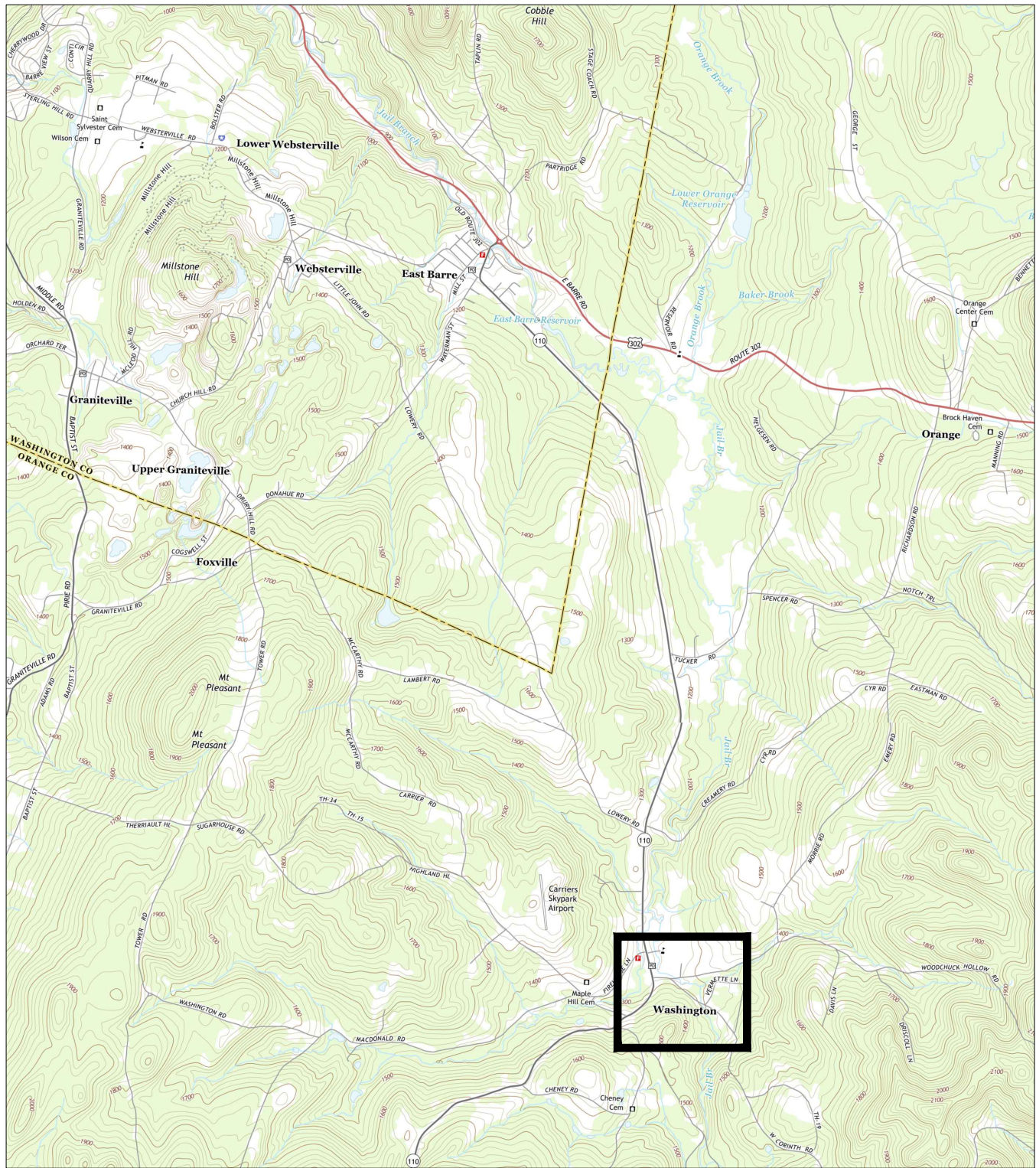


HANDS MILL DAM REMOVAL AT JAIL BRANCH TOWN OF WASHINGTON, VERMONT

PREPARED FOR:
WINOOSKI NATURAL RESOURCES
CONSERVATION DISTRICT

PREPARED BY:
STONE ENVIRONMENTAL, INC.

