

Notice of Intent

18 Knollwood Road Bhatia House Addition

Reading, MA 01867

SUBMITTED TO:

Town of Reading
Conservation Commission
16 Lowell Street
Reading, MA 01867

SUBMITTED ON BEHALF OF:

Bharat & Anita Bhatia
1 Kerrigan Way
Woburn, MA 01801

PREPARED BY:

Caron Environmental Consulting, LLC
247 Bragg Hill Road
Westminster, MA 01473

PROJECT ENGINEER:

Sullivan Engineering Group, LLC
P.O. Box 2004
Woburn, MA 01888

July 23, 2025

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Massachusetts WPA Form 3—Notice of Intent (July 2025)

Attachments

- Locus Map (July 2025)
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PROJECT NARRATIVE

Project Introduction and Overview

This Notice of Intent (NOI) is being filed by Bharat & Anita Bhatia (the Applicant) in accordance with the Massachusetts Wetlands Protection Act (MAWPA) (M.G.L. Chapter 131, Section 40) and its implementing regulations (310 CMR 10.00), and the Town of Reading Wetland Protection Bylaw. This NOI is being filed for the construction of an addition and deck for an existing house.

The proposed work includes the demolition of an existing deck and walkway, the partial demolition of an existing addition, and the reconstruction and expansion of an existing addition (14'x28'), the construction of a new addition (22'x5'), the construction a new deck, the construction of a new porch and appurtenances. Mitigation plantings are proposed within the lawn and a row of arborvitae is proposed along the east edge of the lot. All of the work will be within previously disturbed areas and will result in a net reduction of impervious area.

Project Impacts and Mitigation

Buffer Zone:

All of the work is proposed within the Buffer Zone. At its closest the proposed work will be within 35 ft of the wetlands, consisting of demolition of the existing addition, walkway and deck. A portion of the new deck will be constructed partially within the 35 ft of the wetland being 28 ft from the wetland at its closest. The new addition will be 35 ft from the wetland at its closest.

The majority of the work will be within existing impervious areas. There is a proposed 830 sf of new construction, resulting in be a total reduction of 50 sf of impervious area on site.

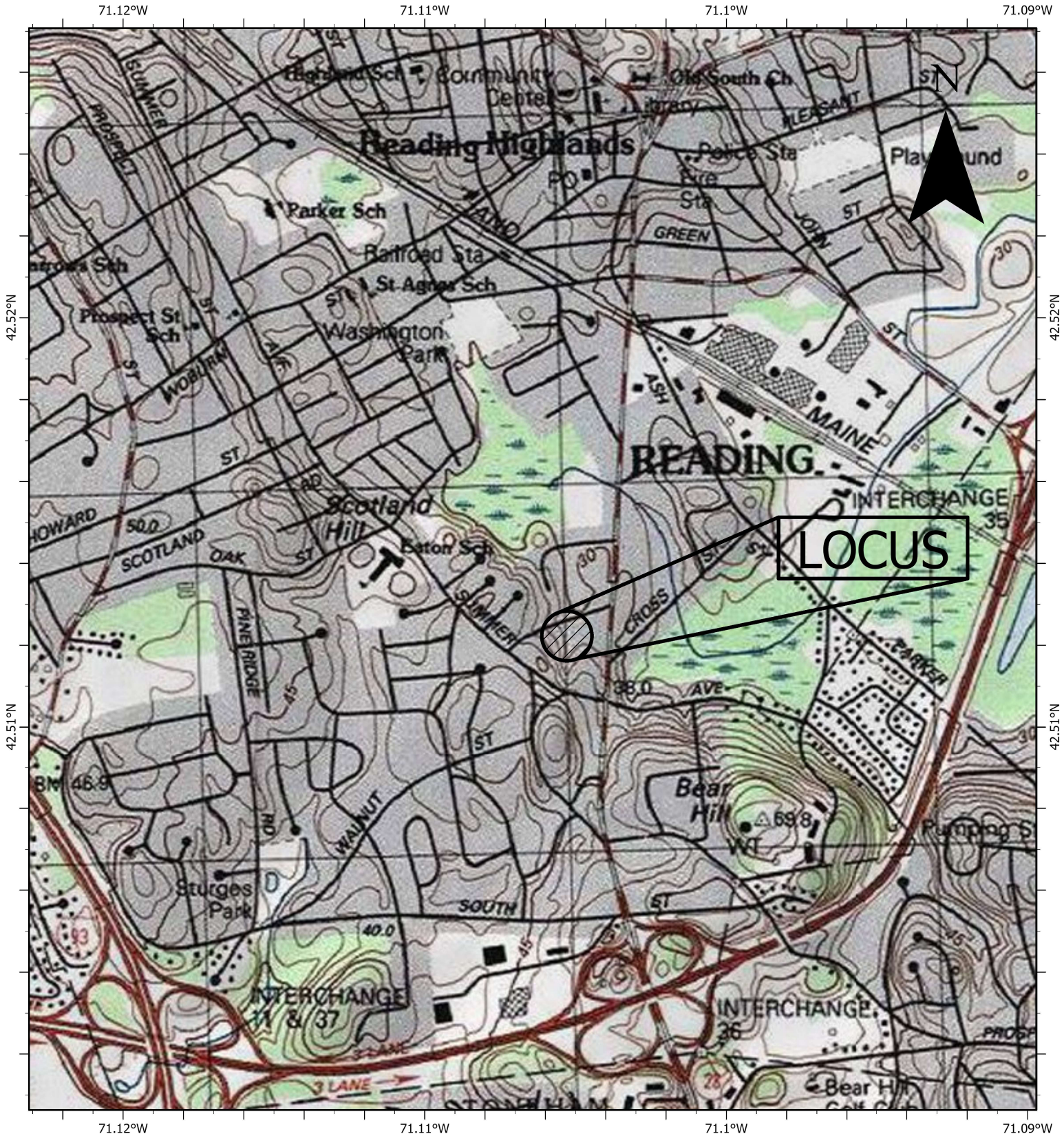
Plantings:

Mitigation plantings are proposed within the current lawn, in a portion of the area within 25 ft of the wetlands. A mix of native tree and shrub species is proposed. Additionally, a row of arborvitae is proposed along the driveway on the eastern edge of the site.

Erosion controls:

Erosion controls will be placed between all work and the wetlands. The erosion control barriers will be installed outside the 25-foot No Disturbance Zone where practicable.

Locus Map: 18 Knollwood Road House Addition; Notice of Intent; Reading, MA 01867



AFFIDAVIT OF SERVICE

Under the Massachusetts Wetlands Protection Act, M.G.L., c.131, s.40 and Reading General Bylaws, Section 7.1

(To be submitted to the Conservation Commission when filing a Notice of Intent or Abbreviated Notice of Resource Area Delineation or Request for Determination of Applicability)

I, Charles Caron (Name), hereby certify under the pains and penalties of perjury that on _____ (Date), I gave notification to abutters in compliance with the second paragraph of Massachusetts General Laws, c.131, s.40, and the **DEP Guide to Abutter Notification** dated April 8, 1994, and Reading General Bylaws, Section 7.1 in connection with the following matter:

(Check the applicable form.)

- Notice of Intent
- Abbreviated Notice of Resource Area Delineation
- Request for Determination of Applicability

filed under M.G.L., c.131, s.40 and R.G.B., s.7.1 by Bharat Bhatia (Applicant) with the Town of Reading Conservation Commission on _____ (Date) for property located at 18 Knollwood Road (Location).

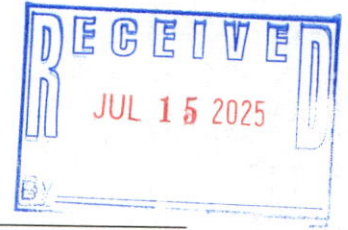
The form of the notification and list of abutters to whom it was given and their addresses are attached to this Affidavit of Service.

Name

Date

TOWN OF READING

REQUEST FOR CERTIFIED ABUTTERS LIST



SUBJECT PROPERTY:

ADDRESS: 18 Knollwood Road

Assessors' Map Number: 11 Lot Number: 8

APPLICANT/AGENT:

Name: Charles Caron, Caron Environmental Consulting, LLC

Address: 247 Bragg Hill Road, Westminster MA 01473

Telephone: (978) 944-2326 Email: caronenv@aol.com

Board or Commission for which this request is made (check all that are applicable):

Community Planning and Development Commission:

- Site Plan Review
Special Permit
Subdivision

Conservation Commission:

- Request for Determination
Abbreviated Notice of Resource Area Delineation
Notice of Intent

Zoning Board of Appeals:

- Appeal
Special Permit
Variance

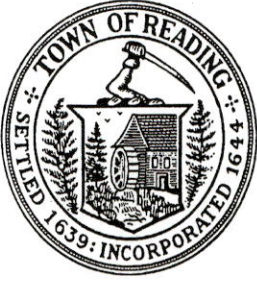
- Health Department
Historic District Commission
Historical Commission
Other:

Brief description of request: The request is for the 300-foot abutters to the above parcel. The proposed project is the construction of a new addition and deck for an existing house.

