

Appeal Period Expires 3/21/13  
 Zoning District RPD-I (25%)

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

Application Date 1/1/13  
 Permit Number 2013-21

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: [Signature]

**A** Parcel Account Num. (Map-Parcel-Lot) 2-072-005-001  
 (found in Town Assessor's Office)  
 Property Address: 16 Thompson Drive, Essex Junction, VT 05452  
 Owner: Black Bay Ventures VII, LLC  
 Owner Address: 26 Thompson Drive, Essex Junction, VT 05452  
 Owner Phone: (work) (802)857-4600 (home) NA  
 (cell) NA (Email) NA  
 Contractors name: Neagley and Chase Construction Phone: (802) 658-6320  
 Cell: NA  
 Estimated Construction Dates: Start: 3/1/13 Completion: 6/30/13  
 Sq. Feet: 57,600 Estimated Cost (labor & materials): \$3.0 Million

**B** Sewage Disposal (Please attach Sewer or Septic Application). 3/6/13  
 Public  Private  Connection Fee \$3,580.00 Date Paid: 1/9/13  
 Proposed New Bedrooms: None Existing Bedrooms None  
 Check No. 430.

**C** Water (Please attach Water Service Application). 3/6/13  
 Public  Private  Fee \$2,560.00 Date Paid: 1/9/13  
 Check No. 429.

**D** Driveway (Please attach copy of approved Curbcut / Utility Application). Approved  
 Date of approval 3/1/13 Submitted 1/9/2013. See attached

**E** Stormwater Submitted 1/9/2013 with Check No. 432 (\$511.00). Approved  
 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.)  
 Please see attached Plan Sheets.  
 To be constructed pursuant to planning commission approval  
 #PC:2013-3

**G** Signature of Tenant and Signature of Owner [Signatures]

**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"/>
Stormwater: <u>57,600 S.F. Warehouse</u>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Erosion Control	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Other:</i>			
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"/>

**Office Use Only**

Fees:	Type	Amount	Date Pd
Permit		<u>\$4,000</u>	<u>3/6/13</u>
Recreation		<u>\$</u>	<u>1/1</u>
Recording		<u>\$20.-</u>	<u>3/1/13</u>
Certificate of Occ		<u>\$75</u>	<u>3/6/13</u>
Other <u>stormwater traffic</u>		<u>\$511.00</u>	<u>1/1</u>

Building Permit  
 Approved  Rejected  Date 3/6/13  
 Issued to: Black Bay Ventures VII, LLC  
 Zoning Administrator: Sharon L. Kelley  
 Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 C.O. Required Yes  No

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

(web) 11/02/10

**TOWN OF ESSEX, VERMONT  
APPLICATION FOR CURB CUT / UTILITY PERMIT**

Pursuant to Title 19 V.S.A. Section 43. Application for curb cut and Utility Installation in Town Right-of-Way

All applications for curb cuts and utility installations shall be submitted to the Director of Public Works / Town Engineer for review. Applicants shall submit the information requested on this form and any additional information requested by the Director of Public Works / Town Engineer for a clear understanding of this application. The permit is issued under authority of the Town Manager in accordance with Section 601 of the Town Charter and 24 V.S.A. paragraph 1236 (2).

Application No. \_\_\_\_\_ / 1/9/2013  
Date

Property Address: 16 Thompson Drive, Essex, VT 05452

Owner Address: 26 Thompson Drive, Essex, VT 05452

Owner Name: Black Bay Ventures VII, L.L.C., c/o Autumn-Harp, Inc.

Phone Number: (home) N/A (work) (802) 857-4600 (cell) N/A

Tax Map # 0 7 2 Tax Parcel 0 0 5 Tax Lot 0 0 1

Application is for: (check one)

A) New Curb Cut  B) Utility Installation: Overhead  Underground

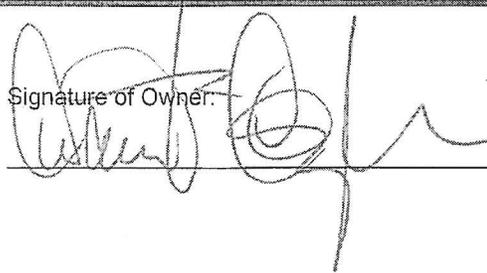
Please use attached diagram to describe location and type of installation.

