

**VT Compliance Monitoring, LLC**  
mmontgomery@compliancevt.com  
PO Box 213  
Huntington, VT 05462

2/12/2016

Zapata Courage, District Wetland Ecologist  
Addison and Rutland Counties  
VT ANR, Department of Environmental Conservation  
Asa Bloomer State Office Building  
88 Merchants Row, Suite 430  
Rutland, VT 05701

**Re: Site 2015-707**  
**VT Wetland Permit Application Package (Revised and resubmitted 3/14/2016)**  
**Josh Baldwin Property, Waltham**

Ms. Courage:

Please find enclosed a revised VT Wetland Permit Application in support of Mr. Josh Baldwin's single family home construction in Waltham. The proposed activity requiring coverage involves improving an existing farm road and installing a sewer force main through managed and substantially modified, yet still jurisdictional, wetland area.

The proposed crossing locations are along the southern edge of Mr. Baldwin's property where the narrowest and driest portions of the wetland occur. This alignment makes use of the existing farm road and minimizes impacts to the wetland as much as possible.

Feedback from your initial review of my original submittal, received on March 4, indicated that the proposed work cannot be considered a linear activity and therefore does not qualify for the VT General Wetland permit given the area of unavoidable impact. The revised application attached here requests coverage under the Individual Wetland permit and documents functions and values as required. A completed ACOE wetland data form is also attached to satisfy the requirements of the Individual permit.

Please confirm that the department finds this revised application package administratively complete at your earliest convenience. Note my new contact information above.

Thank you,

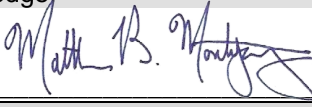


**Matt Montgomery**  
**Wetland Scientist**

## Vermont Wetland Section Wetland Application Database Form (AFFIX TO THE FRONT OF THE APPLICATION)

<b>Applicant Name: Josh Baldwin</b>		<b>Representative Name: Matt Montgomery</b>	
<b>Town where project is located: Waltham</b>		<b>County: Addison</b>	
<b>Project Location Description: Agricultural fields due west of 3727 US Rt. 7, New Haven, VT 05472</b> <i>911 Street Address or direction from nearest intersection</i>			
<b>Project Summary: Linear project in a managed area to improve an existing agricultural access road for single family home construction</b>			
<b>Permit Type Requested</b> (check all that apply)			
<input type="checkbox"/> Vermont General Permit Coverage		<input type="checkbox"/> Wetland Determination	<input checked="" type="checkbox"/> Vermont Wetland Permit
<b>Impact Calculations:</b> Total up proposed impacts from wetland tables listed below			
Total Wetland Impact		1610square feet (s.f.)	Total Buffer Zone Impact
			3300square feet (s.f.)
Total Wetland Clearing (qualified linear projects only)		0square feet (s.f.)	Total Buffer Zone Clearing (qualified linear projects only)
			0square feet (s.f.)
<b>Permit Fees: Make check payable to - State of Vermont</b>			
Wetland Impact Fee: (\$0.75/sf)		\$1,207.50	Administrative Fee: \$240
Buffer Impact Fee: (\$0.25/sf)		\$825.00	Total Check Amount: \$2,272.50
Clearing Fee: (\$0.25/sf)		\$0.00	
<b>Existing Land Use Type:</b> (check all that apply)			
<input checked="" type="checkbox"/> Agriculture		<input type="checkbox"/> Forestry	<input type="checkbox"/> Residential (Subdivision)
<input type="checkbox"/> Transportation		<input type="checkbox"/> Parks/Rec/Trail	<input type="checkbox"/> Residential (Single Family)
			<input type="checkbox"/> Industrial/ commercial
			<input type="checkbox"/> Institutional
			<input type="checkbox"/> Undeveloped
<b>Proposed Land Use Type:</b> (check all that apply)			
<input checked="" type="checkbox"/> Agriculture		<input type="checkbox"/> Forestry	<input type="checkbox"/> Residential (Subdivision)
<input type="checkbox"/> Transportation		<input type="checkbox"/> Parks/Rec/Trail	<input type="checkbox"/> Residential (Single Family)
			<input type="checkbox"/> Industrial/ commercial
			<input type="checkbox"/> Institutional
			<input type="checkbox"/> No Change
<b>Proposed Impact Type:</b> (check all that apply)			
<input checked="" type="checkbox"/> Driveway		<input type="checkbox"/> Buildings	<input checked="" type="checkbox"/> Utilities
<input type="checkbox"/> Road		<input type="checkbox"/> Parking	<input type="checkbox"/> Septic/Well
<input type="checkbox"/> Parks/Path		<input type="checkbox"/> Agriculture	<input type="checkbox"/> Stormwater
<input type="checkbox"/> Pond		<input type="checkbox"/> Lawn	
<input type="checkbox"/> Dry Hydrant		<input type="checkbox"/> Beaver dam alteration	<input type="checkbox"/> Silviculture
<input type="checkbox"/> Aesthetics		<input type="checkbox"/> Other	<input type="checkbox"/> No Impact
<b>Wetland 1: N/A</b> (Label using Wetland ID from application if applicable, use supplemental sheets if more than one wetland is being impacted) Location: <b>most is north of subject property</b>			
Wetland Type: <b>PEM/PFO - Emergent aWL</b> Size Class : <b>1-5 acres</b>			
<b>Proposed Alterations</b>			
<b>Wetland Alteration:</b>		<b>Buffer Zone Alteration:</b>	<b>Wetland Alteration Type</b> (check all that apply)
Wetland Fill: 1540s.f.		Temporary: 70s.f.	<input type="checkbox"/> Dredge
Temporary: 70s.f.		Permanent: : s.f.	<input type="checkbox"/> Drain
Permanent: : s.f.		Permanent: : 3100 s.f	<input type="checkbox"/> Cut Vegetation
			<input type="checkbox"/> Stormwater
			<input checked="" type="checkbox"/> Trench/Fill
			<input type="checkbox"/> Other
<b>Mitigation</b>			
<b>Avoidance and Minimization</b> (s.f. of wetland NOT impacted):			
Wetland:		s.f.	Buffer Zone s.f.
<b>Wetland Mitigation: (s.f. Gained)</b>			
Restoration s.f.		Enhancement s.f.	Buffer Zone Mitigation (s.f. Gained):
Creation s.f.		Conservation s.f.	Restoration s.f.
			Enhancement s.f.
			Creation s.f.
			Conservation s.f.
<b>Reason for Mitigation:</b>			
<input type="checkbox"/> Correction of Violation		<input type="checkbox"/> Mitigation to offset permit impacts	<input type="checkbox"/> Voluntary

## Vermont Wetland Permit Application/Determination Petition

QUESTION	INSTRUCTIONS AND APPLICANT ANSWER	STAFF NOTE
1. Applicant	If the applicant is someone other than the landowner, the landowner information must also be included below.	
1.1. Applicant Name	Joshua Baldwin	
1.2. Applicant Address	1466 Kellog Bay Road, Vergennes, VT 05491	
1.3. Applicant Phone Number	802-989-1487	
1.4. Applicant Email	thejoshman18@yahoo.com	
1.5. Applicant Signature (original signature required)	<p>By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge.</p> <p>X _____ Date: _____</p>	
2. Representative	Consultant, engineer, or other representative that is responsible for filling out this application, if other than the applicant or landowner	
2.1. Representative Name	Matthew Montgomery, Vermont Compliance Monitoring, LLC	
2.2. Representative Address	PO Box 213 Huntington, VT	
2.3. Representative Phone Number	802-363-6288	
2.4. Applicant Email	mmontgomery@compliancevt.com	
2.5. Representative Signature (original signature required)	<p>By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge</p> <p>X  Date: <b>revised</b> <b>03/14/2016</b></p>	
3. Landowner	Landowner must sign the application. Use this space if landowner is different from the applicant	
3.1. Landowner Name		
3.2. Landowner Address		
3.3. Landowner Phone Number		
3.4. Landowner Email		
3.5. Landowner Easement	<p>Attach copies of any easements, agreements or other documents conveying permission, and agreement with the landowner stating who will be responsible for meeting the terms and conditions of the permit. List the attachment for this information in this section.</p> <p>N/A</p>	
3.6. Landowner Signature (original signature required)	<p>By signing this application you are certifying that all the information contained within is true, accurate, and complete to the best of your knowledge.</p> <p>X _____ Date: _____</p>	
4. Location of Wetland and Project	<p>Location description should include the road the wetland is located on, the compass direction of the wetland in relation to the road, 911 street address if available, and any other distinguishing geographic features.</p> <p>The project site is located between Green St. and US Rt. 7 in Waltham approximately 2000 feet to the east of the intersection of Green St. and</p>	

