

Vermont Department of Environmental Conservation

Watershed Management Division
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Montpelier VT 05620-3522
www.watershedmanagement.vt.gov

Agency of Natural Resources

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AUTHORIZATION TO CONDUCT NEXT FLOOD MEASURES

Pursuant to Section F of the Vermont Stream Alteration General Permit

Project Number: NFM-06-23-2016

Applicant Name: Town of Fayston

Phone: (802) 522-7438

Mailing Address: PO Box 691

Project Location: Randell Rd., Fayston, VT (44.2383,-72.8388)

Email: Witthse@cablone.net

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

1. This project authorizes scour protection repairs to the Randell Road crossing of Shepard Brook; to be completed as described in the documents submitted to this office on 11/16/2016; prepared by J.A. McDonald Inc.
2. The proposed activity is eligible for coverage under the VT ANR Stream Alteration General Permit – Next Flood Measures.
3. The proposed activity will meet the terms and conditions of Section F of the General Permit provided:
 - a) The project has been completed as shown on the attached plans and project information.
 - b) The project is proportional to the threat and conditioned to cease when the threat to life or to improved property has ended.
 - c) The project will not result in a threat to life, public health or safety.
 - d) The project will meet the standards detailed in subsection E.2.1 and E.2.2 of the General Permit.
 - e) The project will meet Stream Alteration Standards to the greatest extent possible.
 - f) A pre-construction meeting is held between the contractor, owner/applicant, and the ANR River Management Engineer.
 - g) The River Management Engineer is notified by phone or email when construction begins and when the project is complete.

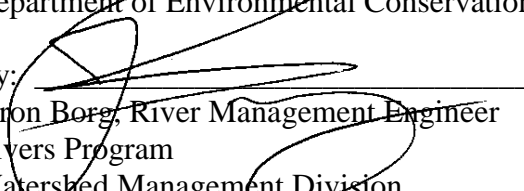
If there are any changes in the project plan or deviation in construction from the plan, the Permittee must notify the River Management Engineer immediately.

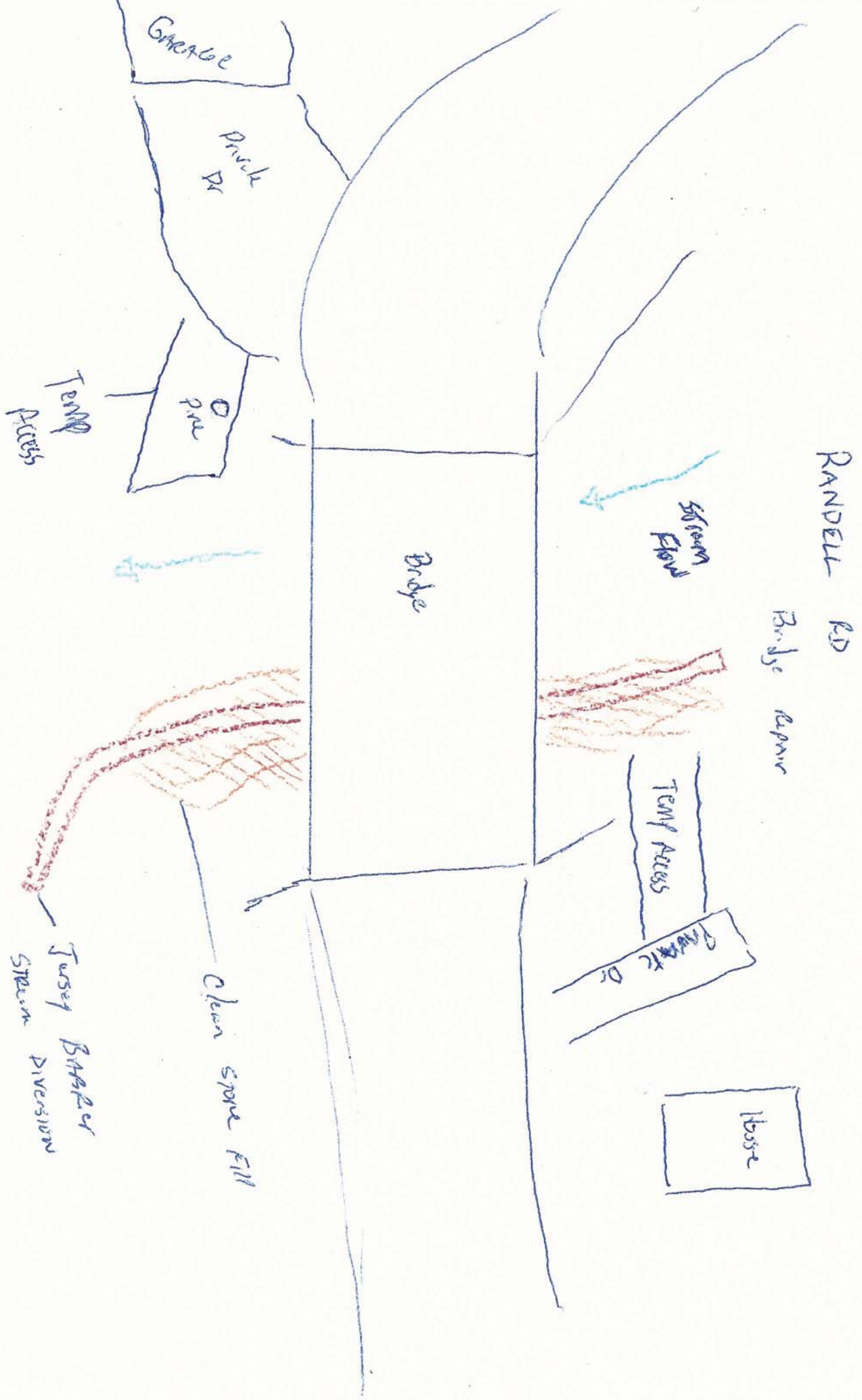
If the project is constructed as you have described, as shown on the above referenced approved plans and according to the above conditions, there is no reason to expect any violation of Vermont Water Quality Standards.

