

October 20, 2022

Boxford Conservation Commission
Town Hall, 7A Spofford Road
Boxford, MA 01921

Subject: Form 3A - Notice of Intent Application; 15 Berry Patch Lane, Boxford, MA

Dear Commissioners,

Enclosed please find one (1) original copy and one (1) digital copy of the above referenced Notice of Intent ("NOI") application filed in accordance with the Massachusetts Wetlands Protection Act ("WPA") (M.G.L. c. 131 § 40) and implementing regulations (310 CMR 10.00) and the Boxford Environmental Bylaw.

The Applicant is proposing to construct a replacement subsurface sewage disposal system associated with an existing single family house lot. Work will be conducted in front of the house within Riverfront Area associated with a perennial stream.

A check is enclosed in the amount of \$570 for local and state filing fees associated with the review of this application.

If you have any questions, please do not hesitate to contact me at 603 475-5826 or via email at jvondrak@yahoo.com.

Sincerely,



Julie Vondrak, Wetland Consultant

CC: Ellen Criscione, Applicant
DEP Northeast Regional Office
Jim Scanlan, P.E.

Notice of Intent Application

Massachusetts Wetlands Protection Act (M.G.L. c.131 s.40)

Boxford Wetland Protection Bylaw (Town Code Chapter 192) & Wetland
Regulations (Chapter 375)

15 Berry Patch Lane Boxford, Massachusetts

Prepared for:

Ellen Criscione

15 Berry Patch Lane
Boxford, MA 01921

Submitted to:

Boxford Conservation Commission

Town Hall, 7A Spofford Road
Boxford, MA 01921

Submitted by:

Julie Vondrak

Wetland Permitting Consultant
56 Corinthian Drive
Salem, NH 03079

In Coordination with:

James Scanlan, P.E.

Scanlan Engineering, LLC
P.O. Box 906
Georgetown, MA 01833

October 20, 2022

TABLE OF CONTENTS

WPA FORM 3 – NOTICE OF INTENT APPLICATION

ATTACHMENT A – PROJECT NARRATIVE

1.0	Introduction	1
2.0	Existing Conditions	1
3.0	Wetland Resource Areas	1
3.1	Bordering Vegetated Wetland	2
3.2	Bank	2
3.3	Riverfront Area	3
3.4	Land Under Water	3
3.5	100-Year Flood Plain Elevation	3
3.6	Natural Heritage and Endangered Species	4
4.0	Proposed Jurisdictional Activities	4
4.1	Subsurface Sewage Disposal System	4
5.0	Impacts and Compliance with Local and WPA Performance Standards	4
5.1	Compliance with RFA Performance Standards	4
5.2	Compliance with Local Bylaw Setbacks	5
6.0	Erosion Control Measures	5
7.0	Conclusion	6

List of Attachments

Attachment A - Narrative

Attachment B – Figures

- Figure 1 – USGS Locus Map
- Figure 2 – FEMA Floodplain Map

Attachment C – Site Photographs

Attachment D – Filing Fee Information

Attachment E – Abutter Notification

Attachment F – Site Plan

**WPA Form 3 - Notice of Intent /
Application for Permit**



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Provided by MassDEP:

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

Boxford

City/Town

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:

Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

15 Berry Patch Lane

a. Street Address

Boxford

b. City/Town

01921

c. Zip Code

Latitude and Longitude:

42.671680

d. Latitude

-71.024870

e. Longitude

27

f. Assessors Map/Plat Number

1-15.5

g. Parcel /Lot Number

2. Applicant:

Ellen

a. First Name

Criscione

b. Last Name

c. Organization

15 Berry Patch Lane

d. Street Address

Boxford

e. City/Town

MA

f. State

01921

g. Zip Code

(508) 843-3141

h. Phone Number

i. Fax Number

ecriscione@verizon.net

j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

SAME

a. First Name

b. Last Name

c. Organization

d. Street Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email address

4. Representative (if any):

Julie

a. First Name

Vondrak

b. Last Name

c. Company

56 Corinthian Drive

d. Street Address

Salem

e. City/Town

NH

f. State

03079

g. Zip Code

603-475-5826

h. Phone Number

i. Fax Number

jvondrak@yahoo.com

j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

\$165 (state) + \$475 (town)

a. Total Fee Paid

\$70

b. State Fee Paid

\$95 + \$475

c. City/Town Fee Paid



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Bureau of Resource Protection - Wetlands

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WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

Boxford

City/Town

A. General Information (continued)

6. General Project Description:

Subsurface sewage disposal system upgrade. Work located within 200-foot Riverfront Area.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential Subdivision
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

- 1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

2. Limited Project Type

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

So. Essex

a. County

22448

c. Book

b. Certificate # (if registered land)

217

d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number _____

Document Transaction Number _____

Boxford _____

City/Town _____

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

For all projects affecting other Resource Areas, please attach a narrative explaining how the resource area was delineated.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
a. <input type="checkbox"/> Bank	1. linear feet _____	2. linear feet _____
b. <input type="checkbox"/> Bordering Vegetated Wetland	1. square feet _____	2. square feet _____
c. <input type="checkbox"/> Land Under Waterbodies and Waterways	1. square feet _____ 3. cubic yards dredged _____	2. square feet _____

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
d. <input type="checkbox"/> Bordering Land Subject to Flooding	1. square feet _____ 3. cubic feet of flood storage lost _____	2. square feet _____ 4. cubic feet replaced _____
e. <input type="checkbox"/> Isolated Land Subject to Flooding	1. square feet _____ 2. cubic feet of flood storage lost _____	3. cubic feet replaced _____
f. <input checked="" type="checkbox"/> Riverfront Area	No Name 1. Name of Waterway (if available) - specify coastal or inland _____	

2. Width of Riverfront Area (check one):

25 ft. - Designated Densely Developed Areas only

100 ft. - New agricultural projects only

200 ft. - All other projects

3. Total area of Riverfront Area on the site of the proposed project:

95,000+/-
square feet

4. Proposed alteration of the Riverfront Area:

2250+/-

a. total square feet

0

b. square feet within 100 ft.

