

Vermont Department of Environmental Conservation
Watershed Management Division
Rutland Regional Office
88 Merchants Row, Suite 430 Asa Bloomer Building
Rutland, VT 05701-5903

Agency of Natural Resources
www.watershedmanagement.vt.gov

[cell] 802-490-6163
[fax] 802-786-5915

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-07-021-2015**

Watercourse: **Tributary to Battenkill**

Applicant Name: **Marc Johnston - Town of Sunderland**

Email: highway@sunderlandvt.org

Mailing Address: **PO BOX 295 East Arlington, VT 05252-0295**

Phone: **(802) 375-2865**

Project Location: **Bentley Hill Road, near house #321**

Lat/Lon: **N 43.1186 / W 73.1238**

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

1. This project authorizes under **Section C.2.2.1 and C.2.2.5, installation of new pipe and stone stabilization.**
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 attached sketch of the proposed improvements, agreed upon at the site with the applicant,** 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) **In-stream working dates for all GP activities are from July 1st through October 1st**; any in-stream work outside these dates will require an Individual Stream Alteration Permit authorization by the River Management Engineer.
 - i) This authorization has been posted for three days public comment. This authorization constitutes final approval.

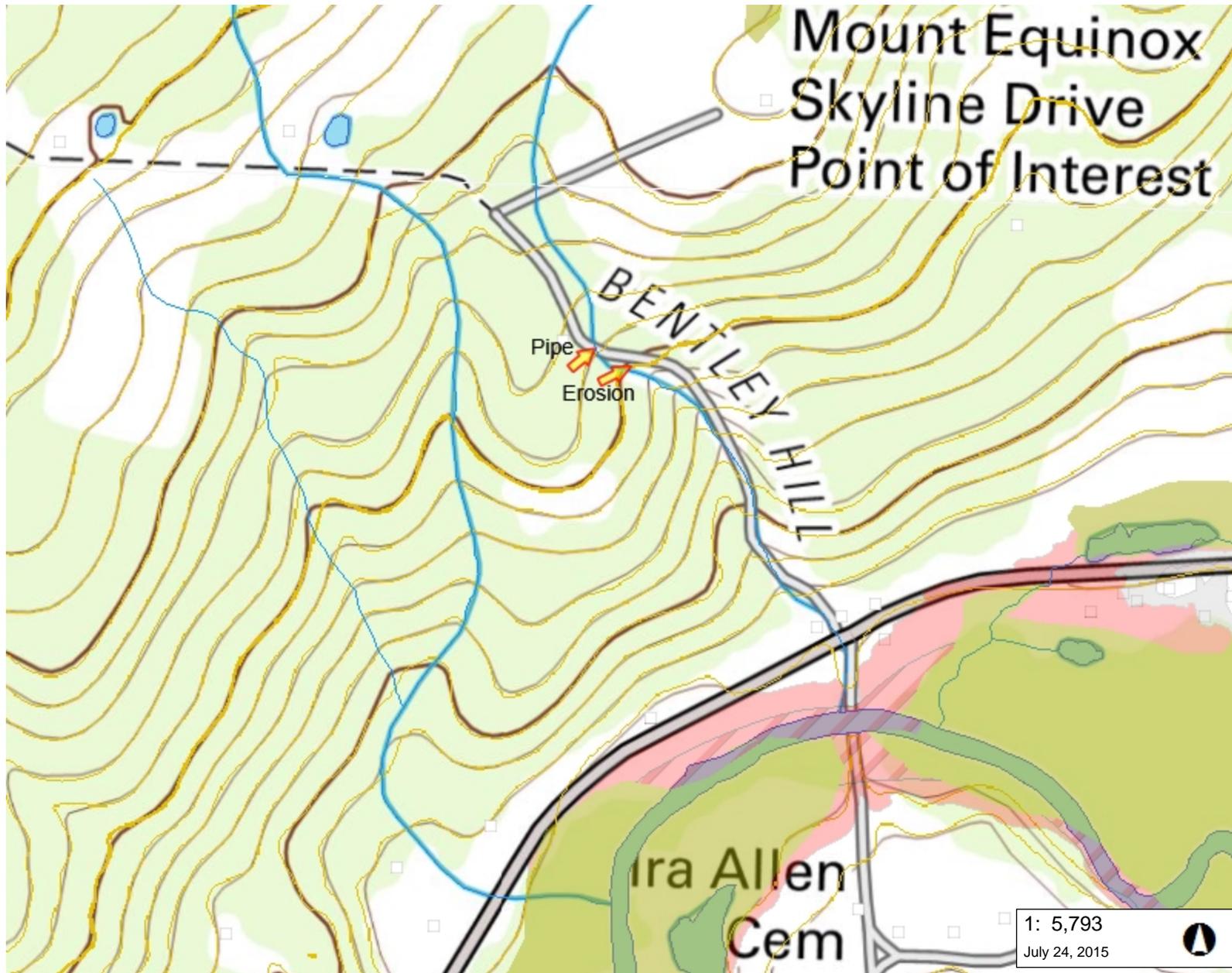
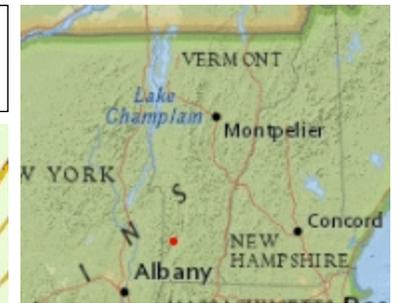
If there are any changes in the project plan or deviation in construction from the approved plans, the Permittee must notify the ANR River Management Engineer immediately via phone (802) 490-6163 or email joshua.carvajal@state.vt.us.