Signed this 16th day of November, 2016

This permit expires October 1, 2017.

Alyssa B. Schuren, ~~Commissioner~~
Department of Environmental Conservation

By: 
Jaron Borg, River Management Engineer
Rivers Program
Watershed Management Division



RANDELL RD

Bridge Repair

56' stream Flow

Bridge

Temp Access

Private Dr

House

Temp Access

Drm

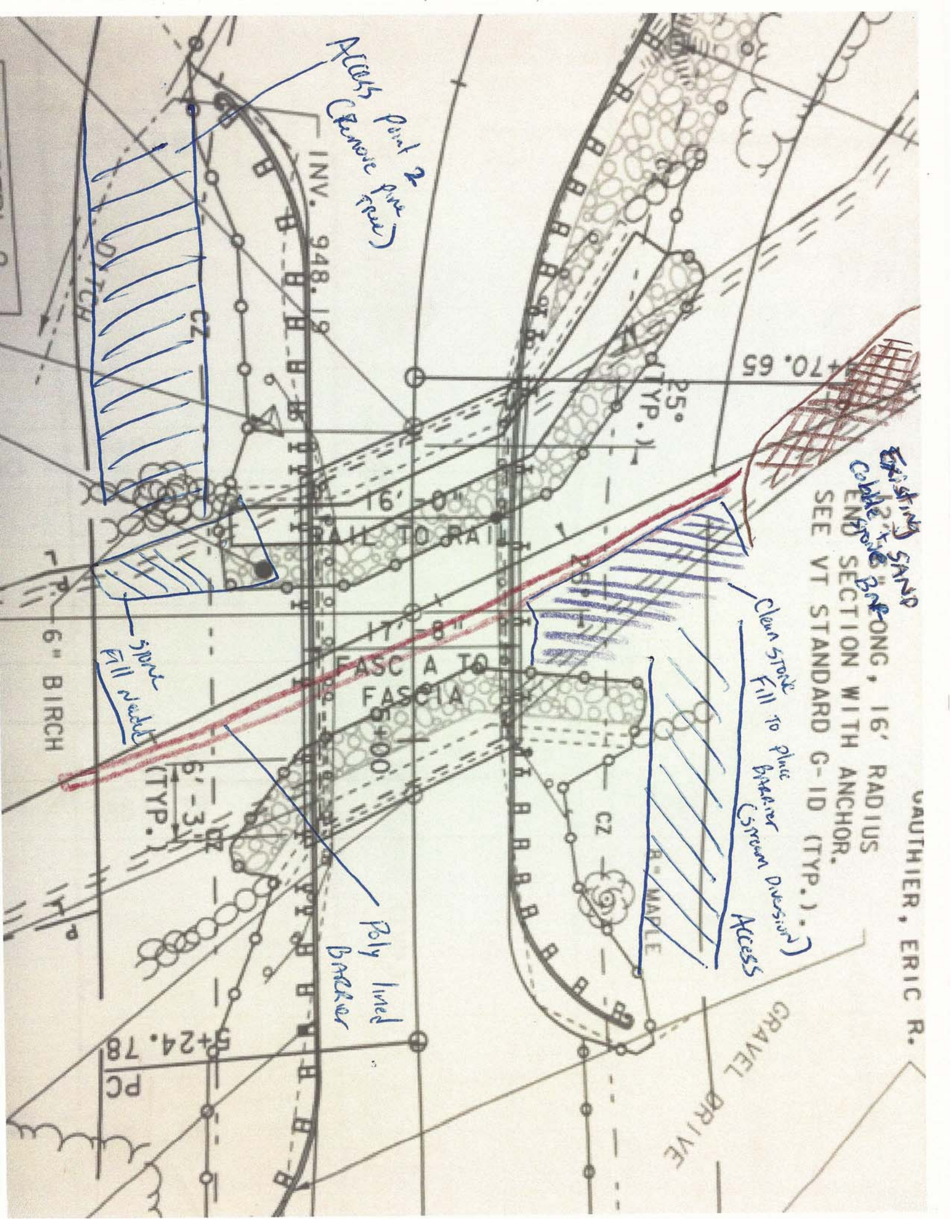
Garage

Porch Dr

Tussock Barrier Stream Diversion

Clean Spore Fill

NTS



Access Point 2
(Remove Pine Tree)

Existing SAND
Copy to the
END SECTION WITH ANCHOR.
SEE VT STANDARD G-ID (TYP.)

Clean Stone
Fill to place
Barrier Division

Access

Poly lined
Barriers

Stone
Fill needed

VAUTHIER, ERIC R.

GRAVEL DRIVE

6" BIRCH

PC
5+24.78

FASCIA TO
FASCIA
5+00

16'-0"
ALL TO RAIL

INV. 948.19

R-MAPLE

25°
(TYP.)

+70.65

6'-3"
(TYP.)

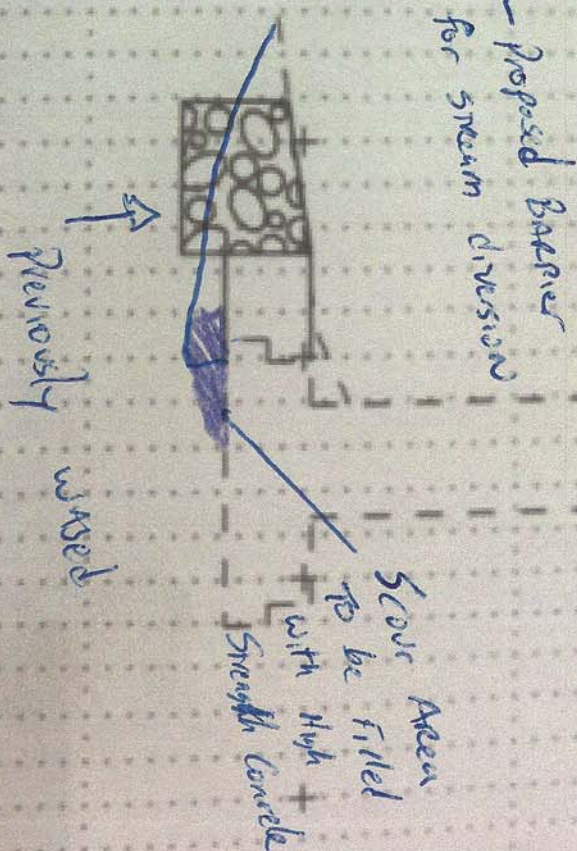
CZ

CZ

DITCH

10+50

-20 -10 0 10 20



Town of Fayston
866 North Fayston Road
Fayston, Vermont 05660
802-496-2454

I stopped by the bridge this morning, and inspected it for high water damage, and have attached some photos.

Brief history:

The bridge is a steel beam type built in 1963, and reconed. just a few years ago, in 2011. The recon. upgraded the wooden deck to a reinforced concrete type, along with three new steel beams. The original abutments which had some scour, undermining and settlement issues, were retained; though their seats augmented, and the south abut. supplemented with a large buried knee wall.

Abut. 1:

The recent water flow did cause some erosion along and behind the downstream end of abut. #1(south), which extends up the side slope, and has exposed a precast concrete block laying now, at the toe of slope. This abutment was noted as having a forward list for a number of years, which increased slowly up to 3" of rotation in 4' noted in 2012. I checked this today and noted 2-3/4" to 2-7/8" in 4', so no indication that this recent flow has caused any further displacement. Some cracking in the upper corners of the abutment are noted, but have been present, and look like thermal cracking, as the wing, and curtains were poured integral. No bending anchor bolts, or seat/curtain displacement either, though a slight drop in 4' horizontally.