2250

c. square feet between 100 ft. and 200 ft.

5. Has an alternatives analysis been done and is it attached to this NOI?

Yes No

6. Was the lot where the activity is proposed created prior to August 1, 1996?

Yes No

3. Coastal Resource Areas: (See 310 CMR 10.25-10.35)

Note: for coastal riverfront areas, please complete **Section B.2.f.** above.



Massachusetts Department of Environmental Protection
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WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

Boxford

City/Town

B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	1. square feet _____	
	2. cubic yards dredged _____	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	1. square feet _____	2. cubic yards beach nourishment _____
e. <input type="checkbox"/> Coastal Dunes	1. square feet _____	2. cubic yards dune nourishment _____

	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	1. linear feet _____	
g. <input type="checkbox"/> Rocky Intertidal Shores	1. square feet _____	
h. <input type="checkbox"/> Salt Marshes	1. square feet _____	2. sq ft restoration, rehab., creation _____
i. <input type="checkbox"/> Land Under Salt Ponds	1. square feet _____	
	2. cubic yards dredged _____	
j. <input type="checkbox"/> Land Containing Shellfish	1. square feet _____	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	
	1. cubic yards dredged _____	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	1. square feet _____	

4. Restoration/Enhancement
If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.

a. square feet of BVW

b. square feet of Salt Marsh

5. Project Involves Stream Crossings

a. number of new stream crossings

b. number of replacement stream crossings



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number _____

Document Transaction Number _____

Boxford _____

City/Town _____

C. Other Applicable Standards and Requirements

- This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

- a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581

Mass GIS _____

b. Date of map _____

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); *OR* complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

- c. Submit Supplemental Information for Endangered Species Review*

1. Percentage/acreage of property to be altered:

(a) within wetland Resource Area _____

percentage/acreage

(b) outside Resource Area _____

percentage/acreage

2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

(a) Project description (including description of impacts outside of wetland resource area & buffer zone)

(b) Photographs representative of the site

* Some projects not in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/mas-endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands

Provided by MassDEP:

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number _____

Document Transaction Number _____

Boxford _____

City/Town _____

C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site

- (e) Project plans showing Priority & Estimated Habitat boundaries

- (f) OR Check One of the Following

1. Project is exempt from MESA review.
 Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing.

a. NHESP Tracking # _____

b. Date submitted to NHESP _____

3. Separate MESA review completed.

Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

- a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and
 the Cape & Islands:

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
 Southeast Marine Fisheries Station
 Attn: Environmental Reviewer
 836 South Rodney French Blvd.
 New Bedford, MA 02744
 Email: dmf.envreview-south@mass.gov

Division of Marine Fisheries -
 North Shore Office
 Attn: Environmental Reviewer
 30 Emerson Avenue
 Gloucester, MA 01930
 Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

- c. Is this an aquaculture project?

- d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Provided by MassDEP:

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

Boxford

City/Town

C. Other Applicable Standards and Requirements (cont'd)

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?

a. Yes No

If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.

b. ACEC

5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?

a. Yes No

6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?

a. Yes No

7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?

a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:

1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
2. A portion of the site constitutes redevelopment
3. Proprietary BMPs are included in the Stormwater Management System.

b. No. Check why the project is exempt:

1. Single-family house
2. Emergency road repair
3. Small Residential Subdivision (less than or equal to 4 single-family houses or less than or equal to 4 units in multi-family housing project) with no discharge to Critical Areas.

D. Additional Information

This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.

Online Users:
Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands

Provided by MassDEP:

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

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Boxford

City/Town

D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

Subsurface Sewage Disposal Upgrade, 15 Berry Patch Lane, Boxford, MA 01921

a. Plan Title

James Scanlan, P.E.

James Scanlan, P.E.

b. Prepared By

c. Signed and Stamped by

October 8, 2022

1" = 20'

d. Final Revision Date

e. Scale

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.
6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.
7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.
8. Attach NOI Wetland Fee Transmittal Form
9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

940

10.17.22

2. Municipal Check Number

3. Check date

941

10.17.22

4. State Check Number

5. Check date

Ellen

Criscione

6. Payor name on check: First Name

7. Payor name on check: Last Name



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

MassDEP File Number

Document Transaction Number

Boxford

City/Town

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

Ellen Criscione

1. Signature of Applicant

10-20-2022

2. Date

3. Signature of Property Owner (if different)

Julie Vondrak

5. Signature of Representative (if any)

4. Date

10/20/22

6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.

Attachment A - Project Narrative

ATTACHMENT A – PROJECT NARRATIVE

1.0 Introduction

Julie Vondrak, on behalf of Ellen Criscione, (the “Applicant”), is pleased to submit this Notice of Intent (“NOI”) to the Boxford Conservation Commission (“BCC”). This NOI has been prepared in accordance with the Massachusetts Wetland Protection Act (MGL c.131 s.40) and implementing Regulations (310 CMR 10.00) (the “Act”), and the Boxford Wetland Protection Bylaw and Regulations (the “Bylaw”).

The Applicant is requesting that the BCC issue an Order of Conditions (“OOC”) approving activities associated with the construction of an upgrade subsurface sewage disposal system located at 15 Berry Patch Lane, Boxford, MA (the “Project Site”). Project activities will be located within Riverfront Area (“RFA”) associated with an un-named perennial stream. The project has been designed to comply with the state and local wetland performance standards to the extent practicable.

Wetland resource areas were delineated on September 26, 2022 by Julie Vondrak and are discussed below in Section 3.0.

2.0 Existing Conditions

The Project Site area is an existing residential lot located on an approximate 2.33 acre +/- of land located at 15 Berry Patch Lane. The property is occupied by a 4 bedroom, approximate 3,700 +/- s.f. living area single family house built in 1992. Utilities associated with the property include propane gas and electric, a well and a subsurface sewage disposal system located in front of the dwelling. The existing system consists of 3 leach pits which have failed Title 5 inspection. Wetland resource areas are located along the northern and eastern property boundaries and are associated with an unnamed perennial stream.

