

**BORDERING VEGETATED WETLAND DETERMINATION FORM**

Project/Site: Forest Street/36 Arthur B Lord Drive City/Town: Reading Sampling Date: 12-20-22  
 Applicant/Owner: John Feudo Sampling Point or Zone: SP-1  
 Investigator(s): Norse Environmental Services, Inc. - Maureen Herald Latitude / Longitude: 42.53981 / -71.11112  
 Soil Map Unit Name: Charlton-Hollis-Rock outcrop NWI or DEP Classification: DEP

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 <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Is the Sampled Area within a Wetland?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
Hydic 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.:					

**HYDROLOGY**

<b>Field Observations:</b>			
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) _____
<b>Wetland Hydrology Indicators</b>			
Reliable Indicators of Wetlands Hydrology <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	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 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 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>30'</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.	Red Maple	Acer rubrum	FAC	30.0	Yes	Yes
2.	Oaks	Quercus sp.	FACU	60.0	Yes	No
3.						
4.						
5.						
6.						
7.						
8.						
9.						
<u>90.0</u> = Total Cover						
<u>Shrub/Sapling Stratum</u>		Plot size <u>15'</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.	Glossy Buckthorn	Rhamnus frangula	FAC	40.0	Yes	Yes
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
<u>40.0</u> = Total Cover						
<u>Herb Stratum</u>		Plot size <u>5'</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.	None					
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
<u>0.0</u> = Total Cover						

**VEGETATION – continued.**

<u>Woody Vine Stratum</u>		Plot size <u>None</u>			
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name	Scientific name				
1.					
2.					
3.					
4.					
		0.0 = Total Cover			

<b>Rapid Test:</b> Do all dominant species have an indicator status of OBL or FACW?		Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>Dominance Test:</b>	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 <input type="checkbox"/> No <input type="checkbox"/>
<b>Prevalence Index:</b>		Total % Cover (all strata)	Result
	OBL species		X 1 = 0.00
	FACW species		X 2 = 0.00
	FAC species	110	X 3 = 330.00
	FACU species	30	X 4 = 120.00
	UPL species		X 5 = 0.00
	Column Totals	(A) 140	(B) 450
Prevalence Index		B/A = <b>3.21</b>	Is the Prevalence Index ≤ 3.0? Yes <input type="checkbox"/> No <input type="checkbox"/>
<b>Wetland vegetation criterion met?</b>		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

**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 %



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Project/Site: Forest Street/36 Arthur B Lord Drive City/Town: Reading Sampling Date: 12-20-22  
 Applicant/Owner: John Feudo Sampling Point or Zone: SP-2  
 Investigator(s): Norse Environmental Services, Inc. - Maureen Herlad Latitude / Longitude: 42.53981 / -71.11112  
 Soil Map Unit Name: Charlton-Hollis-Rock outcrop NWI or DEP Classification: DEP

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

**HYDROLOGY**

<b>Field Observations:</b>			
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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Depth (inches) _____
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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 checked="" 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	Indicators of the Influence of Water <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)	
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Common name		Scientific name				
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3.						
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7.						
8.						
9.						
<u>90.0</u> = Total Cover						
<u>Shrub/Sapling Stratum</u>		Plot size <u>15'</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.	Glossy Buckthorn	Rhannus frangula	FAC	40.0	Yes	Yes
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
<u>40.0</u> = Total Cover						
<u>Herb Stratum</u>		Plot size <u>5'</u>				
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)	
Common name		Scientific name				
1.	None					
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
<u>0.0</u> = Total Cover						

**VEGETATION** – continued.

<u>Woody Vine Stratum</u>		Plot size <u>None</u>			
		Indicator Status	Absolute % Cover	Dominant? (yes/no)	Wetland Indicator? (yes/no)
Common name	Scientific name				
1.					
2.					
3.					
4.					
<u>0.0</u> = Total Cover					

<b>Rapid Test:</b> Do all dominant species have an indicator status of OBL or FACW? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			
<b>Dominance Test:</b>	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 <input type="checkbox"/> No <input type="checkbox"/>
<b>Prevalence Index:</b>		Total % Cover (all strata)	Result
	OBL species		X 1 = 0.00
	FACW species		X 2 = 0.00
	FAC species	100	X 3 = 300.00
	FACU species	30	X 4 = 120.00
	UPL species		X 5 = 0.00
	Column Totals	(A) 130	(B) 420
	Prevalence Index	B/A = <b>3.23</b>	
		Is the Prevalence Index ≤ 3.0? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
<b>Wetland vegetation criterion met?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			

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