

STATE OF VERMONT  
AGENCY OF TRANSPORTATION

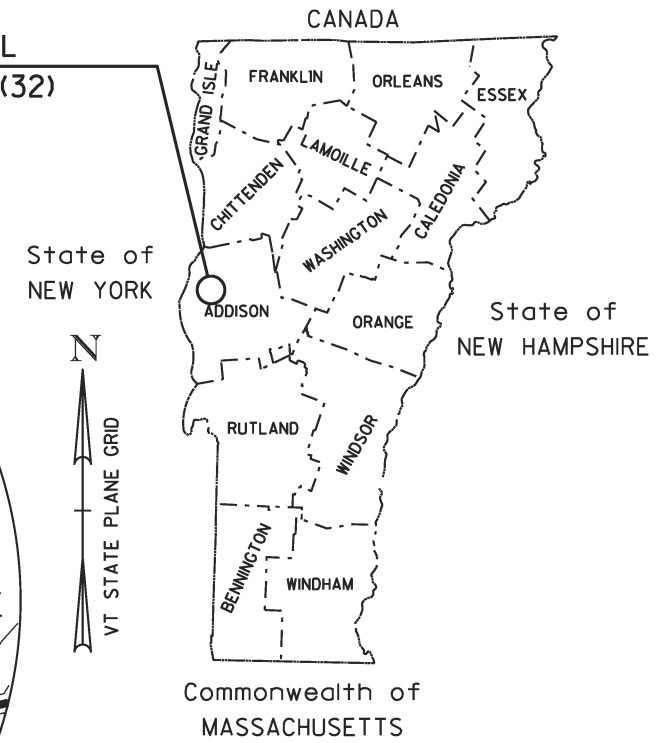
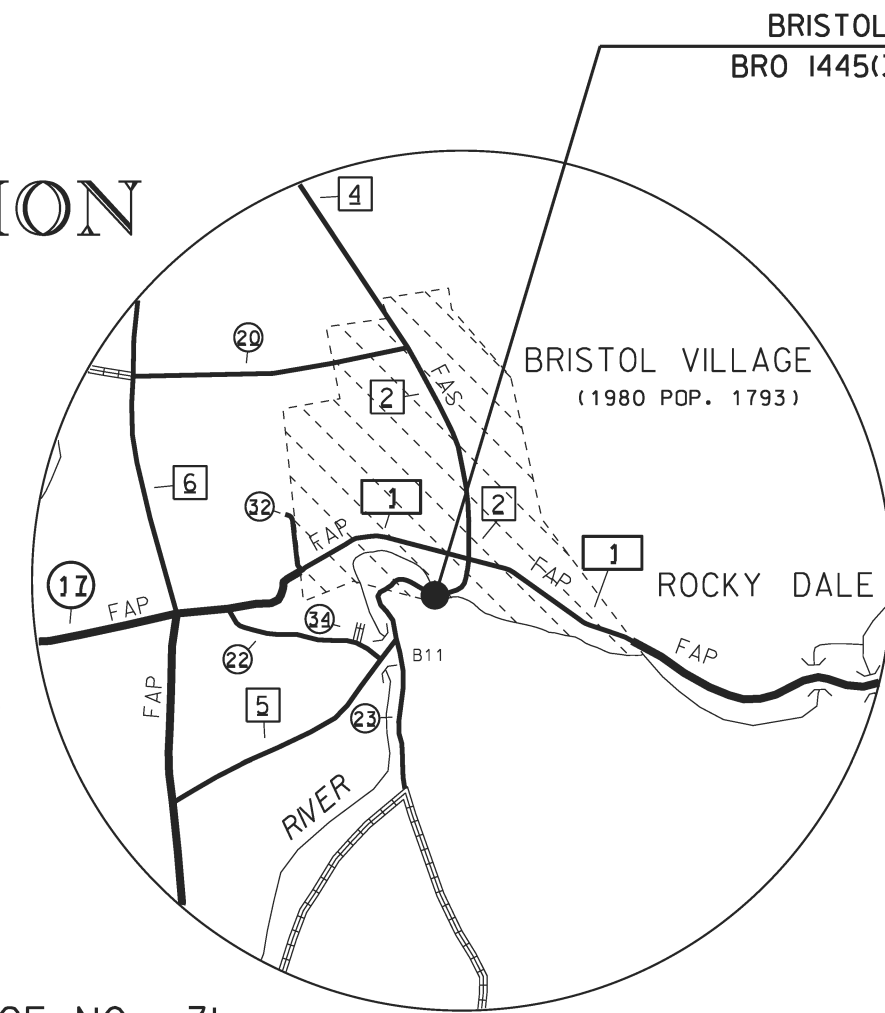


R.O.W. PLANS

PROPOSED IMPROVEMENT  
BRIDGE PROJECT

TOWN OF BRISTOL, ADDISON COUNTY

ROUTE NO : TH 5 CLASS II, LOCAL ROAD (SOUTH STREET) BRIDGE NO : 31

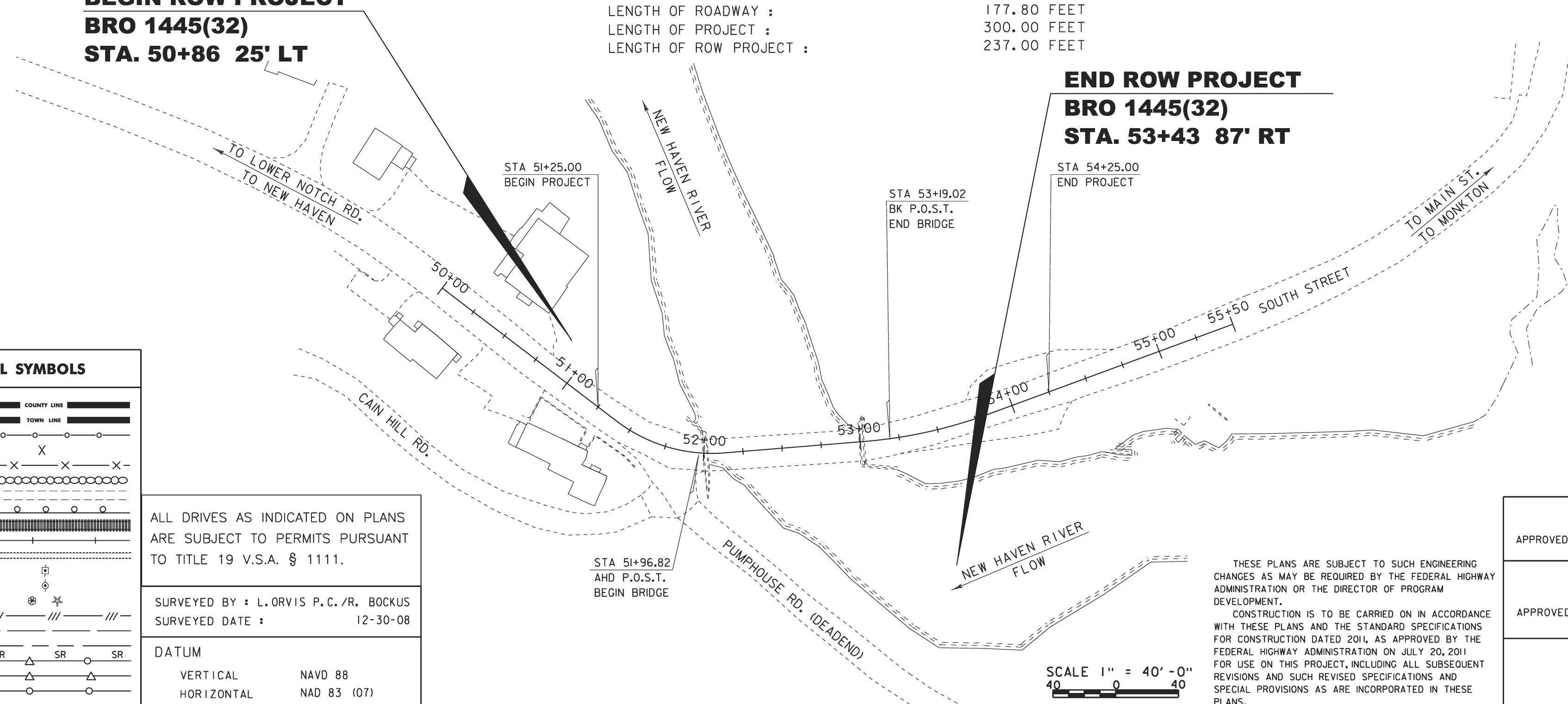


PROJECT LOCATION : THE BRIDGE IS LOCATED ON TOWN HIGHWAY 5 (SOUTH STREET) APPROXIMATELY 0.2 MILES SOUTHWEST OF THE INTERSECTION OF TOWN HIGHWAY 5 AND VT RTE 17.  
PROJECT DESCRIPTION : REPLACEMENT OF EXISTING TRUSS BRIDGE WITH A NEW SINGLE SPAN BRIDGE, NEW ABUTMENTS AND NECESSARY APPROACH WORK.

**BEGIN ROW PROJECT**  
**BRO 1445(32)**  
**STA. 50+86 25' LT**

LENGTH OF STRUCTURE : 122.20 FEET  
LENGTH OF ROADWAY : 177.80 FEET  
LENGTH OF PROJECT : 300.00 FEET  
LENGTH OF ROW PROJECT : 237.00 FEET

**END ROW PROJECT**  
**BRO 1445(32)**  
**STA. 53+43 87' RT**



CONVENTIONAL SYMBOLS

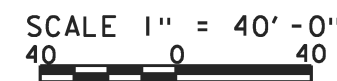
COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

ALL DRIVES AS INDICATED ON PLANS ARE SUBJECT TO PERMITS PURSUANT TO TITLE 19 V.S.A. § 1111.

SURVEYED BY : L. ORVIS P.C./R. BOCKUS  
SURVEYED DATE : 12-30-08

DATUM  
VERTICAL NAVD 88  
HORIZONTAL NAD 83 (07)

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.



APPROVED RICHARD TETREULT DATE 07-23-12  
*Director of Program Development*

APPROVED ROBERT M. WHITE DATE 07-23-12  
*Chief of Right of Way*

BRISTOL  
BRO 1445(32)  
ROW SHEET 1 OF 19 SHEETS

# RIGHT - OF - WAY DETAIL SHEET

TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE	REMAINDER	RIGHT			RECORDING DATA				REMARKS		
					AREA±	AREA±	TYPE	(T)/(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK		PAGE	
1	ADDISON COUNTY COMMUNITY ACTION GROUP, INC., d/b/a HOPE	3	50+86 LT	52+17 LT			CONST.	(T)	550 SF	WDOE	03/15/13	BRISTOL	141	330-331	INCL. PDF & EC	
			50+89 LT	51+55 LT			SLOPE	(T)	780 SF							
			51+01 LT	52+14 LT			CHANNEL	(P)	2,515 SF							
			CH 11+51 LT	CH 12+25 LT			REMOVE & REPLACE	(T)								CHAIN LINK FENCE
2	LATHROP, RUTH A. & LATHROP, CLAIRE S.	3	51+55 RT	53+43 RT			UTILITY	(P)	0.14 A	WDOE	05/06/13	BRISTOL	142	102-103	6,140 SF±	
			51+56 RT	52+55 RT			APPROACH	(T)	3,650 SF							CAIN HILL ROAD AND PUMPHOUSE ROAD INCLUDES PDF, EC, SLOPE RECONTOURING AND RELOCATION OF MAILBOX
			51+60 RT				INSTALL & MAINT.	(P)								PUSH BRACE POLE
			51+63 RT	52+14 RT			CUL., DR.	(P)								INCL. INSTALLATION STONE FILL
			51+95 RT	52+39 RT			INSTALL & MAINT.	(P)								GUARDRAIL
			51+98 RT	52+29 RT			CHANNEL	(P)	400 SF							
			52+15 RT	52+58 RT			CONST.	(T)	216 SF							INCL. BF & EC
3	GREEN MOUNTAIN POWER CORPORATION	3	50+86 LT	53+23 RT			ALL R. T. & I.								UTILITY EASEMENTS	
4	WAITSFIELD-FAYSTON TELEPHONE CO., INC.	3	50+86 LT	53+23 RT			ALL R. T. & I.								UTILITY EASTMENTS	
5	COMCAST OF CONNECTICUT, ETC., LLC	3	50+86 LT	53+23 RT			ALL R. T. & I.								UTILITY EASEMENTS	

TABLE OF REVISIONS

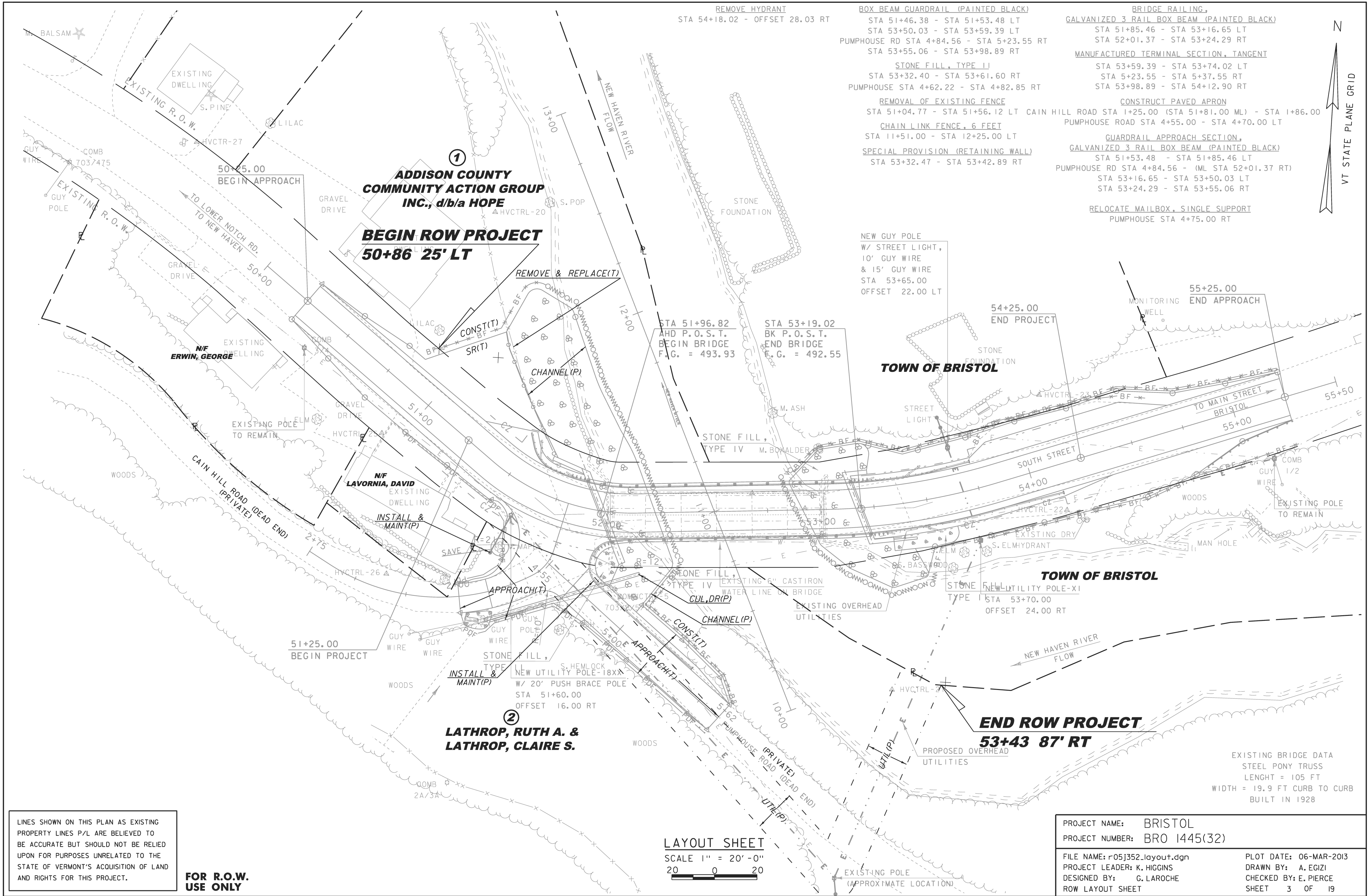
REVISION NO.	SHEET NO.	DESCRIPTION	DATE
1	2, 3	PARCEL 2, LATHROP - MOVED GUARDRAIL, REMOVED CURB, REVISED APPROACH AS REQUESTED BY PROPERTY OWNER. COMPLETED BY: MT C.O. 9781 APPROVED BY: HP	10/11/12
2	1, 2, 3	PARCEL 2, LATHROP - MOVED UTILITY AND RECALCULATED AREA; MOVED END ROW PROJECT TO 53+43 87' RT; ADJUSTED APPROACH (T) ARROWS, RECALCULATED AREA; CHANGED STATION BEGIN & END LOCATIONS FOR EASEMENTS; REMOVED INSTALL & MAINT (P) GUY WIRE EASEMENT. CHANGES MADE ON LAYOUT, DETAIL & TITLE SHEETS. COMPLETED BY: MT C.O. 9790 APPROVED BY: HP	02/19/13

PLAN LEGEND

	EXISTING RIGHT-OF-WAY		TOE OF SLOPE	(P)	-PERMANENT
	TAKING WITH ACCESS		TOP OF CUT	(T)	-TEMPORARY
	TAKING WITHOUT ACCESS		SLOPE RIGHT	DR.	-DRAINAGE RIGHT
	CLEAR ZONE		SR (P)	DIT.	-DITCHING RIGHT
	PROPERTY LINE		CONST. (T)	CH.	-CHANNEL RIGHT
			PDF	DRIVE	-DRIVE RIGHT
			PDF	CUL.	-CULVERT RIGHT
				BND	-BOUND (PROPERTY MARKER)
				SR	-SLOPE RIGHT
				UE	-UTILITY EASEMENT

APPROVED: HARRY PETROVS DATE: 07-23-12  
CHIEF, PLANS & TITLES

PROJECT NAME:	<b>BRISTOL</b>	PLOT DATE:	20-MAY-2013
PROJECT NUMBER:	<b>BRO 1445(32)</b>	DRAWN BY:	<b>M. TROTTIER</b>
FILE NAME:	r05j352DetailSheet.xls	CHECKED BY:	<b>A. EGIZI</b>
PROJECT LEADER:	<b>K. HIGGINS</b>	SHEET	2 OF 19
DESIGNED BY:	<b>A. EGIZI</b>		
R.O.W. DETAIL SHEET #1			



LINES SHOWN ON THIS PLAN AS EXISTING PROPERTY LINES P/L ARE BELIEVED TO BE ACCURATE BUT SHOULD NOT BE RELIED UPON FOR PURPOSES UNRELATED TO THE STATE OF VERMONT'S ACQUISITION OF LAND AND RIGHTS FOR THIS PROJECT.

