

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	Town of Charlotte	
1.2. Applicant Address	PO Box 119, Charlotte, Vermont 05445	
1.3. Applicant Phone Number	(802) 425-3071	
1.4. Applicant Email	Dean@townofcharlotte.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; border-top: 1px solid black; padding-top: 5px;"> X Date: </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	David S. Marshall	
2.2. Representative Address	Civil Engineering Associates, Inc. 10 Mansfield View Lane South Burlington, VT 05403	
2.3. Representative Phone Number	W: (802) 864-2323	
2.4. Applicant Email	dmarshall@cea-vt.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> <div style="display: flex; justify-content: space-between; border-top: 1px solid black; padding-top: 5px;"> X Date: </div>	
3. Landowner	Landowner must sign the application. Use this space if landowner is different from the applicant	
3.1. Landowner Name	Town of Charlotte	
3.2. Landowner Address	PO Box 119, 159 Ferry Road, Charlotte, VT 05445	
3.3. Landowner Phone Number	(802) 425-3071	
3.4. Landowner Email	Dean@townofcharlotte.com	
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>Not applicable</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> <div style="display: flex; justify-content: space-between; border-top: 1px solid black; padding-top: 5px;"> X Date: </div>	
4. Location of Wetland and Project	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.	

	Located on the north side of the Town Offices at 159 Ferry Road		
5. Site Visit Date and Attendees	Date of visit with District Wetlands Ecologist	List people present for site visits including Ecologist, landowner, and representatives.	
	9/20/2013	Alan Quackenbush, Laura Lapierre, Karen Bates	
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		
	1.92 Acres (83,635 SF)		
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 100% lawn area with specimen trees with overgrown ditch.		
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. Broad valley bottom		
7.4. Wetland Hydrology	Describe the main source of wetland hydrology for the wetland complex. List any river, streams, lakes and ponds.		
	Overland flow and heavy valley bottom high groundwater table provide local hydrology 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. Westerly within the wetland to a ditch draining northerly.		
7.4.2. Influence of hydrology on wetland complex	For example: The river provides flood water to the wetland in the spring.		
	Seasonal precipitation events and melt-off create greatest impacts on hydrology of area.		
7.4.3. Relation to the project area	Distance between the project area and any nearby surface waters.		
	The site drains through a series of culverts to a manmade pond northeast of the Fire Station.		
7.4.4. Hydroperiod	Discuss frequency and duration of flooding, ponding, and/or soil saturation. Due to the "heavy" nature of the soils and proximity to impervious surfaces the lawn area is prone to saturated periods during the spring melt-off and after sustained precipitation events.		
7.5. Surrounding Landuse of the Wetland Complex	For example: rural residential and forested; agricultural and undeveloped, Municipal buildings and roadways on all four sides.		
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. Wetland likely extends southerly and southeasterly across the property line onto the lands of N/F Richard Lebouef.		
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. These wetlands have been isolated by the construction of roadways and buildings and are highly influenced by runoff from those impervious surfaces.		
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 project site is located on the edge of a non-hydric soil shallow drumlin within a large basin areas comprised of hydric soils and areas of VSWI mapped Class II wetlands (see Overall Location Map). The subject wetland is not typical of the main wetland body in that it more transitional in nature.	
8.2. Wetland Landuse	For example: mowed lawn; old field; naturally vegetated. Describe any previous and ongoing disturbance in the subject wetland. Mowed lawn	
8.3. Wetland Vegetation	List dominant wetland community type and associated dominant plant species. fine fescues grasses and maple trees.	
8.4. Wetland Soils	Use USDA NRCS information where possible and use the ACOE Delineation Manual soil description Covington silty clay and Livingston Clay	
8.5. Wetland Hydrology	Use descriptions from the ACOE Delineation Manual. High water table, Saturation, Geomorphic position, Wetland drainage patterns,	
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. Roadways, municipal buildings, parking lots, walkways.	
8.6.2. Buffer vegetation	List community type and dominant plant species Lawn grasses and specimen trees.	
8.6.3. Buffer soils	Use USDA NRCS information where possible, and the ACOE Delineation Manual soil description Palatine soils which are well drained and somewhat excessively drained. Permeability is moderate and some small sections of poorly drained Covington Soils with slow permeability.	

