

GRAZ Engineering, L.L.C.

323 West Lake Road • Fitzwilliam, NH 03447 • Telephone (603) 585-6959 • Fax (603) 585-6960

Transmittal

To: Conservation Commission
Company: Town of Leicester
Address: 3 Washburn Square
City/State: Leicester, MA 01524
Subject: Pine Street (Assessors Map 41, Lot C2.3)
NOI Application
Date: December 5, 2018
Transmitted: ☐ Mail ☐ Fax ☒ Hand

<input checked="" type="checkbox"/> For Your Approval	<input checked="" type="checkbox"/> Which You requested
<input checked="" type="checkbox"/> For Your Review	<input type="checkbox"/> Approved
<input type="checkbox"/> For Your Signature	<input type="checkbox"/> Approved As Noted
<input checked="" type="checkbox"/> For Your Information	<input type="checkbox"/> Revise And Resubmit
<input type="checkbox"/> For Your Files	<input type="checkbox"/> Not Approved

2	copies	WPA Form 3, NOI Application, & associated documents
2	copies	NOI – Existing & Proposed Site Plan – dated 12/05/18 (24x36)
3	copies	NOI – Existing & Proposed Site Plan – dated 12/05/18, (11x17)
2	checks	NOI Town Share & Local Filing Fee Checks (see fee breakdown below)
1	CD	PDF Digital Copy of Submittal Materials

Comments: Enclosed is the NOI submittal for the proposed beach access drive and beach area prepared for James & Ann McLoughlin (Owner/Applicant) for the property located on Pine Street at the Leicester/Spencer town line and being depicted on Assessors Map 41 as Parcel C2.3. I trust that this submittal meets the requirements of the Commission and look forward to discussing this project at the public hearing.

The fee breakdown for the filing check is as follows:

Total NOI Fee:	\$ 210.00	
NOI Town Share:	\$ 117.50	
Local Bylaw Fees:	<u>\$ 52.50</u>	(25% of Total NOI Fee)
Total Town Fees:	\$ 170.00	

Should you have any questions or require any additional information, please call my cell at 508-769-9084.

Respectfully yours,
GRAZ Engineering, L.L.C.



Brian MacEwen, P.L.S., E.I.T.
Project Manager

cc: James & Ann McLoughlin, Owner/Applicant
Matt Schold, Schold Development, LLC



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Leicester
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):

Pine Street

a. Street Address

Leicester

b. City/Town

01524

c. Zip Code

Latitude and Longitude:

41

f. Assessors Map/Plat Number

42.219033

d. Latitude

71.945852

e. Longitude

C2.3

g. Parcel /Lot Number

2. Applicant:

James & Ann

a. First Name

McLoughlin

b. Last Name

c. Organization

102 Chickering Road

d. Street Address

Spencer

e. City/Town

MA

f. State

01562

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

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

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):

Brian

a. First Name

MacEwen

b. Last Name

GRAZ Engineering, LLC

c. Company

323 West Lake Road

d. Street Address

Fitzwilliam

e. City/Town

NH

f. State

03447

g. Zip Code

508-769-9084 (Cell) 603-585-6959

h. Phone Number

i. Fax Number

Brian@GrazEngineering.com

j. Email address

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

210.00

a. Total Fee Paid

\$92.50

b. State Fee Paid

\$117.50

c. City/Town Fee Paid



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

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A. General Information (continued)

6. General Project Description:

Construction of lake access gravel drive and lake front access just above lake high water line which
are located in the Buffer Zone to a Bordering Vegetated Wetlands (BVW).

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

- | | |
|---|---|
| 1. <input type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Commercial/Industrial | 4. <input checked="" type="checkbox"/> Dock/Pier |
| 5. <input type="checkbox"/> Utilities | 6. <input type="checkbox"/> Coastal engineering Structure |
| 7. <input type="checkbox"/> Agriculture (e.g., cranberries, forestry) | 8. <input type="checkbox"/> Transportation |
| 9. <input type="checkbox"/> 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 CMR 10.24(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:

Worcester District

a. County

59537

c. Book

b. Certificate # (if registered land)

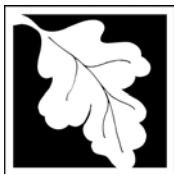
75

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

WPA Form 3 – Notice of Intent

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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 checked="" type="checkbox"/> Bank	<u>20</u> 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 type="checkbox"/> Riverfront Area	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: _____ square feet

4. Proposed alteration of the Riverfront Area:

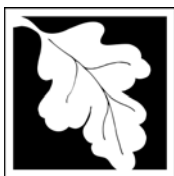
a. total square feet _____ b. square feet within 100 ft. _____ c. square feet between 100 ft. and 200 ft. _____

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.



WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

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.

Resource Area	Size of Proposed Alteration	Proposed Replacement (if any)
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



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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

October 1, 2008

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 <http://www.mass.gov/eea/agencies/dfg/dfw/natural-heritage/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.



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

- (c) ☐ MESA filing fee (fee information available at http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/ mesa/ mesa_fee_schedule.htm).
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, http://www.mass.gov/dfwele/dfw/nhesp/regulatory_review/ mesa/ mesa_exemptions.htm; 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:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
1213 Purchase Street – 3rd Floor
New Bedford, MA 02740-6694
Email: DMF.EnvReview-South@state.ma.us

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: DMF.EnvReview-North@state.ma.us

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.



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

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Online Users:

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

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.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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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.

