Notice of Intent (NOI) Application

After-the-Fact Alteration of Buffer Zone to Inland Bank, Proposed Restoration Plan, & Construction of a Patio

20 Central Street Rowley, MA

August 8, 2022

Prepared for:

TRS Ox Brook Real Estate TRS Gerald N Fandetti, Trustee 350 Main Street Cambridge, MA 02142-1017

Design Team:

The Morin-Cameron Group, Inc. 66 Elm Street, Danvers MA 01923

DeRosa Environmental Consulting, Inc. 167 Main Street, PO Box 716, Rowley MA 01969



August 8, 2022

BY ELECTRONIC AND HAND DELIVERY

Town of Rowley Conservation Commission Town Hall Annex Room #4 39 Central Street Rowley, MA 01969

Mr. Brent Baeslack, Conservation Agent

Phone: (978) 948-2330 Fax: (978) 948-7196

conservation@TownofRowley.org



167 Main Street P. O. Box 716 Rowley Massachusetts

978.948.7717 Office 978.948.7716 Fax

derosaenvironmental.com

RE: After-the-Fact Notice of Intent (ATF NOI) Application for the After-the-Fact Alteration of Buffer Zone to Inland Bank, Proposed Restoration Plan, & Construction of a Patio

20 Central Street Rowley, Massachusetts

Dear Mr. Baeslack & Members of the Commission:

Our office has prepared the following Notice of Intent (NOI) Application to meet the requirements of the Massachusetts Wetlands Protection Act (MGL Ch. 131 Sec. 40) and its Regulations (310 CMR 10.00, et seq) (the "Act") and the Town of Rowley Wetlands Protection Bylaw (the "Bylaw"). We were authorized to prepare this filing at the request of Gerald Fandetti, owner of the property located at 20 Central Street in Rowley, Massachusetts, known as Assessor's Map 25, Lot 7 (Figure 1 and Figure 3).

This After the Fact Notice of Intent (ATF NOI)
Application requests that the Conservation
Commission issue an Order of Conditions (OOC) for
the proposed construction of a patio, implementation
of a Restoration Plan and after-the-fact alteration
within the buffer zone to inland bank.



Aerial view of Site at 236- 240 Newburyport Turnpike looking west.

Executive Summary

Response to Enforcement Order

The Rowley Conservation Commission voted to issue an Amended Enforcement Order (AmEO) at their July 12, 2022, public meeting for "alteration (cutting vegetation) of bank and 100' Buffer Zone to stream 310 CMR 10.02, placement of fill and altering 200' Riverfront Area of Ox Pasture Brook 310 CMR 10.58."

The Commission ordered a restoration plan be filed on or before June 27, 2022, and a Notice of Intent be filed on or before August 8, 2022 for "restoration of affected resource areas (Buffer Zone to Bank and Riverfront Area), removal of fill (boulders), use of appropriate erosion control measures if needed, stabilization of disturbed soils, and restoration of removed vegetation".

A Restoration Plan was prepared and submitted to the Commission on June 27, 2022 (Figure 2c).

The purpose of this After the Fact Notice of Intent (ATF NOI) is to provide the Project Elements Plan (Figure 2b) and Restoration Plan (Figure 2c) for the commission's review, comment and anticipated approval.

Site Description

The subject property is an approximate 0.13 acres parcel west of Central Street in Rowley (the "Site," Figure 1). The Site is bordered by residential properties in all directions, with Ox Pasture Brook located northwest of the Site. Accordingly, the entire site is located within the 200' Riverfront Area associated with Ox Pasture Brook as well as the 100' buffer zone to inland bank. Additionally, the majority of the Site is located within FEMA Flood Zone X (Figure 6).

The Site is a single-family home lot with an existing building, lawn area, and a patio in various levels of completion is located on the northwestern portion of the property and is the subject of this application.

Project Summary

In brief, the proposed project includes the following elements:

- After-the-Fact alteration of buffer zone to inland bank
- Proposed completion of a patio
- Restoration of buffer zone to native plantings

All work is proposed within the 100-foot buffer zone associated with an inland bank and within the 200-foot Riverfront Area to Ox Pasture Brook (Figure 2a).

The following report provides a detailed description of wetland resource areas within the project area and key project elements.

