



-TOWN OF LAKEVILLE MEETING POSTING & AGENDA

Town Clerk's Time Stamp
received & posted:

48-hr notice effective
when time stamped

Notice of every meeting of a local public body must be filed and time-stamped with the Town Clerk's Office at least 48 hours prior to such meeting (excluding Saturdays, Sundays and legal holidays) and posted thereafter in accordance with the provisions of the Open Meeting Law, MGL 30A §18-22 (Ch. 28-2009). Such notice shall contain a listing of topics the Chair reasonably anticipates will be discussed at the meeting.

Name of Board or Committee:	<u>Conservation Commission</u>
Date & Time of Meeting:	<u>April 9, 2024 @ 7pm</u>
Location of Meeting:	<u>Lakeville Police Station</u> <u>323 Bedford St.</u>
Clerk/Board Member posting notice:	<u>Lori Canedy</u>

Cancelled/Postponed to: _____ (circle one)

Clerk/Board Member Cancelling/Postponing: _____

A G E N D A (R E V I S E D)

Please ask if anyone is recording the meeting and announce that LakeCam is taping (if present).

1. Member resignation - review letter of resignation.
2. New Board Members
3. 310 Kenneth Welch Drive - Notice of Intent (SE192-891) Goddard Consulting - increase parking and wetland replication. Continued from 3/26/24 meeting.
4. 9 Cross Street - Notice of Intent (SE192-902) - Zenith Consulting Engineers - new single-family dwelling, septic system, well, grading, lot clearing, utilities, driveway crossing, and replication area. Continued from 3/26/24 meeting.
5. 2 Bedford Street - Notice of Intent (SE192-910) - Zenith Consulting Engineers - new contractor bay facility. Continued from 3/26/24 meeting.
6. Off Freetown Street - Abbreviated Notice of Resource Area Delineation - (SE192-915) - Outback Engineering. Review of delineated resource areas. Continued from 3/26/24 meeting.
7. 22 Stetson St. - Notice of Intent (SE192-916) - Zenith Consulting Engineers - Construction of detached garage with grading, driveway, utilities, and tree removal. Continued from 3/26/24 meeting.
8. 3 Mona St - Request for Determination of Applicability - Installation of aluminum dock with lift. Continued from 3/26/24 meeting.
9. Gillian Drive - Request for Certificate of Compliance (SE192-655) - Zenith Consulting Engineers - roadway and drainage system.

Est. 2003



RI: 401.741.3263
MA: 508.997.0268
www.ecosystem-solutions.com

March 16, 2024

Project no. W23-1918

Robert Bouchard, Chair
Conservation Commission
346 Bedford Street
Lakeville, MA 02347

RE: ANRAD Peer Review Report
9 Cross Street / Parcel no. Map 021, Block 003, Lot 012-02
Lakeville, Massachusetts
DEP File no. 192-0902

Chair Bouchard:

Ecosystem Solutions, Inc. has completed a peer review of the submitted Notice of Intent (NOI) for the above-referenced property (Property). The site investigation portion of the peer review was conducted by a professional wetland scientist on February 9, 2024, in minimal to no-snow conditions. The site investigation was performed in accordance with the Massachusetts Wetlands Protection Act (M.G.L. 131, §40) (Act), and the Massachusetts Wetlands Regulations (310CMR 10.00).

The following documents were reviewed and actions conducted:

- WPA Form 3- Notice of Intent application, Jamie Bissonnette, P.E. of Zenith Consulting Engineers, LLC., representative. Application was signed by the applicant on 08/07/23. The NOI includes a "Performance Standard and Alternatives Analysis" letter dated August 16, 2023.
- Site plan titled "Subsurface Sewage Disposal System New Construction" consisting of two (2) sheets by Zenith Consulting Engineers, LLC, dated July 5, 2023 and stamped by Richard W. Reid, Jr., PLS #46861 and Jamie L. Bissonnette, P.E. #47625. Sheet 2 is stamped by Jamie Bissonnette only.
- Visited the site on February 9, 2024.

General Site Description

The site is located on the west side of Cross Street, approximately 1,500 feet north of the intersection of Cross St. and Taunton St. According to the Lakeville CAI property card, it is 12.55 acres in size. It is undeveloped, and completely forested. In researching the subdivision history of the parcel, I found that the

Lakeville Parcel data obtained from MassGIS show that it was subdivided sometime between 2014 and 2019, changing from Parcel ID 021-003-012 to Parcel ID 021-003-012-2.

On-site topography is fairly level. NRCS mapping depicts soils on-site consisting of mostly poorly to very poorly drained soils found in outwash plains of sandy-textured parent material. These include the Scarboro muck, coastal lowland and Massasoit-Mashpee complex soil map units. Upland areas are mapped as moderately well-drained Deerfield loamy fine sand, also of sandy parent material and found on glacial outwash plains. According to the soil mapping, there are no well-drained soils on-site.

Vegetation on-site is dominated by white pine (*Pinus strobus*), red maple (*Acer rubrum*), swamp fetterbush (*Eubotrys racemosus*), sweet pepperbush (*Clethra alnifolia*), round-leaved greenbrier (*Smilax rotundifolia*), and tree clubmoss (*Lycopodium obscurum*). Although white pine is listed as an upland plant (facultative upland- present in uplands 67%-99% of the time and wetlands 1%-33% of the time) was present and even a dominant tree in the Bordering Vegetated Wetland (BVW). This is something I've found to be common in southeast Massachusetts where glacial outwash plains with sandy parent material are present.

On-Site Flagging

I reviewed the following *on-site* flags:

- WF 2-7 thru WF 2-18
- WF 3-1 thru WF 3-24
- WF 4-2, and 4-5 thru 4-29

Most flags on-site are accurately placed. However, some flags on the proposed house-side of the wetland crossing were determined to be inaccurate. As a result, ESI placed their own flags in the field and created a red-lined sketch of the approximate flag revision locations for ZCE to consider. The newly placed flags are as follows:

- 3-4R, to replace flag 3-4.
- 3-10A, B, and C. I recommend connecting flag 3-10 to new flags 3-10A thru C, and reconnecting to flag 3-11.
- 3-11A. Connect 3-11 to new flag 3-11A. Flag 3-11A will connect to flag 3-12R1 below.
- 3-12R1 and 3-12R2. These flags will replace flag 3-12, with 3-12R2 connecting back to flag 3-13.

Proposed Project

This exercise reviews a driveway crossing to a single-family dwelling, which will be located on the west side of the "3" series wetland flags. In all, construction will include a 4-bedroom house with attached garage, driveway, septic system, well, recreational lawn, associated grading, and wetland replication area. According to the site plan, the crossing will fill 4,894 square feet of BVW. The wetland replication area will be 4,900 square feet in size. However, I believe that with the wetland flag revisions, the BVW fill will be larger than currently depicted.



Picture 1. Typical BVW interior. Looking west along a survey cut-line from Cross Street. The BVW exhibited isolated pockets of standing water. However, they were small, shallow, and unlikely to hold water for 2 consecutive months in the spring and/or summer. Therefore, I believe the chance of them qualifying as vernal pools is small. Vegetation in the BVW was thick and topography flat.

The proposed crossing will have three (3) twelve (12") inch ADS pipes running under the driveway, which will hydraulically connect the two sides of the BVW. No retaining walls are proposed on either side of the driveway crossing. Instead, the driveway is proposed at 12' in width with 4' wide gravel shoulders. The driveway will be paved once construction is completed.

The wetland replication area is proposed in an 'alcove' of the wetland line on the north side of the house.

Comments on Design

First, MassDEP made their own comments when issuing the file number, which is as follows:

1) Technical Comments

Per 310 CMR 10.53(3), the Commission shall consider the following factors in determining whether to exercise its discretion to approve the limited project: the magnitude of the alteration and the significance of the project site to the interests of the Act, the availability of reasonable alternatives to the proposed activity, the extent to which adverse impacts are minimized, and the extent to which mitigation measures, including replication or restoration, are provided to contribute to the protection of the interests of the Act. Per 310 CMR 10.53(3)(e), "Reasonable alternative means of access may include any previously or currently available alternatives such as realignment or reconfiguration of the project to conform to 310 CMR 10.54 to 310 CMR 10.58 or to otherwise minimize adverse impacts on resource areas. The issuing authority may require the applicant to utilize access over an adjacent parcel of land currently or formerly owned by the applicant, or in which the applicant has, or can obtain, an ownership interest." The Commission may wish to include a continuing condition in the Order and on the Certificate of Compliance to prohibit further activities under 310 CMR 10.53(3)(e). DEP recommends that the Applicant and the Conservation

Commission review the Department's Inland Wetlands Replacement Guidance:

<https://www.mass.gov/doc/massachusetts-inland-wetland-replacement-guidelines/download>

The NOI included a Performance Standard and Alternatives Analysis section, where the Applicant stated that there was no other means of ingress or egress to the house site.

In regards to adding a continuing condition to "prohibit further activities" under 10.53(3)(e), it is my opinion that it relates to activities associated with BVW fill. It is also my opinion that 314 CMR 9.00 (Water Quality Certification Regulations) is applicable due to the fairly recent subdivision of land, specifically §9.04(3) is applicable:

(3) Real Estate Subdivision - Any discharge of dredged or fill material associated with the creation of a real estate subdivision, unless there is a valid, unexpired Final Order of Conditions, followed by a Certificate of Compliance, and a *recorded deed restriction* [italics added for emphasis] providing notice to subsequent purchasers limiting the amount of fill for the single and complete project to less than 5000 square feet cumulatively of bordering and/or isolated vegetated wetlands and land under water and the discharge is not to an Outstanding Resource Water. Real estate subdivisions include divisions where approval is required and where approval is not required under the Subdivision Control Law, M.G.L. c. 41, §§ 81K through 81GG. Discharges of dredged or fill material to create the real estate subdivision include but are not limited to discharges resulting from the construction of roads, drainage, sidewalks, sewer systems, buildings, septic systems, wells, and accessory structures.

I recommend that the Applicant provide proof that the other lots that were subdivided since about 2014 have not also filled in wetland that cumulatively exceeds 5,000 square feet of fill of BVW *via an Order of Conditions*, and *provide an affidavit that there has been no illegal filling of BVW* since the 1983 revisions to 310 CMR 10.00 when the "5,000 square foot rule" for BVW fill went into place. If it is found that there are other permitted BVW fill projects, or illegal fill found that exceed 5,000 square feet for the subdivided lots, I do not recommend approving the current NOI. However, if the answer is no, and total fill remains under 5,000 square feet, then I recommend that the Commission require a deed restriction in the Order of Conditions. A recommended Special Conditions may be worded as follows:

Applicant shall record a restriction with the deed for the following parcels: Parcel ID 021-003-012, Parcel ID 021-003-012-1 and Parcel ID 021-003-012-2, that a total of _____ [fill in the blank] square feet of fill to Bordering Vegetated Wetlands was permitted under DEP file no. SE 192-0902. Wetland fill shall be limited to 5,000 square feet, in-perpetuity, for these parcels of land. Applicant shall provide proof of recording of the restriction.

The Commission may add to the Special Condition a timeline by which the Applicant must record the restriction. For example, it must be done before the start of construction, within the 3 year period in which the Order is valid, or before building occupancy is permitted.

- 2) I do not recommend reducing the width of the crossing by installing retaining walls. Not only is it more dangerous for vehicular traffic, but it is also counterproductive to smaller animal (e.g. turtles)

movement. Instead, I would recommend that the shoulder be grassed or smoothed and without riprap, which also effectively restricts movement. One could propose a wildlife culvert, but I personally find that they have limited use.

- 3) The wetland replication notes and/or Special Conditions should require that the work be overseen by a qualified wetland scientist. The scientist should be subject to approval by the Commission and/or Agent. That is, if the Commission and/or Agent is not available for oversight.
- 4) Also in regard to the wetland replication, I recommend changing sequence note no. 4 to: *The area will be graded to a depth compatible with long-term wetland hydrology, a bottom-inspection to be conducted by the Commission, Agent, or approved professional before topsoil is spread and plants installed.* I never recommend just going with a predetermined elevation. The elevation must be confirmed via hydric soil identification in order to be truly effective.
- 5) I recommend adding a note or amending wetland replication note 7 to include a caveat that soils must be inspected by the Commission, Agent, or approved professional to assure that they have adequate organic content before installation. If not, they must be supplemented with compost mulch until they reach at least 18% organic carbon content.
- 6) I recommend adding a note or amending wetland replication note 7 to specify that organic soils shall be at least twelve (12") inches in depth.
- 7) Swamp fatterbush was very common on-site. Therefore, if the Applicant wishes to substitute or supplement this species in the planting list, I would not object. I would also recommend inkberry (*Ilex glabra*), which does well in sandy soils.
- 8) 310 CMR 10.00 has no minimum threshold for requiring a wildlife habitat evaluation for fill of BVW. I found no significant habitat features in the BVW while I was on-site, but this is something that is done at the discretion of the Commission. Therefore, you may require one if you so wish.

Otherwise, it is my opinion that the proposed project, including the driveway crossing, wetland replication area (per comments above), and house construction in the buffer zone meets performance standards found at 310 CMR 10.00, pending review by NHESP (see below).

Other

A search of other critical resources within the project area was conducted using GIS software and data available through various governmental agencies (FEMA, NHESP, DEP and others). The results of our search are listed in Table 1 below:

Table 1. Critical Areas

Mapped Resource On or Within Proximity to Site	Yes	No
Area of Critical Environmental Concern		✓
NHESP Certified Vernal Pool		✓
NHESP Potential Vernal Pool		✓
NHESP Estimated Habitat of Rare Wildlife	✓ ¹	
NHESP Priority Habitat of Rare species	✓ ²	
Outstanding Resource Waters		✓
FEMA Flood Zones		✓
Surface Water Protection Area		✓
Interim Wellhead Protection Area		✓
Zone II Wellhead Protection Area		✓
Mass DCR Designated Coldwater Fisheries		✓

- 1- Site is located within Estimated Habitats of Rare & Endangered Species (EH 474). Therefore, a copy of the NOI was required to be sent to the Natural Heritage and Endangered Species program. NHESP has 30 days in which to respond. The Commission may not close the public hearing until NHESP has responded to the NOI.
- 2- Site is located within Priority Habitats of Rare & Endangered Species (PH 592).

Should you have any questions regarding this letter, please do not hesitate to call at (401) 741-3263 or by using the other contact information above.