Applicant/Agent Signature: Charles Caron Date: 07/15/2025

The Assessors' Office may require up to three weeks in order to process and approve this request.

Authorized Signature: [Signature] Date: 7/15/2025



**TOWN OF READING
16 LOWELL STREET
READING, MA 01867-2693**

**BOARD OF ASSESSORS
TEL.: 781-942-9027
FAX: 781-942-9037**

January 2025

To whom it may concern:

In an effort to streamline our business practices and desire to decrease turnaround time for taxpayers and other municipal departments, please be advised that effective this date, we the Board of Assessors for the Town of Reading hereby delegate to the Town Chief Assessor of the Assessing Department signatory authority of all Certified Abutters Lists as compiled by the department.

Sincerely,

Reading Board of Assessors



Michael E. Golden

Brendan Zarechian



Jean Paul Plouffe



TOWN OF READING
16 LOWELL STREET
READING, MA 01867-2693

BOARD OF ASSESSORS
781-942-9027
FAX: 781-942-9037

ABUTTERS LIST
CERTIFICATION
FOR BOARD OF ASSESSORS

VICTOR P. SANTANIELLO, CHIEF ASSESSOR

DATE

Michele L. Keohan

7/15/25

MICHELE L. KEOHAN, ASSISTANT ASSESSOR

DATE

PROPERTY LOCATION

No	Alt No	Direction/Street/City
18		KNOLLWOOD RD, READING

OWNERSHIP

Owner 1:	BHATIA BHARAT
Owner 2:	BHATIA ANITA TE
Owner 3:	
Street 1:	18 KNOLLWOOD RD
Street 2:	
Twn/City:	READING
St/Prov:	MA Cntry Own Occ:
Postal:	01867 Type:

PREVIOUS OWNER

Owner 1:	DAVEY CAROLYN TRUSTEE -
Owner 2:	GEORGE CHARLES DAVEY IRREV TR -
Street 1:	19555 BLACK FALCON RD
Twn/City:	LOXAHATCHEE
St/Prov:	FL Cntry
Postal:	33412

NARRATIVE DESCRIPTION

This parcel contains .479 ACRES of land mainly classified as ONE FAM with a RANCH Building built about 1962, having primarily CLAPBOARD Exterior and 1681 Square Feet, with 1 Unit, 1 Bath, 0 3/4 Bath, 0 HalfBath, 6 Rooms, and 3 Bdrms.

OTHER ASSESSMENTS

Code	Descrip/No	Amount	Com. Int

PROPERTY FACTORS

Item	Code	Description	%	Item	Code	Description
Z	S15	SINGLE FA	100	water		
o				Sewer		
n				Electri		
Census:				Exmpt		
Flood Haz:						
D	READ	READ	100	Topo		
s				Street	P	PAVED
t				Gas:	M	MEDIUM

LAND SECTION (First 7 lines only)

Use Code	Description	LUC Fact	No of Units	Depth / PriceUnits	Unit Type	Land Type	LT Factor	Base Value	Unit Price	Adj	Neigh	Neigh Infl	Neigh Mod	Infl 1	%	Infl 2	%	Infl 3	%	Appraised Value	Alt Class	%	Spec Land	J Code	Fact	Use Value	Notes
101	ONE FAM		20862		SQ FEET	PRIMARY	1.0	0	10.	2.09	MA	1.23		WETLAN	-5					435,611						435,600	

IN PROCESS APPRAISAL SUMMARY

Use Code	Land Size	Building Value	Yard Items	Land Value	Total Value
101	0.479	274,400		435,600	710,000
Total Card		0.479	274,400	435,600	710,000
Total Parcel		0.479	274,400	435,600	710,000
Source:		Market Adj Cost	Total Value per SQ unit /Card: 422.48		/Parcel: 422.4

Legal Description	User Acct
	019000000012&
	GIS Ref
	GIS Ref
Entered Lot Size	
Total Land: 0.48	
Land Unit Type: AC	

PREVIOUS ASSESSMENT

Tax Yr	Use	Cat	Bldg Value	Yrd Items	Land Size	Land Value	Total Value	Asses'd Value	Notes	Date
2025	101	FV	274,400	0	.479	435,600	710,000		Year End	12/11/2024
2024	101	FV	258,700	0	.479	410,700	669,400		Year end	1/10/2024
2024	101	PTCH	246,400	0	.479	391,200	637,600	637,600	patch	4/27/2023
2023	101	FV	246,400	0	.479	391,200	637,600	637,600	Year end	1/9/2023
2022	101	FV	224,000	0	.479	355,600	579,600	579,600	Year end	12/20/2021
2021	101	FV	202,300	0	.479	331,900	534,200	534,200	Year End Roll	12/15/2020
2020	101	FV	191,500	0	.479	314,200	505,700	505,700	Year End Roll	12/17/2019
2019	101	FV	182,400	0	.479	299,200	481,600	481,600	YER	12/12/2018