**FOR R.O.W. USE ONLY**

PROJECT NAME:	BRISTOL	PLOT DATE:	06-MAR-2013
PROJECT NUMBER:	BRO 1445(32)	DRAWN BY:	A. EGIZI
FILE NAME:	r05j352_layout.dgn	DESIGNED BY:	G. LAROCHE
PROJECT LEADER:	K. HIGGINS	ROW LAYOUT SHEET	SHEET 3 OF 19
		CHECKED BY:	E. PIERCE

**LAYOUT SHEET**  
SCALE 1" = 20'-0"  
20 0 20

EXISTING BRIDGE DATA  
STEEL PONY TRUSS  
LENGTH = 105 FT  
WIDTH = 19.9 FT CURB TO CURB  
BUILT IN 1928

- 1 TITLE SHEET
- 2 DETAIL SHEET
- 3 ROW LAYOUT SHEET
- 4 PRELIMINARY INFORMATION SHEET
- 5-6 TYPICAL SECTIONS
- 7 TIE SHEET
- 8 ALIGNMENT SHEET
- 9-10 PROFILE SHEETS
- 11-12 UTILITY SHEETS
- 13 DRAINAGE LAYOUT SHEET
- 14 SIGN LAYOUT SHEET
- 15 PLAN & ELEVATION SHEET
- 16-18 EPSC DETAIL SHEETS
- 19 EPSC - DURING CONSTRUCTION SHEET

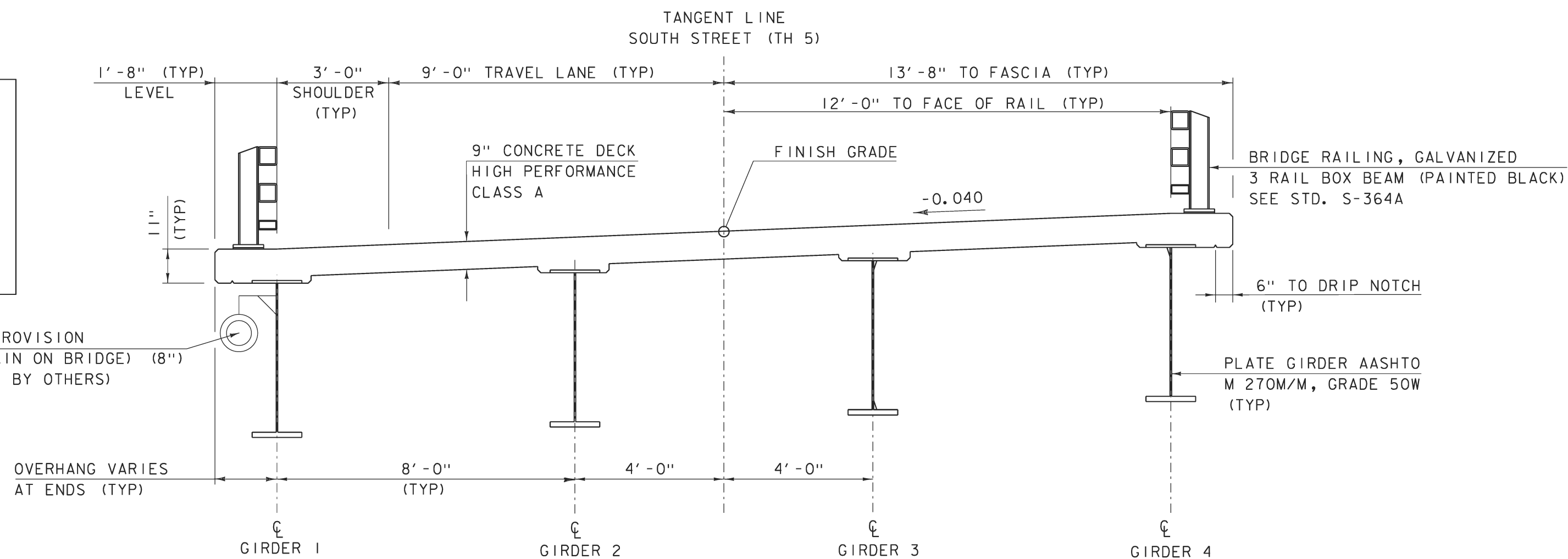
PROJECT NAME: BRISTOL	
PROJECT NUMBER: BRO 1445(32)	
FILE NAME: r05j352_pl.dgn	PLOT DATE: 06-MAR-2013
PROJECT LEADER: K. HIGGINS	DRAWN BY: R. PELLETT
DESIGNED BY: G. LAROCHE	CHECKED BY: T. FILLBACH
PRELIMINARY INFORMATION SHEET	SHEET 4 OF 19

**MATERIAL TOLERANCES**

(IF USED ON PROJECT)

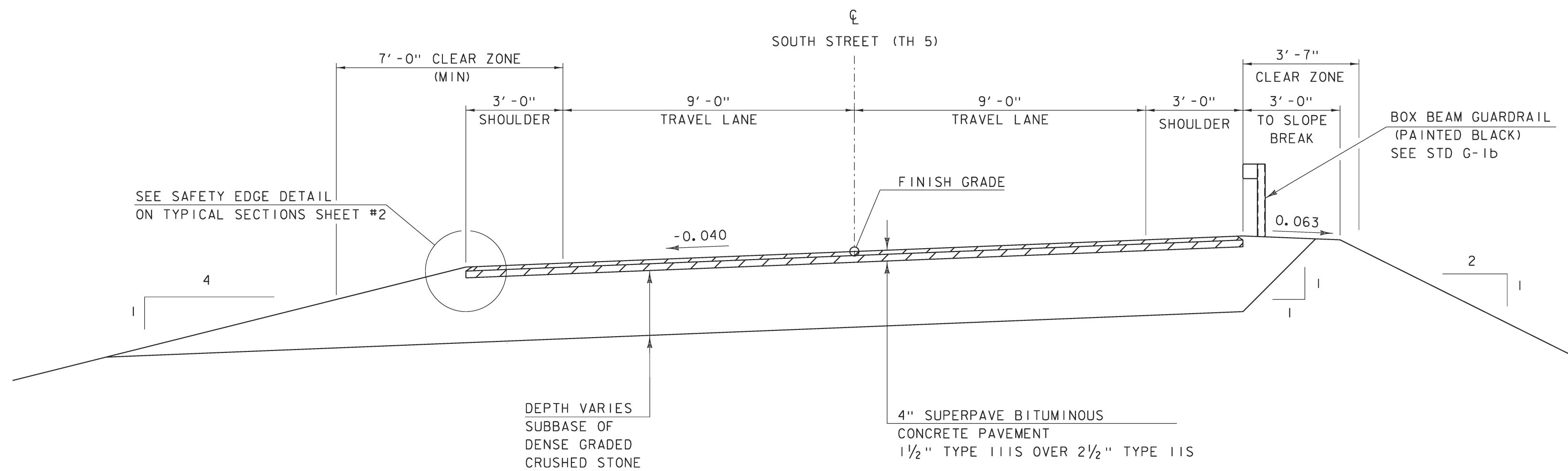
SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	
	+/- 1"
SAND BORROW	
	+/- 1"

SPECIAL PROVISION  
(WATER MAIN ON BRIDGE) (8")  
(DESIGNED BY OTHERS)



**BRIDGE TYPICAL SECTION**

SCALE 1/2" = 1'-0"



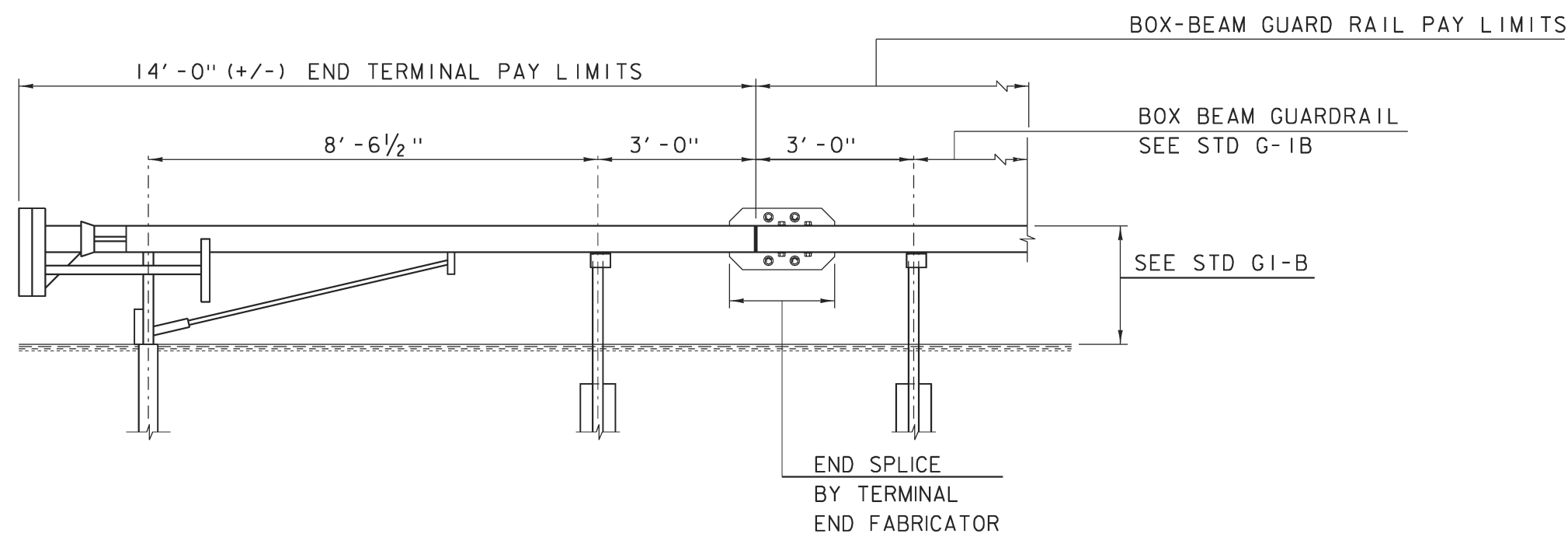
**ROADWAY TYPICAL SECTION**

SCALE 1/2" = 1'-0"

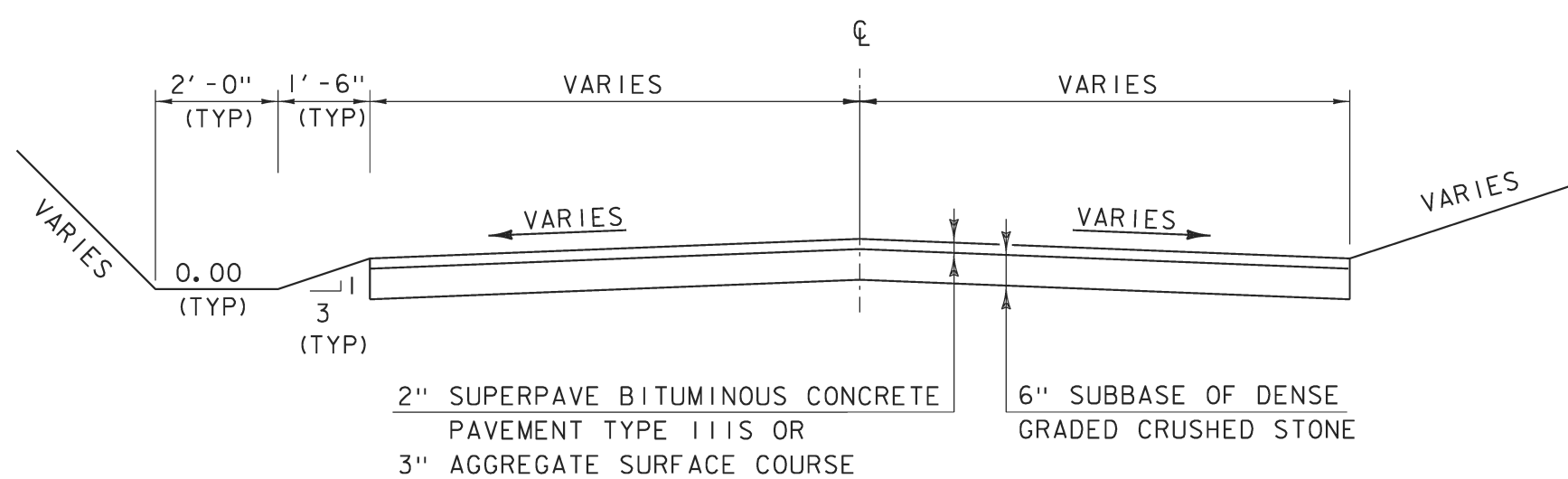
PROJECT NAME: BRISTOL  
PROJECT NUMBER: BRO 1445(32)

FILE NAME: s05j352typ.dgn  
PROJECT LEADER: J. LACROIX  
DESIGNED BY: G. LAROCHE  
TYPICAL SECTIONS SHEET #1

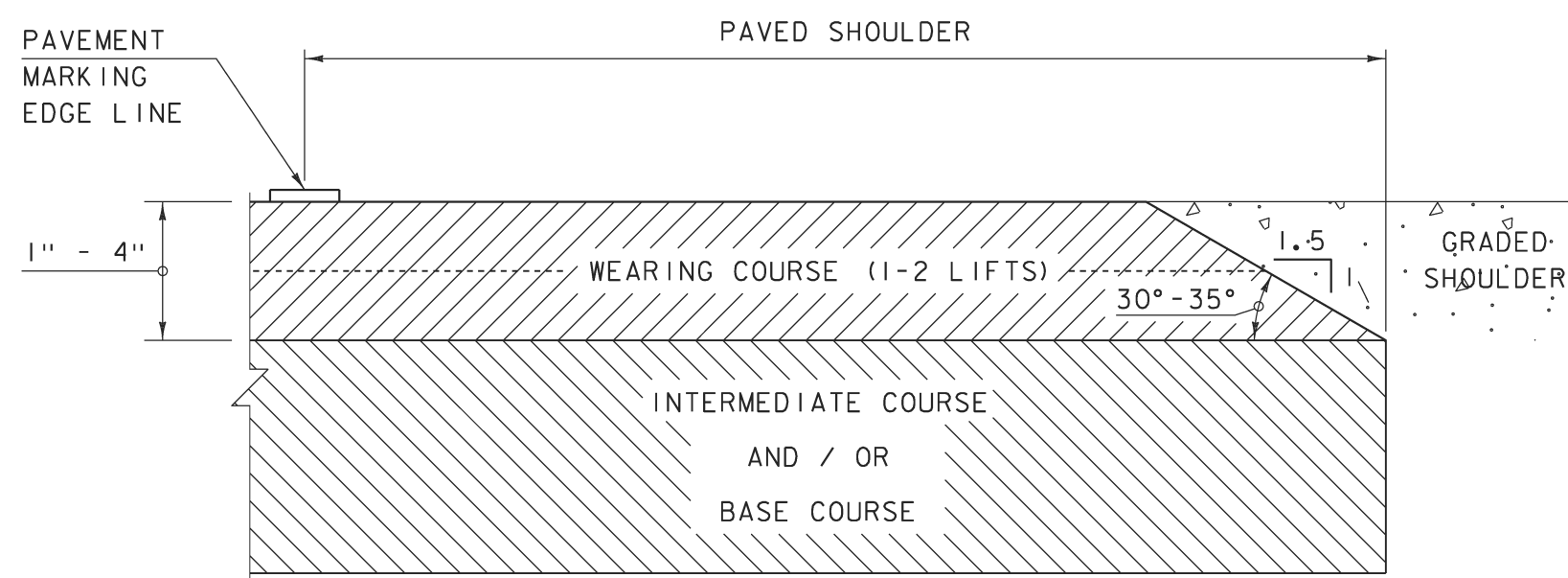
PLOT DATE: 06-MAR-2013  
DRAWN BY: R. PELLETT  
CHECKED BY: T. FILLBACH  
SHEET 5 OF 19



