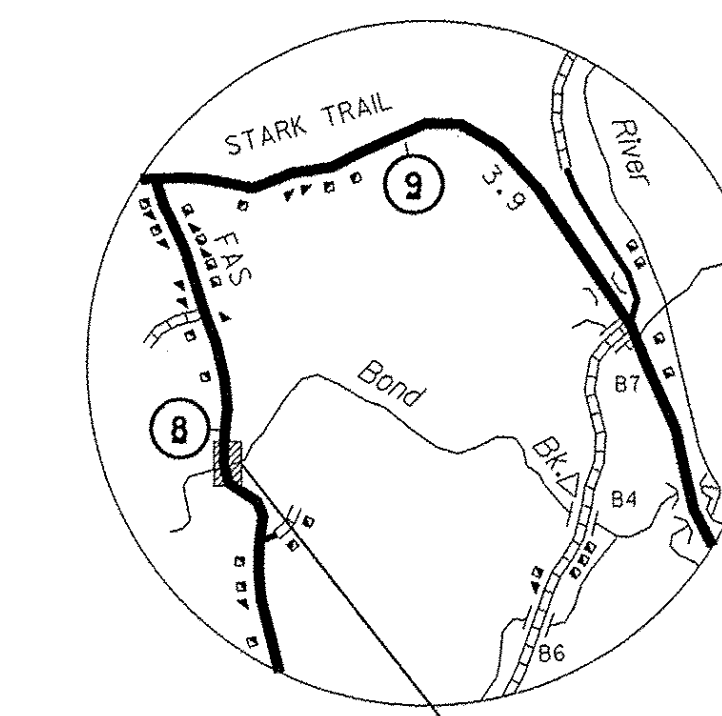


INDEX OF SHEETS
(SEE SHEET 2)

STATE OF VERMONT AGENCY OF TRANSPORTATION

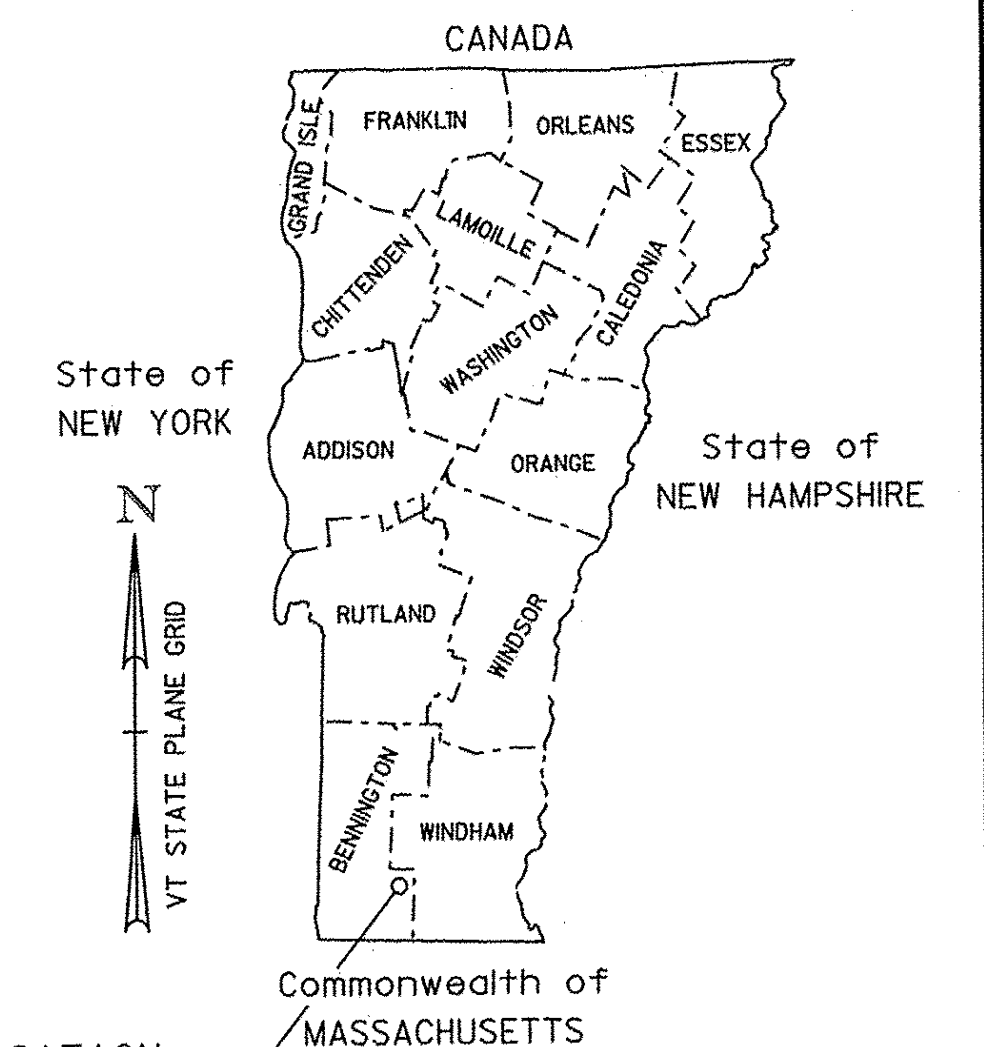


PROPOSED IMPROVEMENT TOWN OF SEARSBURG COUNTY OF BENNINGTON VT ROUTE 8 (MAJOR COLLECTOR) BRIDGE #4



SCALE IN MILES

PROJECT LOCATION
SEARSBURG STP SCRP (7)

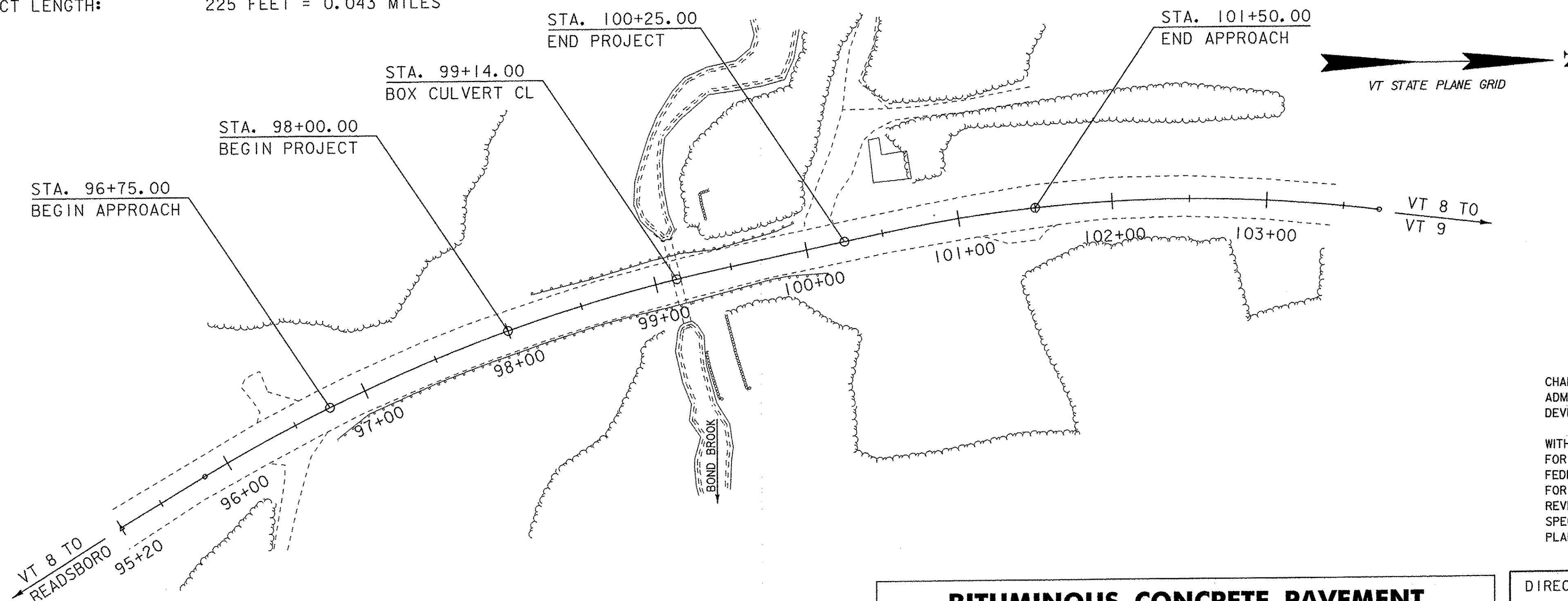


RECORD PLANS	
CONTRACTOR:	B.U.R. CONSTRUCTION, LLC, CLAREMONT, NH
RESIDENT ENGINEER:	RON LEMAIRE
CONSTRUCTION BEGAN:	JULY 8, 2013
CONSTRUCTION COMPLETE:	JUNE 28, 2014
RECORD PLANS BY:	RON LEMAIRE & CHIP PIERCE
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY	RESIDENT ENGINEER
DATE	2/20/15
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.	

PROJECT LOCATION: BEGINNING AT A POINT IN THE TOWN OF SEARSBURG, ON VT ROUTE 8, APPROXIMATELY 1.856 MILES FROM THE READSBORO TOWN LINE AND EXTENDING NORTHERLY APPROXIMATELY 0.043 MILES TO MILE MARKER 1.899.

PROJECT INFORMATION: WORK TO BE PERFORMED UNDER THIS PROJECT CONSISTS OF INSTALLATION OF NEW BOX CULVERT, HEAD WALLS, WING WALLS, GUARD RAIL, EARTHWORKS, AND OTHER INCIDENTAL ROADWAY ITEMS.

PROJECT LENGTH: 225 FEET = 0.043 MILES



QUALITY ASSURANCE PROGRAM: LEVEL 2

CONVENTIONAL SYMBOLS

COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

SURVEYED BY : LGO
SURVEYED DATE : 4/26/11

DATUM
VERTICAL NAVD88
HORIZONTAL NAV83(2007)

BITUMINOUS CONCRETE PAVEMENT SUPER PAVE DESIGN MIXTURE CRITERIA

DESIGN LIFE ESAL'S (DESIGN LANE)	287,280
DESIGN NUMBER OF GYRATIONS	65
PERFORMANCE GRADED ASPHALT BINDER	SEE SUBSECTION 490.03(b)

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED: DATE 2-28-15
PROJECT MANAGER : KEN UPMAL
PROJECT NAME : SEARSBURG
PROJECT NUMBER : STP SCRP (7)
SHEET 1 OF 35 SHEETS

LRFD

TRAFFIC DATA																														PROJECT NUMBER: STP SCRP(7)																			
YEAR	ADT	DHV	% D	% T	ADTT	20 year ESAL for flexible pavement from 2032 to 2052 : 230000														FILE NAME: d10c198_Pi Sheet Builder_v00										PLOT DATE: 2/27/2013																			
2032	580	65	56	5.9	35	40 year ESAL for flexible pavement from 2032 to 2072 : 513000														PROJECT LEADER: K. UPMAL										DRAWN BY: B. MCADAMS																			
2052	610	70	56	8.1	50	Design Speed : 50 mph														DESIGNED BY: B. MCADAMS										CHECKED BY: A. KEMPTON																			
																														PRELIMINARY INFORMATION SHEET										SHEET 2 OF 35									

PRECAST CONCRETE BOX NOTES

DESIGN CRITERIA:

1. A. SOIL UNIT WEIGHT = 140 PCF
B. DESIGN LIVE LOAD = HL-93
C. REINFORCING STEEL GRADE = 60 KSI
D. CONCRETE, HIGH PERFORMANCE CLASS A f_c : 4000
CONCRETE, HIGH PERFORMANCE CLASS B f_c : 3500
E. MAX. WINGWALL FOOTING PRESSURE = 4 KSF
F. FACTOR OF SAFETY FOR SLIDING $\geq$ 2.0
G. FACTOR OF SAFETY FOR OVERTURNING $\geq$ 1.5
H. DESIGN FILL OVER BOX = 11.7 FT
2. ALL CONCRETE SHALL BE PRECAST. PRECAST BOX STRUCTURE SHALL MEET THE REQUIREMENTS OF 2011 STANDARD SPECIFICATION FOR CONSTRUCTION SECTION 540 - PRECAST CONCRETE. ITEM 540.10 PRECAST CONCRETE STRUCTURE INCLUDES ALL BOX SEGMENTS, HEADWALLS, WINGWALLS, AND MEMBRANE WATERPROOFING, AND WATER REPELLENT. ALL CONNECTIONS SHALL BE DESIGNED BY THE FABRICATOR AND SHALL BE CONSIDERED INCIDENTAL TO ITEM 540.10. WORKING DRAWINGS SHALL BE SUBMITTED IN ACCORDANCE WITH SUBSECTION 105.03
3. THE PRECAST BOX SECTIONS ARE SHOWN FOR REFERENCE ONLY. THE ACTUAL DIMENSIONS AND SHAPE WILL BE DEPENDENT ON THE FABRICATOR. ALL UNITS EXCEPT THE FIRST AND LAST WILL BE THE SAME SHAPE AND THE SAME LENGTH. THE INSIDE DIMENSIONS SHALL BE 7'-0" RISE AND 12'-0" SPAN. THE OVERALL LENGTH OF THE BOX SHALL BE 80'-0" ALONG THE DEPICTED VERTICAL ALIGNMENT.
4. THE EXTERIOR (TOP AND SIDES) OF ALL CONCRETE BOX JOINTS ALONG WITH ALL LIFTING HOLES SHALL BE FILLED WITH MORTAR TYPE IV AFTER BEING SET IN THEIR FINAL POSITION. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 540.10.
5. A TWO (2) FOOT WIDE STRIP OF SHEET MEMBRANE WATERPROOFING SHALL BE APPLIED TO THE SIDES AT EACH BOX JOINT, AND TO THE ENTIRE TOP OF THE BOX CULVERT. MEMBRANE SHALL BE CENTERED ON THE JOINT AND COVER THE FULL WIDTH OF THE TOP AND FULL HEIGHT OF THE SIDES. THE SIDES SHALL BE COVERED FIRST AND THE TOP WILL FOLLOW. ANY OVERLAPPING OF MEMBRANE SHALL BE DONE IN A SHINGLE TYPE STYLE TO SHED WATER AND SHALL OVERLAP A MINIMUM OF ONE FOOT. PAYMENT FOR THE SHEET MEMBRANE SHALL BE CONSIDERED INCIDENTAL TO ITEM 540.10 PRECAST CONCRETE STRUCTURE.
6. THE STRUCTURE WILL BE INSTALLED AT A GRADE OF 5.2490%.
7. WATER REPELLENT, SILANE SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 514 AND SHALL BE APPLIED TO ALL EXPOSED SURFACES OF THE WINGWALLS AND HEADWALLS. WATER REPELLENT, SILANE SHALL BE APPLIED TO THE EXPOSED INSIDE SURFACE OF THE BOX STARTING AT THE OPENING AT EACH END AND EXTENDING 3 FEET INTO THE BOX, INCLUDING THE BOTTOM SURFACE OF THE TOP OF THE BOX.
8. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:
SPACING +/- 1"
CLEARANCE +/- 1/4"
9. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" X 1".
10. THE PROPOSED BOX CULVERT SHALL BE INSTALLED IN DRY CONDITIONS, ANY USE OF A DIVERSION PIPE OR BYPASS PUMPING TO ACHIEVE THESE CONDITIONS SHALL BE PAID UNDER ITEM 900.645 SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM).

PROJECT NAME: SEARSBURG
PROJECT NUMBER: STP SCRP(7)

FILE NAME: dl0cl98_forms.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
PRECAST CONCRETE BOX NOTES	SHEET 3 OF 35

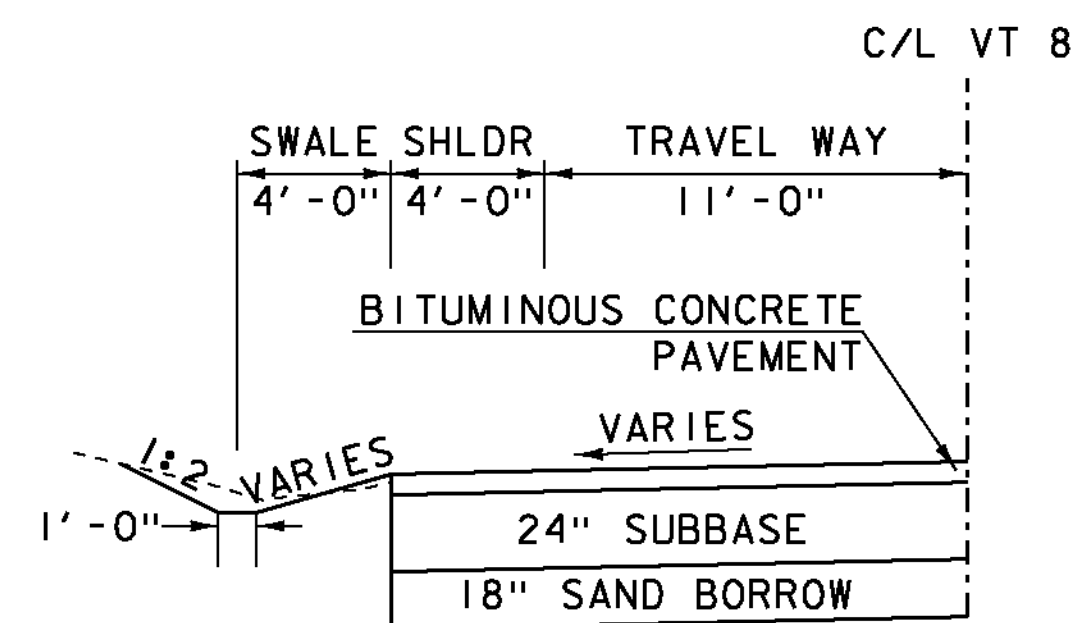
TYPICAL SECTIONS

(THIS SHEET NOT TO SCALE)

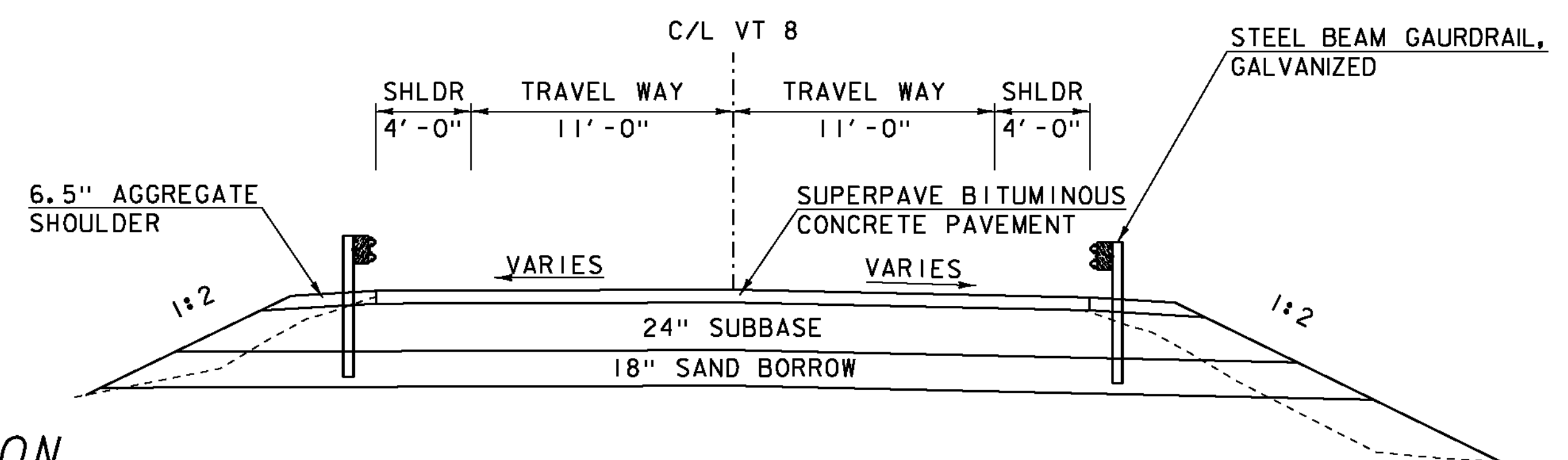
1.50"	SUPERPAVE	BITUMINOUS	CONCRETE	PAVEMENT (TYPE IVS)
2.50"	SUPERPAVE	BITUMINOUS	CONCRETE	PAVEMENT (TYPE IIS)
2.50"	SUPERPAVE	BITUMINOUS	CONCRETE	PAVEMENT (TYPE IIS)
24.00"	SUBBASE OF DENSE GRADED CRUSHED STONE			
18.00"	SAND BORROW			

GENERAL NOTES

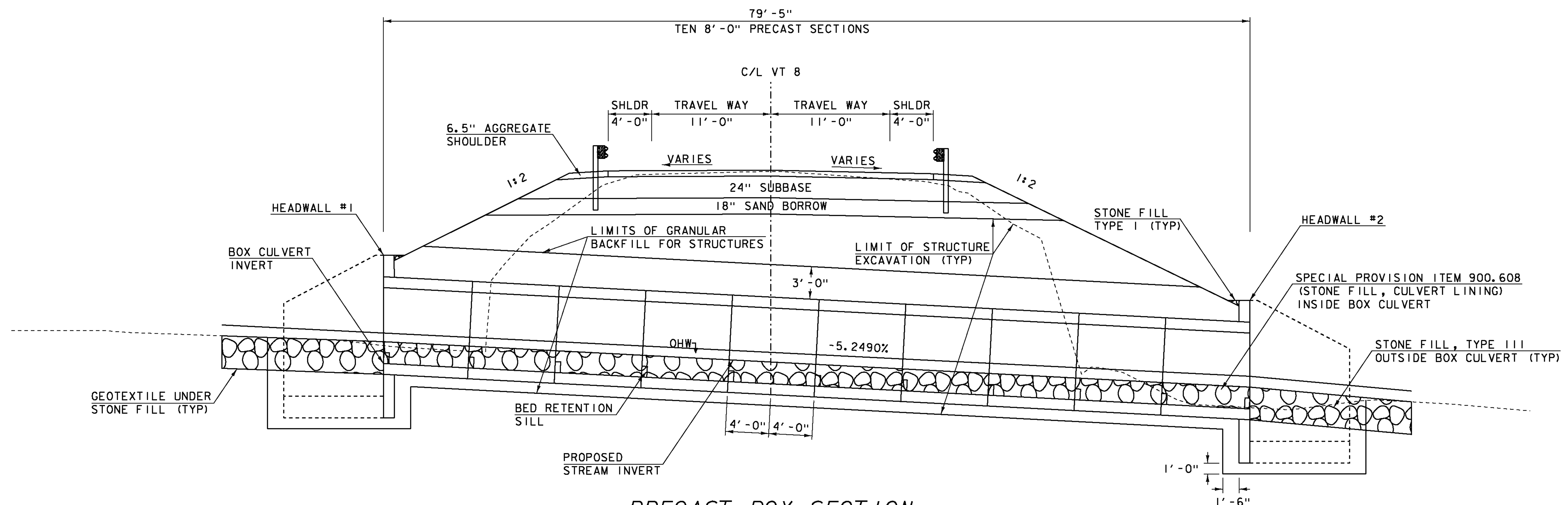
1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR CONSTRUCTION, DATED 2011, AND ITS LATEST REVISIONS, AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SEVENTEENTH EDITION, AND ITS LATEST REVISIONS.
2. EMBANKMENT MATERIAL SHALL BE PROPERLY COMPACTED IN ACCORDANCE WITH THE "2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION."
3. DEPTH OF COVER FROM TOP OF BOX TO THE PAVEMENT FINAL GRADE AT THE ROADWAY CENTERLINE EQUALS 11.7 FEET.
4. BOX INVERT SURFACE SHALL BE CONSTRUCTED OF NATURAL STREAM BED MATERIAL.
5. AT MINIMUM 1 FOOT OF MATERIAL SHALL BE EXCAVATED BELOW THE BOTTOM OF THE BOX CULVERT AND FOOTINGS.
6. GRANULAR BACKFILL FOR STRUCTURES SHALL BE PLACED TO MINIMUM DEPTH OF 1 FOOT BELOW BOX CULVERT, 3 FEET ON TOP, AND 1.5 FEET ON THE SIDES OF THE BOX CULVERT.
7. ITEM 404.65 EMULSIFIED ASPHALT IS TO BE APPLIED AT A RATE OF 0.025 GAL/SY BETWEEN SUCCESSIVE COURSES OF PAVEMENT AND AT A RATE OF 0.08 GAL/SY ON ALL MILLED SURFACES, OR AS DIRECTED BY THE ENGINEER.



