

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

102 Grove Street

Worcester, MA 01605-2629

508-752-9666 – Fax: 508-752-9494

May 4, 2021

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

RE: Notice of Intent under the Massachusetts Wetlands Protection Act and the Town of Leicester Wetlands Protection Bylaw for Proposed Construction of a Single-Family House at 208 Rawson Street (Map 26C, Parcel B3), Leicester, Massachusetts; Owner/Applicant: Sparhawk Realty, LLC

To the Committee:

Enclosed please find the original and one (1) copy of the Notice of Intent filed under the Massachusetts Wetlands Protection Act (“WPA”) and Town of Leicester Wetlands Protection Bylaw for the above-referenced project. Also enclosed please find two checks made payable to the Town of Leicester: (1) \$262.50 (for category 2) to cover the town share of the filing fee under the WPA; and (2) \$125.00 to cover the filing fee under the Bylaw. EcoTec, Inc. (Scott Morrison; 508-752-9666 ext. 227) will pay the Legal Notice fee promptly upon notification of the cost of the advertisement. This filing is comprised of:

1. This cover letter;
2. WPA and Town of Leicester Wetlands Protection Bylaw Filing Fees (category 2: \$262.50 and \$125 respectively) with check copies;
3. WPA Form 3, Notice of Intent Form with Fee Transmittal Form and Copies of WPA Check;
4. Certified Abutters List, Form of Abutter Notice;
5. Wetland Resource Evaluation report by EcoTec, dated May 4, 2021, including:
 - USGS Map, Worcester South Quadrangle, dated 1983, in part, with site indicated;
 - Estimated Habitat Map, , with site indicated; and
 - Flood Insurance Rate Map FIRMette, with site indicated.

One copy of this filing and payment of \$237.50 have been submitted by certified mail, return receipt requested to the Central Regional Office of the Department of Environmental Protection and the MassDEP Lockbox, respectively. Documentation of all payments is included in the filing.

We look forward to meeting with the Commission regarding this filing. If you have any questions, please feel free to contact me at any time.

Cordially,
ECOTEC, INC.



Scott Morrison, PWS

Cc: Department of Environmental Protection, Central Regional Office (DEP-CERO)
Applicant: Sparhawk Realty, 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):

208 Rawson Street

a. Street Address

Leicester

b. City/Town

01524

c. Zip Code

Latitude and Longitude:

42.23803

d. Latitude

-71.92779

e. Longitude

26C

f. Assessors Map/Plat Number

B3

g. Parcel /Lot Number

2. Applicant:

Keith

a. First Name

Sparhawk

b. Last Name

Sparhawk Realty, LLC

c. Organization

13 Virginia Dr

d. Street Address

Rochdale

e. City/Town

MA

f. State

01542

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):

Scott

a. First Name

Morrison

b. Last Name

EcoTec, Inc.

c. Company

102 Grove Street

d. Street Address

Worcester

e. City/Town

MA

f. State

01605

g. Zip Code

508-752-9666

h. Phone Number

508-752-9494

i. Fax Number

smorrison@ecotecinc.com

j. Email address

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

\$500

a. Total Fee Paid

\$237.50

b. State Fee Paid

\$262.50

c. City/Town Fee Paid



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Bureau of Resource Protection - Wetlands

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A. General Information (continued)

6. General Project Description:

Proposed work consists of a single-family home, septic system grading and associated site work. The site is an existing 8.6-acre site which has previously been developed with a single-family home that was demolished due to extensive mold.

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

- | | |
|---|---|
| 1. <input checked="" type="checkbox"/> Single Family Home | 2. <input type="checkbox"/> Residential Subdivision |
| 3. <input type="checkbox"/> Commercial/Industrial | 4. <input 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

a. County

12848

c. Book

b. Certificate # (if registered land)

390

d. Page Number

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

- ☒ 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.
- ☐ 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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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 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.



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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. <input type="checkbox"/> 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. <input type="checkbox"/> 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

4/26/2021

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.



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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

WPA Form 3 – Notice of Intent

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

Provided by MassDEP:

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

Online Users:

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

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.



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WPA Form 3 – Notice of Intent

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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.

Subsurface Sewage Disposal Plan 208 Rawson St

a. Plan Title

Purcell Associates

Thomas Purcell

b. Prepared By

c. Signed and Stamped by

9/14/2018

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:

20801

4/23/2021

2. Municipal Check Number

3. Check date

20802

4/23/2021

4. State Check Number

5. Check date

EcoTec, Inc,

6. Payor name on check: First Name

7. Payor name on check: Last Name



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:

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Leicester

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.

Keith Sparhawk

1. Signature of Applicant

5.5.21

2. Date

[Signature]

3. Signature of Property Owner (if different)

4. Date

5. Signature of Representative (if any)

5/5/2021

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:

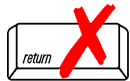
If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

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:

208 Rawson Street

a. Street Address

20802

c. Check number

Leicester

b. City/Town

\$237.50

d. Fee amount

2. Applicant Mailing Address:

Keith

a. First Name

Sparhawk

b. Last Name

Sparhawk Realty, LLC

c. Organization

13 Virginia Dr

d. Mailing Address

Rochdale

e. City/Town

MA

f. State

01542

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
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
Construction of single family house	1	\$500	\$500
Step 5/Total Project Fee:			\$500

Step 6/Fee Payments:

Total Project Fee:	\$500
	a. Total Fee from Step 5
State share of filing Fee:	\$237.50
	b. 1/2 Total Fee less \$12.50
City/Town share of filing Fee:	\$262.50
	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.)

AUTHORIZED SIGNATURE

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

In accordance with the second paragraph of Massachusetts General Law Chapter 131, Section 40 and the Town of Leicester Wetlands Protection Bylaw, you are hereby notified of the following.

- A. The name of the applicant is Sparhawk Realty, LLC.
- B. The applicant has filed a Notice of Intent with the Town of Leicester Conservation Commission seeking permission to work within jurisdictional area(s) of the Massachusetts Wetlands Protection Act (General Laws Chapter 131, Section 40) and the Town of Leicester Wetlands Protection Bylaw.

Specifically, the applicant proposes the construction of a single-family house, septic system, grading and associated site work.