3.0 Wetland Resource Areas

Wetland resource areas were delineated by Julie Vondrak in accordance with the U.S. Army Corps of Engineers “Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region” (USACE, 2012), the Massachusetts Department of Environmental Protection handbook, Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act” (MADEP, 1995), and the Boxford Wetland Protection Bylaw. The federal, state and local delineation methodologies prescribe a similar three parameter approach where hydrophytic vegetation, hydric soils, and hydrology are reviewed in conjunction with one another when delineating a wetland edge.

3.1 *Bordering Vegetated Wetland*

BVW is defined at 310 CMR 10.55. BVW's are freshwater wetlands that border on creeks, rivers, streams, ponds and lakes. The types of freshwater wetlands are wet meadows, marshes, swamps and bogs. BVW's are the areas where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants. The ground and surface regime and the plant community that occur in each type of freshwater wetland are specified in the Act. The boundary of BVW is the line within which 50 percent or more of the plant community consists of wetland indicator plants and saturated and inundation conditions exist.

A Series

BVW is located along the eastern property boundary and extends off the perennial stream located along the northern property boundary. Flags A1 through A6 delineate the boundaries of BVW which was determined through the investigation of soils, vegetation and topographic features (see attached photo 4). The area appears to hold standing water throughout the growing season as evident by staining and areas of an unvegetated soil substrate. Dominant vegetation identified within the A Series BVW include red maple (*Acer rubrum*), American Elm (*Ulmus americana*), Ash (*Fraxinus* spp.), cinnamon fern (*Osmunda cinnamomea*), Sensitive fern (*Onoclea sensibilis*), multiflora rose (*Rosa multiflora*), and goldenrods (*Solidago* spp.).

There is a 100-foot Buffer Zone associated with BVW. No impacts to BVW or within 100-feet of BVW are proposed under this application.

3.2 *Bank*

Bank is defined at 310 CMR 10.54. A bank is the portion of the land surface which normally abuts and confines a water body. It occurs between a water body and BVW and adjacent floodplain, or in the absence of these, it occurs between a water body and an upland. A Bank may be partially or totally vegetated, or it may be comprised of exposed soil, gravel or stone. The upper boundary of Bank is the first observable break in slope or the mean annual high flood level, whichever is lower. The lower boundary of Bank is the annual low flow level.

Flags TOB1 through TOB10 delineate Bank associated with a perennial stream that flows northwesterly along the northern property boundary. The stream originates to the northeast of the site from under Mortimer Road. The stream continues along the entire northern property boundary. The delineated stream averages in width of approximately 3 to 7-feet and bank height ranges from 2 to 5 feet within the Project Site boundaries (see attached photos 5 & 6). Due to recent drought conditions, no water or water flow was observed in the stream during the time of delineation. Bank was identified by the first

observable break in slope and is well-defined. A majority of the Bank is not heavily vegetated (see attached photos). Species along the top of bank included red maple, ash, sugar maple (*Acer saccharum*) and euonymus.

There is a 100-foot Buffer Zone associated with Bank. No impacts to Bank are proposed under this application.

3.3 Riverfront Area

Riverfront Area (“RFA”) is defined at 310 CMR.58. RFA is the area of land between a river’s mean annual high-water line (MAHW) and a parallel line measured 200-feet horizontally outward. A perennial stream identified on the applicable USGS map (See Figure 1 in Attachment B) flows along the northern property boundary. The RFA associated with the stream was established from the stream’s MAHW line as identified by the wetland scientist. The mean annual high water was determined by field observations of the first observable break in slope and/or bankfull conditions indicated by water staining and vegetation changes. Flags TOB1 through TOB10 depict the upper boundaries of Bank for establishment of the limits of RFA associated with the perennial stream. RFA does not have a 100-foot Buffer Zone.

Work proposed within RFA includes construction of a septic tank and associated leach field. All work will be located in front on the house within primarily disturbed areas vegetated with manicured lawn. Tree and shrub woody vegetation clusters will be impacted by the construction of the leach field. Impacts to the woody vegetation are necessary as the system needs to be located greater than 100-feet from the well, therefore, the leach field must be located in the western section of the site. The new subsurface sewage disposal system is required as the existing system has failed Title V inspection.

3.4 Land Under Water

Land Under Water (“LUW”) is defined at 310 CMR 10.56 (2)(a) as the land beneath any creek, river, stream, pond or lake. The boundary is the mean annual low water level (310 CMR 10.56 (c)). LUW is associated with the identified perennial stream. Proposed activities will not be located in or impact LUW.

3.5 100-Year Flood Plain Elevation

According to the applicable FEMA Flood Insurance Rate Map (“FIRM”), Community Panel #25009C0242F, dated July 3, 2012, the Project Site does not appear to be located within a Zone A floodplain (see attached FEMA FIRM figure in attachment B). As Project activities will be located outside of the 100-year flood elevation, no Bordering Land Subject to Flooding (“BLSF”) as defined by 310 CMR 10.57 will be impacted.

3.6 *Natural Heritage and Endangered Species*

According to the Natural Heritage Atlas (Mass GIS data layer), the project site is not mapped within priority habitat of rare species or estimated habitat of rare wetlands wildlife or certified vernal pools.

4.0 Proposed Jurisdictional Activities

Activities proposed within resource areas include construction of a new subsurface sewage disposal system located within partially disturbed and developed areas within the 200-foot Riverfront Area. No work will be conducted within 100-feet of BVW or Bank. Details on the construction activities are discussed below.

4.1 *Subsurface Sewage Disposal System*

As discussed above, the existing subsurface sewage disposal system on site located to the front of the house has failed Title V inspection. The existing system consists of three (3) leach pits. The existing leach pits will be removed as the new system will be located within their existing location. The new gravity system will include installation of a new 1500-gallon septic tank and a 24-foot by 45-foot area subsurface leach field to be constructed in the front of the house. Majority of the leach field will be located within manicured lawn, however, a portion of the system will be located within wooded island areas dominated with red maple and oak species. Impacts to woody vegetation are unavoidable as the leach field has to be located greater than 100-feet from the on-site well. No work will be located within 100-feet of Bank or BVW. Construction of the upgrade system will alter a total of approximately 2,250+/- s.f. of RFA.