MANUFACTURED TERMINAL SECTION, TANGENT DETAIL  
SCALE 1/2" = 1'-0"

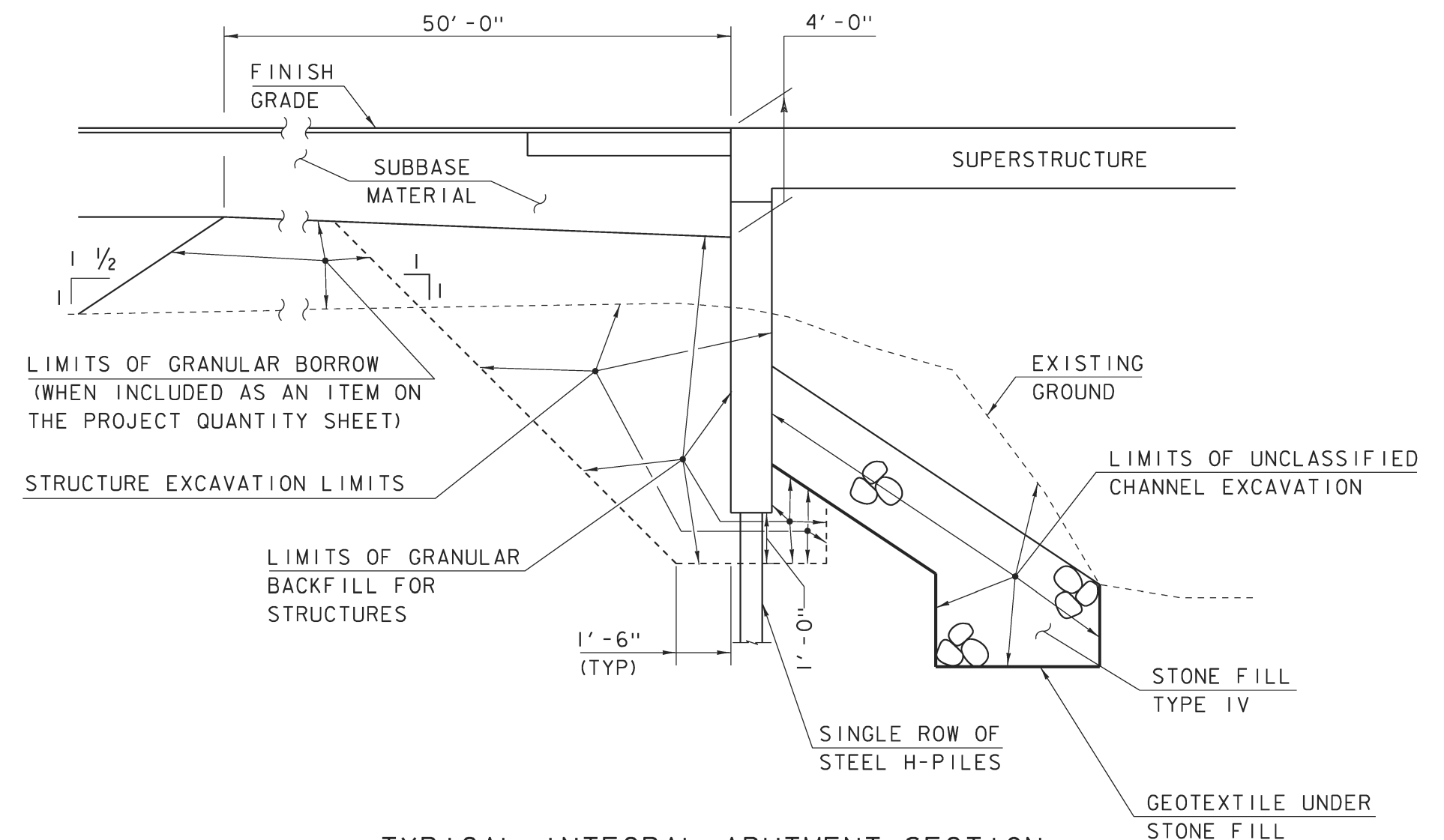


SIDE ROAD TYPICAL SECTION  
SCALE 1/2" = 1'-0"



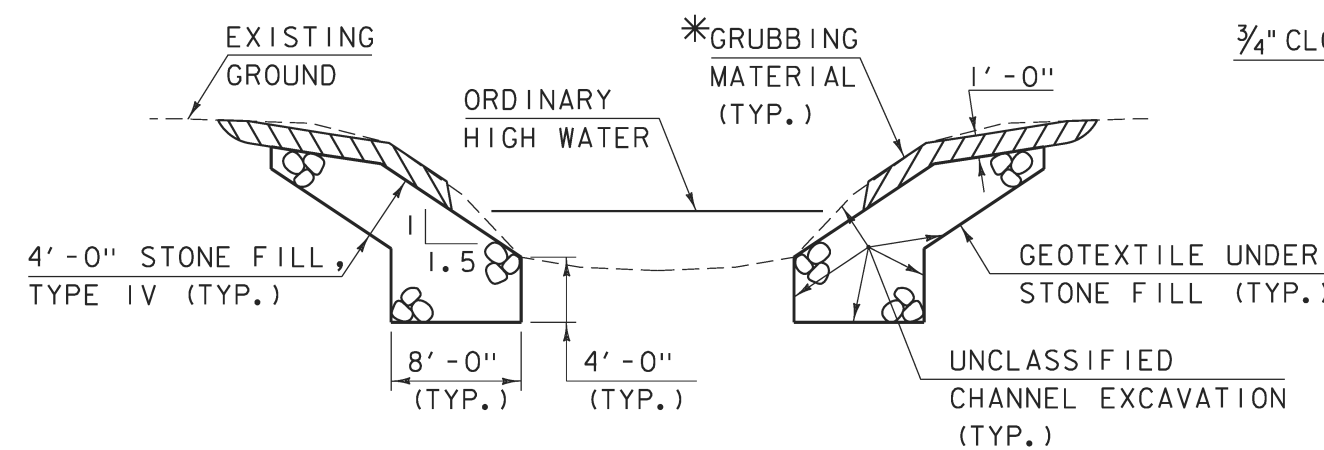
SAFETY EDGE DETAIL  
NOT TO SCALE

NOTE: LEVELING COURSE MAY INCLUDE THE "SAFETY EDGE" AT THE CONTRACTOR'S CHOICE.



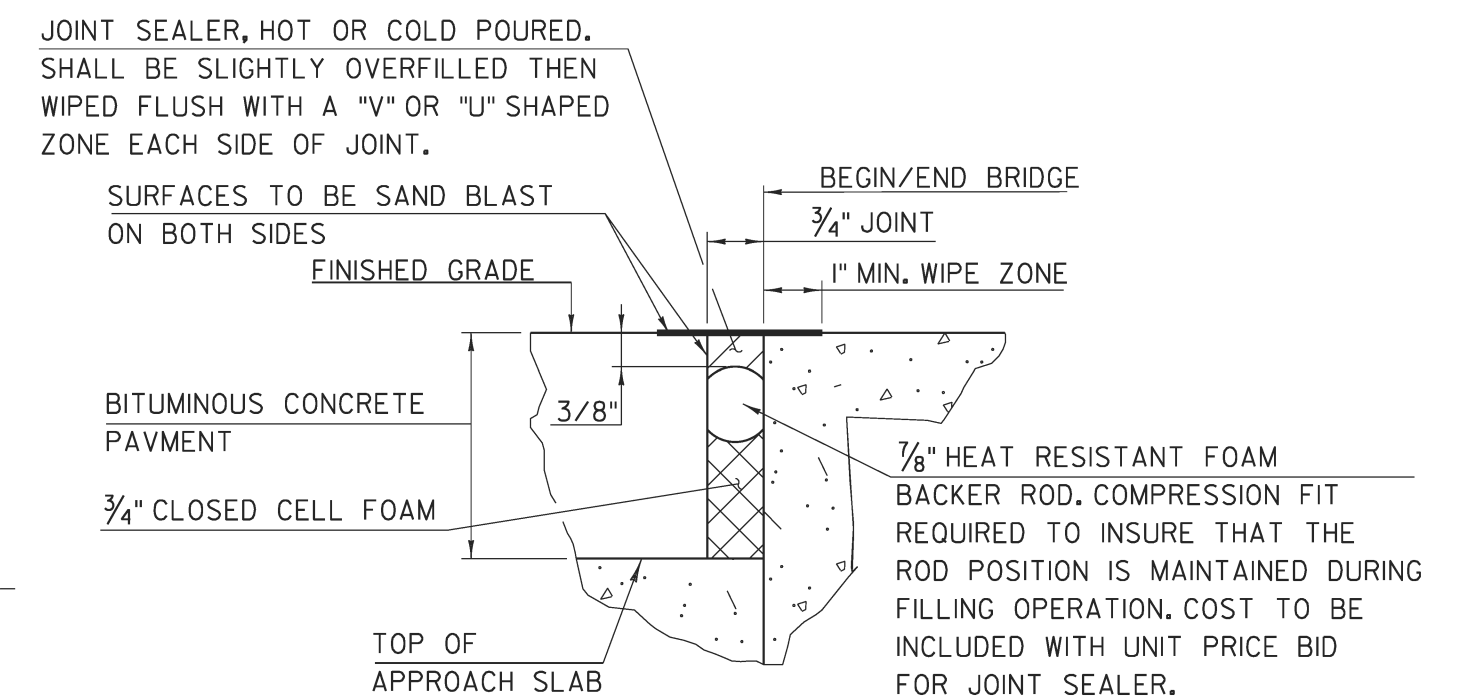
TYPICAL INTEGRAL ABUTMENT SECTION  
NOT TO SCALE

ACTUAL LIMITS OF STRUCTURE EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR. HOWEVER, ONLY THE EXCAVATION BETWEEN THE LIMITS SHOWN WILL BE PAID FOR UNDER THE ITEM 204.25 "STRUCTURE EXCAVATION". EXCAVATION BY THE CONTRACTOR OUTSIDE OF THESE LIMITS WILL BE AT THE EXPENSE OF THE CONTRACTOR.



TYPICAL CHANNEL SECTION  
(NOT TO SCALE)

\*GRUBBING MATERIAL SHALL NOT BE PLACED ON THE STONE FILL IN THE AREA UNDER THE BRIDGE. WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.



PROJECT NAME: BRISTOL  
PROJECT NUMBER: BRO 1445(32)

FILE NAME: s05j352typ.dgn  
PROJECT LEADER: J. LACROIX  
DESIGNED BY: G. LAROCHE  
TYPICAL SECTIONS SHEET #2

PLOT DATE: 06-MAR-2013  
DRAWN BY: R. PELLETT  
CHECKED BY: T. FILLBACH  
SHEET 6 OF 19

GPS CONTROL POINTS

HVCTRL #1

LATHROP AZ MK  
 NORTH = 596195.437  
 EAST = 1486663.832  
 ELEV. = 565.693

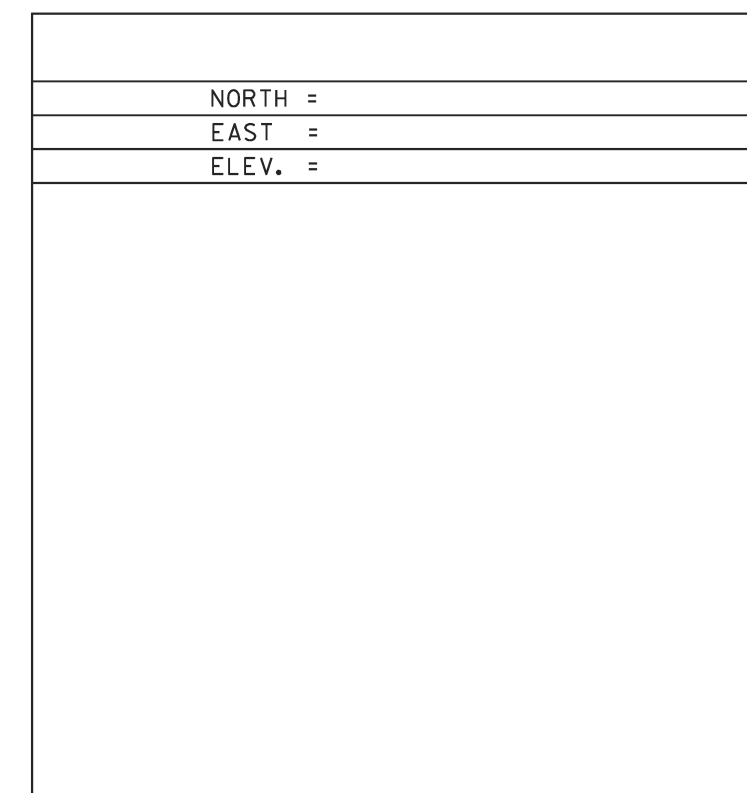
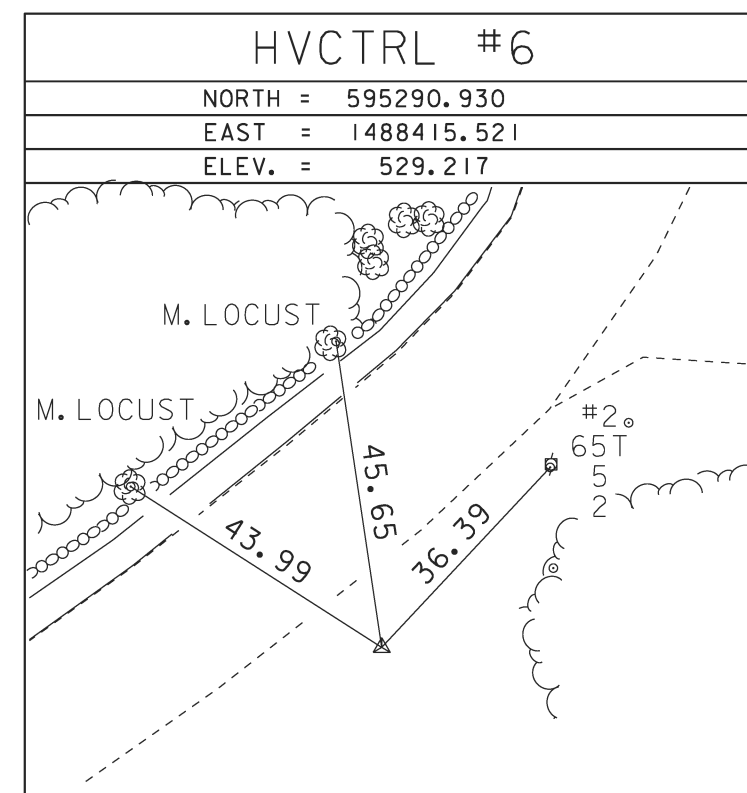
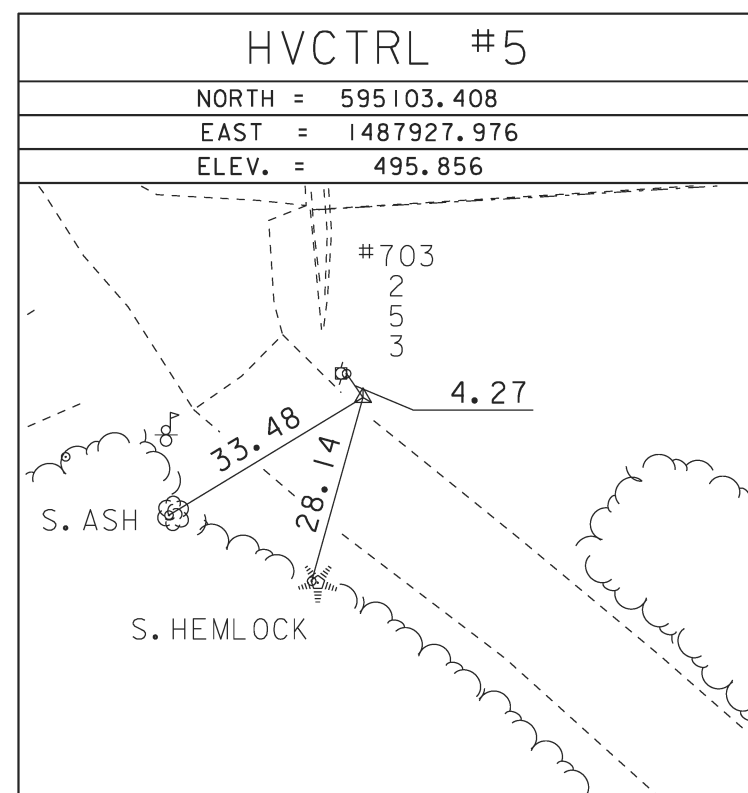
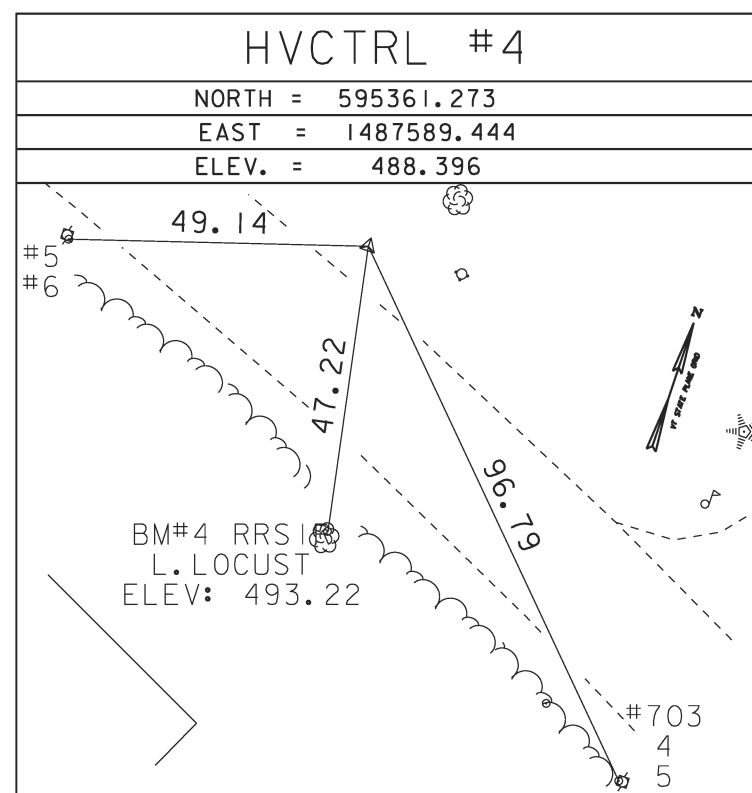
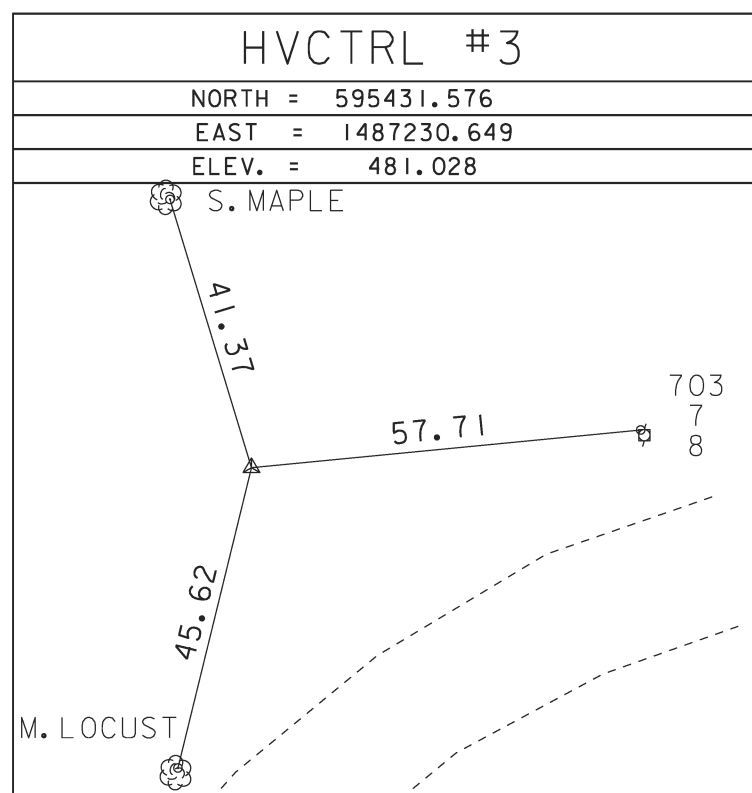
HVCTRL #2

