

NOTICE OF PUBLIC HEARING SUDBURY CONSERVATION COMMISSION

The Sudbury Conservation Commission will hold a public hearing to review the Abbreviated Notice of Resource Area Delineation filing, under the State Act and local Wetland Bylaw, to approve the bordering vegetated wetland and vernal pool delineation at 999 Concord Road, in Sudbury, MA. John and Kim Toomey, applicants. The hearing will be held on Monday, June 15, 2020 at 6:30 pm, via remote participation through Zoom. The link to join this Zoom meeting as well as copies of the application, may be reviewed on the Conservation Department web page at:

<https://sudbury.ma.us/conservationcommission/meeting/conservation-commission-meeting-monday-june-15-2020/>. Please contact the Conservation Office with any questions at 978-440-5470.

SUDBURY CONSERVATION COMMISSION
May 20, 2020

May 20, 2020

Sudbury Conservation Commission
Department of Public Works Building
275 Old Lancaster Road
Sudbury, MA 01776

**Re: Abbreviated Notice of Resource Area Delineation (ANRAD)
999 Concord Road, Sudbury, MA**

Dear Sudbury Conservation Commission,

Goddard Consulting, LLC is pleased to submit this Abbreviated Notice of Resource Area Delineation (ANRAD) on behalf of the applicant and owners, John & Kim Toomey, for the property located at 999 Concord Road (Assessor Map D-12 Lots 0100 & 0201). This ANRAD is a joint filing under the MA Wetlands Protection Act (WPA) and the Town of Sudbury Wetlands Protection Bylaw.

One original and two hard copies of the ANRAD application are enclosed, along with full size site plans. The titles of all the documents enclosed are as follows:

- ANRAD (WPA Form 4a) Application Form
- ANRAD Wetland Fee Transmittal Form, Copy of Checks
- Abutters List and Map
- Notification to Abutters
- Affidavit of Service
- *Wetland Border Report*. Goddard Consulting, LLC, 5/18/20
- *Plan Showing Wetlands of 999 Concord Road*. Sullivan, Connors & Associates. 3/31/20

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

Very truly yours,



Dan Wells
Senior Wetland Scientist and Wildlife Biologist

CC: 999 Concord Road LLC, 23 Slocum Road, Lexington, MA 02421
MassDEP-NERO, 205B Lowell Street, Wilmington, MA 01887



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
WPA Form 4A – Abbreviated Notice of
Resource Area Delineation
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury
 City/Town

A. General Information

1. Project Location (**Note:** electronic filers will click on button for GIS locator):

999 Concord Road

a. Street Address

Sudbury

b. City/Town

01776

c. Zip Code

Latitude and Longitude:

42.40877 N

d. Latitude

71.38183 W

e. Longitude

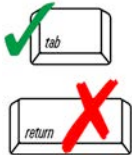
D-12

f. Assessors Map/Plat Number

0100 & 0201

g. Parcel /Lot Number

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



2. Applicant:

John & Kim

a. First Name

Toomey

b. Last Name

999 Concord Road LLC

c. Organization

23 Slocum Road

d. Mailing Address

Lexington

e. City/Town

MA

f. State

02421

g. Zip Code

617-504-1159

h. Phone Number

i. Fax Number

jtoomey87@gmail.com

j. Email Address

3. Property owner (if different from applicant):

☐ Check if more than one owner (attach additional sheet with names and contact information)

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

4. Representative (if any):

Dan

a. Contact Person First Name

Wells

b. Contact Person Last Name

Goddard Consulting LLC

c. Organization

291 Main Street, Suite 8

d. Mailing Address

Northborough

e. City/Town

MA

f. State

01532

g. Zip Code

(508) 393-3784

h. Phone Number

i. Fax Number

dan@goddardconsultingllc.com

j. Email Address

Fees will be calculated for online users.

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

\$2,000

a. Total Fee Paid

\$987.50

b. State Fee Paid

\$1,012.50

c. City/Town Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

**WPA Form 4A – Abbreviated Notice of
Resource Area Delineation**

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury
City/Town

B. Area(s) Delineated

1. Bordering Vegetated Wetland (BVW) approx. 10,000
Linear Feet of Boundary Delineated
2. Check all methods used to delineate the Bordering Vegetated Wetland (BVW) boundary:
 - a. ☒ MassDEP BVW Field Data Form (attached)
 - b. ☐ Other Methods for Determining the BVW boundary (attach documentation):
 1. ☐ 50% or more wetland indicator plants
 2. ☐ Saturated/inundated conditions exist
 3. ☐ Groundwater indicators
 4. ☐ Direct observation
 5. ☐ Hydric soil indicators
 6. ☐ Credible evidence of conditions prior to disturbance
3. Indicate any other resource area boundaries that are delineated:

<u>Vernal Pool</u>	<u>approx. 300</u>
a. Resource Area	b. Linear Feet Delineated
<u> </u>	<u> </u>
c. Resource Area	d. Linear Feet Delineated

C. Additional Information

Applicants must include the following plans with this Abbreviated Notice of Resource Area Delineation. 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. ☒ ANRAD (Delineation Plans only)
2. ☒ 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.)
3. ☒ Plans identifying the boundaries of the Bordering Vegetated Wetlands (BVW) (and/or other resource areas, if applicable).
4. ☒ List the titles and final revision dates for all plans and other materials submitted with this Abbreviated Notice of Resource Area Delineation.

D. Fees



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
**WPA Form 4A – Abbreviated Notice of
 Resource Area Delineation**
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury
 City/Town

The fees for work proposed under each Abbreviated Notice of Resource Area Delineation must be calculated and submitted to the Conservation Commission and the Department (see Instructions and Wetland Fee Transmittal Form).