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: Infomal determination issued 10-9-2013 by Laura LaPierre.	
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. NA	

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.							
	Improvements to Town owned open space active use area.							
10.2.Project Purpose	For example: To construct a residential subdivision, upgrade existing road to improve access, extend a trail system Drainage improvements and minor filling of low spots to the existing lawn area to improve surface drainage.							
10.3.Acres Owned by Applicant	Acreage of subject property. 3.0 acres associated with Town Office and Library buildings							
10.4.Acres Involved in the Project	Acreage of area involved in the project. 0.42 total, 0.35 acres within the wetland.							
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 construction of the proposed curtain drain and placement of topsoil to increase the slope and surface drainage potential of certain flat area.							
11.2.Dimension Details	Square footage of buildings, dimension of roads including fill footprint. None proposed							
11.3.Bridges and Culverts	Culvert circumference, length, placement and shapes, or bridge details. None proposed							
11.4.Construction Sequence	Describe any details pertaining to the worked planned in the wetland and buffer in terms of sequence or phasing that is relevant Begin construction at the egde of the existng ditch and proceed upgradient in installing the curtain drain and then place fill material to grade out the flatter portions of 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. Due to the small size the project does not trigger the jurisdiction of the State Stormwater GP for construction stormwater runoff. EPSC measures will include the installation of a silt fence at the low point of the fill and re-establishment of grass cover through seeding and mulching the site.							
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. None proposed.							
12. Wetland and Buffer Zone Impacts								
12.1.Wetland Impacts	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. Totals <table border="1" data-bbox="560 1675 1383 1774"> <tr> <td>Wetland Fill</td> <td>974 s.f.</td> </tr> <tr> <td>Temporary Wetland Impact</td> <td>1630 s.f.</td> </tr> <tr> <td>Other Permanent Wetland Impact</td> <td>s.f.</td> </tr> </table> Describe in detail the proposed impact. Construction of the proposed stone curtain drain. Permanent impacts will be three (3) feet along the length of the drain with temporary impact of an additional 15 feet per linear foot of drainage line installation.	Wetland Fill	974 s.f.	Temporary Wetland Impact	1630 s.f.	Other Permanent Wetland Impact	s.f.	
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	<p>Permannet fill is also associated with the placement of the fill within the mid portion of the existing lawn.</p>							
<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="561 344 1385 443"> <tr> <td colspan="2">Totals</td> </tr> <tr> <td>Temporary Buffer Impact</td> <td>390 s.f.</td> </tr> <tr> <td>Permanent Buffer Impact</td> <td>1907 s.f.</td> </tr> </table> <p>Describe in detail the proposed impact.</p> <p>The work in the buffer will generally include the installation of the curtain drain with a 3 foot wide permanament impact and a 15 foot wide temporary impavct per linear foot.</p>	Totals		Temporary Buffer Impact	390 s.f.	Permanent Buffer Impact	1907 s.f.	
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Temporary Buffer Impact	390 s.f.							
Permanent Buffer Impact	1907 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>As the the existing functions of the wetland are Water Storage and Surface & Groundwater Protection, the proposed installation of the cutain drain and placement of fill materials to eliminate the low spots will have some impact on the presence of hydrophytic vegetation within the lawn area. Water storage will be slightly impacted but in a very minor way in comparison to the capabilities of the larger wetland/hydric soils immediately updtream of this site (see Overall Location Map).</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 site currently hosts community gatherings which are inherently associated with the municipal buildings in the area (Fire Department, Libarry, Senior Center) and private properties (day care). For example the Town Party relies upon parking facilities of these facilities in hosting this event. Other properties in the area which are large enough to host an event of this type have been avoided as they are too wet or represent saftey issues (Flea market site adjacent to Route 7).</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 proposed curtain drain has been located as far outside of the main lawn area as practicbale to minimize impacts to the main body of the wetland. The proposed filling of the site with 12" to 18" of soil to provide a reliably dry surface has been abandoned.</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 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>							