Notice of Intent - Existing & Proposed Site Plan, Pine Street, Leicester, MA, Sheet 1 of 1

a. Plan Title

GRAZ Engineering, LLC

Paul F. Grasewicz, PE

b. Prepared By

c. Signed and Stamped by

December 5, 2018

1" = 30'

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:

2. Municipal Check Number

eDEP Online Filing with Credit Card

4. State Check Number

Schold Development, LLC

6. Payor name on check: First Name

12/06/2018

3. Check date

5. Check date

7. Payor name on check: Last Name



WPA Form 3 – Notice of Intent

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

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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.

1. Signature of Applicant

12/06/2018

2. Date

3. Signature of Property Owner (if different)

4. Date

12/06/2018

5. Signature of Representative (if any)

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:

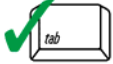
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

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.



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

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



A. Applicant Information

1. Location of Project:

Pine Street

a. Street Address

Leicester

b. City/Town

\$92.50

d. Fee amount

c. Check number

2. Applicant Mailing Address:

James & Ann

a. First Name

McLoughlin

b. Last Name

c. Organization

102 Chickering Road

d. Mailing Address

Spencer

e. City/Town

MA

f. State

01562

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

3. Property Owner (if different):

a. First Name

b. Last Name

c. Organization

d. Mailing Address

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. ***Please see Instructions before filling out worksheet.***

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
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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.b: Site Work/No House	1	\$110	\$110.00
Cat. 5.a: Install lake access and dock	20 lineal feet	\$4/lin.ft. or min. of \$100	\$100.00
Step 5/Total Project Fee:			\$210.00

Step 6/Fee Payments:

Total Project Fee:	\$210.00
	a. Total Fee from Step 5
State share of filing Fee:	\$92.50
	b. 1/2 Total Fee less \$12.50
City/Town share of filing Fee:	\$117.50
	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.)

06/20/2017

4:12:24PM

Town of Leicester

Abutters List

Page 1 of 1

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	State	Zip
41 A1 0	600 PINE ST	CYR HEATHER M	VAN HAZINGA JONATHAN A	600 PINE ST	LEICESTER	MA	01524
41 A2 0	596 PINE ST	ROWLAND SCOTT R	ROWLAND SUSAN L	596 PINE ST	LEICESTER	MA	01524
41 A3 0	PINE ST	HARRIS KATHLEEN		568 PINE ST	LEICESTER	MA	01524
41 A4 0	568 PINE ST	HARRIS REALTY TRUST	HARRIS PAUL A GEOFFREY	568 PINE ST	LEICESTER	MA	01524
41 A6 0	562 PINE ST	REYNOLDS NICOLE J		562 PINE ST	LEICESTER	MA	01524
41 C2.1 0	565 PINE ST	SCHOLD DEVELOPEMENT LLC		77 CHICKERING RD	SPENCER	MA	01562
41 C2.2 0	555 PINE ST	SCHOLD DEVELOPEMENT LLC		77 CHICKERING RD	SPENCER	MA	01562
41 C3 0	PARKER ST	STILES LAKE WATER DISTRICT		PO BOX 401	ROCHDALE	MA	01542-0401

End of Report

Please Note: Abutters in the Town of Spencer

Above is a certified list of abutters and abutters to abutters within 300 feet of subject.

Subject property: 567 Pine Street, Assessors Map 41-C2.3-0, Deed Ref. 56775/126

Subject owner(s): Schold Development LLC

John Prescott, Principal Assessor

Prepared by: Kathleen Asquith, Assistant



Town of Spencer, MA Abutters Report

Please be aware that the abutters list reflects mailing address for the real estate tax bills as requested by the property owners. Mortgage companies, banks and other financial institutions may be receiving the notification and not the homeowner as required. Please be sure you are complying with notification requirements. Property data updated 1/1/2016.

300ft. Abutters of property U30-1
at CHICKERING RD

Abutter	Street Address	Account No.	Tax Bill Address
R16-15 BOUCHER IRREVOCABLE TRUST	95 CHICKERING RD	435	BOUCHER IRREVOCABLE TRUST 95 CHICKERING RD SPENCER, MA 01562
R16-16 CORNACCHIOLI LOUIS	238 GREENVILLE ST	436	CORNACCHIOLI LOUIS 238 GREENVILLE ST SPENCER, MA 01562
R16-51 DAY LOUISE	229 GREENVILLE ST	475	DAY LOUISE 229 GREENVILLE ST SPENCER, MA 01562
R16-52 HOWE WAYNE G	99 CHICKERING RD	476	HOWE WAYNE G 99 CHICKERING RD SPENCER, MA 01562
U30-2 MERCIER RICHARD W	98 CHICKERING RD	4096	MERCIER RICHARD W 98 CHICKERING RD SPENCER, MA 01562
U30-3 MERCIER RICHARD W	CHICKERING RD	4097	MERCIER RICHARD W 98 CHICKERING RD SPENCER, MA 01562



Town of Spencer, MA Abutters Report

Please be aware that the abutters list reflects mailing address for the real estate tax bills as requested by the property owners. Mortgage companies, banks and other financial institutions may be receiving the notification and not the homeowner as required. Please be sure you are complying with notification requirements. Property data updated 1/1/2016.

300ft. Abutters of property U30-1
at CHICKERING RD

I hereby certify that the names and mailing addresses of the persons shown on the above list are the names and addresses of the owners of record as shown on the most recent certified tax list dated 5/30/2017.

