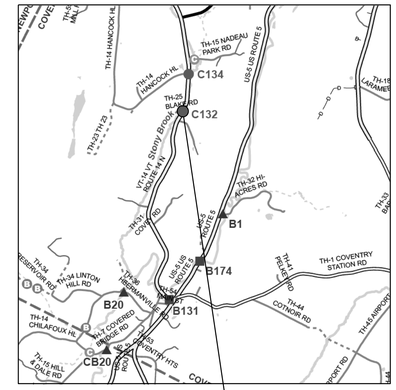
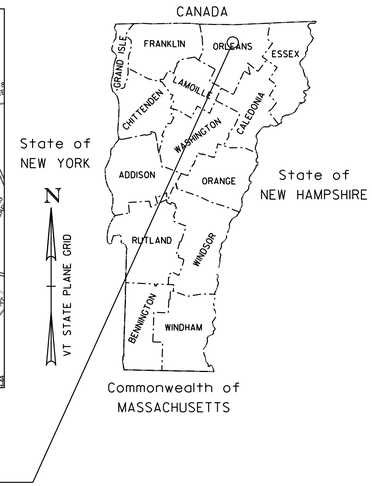
PROJECT NOTES:

1. A 3 DAY BRIDGE CLOSURE PERIOD IS ANTICIPATED WITH A SIGNED DETOUR.
2. TEMPORARY DRIVEWAYS WILL BE CONSTRUCTED DURING INSTALLATION OF THE NEW STRUCTURE.
3. TRUCKS WILL NOT BE ABLE TO MAKE IT THROUGH THE US 5/VT 105 INTERSECTION ON THE SIGNED DETOUR. A UTO WILL BE POSITIONED AT THIS LOCATION DURING THE CLOSURE TO PREVENT TRUCKS FROM ATTEMPTING THIS TURN. TRUCKS WILL NEED TO DETOUR TO VT 58 BETWEE IRASBURG AND LOWELL. THERE WILL BE STATIC SIGNS AT CRITICAL INTERSECTIONS NOTIFYING TRUCKS OF THE DETOUR, BUT THE TRUCK DETOUR WILL NOT BE SIGNED. ADDITIONAL NOTIFICATION TO THE TRUCKING COMMUNITY WILL BE PROVIDED THROUGH OUTREACH PROIR TO THE 3 DAY CLOSURE.
4. THERE WILL BE NO UTILITY RELOCATION. THERE ARE AREIAL LINES ON THE WESTERN SIDE OF VT 14, INCLUDING HIGH VOLTAGE TRANSMISSION LINES THAT THE CONTRACTOR WILL NEED TO WORK AROUND.
5. ALL WORK WILL BE PERFORMED WITHIN THE EXISTING ROW.
6. PROJECT LIMITS HAVE BEEN DETERMINED, BUT THE CROSS SECTIONS ARE STILL BEING REFINED.
7. THE BOX CULVERT WILL HAVE A 6"X6" BEVEL ON THE OPENING AT THE INLET END.

STATE OF VERMONT
AGENCY OF TRANSPORTATION





PROPOSED IMPROVEMENT
BRIDGE PROJECT

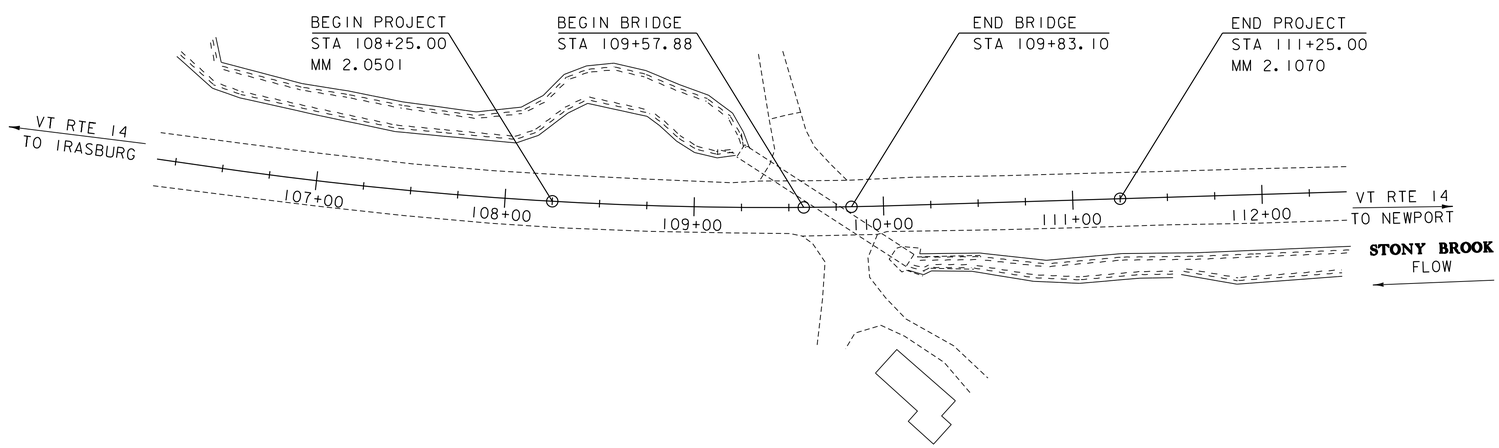
TOWN OF COVENTRY
COUNTY OF ORLEANS

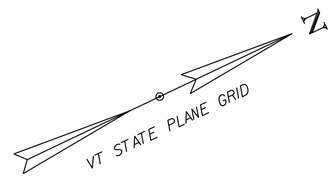
ROUTE NO : VT ROUTE 14, MAJOR COLLECTOR BRIDGE NO: 132

PROJECT LOCATION: IN THE TOWN OF COVENTRY ON VT ROUTE 14 OVER STONY BROOK, APPROXIMATELY 2.7 MILES SOUTH OF THE JUNCTION WITH VT ROUTE 100.