	Middle Brook Rd.		
5. Site Visit Date and Attendees	Date of visit with District Wetlands Ecologist	List people present for site visits including Ecologist, landowner, and representatives.	
	Visit 1: October 2015 Visit 2 #2015-707: 2 December 2015	Visit 1 attendees: Julie Foley, Steve Delphia, Josh Baldwin Visit 2 attendees: Matt Montgomery, Steve Delphia, Josh Baldwin, Zapata Courage	
6. Wetland Classification	The wetland is a Class II wetland because (Choose one):		
	The wetland is contiguous to a VSWI mapped wetland		
7. Description of Entire Wetland or Wetland Complex	Answer the following questions regarding the entire wetland or wetland complex. A wetland complex is generally defined as two or more wetland types that are contiguous and interrelated. Specific questions about the wetland in the project area will follow.		
7.1. Size of Wetland Complex in Acres	Can be obtained from the Environmental Interest Locator Map for mapped wetlands Unknown, most of the complex is to the north and off the investigated parcel.		
7.2. Natural Community Types Present	List all wetland types in the wetland or wetland complex and their abundance or relative abundance. For example: 50 acres of softwood forested swamp; or 30% scrub swamp, 70% emergent wetland No natural community present on the subject parcel. Land has historically been in agricultural production, currently used for forage. The balance of the complex off the parcel to the north is partially forested and primarily an emergent marsh.		
7.3. Landscape Position	Where is the wetland located on the landscape? Examples: bottom of a basin, edge of a stream, shore of a lake, etc.		
	In and beside an active agricultural field.		
7.4. Wetland Hydrology	Describe the main source of wetland hydrology for the wetland complex. List any river, streams, lakes and ponds.		
	precipitation, landscape position, poorly drained soils Include answers to the following where appropriate:		
7.4.1. Direction of flow	For example: stream flows from north to south through the wetland complex. The direction of flow is generally toward the north-northeast off the project parcel.		
7.4.2. Influence of hydrology on wetland complex	For example: The river provides flood water to the wetland in the spring.		
	Spring meltwater and precipitation runoff result in hydric soils in the agricultural field and provide water to the adjacent wetland complex found to the north.		
7.4.3. Relation to the project area	Distance between the project area and any nearby surface waters.		
	The project area drains to unnamed tributaries of Mud Creek, with a confluence about 1 mile to the north.		
7.4.4. Hydroperiod	Discuss frequency and duration of flooding, ponding, and/or soil saturation.		
	Varied, and entirely dependent on precipitation frequency, soils were completely dry at the time of the site visits The investigator found no evidence of seeps or springs on the upgradient areas that contribute flow to the wetland		
7.5. Surrounding Landuse of the Wetland Complex	For example: rural residential and forested; agricultural and undeveloped, rural residential and agriculture		
7.6. Relation to Other Nearby Wetlands	Provide any information on wetlands or wetland complexes that are close enough to contribute to the overall function of the wetland in question.		
	The investigated area contributes flow and is upgradient of the only mapped wetland in the vicinity.		
7.7. Pre-project Cumulative Impacts to the Wetland	Identify any cumulative ongoing impacts outside of the project that may influence the wetland. Examples include but are not limited to wetland encroachments off the subject property, land management in or surrounding the wetland, or development that influences hydrology or water quality.		

	The wetland occurs in an active and regularly cultivated agricultural field. It appears that prior to cultivation, there may have been a network of channelized flow paths through the subject area.	
8. Description of Subject Wetland	Subject Wetland is defined as the area of wetland in the project area, but not limited to the portion of the wetland to be directly impacted by the project. For the purposes of this application, the subject wetland should encompass any portion of the larger wetland or wetland complex that could be directly or indirectly impacted by the project, as defined by hydrology, vegetation and/or physical characteristics.	
8.1. Context of Subject Wetland	Describe where the subject wetland is in the context of the larger wetland or wetland complex described above. The investigated area contributes flow to and is upgradient of the only mapped wetland in the vicinity.	
8.2. Wetland Landuse	For example: mowed lawn; old field; naturally vegetated. Describe any previous and ongoing disturbance in the subject wetland. Agricultural field in more or less continuous cultivation for at least 75 years. Evidence of subsurface drainage measures (e.g. perforated pipe) were found during the site visit.	
8.3. Wetland Vegetation	List dominant wetland community type and associated dominant plant species. Agricultural field. Phalaris arundinacea is dominant in the low areas of the uncultivated portion of the field.	
8.4. Wetland Soils	Use USDA NRCS information where possible and use the ACOE Delineation Manual soil description Covington and Panton Silty Clays - very dense, very poorly drained, abundant shallow redox concentrations observed  blocky structure 10YR 2/1 to 8 inches with 25% redox concentrations of 5YR 6/8 depleted matrix at 10 inches 10YR 5/1	
8.5. Wetland Hydrology	Use descriptions from the ACOE Delineation Manual. Saturation visible on aerial imagery, oxidized rhizospheres on living roots, surface soil cracks, drainage patterns, geomorphic position	
8.6. Buffer Zone	Describe the buffer zone of the subject wetland including:	
8.6.1. General landuse	For example: mowed road shoulder; forested; old field; paved road and residential lawns etc. Describe any previous and ongoing disturbance in the buffer zone. agricultural field, some is cultivated and some is currently hay field  There is no functional wetland buffer in the cultivated portions of the field.	
8.6.2. Buffer vegetation	List community type and dominant plant species Phleum pratense, Trifolium pratense, Poa pratense	
8.6.3. Buffer soils	Use USDA NRCS information where possible, and the ACOE Delineation Manual soil description Covington and Panton silty clays, Vergennes clay, 2 to 8 percent slopes - no redox with 10 inches of the surface, faint redox concentrations (<2%) beginning at about 10 inches  granular structure 10YR 4/3 plow layer to 8 inches	
9. Wetland Determination	If the application involves a wetland determination please answer the following. <b>If not, skip to Section 10.</b>	
9.1. Reason for Petition	Please choose one from the dropdown menu:  Add a Section 4.6 presumed wetland to the VSWI map	
9.2. Previous Decisions	Please list all determinations and decisions, if any, issued by the Secretary, Panel or former Water Resources Board, pertaining to the wetland or buffer at issue:	

9.3. Narrative	Please provide any narrative to support the petition for a wetland determination here. This section is not required for petitions to add a Section 4.6 presumed wetland to the VSWI map, but is required for all other petitions.
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**If the application is only for a Wetland Determination only, skip to Section 13**

10. Project Description	
10.1. Overall Project	Description of the project. For example: six-lot residential subdivision; expansion of an existing commercial building, access drive to a single family residence. Construct an access drive and install a sewer force main to a single family residence through an active agricultural field.
10.2. Project Purpose	For example: To construct a residential subdivision, upgrade existing road to improve access, extend a trail system Upgrading an existing farm road to improve access and bring utilities to a new single family home
10.3. Acres Owned by Applicant	Acreage of subject property. 20 +/-
10.4. Acres Involved in the Project	Acreage of area involved in the project. Approximately 2 acres
11. Project Details	Provide details regarding specific impacts to the wetland and buffer zone
11.1. Specific Impacts to Wetland and Buffer Zone	List portions of the project that will specifically impact the wetland or buffer zone. The driveway and sewer force main crosses the wetland and buffer in two locations.
11.2. Dimension Details	Square footage of buildings, dimension of roads including fill footprint. The permanent impacts from the driveway installation through the buffer and wetland was assumed to be 15 feet wide. The fill footprint of the road will be approximately 1550 sqft in the wetland and 3100 sqft in the buffer
11.3. Bridges and Culverts	Culvert circumference, length, placement and shapes, or bridge details. Two round culverts will be installed at each of the two wetland crossings with diameters of 24" and 14" to accommodate seasonal flows.
11.4. Construction Sequence	Describe any details pertaining to the work planned in the wetland and buffer in terms of sequence or phasing that is relevant The driveway will be installed in the spring of 2016 prior to any of the other proposed work on the site.
11.5. Stormwater Design	List any stormwater permits obtained or applied for. Describe any stormwater and/or erosion controls proposed to prevent discharges to the wetland and buffer zone. Crushed stone and fabric will be used to improve the existing access road where wetland impacts are anticipated. Substantial vegetative buffers exist between the house site location and wastewater treatment and the delineated wetland boundary. No erosion or sediment control measures will be required to prevent discharges to the wetland and buffer zone.
11.6. Permanent Demarcation of Limits of Impact	Describe any plantings, fencing, signage, or other memorialization that provides permanent on-the-ground boundaries for the limits of disturbance for ongoing uses. Nothing planned. The wetland will remain in agricultural use as allowed by Vermont wetland rules.
12. Wetland and Buffer Zone Impacts	

<p>12.1. Wetland Impacts</p>	<p>Summarize the square footage of impact in the appropriate category. If more than one wetland is impacted, provide that information and use the supplemental wetland sheets.</p> <table border="1" data-bbox="560 268 1385 394"> <tr> <td colspan="2"><b>Totals</b></td> </tr> <tr> <td>Wetland Fill</td> <td>1540 s.f.</td> </tr> <tr> <td>Temporary Wetland Impact</td> <td>70 s.f.</td> </tr> <tr> <td>Other Permanent Wetland Impact</td> <td>s.f.</td> </tr> </table> <p>Describe in detail the proposed impact.</p> <p>Improving the existing access road will require stone fill in the wetland area, and installation of the sewer force main will require digging a 70 ft long x 1 ft wide ditch through the wetland parallel to the driveway.</p>	<b>Totals</b>		Wetland Fill	1540 s.f.	Temporary Wetland Impact	70 s.f.	Other Permanent Wetland Impact	s.f.	
<b>Totals</b>										
Wetland Fill	1540 s.f.									
Temporary Wetland Impact	70 s.f.									
Other Permanent Wetland Impact	s.f.									
<p>12.2. Buffer Zone Impacts</p>	<p>Summarize the square footage of impact in the appropriate category. If more than one wetland is impacted, provide that information and use the supplemental wetland sheets.</p> <table border="1" data-bbox="560 758 1385 846"> <tr> <td colspan="2"><b>Totals</b></td> </tr> <tr> <td>Temporary Buffer Impact</td> <td>200 s.f.</td> </tr> <tr> <td>Permanent Buffer Impact</td> <td>3100 s.f.</td> </tr> </table> <p>Describe in detail the proposed impact.</p> <p>Improving the existing access road will require stone fill in the buffer zone, and installation of the sewer force main will require digging a 200 ft long x 1 foot wide trench through the buffer parallel to the driveway.</p>	<b>Totals</b>		Temporary Buffer Impact	200 s.f.	Permanent Buffer Impact	3100 s.f.			
<b>Totals</b>										
Temporary Buffer Impact	200 s.f.									
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<p>12.3. Cumulative Impacts</p>	<p>List any potential cumulative or ongoing, direct and indirect impacts on the functions of the wetland that could result from the proposed project.</p> <p>None envisioned or anticipated, the wetland in its current condition provides little function or value, and will remain in agricultural use.</p>									
<p>12.4. Avoidance and Minimization</p>	<p>Please refer to Section 9.5b of the rules on Mitigation Sequencing for this section.</p>									
<p>12.4.1. Avoidance</p>	<p>Can the proposed activity be practicably located outside the wetland/buffer zone, or on another site owned or controlled by the applicant or reasonably available to satisfy the basic project purpose? If not, indicate why. This answer should include any examination of alternatives that you have explored including using other properties, requesting easements, and altering the project design.</p> <p>No. The most suitable house location is on the west side of the property and the driveway must extend from the east side of the property where primary access to the property already exists. The wetland on the subject property extends north to south over the full width of the parcel.</p>									
<p>12.4.2. Minimization</p>	<p>If the proposed activity cannot practicably be located outside the wetland/buffer zone, have all practicable measures have been taken to avoid adverse impacts on protected functions? Please include any information on on-site alternatives that have been examined; minimizing the size and scope of the project to avoid impacts; or relocating portions of the project to avoid impacts</p> <p>The driveway was located on the extreme southern edge of the property allowing it to cross the wetland at the narrowest point. The driveway is being located on a preexisting agricultural access road.</p>									
<p>12.4.3. Mitigation</p>	<p>If avoidance of adverse effects on protected functions cannot be practically achieved, has the proposed activity has been planned to minimize adverse impacts on the protected functions and a plan has been developed for the prompt restoration of any adverse impacts on protected functions? Include any information on best management practices to be used for the project</p>									