Signed, _____

Name: Linda LeBlanc

Title: Principal Assessor

Date: 6/20/2017

Not official unless stamped by
the Board of Assessors

*Notification to Abutters Under the
Massachusetts Wetlands Protection Act & the
Town of Leicester Wetland Bylaw*

In accordance with the second paragraph Massachusetts General Laws Chapter 131, Section 40, you are hereby notified of the following:

- A. A **Notice of Intent** has been filed with the **Leicester Conservation Commission** for construction of a gravel lake access drive and beach area from the southerly side of Pine Street to the northerly edge of Stiles Reservoir in an Area Subject to Protection under the Wetlands Protection Act (General Laws Chapter 131, Section 40) and the Leicester Wetland Bylaw.
- B. The name of the Applicant/Owner is **James & Ann McLoughlin**.
- C. The project location is at **Pine Street, Assessors Map 41, Parcel C2.3**.
- D. The submitted documents may be viewed **Monday, Wednesday, Thursday, 8 AM to 5 PM** and **Tuesday, 8 AM to 7 PM** in the **Leicester Town Clerk's Office**.
- E. Copies of the submittal or more information may be obtained from the **Applicant's Representative (GRAZ Engineering, LLC)** by calling **508-769-9084** between the hours of **9 AM to 4 PM Monday through Friday**.
- F. Further information regarding the date, time, and place of the Public Hearing may be obtained from: **Leicester Conservation Commission office** by calling **508-892-7007 Monday, Wednesday, Thursday, 8 AM to 5 PM** and **Tuesday, 8 AM to 7 PM**.
- G. Notice of the Public Hearing, including its date, time, and place, will be published at least five (5) days in advance in the **Worcester Telegram & Gazette**.
- H. Notice of the Public Hearing including its date, time, and place will be posted in the Town Hall not less than forty-eight (48) hours in advance.

Note: You also may contact your local Conservation Commission or the nearest Department of Environmental Protection Regional Office for more information about this application or the Wetlands Protection Act. To contact DEP, call: Central Region: 508-792-7650

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act

(To be submitted to the Massachusetts Department of Environmental Protection and the
Conservation Commission when filing a Notice of Intent)

I, Brian C. MacEwen, hereby certify under the pains and penalties of perjury
that on December 7, 2015 I gave notification to the abutters in connection with the following
matter:

A Notice of Intent filed under the Massachusetts Wetlands Protection Act by
James & Ann McLoughlin (Applicant/Owner) with the
Leicester Conservation Commission on December 6, 2018 for property located at
Pine Street, Map 41, Parcel C2.3, Leicester, MA.
(address of proposed work)

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



Signature

December 7, 2017

Date

(Revised 2/07)



EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street
Worcester, MA 01605-2629
508-752-9666 / Fax: 508-752-9494

June 30, 2017

Matthew Schold
Schold Development
77 Chickering Road
Spencer, MA 01562

RE: Wetland Resource Evaluation, Lots A, B & C Pine St., Spencer, Massachusetts

Dear: Matt:

On October 28 & November 2, 2016, EcoTec, Inc. inspected the above-referenced property for the presence of wetland resources as defined by: (1) the Massachusetts Wetlands Protection Act (M.G.L. Ch. 131, § 40; the “Act”) and its implementing regulations (310 CMR 10.00 *et seq.*; the “Regulations”); and (2) the U.S. Clean Water Act (i.e., Section 404 and 401 wetlands). Arthur Allen, CPSS, CWS conducted the inspection.

The subject site consists of three lots comprising a 6-acre area located in Leicester and Spencer. The upland portions of the site are wooded and undeveloped. Plant species observed include northern red oak (*Quercus rubra*), sugar maple (*Acer saccharum*), red maple (*Acer rubrum*), white ash (*Fraxinus americana*), eastern white pine (*Pinus strobus*), American witch-hazel (*Hamamelis virginiana*), American beech (*Fagus grandifolia*), and mountain-laurel (*Kalmia latifolia*). The wetland resources observed on the site are described below.

Methodology

The site was inspected, and areas suspected to qualify as wetland resources were identified. The boundary of Bordering Vegetated Wetlands was delineated in the field in accordance with the definition set forth in the regulations at 310 CMR 10.55(2)(c). Section 10.55(2)(c) states that “The boundary of Bordering Vegetated Wetlands is the line within which 50% or more of the vegetational community consists of wetland indicator plants and saturated or inundated conditions exist.” The methodology used to delineate Bordering Vegetated Wetlands is further described in: (1) the BVW Policy “*BVW: Bordering Vegetated Wetlands Delineation Criteria and Methodology*,” issued March 1, 1995; and (2) “*Delineating Bordering Vegetated Wetlands Under the Massachusetts Wetlands Protection Act: A Handbook*,” produced by the Massachusetts Department of Environmental Protection, dated March 1995. The plant taxonomy used in this report is based on the *National Wetland Plant List (Massachusetts 2012 Final State Wetland Plant List)*, ERDC/CRREL TR-12-11 (Lichvar, 2012). Federal wetlands were presumed to have boundaries conterminous with the delineated Bordering Vegetated Wetlands. Two sets of DEP Bordering Vegetated Wetland Delineation Field Data Forms completed for observation plots located in the wetlands and uplands near flags A-6 and B-12 are attached. The table below provides the Flag Numbers, Flag Type, and Wetland Types and Locations for the delineated wetland resources.

Flag Numbers	Flag Type	Wetland Types and Locations
A-1 to A-63	Blue Flags	Boundary of Bordering Vegetated Wetlands located in the westerly and southerly portions of the site that is associated with Stiles Reservoir and an unnamed, intermittent, tributary stream.
B-1 to B-28	Blue Flags	Boundary of Bordering Vegetated Wetlands located in the northeasterly portion of the site that is associated with the headwaters to an unnamed, intermittent stream.