Jurisdiction and Procedural Matters

In addition to the Massachusetts Wetlands Protection Act, the project is subject to the rules and regulations outlined in the Bylaw. The Bylaw enforces a "No Disturbance Zone" that is determined by the Conservation Commission and typically extends between 25 to 50-feet from a resource area. No activities or work, other than non-motorized passage, are permitted within the No Disturbance Zone, and it must remain unchanged from its natural, vegetated state.

All proposed work is located within 50-feet of the inland bank and the majority of the work is located within 25-feet of the inland bank. Accordingly, we have requested a waiver for work within this buffer zone in a subsequent section of this report.

Abutter Notification

Abutters within 100-feet of the property line of this parcel (Assessor's Map 25, Lot 7) have been notified in writing via Certified Mail in accordance with the Massachusetts Department of Environmental Protection (MADEP) policy regarding such notice, which is in effect for NOIs filed after April 13, 1994. Proof of this notice and a copy of the letter sent (typical) accompany this filing, as required (Appendix A).

Forms and Fees

The fee calculation sheet and fee transmittal form are attached. A single (1) copy of this application has been forwarded to the MADEP/NERO to await the issuance of a file number. In addition, a copy of the Fee Transmittal Form and the state filing fee has been sent to the MADEP Lock Box in Boston, Massachusetts via Certified Mail.

Existing Wetland Resource Areas

Since proposed work at the Site will occur within the buffer zone to inland bank and the 200' Riverfront Area, the project which is the subject of this application is within the jurisdiction of the Rowley Conservation Commission under the Act and the Bylaw.

Buffer Zone - 310 CMR 10.02(2)(b)

Although not a resource area by definition, the Act identifies the buffer zone as that jurisdictional area which extends 100 feet from the edge of a wetland boundary. The area of buffer zone that is regulated by the Act and falls within the limits of work is associated with the inland bank on the northwest side of the property, as discussed below. Work proposed within this buffer zone includes the proposed completion of a patio and the implementation of a Restoration Planting Plan.

As stated in the previous section, the Commission sets a No Disturbance Zone that typically extends between 25 to 50-feet from a resource area.

Inland Bank - 310 CMR 10.55

Portions of the project are located along inland bank to Ox Pasture Brook located on the northwest portion of the site. Alteration on the bank is not proposed, but all work will be located within the 100-foot buffer zone to inland bank.

Riverfront Area – 310 CMR 10.58

Riverfront area is defined under the MA Wetlands Protection Act as "...the area of land between a river's mean annual high-water line and a parallel line measured horizontally." A river is "any natural flowing body of water that empties to any ocean, lake, pond, or other river and which flows throughout the vear."

The entire site is located within the 200-foot riverfront area associated with Ox Pasture Brook, an inland perennial stream, which is located on the northeastern portion of the property. A Restoration Plan is proposed to be installed within the inner riparian zone to mitigate for activities that were previously conducted without an Order of Conditions (Figure 2b). As the entire site falls within the 200-foot riverfront area, all work is also proposed within this area.

Riverfront performance standards, and how this project meets those standards, have been outlined in subsequent sections of this application. The only work to be completed within the Riverfront Area includes restoration planting for the work conducted previously without an Order of Conditions.

Rare and Endangered Species Habitat

The project is not located within, or adjacent to, the boundaries of Priority or Estimated Habitats of Rare Species (Figure 5) as determined by the Massachusetts Natural Heritage and Endangered Species Program (NHESP). Therefore, a review of this application is not required by NHESP and a copy has not been forwarded to them.

FEMA Floodplain

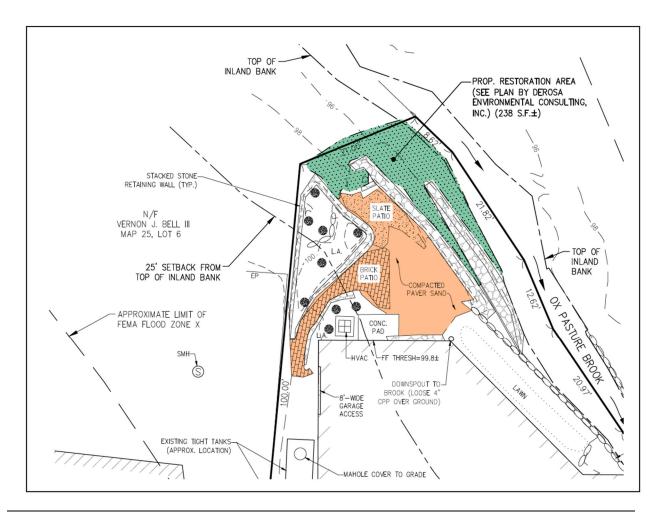
According to the Federal Emergency Management Agency's (FEMA) most recent Flood Insurance Rate Map (FIRM), portions of the site are within FEMA 100-year floodplain (Figure 6). More specifically, portions of the Site are within FEMA Zone X, which is "0.2% annual chance of flooding".