Sincerely,
Ecosystem Solutions, Inc.
 Brandon B. Faneuf, M.S., Principal
 PWS, RPSS, CWB, CPESC

BF/bf

enclosures

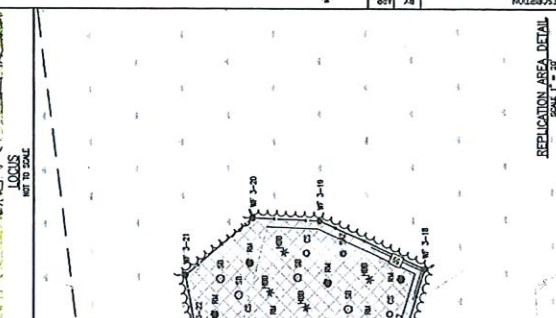




ZCE
ZENITH CONSULTING ENGINEERS, LLC
3 MAIN STREET FALLS CHURCH, VA 22027
PHONE (509) 947-4208

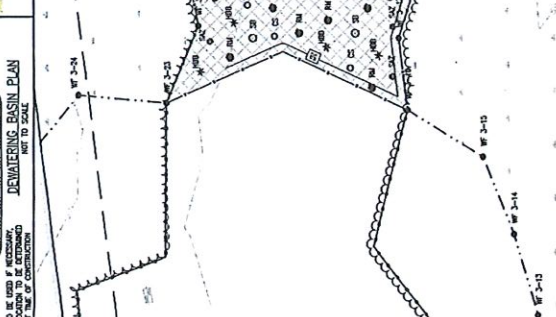
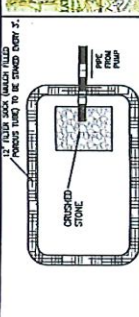
PROJECT NO.	22-1-10
DATE	7-5-23
SCALE	AS SHOWN
PROJECT	NEW CONSTRUCTION
CLIENT	ROBO INVESTMENT REALTY TRUST
ADDRESS	9 CROSS STREET
CITY	LAKEVILLE, MASSACHUSETTS
STATE	MA
COUNTY	WINDHAM
TOWN	LAKEVILLE

SUBSURFACE SEWAGE DISPOSAL SYSTEM
NEW CONSTRUCTION
9 CROSS STREET
LAKEVILLE, MASSACHUSETTS
ROBO INVESTMENT REALTY TRUST
8 ARCHWAY WAY
ACUSHNET, MA 02743



WETLAND REPLICATION CONSTRUCTION SEQUENCE:
THE REPLICATION AREA SHALL BE PROVIDED SUBSTANTIALLY WITH THE PROPOSED WETLAND CLOSING AREA USING THE FOLLOWING GENERAL SEQUENCE OF CONSTRUCTION:

1. SPECIAL CONTRACT SHALL BE AWARDED AND PROVIDED FOR ADVISORY BY ZENITH CONSULTING ENGINEERS, LLC AND THE REPLICATION AREA SHALL THEN BE CLOSURED AND BARRIERS.
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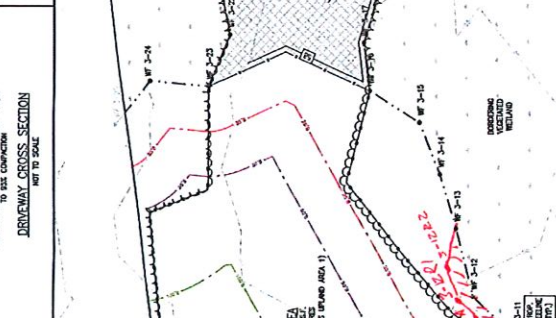
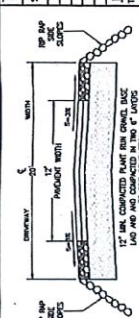
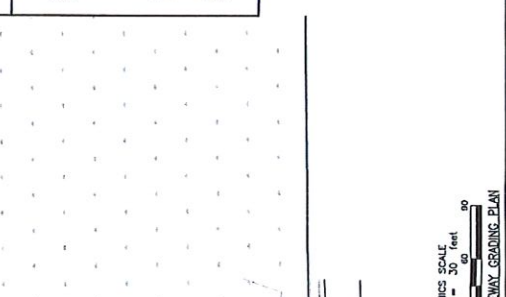
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TREE & SHRUB PLANTING SCHEDULE

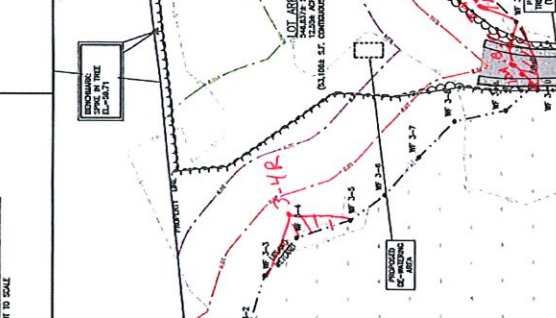
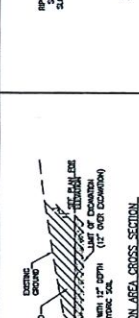
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3	12/15/23	12/15/23	12/15/23	12/15/23	12/15/23
4	1/15/24	1/15/24	1/15/24	1/15/24	1/15/24
5	2/15/24	2/15/24	2/15/24	2/15/24	2/15/24
6	3/15/24	3/15/24	3/15/24	3/15/24	3/15/24
7	4/15/24	4/15/24	4/15/24	4/15/24	4/15/24
8	5/15/24	5/15/24	5/15/24	5/15/24	5/15/24
9	6/15/24	6/15/24	6/15/24	6/15/24	6/15/24
10	7/15/24	7/15/24	7/15/24	7/15/24	7/15/24

REPLICATION NOTES:
1. THE REPLICATION AREA SHALL BE PROVIDED SUBSTANTIALLY WITH THE PROPOSED WETLAND CLOSING AREA USING THE FOLLOWING GENERAL SEQUENCE OF CONSTRUCTION:
2. THE REPLICATION AREA SHALL THEN BE CLOSURED AND BARRIERS.
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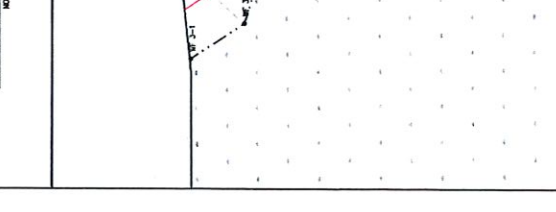
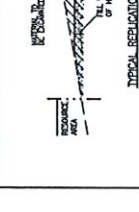
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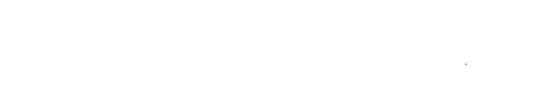
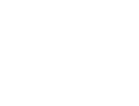
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Massachusetts Department of Environmental Protection
Bureau of Water Resources - Wetlands

WPA Form 1- Request for Determination of Applicability

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

Municipality _____

RECEIVED

MAR -7 2024

A. General Information

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



1. Applicant:

Gary & Catherine	Jaspersohn	
First Name	Last Name	
3 Mona Street	Conservation Commission	
Address		
Lakeville	MA	02347-2529
City/Town	State	Zip Code
617-800-5185	jaspersohn@gmail.com	
Phone Number	Email Address	

2. Property Owner (if different from Applicant):

Jaspersohn Family Trust		
First Name	Last Name	
3 Mona Street		
Address		
Lakeville	MA	02347-2529
City/Town	State	Zip Code
617-800-5185 / 781-883-6843	jaspersohn@gmail.com / cjaspers@gmail.com	
Phone Number	Email Address (if known)	

3. Representative (if any)

_____	_____	
First Name	Last Name	
_____	_____	
Company Name		

Address		
_____	_____	_____
City/Town	State	Zip Code
_____	_____	_____
Phone Number	Email Address (if known)	

B. Project Description

1. a. Project Location (use maps and plans to identify the location of the area subject to this request):

3 Mona Street	Lakeville
Street Address	City/Town
41.80073	-70.95459
Latitude (Decimal Degrees Format with 5 digits after decimal e.g. XX.XXXXX)	Longitude (Decimal Degrees Format with 5 digits after decimal e.g. -XX.XXXXX)
M:00039 B:0001 L:002	
Assessors' Map Number	Assessors' Lot/Parcel Number

[How to find Latitude and Longitude](#)

[and how to convert to decimal degrees](#)

b. Area Description (use additional paper, if necessary):
Private, non-commercial, aluminum dock anchored to existing concrete steps at water's edge of Long Pond

c. Plan and/or Map Reference(s): (use additional paper if necessary)

Appendix B Simplified License Plan	03/08/2024
Title	Date
Appendix C Simplified License Plan	03/08/2024
Title	Date



Massachusetts Department of Environmental Protection

Bureau of Water Resources - Wetlands

WPA Form 1- Request for Determination of Applicability

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

Municipality

B. Project Description (cont.)

2. a. Activity/Work Description (use additional paper and/or provide plan(s) of Activity, if necessary):

Registration and Licensing of a private, non-commercial, aluminum dock for docking and boating access to the navigable waters of Long Pond. The dock is a non-permanent structure that will be removed at the end of every boating season. There will also be a non-permanent pontoon boat lift and jet ski lift adjacent to the dock. The dock will be attached via a cleat to existing concrete steps at the water's edge of Long Pond.

- b. Identify provisions of the Wetlands Protection Act or regulations which may exempt the applicant from having to file a Notice of Intent for all or part of the described work (use additional paper, if necessary).

-
3. a. If this application is a Request for Determination of Scope of Alternatives for work in the Riverfront Area, indicate the one classification below that best describes the project.

- Single family house on a lot recorded on or before 8/1/96
- Single family house on a lot recorded after 8/1/96
- Expansion of an existing structure on a lot recorded after 8/1/96
- Project, other than a single-family house or public project, where the applicant owned the lot before 8/7/96
- New agriculture or aquaculture project
- Public project where funds were appropriated prior to 8/7/96
- Project on a lot shown on an approved, definitive subdivision plan where there is a recorded deed restriction limiting total alteration of the Riverfront Area for the entire subdivision
- Residential subdivision; institutional, industrial, or commercial project
- Municipal project
- District, county, state, or federal government project
- Project required to evaluate off-site alternatives in more than one municipality in an Environmental Impact Report under MEPA or in an alternatives analysis pursuant to an application for a 404 permit from the U.S. Army Corps of Engineers or 401 Water Quality Certification from the Department of Environmental Protection.

- b. Provide evidence (e.g., record of date subdivision lot was recorded) supporting the classification above (use additional paper and/or attach appropriate documents, if necessary.)



Massachusetts Department of Environmental Protection

Bureau of Water Resources - Wetlands

WPA Form 1- Request for Determination of Applicability

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

Municipality _____

C. Determinations

1. I request the Lakeville Conservation Commission make the following determination(s). Check any that apply:
Conservation Commission

- a. whether the **area** depicted on plan(s) and/or map(s) referenced above is an area subject to jurisdiction of the Wetlands Protection Act.
- b. whether the **boundaries** of resource area(s) depicted on plan(s) and/or map(s) referenced above are accurately delineated.
- c. whether the **Activities** depicted on plan(s) referenced above is subject to the Wetlands Protection Act and its regulations.
- d. whether the area and/or Activities depicted on plan(s) referenced above is subject to the jurisdiction of any **municipal wetlands' ordinance or bylaw** of:

Name of Municipality

- e. whether the following **scope of alternatives** is adequate for Activities in the Riverfront Area as depicted on referenced plan(s).
- _____

D. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Request for Determination of Applicability and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge.

I further certify that the property owner, if different from the applicant, and the appropriate DEP Regional Office were sent a complete copy of this Request (including all appropriate documentation) simultaneously with the submittal of this Request to the Conservation Commission.

Failure by the applicant to send copies in a timely manner may result in dismissal of the Request for Determination of Applicability.

Signatures:

I also understand that notification of this Request will be placed in a local newspaper at my expense in accordance with Section 10.05(3)(b)(1) of the Wetlands Protection Act regulations.

Gary M Jaspersohn

Signature of Applicant

03/08/2024

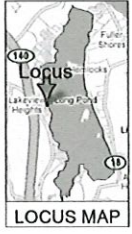
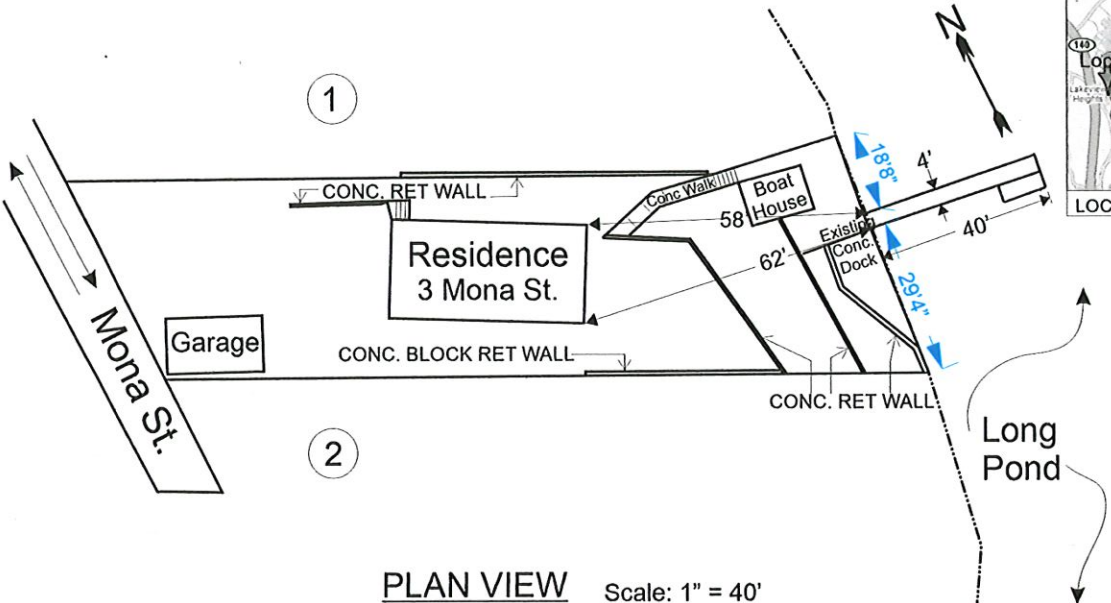

Date

Signature of Representative (if any)