TYPICAL ROADWAY SWALE SECTION
STA. 100+93.00 TO 100+60.00 LT
NOT TO SCALE



TYPICAL ROADWAY SECTION
NOT TO SCALE



PRECAST BOX SECTION
NOT TO SCALE

PROJECT NAME:	SEARSBURG
PROJECT NUMBER:	STP SCRP(7)

FILE NAME: dIOcl98_+yp.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. MCADAMS
TYPICAL SECTIONS SHEET I

PLOT DATE: 27-FEB-2013
DRAWN BY: B. MCADAMS
CHECKED BY: A. KEMPTON
SHEET 4 OF 35

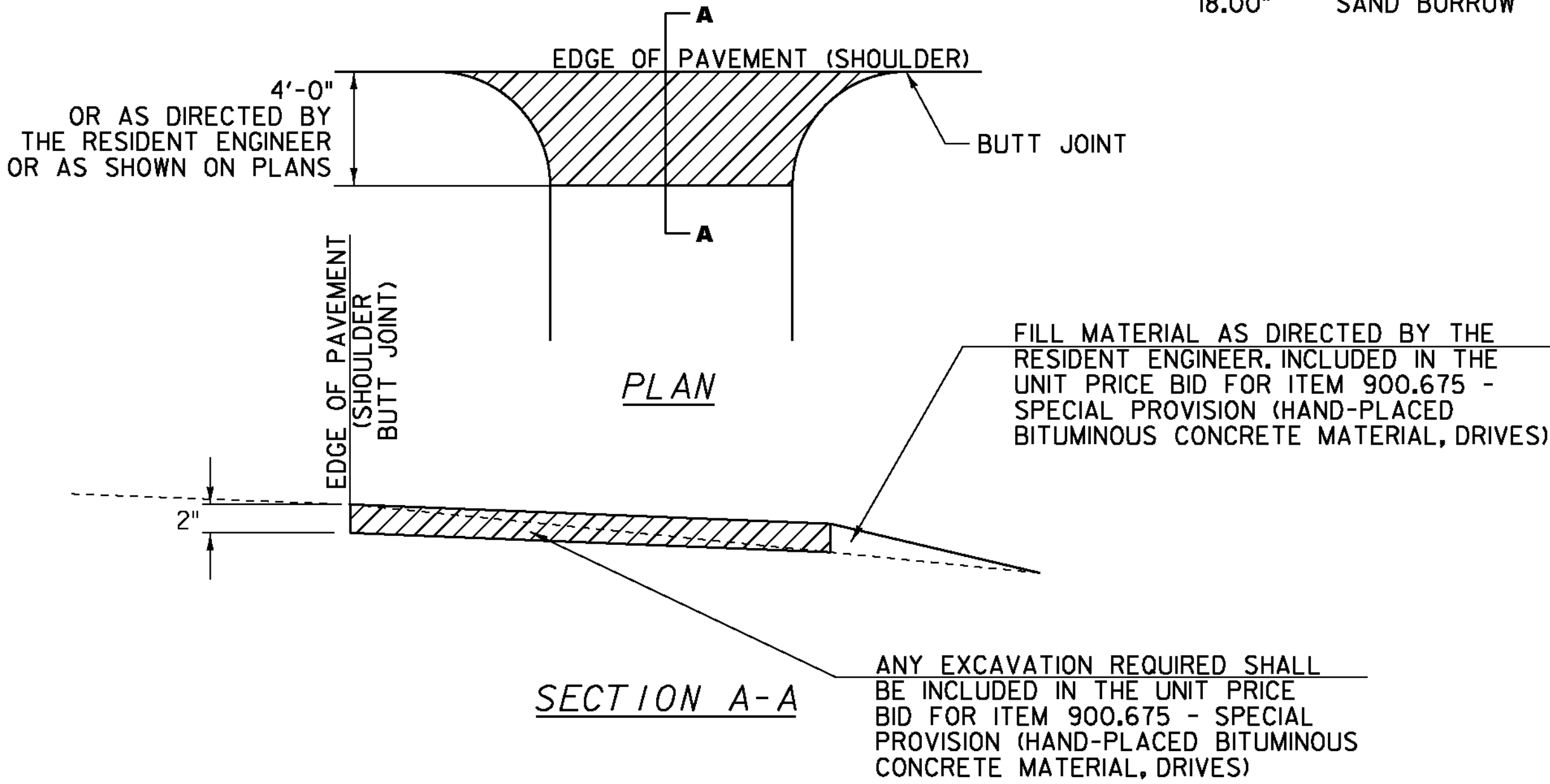
TYPICAL SECTIONS

(THIS SHEET NOT TO SCALE)

1.50"	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IVS)
2.50"	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS)
2.50"	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (TYPE IIS)
24.00"	SUBBASE OF DENSE GRADED CRUSHED STONE
18.00"	SAND BORROW

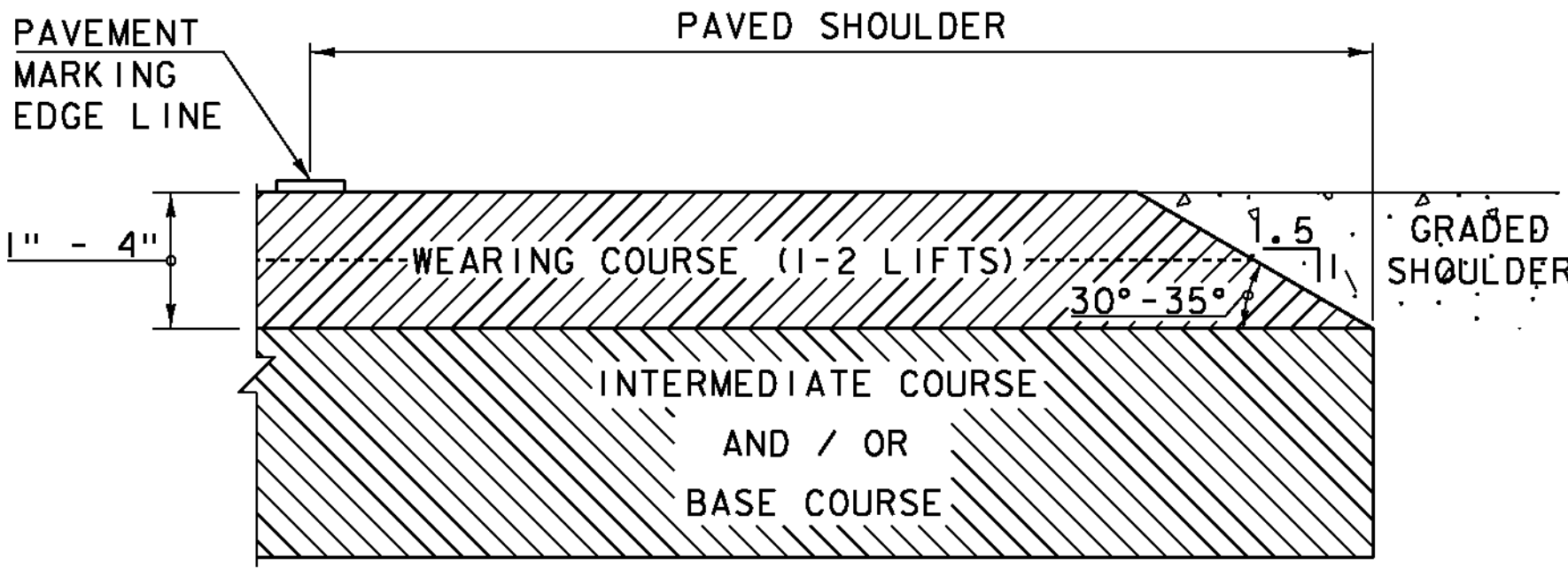
THICKNESS TOLERANCES

PAVEMENT	1/4" +/-	TOTAL DEPTH
SUBBASE	1" +/-	TOTAL DEPTH
SAND	1" +/-	TOTAL DEPTH

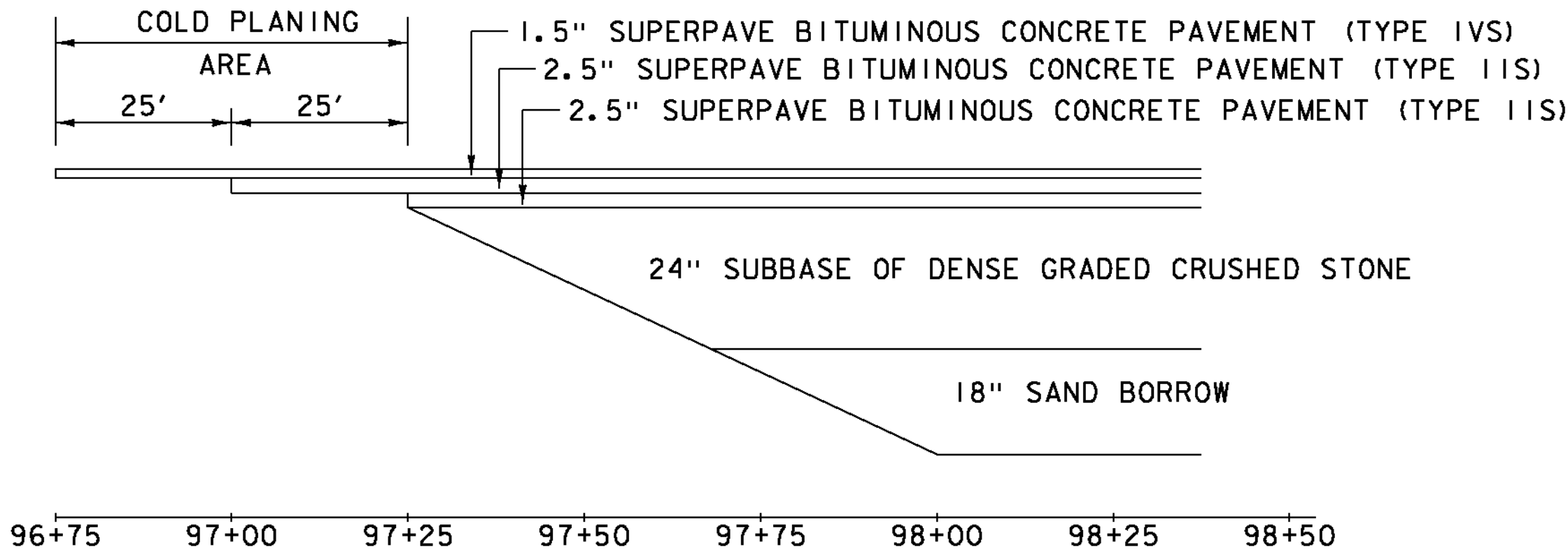


AREAS FOR ITEM 900.675 - SPECIAL PROVISION
(HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)

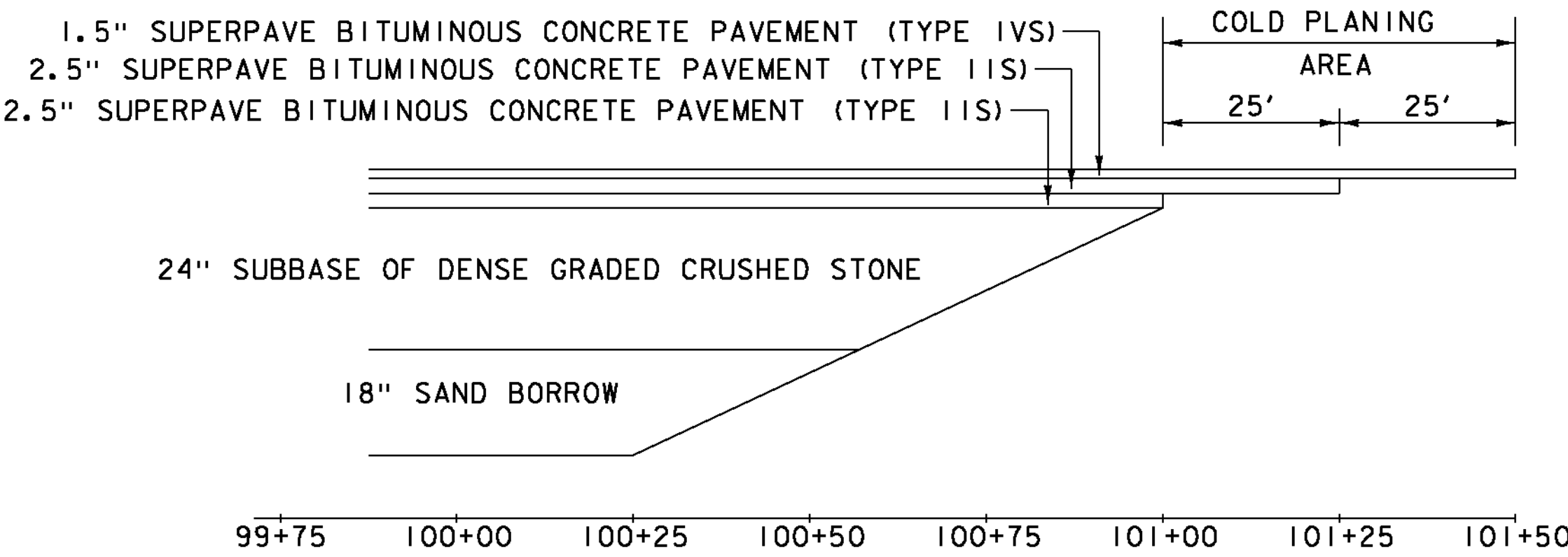
HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES
DETAIL
NOT TO SCALE



SAFETY EDGE DETAIL
NOT TO SCALE



MATERIAL TRANSITION DETAIL
BEGIN APPROACH
NOT TO SCALE



MATERIAL TRANSITION DETAIL
END APPROACH
NOT TO SCALE

PROJECT NAME: SEARSBURG
PROJECT NUMBER: STP SCRP(7)

FILE NAME: d10c198.typ.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. MCADAMS
TYPICAL SECTIONS SHEET 2
PLOT DATE: 27-FEB-2013
DRAWN BY: B. MCADAMS
CHECKED BY: A. KEMPTON
SHEET 5 OF 35

STATE OF VERMONT AGENCY OF TRANSPORTATION														QUANTITY SHEET 1													
SUMMARY OF ESTIMATED QUANTITIES														TOTALS		DESCRIPTIONS						DETAILED SUMMARY OF QUANTITIES					
									ROADWAY	EROSION CONTROL	BRIDGE	FULL CE ITEMS		GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS					
									1					1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	-			EARTHWORK SUMMARY					
									1510					1510		CY	COMMON EXCAVATION	203.15	5	1505	CY	COMMON EXCAVATION					
											60			60		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	6	54	CY	UNCLASIFIED CHANNEL EXCAVATION					
									610					610		CY	EARTH BORROW	203.30	7	1006	CY	STRUCTURE EXCAVATION					
									640					640		CY	SAND BORROW	203.31	9	2565	CY	SUBTOTAL					
									1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	-	15	CY	ROUND					
											1010			1010		CY	STRUCTURE EXCAVATION	204.25	4	2580	CY	TOTAL FILL AVAILABLE					
											590			590		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	3	0.75	-	REDUCTION FACTOR					
									310					310		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	9	1935	CY	TOTAL FACTORED FILL AVAILABLE					
									910					910		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	11	603	CY	TOTAL FILL REQUIRED					
									50					50		CY	AGGREGATE SHOULDERS, IN PLACE	402.10	5	1332	CY	TOTAL WASTE					
									4					4		CWT	EMULSIFIED ASPHALT	404.65	0.4								
									1					1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-								
											1			1		EACH	REMOVAL OF STRUCTURE (5'-0" X 5'-0" X 55'-0" BOX CULVERT)	529.15	-								
											1			1		LS	PRECAST CONCRETE STRUCTURE (12'-0" x 7'-0" x 80'-0" BOX CULVERT)	540.10	-								
																	BEGIN OPTION AA										
									60					60		LF	15" CSP .079 (2-2/3 X 1/2)	601.0011	-								
									60					60		LF	15" RCP CLASS III	601.0810	-								
																	END OPTION AA										
											5			5		CY	STONE FILL, TYPE I	613.10	4								
											85			85		CY	STONE FILL, TYPE III	613.12	5								
									463					463		LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20	-								
									4					4		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	-								
									520					520		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	EST								
									40					40		HR	FLAGGERS	630.15	EST								
												1		1		LS	FIELD OFFICE, ENGINEERS	631.10	-								
												1		1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-								
												3000		3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-								
									1					1		LS	MOBILIZATION/DEMOBILIZATION	635.11	-								
									960					960		LF	DURABLE 4 INCH WHITE LINE, THERMOPLASTIC	646.402	EST								
									960					960		LF	DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC	646.412	EST								
											85			85		SY	GEOTEXTILE UNDER STONE FILL	649.31	5								
										60				60		SY	GEOTEXTILE FOR SILT FENCE	649.51	EST								
									20					20		LB	SEED	651.15	EST								
									75					75		LB	FERTILIZER	651.18	EST								
									0.3					0.3		TON	AGRICULTURAL LIMESTONE	651.20	EST								
									0.5					0.5		TON	HAY MULCH	651.25	EST								
									50					50		CY	TOPSOIL	651.35	EST								
									1					1		LS	EPSC PLAN	652.10	-								
									20					20		HR	MONITORING EPSC PLAN	652.20	-								
																		PROJECT NAME: SEARSBURG									
																		PROJECT NUMBER: STP SCRP(7)									
																		FILE NAME: d10ci98_forms.dgn									
																		PLOT DATE: 19-MAR-2013									
																		PROJECT LEADER: K. UPMAL									
																		DRAWN BY: B. MCADAMS									
																		DESIGNED BY: B. MCADAMS									
																		CHECKED BY: A. KEMPTON									
																		QUANTITY SHEET 1									
																		SHEET 6 OF 35									

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES												TOTALS		DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES				
									ROADWAY	EROSION CONTROL	BRIDGE	FULL CE ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
										1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30	-			
										1100			1100		SY	TEMPORARY EROSION MATTING	653.20	56			
										36			36		CY	VEHICLE TRACKING PAD	653.35	-			
										1050			1050		LF	PROJECT DEMARCATION FENCE	653.55	EST			
										20			20		LF	EROSION LOG	653.60	-			
								0.33					0.33		SF	TRAFFIC SIGNS, TYPE A	675.20	-			
								6					6		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	-			
								1					1		EACH	REMOVING SIGNS	675.50	-			
								1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-			
										75			75		CY	SPECIAL PROVISION (STONE FILL, CULVERT LINING)	900.608	4			
										1			1		LS	SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)	900.645	-			
								1					1		LS	SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)	900.645	-			
								1					1		LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I.)	900.650	-			
								1					1		LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT) (N.A.B.I.)	900.650	-			
								11					11		SY	SPECIAL PROVISION (HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES)	900.675	1			
								520					520		TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680	3			

GPS CONTROL POINTS

HVCTRL #1
B95038

NORTH = 144719.608
EAST = 1515736.325
ELEV. = 2126.030

DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1995 (CHR)
GENERAL LOCATION, SEARSBURG, VT., ABOUT 5 MI (8.0 KM) WEST OF WILMINGTON, VT., ABOUT 12 MI (19.3 KM) EAST OF BENNINGTON, AND ABOUT 11 MI (17.7 KM) NORTH OF THE MASSACHUSETTS/VERMONT STATE LINE. TO REACH FROM THE INTERSECTION OF VT ROUTES 9 AND 8 IN SEARSBURG GO EAST ALONG VT ROUTE 9 FOR 0.6 MI (1.0 KM) TO A TRUCK ESCAPE RAMP AND THE MARK ON THE RIGHT. THE MARK IS SET 3 CM BELOW GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT POURED 1.6 M (5.2 FT) DEEP. IT IS 17.9 M (58.7 FT) SOUTH OF AND ABOUT 2 M (6.6 FT) HIGHER THAN THE CENTERLINE OF VT ROUTE 9, 1.0 M (3.3 FT) NORTH OF THE NORTH EDGE OF THE CRUSHED STONE TRUCK ESCAPE RAMP, 10.3 M (33.8 FT) SOUTHWEST OF POLE NO. 354/607/13 1/2, 18.8 M (61.7 FT) EAST OF A RUNAWAY TRUCK SIGN WITH FLASHING LIGHTS, AND 0.5 M (1.6 FT) NORTH OF A FIBERGLASS WITNESS POST. NOTE, THIS MARK IS INTERVISIBLE WITH MARK B95037.

HVCTRL #2
B95037

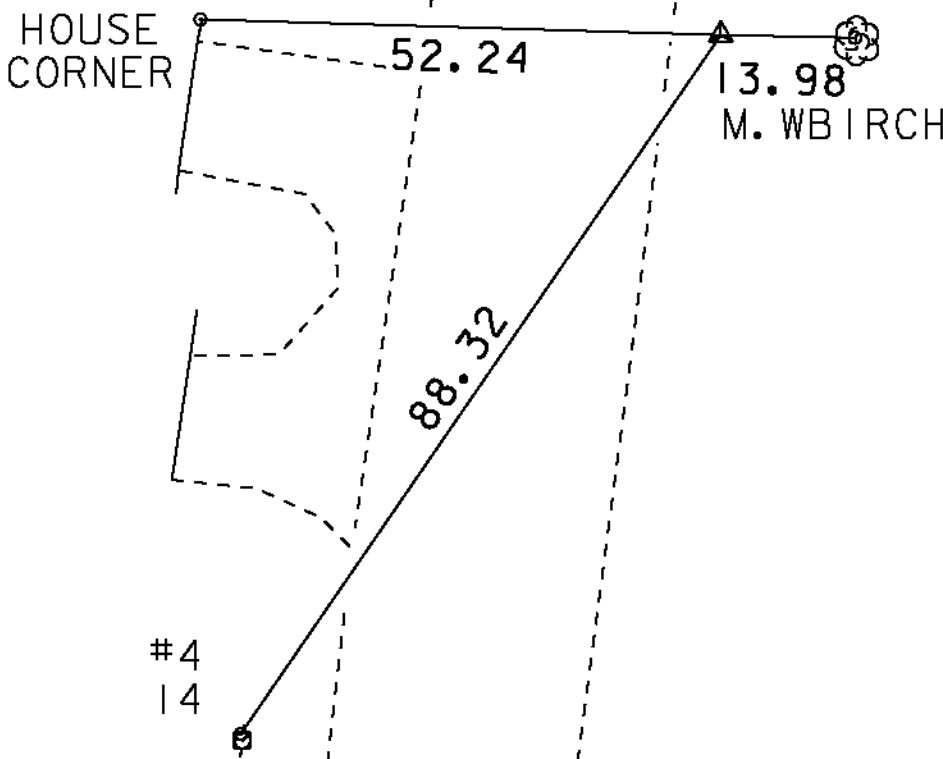
NORTH = 144132.556
EAST = 1513922.465
ELEV. = 2220.920

DESCRIBED BY VERMONT AGENCY OF TRANSPORTATION 1995 (CHR)
GENERAL LOCATION, SEARSBURG, VT., ABOUT 5.5 MI (8.9 KM) WEST OF WILMINGTON, VT., ABOUT 11.5 MI (18.5 KM) EAST OF BENNINGTON, AND ABOUT 11 MI (17.7 KM) NORTH OF THE MASSACHUSETTS/VERMONT STATE LINE. TO REACH FROM THE INTERSECTION OF VT ROUTES 9 AND 8 IN SEARSBURG GO EAST ALONG VT ROUTE 9 FOR 0.25 MI (0.40 KM) TO A PULLOUT (OLD ROAD GRADE) ON THE RIGHT AND THE MARK ON THE RIGHT IN A GRASS ISLAND BETWEEN THE OLD ROAD GRADE AND VT ROUTE 9. THE MARK IS SET FLUSH WITH THE GROUND SURFACE IN THE TOP OF A 30 CM DIAMETER CONCRETE MONUMENT POURED 1.5 M (4.9 FT) DEEP. IT IS 13.5 M (44.3 FT) SOUTH OF AND ABOUT 0.5 M (1.6 FT) LOWER THAN THE CENTERLINE OF VT ROUTE 9, 1.5 M (4.9 FT) NORTH OF THE NORTH EDGE OF PAVEMENT OF THE OLD ROAD GRADE, 11.2 M (36.7 FT) NORTH OF POLE NO. 616/20, 37.8 M (124.0 FT) WEST OF THE WEST END OF A CONCRETE DROP INLET AT THE EAST END OF THE PULLOUT, AND 0.4 M (1.3 FT) SOUTH OF A FIBERGLASS WITNESS POST. NOTE, THIS MARK IS INTERVISIBLE WITH MARK B95038.
THE MARK IS SET 5 CM (2 INCHES) BELOW GROUND SURFACE IN THE TOP OF A 30 CM (12 INCHES) DIAMETER CONCRETE MONUMENT. IT IS 7.4 M (24.3 FT) NORTHWEST OF AND ABOUT 0.6 M (2.0 FT) LOWER THAN THE VT ROUTE 9 NORTHWEST EDGE OF PAVEMENT, 11.0 M (36.1 FT) SOUTHEAST OF POLE NO 616/20, 27.3 SOUTH-SOUTHWEST OF THE MOST SOUTHWESTERLY OF TWO VERTICALLY INSTALLED STEEL I-BEAMS MARKING THE SOUTHEAST END OF A WOODEN BRIDGE SPANNING A SMALL BROOK, AND 9.5 M (31.2 FT) NORTH-NORTHEAST OF A MOOSE CROSSING SIGN.

