

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT IS ON VT 11 APPROXIMATELY 4.0 MILES EAST OF JUNCTION WITH VT 121 IN ANDOVER, VT. THIS PROJECT INVOLVES THE REMOVAL AND REPLACEMENT OF THE SUPER STRUCTURE ON BRIDGE NO. 41, AND MINOR ROADWAY APPROACH AND CHANNEL WORK. A NEW TWO LANE, PRECAST CONCRETE NEXT BEAM SUPERSTRUCTURE WILL BE PLACED ONTO A NEW BRIDGE SEAT OVER THE EXISTING ABUTMENTS. THE BRIDGE WILL BE CLOSED AND TRAFFIC WILL BE DETOURED FOR THE PERIOD OF CONSTRUCTION. THE TOTAL LENGTH OF THE PROJECT IS 325 FEET, INCLUDING ROADWAY APPROACHES.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.32 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE PROJECT SITE IS HILLY TO MOUNTAINOUS WITH SOME OF THE AREA HAVING EROSION DAMAGE FROM HURRICANE IRENE. THE PROJECT AREA CONSISTS OF ESTABLISHED VEGETATION WITH A MIXTURE OF SHRUBS AND GRASS, AND A GRAVEL DRIVEWAY. THERE ARE 3 RESIDENCES IN THE AREA AROUND THE BRIDGE.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE MIDDLE BRANCH OF WILLIAMS RIVER IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE RIVER IS CLASSIFIED AS SINUOUS, INCISED, AND ALLUVIAL WITH A CONFINED AND VULNERABLE CHANNEL AT THE SITE. THE STREAM BED CONSISTS OF GRAVEL, COBBLES, AND SOME BOULDERS. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF PATCHES OF WOODS, UNDERGROWTH AND GRASS. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REHABILITATING THE EXISTING BRIDGE. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE FOR THE COUNTY OF WINDSOR, VERMONT. SOILS ON THE PROJECT SITE ARE: COLTON, FINE SANDY LOAM, 3-8% SLOPES, "K FACTOR" = 0.17. THE SOIL IS CONSIDERED TO HAVE LOW EROSION POTENTIAL.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:

0.0-0.23 = LOW EROSION POTENTIAL
 0.24-0.36 = MODERATE EROSION POTENTIAL
 0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
 HISTORICAL OR ARCHEOLOGICAL AREAS: NO
 PRIME AGRICULTURAL LAND: NO
 THREATENED AND ENDANGERED SPECIES: NO
 WATER RESOURCE: MIDDLE BRANCH OF WILLIAMS RIVER
 WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED OF AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES.

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

TRACKING OF SEDIMENT ONTO PUBLIC HIGHWAYS SHALL BE MINIMIZED TO REDUCE THE POTENTIAL FOR RUNOFF ENTERING RECEIVING WATERS. INSTALLATION SHALL COINCIDE WITH THE CONTRACTORS PROGRESS SCHEDULE.

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE WILL BE INSTALLED AS PROPOSED ON THE EPSC CONSTRUCTION LAYOUT.

FILTER CURTAIN WILL BE INSTALLED AT THE DISCRETION OF THE ENGINEER.

1.4.5 DIVERT UPLAND RUNOFF

DIVERSIONARY MEASURES SHALL BE USED TO INTERCEPT RUNOFF FROM ABOVE THE CONSTRUCTION AND DIRECT IT AROUND THE DISTURBED AREA SO THAT CLEAN WATER DOES NOT BECOME MUDDIED WHILE TRAVELING OVER EXPOSED SOILS ON THE CONSTRUCTION SITE.

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSION POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

STONE CHECK DAMS ARE NOT ANTICIPATED ON THIS PROJECT.

1.4.7 CONSTRUCT PERMANENT CONTROLS

PERMANENT STORMWATER TREATMENT DEVICES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH PERMIT CONDITIONS.

NO PERMANENT CONTROLS ON THIS PROJECT.

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE OR IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT 3-9020 AUTHORIZATION.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

NO WINTER WORK IS ANTICIPATED.

1.4.10 STABILIZE SOIL AT FINAL GRADE

EXPOSED SOIL MUST BE STABILIZED WITHIN 48 HOURS OF REACHING FINAL GRADE.

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES

NO DISCHARGE FROM DEWATERING ACTIVITIES IS ANTICIPATED.

1.4.12 INSPECT YOUR SITE

INSPECT THE PROJECT SITE BASED ON SPECIAL PROVISION REQUIREMENTS OR CONSTRUCTION GENERAL PERMIT AUTHORIZATION STIPULATIONS.



Ronald K. Deel

REV. NO.		DATE:		<p>RENAUD BROS. INC. 283 FT. BRIDGEMAN RD., VERNON VT., 05354 PH. (802) 251-7585 FAX (802) 251-7508</p>	SHEET NAME: EPSC PLAN	
					PROJECT NAME: ANDOVER	SHEET NO. 1
					PROJECT NO: BHF 016-1 (29)	OF
					DRAWN BY: CE	CHK'D BY:
					DATE: 06/09/2015	7