Date

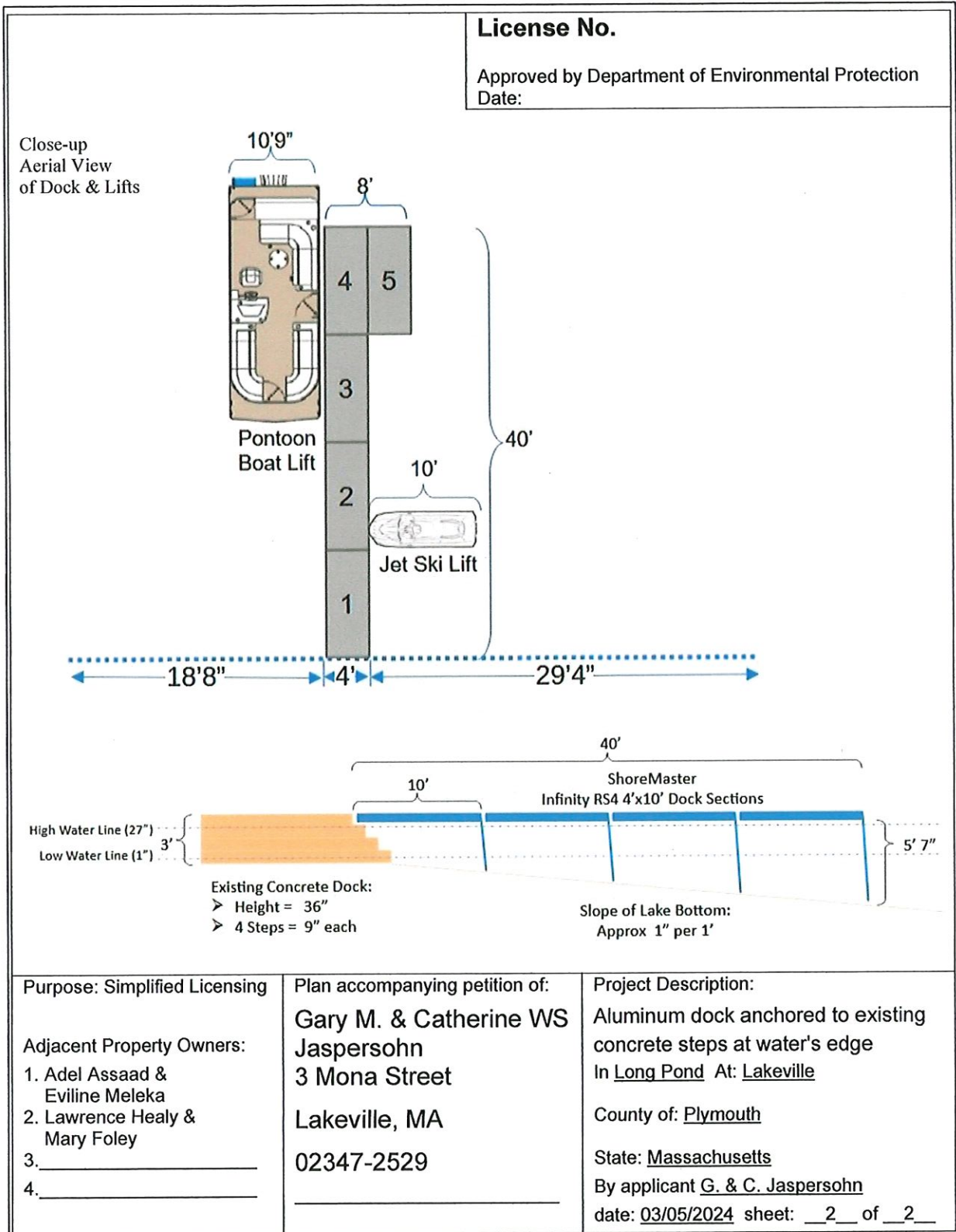
Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Waterways Regulation Program
 Chapter 91 Simplified Waterways License Application

Appendix B: Simplified License Plan

License No. Approved by Department of Environmental Protection Date:		
		
 <p style="text-align: center;">PLAN VIEW Scale: 1" = 40'</p>		
1 Mona Street, Lakeville ----->> 3 Mona Street, Lakeville ----->> 5 Mona Street, Lakeville ----->>		
Purpose: Simplified Licensing Adjacent Property Owners: 1. Adel Assaad & Eviline Meleka 2. Lawrence Healy & Mary Foley 3. _____ 4. _____	Plan accompanying petition of: Gary M. & Catherine WS Jaspersohn 3 Mona Street Lakeville, MA 02347-2529 _____	Project Description: Aluminum dock anchored to existing concrete steps at water's edge In <u>Long Pond</u> At: <u>Lakeville</u> County of: <u>Plymouth</u> State: <u>Massachusetts</u> By applicant <u>G. & C. Jaspersohn</u> date: <u>03/08/2024</u> sheet: <u>1</u> of <u>2</u>

Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Waterways Regulation Program
 Chapter 91 Simplified Waterways License Application

Appendix C: Simplified License Plan



PUBLIC NOTICE

**DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATERWAYS REGULATION PROGRAM**

**Notice of Simplified License Application pursuant to M.G.L. Chapter 91
24-WW-PRE-0026-APP**

NOTIFICATION DATE: March 28,2024

PERMITTEE: Gary M Jaspersohn

**PROJECT SITE ADDRESS: 3 Mona Street, Lakeville, MA 02347,
Plymouth County, Massachusetts**

Public notice is hereby given of the application for a Chapter 91 Simplified License by Gary M Jaspersohn to construct/maintain an existing private, non-commercial, aluminum dock with an adjacent pontoon boat lift and jet ski lift in the waters of Long Pond at 3 Mona Street, Lakeville, Plymouth County, Massachusetts 02347. In as much as the property is only 50' wide, a 25' minimum to the property line is not feasible as per 310 CMR 9.36(2).

The Department will consider all written comments on this Waterways application received by within 30 days of the "Notification Date". Failure of any aggrieved person or group of ten citizens or more to submit written comments to the Waterways Regulation Program will result in the waiver of any right to an adjudicatory hearing in accordance with 310 CMR 9.13(4)(c). The group of citizens must include at least five citizens who are residents of the municipality in which the proposed project is located.

Project plans for this Waterways application are on file for public viewing electronically, by request to dep.waterways@mass.gov. If you do not have access to email, please leave a voicemail at (617) 292-5929 and you will be contacted with information on alternative options.

It is recommended that public comments be filed electronically with dep.waterways@mass.gov when possible. Alternatively, comments may be mailed to the Waterways Regulation Program at: 1 Winter Street, 5th Floor, Boston, MA 02108.

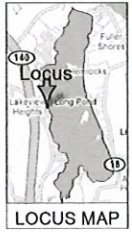
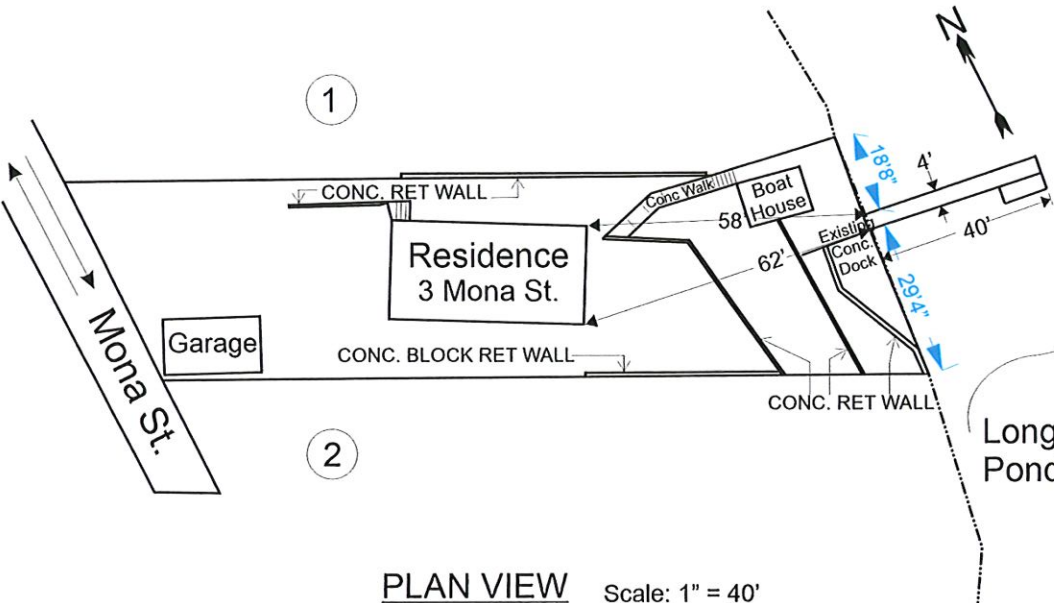

RECEIVED

MAR 26 2024

Conservation Commission

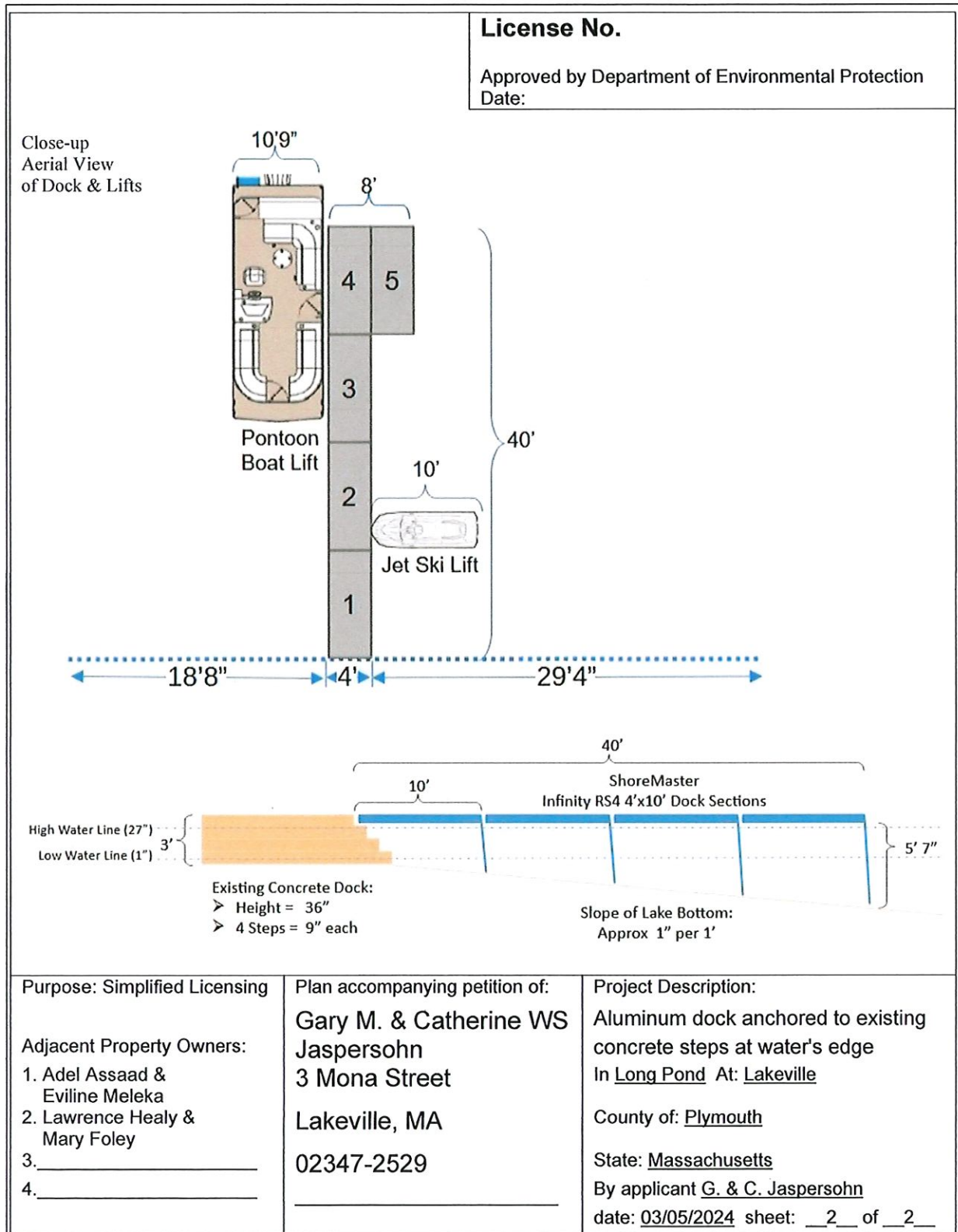
Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Waterways Regulation Program
 Chapter 91 Simplified Waterways License Application

Appendix B: Simplified License Plan

License No. Approved by Department of Environmental Protection Date: _____		
		
 <p style="text-align: center;">PLAN VIEW Scale: 1" = 40'</p>		
1 Mona Street, Lakeville ----->> 3 Mona Street, Lakeville ----->> 5 Mona Street, Lakeville ----->>		
Purpose: Simplified Licensing Adjacent Property Owners: 1. Adel Assaad & Eviline Meleka 2. Lawrence Healy & Mary Foley 3. _____ 4. _____	Plan accompanying petition of: Gary M. & Catherine WS Jaspersohn 3 Mona Street Lakeville, MA 02347-2529 _____	Project Description: Aluminum dock anchored to existing concrete steps at water's edge In <u>Long Pond</u> At: <u>Lakeville</u> County of: <u>Plymouth</u> State: <u>Massachusetts</u> By applicant <u>G. & C. Jaspersohn</u> date: <u>03/08/2024</u> sheet: <u>1</u> of <u>2</u>

Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Waterways Regulation Program
 Chapter 91 Simplified Waterways License Application

Appendix C: Simplified License Plan





MASSWILDLIFE

DIVISION OF FISHERIES & WILDLIFE

1 Rabbit Hill Road, Westborough, MA 01581

p: (508) 389-6300 | f: (508) 389-7890

[MASS.GOV/MASSWILDLIFE](https://www.mass.gov/masswildlife)

April 01, 2024

Martin Schwalm
22 Stetson Street
Lakeville, Massachusetts 02347

Lakeville Conservation Commission
Town Hall
346 Bedford Street
Lakeville, MA 02347

RE: Applicant: Martin Schwalm
 Project Location: 22 Stetson Street
 Project Description: Detached Garage & Driveway, Porch, Deck
 DEP Wetlands File No.: 192-0916
 NHESP File No.: 24-17241
 Heritage Hub Form ID: RC-84269

Dear Commissioners & Applicant:

The Natural Heritage & Endangered Species Program of the Massachusetts Division of Fisheries & Wildlife (the "Division") received a Notice of Intent with site plans (dated 2/26/2024) in compliance with the rare wildlife species section of the Massachusetts Wetlands Protection Act Regulations (310 CMR 10.59). The Division also received the MESA Review Checklist and supporting documentation for review pursuant to the MA Endangered Species Act Regulations (321 CMR 10.18).

WETLANDS PROTECTION ACT (WPA)

Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not adversely affect** the actual Resource Area Habitat of state-protected rare wildlife species. Therefore, it is our opinion that this project meets the state-listed species performance standard for the issuance of an Order of Conditions.

Please note that this determination addresses only the matter of rare wildlife habitat and does not pertain to other wildlife habitat issues that may be pertinent to the proposed project.

MASSACHUSETTS ENDANGERED SPECIES ACT (MESA)


Based on a review of the information that was provided and the information that is currently contained in our database, the Division has determined that this project, as currently proposed, **will not result in a prohibited Take** of state-listed rare species. This determination is a final decision of the Division of Fisheries and Wildlife pursuant to 321 CMR 10.18. Any changes to the proposed project or any additional work beyond that shown on the site

MASSWILDLIFE

plans may require an additional filing with the Division pursuant to the MESA. This project may be subject to further review if no physical work is commenced within five years from the date of issuance of this determination, or if there is a change to the project.

Please note that this determination addresses only the matter of state-listed species and their habitats. If you have any questions regarding this letter please contact Emily Holt, Endangered Species Review Assistant, at Emily.Holt@mass.gov, (508) 389-6385.