SALES INFORMATION

Grantor	Legal Ref	Type	Date	Sale Code	Sale Price	V	Tst	Verif	Notes
DAVEY CAROLYN T	1628-75		6/2/2025		850,000	No	No		
DAVEY GEORGE C	1614-86		5/15/2024	FAMILY		1	No	No	
	00823-0153		8/17/1972		31,000	No	No		

BUILDING PERMITS

Date	Number	Descrip	Amount	C/O	Last Visit	Fed Code	F. Descrip	Comment
8/3/2016	B16623	SIDING	14,000	C				VINYL SIDE HOUSE A

ACTIVITY INFORMATION

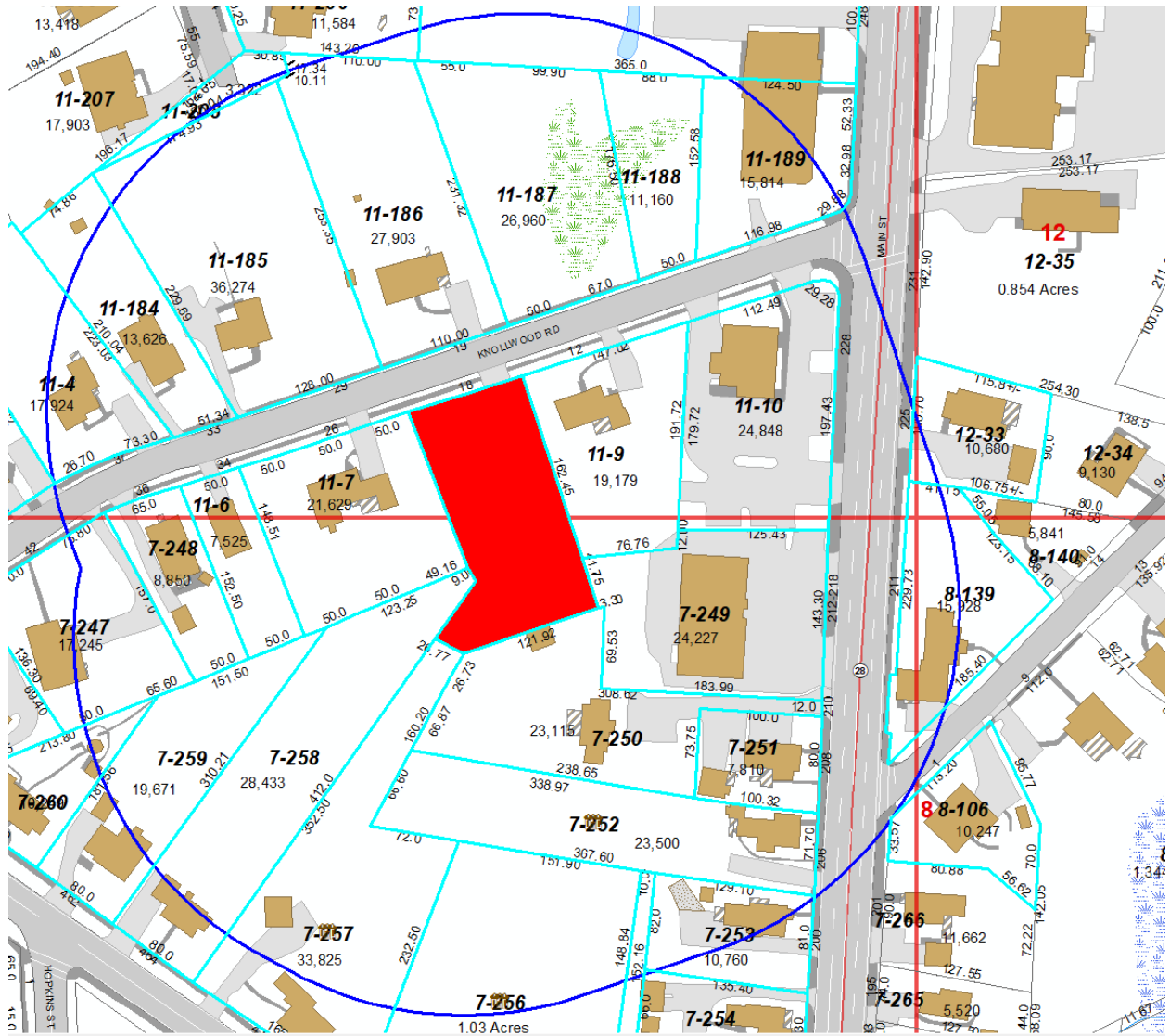
Date	Result	By	Name
11/29/2023	CYCLICAL	PC	PC
1/31/2018	CYCLICAL	PC	PC
11/2/2016	PERMIT VISIT	PC	PC
10/20/2009	COMPLETE-INS	SWM	SWM
10/20/2009	COMPLETE-INS	SWM	SWM