	<p>both for the initial construction and ongoing use. Also include any proposed restoration of temporary impacts, previously disturbed wetland or buffer zones or proposed conservation that are being used to offset the proposed impacts.</p> <p>None anticipated</p>																									
<p>12.4.4. Compensation</p>	<p>Please refer to Section 9.5c of the rules for compensation, which is appropriate when the project will result in an undue adverse impact. If compensation is proposed please include a summary here.</p> <p>None required</p>																									
<p>13. Supporting materials</p>	<p>Where appropriate list the accompanying material by title, author, date and last revision date. Submit these documents and plans with the application.</p>																									
<p>13.1. Location map</p>	<p>Provide a project location map that is 8 ½" x 11" and reproducible in black and white. An Environmental Interest Locator Map is appropriate using the USGS topography map base layer, roads, and VSWI wetlands at minimum.</p> <p>A site location map based on imagery from the ANR Natural Resources Atlas is attached to this permit application.</p>																									
<p>13.2. Site Plans</p>	<p>List by title, author, date and last revision date. Plans should include wetland delineation and buffer zones, limits of disturbance, erosion controls, building envelopes and permanent memorialization.</p> <p>Title "Joshua Baldwin, 20+/- Acre Parcel Wastewater System Design Waltham, Vermont" by Jason Barnard Consulting, LLC, on July 30, 2012, last revised on 12/10/2015.</p>																									
<p>13.3. ACOE Delineation Forms</p>	<p>List by author, location, and date. Required only for Individual Permits.</p> <p>ACOE Delineation Forms for the wetland are attached here. The site was highly modified and reference upland forms were not completed. ACOE Delineation Procedure was followed to determine wetland boundaries. Upland and wetland plots were established by Matt Montgomery, Waltham site, 11/27/2015.</p>																									
<p>13.4. Other Supporting Documents</p>	<p>Provide any other documentation that supports the application. List photographs; easements; agreements; may include a GIS-compatible wetland submittal for determinations; etc.</p> <p>USDA soils map, S. Delphia 11/11/2015 annotated VSWI layer, site visit photos, 12/29/2015 email correspondence from Zapata Courage</p>																									
<p>13.5. List of Abutters (Neighbors with land adjoining wetland or buffer zone)</p>	<p>Attach list of names and mailing addresses or submit as word mailing document.</p> <p>Kevin Bourdon 2073 S. Middlebrook Road, Vergennes, VT 05491          Joe Desautels 7441 Ethan Allen Highway, New Haven, VT 05472          Steve Delphia 7327 US Rt. 7, New Haven, VT 05472</p>																									
<p>13.5.1. Newspaper Notification</p>	<p>If choosing the option to fulfill the notice requirement with a newspaper notice, list the newspaper to be used here. A list of names and addresses for immediately adjacent landowners (500 foot radius) of the project area is required for the List of Abutters. <b>***NOTE: The applicant will be billed directly by the newspaper you list here. Use of newspaper notification may extend the notice period, depending on when the notice posts in the newspaper.</b></p> <p>N/A</p>																									
<p>14. Check Which Functions are Present in the Subject Wetland and in the Wetland Complex.</p>	<p><b>Wetland Function Summary:</b> (if more than one wetland use supplemental wetland sheets)</p> <table border="1" data-bbox="553 1780 1471 2011"> <thead> <tr> <th>Functions &amp; Values</th> <th>Subject Wetland</th> <th>Wetland Complex</th> <th>Functions &amp; Values</th> <th>Subject Wetland</th> <th>Wetland Complex</th> </tr> </thead> <tbody> <tr> <td>Flood/Storm Storage</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>RTE Species</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Surface &amp; Groundwater Protection</td> <td><input type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Education &amp; Research</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Fish Habitat</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Recreation/</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </tbody> </table>	Functions & Values	Subject Wetland	Wetland Complex	Functions & Values	Subject Wetland	Wetland Complex	Flood/Storm Storage	<input type="checkbox"/>	<input checked="" type="checkbox"/>	RTE Species	<input type="checkbox"/>	<input type="checkbox"/>	Surface & Groundwater Protection	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Education & Research	<input type="checkbox"/>	<input type="checkbox"/>	Fish Habitat	<input type="checkbox"/>	<input type="checkbox"/>	Recreation/	<input type="checkbox"/>	<input type="checkbox"/>	
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				Economic		
	Wildlife Habitat	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Open Space/ Aesthetics	<input type="checkbox"/>	<input type="checkbox"/>
	Exemplary Natural Community	<input type="checkbox"/>	<input type="checkbox"/>	Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>
15. Coverage under Vermont General Wetland Permit	<p><b>If applying for an Individual Vermont Wetland Permit or Determination, please proceed to number 16 and answer the remaining application questions.</b></p> <p><b>If applying for Coverage under the Vermont General Wetland Permit, please complete question 15.1 prior to submitting application.</b></p>					
15.1.VWP Vermont General Permit eligibility checklist	<p>If applying for coverage under the Vermont General Wetland Permit, please verify the following to complete the application:</p> <p><input checked="" type="checkbox"/>The activity qualifies as an eligible activity for coverage under the Vermont General Wetland Permit</p> <p><input type="checkbox"/>The proposed project will meet the conditions applicable to the proposed project in the Vermont Wetland General Permit</p> <p><input checked="" type="checkbox"/>The activity does not qualify as an Allowed Use under Section 6 of the Vermont Wetland Rules.</p> <p><input checked="" type="checkbox"/>The activity will not result in an undue adverse impact on protected wetland functions and values, nor does it need additional conditions to protect functions and values.</p> <p><input checked="" type="checkbox"/> All impacts have been avoided and minimized to the greatest extent possible.</p> <p><input checked="" type="checkbox"/>The wetland complex is not significant for Function 5.5 Exemplary Wetland Natural Community or 5.6 Rare, Threatened and Endangered Species Habitat.</p> <p><input checked="" type="checkbox"/>The activity is not located in or adjacent to a vernal pool, fen, or bog.</p> <p><input checked="" type="checkbox"/>The wetland is not at or above 2,500' in elevation (headwaters wetland).</p> <p><input checked="" type="checkbox"/>The project is not located in a Class I wetland or associated buffer zone.</p> <p><input checked="" type="checkbox"/>The activity is not an as-built project that constitutes a violation of the Vermont Wetland Rules.</p>					
<b>Stop here if applying for Coverage under the Vermont General Wetland Permit</b>						

<b>Complete the following Functions and Values checklist if applying for an Individual Wetland Permit and/or a Wetland Determination</b>	
Functions and Values	<p>For each Function and Value, first evaluate the entire wetland or <b>wetland complex</b> and check all that apply. Secondly, evaluate how the wetland in the project area contributes to that function. Thirdly explain how the project will not result in adverse impacts to this function. Include any information on specific avoidance and minimization measures.</p> <p>If more than one wetland complex is involved, use the Supplemental Wetland Forms.</p>

## 16. Storage for Flood Water and Storm Runoff

- Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.
- Constricted outlet or no outlet and an unconstricted inlet.
  - Physical space for floodwater expansion and dense, persistent, emergent vegetation or dense woody vegetation that slows down flood waters or stormwater runoff during peak flows and facilitates water removal by evaporation and transpiration.
  - If a stream is present, its course is sinuous and there is sufficient woody vegetation to intercept surface flows in the portion of the wetland that floods.
  - Physical evidence of seasonal flooding or ponding such as water stained leaves, water marks on trees, drift rows, debris deposits, or standing water.
  - Hydrologic or hydraulic study indicates wetland attenuates flooding.
- If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.
- Check box if any of the following conditions apply that may indicate the wetland provides this function at a *lower* level.
- Significant flood storage capacity upstream of the wetland, and the wetland in question provides this function at a negligible level in comparison to upstream storage (unless the upstream storage is temporary such as a beaver impoundment).
  - Wetland is contiguous to a major lake or pond that provides storage benefits independently of the wetland.
  - Wetland's storage capacity is created primarily by recent beaver dams or other temporary structures.
  - Wetland is very small in size, not contiguous to a stream, and not part of a collection of small wetlands in the landscape that provide this function cumulatively.
- Check box if any of the following conditions apply that may indicate the wetland provides this function at a *higher* level.
- History of downstream flood damage to public or private property.
  - Any of the following conditions present downstream of the wetland, but upstream of a major lake or pond, could be impacted by a loss or reduction of the water storage function.
    - 1. Developed public or private property.
    - 2. Stream banks susceptible to scouring and erosion.