5.0 Impacts and Compliance with Local and WPA Performance Standards

5.1 *Compliance with RFA Performance Standards*

As stated above, construction of the proposed subsurface sewage disposal is necessary, as the existing system has failed. Given almost the entire lot is located within RFA, there is no practicable alternative to locate the components of the upgrade system outside of the RFA resource area. The new system will be located within previously disturbed and developed areas within the site and the leach field will be located greater than 100-feet from the on-site well. At its closest point, the leach field will be located 156-feet from top of bank associated with the stream.

Approximately 2250 s.f. of the outer Riparian Zone (between 100 to 200 feet) will be altered for installation of the underground septic tank and subsurface sewage disposal system.

In accordance with 310 CMR 10.58 (6) (c) "On-site sewage disposal systems in existence on August 7, 1996 and the repair or upgrade of existing systems in compliance with 310 CMR

15.00: *The State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage” are exempted or grandfathered from requirements for Riverfront Area.*

The proposed upgrade system has been designed to comply with the Title 5 requirements and measures have been undertaken to minimize impacts to the RFA and the 100-foot Buffer Zone to the extent practicable.

5.2 Compliance with Local Bylaw Setbacks

The BCC enforces a 25-foot No-Disturbance Zone from the edge of wetland resource areas and a 100-foot No-Build Zone setback from wetlands for soil absorption systems and a 200-foot No-Build setback from rivers for soil absorption systems. As discussed above, construction of the subsurface sewage disposal system will be located greater than 100-feet from Bank/BVW but will be located within the 200-foot RFA. Given the site constraints, including the location of wetland resource areas along the perimeter of the property and the location of the well on the site and the neighbors wells off-site, the only practicable location for the subsurface sewage disposal system is the front of the house. The system will be located as far from resource areas as possible and all work will be located within portions of previously disturbed RFA areas. Tree and shrub vegetation will be impacted from proposed activities as site constraints prevent avoidance of such impacts.

Proposed activities will not be located within 25-feet of the identified BVW and/or Bank resource area. Closest point of work associated with the leach field activities is 156-feet from the top of bank of the perennial stream located to the rear of the house. Erosion controls will be installed prior to commencement of work to ensure protection of the identified resource areas.

The Applicant hereby requests a waiver of the setbacks imposed under the Bylaw Regulations in order to construct a subsurface sewage disposal system that complies with Title 5 design standards.

6.0 Erosion Control Measures

6.1 Sedimentation and Erosion Control

Siltation barriers composed of silt socks will be installed along the limit of work associated with the construction of the subsurface sewage disposal system upgrade. The siltation barrier will demarcate the limit of work, form a work envelope and provide additional assurance that construction equipment will not enter the resource area. All barriers will remain in place until disturbed areas are stabilized by vegetation.

7.0 Conclusion

The Project has been designed to comply with all local, state and federal wetland regulations to the extent practicable and the Project has been designed to avoid and minimize impacts to the identified wetland resource areas and applicable buffer zone to the extent practicable. The ability of the adjacent wetland resource area to provide those functions and values presumed significant under the Act and Bylaw will not be impaired. The Applicant therefore requests that the BCC issue an Order of Conditions approving the Project with conditions.

