

Appeal Period Expires 7.18.13
 Zoning District 01

Town of Essex, Vermont
Application for Zoning Permit
 www.essex.org

Application Date 7/1/13
 Permit Number 2013-703

All construction is to be completed in accordance with the Town of Essex Zoning Regulations and any/all federal or state regulations now in effect. You are required to post this permit in a conspicuous location on the property during the appeal period and it must remain posted throughout the construction period. **You are required to contact the necessary state agencies to obtain state permits @ 879-5676.**

Any interested person may appeal the decision of the Zoning Administrator to the Zoning Board of Adjustment within fifteen (15) days of the permit's date of issuance. Commencing construction within this fifteen (15) day appeal period is prohibited by law.

Signed: Eric Langevin *C.L. KS*

A Parcel Account Num. (Map-Parcel-Lot) 2- 006-002-000
 (found in Town Assessor's Office)
 Property Address: 81 Old Colchester Rd., Essex Jct., VT
 Owner: Town of Essex / Village of Essex Junction
 Owner Address: 81 Main St. / 2 Lincoln St.
 Owner Phone: (work) Town 878-8131 (home) Village 878-6950
 (cell) _____ (Email) _____
 Contractors name: Center for Tech. Essex Phone: 879-1315
eric: 922-5752 Cell: _____
 Estimated Construction Dates: Start: 07/01/13 Completion: 12/01/13
 Sq. Feet: 4500 Estimated Cost (labor & materials): \$ 3000

G

Check box(es) which describe proposed use or construction (circle choice in parenthesis).
 N = New A = Addition R = Remodel

<i>Residential:</i>	N	A	R
Single Family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Two-family (duplex)(other)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Multi-family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Condominium / Townhouse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mobile home	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Inclusions or Additions:</i>			
Garage (attached) (detached)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Porch (enclosed) (open)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Deck	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Pool (in) (above) ground	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Barn (residential) (agriculture)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Non-residential:</i>			
Commercial / Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Stormwater:</i>			
Stormwater	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: <i>additional use of trail for cross-country use</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Change in use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Miscellaneous	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Renewal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B Sewage Disposal (Please attach Sewer or Septic Application).
 Public Private Connection Fee \$ _____ Date Paid: ___/___/___
 Proposed New Bedrooms: _____ Existing Bedrooms _____

C Water (Please attach Water Service Application).
 Public Private Fee \$ _____ Date Paid: ___/___/___

D Driveway (Please attach copy of approved Curbcut / Utility Application).
 Date of approval ___/___/___

E Stormwater
 Project disturbs an area greater than or equal to 1 acre – Erosion Control Permit Required. Attach completed permit application.
 Project creates new or expands existing impervious surface greater than or equal to 1/2 acre – Erosion Control Permit and Stormwater Management Permit required. Attach completed permit application.

F Diagram – Show a sketch of project on reverse of this application with property lines, building, and setbacks or attach separate sheet. (Instruction sheet available upon request.)
 See attached map and description

G Signature of Tenant and Signature of Owner *C.L. Patricia C. Schirle*

Office Use Only

Fees:	Type	Amount	Date Pd
Permit		\$ _____	___/___/___
Recreation		\$ <u>Exempt</u>	___/___/___
Recording		\$ _____	___/___/___
Certificate of Occ		\$ _____	___/___/___
Other		\$ _____	___/___/___

Building Permit
 Approved Rejected Date: 7.3.13
 Issued to: T.O.E. Village
 Zoning Administrator: *Thomas J. Kelley*
 Notes: _____

C.O. Required Yes No

THIS PERMIT VALID FOR TWELVE (12) MONTHS FROM DATE OF ISSUE

Eric Langevin

16 Cedar St.

Essex Junction, VT 05452

June 21, 2013

Re: Essex High School/VAST Trail Drainage Improvements

Dear Eric:

I have revised my culvert size recommendations based upon the request to design for the larger 10-year, 24-hr storm. Attached to this letter is a summary of the calculations. To determine culvert diameters, the following factors are considered:

- Contributing watershed acreage: ~85 acres, divided into 6 subwatersheds specific to each culvert location
- Land use: Primarily forest cover in fair condition (NRCS runoff CN=75)
- Soil characteristics: NRCS Soil Survey Map
- Topography: USGS, Essex Center Quadrangle, 1:24,000 scale
- Storm size: 10-yr, 24-hr event= 3.2" (from the Table 1.2 of the VT Stormwater Management Manual)

From using the data from the above sources and inputting it into HydroCAD 10.00, I determined discharge volumes for each culvert's subcatchment. I then arrived at the culvert diameters using a Manning's equation nomograph.