	None proposed other than limiting the duration of construction in support of stabilizing the sit as quickly as possible.																																									
12.4.4. Compensation	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. As the project will not create undue adverse impacts on this lan area, no mitigation is proposed.																																									
13. Supporting materials	Where appropriate list the accompanying material by title, author, date and last revision date. Submit these documents and plans with the application.																																									
13.1. Location map	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. Two location maps are provided s generated from the ANR Environmental Interest Locator VCGI datte base. Both a re dated June 3, 2014. The first is and overall planof the area - Charlotte Town Offices Lawn Location; Scale 1:11379 - Charlotte Town Offices Local Location Map; Scale 1:1422																																									
13.2. Site Plans	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. Plans prepared by Civil Engineering Associates, Inc. <table border="1"> <thead> <tr> <th>Sheet</th> <th>Title</th> <th>Date</th> <th>Last Rev.</th> </tr> </thead> <tbody> <tr> <td>C1-Att 1</td> <td>Existing Cond. at Library & Town Offices</td> <td>1/13/14</td> <td></td> </tr> <tr> <td>Att 2</td> <td>Photo of Lawn at Library & Town Offices</td> <td>Not dated</td> <td></td> </tr> <tr> <td>C1-Att 4</td> <td>Phase I Drainage Improvements</td> <td>1/3/14</td> <td></td> </tr> <tr> <td>Att 6</td> <td>Photo of lawn with Drainage Imporvements</td> <td>Not dated</td> <td></td> </tr> <tr> <td>C1-Att 1</td> <td>Existing Cond. at Library & Town Offices</td> <td>1/13/14</td> <td></td> </tr> <tr> <td>C1</td> <td>Drainage Improvements - Town Off & Library</td> <td>3/27/14</td> <td></td> </tr> <tr> <td>C2</td> <td>Drainage Improvements - Town Off & Library</td> <td>3/27/14</td> <td></td> </tr> <tr> <td>C3</td> <td>Drainage Improvements - Town Off & Library</td> <td>3/27/14</td> <td></td> </tr> <tr> <td>C4</td> <td>Drainage Improvements - Town Off & Library</td> <td>3/27/14</td> <td></td> </tr> </tbody> </table>	Sheet	Title	Date	Last Rev.	C1-Att 1	Existing Cond. at Library & Town Offices	1/13/14		Att 2	Photo of Lawn at Library & Town Offices	Not dated		C1-Att 4	Phase I Drainage Improvements	1/3/14		Att 6	Photo of lawn with Drainage Imporvements	Not dated		C1-Att 1	Existing Cond. at Library & Town Offices	1/13/14		C1	Drainage Improvements - Town Off & Library	3/27/14		C2	Drainage Improvements - Town Off & Library	3/27/14		C3	Drainage Improvements - Town Off & Library	3/27/14		C4	Drainage Improvements - Town Off & Library	3/27/14		
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13.3. ACOE Delineation Forms	List by author, location, and date. Required only for Individual Permits. None																																									
13.4. Other Supporting Documents	Provide any other documentation that supports the application. List photographs; easements; agreements; may include a GIS-compatible wetland submittal for determinations; etc. Photos are embedded in the submitted plans																																									
13.5. List of Abutters (Neighbors with land adjoining wetland or buffer zone)	Attach list of names and mailing addresses or submit as word mailing document. N/F Richard Lebouef - -																																									
13.5.1. Newspaper Notification	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. Not proposed																																									
14. Check Which Functions are Present in the Subject Wetland and in the Wetland Complex.	Wetland Function Summary: (if more than one wetland use supplemental wetland sheets)																																									
	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"/>

15. Coverage under Vermont General Wetland Permit

If applying for an Individual Vermont Wetland Permit or Determination, please proceed to number 16 and answer the remaining application questions.

If applying for Coverage under the Vermont General Wetland Permit, please complete question 15.1 prior to submitting application.

15.1.VWP Vermont General Permit eligibility checklist

If applying for coverage under the Vermont General Wetland Permit, please verify the following to complete the application:

- The activity qualifies as an eligible activity for coverage under the Vermont General Wetland Permit
- The proposed project will meet the conditions applicable to the proposed project in the Vermont Wetland General Permit
- The activity does not qualify as an Allowed Use under Section 6 of the Vermont Wetland Rules.
- 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.
- All impacts have been avoided and minimized to the greatest extent possible.
- The wetland complex is not significant for Function 5.5 Exemplary Wetland Natural Community or 5.6 Rare, Threatened and Endangered Species Habitat.
- The activity is not located in or adjacent to a vernal pool, fen, or bog.
- The wetland is not at or above 2,500' in elevation (headwaters wetland).
- The project is not located in a Class I wetland or associated buffer zone.
- The activity is not an as-built project that constitutes a violation of the Vermont Wetland Rules.