Sincerely,

A handwritten signature in black ink, appearing to read "Jesse Leddick". The signature is stylized with several loops and a long horizontal stroke at the end.

Jesse Leddick
Assistant Director

cc:



3 Main Street Lakeville, MA 02347
(508) 947-4208 - www.zcellc.com

- Civil Engineering
- Septic Design (Title 5)
- Septic Inspections (Title 5)
- Commercial and Industrial Site Plans
- Chapter 91 Permitting

March 28, 2024

Town of Lakeville
346 Bedford Street
Lakeville, MA 02347
Attention: Conservation Commission

RE: Request for Certificate of Compliance
Gillians Drive Lakeville, MA (SE-192-0655)

RECEIVED

MAR 28 2024

Conservation Commission

Dear Commission members:

We have inspected the above-referenced site and hereby certify that the roadway and drainage system have been constructed in general compliance with the Order of Conditions which you issued on February 17, 2012. On behalf of Donald Bissonnette, we request that you issue a Certificate of Compliance.

Should you have any questions regarding this request, please do not hesitate to contact the office at 508-947-4208 or email RForbes@zcellc.com.

Sincerely,
Zenith Consulting Engineers, LLC

Robert M. Forbes, PE
Senior Engineer





Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 8A – Request for Certificate of Compliance
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

DEP File Number:
192-0655
 Provided by DEP

A. Project Information

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



Upon completion of the work authorized in an Order of Conditions, the property owner must request a Certificate of Compliance from the issuing authority stating that the work or portion of the work has been satisfactorily completed.

1. This request is being made by:

Donald Bissonnette
 Name
1 Holly Hill Lane
 Mailing Address
Lakeville MA 02347
 City/Town State Zip Code
508-269-0976
 Phone Number

2. This request is in reference to work regulated by a final Order of Conditions issued to:

Donald Bissonnette
 Applicant
02/17/2012 SE-192-0655
 Dated DEP File Number

3. The project site is located at:

Gillian Drive Lakeville
 Street Address City/Town
016-005 007-07, 007-02, 007-03, 007-04,
 Assessors Map/Plat Number 007-05, 007-06

4. The final Order of Conditions was recorded at the Registry of Deeds for:

Property Owner (if different)
Plymouth 41129 253
 County Book Page

Certificate (if registered land)

5. This request is for certification that (check one):

- the work regulated by the above-referenced Order of Conditions has been satisfactorily completed.
 the following portions of the work regulated by the above-referenced Order of Conditions have been satisfactorily completed (use additional paper if necessary).

- the above-referenced Order of Conditions has lapsed and is therefore no longer valid, and the work regulated by it was never started.



A. Project Information (cont.)

6. Did the Order of Conditions for this project, or the portion of the project subject to this request, contain an approval of any plans stamped by a registered professional engineer, architect, landscape architect, or land surveyor?

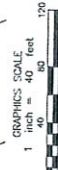
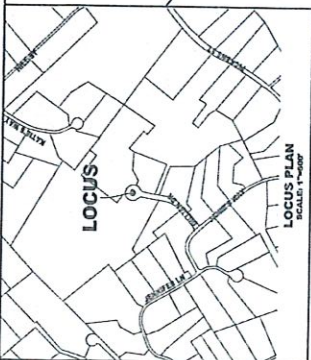
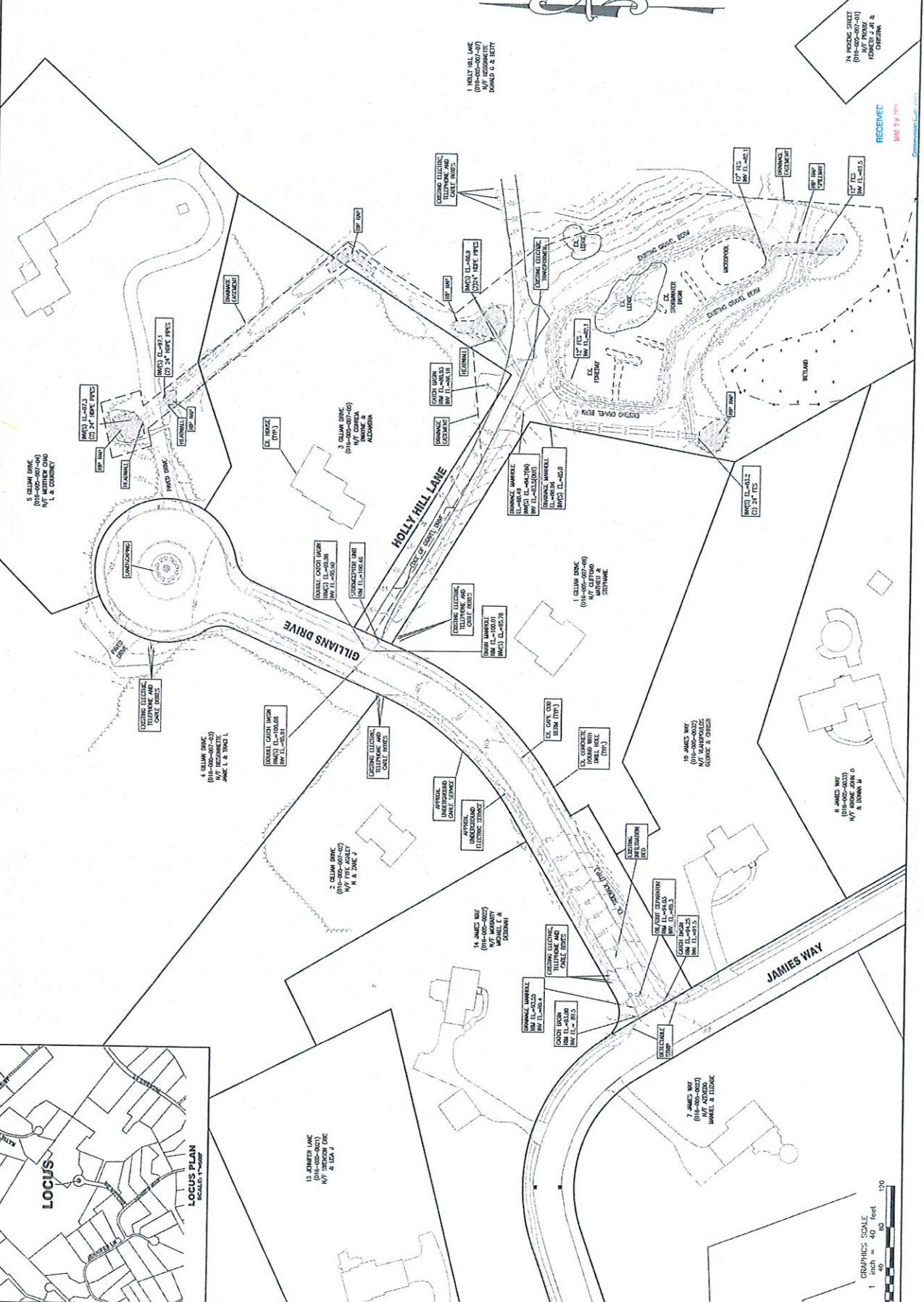
Yes If yes, attach a written statement by such a professional certifying substantial compliance with the plans and describing what deviation, if any, exists from the plans approved in the Order.

No

B. Submittal Requirements

Requests for Certificates of Compliance should be directed to the issuing authority that issued the final Order of Conditions (OOC). If the project received an OOC from the Conservation Commission, submit this request to that Commission. If the project was issued a Superseding Order of Conditions or was the subject of an Adjudicatory Hearing Final Decision, submit this request to the appropriate DEP Regional Office (see <http://www.mass.gov/eea/agencies/massdep/about/contacts/find-the-massdep-regional-office-for-your-city-or-town.html>).

ZENITH CONSULTING ENGINEERS, LLC
 3 MAIN STREET LAKEVILLE, MA 02347
 PHONE: (508) 847-4208
 P.E. STAMP: [Stamp]



RECEIVED
 MAR 2 2023
 COMMERCIAL CONSTRUCTION



RECEIVED

MAR 29 2024

March 25, 2024

Lakeville Conservation Commission
241 Main Street
Lakeville, MA 02347

Conservation Commission

Re: Stream Determination – Supplemental Information for ANRAD (DEP File #192-0915)
Off Freetown Street Lakeville, MA 02347
Map/Parcel: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4

Dear Lakeville Conservation Commission

Goddard Consulting, LLC is pleased to submit this Stream Determination as supplemental information for the Abbreviated Notice of Resource Area Delineation (ANRAD)(DEP File #192-0195) submitted on behalf of the applicant, Simonds Hills, LLC, for the properties located at Off Freetown Street Lakeville, MA 02347 (Map/Parcel: 34-2-1, 34-2-2, 34-2-11, 34-2-12, 35-1-2A, 35-1-4). This Stream Determination will be used to answer questions raised by Massachusetts DEP and the Lakeville Conservation Commission regarding the intermittent status of portion of Cedar Swamp River and an unnamed mapped intermittent stream on-site.

Attachments:

StreamStats Report – Cedar Swamp River, accessed on 3/25/2024
StreamStats Report – Unnamed Intermittent Stream, accessed on 3/25/2024

Existing Conditions

The site consists of six parcels totaling approximately 186.6 acres (8,039,420 square feet). The site is bordered by Freetown Street to the west, and Route 140 to the east. The site is primarily wooded, with several large Bordering Vegetated Wetland (BVW) systems (44.1 acres), two intermittent streams. The larger of the two streams is Cedar Swamp River, which is located adjacent to Freetown Street. The unnamed mapped intermittent stream exists in the southeastern portion of the site adjacent to Route 140.

Cedar Swamp River drains from a large Bordering Vegetated Wetland (BVW) adjacent to Freetown Street between properties addressed as 51 Freetown Street and 59 Freetown Street. Water flows northwest into a culvert under Freetown Street and off-site. Based on the most recent USGS map, the portion of Cedar Swamp River on-site is mapped as intermittent. Cedar Swamp River is mapped as perennial +/-1.6 miles downstream of the site.

The unnamed mapped intermittent stream drains from a BVW system adjacent to Route 140 in the Southeastern portion of the site. Water flows southeast into a culver under Route 140, off-site. Based on the most recent USGS map, the portion of the unnamed intermittent stream on-site is mapped as intermittent. This stream is never mapped perennial.

Massachusetts DEP SERO commented the following regarding the stream on-site:

“The most current USGS map (<https://apps.nationalmap.gov/viewer/>) shows a number of intermittent streams located on the subject property. Has the stream status of each of these streams been assessed per 310 CMR 10.58(2)(a)1.b. or c. to determine if they are perennial?”

310 CMR 10.58(2)(a)(1)(b) states: *“A river or stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size greater than or equal to one square mile, is perennial.”* Cedar Swamp River has a drainage area of 0.44 square miles which is less than 1 square mile (reference attached StreamStats – Cedar Swamp River). Additionally, the unnamed intermittent stream has a drainage area of 0.0762 square miles, which is less than 1 square mile (reference attached StreamStats – Unnamed Intermittent Stream).

310 CMR 10.58(2)(a)(1)(c)(i) states *“A stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size less than one square mile, is intermittent unless:*

- i. The stream has a watershed size of at least 1/2 (0.50) square mile **and** has a predicted flow rate greater than or equal to 0.01 cubic feet per second at the 99% flow duration using the USGS Stream Stats method. The issuing authority shall find such streams to be perennial;”*

Cedar Swamp River is mapped as intermittent on the USGS maps. Using the StreamStats method, Cedar Swamp River has a predicted flow rate of 0.011ft³/s at the 99% flow duration, which is greater than 0.01ft³/s. However, Cedar Swamp River has a drainage area 0.44 square miles which is less than a 1/2 (0.50) square mile. According to 310 CMR 10.58(2)(a)(1)(c)(i) a mapped intermittent stream has to have a predicted flow rate at the 99% flow duration of equal to or greater than 0.01 **and** drainage area of at least a 1/2 (0.50) square miles. This confirms Cedar Swamp Rivers intermittent status on-site (reference attached StreamStats – Cedar Swamp River). Using the StreamStats method, the unnamed intermittent stream has a predicted flow rate of 0.0004111ft³/s at the 99% flow duration and a drainage area of 0.0762 square miles. The unnamed intermittent stream does not have predicted flow rate at the 99% flow duration of equal to or greater than 0.01 or drainage area of at least a 1/2 (0.50) square miles confirming its intermittent status (reference attached StreamStats – Unnamed Intermittent Stream).



Conclusion

It is the professional opinion of Goddard Consulting that the streams mapped on-site on the most recent USGS map are intermittent based on the methods provided in 310 CMR 10.58(2)(a)1.b. or c.

Please feel free to contact us if you have any questions.

Sincerely,
Goddard Consulting, LLC

A handwritten signature in black ink, appearing to read 'Tom Schutz', is written over a light blue circular stamp.

