VERMONT

Vermont Department of Environmental Conservation
Watershed Management Division
St. Johnsbury Regional Office
1229 Portland Street, Suite 201
St. Johnsbury, VT 05819
www.watershedmanagement.vt.gov

Agency of Natural Resources

[fax] 802-748-6687
[cell] 802-279-1143

AUTHORIZATION TO CONDUCT STREAM ALTERATION ACTIVITIES

Pursuant to Section C.2.2 of the VT Stream Alteration General Permit (Reporting activities not requiring an application)

Project Number: **SA-3-** 105 **-2016**

Applicant Name: Town of Williamstown

Mailing Address: P.O. Box 646, Williamstown VT. 05679 Phone: _____

Project Location Williamstown Wastewater Treatment Site Email: williamstownvt.org

The Secretary of the Vermont Agency of Natural Resources (VT ANR) has determined that:

1. This project authorizes the relocation of a municipal ww treated effluent outfall.
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit.
3. The proposed activity will meet the terms and conditions of the General Permit provided:
   a) The project will be completed and approved as shown on the plan dated April 2016, prepared by A+E ENGINEERING, and approved by the Vermont Agency of Natural Resources.
   b) The project will not adversely affect the public safety by increasing flood hazards.
   c) The project will not significantly damage fish life or wildlife.
   d) The project will not significantly damage the rights of riparian owners.
   e) The project will not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.
   f) The project is conducted in a manner which minimizes or avoids any discharge of sediment or other pollutants to surface waters in violation of the VT Water Quality Standards.
   g) The ANR River Management Engineer is notified by phone or email when construction begins and when the project is complete.
   h) A final construction inspection is required for all culvert and bridge projects.
   i) In-stream working dates are from June 1st through October 1st; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
   j) This authorization has been posted for three days public comment. This authorization constitutes final approval.
   k) Additional Conditions for this project: see notes on plans & F&W Email.