- C. The address of the lot where the activity is proposed is 208 Rawson Street (Assessor Map 26C, Parcel B3).
- D. The Notice of Intent may be examined at the Conservation Commission Office, Town Hall, 3 Washburn Square, Leicester. For more information, call the Conservation Commission Department Assistant at 508-892-7007.
- E. A copy of the Notice of Intent may be obtained by calling the applicant's representative, Scott Morrison at EcoTec, Inc., at 508-752-9666 ext. 227 during normal business hours.
- F. Information concerning the date, time, and place of the public hearing may be obtained from either of the following: (1) the Leicester Conservation Commission website: <https://www.leicesterma.org/conservation-commission> or (2) from the Leicester Conservation Commission Department Assistant by calling 508-892-7007 between the hours of 8 AM and 5 PM, Monday through Thursday.

Note: Notice of the public hearing, including its date, time, and place, will be published at least five days in advance in the Worcester Telegram and Gazette or New Leader.

Note: 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 the Leicester 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

Town of Leicester Abutters List

CONCOM

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	State	Zip
26A B12 0	BLUEBERRY LN	PRATTE MARTIN J	PRATTE MARY ELLEN	31 RAWSON DRIVE	LEICESTER	MA	01524
26A B13 0	BLUEBERRY LN	PRATTE MARTIN J	PRATTE MARY ELLEN	31 RAWSON DRIVE	LEICESTER	MA	01524
26A B26 0	12 MT PLEASANT AV	JOHNSON TIMOTHY M	JOHNSON PAULA J	12 MT PLEASANT AVE	LEICESTER	MA	01524
26C B12.1 0	RAWSON ST	MIKKILA IRREV TRUST	MIKKILA RONDEAU KRISTIA	186 RAWSON ST	LEICESTER	MA	01524
26C B3.2 0	212 RAWSON ST	COONEY MEGAN M		212 RAWSON STREET	LEICESTER	MA	01524
26C B3.3 0	210 RAWSON ST	DOYLE JOHN M	DOYLE MAUREEN E	210 RAWSON ST	LEICESTER	MA	01524
26C B4 0	186 RAWSON ST	MIKKILA IRREV TRUST	MIKKILA RONDEAU KRISTIA	186 RAWSON ST	LEICESTER	MA	01524
26C B5 0	184 RAWSON ST	WOODWORTH BRITON	BOBO SAMANTHA	184 RAWSON ST	LEICESTER	MA	01524
26C B5.1 0	RAWSON ST	MIKKILA IRREV TRUST	MIKKILA RONDEAU KRISTIA	186 RAWSON ST	LEICESTER	MA	01524
26C B6 0	180 RAWSON ST	JONES KAREN S	METHOT MARC A	180 RAWSON ST	LEICESTER	MA	01524
26C B6.1 0	176 RAWSON ST	PEPIN TERRY A		176 RAWSON ST	LEICESTER	MA	01524
29 A3 0	209 RAWSON ST	CARTER CLARE E		209 RAWSON ST	LEICESTER	MA	01524
29 A3.1 0	RAWSON ST	DUMAS FAMILY TRUST	DUMAS RUTH A	205 RAWSON ST	LEICESTER	MA	01524
29 A3.2 0	RAWSON ST	DENHAM MICHAEL		211 RAWSON ST	LEICESTER	MA	01524
29 A4 0	205 RAWSON ST	DUMAS FAMILY TRUST	DUMAS RUTH A	205 RAWSON ST	LEICESTER	MA	01524
29 A5 0	195 RAWSON ST	VH FARM TRUST	ALGER EDGAR R 3RD	195 RAWSON STREET	LEICESTER	MA	01524

End of Report

Above is a certified list of abutters and abutters to abutters within 300 feet of subject.
Subject property: 208 Rawson Street, Assessors Map 26C-B3-0, Deed Ref. 54716/318
Subject owner(s): Sparhawk Realty LLC

Sandy Genna, Principal Assessor
Prepared by: Kathleen Asquith, Assistant

EcoTec, Inc.

ENVIRONMENTAL CONSULTING SERVICES

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

May 4, 2021

Keith Sparhawk
Sparhawk Realty
13 Virginia Drive
Rochdale, MA 01542

RE: Wetland Resource Evaluation, 208 Rawson Street, Leicester, Massachusetts

Dear Mr. Sparhawk:

On December 28, 2015 and May 4, 2021, 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”); (2) the U.S. Clean Water Act (i.e., Section 404 and 401 wetlands); and (3) the Town of Leicester Wetlands Protection Bylaw. Scott Morrison, PWS conducted the inspection.

The subject site consists of a 6-acre parcel located to the north of Rawson Street. It should be noted that EcoTec delineated in the southern portion of site including the wetlands in the vicinity of the existing house. It is likely that additional upland and wetland areas exist in the northern portion of the site, but were not evaluated or delineated. The upland portions of the site consist of an existing house, driveway, lawn, sheds, and undeveloped forest. Plant species observed include black cherry (*Prunus serotina*), red maple (*Acer rubrum*), sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), staghorn sumac (*Rhus typhina*) and black birch (*Betula lenta*) trees and/or saplings; oriental bitter-sweet (*Celastrus orbiculata*) climbing woody vines; American witch-hazel (*Hamamelis virginiana*), highbush blueberry (*Vaccinium corymbosum*), American hazel-nut (*Corylus americana*), winged euonymus (*Euonymus alata*), bramble (*Rubus sp.*), honeysuckle (*Lonicera sp.*), multiflora rose (*Rosa multiflora*), and maple-leaf viburnum (*Viburnum acerifolium*) shrubs; and grasses (Gramineae sp.) and wild-lily-of-the-valley (*Maianthemum canadense*) ground cover. 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 or, in the absence of Bordering Vegetated Wetlands, Bank was delineated in the field in accordance with the definitions set forth in the regulations at 310 CMR 10.55(2)(c) and 310 CMR 10.54(2). 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.” Section 10.54(2)(c) states that “The upper boundary of Bank is the first observable break in the slope or the mean annual flood level, whichever is lower.” 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 List of Plant Species that Occur in Wetlands: Massachusetts* (Fish and Wildlife Service, U.S. Department of the Interior, 1988). Federal wetlands were presumed to have boundaries conterminous with the delineated Bordering Vegetated Wetlands and Bank. One set of DEP Bordering Vegetated Wetland Delineation Field Data Forms completed for observation plots located in the wetlands and uplands near flag A18 is 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
Start A1 to A30 Stop (Culvert at A-14)	Blue Flags	Boundary of Bordering Vegetated Wetlands located in the central portion of the site that is associated with an intermittent stream.

