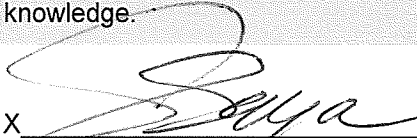
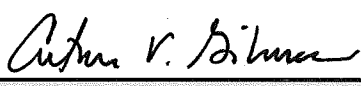



Vermont Wetland Section Wetland Application Database Form (AFFIX TO THE FRONT OF THE APPLICATION)

Applicant Name: McMahon Bros., Inc.		Representative Name: Art Gilman	
Town where project is located: Hyde Park		County: Lamoille	
Project Location Description: 868 Vt. Rte. 15E, Hyde Park <i>911 Street Address or direction from nearest intersection</i>			
Project Summary: Reconfiguration of existing automobile dealership to include changing gravel parking to parking, adding stormwater infrastructure, and replacing building and septic system.			
Permit Type Requested (check all that apply)			
<input type="checkbox"/> Vermont General Permit Coverage		<input type="checkbox"/> Wetland Determination	<input checked="" type="checkbox"/> Vermont Wetland Permit
Impact Calculations: Total up proposed impacts from wetland tables listed below			
Total Wetland Impact		-0square feet (s.f.)	Total Buffer Zone Impact
			9962 square feet (s.f.)
Total Wetland Clearing (qualified linear projects only)		square feet (s.f.)	Total Buffer Zone Clearing (qualified linear projects only)
			square feet (s.f.)
Permit Fees: Make check payable to - State of Vermont			
Wetland Impact Fee: (\$0.75/sf)		\$	Administrative Fee: \$240
Buffer Impact Fee: (\$0.25/sf)		\$2,490.50	Total Check Amount: \$2,730.50
Clearing Fee: (\$0.25/sf)		\$	
Existing Land Use Type: (check all that apply)			
<input type="checkbox"/> Forestry		<input type="checkbox"/> Residential (Subdivision)	<input checked="" type="checkbox"/> Industrial/ commercial
<input type="checkbox"/> Agriculture		<input type="checkbox"/> Transportation	<input type="checkbox"/> Parks/Rec/Trail
		<input type="checkbox"/> Residential (Single Family)	<input type="checkbox"/> Institutional
			<input type="checkbox"/> Undeveloped
Proposed Land Use Type: (check all that apply)			
<input type="checkbox"/> Forestry		<input type="checkbox"/> Residential (Subdivision)	<input checked="" type="checkbox"/> Industrial/ commercial
<input type="checkbox"/> Agriculture		<input type="checkbox"/> Transportation	<input type="checkbox"/> Parks/Rec/Trail
		<input type="checkbox"/> Residential (Single Family)	<input type="checkbox"/> Institutional
			<input type="checkbox"/> No Change
Proposed Impact Type: (check all that apply)			
<input type="checkbox"/> Buildings		<input type="checkbox"/> Utilities	<input checked="" type="checkbox"/> Parking
<input type="checkbox"/> Driveway		<input type="checkbox"/> Road	<input type="checkbox"/> Septic/Well
		<input type="checkbox"/> Parks/Path	<input checked="" type="checkbox"/> Stormwater
		<input type="checkbox"/> Agriculture	<input type="checkbox"/> Pond
		<input type="checkbox"/> Dry Hydrant	<input type="checkbox"/> Lawn
		<input type="checkbox"/> Beaver dam alteration	<input type="checkbox"/> No Impact
		<input type="checkbox"/> Silviculture	
		<input type="checkbox"/> Aesthetics	
		<input type="checkbox"/> Other	
Wetland 1: A (Label using Wetland ID from application if applicable, use supplemental sheets if more than one wetland is being impacted)			
		Location: Next to drive and parking on E side of entrance	
Wetland Type: PEM/PFO - Emergent aWL Size Class : <1 acre			
Proposed Alterations			
Wetland Alteration:		Buffer Zone Alteration:	Wetland Alteration Type (check all that apply)
Wetland Fill: s.f.			<input type="checkbox"/> Dredge
Temporary: s.f.		Temporary: s.f.	<input type="checkbox"/> Drain
Permanent: s.f.		Permanent: 9962 s.f.	<input type="checkbox"/> Cut Vegetation
			<input checked="" type="checkbox"/> Stormwater
			<input type="checkbox"/> Trench/Fill
			<input checked="" type="checkbox"/> Other
Mitigation			
Avoidance and Minimization			
(s.f. of wetland NOT impacted):		Wetland: 7860 s.f.	Buffer Zone 16414 s.f.
Wetland Mitigation: (s.f. Gained)			
Restoration s.f.		Enhancement s.f.	
Creation s.f.		Conservation s.f.	
Buffer Zone Mitigation (s.f. Gained):			
Restoration s.f.		Enhancement s.f.	
Creation s.f.		Conservation s.f.	

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	McMahon Bros, LLC	
1.2. Applicant Address	32 Vt. Rte. 15, Morrisville, VT 05661	
1.3. Applicant Phone Number	1-802-888-4942	
1.4. Applicant Email	steve@mcmahonchevrolet.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> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 5px;"> <p>X </p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>Date: 11-20-15</p> </div> </div>	
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	Arthur V. Gilman	
2.2. Representative Address	Gilman & Briggs Environmental, 1 Conti Circle, Suite 5, Barre, VT 05641	
2.3. Representative Phone Number	802-479-7480	
2.4. Applicant Email	gbenvironmental@earthlink.net	
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> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 5px;"> <p>X </p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>Date: 20 Nov 2015</p> </div> </div>	
3. Landowner	Landowner must sign the application. Use this space if landowner is different from the applicant	
3.1. Landowner Name	Same as applicant	
3.2. Landowner Address	Same as applicant	
3.3. Landowner Phone Number	Same as applicant	
3.4. Landowner Email	Same as applicant	
3.5. Landowner Easement	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.	
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> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="border: 1px solid black; padding: 5px;"> <p>X </p> </div> <div style="border: 1px solid black; padding: 5px;"> <p>Date: 11-20-15</p> </div> </div>	
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>South side of Vt. Rte. 15, at 868 Rte. 15, town of Hyde Park, just W of the village of Morrisville and Morristoryn/Hyde Park town line</p>	

5. Site Visit Date and Attendees	Date of visit with District Wetlands Ecologist 24 May 2015	List people present for site visits including Ecologist, landowner, and representatives. Arthur V. Gilman (Representative); Shannon Morrison (District Wetland Ecologist)	
6. Wetland Classification	The wetland is a Class II wetland because (Choose one): The wetland meets the presumption of significance		
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 Ca. 0.6 acre		
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 25% forested; 75% shallow marsh (emergent - wet meadow type)		
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. Shallow basin and along stream		
7.4. Wetland Hydrology	Describe the main source of wetland hydrology for the wetland complex. List any river, streams, lakes and ponds. Groundwater discharge and overland flow from slope tha 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. Intermittent stream flows to NW and is culverted under the drive to a manmade pond, which is an exempt wetland type.		
7.4.2. Influence of hydrology on wetland complex	For example: The river provides flood water to the wetland in the spring. High groundwater table, stream drains area.		
7.4.3. Relation to the project area	Distance between the project area and any nearby surface waters. The wetland is adjacent to the proposed work area, some of which drains toward the wetland.		
7.4.4. Hydroperiod	Discuss frequency and duration of flooding, ponding, and/or soil saturation. Wetland appears to be permanently saturated although upper (uphill) margins are like to be only seasonally saturated; the stream is likely intermittent (i.e., without continuous year-round flow); the wetland is confined to a ditch at the lower end .		
7.5. Surrounding Landuse of the Wetland Complex	For example: rural residential and forested; agricultural and undeveloped, Wetland is in a semi-industrial area with old-field / woodlands south of the area, residences and businesses on the east and north.		
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. Drains to a manmade pond, although separated by the driveway; two small Class Three wetlands contribute to some flows by a curtain drain but do not contribute any functionality.		
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. There has been some fill over time for parking and other uses, especially on adjacent (not subject) property, and the stream, in the area of the proposed work, is channelized. Runoff from unpaved areas may be degrading water quality and impacting wetland functions.		
8. Description of Subject	Subject Wetland is defined as the area of wetland in the project area, but not		

Wetland	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. No direct impacts are proposed to the wetland	
8.2. Wetland Landuse	For example: mowed lawn; old field; naturally vegetated. Describe any previous and ongoing disturbance in the subject wetland. Not applicable	
8.3. Wetland Vegetation	List dominant wetland community type and associated dominant plant species. Not applicable	
8.4. Wetland Soils	Use USDA NRCS information where possible and use the ACOE Delineation Manual soil description Soils are mapped as Boothbay silt loam and inspection showed them to be silt loam, with oxidized rhizospheres and a depleted matrix	
8.5. Wetland Hydrology	Use descriptions from the ACOE Delineation Manual.	
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. Unpaved parking lot and old field; some old ditching around unpaved parkio, old field; forest strip (between parking and wetland); industrial (on adjacent parcel). Further distant: forest.	
8.6.2. Buffer vegetation	List community type and dominant plant species Old field, forest strip. Poplars, firs, apple, black cherry. Tall goldenrod, Kentucky bluegrass, and a mix of other old-field ehrbs. Sensitive fern. But much of the buffer where impact will be is bare gravel.	
8.6.3. Buffer soils	Use USDA NRCS information where possible, and the ACOE Delineation Manual soil description Buffer soils are mapped as Boothbay silt loam and inspection showed them to be similar to the wetland soils, a silt loam, but with only faint - not prominent or distinct - redox features	

9. Wetland Determination	If the application involves a wetland determination please answer the following. If not, skip to Section 10.	
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.	