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 24th day of June, 2015
David K. Mears, Commissioner
Department of Environmental Conservation

This permit expires on October 1, 2015.

by: 
Josh Carvajal, P.E. CFM, River Management Engineer



LEGEND

- Wetlands - VSWI
 - Class 1 Wetland
 - Class 2 Wetland
- Wetlands Advisory Layer
- DFIRM Floodways
- DFIRM Preliminary Floodways
- Special Flood Hazard Areas (A Counties)
 - AE (1-percent annual chance flood)
 - A (1-percent annual chance floodpl.)
 - AO (1-percent annual chance zone feet)
 - 0.2-percent annual chance flood ha
- Special Flood Hazard Areas (F DFIRM)
 - AE (1-percent annual chance flood)
 - A (1-percent annual chance floodpl.)
 - AO (1-percent annual chance zone feet)
 - 0.2-percent annual chance flood ha
- Buildings (E911)
- Railroads
- Waterbody
- Stream
- Town Boundary

1: 5,793
July 24, 2015

294.0 0 147.00 294.0 Meters
WGS_1984_Web_Mercator_Auxiliary_Sphere 1" = 483 Ft. 1cm = 58 Meters
© Vermont Agency of Natural Resources THIS MAP IS NOT TO BE USED FOR NAVIGATION

DISCLAIMER: This map is for general reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable. ANR and the State of Vermont make no representations of any kind, including but not limited to, the warranties of merchantability, or fitness for a particular use, nor are any such warranties to be implied with respect to the data on this map.

NOTES

Map created using ANR's Natural Resources Atlas

STRUCTURE

EXISTING - RCP/CMP
TEMPORARY - 42" HDPE
Q25 DESIGN = 48" HDPE
BF WIDTH = NEED 5 FT.