Findings

Wetlands A and B consist of wooded swamps located in the easterly and westerly portions of the site that are associated with intermittent streams. Plant species observed include red maple (*Acer rubrum*), yellow birch (*Betula allegheniensis*), highbush blueberry (*Vaccinium corymbosum*), cinnamon fern (*Osmunda cinnamomea*), common winterberry (*Ilex verticillata*), skunk cabbage (*Symplocarpus foetidus*), cinnamon fern (*Osmunda cinnamomea*) and New York fern (*Parathelypteris noveboracensis*). Evidence of wetland hydrology, including hydric soils, high groundwater and saturated soils was observed within the delineated wetlands. These vegetated wetlands border intermittent streams; accordingly, the vegetated wetlands would be regulated as Bordering Vegetated Wetlands and the intermittent streams would be regulated as Bank under the Act. A 100-foot Buffer Zone extends horizontally outward from the edge of Bordering Vegetated Wetlands under the Act.

Bordering Land Subject to Flooding is an area that floods due to a rise in floodwaters from a bordering waterway or water body. Where flood studies have been completed, the boundary of Bordering Land Subject to Flooding is based upon flood profile data prepared by the National Flood Insurance Program. Section 10.57(2)(a)3. states that “The boundary of Bordering Land Subject to Flooding is the estimated maximum lateral extent of flood water which will theoretically result from the statistical 100-year frequency storm.” The project engineer should evaluate the most recent National Flood Insurance Program flood profile data to determine the limits of Bordering Land Subject to Flooding on the site. Bordering Land Subject to Flooding would occur in areas where the 100-year flood elevation is located outside of or upgradient of the delineated Bordering Vegetated Wetlands boundary. Bordering Land Subject to Flooding does not have a Buffer Zone under the Act. A copy of the most recent FEMA flood zone map is attached to this report.

The Massachusetts Rivers Protection Act amended the Act to establish an additional wetland resource area: Riverfront Area. Based upon a review of the current USGS Map (i.e., Worcester South Quadrangle, dated 1983, attached) and observations made during the site inspection, two streams that are not shown on the USGS Map are located within wetlands A & B. The watershed areas for these streams, at the site, were determined to be less than 0.1 square miles each, which is less than 0.5 square miles. As such, the stream would be designated intermittent under the Massachusetts Wetlands Protection Act regulations. Furthermore, based upon a review of the current USGS Map and observations made during the site inspection, there are no other mapped

or unmapped streams located within 200 feet of the site. Accordingly, Riverfront Area would not occur on the site. Riverfront Area does not have a Buffer Zone under the Act.

The Regulations require that no project may be permitted that will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified by procedures set forth at 310 CMR 10.59. Based upon a review of the *Massachusetts Natural Heritage Atlas*, 13th edition, Priority Habitats and Estimated Habitats, Leicester Quadrangle, valid from October 1, 2008, there are no Estimated Habitats [for use with the Act and Regulations (310 CMR 10.00 *et seq.*)], Priority Habitats [for use with Massachusetts Endangered Species Act (M.G.L. Ch. 131A; “MESA”) and MESA Regulations (321 CMR 10.00 *et seq.*)], or Certified Vernal Pools on or in the immediate vicinity of the site. A copy of this map is attached.

The reader should be aware that the regulatory authority for determining wetland jurisdiction rests with local, state, and federal authorities. A brief description of my experience and qualifications is attached. If you have any questions, please feel free to contact me at any time.

Cordially,
ECOTEC, INC.



Arthur Allen, CPSS, CWS, CESSWI, ASE
Vice President

Attachments (5, 12 pages)

AA/Wetland/Leicester Pine St Report

QUALIFICATIONS

Arthur Allen, CPSS, CWS, CESSWI
Vice President
Soil & Wetland Scientist

Arthur Allen is the Vice President of EcoTec, Inc. and has been a senior environmental scientist there since 1995. His work with EcoTec has involved wetland delineation, wildlife habitat evaluation, environmental permitting (federal, state and local), environmental monitoring, expert testimony, peer reviews, contaminated site assessment and the description, mapping and interpretation of soils. His clients have included private landowners, developers, major corporations and regulatory agencies. Prior to joining EcoTec, Mr. Allen mapped and interpreted soils in Franklin County, MA for the U.S.D.A. Natural Resources Conservation Service (formerly Soil Conservation Service) and was a research soil scientist at Harvard University's Harvard Forest. Since 1994, Mr. Allen has assisted the Massachusetts Department of Environmental Protection and the Massachusetts Association of Conservation Commissions as an instructor in the interpretation of soils for wetland delineation and for the Title V Soil Evaluator program.

Mr. Allen has a civil service rating as a soil scientist, an undergraduate degree in Natural Resource Studies and a graduate certificate in Soil Studies. His work on the Franklin County soil survey involved interpretation of landscape-soil-water relationships, classifying soils and drainage, and determining use and limitation of the soil units that he delineated. As a soil scientist at the Harvard Forest, Mr. Allen was involved in identifying the legacies of historical land-use in modern soil and vegetation at a number of study sites across southern New England. He has a working knowledge of the chemical and physical properties of soil and water and how these properties interact with the plants that grow on a given site. While at Harvard Forest he authored and presented several papers describing his research results which were later published. In addition to his aforementioned experience, Mr. Allen was previously employed by the Trustees of Reservations as a land manager and by the Town of North Andover, MA as a conservation commission intern.

