

Stamski and McNary, Inc.
Engineering - Planning - Surveying
1000 Main Street Acton, MA 01720 (978) 263-8585
www.stamskiandmcnary.com

Abbreviated Notice of Resource Area Delineation

Under the Massachusetts Wetland Protection Act,
M.G.L. c. 131, s. 40 &
Town of Littleton Wetland Bylaw

for

**95 Taylor Street
Littleton, MA 01460
Map U40 Parcel 8**

Applicant: Seal Harbor Companies, LLC
179 Great Road, Suite 212
P.O. Box 2857
Acton, MA 01720

Date: July 3, 2023

SM-7306

Table of Contents

- **WPA Form 4A** (Abbreviated Notice of Resource Area Delineation)
- **WPA Form 4A** (ANRAD Wetland Fee Transmittal Form)
- **Certified Abutters List / Affidavit / Notice to Abutters**
- **Attachments:**
 - *U.S.G.S. Locus Map*
 - *Wetland Data Delineation Sheets*
 - *Resource Area Delineation Plan by Stamski And McNary, Inc.*

WPA Form 4A (Abbreviated Notice of Resource Area Delineation)



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

Littleton

City/Town

A. General Information

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

95 Taylor Street

a. Street Address

Littleton

01460

Latitude and Longitude:

b. City/Town

c. Zip Code

42° 31' 53.8"

71° 30' 37.5"

d. Latitude

e. Longitude

U40

8/0

f. Assessors Map/Plat Number

g. Parcel /Lot Number

2. Applicant:

Mark

Gallagher

a. First Name

b. Last Name

Seal Harbor Companies, LLC

c. Organization

PO Box 2857

d. Mailing Address

Acton

MA

01720

e. City/Town

f. State

g. Zip Code

781-424-7250

h. Phone Number

i. Fax Number

mgallagher@seal-harbor.com

j. Email Address

3. Property owner (if different from applicant):

Gilbert

Friberg

a. First Name

b. Last Name

c. Organization

95 Taylor Street

d. Mailing Address

Littleton

MA

01460

e. City/Town

f. State

g. Zip Code

h. Phone Number

i. Fax Number

j. Email Address

4. Representative (if any):

Aidan

Schlotman

a. Contact Person First Name

b. Contact Person Last Name

c. Organization

abs@stamskiandmcnary.com

d. Mailing Address

Acton

MA

01720

e. City/Town

f. State

g. Zip Code

978-263-8585x218

h. Phone Number

i. Fax Number

abs@stamskiandmcnary.com

j. Email Address

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

\$2,000

\$987.50

\$1,012.50

a. Total Fee Paid

b. State Fee Paid

c. City/Town Fee Paid

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



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

Fees will be calculated for online users.



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

Littleton

City/Town

B. Area(s) Delineated

1. Bordering Vegetated Wetland (BVW) 907
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:

Riverfront Area

a. Resource Area

Bordering Land Subject to Flooding

c. Resource Area

1,200 +/-

b. Linear Feet Delineated

900 +/-

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

Littleton

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:

3053

6/26/23

2. Municipal Check Number
3052

3. Check date
6/26/23

4. State Check Number
Seal Harbor Companies LLC

5. Check date

6. Payor name on check: First Name

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

Littleton

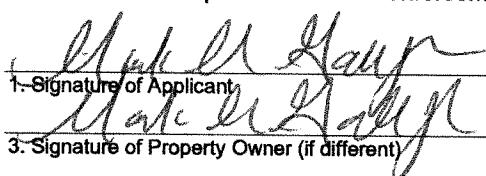
City/Town

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).

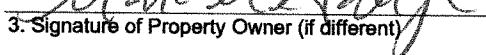
I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the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



3. Signature of Property Owner (if different)



5. Signature of Representative (if any)

6/26/23

2. Date

6/26/23

4. Date

6. Date

For Conservation Commission:

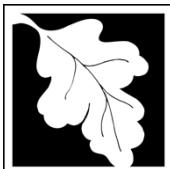
Two copies of the completed Abbreviated Notice of Resource Area Delineation (Form 4A), including supporting plans and documents; two copies of the ANRAD Wetland Fee Transmittal Form; and the city/town fee payment must be sent to the Conservation Commission by certified mail or hand delivery.

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.