PROJECT DESCRIPTION: REMOVAL AND REPLACEMENT OF BRIDGE NO. 132 WITH RELATED APPROACH ROADWAY AND CHANNEL WORK.

LENGTH OF STRUCTURE: 25.22 FEET
LENGTH OF ROADWAY: 274.78 FEET
LENGTH OF PROJECT: 300.00 FEET





CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2018, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON APRIL 13, 2018 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL	2
SURVEYED BY :	VTRANS
SURVEYED DATE :	05/2021
DATUM	
VERTICAL	NAVD88
HORIZONTAL	NAD 83(2011)

SCALE 1" = 40'-0"
40 0 40

PRELIMINARY PLANS

9/5/2023

HIGHWAY DIVISION, CHIEF ENGINEER
APPROVED _____ DATE _____

PROJECT MANAGER : ROBERT KLINEFELTER, P.E.

PROJECT NAME : COVENTRY
PROJECT NUMBER : BF 0251(49)

SHEET 1 OF 29 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (CULVERT)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

STANDARDS LIST

DETAIL SHEETS

FINAL HYDRAULICS REPORT

TOWN:	Coventry	COUNTY:	Orleans
PROJECT NO.:	BF 0251(49)	STREAM:	Stoney Brook
HIGHWAY NO.:	Vermont Route 14	STRUCTURE NO.:	Bridge 132

STRUCTURE AND CHANNEL INFORMATION:

DRAINAGE AREA:	4.66 mi^2
DESIGN FLOW FREQUENCY:	2% AEP (Q50)
STRUCTURE SPAN:	12-ft
STRUCTURE HEIGHT:	8-ft
STRUCTURE EMBEDMENT:	2-ft
STRUCTURE INFILL MATERIAL:	E-Stone Fill Type II
STRUCTURE WATERWAY AREA:	72 ft^2
STRUCTURE INLET INVERT ELEVATION:	779.42-ft
STRUCTURE OUTLET INVERT ELEVATION:	777.55-ft
STRUCTURE LENGTH:	93.5-ft

FLOW FREQUENCY:	FLOW:	HEADWATER ELEVATION:	OUTLET VELOCITY:
AEP 50% (Q2):	140 cfs	784.15-ft	6.43-fps
AEP 10% (Q10):	220 cfs	785.78-ft	9.04-fps
AEP 4% (Q25):	280 cfs	786.14-ft	10.06-fps
AEP 2% (Q50):	370 cfs	786.74-ft	10.75-fps
AEP 1% (Q100):	530 cfs	787.51-ft	11.53-fps

TAILWATER ELEVATION @ DESIGN FLOW:	Normal Depth
ROADWAY OVERTOPPING FREQUENCY:	>Q100
DISCHARGE OVER ROAD @ Q100:	None
REQUIRED CHANNEL BANK PROTECTION:	Type II Stone Fill

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.
2. TRAFFIC SIGNALS ARE NOT NECESSARY.
3. SIDEWALKS ARE NOT NECESSARY

DESIGN VALUES

1.	DESIGN LIVE LOAD		HL-93
2.	FUTURE PAVEMENT	d_p:	3.0 INCH
3.	CULVERT OPENING	D:	12.00 FT
4.	MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	---
5.	PRESTRESSING STRAND	f_y:	---
6.	PRESTRESSED CONCRETE STRENGTH	f'_c:	---
7.	PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	---
8.	HIGH PERFORMANCE CONCRETE, CLASS PCD	f'_c:	---
9.	HIGH PERFORMANCE CONCRETE, CLASS PCS	f'_c:	---
10.	CONCRETE HIGH PERFORMANCE, CLASS SCC	f'_c:	---
11.	CONCRETE, CLASS C	f'_c:	---
12.	REINFORCING STEEL	f_y:	60 KSI
13.	STRUCTURAL STEEL AASHTO M270 (WEATHERING)	f_y:	50 KSI
14.	NOMINAL BEARING RESISTANCE OF SOIL	q_n:	---
15.	SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
16.	NOMINAL BEARING RESISTANCE OF ROCK	q_n:	---
17.	ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	---
18.	PILE RESISTANCE FACTOR	ϕ:	---
19.	LATERAL PILE DEFLECTION	Δ:	---
20.	BASIC WIND SPEED	V_{3s}:	---
21.	MINIMUM GROUND SNOW LOAD	p_g:	---
22.	SEISMIC DATA PGA: ---	S_s:	---
		S_1:	---
23.			
24.			---
25.			---
26.			---

LRFR LOAD RATING FACTORS

LOADING LEVELS	TRUCK						
	H-20	HL-93	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEM
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:	TABLE TO BE COMPLETED BY CONTRACTOR'S DESIGNER						

CULVERT DESIGN CRITERIA

1. PROPOSED CULVERT IS A PRECAST CONCRETE STRUCTURE (12'-0" X 8'-0" X 93'-6" BOX).
2. CULVERT ENDS ARE NOT SKEWED.
3. CULVERT WILL BE SET AT A SLOPE OF 12.00 IN. ON 50 FT.
4. CULVERT WILL REQUIRE FISH PASSAGE ACCOMODATIONS
5. CULVERT CONSTRUCTION WILL REQUIRE A TEMPORARY PIPE
6. CULVERT WILL HAVE A 6"X6" BEVEL ON THE OPENING AT THE INLET END