Comments be Director of Public Works / Town Engineer:

Culvert : Yes  No  Water Bar(s) : Yes  No

Culvert Diameter: (18 inch minimum) \_\_\_\_\_ Total length of Culvert: (30 foot minimum) \_\_\_\_\_

\*\*\* FOR OFFICE USE ONLY \*\*\*

Signature of Owner: 

Fee Paid \$ \_\_\_\_\_

Approved  Rejected

Per Authority of the Town Manager by the  
Director of Public Works / Town Engineer

1. Culvert must be HIGH DENSITY POLYETHYLENE (HDPE) PIPE
2. Culvert will be purchased by the Applicant  
Culvert will be purchased and installed by the applicant. The Town of Essex Department of Public Works will inspect.
- 3.

Note: A MINIMUM OF 24 HOURS NOTICE IS REQUIRED PRIOR TO COMMENCEMENT OF CONSTRUCTION. WITHIN 24 HOURS OF COMPLETION, THE APPLICANT IS REQUIRED TO NOTIFY THE DIRECTOR OF PUBLIC WORKS / TOWN ENGINEER FOR INSPECTION PURPOSES.

Permit Number 6956-9015  
Project ID Number EJ95-0087.19

VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
AUTHORIZATION TO DISCHARGE UNDER  
GENERAL PERMIT 3-9015

A determination has been made that the applicant:

Black Bay Ventures VII, LLC  
c/o Autumn-Harp, Inc.  
26 Thompson Drive  
Essex Junction, VT 05452

Impervious Area: 2.11 acres

meets the criteria necessary for inclusion under General Permit 3- 9015. Hereinafter the named applicant shall be referred to as the permittee. Subject to the conditions of General Permit No. 3-9015, the permittee is authorized to discharge stormwater from a Proposed Storage Facility located at 16 Thompson Drive in Essex Junction, Vermont to groundwater leading to an unnamed tributary of Winooski River.

*Manner of Discharge:*

S/N 001 consists of an infiltration basin (I-2) responsible of treating stormwater from the new warehouse and the proposed loading dock area. Stormwater runoff from the loading dock area will be conveyed to the infiltration basin (I-2) through a grass channel (O-3). The total impervious area of the building and loading dock area equals  $\pm 1.70$  acres. The proposed grass channel and infiltration basin provides adequate capacity for the 1-year, 10-year, and 100-year design storms.

S/N 002 consists of subsurface infiltration chambers placed on a 6' stone bed. Stormwater from the south parking lot will enter the infiltration chambers as overflow from the proposed dry swale (O-1). The dry swale is located adjacent to the proposed parking lot located along the south side of the warehouse. The total impervious area of the parking area equals  $\pm 0.41$  acres. The proposed dry swale and infiltration chambers have adequate capacity for the 1-year, 10-year, and 100-year design storms.

*Design:* This project shall be constructed and operated in accordance with the site plans and details designed by Green Mountain Engineering (Sheet 1, "Title Sheet & Location Plan," dated 02/2013, revised 02/01/2013; Sheet 2, "Legend & General Construction Notes," dated 02/01/2013, revised 02/01/2013; Sheet 3, "Existing Conditions Site Plan," dated 02/01/2013, revised 02/01/2013; Sheet 4, "Proposed Overall Conditions Site Plan," dated 02/01/2013, revised 02/01/2013; Sheet 5, "Proposed Stormwater and Grading Plan" dated 02/01/2013, revised 02/01/2013; Sheet 6, "Proposed Lighting, Landscape and Truck Movement Plan" dated 02/01/2013, revised 02/01/2013; Sheet 9, "Stormwater & Erosion Control Details," dated 02/01/2013, revised 02/01/2013; Sheet 10, "Miscellaneous Details," dated 02/01/2013, revised 02/01/2013; and supporting information).

By reference, the above noted plans are made part of this authorization.

Renewable Energy Projects – Right to Appeal to Public Service Board:

Any appeal of this decision must be filed with the clerk of the Vermont Public Service Board pursuant to 10 V.S.A. §8506 within 30 days of the date of this decision. The appellant must file with the Clerk an original and six copies of its appeal. The appellant shall provide notice of the filing of an appeal in accordance with 10 V.S.A. §8504(c)(2), and shall also serve a copy of the Notice of Appeal on the Vermont Department of Public Service. For information, see the Rules and General orders of the Public Service Board available on line at [www.psb.vermont.gov](http://www.psb.vermont.gov). The address for the Public Service Board is 112 State Street Montpelier, Vermont 05620-2701 (Tel. #802-828-2358).