TRAVERSE TIES

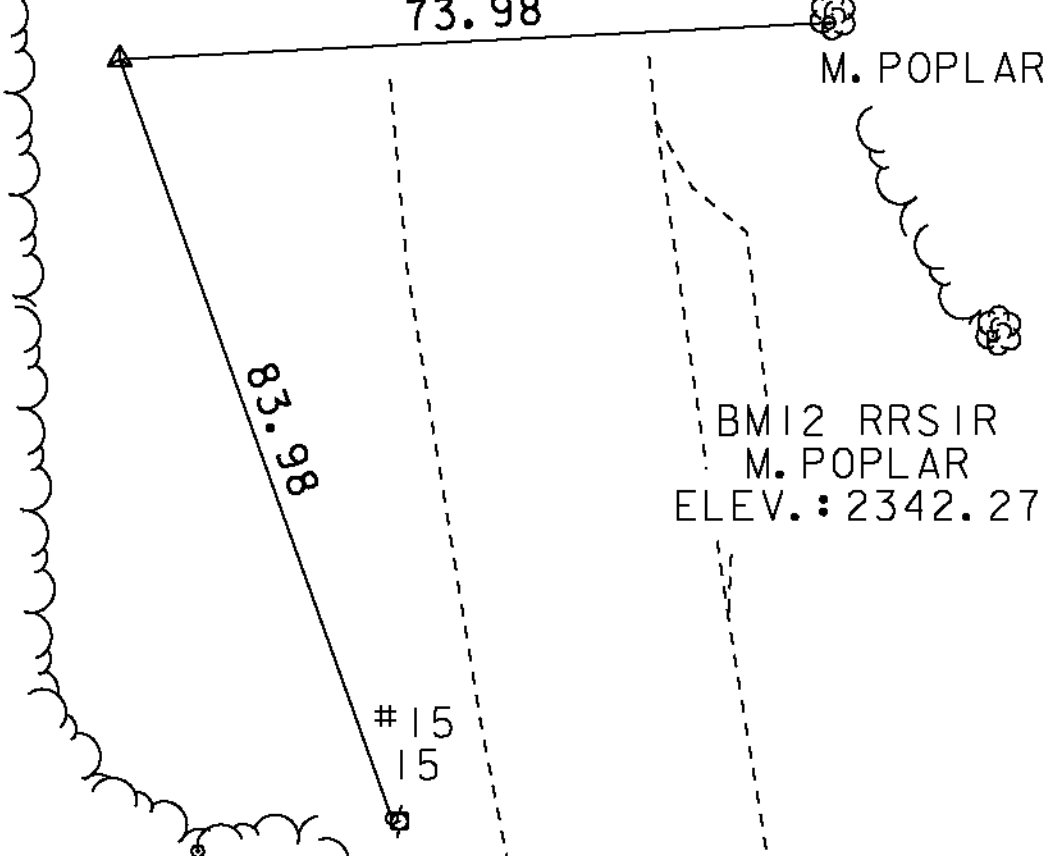
HVCTRL #11

NORTH = 140958.289
EAST = 1513671.877
ELEV. = 2375.999



HVCTRL #12

NORTH = 140465.723
EAST = 1513568.041
ELEV. = 2353.844



* MAIN TRAVERSE COMPLETED 4/12/11 BY L.ORVIS P.C. & G.HITCHCOCK

ALIGNMENT TIES

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

DATUM

VERTICAL NAVD 88

HORIZONTAL NAD 83 (07)

ADJUSTMENT COMPASS

PROJECT NAME: SEARSBURG

PROJECT NUMBER: STP SCRP (7)

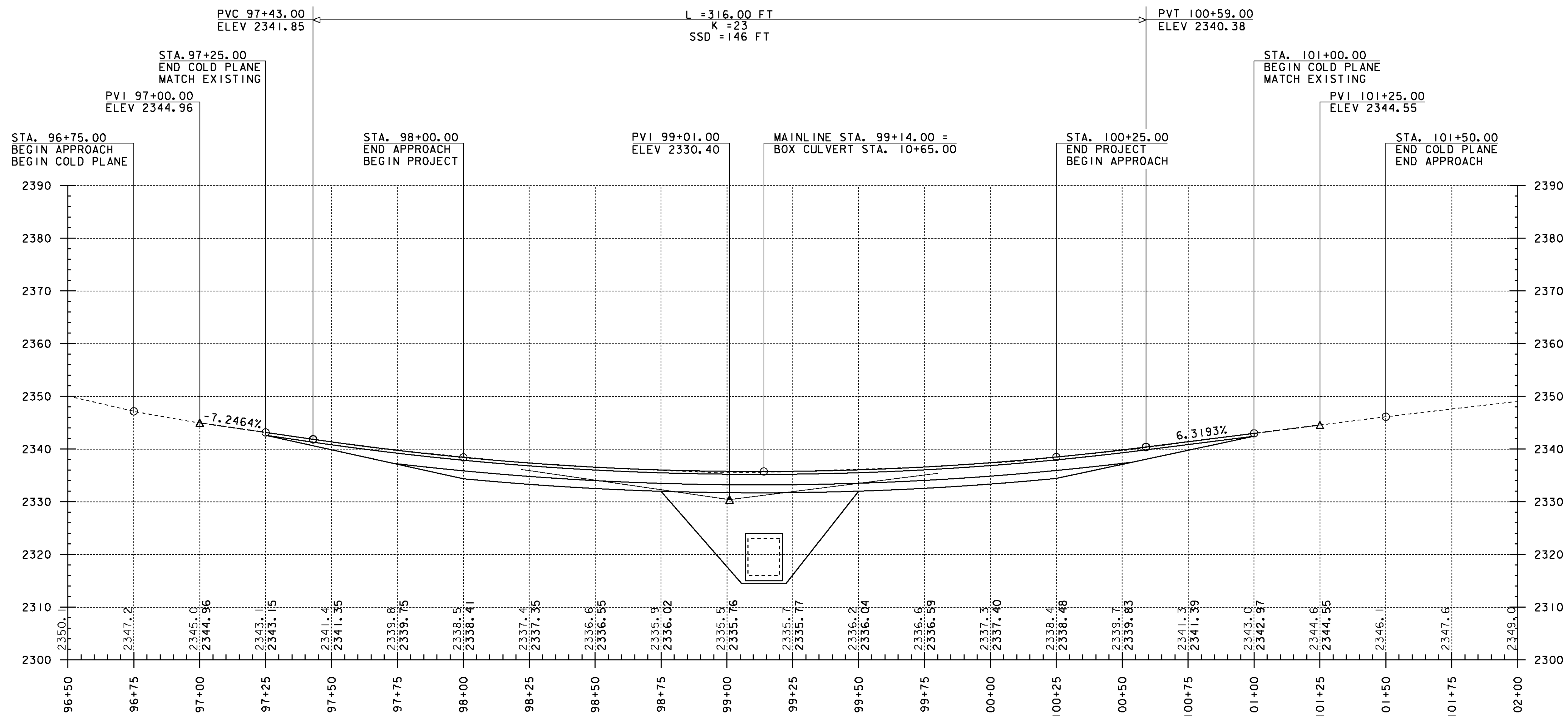
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PROJECT LEADER: K. UPMALL
DESIGNED BY: B. MCADAMS
TIE SHEET 1

PLOT DATE: 27-FEB-2013
DRAWN BY: R. BULLOCK
CHECKED BY: B. MCADAMS
SHEET 8 OF 35

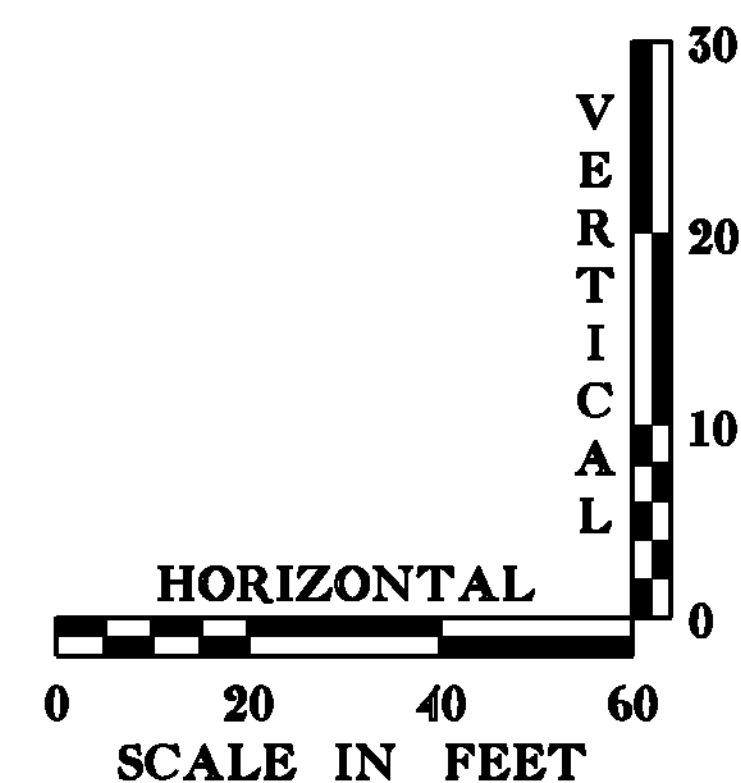
ALIGNMENT TIES	POB 95+20.00 NORTH = 139853.7129 EAST = 1513812.7292 ELEV. =	PC 95+82.97 NORTH = 139907.7339 EAST = 1513780.3762 ELEV. =	PI 97+64.57 NORTH = 140063.5313 EAST = 1513687.0699 ELEV. =	PT 99+42.78 NORTH = 140241.3332 EAST = 1513650.1188 ELEV. =	PC 100+52.02 NORTH = 140348.2881 EAST = 1513627.8913 ELEV. =
	PI 102+14.11 NORTH = 140506.9915 EAST = 1513594.9093 ELEV. =	PT 103+73.17 NORTH = 140667.7256 EAST = 1513615.8638 ELEV. =	POE 105+00.00 NORTH = 140793.4867 EAST = 1513632.2589 ELEV. =	NORTH = EAST = ELEV. =	NORTH = EAST = ELEV. =
	POB 9+50.00 NORTH = 140186.1860 EAST = 1513544.5781 ELEV. =	POE 12+25.00 NORTH = 140250.8845 EAST = 1513811.8591 ELEV. =	NORTH = EAST = ELEV. =	NORTH = EAST = ELEV. =	NORTH = EAST = ELEV. =

DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (07)
ADJUSTMENT	COMPASS

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: d10ci98_forms.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY:
TIE SHEET 2	SHEET 9 OF 35



MAINLINE PROFILE



DATUM

VERTICAL NAVD88

HORIZONTAL NAD83 (2007)

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISHED GRADES FOR THE PROPOSED ALIGNMENT.

PROJECT NAME: SEARSBURG

PROJECT NUMBER: STP SCRP(7)

FILE NAME: d:\0c198_xsec.dgn

PROJECT LEADER: K. UPMAL

DESIGNED BY: B. MCADAMS

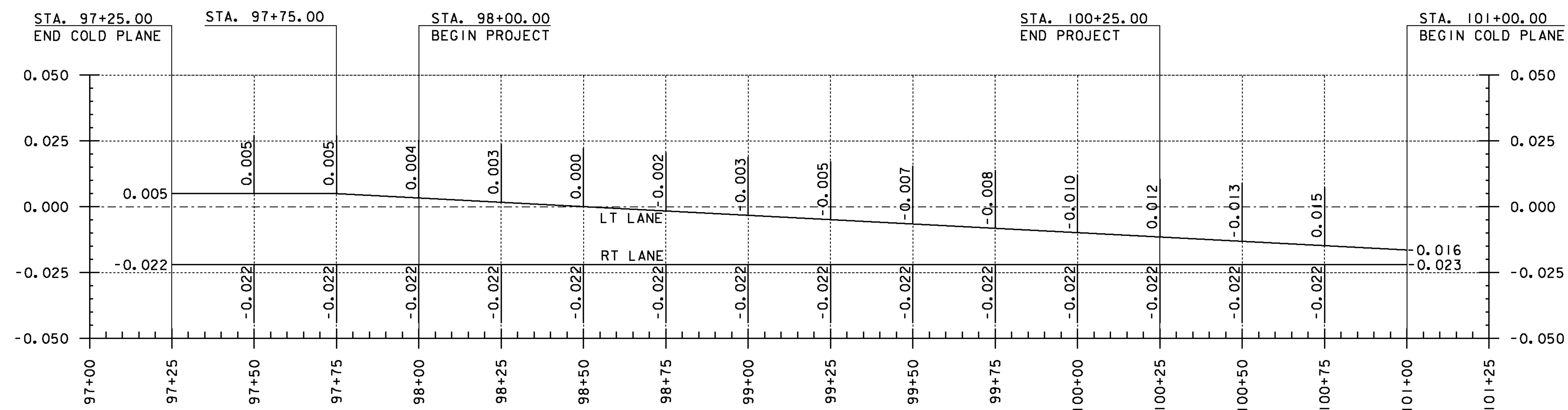
MAINLINE PROFILE SHEET

PLOT DATE: 27-FEB-2013

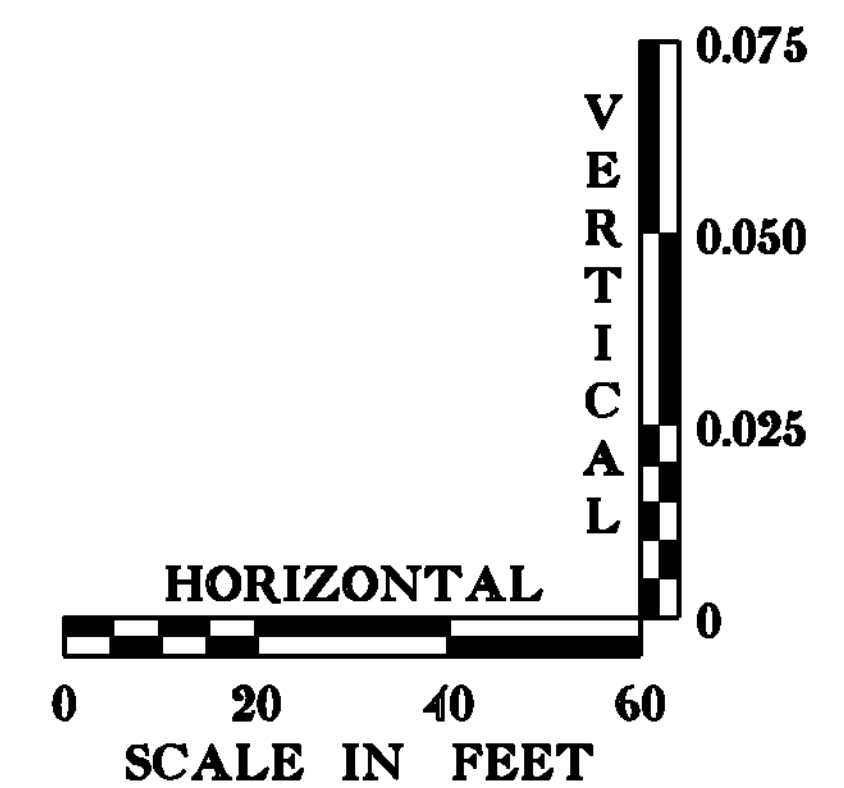
DRAWN BY: B. MCADAMS

CHECKED BY: A. KEMPTON

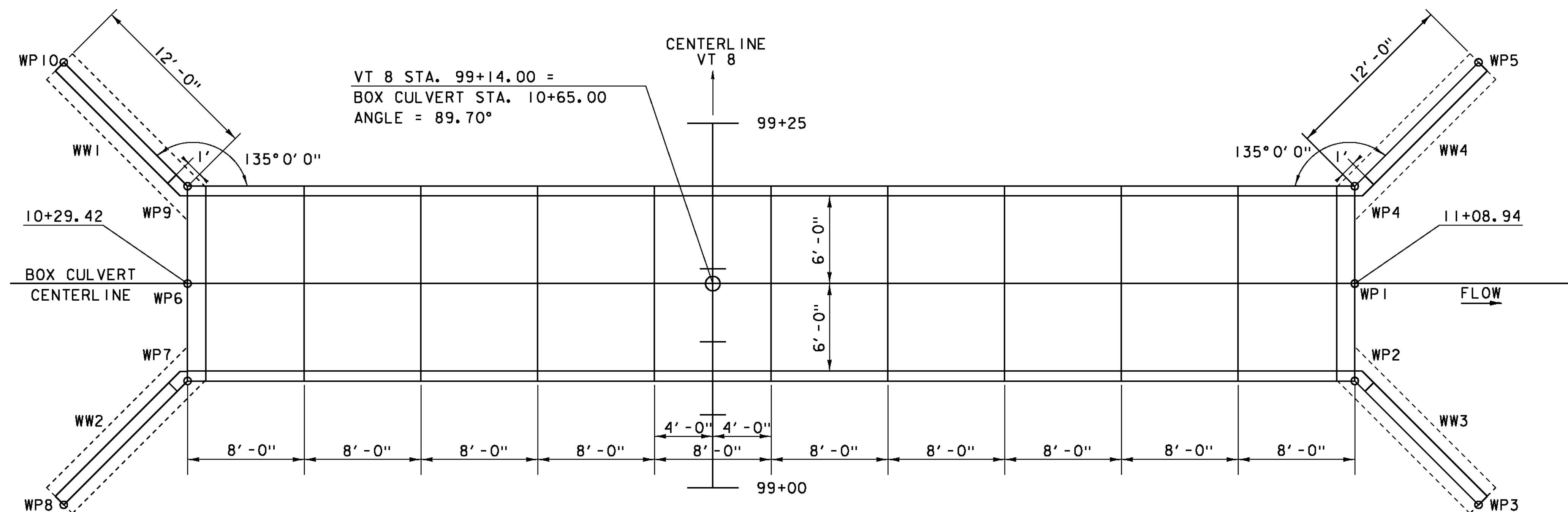
SHEET 11 OF 35



MAINLINE
BANKING DIAGRAM



PROJECT NAME:	SEARSBURG
PROJECT NUMBER:	STP SCRP(7)
FILE NAME:	d:\0ci98.xsec.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	B. MCADAMS
BANKING DIAGRAM	
PLOT DATE:	27-FEB-2013
DRAWN BY:	B. MCADAMS
CHECKED BY:	A. KEMPTON
SHEET	12 OF 35



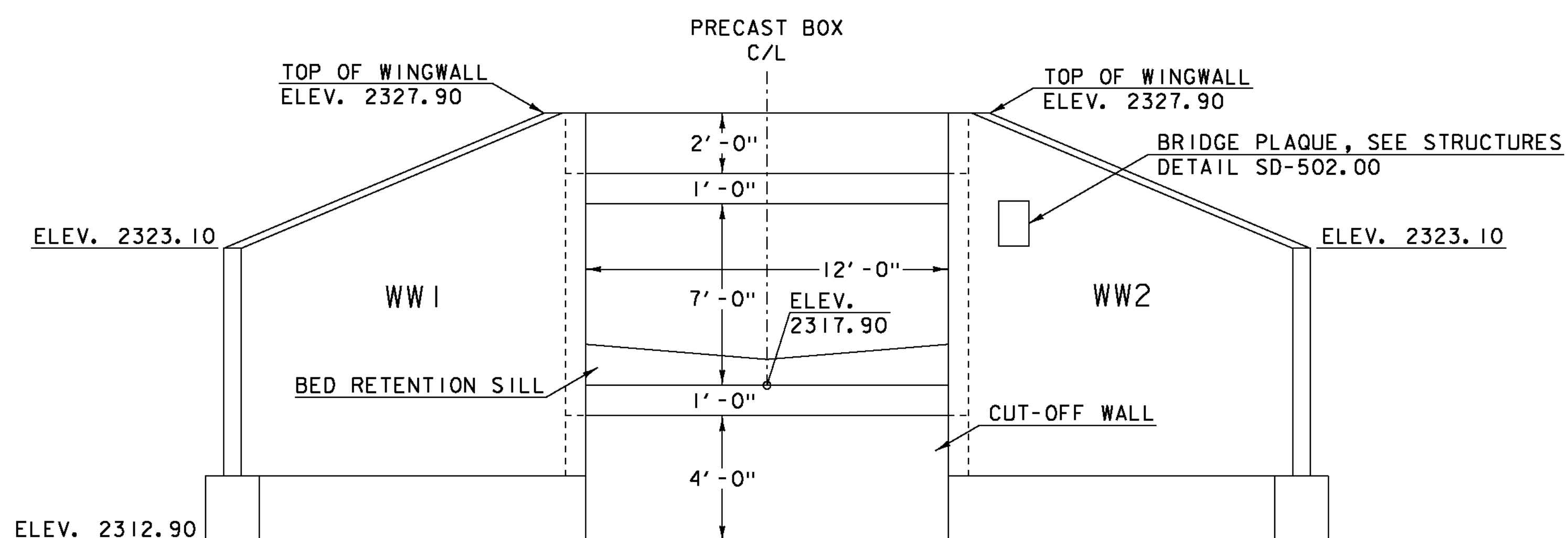
PRECAST BOX CULVERT LAYOUT

NOT TO SCALE

- ### NOTES
1. DIMENSIONS AND ORIENTATION OF WW1 AND WW2 ARE IDENTICAL.
 2. DIMENSIONS AND ORIENTATION OF WW3 AND WW4 ARE IDENTICAL.
 3. BOX, WINGWALL, AND FOOTING THICKNESSES ARE SHOWN FOR ILLUSTRATION PURPOSES ONLY. THE ACTUAL THICKNESSES WILL BE DETERMINED BY THE FABRICATOR.
 4. CUT-OFF WALLS SHALL EXTEND A MINIMUM OF 4' BELOW THE BOTTOM OF THE BOX CULVERT.

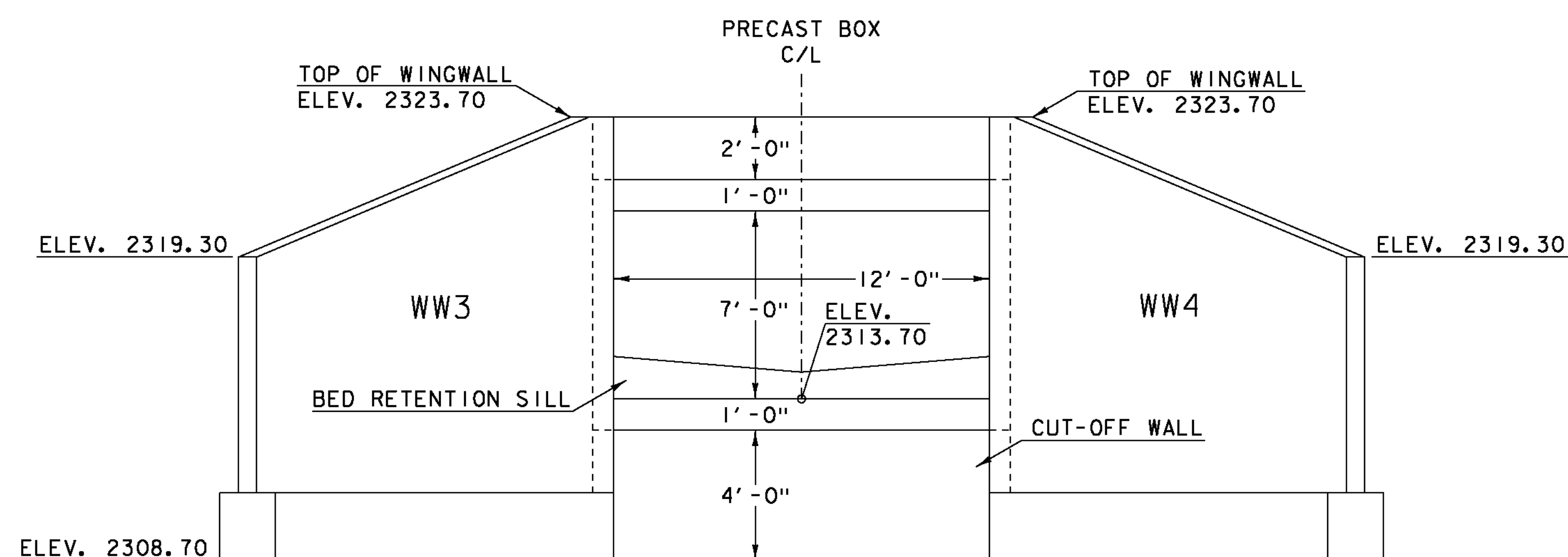
WORKING POINTS STATION AND OFFSET

WP#	STATION	OFFSET
WP1	11+08.94	N/A
WP2	11+08.94	6.67 RT
WP3	11+17.43	15.15 RT
WP4	11+08.94	6.67 LT
WP5	11+17.43	15.15 LT
WP6	10+29.42	N/A
WP7	10+29.42	6.67 RT
WP8	10+20.93	15.15 RT
WP9	10+29.42	6.67 LT
WP10	10+20.93	15.15 LT