Findings

Wetland A (i.e., flags A1 to A30) consists of a forested swamp located in the northern portion of the site that is associated with an intermittent stream. Plant species observed include red maple (*Acer rubrum*), yellow birch (*Betula alleghaniensis*), gray birch (*Betula populifolia*), and American elm (*Ulmus americana*) trees and/or saplings; poison ivy (*Toxicodendron radicans*) climbing woody vines; highbush blueberry (*Vaccinium corymbosum*), common winterberry (*Ilex verticillata*), arrow-wood (*Viburnum dentatum*) speckled alder (*Alnus rugosa*), silky dogwood (*Cornus amomum*), and American elderberry (*Sambucus canadensis*) shrubs; and sheep-laurel (*Kalmia angustifolia*), bristly blackberry (*Rubus hispida*), cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*), and sensitive fern (*Onoclea sensibilis*) ground cover. Evidence of wetland hydrology, including hydric soils, high groundwater, saturated soils, and pore linings, was observed within the delineated wetland. This vegetated wetland borders an intermittent stream; accordingly, the vegetated wetlands would be regulated as Bordering Vegetated Wetlands and the intermittent stream would be regulated as Bank under the Act and Bylaw. A 100-foot Buffer Zone extends horizontally outward from the edge of Bordering Vegetated Wetlands and Bank under the Act and Bylaw.

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 if Bordering Land Subject to Flooding occurs 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.

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 North Quadrangle, dated 1983, attached) and observations made during the site inspection, a stream that is not shown on the USGS Map is located in the central portion of the site. The watershed area for this stream at the site was determined to be approximately 0.1 square miles, which is substantially 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 and Bylaw.

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*, 14th edition, Priority Habitats and Estimated Habitats from the NHESP Interactive Viewer, valid from August 1, 2017, and Certified Vernal Pools from MassGIS, 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.

208 Rawson Street, Leicester
May 4, 2021
Page 4.

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.



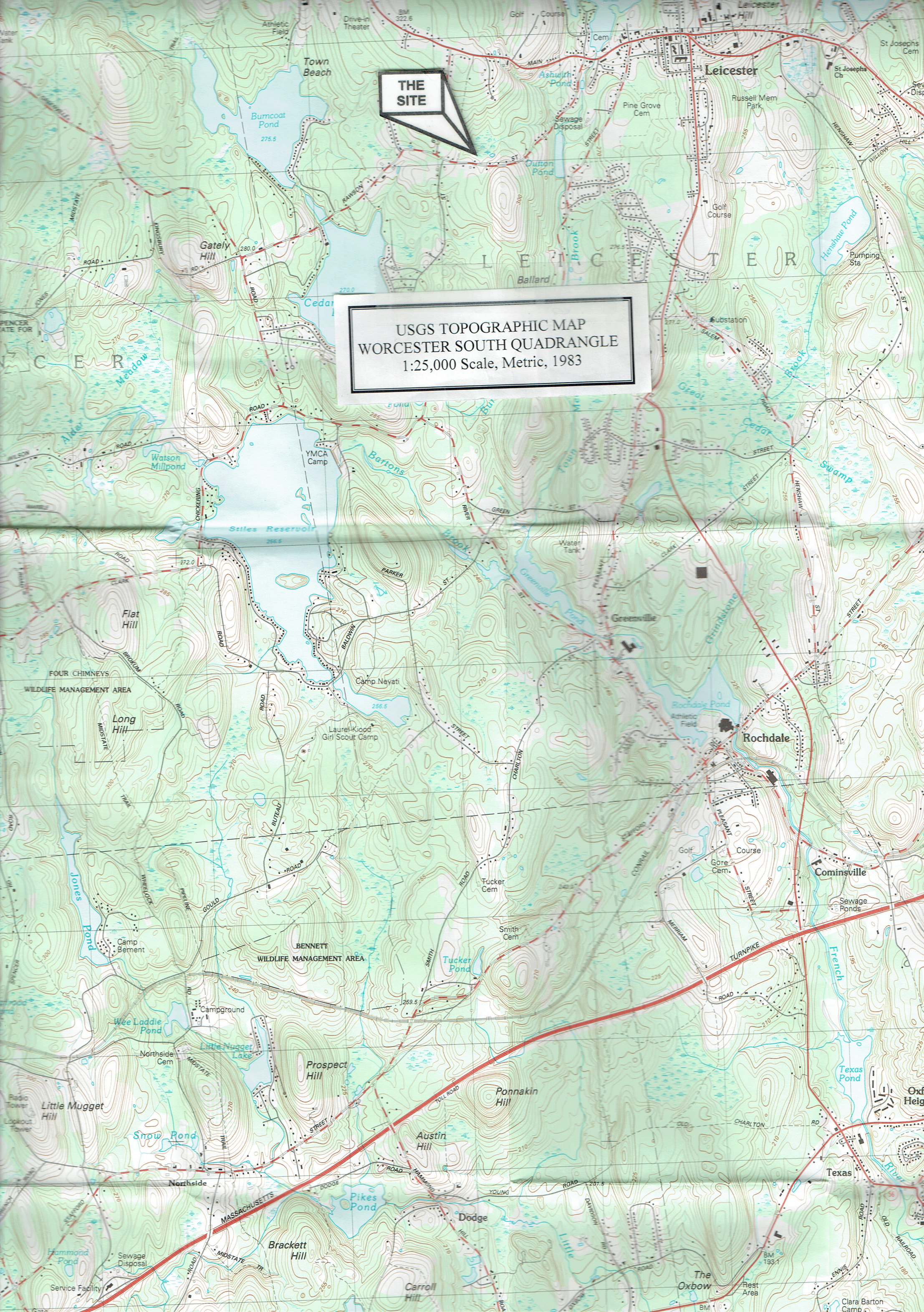
Scott M. Morrison, PWS
Senior Environmental Scientist

Attachments (6, 8 pages)