1.5 SEQUENCE AND STAGING

1.5.1a CLEARING AND GRUBING

PDF FENCE
SILT FENCE

1.5.1b IN STREAM WORK

FILTER CURTAIN
STREAM EXCAVATION
GROUT BAGS
TYPE II STONE FILL
SLOPE TRACKING STABILIZATION
SEED, MULCH, EROSION MATTING

1.5.1c ABUTMENT WORK

MAINTAIN EROSION CONTROLS ALREADY IN PLACE

1.5.1d BRIDGE DECK

ALL SHEAR KEYS TO BE PLUGED AT THE BOTTOM BEFORE GROUTING
MAINTAIN EROSION CONTROLS ALREADY IN PLACE

1.5.1e ROAD CUT, PAVING, RAIL

PROTECT SIDE SLOPES
MAINTAIN EROSION CONTROLS ALREADY IN PLACE

1.5.1f FINAL EPSC ELEMNTS

INSTALL FINAL EPSC ELEMENTS PER PLAN, SEED, MULCH EROSION FABRIC
REMOVE TEMPORAY EPSC ELEMENTS UPON APPROVAL

1.5.2 OFF SITE ACTIVITIES

THE TRAILER SITE IS AT 1104 ROUTE 11
THE WASTE SITE IS CHAVES PIT OFF LAMPSON RD

1.6 CONTACT INFORMATION

1.6.1 ONSITE PLAN COORDINATOR

PRIMARY ONSITE CONTINUOUS REPRESENTATIVE

SCOTT SARGENT 802-380-9495

15 YEARS OF HEAVY CONSTRUCTION EXPERIENCE AND EROSION
CONTROL IMPLEMENTATION AND INSPECTION

SECONDARY ONSITE REPRESENTATIVE PRIMARY PLAN PREPARER

CHARLIE EZEQUELLE 802-365-1944

15 YEARS OF HEAVY CONSTRUCTION EXPERIENCE WITH 5 YEARS
OF EPSC PLAN DEVELOPMENT, IMPLEMENTATION AND INSPECTION

THIRD

DUANE FLETCHER 802-258-1863

20 + YEARS OF HEAVY CONSTRUCTION EXPERIENCE AND EROSION
CONTROL IMPLEMENTATION AND INSPECTION

SECONDARY PLAN PREPARER

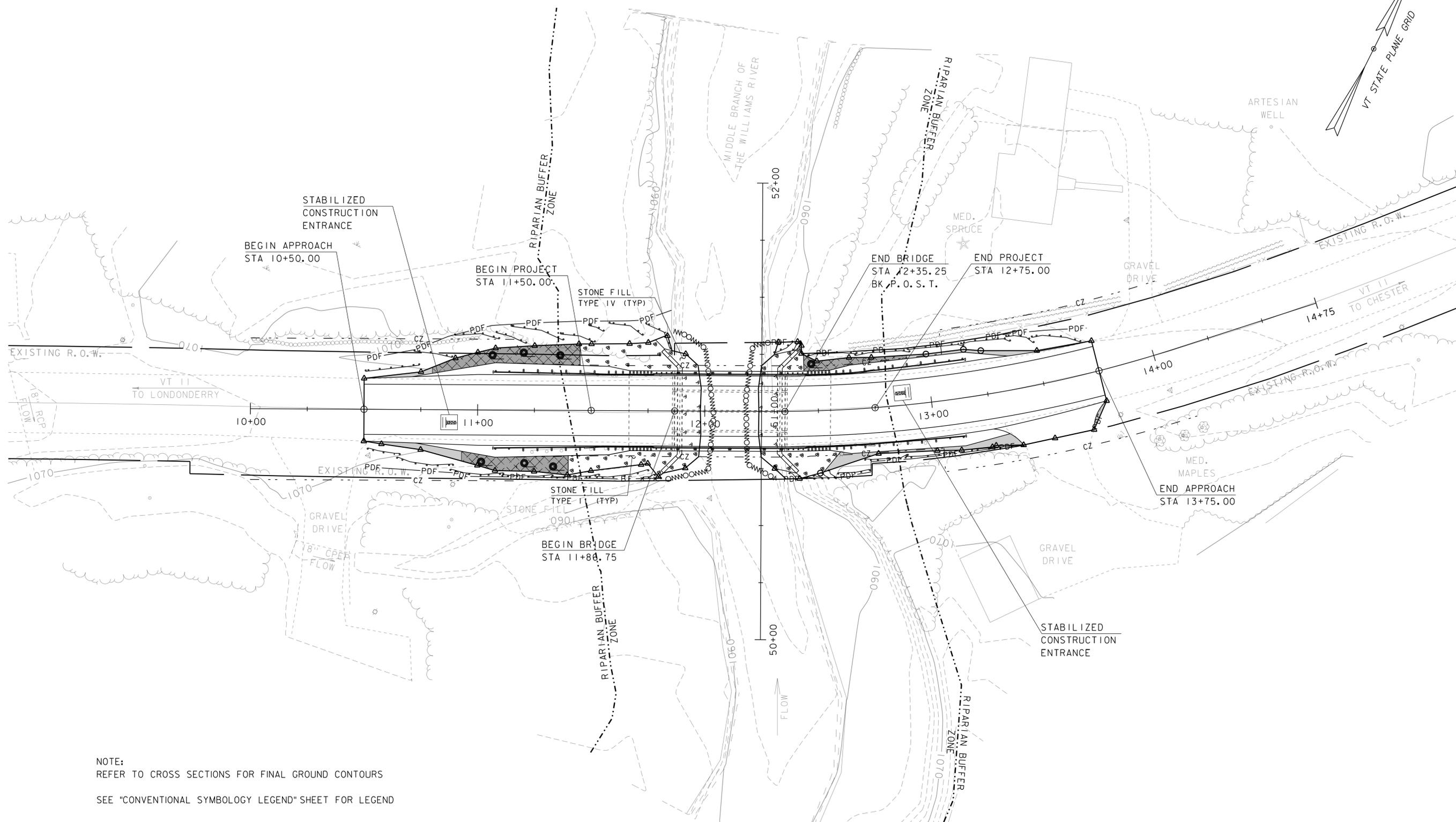
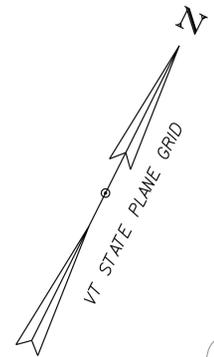
RON BELL 603-363-9966

REV. NO.	DATE:



RENAUD BROS. INC.
283 FT. BRIDGEMAN RD. VERNON VT. 05354
PH. (802) 251-7383 FAX (802) 251-7308

SHEET NAME: EPSC PLAN		
PROJECT NAME: ANDOVER	SHEET NO. 2	
PROJECT NO: BHF 016-1 (29)	OF 7	
DRAWN BY: CE	CHK'D BY:	DATE: 06/09/2015