In summary, I recommend using 18" HDPE culverts at locations 1, 3, 4, & 5 and 24" HDPE culverts at locations 2 and 6 as shown on the attached location map. Additionally, all drainage swales discussed during site visits and included in the permit application materials shall be installed as directed in the attached Town of Essex installation detail. Culvert and outfall installations shall be constructed per the attached Town of Essex details.

If you or your associates have any further questions, please feel free to contact me. I can be reached at 802.318.6933 or jsorenson@ccsuvt.org.

Sincerely,



Justin Sorenson, PE

VT Registered Civil Engineer, License #8428

Attachments

Proposed Culvert Location Map

NRCS Soil Survey Map

Culvert Sizing Table

Subcatchment Hydrographs

Trench/Stormwater Outfall/Drainage Swale Installation Details

Proposed Culvert Location Map



NRCS Soil Survey Map: Chittenden County, Vermont

The areas of interest are covered by forests in fair condition. The soils consist primarily of rocky loams over steep slopes. The NRCS runoff curve number was approximated as 75.



141741

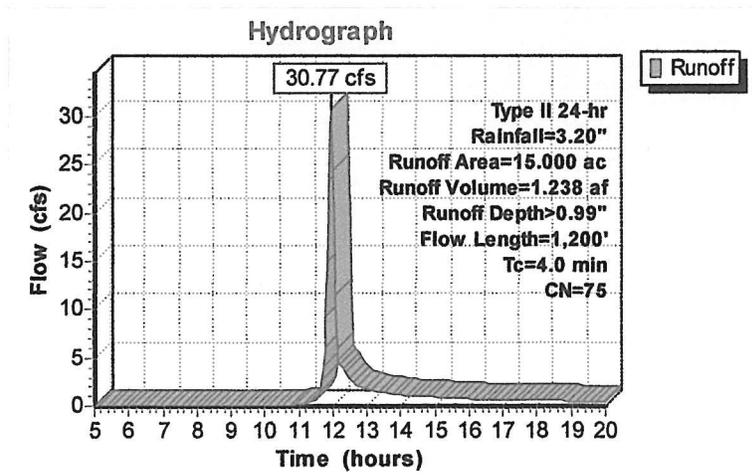


Culvert Sizing Table

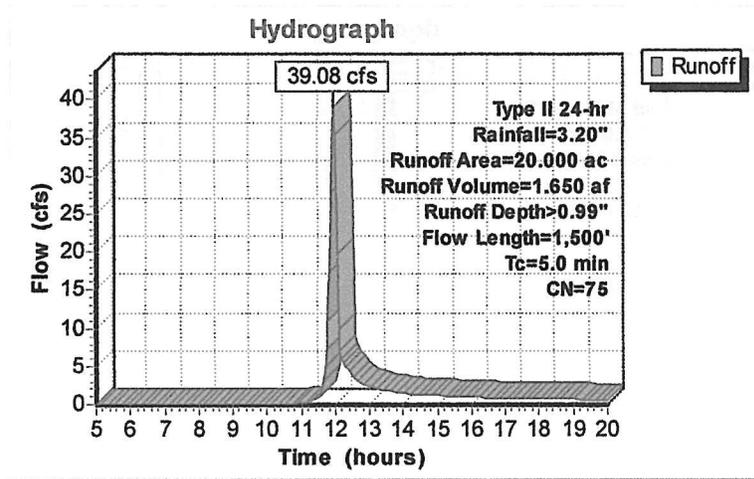
Culvert Location	Approximate Contributing Acreage	Time of Concentration (min)	Flow Length(ft)	Slope(%)	NRCS Curve Number(CN)	Q(cfs): from HydroCAD 10.00	Culvert Diameter(in) (as determined by a Manning's equation nomograph)
1	15	4	1000	15	75	31	18
2	20	5	1500	15	75	39	24
3	10	2	1100	25	75	21	18
4	10	2	1000	20	75	21	18
5	10	2	1000	20	75	21	18
6	20	4	900	10	75	41	24