30% DESIGN
ISSUED: NOVEMBER, 2020



Project Vicinity
Scale: 1" = 4000'



Project Location
Scale: 1" = 400'

DRAWING INDEX:

SHEET	TITLE
1	COVER SHEET
2	EXISTING CONDITIONS PLAN
3	SITE ACCESS & MATERIAL REMOVAL PLAN
4	EXISTING DAM & DEMOLITION PLAN
5	CHANNEL RESTORATION PLAN
6	CHANNEL RESTORATION PROFILE & DETAILS

30% DESIGN PLANS, NOT FOR
PERMITTING OR CONSTRUCTION

FILE:

DRAWING CREDITS	DRAWN ON: 11/2/2020	REVISIONS	#	DATE	DRWN	CHK'D	APP'D	DESCRIPTION
	DRAWN BY: GMB							
	CHECKED ON:							
	CHECKED BY:							
	PROJECT NO: 20-007							

DRAWN ON: 11/2/2020	
DRAWN BY: GMB	
CHECKED ON:	
CHECKED BY:	
PROJECT NO: 20-007	



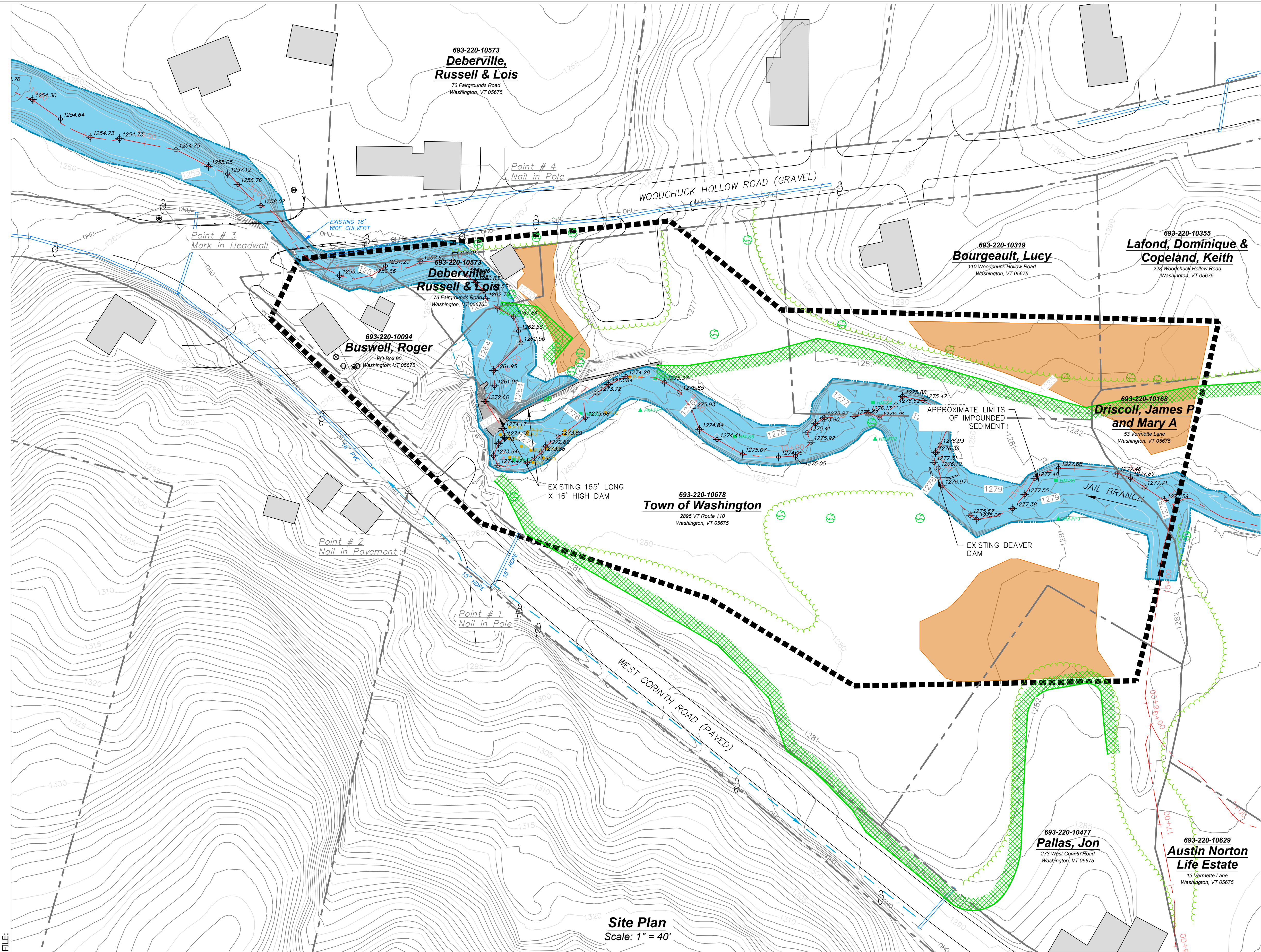
STONE ENVIRONMENTAL
535 Stone Cutters Way / Montpelier / VT / 05602 / USA
802.229.4541 / info@stone-env.com / www.stone-env.com

HANDS MILL DAM REMOVAL
AT JAIL BRANCH
COVER SHEET

WASHINGTONVERMONT

FIGURE NO.