Tom Schutz, WPIT, WSA
Wetland Scientist

Cc:

MassDEP Southeast Regional Office, Wetlands Division, 20 Riverside Drive, Lakeville, MA 02347

Simonds Hills, LLC, 32 Norfolk Avenue, South Easton, MA 02375

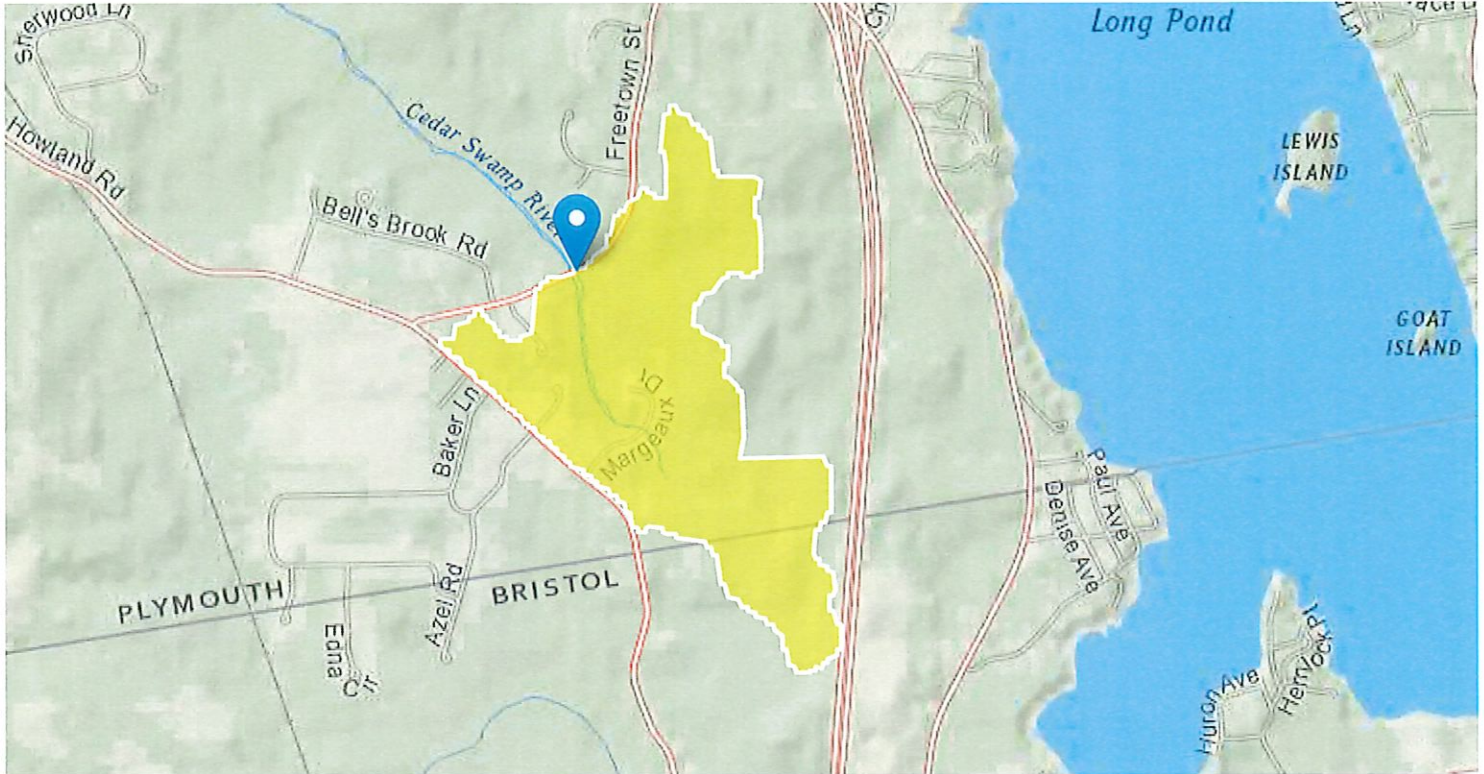
StreamStats Report - Cedar Swamp River

Region ID: MA

Workspace ID: MA20240325154501261000

Clicked Point (Latitude, Longitude): 41.79470, -70.97335

Time: 2024-03-25 11:45:22 -0400



Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLDEM10M	Mean basin slope computed from 10 m DEM	4.877	percent
BSLDEM250	Mean basin slope computed from 1:250K DEM	1.203	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.24	square mile per mile
DRNAREA	Area that drains to a point on a stream	0.44	square miles
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

➤ Bankfull Statistics

Bankfull Statistics Parameters [Bankfull Statewide SIR2013 5155]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.44	square miles	0.6	329
BSLDEM10M	Mean Basin Slope from 10m DEM	4.877	percent	2.2	23.9

Bankfull Statistics Parameters [Appalachian Highlands D Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.44	square miles	0.07722	940.1535

Bankfull Statistics Parameters [New England P Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.44	square miles	3.799224	138.999861

Bankfull Statistics Parameters [USA Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.44	square miles	0.07722	59927.7393

Bankfull Statistics Disclaimers [Bankfull Statewide SIR2013 5155]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [Bankfull Statewide SIR2013 5155]

Statistic	Value	Unit
Bankfull Width	10.2	ft
Bankfull Depth	0.713	ft
Bankfull Area	7.15	ft ²
Bankfull Streamflow	14.9	ft ³ /s

Bankfull Statistics Flow Report [Appalachian Highlands D Bieger 2015]

Statistic	Value	Unit
Bieger_D_channel_width	10.8	ft

Statistic	Value	Unit
Bieger_D_channel_depth	0.886	ft
Bieger_D_channel_cross_sectional_area	9.67	ft ²

Bankfull Statistics Disclaimers [New England P Bieger 2015]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [New England P Bieger 2015]

Statistic	Value	Unit
Bieger_P_channel_width	20.1	ft
Bieger_P_channel_depth	1.15	ft
Bieger_P_channel_cross_sectional_area	22.8	ft ²

Bankfull Statistics Flow Report [USA Bieger 2015]

Statistic	Value	Unit
Bieger_USA_channel_width	9.28	ft
Bieger_USA_channel_depth	1.01	ft
Bieger_USA_channel_cross_sectional_area	11	ft ²

Bankfull Statistics Flow Report [Area-Averaged]

Statistic	Value	Unit
Bankfull Width	10.2	ft
Bankfull Depth	0.713	ft
Bankfull Area	7.15	ft ²
Bankfull Streamflow	14.9	ft ³ /s
Bieger_D_channel_width	10.8	ft
Bieger_D_channel_depth	0.886	ft
Bieger_D_channel_cross_sectional_area	9.67	ft ²
Bieger_P_channel_width	20.1	ft
Bieger_P_channel_depth	1.15	ft
Bieger_P_channel_cross_sectional_area	22.8	ft ²
Bieger_USA_channel_width	9.28	ft
Bieger_USA_channel_depth	1.01	ft

Statistic	Value	Unit
Bieger_USA_channel_cross_sectional_area	11	ft ²

Bankfull Statistics Citations

Bent, G.C., and Waite, A.M.,2013, Equations for estimating bankfull channel geometry and discharge for streams in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2013-5155, 62 p., (<http://pubs.usgs.gov/sir/2013/5155/>)

Bieger, Katrin; Rathjens, Hendrik; Allen, Peter M.; and Arnold, Jeffrey G.,2015, Development and Evaluation of Bankfull Hydraulic Geometry Relationships for the Physiographic Regions of the United States, Publications from USDA-ARS / UNL Faculty, 17p.

([https://digitalcommons.unl.edu/usdaarsfacpub/1515?](https://digitalcommons.unl.edu/usdaarsfacpub/1515?utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign=)

[utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign=](https://digitalcommons.unl.edu/usdaarsfacpub/1515?utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign=)

➤ Flow-Duration Statistics

Flow-Duration Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.44	square miles	1.61	149
DRFTPERSTR	Stratified Drift per Stream Length	0.24	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1
BSLDEM250	Mean Basin Slope from 250K DEM	1.203	percent	0.32	24.6

Flow-Duration Statistics Disclaimers [Statewide Low Flow WRIR00 4135]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Flow-Duration Statistics Flow Report [Statewide Low Flow WRIR00 4135]

Statistic	Value	Unit
50 Percent Duration	0.413	ft ³ /s
60 Percent Duration	0.282	ft ³ /s
70 Percent Duration	0.172	ft ³ /s
75 Percent Duration	0.132	ft ³ /s
80 Percent Duration	0.104	ft ³ /s
85 Percent Duration	0.0705	ft ³ /s
90 Percent Duration	0.0504	ft ³ /s

Statistic	Value	Unit
95 Percent Duration	0.0253	ft ³ /s
98 Percent Duration	0.0163	ft ³ /s
99 Percent Duration	0.011	ft ³ /s

Flow-Duration Statistics Citations

Ries, K.G., III, 2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p.
(<http://pubs.usgs.gov/wri/wri004135/>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.19.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

StreamStats Report - Unnamed Intermittent Strea,

Region ID: MA

Workspace ID: MA20240325153846709000

Clicked Point (Latitude, Longitude): 41.79256, -70.95966

Time: 2024-03-25 11:39:09 -0400



 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLDEM10M	Mean basin slope computed from 10 m DEM	6.179	percent
BSLDEM250	Mean basin slope computed from 1:250K DEM	1.198	percent
DRFTPERSTR	Area of stratified drift per unit of stream length	0.00309	square mile per mile
DRNAREA	Area that drains to a point on a stream	0.0762	square miles
MAREGION	Region of Massachusetts 0 for Eastern 1 for Western	0	dimensionless

➤ Flow-Duration Statistics

Flow-Duration Statistics Parameters [Statewide Low Flow WRIR00 4135]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0762	square miles	1.61	149
DRFTPERSTR	Stratified Drift per Stream Length	0.00309	square mile per mile	0	1.29
MAREGION	Massachusetts Region	0	dimensionless	0	1
BSLDEM250	Mean Basin Slope from 250K DEM	1.198	percent	0.32	24.6

Flow-Duration Statistics Disclaimers [Statewide Low Flow WRIR00 4135]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Flow-Duration Statistics Flow Report [Statewide Low Flow WRIR00 4135]

Statistic	Value	Unit
50 Percent Duration	0.0691	ft ³ /s
60 Percent Duration	0.0387	ft ³ /s
70 Percent Duration	0.0172	ft ³ /s
75 Percent Duration	0.0118	ft ³ /s
80 Percent Duration	0.0071	ft ³ /s
85 Percent Duration	0.00435	ft ³ /s
90 Percent Duration	0.00234	ft ³ /s
95 Percent Duration	0.00107	ft ³ /s
98 Percent Duration	0.000656	ft ³ /s
99 Percent Duration	0.000411	ft ³ /s

Flow-Duration Statistics Citations

Ries, K.G., III, 2000, Methods for estimating low-flow statistics for Massachusetts streams: U.S. Geological Survey Water Resources Investigations Report 00-4135, 81 p. (<http://pubs.usgs.gov/wri/wri004135/>)

➤ Bankfull Statistics

Bankfull Statistics Parameters [Bankfull Statewide SIR2013 5155]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0762	square miles	0.6	329
BSLDEM10M	Mean Basin Slope from 10m DEM	6.179	percent	2.2	23.9

Bankfull Statistics Parameters [Appalachian Highlands D Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0762	square miles	0.07722	940.1535

Bankfull Statistics Parameters [New England P Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0762	square miles	3.799224	138.999861

Bankfull Statistics Parameters [USA Bieger 2015]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0762	square miles	0.07722	59927.7393

Bankfull Statistics Disclaimers [Bankfull Statewide SIR2013 5155]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [Bankfull Statewide SIR2013 5155]

Statistic	Value	Unit
Bankfull Width	5.33	ft
Bankfull Depth	0.444	ft
Bankfull Area	2.32	ft ²
Bankfull Streamflow	4.77	ft ³ /s

Bankfull Statistics Disclaimers [Appalachian Highlands D Bieger 2015]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [Appalachian Highlands D Bieger 2015]

Statistic	Value	Unit
Bieger_D_channel_width	5.22	ft
Bieger_D_channel_depth	0.535	ft
Bieger_D_channel_cross_sectional_area	2.82	ft ²

Bankfull Statistics Disclaimers [New England P Bieger 2015]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [New England P Bieger 2015]

Statistic	Value	Unit
Bieger_P_channel_width	12.3	ft
Bieger_P_channel_depth	0.781	ft
Bieger_P_channel_cross_sectional_area	9.31	ft ²

Bankfull Statistics Disclaimers [USA Bieger 2015]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Bankfull Statistics Flow Report [USA Bieger 2015]

Statistic	Value	Unit
Bieger_USA_channel_width	5	ft
Bieger_USA_channel_depth	0.697	ft
Bieger_USA_channel_cross_sectional_area	4.26	ft ²

Bankfull Statistics Flow Report [Area-Averaged]

Statistic	Value	Unit
Bankfull Width	5.33	ft
Bankfull Depth	0.444	ft
Bankfull Area	2.32	ft ²
Bankfull Streamflow	4.77	ft ³ /s
Bieger_D_channel_width	5.22	ft
Bieger_D_channel_depth	0.535	ft

Statistic	Value	Unit
Bieger_D_channel_cross_sectional_area	2.82	ft ²
Bieger_P_channel_width	12.3	ft
Bieger_P_channel_depth	0.781	ft
Bieger_P_channel_cross_sectional_area	9.31	ft ²
Bieger_USA_channel_width	5	ft
Bieger_USA_channel_depth	0.697	ft
Bieger_USA_channel_cross_sectional_area	4.26	ft ²

Bankfull Statistics Citations

Bent, G.C., and Waite, A.M.,2013, Equations for estimating bankfull channel geometry and discharge for streams in Massachusetts: U.S. Geological Survey Scientific Investigations Report 2013–5155, 62 p., (<http://pubs.usgs.gov/sir/2013/5155/>)

Bieger, Katrin; Rathjens, Hendrik; Allen, Peter M.; and Arnold, Jeffrey G.,2015, Development and Evaluation of Bankfull Hydraulic Geometry Relationships for the Physiographic Regions of the United States, Publications from USDA-ARS / UNL Faculty, 17p.

([https://digitalcommons.unl.edu/usdaarsfacpub/1515?](https://digitalcommons.unl.edu/usdaarsfacpub/1515?utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign=)

utm_source=digitalcommons.unl.edu%2Fusdaarsfacpub%2F1515&utm_medium=PDF&utm_campaign="

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Application Version: 4.19.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1



Natural Heritage & Endangered Species Program Massachusetts Division of Fisheries and Wildlife Vernal Pool Field Observation Form

(7199)

(For use with *Guidelines for Certification of Vernal Pool Habitat*)

CVP2684

For office use only.

1. Pool location

Town Lakeville County Plymouth

USGS Quadrangle name Assawampsett Pond SERIES 7.5' X 7.5'
 SERIES 7.5' X 15'

WRITTEN DIRECTIONS TO POOL: Frederick Street, east along dirt road 600m to cell phone tower, south 100m to intermittent stream, follow upstream (west & then south) ~100 meters to pocket area in swamp.

THIS INFORMATION MUST BE SUBMITTED

UP#1

(USE ADDITIONAL PAGES, IF NECESSARY.)

Instructions

FOR COMPLETE INFORMATION ABOUT CERTIFICATION, REFER TO *GUIDELINES FOR CERTIFICATION OF VERNAL POOL HABITAT*.

PROVIDE ALL OF THE INFORMATION REQUESTED IN BOXES 1-6. IF MORE SPACE IS REQUIRED, ATTACH ADDITIONAL PAGES. INCLUDE ALL REQUIRED PHOTOGRAPHS AND DOCUMENTATION. SIGN THE FORM IN THE AREA PROVIDED ON THE REVERSE SIDE. INCOMPLETE OR UNSIGNED SUBMISSIONS WILL BE RETURNED.

THE FOLLOWING INSTRUCTIONS REFER TO EACH OF THE NUMBERED BOXES.

1. THE 7.5 X 7.5 SERIES HAS THE LEGEND "7.5 MINUTE SERIES" IN THE UPPER RIGHT HAND CORNER ALONG WITH THE QUADRANGLE NAME. THE 7.5 X 15 MINUTE SERIES IS SO LABELED IN THE UPPER RIGHT HAND CORNER AND HAS THE QUADRANGLE NAME IN THE LOWER RIGHT CORNER.

WRITTEN DIRECTIONS MUST BE INCLUDED.

2 INDICATE THE FIRST AND LAST DATES THAT THE POOL OR ITS BIOLOGICAL COMPONENTS WERE OBSERVED.

3. PART A AND B ARE FOR CERTIFICATION BY OBLIGATE SPECIES. PART C IS EITHER FOR ADDITIONAL INFORMATION (APPRECIATED) OR FOR CERTIFICATION BY THE FACULTATIVE SPECIES. IF CERTIFYING BY OBLIGATE SPECIES, PROVIDE A PHOTOGRAPH OF THE POOL HOLDING WATER AND AT LEAST ONE PHOTOGRAPH (OR AUDIO TAPE FOR CHORUSING) OF BREEDING ACTIVITY.