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 the attached Wetland Fee Transmittal Form) to confirm fee payment:

534

2. Municipal Check Number

533

4. State Check Number

John

6. Payor name on check: First Name

5/11/20

3. Check date

5/11/20

5. Check date

Toomey

7. Payor name on check: Last Name

E. Signatures

I certify under the penalties of perjury that the foregoing Abbreviated Notice of Resource Area Delineation and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

**WPA Form 4A – Abbreviated Notice of
Resource Area Delineation**

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

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Sudbury
City/Town

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 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.

I hereby grant permission, to the Agent or member of the Conservation Commission and the Department of Environmental Protection, to enter and inspect the area subject to this Notice at reasonable hours to evaluate the wetland resource boundaries subject to this Notice, and to require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.

I acknowledge that failure to comply with these certification requirements is grounds for the Conservation Commission or the Department to take enforcement action.

1. Signature of Applicant	<i>K</i> Managing Member, 999 Concord Road LLC	2. Date	5/11/20
3. Signature of Property Owner (if different)	<i>K</i> Managing Member, 999 Concord Road LLC	4. Date	5/11/20
5. Signature of Representative (if any)	<i>De W...</i>	6. Date	5/18/20

For Conservation Commission:

Two copies of the completed Abbreviated Notice of Resource Area Delineation (Form 4A), including supporting plans and documents; two copies of the ANRAD Wetland Fee Transmittal Form; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Abbreviated Notice of Resource Area Delineation (Form 4A), including supporting plans and documents; one copy of the ANRAD Wetland Fee Transmittal Form; and a copy of the state fee payment must be sent to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery. (E-filers may submit these electronically.)

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.

Gotha Perry
Sudbury Assessors
print this list
Office
5/19/2020

Abutters List

Date: May 08, 2020

Subject Property Address: CONCORD RD Sudbury, MA

Subject Property ID: D12-0100

Subject Property Address: 999 CONCORD RD Sudbury, MA

Subject Property ID: D12-0201

Search Distance: 100 Feet

Prop ID: C12-0200

Prop Location: NORTH RD Sudbury, MA

Owner: VERRILL STEPHEN B & JOAN F

Co-Owner:

Mailing Address:

89 SEVEN STAR LN
CONCORD, MA 01742

Prop ID: D11-0102

Prop Location: CONCORD RD Sudbury, MA

Owner: FLOWERS RICHARD & MARY

Co-Owner:

Mailing Address:

5816 PARKWAY DR
LAUREL, MD 20707

Prop ID: D11-0104

Prop Location: CONCORD RD Sudbury, MA

Owner: AMES ADAM

Co-Owner:

Mailing Address:

285 MARLBORO RD
SUDBURY, MA 01776

Prop ID: D11-0205
Prop Location: 857 CONCORD RD Sudbury, MA
Owner: DONNELLAN BRENDON & CHRISTA
Co-Owner:
Mailing Address:
857 CONCORD RD
SUDBURY, MA 01776

Prop ID: D12-0001
Prop Location: CONCORD RD Sudbury, MA
Owner: DARRIGO BROS
Co-Owner: C/O PETER DARRIGO
Mailing Address:
62 SUMMIT RD
BELMONT, MA 02478

Prop ID: D12-0106
Prop Location: OFF CONCORD RD Sudbury, MA
Owner: TOWN OF SUDBURY
Co-Owner: CONSERVATION
Mailing Address:
278 OLD SUDBURY RD
SUDBURY, MA 01776

Prop ID: D12-0200
Prop Location: 1011 CONCORD RD Sudbury, MA
Owner: DILLON DANIEL P & SHARON T

Co-Owner:

Mailing Address:

1011 CONCORD RD
SUDBURY, MA 01776

Prop ID: D13-0008

Prop Location: CONCORD RD Sudbury, MA

Owner: COMM OF MASSACHUSETTS

Co-Owner: FISHERIES AND GAME

Mailing Address:

251 CAUSE WAY ST SUITE 400
BOSTON, MA 02114

Prop ID: E12-0001

Prop Location: CONCORD RD Sudbury, MA

Owner: COMM OF MASSACHUSETTS

Co-Owner: FISHERIES AND GAME

Mailing Address:

251 CAUSEWAY ST SUITE 400
BOSTON, MA 02114

Prop ID: E12-0006

Prop Location: 931 CONCORD RD Sudbury, MA

Owner: GAROFALO NICHOLAS R & LAURA

Co-Owner:

Mailing Address:

931 CONCORD RD
SUDBURY, MA 01776

Prop ID: E12-0007

Prop Location: CONCORD RD Sudbury, MA

Owner: DILLON DANIEL P & SHARON T

Co-Owner:

Mailing Address:

1011 CONCORD RD
SUDBURY, MA 01776

Prop ID: E12-0102

Prop Location: 941 CONCORD RD Sudbury, MA

Owner: LUTHRA SANJIV & NALINI

Co-Owner:

Mailing Address:

941 CONCORD RD
SUDBURY, MA 01776

Prop ID: E12-0104

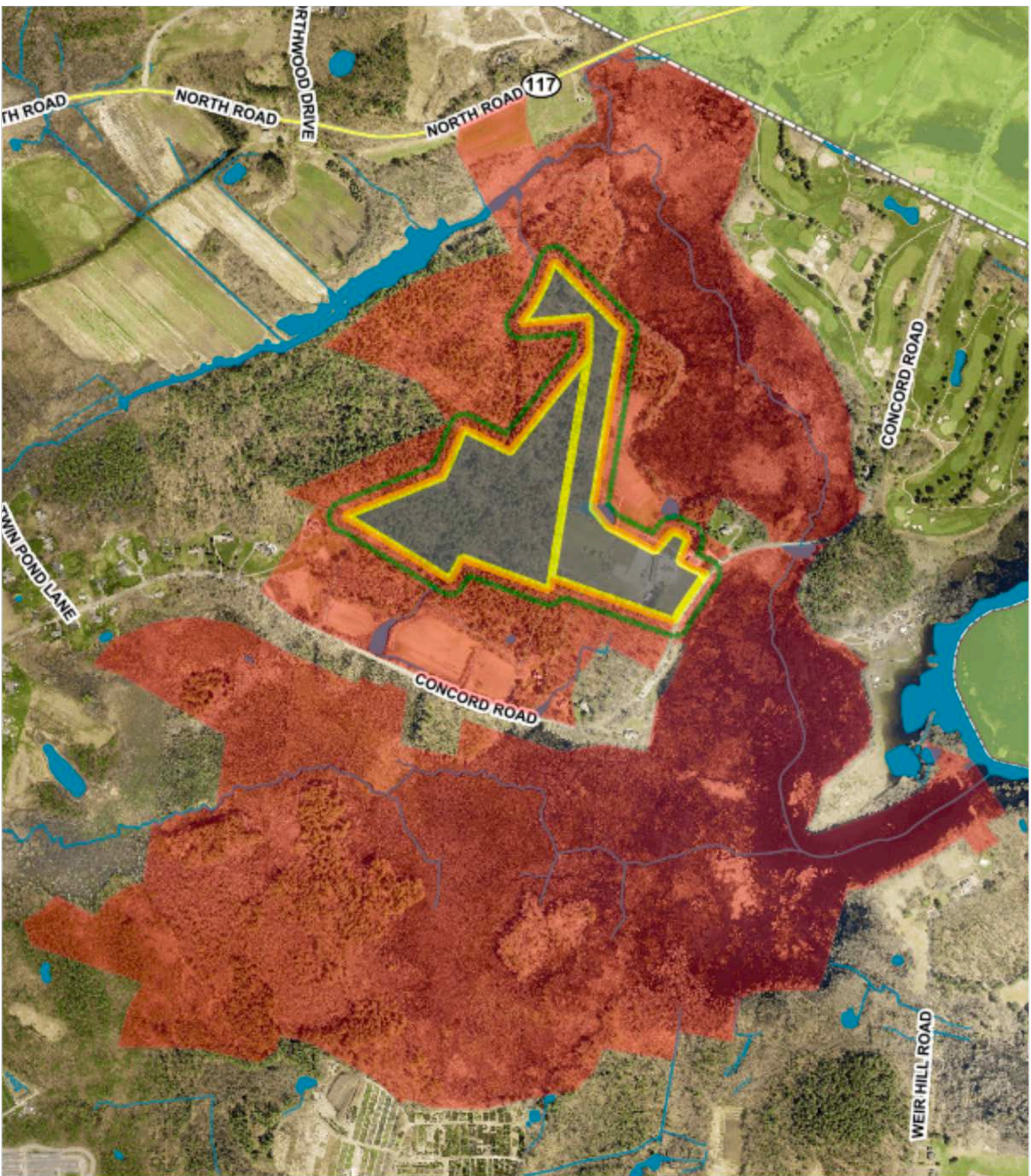
Prop Location: CONCORD RD Sudbury, MA

Owner: TOWN OF SUDBURY

Co-Owner: CONSERVATION

Mailing Address:

278 OLD SUDBURY RD
SUDBURY, MA 01776



NOTIFICATION TO ABUTTERS

Under the Massachusetts Wetlands Protection Act & Sudbury Wetlands Administration Bylaw

In accordance with the second paragraph of Massachusetts Wetlands Protection Act (G.L. Ch. 131, §40), and regulations, and the Town of Sudbury Wetlands Administration Bylaw and regulations, you are hereby notified of a public hearing on the matter described below:

- A. The applicant has filed an Abbreviated Notice of Resource Area Delineation with the Sudbury Conservation Commission for the delineation of areas subject to protection under the Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw.
- B. The name of the applicant is 999 Concord Road LLC
- C. The address of the land where the activity is proposed is 999 Concord Road, Sudbury.
- D. Copies of the Abbreviated Notice of Resource Area Delineation may be examined at the Conservation Commission's office, DPW Building, 275 Old Lancaster Road, between the hours of 9:00 am to 2:00 pm Monday through Wednesday, 10:00 am to 4:00 pm on Thursdays, and 9:00 am to 2:00 pm on Fridays.
- E. Copies of the Abbreviated Notice of Resource Area Delineation may be obtained from either (*check one*) the ☐ applicant or the ☒ applicant's representative Goddard Consulting, LLC by calling (508) 393-3784 from [*times*] 9:00am – 4:00pm on [*days*] Monday through Friday.

NOTE: Notice of the public hearing, including its date, time, and place, will be published at least five (5) days in advance in the **Sudbury Town Crier**.

NOTE: Notice of the public hearing, including the date, time, and place, will be posted in the Dept. of Public Works Building not less than forty-eight (48) hours in advance.

NOTE: You may also contact the nearest Department of Environmental Protection Regional Office* for the information about this application or the Wetlands Protection Act. Sudbury is in the Northeast Region of DEP. To contact DEP, call:

***DEP Northeast Region: (978) 694-3200
205B Lowell Street, Wilmington, MA 01887**

For additional information about this application, please contact the Sudbury Conservation Commission at (978) 440-5471 or by email at concom@sudbury.ma.us

AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act
And Sudbury Wetlands Administration Bylaw

I, Mitch Maslanka hereby certify under the pains and penalties of perjury that on May 20, 2020 I gave notification to abutters in Compliance with the second paragraph of Massachusetts General Law Chapter 131, Section 40, and the DEP Guide to Abutter Notification dating April, 8, 1994 in connection with the following matter:

An Abbreviated Notice of Resource Area Delineation was filed under the Massachusetts Wetlands Protection Act and the Sudbury Wetlands Administration Bylaw by 999 Concord Road LLC with the Sudbury Conservation Commission on May 20, 2020 for the property located at 999 Concord Road.