If the application is only for a Wetland Determination only, skip to Section 13

10. Project Description		
-------------------------	--	--

10.1.Overall Project	<p>Description of the project. For example: six-lot residential subdivision; expansion of an existing commercial building, access drive to a single family residence.</p> <p>The project is a rehabilitation of an existing automobile dealership, which includes converting existing unpaved parking areas to properly graded and paved parking, reconstruction of the existing sales building, addition of an approved, properly size, on-site septic system, and, importantly, stormwater infrastructure including swales and a stormwater retention pond.</p>	
10.2.Project Purpose	<p>For example: To construct a residential subdivision, upgrade existing road to improve access, extend a trail system</p> <p>To provide a more adequate, safe, and environmentally protective infrastructure at an existing automobile dealership, to include wastewater treatment, paved parking and stormwater management</p>	
10.3.Acres Owned by Applicant	<p>Acreage of subject property.</p> <p>6.04</p>	
10.4.Acres Involved in the Project	<p>Acreage of area involved in the project.</p> <p>4.8</p>	
11. Project Details	<p>Provide details regarding specific impacts to the wetland and buffer zone</p>	
11.1.Specific Impacts to Wetland and Buffer Zone	<p>List portions of the project that will specifically impact the wetland or buffer zone.</p> <p>There are no direct impacts to the wetland - closest approaches will be for a stormwater swale outfall, and for a culvert replacement, both near the lower (downstream) end of the wetland.</p> <p>The area of impact in the buffer zone is 9962 sq, ft, which includes: conversion of the area of informal unpaved, gravel surface parking to a more formalized, paved parking. There will be minor regrading of the surface, and a grassed stormwater treatment swale – all within the limits of the former disturbance/open area and resulting in no cutting of trees.</p>	
11.2.Dimension Details	<p>Square footage of buildings, dimension of roads including fill footprint.</p> <p>The proposed buildings will be 15,400 sq. ft.</p> <p>Parking will be sufficient for 176 vehicles.</p>	
11.3.Bridges and Culverts	<p>Culvert circumference, length, placement and shapes, or bridge details.</p> <p>The culvert to be replaced is 2' (24") x 64'.</p>	
11.4.Construction Sequence	<p>Describe any details pertaining to the worked planned in the wetland and buffer in terms of sequence or phasing that is relevant</p> <ol style="list-style-type: none"> 1) Placement of silt fence at limit of disturbance; 2) Stormwater infrastructure will be constructed first, with prompt seeding and mulching of disturbed soils in the swales; 3) Culvert replacement 4) Construction of buildings, etc. outside the wetland and buffer 5) Finish grade and paving 	
11.5.Stormwater Design	<p>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.</p> <p>A Vermont Stormwater permit is being applied for; the project includes significant stormwater treatment and detention. The stormwater as currently planned will - for the area near the wetland - be diverted through and treated in grassed swales, with the outfall at the lower end of the system, just above above the driveway culvert. Thus, untreated flow that may now reach the wetland system will be treated and will not reach the wetland. This stormwater treatment mostly is outside the buffer zone but some will be within the buffer zone - but only in the currently disturbed area. Stormwater from elsewhere on the site will be diverted to a treatment pond in what is now lawn, not near the Class Two wetland.</p>	
11.6.Permanent	<p>Describe any plantings, fencing, signage, or other memorialization that provides permanent on-the-ground boundaries for the limits of disturbance</p>	

<p>Demarcation of Limits of Impact</p>	<p>for ongoing uses.</p> <p>Several red maple trees (<i>Acer x freemannii</i> 'Armstrong') will be planted in the buffer zone, which will form permanent markers; the sculpted land surface of the drainage swale will also inhibit encroachment.</p>									
<p>12. Wetland and Buffer Zone Impacts</p>										
<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="561 537 1385 663"> <tr> <td colspan="2">Totals</td> </tr> <tr> <td>Wetland Fill</td> <td>0 s.f.</td> </tr> <tr> <td>Temporary Wetland Impact</td> <td>0 s.f.</td> </tr> <tr> <td>Other Permanent Wetland Impact</td> <td>0 s.f.</td> </tr> </table> <p>Describe in detail the proposed impact.</p> <p>No impacts are proposed in the wetland.</p>	Totals		Wetland Fill	0 s.f.	Temporary Wetland Impact	0 s.f.	Other Permanent Wetland Impact	0 s.f.	
Totals										
Wetland Fill	0 s.f.									
Temporary Wetland Impact	0 s.f.									
Other Permanent Wetland Impact	0 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="561 978 1385 1073"> <tr> <td colspan="2">Totals</td> </tr> <tr> <td>Temporary Buffer Impact</td> <td>0 s.f.</td> </tr> <tr> <td>Permanent Buffer Impact</td> <td>9962 s.f.</td> </tr> </table> <p>Describe in detail the proposed impact.</p> <p>This includes two types of impacts - 1) placement of a stormwater treatment swale and, 2) an area to be regraded and paved, to replace existing unpaved parking. Due to the configuration of the parcel this figure include not only the informal gravel parking area but some of the existing entrance road surface.</p>	Totals		Temporary Buffer Impact	0 s.f.	Permanent Buffer Impact	9962 s.f.			
Totals										
Temporary Buffer Impact	0 s.f.									
Permanent Buffer Impact	9962 s.f.									
<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>The project improves the existing condition, especially with respect to stormwater runoff for the water quality function of the wetland.</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>The automobile dealership necessarily requires parking for a large number of vehicles. The site is limited, especially toward the main road, by a manmade pond. The only significantly sized areas of upland on the parcel are 1) occupied by the existing and proposed buildings or 2) dedicated to a proposed on-site septic system and 3) dedicated to other parking (in front of the building and 4) dedicated to additional stormwater treatment facilities. Original plans to replace the driveway culvert in a slightly different area wer changed, eliminating about 50 sq. ft. of wetland impact.</p>									
<p>12.4.2. Minimization</p>	<p>If the proposed activity cannot practicably be located outside the</p>									