If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

Alyssa B. Schuren, ANR DEC Commissioner

Dated: 4/20/14

Patrick Ross, P.E., River Management Engineer

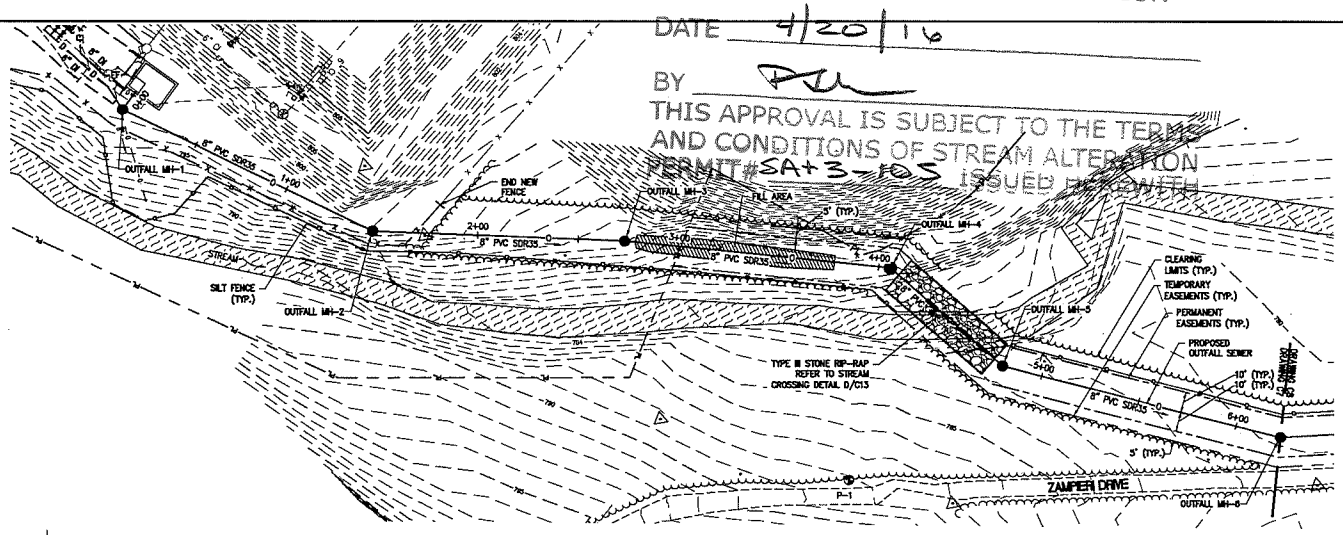
APPROVAL
WATERSHED MANAGEMENT DIVISION

June 1 - Oct 1

DATE 4/20/16

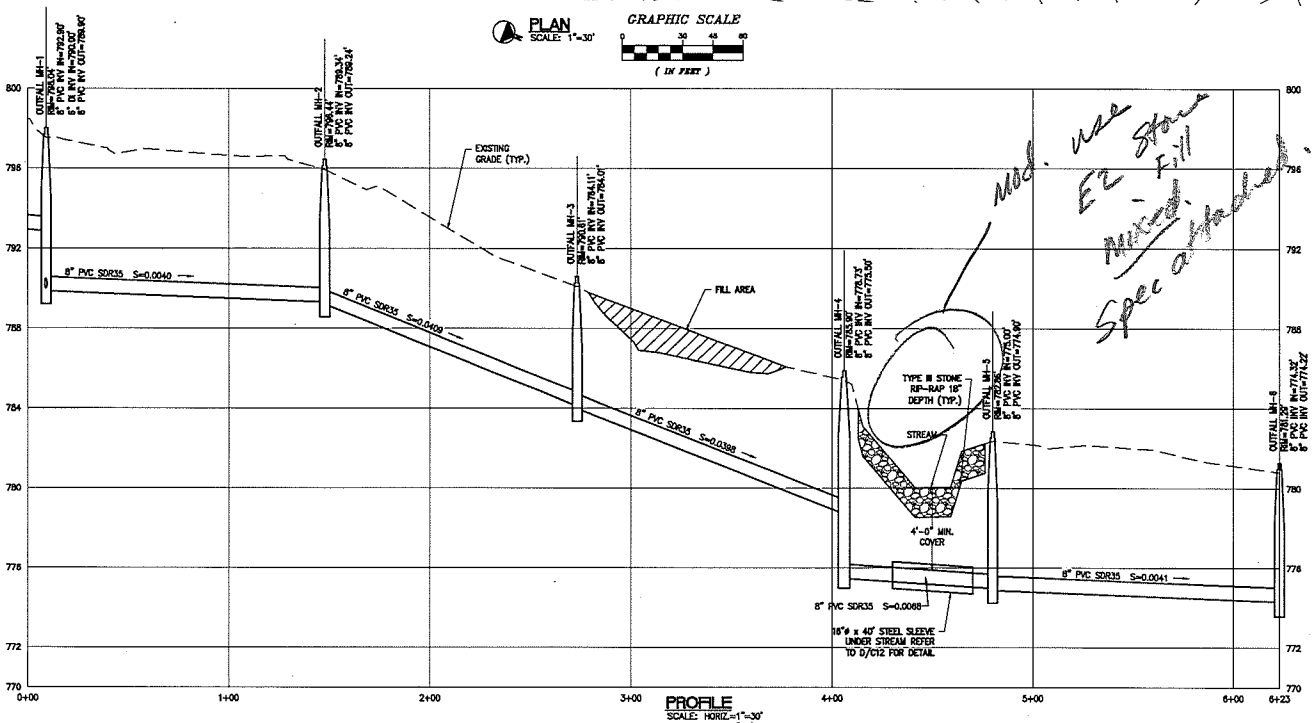
BY

THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT #SA+3-105 ISSUED HEREWITH



PLAN
SCALE: 1"=30'

GRAPHIC SCALE
0 30 45 60
(IN FEET)



mod. use E2 Stone Fill - mixed. Spec attached.

PROFILE
SCALE: HORIZ.=1"=30'
VERT.=1"=3'

Aldrich + Elliott
WATER RESOURCE ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