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

(Mitch Maslanka)

5/20/20
(Date)

May 18, 2020

John Toomey
23 Slocum Road
Lexington, MA 02421

**Re: Wetland Border Report
999 Concord Road - Sudbury, MA**

Dear John,

In March of 2020, the wetland resource areas were delineated within a site located at 999 Concord Road in Sudbury, MA (see attached orthophoto and USGS maps of site). The wetland border was flagged using the criteria in the most recent edition of MA Wetlands Protection Act (WPA) and Regulations 310 CMR 10.00 *et al.* as well as the Sudbury Wetlands Administration Bylaw and Regulations. Hydric soil indicators, vegetational changes, hydrological indicators, and topography were all considered for delineation purposes.

The wetland border was delineated with blue flags, denoted with a unique letter for each contiguous wetland system, followed by a consecutive number. Wetland resource areas delineated include Bordering Vegetated Wetland (BVW) and Vernal Pool, which is a resource area subject to the Sudbury Bylaw only. Flags #B29, B46 and F48 were documented with MA DEP BVW Data Sheets and those sheets are attached.

According to the MassGIS data layers for NHESP, portions of the property are located within an Estimated Habitat of Rare Wildlife / Priority Habitat of Rare Species. No certified vernal pools, ACEC or ORW are mapped within the site or immediate vicinity. Two potential vernal pools are mapped near the site - one partially onsite - however it is likely that both are actually permanent ponds.

Portions of the site fall within FEMA "Zone AE" 100-year floodplain with a Base Flood Elevation of 121 feet (see Figure 1 below for relevant portion of FIRM panel). The approximate 100-year flood zone boundary is indicated on the ANRAD plan. The plans do not have detailed topography so the ANRAD is not requesting confirmation of Bordering Land Subject to Flooding (BLSF) resource area.

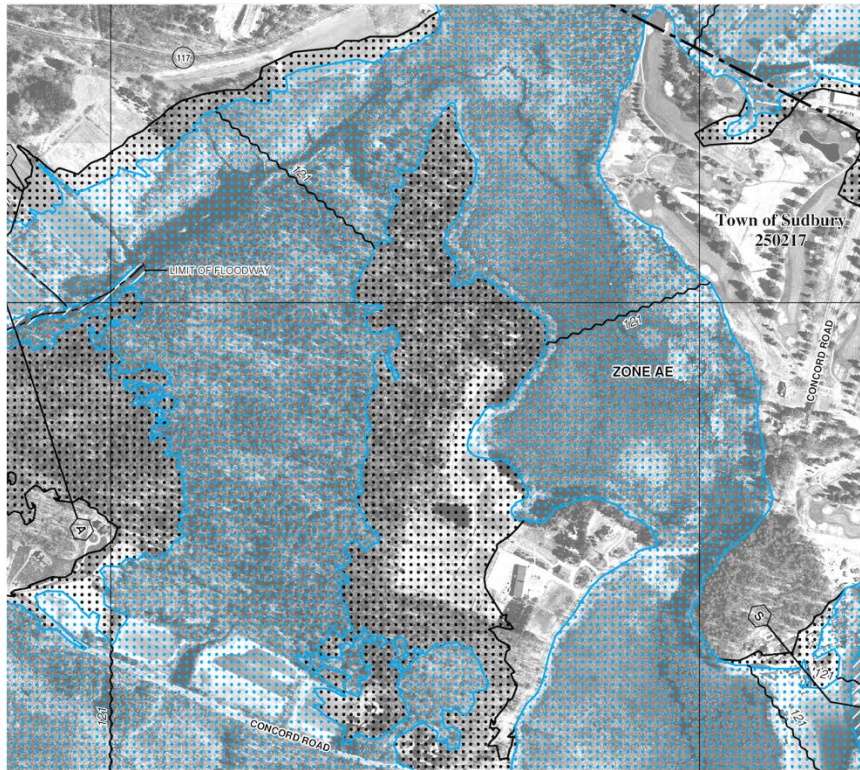


Figure 1 - Portion of FEMA FIRM panel in vicinity of subject property.

Wetland Resource Area Descriptions

The A-series defines the edge of BVW of a large forested wetland beginning at a small ditch north of the site, meandering through the north-center of the property and ending just west of the center of the site.

The B-Series defines the edge of BVW beginning just north and west of the center of the property and terminates to the west of existing horse farm buildings. It ranges from BVW along an intermittent stream channel, edge of forested wetland edge of man-made ditch, and scrub/shrub wetland.

The C-series begins in the south-center of the site, defining the western edge of a scrub/shrub wetland, the edge of a small section of the ditch, and edge of a large forested wetland.

The D-series begins on the opposite side of the wetland where the C-series terminates, entering the subject property at flag #D23. This wetland series defines the edge of BVW of a variety of wetland types including forested wetland, scrub/shrub wetland and intermittent stream. The D-series follows an intermittent stream channel northward until it reaches the property boundary.

The E-series defines the edge of BVW of a large forested swamp wetland in the west-central portions of the site.

The F-series defines the edges of BVW of a small pond (F1-F12), before broadening out from the pond and delineating the edge of a forested wetland that wraps around the pond and leads back to the footbridge where the series begins (F23-F48).

The G-series defines the maximum observed extent of flooding during the vernal pool breeding season, which denoted the border of a vernal pool. This wetland is a confined basin depression that was documented to contain breeding wood frogs on 3/18/20 (Photo 1). The pool is likely to contain standing water only for brief periods, and probably dries up completely during summer and early fall.



Photo 1 - Large raft of wood frog egg masses observed in G-series Vernal Pool on 3/18/20.