Education:

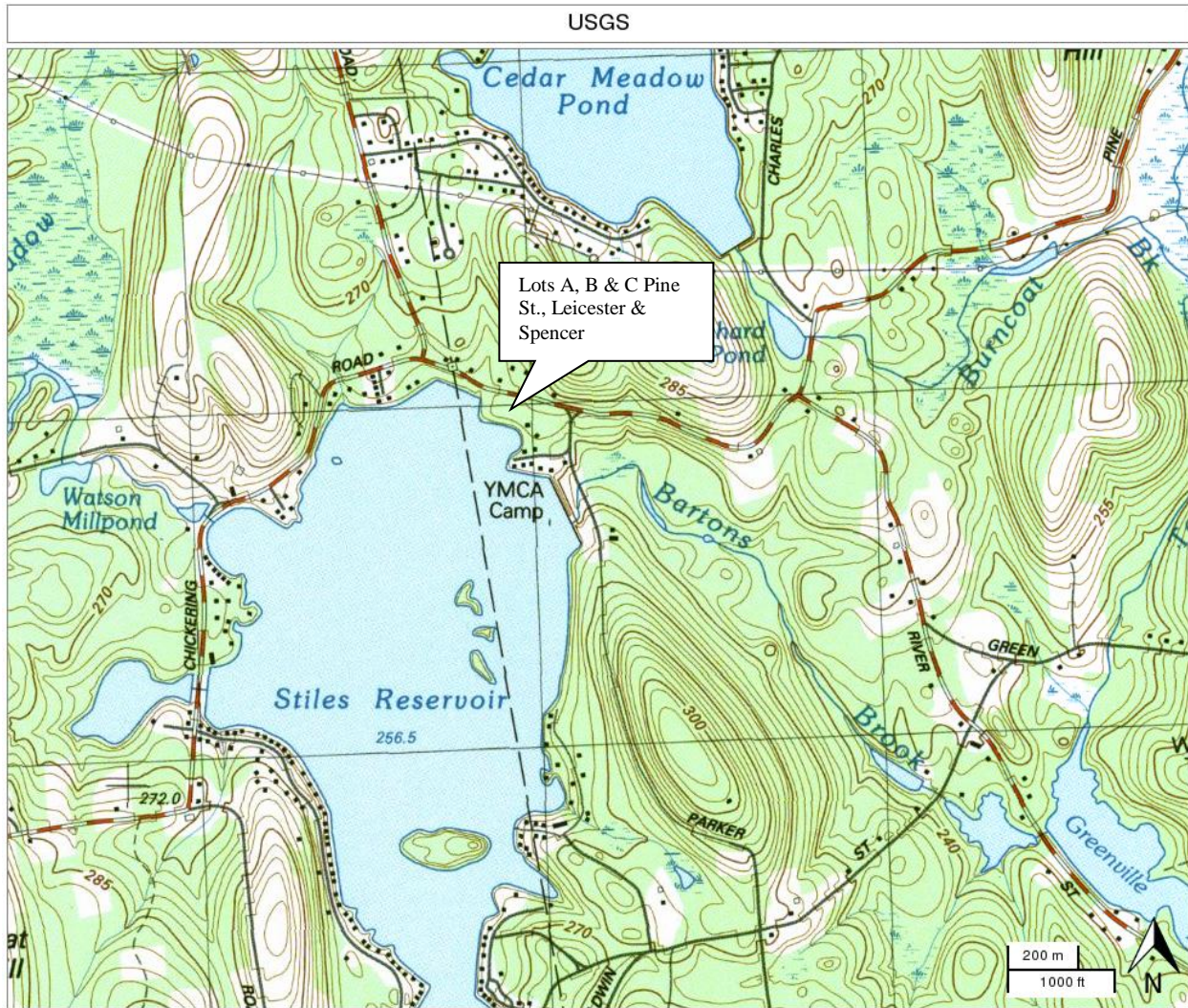
1993-Graduate Certificate in Soil Studies, University of New Hampshire
1982-Bachelor of Science in Natural Resource Studies, University of Massachusetts

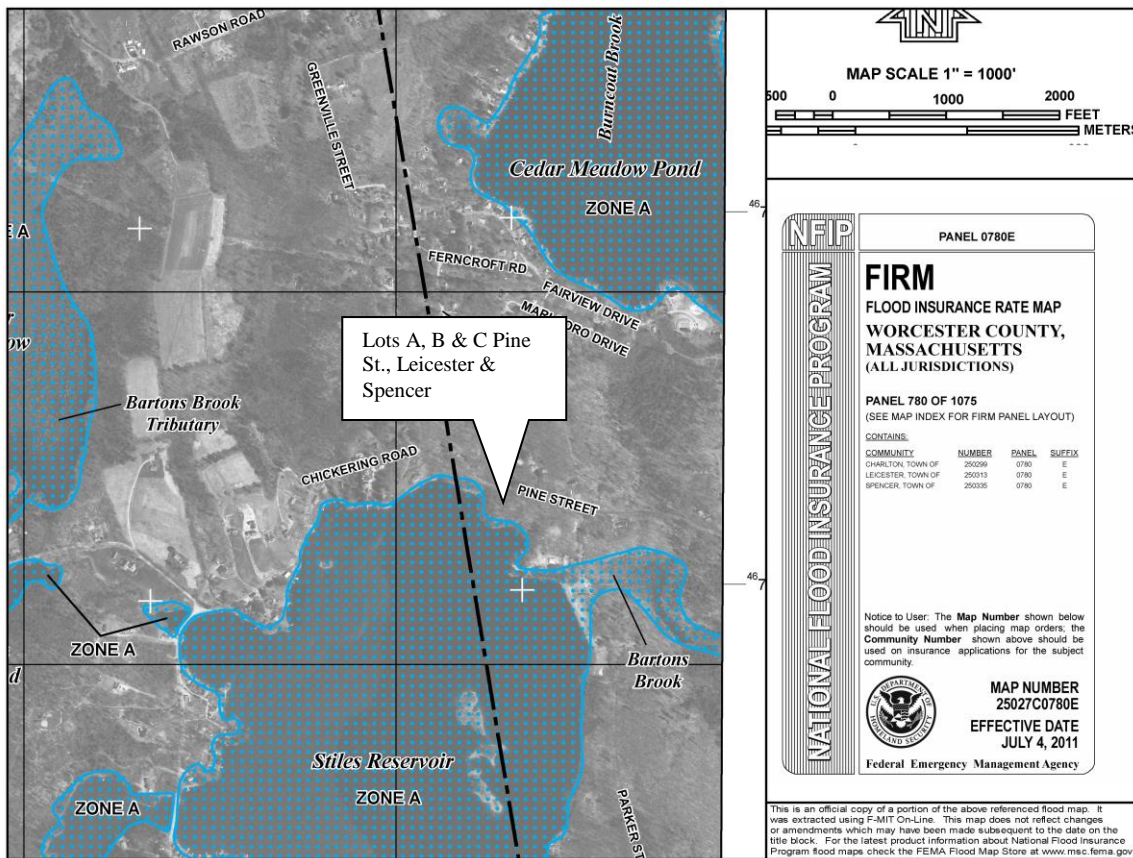
Professional Affiliations:

Certified Professional Soil Scientist (ARCPACS CPSS #22529)
New Hampshire Certified Wetland Scientist (#19)
Registered Professional Soil Scientist – Society of Soil Scientists of SNE [Board Member (2000-2006)]
Certified Erosion, Sediment & Stormwater Inspector (#965)
Approved Soil Evaluator (#13764)
Massachusetts Arborists Association-Certified Arborist (1982 – 1998)
New England Hydric Soils Technical Committee member
Massachusetts Association of Conservation Commissions member
Society of Wetland Scientists member

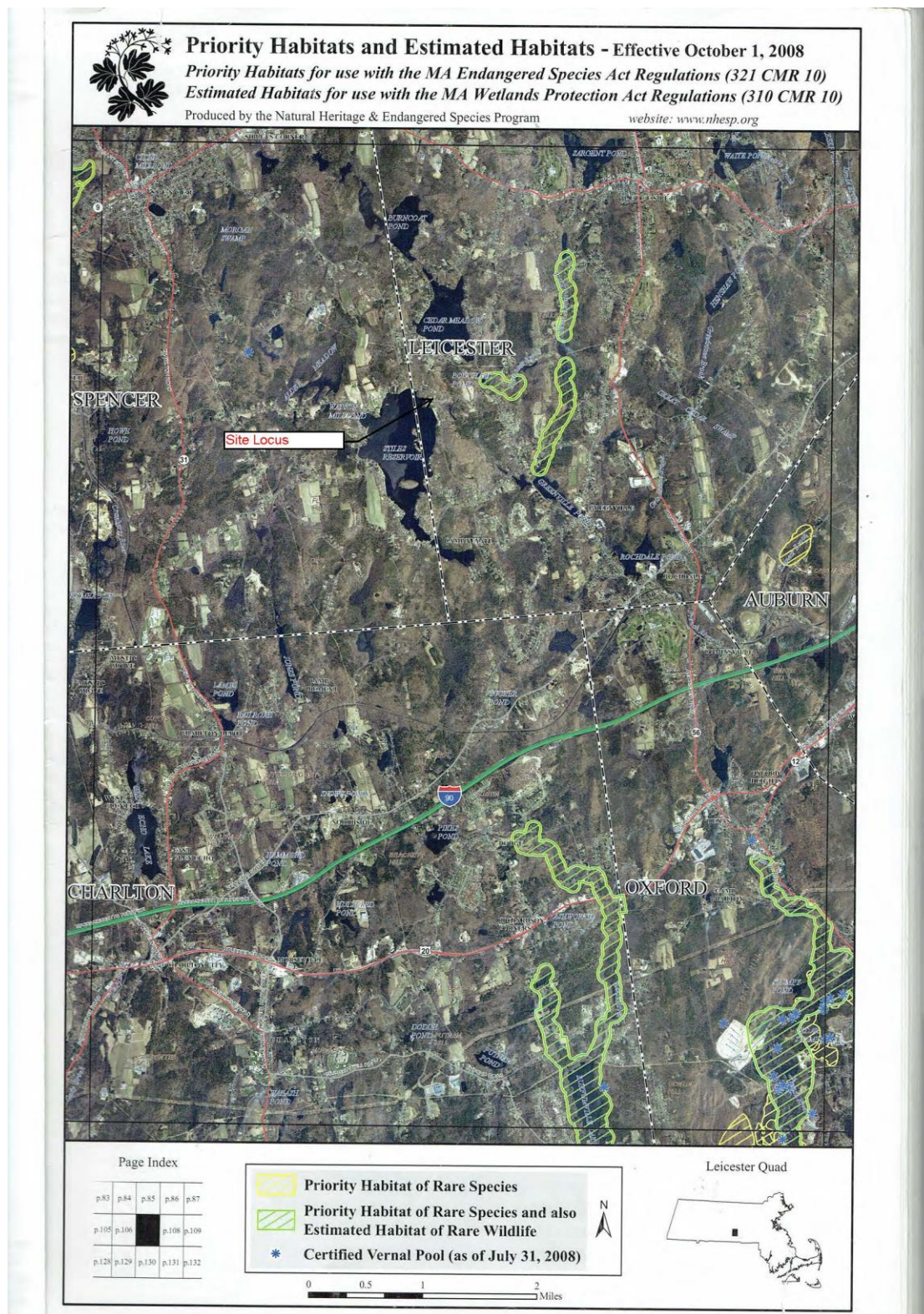
Refereed Publications:

Soil Science and Survey at Harvard Forest. A.Allen. In: Soil Survey Horizons. Vol. 36, No. 4, 1995, pp. 133-142.
Controlling Site to Evaluate History: Vegetation Patterns of a New England Sand Plain. G.Motzkin, D.Foster, A.Allen, J.Harrodd, & R.Boone. In: Ecological Monographs 66(3), 1996, pp. 345-365.
Vegetation Patterns in Heterogeneous Landscapes: The Importance of History and Environment. G.Motzkin, P.Wilson, D.R.Foster & A.Allen. In: Journal of Vegetation Science 10, 1999, pp. 903-920.