	<p>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 area of temporary disturbance for the stormwater swale will be promptly seeded and mulched.</p> <p>Original plans to replace the driveway culvert in a slightly different (adjacent) area were changed, eliminating about 50 sq. ft. of wetland impact.</p>	
12.4.3. Mitigation	<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 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>	
12.4.4. Compensation	<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>No compensation is proposed.</p>	
13. Supporting materials	<p>Where appropriate list the accompanying material by title, author, date and last revision date. Submit these documents and plans with the application.</p>	
13.1. Location map	<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>Please see the attached location maps: 1) location on a USGS topographic map and 2) location on a graphic from the Vermont Natural Resources Atlas.</p>	
13.2. Site Plans	<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>1) Wetland Impact Plan, C5, Chenette Associates, PC, 11/18/2015 2) Overall Site Plan, C2, Chenette Associates, PC, 11/11, 2015 2) Planting Plan, Cynthia Knauf, 11/05/2015</p>	
13.3. ACOE Delineation Forms	<p>List by author, location, and date. Required only for Individual Permits.</p> <p>Arthur V. Gilman & Errol Briggs, 6 May 2015; note this is for a small nearby Class 3 wetland on this property</p>	
13.4. Other Supporting Documents	<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>None</p>	
13.5. List of Abutters (Neighbors with land adjoining wetland or buffer zone)	<p>Attach list of names and mailing addresses or submit as word mailing document.</p> <p>1) Parcel 012-015-001</p> <p>Clint Coakley, Rachel Coakley 992 VT Route 15 East Hyde Park, VT 05655</p> <p>2) Parcel 012-015-005 Fred's Plumbing and Heating 328 Main Street Derby, VT 05829</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. ***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.</p> <p>NA</p>																																					
<p>14. Check Which Functions are Present in the Subject Wetland and in the Wetland Complex.</p>	<p>Wetland Function Summary: (if more than one wetland use supplemental wetland sheets)</p> <table border="1"> <thead> <tr> <th>Functions & Values</th> <th>Subject Wetland</th> <th>Wetland Complex</th> <th>Functions & Values</th> <th>Subject Wetland</th> <th>Wetland Complex</th> </tr> </thead> <tbody> <tr> <td>Flood/Storm Storage</td> <td><input checked="" 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 & Groundwater Protection</td> <td><input checked="" type="checkbox"/></td> <td><input checked="" type="checkbox"/></td> <td>Education & 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/Economic</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Wildlife Habitat</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Open Space/Aesthetics</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td>Exemplary Natural Community</td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td>Erosion Control</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 checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	RTE Species	<input type="checkbox"/>	<input type="checkbox"/>	Surface & Groundwater Protection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Education & Research	<input type="checkbox"/>	<input type="checkbox"/>	Fish Habitat	<input type="checkbox"/>	<input type="checkbox"/>	Recreation/Economic	<input type="checkbox"/>	<input type="checkbox"/>	Wildlife Habitat	<input type="checkbox"/>	<input 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"/>	
Functions & Values	Subject Wetland	Wetland Complex	Functions & Values	Subject Wetland	Wetland Complex																																	
Flood/Storm Storage	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	RTE Species	<input type="checkbox"/>	<input type="checkbox"/>																																	
Surface & Groundwater Protection	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Education & Research	<input type="checkbox"/>	<input type="checkbox"/>																																	
Fish Habitat	<input type="checkbox"/>	<input type="checkbox"/>	Recreation/Economic	<input type="checkbox"/>	<input type="checkbox"/>																																	
Wildlife Habitat	<input type="checkbox"/>	<input 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"/>																																	
<p>15. Coverage under Vermont General Wetland Permit</p>	<p>If applying for an Individual Vermont Wetland Permit or Determination, please proceed to number 16 and answer the remaining application questions.</p> <p>If applying for Coverage under the Vermont General Wetland Permit, please complete question 15.1 prior to submitting application.</p>																																					
<p>15.1.VWP Vermont General Permit eligibility checklist</p>	<p>If applying for coverage under the Vermont General Wetland Permit, please verify the following to complete the application:</p> <p><input 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 type="checkbox"/>The activity does not qualify as an Allowed Use under Section 6 of the Vermont Wetland Rules.</p> <p><input 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 type="checkbox"/> All impacts have been avoided and minimized to the greatest extent possible.</p> <p><input 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 type="checkbox"/>The activity is not located in or adjacent to a vernal pool, fen, or</p>																																					

	<p>bog.</p> <p><input type="checkbox"/> The wetland is not at or above 2,500' in elevation (headwaters wetland).</p> <p><input type="checkbox"/> The project is not located in a Class I wetland or associated buffer zone.</p> <p><input type="checkbox"/> The activity is not an as-built project that constitutes a violation of the Vermont Wetland Rules.</p>	
<p>Stop here if applying for Coverage under the Vermont General Wetland Permit</p>		

<p>Complete the following Functions and Values checklist if applying for an Individual Wetland Permit and/or a Wetland Determination</p>		
<p>Functions and Values</p>	<p>For each Function and Value, first evaluate the entire wetland or wetland complex 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>	
<p>16. Storage for Flood Water and Storm Runoff</p>	<p><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.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Constricted outlet or no outlet and an unconstricted inlet. <input type="checkbox"/> 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. <input type="checkbox"/> 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. <input type="checkbox"/> Physical evidence of seasonal flooding or ponding such as water stained leaves, water marks on trees, drift rows, debris deposits, or standing water. <input type="checkbox"/> Hydrologic or hydraulic study indicates wetland attenuates flooding. <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"> <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"> <input type="checkbox"/> 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). <input type="checkbox"/> Wetland is contiguous to a major lake or pond that provides 	

	<p>storage benefits independently of the wetland.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Wetland's storage capacity is created primarily by recent beaver dams or other temporary structures. <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. <input checked="" 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"> <input type="checkbox"/> History of downstream flood damage to public or private property. <input checked="" type="checkbox"/> 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. <ul style="list-style-type: none"> <input checked="" type="checkbox"/> 1. Developed public or private property. <input checked="" type="checkbox"/> 2. Stream banks susceptible to scouring and erosion. <input type="checkbox"/> 3. Important habitat for aquatic life. <input type="checkbox"/> The wetland is large in size and naturally vegetated. <input 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"> <input type="checkbox"/> 1. A large amount of impervious surface in urbanized areas. <input type="checkbox"/> 2. Relatively impervious soils. <input type="checkbox"/> 3. Steep slopes in the adjacent areas. 	
<p>16.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The contribution of this wetland to flood storage is minor. Although it has a constricted outlet, the catchment area is small and the slope is such that there is not much physical storage capacity, which is essentially limited to the ditch area</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>Runoff to the area will not be increased, and there is no displacement of capacity by fill within the wetland, so there will be no undue adverse impact to this function.</p>	
<p>17. Surface and Ground Water Protection</p>	<ul style="list-style-type: none"> <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"> <input checked="" type="checkbox"/> Constricted or no outlets. <input type="checkbox"/> Low water velocity through dense, persistent vegetation. <input checked="" type="checkbox"/> Hydroperiod permanently flooded or saturated. <input type="checkbox"/> Wetlands in depositional environments with persistent vegetation wider than 20 feet. <input type="checkbox"/> Wetlands with persistent vegetation comprising a defined 	

	<p>delta, island, bar or peninsula.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Presence of seeps or springs. <input type="checkbox"/> Wetland contains a high amount of microtopography that helps slow and filter surface water. <input type="checkbox"/> Position in the landscape indicates the wetland is a headwaters area. <input checked="" type="checkbox"/> Wetland is adjacent to surface waters. <input type="checkbox"/> Wetland recharges a drinking water source. <input type="checkbox"/> Water sampling indicates removal of pollutants or nutrients. <input type="checkbox"/> Water sampling indicates retention of sediments or organic matter. <input type="checkbox"/> Fine mineral soils and alkalinity not low. <input checked="" type="checkbox"/> The wetland provides an obvious filter between surface water or ground water and land uses that may contribute 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>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"> <input checked="" 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"> <input type="checkbox"/> Presence of dead forest or shrub areas in sufficient amounts to result in diminished nutrient uptake. <input checked="" type="checkbox"/> Presence of ditches or channels that confine water and restrict contact of water with vegetation. <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. <input type="checkbox"/> Current use in the wetland results in disturbance that compromises this function. <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"> <input type="checkbox"/> The wetland is adjacent to a well head or source protection area, and provides ground water recharge. <input type="checkbox"/> The wetland provides flows to Class A surface waters. <input type="checkbox"/> The wetland contributes to the protection or improvement of water quality of any impaired waters. <input type="checkbox"/> The wetland is large in size and naturally vegetated. 	
<p>17.1.Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed</p>	

	<p>above</p> <p>Probable cumulative input from pre-existing uses; captures sediments and nutrients. Note - wellheads are nearby but wetland is not characterized by recharge.</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>This project will ameliorate pre-existing inputs to the wetland.</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> <p><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 streambank stability.</p> <p><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.</p> <p><input type="checkbox"/> Documented or professionally judged spawning habitat for northern pike.</p> <p><input type="checkbox"/> Provides cold spring discharge that lowers the temperature of receiving waters and creates summer habitat for salmonoid species.</p> <p><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.</p>	
<p>18.1.Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>This wetland does not contribute to this function as the ditched, intermittent stream passes 1) through an unshaded, manmade pond (which likely obviates the benefits of shade along the wetland margin, and 2) through an existing culvert about 200' long before reaching a natural blue-line stream.</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>There will be no cutting of trees in the buffer zone or along the stream, and by improving water quality the project will benefit downstream fish habitat.</p>	
<p>19.Wildlife 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"/> 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.</p> <p><input type="checkbox"/> Habitat to support one or more breeding pairs or broods of</p>	

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.