The H-series is located in the northern portions of the site. It defines the edge of a ditch/stream and then edge of forested wetland.

The J-series defines the edge of a large shrub swamp wetland across Concord Road offsite to the southeast

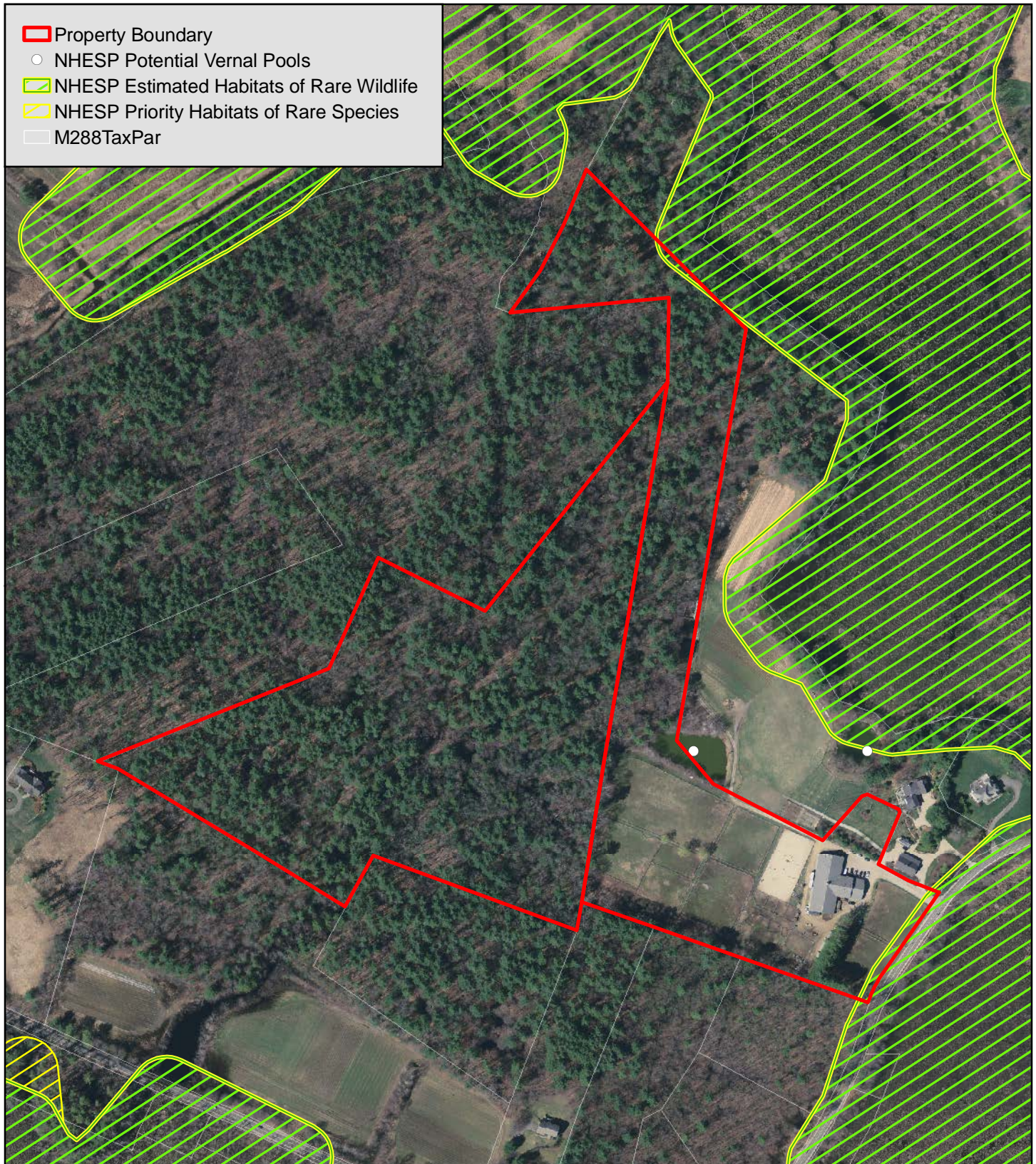
Note that the resource area boundaries need to be confirmed by the Sudbury Conservation Commission with the submission of an Abbreviated Notice of Resource Area Delineation (ANRAD). Any work proposed within 100 feet of the BVW or vernal pool resource areas requires the filing of a Request for Determination of Applicability (RDA) or Notice of Intent (NOI), depending on the nature of propose work and/or proximity to the delineated resource areas.