TRAFFIC DATA

YEAR	ADT	DHV	%D	%T	ADTT
2025	2200	250	58	12.2	250
2045	2400	270	58	14.9	340

20 year ESAL for flexible pavement from 2025 to 2045 : 2563000

40 year ESAL for flexible pavement from 2025 to 2065 : 5470000

Design Speed : 50 mph

AS BUILT "REBAR" DETAIL

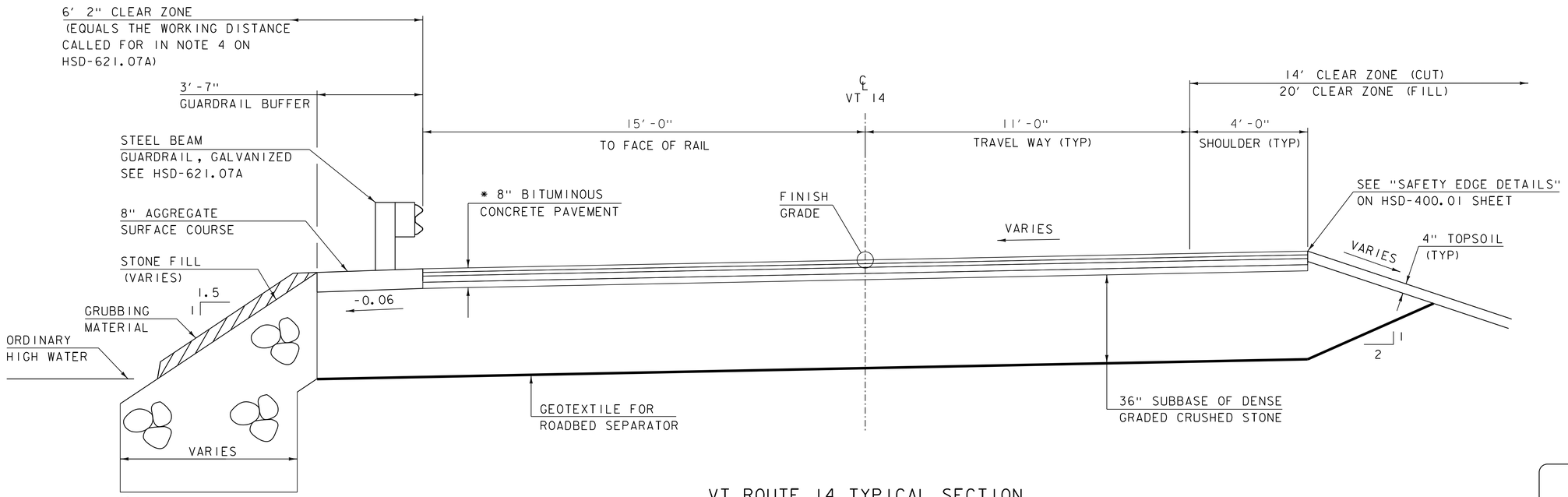
LEVEL I	LEVEL II	LEVEL III
TYPE:	TYPE:	TYPE:
GRADE:	GRADE:	GRADE:

PROJECT NAME: **COVENTRY**

PROJECT NUMBER: **BF 0251(49)**

FILE NAME: **s21b025PI.dgn**
PROJECT LEADER: **R. KLINEFELTER**
DESIGNED BY: **S. COLEY**
PRELIMINARY INFORMATION SHEET

PLOT DATE: 9/5/2023
DRAWN BY: **S. COLEY**
CHECKED BY: **R. KLINEFELTER**
SHEET 2 OF 29



* 1 ½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVS OVER
1 ½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVS OVER
2 ½" BITUMINOUS CONCRETE PAVEMENT, TYPE IIS OVER
2 ½" BITUMINOUS CONCRETE PAVEMENT, TYPE IIS

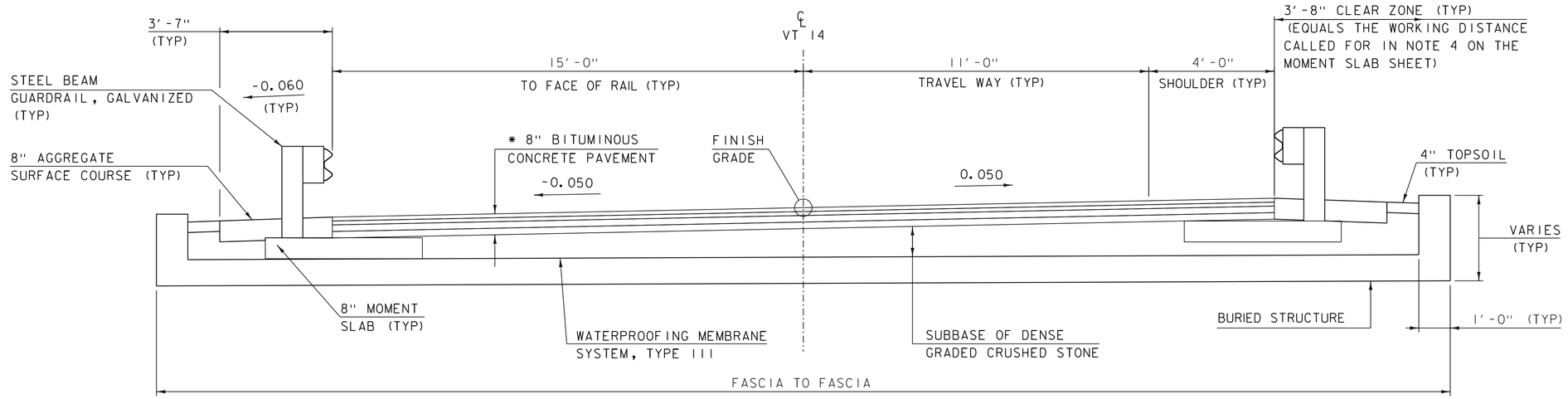
VT ROUTE 14 TYPICAL SECTION

SCALE: ½" = 1'-0"

DESIGN LANE	1,486,540
PERFORMANCE GRADE ASPHALT BINDER	70-28
DESIGN NUMBER OF GYRATIONS	65

MATERIAL TOLERANCES
(IF USED ON PROJECT)

SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- ¼"
- AGGREGATE SURFACE COURSE	+/- ½"
SUBBASE	+/- 1"
SAND BORROW	+/- 1"