Sign: VERIFICATION OF VISIT NOT DATA



USER DEFINED

Prior Id # 1:	
Prior Id # 2:	
Prior Id # 3:	
Prior Id # 1:	
Prior Id # 2:	
Prior Id # 3:	
Prior Id # 1:	
Prior Id # 2:	
Prior Id # 3:	
ASR Map:	
Fact Dist:	
Reval Dist:	
Year:	
LandReason:	
BldReason:	
CivilDistrict:	
Ratio:	





Patriot Properties

07/15/2025

12:39:27PM

Reading

Abutters List

Filter Used: DataProperty.AccountNumber in
(1866,746,745,738,905,736,737,1688,744,1685,1689,943,947,734,1683,743,739,1686,1993,1861,735,741,1687,747,1684,749,740,1867,1883,1885,
1863,1864,1865,1862)

Subject Parcel ID: 18 KNOLLWOOD RD REPORT

Subject Property Location:

ParcelID	Location	Owner	Co-Owner	Mailing Address	City	State	Zip
007.0-0000-0247.0	42 KNOLLWOOD RD	MOHYDE KATHLEEN L		42 KNOLLWOOD RD	READING	MA	01867
007.0-0000-0248.0	36 KNOLLWOOD RD	RUSHWORTH PAUL P	NANCY RUSHWORTH	36 KNOLLWOOD RD	READING	MA	01867
007.0-0000-0249.0	212 MAIN ST	PATEL KALPESH TRUSTEE	JK REALTY TRUST	212-214 MAIN ST	READING	MA	01867
007.0-0000-0250.0	210 MAIN ST	RICKY AND JAY LLC		12 BENJAMIN LANE	READING	MA	01867
007.0-0000-0251.0	208 MAIN ST	ARETUSI REMO		23 NELSON AVE	READING	MA	01867
007.0-0000-0252.0	206 MAIN ST	HAJJAR AHMAD		131 FELLSWAY WEST	MEDFORD	MA	02155
007.0-0000-0253.0	200 MAIN ST	GAGE JASON L	ROBIN A GAGE	200 MAIN ST	READING	MA	01867
007.0-0000-0254.0	196 MAIN ST	SEPULVEDA RICHARD	SEPULVEDA JENNIFER MOH	196 MAIN ST	READING	MA	01867
007.0-0000-0256.0	484 SUMMER AVE	WEIS TIMOTHY MICHAEL	WEIS KELLY TE	484 SUMMER AVE	READING	MA	01867
007.0-0000-0257.0	472 SUMMER AVE	TRINITY HOME BUILDERS LLC		429 SOUTH MAIN ST	ANDOVER	MA	01810
007.0-0000-0258.0	464 SUMMER AVE	DOHERTY THOMAS N TRUSTEE	THOMAS N DOHERTY ESTA	464 SUMMER AVE	READING	MA	01867
007.0-0000-0259.0	462 SUMMER AVE	PATTERSON DILLON	PATTERSON ALEXANDRIA T	462 SUMMER AVE	READING	MA	01867
007.0-0000-0260.0	460 SUMMER AVE	KOSZKA KATHRYN	BURNS NOLAN JTROS	460 SUMMER AVE	READING	MA	01867
007.0-0000-0262.0	492 SUMMER AVE	MALO BIPLAB K	MALO SHAMAPTI G	492 SUMMER AVE	READING	MA	01867
008.0-0000-0106.0	1 CROSS ST	NAKHTIGAL MARIA R	PARISE ROBERT	1 CROSS ST	READING	MA	01867
008.0-0701-0139.0	211 MAIN ST 1	PANDYA SAGAR K JT	PANDYA KAMALNAYAN BH	211 MAIN STREET UNIT 1	READING	MA	01867
008.0-0702-0139.0	211 MAIN ST 2	COBAN HAKAN		211 MAIN ST UNIT 2	READING	MA	01867
011.0-0000-0004.0	37 KNOLLWOOD RD	FERGUSON JOHN R	DIANNE M FERGUSON	37 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0005.0	41 KNOLLWOOD RD	OLEARY REALTY TRUST	OLEARY TIMOTHY E MAURE	41 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0006.0	34 KNOLLWOOD RD	RACICOT THOMAS	RACICOT JESSICA	34 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0007.0	26 KNOLLWOOD RD	HODSDON RUSSELL M	CLAIRE E HODSDON	26 KNOLLWOOD ROAD	READING	MA	01867
011.0-0000-0008.0	18 KNOLLWOOD RD	BHATIA BHARAT	BHATIA ANITA TE	18 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0009.0	12 KNOLLWOOD RD	POUDYAL SUSHIL B	POUDYAL EVA TE	12 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0010.0	228 MAIN ST	BP READ LLC		50 LIBERTY DRIVE UNIT 5D	BOSTON	MA	02210
011.0-0000-0184.0	33 KNOLLWOOD RD	DIROCCO CARL J	GINA M DIROCCO	33 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0185.0	29 KNOLLWOOD RD	KORDOWSKA ALEKSANDRA	CASEY JOHN TE	29 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0186.0	19 KNOLLWOOD RD	KRAMER MICHELLE	STEPHEN R COOK	19 KNOLLWOOD RD	READING	MA	01867
011.0-0000-0187.0	KNOLLWOOD RD	TOWN OF READING		16 LOWELL ST	READING	MA	01867
011.0-0000-0188.0	KNOLLWOOD RD	C&S CAPITAL PROPERTIES LLC		51 MAIN STREET	STONEHAM	MA	02180
011.0-0000-0189.0	240 MAIN ST	C&S CAPITAL PROPERTIES LLC		51 MAIN ST #3	STONEHAM	MA	02180
011.0-0000-0190.0	242 MAIN ST	C&S CAPITAL PROPERTIES LLC		51 MAIN STREET	STONEHAM	MA	02180
011.0-0000-0206.0	54 PINEVALE AVE	GUIDI JOAN M TRUSTEE	GUIDI FAMILY REALTY TRU	54 PINEVALE AVENUE	READING	MA	01867
011.0-0000-0208.0	OFF PINEVALE AVE	CRONIN DANIEL D	DOREEN S CRONIN	55 PINEVALE AVE	READING	MA	01867
012.0-0000-0033.0	225 MAIN ST	MARIO BERTONE TRUST	BERTONE MARIO TRUSTEE	231 MAIN ST	READING	MA	01867