LATHROP  
 NORTH = 595029.754  
 EAST = 1487003.577  
 ELEV. = 461.658

GENERAL LOCATION BRISTOL, VT.  
 TO REACH FROM THE INTERSECTION OF BURPEE ROAD, VT ROUTE 17 AND VT ROUTE 116 SOUTH, JUST WEST OF BRISTOL VILLAGE, GO EAST ALONG VT ROUTES 17/116 FOR 0.8 MI (1.3 KM) TO THE INTERSECTION OF MUNSILL AVENUE LEFT AND THE SITE OF THE MARK ON THE RIGHT. THE MARK IS SET IN THE TOP OF A 30 CM (12 INCHES) DIAMETER CONCRETE MONUMENT POURED 1.4 M (4.6 FT) DEEP. IT IS 6.5 M (21.3 FT) SOUTH OF AND ABOUT 0.3 M (1.0 FT) LOWER THAN THE CENTERLINE OF VT ROUTE 17/116, 1.8 M (5.9 FT) SOUTH OF A STEEL BEAM GUARD RAIL, 21.4 M (70.2 FT) EAST OF POLE NO 21/8/13, 10.7 M (35.1 FT) WEST OF POLE NO 20/12, 2.5 M (8.2 FT) NORTH OF THE TOP OF A STEEP BANK, AND 0.3 M (1.0 FT) NORTH OF A FIBERGLASS WITNESS POST.

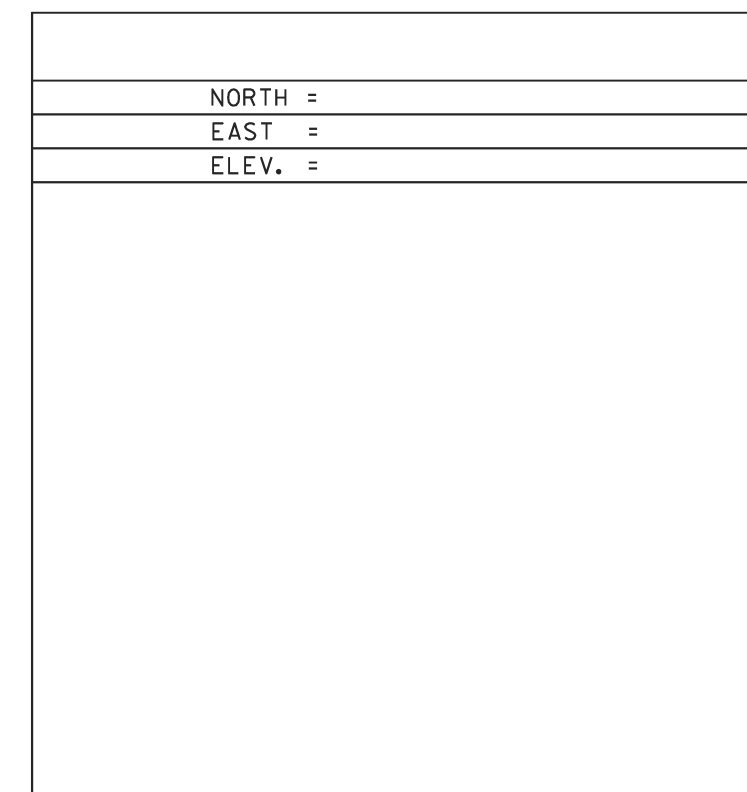
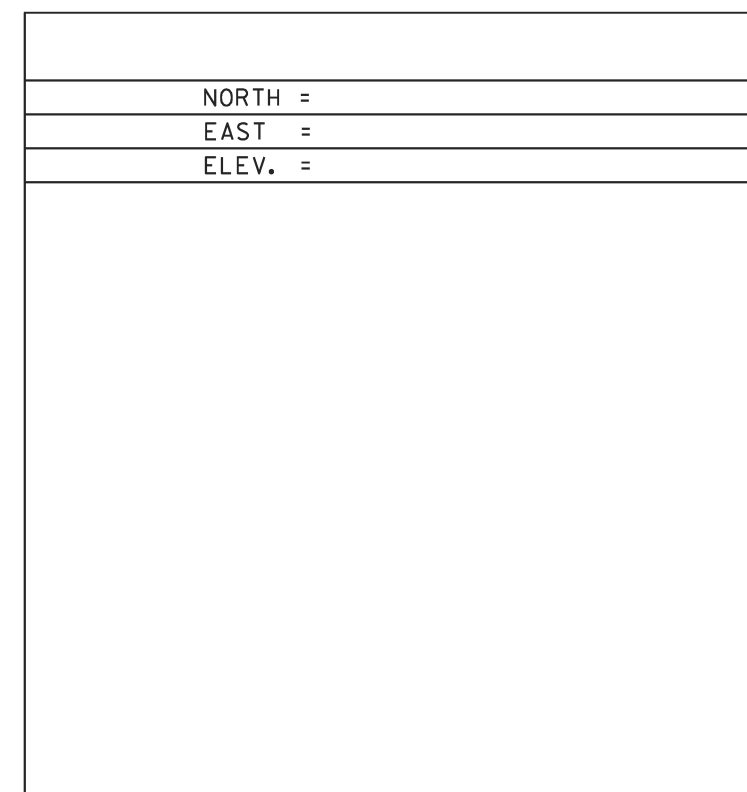
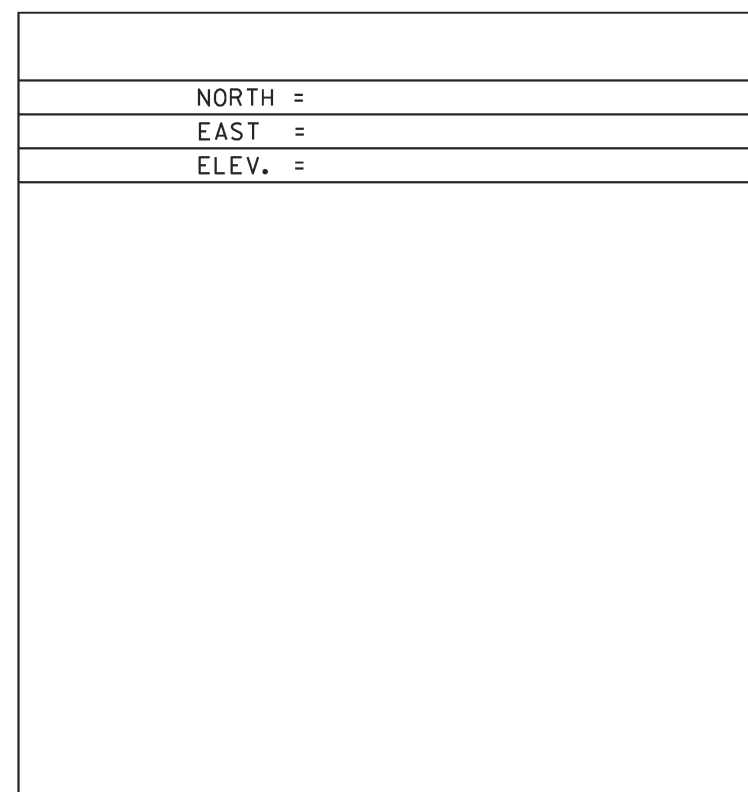
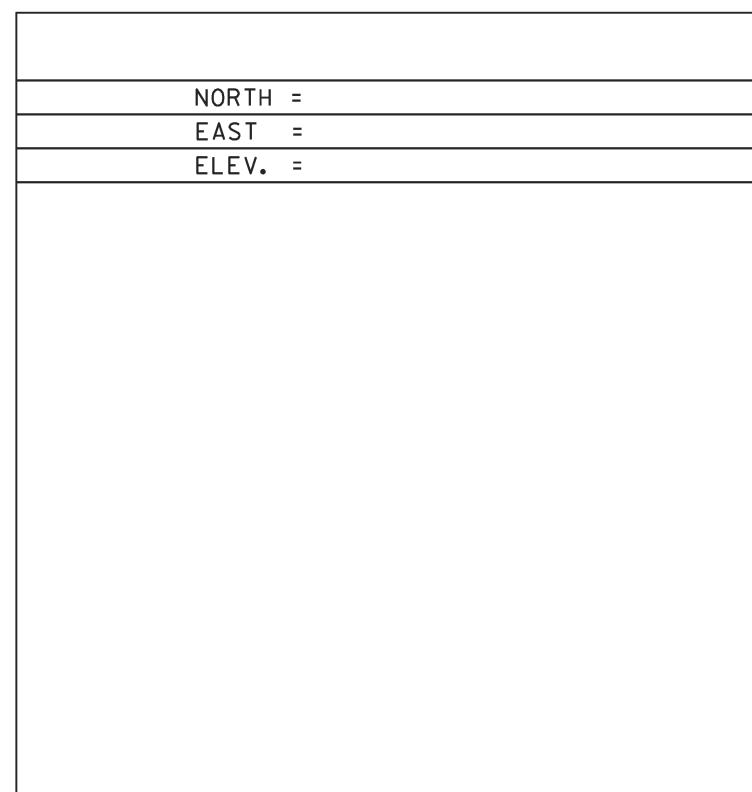
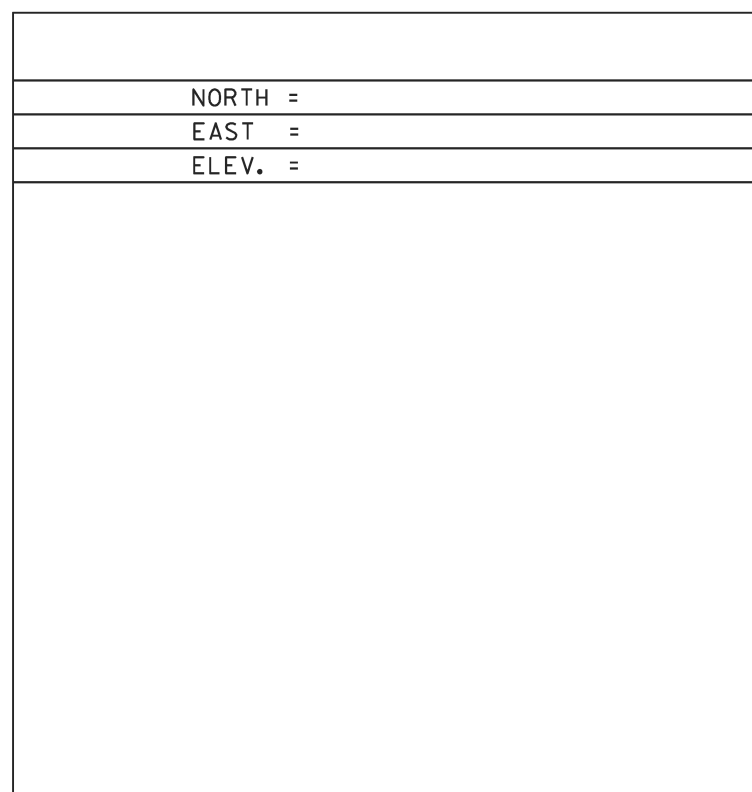
GENERAL LOCATION BRISTOL, VT. OWNERSHIP-- LATHROP LTD, 62 WEST STREET, BRISTOL, VT 05443.  
 TO REACH FROM THE INTERSECTION OF BURPEE ROAD, VT ROUTE 17 AND VT ROUTE 116 SOUTH, JUST WEST OF BRISTOL VILLAGE, GO EAST ALONG VT ROUTES 17/116 FOR 1.1 MI (1.8 KM) TO THE INTERSECTION OF NORTH STREET LEFT AND SOUTH STREET RIGHT AT THE TRAFFIC LIGHT IN BRISTOL VILLAGE. TURN RIGHT AND GO SOUTH ALONG SOUTH STREET FOR 0.4 MI (0.6 KM) TO THE CLARE LATHROP LUMBER YARD ON THE RIGHT AND THE SITE OF THE MARK ON THE LEFT, ABOUT OPPOSITE THE MOST SOUTHERLY GATE TO THE LUMBER YARD. THE MARK IS SET IN THE TOP OF A 1.5 M (4.9 FT) X 1.2 M (3.9 FT) BOULDER WHICH PROJECTS ABOUT 0.8 M ABOVE GROUND SURFACE. IT IS 12.9 M (42.3 FT) EAST OF AND ABOUT 2.2 M (7.2 FT) HIGHER THAN THE CENTERLINE OF SOUTH STREET, 20.6 M (67.6 FT) EAST-NORTHEAST OF POLE NO 11, 22.8 M (74.8 FT) EAST-SOUTHEAST OF THE MOST SOUTHERLY GATE POST OF THE SOUTHERN GATE TO THE LATHROP LUMBER YARD, 41.2 M (135.2 FT) SOUTH-SOUTHWEST OF POLE NO 9, AND 1.7 M (5.6 FT) NORTHWEST OF A FIBERGLASS WITNESS POST.