PRECAST BOX CULVERT INLET ELEVATION

NOT TO SCALE



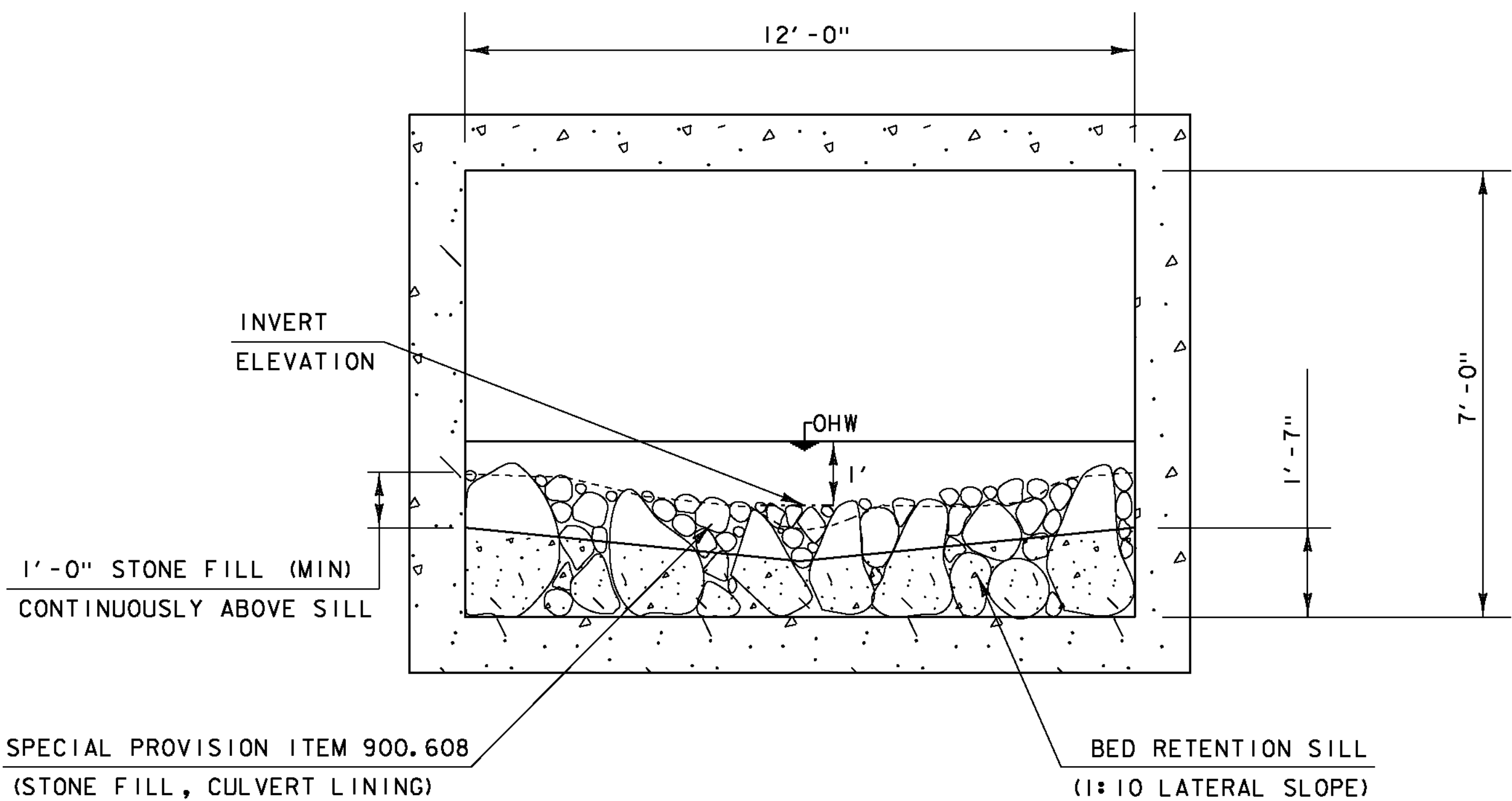
PRECAST BOX CULVERT OUTLET ELEVATION

NOT TO SCALE

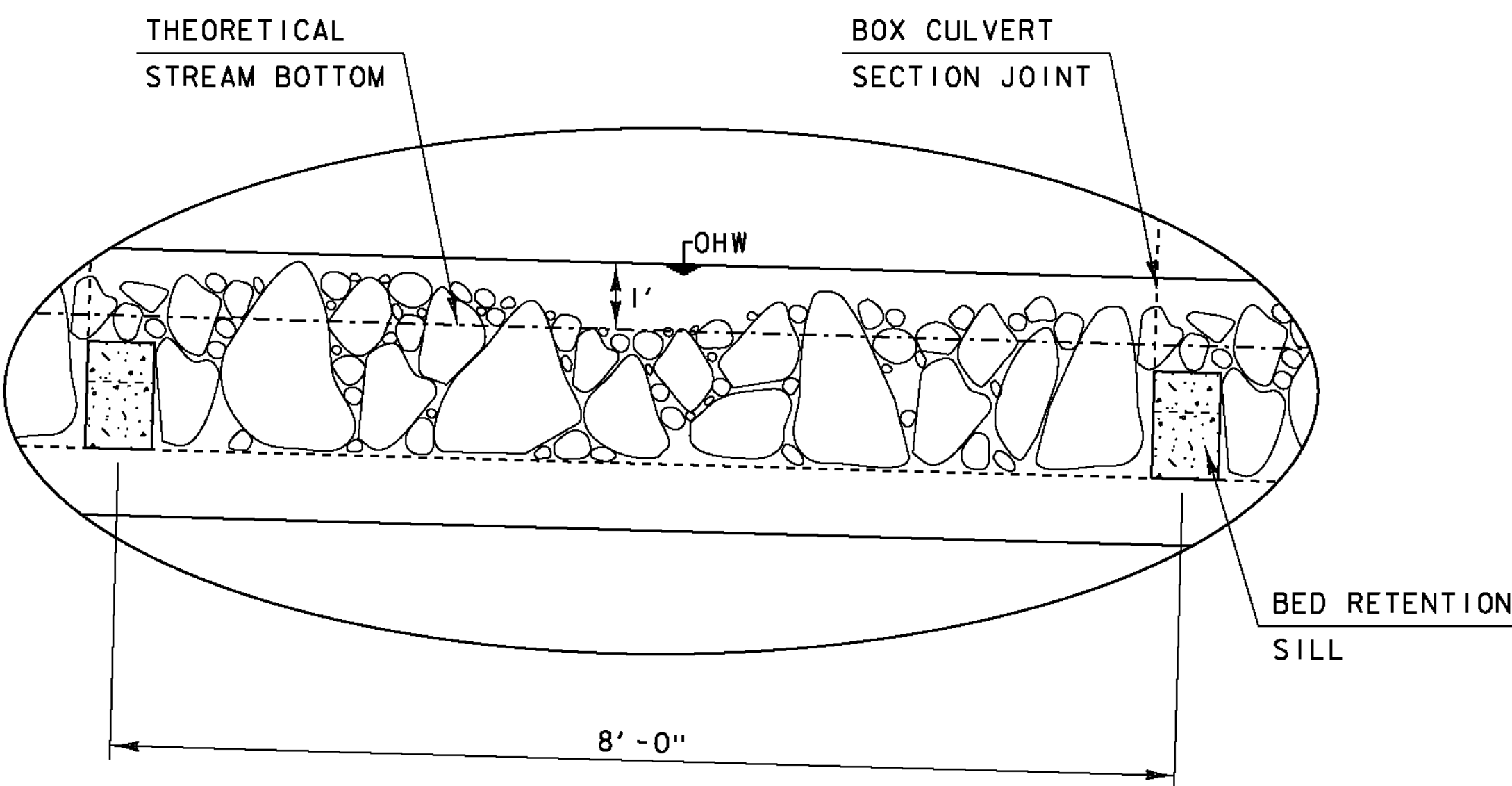
PROJECT NAME:	SEARSBURG
PROJECT NUMBER:	STP SCRP(7)
FILE NAME:	d10c198.dtl.dgn
PROJECT LEADER:	K.UPMAL
DESIGNED BY:	B. MCADAMS
BOX DETAIL SHEET 1	
PLOT DATE:	27-FEB-2013
DRAWN BY:	B. MCADAMS
CHECKED BY:	A. KEMPTON
SHEET	13 OF 35

STONE FILL NOTES

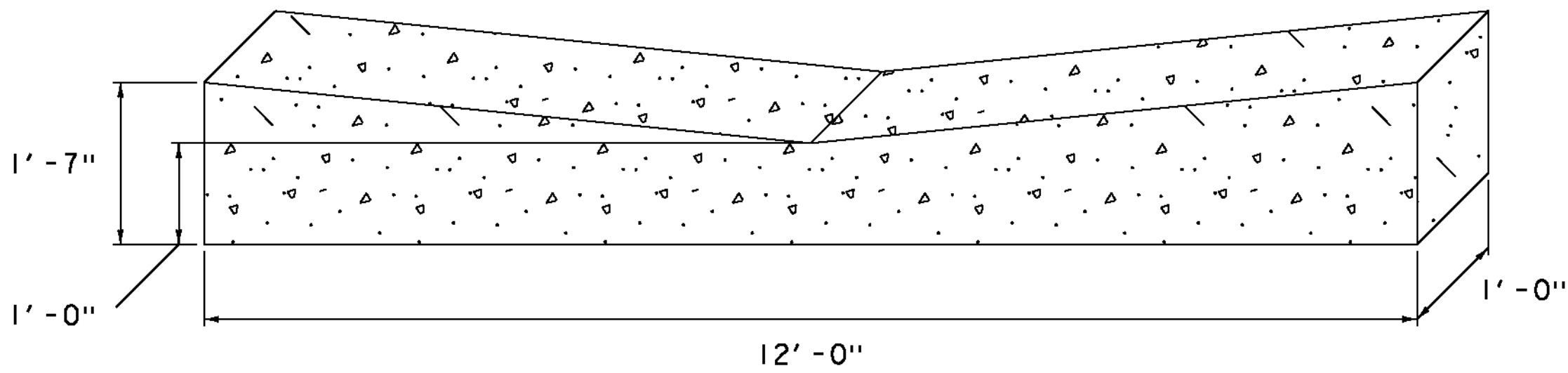
1. SPECIAL PROVISION 900.608 (STONE FILL, CULVERT LINING) SHALL BE OF A SIMILAR SIZE AND HAVE SIMILAR ANGLES AS THE NATURAL STREAM BED MEDIUM LOCATED UP AND DOWNSTREAM FROM THE STRUCTURE.
2. AN ATTEMPT SHALL BE MADE TO LOCATE THE LARGE ROCKS BOTH ALONG THE SIDES AS WELL AS THE MIDDLE OF THE BOX BETWEEN THE SILLS IN ORDER TO ENSURE ANCHORAGE THROUGHOUT THE STRUCTURE.
3. SEE SPECIAL PROVISIONS FOR MORE INFORMATION.



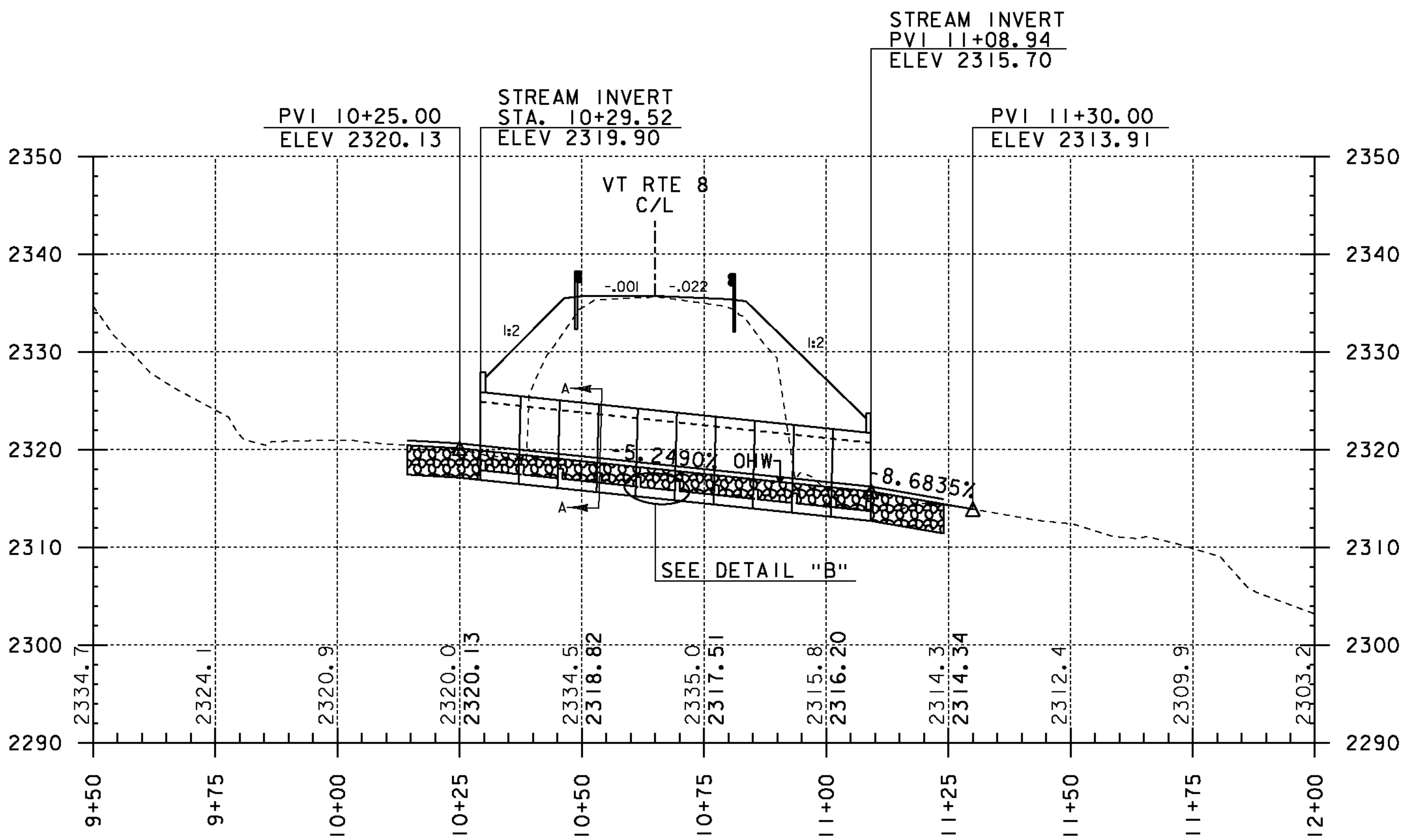
SECTION A-A
NOT TO SCALE



DETAIL "B"
NOT TO SCALE



BED RETENTION SILL
DETAIL
NOT TO SCALE



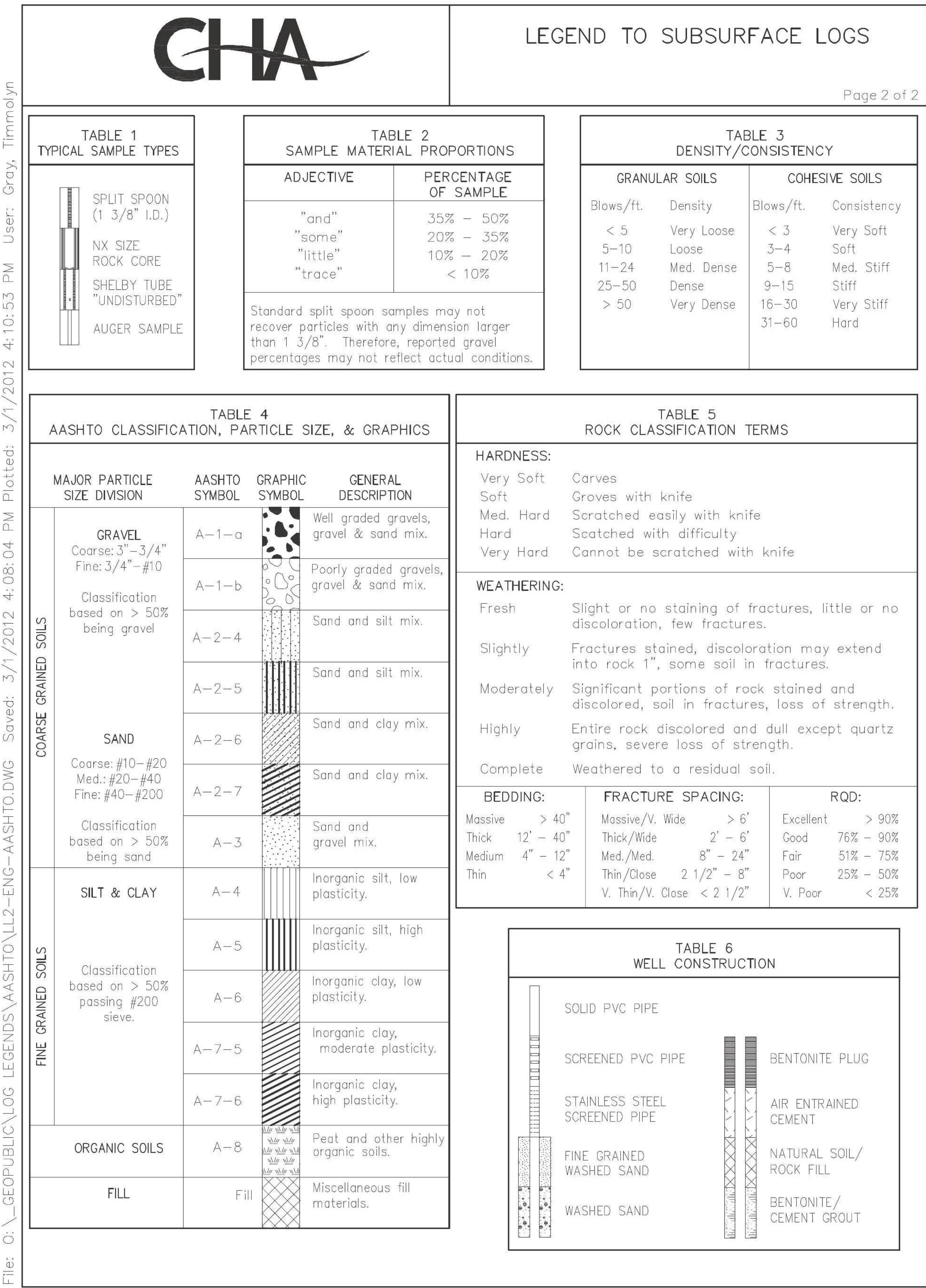
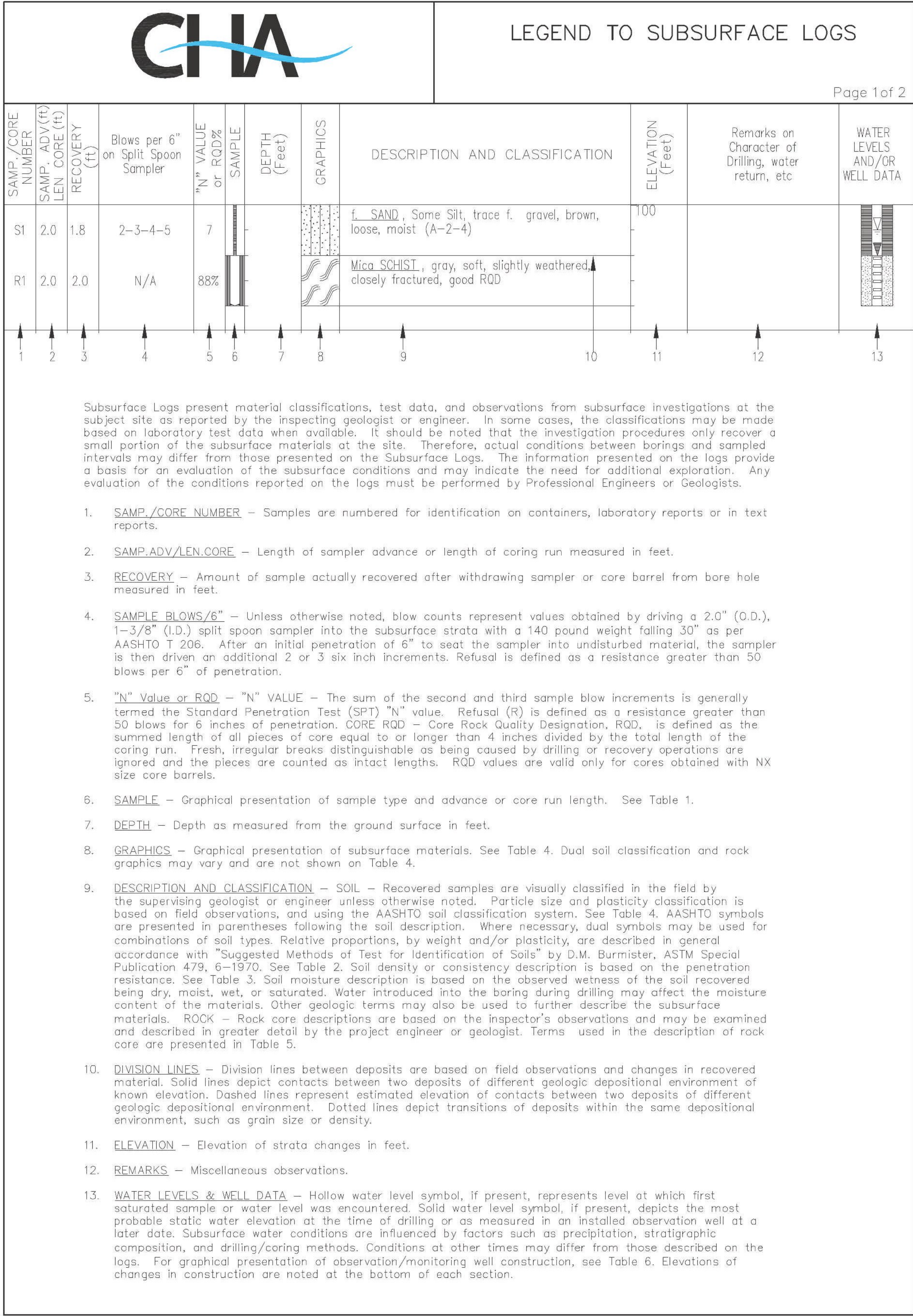
BOND BROOK BOX CULVERT
PROFILE

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISHED GRADES FOR THE PROPOSED ALIGNMENT.

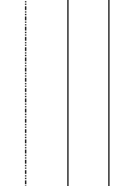
PROJECT NAME: SEARSBURG
PROJECT NUMBER: STP SCRP(7)

FILE NAME: d10c198.dtl.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. MCADAMS
BOX DETAIL SHEET 2

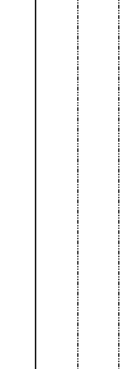
PLOT DATE: 27-FEB-2013
DRAWN BY: B. MCADAMS
CHECKED BY: A. KEMPTON
SHEET 14 OF 35



2010 COPY 24584 BORINGSLOGS.GPJ VERMONT AOT.GDT 10/19/12

 STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-101							
		Searsburg Culvert Replacement 24584.1000.32000		Page No.: 1 of 1							
				Pin No.: STP SCRP(7)							
				Checked By: JACM							
Boring Crew: J. Leonhardt, A. Jensen		Type:	Casing	Sampler	Groundwater Observations						
Date Started: 9/12/12 Date Finished: 9/12/12		I.D.:	H.S.A.	SS	Date						
VTSPG NAD83: N 1513635.74 ft E 140262.79 ft		Hammer Wt:	3.25 in	1.5 in	Depth (ft)						
Station: 99+65.97 Offset: 8.75 L		Hammer Fall:	N.A.	140 lb.	Notes						
Ground Elevation: 2336.5 ft		Hammer/Rod Type:	30 in	30 in.							
		Rig: CME 75 ATV Mounted	Auto/AWJ								
			C _E = 1								
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)			Run (Dip deg.)	Core Rec. % (RQD %)	Blows/g (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
10		ASPHALT PAVEMENT					20-14-12 (26)				
		A-4, Clayey Silt , Some f.m.c. Sand, little f.c. gravel, very stiff, brown, moist, Rec. = 1.1 ft, (Fill)									
		A-4, Similar Soil , Rec. = 1.5 ft, (Fill)					10-12-8-6 (20)	9.9	12.5	31.4	51.2
		A-4, Similar Soil , Rec. = 2.0 ft, (Fill)					7-8-21-11 (29)				
20		A-4									
		A-4, Clayey Silt , little f.m.c. sand, trace f. gravel, hard, gray/brown, wet, Rec. = 1.0 ft					14-15-100/4" (R)				
		A-4, becomes moist, Rec. = 0.5 ft					30-100/1" (R)	8.6	15.2	45.3	28.4
		A-2-4, f.m.c. Sand , Some clayey Silt, Some f.c. Gravel, very compact, gray/brown, wet, Rec. = 2.0 ft, (Till)					25-44-29-67 (73)				
30		A-2-4, Similar Soil , Rec. = 2.0 ft, (Till)					40-64-65-75 (129)				
		A-2-4, becomes little f. gravel and moist, Rec. = 1.8 ft, (Till)					24-57-74-100/4" (131)				
		A-2-4, Similar Soil , Rec. = 1.3 ft, (Till)					74-81-100/4" (R)				
		33.5 ft - 38.5 ft, Cobbles & boulders NXDC			R-1	0.56					
40		A-2-4, Similar Soil , Rec. = 0.3 ft, (Till)					100/4" (R)				
Hole stopped @ 38.8 ft											
Remarks: Standard sampling was conducted through embankment fill to culvert invert elevation. Water level measurement was based on visual observation, water level not measurable in borehole. Lab Results for the sample taken from 5 to 7 feet: 51.2% Silt, 31.3% Sand, and 17.4% Gravel. Hard drilling encountered from 13' to boring termination. Boulders and cobbles were encountered during augering and while driving and washing. Lab Results for the sample taken from 20 to 22 feet: 45.3% Sand, 28.4% Silt, and 26.3% Gravel. Auger and spoon refusal at 33.5' on cobble/boulder. Augers were pulled and 3" FJC installed and a 5' core run was completed. Coring went through hard and soft zones during core run, interpreted as a cobble and boulder layer. Roller bit refusal at 38.8' interpreted as refusal on boulder/cobble. Boring terminated in till layer at 38.8'. The description of the classification of the materials is based on USCS criteria that gravel is defined as material retained on a #4 sieve or larger. Laboratory data provided follows AASHTO classification guidelines that gravel is defined as material retained on a #10 sieve or larger.											
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. C _E is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.											

2010 COPY 24584 BORINGSLOGS.GPJ VERMONT AOT.GDT 10/19/12

 STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-102							
		Searsburg Culvert Replacement 24584.1000.32000		Page No.: 1 of 1							
				Pin No.: STP SCRP(7)							
				Checked By: JACM							
Boring Crew: J. Leonhardt, A. Jensen		Type:	Casing	Sampler	Groundwater Observations						
Date Started: 9/13/12 Date Finished: 9/13/12		I.D.:	WB	SS	Date						
VTSPG NAD83: N 1513687.40 ft E 140180.19 ft		Hammer Wt:	3 in	1.5 in	Depth (ft)						
Station: 98+73.88 Offset: 21.29 R		Hammer Fall:	140 lb.	140 lb.	Notes						
Ground Elevation: 2334.0 ft		Hammer/Rod Type:	30 in.	30 in.							
		Rig: CME 75 ATV Mounted	Auto/AWJ								
			C _E = 1								
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)			Blows/g (N Value)	Moisture Content %	Gravel %	Sand %	Fines %		
10		A-2-4, f.m.c. Sand , Some clayey Silt, little f. gravel, trace organics, loose, dark brown, moist, Rec. = 0.8 ft, (Fill)			1-2-4-3 (6)						
		A-2-4, f.m.c. Sand , Some clayey Silt, little f.c. gravel, loose, brown, moist, Rec. = 1.2 ft, (Fill)			5-7-1-2 (8)						
		A-4, Clayey Silt , Some f.m.c. Sand, little f.c. gravel, very compact, brown, moist Rec. = 1.3 ft			8-38-25-100/4" (63)						
		A-4, Clayey Silt , little f.m.c. sand, little f. gravel, stiff, brown, moist, Rec. = 0.9 ft			6-5-5-5 (10)						
20		A-4, Similar Soil , Rec. = 1.5 ft			8-5-8-9 (13)						
		A-4, Clayey Silt , trace f.m.c. sand, trace f. gravel, hard, gray/brown, moist, Rec. = 1.7 ft, (Till)			14-12-37-27 (49)						
		A-4, grades to little f.m.c. sand, Rec. = 2.0 ft, (Till)			18-22-22-29 (44)	9.3	11.7	35.8	48.8		
		A-4, Clayey Silt and f.m.c. Sand , little f. gravel, hard, gray/brown, moist, Rec. = 2.0 ft, (Till)			20-23-33-29 (55)						
30		A-4, Similar Soil , Rec. = 0.8 ft, (Till)			9-100/4" (R)						
		A-4, Similar Soil , Rec. = 2.0 ft, (Till)			31-23-25-33 (48)						
		A-4, Similar Soil , Rec. = 2.0 ft, (Till)			10-15-24-26 (39)						
		Hole stopped @ 40.0 ft									
Remarks: Standard sampling was conducted through embankment fill to culvert invert elevation. Water level measurement was based on visual observation. Lab Results for the sample taken from 23 to 25 feet: 48.8% Silt, 35.8% Sand, and 15.4% Gravel. Boulders and cobbles were encounttered while driving and washing casing from 11.9' to 15' and 25' to boring termination. Boring terminated in till layer. The description of the classification of the materials is based on USCS criteria that gravel is defined as material retained on a #4 sieve or larger. Laboratory data provided follows AASHTO classification guidelines that gravel is defined as material retained on a #10 sieve or larger.											
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. N Values have not been corrected for hammer energy. C _E is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.											