Attachment B - Figures

USGS TOPOGRAPHIC PLAN

from MassGIS Website

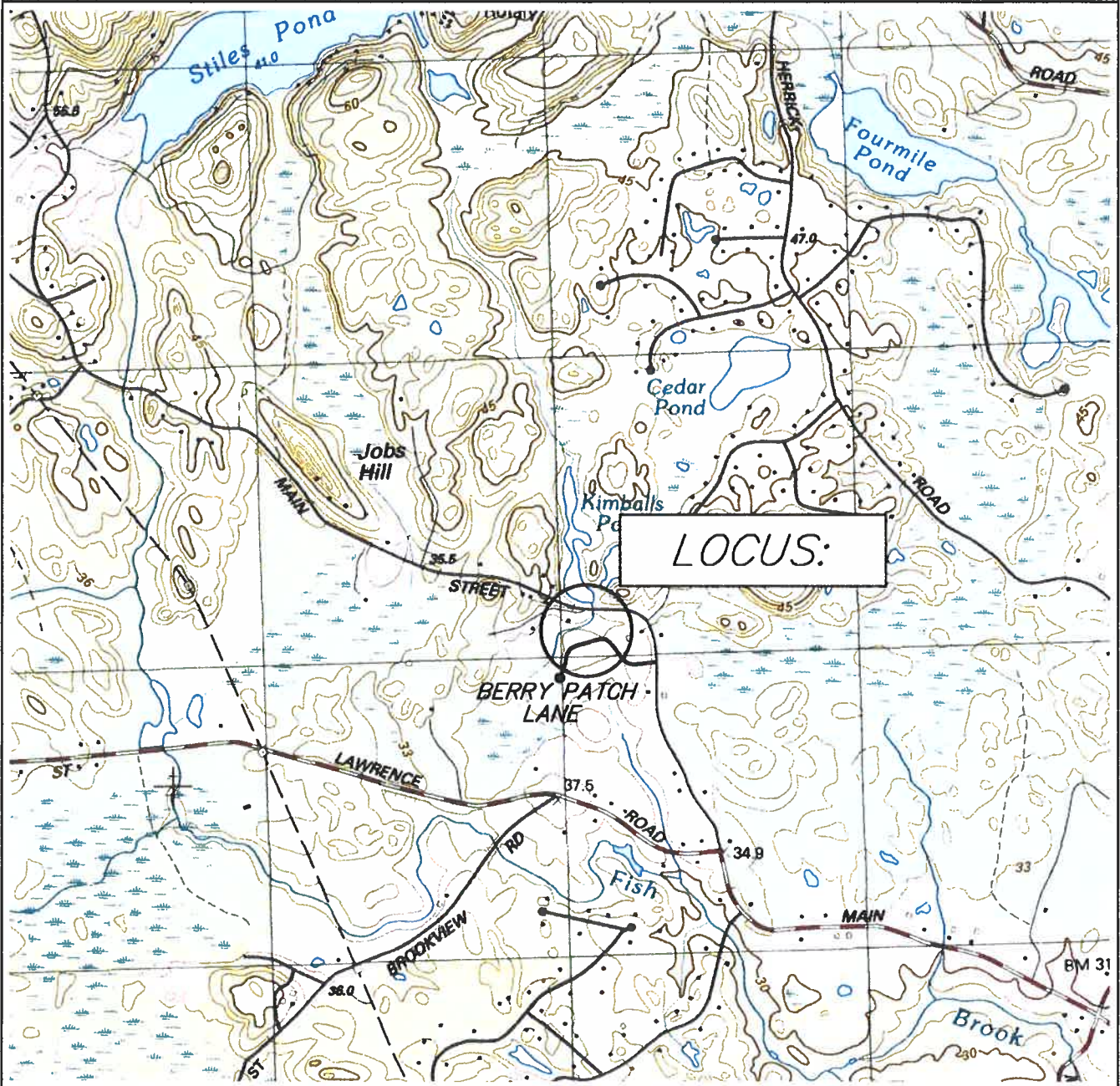


FIGURE 1

15 Berry Patch Lane
Boxford, MA

Scale: 1"=500'
10/8/2022

National Flood Hazard Layer FIRMette

71°1'46"W 42°40'30"N



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS

- Without Base Flood Elevation (BFE)
Zone A, V, A99
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD

- 0.2% Annual Chance Flood Hazard, Area of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS

- NO SCREEN
- Area of Minimal Flood Hazard *Zone X*
- Effective LOMRS
- Area of Undetermined Flood Hazard *Zone*

GENERAL STRUCTURES

- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

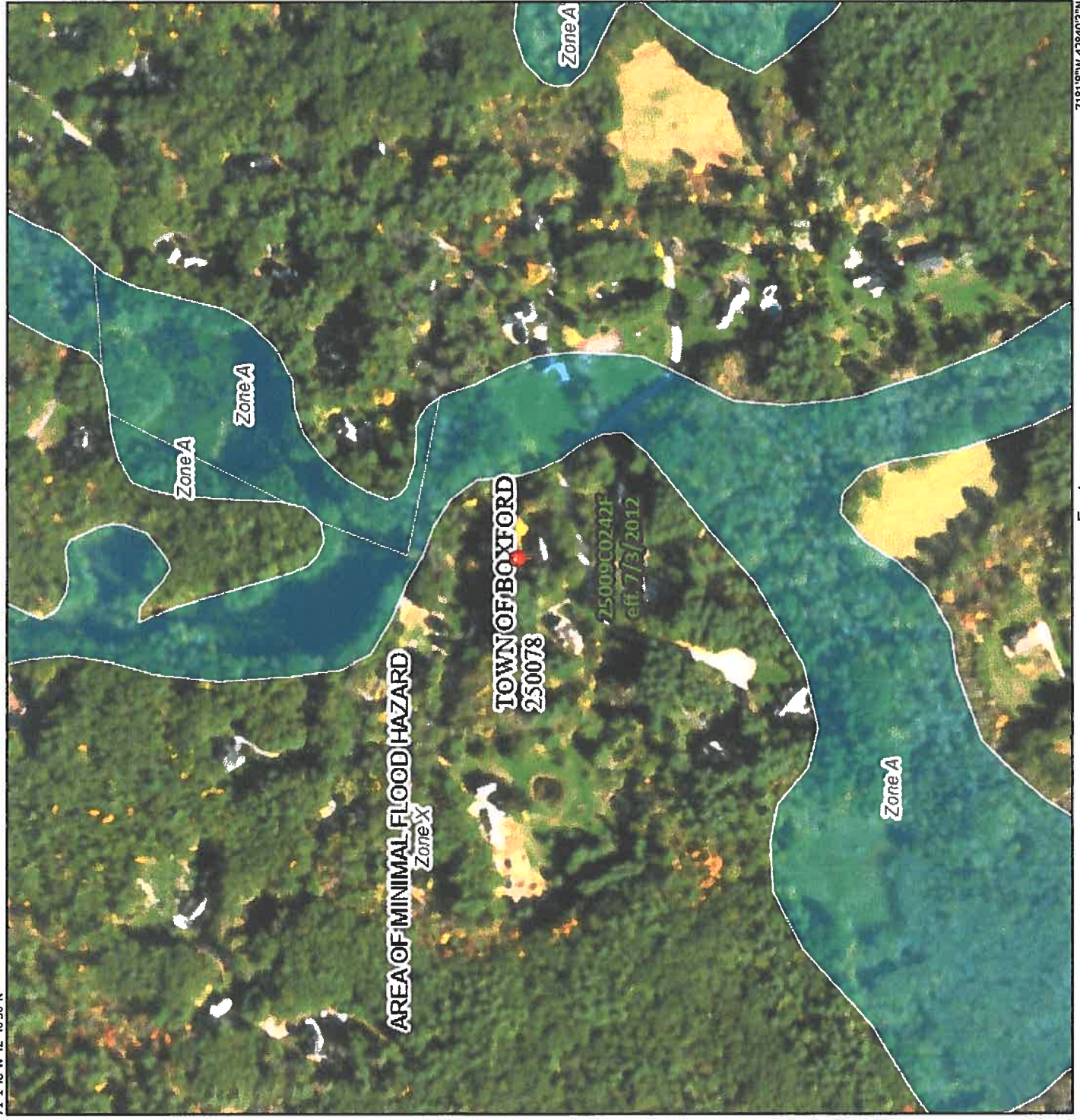
OTHER FEATURES

- Cross Sections with 1% Annual Chance Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS

- Digital Data Available
- No Digital Data Available
- Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.



0 250 500 1,000 1,500 2,000 Feet 1:6,000
 71°18'W 42°40'3"N
 Reseman - USGS National Map, Orthoimagery. Data refreshed October 2020

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards.

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 9/26/2022 at 5:56 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Attachment C - Site Photographs



Photos 1: Proposed location of new subsurface sewage disposal system in front of left corner of house (10.17.22).

Photos 2: Clump of vegetation consisting of red maples and oaks to be altered for leach field construction along western property boundary (10.17.22).