	<ul style="list-style-type: none"> <li><input type="checkbox"/> 3. Important habitat for aquatic life.</li> <li><input type="checkbox"/> The wetland is large in size and naturally vegetated.</li> <li><input checked="" type="checkbox"/> Any of the following conditions present upstream of the wetland may indicate a large volume of runoff may reach the wetland.             <ul style="list-style-type: none"> <li><input type="checkbox"/> 1. A large amount of impervious surface in urbanized areas.</li> <li><input checked="" type="checkbox"/> 2. Relatively impervious soils.</li> <li><input type="checkbox"/> 3. Steep slopes in the adjacent areas.</li> </ul> </li> </ul>	
<p>16.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>It does not. The subject wetland is a concentrated flow path that conveys stormwater to the more or less intact portion of the wetland complex for on the adjacent property to the north. The wetland areas on the subject property may have been created or expanded when the land was modified for an agricultural conversion decades, perhaps a century or more, ago.</p>	
<p>16.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p> <p>Multiple culverts will be installed at each of the crossing locations to allow continued flow of stormwater run-off through the farm field and into the adjacent wetland complex.</p>	
<p>17. Surface and Ground Water Protection</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.             <ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Constricted or no outlets.</li> <li><input type="checkbox"/> Low water velocity through dense, persistent vegetation.</li> <li><input type="checkbox"/> Hydroperiod permanently flooded or saturated.</li> <li><input checked="" type="checkbox"/> Wetlands in depositional environments with persistent vegetation wider than 20 feet.</li> <li><input type="checkbox"/> Wetlands with persistent vegetation comprising a defined delta, island, bar or peninsula.</li> <li><input type="checkbox"/> Presence of seeps or springs.</li> <li><input type="checkbox"/> Wetland contains a high amount of microtopography that helps slow and filter surface water.</li> <li><input type="checkbox"/> Position in the landscape indicates the wetland is a headwaters area.</li> <li><input type="checkbox"/> Wetland is adjacent to surface waters.</li> <li><input type="checkbox"/> Wetland recharges a drinking water source.</li> <li><input type="checkbox"/> Water sampling indicates removal of pollutants or nutrients.</li> <li><input type="checkbox"/> Water sampling indicates retention of sediments or organic matter.</li> <li><input type="checkbox"/> Fine mineral soils and alkalinity not low.</li> </ul> </li> <li><input checked="" type="checkbox"/> The wetland provides an obvious filter between surface water or ground water and land uses that may contribute</li> </ul>	

	<p>point or nonpoint sources of sediments, toxic substances or nutrients to the wetland, such as: steep erodible slopes; row crops; dumps; areas of pesticide, herbicide or fertilizer application; feed lots; parking lots or heavily traveled road; and septic systems.</p> <p>If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.</p> <p><input type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>lower</i> level.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Presence of dead forest or shrub areas in sufficient amounts to result in diminished nutrient uptake.</li> <li><input type="checkbox"/> Presence of ditches or channels that confine water and restrict contact of water with vegetation.</li> <li><input type="checkbox"/> Wetland is very small in size, not contiguous to a stream, and not part of a collection of small wetlands in the landscape that provide this function cumulatively.</li> <li><input type="checkbox"/> Current use in the wetland results in disturbance that compromises this function.</li> </ul> <p><input type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>higher</i> level.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> The wetland is adjacent to a well head or source protection area, and provides ground water recharge.</li> <li><input type="checkbox"/> The wetland provides flows to Class A surface waters.</li> <li><input type="checkbox"/> The wetland contributes to the protection or improvement of water quality of any impaired waters.</li> <li><input type="checkbox"/> The wetland is large in size and naturally vegetated.</li> </ul>	
<p>17.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The subject wetland rarely contributes to this function since it is only intermitently vegetated. It may catch sediment and trap nutrients if left uncultivated when the adjacent upgradient ag field gets plowed and row-cropped.</p>	
<p>17.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p> <p>There will be no change in land management. The part of the wetland complex that preforms this function is off the subject property, will not be involve with the project, and will remain unchanged.</p>	
<p>18. Fish Habitat</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Contains woody vegetation that overhangs the banks of a stream or river and provides any of the following: shading that controls summer water temperature; cover including refuges created by overhanging branches or undercut banks; source of terrestrial insects as fish food; or</li> </ul>	

	<p>streambank stability.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Provides spawning, nursery, feeding or cover habitat for fish (documented or professionally judged). Common habitat includes deep marsh and shallow marsh associates with lakes and streams, and seasonally flooded wetlands associated with streams and rivers.</li> <li><input type="checkbox"/> Documented or professionally judged spawning habitat for northern pike.</li> <li><input type="checkbox"/> Provides cold spring discharge that lowers the temperature of receiving waters and creates summer habitat for salmonoid species.</li> <li><input type="checkbox"/> The wetland is located along a tributary that does not support fish, but contributes to a larger body of water that does support fish. The tributary supports downstream fish by providing cooler water, and food sources.</li> </ul>	
<p>18.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	
<p>18.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p>	
<p>19. Wildlife Habitat</p>	<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.             <ul style="list-style-type: none"> <li><input type="checkbox"/> Provides resting, feeding staging or roosting habitat to support waterfowl migration, and feeding habitat for wading birds. Good habitats for these species include open water wetlands.</li> <li><input type="checkbox"/> Habitat to support one or more breeding pairs or broods of waterfowl including all species of ducks, geese, and swans. Good habitats for these species include open water habitats adjacent shallow marsh, deep marsh, shrub wetland, forested wetland, or naturally vegetated buffer zone.</li> <li><input checked="" type="checkbox"/> Provides a nest site, a buffer for a nest site or feeding habitat for wading birds including but not limited to: great blue heron, black-crowned night heron, green-backed heron, cattle egret, or snowy egret. Good habitats for these species include open water or deep marsh adjacent to forested wetlands, or standing dead trees.</li> <li><input type="checkbox"/> Supports or has the habitat to support one or more breeding pairs of any migratory bird that requires wetland habitat for breeding, nesting, rearing of young, feeding, staging roosting, or migration, including: Virginia rail, common snipe, marsh wren, American bittern, northern water thrush, northern harrier, spruce grouse, Cerulean warbler, and common loon.</li> <li><input type="checkbox"/> Supports winter habitat for white-tailed deer. Good habitats</li> </ul> </li> </ul>	

for these species include softwood swamps. Evidence of use includes deer browsing, bark stripping, worn trails, or pellet piles.

- Provides important feeding habitat for black bear, bobcat, or moose based on an assessment of use. Good habitat for these types of species includes wetlands located in a forested mosaic.
- Has the habitat to support muskrat, otter or mink. Good habitats for these species include deep marshes, wetlands adjacent to bodies of water including lakes, ponds, rivers and streams.
- Supports an active beaver dam, one or more lodges, or evidence of use in two or more consecutive years by an adult beaver population.
- Provides the following habitats that support the reproduction of Uncommon Vermont amphibian species including:
  - 1. Wood Frog, Jefferson Salamander, Blue-spotted Salamander, or Spotted Salamander. Breeding habitat for these species includes vernal pools and small ponds.
  - 2. Northern Dusky Salamander and the Spring Salamander. Habitat for these species includes headwater seeps, springs, and streams.
  - 3. The Four-toed salamander; Fowler's Toad; Western or Boreal Chorus frog, or other amphibians found in Vermont of similar significance.
- Supports or has the habitat to support significant populations of Vermont amphibian species including, but not limited to Pickerel Frog, Northern Leopard Frog, Mink Frog, and others found in Vermont of similar significance. Good habitat for these types of species includes large marsh systems with open water components.
- Supports or has the habitat to support populations of uncommon Vermont reptile species including: Wood Turtle, Northern Map Turtle, Eastern Musk Turtle, Spotted Turtle, Spiny Softshell, Eastern Ribbonsnake, Northern Watersnake, and others found in Vermont of similar significance.
- Supports or has the habitat to support significant populations of Vermont reptile species, including Smooth Greensnake, DeKay's Brownsnake, or other more common wetland-associated species.
- Meets four or more of the following conditions indicative of wildlife habitat diversity:
  - 1. Three or more wetland vegetation classes (greater than 1/2 acre) present including but not limited to: open water contiguous to, but not necessarily part of, the wetland, deep marsh, shallow marsh, shrub swamp, forested swamp, fen, or bog;

- 2. The dominant vegetation class is one of the following types: deep marsh, shallow marsh, shrub swamp or, forested swamp;
- 3. Located adjacent to a lake, pond, river or stream;
- 4. Fifty percent or more of surrounding habitat type is one or more of the following: forest, agricultural land, old field or open land;
- 5. Emergent or woody vegetation occupies 26 to 75 percent of wetland, the rest is open water;
- 6. One of the following:
  - i. hydrologically connected to other wetlands of different dominant classes or open water within 1 mile;
  - ii. hydrologically connected to other wetlands of same dominant class within 1/2 mile;
  - iii. within 1/4 mile of other wetlands of different dominant classes or open water, but not hydrologically connected;

Wetland or wetland complex is owned in whole or in part by state or federal government and managed for wildlife and habitat conservation; and

Contains evidence that it is used by wetland dependent wildlife species.

If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.