Subcatchment Hydrographs

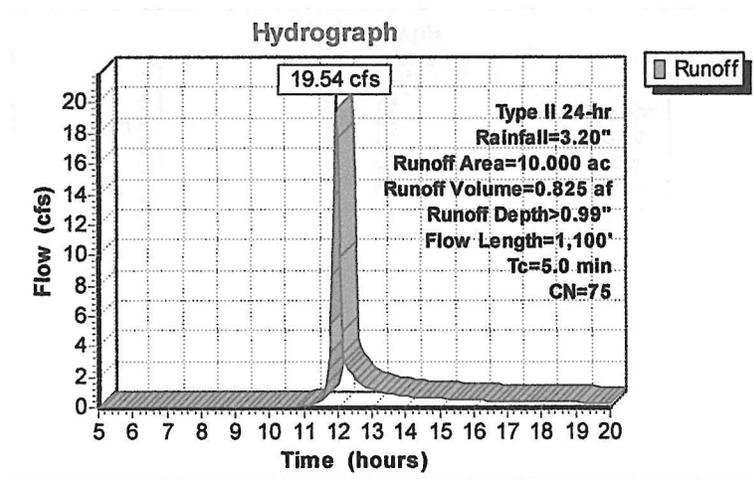
Culvert #1

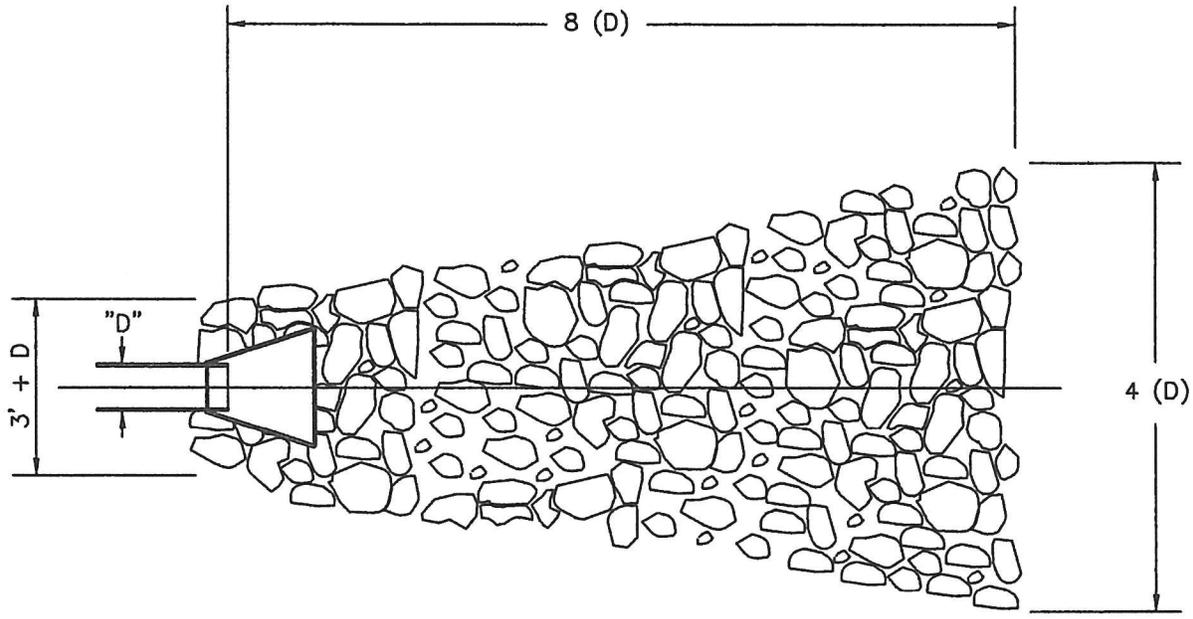


Culvert #2

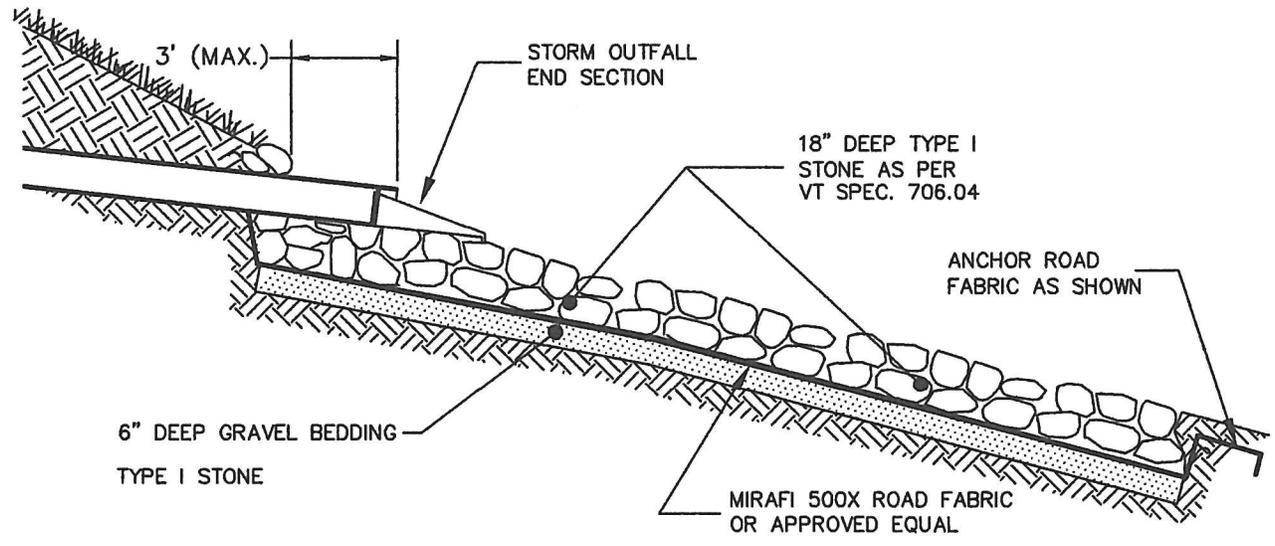


Culvert #3





PLAN



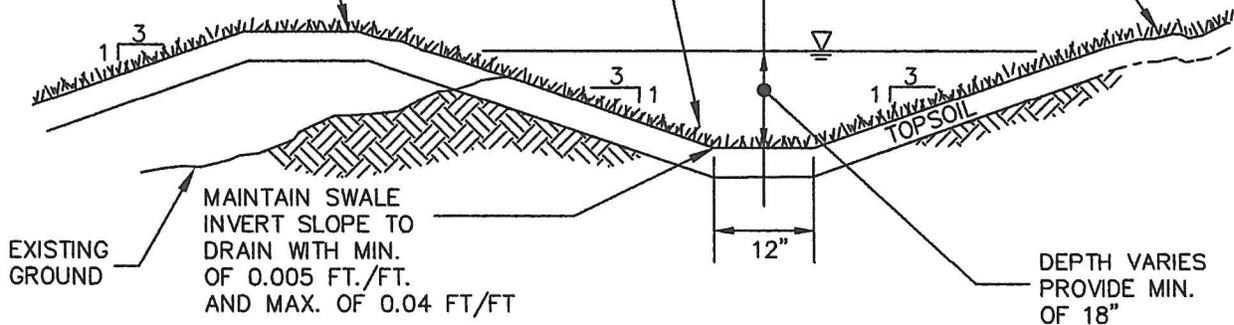
PROFILE

<p><small>Division of Engineering & Surveying Services</small></p> <p>TOWN OF ESSEX PUBLIC WORKS 61 MAIN STREET ESSEX JCT., VT 05452</p> <p>P: 802 878-1344 F: 802 878-1355 E: www.essex.org</p>	<p>TOWN OF ESSEX, VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION</p>		Detail No: 200.05
	<p>STORM OUTFALL</p>		Scale: NOT TO SCALE
			Date: MARCH 2009
			A-16