FOR CERTIFICATION BY FACULTATIVE SPECIES, PROVIDE PHOTOGRAPHS OF THE POOL HOLDING WATER AND PHOTOGRAPHS (OR TAPES) OF THE FACULTATIVE SPECIES AS REQUIRED. ADDITIONALLY, PROVIDE A PHOTOGRAPH OF THE POOL WHEN DRY OR OTHERWISE PROVE THAT IT HAS NO FISH.

2. Observation dates

First date pool/species observed 5/8/01

Last date pool observed 5/8/01 Last date species observed 5/8/01

3 A. Evidence: obligate amphibians Indicate date of observation.

* = RARE SPECIES	COURTING ADULTS	SPERMATOPHORES	EGG MASSES	SALAMANDER LARVAE	TRANSFORMING JUVENILES
SPOTTED SALAMANDER			5/8/01		
* BLUE-SPOTTED SALAMANDER					
* JEFFERSON SALAMANDER					
* MARBLED SALAMANDER					
UNIDENTIFIED MOLE SALAMANDER					
	BREEDING CHORUS	MATED PAIRS	EGG MASSES	FROG TADPOLES	TRANSFORMING JUVENILES
WOOD FROG					
* SPADEFOOT TOAD					

3 B. Evidence: fairy shrimp

DATE OBSERVED _____

3 C. Evidence: facultative organisms Indicate date of observation.

* = RARE SPECIES	DATE OBSERVED	ACTIVITY OBSERVED	DATE OBSERVED	ACTIVITY OBSERVED
BREEDING SPRING PEEPERS			PAINTED TURTLES	
BREEDING GRAY TREEFROGS			SNAPPING TURTLES	
BREEDING GREEN FROGS			PREDACEOUS DIVING BEETLE LARVAE	
BREEDING LEOPARD FROGS			WATER SCORPIONS	
BREEDING PICKERAL FROGS			DRAGONFLY NYMPHS	
BREEDING AMERICAN TOADS			DAMSELFLY NYMPHS	
BREEDING FOWLER'S TOADS			DOBSONFLY LARVAE	
* BREEDING FOUR-TOED SALAMANDERS			WHIRLIGIG BEETLE LARVAE	
RED-SPOTTED NEWT (ADULTS)			CADDISFLY LARVAE	
* SPOTTED TURTLES			LEECHES	
* WOOD TURTLES			FINGERNAIL (FRESHWATER) CLAMS	
* BLANDINGS TURTLES			AMPHIBIOUS AIR-BREATHING SNAILS	

Instructions (continued)

4. INDICATE THE PHOTOGRAPHS BEING SUBMITTED. LABEL, DATE, AND SIGN ALL PHOTOS.
 5. MARK THE POOL CLEARLY ON ALL MAPS. THE POOL MUST BE CLEARLY DISTINGUISHED FROM OTHER WETLANDS AND BE RELOCATEABLE BY OTHERS. PROVIDE ANY MAPS THAT WOULD HELP SOMEONE UNFAMILIAR WITH THE AREA LOCATE THE VERNAL POOL IN THE FIELD.

6. THE FORM MUST BE SIGNED. UNSIGNED SUBMISSIONS WILL BE RETURNED WITHOUT FURTHER ACTION.

OPTIONAL INFORMATION:

PROPERTY OWNER. PROVIDE INFORMATION ABOUT PROPERTY OWNER(S), IF KNOWN. IT IS RECOMMENDED THAT YOU SEEK PROPERTY OWNER PERMISSION PRIOR TO CERTIFICATION ACTIVITIES.

RARE SPECIES. A PHOTOGRAPH IS NECESSARY FOR DOCUMENTATION OF RARE SPECIES HABITAT.

DESCRIPTION. PROVIDE ANY INFORMATION THAT WILL DISTINGUISH THE POOL FROM OTHER WETLANDS (BOULDERS, DEBRIS, TREE SPECIES, ETC.).

Optional information

Although the following information is not required for certification, it is useful to NHESP to possibly better protect the vernal pool, its habitat and species.

Property owner

IT IS STRONGLY RECOMMENDED THAT LANDOWNER PERMISSION BE OBTAINED PRIOR TO COLLECTING CERTIFICATION DOCUMENTATION.

Name _____

Address _____

Town _____ State _____ ZIP _____

Rare wetland species

WERE ANY RARE STATE-LISTED SPECIES OBSERVED USING THIS POOL?

IS A PHOTOGRAPH OF THE RARE SPECIES INCLUDED WITH THIS FILING?

Description of pool and surroundings

DIMENSIONS: APPROXIMATE LENGTH 15m APPROXIMATE WIDTH 16m

APPROXIMATE DEPTH 0.25m

DESCRIBE DISTINCTIVE FEATURES (ROADS, STRUCTURES, BOULDERS, ETC.) WHICH ARE VISIBLE FROM OR NEAR THE POOL.

Associated with a larger Red Maple Swamp E. intermittent stream complex. Forested canopy 90% and continuous Sphagnum layer.

ARE THERE OTHER DISTINCTIVE FEATURES ABOUT THIS POOL (VEGETATION TYPES, ABANDONED VEHICLES, FOOT TRAILS, ETC.) THAT WOULD HELP SOMEONE RECOGNIZE IT?

Located in between rock outcrops (relief features not adequately shown on topo map).

4. Photographs

MUST BE LABELED, DATED, AND SIGNED.

- POOL HOLDING WATER
- OBLIGATE +/-OR FACULTATIVE SPECIES
- DRY POOL (REQUIRED FOR EVIDENCE 3C)

5. Maps submitted

USGS TOPOGRAPHIC MAP (REQUIRED) AND ONE OR MORE OF THE FOLLOWING:

- AERIAL PHOTOGRAPH
- DISTANCES/COMPASS DIRECTIONS
- PROFESSIONAL SURVEY
- LARGE SCALE TOPO
- OTHER _____

OPTIONAL EXTRA INFORMATION

- SKETCH MAP OF AREA
- ASSESSOR'S MAP
- GPS LONGITUDE/LATITUDE COORDINATES
 NAL 71704 W70.96240

6. Observer information & signature

Name Brian Reed

Address Po Box 1221

Town Amherst State MA ZIP 02362

Telephone [REDACTED]

e-mail _____

I hereby certify under the pains and penalties of perjury that the information contained in this report is true and complete to the best of my knowledge.

Signature [Signature] Date 7/1/01

SEND COMPLETED FORM AND SUPPORTING DOCUMENTATION TO:

NH&ESP
 VERNAL POOL CERTIFICATION
 MA DIVISION OF FISHERIES & WILDLIFE
 ROUTE 135
 WESTBOROUGH, MA 01581

All submissions and supporting documents will be retained by the Natural Heritage & Endangered Species Program. Information submitted on this form and other documents is part of the public record and is available to interested parties under the State Documents Request Law.



rotted Salamander egg masses

Rocky Woods VP#1 - Leleville

8/01

B. Reid

Brian Reid

Normal Pool #1

Leleville - Rocky Woods

1/8/01

B. Reid

Brian Reid



Natural Heritage & Endangered Species Program Massachusetts Division of Fisheries and Wildlife Vernal Pool Field Observation Form

(7/99)

(For use with *Guidelines for Certification of Vernal Pool Habitat*)

CVP20085

For office use only.

1. Pool location

Town Lakeville County Plymouth

USGS Quadrangle name Assawampsett Pond SERIES 7.5' X 7.5'
 SERIES 7.5' X 15'

WRITTEN DIRECTIONS TO POOL: Pool is located south of cart path
running 800 m east of Freeman Street (as shown on
topo map)

THIS INFORMATION
MUST BE SUBMITTED

VP# 2

(USE ADDITIONAL PAGES, IF NECESSARY.)

Instructions

FOR COMPLETE INFORMATION ABOUT CERTIFICATION, REFER TO *GUIDELINES FOR CERTIFICATION OF VERNAL POOL HABITAT*.

PROVIDE ALL OF THE INFORMATION REQUESTED IN BOXES 1-6. IF MORE SPACE IS REQUIRED, ATTACH ADDITIONAL PAGES. INCLUDE ALL REQUIRED PHOTOGRAPHS AND DOCUMENTATION. SIGN THE FORM IN THE AREA PROVIDED ON THE REVERSE SIDE. INCOMPLETE OR UNSIGNED SUBMISSIONS WILL BE RETURNED.

THE FOLLOWING INSTRUCTIONS REFER TO EACH OF THE NUMBERED BOXES.

1. THE 7.5 X 7.5 SERIES HAS THE LEGEND "7.5 MINUTE SERIES" IN THE UPPER RIGHT HAND CORNER ALONG WITH THE QUADRANGLE NAME. THE 7.5 X 15 MINUTE SERIES IS SO LABELED IN THE UPPER RIGHT HAND CORNER AND HAS THE QUADRANGLE NAME IN THE LOWER RIGHT CORNER.

WRITTEN DIRECTIONS MUST BE INCLUDED.

2 INDICATE THE FIRST AND LAST DATES THAT THE POOL OR ITS BIOLOGICAL COMPONENTS WERE OBSERVED.

3. PART A AND B ARE FOR CERTIFICATION BY OBLIGATE SPECIES. PART C IS EITHER FOR ADDITIONAL INFORMATION (APPRECIATED) OR FOR CERTIFICATION BY THE FACULTATIVE SPECIES. IF CERTIFYING BY OBLIGATE SPECIES, PROVIDE A PHOTOGRAPH OF THE POOL HOLDING WATER AND AT LEAST ONE PHOTOGRAPH (OR AUDIO TAPE FOR CHORUSING) OF BREEDING ACTIVITY.

FOR CERTIFICATION BY FACULTATIVE SPECIES, PROVIDE PHOTOGRAPHS OF THE POOL HOLDING WATER AND PHOTOGRAPHS (OR TAPES) OF THE FACULTATIVE SPECIES AS REQUIRED. ADDITIONALLY, PROVIDE A PHOTOGRAPH OF THE POOL WHEN DRY OR OTHERWISE PROVE THAT IT HAS NO FISH.

2. Observation dates

First date pool/species observed 5/8/01

Last date pool observed 5/8/01 Last date species observed 5/8/01

3 A. Evidence: obligate amphibians Indicate date of observation.

* = RARE SPECIES	COURTING ADULTS	SPERMATOPHORES	EGG MASSES	SALAMANDER LARVAE	TRANSFORMING JUVENILES
SPOTTED SALAMANDER			<u>5/8/01</u>		
* BLUE-SPOTTED SALAMANDER					
* JEFFERSON SALAMANDER					
* MARBLED SALAMANDER					
UNIDENTIFIED MOLE SALAMANDER					
	BREEDING CHORUS	MATED PAIRS	EGG MASSES	FROG TADPOLES	TRANSFORMING JUVENILES
WOOD FROG					
* SPADEFOOT TOAD					

3 B. Evidence: fairy shrimp

DATE OBSERVED _____

3 C. Evidence: facultative organisms Indicate date of observation.

* = RARE SPECIES	DATE OBSERVED	ACTIVITY OBSERVED		DATE OBSERVED	ACTIVITY OBSERVED
BREEDING SPRING PEEPERS			PAINTED TURTLES		
BREEDING GRAY TREEFROGS			SNAPPING TURTLES		
BREEDING GREEN FROGS			PREDACEOUS DIVING BEETLE LARVAE		
BREEDING LEOPARD FROGS			WATER SCORPIONS		
BREEDING PICKERAL FROGS			DRAGONFLY NYMPHS		
BREEDING AMERICAN TOADS			DAMSELFLY NYMPHS		
BREEDING FOWLER'S TOADS			DOBSONFLY LARVAE		
* BREEDING FOUR-TOED SALAMANDERS			WHIRLIGIG BEETLE LARVAE		
RED-SPOTTED NEWT (ADULTS)			CADDISFLY LARVAE		
* SPOTTED TURTLES			LEECHES		
* WOOD TURTLES			FINGERNAIL (FRESHWATER) CLAMS		
* BLANDINGS TURTLES			AMPHIBIOUS AIR-BREATHING SNAILS		

Instructions (continued)

- 4. INDICATE THE PHOTOGRAPHS BEING SUBMITTED. LABEL, DATE, AND SIGN ALL PHOTOS.
- 5. MARK THE POOL CLEARLY ON ALL MAPS. THE POOL MUST BE CLEARLY DISTINGUISHED FROM OTHER WETLANDS AND BE RELOCATEABLE BY OTHERS. PROVIDE ANY MAPS THAT WOULD HELP SOMEONE UNFAMILIAR WITH THE AREA LOCATE THE VERNAL POOL IN THE FIELD.
- 6. THE FORM MUST BE SIGNED. UNSIGNED SUBMISSIONS WILL BE RETURNED WITHOUT FURTHER ACTION.

OPTIONAL INFORMATION:

PROPERTY OWNER. PROVIDE INFORMATION ABOUT PROPERTY OWNER(S), IF KNOWN. IT IS RECOMMENDED THAT YOU SEEK PROPERTY OWNER PERMISSION PRIOR TO CERTIFICATION ACTIVITIES.
RARE SPECIES. A PHOTOGRAPH IS NECESSARY FOR DOCUMENTATION OF RARE SPECIES HABITAT.
DESCRIPTION. PROVIDE ANY INFORMATION THAT WILL DISTINGUISH THE POOL FROM OTHER WETLANDS (BOULDERS, DEBRIS, TREE SPECIES, ETC.).

Optional information

Although the following information is not required for certification, it is useful to NHESP to possibly better protect the vernal pool, its habitat and species.

Property owner

IT IS STRONGLY RECOMMENDED THAT LANDOWNER PERMISSION BE OBTAINED PRIOR TO COLLECTING CERTIFICATION DOCUMENTATION.

Name _____
 Address _____

 Town _____ State _____ ZIP _____

Rare wetland species

- WERE ANY RARE STATE-LISTED SPECIES OBSERVED USING THIS POOL?
- IS A PHOTOGRAPH OF THE RARE SPECIES INCLUDED WITH THIS FILING?

Description of pool and surroundings

DIMENSIONS: APPROXIMATE LENGTH 40m APPROXIMATE WIDTH 12m
 APPROXIMATE DEPTH 0.3m

DESCRIBE DISTINCTIVE FEATURES (ROADS, STRUCTURES, BOULDERS, ETC.) WHICH ARE VISIBLE FROM OR NEAR THE POOL.
Deeper, open canopy (60%) w/ shrub border, visible from cart path.

ARE THERE OTHER DISTINCTIVE FEATURES ABOUT THIS POOL (VEGETATION TYPES, ABANDONED VEHICLES, FOOT TRAILS, ETC.) THAT WOULD HELP SOMEONE RECOGNIZE IT?
Logging slash within pool along northwest side.

4. Photographs

MUST BE LABELED, DATED, AND SIGNED.