- Check box if any of the following conditions apply that may indicate the wetland provides this function at a *lower* level.
  - The wetland is small in size for its type and does not represent fugitive habitat in developed areas (vernal pools and seeps are generally small in size, so this does not apply).
  - The surrounding land use is densely developed enough to limit use by wildlife species (with the exception of wetlands with open water habitat). Can be negated by evidence of use.
  - The current use in the wetland results in frequent cutting, mowing or other disturbance.
  - The wetland hydrology and character is at a drier end of the scale and does not support wetland dependent species.
- Check box if any of the following conditions apply that may indicate the wetland provides this function at a *higher* level.
  - The wetland complex is large in size and high in quality.
  - The habitat has the potential to support several species

	<p>based on the assessment above.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Wetland is associated with an important wildlife corridor.</li> <li><input type="checkbox"/> The wetland has been identified as a locally important wildlife habitat by an ANR Wildlife Biologist.</li> </ul>	
<p>19.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>It does not contribute to the listed function. Subject wetland is a cultivated agricultural field.</p>	
<p>19.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p> <p>There will be no change in land management. The part of the wetland complex that performs this function is off the subject property and will remain unchanged.</p>	
<p>20. Exemplary Wetland Natural Community</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.             <ul style="list-style-type: none"> <li><input type="checkbox"/> Wetlands that are identified as high quality examples of Vermont's natural community types recognized by the Natural Heritage Information Project of the Vermont Fish and Wildlife Department, including rare types such as dwarf shrub bogs, rich fens, alpine peatlands, red maple-black gum swamps and the more common types including deep bulrush marshes, cattail marshes, northern white cedar swamps, spruce-fir-tamarack swamps, and red maple-black ash seepage swamps are automatically significant for this function.</li> </ul> </li> </ul> <p>The wetland is also likely to be significant if any of the following conditions are met:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Is an example of a wetland natural community type that has been identified and mapped by, or meets the ranking and mapping standards of, the Natural Heritage Information Project of the Vermont Fish and Wildlife Department.</li> <li><input type="checkbox"/> Contains ecological features that contribute to Vermont's natural heritage, including, but not limited to:             <ul style="list-style-type: none"> <li><input type="checkbox"/> Deep peat accumulation reflecting a long history of wetland formation;</li> <li><input type="checkbox"/> Forested wetlands displaying very old trees and other old growth characteristics;</li> <li><input type="checkbox"/> A wetland natural community that is at the edge of the normal range for that type;</li> <li><input type="checkbox"/> A wetland mosaic containing examples of several to many wetland community types; or</li> <li><input type="checkbox"/> A large wetland complex containing examples of several wetland community types.</li> </ul> </li> </ul> <p>List species or communities of concern:</p>	
<p>20.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	



<p>20.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p>	
<p>21. Rare, Threatened, and Endangered Species Habitat</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <p><input type="checkbox"/> Wetlands that contain one or more species on the federal or state threatened or endangered lists, as well as species that are rare in Vermont, are automatically significant for this function.</p> <p>The wetland is also likely to be significant if any of the following apply:</p> <p><input type="checkbox"/> There is credible documentation that the wetland provides important habitat for any species on the federal or state threatened or endangered species lists;</p> <p><input type="checkbox"/> There is credible documentation that threatened or endangered species have been present in past 10 years;</p> <p><input type="checkbox"/> There is credible documentation that the wetland provides important habitat for any species listed as rare in Vermont (S1 or S2 ranks), state historic (SH rank), or rare to uncommon globally (G1, G2, or G3 ranks) by the Natural Heritage Information Project of the Vermont Fish and Wildlife Department;</p> <p><input type="checkbox"/> There is credible documentation that the wetland provides habitat for multiple uncommon species of plants or animals (S3 rank).</p> <p>List name of species and ranking:</p>	
<p>21.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	
<p>21.2. Statement of no adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p>	
<p>22. Education and Research in Natural Sciences</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function.</p> <p><input type="checkbox"/> Owned by or leased to a public entity dedicated to education or research.</p> <p><input type="checkbox"/> History of use for education or research.</p> <p><input type="checkbox"/> Has one or more characteristics making it valuable for education or research.</p>	
<p>22.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	

<p>22.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p>	
<p>23. Recreational Value and Economic Benefits</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Used for, or contributes to, recreational activities.</li> <li><input type="checkbox"/> Provides economic benefits.</li> <li><input type="checkbox"/> Provides important habitat for fish or wildlife which can be fished, hunted or trapped under applicable state law.</li> <li><input type="checkbox"/> Used for harvesting of wild foods.</li> </ul> <p>Comments:</p>	
<p>23.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	
<p>23.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p>	
<p>24. Open Space and Aesthetics</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Can be readily observed by the public; and             <ul style="list-style-type: none"> <li><input type="checkbox"/> Possesses special or unique aesthetic qualities; or</li> <li><input type="checkbox"/> Has prominence as a distinct feature in the surrounding landscape;</li> </ul> </li> <li><input type="checkbox"/> Has been identified as important open space in a municipal, regional or state plan.</li> </ul> <p>Comments:</p>	
<p>24.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	
<p>24.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue, adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p>	
<p>25. Erosion Control through Binding and Stabilizing the Soil</p>	<p><input type="checkbox"/> Function is present and likely to be significant: Any of the following physical and vegetative characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Erosive forces such as wave or current energy are present and any of the following are present as well:             <ul style="list-style-type: none"> <li><input type="checkbox"/> Dense, persistent vegetation along a shoreline or</li> </ul> </li> </ul>	

	<p>stream bank that reduces an adjacent erosive force.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Good interspersion of persistent emergent vegetation and water along course of water flow.</li> <li><input type="checkbox"/> Studies show that wetlands of similar size, vegetation type, and hydrology are important for erosion control.</li> </ul> <p>What type of erosive forces are present:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Lake fetch and waves</li> <li><input type="checkbox"/> High current velocities:</li> <li><input type="checkbox"/> Water level influenced by upstream impoundment</li> </ul> <p>If any of the above boxes are checked, the wetland provides this function. Complete the following to determine if the wetland provides this function above or below a moderate level. If none of the following apply, the wetland provides this function at a moderate level.</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>lower</i> level.             <ul style="list-style-type: none"> <li><input type="checkbox"/> The stream is artificially channelized and/or lacks vegetation that contributes to controlling the erosive force.</li> </ul> </li> <li><input type="checkbox"/> Check box if any of the following conditions apply that may indicate the wetland provides this function at a <i>higher</i> level.             <ul style="list-style-type: none"> <li><input type="checkbox"/> The stream contains high sinuosity.</li> <li><input type="checkbox"/> Has been identified through fluvial geomorphic assessment to be important in maintaining the natural condition of the stream or river corridor.</li> </ul> </li> </ul>	
<p>25.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p>	
<p>25.2. Statement of no undue adverse impact</p>	<p>Please explain how the proposed project will not result in any undue adverse impact to this function. Include any avoidance and minimization measures relevant to this function.</p>	

**All Applications Should be Mailed To:**

**Vermont Wetlands Program  
 Watershed Management Division  
 One National Life Drive, Main 2  
 Montpelier, VT 05620-3522**

**Staff To Complete**

<b>Wetland Project Number:</b>		
<b>Wetland Project Name:</b>		<b>DEC ID#:</b>
<b>Date Application Received:</b>		
<b>Request for Information Date:</b>		<b>Information Received Date:</b>
<b>Request for Information Date:</b>		<b>Information Received Date:</b>
<b>Date Application Complete:</b>		<b>Distribution Complete Date:</b>
<b>Notice Begin Date:</b>		<b>Notice End Date:</b>
<b>Final Action Date:</b>		<b>Public Meeting Date:</b>
<b>Check#</b>	<b>Check Amount</b>	<b>Date Check Received</b>
<b>Check#</b>	<b>Check Amount</b>	<b>Date Check Received</b>

## WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Driveway to single family housesite through Ag Field City/County: Waltham / Addison Sampling Date: 11/27/2015  
 Applicant/Owner: Josh Baldwin State: VT Sampling Point: wet  
 Investigator(s): Matt Montgomery, VCM Section, Township, Range: N/A  
 Landform (hillside, terrace, etc.): valley Local relief (concave, convex, none): concave Slope (%): 2  
 Subregion (LRR or MLRA): LRR R, MLRA 142 Lat: 44.143829 Long: -73.211906 Datum: NAD 83  
 Soil Map Unit Name: Cw - Covington and Panton Silty Clays NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation Y, Soil Y, or Hydrology Y significantly disturbed? Are "Normal Circumstances" present? Yes  No   
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If yes, optional Wetland Site ID: _____
Remarks: (Explain alternative procedures here or in a separate report.) The wetland occurs within a cultivated agricultural field that has been in near constant agricultural use for 60+ years. Portions were just plowed prior to my site visit. Sub-surface drainage pipes were observed daylighting along the lowest/northern property boundary. Wetland habitat occurs on an adjacent property to the north in an unmanaged condition.	

### HYDROLOGY

<b>Wetland Hydrology Indicators:</b> <u>Primary Indicators (minimum of one is required; check all that apply)</u> <input type="checkbox"/> Surface Water (A1) <input type="checkbox"/> Water-Stained Leaves (B9) <input type="checkbox"/> High Water Table (A2) <input type="checkbox"/> Aquatic Fauna (B13) <input type="checkbox"/> Saturation (A3) <input type="checkbox"/> Marl Deposits (B15) <input type="checkbox"/> Water Marks (B1) <input type="checkbox"/> Hydrogen Sulfide Odor (C1) <input type="checkbox"/> Sediment Deposits (B2) <input checked="" type="checkbox"/> Oxidized Rhizospheres on Living Roots (C3) <input type="checkbox"/> Drift Deposits (B3) <input type="checkbox"/> Presence of Reduced Iron (C4) <input type="checkbox"/> Algal Mat or Crust (B4) <input checked="" type="checkbox"/> Recent Iron Reduction in Tilled Soils (C6) <input type="checkbox"/> Iron Deposits (B5) <input type="checkbox"/> Thin Muck Surface (C7) <input type="checkbox"/> Inundation Visible on Aerial Imagery (B7) <input type="checkbox"/> Other (Explain in Remarks) <input type="checkbox"/> Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> <input type="checkbox"/> Surface Soil Cracks (B6) <input checked="" type="checkbox"/> Drainage Patterns (B10) <input type="checkbox"/> Moss Trim Lines (B16) <input type="checkbox"/> Dry-Season Water Table (C2) <input type="checkbox"/> Crayfish Burrows (C8) <input checked="" type="checkbox"/> Saturation Visible on Aerial Imagery (C9) <input type="checkbox"/> Stunted or Stressed Plants (D1) <input checked="" type="checkbox"/> Geomorphic Position (D2) <input type="checkbox"/> Shallow Aquitard (D3) <input type="checkbox"/> Microtopographic Relief (D4) <input checked="" type="checkbox"/> FAC-Neutral Test (D5)
<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? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Depth (inches): _____ (includes capillary fringe)	<b>Wetland Hydrology Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:	
Remarks: It has been unseasonably dry and warm in the weeks prior to this field delineation. Surface soil layers were very dry, soils at depth were only slightly moist. Wetland hydrology on the property may have been enhanced by its agricultural conversion. Flagged wetland areas are in concentrated flow paths. I expect that the intermittent stormwater and melt water flows that provide water to property were more channelized in stream beds historically. Once the drainages were filled, graded, and plowed the poorly drained clay soils retained more water.	