Sincerely,

GODDARD CONSULTING, LLC

by 

Daniel Wells, M.S.
Senior Wildlife Biologist and Wetland Scientist



Orthophoto View of Site

999 Concord Road - Sudbury, MA



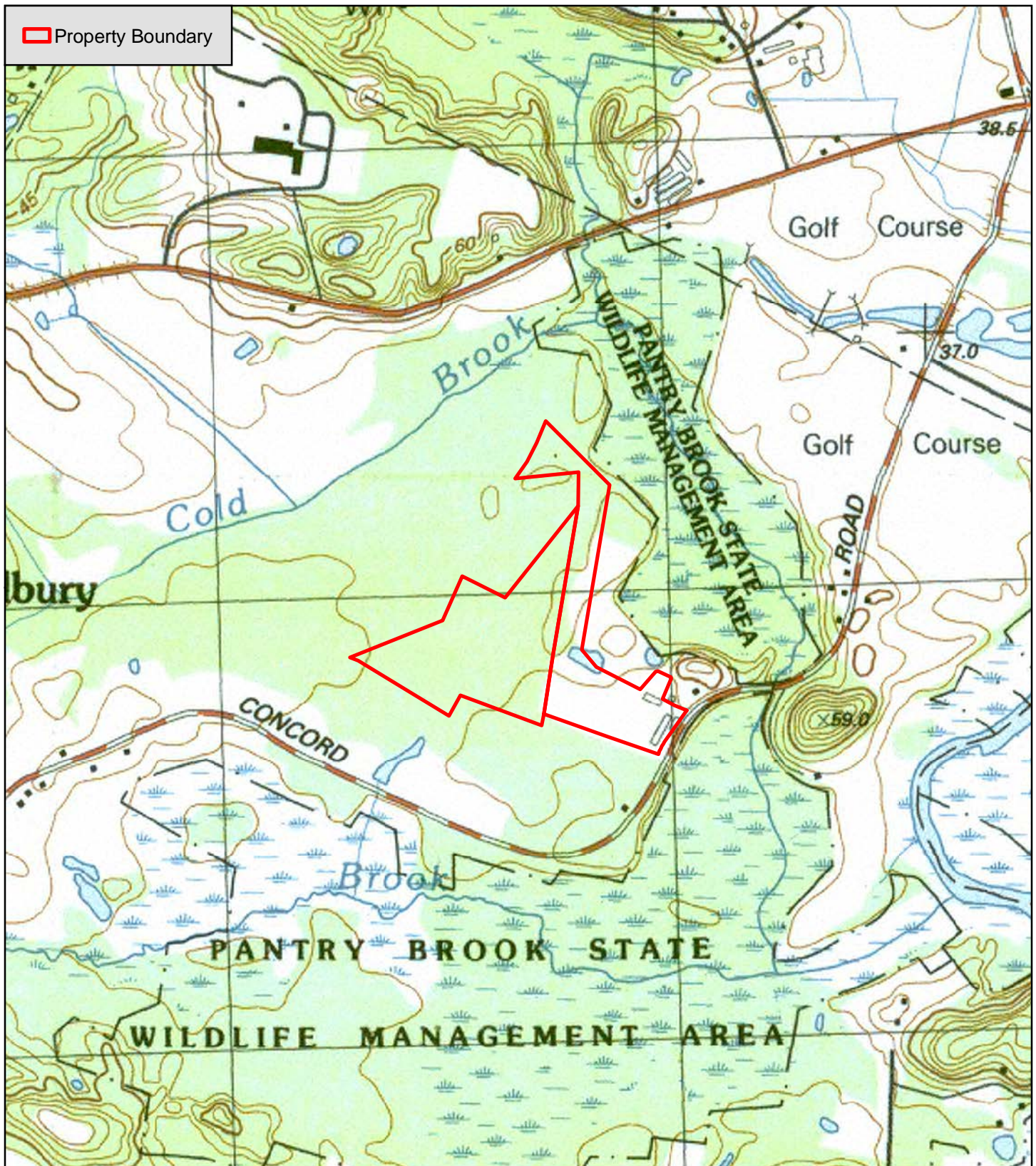
0 100 200 400
Feet

1 inch = 400 feet

Date: 5/18/2020

GIS Data Source: "Office of Geographic Information
(MassGIS), Commonwealth of Massachusetts Information
Technology Division"

GODDARD CONSULTING
Strategic Wetland Permitting LLC



USGS Site Locus

999 Concord Road - Sudbury, MA



0 250 500 1,000 Feet

1 inch = 1,000 feet

Date: 3/18/2020

GIS Data Source: "Office of Geographic Information (MassGIS), Commonwealth of Massachusetts Information Technology Division"

GODDARD CONSULTING
Strategic Wetland Permitting LLC

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

Applicant:
Prepared by: Goddard Consulting
Project location: 999 Concord Road
DEP File #:

Check all that apply:

☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒ Vegetation and other indicators 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: B 29	Transect Number: Upgradient		Date of Delineation: 19-Mar-20
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<u>Tree Layer</u>					
Red oak	<i>Quercus rubra</i>	40%	40.0%	Yes	FACU
Eastern White Pine	<i>Pinus strobus</i>	60%	60.0%	Yes	FACU
<u>Sapling Layer</u>					
Eastern white pine	<i>Pinus strobus</i>	30%	100.0%	Yes	FACU
<u>Shrub Layer</u>					
Glossy Buckthorn	<i>Frangula alnus</i>	5%	100.0%	Yes	FAC*
<u>Climbing Woody Vine</u>					
<u>Ground Cover</u>					
Late Lowbush Blueberry	<i>Vaccinium angustifolium</i>	10%	66.7%	Yes	FACU
Starflower	<i>Trientalis borealis</i>	5%	33.3%	Yes	FAC*
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth					
Morphological Adaptations: 0		Description:			
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.					
Vegetation conclusion:					
Number of dominant wetland indicator plants: 2			Number of dominant non-wetland indicator plants: 4		
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? no					

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: _____

soil type mapped: Scio very fine sandy loam, 0 to 3 percent slopes

hydric soil inclusions: _____

Are field observations consistent with soil survey? ☒ yes ☐ no

Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
A	0-4	10YR 2/1	loam
B	4-14+	10YR 3/3	sandy loam

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☐ yes ☒ no

Other Indicators 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 for Upgradient of B 29		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants		X
Wetland hydrology present:		
hydric soils present		X
other indicators of hydrology present		X
Sample location is in a BVW		X

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: **Goddard Consulting**

Project location: **999 Concord Road**

DEP File #: _____

Check all that apply:

☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only

☒ Vegetation and other indicators 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: B 29	Transect Number: Downgradient	Date of Delineation: 19-Mar-20	
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (ves or no)	Wetland Indicator Category*
<u>Tree Layer</u>					
Red Maple	Acer rubrum	50%	100.0%	Yes	FAC*
<u>Sapling Layer</u>					
<u>Shrub Layer</u>					
Glossy buckthorn	Frangula alnus	35%	100.0%	Yes	FAC*
<u>Climbing Woody Vine</u>					
none					
<u>Ground Cover</u>					
Sensitive Fern	Onoclea sensibilis	10%	25.0%	Yes	FACW*
Cinnamon fern	Osmundastrum cinnamomeum	20%	50.0%	Yes	FACW*
Jewelweed	Impatiens capensis	10%	25.0%	Yes	FACW*
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth					
Morphological Adaptations: 0		Description:			
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.					
Vegetation conclusion:					
Number of dominant wetland indicator plants: 5			Number of dominant non-wetland indicator plants: 0		
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes					