PROJECT NAME: SEARSBURG
PROJECT NUMBER: STP SCRP(7)

FILE NAME: d:\Oc198_forms.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. MCADAMS
BORING LOGS

PLOT DATE: 27-FEB-2013
DRAWN BY: B. MCADAMS
CHECKED BY: A. KEMPTON
SHEET 16 OF 35

TRAFFIC PHASE DESCRIPTION:

PHASE 1:

ALL TRAFFIC SHALL BE SHIFTED TO THE NORTHBOUND SHOULDER AND TRAVEL WAY OF VT 8. THE SOUTHBOUND SHOULDER AND TRAVEL WAY SHALL BE EXCAVATED AND GRADED TO A SUITABLE TEMPORARY TRAVEL WAY AT AN APPROXIMATE DEPTH OF 8.5' BELOW EXISTING GRADE ABOVE THE EXISTING BOX CULVERT. A TEMPORARY TRAFFIC SIGNAL SHALL BE USED TO ALTERNATE NORTH AND SOUTHBOUND TRAFFIC.

PHASE 2:

ALL TRAFFIC SHALL BE SHIFTED TO THE TEMPORARY TRAVEL WAY ON THE WESTERN SIDE OF VT 8 CONSTRUCTED DURING PHASE 1. DURING THIS PHASE, THE DOWNSTREAM END OF THE EXISTING CULVERT WILL BE REMOVED AND REPLACED WITH FIVE PRECAST CONCRETE BOX CULVERT SECTIONS. A TEMPORARY TRAVEL WAY SHALL ALSO BE CONSTRUCTED DURING THIS PHASE ON THE EASTERN SIDE OF VT 8 APPROXIMATELY 8' ABOVE THE PROPOSED BOX CULVERT. A TEMPORARY TRAFFIC SIGNAL SHALL BE USED TO ALTERNATE NORTH AND SOUTHBOUND TRAFFIC.

PHASE 3:

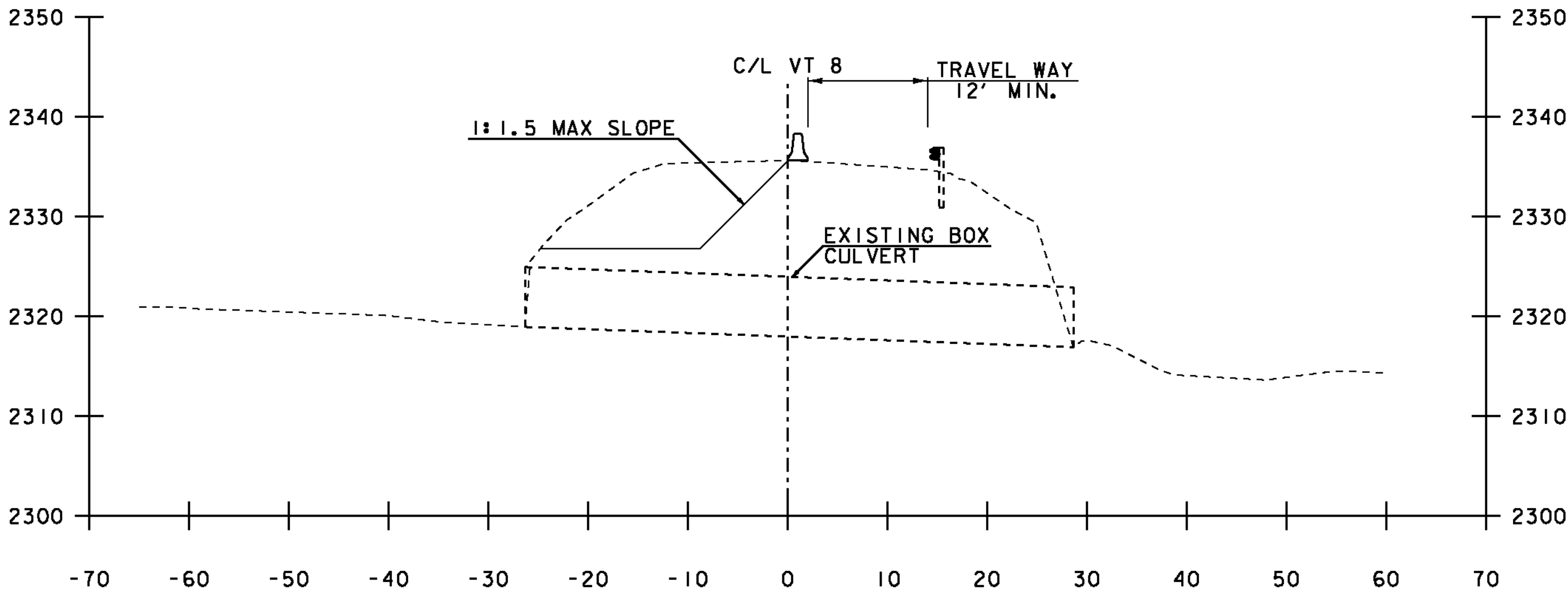
ALL TRAFFIC SHALL BE SHIFTED TO THE TEMPORARY TRAVEL WAY ON THE EASTERN SIDE OF VT 8 CONSTRUCTED DURING PHASE 2. DURING THIS PHASE, THE UPSTREAM END OF THE EXISTING CULVERT WILL BE REMOVED AND REPLACED WITH FIVE PRECAST CONCRETE BOX CULVERT SECTIONS. THE FINAL SOUTHBOUND SHOULDER AND TRAVEL WAY SHALL ALSO BE CONSTRUCTED TO FINISH GRADE DURING THIS PHASE.

PHASE 4:

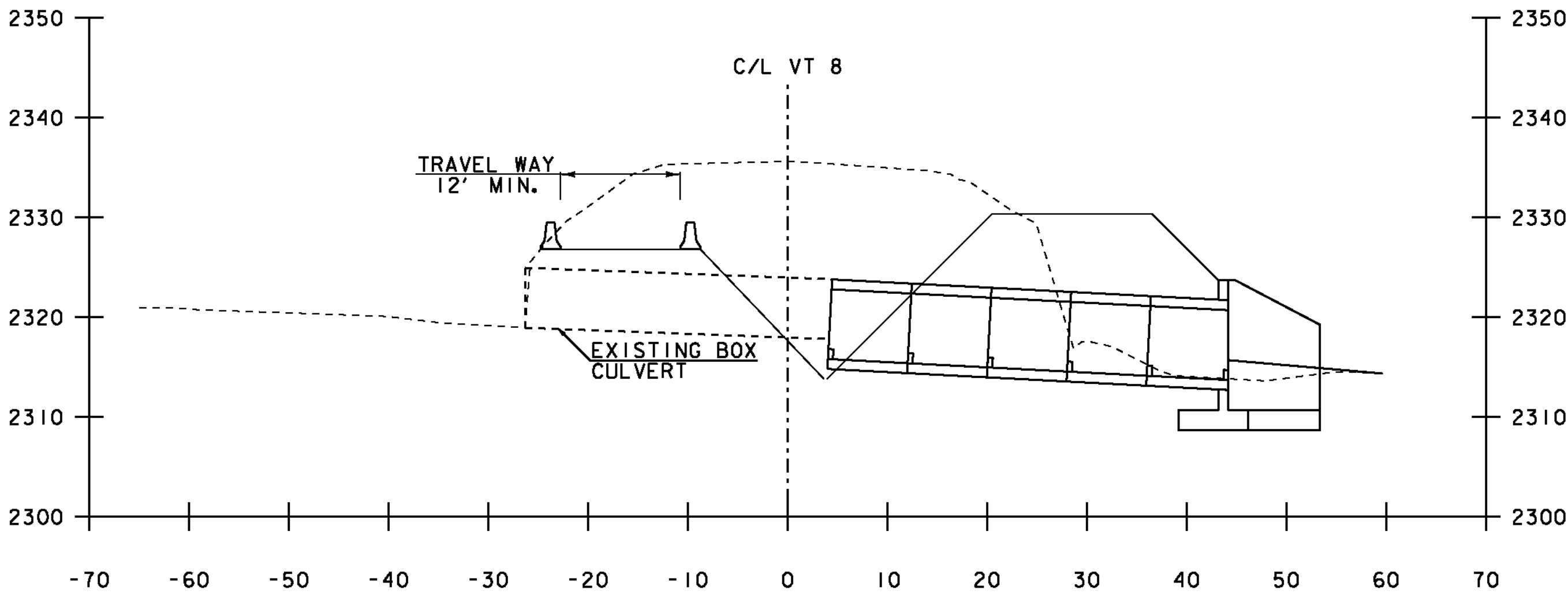
ALL TRAFFIC SHALL THEN BE SHIFTED TO THE SOUTHBOUND SHOULDER AND TRAVEL WAY WHILE THE NORTHBOUND SHOULDER AND TRAVEL WAY ARE CONSTRUCTED. A TEMPORARY TRAFFIC SIGNAL SHALL BE USED TO ALTERNATE NORTH AND SOUTHBOUND TRAFFIC.

TRAFFIC CONTROL NOTES:

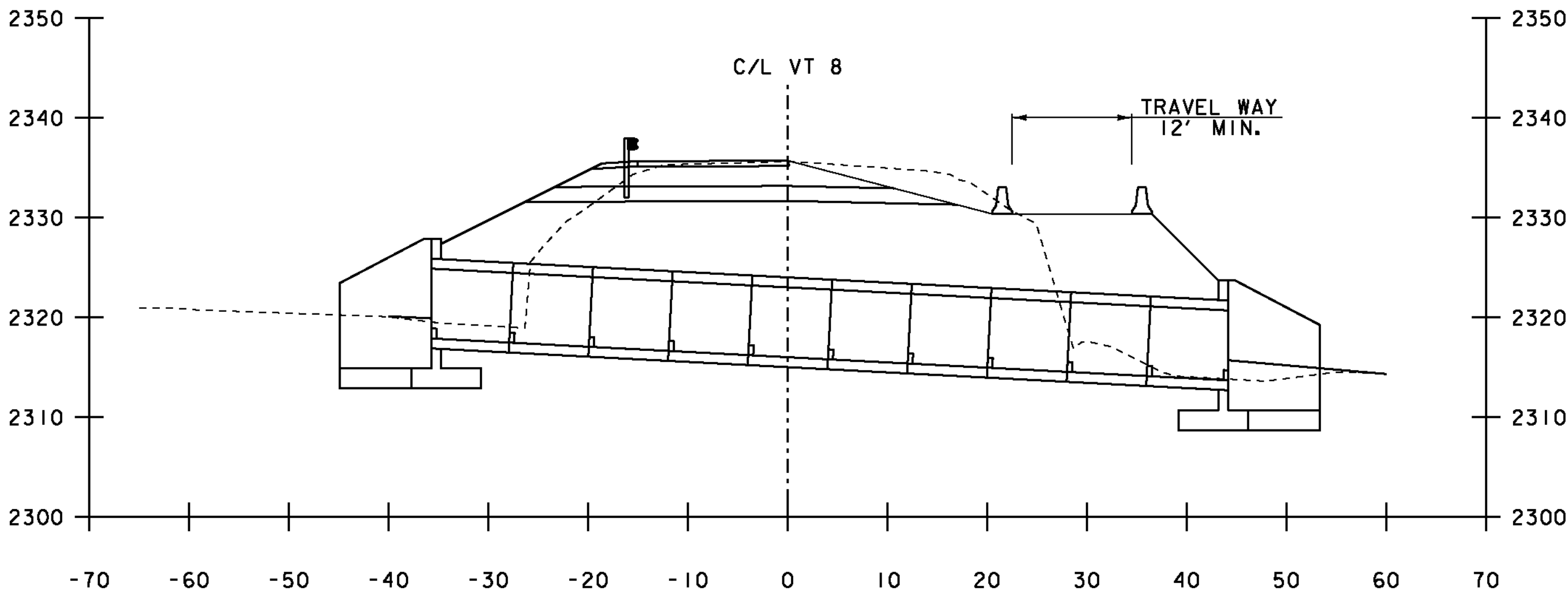
1. ANY TEMPORARY MEANS OF SUPPORTING EXCAVATION NECESSARY FOR THE INSTALLATION OF THE BOX STRUCTURE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 204.25 STRUCTURE EXCAVATION, AND SHALL MEET THE REQUIREMENTS OF SECTION 204.
2. ANY EXCAVATION OR FILL NECESSARY TO MAINTAIN THE STREAM FLOW IN THE BROOK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645 SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM).
3. ANY TEMPORARY EXCAVATION AND FILL NECESSARY TO MAINTAIN TRAFFIC SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
4. ANY USE OF FLAGGERS SHALL BE PAID UNDER ITEM 630.15 FLAGGERS.
5. ANY TEMPORARY TRAVEL WAY AND SHOULDERS UTILIZED TO MAINTAIN TRAFFIC DURING CONSTRUCTION SHALL BE PAVED WITH A MINIMUM OF 3" OF PAVEMENT AND MEET THE MATERIAL REQUIREMENTS OF SUBSECTION 528.04(a). PAYMENT FOR PLACING AND REMOVING ANY TEMPORARY PAVEMENT WILL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL ALL-INCLUSIVE)
6. AT LEAST ONE LANE OF TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.
7. THE MINIMUM LANE WIDTH OF ANY TEMPORARY ROADWAY SHALL BE 10 FEET AND THE MINIMUM SHOULDER WIDTH SHALL BE 1 FOOT ON EACH SIDE FOR A TOTAL MINIMUM TRAVEL WIDTH OF 12 FEET.
8. NO ADDITIONAL ACCOMMODATIONS NEED TO BE MADE FOR PEDESTRIAN AND BICYCLE TRAFFIC.
9. IF SIGNALS ARE INCLUDED IN THE TRAFFIC CONTROL PLAN, THE PROPOSED SIGNAL SEQUENCES SHALL BE INCLUDED IN THE SUBMITTAL. PER SUBSECTION 104.04 (b) THE MAXIMUM PERMISSIBLE QUEUE TIME FOR A SINGLE VEHICLE SHALL BE 10 MINUTES. IF THE QUEUE TIME EXCEEDS 10 MINUTES, THEN THE SIGNAL SEQUENCES SHALL BE MODIFIED TO RECTIFY THE SITUATION. PAYMENT FOR TEMPORARY TRAFFIC SIGNAL SYSTEM SHALL BE MADE UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
10. ANY DISTURBED VEGETATION WITHIN OR OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS WHICH ARE DISTURBED IN ORDER TO MAINTAIN TRAFFIC IN CONJUNCTION WITH THIS PLAN OR ANY OTHER PLAN, SHALL BE RE-ESTABLISHED TO THE SATISFACTION OF THE ENGINEER. PAYMENT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
11. ANY TEMPORARY EXCAVATIONS AND FILLS NECESSARY TO MAINTAIN TRAFFIC OUTSIDE THE CONSTRUCTION LIMITS SHOWN ON THE PLANS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION. THIS RESTORATION SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
12. ACCESS TO ALL EXISTING DRIVES SHALL BE MAINTAINED AT ALL TIMES DURING ALL PHASES OF CONSTRUCTION.
13. INSTALLATION OF NECESSARY SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL ATTEMPT TO MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES.
14. THE CONTRACTOR SHALL CONTACT DIG SAFE AT 1-888-344-7233 PRIOR TO BREAKING GROUND TO INSTALL ANY SIGN POSTS.
15. ALL SIGNS THAT ARE 36" X 36" OR LARGER SHALL BE MOUNTED ON TWO POSTS.
16. IF CONSTRUCTION CONTINUES INTO WINTER MONTHS ALL TEMPORARY TRAVEL WAYS SHALL HAVE A MINIMUM WIDTH OF 14 FEET.
17. ALL TEMPORARY PAVEMENT MARKINGS AND REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
18. ALL SIGN PACKAGES SHALL CONFORM TO THE 2009 MUTCD OR ITS LATEST REVISION.



PHASE 1



PHASE 2

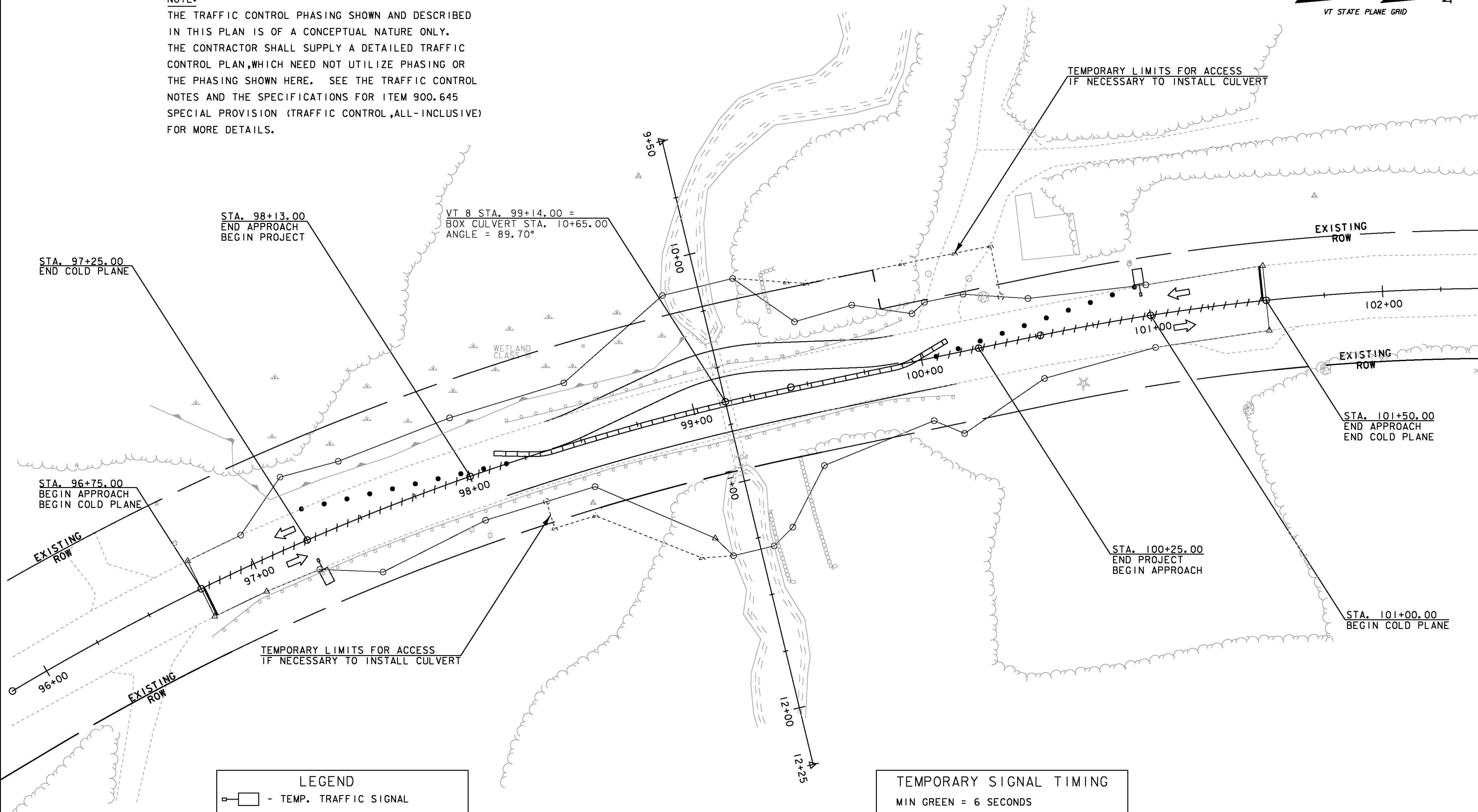


PHASE 3

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: dl0ci98.fc.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
TRAFFIC CONTROL - TYPICAL SECTIONS	SHEET 17 OF 35

NOTE:

THE TRAFFIC CONTROL PHASING SHOWN AND DESCRIBED IN THIS PLAN IS OF A CONCEPTUAL NATURE ONLY. THE CONTRACTOR SHALL SUPPLY A DETAILED TRAFFIC CONTROL PLAN, WHICH NEED NOT UTILIZE PHASING OR THE PHASING SHOWN HERE. SEE THE TRAFFIC CONTROL NOTES AND THE SPECIFICATIONS FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE) FOR MORE DETAILS.



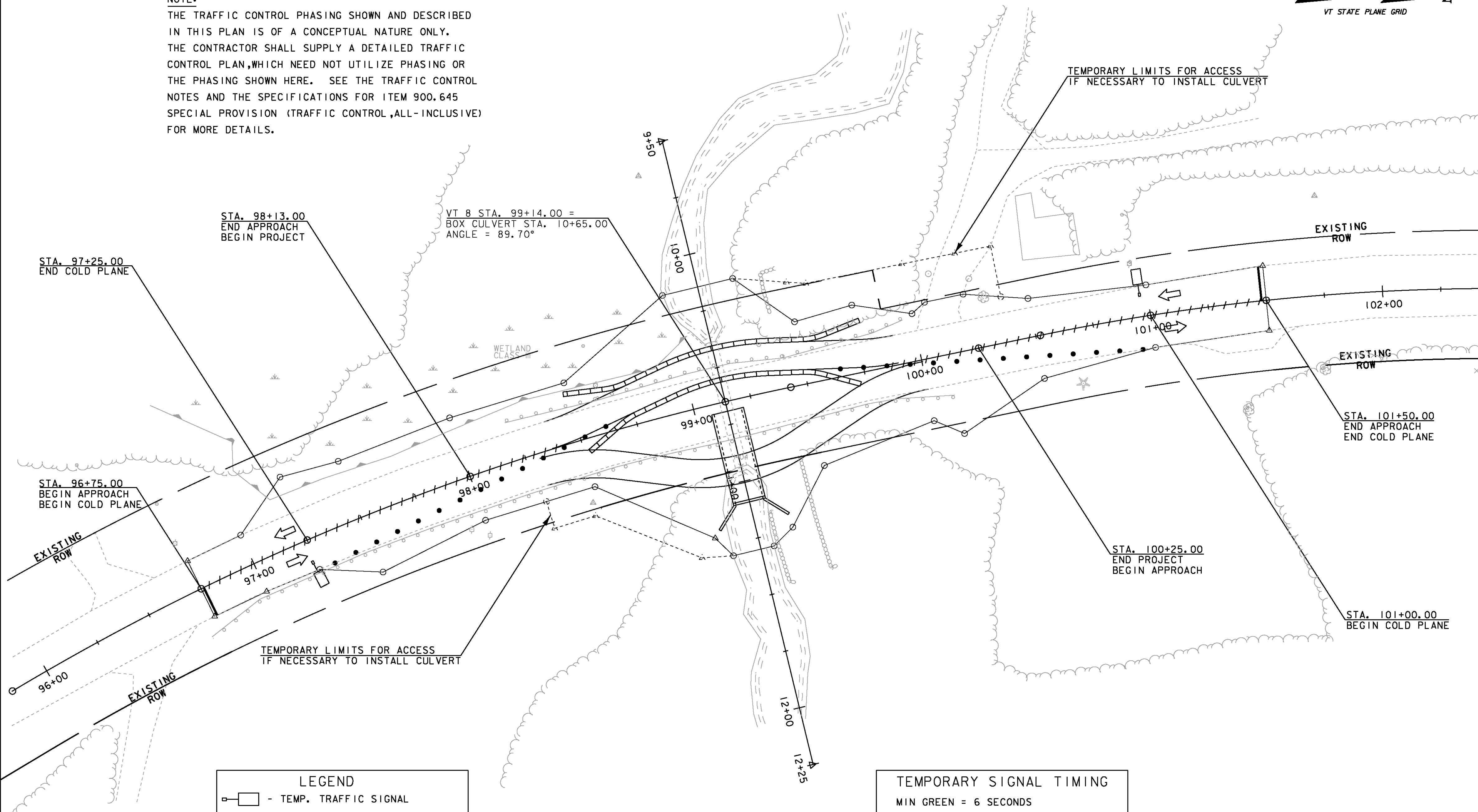
LEGEND	
	- TEMP. TRAFFIC SIGNAL
	- TEMP. TRAFFIC BARRIER
	- CHANNELIZING DEVICE
	- REMOVAL OF EXISTING MARKINGS

TEMPORARY SIGNAL TIMING	
MIN GREEN	= 6 SECONDS
MAX GREEN	= 16 SECONDS
YELLOW	= 4 SECONDS
RED	= 25 SECONDS

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: d10c198.fc.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
TRAFFIC CONTROL - PHASE I	SHEET 18 OF 35

NOTE:

THE TRAFFIC CONTROL PHASING SHOWN AND DESCRIBED IN THIS PLAN IS OF A CONCEPTUAL NATURE ONLY. THE CONTRACTOR SHALL SUPPLY A DETAILED TRAFFIC CONTROL PLAN, WHICH NEED NOT UTILIZE PHASING OR THE PHASING SHOWN HERE. SEE THE TRAFFIC CONTROL NOTES AND THE SPECIFICATIONS FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE) FOR MORE DETAILS.