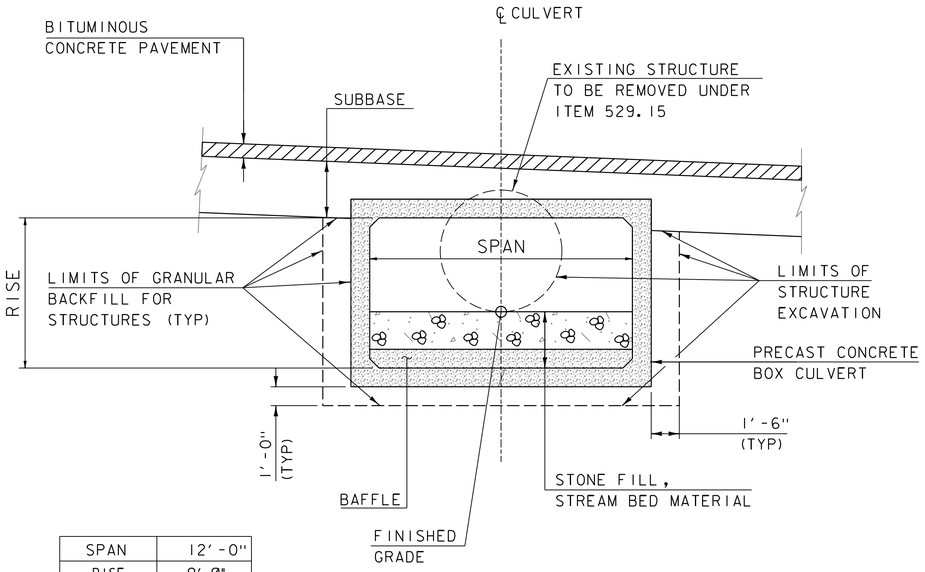
VT ROUTE 14 BURIED STRUCTURE TYPICAL SECTION

SCALE: ½" = 1'-0"

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 0251(49)

FILE NAME: S21b025typ.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
TYPICAL SECTIONS 1

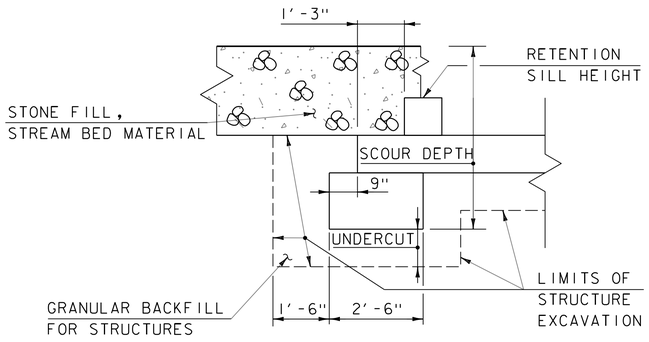
PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 3 OF 29



SPAN	12'-0"
RISE	8'-0"
LENGTH	93'-6"

CULVERT TYPICAL SECTION

NOT TO SCALE



CUTOFF WALL TYPICAL SECTION

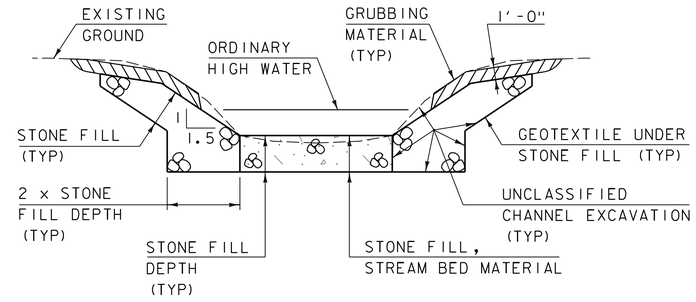
NOT TO SCALE

NOTE:

THE CUTOFF WALL MAY BE OMITTED IF THE DEPTH OF STONE FILL, STREAM BED MATERIAL PLUS THE THICKNESS TO THE BOTTOM OF THE BOX MEETS OR EXCEEDS THE LISTED SCOUR DEPTH.

CUTOFF WALL - CRITICAL DIMENSIONS

	DIMENSION
SCOUR DEPTH	4'-0"
RETENTION SILL HEIGHT	1'-0"
UNDERCUT	1'-0"



TYPICAL CHANNEL SECTION

(NOT TO SCALE)

1) WHENEVER CHANNEL SLOPE INTERSECTS ROADWAY SUBBASE, GRUBBING MATERIAL SHALL BEGIN AT THE BOTTOM OF SUBBASE.

2) THE CONTRACTOR SHALL CREATE A LOW FLOW CHANNEL IN THE STREAM BED MATERIAL AS DIRECTED BY THE ENGINEER.

3) GRUBBING MATERIAL SHALL BE PLACED UNDERNEATH STRUCTURES WHERE THERE IS MORE THAN 6 FEET VERTICALLY FROM ORDINARY HIGH WATER (OHW) TO THE BOTTOM OF SUPERSTRUCTURE AND MORE THAN 6 FEET HORIZONTALLY FROM OHW LINE TO FRONT FACE OF ABUTMENT. THIS MATERIAL SHALL START JUST ABOVE THE OHW ELEVATION AND TERMINATE 3 FEET HORIZONTALLY FROM THE FRONT FACE OF THE ABUTMENT. THIS MATERIAL SHALL NOT BE PLACED UNDERNEATH DOWNSPOUTS. SEE THE CHANNEL SECTIONS FOR ADDITIONAL DETAILING.