17/wLeic208RawsonStReport2021.5.4

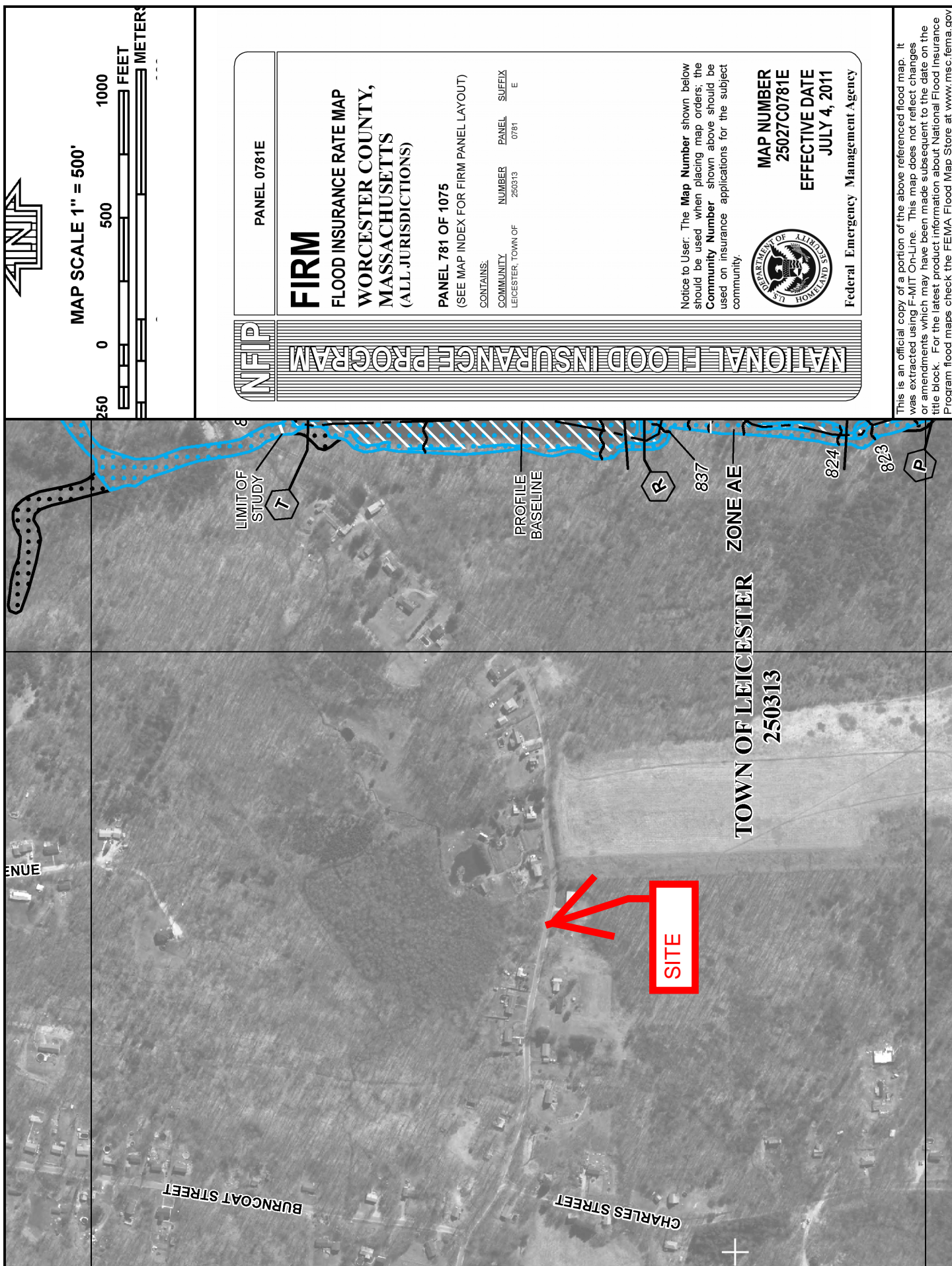
THE SITE

USGS TOPOGRAPHIC MAP
WORCESTER SOUTH QUADRANGLE
1:25,000 Scale, Metric, 1983





Natural Heritage
Atlas Online Data
Viewer Output
April 26, 2021
208 Rawson
Street, Leicester



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

Applicant: Prepared by: EcoTec, Inc. Project location: Leicester, 208 Rawson St. 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: Upland	Transect Number: A-18	Date of Delineation: 12/28/15	
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 *
Tree	red maple				
	white ash	<i>Acer rubrum</i> <i>Fraxinus americana</i>	40% 40%	yes yes	FAC* FACU
Sapling	red maple	<i>Acer rubrum</i>	20%	yes	FAC*
	sugar maple	<i>Acer saccharum</i>	20%	yes	FACU-
Vine	oriental bittersweet	<i>Celastrus orbiculata</i>	40%	yes	UPL
Shrub	witch-hazel	<i>Hanamelis virginiana</i>	20%	yes	FAC-
	apple	<i>Pyrus malus</i>	20%	yes	NL
	red maple	<i>Acer rubrum</i>	10%	yes	FAC*
Ground Cover	oriental bittersweet	<i>Celastrus orbiculata</i>	20%	yes	UPL

*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: 6
 Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? no

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
A	0-10	10YR 3/2	
Bw	10-18	10YR 4/6	

Remarks: fine sandy loam

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: EcoTec, Inc. Project location: Leicester, 208 Rawson Street 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:	Wetland	Transect Number: A-18	Date of Delineation: 12/28/15	
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 *	
Tree	red maple	<i>Acer rubrum</i>	30%	100%	yes	FAC*
Sapling	black cherry	<i>Prunus serotina</i>	20%	100%	yes	FACU
Shrub	elderberry	<i>Sambucus canadensis</i>	30%	50%	yes	FACW-*
	speckled alder	<i>Alnus rugosa</i>	30%	50%	yes	FACW+*
Ground Cover	sensitive fern	<i>Onoclea sensibilis</i>	80%	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: 4 Number of dominant non-wetland indicator plants: 1
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes

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
A	0-3	10YR 2/1	
Bg	3-12+	10YR 4/2	20% 10YR 5/1 5% 10YR 4/4