1



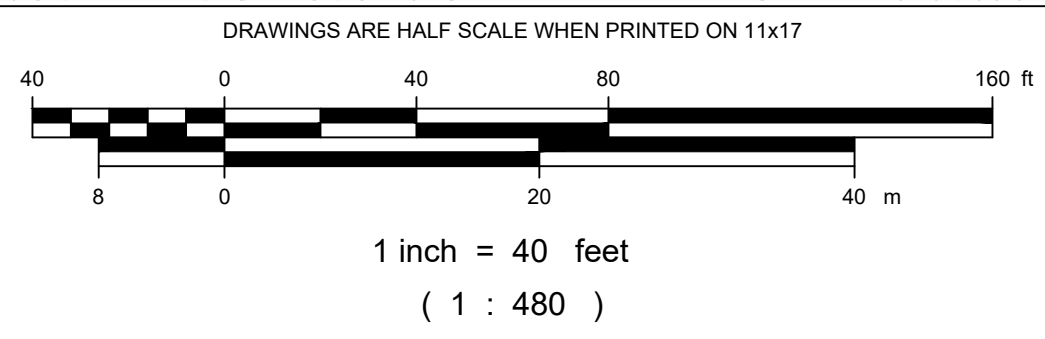
Point Table			
Point	Description	Northing	Easting
1	Nail in Pole	585021.9815'	1658864.2012'
2	Nail in Pavement	585119.0352'	1658774.6143'
3	Mark in Headwall	585312.4075'	1658681.0191'
4	Nail in Pole	585325.0713'	1658817.8600'

- Legend**
- Survey Control Point
 - Major Contour
 - Minor Contour
 - Parcel Boundaries
 - Edge of Road
 - Guard Rail
 - Overhead Utility
 - Vegetation Line
 - Tree
 - River Top of Bank (OHV)
 - Existing Wetland (See Note 6)
 - Thalweg Spot Elevations
 - Utility Pole
 - Manhole
 - Sanitary Manhole or Septic Cover
 - Well
 - Vent
 - Hydrant
 - Water Valve
 - Stormwater Pipe
 - Stormwater Swale
 - Sediment Probing Location
 - Sediment Sampling Location
 - Floodplain Boring Location
 - Archaeological Sensitive Areas
 - Proposed Limits of Disturbance

- Survey Notes:**
- The vertical datum refers to NAVD88. Horizontal datum refers to Vermont State Plane Grid NAD83. Contour interval = 1 foot.
 - Contours were created using two sources of data: 1) a topographic survey of the channel bed, banks, floodplains and structural features collected by Stone Environmental (see Note 3 below), and 2) LIDAR data of upland features, obtained from the Vermont Center for Geographic Information.
 - Site survey was performed on August 11 and 12, 2020 by Gabe Bolin, PE, of Stone Environmental, Inc. using a Stonex S900 GPS base and rover.
 - Survey data provided in these plans do not represent a boundary survey.
 - Utility locations shown on this plan should be considered approximate. Contractor is required to verify utility locations prior to work.
 - Wetland boundaries shown on this plan were delineated by Karina Dailey of the Vermont Natural Resources Council (VNRC) on October 8, 2020. The wetland delineation was performed in accordance with the U.S. Army Corps of Engineers Wetland Delineation Manual, Technical Report Y-87-1, January 1987, Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0), January 2012, and Section 3.2 of the Vermont Wetland Rules.
 - Archaeological sensitive areas identified by the University of Vermont Consulting Archaeology Program, October, 2020.