**VEGETATION** – Use scientific names of plants.

Sampling Point: wet

	Absolute % Cover	Dominant Species?	Indicator Status																																	
<b>Tree Stratum</b> (Plot size: _____)																																				
1. <u>None</u>	_____	_____	_____	<b>Dominance Test worksheet:</b>  Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)  Total Number of Dominant Species Across All Strata: <u>1</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100.0%</u> (A/B)																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
_____ =Total Cover																																				
<b>Sapling/Shrub Stratum</b> (Plot size: _____)																																				
1. <u>None</u>	_____	_____	_____	<b>Prevalence Index worksheet:</b>  <table style="width:100%; border:none;"> <tr> <td style="text-align:right;">Total % Cover of:</td> <td style="text-align:center;">_____</td> <td style="text-align:right;">Multiply by:</td> <td style="text-align:center;">_____</td> </tr> <tr> <td>OBL species</td> <td style="text-align:center;"><u>0</u></td> <td>x 1 =</td> <td style="text-align:center;"><u>0</u></td> </tr> <tr> <td>FACW species</td> <td style="text-align:center;"><u>100</u></td> <td>x 2 =</td> <td style="text-align:center;"><u>200</u></td> </tr> <tr> <td>FAC species</td> <td style="text-align:center;"><u>0</u></td> <td>x 3 =</td> <td style="text-align:center;"><u>0</u></td> </tr> <tr> <td>FACU species</td> <td style="text-align:center;"><u>0</u></td> <td>x 4 =</td> <td style="text-align:center;"><u>0</u></td> </tr> <tr> <td>UPL species</td> <td style="text-align:center;"><u>0</u></td> <td>x 5 =</td> <td style="text-align:center;"><u>0</u></td> </tr> <tr> <td>Column Totals:</td> <td style="text-align:center;"><u>100</u></td> <td>(A)</td> <td style="text-align:center;"><u>200</u> (B)</td> </tr> <tr> <td colspan="4" style="text-align:center;">Prevalence Index = B/A = <u>2.00</u></td> </tr> </table>	Total % Cover of:	_____	Multiply by:	_____	OBL species	<u>0</u>	x 1 =	<u>0</u>	FACW species	<u>100</u>	x 2 =	<u>200</u>	FAC species	<u>0</u>	x 3 =	<u>0</u>	FACU species	<u>0</u>	x 4 =	<u>0</u>	UPL species	<u>0</u>	x 5 =	<u>0</u>	Column Totals:	<u>100</u>	(A)	<u>200</u> (B)	Prevalence Index = B/A = <u>2.00</u>			
Total % Cover of:	_____	Multiply by:	_____																																	
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Column Totals:	<u>100</u>	(A)	<u>200</u> (B)																																	
Prevalence Index = B/A = <u>2.00</u>																																				
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
_____ =Total Cover																																				
<b>Herb Stratum</b> (Plot size: _____)																																				
1. <u>Phalaris arundinacea</u>	<u>100</u>	<u>Yes</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input checked="" type="checkbox"/> 3 - Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> 4 - Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
5. _____	_____	_____	_____																																	
6. _____	_____	_____	_____																																	
7. _____	_____	_____	_____																																	
8. _____	_____	_____	_____																																	
9. _____	_____	_____	_____																																	
10. _____	_____	_____	_____																																	
11. _____	_____	_____	_____																																	
12. _____	_____	_____	_____																																	
_____ =Total Cover																																				
<b>Woody Vine Stratum</b> (Plot size: _____)																																				
1. <u>None</u>	_____	_____	_____	<b>Definitions of Vegetation Strata:</b>  <b>Tree</b> – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.  <b>Sapling/shrub</b> – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.  <b>Herb</b> – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.  <b>Woody vines</b> – All woody vines greater than 3.28 ft in height.																																
2. _____	_____	_____	_____																																	
3. _____	_____	_____	_____																																	
4. _____	_____	_____	_____																																	
_____ =Total Cover																																				
				<b>Hydrophytic Vegetation Present?</b> Yes <u>X</u> No _____																																

Remarks: (Include photo numbers here or on a separate sheet.)  
 This part of the field was not cultivated this year. Phalaris only occurs in the low wetland areas and it was a monoculture. A slight rise in topography on the adjacent upland areas supported 50% Phleum pratense, 45% Trifolium pratense, and ~5% Poa pratense.

**SOIL**

Sampling Point: wet

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 <sup>1</sup>	Loc <sup>2</sup>		
0-8	10YR 2/1	100					Loamy/Clayey	Ap
8-12	10YR 4/1	75	5YR 6/8	25	C	PL	Loamy/Clayey	Prominent redox concentrations
12-16	10YR 5/1	60	5YR 6/8	40	C	PL	Loamy/Clayey	Prominent redox concentrations

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators:**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5)
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)
- Sandy Redox (S5)
- Stripped Matrix (S6)
- Dark Surface (S7)
- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- High Chroma Sands (S11) (LRR K, L)
- Loamy Mucky Mineral (F1) (LRR K, L)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Marl (F10) (LRR K, L)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 2 cm Muck (A10) (LRR K, L, MLRA 149B)
- Coast Prairie Redox (A16) (LRR K, L, R)
- 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- Polyvalue Below Surface (S8) (LRR K, L)
- Thin Dark Surface (S9) (LRR K, L)
- Iron-Manganese Masses (F12) (LRR K, L, R)
- Piedmont Floodplain Soils (F19) (MLRA 149B)
- Mesic Spodic (TA6) (MLRA 144A, 145, 149B)
- Red Parent Material (F21)
- Very Shallow Dark Surface (TF12)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if observed):**

Type: \_\_\_\_\_

Depth (inches): \_\_\_\_\_

Hydric Soil Present? Yes  No

**Remarks:**

Per NRCS Field Indicators of Hydric Soils version 7.0 March 2013.

Very dense clay soils, somewhat granular in the plow layer, very angular blocky below.





Evidence of reduced Fe in recently plowed soils



Sub-surface drainage measures and current use diminishes the WL's function and values



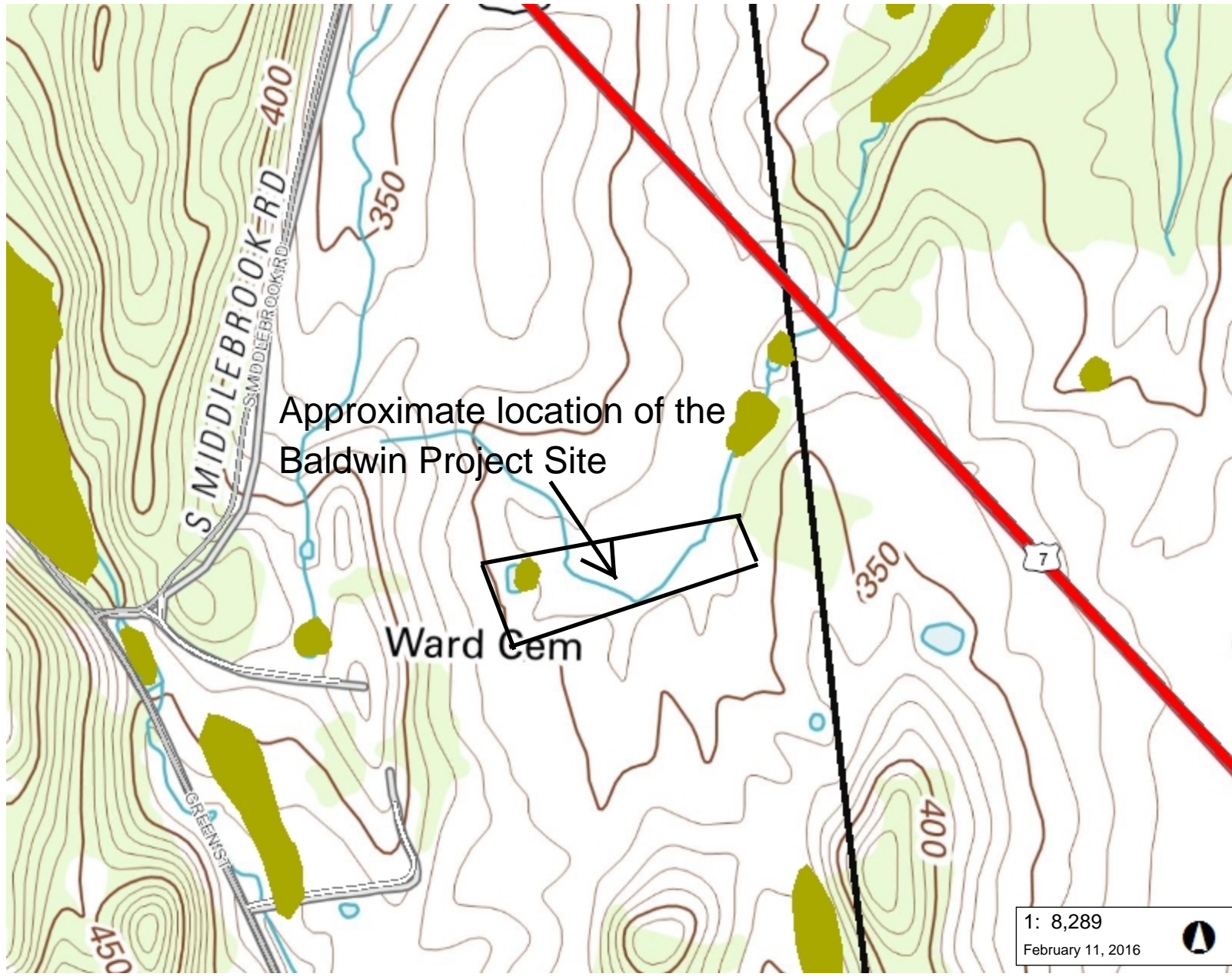
Upland soils, Ap horizon



Abundant shallow Redox concentrations throughout WL area







### LEGEND

**Wetlands - VSWI**

- Class 1 Wetland
- Class 2 Wetland

**Roads**

- Principal Arterial
- Minor Arterial
- Rural Major Collector
- Rural Minor Collector
- Urban Collector
- Local
- Not part of the Functional Classific