TRAVERSE TIES



\* Main Traverse Completed 12/30/2008 by L.Orvis & R.Bockus

ALIGNMENT TIES



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

PROJECT NAME:	Bristol
PROJECT NUMBER:	BRO 1445 (32)
FILE NAME:	05j352\survey\x05j352+1.dg
PROJECT LEADER:	Kristin Higgins
DESIGNED BY:	G. LAROCHE
TIE SHEET	
PLOT DATE:	06-MAR-2013
DRAWN BY:	R. Bullock
CHECKED BY:	T. FILLBACH
SHEET	7 OF 19

MAINLINE  
CURVE DATA #1

$\Delta = 42^{\circ}-01'-18.93''$   
 $D = 57^{\circ}-17'-44.81''$   
 $R = 100'-0''$   
 $T = 38.41'$   
 $L = 73.34'$   
 $E = 7.12'$

MAINLINE  
CURVE DATA #2

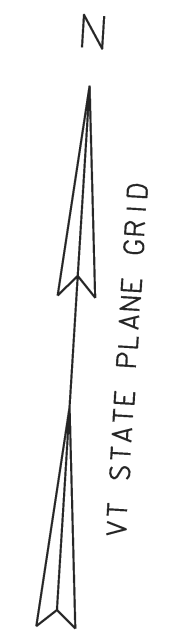
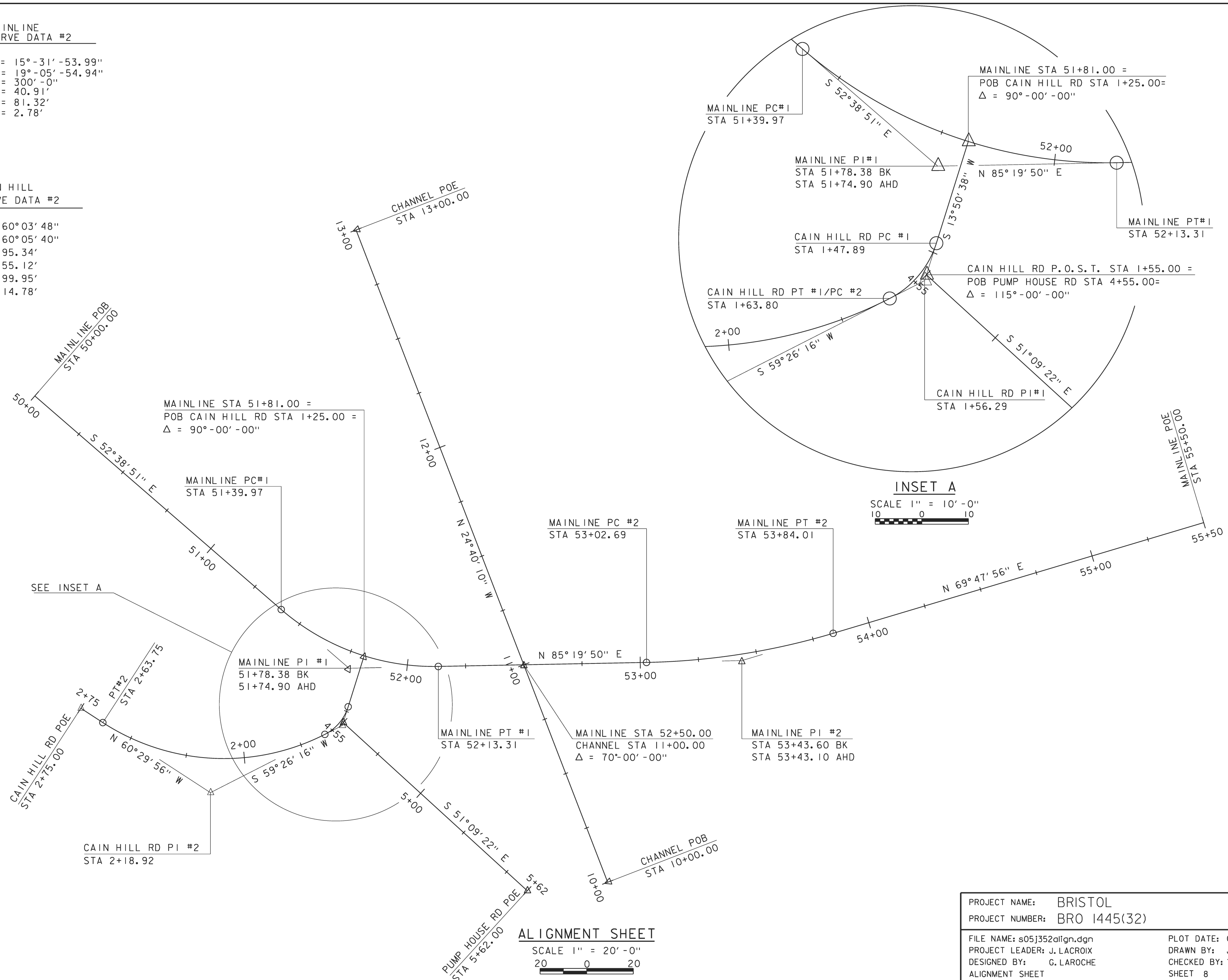
$\Delta = 15^{\circ}-31'-53.99''$   
 $D = 19^{\circ}-05'-54.94''$   
 $R = 300'-0''$   
 $T = 40.91'$   
 $L = 81.32'$   
 $E = 2.78'$

CAIN HILL  
CURVE DATA #1

$\Delta = 45^{\circ}35'39''$   
 $D = 286^{\circ}28'44''$   
 $R = 20.00'$   
 $T = 8.41'$   
 $L = 15.92'$   
 $E = 1.69'$

CAIN HILL  
CURVE DATA #2

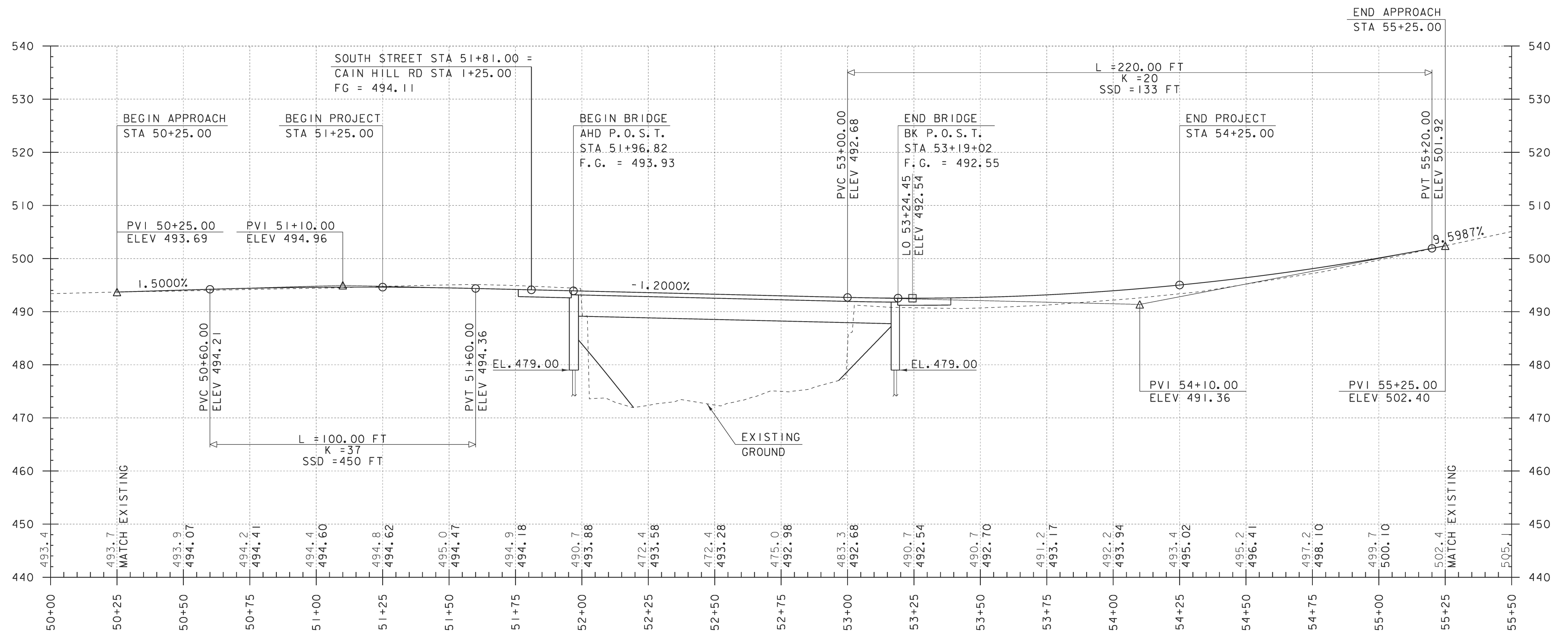
$\Delta = 60^{\circ}03'48''$   
 $D = 60^{\circ}05'40''$   
 $R = 95.34'$   
 $T = 55.12'$   
 $L = 99.95'$   
 $E = 14.78'$



INSET A  
SCALE 1" = 10'-0"  
10 0 10

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

PROJECT NAME: BRISTOL	PLOT DATE: 06-MAR-2013
PROJECT NUMBER: BRO 1445(32)	DRAWN BY: J. SALVATORI
FILE NAME: s05j352align.dgn	CHECKED BY: T. FILLBACH
PROJECT LEADER: J. LACROIX	SHEET 8 OF 19
DESIGNED BY: G. LAROCHE	
ALIGNMENT SHEET	

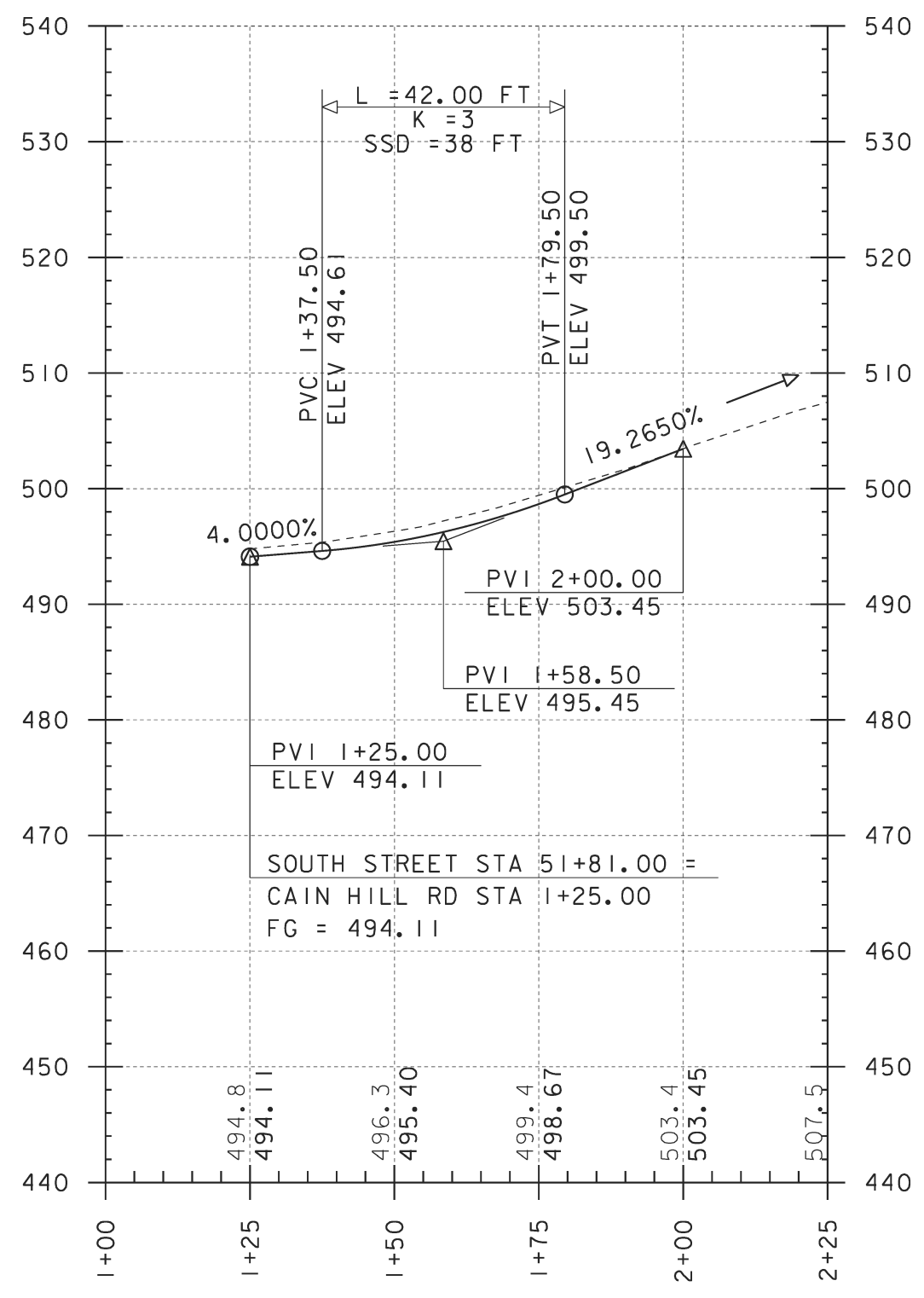


MAINLINE PROFILE

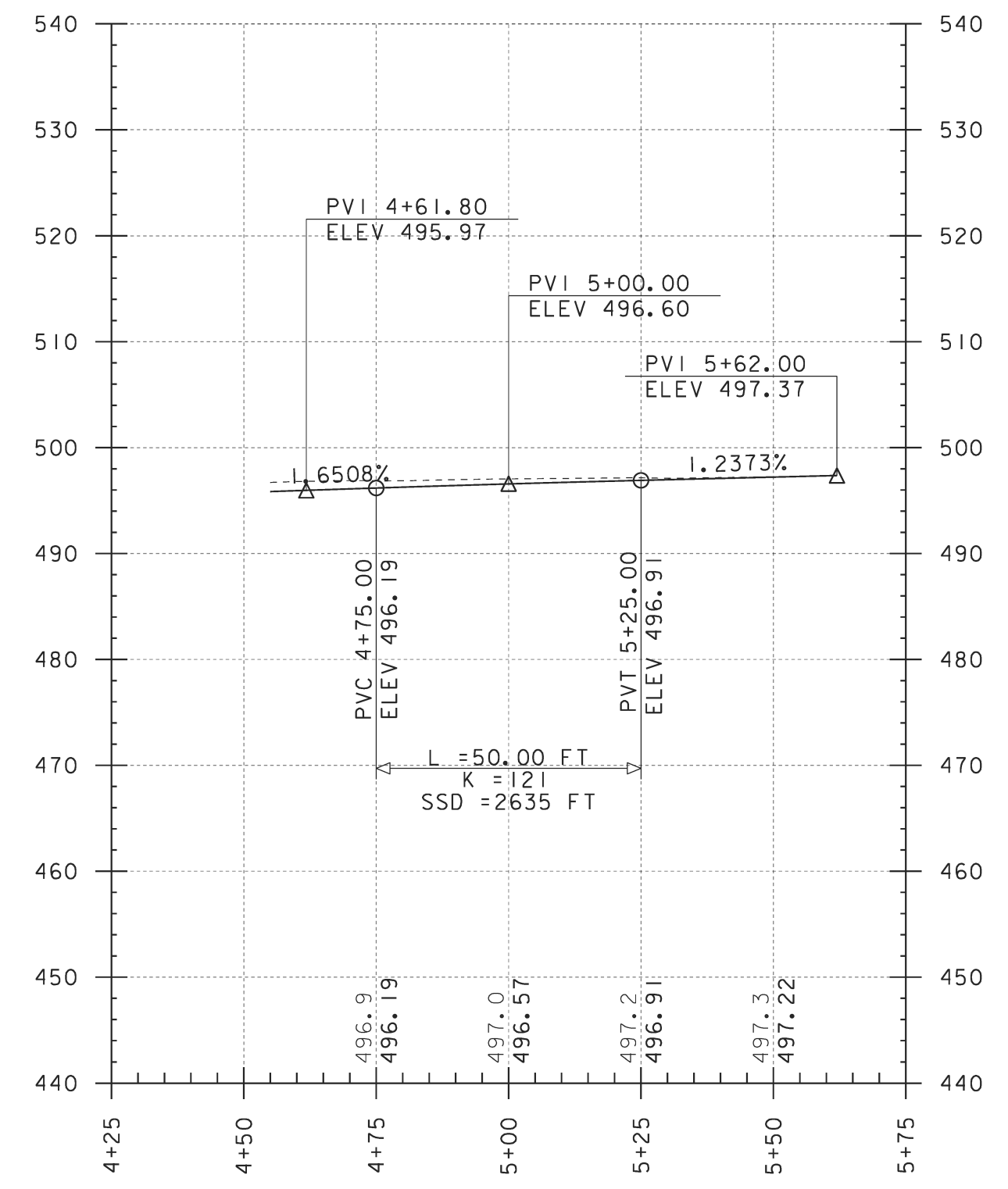
THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