Photos 3: View towards back yard and stream channel within wooded area. Well location here (9.26.22).

WELL

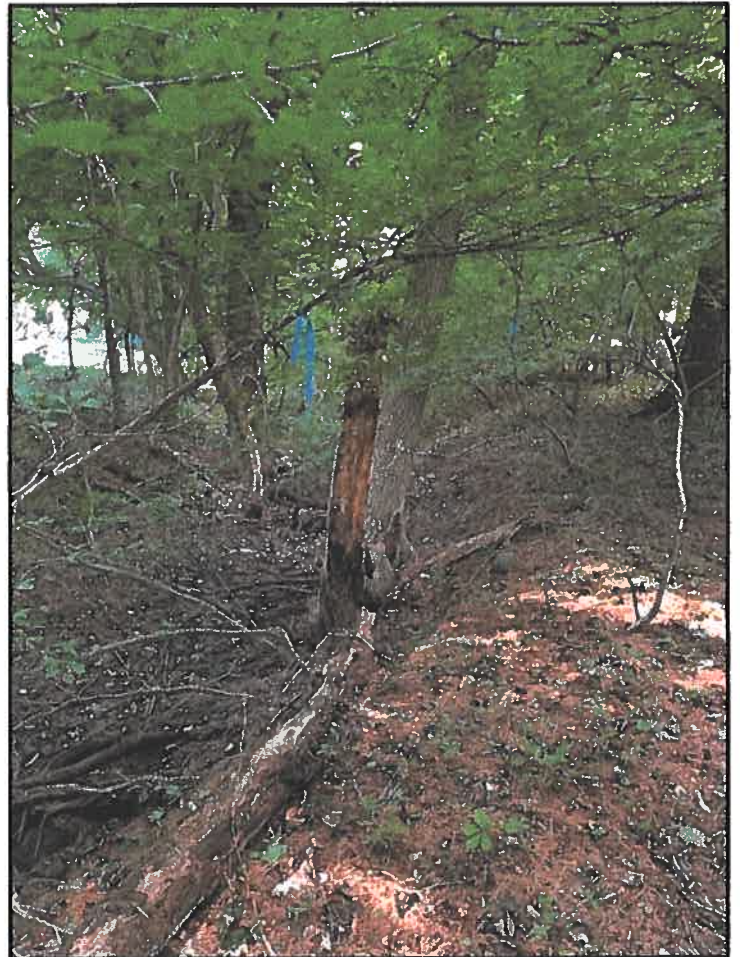
Photos 4: BVW located along the eastern property boundary (9.26.22).





Photos 5: View of dry stream channel behind house facing west (9.26.22).

Photos 6: View of dry stream and top of bank facing east (9.26.22).



Attachment D - Filing Fee Information



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Cat 1: septic system upgrade(RFA)	1	\$110 x 1.5	\$165
Boxford Bylaw Fee: Cat 1	1	\$475	\$475

Step 5/Total Project Fee: _____

Step 6/Fee Payments:

Total Project Fee:	<u>\$165(state)\$475(town)</u>
State share of filing Fee:	a. Total Fee from Step 5
City/Town share of filling Fee:	<u>\$70</u>
	b. 1/2 Total Fee less \$12.50
	<u>\$95 plus \$475</u>
	c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a copy of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a copy of this form; and a copy of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

ELLEN FITZPATRICK CRISCIONE
15 BERRY PATCH LANE
BOXFORD, MA 01921-2239

940

53-13/110 MA
26683

October 17, 2022
Date

Pay To The Order Of Town of Boxford \$ 570.00

Five hundred seventy dollars and ⁰⁰/₁₀₀ Dollars



BANK OF AMERICA

ACH R/T 011000138

For Filing Fees Ellen F Criscione NP

⑆0⑆1000⑆38⑆ 0000⑆2346646⑆0940

Hartford Clerk

ELLEN FITZPATRICK CRISCIONE
15 BERRY PATCH LANE
BOXFORD, MA 01921-2239

941

53-13/110 MA
26683

October 17, 2022
Date

Pay To The Order Of Commonwealth of Massachusetts \$ 70.00

Seventy dollars and ⁰⁰/₁₀₀ Dollars



BANK OF AMERICA

ACH R/T 011000138

For Filing Fees Ellen F Criscione NP

⑆0⑆1000⑆38⑆ 0000⑆2346646⑆0940

Hartford Clerk

Attachment E - Abutter Notification

Affidavit Of Service
Under The Massachusetts Wetlands Protection Act
And
Boxford Wetland Protection Bylaw

I, **Ellen Criscione**, hereby certify under the pains and penalties of perjury that on **October 20, 2022** gave notification to abutters in compliance with the second paragraph of Massachusetts General Laws Chapter 131, Section 40, and the DEP Guide to Abutter Notification dated April 8, 1994, in connection with the following matter:

A Notice of Intent filed under the Massachusetts Wetland Protection Act and Boxford Wetland Protection Bylaw and Regulation **by Ellen Criscione** on **October 21, 2022**, for property located at **15 Berry Patch Lane Boxford, MA (Tax Map 27, Lot/Parcel 1-15.5)**.

The form of notification, and a list of the abutters to whom it was given and their addresses are attached to this Affidavit of Service.