MATERIAL INFORMATION

	THICKNESS	TYPE
STONE FILL	3'-0"	TYPE III
STONE FILL, STREAM BED MATERIAL	2'-0"	E-STONE TYPE II

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb025typ.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
TYPICAL SECTIONS 2

PLOT DATE: 9/5/2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	BF	BARRIER FENCE
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	PDF	PROJECT DEMARCATION FENCE
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	R.T.& I.	RIGHT, TITLE, AND INTEREST
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⧈	BNDNS	BOUND TO BE SET
◎	IPNF	IRON PIN FOUND
●	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCHMARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALVE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADIUS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE
CB	CHORD BEARING

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UTILITY (GENERIC-UNKNOWN)
- TELEPHONE
- ELECTRIC
- CABLE (TV)
- ELECTRIC+CABLE
- ELECTRIC+TELEPHONE
- CABLE+TELEPHONE
- ELECTRIC+CABLE+TELEPHONE
- GAS LINE
- WATER LINE
- SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- UTILITY (GENERIC-UNKNOWN)
- TELEPHONE
- ELECTRIC
- CABLE (TV)
- ELECTRIC+CABLE
- ELECTRIC+TELEPHONE
- ELECTRIC+TELEPHONE
- CABLE+TELEPHONE
- ELECTRIC+CABLE+TELEPHONE
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CZ — CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH ℄
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PROJECT DEMARCATION FENCE
- BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN BOUNDARY LINE
- COUNTY BOUNDARY LINE
- STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- PROPERTY LINE (P/L)
- SLOPE RIGHTS
- 6F PROPERTY BOUNDARY
- 4F PROPERTY BOUNDARY
- HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

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

SEE EPSC DETAIL SHEETS FOR ADDITIONAL SYMBOLOGY

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- T&E — THREATENED & ENDANGERED SPECIES
- 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

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s21b025legend.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
LEGEND SHEET

PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 5 OF 29

PRIMARY CONTROL

HVCTRL #1
NORTH = 868800.2690
EAST = 1701687.5590
ELEV. = 762.0100

TO REACH FROM THE NORTHERLY INTERSECTION OF ROUTES 5 AND 14 IN COVENTRY, GO NORTH ON ROUTE 14 FOR 1.25 MI (2.01 KM) TO THE SITE OF THE MARK ON THE LEFT, ABOUT 20 M (65.6 FT) SOUTHWEST OF A WOODS ROAD.

THE MARK IS A 3/4 INCH (19 MM) REBAR WITH RED PLASTIC CAP SET 4 CM (2 INCHES) BELOW GROUND SURFACE.

IT IS 6.5 M (21.3 FT) NORTHWEST OF THE CENTERLINE OF ROUTE 14, 16.5 M (54.1 FT) NORTH-NORTHWEST OF A 12 CM (5 INCHES) SPRUCE AND 21.2 M (69.6 FT) WEST OF A 20 CM (8 INCHES) SPRUCE.

HVCTRL #2
NORTH = 871888.3040
EAST = 1702649.4520
ELEV. = 789.5800

TO REACH FROM THE NORTHERLY INTERSECTION OF ROUTES 5 AND 14 IN COVENTRY, GO NORTH ALONG ROUTE 14 FOR 1.9 MI (3.1 KM) TO THE SITE OF THE MARK ON THE LEFT, ABOUT 15 M (49.2 FT) SOUTHWEST OF SPENCER HILL ROAD.

THE MARK IS A 3/4 INCH (19 MM) REBAR WITH RED CAP SET 4 CM (2 INCHES) BELOW GROUND SURFACE.

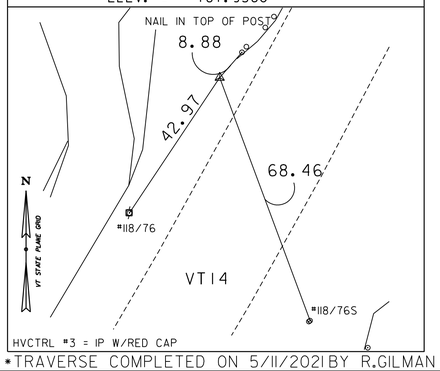
IT IS 8.1 M (26.6 FT) NORTHWEST OF THE CENTERLINE OF ROUTE 14, 21.7 M (71.2 FT) NORTHWEST OF A 20 CM (8 INCHES) SPRUCE AND 31.8 M (104.3 FT) SOUTHWEST OF POLE 118/75.