BERM AS NECESSARY TO MAINTAIN 18" DEPTH AND 0.005 FT./FT. MIN. SLOPE IN DITCH

PROVIDE 4" TOPSOIL SEED, FERTILIZE, AND MULCH

EXISTING GROUND



EXISTING GROUND
 MAINTAIN SWALE INVERT SLOPE TO DRAIN WITH MIN. OF 0.005 FT./FT. AND MAX. OF 0.04 FT/FT

DEPTH VARIES PROVIDE MIN. OF 18"

GRASS LINED SWALE

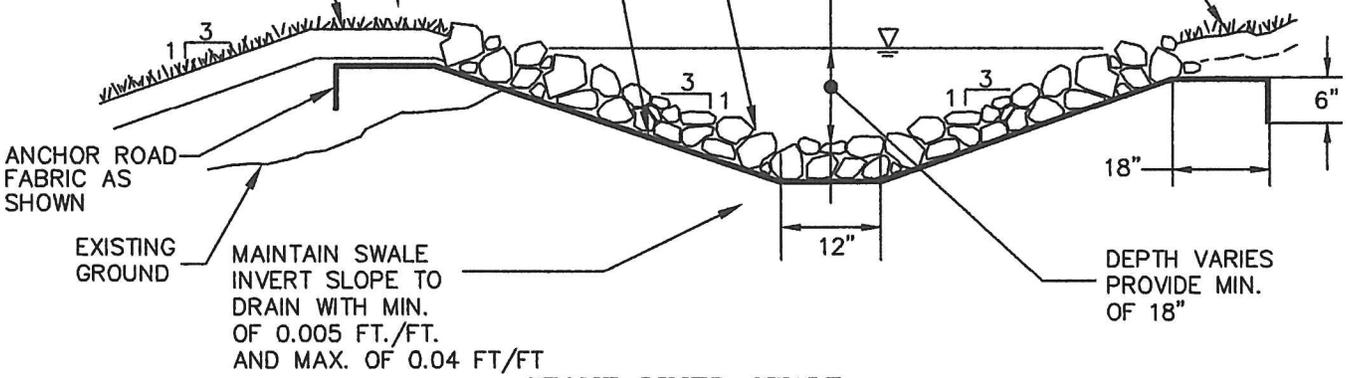
BERM AS NECESSARY TO MAINTAIN 18" DEPTH AND 0.005 FT./FT. MIN. SLOPE IN DITCH

PROVIDE 12" DEPTH OF 8" MINUS STONE

EXISTING GROUND

PROVIDE 4" TOPSOIL SEED, FERTILIZE, AND MULCH

PROVIDE MIRIFI ROAD FABRIC



ANCHOR ROAD FABRIC AS SHOWN

EXISTING GROUND
 MAINTAIN SWALE INVERT SLOPE TO DRAIN WITH MIN. OF 0.005 FT./FT. AND MAX. OF 0.04 FT/FT

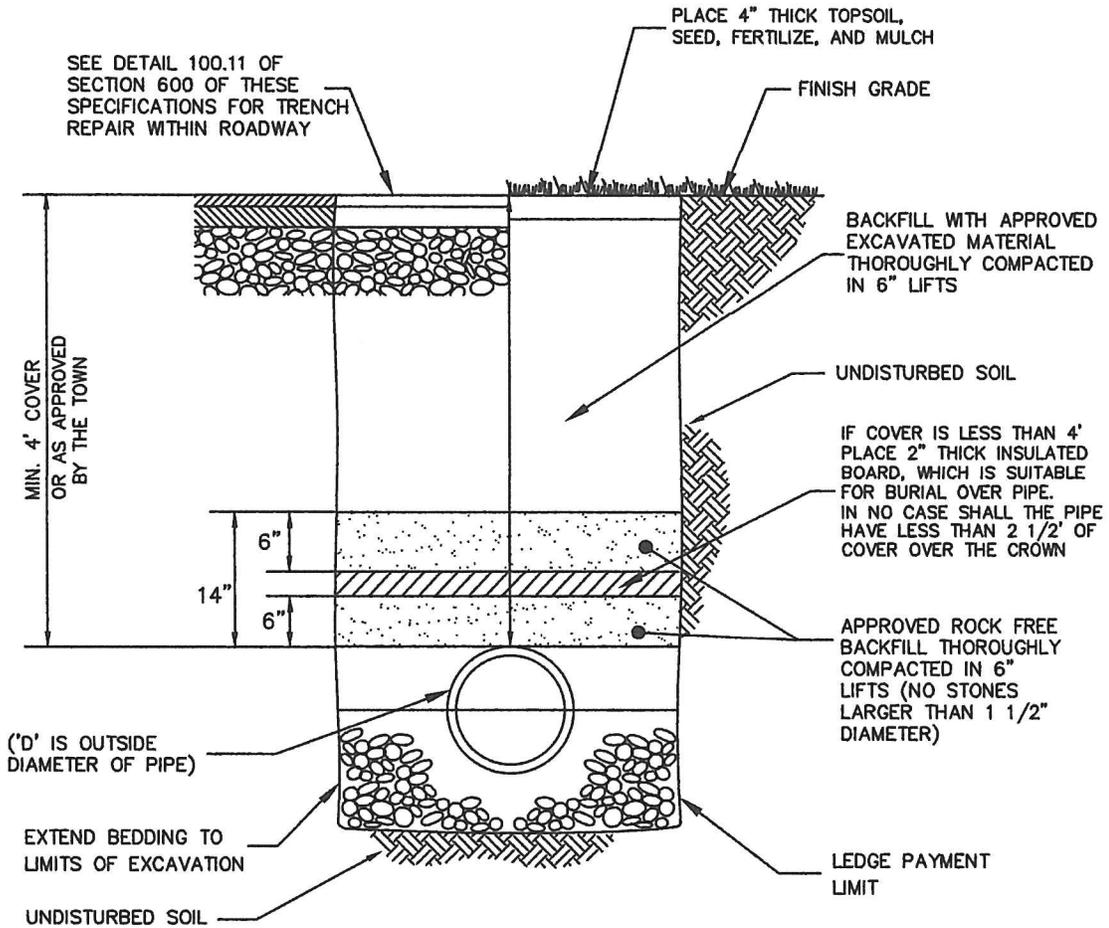
DEPTH VARIES PROVIDE MIN. OF 18"

STONE LINED SWALE

NOTES:

1. THE CONTRACTOR SHALL MAINTAIN THE GRASS LINED SWALE AND RESTORE EROSION AFTER EACH STORM EVENT, SEE SECTION 500 OF THESE SPECIFICATIONS FOR FURTHER DIRECTION ON EROSION AND SEDIMENT CONTROL MEASURES.
2. REFER TO THESE SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS
3. REFER TO THESE SPECIFICATIONS FOR STORM DRAINAGE PIPE REQUIREMENTS
4. STONE LINED SWALES SHALL BE USED FOR GRADES IN EXCESS OF 0.05 FT/FT (5.0%)

<p>TOWN OF ESSEX PUBLIC WORKS 81 MAIN STREET ESSEX JCT., VT 05452</p> <p>P: 802 878-1344 F: 802 878-1355 E: www.essex.org</p>	<p>TOWN OF ESSEX, VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION</p>	<p>Detail No: 200.06</p>
	<p>DRAINAGE SWALES</p>	<p>Scale: NOT TO SCALE</p>
		<p>Date: MARCH 2009</p>
		<p>A-17</p>



NOTES:

1. THE CONTRACTOR SHALL AT ALL TIMES KEEP THE TRENCHES ENTIRELY FREE OF WATER UNTIL ALL WORK IS FINISHED AND READY FOR BACKFILLING
2. REFER TO THESE SPECIFICATIONS FOR BACKFILL AND COMPACTION REQUIREMENTS
3. REFER TO THESE SPECIFICATIONS FOR STORM DRAINAGE PIPE REQUIREMENTS
4. THE SIDES OF THE TRENCHES 4 FEET OR MORE IN DEPTH ENTERED BY PERSONNEL SHALL BE SHEETED, SLOPED, OR PROPERLY SUPPORTED, CONFORMING TO VOSHA REQUIREMENTS
5. PIPE BEDDING SHALL BE 3/4" WASHED STONE, FROM 6" BELOW THE INVERT, TO THE SPRINGLINE OF THE PIPE