Remarks: fine sandy 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

Scott M. Morrison, PWS, RPSS, SE **Senior Environmental Scientist**

Scott Morrison is a Senior Environmental Scientist with EcoTec, Inc. Since joining EcoTec in 2000, Mr. Morrison's project experience include wetland resource evaluation, delineation, and permitting at the local, state, and federal levels; wildlife habitat evaluation; pond and stream evaluation; vernal pool evaluation, monitoring, and certification; wetland replacement, replication, and restoration area design, construction, and monitoring; soil evaluations to determine infiltration rates and seasonal high groundwater elevations for detention basin construction; environmental sampling and analysis tasks, including soil and groundwater sample collection and handling; and expert testimony preparation. He has conducted rare species habitat assessments for the eastern box turtle, wood turtle, Blanding's turtle, spotted turtle, and marbled salamander. He has participated in rare species studies for rare species including the marbled salamander, piping plover, eastern box turtle, and northern diamondback terrapin and developed mitigation strategies for the marbled salamander, spotted turtle, eastern box turtle and wood turtle. He has participated in visual preconstruction sweeps for the wood turtle and both preconstruction and research projects for the eastern box turtle. He has served as a consultant to municipalities, conservation commissions, engineering and survey firms. He has completed numerous wetland related projects including environmental impact assessments for proposed development, erosion control and environmental monitoring for subdivisions, commercial developments, golf courses and landfills. He has prepared Massachusetts Environmental Policy Act (MEPA) documentation, including Environmental Notification Forms (ENFs), Notice of Project Changes (NPCs), and Draft and Final Environmental Impact Reports (EIRs) including Green House Gas Assessments for various projects including subdivisions, commercial buildings, and dredging projects. Prior to joining EcoTec, Inc. Mr. Morrison worked for the Massachusetts Department of Environmental Management (currently the Department of Conservation and Recreation) where he was involved with the monitoring and protection of endangered species and rare old growth forest. He was an active member of the Spencer Conservation Commission from 1998 to 2000 where he provided oversight of proposed wetland replication projects and review of projects submitted for wetland permitting. His educational background includes courses in forestry, ecology, chemistry, soils, and natural resource policy. His prior research experience includes research on forest succession and field research on nesting piping plovers, an endangered coastal shore bird.

Education:

Graduate Soil Science Certificate Program
University of Massachusetts at Amherst, 2006
Bachelor of Science: Natural Resource Studies
University of Massachusetts at Amherst, 1998
Associate of Science: Business Administration
Quinsigamond Community College, 1996

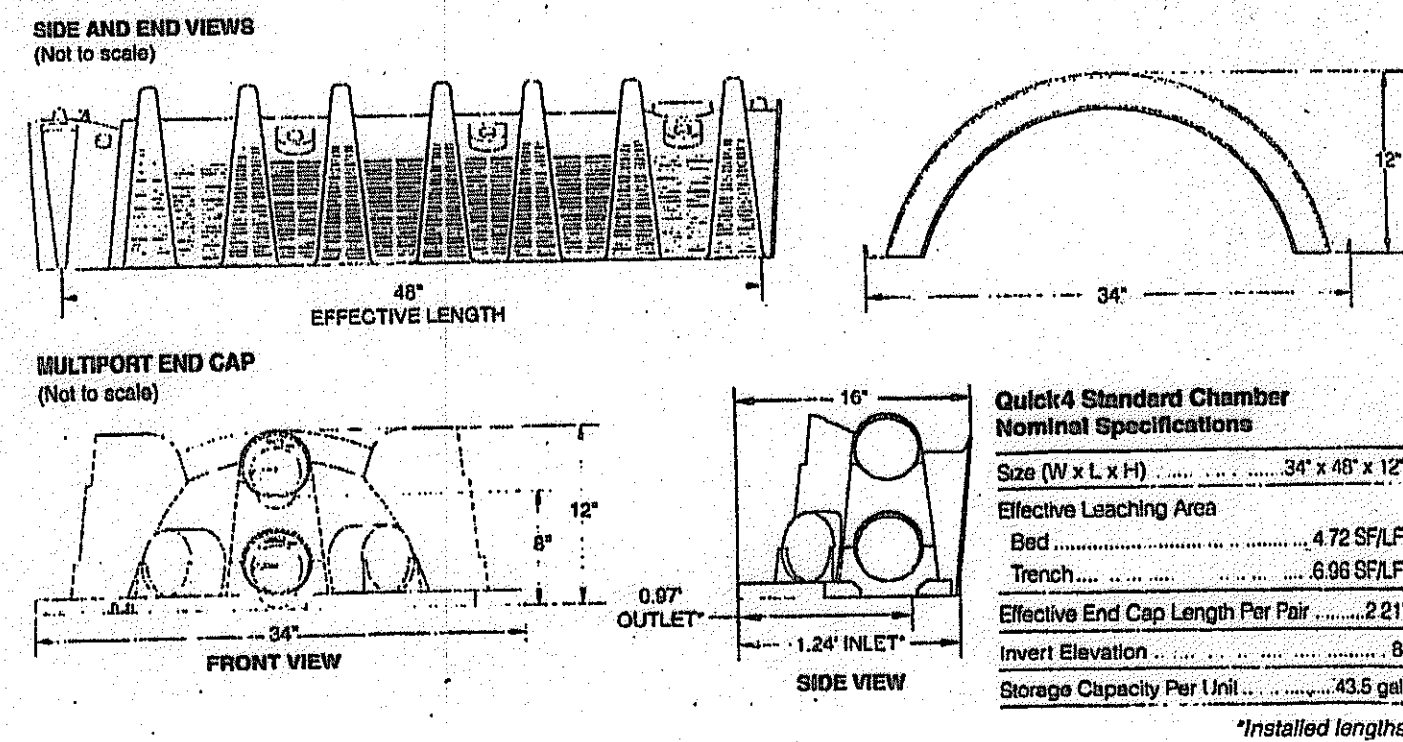
Professional Affiliations:

Registered Professional Soil Scientist, Society of Soil Scientists of
Southern New England (SSSSNE)
Massachusetts Association of Conservation Commissioners
Association of Massachusetts Wetland Scientists
Society of Wetland Scientists

Certifications:

Society of Wetlands Scientists Professional Wetland Scientist,
Certification Number 2583
Massachusetts Department of Environmental Protection Soil Evaluator,
Certification Number SE 13766