Parcel Count: 34

End of Report



Caron Environmental Consulting

Wetlands • Forestry • Permitting • Habitat Studies

May 20, 2025

Mr. Bharat Bhatia
1 Kerrigan Way
Woburn, MA 01801

Re: Wetland Delineation
18 Knollwood Road/Reading

Dear Mr. Bhatia:

As requested, we have delineated the wetlands on the above-referenced site. The delineation was conducted on April 29, 2025. The delineation was based on observations of the soils, the plant communities and hydrology.

The edges of Bordering Vegetated Wetlands were delineated with blue flagging labeled A1 to A16 and B1 to B3. The wetlands are primarily wooded. The uplands contain a house and lawn. The B-series wetland is located across Knollwood Road from the site.

Species which were observed to be dominant primarily in the wetlands include Swamp Dogwood, Henbit, Garlic Mustard, Sensitive Fern, Skunk Cabbage and sedges. Several species are common in both the wetlands and uplands including Red Maple and Violets. Species abundant primarily in the uplands include Norway Maple along with lawn. The attached Bordering Vegetated Wetland Determination Forms provide greater detail on the vegetation, soil conditions and hydrological indicators.

The MassGIS MassMapper does not show any Estimated/Priority Habitat Areas or Certified Vernal Pools on the site.

The delineation was based on features visually apparent and the regulations in place at the time. As you are aware the interpretation of the boundaries of wetlands can vary depending on many factors including the time of year, growth phase of vegetation, groundwater levels, soil conditions, weather, and other factors. As a result, no delineation can be considered definitive until it has been reviewed and verified by all of the relevant approving authorities.

If you have any questions in regards to this matter, please feel free to contact us.