Stop here if applying for Coverage under the Vermont General Wetland Permit

Complete the following Functions and Values checklist if applying for an Individual Wetland Permit and/or a Wetland Determination

Functions and Values	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.
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	If more than one wetland complex is involved, use the Supplemental Wetland Forms.	
16. Storage for Flood Water and Storm Runoff	<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 checked="" 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 storage benefits independently of the wetland. <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 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 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 type="checkbox"/> 1. Developed public or private property. <input 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 checked="" 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 lawn area wetland provides some storage of floodwater through the culvert constriction under Ferry Road. This constriction is marginilized by the presence of a similar culvert immediately upstream of this 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>The proposed curtain drain does not reduce the carrying capacity of lawn area, in fact it technically increases it by introducing pipe and fill volumes not currently present beneath the crown of the existng outlet culvert.</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 checked="" type="checkbox"/> Low water velocity through dense, persistent vegetation. <input 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 delta, island, bar or peninsula. <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 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 type="checkbox"/> The wetland provides an obvious filter between surface 	

	<p>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> <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"> <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 checked="" type="checkbox"/> Current use in the wetland results in disturbance that compromises this function. <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 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 above</p> <p>Due to its small size and presence of fine grained soils, the subject wetland provides some, but ilimited amount of groundwater protection of surface runoff from the edge of Ferry Road. Surface water protection is llimited to what the existing lawn area can provide. Most of this runoff is associated with roofs or lawn area.</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>The project will reduce the already limited capacity of the existing soils to mitigate runoff from impervious surfaces as the Hydrological Group D soils present in this area severly limit the potential to infiltrate surface water into the underlying rock acquifer. There are no "Hot Spots" in the area but the "heavy" nature of the soils due preclude the ready conveyance of pollutants to the underlying acquifer. The depth of over lying unconsolidated amterial over bedrock (30' to 50') will not be unduly impacted by the three to four foot depth of the perimter curtain drain.</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</p>	

	<p>wetland provides this function.</p> <ul style="list-style-type: none"> <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. <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. <input type="checkbox"/> Documented or professionally judged spawning habitat for northern pike. <input type="checkbox"/> Provides cold spring discharge that lowers the temperature of receiving waters and creates summer habitat for salmonoid species. <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>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"> <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"/> 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. <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. <input 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. <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.

- 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 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

	<p>scale and does not support wetland dependent species.</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>higher</i> level.</p> <p><input type="checkbox"/> The wetland complex is large in size and high in quality.</p> <p><input type="checkbox"/> The habitat has the potential to support several species based on the assessment above.</p> <p><input type="checkbox"/> Wetland is associated with an important wildlife corridor.</p> <p><input type="checkbox"/> The wetland has been identified as a locally important wildlife habitat by an ANR Wildlife Biologist.</p>	
<p>19.1. Subject Wetland</p>	<p>Please explain how the subject wetland contributes to the function listed above</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>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> <p><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> <p>The wetland is also likely to be significant if any of the following conditions are met:</p> <p><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.</p> <p><input type="checkbox"/> Contains ecological features that contribute to Vermont's 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. 	

	List species or communities of concern:	
20.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
20.2. Statement of no undue adverse impact	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.	
21. Rare, Threatened, and Endangered Species Habitat	<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. <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. The wetland is also likely to be significant if any of the following apply: <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). List name of species and ranking:	
21.1. Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
21.2. Statement of no adverse impact	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.	
22. Education and Research in Natural Sciences	<input type="checkbox"/> Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function. <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.	
22.1.Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
22.2.Statement of no undue adverse impact	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.	
23.Recreational Value and Economic Benefits	<input type="checkbox"/> Function is present and likely to be significant: Any of the following characteristics indicate the wetland provides this function. <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. Comments:	
23.1.Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
23.2.Statement of no undue adverse impact	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.	
24.Open Space and Aesthetics	<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"/> 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, regional or state plan. Comments:	
24.1.Subject Wetland	Please explain how the subject wetland contributes to the function listed above	
24.2.Statement of no undue adverse impact	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.	
25.Erosion Control through	<input type="checkbox"/> Function is present and likely to be significant: Any of the	