WPA Form 4A (ANRAD Wetland Fee Transmittal Form)



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

ANRAD Wetland Fee Transmittal Form

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

Important:

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



A. Applicant Information

1. Location of Project:

95 Taylor Street
a. Street Address
\$987.50
c. Fee amount

Littleton
b. City/Town
3052
d. Check number

2. Applicant:

Mark

a. First Name

PO Box 2857

d. Mailing Address

Acton

e. City/Town

781-424-7250

h. Phone Number

Gallagher

b. Last Name

Seal Harbor, LLC

c. Company

MA

f. State

01720

g. Zip Code

3. Property Owner (if different):

Gilbert

a. First Name

95 Taylor Street

d. Mailing Address

Friberg

b. Last Name

c. Company

Littleton

e. City/Town

MA

f. State

01460

g. Zip Code

h. Phone Number

B. Fees

The fee is calculated as follows for each Resource Area Delineation included in the ANRAD (check applicable project type). The maximum fee for each ANRAD, regardless of the number of Resource Area Delineations, is \$200 activities associated with a single-family house and \$2,000 for any other activity.

Bordering Vegetated Wetland Delineation Fee:

Online users: check box if fee exempt.

1. <input type="checkbox"/>	single family house project	a. feet of BVW	x \$2.00 =	b. Fee for BVW
2. <input checked="" type="checkbox"/>	all other projects	907	\$2.00	\$1,814

Other Resource Area (e.g., bank, riverfront area, etc.):

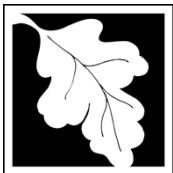
3. <input type="checkbox"/>	single family house project	a. linear feet	x \$2.00 =	b. Fee
4. <input checked="" type="checkbox"/>	all other projects	1,200	\$2.00	\$186 (\$2000 Maximum)

Total Fee for all Resource Areas:

State share of filing fee:

City/Town share of filing fee:

\$987.50
5. 1/2 of total fee less \$12.50
\$1,012.50
6. 1/2 of total fee plus \$12.50



Massachusetts Department of Environmental Protection

Bureau of Resource Protection - Wetlands

ANRAD Wetland Fee Transmittal Form

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

C. Submittal Requirements

- a.) Send a copy of this form, with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts, to:

Department of Environmental Protection
Box 4062
Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Abbreviated Notice of Resource Area Delineation; a **copy** of this form; and the city/town fee payment.
- c.) **To DEP Regional Office:** Send one copy of the Abbreviated Notice of Resource Area Delineation (and any additional documentation required as part of a Simplified Review Buffer Zone Project); a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

Certified Abutters List / Affidavit / Notice to Abutters



**TOWN OF LITTLETON
BOARD OF ASSESSORS**

P.O. BOX 1305
LITTLETON, MA 01460
(978) 540-2410
FAX: (978) 952-2321

Date: June 26, 2023

Re: Certified List of Abutters Conservation Commission

Applicant: Aidan Scholtman
Name of Firm: Stamski & McNary, INC
Mailing Address 1000 Main St Acton, MA 01720

Subject Parcel Location: 95 Taylor Street

Subject Parcel No.: U40-8-0

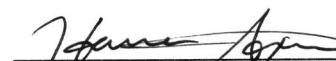
Subject Owner Name: Gilbert Friberg

M.G.L. Chapter 131: Section 40 "Any person filing a notice of intention with a conservation commission shall at the same time give written notification thereof, by delivery in hand or certified mail, return receipt requested, to all abutters within one hundred feet of the property line of the land where the activity is proposed, but not limited to, owners of land directly opposite said proposed activity on any public or private street or way, and in another municipality or across a body of water. When a notice of intent proposes activities on land under water bodies and waterways or on a tract of land greater than 50 acres, written notification shall be given to all abutters within 100 feet of the proposed project site. For the purposes of this action, "project site" shall mean lands where the following activities are proposed to take place: dredging, excavating, filling, grading, the erection, reconstruction or expansion of a building or structure, the driving of pilings, the construction or improvement of roads or other ways and the installation of drainage, sewerage and water systems, and "land under water bodies and waterways" shall mean the bottom of, or land under, the surface of the ocean or an estuary, creek, river stream, pond or lake. When a notice of intent proposes activity on a linear shaped project site longer than 1,000 feet in length, notification shall be given to all abutters within 1,000 feet of the proposed project site. If the linear project site takes place wholly within an easement through another person's land, notice shall also be given to the landowner. Said notification shall be at the applicant's expense, and shall state where copies of the notice of intention may be examined and obtained and where information regarding the date, time and place of the public hearing may be obtained. Proof of such notification, with a copy of the notice mailed or delivered, shall be filed with the conservation commission."