If vegetation alone is presumes adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: _____

soil type mapped: Birdsall mucky silt loam, 0 to 1 percent slopes

hydric soil inclusions: Wareham, Scarboro, Raypol, Swansea

Are field observations consistent with soil survey? ☒ yes ☐ no

Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
O	0-8+	10YR 2/1	muck

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☒ yes ☐ no

Other Indicators 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 for Downgradient of B 29		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants	X	
Wetland hydrology present:		
hydric soils present	X	
other indicators of hydrology present	X	
Sample location is in a BVW	X	

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: **Goddard Consulting**

Project location: 999 Concord Road

DEP File #: _____

Check all that apply:

	Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
✓	Vegetation and other indicators 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:		B 46	Transect Number:		Upgradient
Date of Delineation:	19-Mar-20				
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<u>Tree Layer</u>					
<u>Sapling Layer</u>					
<u>Shrub Layer</u>					
<u>Climbing Woody Vine</u>					
<u>Ground Cover</u>					
Upland grass	Gramineae sp.	80%	94.1%	Yes	FACU
Dandelion	Taraxacum officinale	5%	5.9%	Yes	FACU
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth					
Morphological Adaptations:		Description:			
0					
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.					
Vegetation conclusion:					
Number of dominant wetland indicator plants:		Number of dominant non-wetland indicator plants:			
0		2			
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? no					

If vegetation alone is presumes adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: _____

soil type mapped: Scio very fine sandy loam, 0 to 3 percent slopes

hydric soil inclusions: _____

Are field observations consistent with soil survey? ☒ yes ☐ no

Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
A	0-12	10YR 2/2	loam
B	12-16+	2.5Y 5/4	loamy sand
			with 10YR 5/6 redox
			<5%

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☐ yes ☒ no

Other Indicators 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 for Upgradient of B 46		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants ≥ number of non-wetland plants		X
Wetland hydrology present:		
hydric soils present		X
other indicators of hydrology present		X
Sample location is in a BVW		X

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: **Goddard Consulting**Project location: 999 Concord Road

DEP File #: _____

Check all that apply:

	Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
✓	Vegetation and other indicators 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: B 46	Transect Number: Downgradient	Date of Delineation: 19-Mar-20
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Wetland Indicator Category*
<u>Tree Layer</u>				
<u>Sapling Layer</u>				
<u>Shrub Layer</u> Glossy buckthorn	<i>Frangula alnus</i>	35%	100.0%	FAC*
<u>Climbing Woody Vine</u> none				
<u>Ground Cover</u> Sensitive Fern	<i>Onoclea sensibilis</i>	70%	100.0%	FACW*
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth				
Morphological Adaptations: 0		Description:		
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.				
Vegetation conclusion:				
Number of dominant wetland indicator plants: 2		Number of dominant non-wetland indicator plants: 0		
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes				

If vegetation alone is presumed adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: _____

soil type mapped: Birdsall mucky silt loam, 0 to 1 percent slopes

hydric soil inclusions: Wareham, Scarboro, Raypol, Swansea

Are field observations consistent with soil survey? ☒ yes ☐ no

Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
A	0-6	10YR 2/2	loam
B	6-12+	2.5Y 5/2	loamy sand
			with 10YR 5/6 redox

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☒ yes ☐ no

Other Indicators 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 for Downgradient of B 46		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants	X	
Wetland hydrology present:		
hydric soils present	X	
other indicators of hydrology present	X	
Sample location is in a BVW	X	

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: Goddard Consulting
Project location: 999 Concord Road
DEP File #: _____

Check all that apply:

☐ Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
☒ Vegetation and other indicators 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: F 48	Transect Number: Upgradient		Date of Delineation: 19-Mar-20
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<u>Tree Layer</u>					
Red oak	<i>Quercus rubra</i>	80%	100.0%	No	FACU
<u>Sapling Layer</u>					
Red Maple	<i>Acer rubrum</i>	10%	100.0%	Yes	FAC*
<u>Shrub Layer</u>					
Eastern white pine	<i>Pinus strobus</i>	5%	50.0%	Yes	FACU
Glossy buckthorn	<i>Frangula alnus</i>	5%	50.0%	Yes	FAC*
<u>Climbing Woody Vine</u>					
<u>Ground Cover</u>					
Late lowbush blueberry	<i>Vaccinium angustifolium</i>	5%	62.5%	Yes	FACU
Starflower	<i>Trientalis borealis</i>	3%	37.5%	Yes	FAC*
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth					
Morphological Adaptations: 0		Description: _____			
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.					
Vegetation conclusion:					
Number of dominant wetland indicator plants: 3			Number of dominant non-wetland indicator plants: 2		
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

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: _____

soil type mapped: Scio very fine sandy loam, 0 to 3 percent slopes

hydric soil inclusions: _____

Are field observations consistent with soil survey? ☒ yes ☐ no

Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
A	0-8	10YR 2/2	loam
B	8-16+	10YR 3/4	sandy loam

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☐ yes ☒ no

Other Indicators 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 for Upgradient of F 48		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants	X	
Wetland hydrology present:		
hydric soils present		X
other indicators of hydrology present		X
Sample location is in a BVW		X

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: Goddard Consulting

Project location: 999 Concord Road

DEP File #: _____

Check all that apply:

	Vegetation alone presumed adequate to delineate BVW boundary: fill out Section I only
✓	Vegetation and other indicators 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:	F 48	Transect Number:	Downgradient	Date of Delineation: 19-Mar-20
Sample Layer and Plant Species	Scientific name	% Cover	% Dominance	Dominant Plant (yes or no)	Wetland Indicator Category*
<u>Tree Layer</u> Red Maple	Acer rubrum	50%	100.0%	Yes	FAC*
<u>Sapling Layer</u>					
<u>Shrub Layer</u> Glossy buckthorn	Frangula alnus	20%	100.0%	Yes	FAC*
<u>Climbing Woody Vine</u> none					
<u>Ground Cover</u> Sensitive Fern	Onoclea sensibilis	3%	37.5%	Yes	FACW*
Glossy Buckthorn	Frangula alnus	5%	62.5%	Yes	FAC*
Remarks: * An asterisk after common plant name indicates stunted growth; ** indicates extremely stunted growth					
Morphological Adaptations: 0		Description:			
* An asterisk after indicator status denotes wetlands plants: plants listed in the Wetlands Protection Act (MGL c.131, s.40); plants in the genus Sphagnum; or plants listed as FAC, FACW, or OBL.					
Vegetation conclusion:					
Number of dominant wetland indicator plants: 4			Number of dominant non-wetland indicator plants: 0		
Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes					

If vegetation alone is presumes adequate to delineate the BVW boundary, submit this form with the Request for Determination of Applicability or Notice of Intent.

Section II. Indicators of Hydrology

Hydric Soil Interpretation

1. Soil Survey

Is there a published soil survey for this site? ☒ yes ☐ no

title/date: Interim Soil Survey of Middlesex County - 1991 (Maps - 1989)

map number: _____

soil type mapped: Birdsall mucky silt loam, 0 to 1 percent slopes

hydric soil inclusions: Wareham, Scarboro, Raypol, Swansea

Are field observations consistent with soil survey? ☒ yes ☐ no

Remarks: _____

2. Soil Description

<u>Horizon</u>	<u>Depth (inches)</u>	<u>Matrix Color</u>	<u>Mottles Color or Texture</u>
O	0-8+	10YR 2/1	muck

Remarks: _____

3. Other: _____

Conclusion: Is soil hydric? ☒ yes ☐ no

Other Indicators 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: _____

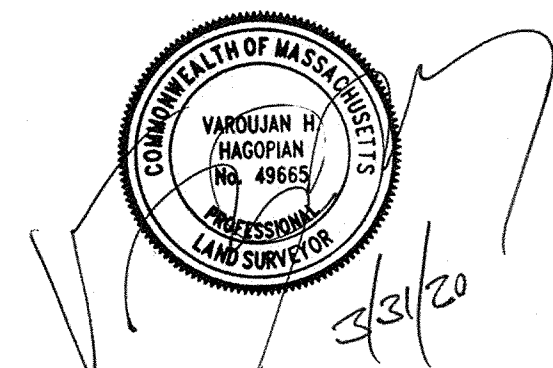
Vegetation and Hydrology Conclusion for Downgradient of F 48		
	<u>yes</u>	<u>no</u>
Number of wetland indicator plants >= number of non-wetland plants	X	
Wetland hydrology present:		
hydric soils present	X	
other indicators of hydrology present	X	
Sample location is in a BVW	X	

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



GENERAL NOTES:

1. OWNERS OF ADJOINING PROPERTIES ARE SHOWN ACCORDING TO CURRENT TOWN OF SUBURRY ASSESSORS RECORDS.
2. THIS PLAN IS BASED ON AN ON-THE-GROUND SURVEY BY SULLIVAN CONNORS AND ASSOCIATES INC. PERFORMED ON JANUARY 18-22, 2016. WETLAND FLAGS SHOWN HEREON WERE UPDATED ON MARCH 25, 2020.
3. LEGAL STATUS OF EASEMENTS AND WAYS, NOT DETERMINED BY THIS SURVEY.
4. THIS PLAN IS INTENDED TO BE FILED WITH AN ABSTAINMENT NOTICE OF RESOURCE AREA DELINEATION AND SHOULD NOT BE USED FOR BOUNDARY DETERMINATION OR CONVEYANCE PURPOSES.
5. WETLANDS SHOWN HEREON WERE FLAGGED BY GODDARD CONSULTING AND DAVID BURKE, AND LOCATED ON-THE-GROUND BY SULLIVAN CONNORS AND ASSOCIATES INC.
6. PORTIONS OF THE SUBJECT PARCELS SHOWN HEREON ARE LOCATED WITHIN THE 100 YEAR FEDERAL FLOOD HAZARD AREA AS SHOWN ON THE FLOOD INSURANCE RATE MAPS FOR THE TOWN OF SUBURRY, MAP 387 OF 656, MAP NUMBER 25017C03677, DATED JULY 7, 2014.
7. THE 100 YEAR FLOOD HAZARD AREA SHOWN HEREON IS COMPILED FROM THE FLOOD INSURANCE RATE MAPS AND SHOULD BE CONSIDERED APPROXIMATE.



PREPARED FOR:
999 CONCORD ROAD, LLC
999 CONCORD ROAD
SUDBURY, MA 01776

**SULLIVAN, CONNORS
AND ASSOCIATES**
LAND SURVEYING AND CIVIL ENGINEERING
121 BOSTON POST ROAD
SUDBURY, MASSACHUSETTS 01776
PHONE: 978-443-9566 FAX: 978-443-8915

*PLAN SHOWING WETLANDS
OF
999 CONCORD ROAD
IN
SUDBURY, MASS.*

REVISED:	DESCRIPTION:
DRAWN BY: VHH	CHECK BY: REM
DATE: MARCH 31, 2020	
SCALE: 1"=120'	SHEET 1 OF 1.