MIN. SLOPE = 2%
PIPE LENGTH = 40 FT

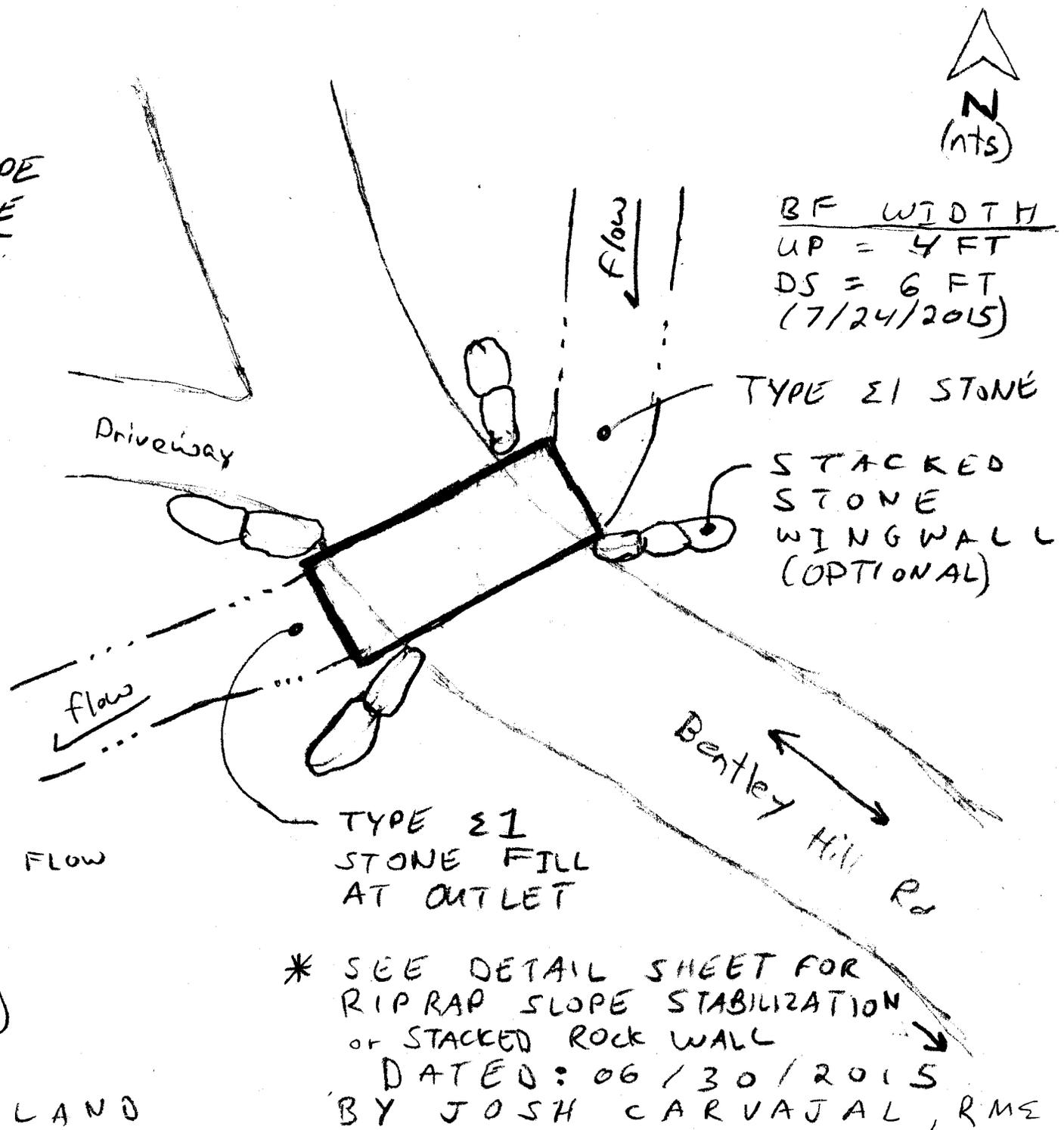
TYPE E1 STONE
ANGULAR/ROUND
18" MINUS ROCK
D50 = 12"
D25 = 2"

WATERSHED

BASED ON
USGS VERMONT
STREAMSTATS:
Q10 = 145 cfs
Q25 = 200 cfs DESIGN FLOW
Q50 = 250 cfs
Q100 = 305 cfs

DA = 0.745 m (Estimated)
AGP = NOT REQUIRED

TOWN OF SUNDERLAND



BF WIDTH
UP = 4 FT
DS = 6 FT
(7/24/2015)

