

Three Oaks Environmental

P.O. Box 404 Hubbardston, MA 01452

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September 27, 2022

Conservation Commission
Sturbridge, MA
rgendreau@sturbridge.gov

Re: Additional wetlands information
235 & 237 Pondunk Rd.

I examined a depression with some wetland vegetation present and then followed a flow path from it towards the downgradient BVW. The flow path breaks up a short distance from the depression where there is an upland rise. I analyzed a spot within the apparent flow path which was a low area upgradient of the upland rise. The herbaceous layer was mixed. I performed an analysis of the plant community using the DEP wetland delineation data method (see attached). I was unable to auger more than 4 inches into the depression further upgradient that we had identified in the field during the site inspection this morning. I did find an area between the rocks and within the flow path we identified in the field where I was able to auger over 14 inches before hitting rock.

I had found the A horizon plow layer to be about 10 inches thick with a 10 YR3/1 munsell color, and the B horizon to be 10YR 4/4. Then I checked the Soil Web app on my phone and saw the soil to be identified as Woodbridge. The NRCS soil description is comparable to what I had identified. With the A horizon being 10YR3/2 and the B horizon 10YR4/4. The overall vegetation analysis conducted just downgradient of the soil hole also indicates an upland plant community in excess of 50%.. I have included the following photos and descriptions as well as the data sheet for the plot I analyzed.

I also placed pink flagging on the existing wetlands line that corresponds to the numbers shown on the most recently revised plan. The survey crew had incorrectly located flag W26 and had two flags labeled W27. One of those W27 flags, at the stonewall on the property line, has been corrected as W26 on the plan.



Vegetation along upland rise between the study plot and the wetland line



Pink flags with the original wetland numbering coincide with the recent blue flags as seen on this sugar maple.



Soil augur location chosen along the flow path identified in the field today



I placed the soil sections I augered, as noted in the previous photo, on top of a nearby gray rock. The first 10 inches was 10YR3/1, next 4 inches 10YR4/4

Small pockets of wetland vegetation exist within small depressions (pits) in the overall upland plant community. Soil analysis confirms that this area is an upland even while possessing a mixture of wetland and upland plant species. The attached data sheet also indicates that the plant community exceeds 50% upland species.

It is my professional opinion that the wetland delineation is accurate as it is currently flagged and represented on the revised plan dated 9/27/22.

Respectfully submitted,
MaryAnn DiPinto, PWS #227
threeoaksenvironmental@gmail.com

MaryAnn DiPinto 9/27/22

Section I. 235/237 Podunk Rd Sturbridge - data sheet

Data collected 9/27/22 by MaryAnn DiPinto, Three Oaks Environmental - plot above flag W22

Vegetation		Observation Plot Number:		Transect Number:	Date of Delineation:
A. Sample Layer & Plant Species (by common/scientific name)	B. Percent Cover (or basal Area)	C. Percent Dominance	D. Dominant Plant (yes or no)	E. Wetland Indicator Category*	
<u>Trees:</u>					
White ash	<i>Fraxinus americana</i>	50	43	Y	FacU
White Oak	<i>Quercus alba</i>	10	9	N	
Sugar maple	<i>Acer saccharum</i>	30	26	Y	FacU
Red Maple	<i>Acer rubrum</i>	25	22	Y	Fac*
<u>Shrubs:</u>					
Sugar maple	<i>Acer saccharum</i>	20	19	Y	FacU
Red Oak	<i>Quercus rubra</i>	15	14	N	
Black cherry	<i>Prunus serotina</i>	5	5	N	
Witch hazel	<i>Hamamelis virginiana</i>	25	24	Y	FacU
Winterberry holly	<i>Ilex verticillata</i>	25	24	Y	FacW*
Hawthorn	<i>Crataegus monogyna</i>	10	10	N	
Multiflora rose	<i>Rosa multiflora</i>	5	5	N	
<u>Saplings:</u>					
Sugar maple	<i>Acer saccharum</i>	20	36	Y	FacU
Witch hazel	<i>Hamamelis virginiana</i>	20	36	Y	FacU
Ironwood	<i>Ostrya virginiana</i>	15	27	Y	FacU
<u>Herbaceous:</u>					
Virginia creeper	<i>Parthenocissus quinquefolia</i>	25	24	Y	FacU
Canada goldenrod	<i>Solidago canadensis</i>	15	16	N	
Hayscented fern	<i>Dennstaedtia punctilobula</i>	15	20	Y	FacU
Solomon's seal	<i>Maianthemum racemosum</i>	15	16	N	

Vegetation conclusion:

Number of dominant wetland indicator plants: **2**

Number of dominant non-wetland indicator plants: **9**

Is the number of dominant wetland plants equal to or greater than the number of dominant non-wetland plants? yes **no**
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: NRCS web soil survey online NRCS "Soil Web"
Soil type mapped: Woodbridge, fine sandy loam,
Are field observations consistent with soil survey? **yes** no

2. Soil Description. Upland 235-237 Podunk Rd Sturbridge 9/27/22 cont-

Horizon	Depth	Matrix Color	Mottles Color
A _p	0-10	10YR 3/1 (soil survey indicates 10YR 3/2)	
B	10-14+	10YR 4/4 too rocky at 15"	

Remarks:

3. Other:

Conclusion: Is soil hydric? yes no

Vegetation and Hydrology Conclusion

	Yes	No
Number of wetland indicator plants ≥ # of non-wetland indicator plants	—	X—
Wetland hydrology present:		
Hydric soil present	—	X—
Other indicators of hydrology present	X-see note*	—
Sample location is in a BVW	—	X—

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

Other Indicators of Hydrology: (check all that apply & 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 *overland flow path through upland —

☐ Oxidized rhizospheres: —

Water-stained leaves: —

☐ Recorded Data (streams, lake, or tidal gauge; aerial photo; other): —

☐ Other: . —