- 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.
- 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.
- Supports winter habitat for white-tailed deer. Good habitats 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

	<p>indicate the wetland provides this function at a <i>lower</i> level.</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> 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). <input type="checkbox"/> 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. <input type="checkbox"/> The current use in the wetland results in frequent cutting, mowing or other disturbance. <input type="checkbox"/> The wetland hydrology and character is at a drier end of the scale and does not support wetland dependent species. <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"> <input type="checkbox"/> The wetland complex is large in size and high in quality. <input type="checkbox"/> The habitat has the potential to support several species based on the assessment above. <input type="checkbox"/> Wetland is associated with an important wildlife corridor. <input type="checkbox"/> The wetland has been identified as a locally important wildlife habitat by an ANR Wildlife Biologist. 	
<p>19.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The subject wetland does not contribute to this function.</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 undue adverse impacts to wildlife.</p>	
<p>20. Exemplary Wetland Natural Community</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"> <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. <p>The wetland is also likely to be significant if any of the following conditions are met:</p> <ul style="list-style-type: none"> <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. <input type="checkbox"/> Contains ecological features that contribute to Vermont's 	

	<p>natural heritage, including, but not limited to:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Deep peat accumulation reflecting a long history of wetland formation; <input type="checkbox"/> Forested wetlands displaying very old trees and other old growth characteristics; <input type="checkbox"/> A wetland natural community that is at the edge of the normal range for that type; <input type="checkbox"/> A wetland mosaic containing examples of several to many wetland community types; or <input type="checkbox"/> A large wetland complex containing examples of several wetland community types. <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>The subject wetland is not a significant natural community</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>There will be no undue adverse impacts.</p>	
<p>21. Rare, Threatened, and Endangered Species Habitat</p>	<ul style="list-style-type: none"> <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"> <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>The wetland is also likely to be significant if any of the following apply:</p> <ul style="list-style-type: none"> <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; <input type="checkbox"/> There is credible documentation that threatened or endangered species have been present in past 10 years; <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; <input type="checkbox"/> There is credible documentation that the wetland provides habitat for multiple uncommon species of plants or animals (S3 rank). <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>There are no known or observed rare, threatened, endangered, or uncommon species on this site.</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>There will be no undue adverse impact.</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> <ul style="list-style-type: none"> <input type="checkbox"/> Owned by or leased to a public entity dedicated to education or research. <input type="checkbox"/> History of use for education or research. <input type="checkbox"/> Has one or more characteristics making it valuable for education or research. 	
<p>22.1.Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>The wetland is not significant for this function.</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>There will be no undue adverse impacts.</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"> <input type="checkbox"/> Used for, or contributes to, recreational activities. <input type="checkbox"/> Provides economic benefits. <input type="checkbox"/> Provides important habitat for fish or wildlife which can be fished, hunted or trapped under applicable state law. <input type="checkbox"/> Used for harvesting of wild foods. <p>Comments:</p>	
<p>23.1.Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</p> <p>This wetland is not significant for this function.</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>There will be no undue adverse impacts.</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"> <input type="checkbox"/> Can be readily observed by the public; and <ul style="list-style-type: none"> <input type="checkbox"/> Possesses special or unique aesthetic qualities; or <input type="checkbox"/> Has prominence as a distinct feature in the surrounding landscape; <input type="checkbox"/> Has been identified as important open space in a municipal, 	

	<p>regional or state plan.</p> <p>Comments:</p>	
<p>24.1.Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above This wetland is not significant for this function; it is near Vt. Rte. 15 but is minimally visible from the road and has no special qualities.</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. There will be no undue adverse impacts 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> <p><input type="checkbox"/> Erosive forces such as wave or current energy are present and any of the following are present as well:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Dense, persistent vegetation along a shoreline or stream bank that reduces an adjacent erosive force. <input type="checkbox"/> Good interspersion of persistent emergent vegetation and water along course of water flow. <input type="checkbox"/> Studies show that wetlands of similar size, vegetation type, and hydrology are important for erosion control. <p>What type of erosive forces are present:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Lake fetch and waves <input type="checkbox"/> High current velocities: <input type="checkbox"/> Water level influenced by upstream impoundment <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 checked="" 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"> <input checked="" type="checkbox"/> The stream is artificially channelized and/or lacks vegetation that contributes to controlling the erosive force. <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"> <input type="checkbox"/> The stream contains high sinuosity. <input type="checkbox"/> Has been identified through fluvial geomorphic assessment to be important in maintaining the natural condition of the stream or river corridor. 	
<p>25.1.Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above This wetland is not significant for this function.</p>	
<p>25.2.Statement of no undue</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</p>	

adverse impact	relevant to this function.	
	There will be no undue adverse impacts to this function.	

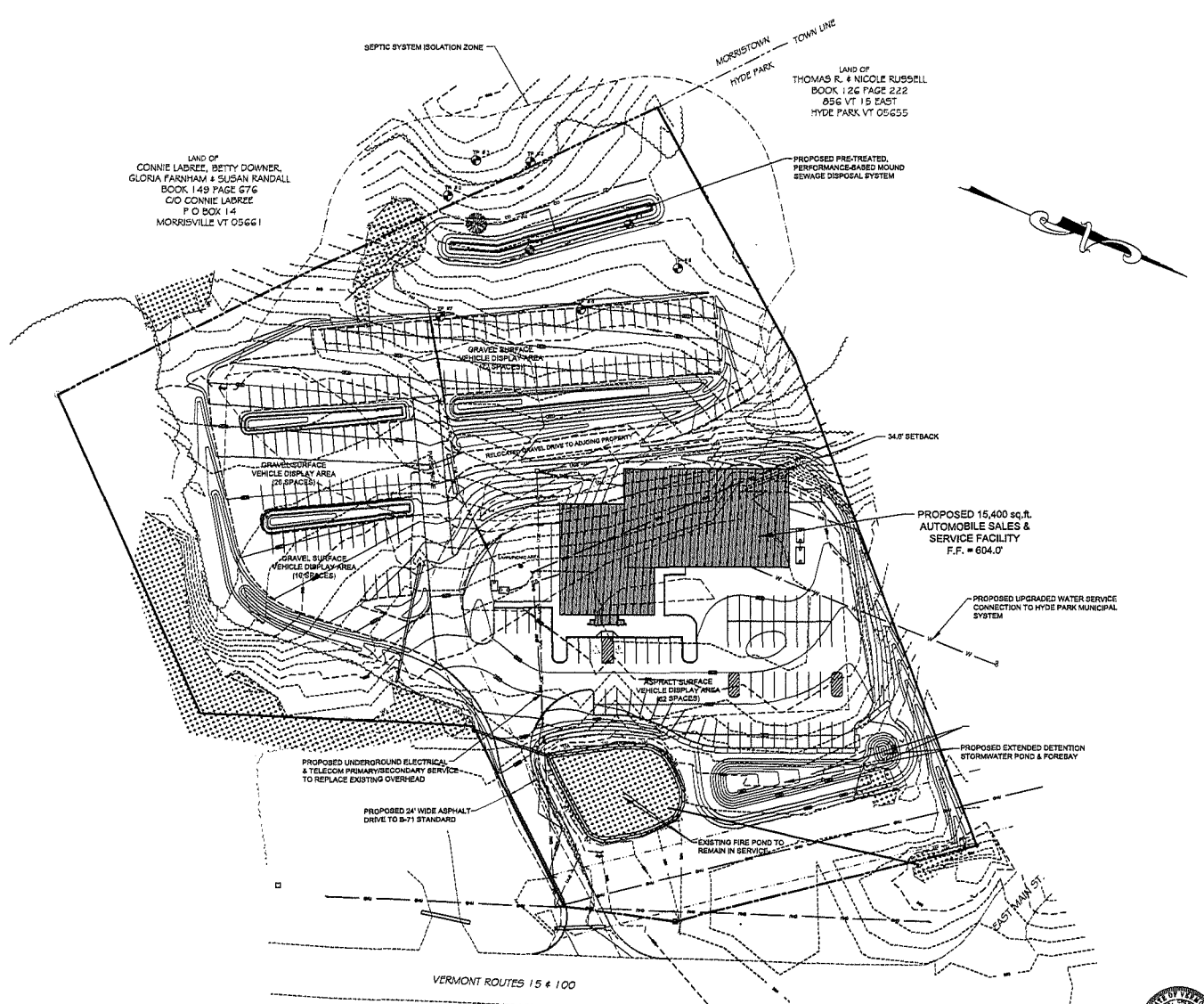
Reason for Mitigation: Correction of Violation Mitigation to offset permit impacts Voluntary