Abut. 2:

Some scour has occurred along the north abutment which has had chronic undermining issues in the past. The abutment has been repaired at least twice over the years, with narrow knee walls, and riprap added to correct undermining. The water now is 5' deep along the abutment, still murky making visibility limited, but there is now undermining that extends along the upstream wing for approximately 6', and along the footing below the stem for approximately 10'. The voiding is at least 10" deep, and extends in 6' or more in some spots. The added narrow knee walls are cracked thru at the downstream end, but the abutment which was noted as having 3/4" of forward list in 4' remains the same; with no additional movement.

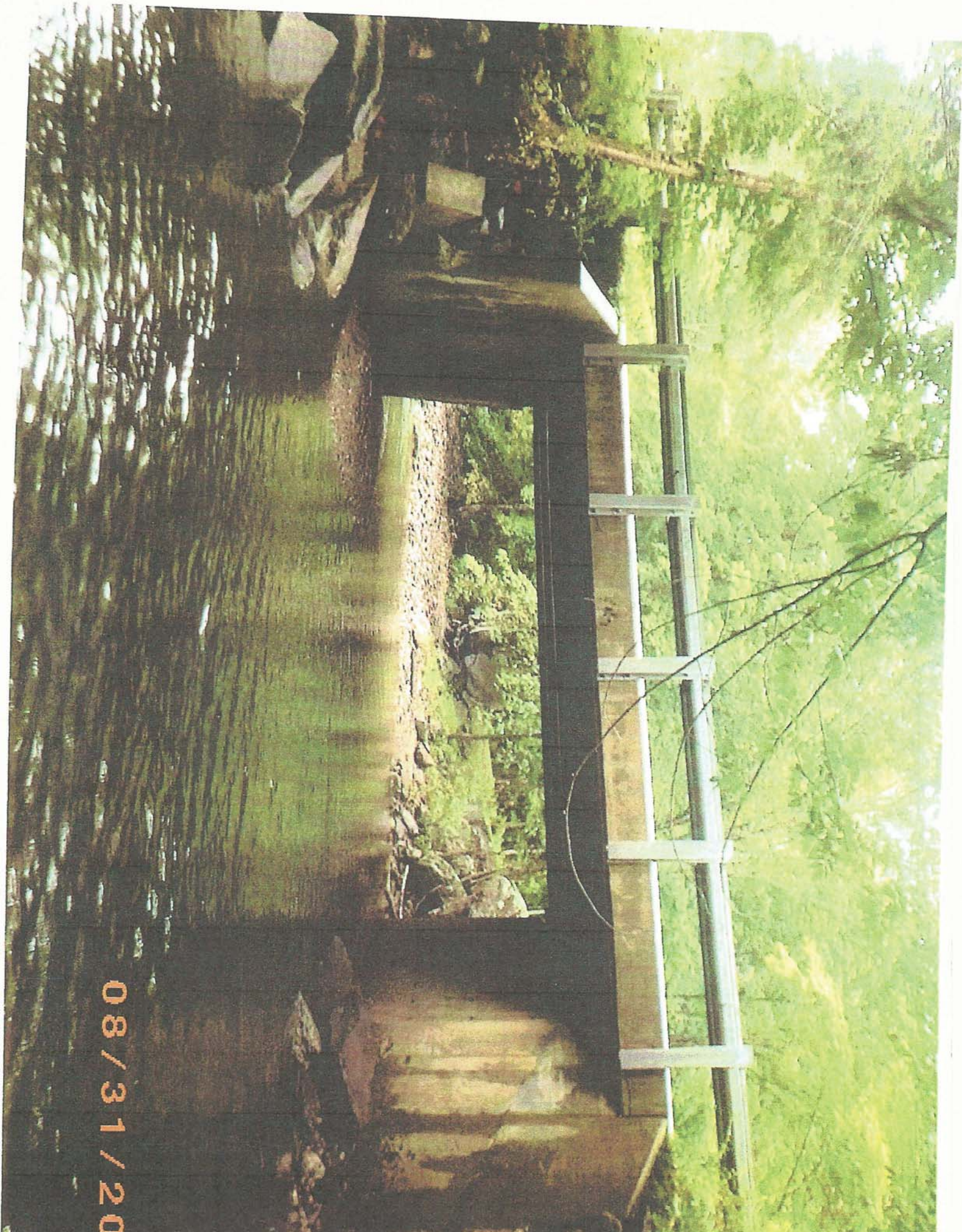
Summary:

I would recommend, that abutment #2(north) be repaired with concrete flowed in under, to fill the voids, and jagged stone protection added again. The Town could get a better estimate on the void dimensions for quantities, once the water level, and clarity have improve.