- POOL HOLDING WATER
- OBLIGATE +/-OR FACULTATIVE SPECIES
- DRY POOL (REQUIRED FOR EVIDENCE 3C)

5. Maps submitted

- USGS TOPOGRAPHIC MAP (REQUIRED) AND ONE OR MORE OF THE FOLLOWING:
 - AERIAL PHOTOGRAPH
 - DISTANCES/COMPASS DIRECTIONS
 - PROFESSIONAL SURVEY
 - LARGE SCALE TOPO
 - OTHER _____
- OPTIONAL EXTRA INFORMATION**
 - SKETCH MAP OF AREA
 - ASSESSOR'S MAP
 - GPS LONGITUDE/LATITUDE COORDINATES
N41.79485 W70.96342

6. Observer information & signature

Name Bruno Lord
 Address PO Box 1221

 Town Plymouth State MA ZIP 02362
 Telephone [REDACTED]
 e-mail _____

I hereby certify under the pains and penalties of perjury that the information contained in this report is true and complete to the best of my knowledge.

Signature [Signature] Date 7/01/01

SEND COMPLETED FORM AND SUPPORTING DOCUMENTATION TO:

NH&ESP
 VERNAL POOL CERTIFICATION
 MA DIVISION OF FISHERIES & WILDLIFE
 ROUTE 135
 WESTBOROUGH, MA 01581

All submissions and supporting documents will be retained by the Natural Heritage & Endangered Species Program. Information submitted on this form and other documents is part of the public record and is available to interested parties under the State Documents Request Law.



small bel #2

oak Woods - Lakeville

1/8/01

[Signature]

man Reed

Red Salamander Egg Mass

oak Woods #2 - Lakeville

3/01

[Signature]

man Reed



Spotted Salamander - Egg mass

Rocky Woods SP#2 - Lakeville

5/8/01

M. J. J.

Branford



Natural Heritage & Endangered Species Program Massachusetts Division of Fisheries and Wildlife Vernal Pool Field Observation Form

(7/99)

(For use with *Guidelines for Certification of Vernal Pool Habitat*)

CVP2686

For office use only.

1. Pool location

Town Lakeville County Plymouth

USGS Quadrangle name Assawampsett Pond SERIES 7.5' X 7.5'
 SERIES 7.5' X 15'

WRITTEN DIRECTIONS TO POOL: 250m south of UPH2 (damslope for first 150m then following intermittent stream between rock outcrops to pool)

THIS INFORMATION MUST BE SUBMITTED

VP #3

(USE ADDITIONAL PAGES, IF NECESSARY.)

Instructions

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PROVIDE ALL OF THE INFORMATION REQUESTED IN BOXES 1-6. IF MORE SPACE IS REQUIRED, ATTACH ADDITIONAL PAGES. INCLUDE ALL REQUIRED PHOTOGRAPHS AND DOCUMENTATION. SIGN THE FORM IN THE AREA PROVIDED ON THE REVERSE SIDE. INCOMPLETE OR UNSIGNED SUBMISSIONS WILL BE RETURNED.

THE FOLLOWING INSTRUCTIONS REFER TO EACH OF THE NUMBERED BOXES.

1. THE 7.5 X 7.5 SERIES HAS THE LEGEND "7.5 MINUTE SERIES" IN THE UPPER RIGHT HAND CORNER ALONG WITH THE QUADRANGLE NAME. THE 7.5 X 15 MINUTE SERIES IS SO LABELED IN THE UPPER RIGHT HAND CORNER AND HAS THE QUADRANGLE NAME IN THE LOWER RIGHT CORNER.

WRITTEN DIRECTIONS MUST BE INCLUDED.

2 INDICATE THE FIRST AND LAST DATES THAT THE POOL OR ITS BIOLOGICAL COMPONENTS WERE OBSERVED.

3. PART A AND B ARE FOR CERTIFICATION BY OBLIGATE SPECIES. PART C IS EITHER FOR ADDITIONAL INFORMATION (APPRECIATED) OR FOR CERTIFICATION BY THE FACULTATIVE SPECIES. IF CERTIFYING BY OBLIGATE SPECIES, PROVIDE A PHOTOGRAPH OF THE POOL HOLDING WATER AND AT LEAST ONE PHOTOGRAPH (OR AUDIO TAPE FOR CHORUSING) OF BREEDING ACTIVITY.

FOR CERTIFICATION BY FACULTATIVE SPECIES, PROVIDE PHOTOGRAPHS OF THE POOL HOLDING WATER AND PHOTOGRAPHS (OR TAPES) OF THE FACULTATIVE SPECIES AS REQUIRED. ADDITIONALLY, PROVIDE A PHOTOGRAPH OF THE POOL WHEN DRY OR OTHERWISE PROVE THAT IT HAS NO FISH.

2. Observation dates

First date pool/species observed 5/8/01

Last date pool observed 5/8/01 Last date species observed 5/8/01

3 A. Evidence: obligate amphibians Indicate date of observation.

* = RARE SPECIES	COURTING ADULTS	SPERMATOPHORES	EGG MASSES	SALAMANDER LARVAE	TRANSFORMING JUVENILES
SPOTTED SALAMANDER					
* BLUE-SPOTTED SALAMANDER					
* JEFFERSON SALAMANDER					
* MARBLED SALAMANDER					
UNIDENTIFIED MOLE SALAMANDER					
	BREEDING CHORUS	MATED PAIRS	EGG MASSES	FROG TADPOLES	TRANSFORMING JUVENILES
WOOD FROG			<u>5/8/01</u>		
* SPADEFOOT TOAD					

3 B. Evidence: fairy shrimp

DATE OBSERVED _____

3 C. Evidence: facultative organisms Indicate date of observation.

* = RARE SPECIES	DATE OBSERVED	ACTIVITY OBSERVED		DATE OBSERVED	ACTIVITY OBSERVED
BREEDING SPRING PEEPERS				PAINTED TURTLES	
BREEDING GRAY TREEFROGS				SNAPPING TURTLES	
BREEDING GREEN FROGS				PREDACEOUS DIVING BEETLE LARVAE	
BREEDING LEOPARD FROGS				WATER SCORPIONS	
BREEDING PICKERAL FROGS				DRAGONFLY NYMPHS	
BREEDING AMERICAN TOADS				DAMSELFLY NYMPHS	
BREEDING FOWLER'S TOADS				DOBSONFLY LARVAE	
* BREEDING FOUR-TOED SALAMANDERS				WHIRLIGIG BEETLE LARVAE	
RED-SPOTTED NEWT (ADULTS)				CADDISFLY LARVAE	
* SPOTTED TURTLES				LEECHES	
* WOOD TURTLES				FINGERNAIL (FRESHWATER) CLAMS	
* BLANDINGS TURTLES				AMPHIBIOUS AIR-BREATHING SNAILS	

Instructions (continued)

4. INDICATE THE PHOTOGRAPHS BEING SUBMITTED. LABEL, DATE, AND SIGN ALL PHOTOS.
5. MARK THE POOL CLEARLY ON ALL MAPS. THE POOL MUST BE CLEARLY DISTINGUISHED FROM OTHER WETLANDS AND BE RELOCATEABLE BY OTHERS. PROVIDE ANY MAPS THAT WOULD HELP SOMEONE UNFAMILIAR WITH THE AREA LOCATE THE VERNAL POOL IN THE FIELD.
6. THE FORM MUST BE SIGNED. UNSIGNED SUBMISSIONS WILL BE RETURNED WITHOUT FURTHER ACTION.

OPTIONAL INFORMATION:

PROPERTY OWNER. PROVIDE INFORMATION ABOUT PROPERTY OWNER(S), IF KNOWN. IT IS RECOMMENDED THAT YOU SEEK PROPERTY OWNER PERMISSION PRIOR TO CERTIFICATION ACTIVITIES.
RARE SPECIES. A PHOTOGRAPH IS NECESSARY FOR DOCUMENTATION OF RARE SPECIES HABITAT. DESCRIPTION. PROVIDE ANY INFORMATION THAT WILL DISTINGUISH THE POOL FROM OTHER WETLANDS (BOULDERS, DEBRIS, TREE SPECIES, ETC.).

Optional information

Although the following information is not required for certification, it is useful to NHESP to possibly better protect the vernal pool, its habitat and species.

Property owner

IT IS STRONGLY RECOMMENDED THAT LANDOWNER PERMISSION BE OBTAINED PRIOR TO COLLECTING CERTIFICATION DOCUMENTATION.

Name _____

Address _____

Town _____ State _____ ZIP _____

Rare wetland species WERE ANY RARE STATE-LISTED SPECIES OBSERVED USING THIS POOL?

IS A PHOTOGRAPH OF THE RARE SPECIES INCLUDED WITH THIS FILING?

Description of pool and surroundings

DIMENSIONS: APPROXIMATE LENGTH 15m APPROXIMATE WIDTH 25m

APPROXIMATE DEPTH 1m

DESCRIBE DISTINCTIVE FEATURES (ROADS, STRUCTURES, BOULDERS, ETC.) WHICH ARE VISIBLE FROM OR NEAR THE POOL.

Deep pool, partly open canopy
E. dense shrub border

ARE THERE OTHER DISTINCTIVE FEATURES ABOUT THIS POOL (VEGETATION TYPES, ABANDONED VEHICLES, FOOT TRAILS, ETC.) THAT WOULD HELP SOMEONE RECOGNIZE IT?

4. Photographs

MUST BE LABELED, DATED, AND SIGNED.

- POOL HOLDING WATER
 OBLIGATE +/-OR FACULTATIVE SPECIES
 DRY POOL (REQUIRED FOR EVIDENCE 3C)

5. Maps submitted

USGS TOPOGRAPHIC MAP (REQUIRED)

AND ONE OR MORE OF THE FOLLOWING:

- AERIAL PHOTOGRAPH
 DISTANCES/COMPASS DIRECTIONS
 PROFESSIONAL SURVEY
 LARGE SCALE TOPO
 OTHER _____

OPTIONAL EXTRA INFORMATION

- SKETCH MAP OF AREA
 ASSESSOR'S MAP
 GPS LONGITUDE/LATITUDE COORDINATES
N41.79221 W70.96199

6. Observer information & signature

Name Brian Bird

Address Po Box 1221

Town Plymouth State MA ZIP 02362

Telephone [REDACTED]

e-mail _____

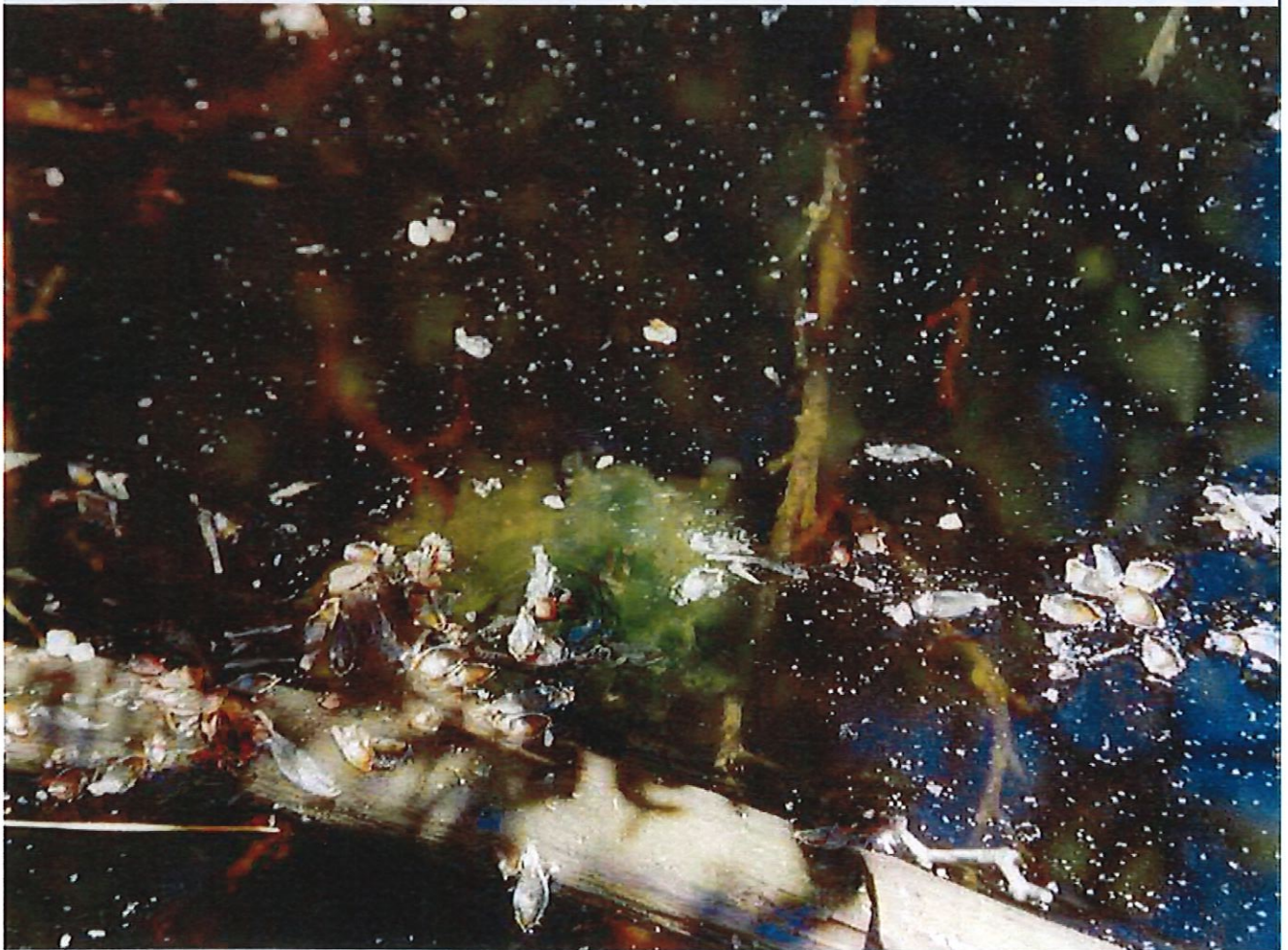
I hereby certify under the pains and penalties of perjury that the information contained in this report is true and complete to the best of my knowledge.

Signature [Signature] Date 7/1/01

SEND COMPLETED FORM AND SUPPORTING DOCUMENTATION TO:

NH&ESP
VERNAL POOL CERTIFICATION
MA DIVISION OF FISHERIES & WILDLIFE
ROUTE 135
WESTBOROUGH, MA 01581

All submissions and supporting documents will be retained by the Natural Heritage & Endangered Species Program. Information submitted on this form and other documents is part of the public record and is available to interested parties under the State Documents Request Law.



