riverfront area is degraded, the requirements of 310 CMR 10.58(4) shall be met.

The project is an improvement over the existing conditions as it results in a net decrease of degraded areas. There is currently no paved driveway, and vehicles have been parking on a gravel area within the FEMA flood zone, 100’ inner riparian zone, and directly adjacent to the coastal beach resource area. The proposed driveway is located as far away from the resources as is feasible for the site. The project is also proposing on-site stormwater management systems where none currently exist.

310 CMR 10.58(5)(b) Stormwater management is provided according to standards established by the Department.

A stormwater management system consisting of a crushed stone trench and shallow grassed depression is proposed and was designed in accordance with the Massachusetts Stormwater Handbook.

310 CMR 10.58(5)(c) Within 200 foot riverfront areas, proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less, or not closer than existing conditions within 25 foot riverfront areas, except in accordance with 310 CMR 10.58(5)(f) or (g).

This is a previously developed / disturbed property. The proposed work is not located within the 100’ inner riparian zone, except for 198 s.f. of proposed deck that will be mitigated by removing the same sized existing shed, which is located as close as 55.4’ from mean high water of the Weir River. A portion of the grassed depression is also located in the 100’ inner riparian zone, but this is stormwater management system is an improvement to the site compared to the existing conditions as it mitigated rates and volumes of runoff and promotes groundwater recharge.

310 CMR 10.58(5)(d) Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58(5)(f) or (g).

The entire site is located inside the 200' riverfront area and is previously developed. The project has been designed to locate proposed developed areas as far away from the river as is feasible. The project provides a driveway, on a site where one currently doesn't exist. The driveway has been designed to accommodate a turnaround and a level area for parking. It should be noted that the area directly adjacent to the coastal beach and salt marsh has historically been used as a gravel parking area currently occupied with trash / debris. The proposed project will clean this area up, mitigation plantings will be provided, and on-site parking will be provided much further from the Weir River than what currently exists.

310 CMR 10.58(5)(e) The area of proposed work shall not exceed the amount of degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58(5)(f) or (g).

As noted on the Site Plan, the existing degraded areas consist of roof, concrete stairs/walkways, and the gravel parking area, totaling 3,132 s.f. The proposed degraded areas consist of roof, driveway, pervious patio and retaining walls, totaling 3,900 s.f. The 768 s.f. of increased degraded area will be mitigated within an existing degraded area, being the gravel parking area.

310 CMR 10.58(5)(f) When an applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), and (e) at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. Areas immediately along the river shall be selected for restoration. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Restoration shall include:

- 1. removal of all debris, but retaining any trees or other mature vegetation;*
- 2. grading to a topography which reduces runoff and increases infiltration;*
- 3. coverage by topsoil at a depth consistent with natural conditions at the site; and*
- 4. seeding and planting with an erosion control seed mixture, followed by plantings of herbaceous and woody species appropriate to the site;*

As noted on the Site Plan, the existing degraded areas consist of roof, concrete stairs/walkways, and the gravel parking area, totaling 3,132 s.f. The proposed degraded areas consist of roof, driveway, pervious patio and retaining walls, totaling 3,900 s.f. The 768 s.f. of increased degraded area will be mitigated within an existing degraded area, being the gravel parking area.

310 CMR 10.58(5)(g) When an applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), or (e) at a ratio in square feet of at least 2:1 of mitigation area to area of alteration not conforming to the criteria or an equivalent level of environmental protection where square footage is not a relevant measure. Alteration not conforming to the criteria shall begin at the riverfront area boundary. Mitigation may include off-site restoration of riverfront areas, conservation restrictions under M.G.L. c. 184, §§ 31 through 33 to preserve undisturbed riverfront areas that could be otherwise altered under 310 CMR 10.00, the purchase of development rights within the riverfront area, the restoration of bordering vegetated wetland, projects to remedy an existing adverse impact on the interests identified in M.G.L. c. 131, § 40 for which the applicant is not legally responsible, or similar activities undertaken voluntarily by the applicant which will support a determination by the issuing authority of no significant adverse impact. Preference shall be given to potential mitigation projects, if any, identified in

a River Basin Plan approved by the Secretary of the Executive Office of Energy and Environmental Affairs.