PT'S 1 AND 2 COORDINATES WERE DERIVED FROM OPUS RS USING THE RAPID EPHEMERIS

SECONDARY CONTROL

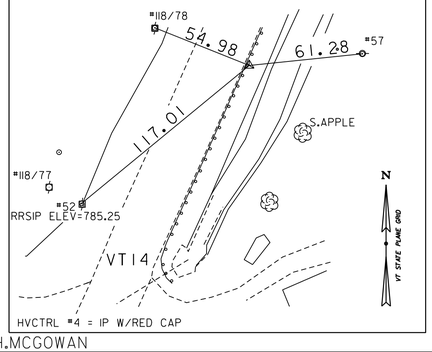
HVCTRL #3

NORTH = 872254.7368
EAST = 1702875.6734
ELEV. = 787.9360



HVCTRL #4

NORTH = 872492.0392
EAST = 1703029.9210
ELEV. = 789.1140



NORTH = / EAST = / ELEV. =

NORTH = / EAST = / ELEV. =

NORTH = / EAST = / ELEV. =

*TRAVERSE COMPLETED ON 5/11/2021 BY R.GILMAN H.MCGOWAN

ALIGNMENT TIES

NORTH = / EAST = / ELEV. =

NORTH = / EAST = / ELEV. =

NORTH = / EAST = / ELEV. =

NORTH = / EAST = / ELEV. =

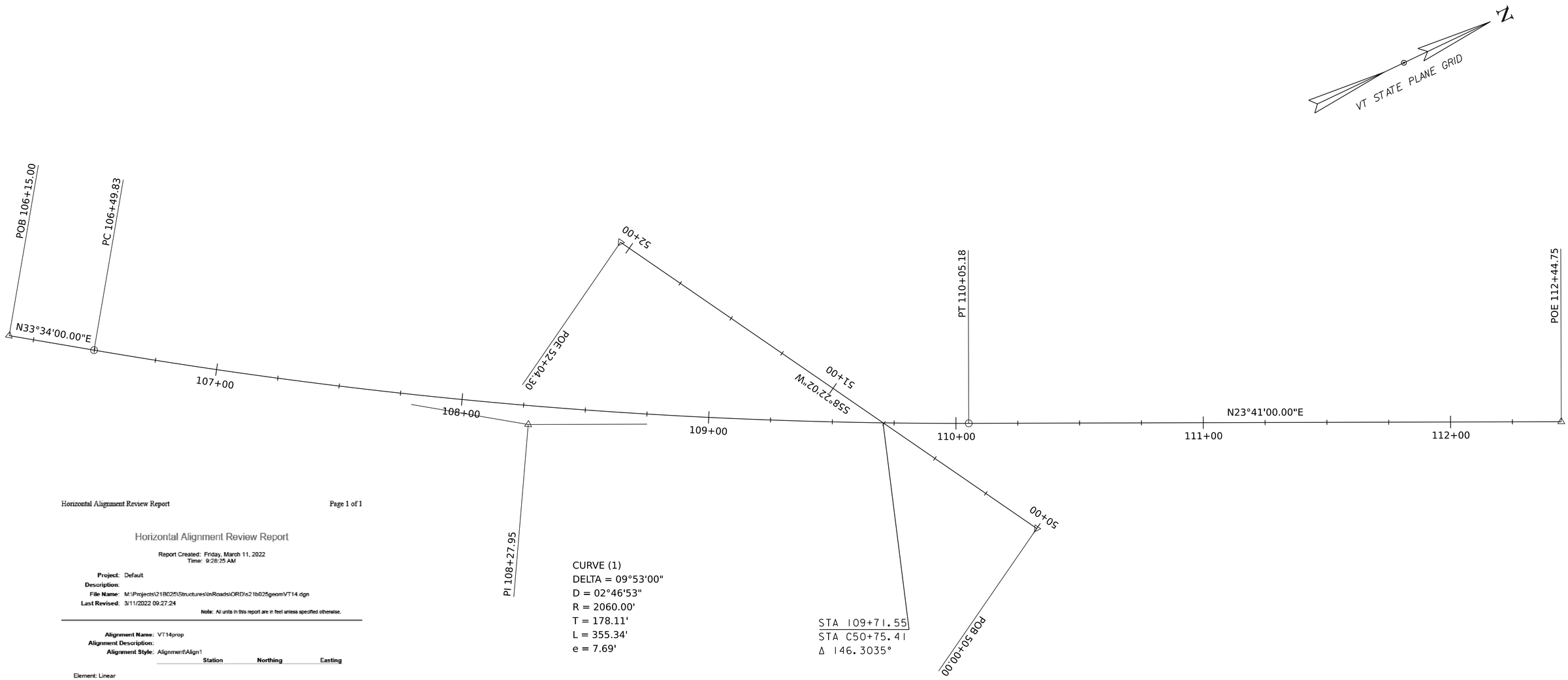
NORTH = / EAST = / ELEV. =

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD83 (2011)
ADJUSTMENT COMPASS

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: X21B025TI.DGN
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: VTRANS
TIE SHEET

PLOT DATE: 26-JUN-2023
DRAWN BY: H.MCGOWAN
CHECKED BY: R. GILMAN
SHEET 6 OF 29



Horizontal Alignment Review Report

Report Created: Friday, March 11, 2022
Time: 9:28:25 AM

Project: Default
Description:
File Name: M:\Projects\21B025\Structures\InRoads\ORD\s21b025geom\VT14.dgn
Last Revised: 3/11/2022 09:27:24

Note: All units in this report are in feet unless specified otherwise.

Alignment Name: VT14prop
Alignment Description:
Alignment Style: Alignment\Align1

		Station	Northing	Easting
Element: Linear				
POB	( )	10615.000	872051.310	1702777.881
PC	( )	10649.832	872080.334	1702797.140
Tangential Direction:		N33.567°E		
Tangential Length:		34.832		
Element: Circular				
PC	( )	10649.832	872080.334	1702797.140
PI	( )	10827.946	872228.746	1702895.620
CC	( )		873219.322	1701080.659
PT	( )	11005.178	872301.858	1702967.165
Radius:		2060.000		
Delta:		9.883° Left		
Degree of Curvature (Arc):		2.781°		
Length:		355.343		
Tangent:		178.113		
Chord:		354.903		
Middle Ordinate:		7.857		
External:		7.686		
Back Tangent Direction:		N33.567°E		
Back Radial Direction:		S56.433°E		
Chord Direction:		N28.825°E		
Ahead Radial Direction:		S66.317°E		
Ahead Tangent Direction:		N23.083°E		
Element: Linear				
PT	( )	11005.178	872301.858	1702967.165
POE	( )	11244.748	872511.254	1703063.397
Tangential Direction:		N23.683°E		
Tangential Length:		239.573		

Horizontal Alignment Review Report

Report Created: Monday, May 1, 2023
Time: 3:20:31 PM

Project: Default
Description:
File Name: C:\Users\scoley\Desktop\Coventry\ORD\s21b025geomchannel.dgn
Last Revised: 5/1/2023 15:12:12

Note: All units in this report are in feet unless specified otherwise.

Alignment Name: CL3_
Alignment Description:
Alignment Style: Alignment\Align3

		Station	Northing	Easting
Element: Linear				
POB	( )	5000.000	872300.820	1703017.198
POE	( )	5204.303	872292.668	1702843.250
Tangential Direction:		S58.307°W		
Tangential Length:		204.303		

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

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)
FILE NAME: s21b025bdr.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
ALIGNMENT SHEET	SHEET 7 OF 29

SOIL INFORMATION:
RUMNEY FINE SANDY LOAM
KfactWS = 0.20, 0% TO 3% SLOPES
HYDROLOGICAL SOIL GROUP: B/D

SOIL INFORMATION:
COLTON-DUXBURY COMPLEX
25% TO 60% SLOPES
HYDROLOGICAL SOIL GROUP: A

VT STATE PLANE GRID

N/F
BLAKE, APRIL M.

N/F
PIKE INDUSTRIES, INC.

RIPARIAN BUFFER

AER E

AER E&T

APPROX. EXISTING R.O.W.