PROJECT NAME:	BRISTOL	PLOT DATE:	06-MAR-2013
PROJECT NUMBER:	BRO 1445(32)	DRAWN BY:	R. PELLETT
FILE NAME:	s05j352pro.dgn	CHECKED BY:	T. FILLBACH
PROJECT LEADER:	J. LACROIX	MAINLINE PROFILE SHEET	SHEET 9 OF 19
DESIGNED BY:	G. LAROCHE		



CAIN HILL ROAD PROFILE



PUMPHOUSE ROAD PROFILE

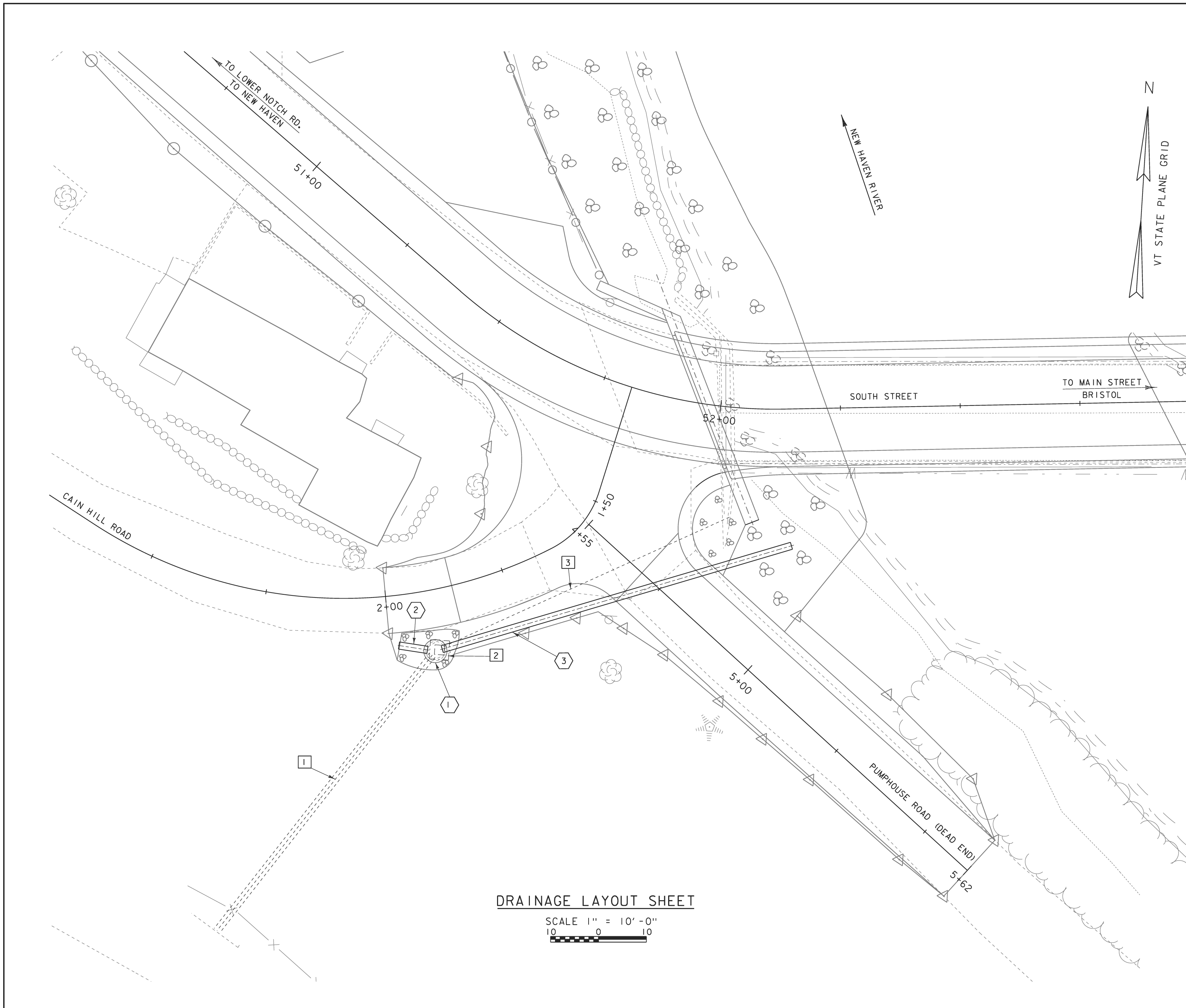
THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT.

THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE FINISH GRADES ALONG THE PROPOSED ALIGNMENT.

PROJECT NAME: BRISTOL	PLOT DATE: 06-MAR-2013
PROJECT NUMBER: BRO 1445(32)	DRAWN BY: G. LAROCHE
FILE NAME: s05j352pro.dgn	CHECKED BY: T. FILLBACH
PROJECT LEADER: J. LACROIX	SHEET 10 OF 19
DESIGNED BY: G. LAROCHE	SIDELINE PROFILES SHEET





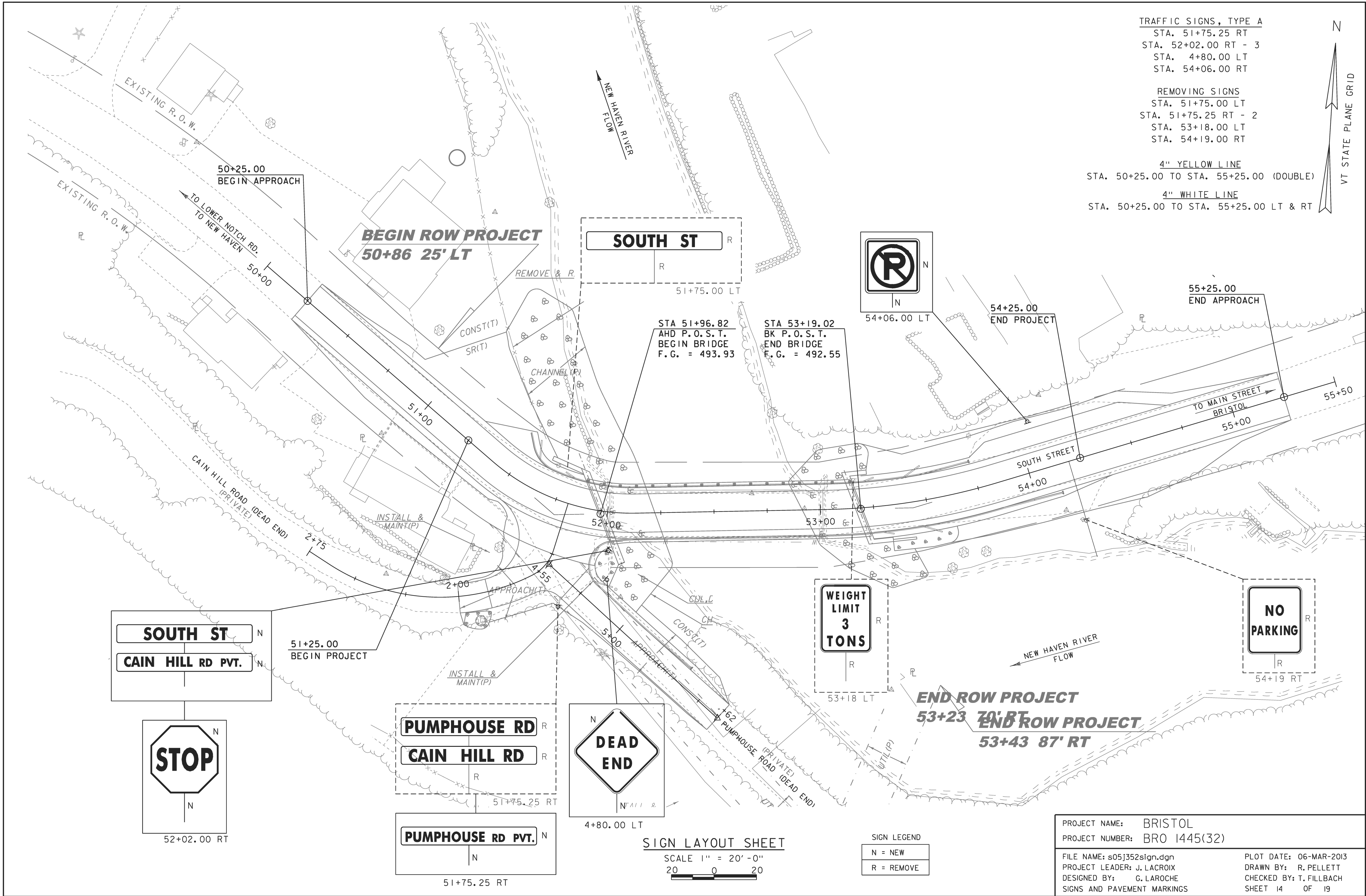


- 1 EXISTING 18" ACCGMP CULVERT (DO NOT REMOVE PLACE PIPE AS INDICATED INTO STRUCTURE)
- 2 REMOVE EXISTING 18" ACCGMP CULVERT (DO NOT REMOVE PIPE AS INDICATED INTO STRUCTURE)  
 CAIN HILL STA. 1+90.97 OFFSET 12'-8" LT  
 REMOVE EXISTING DROP INLET  
 STA. 30+20.80
- 3 REMOVE EXISTING 18" ACCGMP CULVERT  
 STA. 1+44.80 TO 1+90.63 LT  
 LENGTH = 66'-93"  
 REMOVE EXISTING 18" ACCGMP CULVERT  
 STA. 1+44.80 TO 1+90.63 LT
- 6 NEW PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON COVER W/FRAME.  
 STA. 30+20.00  
 CAIN HILL STA. 1+91.76 OFFSET 12'-8" WITH CAST IRON COVER W/FRAME.  
 STA. 30+20.00
- 2 PROPOSED 18" PIPE OPTION  
 STA. 1+93.16 TO 1+98.32 LT (CAIN HILL)  
 STA. 8+02.98 TO 8+08.98 OFFSET 12'-8" LENGTH 60'-0"
- 3 PROPOSED 18" PIPE OPTION  
 STA. 1+93.16 TO 1+98.32 LT (CAIN HILL)  
 STA. 1+46.60 TO 1+90.45 LT (CAIN HILL)  
 STA. 30+21.49 TO 30+97.49  
 PIPE LENGTH 76'-0"
- 6 PROPOSED 18" PIPE OPTION  
 STA. 1+46.60 TO 1+90.45 LT (CAIN HILL)  
 STA. 30+21.49 TO 30+97.49  
 PIPE LENGTH 76'-0"

**DRAINAGE LAYOUT SHEET**

SCALE 1" = 10'-0"  
 10 0 10

PROJECT NAME: BRISTOL	PLOT DATE: 06-MAR-2013
PROJECT NUMBER: BRO 1445 (32)	DRAWN BY: G. LAROCHE
FILE NAME: s05j352drainage_10sca.dgn	CHECKED BY: J. SALVATORI
DESIGNED BY: G. LAROCHE	SHEET 13 OF 19
DRAINAGE LAYOUT SHEET	



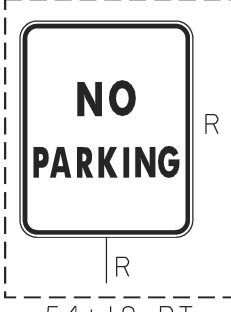
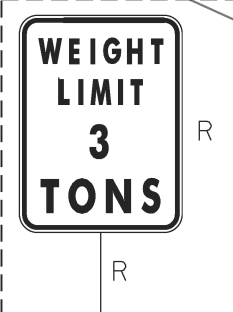
TRAFFIC SIGNS, TYPE A  
 STA. 51+75.25 RT  
 STA. 52+02.00 RT - 3  
 STA. 4+80.00 LT  
 STA. 54+06.00 RT

REMOVING SIGNS  
 STA. 51+75.00 LT  
 STA. 51+75.25 RT - 2  
 STA. 53+18.00 LT  
 STA. 54+19.00 RT

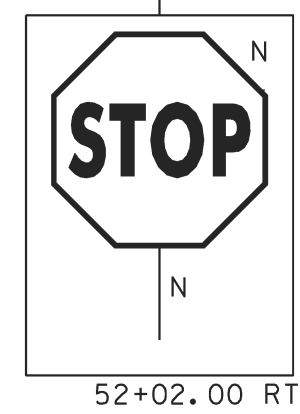
4" YELLOW LINE  
 STA. 50+25.00 TO STA. 55+25.00 (DOUBLE)  
 4" WHITE LINE  
 STA. 50+25.00 TO STA. 55+25.00 LT & RT



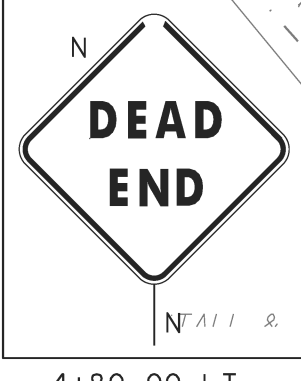
**SOUTH ST**  
 R  
 51+75.00 LT



**SOUTH ST**  
**CAIN HILL RD PVT.**  
 N



**PUMPHOUSE RD**  
**CAIN HILL RD**  
 R



**PUMPHOUSE RD PVT.**  
 N  
 51+75.25 RT

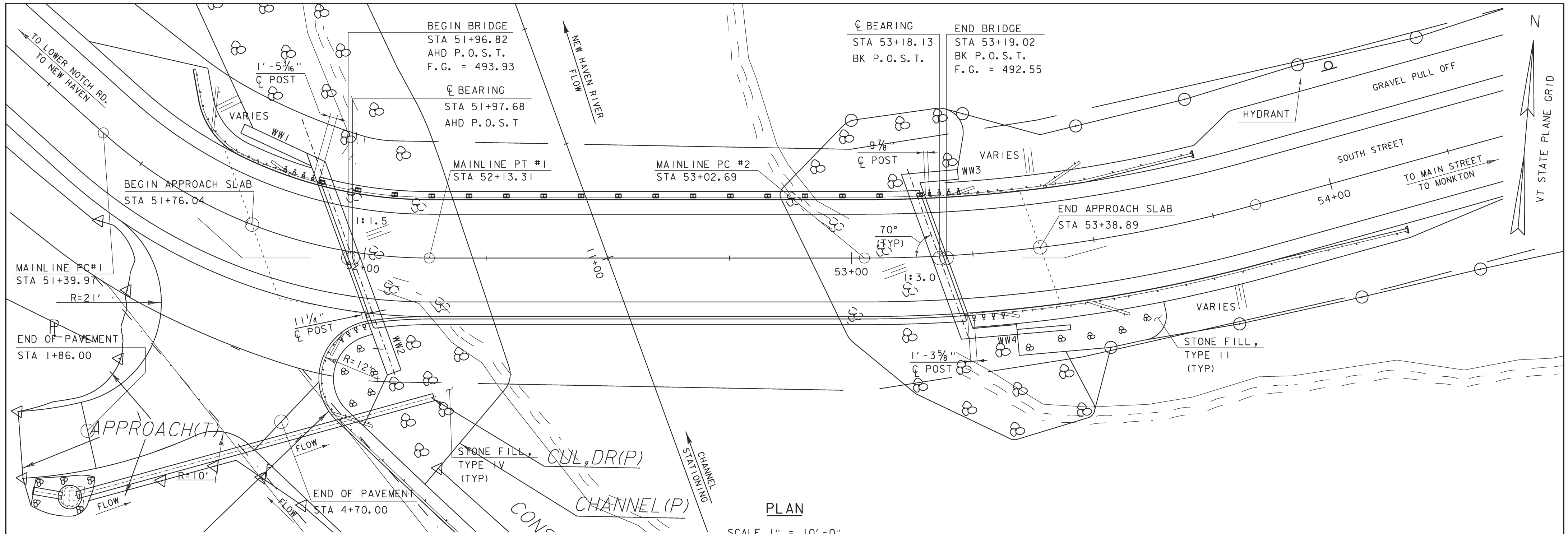
**SIGN LAYOUT SHEET**

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

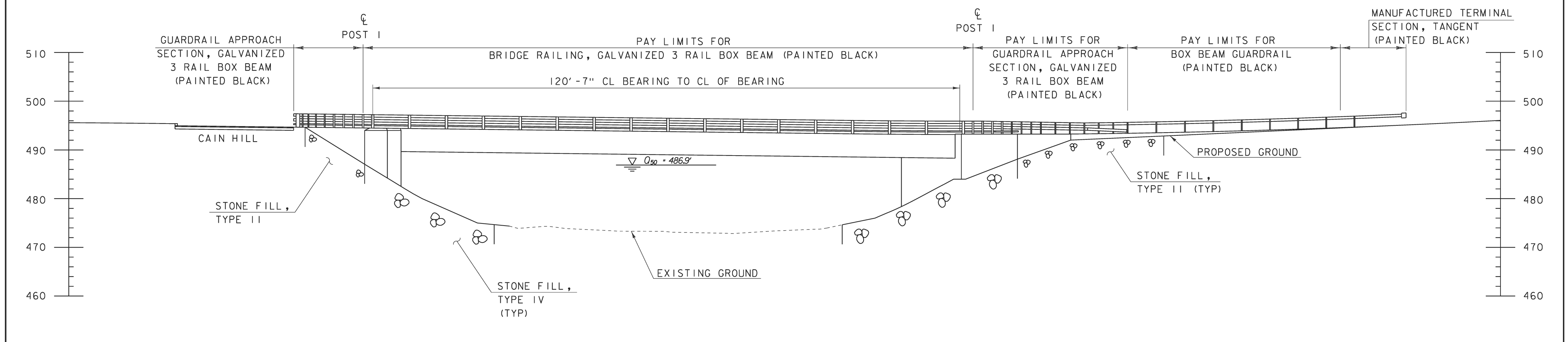
**SIGN LEGEND**

N = NEW  
 R = REMOVE

PROJECT NAME: BRISTOL	PLOT DATE: 06-MAR-2013
PROJECT NUMBER: BRO 1445(32)	DRAWN BY: R. PELLETT
FILE NAME: s05j352sign.dgn	CHECKED BY: T. FILLBACH
PROJECT LEADER: J. LACROIX	SHEET 14 OF 19
DESIGNED BY: G. LAROCHE	
SIGNS AND PAVEMENT MARKINGS	