NOTE:
 REFER TO CROSS SECTIONS FOR FINAL GROUND CONTOURS
 SEE "CONVENTIONAL SYMBOLOGY LEGEND" SHEET FOR LEGEND

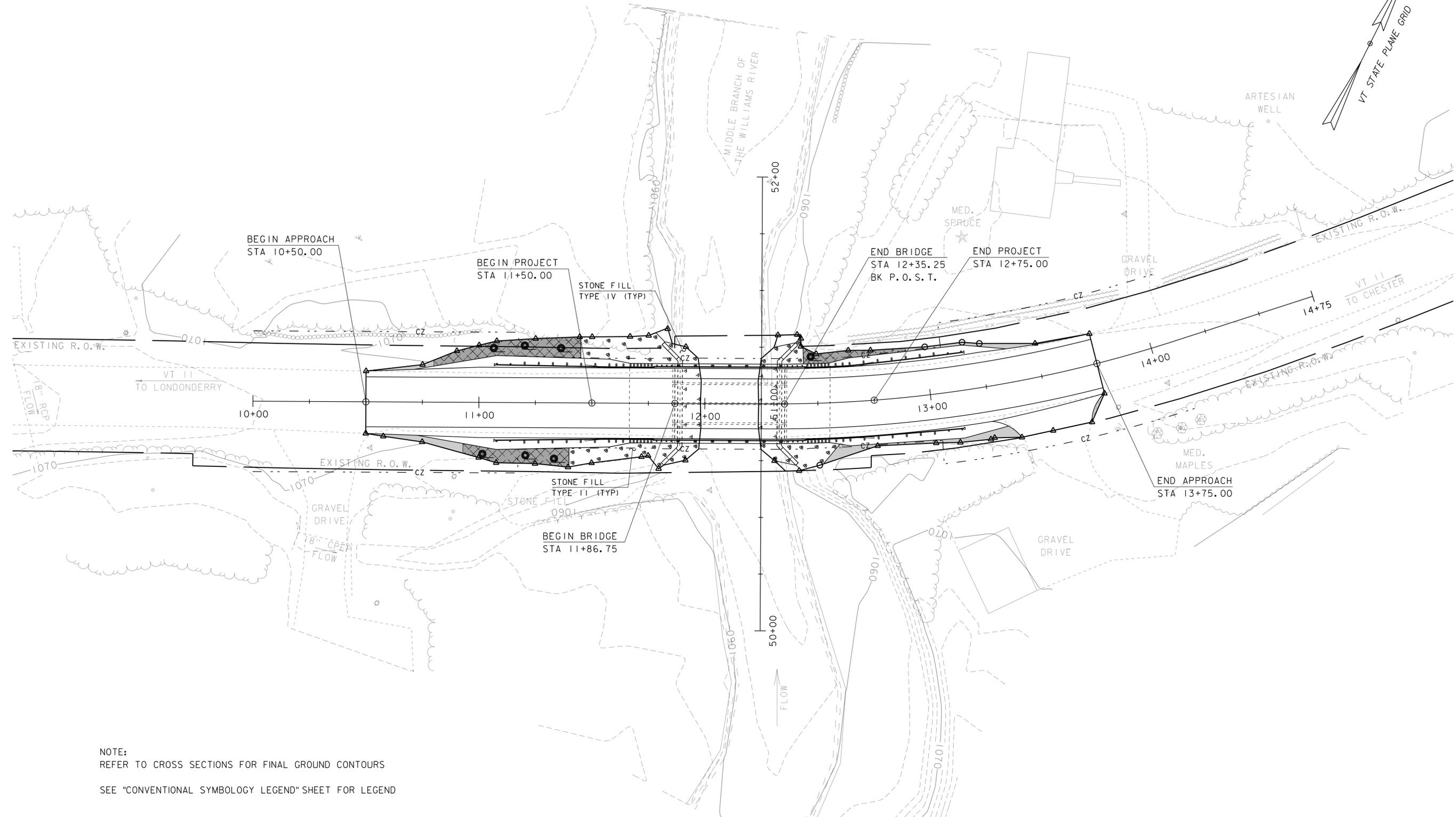
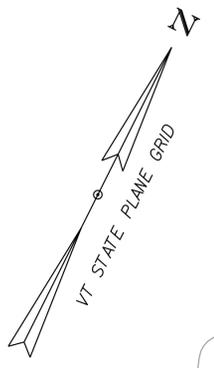
CONSTRUCTION LAYOUT

SCALE 1" = 20'-0"
 20 0 20

REV. NO.	DATE:

RENAUD BROS. INC.
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SHEET NAME: EPSC PLAN		SHEET NO. 3
PROJECT NAME: ANDOVER		
PROJECT NO: BHF 016-1 (29)		OF 7
DRAWN BY: CE	CHK'D BY:	



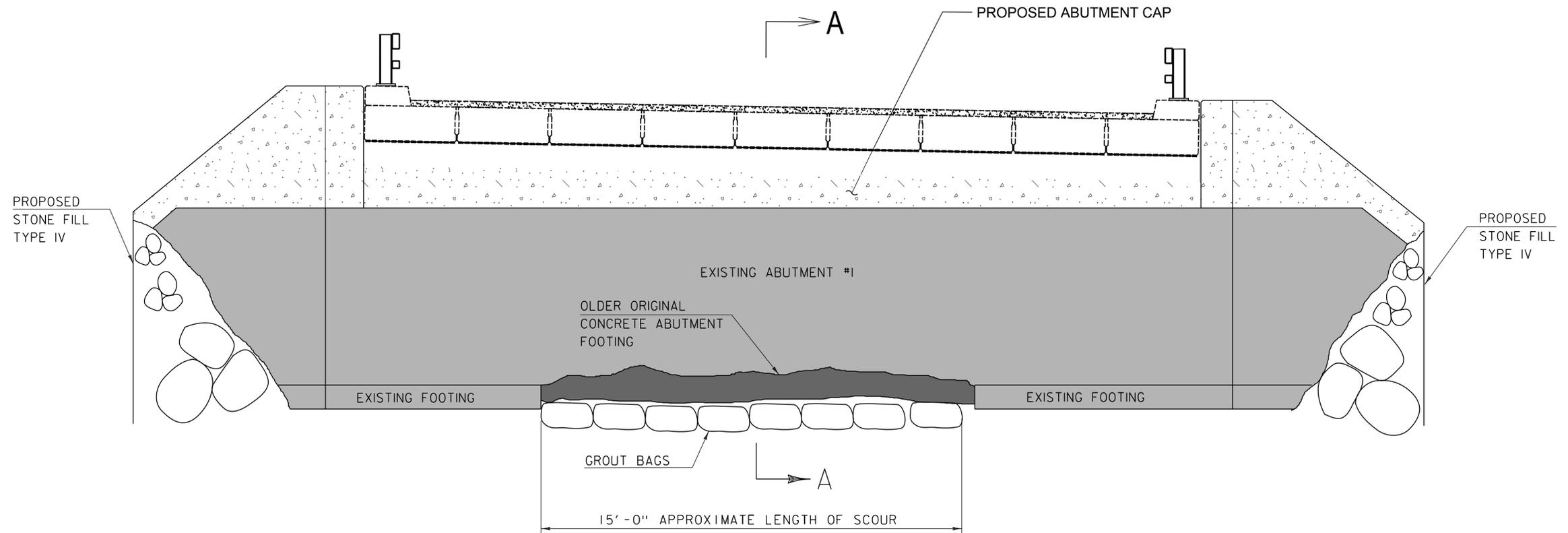
NOTE:
 REFER TO CROSS SECTIONS FOR FINAL GROUND CONTOURS
 SEE "CONVENTIONAL SYMBOLGY LEGEND" SHEET FOR LEGEND