Project Elements

The project is comprised of several elements within the jurisdiction of the Rowley Conservation Commission that require preconstruction review and the issuance of an Order of Conditions prior to the commencement of work. The major project components are discussed below.

Site Preparation

In order to prepare the site for the construction of a patio, site preparation work was carried out and included the installation of compacted paver sand in the proposed patio area. Portions of the patio area have been completed and a portion of the area remains as compacted paver sand as shown on the Existing Conditions Plan (Figure 2a).



Construction of a Patio

A brick and slate patio is proposed on the northwestern portion of the Site adjacent to the existing building. Portions of the patio have been completed and are included in this application for after-the-fact approval. Additionally, this project proposes the completion of the patio within the area currently existing as compacted paver sand (Figure 2b). A stacked stone retaining wall is located between the proposed patio area and Ox Pasture Brook.

As the entire site is located within the 100-foot buffer zone to inland bank and the 200-foot Riverfront Area, the entire project is located within these zones. The proposed patio is approximately 344 square feet with 302 square feet located 25-feet from inland bank



View of the existing patio area proposed to be completed.

and 42 square feet located between 25 and 50 feet from inland bank.

Proposed Riverfront Restoration Plan

To compensate for the proposed adverse impacts to the buffer zones to inland bank and riverfront area, the project proposes to install a native species planting area along the bank. In this way, the wildlife function and value of the resource areas will be significantly enhanced. The proposed restoration area is approximately 238 square feet within 25-feet of inland bank.

Details of the proposed planting plan are discussed in the subsequent section of this application titled "Restoration Planting Plan" below.

Stormwater Management

As the project is limited to minor improvements of a single-family lot, the Stormwater Management Standards (Volume 1, p. 1-3, <u>MADEP Stormwater Management Policy Handbook)</u> and do not apply to this project.

Waiver Requests

We request that the commission waive a formal delineation of the resource area as the inland bank was located based on a clear break in slope. This project will take place solely in the most restrictive buffer zone and a formal delineation of the boundaries should not neither help nor hinder the commission's decision. Additionally, we request that the commission grant a waiver for work within the no cut/no disturbance zone. All work is located within previously degraded areas and did not result in the loss of undisturbed area. Additionally, this project proposes the implementation of a native species planting plan adjacent to the inland bank which will enhance the function and value of the resource area.

Alternatives Analysis

The entire site is located within the 200-foot Riverfront Area. Accordingly, all proposed work is located within the 200-foot Riverfront Area. The proposed project will result in minimal disturbance due to the proposed activities associated with the construction of a patio and implementation of a restoration plan. The hardscape work will occur within previously disturbed areas limiting any new alteration. The proposed restoration work serves to improve ecological conditions at the site. Accordingly, we suggest that impacts to the buffer zone and riverfront area have been minimized to the extent practicable.

The project has been designed to be as far from the river as possible. Due to the location and size of the site the project could not be completed on another section of the lot or outside the riverfront area. Apart from a do-nothing alternative, we believe the current option is the most conservative. It is our professional opinion that this is the best alternative for the site as work is limited to previously disturbed areas and will result in the implementation of a restoration plan along the resource area.

Restoration Planting Plan

Installation of various plant species adapted to the local habitat will be installed according to the proposed Restoration Planting Plan (Figure 2c). This planting palette includes native shrub and herbaceous species that will create habitat value, as well as increase plant and wildlife diversity within the general area. Specific locations of these plantings will be chosen on Site at the time of installation, but all will be within the designated restoration area. All plantings are to be installed by hand within the existing landscape to maintain soil stability unless otherwise noted. Plantings will be interspersed across the planting area and not in a uniform "on-center" planting schedule (Figure 2c).