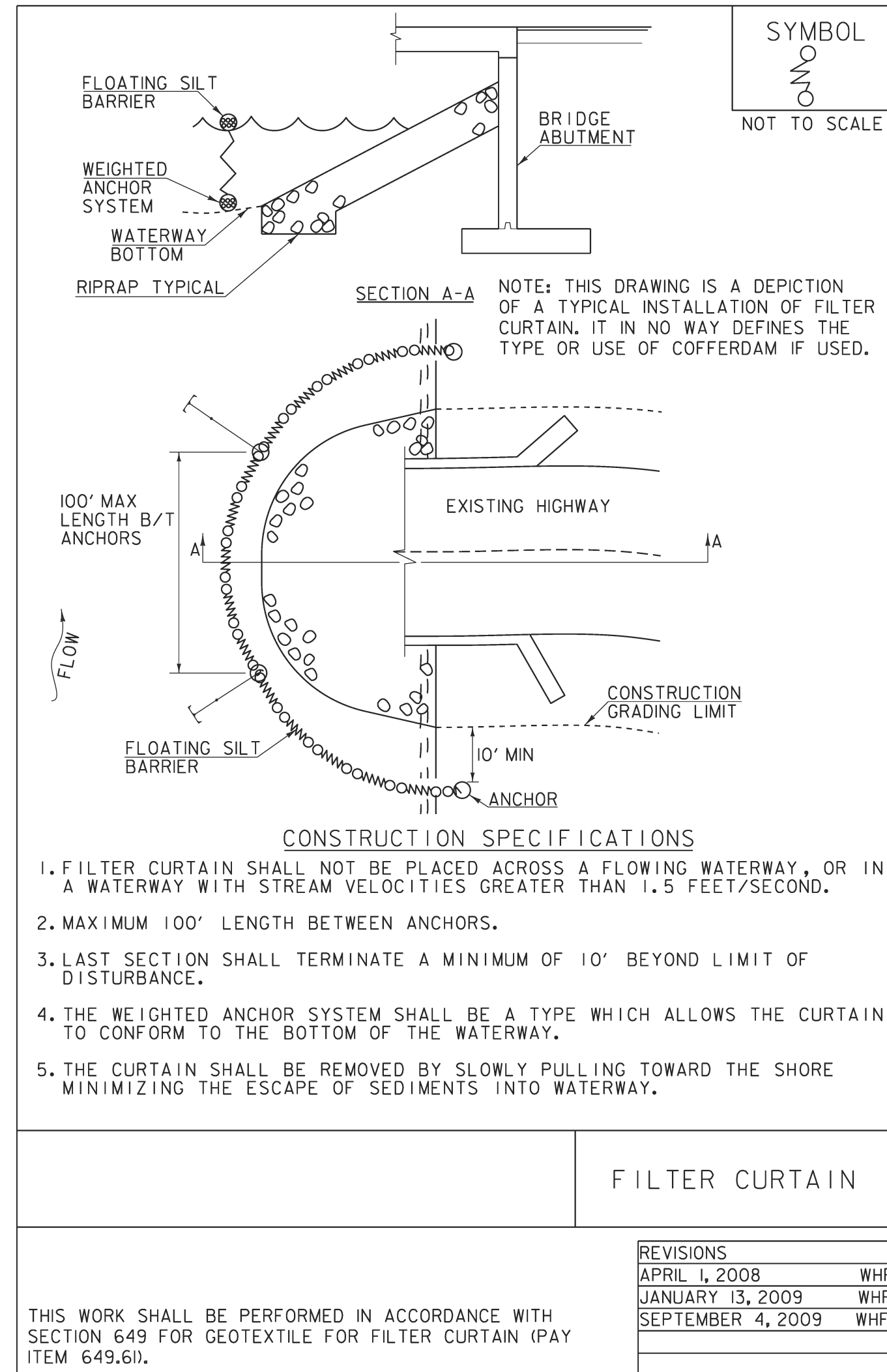
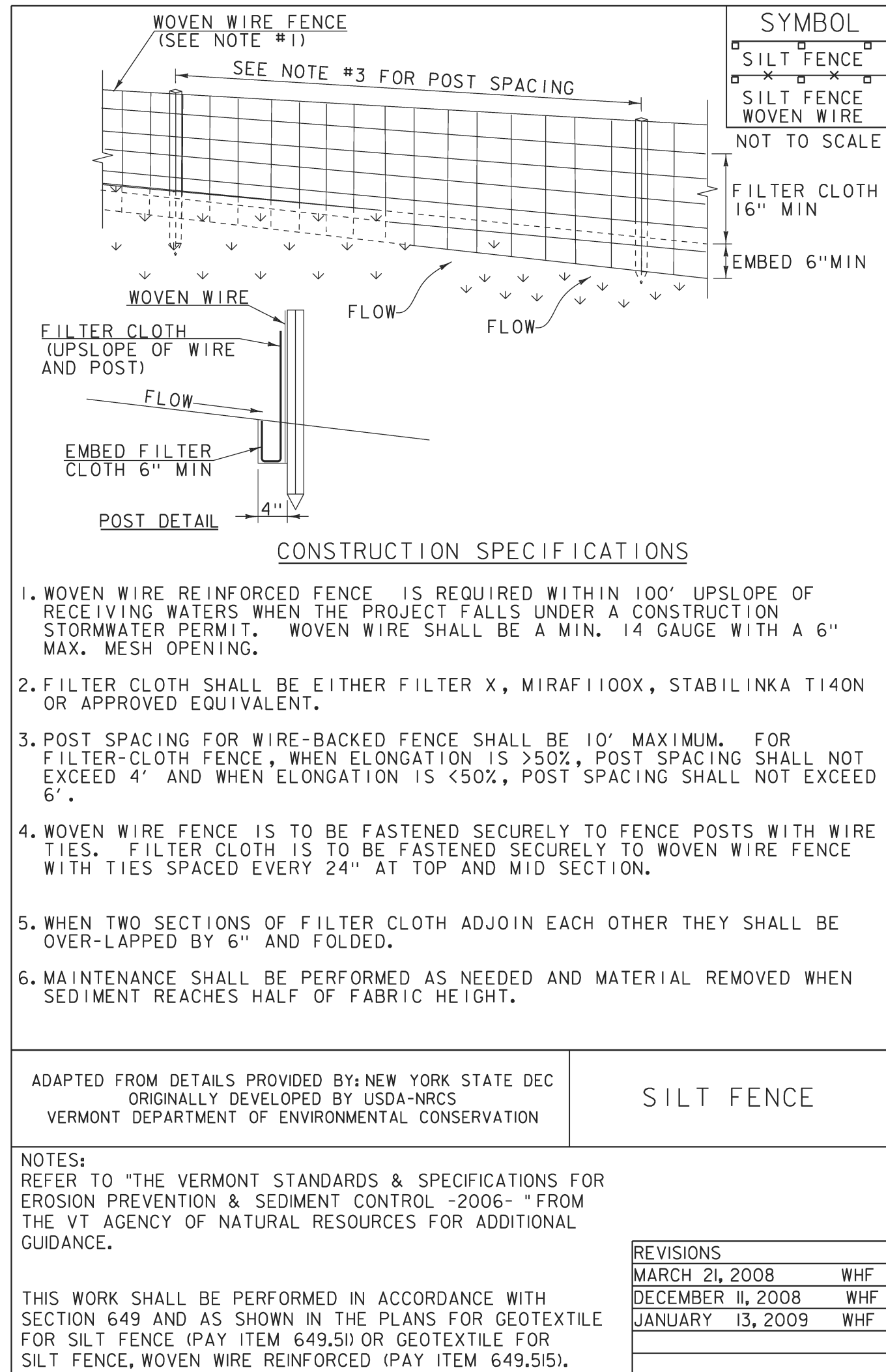


**PLAN**  
 SCALE 1" = 10'-0"  
 10 0 10



**ELEVATION AT UPSTREAM FASCIA**  
 SCALE 1" = 10'-0"  
 10 0 10

PROJECT NAME:	BRISTOL	PLOT DATE:	06-MAR-2013
PROJECT NUMBER:	BRO 1445(32)	DRAWN BY:	J. SALVATORI
FILE NAME:	s05j352pe.dgn	CHECKED BY:	T. FILLBACH
PROJECT LEADER:	J. LACROIX	PLAN AND ELEVATION SHEET	SHEET 15 OF 19
DESIGNED BY:	G. LAROCHE		



**EPSC LAYOUT PLAN SYMBOLOGY LEGEND**

**PROJECT BOUNDARY FENCE**  
 PDF — PDF PROJECT DEMARCATION FENCE  
 BF — BF BARRIER FENCE

**EPSC MEASURES**

ONNOONNOONNO FILTER CURTAIN  
 SILT FENCE  
 SILT FENCE WOVEN WIRE  
 CHECK DAM  
 DISTURBED AREAS REQUIRING RE-VEGETATION  
 EROSION MATTING

**ENVIRONMENTAL RESOURCES**

WETLAND BOUNDARY  
 RIPARIAN BUFFER ZONE  
 WETLAND BUFFER ZONE  
 SOIL TYPE BOUNDARY  
 T&E THREATENED & ENDANGERED SPECIES  
 HAZ HAZ HAZARDOUS WASTE AREA  
 AG AGRICULTURAL LAND  
 HABITAT FISH & WILDLIFE HABITAT  
 FLOOD PLAIN FLOOD PLAIN  
 OHW ORDINARY HIGH WATER (OHW)  
 STORM WATER  
 USDA FOREST SERVICE LANDS  
 WILDLIFE HABITAT SUIT/CONN

**ARCHEOLOGICAL & HISTORIC**

ARCH ARCHEOLOGICAL BOUNDARY  
 HISTORIC DIST HISTORIC DISTRICT BOUNDARY  
 HISTORIC HISTORIC AREA  
 (H) HISTORIC STRUCTURE

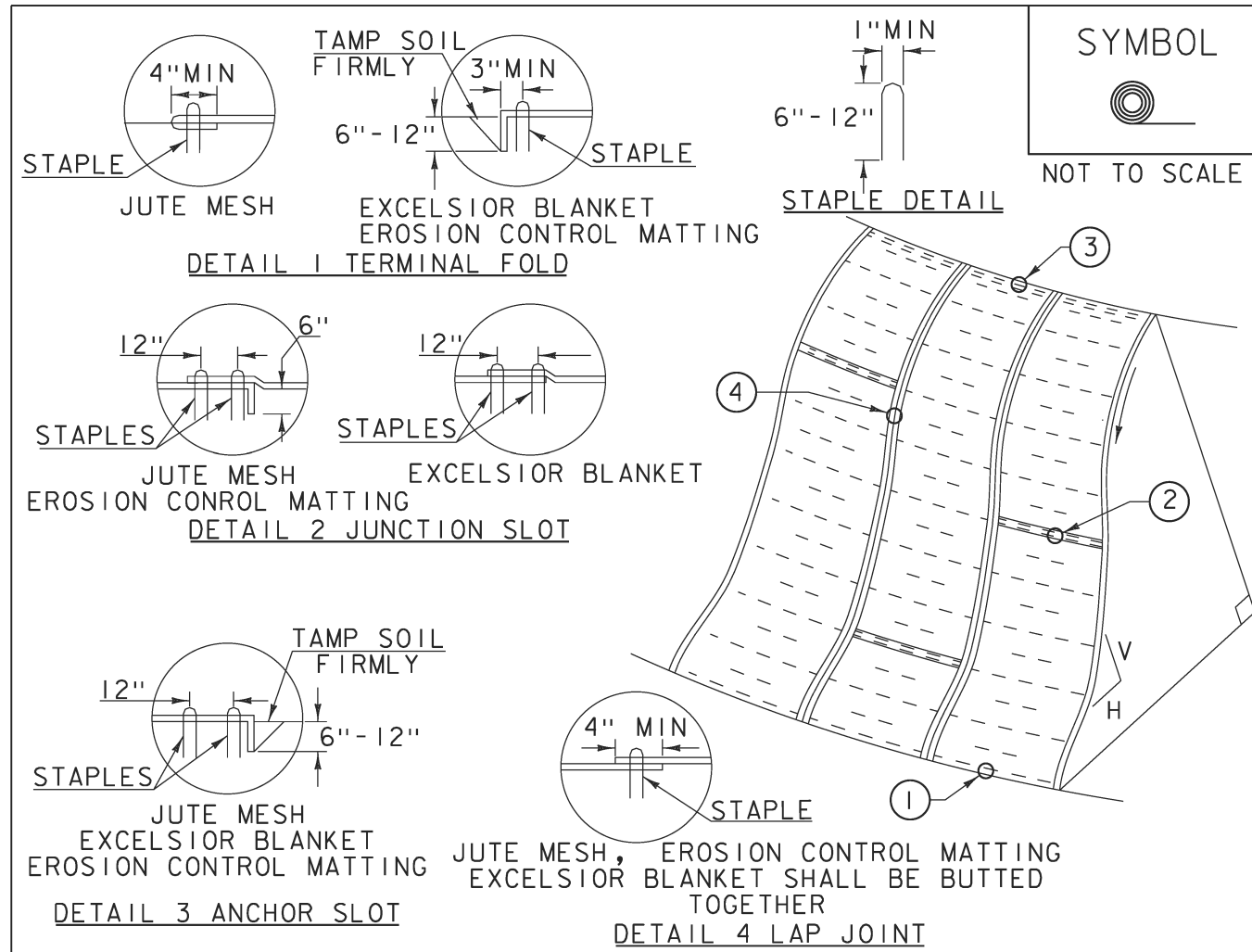
**UTILITY SYMBOLOGY**

AER E&T AREAL ELECTRIC & TELEPHONE  
 E AREAL ELECTRIC  
 UE UNDERGROUND ELECTRIC  
 UT UNDERGROUND TELEPHONE  
 UC UNDER GROUND TV  
 G GAS LINE  
 W WATER LINE

**CONSTRUCTION FEATURES**

TOE OF SLOPE CUT OR FILL  
 STONE FILL, TYPE III  
 STONE FILL, TYPE II  
 STONE FILL, TYPE I

PROJECT NAME: BRISTOL  
 PROJECT NUMBER: BRO 1445(32)  
 FILE NAME: s05j352EPSC\_details.dgn PLOT DATE: 06-MAR-2013  
 PROJECT LEADER: J. LACROIX DRAWN BY: R. PELLETT  
 DESIGNED BY: G. LAROCHE CHECKED BY: J. SALVATORI  
 EPSC DETAILS - #1 SHEET 16 OF 19