LEGEND

- TEMP. TRAFFIC SIGNAL
- TEMP. TRAFFIC BARRIER
- CHANNELIZING DEVICE
- REMOVAL OF EXISTING MARKINGS

TEMPORARY SIGNAL TIMING

MIN GREEN = 6 SECONDS

MAX GREEN = 16 SECONDS

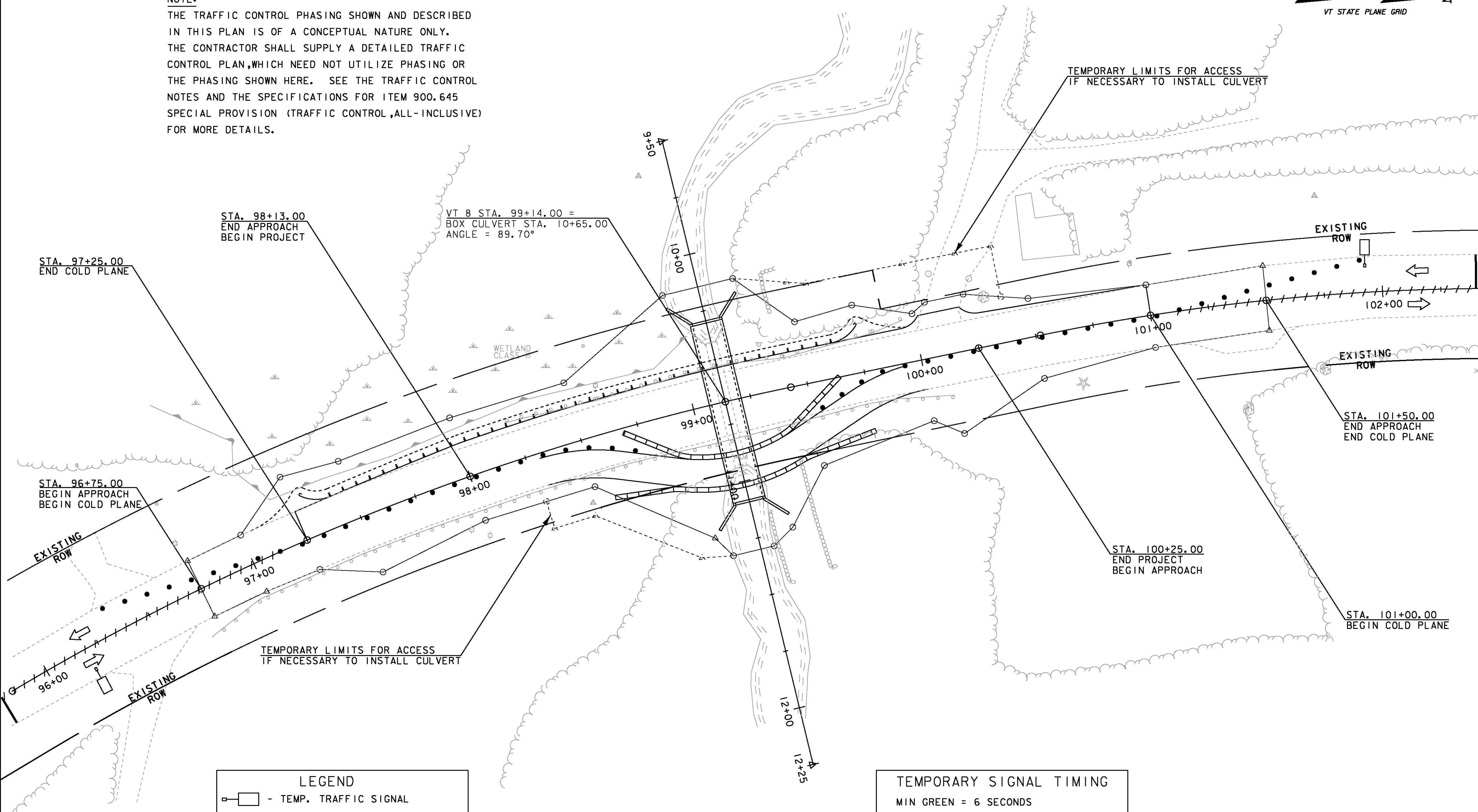
YELLOW = 4 SECONDS

RED = 25 SECONDS

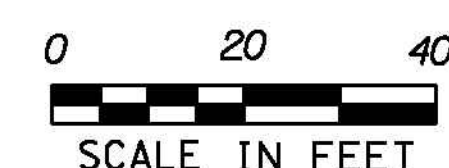
PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: d10c198.fc.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
TRAFFIC CONTROL - PHASE 2	SHEET 19 OF 35

NOTE:

THE TRAFFIC CONTROL PHASING SHOWN AND DESCRIBED IN THIS PLAN IS OF A CONCEPTUAL NATURE ONLY. THE CONTRACTOR SHALL SUPPLY A DETAILED TRAFFIC CONTROL PLAN, WHICH NEED NOT UTILIZE PHASING OR THE PHASING SHOWN HERE. SEE THE TRAFFIC CONTROL NOTES AND THE SPECIFICATIONS FOR ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE) FOR MORE DETAILS.

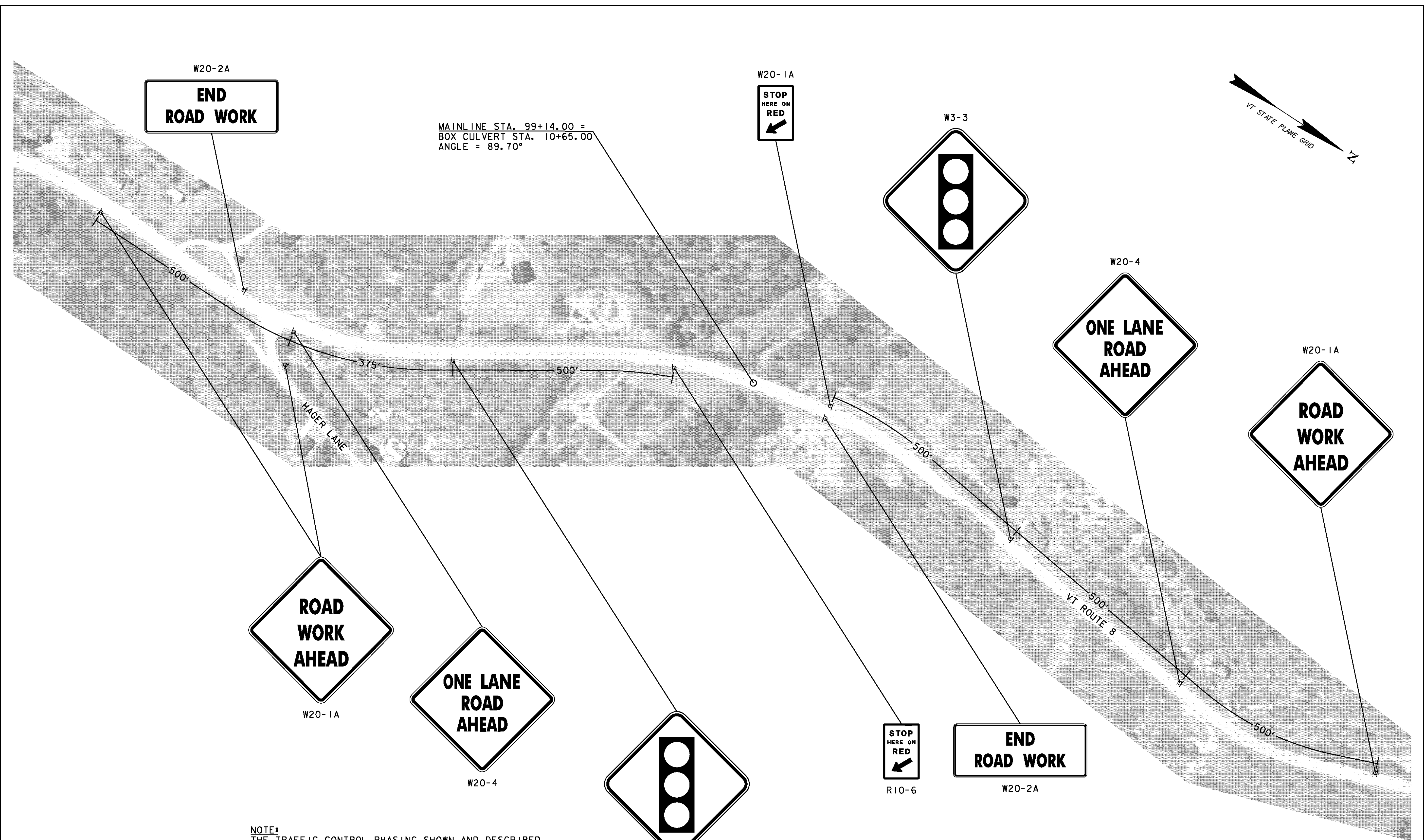


LEGEND	
	- TEMP. TRAFFIC SIGNAL
	- TEMP. TRAFFIC BARRIER
	- CHANNELIZING DEVICE
	- REMOVAL OF EXISTING MARKINGS



TEMPORARY SIGNAL TIMING	
MIN GREEN	= 6 SECONDS
MAX GREEN	= 16 SECONDS
YELLOW	= 4 SECONDS
RED	= 25 SECONDS

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: d10c198.fc.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
TRAFFIC CONTROL - PHASE 3	SHEET 20 OF 35



MAINLINE STA. 99+14.00 =
BOX CULVERT STA. 10+65.00
ANGLE = 89.70°

NOTE:
THE TRAFFIC CONTROL PHASING SHOWN AND DESCRIBED
IN THIS PLAN IS OF A CONCEPTUAL NATURE ONLY.
THE CONTRACTOR SHALL SUPPLY A DETAILED TRAFFIC
CONTROL PLAN, WHICH NEED NOT UTILIZE PHASING OR
THE PHASING SHOWN HERE. SEE THE TRAFFIC CONTROL
NOTES AND THE SPECIFICATIONS FOR ITEM 900.645
SPECIAL PROVISION (TRAFFIC CONTROL, ALL INCLUSIVE)
FOR MORE DETAILS. ALL DIMENSIONS GIVEN ARE ALONG
THE ROADWAY CENTERLINE.

0 100 200
SCALE IN FEET

PROJECT NAME: SEARSBURG
PROJECT NUMBER: STP SCRP(7)

FILE NAME: d10c198.fc.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. MCADAMS
TRAFFIC CONTROL - SIGN PLAN

PLOT DATE: 27-FEB-2013
DRAWN BY: B. MCADAMS
CHECKED BY: A. KEMPTON
SHEET 21 OF 35

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REMOVAL OF BRIDGE 4 AND ITS HEADWALLS AND WINGWALLS. BRIDGE 4 WILL BE REPLACED WITH A PRECAST BOX CULVERT WITH A 7 FOOT RISE, SPANNING 12 FEET OVER BOND BROOK, ALONG THE SAME ALIGNMENT AS THE EXISTING CULVERT. BRIDGE 4 IS LOCATED IN THE TOWN OF SEARSBURG, ON VT ROUTE 8, AT APPROXIMATE MILE MARKER 1.88. THE LENGTH OF THE CULVERT WILL BE INCREASED TO 80 FEET. THE PROPOSED STRUCTURE WILL INCLUDE MEASURES TO FACILITATE THE PASSAGE OF AQUATIC ORGANISMS.

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 0.75 ACRES.

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

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS MOUNTAINOUS THAT IS MOSTLY WELL ESTABLISHED FOREST WITH SOME OPEN AREAS. VT ROUTE 8, A CLASS III WETLAND, A CLEARED POWER LINE RUN, AND A GRAVEL DRIVEWAY ARE WITHIN THE PROJECT SITE. THERE IS A RESIDENCE TO THE SOUTHWEST OF THE PROJECT.

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

THE BOND BROOK IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THE BROOK IS CLASSIFIED AS SINUOUS, PROBABLY INCISED AND SEMI-ALLUVIAL AT THE SITE. THE STREAM BED CONSISTS OF MOSTLY COBBLES AND BOULDERS WITH SOME GRAVEL. THE TRIBUTARY AREA AT THE CULVERT CROSSING IS 0.74 MILES². THE WETLAND TO THE SOUTHWEST IS DRAINED BY THE BROOK. 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 HARDWOOD TREES AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING CULVERT. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL FOR CULVERT LINING AS SPECIFIED ON THE PLANS.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 SOIL CONSERVATION SERVICE FOR THE COUNTY OF BENNINGTON, VERMONT. SOILS ON THE PROJECT SITE ARE MUNDAL-HOUGHTONVILLE ASSOCIATION, ROLLING, VERY STONEY, 8% TO 15% SLOPES, “K FACTOR” = 0.49. THE SOIL IS CONSIDERED HIGHLY ERODIBLE DUE TO SIGNIFICANT SLOPES.

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: YES
THE STONE FOUNDATION LOCATED TO THE NORTHWEST OF THE PROJECT IS ARCHEAOLOGICALLY SENSITIVE AND MUST REMAIN UNDESTRUCTED.
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: BOND BROOK
WETLANDS: YES
CLASS III WETLANDS ARE LOCATED SOUTHWEST OF THE SITE.

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 SPECIFC 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. THIS MEASURE LIMITS THE AREA THAT CAN BE DISTURBED AND EXPOSED TO EROSION.

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.

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 CONTRACTOR’S 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 PLAN PRIOR TO ANY SLOPE WORK AS NECESSARY.

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.

NO DIVERIONARY MEASURES SHALL BE USED ON THIS PROJECT TO INTERCEPT OFF SITE RUNOFF.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF
CHECK STRUCTURES SHALL BE UTILIZED TO REDUCE THE VELOCITY, AND THUS THE EROSIIVE POTENTIAL, OF CONCENTRATED FLOW IN CHANNELS.

THERE IS NO TOPOGRAPHY AROUND THE PROJECT AREA THAT WOULD RESULT IN CHANELIZED RUNOFF.

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 STORMWATER TREATMENT DEVICES SHALL BE INSTALLED 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.

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
DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS.

A DIVERSION PIPE, OR BYPASS PUMPING MAY BE USED TO TEMPORARILY RELOCATE THE STREAM.

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

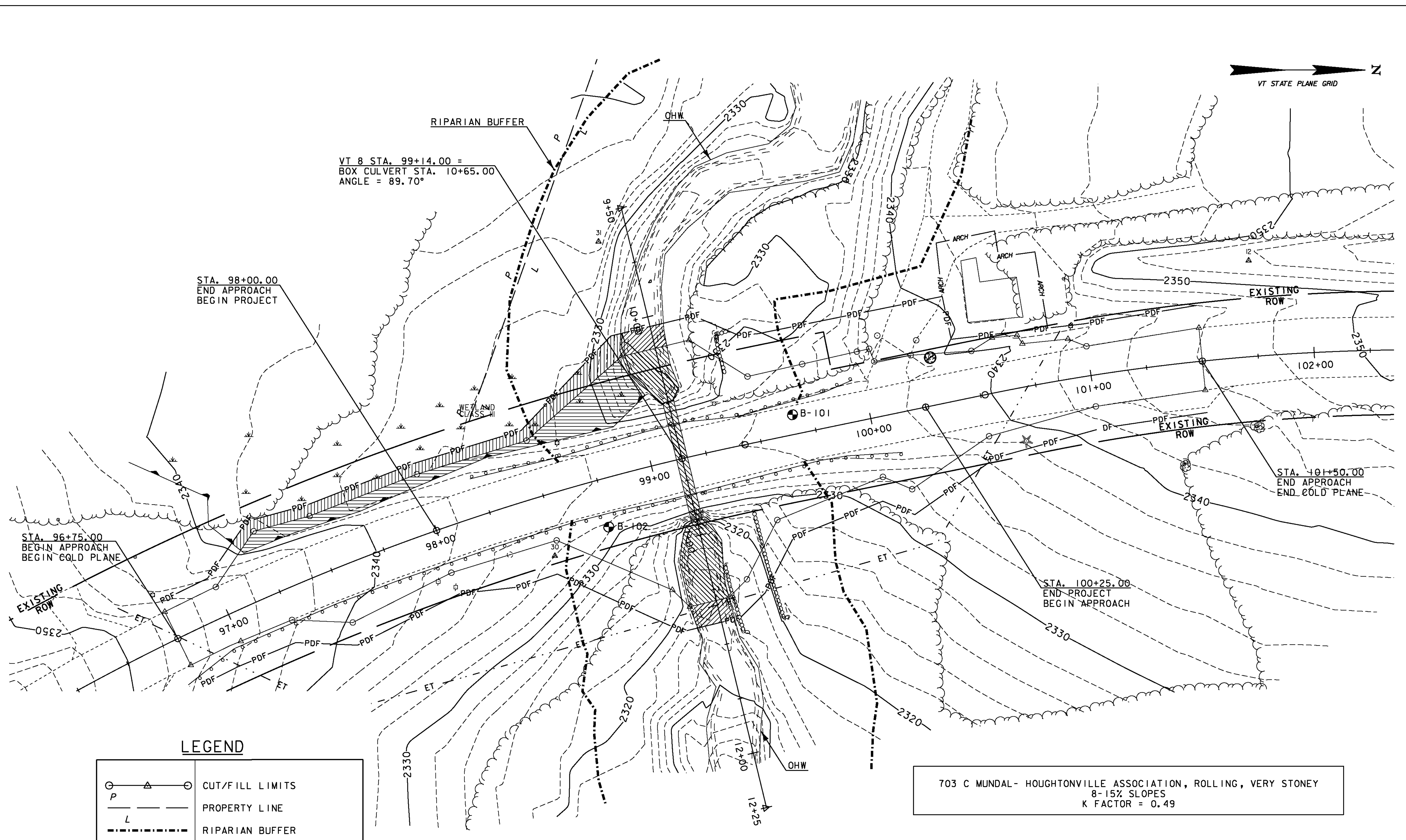
1.5 SEQUENCE AND STAGING

THIS SECTION WILL BE DEVELOPED BY THE CONTRACTOR USING THE GUIDANCE OUTLINED IN THE VTRANS EPSC PLAN CONTRACTOR CHECKLIST.

1.5.1 CONSTRUCTION SEQUENCE

1.5.2 OFF-SITE ACTIVITIES
IN ADDITION TO THE CONTRACTOR CHECKLIST ANY ACTIVITIES OUTSIDE THE CONSTRUCTION LIMITS SHALL FOLLOW SUBSECTIONS 105.25- 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: dl0cl98_ero.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
EPSC NARATIVE	SHEET 22 OF 35



VT 8 STA. 99+14.00 =
BOX CULVERT STA. 10+65.00
ANGLE = 89.70°

STA. 98+00.00
END APPROACH
BEGIN PROJECT

STA. 96+75.00
BEGIN APPROACH
BEGIN GOLD PLANE

STA. 101+50.00
END APPROACH
END GOLD PLANE

STA. 100+25.00
END PROJECT
BEGIN APPROACH

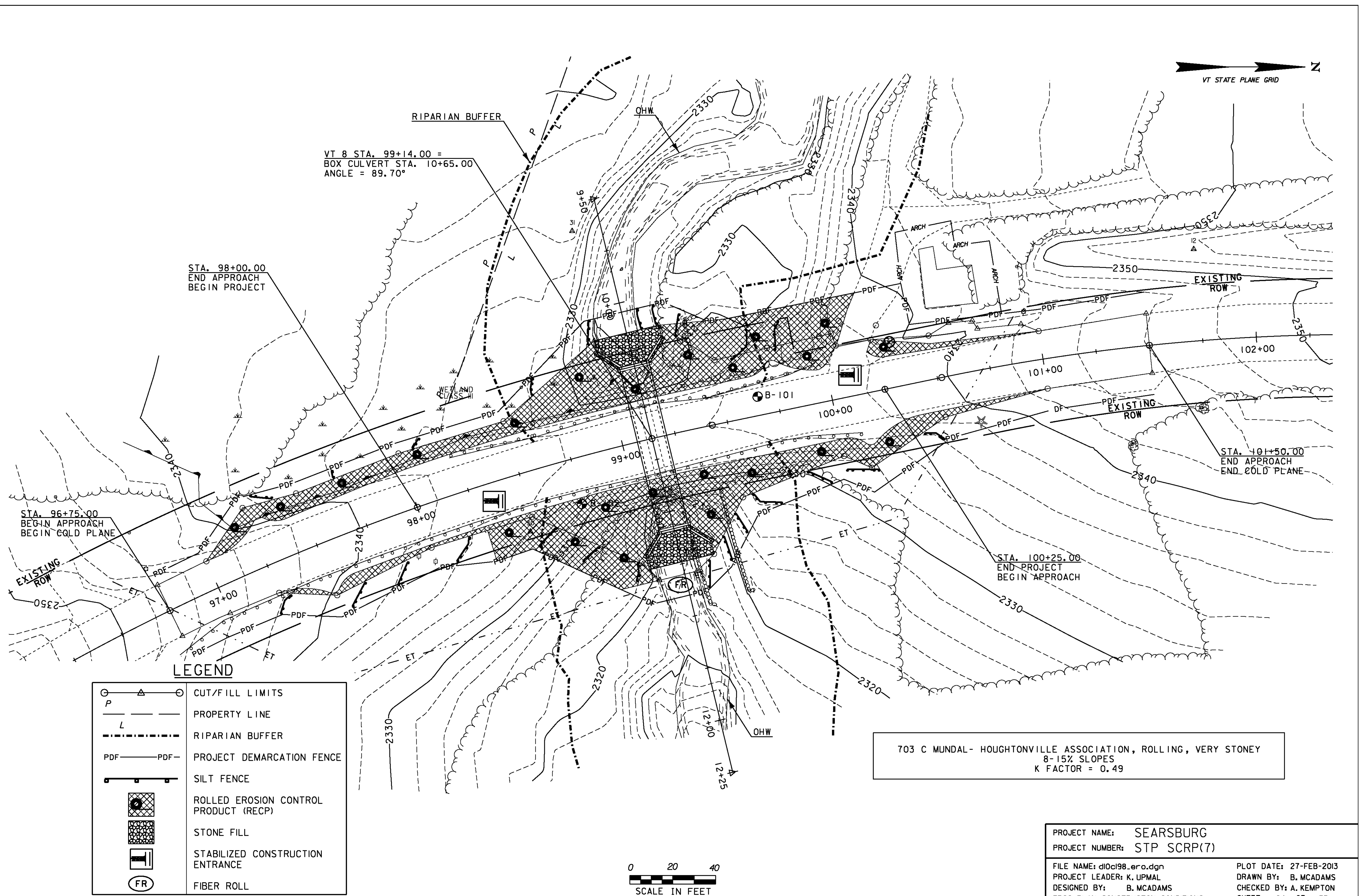
LEGEND

	CUT/FILL LIMITS
	PROPERTY LINE
	RIPARIAN BUFFER
	TEMPORARY WETLAND IMPACTS
	PERMANENT WETLAND IMPACTS
	TEMPORARY OHW IMPACTS
	PERMANENT OHW IMPACTS



703 C MUNDAL- HOUGHTONVILLE ASSOCIATION, ROLLING, VERY STONEY
8-15% SLOPES
K FACTOR = 0.49

PROJECT NAME:	SEARSBURG
PROJECT NUMBER:	STP SCRP(7)
FILE NAME:	d:\0c198_ero.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	B. MCADAMS
EPSC PLAN, EXISTING CONDITIONS	
PLOT DATE:	27-FEB-2013
DRAWN BY:	B. MCADAMS
CHECKED BY:	A. KEMPTON
SHEET	23 OF 35



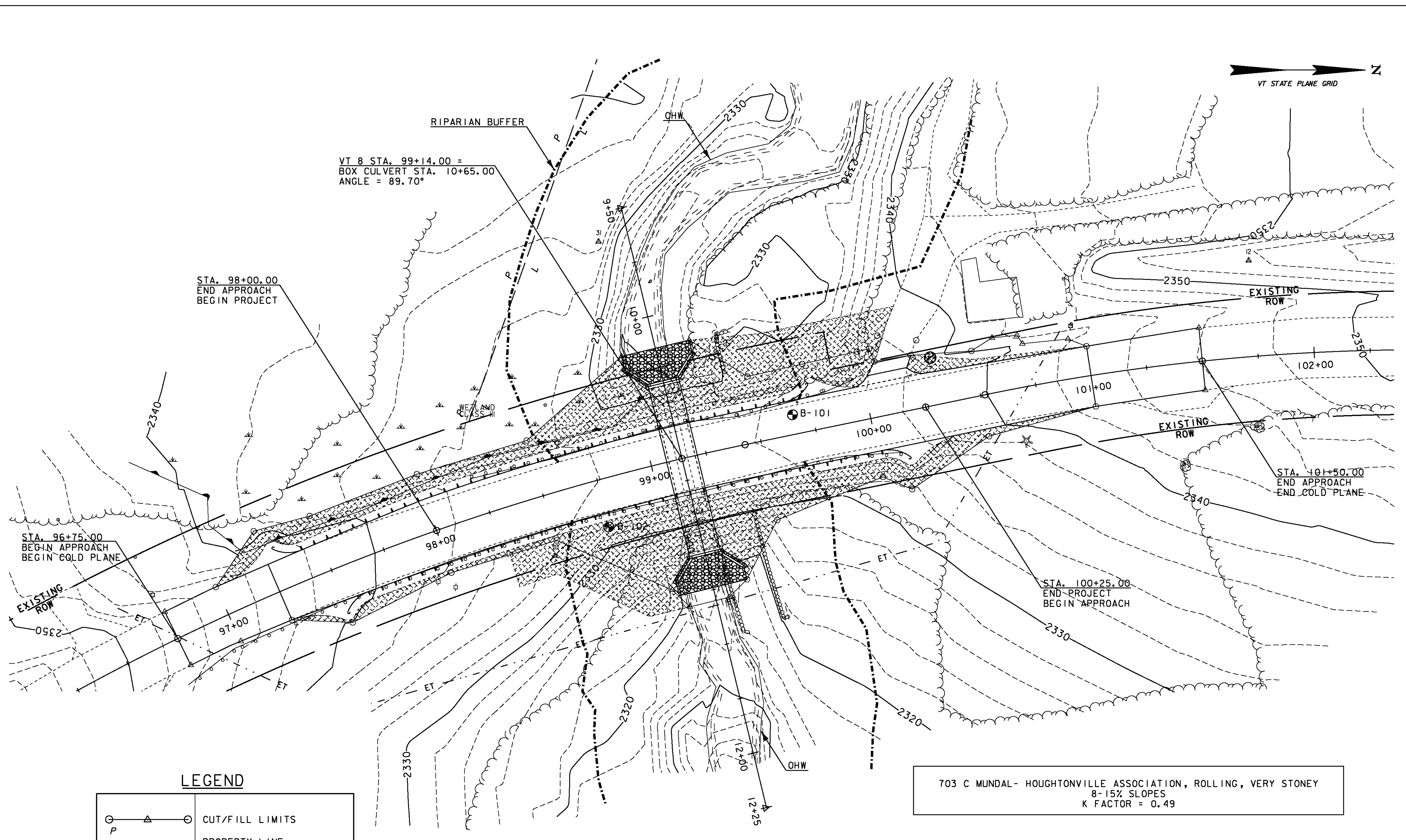
LEGEND

	CUT/FILL LIMITS
	PROPERTY LINE
	RIPARIAN BUFFER
	PROJECT DEMARCATION FENCE
	SILT FENCE
	ROLLED EROSION CONTROL PRODUCT (RECP)
	STONE FILL
	STABILIZED CONSTRUCTION ENTRANCE
	FIBER ROLL