30% DESIGN PLANS, NOT FOR PERMITTING OR CONSTRUCTION

DRAWING CREDITS	#	DATE	DRWN	CHK'D	APP'D	DESCRIPTION
REVISIONS						
DRAWING SCALE						

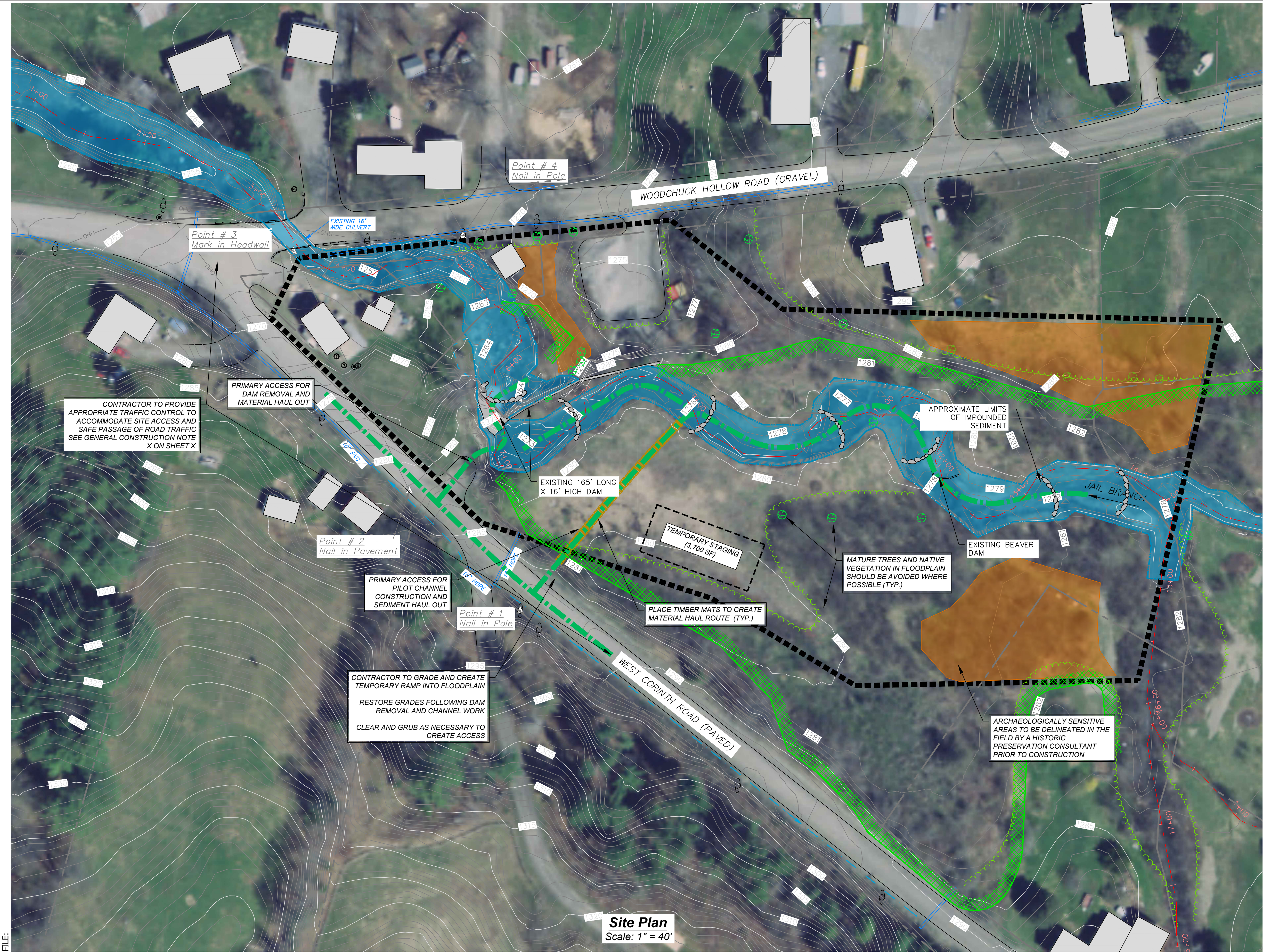


STONE ENVIRONMENTAL

535 Stone Cutters Way / Montpelier / VT / 05602 / USA
802.229.4541 / info@stone-env.com / www.stone-env.com

HANDS MILL DAM REMOVAL
AT JAIL BRANCH
EXISTING CONDITIONS PLAN

WASHINGTON VERMONT



Legend

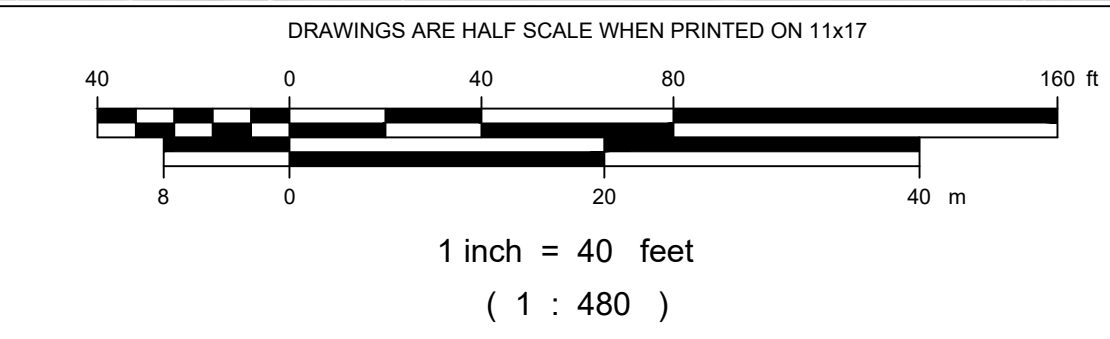
- Survey Control Point
- 1280 Major Contour
- 1275 Minor Contour
- Parcel Boundaries
- Edge of Road
- Guard Rail
- Overhead Utility
- Vegetation Line
- Tree
- River Top of Bank (OHW)
- Existing Wetland
- Thalweg Spot Elevations
- Utility Pole
- Manhole
- Sanitary Manhole or Septic Cover
- Well
- Vent
- Hydrant
- Water Valve
- Stormwater Pipe
- Stormwater Swale
- Sediment Probing Location
- Sediment Sampling Location
- Floodplain Boring Location
- Archaeological Sensitive Areas
- Proposed Limits of Disturbance
- Proposed Site Access Route
- Proposed Timber Mats