All Other Projects – Right to Appeal to the Environmental Court

Pursuant to 10 V.S.A. Chapter 220, any appeal of this decision must be filed with the clerk of the Environmental Court within 30 days of the date of the decision. The appellant must attach to the Notice of Appeal the entry fee of \$250.00, payable to the state of Vermont. The Notice of Appeal must specify the parties taking the appeal and the statutory provision under which each party claims party status; must designate the act or decision appealed from; must name the Environmental Court; and must be signed by the appellant or their attorney. In addition, the appeal must give the address or location and description of the property, project or facility with which the appeal is concerned and the name of the applicant or any permit involved in the appeal. The appellant must also serve a copy of the Notice of Appeal in accordance with Rule 5(b)(4)(B) of the Vermont Rules for Environmental Court Proceedings. For further information, see the Vermont Rules for Environmental Court Proceedings, available on line at [www.vermontjudiciary.org](http://www.vermontjudiciary.org). The address for the Environmental Court is 2418 Airport Road, Suite 1, Barre, VT 05641 (Telephone #802-828-1660).

Effective Date and Expiration Date of this Authorization

This authorization to discharge shall become effective on February 19, 2013 and shall continue until February 19, 2023. The permittee shall reapply for coverage at least sixty (60) days prior to February 19, 2023.

Dated this 19<sup>th</sup> day of February, 2013.

David K. Mears, Commissioner  
Department of Environmental Conservation

By   
Padraic Monks, Stormwater Program Manager  
Stormwater Management Program

## Notice of Authorization

Under Vermont Construction General Permit 3-9020  
For Low Risk Projects



<b>Project Name: Forestdale Technology Park</b>	<b>Notice of Intent Number: 6956-9020</b>
<b>Permittee Name: Black Bay Ventures VII, LLC</b>	<b>Date of Authorization: 2/5/2013</b>
	<b>Date of Expiration: 2/5/2015</b>

**The project listed above has received authorization under General Permit 3-9020 to discharge stormwater from the following construction activities:** A new stormwater collection and treatment system is proposed to serve a new 57,600 sq. ft. warehouse, associated employee parking and shipping receiving areas

**This authorization includes the following requirements:**

1. Implementation of erosion prevention and sediment control practices required by the Low Risk Site Handbook for Erosion Prevention and Sediment Control.
2. All areas of disturbance must have temporary or final stabilization within **14 days** of the initial disturbance. After this time, all disturbed soil must be stabilized at the end of each work day. Between October 15 and April 15 all disturbed soil must be stabilized at the end of each work day. The following exceptions apply:
  - a. Stabilization is not required if work is to continue in the area within the next 24 hours and there is no precipitation forecast for the next 24 hours.
  - b. Stabilization is not required if the work is occurring in a self-contained excavation (i.e. no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation, utility trenches).
3. No more than **2 acres** of land may be disturbed at any one time.
4. No disturbance shall occur within 50 ft upslope of any stream or river, or 100 ft of any lake or pond (except disturbance for the installation of Stormwater treatment facilities or road Stream crossing with no reasonable alternative location).
5. Inspections shall be conducted at least once every (7) calendar days and within twenty-four (24) hours of the end of a storm event resulting in discharge of Stormwater from construction site.
6. If there is a discharge of visibly discolored stormwater from the construction site or from the construction site to waters of the State, the permittee shall take immediate corrective action.
7. If, after completing corrective action, there continues to be a discharge of sediment from the construction site to waters of the State, the permittee shall notify DEC by submitting a report within 72 hours of the discharge.

To request information on this authorization, or to report compliance concerns, please contact:

**Vermont DEC, Watershed Management Division**  
**Main Building, Second Floor**  
**One National Life Drive**  
**Montpelier, VT 05620-3522**  
**(802) 828-1535**

[See next page for posting requirements]

# Stormwater System Operation and Maintenance Plan

16 Thompson Drive, Essex Jct, Vermont 05452

Prepared by Green Mountain Engineering, Inc.

1438 South Brownell Road, Williston Vermont 05495

January 2013

## Overview

The stormwater management system located on-site consists of several Stormwater Treatment Practices (STP's) to provide adequate pollutant and sediment removal from stormwater runoff from various impervious surfaces such as rooftops and parking areas. The designed system includes the following strategies to perform this task:

- Rooftop Collection System
- Grass-Lined Channel
- Dry Swale
- Infiltration Basin
- Infiltration Chambers

A rooftop collection system collects stormwater from the rooftop impervious area through a series of drains and pipes linked together before discharging into the infiltration basin. The sheet flow runoff from the truck loading area is collected by a grass-lined channel to convey the concentrated flow while still providing sediment removal before entering the infiltration basin. Surface runoff from the lower parking area sheet flows through a gravel diaphragm into a dry swale which provides infiltration as well as sediment filtration. Large storms overflow into a vertical riser which discharges to underground infiltration chambers beneath the parking lot area.