<p>Binding and Stabilizing the Soil</p>	<p>following physical and vegetative characteristics indicate the wetland provides this function.</p> <ul style="list-style-type: none"> <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"> <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> <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"/> The stream is artificially channelized and/or lacks vegetation that contributes to controlling the erosive force. <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 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</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>	

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

Applicant Name: Town of Charlotte		Representative Name: Dean Bloch, Town Manager	
Town where project is located: Charlotte		County: Chittenden	
Project Location Description: 159 Ferry Road <i>911 Street Address or direction from nearest intersection</i>			
Project Summary: Construction of drainage improvements to reduce surface water retention and improve use of lawn area after rainfall events.			
Permit Type Requested (check all that apply)			
<input checked="" type="checkbox"/> Vermont General Permit Coverage <input type="checkbox"/> Wetland Determination <input type="checkbox"/> Vermont Wetland Permit			
Impact Calculations: Total up proposed impacts from wetland tables listed below			
Total Wetland Impact		Total Buffer Zone Impact	
2604square feet (s.f.)		2297square feet (s.f.)	
Total Wetland Clearing (qualified linear projects only)		Total Buffer Zone Clearing (qualified linear projects only)	
square feet (s.f.)		square feet (s.f.)	
Permit Fees: Make check payable to - State of Vermont			
Wetland Impact Fee: (\$0.75/sf)		Administrative Fee:	
\$1,953.19		\$120	
Buffer Impact Fee: (\$0.25/sf)		Total Check Amount:	
\$574.25		\$2,647.44	
Clearing Fee: (\$0.25/sf)		\$	
Existing Land Use Type: (check all that apply)			
<input type="checkbox"/> Forestry <input type="checkbox"/> Residential (Subdivision) <input 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 checked="" 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 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 checked="" type="checkbox"/> Institutional <input checked="" type="checkbox"/> No Change			
Proposed Impact Type: (check all that apply)			
<input type="checkbox"/> Buildings <input type="checkbox"/> Utilities <input type="checkbox"/> Parking <input type="checkbox"/> Septic/Well <input checked="" type="checkbox"/> Stormwater <input type="checkbox"/> Driveway <input type="checkbox"/> Road <input type="checkbox"/> Parks/Path <input type="checkbox"/> Agriculture <input type="checkbox"/> Pond <input checked="" 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			
Wetland 1: (Label using Wetland ID from application if applicable, use supplemental sheets if more than one wetland is being impacted)		Location: SW corner of property.	
Wetland Type: PSS1 - Shrub, Broad L_WL Size Class :		<1 acre	
Proposed Alterations			
Wetland Alteration:		Buffer Zone Alteration:	
Wetland Fill: 2604ls.f.		Temporary: 1907 s.f.	
Temporary: 1630s.f.		Permanent: : 390 s.f.	
Permanent: : 974s.f.			
Wetland Alteration Type (check all that apply)			
<input type="checkbox"/> Dredge <input type="checkbox"/> Drain <input type="checkbox"/> Cut Vegetation <input type="checkbox"/> Stormwater <input checked="" type="checkbox"/> Trench/Fill <input type="checkbox"/> Other			
Mitigation			
Avoidance and Minimization (s.f. of wetland NOT impacted):		Wetland: s.f. Buffer Zone s.f.	
Wetland Mitigation: (s.f. Gained)		Buffer Zone Mitigation (s.f. Gained):	
Restoration s.f. Enhancement s.f.		Restoration s.f. Enhancement s.f.	
Creation s.f. Conservation s.f.		Creation s.f. Conservation s.f.	
Reason for Mitigation:		<input type="checkbox"/> Correction of Violation <input type="checkbox"/> Mitigation to offset permit impacts <input type="checkbox"/> Voluntary	

All Applications Should be Mailed To:

**Vermont Wetlands Program
 Water Quality Division
 103 South Main St
 Building 10 North
 Waterbury, VT 05671-0408**

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