As noted on the Site Plan, the existing degraded areas consist of roof, concrete stairs/walkways, and the gravel parking area, totaling 3,132 s.f. The proposed degraded areas consist of roof, driveway, pervious patio and retaining walls, totaling 3,900 s.f. The 768 s.f. of increased degraded area will be mitigated within an existing degraded area, being the gravel parking area.

310 CMR 10.58(5)(h) The issuing authority shall include a continuing condition in the Certificate of Compliance for projects under 310 CMR 10.58(5)(f) or (g) prohibiting further alteration within the restoration or mitigation area, except as may be required to maintain the area in its restored or mitigated condition. Prior to requesting the issuance of the Certificate of Compliance, the applicant shall demonstrate the restoration or mitigation has been successfully completed for at least two growing seasons.

It is understood that the mitigation area will need to have successfully completed two growing seasons prior to a Certificate of Compliance being issued.

HWR 21.1.(d)(1) Except as stated below, the Commission hereby incorporates 310 CMR 10.58 in its regulations for all matters related to Bylaw jurisdiction in lands within 200 feet of rivers and streams.

See analysis' above regarding 310 CMR 10.58.

HWR 21.1.(d)(2) Notwithstanding the above, a river is any natural flowing body of water that empties to any ocean, lake, pond, other river, stream or wetland and which flows throughout the year. Perennial rivers, streams and creeks are rivers; intermittent streams are not. Notwithstanding 310 CMR 10.58, the burden of proof shall be on any applicant to show that a river, stream or creek is not perennial (i.e., is intermittent).

The Weir River is perennial and compliance with 310 CMR 10.58 is analyzed above.

HWR 21.1.(d)(3) For any river or stream that is tidally influenced, the Commission shall use the DEP mouth of the river designation line.

Not applicable.

HWR 21.1.(d)(4) Notwithstanding any provisions of 310 CMR 10.58, the Commission shall presume that the mean annual high water line of a non-tidal river is coincident with the outer (landmost) boundary of any Bordering Vegetated Wetland (as defined in these regulations) that may be adjacent to the river. This presumption may be overcome upon a clear showing that the mean annual high water line is closer to the river. Such evidence may include hydrological measurements and calculations prepared by a registered professional engineer and/or hydrologist, and/or stream flow stage data from U.S. Geological Survey stream gauges and survey. For non-tidal rivers lacking any Bordering Vegetated Wetland, the inner boundary of the 200-foot Riverfront Area shall be the top of Inland Bank as determined by the first observable break in slope or the mean annual flood level, whichever is lower. For tidal rivers, the inner boundary of the 200-foot Riverfront Area shall be the mean annual high water line.

The Weir River is a tidal river and the inner boundary of the 200-foot Riverfront Area is delineated as the mean high water line.

HWR 21.1.(d)(5) Notwithstanding any provisions of 310 CMR 10.58, the alternatives analysis shall include only lots adjacent to the lot(s) being proposed for development, or located in the near vicinity.

An alternatives analysis is attached herewith.

HWR 21.1.(d)(6) Notwithstanding the above provisions, no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate and rare plant species, as identified by procedures established under 310 CMR 10.59.

The proposed project will not have any adverse effect on the habitats listed above. The project will result in an improvement of wildlife habitat with the proposed 2,507 s.f. mitigation area.

HWR 21.1.(d)(7) The Commission may impose such additional requirements as are necessary to protect the wetland values protected under the Bylaw.

No analysis required.

HWR 21.1.(d)(8) Refer to HWR 23.0 et seq. for additional project-specific performance standards.

The proposed building foundation lies between the 50' and 100' buffer zones and mitigation has been provided in accordance with the Hingham Buffer Zone Mitigation Policy.

HWR 22.0.(d)(1) The intent of the Conservation Commission is to move all structures and activities as far away as possible from any Resource Area, in order to protect the wetland values of Resource Areas.