Ellen Criscione
Ellen Criscione

10-20-2022
Date

27-1-15.5 - 15 BERRY PATCH LN, BOXFORD ABUTTERS LIST
 CONSERVATION COMMISSION 250'

Parcel ID	Location	Owner	Owner 2	Owner Address	Owner City/Town	Owner State	Zip Code
23-01-04	193 MAIN ST	LEE DONGIK TE	LEE JAESOOK	193 MAIN ST	BOXFORD	MA	01921
23-01-04-1	63 SHEFFIELD RD	THOMPSON BRIAN D	SCHOONIMAKER JESSICA R	63 SHEFFIELD RD	BOXFORD	MA	01921
23-01-04-2	55 SHEFFIELD RD	RYAN, STEVEN	RYAN, PATRICIA N	55 SHEFFIELD RD	BOXFORD	MA	01921
23-01-04-3	49 SHEFFIELD RD	HOUGHTON RICHARD R	HOUGHTON PATRICIA-LANE	49 SHEFFIELD RD	BOXFORD	MA	01921
23-01-04-4	47A SHEFFIELD RD	SCHILDKRAUT EZRA J	SCHILDKRAUT RENEE C	47A SHEFFIELD RD	BOXFORD	MA	01921
23-01-05-3	223C MAIN ST	CERRA, JOSEPH	CERRA, MARISA	223C MAIN ST	BOXFORD	MA	01921
27-01-12	207 MAIN ST	HOSTETTER HEATHER L		207 MAIN ST	BOXFORD	MA	01921
27-01-13	5 MORTIMER RD	COLANGELO PETER		5 MORTIMER ROAD	BOXFORD	MA	01921
27-01-14	4 MORTIMER RD	GRAHAM JONATHAN L		4 MORTIMER RD	BOXFORD	MA	01921
27-01-15	16 BERRY PATCH LN	CRUMRINE II MICHAEL EDWARD & ELIZABETH KATE	THE CRUMRINE FAMILY 2020 REVOCABLE TRUST	16 BERRY PATCH LN	BOXFORD	MA	01921
27-01-15-1	18 BERRY PATCH LN	LEON SCOTT E	LEON LORRAINE I	18 BERRY PATCH LN	BOXFORD	MA	01921
27-01-15-3	25 BERRY PATCH LN	PICKUL CHRISTOPHER	MADURI PERRI	25 BERRY PATCH LN	BOXFORD	MA	01921
27-01-15-4	19 BERRY PATCH LN	THORNBOROUGH GLEN	THORNBOROUGH BONNIE	19 BERRY PATCH LN	BOXFORD	MA	01921
27-01-15-5	15 BERRY PATCH LN	CRISCIONE PAUL A	CRISCIONE ELLEN F	15 BERRY PATCH LN	BOXFORD	MA	01921
27-01-15-6	186 MAIN ST	GORE JUDITH A	GORE ROBERT C	186 MAIN ST	BOXFORD	MA	01921

CERTIFIED COPY
 10/05/2022

Heather Thijault

GORE JUDITH A
GORE ROBERT C
186 MAIN ST
BOXFORD, MA 01921

THORNBOROUGH GLEN
THORNBOROUGH BONNIE
19 BERRY PATCH LN
BOXFORD, MA 01921

CRISCIONE PAUL A
CRISCIONE ELLEN F
15 BERRY PATCH LN
BOXFORD, MA 01921

GRAHAM JONATHAN L
4 MORTIMER RD
BOXFORD, MA 01921

LEON SCOTT E
LEON LORRAINE I
18 BERRY PATCH LN
BOXFORD, MA 01921

CRUMRINE II MICHAEL EDWARD & ELIZABETH
THE CRUMRINE FAMILY 2020 REVOCABLE TRUST
16 BERRY PATCH LN
BOXFORD, MA 01921

HOUGHTON RICHARD R
HOUGHTON PATRICIA-LANE
49 SHEFFIELD RD
BOXFORD, MA 01921

~~NAPOLITANO ROBERT A~~ PICKUL CHRISTOPHER
~~WALLACE JULIE DOWD~~ MADURI PERRI
25 BERRY PATCH LN
BOXFORD, MA 01921

SCHILDKRAUT EZRA J
SCHILDKRAUT RENEE C
47A SHEFFIELD RD
BOXFORD, MA 01921

COLANGELO PETER
5 MORTIMER ROAD
BOXFORD, MA 01921

THOMPSON BRIAN D
SCHOONMAKER JESSICA R
63 SHEFFIELD RD
BOXFORD, MA 01921

RYAN, STEVEN
RYAN, PATRICIA N
55 SHEFFIELD RD
BOXFORD, MA 01921

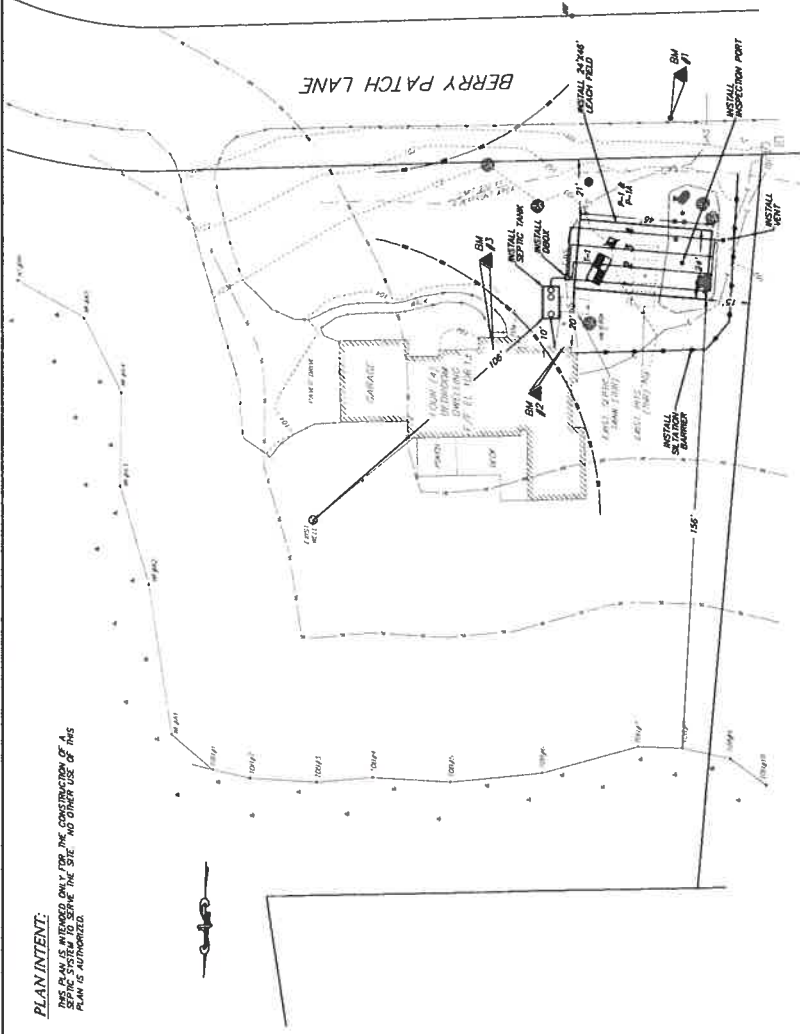
HOSTETTER HEATHER L
207 MAIN ST
BOXFORD, MA 01921