Site Access & Material Removal Notes:

- Utility locations shown on this plan should be considered approximate. Contractor is required to verify utility locations prior to work.
- The suggested site access shown on this sheet is an example and for the purposes of project bidding.
- The Contractor shall submit an Access and Material Removal Plan for approval by the Engineer prior to mobilization. The plan can follow the suggested route, or vary based on revised project sequencing. Overall, the Plan will be the Contractor's plan that meets all permit requirements and is subject to approval by the Engineer. See specifications.

30% DESIGN PLANS, NOT FOR PERMITTING OR CONSTRUCTION

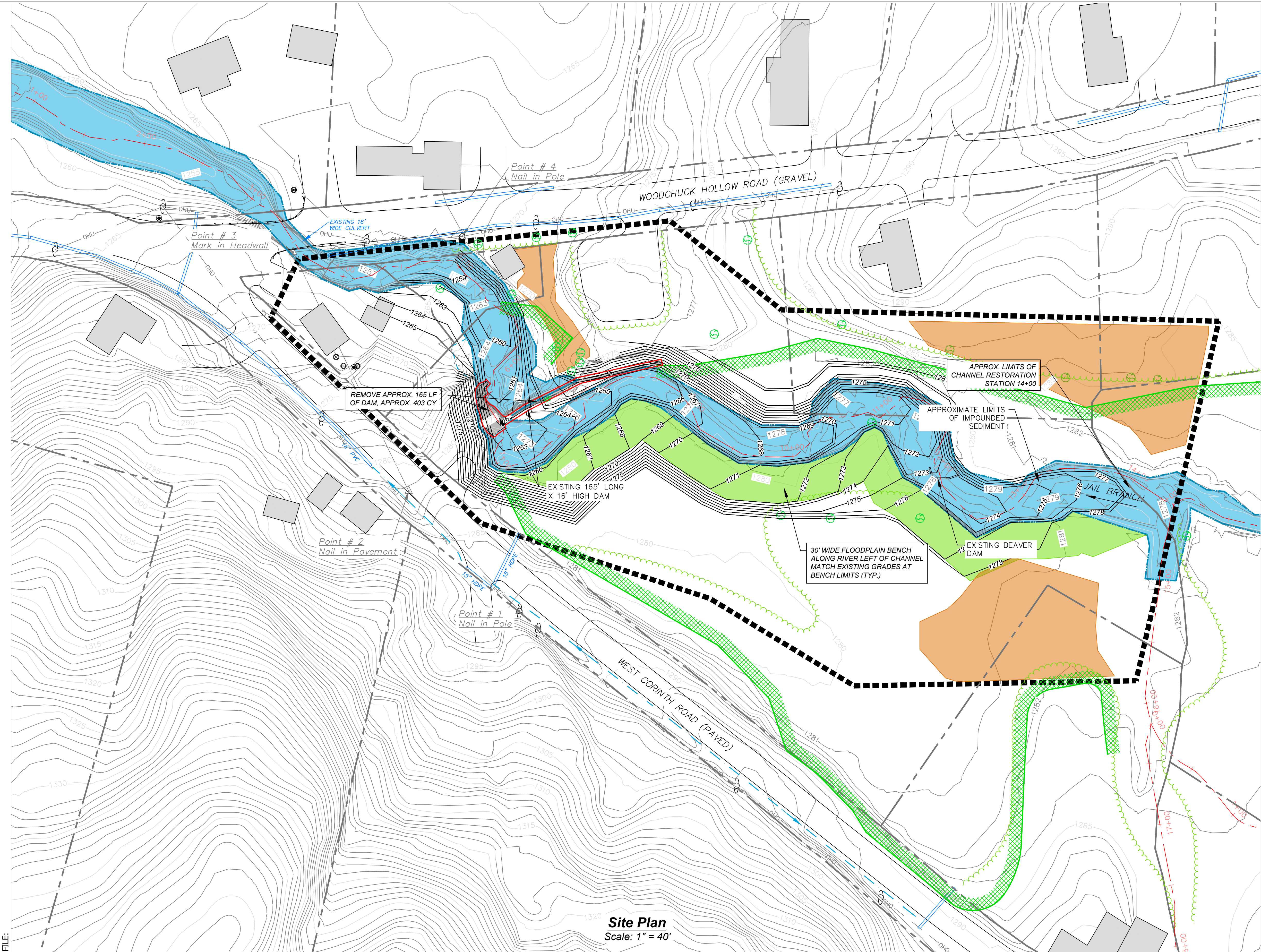
#	DATE	DRWN	CHK'D	APP'D	DESCRIPTION
1	9/4/2020	GMB			DRAWN ON: 9/4/2020
2					DRAWN BY: GMB
3					CHECKED ON:
4					CHECKED BY:
5					PROJECT NO: 20-007