OHW

780'

790'

VT ROUTE 14
TO TRASBURG

VT ROUTE 14
AER ETO NEWPORT

TH-25
(BLAKE RD)

7'-8" X 5'-6" CMP
STREAM FLOW

STONY BROOK
FLOW

GRAVEL
DRIVE

107+00
108+00
109+00
110+00
111+00
112+00

P L

N/F
DROWN, CHARLES W. SR.

N/F
SANVILLE, ISRAEL B. & DENISE S.

N/F
DROWN, CHARLES W. SR.

SOIL INFORMATION:
ADAMS LOAMY SAND
KfactWS = 0.15, 15% TO 25% SLOPES
HYDROLOGICAL SOIL GROUP: A

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

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: 21b025ero.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
EXISTING CONDITIONS

PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 8 OF 29

CONSTRUCT 5' PAVED APRON
STA 109+78 RT

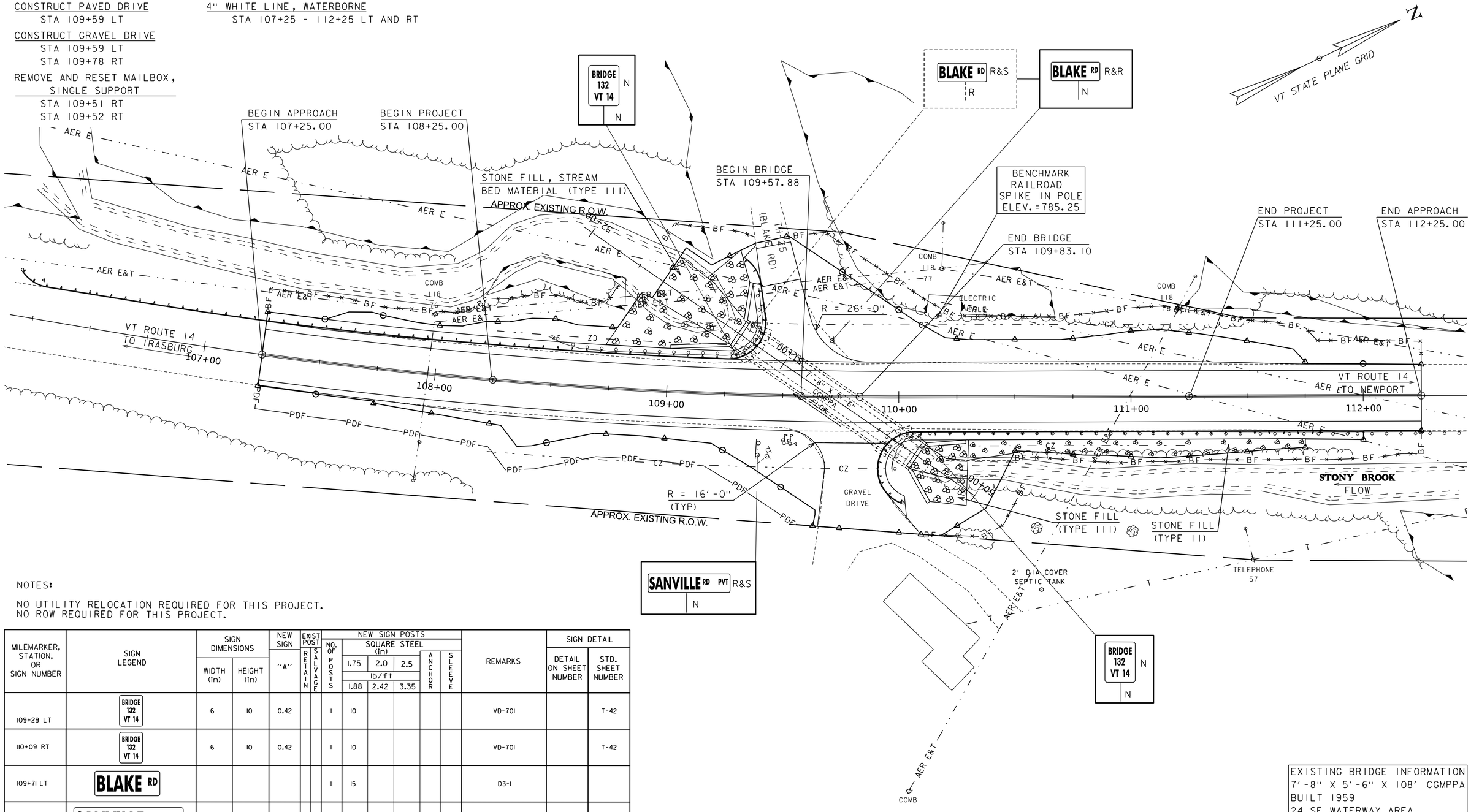
CONSTRUCT PAVED DRIVE
STA 109+59 LT

CONSTRUCT GRAVEL DRIVE
STA 109+59 LT
STA 109+78 RT

REMOVE AND RESET MAILBOX, SINGLE SUPPORT
STA 109+51 RT
STA 109+52 RT

4" YELLOW LINE, WATERBORNE (DOUBLE)
STA 107+25 - 112+25

4" WHITE LINE, WATERBORNE
STA 107+25 - 112+25 LT AND RT



NOTES:

NO UTILITY RELOCATION REQUIRED FOR THIS PROJECT.
NO ROW REQUIRED FOR THIS PROJECT.