<p>TOWN OF ESSEX PUBLIC WORKS 91 MAIN STREET ESSEX JCT., VT 05452</p> <p>P: 802 878-1344 F: 802 878-1355 E: www.essex.org</p>	<p>TOWN OF ESSEX, VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION</p>		Detail No: 200.04
	<p>STORM PIPE TRENCH</p>		Scale: NOT TO SCALE
			Date: MARCH 2009
			A-15



CERTIFICATE OF COVERAGE

DATE (05/06/2013)

PROGRAM SPONSOR
VSBIT MULTI-LINE INTERMUNICIPAL SCHOOL PROGRAM
 79 RIVER STREET
 THIRD FLOOR, SUITE 301
 MONTPELIER, VT 05602
 802.223.6132

COVERED MEMBER
CHITTENDEN CENTRAL SUPERVISORY UNION
 51 Park Street
 Essex Junction, VT 05452

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE COVERAGE DOCUMENTS BELOW.

COVERAGES

THE COVERAGE DOCUMENTS LISTED BELOW HAVE BEEN ISSUED TO THE COVERED MEMBER NAMED ABOVE FOR THE COVERAGE PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE COVERAGE AFFORDED BY THE COVERAGE DOCUMENTS DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH COVERAGE DOCUMENTS. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

TYPE OF COVERAGE	COVERAGE DOCUMENT NUMBER	COVERAGE EFFECTIVE DATE (MM/DD/YYYY)	COVERAGE EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
GENERAL LIABILITY <input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> GARAGE LIABILITY INCLUDED	VSBITCGL2012	07/01/2012	07/01/2013	EACH OCCURRENCE	\$5,000,000
				DAMAGE TO RENTED PREMISES (Each occurrence)	\$1,000,000
				MEDICAL EXPENSE (Any one person)	\$25,000
				PERSONAL & ADV INJURY	\$5,000,000
				GENERAL AGGREGATE	\$5,000,000
				PRODUCTS-COMP/OP AGG	INCLUDED
AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> OWNED/LEASED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS <input checked="" type="checkbox"/> NON-OWNED AUTOS	VSBITAL2012	07/01/2012	07/01/2013	COMBINED SINGLE LIMIT (each accident)	\$5,000,000
				BODILY INJURY (Per person)	
				BODILY INJURY (Per accident)	
				PROPERTY DMG (Per accident)	
AUTO PHYSICAL DAMAGE <input checked="" type="checkbox"/> OWNED/LEASED AUTOS <input checked="" type="checkbox"/> AUTOS IN YOUR CARE FOR WHICH YOU ARE LEGALLY LIABLE	VSBITPR2012	07/01/2012	07/01/2013	ACTUAL CASH VALUE LESS	
				<input checked="" type="checkbox"/> COMP DEDUCTIBLE \$500	
SCHOOL LEADERS ERRORS & OMISSIONS <input checked="" type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR	VSBITELL2012	07/01/2012	07/01/2013	EACH OCCURRENCE	\$5,000,000
				AGGREGATE	\$5,000,000
WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY	VSBITWC2012	07/01/2012	07/01/2013	<input checked="" type="checkbox"/> WC STATUTORY LIMITS	
				E.L. Each Accident	\$1,000,000
				E.L. DISEASE-EA EMPLOYEE	\$1,000,000
				E.L. DISEASE-POLICY LIMIT	\$1,000,000
PROPERTY	VSBITPR2012	07/01/2012	07/01/2013	REPLACEMENT COST VALUATION. SPECIAL RISK CAUSES OF LOSS.	On File with VSBIT

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS
 Vermont Technical College Is included as additional member with regards to the general liability pertaining to the use of facilities for the FFA Convention and Woodsmen competition on May 15 and 16th; as per the VSBIT Coverage Document 2012.