The proposed structures are located as far away from the Resource Areas as possible while also providing the required zoning side yard and a safe level parking area and on-site turnaround. See alternatives analysis for further information.

HWR 22.0.(d)(2) Except as otherwise specified, Resource Area buffers shall be retained and maintained in a naturally vegetated condition. Where buffer disturbance has occurred during construction, revegetation with native vegetation may be required.

The proposed disturbance area is set as far away from the resource areas as is practicable for this project. Mitigation plantings are proposed for the alteration area proposed within the buffer zones.

HWR 22.0.(d)(3) The Commission may require that already-altered buffer zone be restored in order to protect or improve Resource Area values. Restoration means planting native vegetation, grading, correcting site drainage, removing debris, or other measures which will improve, restore and protect the wetland values of the Resource Area.

A large area within the existing buffer zone is currently used as a gravel parking area that is occupied with trash / debris . The applicant is proposing to restore this area by relocating the parking area, cleaning the trash up, and providing mitigation plantings.

HWR 22.0.(d)(4) Notwithstanding the above provisions, no project may be permitted which will have any adverse effect on specified habitat of rare vertebrate or invertebrate and rare plant species, as identified by procedures established under 310 CMR 10.37 for Coastal Resource Areas or 310 CMR 10.59 for Inland Resource Areas.

There is no habitat of rare vertebrate or invertebrate or plant species at this site.

HWR 22.0.(d)(5) The Commission may impose such additional requirements as are necessary to protect the wetland values protected under the Bylaw.

No response required.

4.0 Alternatives Analysis for work within Riverfront Area

Option 1: Rebuild the single family dwelling in its existing location and leave on-site parking in its existing location. This is the least favorable option as it results in the least amount of improvements to the site. The existing parking area is a detriment to the resource areas that it is directly adjacent to. This is an unimproved parking area with no stormwater systems in place. This option is not favorable in terms of Hingham Zoning requirements. In the Residence C District, the required side yard setback is 20', but the existing dwelling only provides 2.7' from its side property line.

Option 2: Rebuild the single family dwelling in its existing location and provide a garage on its front face connected to a new paved driveway. Due to the existing on-site topography, this option would prohibit the new driveway from providing a level parking area and an on-site turnaround area. Without a level parking area, it would be dangerous to back out of a garage onto such a steep slope. This option is not favorable in terms of Hingham Zoning requirements. In the Residence C District, the required side yard setback is 20', but the existing dwelling only provides 2.7' from its side property line.

Option 2: This is the option currently proposed by the applicant, which is to raze the existing dwelling and construct a new dwelling compliant with the 20' side yard zoning setback. With this layout, a paved driveway is proposed as far away from the resources as is feasible. The paved driveway provides a level parking area and an on-site turnaround. The existing parking area will be cleaned up and a large mitigation area will be planted. This option also proposes on-site stormwater management systems, where none currently exist, to mitigate rates and volumes of runoff and provide groundwater recharge. This option is preferable to all alternatives.

5.0 Construction Phase Mitigating Measures

The following are mitigating measures that will be employed to ensure that impacts to wetland interests protected under the Town of Hingham Wetlands Protection Bylaw and the Wetlands Protection Act are minimized to the extent possible.

Erosion and Sedimentation Control

The potential for temporary impacts to wetlands due to erosion and migration of sediments into adjacent wetlands will be mitigated by adherence to basic erosion control practices. These include:

1. Install staked 12" diameter mulch sock and/or silt fence (as directed by Conservation Agent) at the upland edge of the limit of work as shown on the Site Plan. This erosion control barrier shall be installed prior to earthwork at the site. An additional stockpile of siltation fence, and stakes will be stored on site for use in repairing the erosion control barrier as needed. Inspections of the erosion control barrier shall be made weekly and after all significant rainfall events.
2. Clearly define the limits of work in the field in order to minimize the extent of clearing and soil disturbance.
3. Regrade, loam, and seed exposed soil areas immediately following construction.