STONE ENVIRONMENTAL

535 Stone Cutters Way / Montpelier / VT / 05602 / USA
802.229.4541 / info@stone-env.com / www.stone-env.com

HANDS MILL DAM REMOVAL
AT JAIL BRANCH
SITE ACCESS & MATERIAL REMOVAL PLAN
WASHINGTON VERMONT



Legend

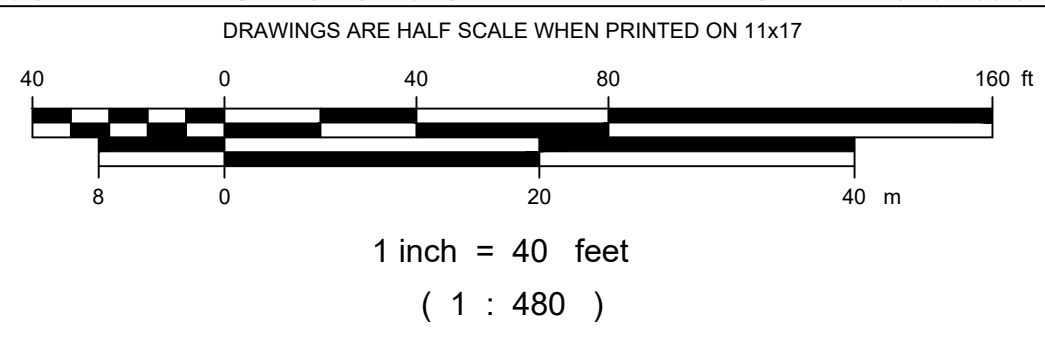
- Survey Control Point
- Major Contour
- Minor Contour
- Parcel Boundaries
- Edge of Road
- Guard Rail
- Overhead Utility
- Vegetation Line
- Tree
- River Top of Bank (OHW)
- Existing Wetland (See Note 6)
- Thalweg Spot Elevations
- Utility Pole
- Manhole
- Sanitary Manhole or Septic Cover
- Well
- Vent
- Hydrant
- Water Valve
- Stormwater Pipe
- Stormwater Swale
- Archaeological Sensitive Areas
- Proposed Limits of Disturbance
- Proposed Contours
- Dam Removal Line

Channel Restoration Plan Notes:

- Contractor to clear and grub as necessary to provide access, remove dam and construct bank stabilizations (Item 201.10).
- Contractor to install topsoil and seed along disturbed floodplains and other areas of disturbance per the direction of the Engineer.
- See the 'Typical Channel Cross Section' on Sheet 6 for a depiction of the pilot channel cross section to be constructed per the extents shown on this sheet.
- Final channel and floodplain grading associated with the limits of pilot channel construction and bank stabilizations shown on this plan may be further revised in 100% design plans.

30% DESIGN PLANS, NOT FOR PERMITTING OR CONSTRUCTION

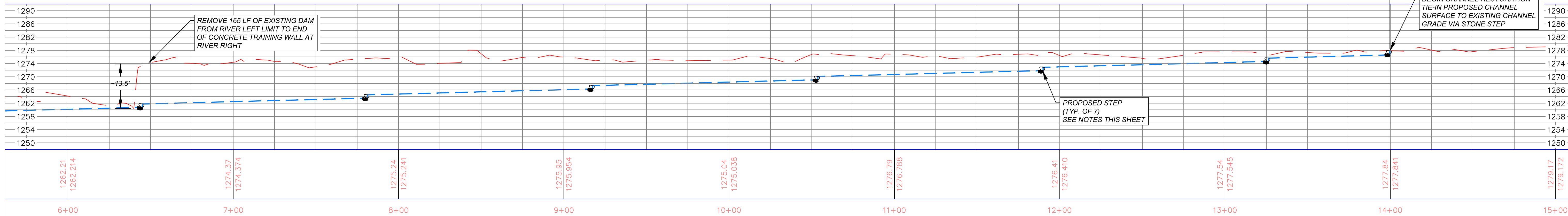
DRAWING CREDITS	FILE:					
	DRAWN ON: 9/4/2020					
	DRAWN BY: GMB					
	CHECKED ON:					
	CHECKED BY:					
REVISIONS	PROJECT NO: 20-007					
	#	DATE	DRWN	CHK'D	APP'D	DESCRIPTION



STONE ENVIRONMENTAL
535 Stone Cutters Way / Montpelier / VT / 05602 / USA
802.229.4541 / info@stone-env.com / www.stone-env.com