I hereby certify the attached list of abutter (s) as stated in the M.G.L. Chapter 131, Section 40.

Number of Abutter(s) 12 including the subject parcels + 1 Applicant Requesting Abutter's List.

Certified by:



Hanna Axon, Office Assistant

OFF PORTER RD	R12 25 4	91 TAYLOR ST	U40 9 0
LITTLETON TOWN OF	LUC: 974	CALLANAN BRIAN P	LUC: 101
WATER DEPARTMENT		91 TAYLOR ST	
PO BOX 1305		LITTLETON, MA 01460	
LITTLETON, MA 01460			
85 TAYLOR ST	U40 10 0	55 TAYLOR ST	U41 31 A
	LUC: 101		LUC: 101
PROULX MICHAEL		KAZMAIER SUSAN M	
WHITE RODNEY & ROBIN		51 PLAINFIELD ROAD	
85 TAYLOR ST		CONCORD, MA 01742-5726	
LITTLETON, MA 01460			
81 TAYLOR ST	U40 11 0		
	LUC: 101		
LI HON W			
MAK CHING M			
81 TAYLOR ST			
LITTLETON, MA 01460			
71 TAYLOR ST	U40 12 0		
	LUC: 101		
BURBA JASON			
BURBA CHRISTINE			
71 TAYLOR ST			
LITTLETON, MA 01460			
67 TAYLOR ST	U40 13 0		
	LUC: 101		
TUCKER DAWN E			
FINAN MARY-LOU			
69 TAYLOR ST			
LITTLETON, MA 01460			
76 WHITCOMB AV	U40 14 0		
	LUC: 971		
LITTLETON TOWN OF			
ELECTRIC + WATER DEPT			
PO BOX 1305			
LITTLETON, MA 01460			
96 TAYLOR ST	U40 2 0		
	LUC: 043		
28 KEEL, LLC			
PO BOX 2276			
LITTLETON, MA 01460			
99 TAYLOR ST	U40 7 0		
	LUC: 101		
HSU HERMAN HM			
HSU-PHOUN LING JY			
99 TAYLOR ST			
LITTLETON, MA 01460			
101 TAYLOR ST	U40 7 1		
	LUC: 101		
WRIGHT BRIAN K			
101 TAYLOR ST			
LITTLETON, MA 01460			
95 TAYLOR ST	U40 8 0		
	LUC: 101		
FRIBERG GILBERT L			
FRIBERG VILENA T			
P.O. BOX 2117			
LITTLETON, MA 01460			

NOTIFICATION TO ABUTTERS

Modified for Covid-19 Emergency Response

Notice of Intent or abbreviated Notice of Resource Area Delineation

Under MA Wetlands Protection Act and Littleton Wetlands Protection ByLaw (Chapter 171), this form must be completed and mailed, certified mail return receipt requested, to all abutters at their mailing addresses shown on the most recent Town Assessor's records as well as the owner (if not applicant).

In accordance with the MA Wetlands Protection Act and Littleton Wetlands Protection ByLaw Chapter 171-2D, you are hereby notified of a public hearing on the matter described below:

- A. The applicant has filed a Notice of Intent with the Littleton Conservation Commission for work in an area subject to protection under the Massachusetts Wetlands Protection Act and Littleton Wetlands Protection ByLaw.

- B. The name of the applicant is Seal Harbor Companies, LLC

- C. The address of the land where the activity is proposed is 95 Taylor Road

- D. The work proposed is Delineation of Resource areas

- E. Due to the Commonwealth and Town of Littleton's Covid-19 Emergency Response, it is anticipated that paper copies of the Notice of Intent will not be available for inspection. Copies of the Notice of Intent may be examined at the Conservation Commission webpage at <https://www.littletonma.org/conservation>, under "Conservation Calendar" at least 48 hours before the meeting. If you click on the day of the meeting in the Calendar, you will be lead to a link showing posted project information. If you have questions you can contact the Littleton Conservation Commission (contact information at the end of this notice).