FINAL LAYOUT
 SCALE 1" = 20' - 0"
 20 0 20

REV. NO.	DATE

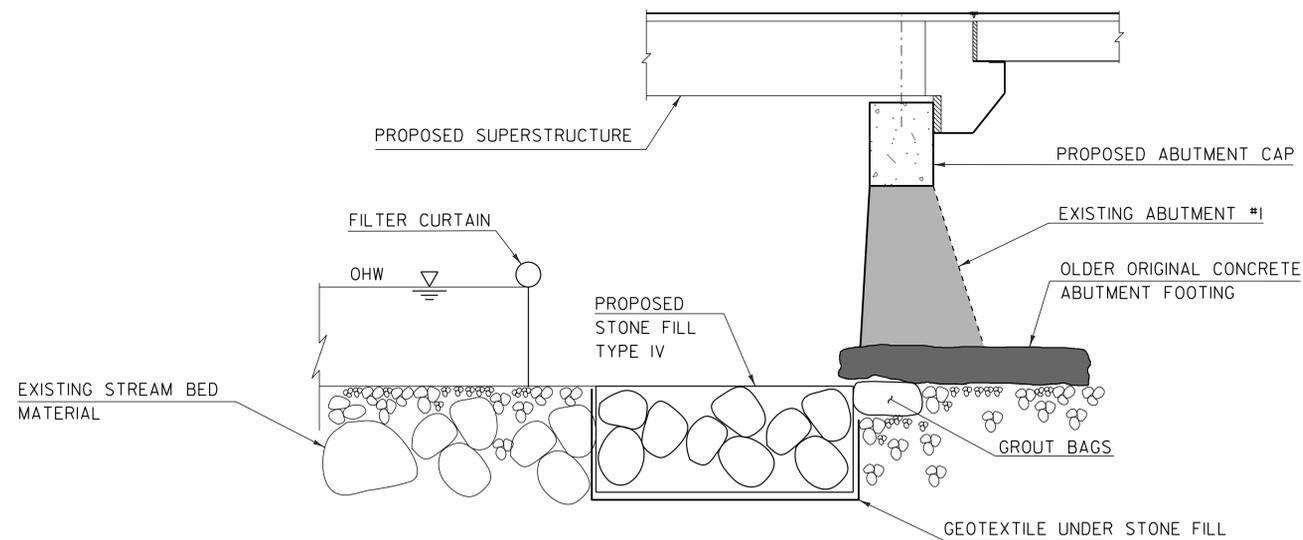
RENAUD BROS. INC.
 283 FT. BRIDGEMAN RD., VERNON VT., 05354
 PH. (802) 251-7383 FAX (802) 251-7308

SHEET NAME: EPSC PLAN		SHEET NO. 4 OF 7
PROJECT NAME: ANDOVER		
PROJECT NO: BHF 016-1 (29)		DRAWN BY: CE
CHK'D BY:	DATE: 06/09/2015	



GROUT BAG PLACEMENT ABUTMENT #1 ELEVATION

SCALE NTS



SECTION A-A

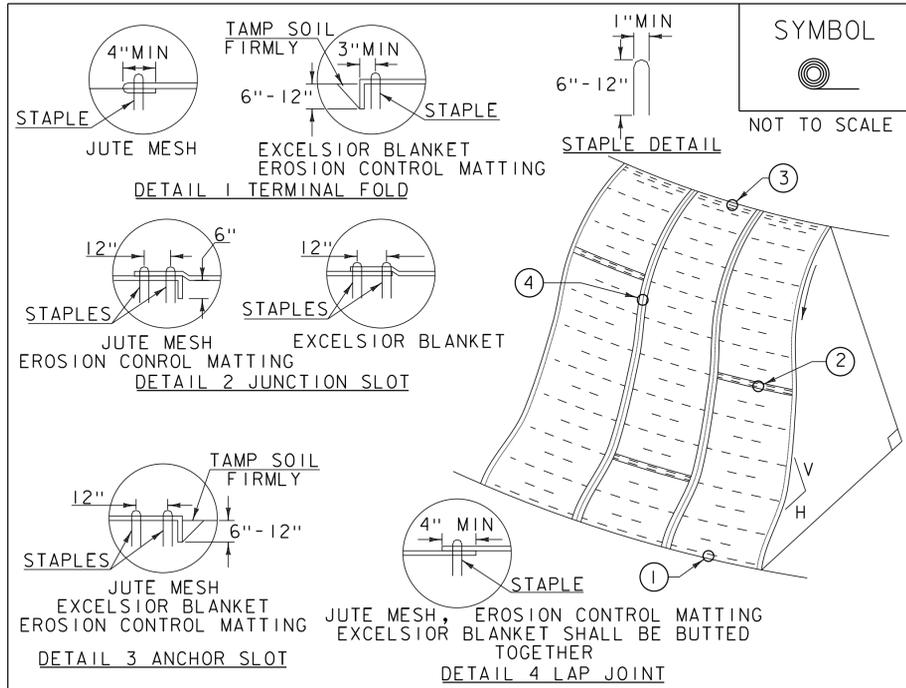
SCALE NTS

NOTE: PAYMENT FOR FURNISHING AND PLACING GROUT BAGS WILL BE UNDER CONTRACT ITEM 900.640 SPECIAL PROVISION (GROUT BAGS).

REV. NO.	DATE:

RENAUD BROS. INC.
 283 FT. BRIDGEMAN RD. VERNON VT. 05354
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SHEET NAME: EPSC PLAN		SHEET NO. 5
PROJECT NAME: ANDOVER		
PROJECT NO: BHF 016-1 (29)		OF 7
DRAWN BY: CE	CHK'D BY:	
DATE: 06/09/2015		



CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF

VAOT RURAL AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
37.5%	22.5	45	CREeping RED FESCUE	85%	98%
37.5%	22.5	45	TALL FESCUE	90%	95%
5.0%	3	6	RED TOP	90%	95%
15.0%	9	18	BIRDSFOOT TREFOIL	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	85%	95%
100%	60	120			

VAOT URBAN AREA MIX					
% WEIGHT	LBS/AC		NAME	GERM %	PURITY %
	BROADCAST	HYDROSEED			
42.5%	34	68	CREeping RED FESCUE	85%	98%
10.0%	8	16	PERENNIAL RYE GRASS	90%	95%
42.5%	34	68	KENTUCKY BLUE GRASS	85%	85%
5.0%	4	8	ANNUAL RYE GRASS	85%	95%
100%	80	160			

SOIL AMENDMENT GUIDANCE			
FERTILIZER		LIME	
BROADCAST	HYDROSEED	BROADCAST	HYDROSEED
10-20-10	FOLLOW	PELLETIZED	FOLLOW
500 LBS/AC	MANUFACTURER	2 TONS/AC	MANUFACTURER