0 20 40
SCALE IN FEET

703 C MUNDAL- HOUGHTONVILLE ASSOCIATION, ROLLING, VERY STONEY
8-15% SLOPES
K FACTOR = 0.49

PROJECT NAME:	SEARSBURG
PROJECT NUMBER:	STP SCRP(7)
FILE NAME:	d:\0c198_ero.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	B. MCADAMS
EPSC PLAN, CONSTRUCTION CONDITIONS	
PLOT DATE:	27-FEB-2013
DRAWN BY:	B. MCADAMS
CHECKED BY:	A. KEMPTON
SHEET	24 OF 35



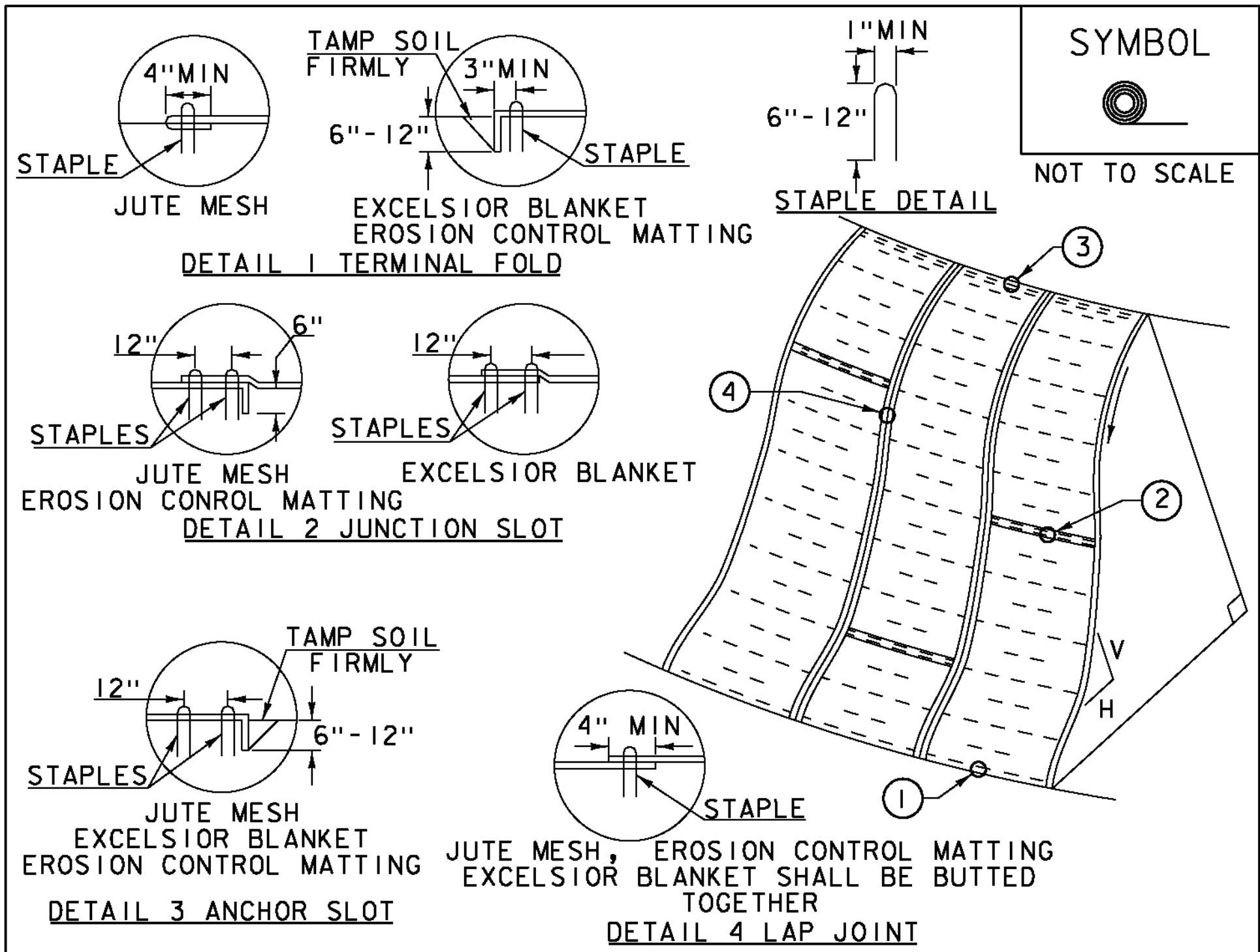
LEGEND

	CUT/FILL LIMITS
	PROPERTY LINE
	RIPARIAN BUFFER
	STONE FILL
	DISTURBED AREAS REQUIRING REVEGETATION



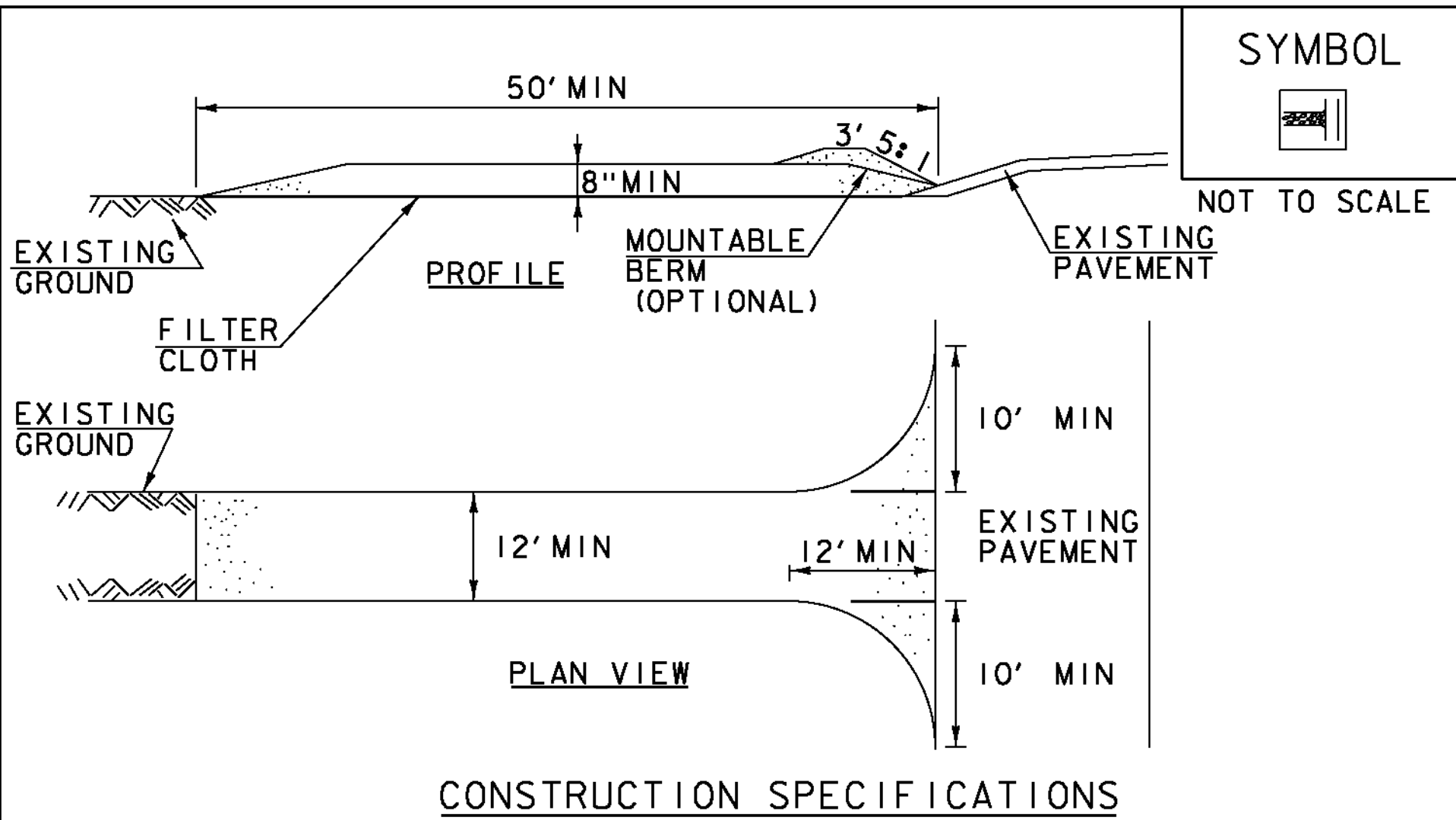
703 C MUNDAL- HOUGHTONVILLE ASSOCIATION, ROLLING, VERY STONEY
8-15% SLOPES
K FACTOR = 0.49

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FILE NAME:	d:\0c198_ero.dgn
PROJECT LEADER:	K. UPMAL
DESIGNED BY:	B. MCADAMS
EPSC PLAN, FINAL CONDITIONS	
PLOT DATE:	27-FEB-2013
DRAWN BY:	B. MCADAMS
CHECKED BY:	A. KEMPTON
SHEET	25 OF 35



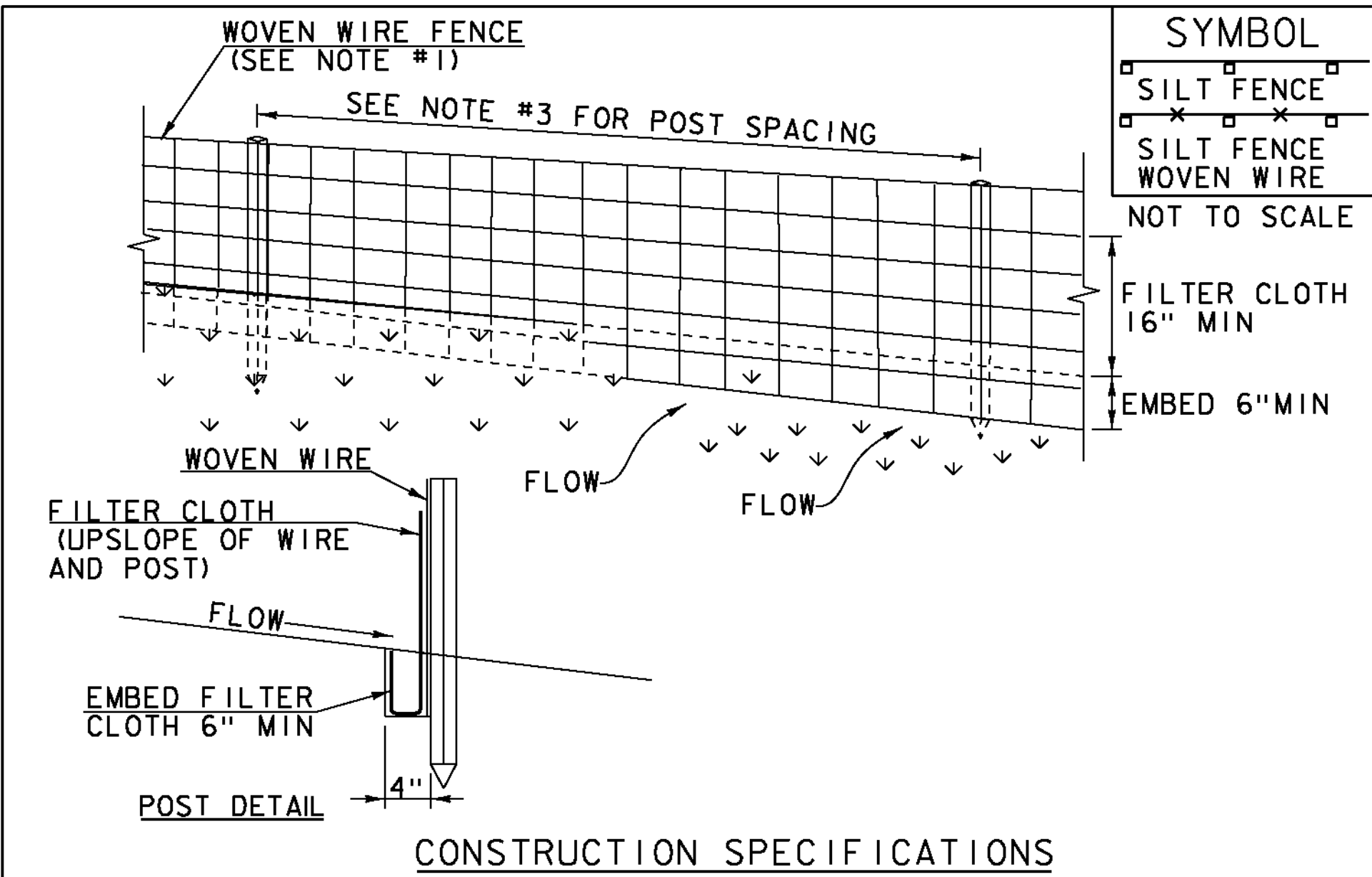
- CONSTRUCTION SPECIFICATIONS**
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
 2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
 3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' 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	



- 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	



- CONSTRUCTION SPECIFICATIONS**
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. 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).	
REVISIONS	
MARCH 21, 2008 WHF	
DECEMBER 11, 2008 WHF	
JANUARY 13, 2009 WHF	

VAOT RURAL AREA MIX					
LBS/AC					
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
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					
LBS/AC					
% WEIGHT	BROADCAST	HYDROSEED	NAME	GERM %	PURITY %
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.

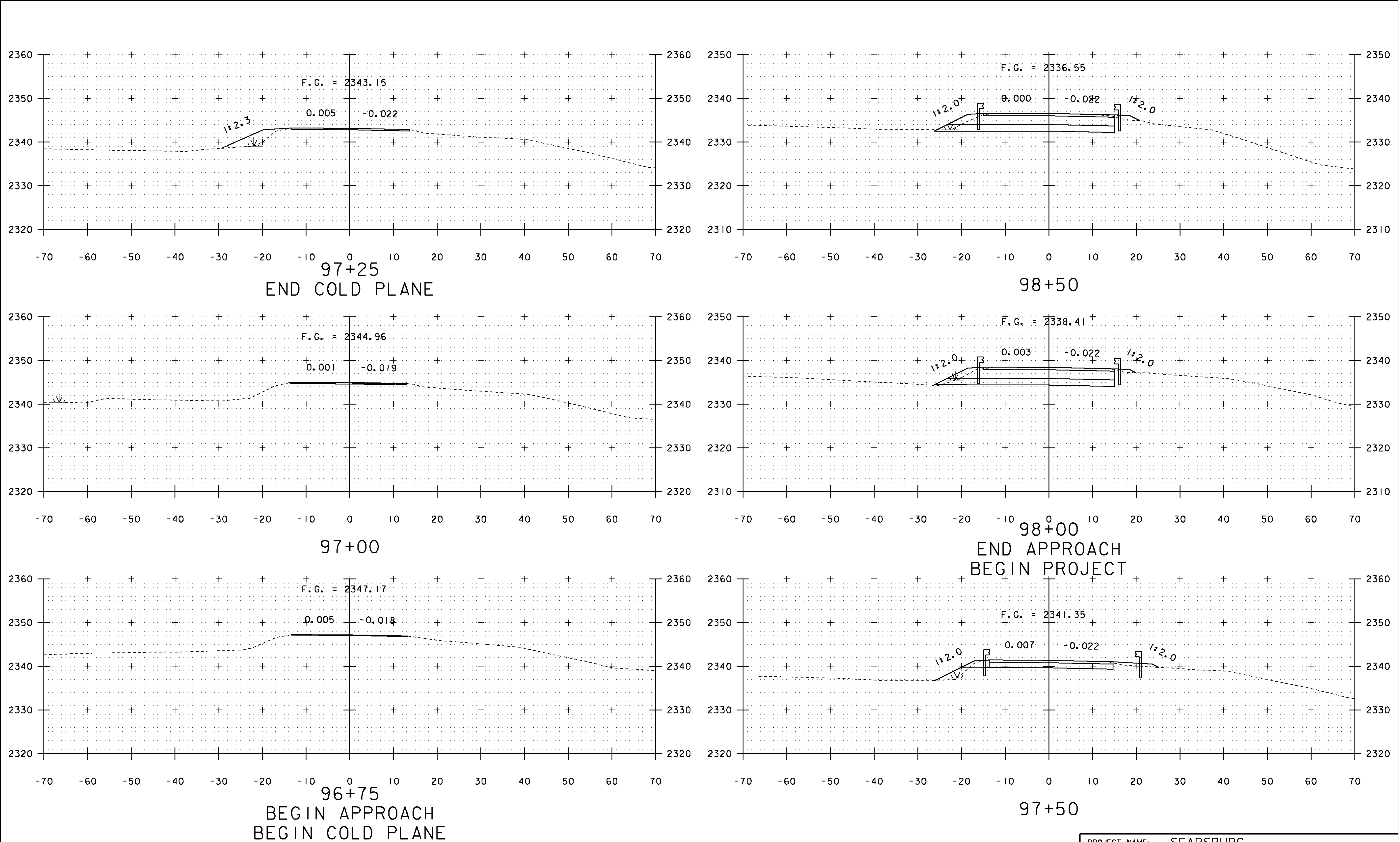
7.HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED

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

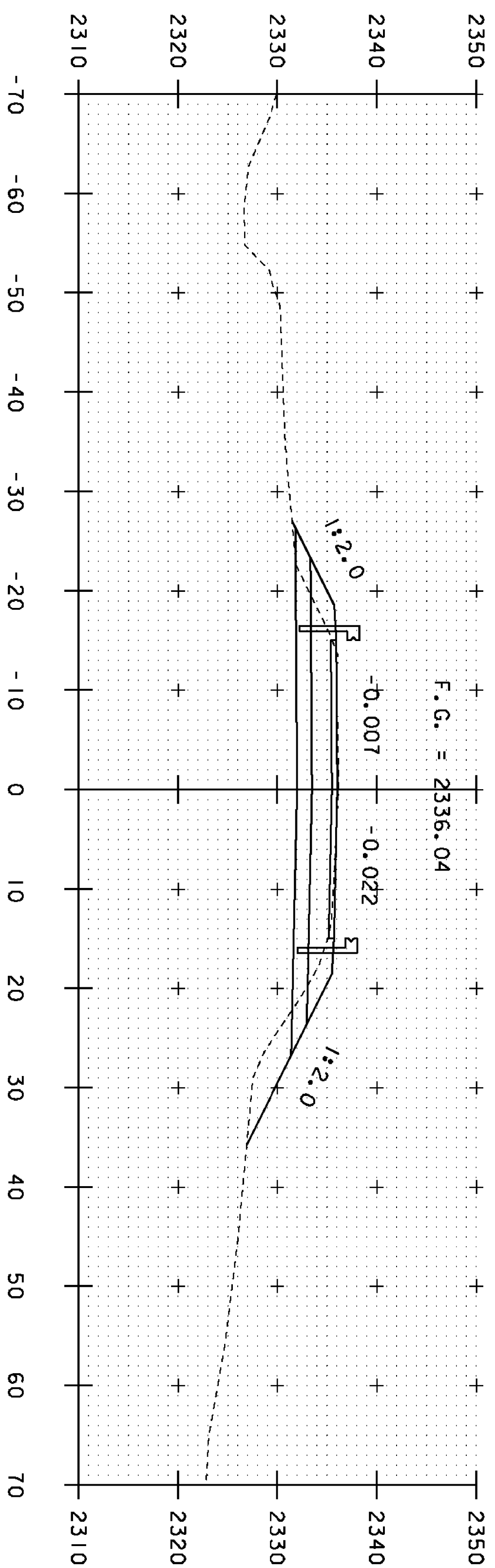
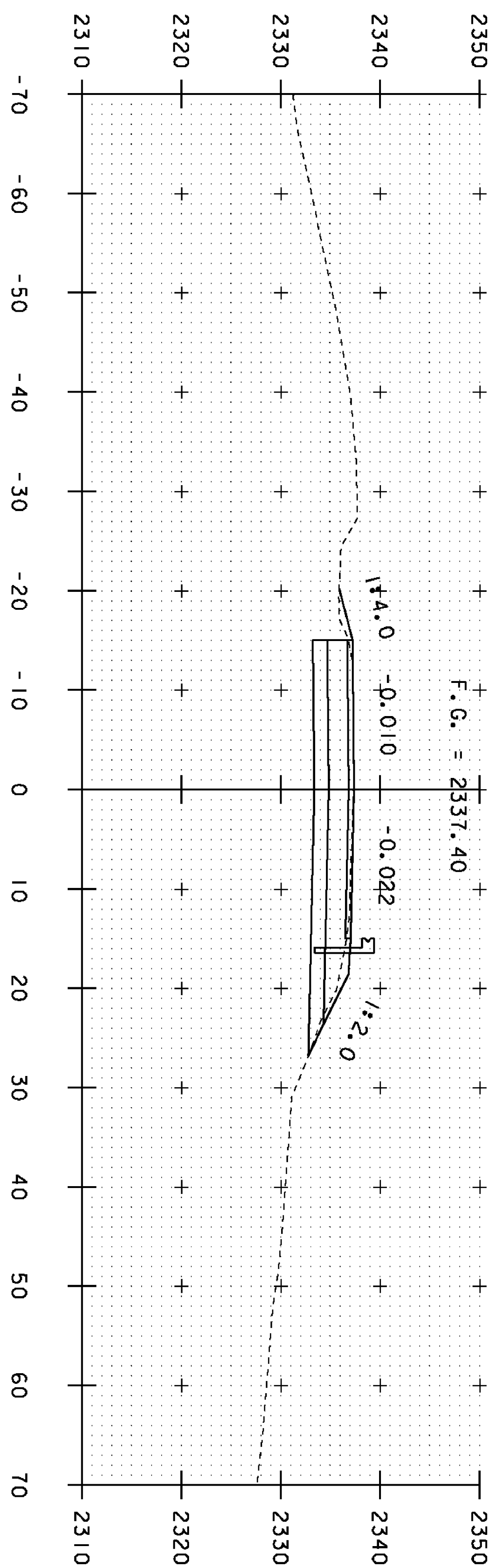
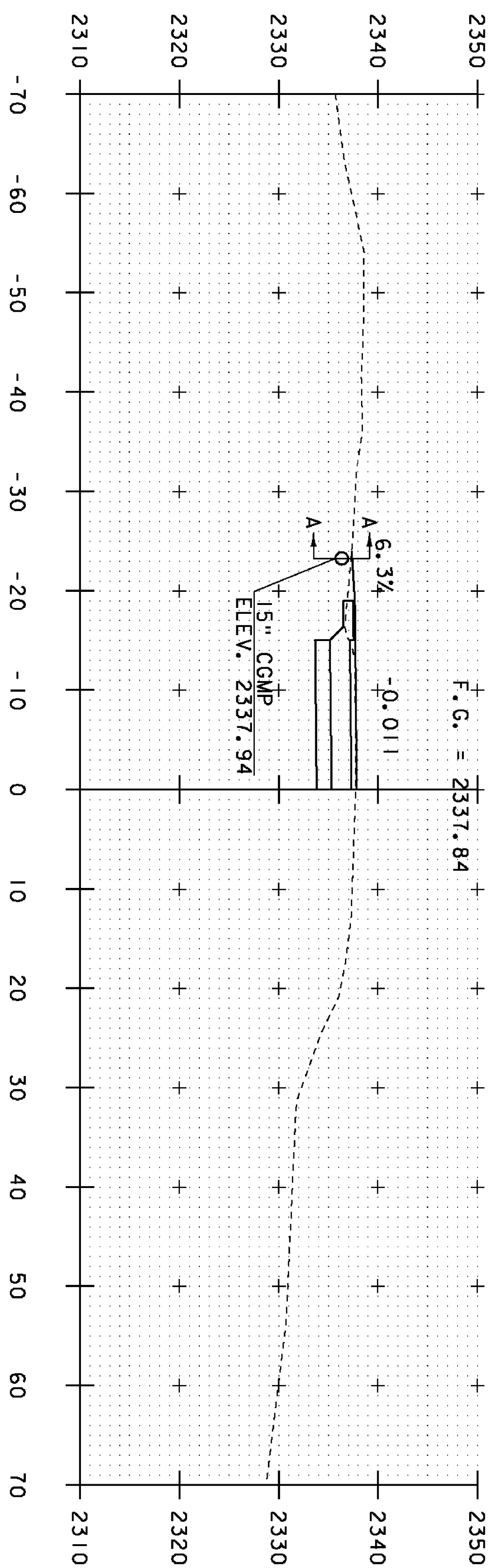
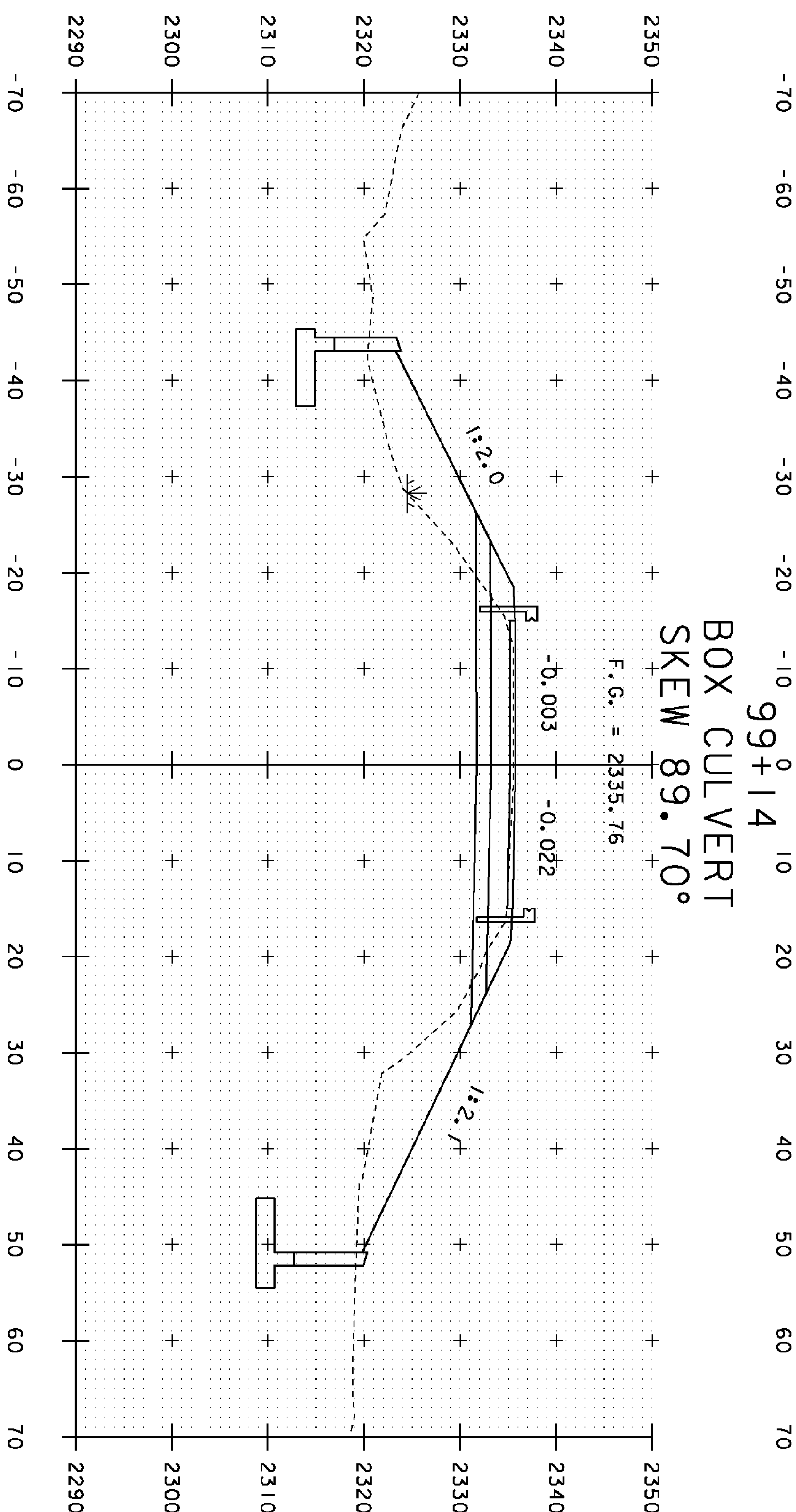
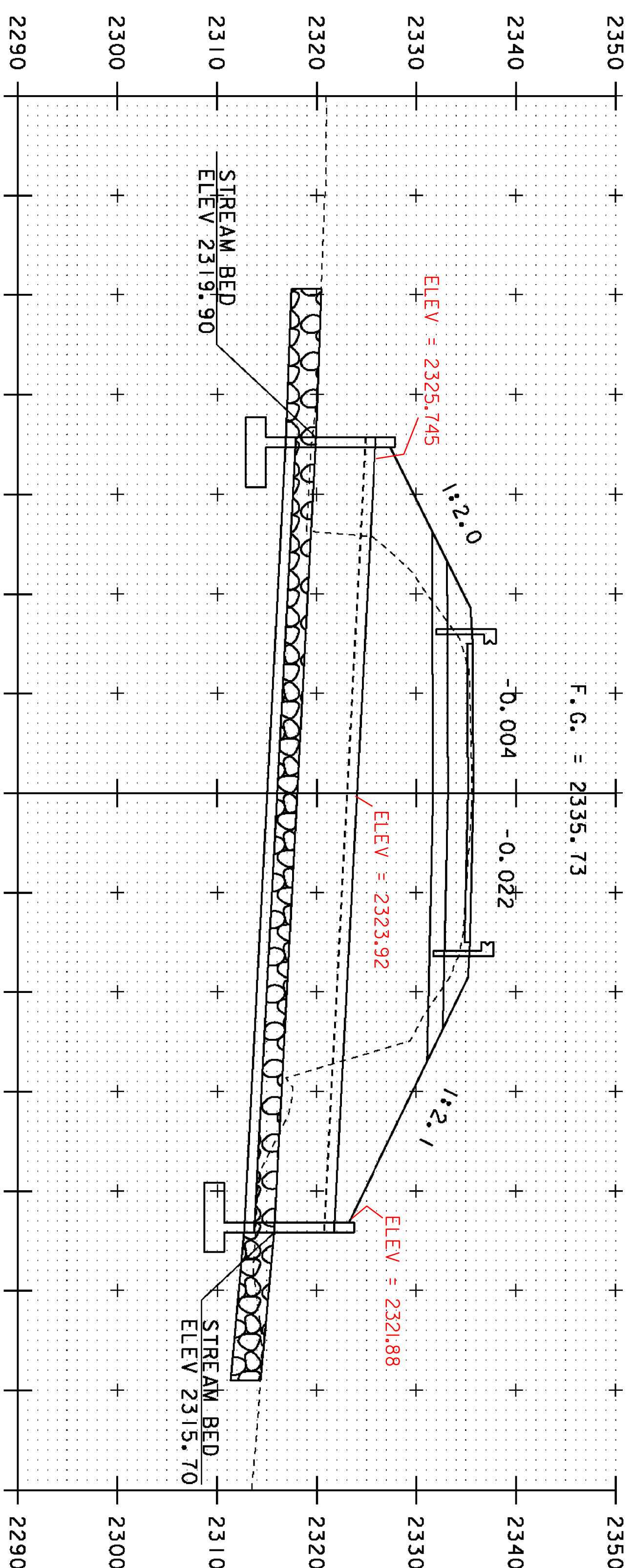
		SYMBOL FR												
NOT TO SCALE														
CONSTRUCTION SPECIFICATIONS														
1. EXCAVATE A SHALLOW TRENCH SLIGHTLY BELOW BASEFLOW OR A 4" TRENCH ON SLOPE CONTOURS 2. PLACE THE ROLL IN THE TRENCH AND ANCHOR WITH 2"x2" POSTS PLACED ON BOTH SIDES FO THE ROLL AND SPACED Laterally ON 2' TO 4' CENTERS. TRIM THE TOP OF THE POSTS EVEN WITH THE EDGE OF THE ROLL, IF NECESSARY. 3. NOTCH THE POSTS AND TIE TOGETHER, ACROSS THE ROLL, WITH 9 GAUGE GALVANIZED WIRE OR 1/8" DIAMETER BRAIDED NYLON ROPE. 4. PLACE SOIL EXCAVATED FROM THE TRENCH BEHIND THE ROLL AND HAND TAMP. PLANT WITH SUITABLE HERBACEOUS OR WOODY VEGETATION AS SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS. VEGETATION SHALL BE PLACED IMMEDIATELY ADJACENT TO THE ROLL TO PROMOTE ROOT GROWTH INTO THE FIBER. HERBACEOUS VEGETATION, IF SPECIFIED, SHALL BE PLANTED INTO THE FIBER ROLL.														
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	FIBER ROLL (EROSION LOG)													
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 EROSION LOG (PAY ITEM 653.60)														
<table border="1"> <thead> <tr> <th colspan="2">REVISIONS</th> </tr> </thead> <tbody> <tr> <td>MARCH 21, 2008</td> <td>WHF</td> </tr> <tr> <td>JANUARY 13, 2009</td> <td>WHF</td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> </tr> </tbody> </table>			REVISIONS		MARCH 21, 2008	WHF	JANUARY 13, 2009	WHF						
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MARCH 21, 2008	WHF													
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PROJECT NAME:	SEARSBURG
PROJECT NUMBER:	STP SCRP(7)
FILE NAME: dl0ci98_ero.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
EPSC DETAILS SHEET 2	SHEET 27 OF 35