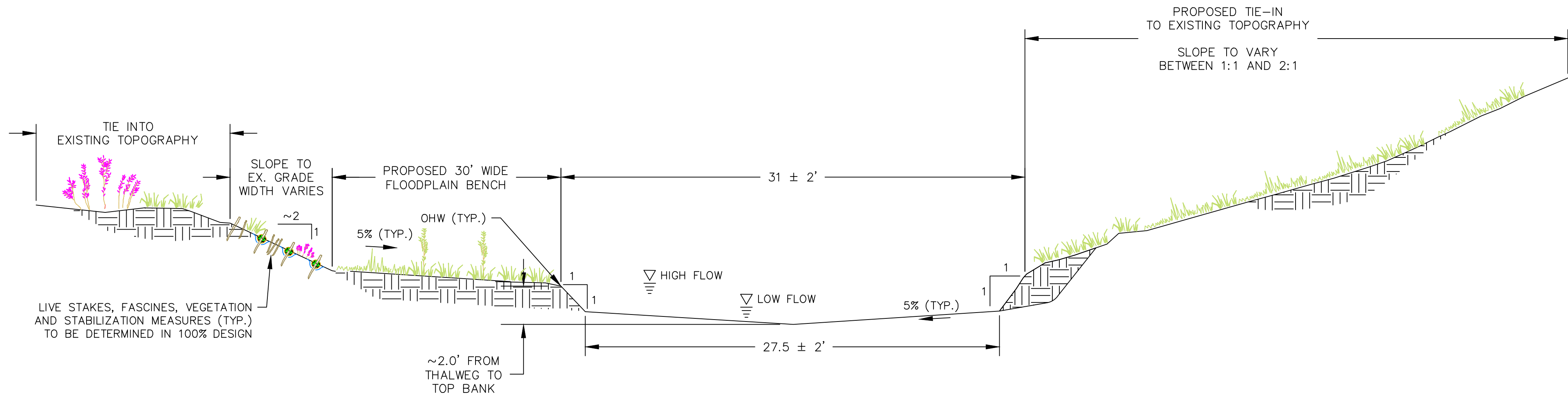
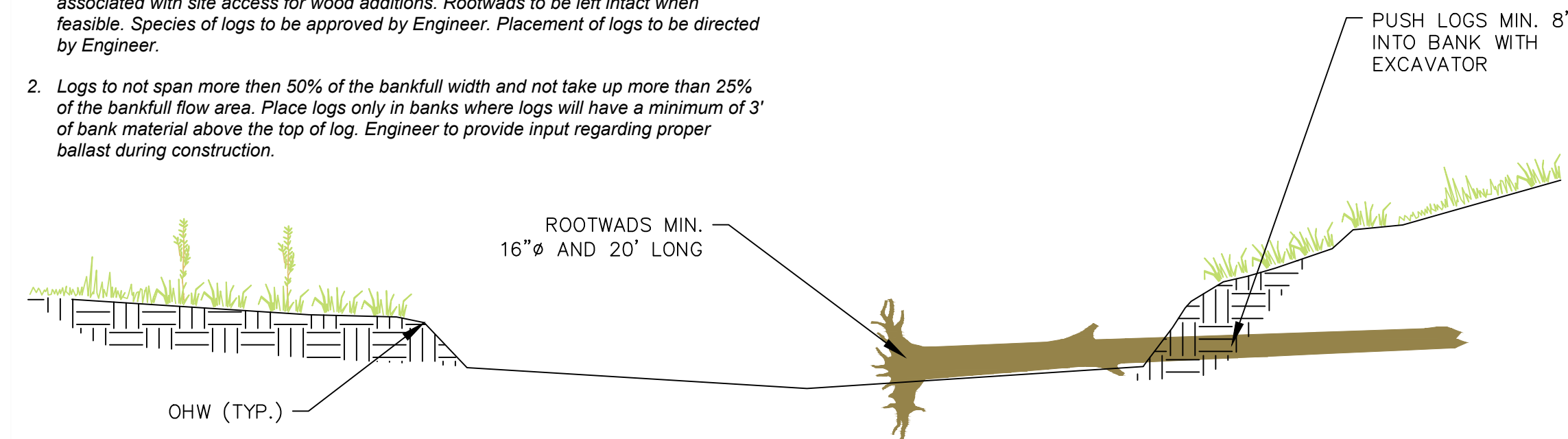
HANDS MILL DAM REMOVAL
AT JAIL BRANCH
CHANNEL RESTORATION PLAN
WASHINGTON VERMONT

LIMITS OF RESTORED CHANNEL (STATION 5+08 TO 14+00)