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

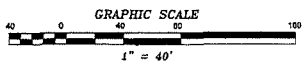
Wetland Project Number:			
Wetland Project Name:		DEC ID#:	
Date Application Received:			
Request for Information Date:		Information Received Date:	
Request for Information Date:		Information Received Date:	
Date Application Complete:		Distribution Complete Date:	
Notice Begin Date:		Notice End Date: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



LAND OF
CONNIE LABRZE, BETTY DOWNER,
GLORIA FARNHAM & SUSAN RANDALL
BOOK 149 PAGE 676
C/O CONNIE LABRZE
P O BOX 14
MORRISVILLE VT 05661

LAND OF
THOMAS R. & NICOLE RUSSELL
BOOK 126 PAGE 222
856 VT 15 EAST
HYDE PARK VT 05655

- LEGEND:**
- EXISTING FEATURES**
- ROAD RIGHT OF WAY LINE
 - PROPERTY LINE
 - EDGE OF PAVEMENT
 - EDGE OF GRAVEL
 - THROAT OF BROCK
 - UTILITY HOLE
 - DRILLED WELL
 - EXISTING 2-FOOT CONTOUR
 - EXISTING 1'-0" CONTOUR
 - FINE HYDRANT
 - WATER MAIN
 - WATER SERVICE LINE
 - ETCHING/GRAN LINE
 - OVERHEAD POWER OR TELEPHONE
 - UNDERGROUND POWER OR TELEPHONE
- PROPOSED IMPROVEMENTS**
- EDGE OF ASPHALT SURFACE
 - EDGE OF GRAVEL SURFACE
 - ⬇ CURB STOP/WATER GUT-OFF
 - WATER SERVICE LINE
 - REINFORCEMENT
 - SEWER SERVICE LINE
 - FINISH GRADE CONTOUR
 - UNDERGROUND POWER AND/OR TELEPHONE



OVERALL SITE PLAN McMAHON CHEVROLET ROUTES 15 & 100 HYDE PARK, VERMONT CHENETTE ASSOCIATES, P.C. BERNARD X. CHENETTE P.E. BERLIN, VERMONT		
DRAWN BY: KJ	SCALE: 1"=40'	DWG. NO. 15048B
CHECKED BY: BXC	DATE: 11/11/15	SHEET: C2

NOTES:
 1. WETLANDS DELINEATED BY GILMAN & BRIGGS ENVIRONMENTAL, MAY 2015.
 2. WETLAND DELINEATION MAPPED BY DAVID PEATMAN OF PEATMAN SURVEYING, MAY 2015.

LEGEND:

EXISTING FEATURES

- ROAD RIGHT-OF-WAY LINE
- PROPERTY LINE
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- THRESHOLD OF DROCK
- UTILITY POLE
- DRILLED WELL
- EXISTING 3'-0" FOOT CONTOUR
- EXISTING 1'-0" FOOT CONTOUR
- FIRE HYDRANT
- WATER MAIN
- WATER SERVICE LINE
- STORMSEWER LINE
- OVERHEAD POWER OR TELEPHONE
- UNDERGROUND POWER OR TELEPHONE
- EDGE OF WOODS/SHRUB

PROPOSED IMPROVEMENTS

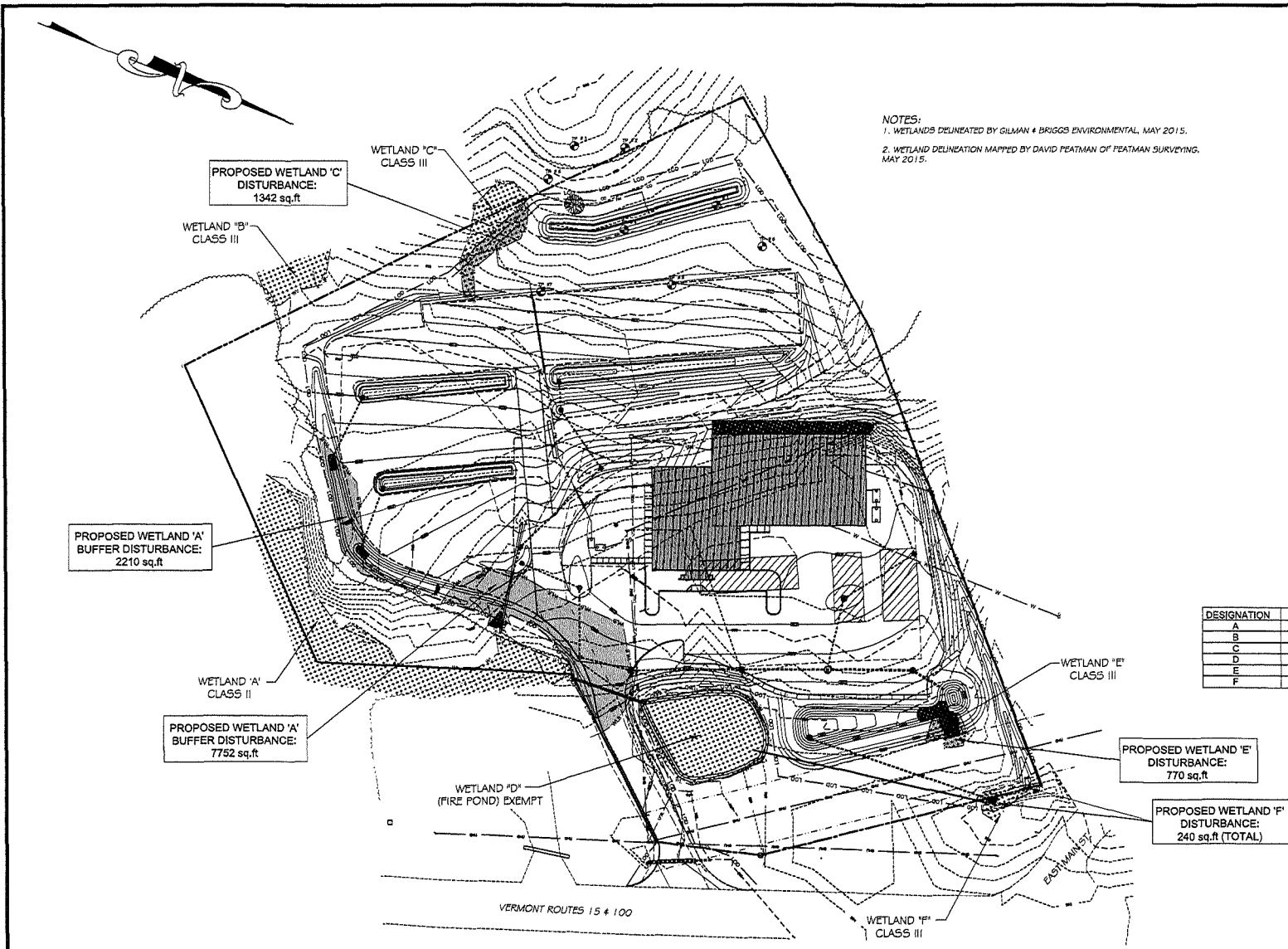
- EDGE OF PAVEMENT
- EDGE OF GRAVEL
- STOPSMOKE MANHOLE
- CATCHBASIN
- ▽ CURB STOPSMOKE INLET/OUTLET
- WATER SERVICE LINE
- SEWER FORCEMAIN
- SEWER SERVICE LINE
- STOPSMOKE MANHOLE
- FRESH GRADE CONTOUR
- SPOT ELEVATION
- LIMIT OF PROPOSED EASEMENT
- UNDERGROUND POWER AND/OR TELEPHONE

WETLANDS RELATED FEATURES

- DELINEATED WETLAND BOUNDARY
- WETLAND
- LIMIT OF 60' WIDE CLASS II BUFFER
- LIMIT OF EXISTING DISTURBED AREA
- PROPOSED LIMITS PROJECT DISTURBANCE
- DISTURBED WETLAND/BUFFER AREA
- TREE TO BE REMOVED (N^o 56)