The following is a description of the proposed methodology to install native plant species to substantially improve the function and value of the property.

Proposed Bank Planting Plan

An inland bank is the design concept for the habitat along Ox Pasture Brook (Figures 2c). This planting palette includes native shrub and herbaceous species that will create habitat value as well as increase plant and wildlife diversity within the general area.

Shrub Plantings

Shrub plant stock in this area will include red osier dogwood (*Cornus sericea*) to provide cover, natural forage and nesting Sites for birds and other animals. The shrubs will be installed by hand as one (1), two (2) or three (3) gallon containerized nursery stock (Figure 2c).

Herbaceous Plantings

The herbaceous plant community will consist of native species including cardinal flower (Lobelia cardinalis), turtlehead (Chelone glabra), Joe pye weed (Eutrochium maculatum), blue flag iris (Iris versicolor), blue vervain (Verbena hastata), sensitive fern (Onoclea sensibilis), tussock sedge (Carex stricta), Virginia wild-rye (Elymus virginicus), and ticklegrass (Agrostis scabra). Herbaceous species will be planted as 1 gallon or 1 quart nursery stock.

This planting plan will create a dense vegetated layer that will improve the area's capacity to provide ecosystem functions including nesting areas and food



Cardinal flower (Lobelia cardinalis) is a flowering wetland species that attracts hummingbirds, butterflies, and other bird species.

and cover for wildlife, particularly small mammals and our North American songbirds. The wildflower plantings will not only function well as groundcover, but will also provide habitat for our birds, pollinators and butterflies. All species to be installed are native to this region and are adapted to the surrounding soils and hydrology.

Aftercare and Maintenance

The proposed restoration efforts will follow the requirements under 310 CMR 10.55 for the restoration of vegetated wetlands and will include follow-up and aftercare reports for two years or until the area becomes successfully vegetated.

Construction Oversight, Follow-up Observations, & Maintenance Plantings

Construction oversight, follow-up observations, and all plant installation work will be overseen by a competent professional in the fields of landscape ecology and/or landscape architecture or by a qualified engineer or other qualified professional. It is proposed that the restoration areas be reviewed prior to the issuance of a Certificate of Compliance and within the two (2) year regulatory provision to ensure that wetland plant material has established itself as required under the Act and the Bylaw.

Any plant material that has failed to establish itself and has impaired the restoration area from providing the necessary plant species functions will be replaced in kind or substituted for a species that is establishing more efficiently. These species will be chosen based on the judgment of the restoration professional and the success of other plantings installed in the restoration areas.

Observations over the two-year period will be summarized in a final written report, which will be submitted before or as part of the request for a Certificate of Compliance for the project. This report will summarize the restoration effort and function and value of the created area. Interim reports (written and/or oral) during the two-year period can be requested at the discretion of the Commission.

Erosion & Sedimentation Control Plan

Configuration of Siltation Barriers

As the remainder of the project is limited to the installation of plantings and completion of a patio within further compacted paver sand, no earth work is proposed as part of this project. Accordingly, we are not proposing erosion controls as part of this project.

Limits of Work

All proposed patio work will be landward of the existing stone retaining wall with the exception of the native plantings that will be installed along the riverbank.

Request for Issuance of an Order of Conditions

The proposed project has been designed to minimize impacts to existing wetland resource areas as defined under the Massachusetts Wetlands Protection Act (MGL CH. 131 Sec. 40, et seq.), as well as the Town of Rowley Wetlands Protection Bylaw. Since the interests of the Act and the Bylaw have been addressed as part of this plan, we request that an Order of Conditions be issued so that Gerald Fandetti may commence with the construction of the proposed project.

Should you have any questions or would like to arrange a site walk to review the project, please don't hesitate to call us at (978) 948-7717.

Respectfully submitted,

DeRosa Environmental Consulting, Inc.

Abigail Manzi

Environmental Scientist

Michael J. DeRosa, Principal

Wetland Ecologist, LSP, LEED AP, PWS

MJD/aem

Cc: MADEP/NERO, Wetlands Division, 205 Lowell Street, Wilmington, MA 01887

John Morin, PE, The Morin-Cameron Group, INC. (by email)

Gerald Fandetti (by email)