The infiltration basin and the other integrated components of this stormwater management system, require scheduled monitoring and maintenance. This includes seasonal landscaping maintenance, along with potential monthly trash and grit removal. In addition, the system must be inspected within 5 days of any 10 year storm event or greater (3.2 inches in 24 hours) and corrective actions initiated upon discovery. This system has been designed to ensure that the infiltration basin, grass channel and dry swale are easily accessible for all maintenance operations. Written maintenance reports will be kept onsite as required by the Town of Essex. The following table shall provide a basis for scheduled maintenance of the system:

<b>Activity</b>	<b>Frequency</b>
Water plantings	As necessary during first growing season
Water trees as necessary during dry periods	As needed for first five growing seasons
Re-mulch void areas	As Needed
Replace mulch	Every third year
Replace diseased trees and shrubs	As Needed
Inspect soils and repair eroded areas	Monthly for first year, after all 3.2 inch storms
Remove litter and debris	Monthly
Prune trees	As needed to maintain good form and site lines
Shrub cutting to ground	Once every two to three years

Sediment recovery at bottom of infiltration basin	As needed or every two to three years
Sediment recovery at bottom of dry swale	As needed or every two to three years
Energy dissipation repair of stone-lined ditch	Restore as needed
Energy dissipation repair of Rip-rap at rooftop discharge in infiltration basin	Restore as needed or after all 3.2 inch storms
Trash removal from trash racks in dry swale	Monthly, or as needed
Basin/swale aeration	Once annually
Weed control	As needed
Monitoring Report	Annual

### **Inspection and General Maintenance**

A maintenance and inspection program that addresses routine tasks is necessary to ensure that the system continues to function as designed. Adhering to a maintenance schedule is necessary and will be critical to the systems success. Principal inspection elements will include debris accumulation, erosion damage, vegetative health and infiltration characteristics. Increased attention will be needed for litter and trash pick-up, since it cannot be allowed to wash away into the stormwater system. All areas that require periodic maintenance are accessible by equipment so that accumulated debris can be easily removed with minimal field labor.

### **Dry Swale**

Over time it is expected that sediment particles will fill in the designed swale resulting in a reduced infiltration rate. The top six inches (6") of bottom area should be replaced every 5-7 years or as needed. Under ideal conditions, this material would be removed with a small excavator capable of reaching into the swale without driving on any infiltration area. The overflow risers and stormwater drain should be inspected bi-annually in the spring and fall of each year and sediment and/or debris removed as needed.

### **Infiltration Chambers**

The infiltration chambers utilize inspection ports which should be inspected bi-annually in the spring and fall of each year and sediment and/or debris removed as needed. Jet vac maintenance is recommended if sediment has been collected to an average depth of 2" in the initial chambers.

### **Grass-Lined Channel**

Sandy deposits from deicing operations should be hand or mechanically broom lifted from the sodded edge near the channel prior to melting temperatures each spring. The Grass-Lined Channel should be inspected annually for rill or other damage that contributes to soil detachment. These areas need stabilization (soil filling, seeding and mulching) as detected. If sandy deposits end up in the swale, they should be removed by a vacuum truck. This area will require regular mowing and lawn care maintenance. It is expected that this area will be aerated when the Infiltration Basin is aerated.

### **Storm Water Infiltration Basin**

The Infiltration Basin has been designed to infiltrate the 100-year storm event; however, in most cases the basin will rarely fill up to one-half the designed capacity. The basin inlets (outlet of the grass channel, surface diversion swale and rooftop collection system) may form sediment deltas that should be removed by a vacuum truck, a small excavator, or by hand labor excavation. The outlet structure from the rooftop collection system will require annual examination, and after every 10 year (3.2-inch) storm event to ensure the structure is working properly and the energy dissipating rocks are still in place. A complete cleanout (removal of top 6-12 inches of bottom area) may not be warranted dependent upon infiltration rate observations by a qualified individual acquainted with similar stormwater treatment practices. All trapped debris must be removed within 24 hours of discovery. All damaged turf will be replaced with seed mixes native to the area or with rolled erosion control matting.

### **Snow Removal and Storage**

Care must be taken to not use the Grass-Lined Channel and Dry Swale as a first line of snow storage. Areas designated to the south of the lower parking area and north of the truck loading area should be utilized first. Depending on parking demand, snow can be piled into vacant stalls since parking space exceeds the number of employees. It is not advisable to store snow residues adjacent to the pavement and the basins due to high chloride residuals from snow melt. If possible, sodium chloride substitutes such as potassium chloride or magnesium acetate should be used.