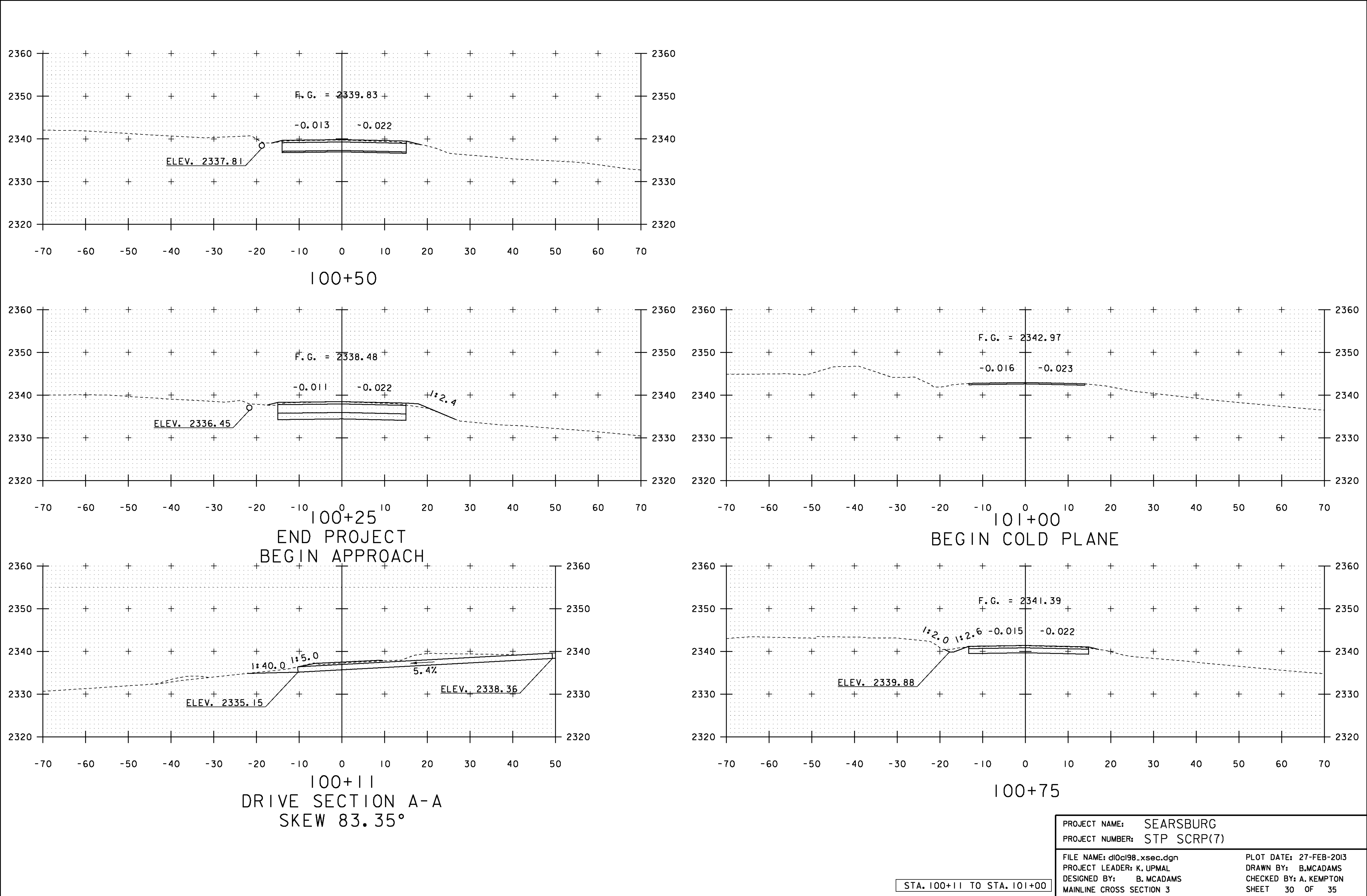


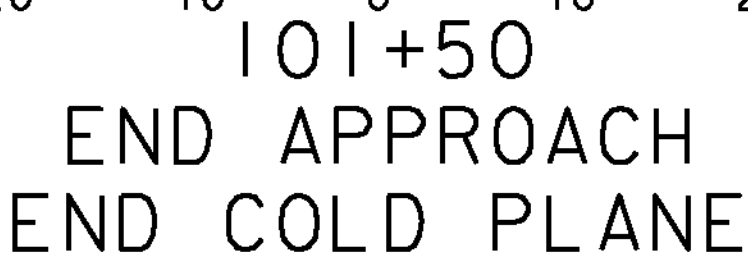
STA. 96+75 TO STA. 98+50

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: d:\0ci98_xsec.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
MAINLINE CROSS SECTIONS 1	SHEET 28 OF 35



PROJECT NAME: SEARSBURG
PROJECT NUMBER: STP SCRP(7)
FILE NAME: d:\c0198_x\sec.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B. MCADAMS
MAINLINE CROSS SECTIONS 2
PLOT DATE: 27-FEB-2013
DRAWN BY: B. MCADAMS
CHECKED BY: A. KEMPTON
SHEET 29 OF 35

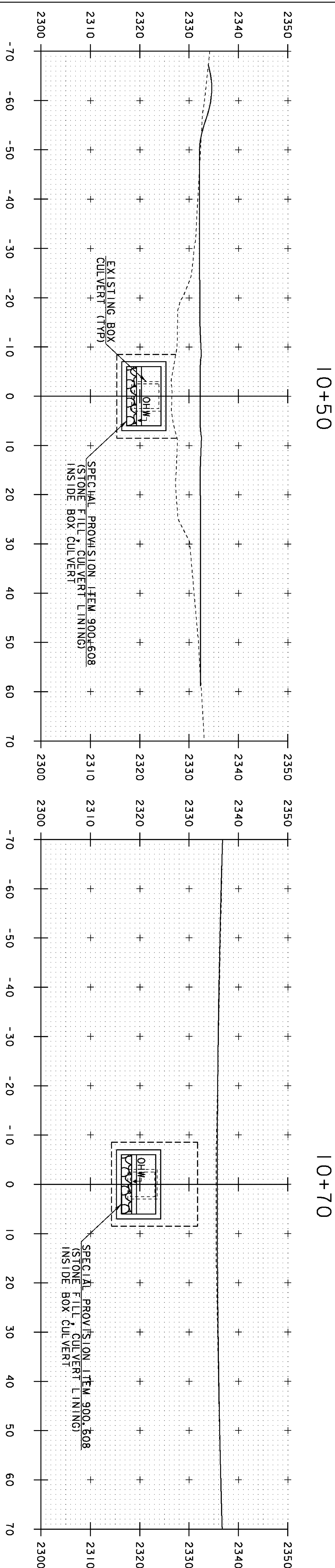
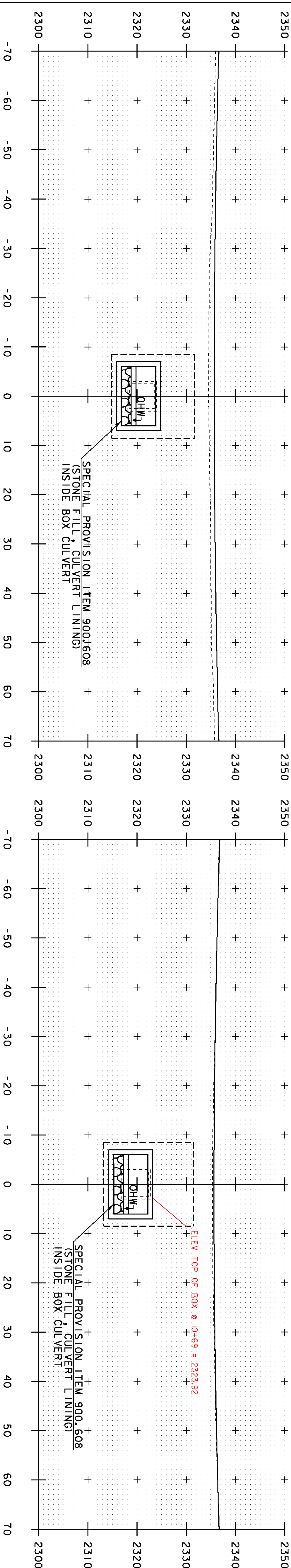




PROJECT NAME: SEARSBURG
PROJECT NUMBER: STP SCRP(7)

FILE NAME: d10cl98_xsec.dgn
PROJECT LEADER: K. UPMAL
DESIGNED BY: B.MCADAMS
MAINLINE CROSS SECTIONS 4

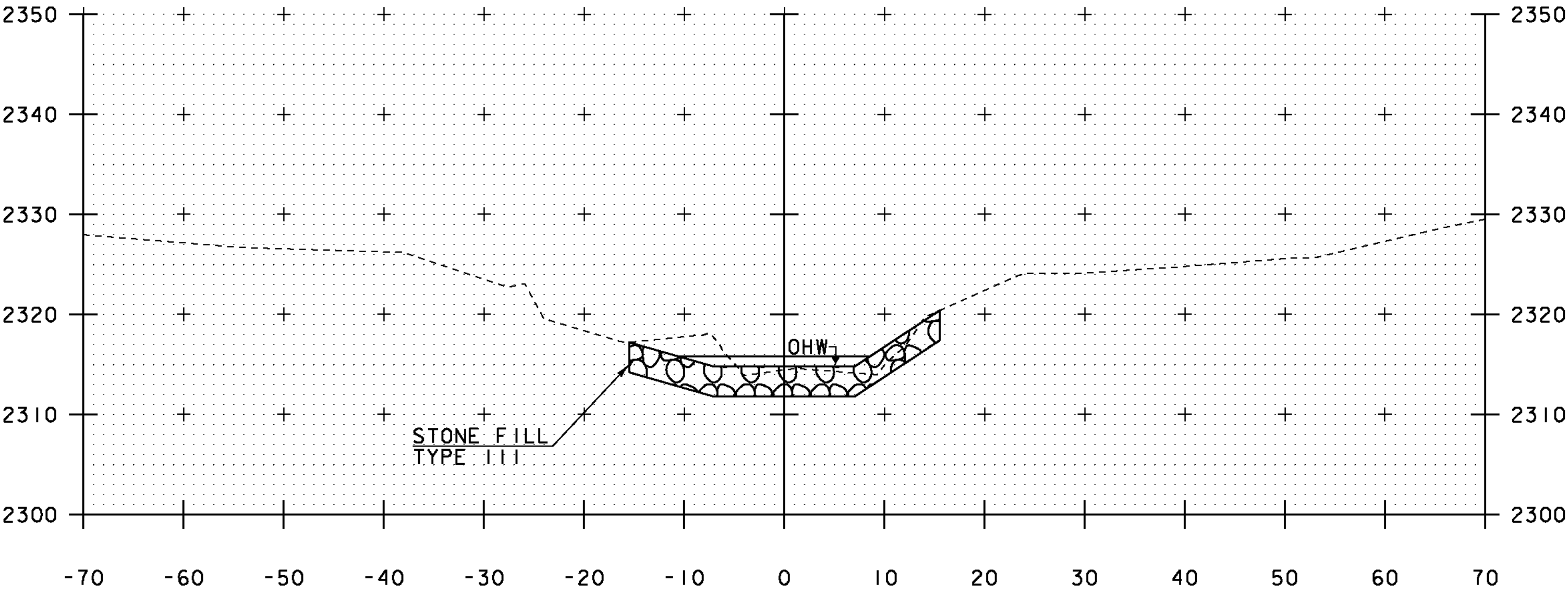
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DRAWN BY: B.MCADAMS
CHECKED BY: A. KEMPTON
SHEET 31 OF 35



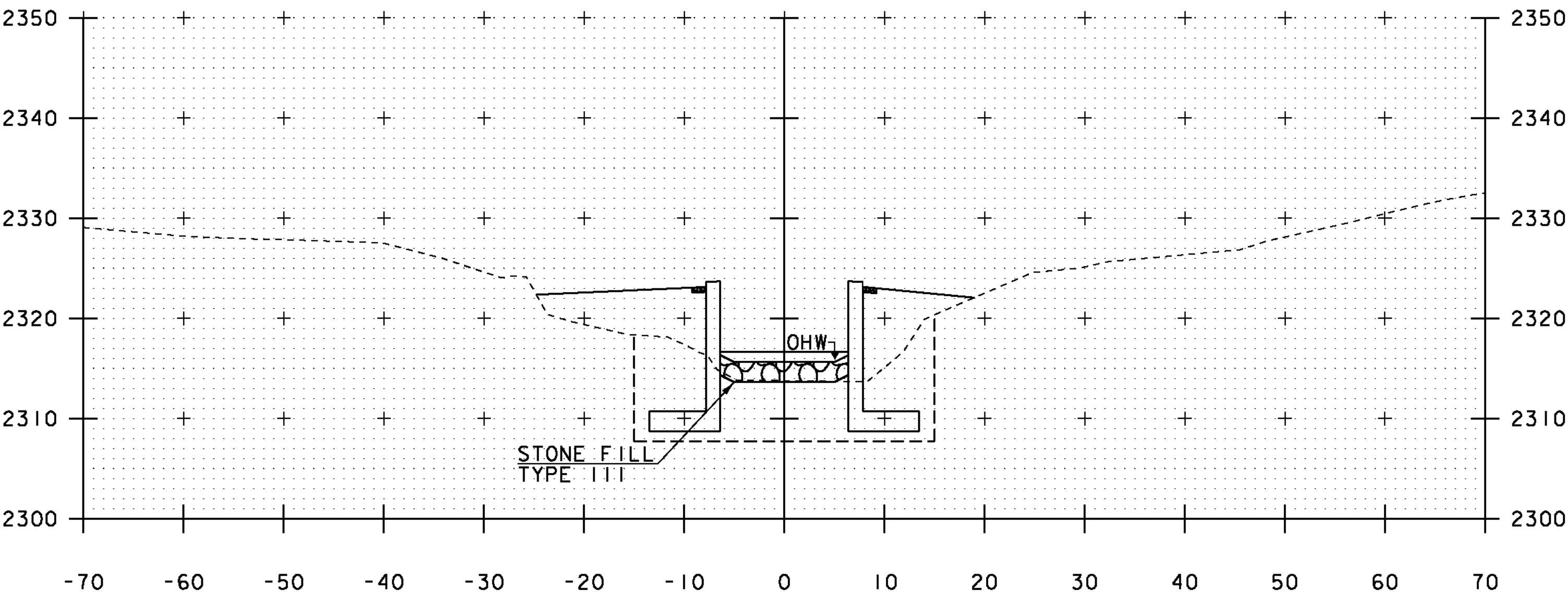
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PROJECT LEADER: K. UPMAL	PROJECT LEADER: K. UPMAL
DESIGNED BY: B. MCADAMS	DESIGNED BY: B. MCADAMS
CHANNEL CROSS SECTIONS 2	CHANNEL CROSS SECTIONS 2
	PLOT DATE: 27-FEB-2013
	DRAWN BY: B. MCADAMS
	CHECKED BY: A. KEMPTON
	SHEET 33 OF 35

STA. 10+40 TO STA. 10+70

STA 11+24.10
END STONE FILL, TYPE III
END GEOTEXTILE UNDER STONE FILL
END UNCLASSIFIED CHANNEL EXCAVATION

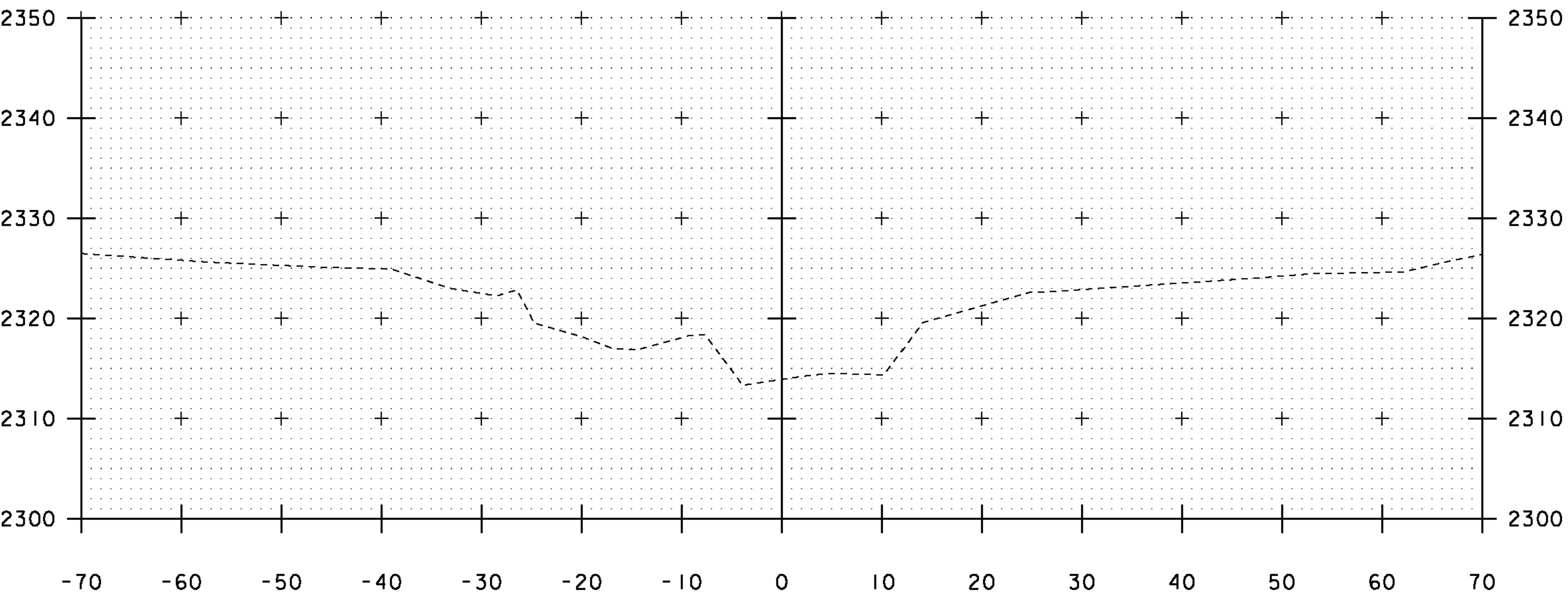


11+20



11+10

STA 11+09.20
BEGIN STONE FILL, TYPE III
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN UNCLASSIFIED CHANNEL EXCAVATION



11+30

STA. 11+10 TO STA. 11+30

PROJECT NAME: SEARSBURG	
PROJECT NUMBER: STP SCRP(7)	
FILE NAME: d10c198.xsec.dgn	PLOT DATE: 27-FEB-2013
PROJECT LEADER: K. UPMAL	DRAWN BY: B. MCADAMS
DESIGNED BY: B. MCADAMS	CHECKED BY: A. KEMPTON
CHANNEL CROSS SECTIONS 4	SHEET 35 OF 35