CONSTRUCTION GUIDANCE

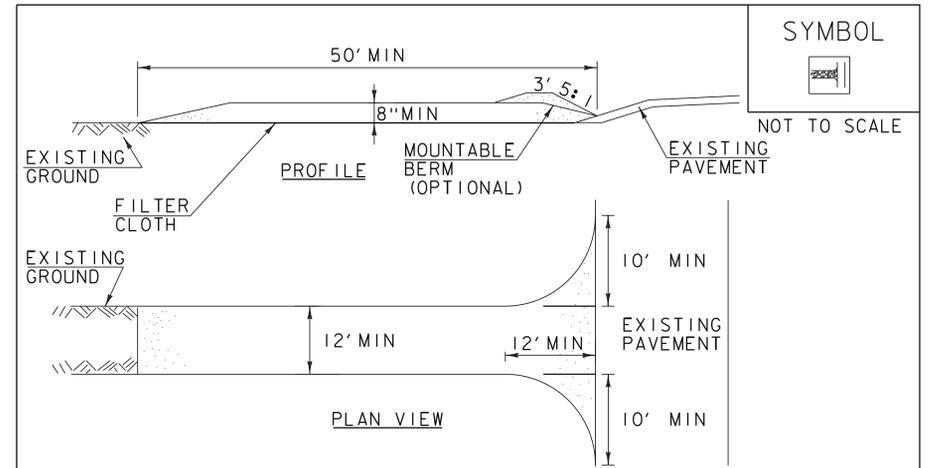
1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. TOPSOIL: TO BE USED WITH SEED AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
7. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
8. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

TURF ESTABLISHMENT

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)

REVISIONS	
JUNE 23, 2009	WHF
JANUARY 15, 2010	WHF
FEBRUARY 16, 2011	WHF



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30" MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED CONSTRUCTION ENTRANCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35) OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

SHEET NAME: **EPSC PLAN**

PROJECT NAME: **ANDOVER**

PROJECT NO: **BHF 016-1 (29)**

DRAWN BY: **CE** CHK'D BY: DATE: **06/09/2015**

SHEET NO.

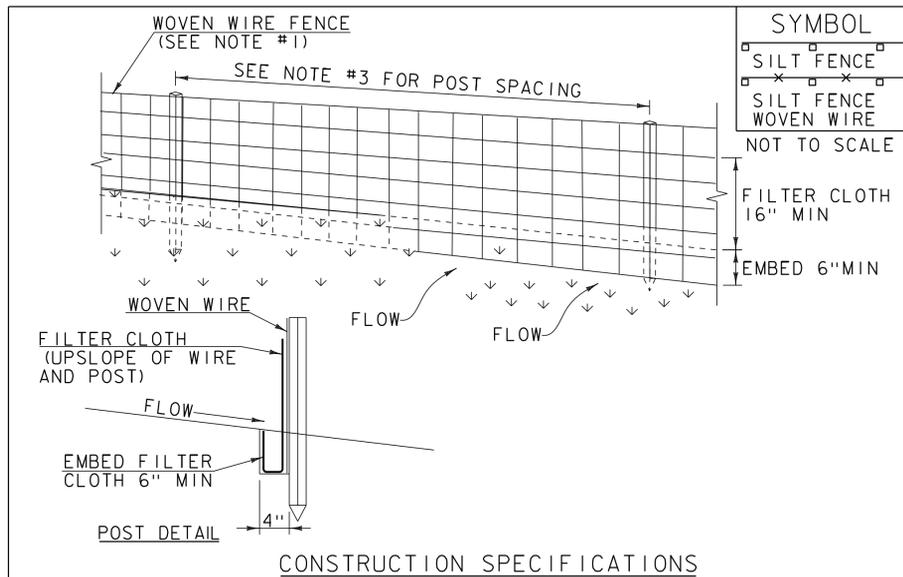
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OF

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REV. NO.	DATE

RENAUD BROS. INC.
2835 FT. BRIDGEMAN RD. VERNON VT. 05354
PH: (802) 251-7585 FAX: (802) 251-7508



1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAF1100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

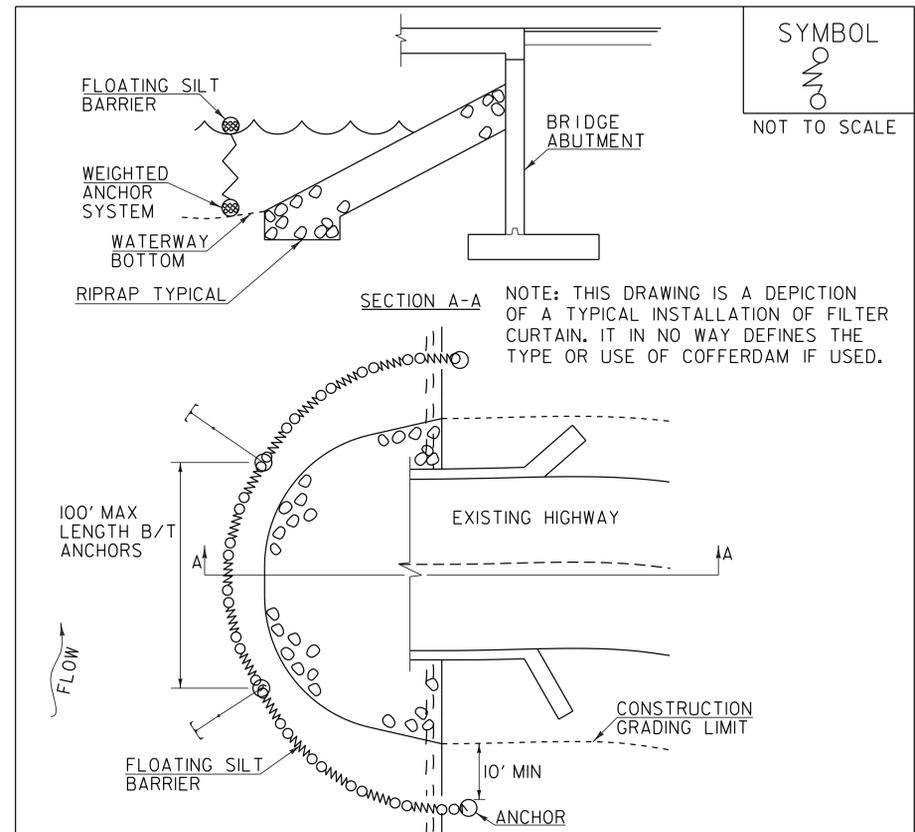
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

REVISIONS		
MARCH 21, 2008	WHF	
DECEMBER 11, 2008	WHF	
JANUARY 13, 2009	WHF	

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).