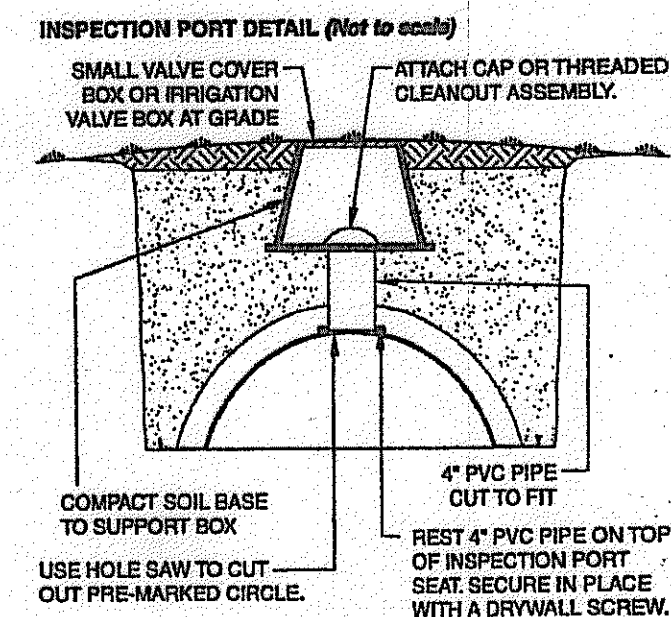
Quick4 Standard Chambers



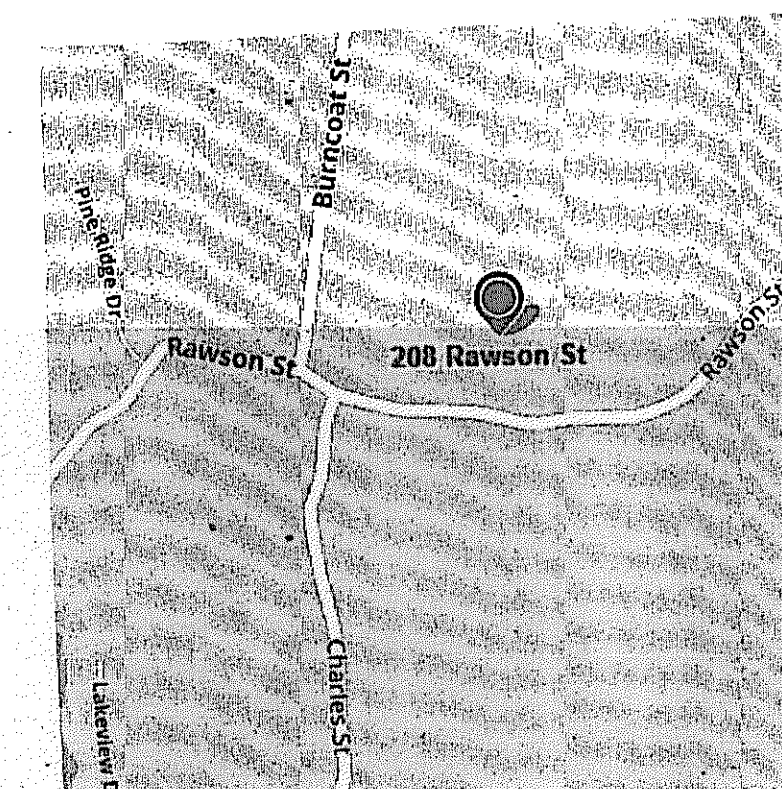
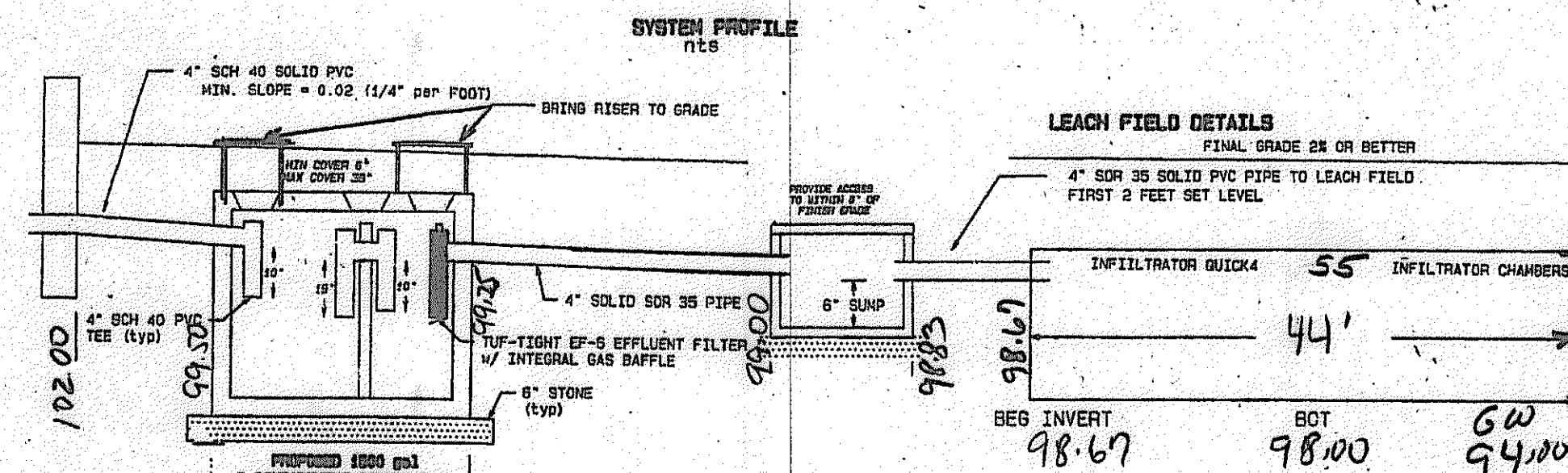
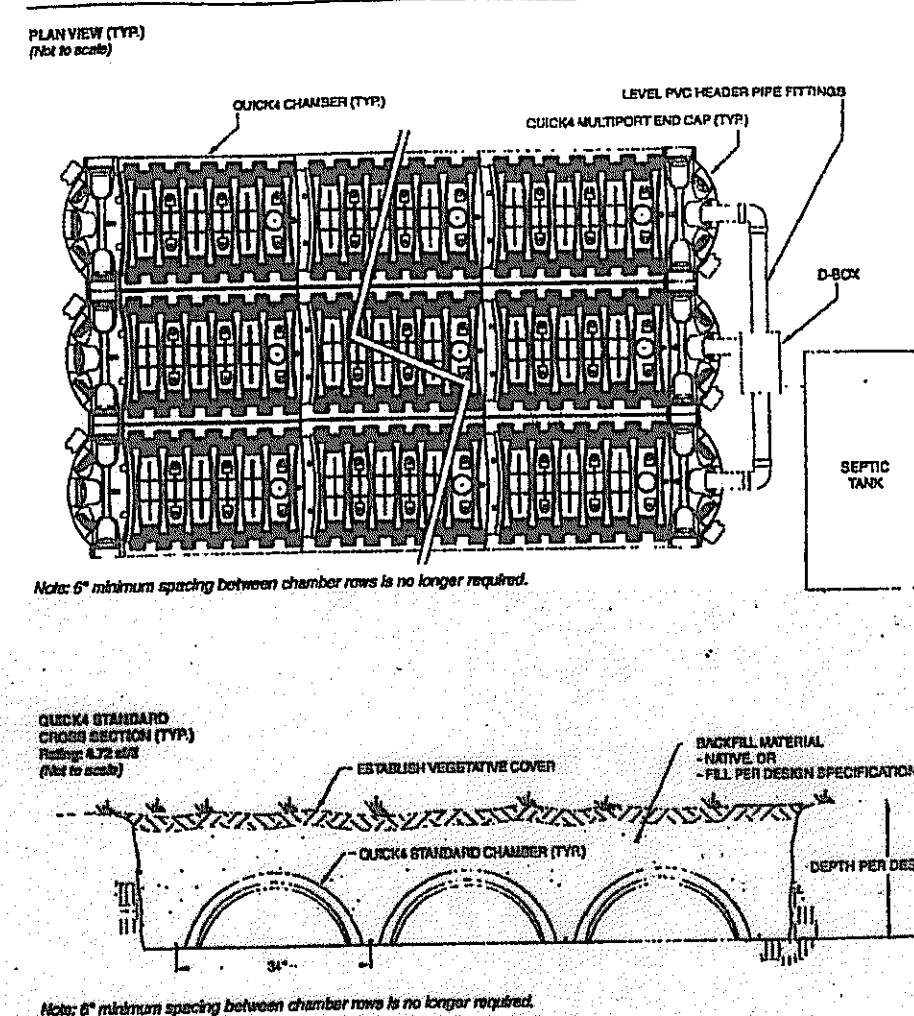
Quick4 Chamber Systems