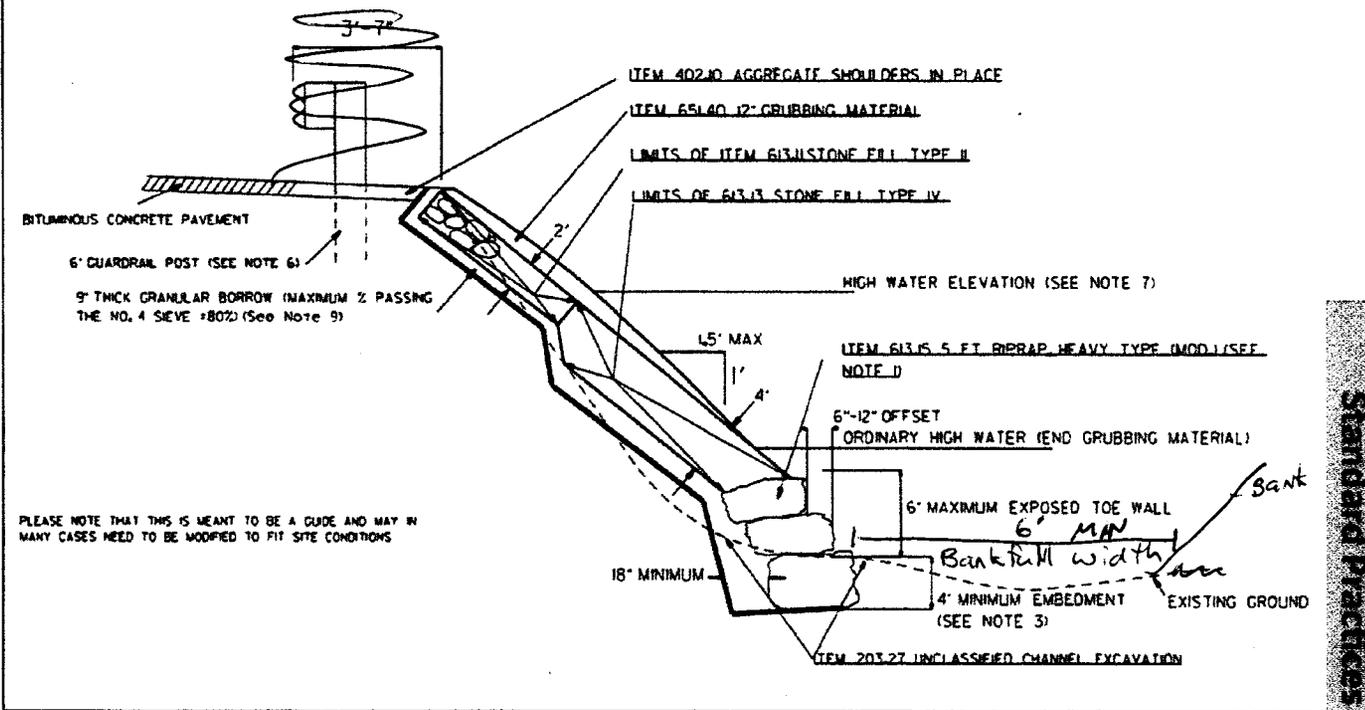
TYPE E1 STONE

STACKED
STONE
WINGWALL
(OPTIONAL)