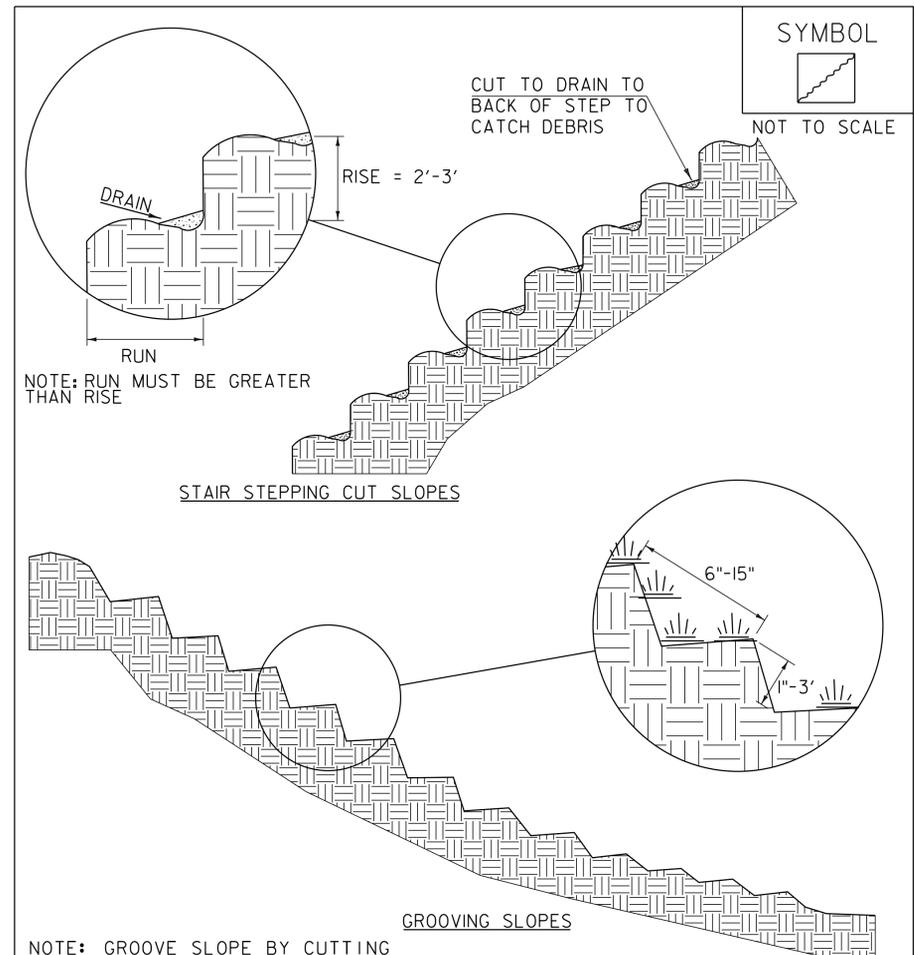
1. FILTER CURTAIN SHALL NOT BE PLACED ACROSS A FLOWING WATERWAY, OR IN A WATERWAY WITH STREAM VELOCITIES GREATER THAN 1.5 FEET/SECOND.
2. MAXIMUM 100' LENGTH BETWEEN ANCHORS.
3. LAST SECTION SHALL TERMINATE A MINIMUM OF 10' BEYOND LIMIT OF DISTURBANCE.
4. THE WEIGHTED ANCHOR SYSTEM SHALL BE A TYPE WHICH ALLOWS THE CURTAIN TO CONFORM TO THE BOTTOM OF THE WATERWAY.
5. THE CURTAIN SHALL BE REMOVED BY SLOWLY PULLING TOWARD THE SHORE MINIMIZING THE ESCAPE OF SEDIMENTS INTO WATERWAY.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

FILTER CURTAIN

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 649 FOR GEOTEXTILE FOR FILTER CURTAIN (PAY ITEM 649.61).

REVISIONS		
APRIL 1, 2008	WHF	
JANUARY 13, 2009	WHF	
SEPTEMBER 4, 2009	WHF	



1. GROOVE SLOPE BY CUTTING FURROWS ALONG THE CONTOUR. IRREGULARITIES IN THE SOIL SURFACE CATCH RAINWATER AND RETAIN LIME, FERTILIZER AND SEED.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SURFACE ROUGHENING

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

REVISIONS		
APRIL 1, 2008	WHF	
JANUARY 13, 2009	WHF	

THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT

REV. NO.		DATE		<p>RENAUD BROS. INC. 283 FT. BRIDGEMAN RD. VERNON VT. 05354 PH. (802) 251-7585 FAX (802) 251-7508</p>	SHEET NAME: EPSC PLAN	
PROJECT NAME: ANDOVER		SHEET NO. 7				
PROJECT NO: BHF 016-1 (29)		OF				
DRAWN BY: CE		DATE: 06/09/2015				
CHK'D BY:		DATE:				

			EPSC Plan Inspection Report (Non-Jurisdictional and Low Risk Projects)			
Project Name:			Date:		Time Since Last Storm:	
Inspector:			On-Site Coordinator: (signature required)			
Measure Inspected	Y	N	STA/Off	Corrective Action (CA) Required	Date CA Occurred	
Boundary Limits						
Site boundary markers are up and visible						
Disturbance is only occurring within marked boundaries						
Disturbance Area Limit						
Only acreage listed on <i>Authorization to Discharge</i> is disturbed at one time						
Stabilized Construction Entrance/Exit						
Off site tracking of sediment prevented						
Sediment Barriers						
Measure has been installed properly and is functioning as designed						
Accumulated sediment < ½ height of measure						
Diversions						
Upland stormwater is diverted around the work area						
Channelized Runoff						
Check structures are in place, extend the width of the channel, and have capacity to retain sediment in the next storm event						
Channels are stable with no erosion						
Exposed Soils Stabilization						
Seed and mulch, and/or matting placed in accordance w/ permit requirements and/or Specifications						
Soil is seeded and mulched or covered in erosion matting within 48 hours of final grade						
Winter Stabilization						
After Sept. 15' all disturbed areas are seeded & mulched to 3" deep or covered w/ matting						
For ongoing construction, exposed soil is mulched prior to forecasted events						
Dewatering Treatment						
Measure is preventing a discharge of turbid water from leaving the site						
Accumulated sediment is removed to allow sufficient treatment						

* Additional Measures and Discharges shall be reported on the back side of this form.



EPSC Plan Inspection Report (Non-Jurisdictional and Low Risk Projects)

Measure Inspected	Y	N	STA/Off	Corrective Action	Date Taken
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Additional Measures

Discharges Noted

* If there is a discharge of visibly discolored stormwater from the construction site to waters of the state, the On-Site Plan Coordinator shall inform the Resident Engineer and take corrective action and report the discharge in accordance with Section 6.1 of Permit 3-9020.