Installing Optional Inspection Ports

1. With a hole saw, drill the pre-marked area in the top of the chamber to create a 4-inch opening.
2. Set a cut piece of pipe of the appropriate length into the corresponding chamber's inspection port sleeve.
- Notes: The sleeve will accommodate a 4-inch SCH40 pipe.
3. Use two screws to fasten the pipe to the sleeve around the inspection port.
4. Attach a threaded cap or cleanout assembly onto the protruding pipe at the appropriate height.
5. A small valve cover box may be used if inspection port is below the desired grade.



Quick4 Standard and Quick4 High Capacity Bed Configurations



LOCUS LEGEND

- SEPTIC TANK
- DISTRIBUTION BOX
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DEEP TEST PIT
- PERC TEST PIT
- WELL

LOT SIZE 6.22 Ac +/-

OFFSET DATA

S.A.S. TO FOUNDATION	20'
S.A.S. TO OWN WELL	81'
S.A.S. TO PROPERTY LINE	19'
S.A.S. TO DRAIN	N/A
S.A.S. TO WETLAND	86'
S.T. TO FOUNDATION	10'

PERC TEST DATA

PERFORMED BY T. PURCELL
WITNESSED BY PHIL LEGER
DATE 5-4-18

DEPTH	PERC#1	PERC#2
42"		
RATE	SLIEVE ANALYSIS	
DESIGN RATE	30 ml	

DEEP TEST PIT DATA

BENCH MARK ELEVATION	100.00
PIT#1 (EL = 96.00)	PIT#2 (EL = 94.00)
0-18" A+O(SL)10VR3/2	0-12" FILL
18-24" Bw(SL)10VR5/6	12-18" A(SL)10VR3/2
24-108" C(SL)2.SY5/3	18-36" Bw(SL)10VR5/6
	36-84" C(SL)2.SY5/3
MOTTLES @ 24"	MOTTLES @ 36"

>108" REFUSAL	>84"
30" GW OBS	36"
24" GW ADJ	24"

PERFORMED BY T. PURCELL
WITNESSED BY PHIL LEGER
DATE 5-4-18

GENERAL NOTES

1. ALL CONSTRUCTION TO CONFORM TO TITLE 5 OF THE MASSACHUSETTS STATE ENVIRONMENTAL CODE (310 CMR 15.00) AND THE BOARD OF HEALTH REQUIREMENTS FOR THE COMMUNITY OF LEICESTER, MASSACHUSETTS.
2. ALL TOPSOIL AND DELETERIOUS MATERIAL, IF ANY, MUST BE EXCAVATED AND REMOVED BELOW THE LEACHING AREA TO A DISTANCE OF 5 FEET FROM ALL OF THE SIDES OF THE LEACH AREA. ANY FILL USED BELOW THE LEACHING AREA WITHIN THE LIMITS OF EXCAVATION SHALL COMPLY WITH 310 CMR 15.255(3). ANY SUCH FILL SHALL BE INSTALLED IN CONFORMANCE WITH 310 CMR 15.255(6) IN 6-INCH LIFTS.
3. ANY CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFERING FROM THOSE SHOWN HEREON SHALL BE REPORTED TO THE SYSTEM DESIGNER AND LOCAL BOARD OF HEALTH PRIOR TO CONTINUATION OF CONSTRUCTION.
4. THE S.A.S. SHALL NOT BE CONSTRUCTED UNTIL THE LIMIT OF EXCAVATION HAS BEEN INSPECTED BY THE SYSTEM DESIGNER. THE S.A.S. AND ITS COMPONENTS SHALL NOT BE BACKFILLED UNTIL ALL REQUIRED INSPECTIONS HAVE BEEN PERFORMED BY THE SYSTEM DESIGNER AND A FINAL INSPECTION HAS BEEN CONDUCTED BY THE LOCAL APPROVING AUTHORITY AND PERMISSION, BY THAT AGENT AND THE SYSTEM DESIGNER, HAS BEEN GRANTED TO BACKFILL. BACKFILL MUST BE CLEAN AND FREE OF STONES GREATER THAN 6 INCHES IN SIZE.
5. THE S.A.S. AND ITS COMPONENTS SHALL BE STAKED AND FLAGGED BY THE SYSTEM INSTALLER IN COMPLIANCE WITH 310 CMR 15.246, TO PREVENT VEHICULAR TRAFFIC AND PARKING OF VEHICLES OR EQUIPMENT IN OR ON THE AREA OF THE S.A.S. AND ITS COMPONENTS. SUCH FLAGGING IS NOT TO PRECLUDE FINAL GRADING AND LANDSCAPING OF THE AREA. STOCKPILING OF MATERIALS OR EQUIPMENT WITHIN THE AREA IS PROHIBITED.
6. THIS SYSTEM IS NOT DESIGNED FOR A GARBAGE DISPOSAL.
7. THE SEPTIC TANK SHOULD BE INSPECTED AND PUMPED AS REQUIRED PURSUANT TO 310 CMR 15.351. TYPICALLY THE SYSTEM SHOULD BE INSPECTED ANNUALLY AND MAY REQUIRE PUMPING EVERY 3 YEARS OR MORE OFTEN.
8. UNDERGROUND UTILITIES DATA INDICATED ON THE PLAN IS PLOTTED FROM VISIBLE FIELD LOCATION AND AVAILABLE RECORDS. THE LOCATIONS ARE APPROXIMATE ONLY AND SHOULD BE VERIFIED BY THE APPROPRIATE UTILITY COMPANIES.
9. NO PROPERTY SURVEY WAS MADE AS PART OF THIS PLAN. OFFSETS ARE NOT TO BE USED FOR REPRODUCTIONS OF PROPERTY LINES. LOT DIMENSIONS WERE TAKEN FROM THE OTHERS. CONFIRMING HOUSE LOCATION AND SOME TOPOGRAPHY WERE CONDUCTED BY PURCELL ASSOCIATES.
10. THE PROPOSED CONSTRUCTION IS SUBJECT TO THE MASSACHUSETTS WETLANDS PROTECTION ACT ADMINISTERED BY THE LEICESTER CONSERVATION COMMISSION AND THE MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION.
11. OTHER THAN AS SHOWN, NO KNOWN WELLS OR PUBLIC WATER SUPPLIES EXIST WITHIN 150' OF THE PROPOSED CONSTRUCTION.
12. ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC TAPE.
13. DISTRIBUTION BOXES BURIED GREATER THAN 9 INCHES BELOW GRADE SHALL BE FILLED WITH PROPER RISERS & LID TO WITHIN 6 INCHES OF FINISH GRADE.