Very truly yours,
CARON ENVIRONMENTAL CONSULTING

By;

Charles E. Caron

BORDERING VEGETATED WETLAND DETERMINATION FORM

Project/Site: 18 Knollwood Road City/Town: Reading Sampling Date: 04/29/2025

Applicant/Owner: Bharat Bhatia Sampling Point or Zone: A-W

Investigator(s): Charles Caron Latitude/Longitude: 42.5124N/71.1050W

Soil Map Unit Name: Merrimac-Urban Land Complex NWI or DEP Classification: PFO1

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

Are Vegetation Yes, Soil No, or Hydrology No significantly disturbed? (If yes, explain in Remarks)

Are Vegetation No, Soil No, or Hydrology No 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 <input checked="" type="checkbox"/> No <input type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Hydric Soils criterion met?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Wetlands hydrology present?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Remarks, Photo Details, Flagging, etc.: Plot is an estimate of entire wetland swath, and uplands from back edge of house to wetlands. Some landscaped planting within wetland excluded from plotset. Region under Mild Drought Conditions effective April 1, 2025.		

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Saturation Present (including capillary fringe)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Wetland Hydrology Indicators		
Reliable Indicators of Wetlands Hydrology <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	Indicators that can be Reliable with Proper Interpretation <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 checked="" 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	Indicators of the Influence of Water <input type="checkbox"/> Direct observation of inundation <input checked="" 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 checked="" 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.

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>See notes</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Red Maple	<i>Acer rubrum</i>	FAC*	38.0	Yes	Yes
2. Norway maple	<i>Acer platanoides</i>	FACU	38.0	Yes	No
3. Green Ash	<i>Fraxinus pensylvanica</i>	FACW*	3.0	No	Yes
4.					
5.					
6.					
7.					
8.					
9.					
			79.0 = Total Cover		
<u>Shrub/Sapling Stratum</u>		Plot size <u>See notes</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Privet	<i>Ligustrum vulgare</i>	FACU	10.5	Yes	No
2. Swamp Dogwood	<i>Cornus amomum</i>	FACW*	3.0	Yes	Yes
3. American Elm	<i>Ulmus americana</i>	FACW*	3.0	Yes	Yes
4. European Buckthorn	<i>Frangula alnus</i>	FAC*	3.0	Yes	Yes
5. Norway Maple	<i>Acer platanoides</i>	FACU	3.0	Yes	No
6. Chokecherry	<i>Prunus virginiana</i>	FACU	3.0	Yes	No
7. Arrowwood	<i>Viburnum dentatum</i>	FAC*	3.0	Yes	Yes
8. Blackberry	<i>Rubus allegheniensis</i>	FACU	3.0	Yes	No
9.					
			31.5 = Total Cover		
<u>Herb Stratum</u>		Plot size <u>See notes</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Henbit	<i>Lamium amplexicaule</i>	UPL	38.0	Yes	No
2. Skunk Cabbage	<i>Symplocarpus foetidus</i>	OBL*	20.5	Yes	Yes
3. Sensitive Fern	<i>Onoclea sensibilis</i>	FACW*	10.5	No	Yes
4. Jewelweed	<i>Impatiens capensis</i>	FACW*	3.0	No	No
5. Garlic Mustard	<i>Alliaria petiolata</i>	FACU	3.0	No	No
6. New York Fern	<i>Thelypteris noveboracensis</i>	FAC*	3.0	No	Yes
7. Spinulose Woodfern	<i>Dryopteris carthusiana</i>	FACW*	3.0	No	Yes
8. Sedge spp.	<i>Carex spp.</i>	FACW*	3.0	No	Yes
9. Small White Violet	<i>Viola macloskeyi</i>	OBL*	3.0	No	No
10.					
11.					
12.					
			87.0 = Total Cover		

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size _____			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
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>X</u>	
<u>Dominance Test:</u>	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes <u>X</u> No _____
	12	6	
<u>Prevalence Index:</u>		Total % Cover (all strata)	Multiply by: Result
	OBL species		X 1 =
	FACW species		X 2 =
	FAC species		X 3 =
	FACU species		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 <u>X</u> No _____	

Definitions of Vegetation Strata

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

SOIL

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Location ²		
0"-8"	2.5Y 2.5/1	96	10YR 4/1	4	D	M	Fine Sandy Loam	A-horizon
8"-20"	5YR 3/2	96	10YR 5/2	1	D	M	VFSL	B1-horizon
			5YR 4/6	3	C	M		
20"-26"+	2.5Y 5/2	60	5YR 4/6	25	C	M	VFSL	B2-horizon
			2.5Y 6/1	15	D	M		