ID	Task Name	Duration	Remaining Duration	Early Start	Actual Start	Early Finish	Actual Finish	Total Slack	% Complete	Predecessors	'15	Apr 19 '15	Apr 26 '15	May 3 '15	May 10 '15	May 17 '15	May 24 '15	May 31 '15	Jun 7 '15	Jun 14 '15	Jun 21 '15	Jun 28 '15	Jul 5 '15	Jul 12 '15	Jul 19 '15	Jul 26 '15	Aug 2 '15	Aug 9 '15	Aug 16 '15	Aug 23 '15	Aug 30 '15	S
1	PRE-CONSTRUCTION	56 days	20.76 days	Thu 4-16-15	Thu 4-16-15	Thu 7-2-15	NA	45 days	63%																							
2	NOTICE TO PROCEED	1 day	0 days	Mon 4-27-15	Mon 4-27-15	Mon 4-27-15	Mon 4-27-15	0 days	100%																							
3	CONCEPTUAL VALUE ENGINEERING SUBMITTAL	0 days	0 days	Thu 4-16-15	Thu 4-16-15	Fri 4-17-15	Fri 4-17-15	0 days	100%	2																						
4	CVE REVIEW	4 days	0 days	Fri 4-17-15	Fri 4-17-15	Thu 4-23-15	Thu 4-23-15	0 days	100%	3																						
5	TRAFFIC CONTROL PLAN	3 days	0 days	Mon 6-8-15	Mon 6-8-15	Wed 6-10-15	Wed 6-10-15	0 days	100%	2																						
6	TRAFFIC CONTROL PLAN REVIEW	10 days	9.5 days	Wed 6-10-15	Wed 6-10-15	Wed 6-24-15	NA	36.5 days	5%	5																						
7	DETAILED VALUE ENGINEERING SUBMITTAL	0 days	0 days	Fri 4-17-15	Fri 4-17-15	Fri 4-17-15	Fri 4-17-15	0 days	100%	4																						
8	DVE REVIEW	14 days	7 days	Fri 4-17-15	Fri 4-17-15	Thu 5-7-15	NA	52.5 days	50%	7																						
9	PRECAST BEAMS SUBMITTAL	13 days	0 days	Thu 4-23-15	Thu 4-23-15	Thu 5-14-15	Thu 5-14-15	0 days	100%	2																						
10	PRECAST BEAMS SUBMITTAL REVIEW	23 days	0 days	Thu 5-14-15	Thu 5-14-15	Tue 6-16-15	Tue 6-16-15	0 days	100%	9																						
11	EROSION CONTROL PLAN	4 days	0 days	Mon 6-8-15	Mon 6-8-15	Thu 6-11-15	Thu 6-11-15	0 days	100%	2																						
12	EROSION CONTROL PLAN REVIEW	10 days	9.5 days	Thu 6-11-15	Thu 6-11-15	Thu 6-25-15	NA	50 days	5%	11																						
13	APPROCH SLAB SUBMITTAL	2 days	0 days	Wed 4-22-15	Wed 4-22-15	Wed 4-29-15	Wed 4-29-15	0 days	100%	2																						
14	APPROCH SLAB SUBMITTAL REVIEW	21 days	5.25 days	Wed 4-29-15	Wed 4-29-15	Thu 5-28-15	NA	42 days	75%	13																						
15	RIGGING PLAN SUBMITTAL	2 days	2 days	Thu 5-14-15	Thu 5-14-15	Thu 6-18-15	NA	38 days	0%	10																						
16	RIGGING PLAN SUBMITTAL REVIEW	10 days	10 days	Fri 6-19-15	NA	Thu 7-2-15	NA	38 days	0%	15																						
17	BRIDGE RAIL SUBMITTAL	3 days	0 days	Mon 4-27-15	Mon 4-27-15	Thu 4-30-15	Thu 4-30-15	0 days	100%	2																						
18	BRIDGE RAIL SUBMITTAL REVIEW	10 days	2.5 days	Thu 4-30-15	Thu 4-30-15	Thu 5-14-15	NA	68.5 days	75%	17																						
19	GROUT BAG SUBMITTAL	2 days	0 days	Fri 5-1-15	Fri 5-1-15	Mon 5-4-15	Mon 5-4-15	0 days	100%	2																						
20	GROUT BAG SUBMITTAL REVIEW	10 days	0 days	Mon 5-4-15	Mon 5-4-15	Mon 5-18-15	Mon 5-18-15	0 days	100%	19																						
21	CONCRETE MIX DESIGNS SUBMITTALS	0 days	0 days	Fri 4-24-15	Fri 4-24-15	Fri 4-24-15	Fri 4-24-15	0 days	100%	2																						
22	CONCRETE MIX DESIGNS SUBMITTAL REVIEW	10 days	5 days	Fri 4-24-15	Fri 4-24-15	Fri 5-8-15	NA	66.88 days	50%	21																						
23	REINFORCING DRAWING SUBMITTAL	7 days	0 days	Mon 6-1-15	Mon 6-1-15	Tue 6-9-15	Tue 6-9-15	0 days	100%	2																						
24	REINFORCING DRAWING SUBMITTAL REVIEW	10 days	9.5 days	Tue 6-9-15	Tue 6-9-15	Tue 6-23-15	NA	34.88 days	5%	23																						
25	BEARING DEVICE SUBMITTAL	2 days	0 days	Tue 6-9-15	Tue 6-9-15	Wed 6-10-15	Wed 6-10-15	0 days	100%	2																						
26	BEARING DEVICE SUBMITTAL REVIEW	0 days	0 days	Wed 6-10-15	Wed 6-10-15	Wed 6-10-15	Wed 6-10-15	0 days	100%	25																						
27	BITUMINOUS CONCRETE PAVEMENT	5 days	5 days	Mon 6-1-15	Mon 6-1-15	Fri 6-5-15	NA	48 days	0%	2																						
28	BITUMINOUS CONCRETE PAVEMENT REVIEW	10 days	10 days	Mon 6-8-15	NA	Fri 6-19-15	NA	48 days	0%	27																						
29	CPM SCHEDULE	34 days	0 days	Thu 4-23-15	Thu 4-23-15	Fri 6-12-15	Fri 6-12-15	0 days	100%	2																						
30	CPM SCHEDULE REVIEW	10 days	10 days	Fri 6-12-15	Fri 6-12-15	Fri 6-26-15	NA	25.88 days	0%	29																						
31	CONSTRUCTION	93 days	93 days	Wed 4-29-15	Wed 4-29-15	Fri 9-4-15	NA	0 days	0%																							
32	APPROACH SLAB F,R & P	22 days	22 days	Wed 4-29-15	Wed 4-29-15	Mon 6-29-15	NA	42 days	0%	14																						
33	PRE-CAST BEAMS	18 days	18 days	Wed 6-17-15	NA	Fri 7-10-15	NA	24.5 days	0%	10,8																						
34	MOBILIZATION	1 day	1 day	Mon 6-29-15	NA	Mon 6-29-15	NA	25.88 days	0%	30																						
35	EROSION CONTROL	1 day	1 day	Mon 6-29-15	NA	Mon 6-29-15	NA	49 days	0%	34FS-1 day,12																						
36	TRAFFIC CONTROL	5 days	5 days	Tue 6-30-15	NA	Mon 7-6-15	NA	33.5 days	0%	34.6																						
37	GROUT BAGS	5 days	5 days	Tue 6-30-15	NA	Mon 7-6-15	NA	35 days	0%	34.20																						
38	WING WALL SAW CUTTING	5 days	5 days	Tue 6-30-15	NA	Mon 7-6-15	NA	25.88 days	0%	34																						