No.	DATE	DESCRIPTION	CHECKED

TOWN OF WILLIAMSTOWN, VERMONT

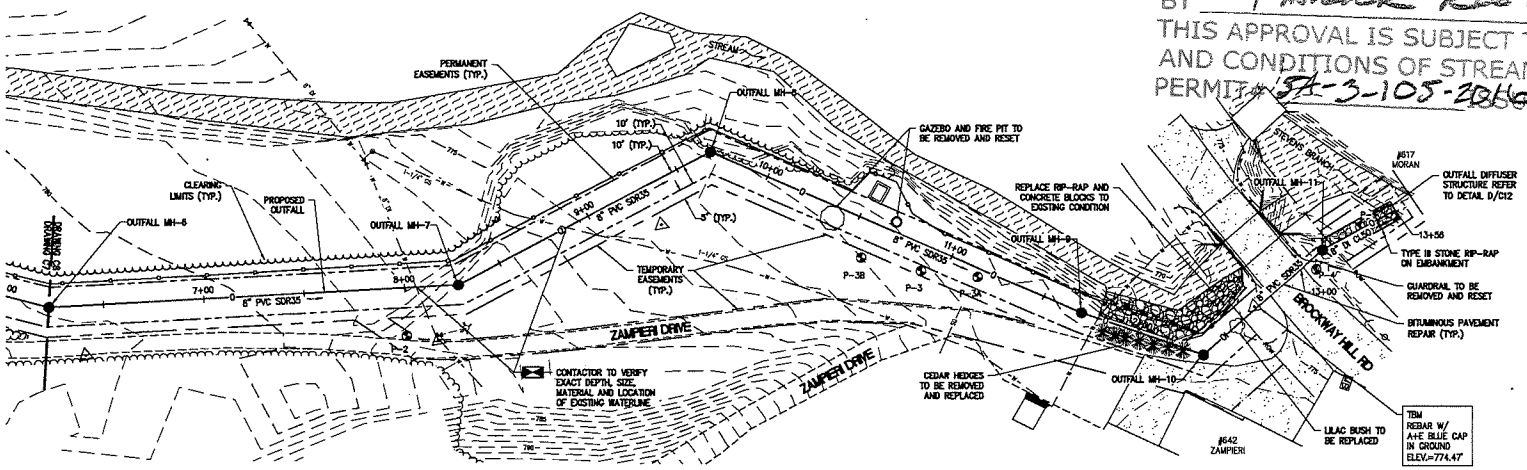
WASTEWATER TREATMENT FACILITY REFURBISHMENT CONTRACT No. 1

PROPOSED OUTFALL PLAN AND PROFILE STATION 0+00 TO 6+23

DESIGNED CM	PROJECT NO. 15072
DRAWN JEB	DRAWING C7
CHECKED JA	
DATE APRIL, 2016	

Y:\15072-AS\LAYOUT\W-15072-C7.dwg 3/30/2016 5:05:57 AM

APPROVAL
WATERSHED MANAGEMENT DIVISION
DATE 4/20/16
BY Patrick Robs
THIS APPROVAL IS SUBJECT TO THE TERMS AND CONDITIONS OF STREAM ALTERATION PERMIT # 54-3-105-2016 ISSUED HEREWITH