WETLANDS IMPACT SUMMARY

DESIGNATION	CLASS	WETLAND IMPACT	BUFFER IMPACT
A	III	N/A	9,982 sq.ft.
B	III	N/A	N/A
C	III	1,972 sq.ft.	N/A
D	EXEMPT	N/A	N/A
E	III	770 sq.ft.	N/A
F	III	240 sq.ft.	N/A



PROPOSED WETLAND 'C'
 DISTURBANCE:
 1342 sq.ft

WETLAND 'B'
 CLASS III

PROPOSED WETLAND 'A'
 BUFFER DISTURBANCE:
 2210 sq.ft

WETLAND 'A'
 CLASS II

PROPOSED WETLAND 'A'
 BUFFER DISTURBANCE:
 7752 sq.ft

WETLAND 'D'
 (FIRE POND) EXEMPT

WETLAND 'E'
 CLASS III

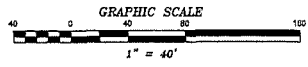
PROPOSED WETLAND 'E'
 DISTURBANCE:
 770 sq.ft

PROPOSED WETLAND 'F'
 DISTURBANCE:
 240 sq.ft (TOTAL)

VERMONT ROUTES 15 & 100

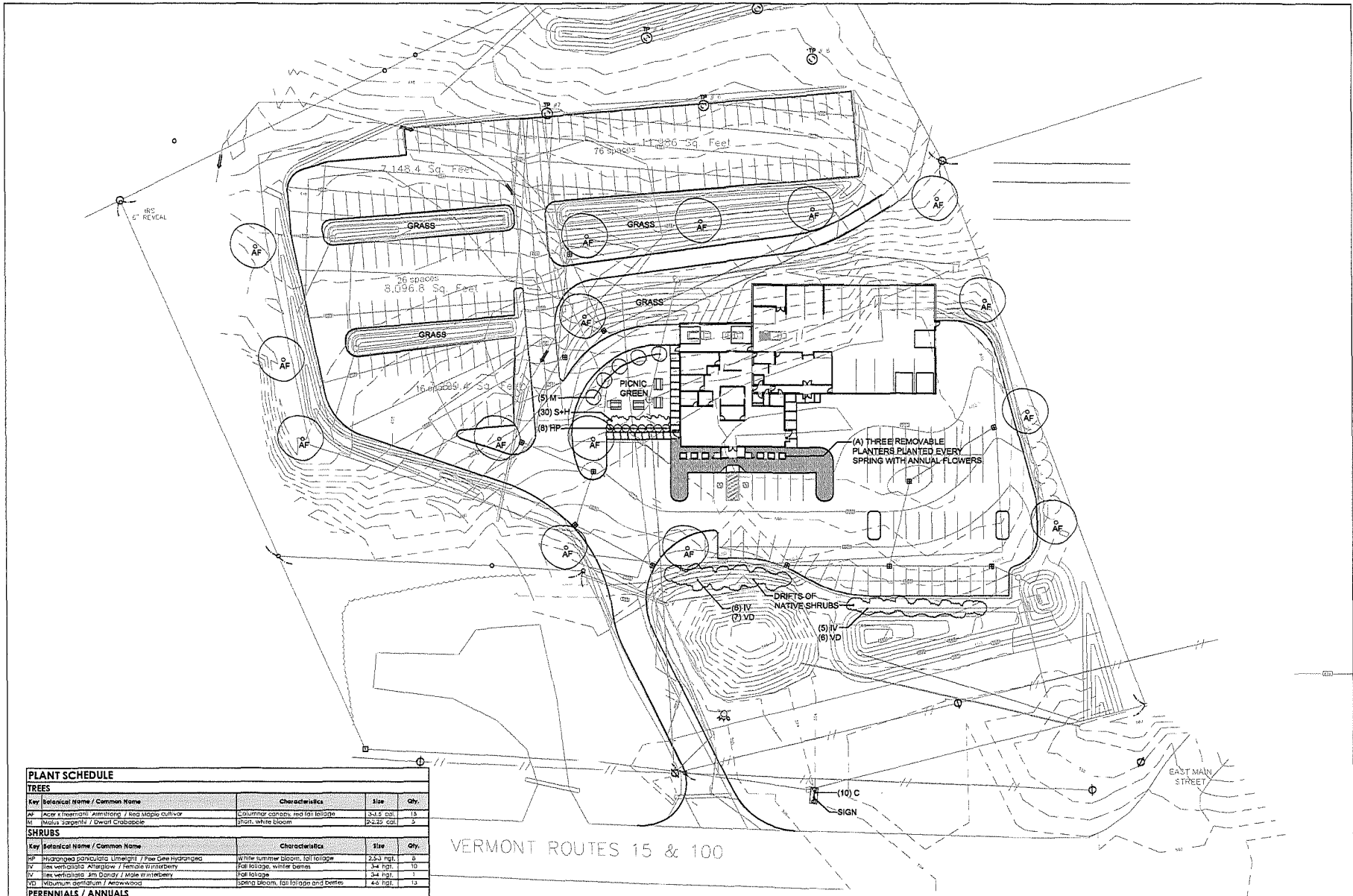
WETLAND 'F'
 CLASS III

EASTMAN ST



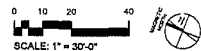
WETLANDS IMPACT PLAN
McMAHON CHEVROLET
 ROUTES 15 & 100
 HYDE PARK, VERMONT
 CHENETTE ASSOCIATES, P.C.
 BERNARD X. CHENETTE P.E.
 BERLIN, VERMONT

DRAWN BY: KJK	SCALE: 1"=40'	DWG. NO. 15048E
CHECKED BY: BXC	DATE: 11/18/15	SHEET: C5



PLANT SCHEDULE				
TREES				
Key	Botanical Name / Common Name	Characteristics	Size	Qty.
AF	Acer x fraxinifolia / American Fraxinifera / Red Maple Quilted	Columnar canopy, red fall foliage	3-4.5' tall	13
H	Hedera helix / Dwarf Hedera	Small, white bloom	2-2.5' tall	2
SHRUBS				
Key	Botanical Name / Common Name	Characteristics	Size	Qty.
HP	Hydrangea paniculata / Limelight / Five One hydrangea	White summer bloom, tall rounded	2-2.5' tall	2
W	Wickstroemia / Winterberry	Red foliage, winter berries	3-4' tall	10
IV	Ilex verticillata / Am. Holly / Winterberry	Red foliage	3-4' tall	1
VD	Viburnum dentatum / Arrowwood	White bloom, tall foliage and berries	4-5' tall	13
PERENNIALS / ANNUALS				
Key	Botanical Name / Common Name	Characteristics	Size	Qty.
A	Annual flowers to be selected and planted by Owner every spring		100	
E	Echinopsia / Echinops / Red Cone	Summer flower plumes	3'	10
H	Hemerocallis / Daylily	Wide yellow bloom	13	
S	Sedum x spectabile / Caradonna	Purple sage	17	

VERMONT ROUTES 15 & 100



PRELIMINARY - NOT FOR CONSTRUCTION

CYNTHIA KNAUF
LANDSCAPE DESIGN, INC.
1000 W. Main Street, Suite 100, Ferrisburgh, VT 05752
Tel: 802.833.1111
www.cynthiaknauf.com

MEMBER:
BI Design Associates, Architects
 330 Western Avenue, Suite 104, St. Albans, VT 05478
 Email: cna@biassociates.com
CNA INC./NER
PC Chenille Associates
 1400 North Main Street, Ferrisburgh, VT 05752
 Email: cna@chenille.com

PROJECT NAME:
McMahon Chevrolet
 Ferrisburgh, VT 05752

DATE: 11.5.15
SCALE: As Indicated
DRAWN BY: ABC
SHEET TITLE: Planting Plan

REVISIONS:

SHEET

L1.1

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: McMahon Chevrolet City/County: Hyde Park, Lamoille Sampling Date: 8 May 2015
 Applicant/Owner: McMahon Chevrolet State: VT Sampling Point: 1-U
 Investigator(s): Arthur V. Gilman & Errol Briggs Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Gentle slope Local relief (concave, convex, none): CONVEX Slope (%): 5%
 Subregion (LRR or MLRA): LRR Lat: 44.58719 Long: -72.60544 Datum: DD
 Soil Map Unit Name: Boothbay silt loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes Y No _____ (If no, explain in Remarks.)
 Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes Y 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 _____ No <u>N</u> Hydric Soil Present? Yes _____ No <u>N</u> Wetland Hydrology Present? Yes _____ No <u>N</u>	Is the Sampled Area within a Wetland? Yes _____ No <u>N</u> If yes, optional Wetland Site ID: <u>Wetland C at C-11</u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: <u>Primary Indicators (minimum of one is required; check all that apply)</u> ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) ___ Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	<u>Secondary Indicators (minimum of two required)</u> ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>N</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>N</u> Depth (inches): _____ Saturation Present? Yes _____ No <u>N</u> Depth (inches): _____ (includes capillary fringe)	Wetland Hydrology Present? Yes _____ No <u>N</u>
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks:	

VEGETATION – Use scientific names of plants.