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											W	T	F	S	S	M	T	W	F	S	S	M	T	W	F	S	S	M	T	W	F	S
39	GRANULAR MATERIALS STOCK PILE	5 days	5 days	Tue 6-30-15	NA	Mon 7-6-15	NA	35.75 days	0%	34																						
40	WING WALL F.R & P	10 days	10 days	Tue 7-7-15	NA	Mon 7-20-15	NA	25.88 days	0%	38,24,22																						
41	FACIA BEAM CURBS	8 days	8 days	Mon 7-6-15	NA	Wed 7-15-15	NA	24.5 days	0%	33FS-5 days																						
42	BRIDGE RAIL	2 days	2 days	Thu 7-16-15	NA	Fri 7-17-15	NA	24.5 days	0%	18,41																						
43	PRE-CLOSURE MEETING	4 hrs	4 hrs	Mon 7-20-15	NA	Mon 7-20-15	NA	196 hrs	0%	36,42																						
44	ROAD CLOSURE START	4 hrs	4 hrs	Mon 7-20-15	NA	Mon 7-20-15	NA	822 hrs	0%	43																						
45	BRIDGE DECK DEMO	27 hrs	27 hrs	Mon 7-20-15	NA	Tue 7-21-15	NA	822 hrs	0%	44																						
46	BRIDGE SEAT SAW CUTTING ABUTMENT 1	5 hrs	5 hrs	Tue 7-21-15	NA	Tue 7-21-15	NA	822 hrs	0%	45FS-1 day																						
47	BRIDGE SEAT SAW CUTTING ABUTMENT 2	5 hrs	5 hrs	Tue 7-21-15	NA	Tue 7-21-15	NA	822 hrs	0%	45FS-1 day																						
48	STONE FILL @ ABUTMENT 1	8 hrs	8 hrs	Tue 7-21-15	NA	Wed 7-22-15	NA	822 hrs	0%	46,37																						
49	STONE FILL @ ABUTMENT 2	8 hrs	8 hrs	Tue 7-21-15	NA	Wed 7-22-15	NA	822 hrs	0%	47																						
50	DRILL DOWELS @ ABUTMENT 1	10 hrs	10 hrs	Wed 7-22-15	NA	Wed 7-22-15	NA	822 hrs	0%	48																						
51	DRILL DOWELS @ ABUTMENT 2	10 hrs	10 hrs	Wed 7-22-15	NA	Wed 7-22-15	NA	822 hrs	0%	49																						
52	ABUTMENT 1 F.R & P	10 hrs	10 hrs	Wed 7-22-15	NA	Wed 7-22-15	NA	822 hrs	0%	50,40																						
53	ABUTMENT 2 F.R & P	10 hrs	10 hrs	Wed 7-22-15	NA	Wed 7-22-15	NA	822 hrs	0%	51																						
54	ABUTMENT 1 ROAD CUT	24 hrs	24 hrs	Wed 7-22-15	NA	Thu 7-23-15	NA	831 hrs	0%	48,39																						
55	ABUTMENT 2 ROAD CUT	24 hrs	24 hrs	Wed 7-22-15	NA	Thu 7-23-15	NA	831 hrs	0%	49																						
56	SET SUPERSTRUCTURE	10 hrs	10 hrs	Wed 7-22-15	NA	Thu 7-23-15	NA	822 hrs	0%	53,16,52																						
57	FIRST POST TENSION	2 hrs	2 hrs	Wed 7-22-15	NA	Thu 7-23-15	NA	828 hrs	0%	56FS-1 day																						
58	GROUT SHEAR KEYS	4 hrs	4 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	822 hrs	0%	57,56																						
59	SECOND POST TENSION	3 hrs	3 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	822 hrs	0%	58																						
60	APPROACH SLAB 1 SUBGRADE	4 hrs	4 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	831 hrs	0%	54																						
61	APPROACH SLAB 2 SUBGRADE	4 hrs	4 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	831 hrs	0%	55																						
62	SET APPROCH SLAB 1	4 hrs	4 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	831 hrs	0%	60,32																						
63	SET APPROACH SLAB 2	4 hrs	4 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	831 hrs	0%	61																						
64	APPROACH SLAB CLOSURE POURS	4 hrs	4 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	831 hrs	0%	62FS-1 day,63FS-1 day																						
65	BRIDGE DECK MEMBRANE	10 hrs	10 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	822 hrs	0%	59																						
66	FINAL GRADING	10 hrs	10 hrs	Thu 7-23-15	NA	Thu 7-23-15	NA	831 hrs	0%	64																						
67	BASE PAVING	10 hrs	10 hrs	Thu 7-23-15	NA	Fri 7-24-15	NA	822 hrs	0%	66,28,65																						
68	GUARD RAIL	10 hrs	10 hrs	Fri 7-24-15	NA	Fri 7-24-15	NA	822 hrs	0%	67																						
69	COLD PLANE	5 hrs	5 hrs	Fri 7-24-15	NA	Sat 7-25-15	NA	822 hrs	0%	68																						
70	FINAL PAVING	10 hrs	10 hrs	Fri 7-24-15	NA	Sat 7-25-15	NA	822 hrs	0%	69FS-1 day																						
71	LINE STRIPING	4 hrs	4 hrs	Sat 7-25-15	NA	Sat 7-25-15	NA	822 hrs	0%	70																						
72	OPEN ROAD	4 hrs	4 hrs	Fri 7-24-15	NA	Sat 7-25-15	NA	822 hrs	0%	71FS-1 day																						
73	FINAL EPSC AND SEEDING	3 days	3 days	Mon 7-27-15	NA	Wed 7-29-15	NA	24 days	0%	72																						
74	SUBSTANTIAL COMPLETION	1 day	1 day	Thu 7-30-15	NA	Thu 7-30-15	NA	24 days	0%	73																						
75	DEMobilIZATION	1 day	1 day	Fri 7-31-15	NA	Fri 7-31-15	NA	24 days	0%	74																						
76	CONTRACT COMPLETION	1 day	1 day	Fri 9-4-15	NA	Fri 9-4-15	NA	0 days	0%	75																						