Small Pool #3

oak woods - Lakeville

1/8/01

W. C. C.

Brown Reed

Small Frog Egg Mass

oak woods UP#3 - Lakeville

1/8/01

W. C. C.

on level



Wood Frog egg mass

Rocky Woods VP#3-Lakeville

5/8/01

Neil

Brian Reid

Wood Frog Egg Mass

Rocky Woods VP#3-Lakeville

5/8/01

Neil

Brian Reid



Natural Heritage & Endangered Species Program Massachusetts Division of Fisheries and Wildlife Vernal Pool Field Observation Form

(7/99)

(For use with *Guidelines for Certification of Vernal Pool Habitat*)

PVP
CVP2687
For office use only.

1. Pool location

Town Lakeville County Plymouth

USGS Quadrangle name Assawampsett SERIES 7.5' X 7.5'
 SERIES 7.5' X 15'

WRITTEN DIRECTIONS TO POOL: On edge of swamp associated with Cedar Swamp River, 50m SE of Freeman Street

THIS INFORMATION MUST BE SUBMITTED

VP#4

(USE ADDITIONAL PAGES, IF NECESSARY.)

Instructions

FOR COMPLETE INFORMATION ABOUT CERTIFICATION, REFER TO *GUIDELINES FOR CERTIFICATION OF VERNAL POOL HABITAT*.

PROVIDE ALL OF THE INFORMATION REQUESTED IN BOXES 1-6. IF MORE SPACE IS REQUIRED, ATTACH ADDITIONAL PAGES. INCLUDE ALL REQUIRED PHOTOGRAPHS AND DOCUMENTATION. SIGN THE FORM IN THE AREA PROVIDED ON THE REVERSE SIDE. INCOMPLETE OR UNSIGNED SUBMISSIONS WILL BE RETURNED.

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WRITTEN DIRECTIONS MUST BE INCLUDED.

2. INDICATE THE FIRST AND LAST DATES THAT THE POOL OR ITS BIOLOGICAL COMPONENTS WERE OBSERVED.

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2. Observation dates

First date pool/species observed 5/8/01

Last date pool observed 5/8/01 Last date species observed 5/8/01

3 A. Evidence: obligate amphibians Indicate date of observation.

* = RARE SPECIES	COURTING ADULTS	SPERMATOPHYTES	EGG MASSES (2+)	SALAMANDER LARVAE	TRANSFORMING JUVENILES
SPOTTED SALAMANDER			<u>5/8/01</u>		
* BLUE-SPOTTED SALAMANDER					
* JEFFERSON SALAMANDER					
* MARBLED SALAMANDER					
UNIDENTIFIED MOLE SALAMANDER					
	BREEDING CHORUS	MATED PAIRS	EGG MASSES (2+)	FROG TADPOLES	TRANSFORMING JUVENILES
WOOD FROG					
* SPADEFOOT TOAD					

3 B. Evidence: fairy shrimp

DATE OBSERVED _____

3 C. Evidence: facultative organisms Two or more must be documented. Indicate date of observation.

* = RARE SPECIES	DATE OBSERVED	ACTIVITY OBSERVED
BREEDING SPRING PEEPERS		
BREEDING GRAY TREEFROGS		
BREEDING GREEN FROGS		
BREEDING LEOPARD FROGS		
BREEDING PICKEREL FROGS		
BREEDING AMERICAN TOADS		
BREEDING FOWLER'S TOADS		
* BREEDING FOUR-TOED SALAMANDERS		
RED-SPOTTED NEWT (ADULTS)		
* SPOTTED TURTLES		
* WOOD TURTLES		
* BLANDINGS TURTLES		

	DATE OBSERVED	ACTIVITY OBSERVED
PAINTED TURTLES		
SNAPPING TURTLES		
PREDACEOUS DIVING BEETLE LARVAE		
WATER SCORPIONS		
DRAGONFLY NYMPHS		
DAMSELFLY NYMPHS		
DOBSONFLY LARVAE		
WHIRLIGIG BEETLE LARVAE		
CADDISFLY LARVAE		
LEECHES		
FINGERNAIL (FRESHWATER) CLAMS		
AMPHIBIOUS AIR-BREATHING SNAILS		

Instructions (continued)

4. INDICATE THE PHOTOGRAPHS BEING SUBMITTED. LABEL, DATE, AND SIGN ALL PHOTOS.
5. MARK THE POOL CLEARLY ON ALL MAPS. THE POOL MUST BE CLEARLY DISTINGUISHED FROM OTHER WETLANDS AND BE LOCATABLE BY OTHERS. PROVIDE ANY MAPS THAT WOULD HELP SOMEONE UNFAMILIAR WITH THE AREA LOCATE THE VERNAL POOL IN THE FIELD.
6. THE FORM MUST BE SIGNED. UNSIGNED SUBMISSIONS WILL BE RETURNED WITHOUT FURTHER ACTION.

OPTIONAL INFORMATION:

PROPERTY OWNER. PROVIDE INFORMATION ABOUT PROPERTY OWNER(S), IF KNOWN. IT IS RECOMMENDED THAT YOU SEEK PROPERTY OWNER PERMISSION PRIOR TO CERTIFICATION ACTIVITIES.

RARE SPECIES. A PHOTOGRAPH IS NECESSARY FOR DOCUMENTATION OF RARE SPECIES HABITAT.

DESCRIPTION. PROVIDE ANY INFORMATION THAT WILL DISTINGUISH THE POOL FROM OTHER WETLANDS (BOULDERS, DEBRIS, TREE SPECIES, ETC.).

Optional information

Although the following information is not required for certification, it is useful to NHESP to possibly better protect the vernal pool, its habitat and species.

Property owner

IT IS STRONGLY RECOMMENDED THAT LANDOWNER PERMISSION BE OBTAINED PRIOR TO COLLECTING CERTIFICATION DOCUMENTATION.

Name _____

Address _____

Town _____

State _____

ZIP _____

Rare wetland species



WERE ANY RARE STATE-LISTED SPECIES OBSERVED USING THIS POOL?



IS A PHOTOGRAPH OF THE RARE SPECIES INCLUDED WITH THIS FILING?

Description of pool and surroundings

DIMENSIONS: APPROXIMATE LENGTH 10m APPROXIMATE WIDTH 5m

APPROXIMATE DEPTH 0.1m

DESCRIBE DISTINCTIVE FEATURES (ROADS, STRUCTURES, BOULDERS, ETC.) WHICH ARE VISIBLE FROM OR NEAR THE POOL.

Pooled area at base of slope in seepage swamp, frequent pooled areas nearby. Open canopy & dense shrub layer, rich herbaceous understory.

ARE THERE OTHER DISTINCTIVE FEATURES ABOUT THIS POOL (VEGETATION TYPES, ABANDONED VEHICLES, FOOT TRAILS, ETC.) THAT WOULD HELP SOMEONE RECOGNIZE IT?

50m SE of Freeman Street.

4. Photographs

MUST BE LABELED, DATED, AND SIGNED.



POOL HOLDING WATER



OBLIGATE +/- OR FACULTATIVE SPECIES



DRY POOL (REQUIRED FOR EVIDENCE 3C)

5. Maps submitted



USGS TOPOGRAPHIC MAP (REQUIRED)

AND ONE OR MORE OF THE FOLLOWING:



AERIAL PHOTOGRAPH



SKETCH MAP WITH COMPASS DIRECTIONS AND DISTANCES FROM LAND MARKS



PROFESSIONAL SURVEY



LARGE SCALE TOPO

OPTIONAL EXTRA INFORMATION



SKETCH MAP OF AREA



ASSESSOR'S MAP



GPS LONGITUDE/LATITUDE COORDINATES

N41.7922A W70.96149

6. Observer information & signature

Name

Brian Reid

Address

P.O. Box 1221

Town

Plymouth

State

MA

ZIP

02362

Telephone

e-mail

SEND COMPLETED FORM AND SUPPORTING DOCUMENTATION TO:

NH&ESP
VERNAL POOL CERTIFICATION
MA DIVISION OF FISHERIES & WILDLIFE
ROUTE 135
WESTBOROUGH, MA 01581

All submissions and supporting documents will be retained by the Natural Heritage & Endangered Species Program. Information submitted on this form and other documents is part of the public record and is available to interested parties under the State Documents Request Law.

I hereby certify under the pains and penalties of perjury that the information contained in this report is true and complete to the best of my knowledge.

Signature

Brian Reid

Date

7/1/01



UP #4

Roxy Woods - Lakeville

5/3/01

M. W.

Branford

Spotted Salamander Egg Masses

Roxy Woods UP #4 - Lakeville

7/8/01

M. W.

Branford



Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

VERNAL POOL CERTIFICATION FORM

Certified Vernal Pool: 2684

Town: LAKEVILLE

Date Certified: 2001-07-10

Directions: 2001-05-08: FROM FREETOWN STREET, TURN EAST ALONG THE DIRT ROAD. FOLLOW THE DIRT ROAD 600 METERS TO THE CELL PHONE TOWER AND THEN SOUTH FOR 100 METERS TO AN INTERMITTENT STREAM. FOLLOW THE STREAM WEST AND THEN SOUTH FOR ABOUT 100 METERS TO THE POOLED AREA IN THE SWAMP.

Land Ownership Information (If Supplied):

Maps submitted with certification and attached to this form

- USGS topographic map showing location of the vernal pool
- Assessor's map (or other property map) showing location of pool
- Compass bearings and distances to the pool from permanent landmarks
- Aerial photograph/80 or 100 scale topographic map showing location of the pool
- Professional survey showing location of the pool
- Sketch map or description of the immediate vicinity of the pool

Documented Biological Indicators Accepted by NHESP

- Wood Frog (Obligate Amphibian)
- Mole Salamander (Obligate Amphibian)
- Fairy Shrimp (Obligate Invertebrate)
- Facultative Amphibian
- Facultative Invertebrate
- Facultative Reptile

The NHESP has not been notified of the presence of rare state-listed wildlife species in this vernal pool habitat

Vernal pools may be protected under the following regulations:

- Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00)
- Massachusetts Surface Water Quality Standards Regulations (314 CMR 4.00)
- Title V (Subsurface Sewage Disposal) Regulations (30 CMR 15.00)
- Forest Cutting Practices Act Regulations (304 CMR 11.00)



Natural Heritage & Endangered Species Program

Route 135, Westborough, MA 01581 Tel: (508) 792-7270 x 200 Fax: (508) 792-7821
An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement
<http://www.state.ma.us/dfwe/dfw/nhesp>





Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

VERNAL POOL CERTIFICATION FORM

Certified Vernal Pool: 2685

Town: LAKEVILLE

Date Certified: 2001-07-10

Directions: 2001-05-08: FOLLOW FREETOWN STREET SOUTH AND TURN LEFT ONTO THE CARPATH. THE POOL IS LOCATED SOUTH OF THE CART PATH ABOUT 800 METERS FROM FREETOWN STREET. REFER TO THE SUBMITTED MAPS FOR THE EXACT LOCATION OF THE POOL.

Land Ownership Information (If Supplied):

Maps submitted with certification and attached to this form

- USGS topographic map showing location of the vernal pool
- Assessor's map (or other property map) showing location of pool
- Compass bearings and distances to the pool from permanent landmarks
- Aerial photograph/80 or 100 scale topographic map showing location of the pool
- Professional survey showing location of the pool
- Sketch map or description of the immediate vicinity of the pool

Documented Biological Indicators Accepted by NHESP

- Wood Frog (Obligate Amphibian)
- Mole Salamander (Obligate Amphibian)
- Fairy Shrimp (Obligate Invertebrate)
- Facultative Amphibian
- Facultative Invertebrate
- Facultative Reptile

The NHESP has not been notified of the presence of rare state-listed wildlife species in this vernal pool habitat

Vernal pools may be protected under the following regulations:

- Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00)
- Massachusetts Surface Water Quality Standards Regulations (314 CMR 4.00)
- Title V (Subsurface Sewage Disposal) Regulations (30 CMR 15.00)
- Forest Cutting Practices Act Regulations (304 CMR 11.00)



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<http://www.state.ma.us/dfwele/dfw/nhesp>



Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

VERNAL POOL CERTIFICATION FORM

Certified Vernal Pool: 2686

Town: LAKEVILLE

Date Certified: 2001-07-10

Directions: 2001-05-08: FOLLOW FREETOWN STREET SOUTH AND TURN LEFT ONTO THE CARPATH. FOLLOW THE CARPATH FOR ABOUT 800 METERS TO ONE VERNAL POOL (CVP #2685) AND THEN TURN SOUTH. WALK DOWNSLOPE FOR 150 METERS AND THEN FOLLOW THE INTERMITTENT STREAM THAT RUNS BETWEEN THE ROCK OUTCROPS TO THE POOL.

Land Ownership Information (If Supplied):

Maps submitted with certification and attached to this form

- USGS topographic map showing location of the vernal pool
- Assessor's map (or other property map) showing location of pool
- Compass bearings and distances to the pool from permanent landmarks
- Aerial photograph/80 or 100 scale topographic map showing location of the pool
- Professional survey showing location of the pool
- Sketch map or description of the immediate vicinity of the pool

Documented Biological Indicators Accepted by NHESP

- Wood Frog (Obligate Amphibian)
- Mole Salamander (Obligate Amphibian)
- Fairy Shrimp (Obligate Invertebrate)
- Facultative Amphibian
- Facultative Invertebrate
- Facultative Reptile

The NHESP has not been notified of the presence of rare state-listed wildlife species in this vernal pool habitat

Vernal pools may be protected under the following regulations:

- Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00)
- Massachusetts Surface Water Quality Standards Regulations (314 CMR 4.00)
- Title V (Subsurface Sewage Disposal) Regulations (30 CMR 15.00)
- Forest Cutting Practices Act Regulations (304 CMR 11.00)



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<http://www.state.ma.us/dfwele/dfw/nhesp>



Division of Fisheries & Wildlife

Wayne F. MacCallum, *Director*

VERNAL POOL CERTIFICATION FORM

Certified Vernal Pool: 2687

Town: LAKEVILLE

Date Certified: 2001-07-10

Directions: 2001-05-08: THE POOL IS LOCATED AT THE EDGE OF THE SWAMP ASSOCIATED WITH CEDAR SWAMP RIVER ABOUT 50 METERS SOUTHEAST OF FREETOWN STREET. REFER TO THE SUBMITTED MAPS FOR THE EXACT LOCATION OF THE POOL.

Land Ownership Information (If Supplied):

Maps submitted with certification and attached to this form

- USGS topographic map showing location of the vernal pool
- Assessor's map (or other property map) showing location of pool
- Compass bearings and distances to the pool from permanent landmarks
- Aerial photograph/80 or 100 scale topographic map showing location of the pool
- Professional survey showing location of the pool
- Sketch map or description of the immediate vicinity of the pool

Documented Biological Indicators Accepted by NHESP

- Wood Frog (Obligate Amphibian)
- Mole Salamander (Obligate Amphibian)
- Fairy Shrimp (Obligate Invertebrate)
- Facultative Amphibian
- Facultative Invertebrate
- Facultative Reptile

The NHESP has not been notified of the presence of rare state-listed wildlife species in this vernal pool habitat

Vernal pools may be protected under the following regulations:

- Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00)
- Massachusetts Surface Water Quality Standards Regulations (314 CMR 4.00)
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