LEE DONGIK TE
LEE JAESOOK
193 MAIN ST
BOXFORD, MA 01921

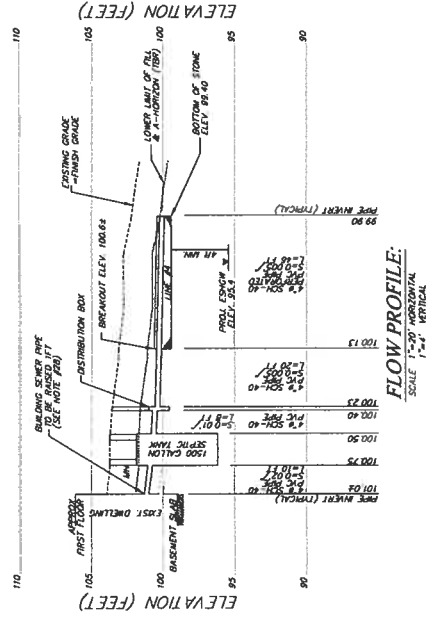
CERRA, JOSEPH
CERRA, MARISA
223C MAIN ST
BOXFORD, MA 01921

PLAN INTENT:

THIS PLAN IS INTENDED ONLY FOR THE CONSTRUCTION OF THIS SYSTEM. ANY OTHER USE OF THIS PLAN IS AUTHORIZED.



SITE PLAN:
SCALE 1"=20'



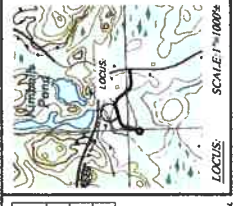
FLOW PROFILE:
SCALE 1"=20' HORIZONTAL
1"=4' VERTICAL

BENCHMARKS: ASSUMED DATUM

#	INSTRUMENT	ELEV.
#1	MAIL IN PAVEMENT	100.00
#2	TOP OF FOUNDATION	104.93
#3	FRONT DOOR THRESHOLD	106.10

SOILS INFORMATION:
SOIL EVALUATOR: JAMES SCANLAN, P.E.
DATE: 02/21/99 - APRIL 1995
TOWN: WINDSOR
COUNTY: WINDSOR

SOILS INFORMATION:
CLASS: A
TEXTURE: CLAY
PERCENT SAND: 100%
PERCENT SILT: 0%
PERCENT CLAY: 0%
SLOPE: 1%
ROCK: NONE
WATER TABLE: 100%
PERCENT ORGANIC MATTER: 0%
PERCENT HUMUS: 0%



DESIGN CRITERIA:

SWITCH JARVIS SHELLING
FACILITY SIZE: 110 GAL/RED/DAY
UNIT FLOW RATE: 440 GAL/DAY
DAILY FLOW: 880 GAL/DAY
SYSTEM DESIGN: 880 GAL/DAY
SLOPE: 0.00 GAL/PS/DAY
PROPOSED LEACH AREA: 1100 SF
EXISTING LEACH AREA: 1100 SF
LEACH AREA: 24' x 46' = 1104 SF

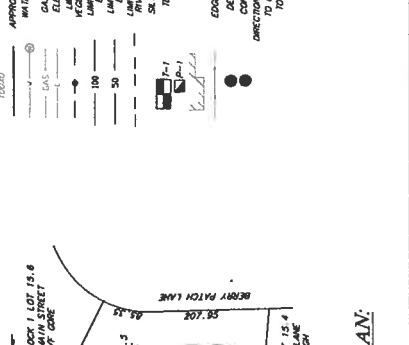
DESIGN CRITERIA:
SWITCH JARVIS SHELLING
FACILITY SIZE: 110 GAL/RED/DAY
UNIT FLOW RATE: 440 GAL/DAY
DAILY FLOW: 880 GAL/DAY
SYSTEM DESIGN: 880 GAL/DAY
SLOPE: 0.00 GAL/PS/DAY
PROPOSED LEACH AREA: 1100 SF
EXISTING LEACH AREA: 1100 SF
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DESIGN CRITERIA:

SWITCH JARVIS SHELLING
FACILITY SIZE: 110 GAL/RED/DAY
UNIT FLOW RATE: 440 GAL/DAY
DAILY FLOW: 880 GAL/DAY
SYSTEM DESIGN: 880 GAL/DAY
SLOPE: 0.00 GAL/PS/DAY
PROPOSED LEACH AREA: 1100 SF
EXISTING LEACH AREA: 1100 SF
LEACH AREA: 24' x 46' = 1104 SF

VARIANCES/WAIVERS:
REGULATIONS: NONE REQUESTED
REQUIRED: PROVIDED.

LEGEND:
EXISTING: 100.00
PROPOSED: 100.00



LOCUS PLAN:
SCALE 1"=100'

SUBSURFACE SEWAGE DISPOSAL SYSTEM UPGRADE

15 BERRY PATCH LANE
BOXFORD, MA

REGISTRY INFORMATION:

DEED: BOOK NO. 40896
PAGE NO. 536

ASSESSORS INFORMATION:

MAP: 27
BLOCK: 1
LOT: 18.5

PREPARED FOR:

ELLEN CRISCIONE
15 BERRY PATCH LANE
BOXFORD, MA

SCANLAN ENGINEERING LLC
20 BOXFORD INDUSTRIAL BLVD
BOXFORD, MA 01704
PHONE: (978) 372-3440
EMAIL: info@scanlanengineering.com

DATE	BY	DATE	BY
02/21/99	J.S.	02/21/99	J.S.
04/15/99	J.S.	04/15/99	J.S.

PLAN & FLOW PROFILE

SHEET 1 OF 2 SCALE: 1"=20'

PROJECT # 1144