- F. Due to the Commonwealth and Town of Littleton's Covid-19 Emergency Response, it is anticipated that paper copies of the Notice of Intent will not be available for distribution. Copies of the Notice of Intent may be obtained electronically from (check one) the applicant or X the applicant's representative by calling 978 - 263 - 8585 during the following times: 7:30am-4pm Mon-Fri

- G. The public hearing will be held on 7/20. Information regarding the date and time of the public hearing may be obtained from the Littleton Conservation Commission (see contact info at the end of this notice).

H. Notice of the public hearing, including date, will be published at least five business days in advance in a paper of local circulation. The agenda, noting times will be posted at Town Hall and at <https://www.littletonma.org/conservation> under “Conservation Calendar” at least 48 hours in advance of the meeting. It is currently anticipated that this meeting will be held entirely remotely, pursuant to Governor Baker’s March 12, 2020 Order Suspending Certain Provisions of the Open Meeting Law and Governor Baker’s March 15, 2020 Order imposing strict limitations on the number of people that may gather in one place. If the meeting is held remotely, instructions for remote viewing of, and participation in, the meeting will be included in the agenda and may also be obtained from the Littleton Conservation Commission.

You may contact the Littleton Conservation Commission Coordinator (Amy Green; agreen@littletonma.org; 978-540-2428), or the Massachusetts Department of Environmental Protection/ Central Region (508-792-7650) at 8 New Bond Street, Worcester, MA 01606) for information about this application

AFFIDAVIT OF SERVICE

Notice of Intent

Abbreviated Notice of Resource Area Delineation

Under Massachusetts Wetlands Protection Act and the Littleton Wetlands Protection ByLaw (Chapter 171), this form must be completed and submitted with the Notice of Intent or Abbreviated Notice of Resource Area Delineation.

I, _____ *(name of applicant or representative)* certify under the pains and penalties of perjury that on _____ 7/3/23 *(date)* I gave notification to abutters in compliance the second paragraph of the Massachusetts General Laws Chapter 131, Section 40, DEP requirements for Abutter Notification and with the Littleton Wetlands ByLaw 171-2.D in connection with the following matter:

A ANRAD _____ *(NOI or ANRAD)* filed under the Massachusetts Wetlands Protection Act and Littleton Wetlands Protection ByLaw by _____ Seal Harbor Companies LLC *(name of applicant)* with the Littleton Conservation Commission on _____ 7/3/23 *(date)* for the property located at _____ 95 Taylor Street *(address of land where work is proposed)*.

The list of abutters with their addresses and a copy of the Notification Abutter form as sent to the abutters is attached to this Affidavit of Service.

Name

Date

Narrative

Resource Area Description

The subject property is located at 95 Taylor Street, Littleton. The property was previously a gravel pit. Beaver Brook, a perennial stream, runs through the site. Riverfront Area, Bordering Land Subject to Flooding and Bordering Vegetated Wetland are associated with the brook. The applicant is seeking confirmation of the delineation of these resource areas.

U.S.G.S. Locus Map



Wetland Data Delineation Sheets

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: _____ City/Town: _____ Sampling Date: _____

Applicant/Owner: _____ Sampling Point or Zone: _____

Investigator(s): _____ Latitude/Longitude: _____

Soil Map Unit Name: _____ NWI or DEP Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No _____	Is the Sampled Area within a Wetland?
Hydric Soils criterion met?	Yes _____ No _____	
Wetlands hydrology present?	Yes _____ No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:		
Surface Water Present? Yes _____ No _____ Depth (inches) _____		
Water Table Present? Yes _____ No _____ Depth (inches) _____		
Saturation Present (including capillary fringe)? Yes _____ No _____ Depth (inches) _____		
Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
<input type="checkbox"/> Water-stained leaves	<input type="checkbox"/> Hydrological records	<input type="checkbox"/> Direct observation of inundation
<input type="checkbox"/> Evidence of aquatic fauna	<input type="checkbox"/> Free water in a soil test hole	<input type="checkbox"/> Drainage patterns
<input type="checkbox"/> Iron deposits	<input type="checkbox"/> Saturated soil	<input type="checkbox"/> Drift lines
<input type="checkbox"/> Algal mats or crusts	<input type="checkbox"/> Water marks	<input type="checkbox"/> Scoured areas
<input type="checkbox"/> Oxidized rhizospheres/pore linings	<input type="checkbox"/> Moss trim lines	<input type="checkbox"/> Sediment deposits
<input type="checkbox"/> Thin muck surfaces	<input type="checkbox"/> Presence of reduced iron	<input type="checkbox"/> Surface soil cracks
<input type="checkbox"/> Plants with air-filled tissue (aerenchyma)	<input type="checkbox"/> Woody plants with adventitious roots	<input type="checkbox"/> Sparsely vegetated concave surface
<input type="checkbox"/> Plants with polymorphic leaves	<input type="checkbox"/> Trees with shallow root systems	<input type="checkbox"/> Microtopographic relief
<input type="checkbox"/> Plants with floating leaves	<input type="checkbox"/> Woody plants with enlarged lenticels	<input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
Hydrogen sulfide odor		
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point _____