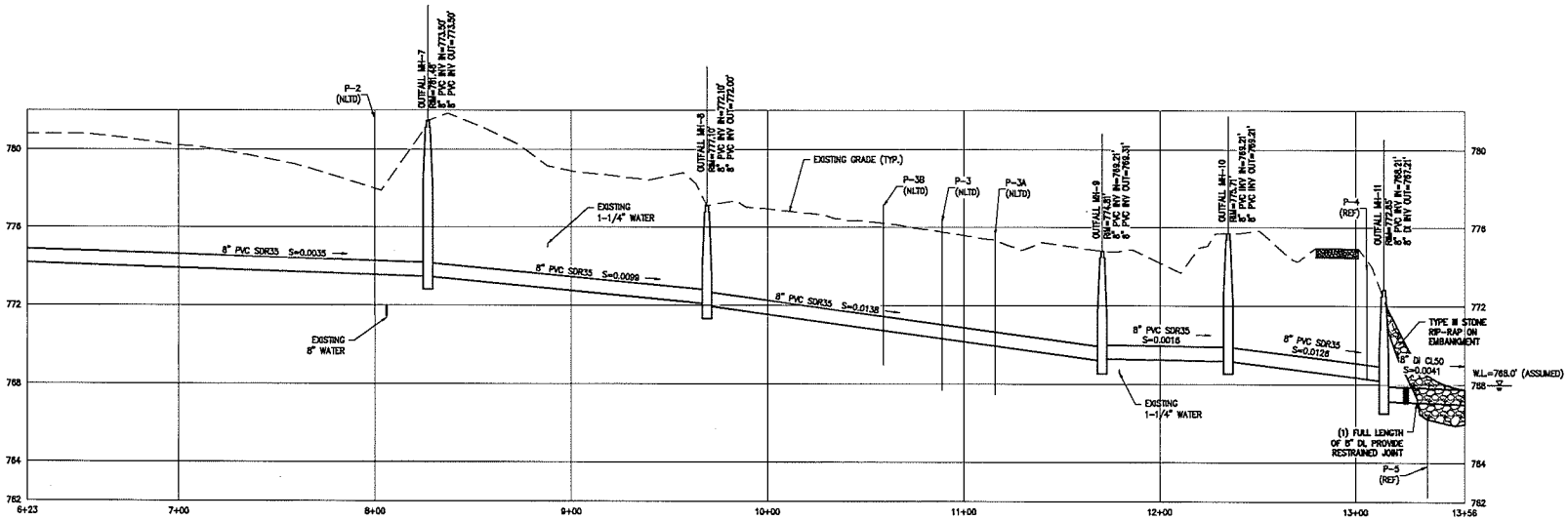


PLAN
SCALE: 1"=30'

GRAPHIC SCALE
0 30 45 60
(IN FEET)

NOTES:

1. ZAMPIERI DRIVE TO BE RESTORED BACK TO EXISTING CONDITIONS OR BETTER BY THE CONTRACTOR FOLLOWING COMPLETION OF CONSTRUCTION.
2. MAINTAIN (1) ONE WAY TRAFFIC ON BROCKWAY HILL ROAD. PROVIDE SIGNAGE AND FLAGGERS WHEN (1) ONE WAY TRAFFIC IS MAINTAINED.
3. DO NOT ACCESS OVER PAVED DRIVE WITH ANY EQUIPMENT WITH TRACKS/LAGS.



PROFILE
SCALE: HORIZ.=1"=30'
VERT.=1"=3'

Aldrich + Elliott
WATER RESOURCES ENGINEERS
6 Market Place, Suite 2
Essex Jct., VT 05452
P: 802.879.7733
AEengineers.com

No.	DATE	DESCRIPTION	CHECKED

TOWN OF WILLIAMSTOWN, VERMONT

WASTEWATER TREATMENT FACILITY REFURBISHMENT CONTRACT No. 1

PROPOSED OUTFALL PLAN AND PROFILE STATION 6+23 TO 13+56

DESIGNED GM	PROJECT NO. 15072
DRAWN JEB	DRAWING C8
CHECKED JA	
DATE APRIL, 2016	

Ross, Patrick

To: Kirn, Rich
Subject: RE: Williamstown - Stream Alteration Permit

From: Kirn, Rich
Sent: Wednesday, April 20, 2016 8:08 AM
To: Ross, Patrick <Patrick.Ross@vermont.gov>
Subject: RE: Williamstown - Stream Alteration Permit

Pat,

I visited the site and have the following recommendations:

- Instream construction should be limited to the period of June 1 – Oct 1 to protect wild brook trout reproduction within the Stevens Branch and its tributary.
- The restoration of the stream channel where pipeline crossings are proposed should include a gradation of materials, including fines, as required for bed armor treatments. Currently the proposal calls for Type III stone. Streambed and channel roughness characteristics should match adjacent sections of the unaltered stream upon completion.

Rich Kirn
Fisheries Program Manager
Vermont Department of Fish and Wildlife
3902 Roxbury Road
Roxbury, VT 05669
(802) 485-7566
rich.kirn@vermont.gov

Streambed Stone Fill Design Guidance

Type	Velocity Range (fps)*	Embeddedness (in)
E1	$V \leq 9$	18
E2	$9 < V \leq 11$	24
E3	$11 < V \leq 13$	36
E4	$13 < V \leq 15$	48

*Maximum velocity should be based on a minimum 50-year design flow rate and calculated at the structure outlet.

Item xxx.xxx CY Streambed Stone Fill Specification

Type E1. The longest dimension of the stone shall be at least 18 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 12 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

USE

Type E2. The longest dimension of the stone shall be at least 24 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 18 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

Type E3. The longest dimension of the stone shall be at least 36 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 24 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

Type E4. The longest dimension of the stone shall be at least 48 inches, and at least 50 percent of the volume of the stone in place shall have a least dimension of 36 inches, and at least 25 percent of the particles shall have a maximum dimension of 2 inches and be well graded material.

Notes

- The streambed stone fill shall be hard, blasted, angular rock other than serpentine rock containing the fibrous variety chrysotile (asbestos). Similar sized river sediment is an acceptable alternative as is a mixture of angular material and river sediment.
- Stone placed inside of a closed structure shall be placed such that the structure is not damaged.
- Care shall be taken to limit segregation of the materials.
- Add sand borrow item as needed to seal the bed and prevent subsurface flow.
- There shall be no subsurface flow upon final inspection.