**Town Boundary**

1: 8,289  
February 11, 2016

421.0 0 210.00 421.0 Meters  
 WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
 © Vermont Agency of Natural Resources  
 1" = 691 Ft. 1cm = 83 Meters  
 THIS MAP IS NOT TO BE USED FOR NAVIGATION

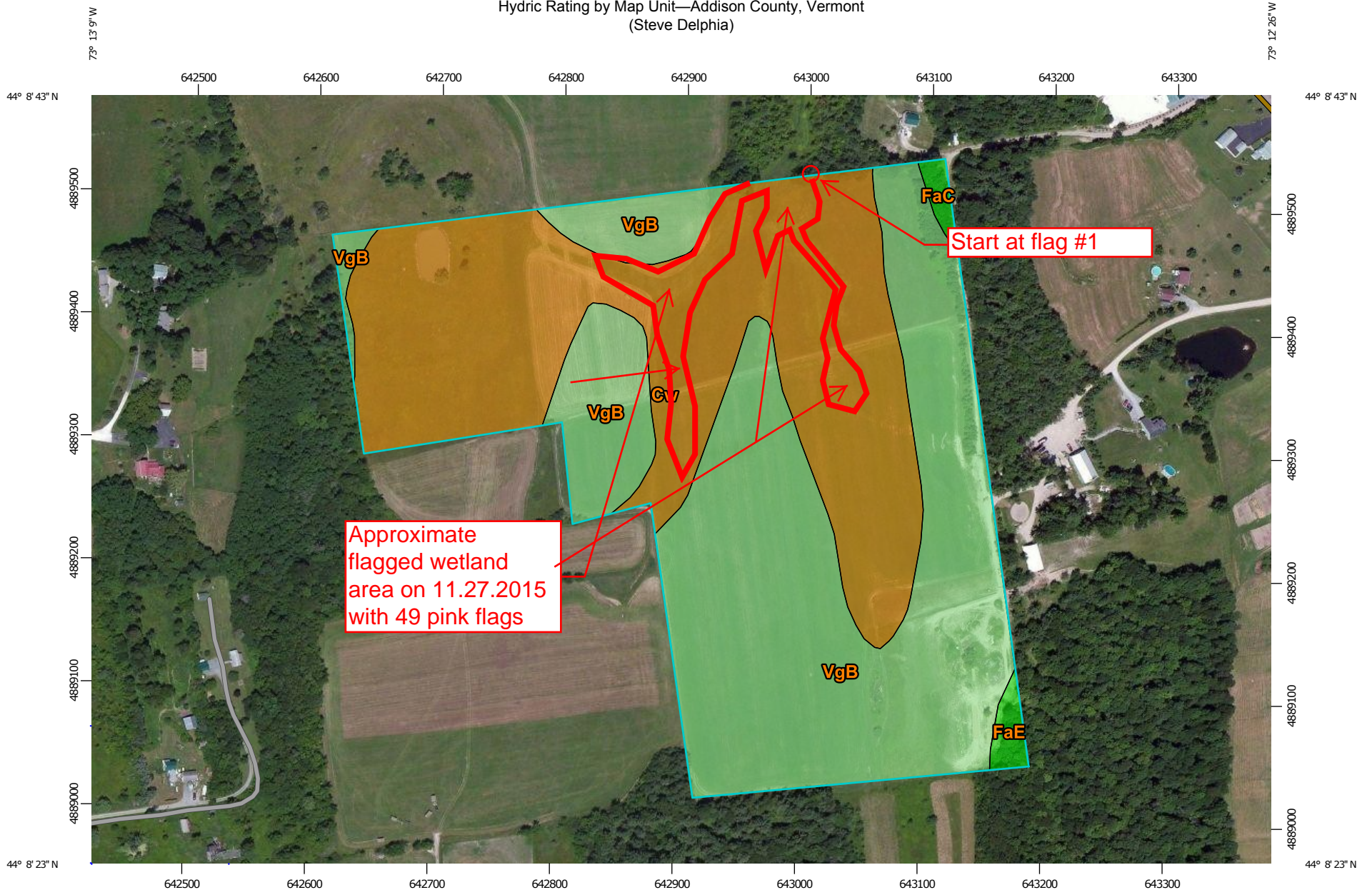
**DISCLAIMER:** This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

### NOTES

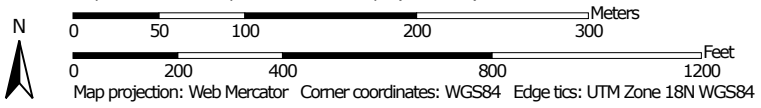
Map created using ANR's Natural Resources Atlas



Hydric Rating by Map Unit—Addison County, Vermont  
(Steve Delphia)



Map Scale: 1:4,400 if printed on A landscape (11" x 8.5") sheet.



Notes by Matt Montgomery,  
Vermont Compliance Monitoring  
11/30/2015







## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)

### Soils







#### Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


#### Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






#### Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available

### Water Features

 Streams and Canals

### Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Addison County, Vermont  
Survey Area Data: Version 17, Sep 25, 2015

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Aug 28, 2010—Oct 8, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

**Zimbra****mmontgomery@gmavt.net**

---

**RE: Driveway-Wetland site visit summary 2015-707**

---

**From :** Courage, Zapata  
<Zapata.Courage@vermont.gov>

Tue, Dec 29, 2015 02:02 PM

**Subject :** RE: Driveway-Wetland site visit summary 2015-707

**To :** 'Matt Montgomery'  
<mmontgomery@compliancevt.com>,  
'delphiaexcavating@yahoo.com'  
<delphiaexcavating@yahoo.com>

Hello gentlemen,

Great to meet with you all at the beginning of the month. Please find my site visit summary below and I look forward to working with you moving forward.

**Site Visit Summary:2015-707** Please reference this project number in future communications regarding this project.

ZC conducted a site visit with Matt Montgomery and landowners on Dec. 2 to confirm the wetland delineation and classification. ZC concurs with the delineation. The wetland has primarily two long narrow fingers that extend into the agri. fields, along slight drainage depressions which drain towards the north into the forested area along the property boundary. The classification of the wetland system is Class 2. A Class 2 wetland requires a 50-ft buffer. Any activity that is not considered an Allowed Use under VWR, occurring within the wetland or its 50-ft buffer shall require a wetland permit.

The proposed activity of installing an upgraded driveway access along an existing farm road with culverts located at each wetland and subsequent buffer crossing shall require a wetland permit. This proposed crossing location is at the narrowest and driest area of the wetland. The building envelope for the house, inclusive of the septic system and lawn area shall remain outside of the wetland and wetland buffer. The fields can continue to be hayed or cropped in normal rotation without a wetland permit. The proposed activity and expected impacts will likely qualify under a General Permit.

I look forward to reviewing your permit application.  
Happy New Year,  
Zapata

**Zapata Courage**  
***District Wetland Ecologist***

Addison and Rutland Counties  
Please note, districts have changed.

## Hydric Rating by Map Unit

Hydric Rating by Map Unit— Summary by Map Unit — Addison County, Vermont (VT001)				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Cw	Covington and Panton silty clays	95	20.3	44.9%
FaC	Farmington extremely rocky silt loam, 5 to 20 percent slopes	0	0.3	0.6%
FaE	Farmington extremely rocky silt loam, 20 to 50 percent slopes	0	0.4	0.9%
VgB	Vergennes clay, 2 to 6 percent slopes	9	24.1	53.6%
<b>Totals for Area of Interest</b>			<b>45.1</b>	<b>100.0%</b>