**CONSTRUCTION SPECIFICATIONS**

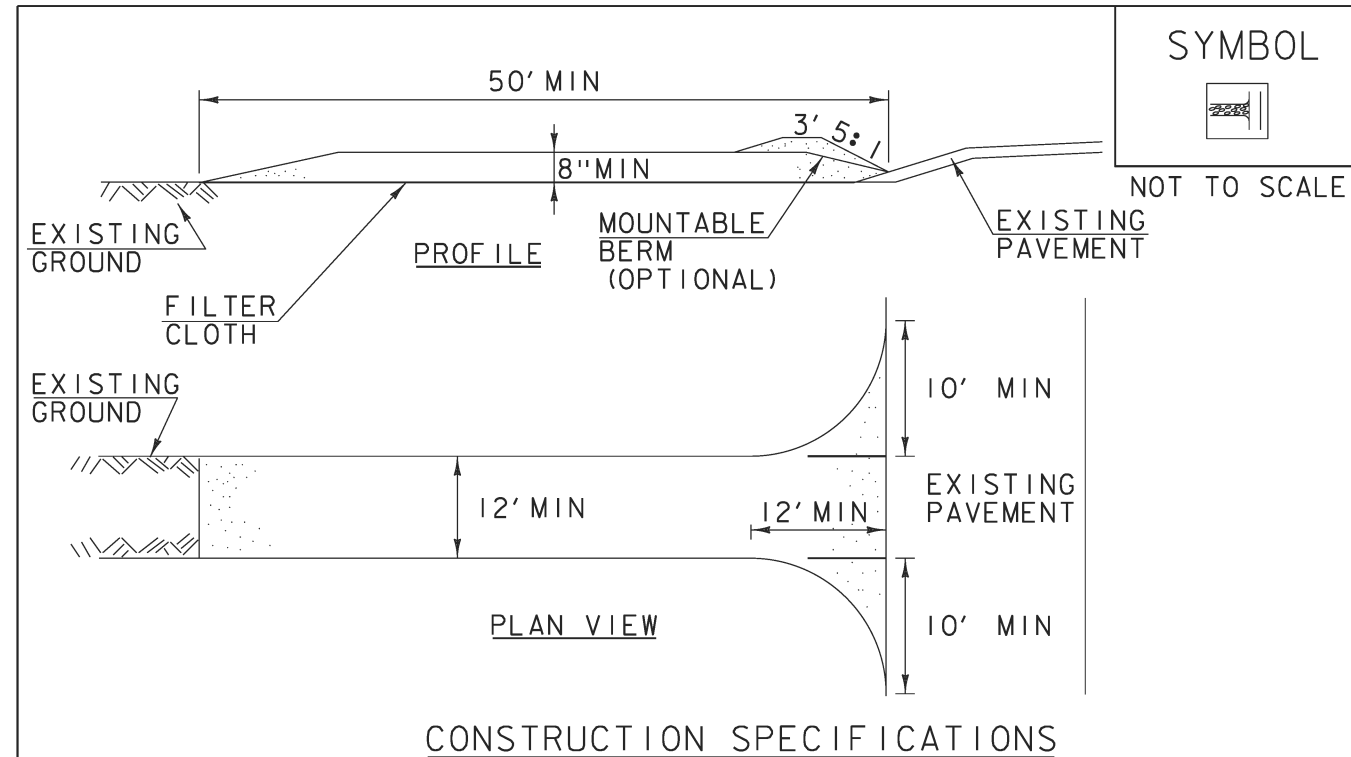
1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 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	



**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	

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**

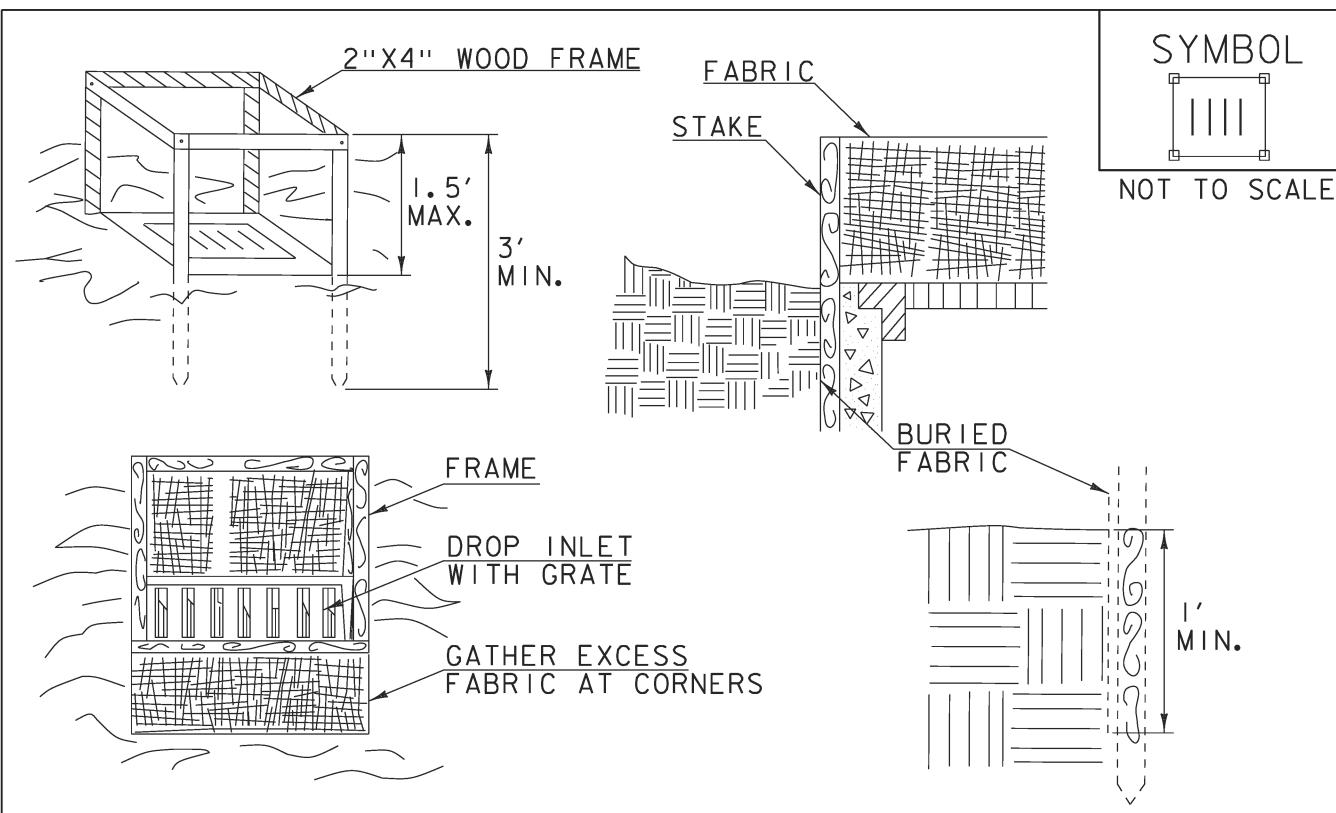
1. RURAL SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
2. URBAN SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED LAWN AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 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**

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

PROJECT NAME: BRISTOL  
PROJECT NUMBER: BRO 1445(32)  
FILE NAME: s05j352EPSC\_details.dgn PLOT DATE: 06-MAR-2013  
PROJECT LEADER: J. LACROIX DRAWN BY: R. PELLETT  
DESIGNED BY: G. LAROCHE CHECKED BY: J. SALVATORI  
EPSC DETAILS - \*2 SHEET 17 OF 19



**CONSTRUCTION SPECIFICATIONS**

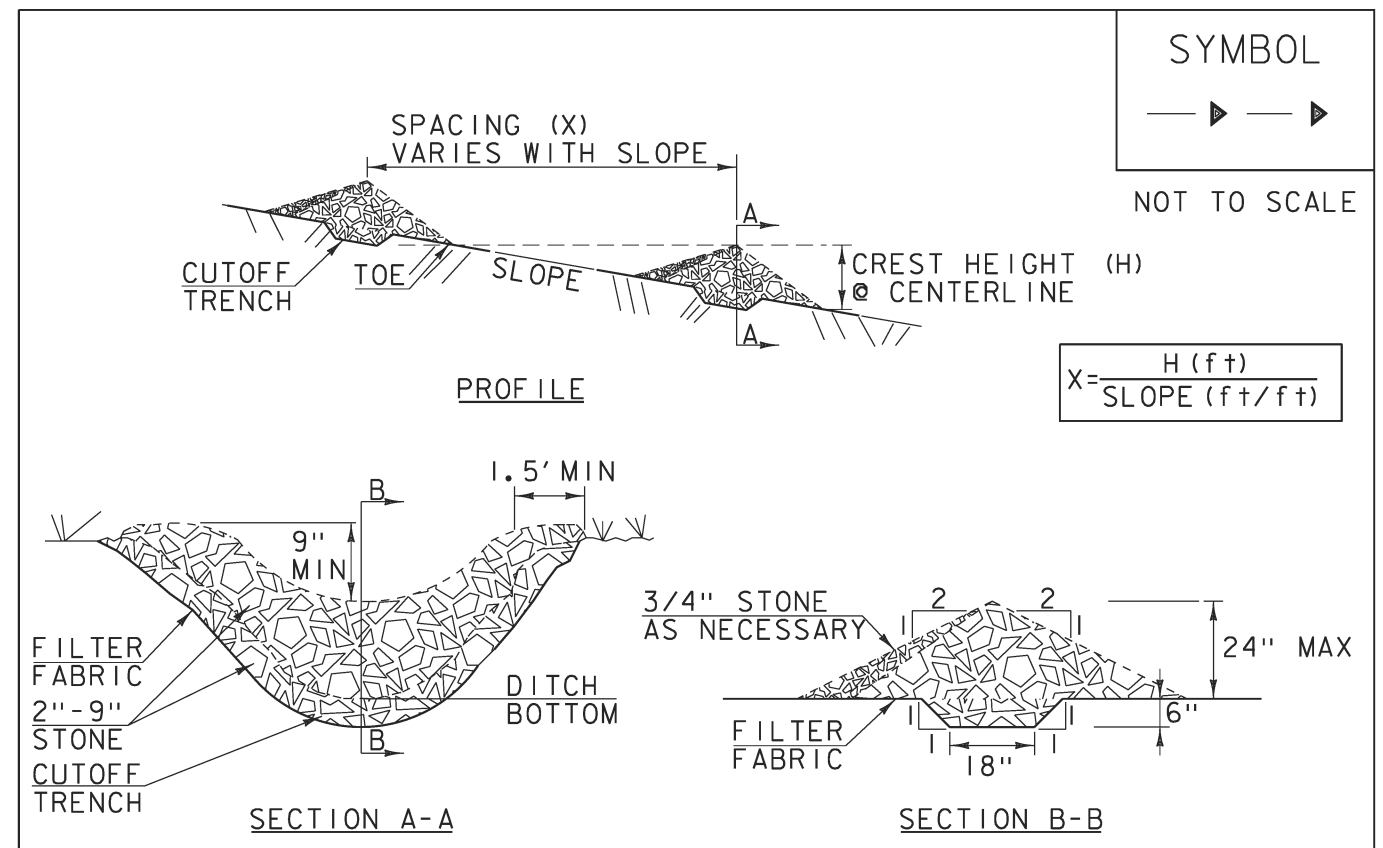
1. FILTER FABRIC SHALL HAVE AN APPARENT OPENING SIZE OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3'.
4. SPACE STAKES EVENLY AROUND INLET 3' APART AND DRIVE A MINIMUM 18" DEEP. SPANS GREATER THAN 3' MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1' MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.
7. MAXIMUM DRAINAGE AREA 1 ACRE

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

**FILTER FABRIC  
 DROP INLET  
 PROTECTION**

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 INLET PROTECTION DEVICE, TYPE I(PAY ITEM 653.40).

REVISIONS	
MARCH 7, 2008	WHF
JANUARY 13, 2009	WHF



**CONSTRUCTION SPECIFICATIONS**

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. CHECK DAMS SHALL BE SPACED SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. 3/4" FILTERING STONE MAY BE ADDED TO THE FACE OF THE CHECK DAM AS NECESSARY.
4. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
5. PROTECT CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
6. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.
7. MAXIMUM DRAINAGE AREA 2 ACRES.

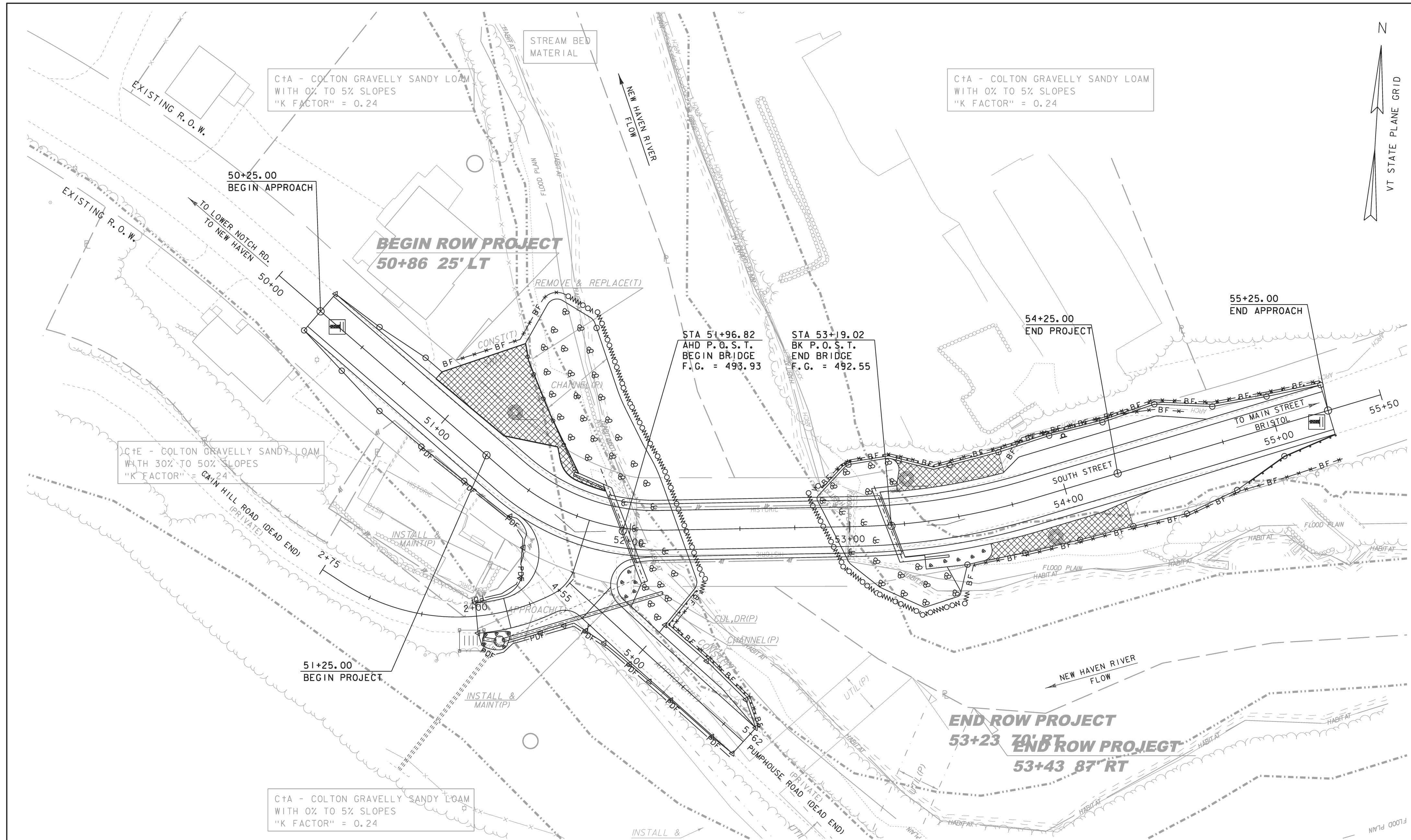
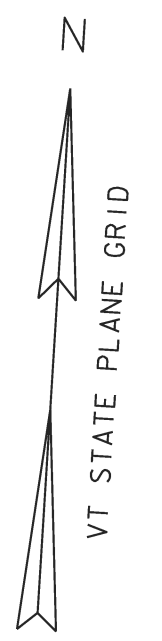
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC  
 ORIGINALLY DEVELOPED BY USDA-NRCS  
 VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

**CHECK DAM**

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 TEMPORARY STONE CHECK DAM, TYPE I(PAY ITEM 653.25)

REVISIONS	
MARCH 21, 2008	WHF
JANUARY 8, 2009	WHF

PROJECT NAME: BRISTOL	PLOT DATE: 06-MAR-2013
PROJECT NUMBER: BRO 1445(32)	DRAWN BY: R. PELLETT
FILE NAME: s05j352EPSC_details.dgn	CHECKED BY: J. SALVATORI
PROJECT LEADER: J. LACROIX	SHEET 18 OF 19
DESIGNED BY: G. LAROCHE	
EPSC DETAILS - #3	



EPSC - DURING CONSTRUCTION

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

PROJECT NAME:	BRISTOL	PLOT DATE:	06-MAR-2013
PROJECT NUMBER:	BRO 1445(32)	DRAWN BY:	R. PELLETT
FILE NAME:	s05j352epsc-dur.dgn	CHECKED BY:	J. SALVATORI
PROJECT LEADER:	J. LACROIX	DESIGNED BY:	G. LAROCHE
EPSC - DURING CONSTRUCTION		SHEET	19 OF 19