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1. White Pine						
2. Red Maple						
3. Red Oak						
4. White Oak						
5.						
6.						
7.						
8.						
9.						
_____ = Total Cover						
<u>Shrub/Sapling Stratum</u>		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1. Sweet Pepperbush						
2. Common Witch-Hazel						
3. Highbush Blueberry						
4. Mountain Laurel						
5. Swamp Azalea						
6. Red Maple						
7. White Pine						
8.						
9.						
_____ = Total Cover						
<u>Herb Stratum</u>		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1. Canada Mayflower						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
_____ = Total Cover						

VEGETATION – continued.

Woody Vine Stratum		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1.						
2.						
3.						
4.						
						= Total Cover

<u>Rapid Test:</u> Do all dominant species have an indicator status of OBL or FACW?		Yes _____ No _____	
<u>Dominance Test:</u>	Number of dominant species	Number of dominant species that are wetland indicator plants	
		Do wetland indicator plants make up $\geq 50\%$ of dominant plant species? Yes _____ No _____	
<u>Prevalence Index:</u>	Total % Cover (all strata)	Multiply by:	Result
		X 1	=
		X 2	=
		X 3	=
		X 4	=
	UPL species	X 5	=
Column Totals	(A)	(B)	
Prevalence Index B/A =		Is the Prevalence Index ≤ 3.0 ? Yes _____ No _____	
Wetland vegetation criterion met? Yes _____ No _____			

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub/Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		Indicators for Problematic Hydric Soils
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Polyvalue Below Surface (S8)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9)	<input type="checkbox"/> Polyvalue Below Surface (S8)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Thin Dark Surface (S9)
<input type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Mesic Spodic (A17)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7)		<input type="checkbox"/> Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: Depth (inches):

Remarks:

Hydric Soils criterion met? Yes No

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: _____ City/Town: _____ Sampling Date: _____

Applicant/Owner: _____ Sampling Point or Zone: _____

Investigator(s): _____ Latitude/Longitude: _____

Soil Map Unit Name: _____ NWI or DEP Classification: _____

Are climatic/hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? (If yes, explain in Remarks)

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If yes, explain in Remarks)

SUMMARY OF FINDINGS – Attach site map and photograph log showing sampling locations, transects, etc.

Wetland vegetation criterion met?	Yes _____ No _____	Is the Sampled Area within a Wetland?
Hydric Soils criterion met?	Yes _____ No _____	
Wetlands hydrology present?	Yes _____ No _____	
Remarks, Photo Details, Flagging, etc.:		

HYDROLOGY

Field Observations:		
Surface Water Present? Yes _____ No _____ Depth (inches) _____		
Water Table Present? Yes _____ No _____ Depth (inches) _____		
Saturation Present (including capillary fringe)? Yes _____ No _____ Depth (inches) _____		
Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology	Indicators that can be Reliable with Proper Interpretation	Indicators of the Influence of Water
<input checked="" type="checkbox"/> Water-stained leaves <input type="checkbox"/> Evidence of aquatic fauna <input type="checkbox"/> Iron deposits <input type="checkbox"/> Algal mats or crusts <input type="checkbox"/> Oxidized rhizospheres/pore linings <input type="checkbox"/> Thin muck surfaces <input type="checkbox"/> Plants with air-filled tissue (aerenchyma) <input type="checkbox"/> Plants with polymorphic leaves <input type="checkbox"/> Plants with floating leaves <input type="checkbox"/> Hydrogen sulfide odor	<input type="checkbox"/> Hydrological records <input type="checkbox"/> Free water in a soil test hole <input type="checkbox"/> Saturated soil <input type="checkbox"/> Water marks <input type="checkbox"/> Moss trim lines <input type="checkbox"/> Presence of reduced iron <input type="checkbox"/> Woody plants with adventitious roots <input type="checkbox"/> Trees with shallow root systems <input type="checkbox"/> Woody plants with enlarged lenticels	<input type="checkbox"/> Direct observation of inundation <input type="checkbox"/> Drainage patterns <input type="checkbox"/> Drift lines <input type="checkbox"/> Scoured areas <input type="checkbox"/> Sediment deposits <input type="checkbox"/> Surface soil cracks <input type="checkbox"/> Sparsely vegetated concave surface <input type="checkbox"/> Microtopographic relief <input type="checkbox"/> Geographic position (depression, toe of slope, fringing lowland)
Remarks (describe recorded data from stream gauge, monitoring well, aerial photos, previous inspections, if available):		