Consideration should also be given to adding a larger and deeper knee wall along this abutment, as was done to the south abutment during the recon. project. Stone fill material needs to be added to correct the southern slope erosion. No loading restrictions are necessary at this time, though the undermining repair should be made this fall. Further scour and undermining could certainly destabilize the abutment.

If I could answer any more questions, or clarify anything, please don't hesitate to ask.

Matt



08/31/20

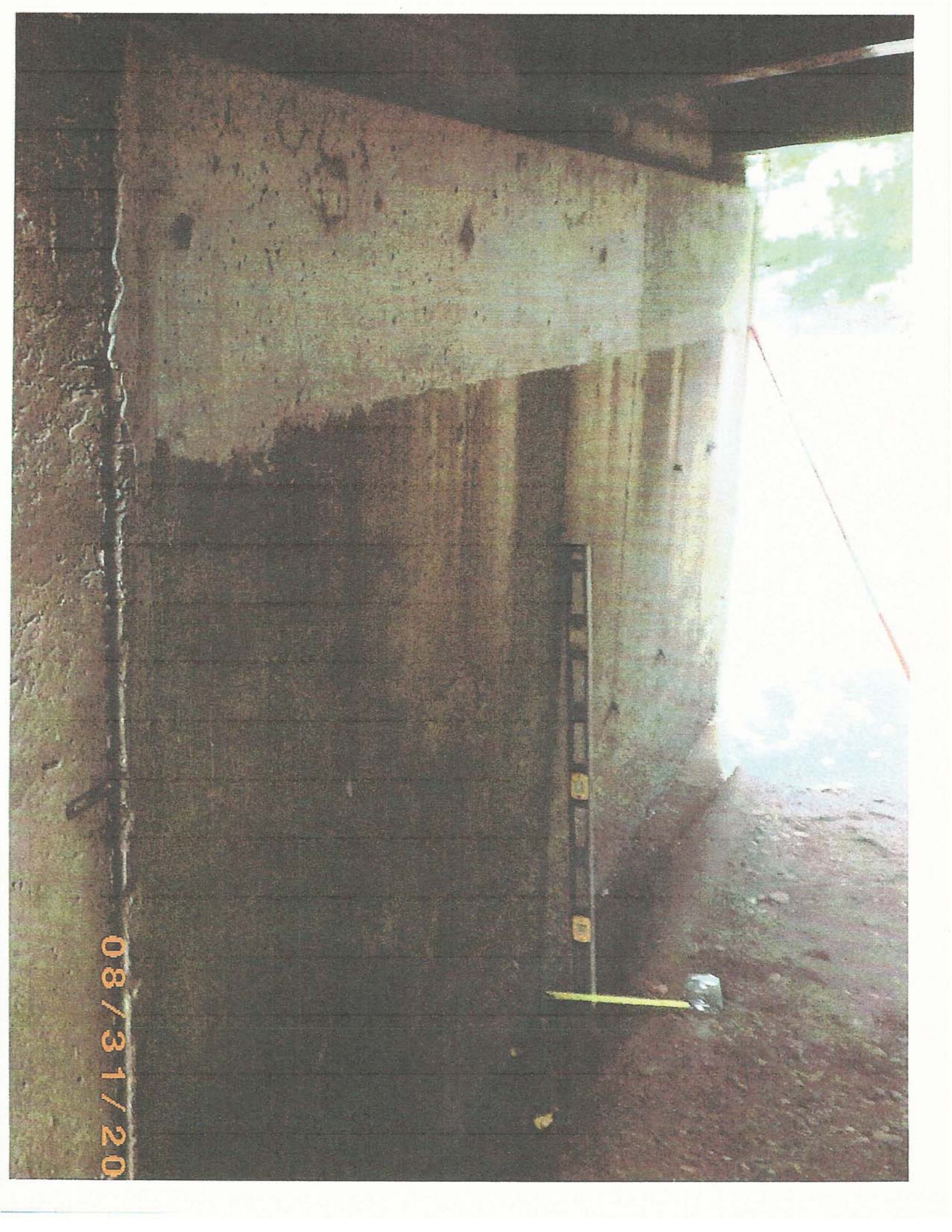


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