FEMA FLOOD MAP



NATURAL HERITAGE RARE SPECIES & VERNAL POOL MAP

EcoTec, Inc.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant:

Prepared by: A.Allen - EcoTec, Inc.

Project location: Pine St. Leicester MA

DEP File # :

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒ Vegetation and other indications of hydrology used to delineate BVW boundary: fill out Sections I and II
☐ Method other than dominance test used (attach additional information)

Section I. Vegetation			Observation Plot Number: TP-U	Transect Number: A-6	Date of Delineation: 11/2/16		
A. Sample Layer and Plant Species (by common/scientific name)				B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category *
TREES	Red oak	<i>Quercus rubra</i>		50	71	yes	FACU-
	Sugar maple	<i>Acer saccharum</i>		20	28	yes	FACU-
SAPLINGS	Red maple	<i>Acer rubrum</i>		10	100	yes	FAC*
SHRUB	Witch hazel	<i>Hamamelis virginiana</i>		90	90	yes	FAC-
	American Beech	<i>Fagus grandifolia</i>		10	10	no	FACU
GROUNDCOVER	Cinnamon fern	<i>Osmunda cinnamomea</i>		10	66	yes	FACW*
	Lady fern	<i>Athyrium pycnocarpopn</i>		5	33	yes	FAC*

*Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusions:

Number of dominant wetland indicator plants: 3 Number of dominant non-wetland indicator plants: 3
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes

Pine St. Leicester; A-6

Section II. Indicators of Hydrology

1. Soil Survey

Is there a published soil survey for this site?

title/date:

map number:

soil type mapped:

hydric soil inclusions:

Are field observations consistent with soil survey?

Remarks:

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
litter	2		
0	1-0		
A	0-6	10YR2/2	
Bw	6-14	10YR4/6	

Remarks: very stony fine sandy loams

3. Other:

Conclusion: Is soil Hydric? no

Other Indications of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present:		
hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant:

Prepared by: A.Allen - EcoTec, Inc.

Project location: Pine St. Leicester Ma

DEP File # :

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒ Vegetation and other indications of hydrology used to delineate BVW boundary: fill out Sections I and II
☐ Method other than dominance test used (attach additional information)

Section I. Vegetation		Observation Plot Number: TP-U	Transect Number: B-12		Date of Delineation: 11/2/17	
A. Sample Layer and Plant Species (by common/scientific name)			B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category *
TREES	Red Oak	<i>Quercus rubra</i>	60	60	yes	FACU-
	White ash	<i>Fraxinus americana</i>	20	20	yes	FACU
	White pine	<i>Pinus strobus</i>	10	10	no	FACU
	Red maple	<i>Acer rubrum</i>	10	10	no	FAC*
SAPLINGS	Red maple	<i>Acer rubrum</i>	20	66	yes	FAC*
	Yellow birch	<i>Betula Alleghaniensis</i>	10	33	yes	FAC*
SHRUB	Mountain laurel	<i>Kalmia latifolia</i>	10	40	yes	FACU
	Beaked hazelnut	<i>Corylus cornuta</i>	10	40	yes	FACU-
	Red maple	<i>Acer rubrum</i>	5	20	yes	FAC*
	White Pine	<i>Pinus strobus</i>	<5	<5	no	FACU
GROUND COVER						

*Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusions:

Number of dominant wetland indicator plants: 3 Number of dominant non-wetland indicator plants: 4
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? NO

Pine St. Leicester; B-12

Section II. Indicators of Hydrology

1. Soil Survey

Is there a published soil survey for this site?

title/date:

map number:

soil type mapped:

hydric soil inclusions:

Are field observations consistent with soil survey?

Remarks:

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
litter	3		
O	2-0		
A	0-6	10YR2/2	
Bw	6-15	10YR4/6	

Remarks: Stony fine sandy loams

3. Other:

Conclusion: Is soil Hydric? no

Other Indications of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland hydrology present:		
hydric soil present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant:

Prepared by: A.Allen - EcoTec, Inc.

Project location: Pine St. Leicester MA

DEP File # :

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒ Vegetation and other indications of hydrology used to delineate BVW boundary: fill out Sections I and II
☐ Method other than dominance test used (attach additional information)

Section I. Vegetation			Observation Plot Number: TP-W	Transect Number: A-6	Date of Delineation: 11/2/16	
A. Sample Layer and Plant Species (by common/scientific name)			B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category *
TREES	Red oak	<i>Quercus rubra</i>	40	66	yes	FACU-
	White ash	<i>Fraxinus americana</i>	20	33	yes	FACU
SAPLINGS	Red maple	<i>Acer rubrum</i>	10	50	yes	FAC*
	Yellow birch	<i>Betula alleghaniensis</i>	10	50	yes	FAC*
SHRUB	Witch hazel	<i>Hamamelis virginiana</i>	80	88	yes	FAC-
	Canada elderberry	<i>Sambucus canadensis</i>	10	11	no	FACW
GROUND COVER	Cinnamon fern	<i>Osmunda cinnamomea</i>	30	100	yes	FACW*

*Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusions:

Number of dominant wetland indicator plants: 3 Number of dominant non-wetland indicator plants: 3
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES

Pine St. Leicester; A-6

Section II. Indicators of Hydrology

1. Soil Survey

Is there a published soil survey for this site?

title/date:

map number:

soil type mapped:

hydric soil inclusions:

Are field observations consistent with soil survey?