This form is only for BVW delineations. Other wetland resource areas may be present and should be delineated according to the applicable regulatory provisions.

Sampling Point _____

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1. White Pine						
2. Red Maple						
3. Red Oak						
4. White Oak						
5.						
6.						
7.						
8.						
9.						
_____ = Total Cover						
<u>Shrub/Sapling Stratum</u>		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1. Sweet Pepperbush						
2. Common Witch-Hazel						
3. Mountain Laurel						
4. Swamp Azalea						
5. Highbush Blueberry						
6. White Pine						
7. Red Maple						
8.						
9.						
_____ = Total Cover						
<u>Herb Stratum</u>		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1. Cinnamon Fern						
2. Canada Mayflower						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
_____ = Total Cover						

VEGETATION – continued.

Woody Vine Stratum		Plot size _____	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indictor? (yes/no)
Common name	Scientific name					
1.						
2.						
3.						
4.						
						= Total Cover

<u>Rapid Test:</u> Do all dominant species have an indicator status of OBL or FACW?		Yes _____ No _____	
<u>Dominance Test:</u>	Number of dominant species	Number of dominant species that are wetland indicator plants	
		Do wetland indicator plants make up $\geq 50\%$ of dominant plant species? Yes _____ No _____	
<u>Prevalence Index:</u>	Total % Cover (all strata)	Multiply by:	Result
		X 1	=
		X 2	=
		X 3	=
		X 4	=
	UPL species	X 5	=
Column Totals	(A)	(B)	
Prevalence Index B/A =		Is the Prevalence Index ≤ 3.0 ? Yes _____ No _____	
Wetland vegetation criterion met? Yes _____ No _____			

Definitions of Vegetation Strata

Tree - Woody plants 3 in. (7.62 cm) or more in diameter at breast height (DBH), regardless of height

Shrub/Sapling - Woody plants less than 3 in. (7.62 cm) DBH and greater than or equal to 3.3 ft. (1 m) tall

Herb - All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.3 ft. (1 m) tall

Woody vines - All woody vines greater than 3.3 ft. (1 m) in height

Cover Ranges	
Range	Midpoint
1-5 %	3.0 %
6-15 %	10.5 %
15-25 %	20.5 %
26-50 %	38.0 %
51-75 %	63.0 %
76-95 %	85.5 %
96-100 %	98.0 %

Sampling Point _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators)

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains ²Location: PL=Pore Lining, M=Matrix

Hydric Soil Indicators (Check all that apply)		Indicators for Problematic Hydric Soils
<input type="checkbox"/> Histosol (A1)	<input type="checkbox"/> Sandy Redox (S5)	<input type="checkbox"/> 2 cm Muck (A10)
<input type="checkbox"/> Histic Epipedon (A2)	<input type="checkbox"/> Stripped Matrix (S6)	<input type="checkbox"/> 5 cm Mucky Peat or Peat (S3)
<input checked="" type="checkbox"/> Black Histic (A3)	<input type="checkbox"/> Polyvalue Below Surface (S8)	<input type="checkbox"/> Dark Surface (S7)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9)	<input type="checkbox"/> Polyvalue Below Surface (S8)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Mucky Mineral (F1)	<input type="checkbox"/> Thin Dark Surface (S9)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Mesic Spodic (A17)
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Redox Dark Surface (F7)	<input type="checkbox"/> Red Parent Material (F21)
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Depleted Dark Surface (F8)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input type="checkbox"/> Dark Surface (S7)		<input type="checkbox"/> Other (Include Explanation in Remarks)

Restrictive Layer (if observed) Type: Depth (inches):

Remarks:

Hydric Soils criterion met? Yes _____ No _____

**Resource Area Delineation Plan by
Stamski and McNary, Inc.**