TYPE E1
STONE FILL
AT OUTLET

* SEE DETAIL SHEET FOR
RIP RAP SLOPE STABILIZATION
or STACKED ROCK WALL
DATED: 06/30/2015
BY JOSH CARVAJAL, RME

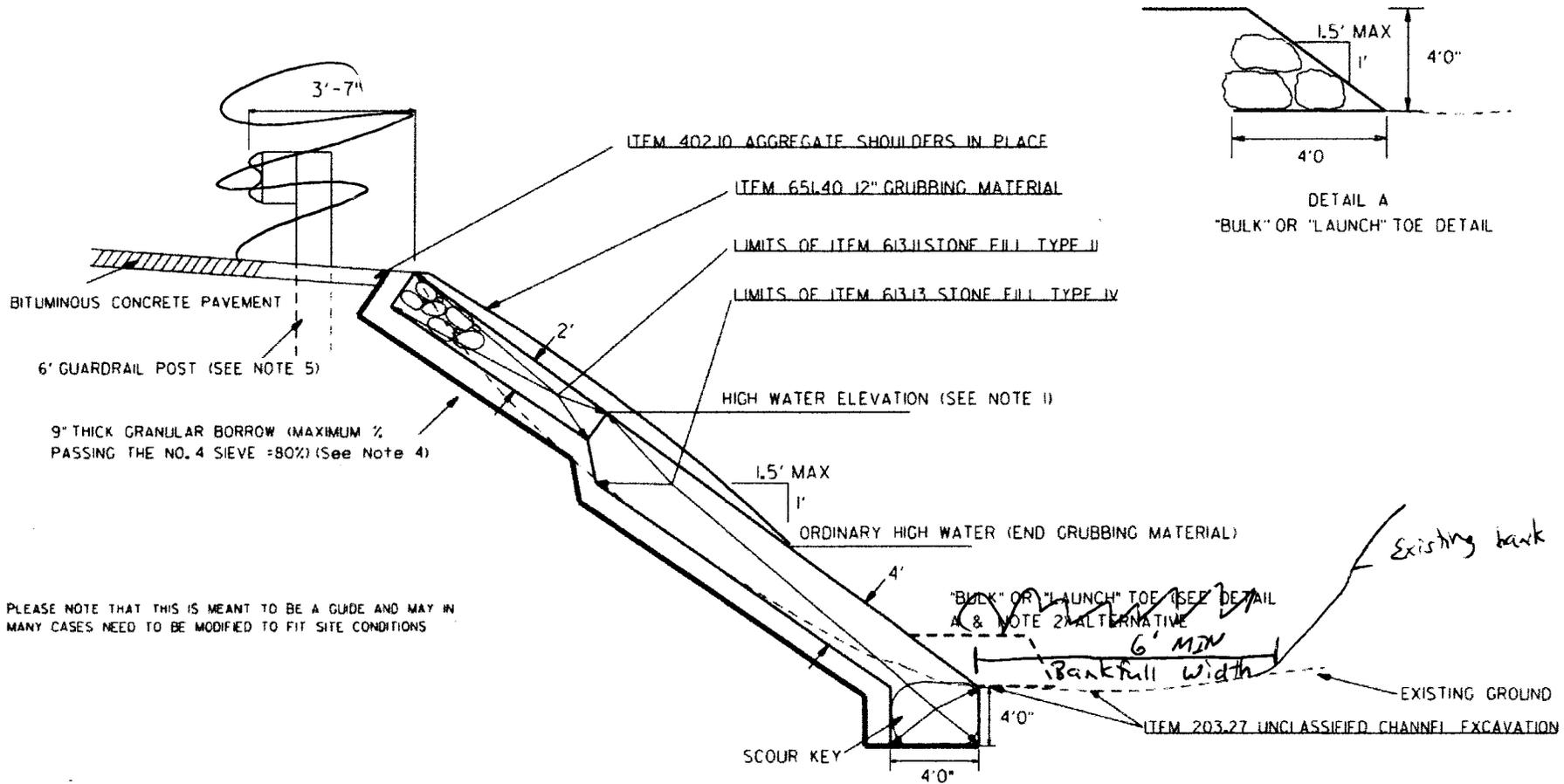
STONE FILL SLOPE PROTECTION WITH STONE TOE WALL



Town of Sunderland

Bentley Hill Road

STONE FILL SLOPE PROTECTION



PLEASE NOTE THAT THIS IS MEANT TO BE A GUIDE AND MAY IN MANY CASES NEED TO BE MODIFIED TO FIT SITE CONDITIONS

DETAIL A
"BULK" OR "LAUNCH" TOE DETAIL

Standard Practices

Vermont Rivers and Roads Field Manual

Town of Sunderland

Bently Hill Road