CERTIFICATE HOLDER

CANCELLATION

Vermont Technical College
 PO Box 500
 Randolph Center, VT 05061

SHOULD ANY OF THE ABOVE DESCRIBED COVERAGES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE PROGRAM SPONSOR WILL ENDEAVOR TO MAIL 30 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE SERVICE PROVIDER, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Cynthia S. LaMonte

Village of Essex Junction, Vermont

JUN 4 2013

ZONING PERMIT

No. 61 Date Issued: 5/28/13

Parcel Number: 1006002000

Location: 81 Old Colchester Road

Issued to: Town of Essex, Village of

Essex Junction
FOR USE/CONSTRUCTION OF: Minor

site plan amendment-

restoration of VAST

Trail @ Old Colchester

Road Tree Farm *

A. Sui

STAFF APPROVAL

APPLICANT TO POST PERMIT IMMEDIATELY ON THE PROPERTY IN A LOCATION VISIBLE FROM THE STREET UNTIL THE DEVELOPMENT IS COMPLETE.

THIS PERMIT EXPIRES 12 MONTHS FROM DATE OF ISSUANCE.

A CERTIFICATE OF OCCUPANCY is required for new dwellings, residential additions, accessory apartments, commercial buildings and additions, or Change of Use.

*PERMIT IS NOT VALID UNTIL 15 DAYS AFTER DATE OF ISSUE, FOR APPEALS.

PERMIT VALID: 6/12/13

* Conditions of Approval

dated 5/28/13 attached

Development Application

Permit #
SP# 61

Planned Development: Minor _____ Minimal ~~X~~ Major _____
Conceptual _____ Preliminary _____ Final ~~X~~ Accessory Apartment: _____
Site Plan: Minor X Major _____ Conceptual _____ Final _____
Subdivision: Sketch _____ Preliminary _____ Final _____ Variance: _____ Conditional Use: _____

Property description (address) for application Tree Farm Facility 103 Old Colchester Rd., Essex Jct., VT 05452

General Information Eric Langevin (922-5752)
Applicant Town of Essex, Village of Essex Junction, EHS Day Phone# Town: 878-1341
Address Town: 81 Main St., Essex Jct., VT Village: 2 Lincoln St., Essex Jct., VT EHS: 2 Educational Dr., Essex Jct.

Owner of Record (attach affidavit if not applicant)
Name Town of Essex, Village of Essex Junction Day Phone# Town: 878-1341
Address Town: 81 Main St., Essex Jct., VT Village: 2 Lincoln St., Essex Jct., VT

Applicant's agents
Name _____ Day Phone# _____
Address _____

Property information
Zoning District Open Space Current Use Recreational Tax Map# 6 Lot# 2 Lot size sf 99.1 acres

Other Information
Street frontage (public or private) _____ feet Proposed number of stories & height _____
Estimated completion date October 2013 Landscape cost \$5000
Proposed Parking Spaces _____ Required spaces _____
Area of accessory apartment _____ s.f. Total area of existing dwelling _____ s.f.
Number of persons to occupy new unit _____ (2 maximum)

Lot coverage (include all structures and impervious surface)
Existing (sq ft.) _____ plus proposed (sq .ft.) _____ equals _____ total sq .ft. divided by _____ lot s.f.
equals _____ percent lot coverage

Attach three (3) full size copies and eight (8) 18" x 24" copies of your proposal, supportive documentation required by the Code and the appropriate completed checklist thirty (30) days prior to a scheduled meeting. Applications that are not complete cannot be accepted for review.

Briefly describe your proposal (attach separate sheet if necessary) See attached description.

Describe all waiver requests (if applicable) _____

I certify that the information on this application is true and correct. I agree to abide by all the rules and regulations as specified in the land development code and any conditions placed upon approval of this application. In accordance with the Essex Junction Trustees Policy for Funding Engineer Plan Review and Inspections, the applicant by signing this form agrees to pay for the actual cost of engineering plan review and construction inspections by the Village Engineer.

Eric Langevin 5/1/13
Applicant Date
Essex Junction Trustees 5/28/13
Land Owner (if different) Date

May 28, 2013

Approval of Permit # 61 issued for restoration of VAST trail subject to the following conditions:-

1. There shall be no increase in runoff or scarring of the hillside, or landscape, as a result of this running and walking trail (Trail) being installed.
2. No cross country skiing shall take place on the portion of the trail that is currently used for snowmobiling.
3. No ponding shall be created as a result of the work undertaken to install the Trail.
4. No trees shall be cut or removed, either living or dead, as a result of the installation of the Trail without prior approval of the Town and Village zoning administrators.