Remarks:

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
litter	3		
O	2-0		
A	0-10	10YR3/2	
Bw	10-17	7.5YR4/3	15% 10YR5/2 10% 7.5YR4/6

Remarks: Very stony fine sandy loams

3. Other:

Conclusion: Is soil Hydric? YES

Other Indications of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present:		
hydric soil present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent.

DEP Bordering Vegetated Wetland (310 CMR 10.55) Delineation Field Data Form

Applicant:

Prepared by: A.Allen - EcoTec, Inc.

Project location: Pine St. Leicester MA

DEP File # :

Check all that apply:

- ☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒ Vegetation and other indications of hydrology used to delineate BVW boundary: fill out Sections I and II
☐ Method other than dominance test used (attach additional information)

Section I. Vegetation		Observation Plot Number: TP-W	Transect Number: B-12		Date of Delineation: 11/2/16	
A. Sample Layer and Plant Species (by common/scientific name)			B. Percent Cover (or basal area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category *
TREES	Red oak	<i>Quercus rubra</i>	90	90	yes	FACU-
	White pine	<i>Pinus strobus</i>	10	10	no	FACU
SAPLINGS	Red maple	<i>Acer rubrum</i>	20	66	yes	FAC*
	American chestnut	<i>Castanea dentata</i>	10	33	yes	NL
SHRUB	Highbush blueberry	<i>Vaccinium corymbosum</i>	10	50	yes	FACW-*
	White pine	<i>Pinus strobus</i>	10	50	yes	FACU
GROUND COVER	Cinnamon fern	<i>Osmunda cinnamomea</i>	60	63	yes	FACW*
	Teaberry	<i>Gaultheria procumbens</i>	15	15	no	FACU
	New York fern	<i>Thelypteris novaboracensis</i>	20	21	yes	FAC*

*Use an asterisk to mark wetland indicator plants: plant species listed in the Wetlands Protection Act (MGL c. 131, s. 40); plants in the genus *Sphagnum*; plants listed as FAC, FAC+, FACW-, FACW, FACW+, or OBL; or plants with physiological or morphological adaptations. If any plants are identified as wetland indicator plants due to physiological or morphological adaptations, describe the adaptation next to the asterisk.

Vegetation conclusions:

Number of dominant wetland indicator plants: 4 Number of dominant non-wetland indicator plants: 3
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? YES

Pine St. Leicester; B-12

Section II. Indicators of Hydrology

1. Soil Survey

Is there a published soil survey for this site?

title/date:

map number:

soil type mapped:

hydric soil inclusions:

Are field observations consistent with soil survey?

Remarks:

2. Soil Description

Horizon	Depth (inches)	Matrix Color	Mottle Color
litter	2		
O	2-0		
A	0-10	10YR2/1	
Bg	10-16	10YR5/2	10% 7.5YR4/4

Remarks: **Stony loam**

3. Other:

Conclusion: Is soil Hydric? **YES**

Other Indications of Hydrology: (check all that apply and describe)

- ☐ Site inundated: _____
- ☐ Depth to free water in observation hole: _____
- ☐ Depth to soil saturation in observation hole: _____
- ☐ Water marks: _____
- ☐ Drift lines: _____
- ☐ Sediment deposits: _____
- ☐ Drainage patterns in BVW: _____
- ☐ Oxidized rhizospheres: _____
- ☐ Water-stained leaves: _____
- ☐ Recorded data (stream, lake, or tidal gauge; aerial photo; other): _____
- ☐ Other: _____

Vegetation and Hydrology Conclusion

	yes	no
Number of wetland indicator plants ≥ number of non-wetland indicator plants	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Wetland hydrology present:		
hydric soil present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
other indicators of hydrology present	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Sample location is in a BVW	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Submit this form with the Request for Determination of Applicability or Notice of Intent.



EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street
Worcester, MA 01605-2629
508-752-9666 / Fax: 508-752-9494

November 14, 2017

Leicester Conservation Commission
Town Hall
3 Washburn Square
Leicester, MA 01524

Re: Lot A Pine Street, Leicester, MA (DEP File #197-0610)

Subject: Wetland Replication Monitoring

Dear Commissioners:

EcoTec, Inc., was retained by the site contractor to monitor construction of a 1,416 square foot wetland replication area (located in Leicester) which serves as mitigation for adjacent site improvements in Spencer. I wrote the "Wetland Replication Area Description & Construction Protocol" dated July 21, 2017. I was on site to monitor construction of the area on October 31 and November 9 & 10, 2017. The attached photos depict the replication area during the phases of construction. Following installation of a perimeter sediment control barrier, the area was cleared and excavated to sub-grade. I inspected sub-grade elevations and found them to exhibit groundwater and redoximorphic features at approximately 12 inches below the surface of the adjacent wetland. The finish-grade was completed using approximately 12 inches of organic-rich topsoil with compost. The plant materials were properly sized and in good condition when planted. I directed the layout of plants. Following planting the replication area was mulched with weed-free straw and the sideslopes were stabilized with bark mulch.

In my opinion this work has been done in accordance with the approved plan and protocol and complies with the General Performance Standard requirements for Bordering Vegetated Wetland replication at 310 CMR 10.55(4)(b).

Please do not hesitate to contact me if you have any questions concerning this or other matters.

Sincerely,

Arthur Allen
Senior Environmental Scientist

AA/Monitoring/LeicesterLot A Pine ReplicationReport.doc

attachments: 2 pages (photos)

pc : Matthew Schold



1. Replication area sub-grade with observed water table and redox features



2. Finish graded and stabilized replication area



3. Plant materials condition



4. Planted and mulched replication area