Sampling Point: 1-U

	Absolute % Cover	Dominant Species?	Indicator Status	
Tree Stratum (Plot size: <u>30'</u>)				Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>2</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0/2 = 100%</u> (A/B)
1. <u>No trees present</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
_____ = Total Cover				Prevalence Index worksheet: Total % Cover of: _____ Multiply by: _____ OBL species _____ x 1 = _____ FACW species _____ x 2 = _____ FAC species _____ x 3 = _____ FACU species _____ x 4 = _____ UPL species _____ x 5 = _____ Column Totals: _____ (A) _____ (B) Prevalence Index = B/A = _____
Sapling/Shrub Stratum (Plot size: <u>15'</u>)				
1. <u>No shrubs present</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
_____ = Total Cover				
Herb Stratum (Plot size: <u>5'</u>)				Hydrophytic Vegetation Indicators: <input type="checkbox"/> 1 - Rapid Test for Hydrophytic Vegetation <input checked="" type="checkbox"/> 2 - Dominance Test is >50% <input type="checkbox"/> 3 - Prevalence Index is ≤3.0 ¹ <input type="checkbox"/> 4 - Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Poa pratensis</u>	<u>30</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Erythronium americanum</u>	<u>25</u>	<u>Y</u>	<u>UPL</u>	
3. <u>Solidago altissima</u>	<u>10</u>	<u>N</u>	<u>FACU</u>	
4. <u>Veronica chamaedrys</u>	<u>10</u>	<u>N</u>	<u>UPL</u>	
5. <u>Carex arctata</u>	<u>10</u>	<u>N</u>	<u>UPL</u>	
6. <u>Onoclea sensibilis</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
7. <u>Plantago lanceolata</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
8. <u>Solidago gigantea</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
9. <u>Bromus inermis</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
10. <u>Fragaria virginiana</u>	<u>5</u>	<u>N</u>	<u>UPL</u>	
11. _____				
12. _____				
<u>110</u> = Total Cover				Definitions of Vegetation Strata: Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height. Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall. Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall. Woody vines – All woody vines greater than 3.28 ft in height.
Woody Vine Stratum (Plot size: _____)				
1. <u>No woody vines</u>				
2. _____				
3. _____				
4. _____				
_____ = Total Cover				Hydrophytic Vegetation Present? Yes _____ No <u>N</u>
Remarks: (Include photo numbers here or on a separate sheet.)				

SOIL

Sampling Point: 1-U

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-10	10 YR 4/3	100					silt loam	
10-15	5Y 4/2	98	2,5Y 4/3	2	C	M	silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: 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) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- 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)

Indicators for Problematic Hydric Soils³:

- 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)
- Dark Surface (S7) (LRR K, L)
- 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)

³Indicators 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 Y

Remarks:

Redox features are faint, not prominent or distinct, so criterion for depleted matrix is not met.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: McMahon Chevrolet City/County: Hyde Park, Lamoille, Sampling Date: 8 May 2015
 Applicant/Owner: McMahon Chevrolet State: VT Sampling Point: 1-W
 Investigator(s): Arthur V. Gilman & Errol Briggs Section, Township, Range: _____
 Landform (hillslope, terrace, etc.): Gentle slope Local relief (concave, convex, none): CONCAVE Slope (%): 5%
 Subregion (LRR or MLRA): LRR Lat: 44.58719 Long: -72.60544 Datum: DD
 Soil Map Unit Name: Boothbay silt loam NWI classification: PEM

Are climatic / hydrologic conditions on the site typical for this time of year? Yes Y No _____ (If no, explain in Remarks.)
 Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes Y 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 <u>Y</u> No _____ Hydric Soil Present? Yes <u>Y</u> No _____ Wetland Hydrology Present? Yes <u>Y</u> No _____	Is the Sampled Area within a Wetland? Yes <u>Y</u> No _____ If yes, optional Wetland Site ID: <u>Wetland C at C-11</u>
Remarks: (Explain alternative procedures here or in a separate report.) 	

HYDROLOGY

Wetland Hydrology Indicators: Primary Indicators (minimum of one is required; check all that apply) ___ Surface Water (A1) ___ Water-Stained Leaves (B9) ___ High Water Table (A2) ___ Aquatic Fauna (B13) <u>Y</u> Saturation (A3) ___ Marl Deposits (B15) ___ Water Marks (B1) ___ Hydrogen Sulfide Odor (C1) ___ Sediment Deposits (B2) ___ Oxidized Rhizospheres on Living Roots (C3) ___ Drift Deposits (B3) ___ Presence of Reduced Iron (C4) ___ Algal Mat or Crust (B4) ___ Recent Iron Reduction in Tilled Soils (C6) ___ Iron Deposits (B5) ___ Thin Muck Surface (C7) ___ Inundation Visible on Aerial Imagery (B7) ___ Other (Explain in Remarks) ___ Sparsely Vegetated Concave Surface (B8)	Secondary Indicators (minimum of two required) ___ Surface Soil Cracks (B6) ___ Drainage Patterns (B10) ___ Moss Trim Lines (B16) ___ Dry-Season Water Table (C2) ___ Crayfish Burrows (C8) ___ Saturation Visible on Aerial Imagery (C9) ___ Stunted or Stressed Plants (D1) ___ Geomorphic Position (D2) ___ Shallow Aquitard (D3) ___ Microtopographic Relief (D4) ___ FAC-Neutral Test (D5)
Field Observations: Surface Water Present? Yes _____ No <u>N</u> Depth (inches): _____ Water Table Present? Yes _____ No <u>N</u> Depth (inches): <u>15"</u> Saturation Present? Yes <u>Y</u> No _____ Depth (inches): <u>6"</u> (includes capillary fringe)	Wetland Hydrology Present? Yes <u>Y</u> No _____
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available: 	
Remarks:	

VEGETATION – Use scientific names of plants.

Sampling Point: 1-W

Tree Stratum (Plot size: <u>30'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>No trees present</u>			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			

Sapling/Shrub Stratum (Plot size: <u>15'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>No shrubs present</u>			
2. _____			
3. _____			
4. _____			
5. _____			
6. _____			
7. _____			

Herb Stratum (Plot size: <u>5'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Scirpus atrovirens</u>	<u>30</u>	<u>Y</u>	<u>OBL</u>
2. <u>Onoclea sensibilis</u>	<u>20</u>	<u>Y</u>	<u>FACW</u>
3. <u>Carex vulpinoidea</u>	<u>15</u>	<u>Y</u>	<u>OBL</u>
4. <u>Solidago rugosa</u>	<u>15</u>	<u>N</u>	<u>FAC</u>
5. <u>Solidago solidago</u>	<u>5</u>	<u>N</u>	<u>FACW</u>
6. _____			
7. _____			
8. _____			
9. _____			
10. _____			
11. _____			
12. _____			

Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>No woody vines</u>			
2. _____			
3. _____			
4. _____			

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 3 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 2/2 = 100% (A/B)

Prevalence Index worksheet:

Total % Cover of: _____ Multiply by: _____

OBL species _____ x 1 = _____

FACW species _____ x 2 = _____

FAC species _____ x 3 = _____

FACU species _____ x 4 = _____

UPL species _____ x 5 = _____

Column Totals: _____ (A) _____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

1 - Rapid Test for Hydrophytic Vegetation

2 - Dominance Test is >50%

3 - Prevalence Index is ≤3.0¹

4 - Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes Y No _____

Remarks: (Include photo numbers here or on a separate sheet.)

SOIL

Sampling Point: 1-W

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

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-9	10 YR 4/2	100					silt loam	oxidized rhizospheres
9-15	2.5Y 5/3	95	10 YR 3/3	5	C	M	silt loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains.