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"/> Iron-Manganese Masses (F12)
<input type="checkbox"/> Hydrogen Sulfide (A4)	<input type="checkbox"/> Thin Dark Surface (S9)	<input type="checkbox"/> Mesic Spodic (A17)
<input type="checkbox"/> Stratified Layers (A5)	<input type="checkbox"/> Loamy Gleyed Matrix (F2)	<input type="checkbox"/> Red Parent Material (F21)
<input checked="" type="checkbox"/> Depleted Below Dark Surface (A11)	<input type="checkbox"/> Depleted Matrix (F3)	<input type="checkbox"/> Very Shallow Dark Surface (TF12)
<input checked="" type="checkbox"/> Thick Dark Surface (A12)	<input type="checkbox"/> Redox Dark Surface (F6)	
<input type="checkbox"/> Sandy Mucky Mineral (S1)	<input type="checkbox"/> Depleted Dark Surface (F7)	
<input type="checkbox"/> Sandy Gleyed Matrix (S4)	<input type="checkbox"/> Redox depressions (F8)	
<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: 18 Knollwood Road City/Town: Reading Sampling Date: 04/29/2025

Applicant/Owner: Bharat Bhatia Sampling Point or Zone: A-U

Investigator(s): Charles Caron Latitude/Longitude: 42.5124N/71.1050W

Soil Map Unit Name: Merrimac-Urban Land Complex NWI or DEP Classification: Upland

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

Are Vegetation Yes, Soil Yes, or Hydrology No significantly disturbed? (If yes, explain in Remarks)

Are Vegetation No, Soil No, or Hydrology No 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 <input type="checkbox"/> No <input checked="" type="checkbox"/>	Is the Sampled Area within a Wetland? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Hydric Soils criterion met?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Wetlands hydrology present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Remarks, Photo Details, Flagging, etc.: Plot is an estimate of entire wetland swath, and uplands from back edge of house to wetlands. Some landscaped planting within wetland excluded from plotset. The upland is predominantly Lawn. Region under mild Drought Conditions effective April 1, 2025.		

HYDROLOGY

Field Observations:		
Surface Water Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Water Table Present?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Depth (inches) _____
Saturation Present (including capillary fringe)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	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"/> 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.

VEGETATION – Use both common and scientific names of plants.

<u>Tree Stratum</u>		Plot size <u>See notes</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Red Maple	<i>Acer rubrum</i>	FAC*	20.5	Yes	Yes
2. Norway Maple	<i>Acer platanoides</i>	UPL	3.0	No	No
3.					
4.					
5.					
6.					
7.					
8.					
9.					
			<u>23.0</u> = Total Cover		
<u>Shrub/Sapling Stratum</u>		Plot size <u>See notes</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Norway Maple	<i>Acer platanoides</i>	UPL	3.0	Yes	No
2. Morrow's Honeysuckle	<i>Lonicera morrowii</i>	FACU	3.0	Yes	No
3. Raspberry	<i>Rubus idaeus</i>	FACU	3.0	Yes	No
4.					
5.					
6.					
7.					
8.					
9.					
			<u>9.0</u> = Total Cover		
<u>Herb Stratum</u>		Plot size <u>See notes</u>			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
1. Henbit	<i>Lamium amplexicaule</i>	UPL	3.0	Yes	No
2. Small White Violet	<i>Viola macloskeyi</i>	OBL*	3.0	Yes	Yes
3. Dandelion	<i>Taraxacum officinale</i>	FACU	3.0	Yes	No
4. Garlic Mustard	<i>Alliaria petiolata</i>	FACU	3.0	Yes	No
5. Common Plantain	<i>Plantago major</i>	FACU	3.0	Yes	No
6. Common Blue Violet	<i>Viola sororia</i>	FAC*	3.0	Yes	Yes
7.					
8.					
9.					
10.					
11.					
12.					
			<u>18.0</u> = Total Cover		

VEGETATION – continued.

<u>Woody Vine Stratum</u>		Plot size _____			
Common name	Scientific name	Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
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>X</u>	
<u>Dominance Test:</u>	Number of dominant species	Number of dominant species that are wetland indicator plants	Do wetland indicator plants make up ≥ 50% of dominant plant species? Yes _____ No <u>X</u>
	10	3	
<u>Prevalence Index:</u>		Total % Cover (all strata)	Multiply by: Result
	OBL species	3.0	X 1 = 3.0
	FACW species	0.0	X 2 = 0.0
	FAC species	23.5	X 3 = 70.5
	FACU species	12.0	X 4 = 48.0
	UPL species	9.0	X 5 = 45.0
	Column Totals	(A) 50.0	(B) 166.5
	Prevalence Index	B/A = 3.33	
		Is the Prevalence Index ≤ 3.0? Yes _____ No <u>X</u>	
<u>Wetland vegetation criterion met?</u>		Yes _____ No <u>X</u>	

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Wetland at Plot A-W



Upland at Plot A-U



Soil at Plot A-W



Soil at Plot A-U