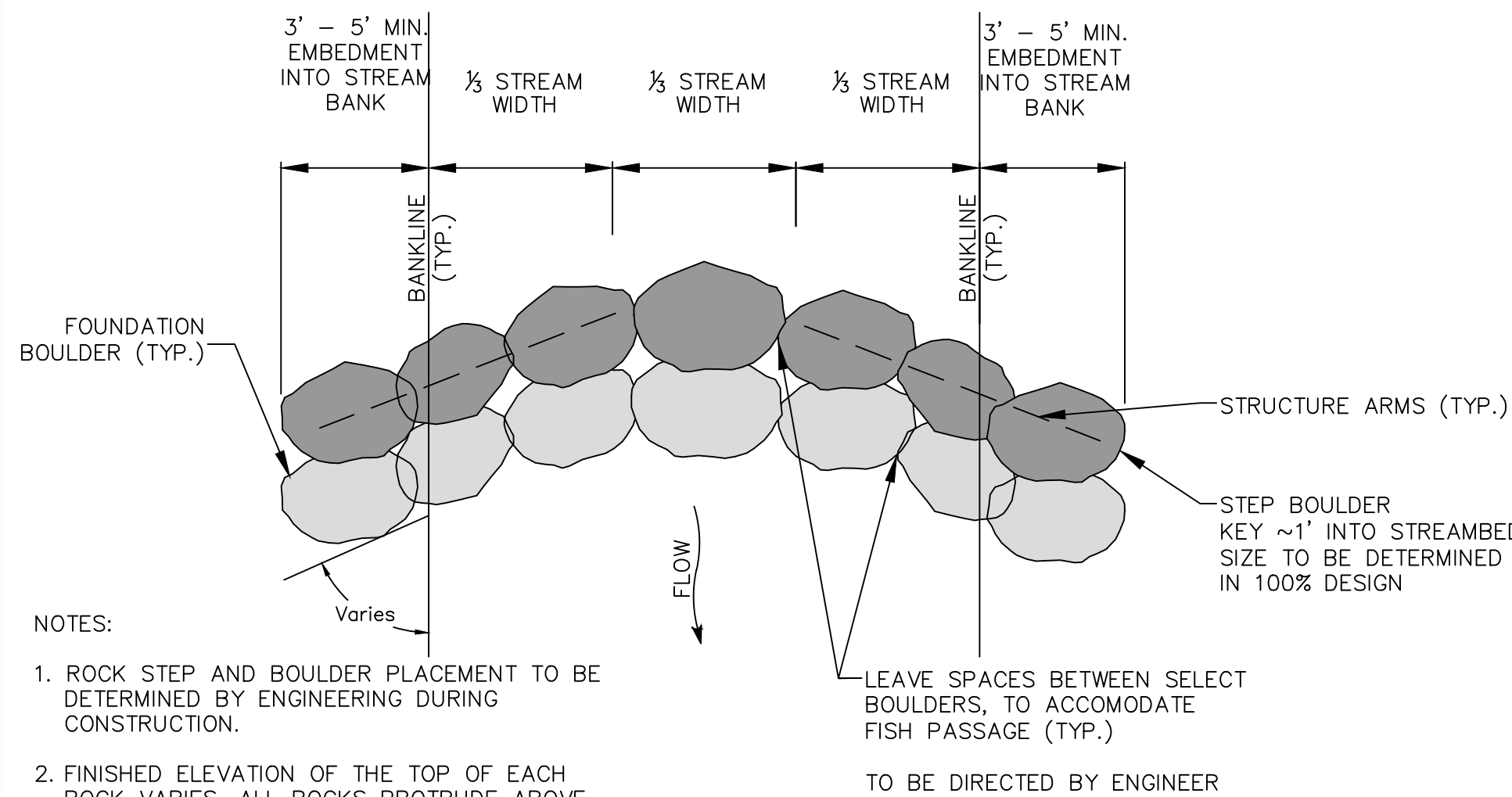
Wood Addition Detail - Section View

Scale: 1" = 2'



Typical Channel Cross Section

Scale: 1" = 5'



Rock Step - Plan View

Scale: NTS

30% DESIGN PLANS, NOT FOR PERMITTING OR CONSTRUCTION

FILE:

DRAWING CREDITS

DRAWN ON: 9/4/2020
DRAWN BY: GMB
CHECKED ON:
CHECKED BY:
PROJECT NO: 20-007

#	DATE	DRWN	CHK'D	APP'D	DESCRIPTION

REVISIONS

DRAWING SCALE

DRAWINGS ARE HALF SCALE WHEN PRINTED ON 11X17



STONE ENVIRONMENTAL

535 Stone Cutters Way / Montpelier / VT / 05602 / USA
802.229.4541 / info@stone-env.com / www.stone-env.com

HANDS MILL DAM REMOVAL
AT JAIL BRANCH
CHANNEL RESTORATION PROFILE & DETAILS
WASHINGTON VERMONT

FIGURE NO.

6