²Location: 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) (LRR R, MLRA 149B)

- Polyvalue Below Surface (S8) (LRR R, MLRA 149B)
- Thin Dark Surface (S9) (LRR R, MLRA 149B)
- 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)

Indicators for Problematic Hydric Soils³:

- 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)
- Dark Surface (S7) (LRR K, L)
- 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)

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

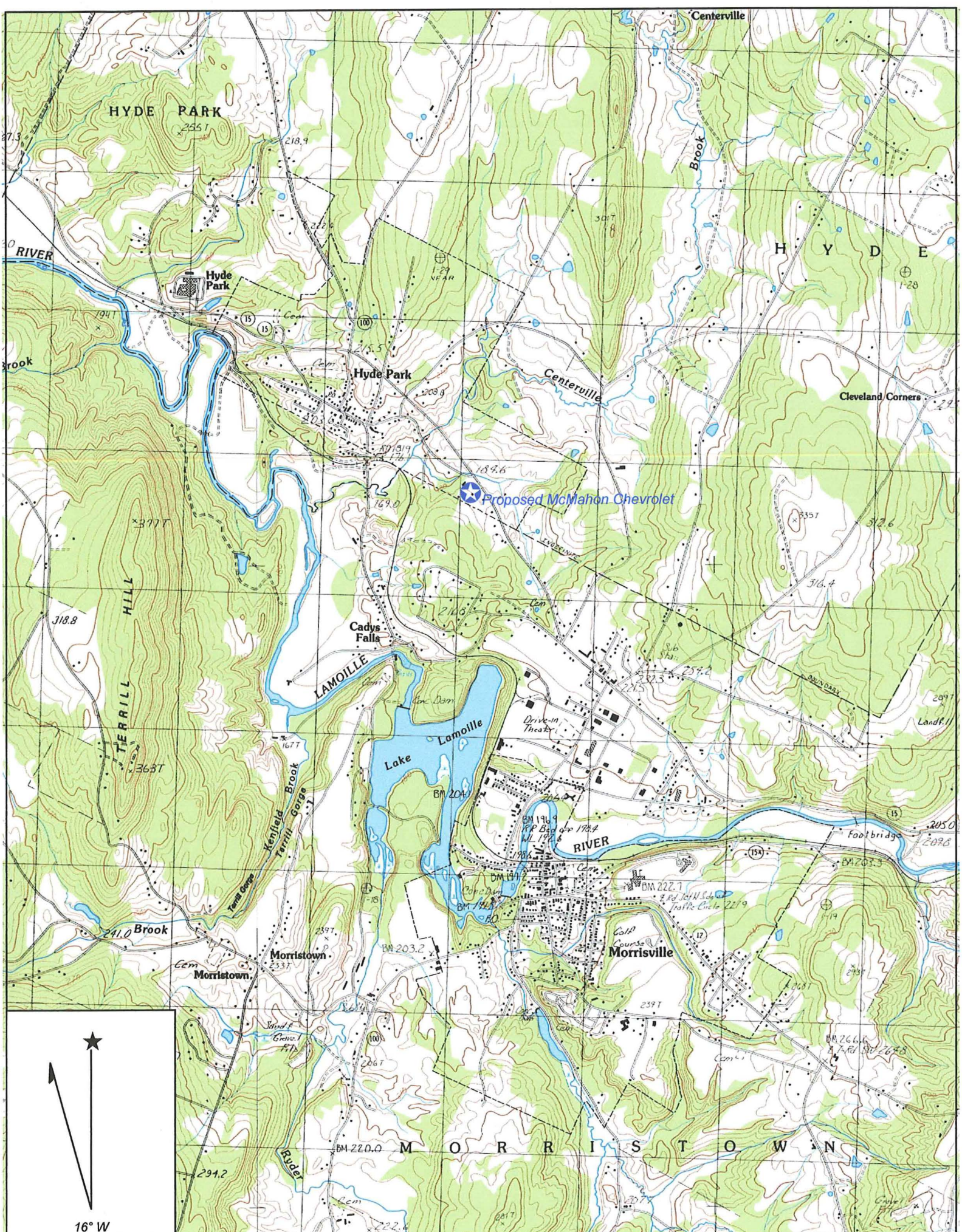
Restrictive Layer (if observed):

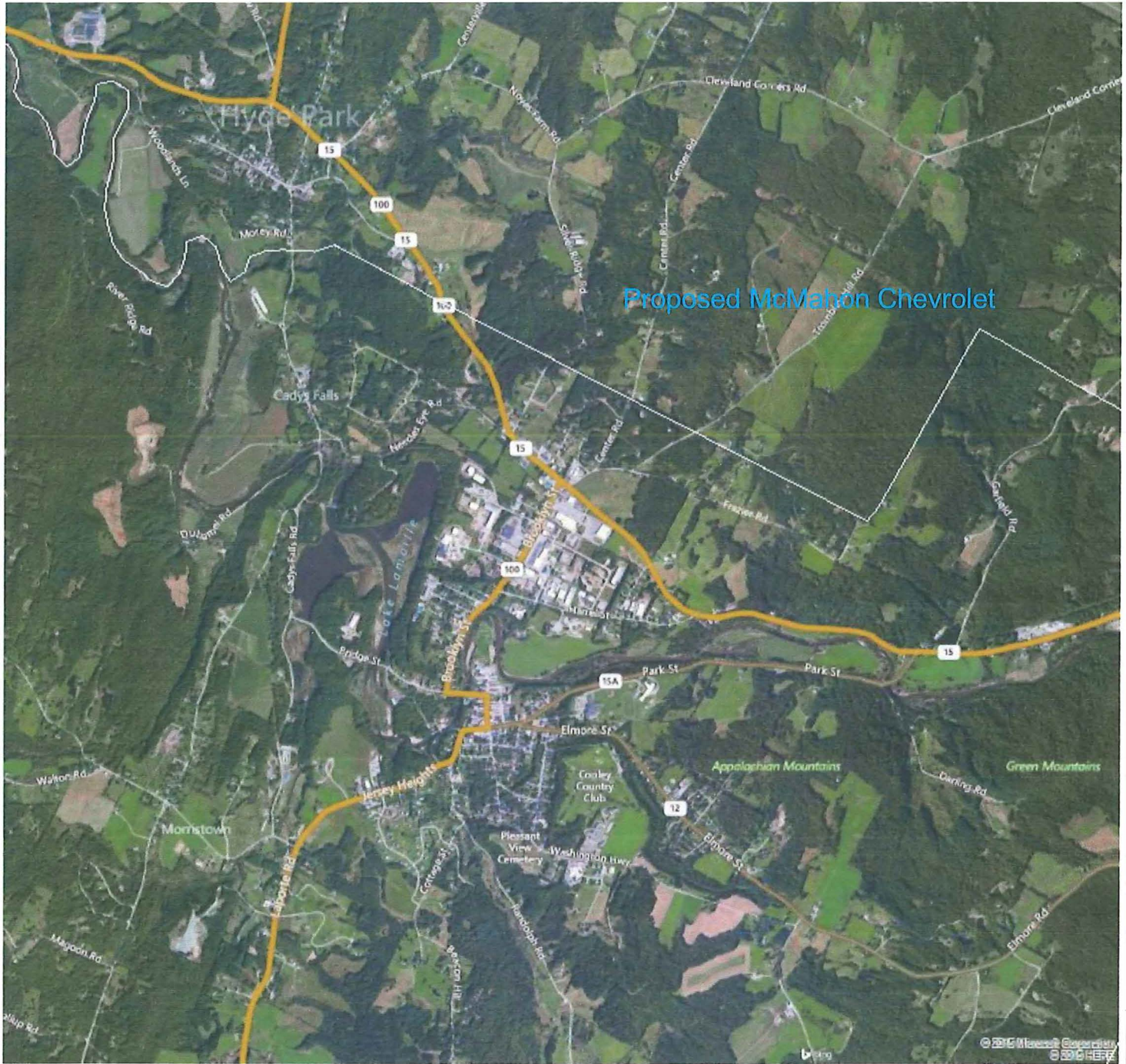
Type: _____

Depth (inches): _____

Hydric Soil Present? Yes No

Remarks:





Town Boundary

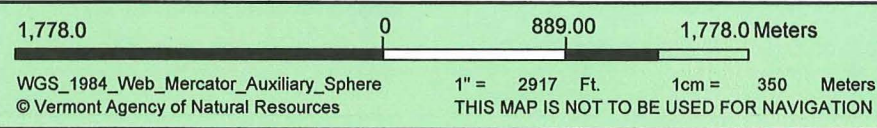
LEGEND

NOTES

Map created using ANR GIS mapping technology.

1: 35,000

November 19, 2015



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.