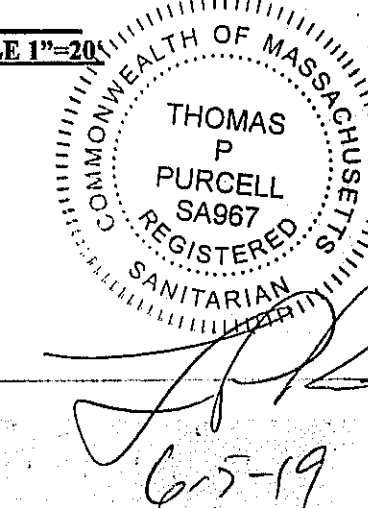
ELEVATIONS	PROPOSED	AS BUILT
TOP OF FOUNDATION	102.00	
SLAB ELEVATION	94.50	
INVERT AT FOUNDATION	99.75	
INVERT AT SEPTIC TANK INLET	99.50	
INVERT AT SEPTIC TANK OUTLET	99.25	
INVERT AT D-BOX INLET	99.00	
INVERT AT D-BOX OUTLET	98.83	
INVERT AT LEACH BEGINNING	98.67	
INVERT AT LEACH END	N/A	
S.A.S. BOTTOM ELEVATION	98.00	
LIMIT OF EXCAVATION ELEVATION	24-36" BELOW GRADE +/-	
GROUNDWATER ELEVATION	94.00 (24" BELOW GRADE)	
AVERAGE ELEVATION OVER S.A.S.	101.00	
BREAKOUT ELEVATION	99.00	

DESIGN CRITERIA

1. TYPE OF FACILITY REPLACEMENT 3-ROOM HOUSE
2. DESIGN FLOW 3 BEDROOMS x 110 GPD/BEDROOM = 330 GPD
3. EFFLUENT LOADING RATE 0.33 GPD/SQ.FT. (Sieve Analysis)
4. SOIL CLASS II TEXTURAL DESCRIPTION SANDY LOAM
5. LEACH AREA PROVIDED: 55 QUICK-4 CHAMBERS
55 x 4 x 4.72 = 1038.4 SF (EFFECTIVE)
15' x 44' = 660 SF (ACTUAL)
6. LEACHING CAPACITY PROVIDED 1038 SQ.FT. x 0.33 GPD/SQ.FT. = 342.6 GPD
7. LTAR REQUIRED 330 GPD DESIGNED 342.6 GPD
8. 1500 GALLON SEPTIC TANK. ZABEL OUTLET FILTER AND PROPER RISER, LID AND LABEL TO FINISH GRADE SHALL BE INSTALLED ON THE SEPTIC TANK.
9. ALL SOIL ABSORPTION SYSTEMS SHALL BE FITTED WITH A MINIMUM OF 1 INSPECTION PORT CONSISTING OF A PERFORATED 4-INCH PIPE PLACED VERTICALLY DOWN INTO THE NATURALLY OCCURRING SOIL OR SAND FILL BELOW THE SYSTEM. THE PIPE SHALL BE CAPPED WITH A SCREW-TYPE CAP AND BE LOCAL UPGRADE APPROVAL 310 CMR 15.405(1)(b) SAS 3" TO GROUNDWATER ACCESSIBLE TO WITHIN 3 INCHES OF GRADE AND MARKED WITH MAGNET TAPE.

LOCAL UPGRADE APPROVAL REQUEST- 310 CMR 15.405(1)(g) 80" to own well
310 CMR 15.405(1)(i) sieve analysis

REVISIONS
DATE 9/10/18 BY TTP
SUBSURFACE SEWAGE DISPOSAL SYSTEM
PROPOSED REPAIR PLAN PREPARED FOR
SPARHAWK REALTY, LLC
208 RAWSON STREET (1 D- 26C-B3-0)
LEICESTER, MASSACHUSETTS 01524
DEED BOOK 54716 / PAGE 318 DATED 12-18-15
DRAWN BY: TTP DESIGNED BY: TTP DATE 9-14-18 SHEET 1 OF 1 SCALE 1"=20'
PURCELL ASSOCIATES, INC
P.O. BOX 117
OXFORD, MA 01540-0117
508-987-6108



*Certificate of Compliance
To be held until
T-5 Water Quality Test
performed on well