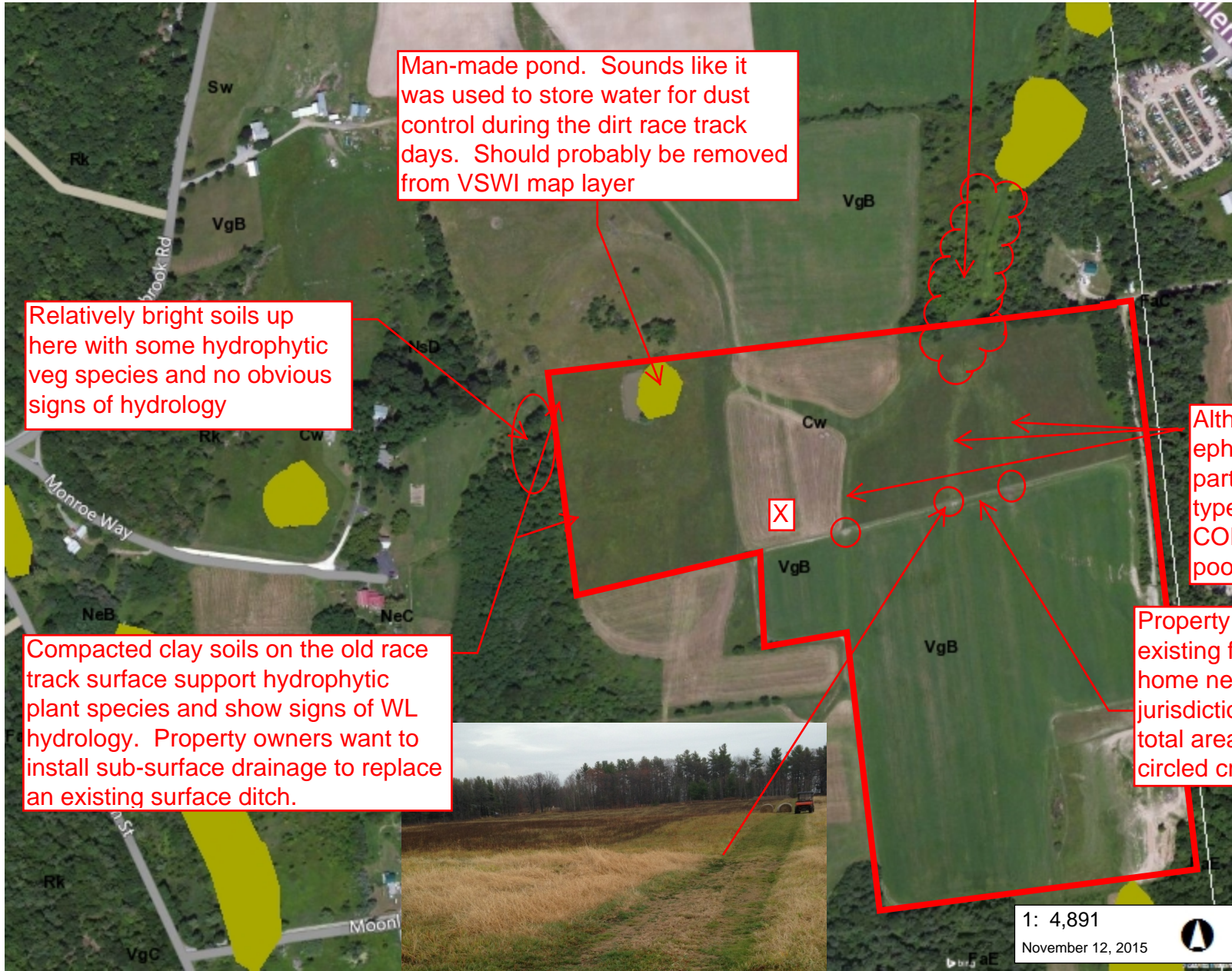
### LEGEND

**Wetlands - VSWI**

- Class 1 Wetland
- Class 2 Wetland
- Wetlands Advisory Layer

**Floodable Soils - NRCS**

- Frequent
- Occasional
- Rare



Man-made pond. Sounds like it was used to store water for dust control during the dirt race track days. Should probably be removed from VSWI map layer

Relatively bright soils up here with some hydrophytic veg species and no obvious signs of hydrology

Compacted clay soils on the old race track surface support hydrophytic plant species and show signs of WL hydrology. Property owners want to install sub-surface drainage to replace an existing surface ditch.

Although completely dry, these ephemeral flow paths in the low parts of the cultivated field would type out to be wetland per the COE protocol due to the very poorly drained clay soils.

Property owners want to improve this existing farm road to construct a new home near the 'X'. If considered jurisdictional WL, about 1000 sqft of total area is involved at these three circled crossing locations.



248.0 0

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere 1" = THIS

© Vermont Agency of Natural Resources

1: 4,891

November 12, 2015

### NOTES

Map created using ANR's Natural Resources Atlas

This map is for general reference only. Data layers that appear or may be used for legal purposes are subject to the Vermont Warrents Act. This map is not a warranty or contract.

2015.11.12 notes by Matt Montgomery, VT Compliance Monitoring

**Zimbra****mmontgomery@gmavt.net**

---

**RE: Driveway-Wetland site visit summary 2015-707**

---

**From :** Courage, Zapata  
<Zapata.Courage@vermont.gov>

Tue, Dec 29, 2015 02:02 PM

**Subject :** RE: Driveway-Wetland site visit summary 2015-707

**To :** 'Matt Montgomery'  
<mmontgomery@compliancevt.com>,  
'delphiaexcavating@yahoo.com'  
<delphiaexcavating@yahoo.com>

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The proposed activity of installing an upgraded driveway access along an existing farm road with culverts located at each wetland and subsequent buffer crossing shall require a wetland permit. This proposed crossing location is at the narrowest and driest area of the wetland. The building envelope for the house, inclusive of the septic system and lawn area shall remain outside of the wetland and wetland buffer. The fields can continue to be hayed or cropped in normal rotation without a wetland permit. The proposed activity and expected impacts will likely qualify under a General Permit.

I look forward to reviewing your permit application.  
Happy New Year,  
Zapata

**Zapata Courage**  
***District Wetland Ecologist***

Addison and Rutland Counties  
Please note, districts have changed.

For more information, visit our [inquiry portal](#).

Asa Bloomer State Office Building  
88 Merchants Row, Suite 430  
Rutland, Vermont 05701  
Phone: 802-490-6179

**NEW email:** [zapata.courage@vermont.gov](mailto:zapata.courage@vermont.gov)

<http://www.vtwaterquality.org/wetlands.htm>

See what we're up to on our [Blog, Flow](#).

---

**From:** Foley, Julie  
**Sent:** Monday, November 16, 2015 3:13 PM  
**To:** 'Matt Montgomery'; 'delphiaexcavating@yahoo.com'  
**Cc:** Courage, Zapata  
**Subject:** FW: Driveway and drainage work in Waltham Ag fields

Hi Matt,

Thank you for checking in about this property and thank you Steve for checking in with Matt.

The installation of the subsurface drainage in the ag field (currently hay) would not require a wetland permit (where in wetland and buffer) if the area is immediately returned to ordinary rotation and not converted to other non-crop use.

If you are confident that the wetland indicators are evident, then delineation of the drainages along the road would be ok with the standard requirement that the Program confirm your findings in the field. I believe these will be considered Class II, as they drain into the natural Class II wetland to the northwest. We were running short on time when I visited the site last, but it appeared the proposed house site was upland. Please also delineate any wetlands in the vicinity of the proposed house/lawn/wastewater areas. I don't know the location and limits of all these residential uses. As with any project, all efforts should be made to avoid and minimize impacts to Class II wetlands and 50-foot buffer zones. Any unavoidable impacts associated with the road or residential uses will require a Wetland Permit.

Since we last met, I have moved Districts and my trusted colleague Zapata now covers Addison County (cc'd above). Please let her know when you plan to delineate the site, so she can get you on her schedule shortly thereafter. I have discussed this project with her.

Regards,  
Julie

Ps. I enjoyed looking at the racetrack photos. I'm amazed that so much was saved!

---

**From:** Matt Montgomery [mailto:mmontgomery@compliancevt.com]  
**Sent:** Monday, November 16, 2015 12:06 PM  
**To:** Foley, Julie <Julie.Foley@vermont.gov>  
**Cc:** delphiaexcavating@yahoo.com  
**Subject:** Driveway and drainage work in Waltham Ag fields



Hi Julie-

Steve Delphia and Josh Baldwin, landowners of agricultural fields in Waltham found due west of New Haven address 7327 US Rte 7 (outlined on the attached sheets) have pending work proposed that they recently discussed with you. They contacted me and asked that I look at the property after you recommended that they contact a wetland consultant prior to proceeding.

The work I specifically discussed with Steve and Josh on Nov 11, 2015 was A) installing sub-surface drainage pipe and stone at one spot along the western edge of the property, and B) improving an existing agricultural access road to provide a driveway to a new single family home-site. The location of this proposed work is noted on the attached VSWI map.

In regards to A):

The drainage work is to replace a pre-existing surface ditch found along the edge of an old race track surface (!?) with a sub-surface 'French-drain' i.e. sloping trench filled with stone and perforated pipe. Soils in the area are very dense clay, support hydrophytic plant species, and have shallow redox indicators in the profile. *Juniperus virginiana* (FACU) however is the dominant shrub on the same landform directly next to the old track surface.

Given the unique circumstances of the drainage work area (compacted clay soils from several decades of car racing), and its current agricultural use, I felt that there should not be any jurisdictional wetland identified in the vicinity or wetland permitting required, even though some of the area would likely qualify as wetland per the COE delineation protocol. Let me know if you concur with my assessment.

A pond was dug in the center of the raceway, presumably to provide dust-control water for the track. This pond was picked up during the VSWI and is shown on the state maps as such. Recent discussions with you on other projects suggest a precedent for VT DEC to remove these man-made features from the VSWI maps.

In regards to B):

There are three low ephemeral drainages in the cultivated field that the existing farm access road crosses through to reach the proposed house site. These locations are circled and identified on the attached VSWI map. There is no defined channel at any of them. When flowing, these drain into an emergent marsh/scrub-shrub wetland found north of the subject property.

The Covington and Panton clay soils in the field are mapped as hydric by the USDA. I found that soils in the three low areas were completely dry but still had shallow redox indicators and supported mostly *Phalaris arundinacea*. Elsewhere in the field soils were relatively bright in the plow layer and the seeded red clover and timothy were dominant.

The landowners plan to continue with the property's agricultural use after the farm road is improved. Would wetland permitting be required for the proposed improvements to the farm access road? I saw no evidence of prior fills being placed on the access road

at this site. I estimated that ~1000 sqft of land area would be involved where the road crosses the low drainages. Late season delineation would be easy if you say it is necessary.

Let us know what you think.

Thanks,

m-

P.S.

This site was the most interesting of all those I have visited with 'non-normal conditions'. Not just actively cultivated agricultural fields but an old NASCAR sanctioned ½ mile dirt-track speedway from late 1950s-70! That is great. See the link below for pictures of the site while the track was active.

[http://www.catamountstadium.com/an\\_original\\_program\\_from.htm#THE](http://www.catamountstadium.com/an_original_program_from.htm#THE)

**Matt Montgomery, CPESC**

*PERMIT SPECIALIST / WETLAND SCIENTIST*

[mmontgomery@compliancevt.com](mailto:mmontgomery@compliancevt.com)

802.363.6288 (cell)

802.434.6753 (off)

**VT Compliance Monitoring, LLC**

PO Box 213 Huntington, VT 05462