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS WIDTH (in)	SIGN DIMENSIONS HEIGHT (in)	NEW SIGN "A"	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	NEW SIGN POSTS SQUARE STEEL (in) 1.75 lb/ft 1.88	2.0 2.42	2.5 3.35	ANCHOR	SLEEVE	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	SIGN DETAIL STD. SHEET NUMBER
109+29 LT	BRIDGE 132 VT 14	6	10	0.42			1	10					VD-701		T-42
110+09 RT	BRIDGE 132 VT 14	6	10	0.42			1	10					VD-701		T-42
109+71 LT	BLAKE RD						1	15					D3-1		
109+40 RT	SANVILLE RD PVT						2	30					D3-1		
								FT 65	FT	FT		EA			
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE VTRANS "SIGN POST DESIGN GUIDELINE."		TOTALS		SF 0.84				FT 35					SHS = STANDARD HIGHWAY SIGNS (MUTCD)		

SIGN LEGEND

N = NEW
R = REMOVE
R&S = REMOVE & SALVAGE
R&R = REMOVE & RESET

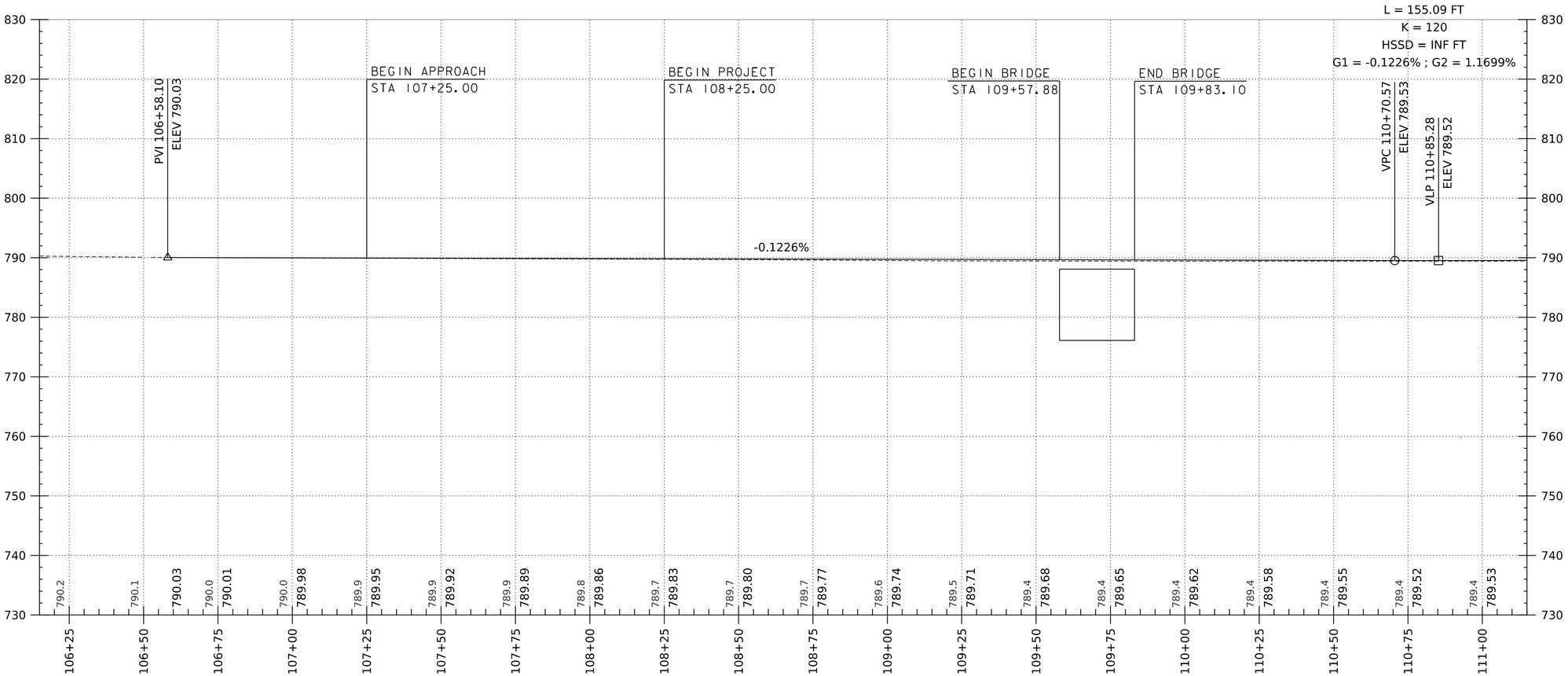
SCALE 1" = 20'-0"
20 0 20

EXISTING BRIDGE INFORMATION
7'-8" X 5'-6" X 108' CGMPPA
BUILT 1959
24 SF WATERWAY AREA
4' AVERAGE COVER

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb025bdr.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
LAYOUT SHEET

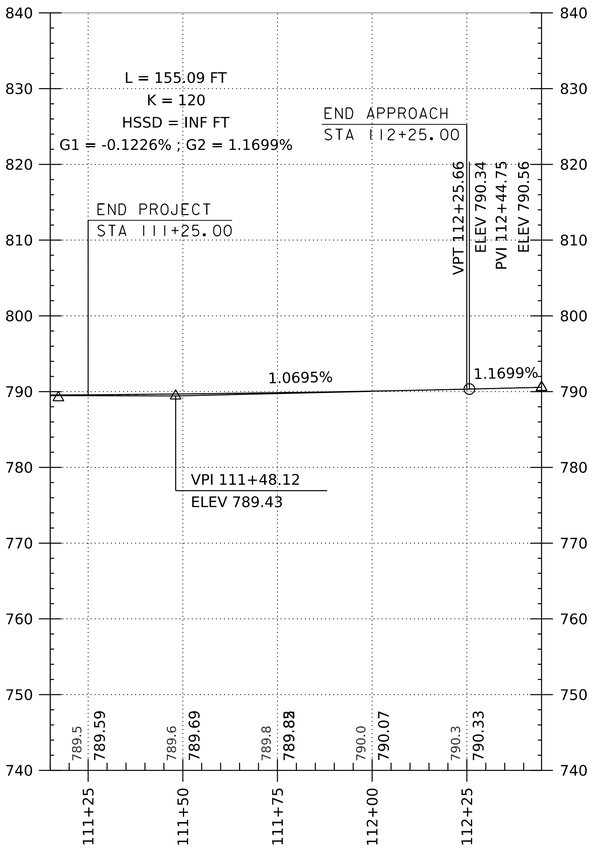
PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 9 OF 29



HORIZONTAL SCALE: 1" = 20'-0"
VERTICAL SCALE: 1" = 10'-0"

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 0251(49)

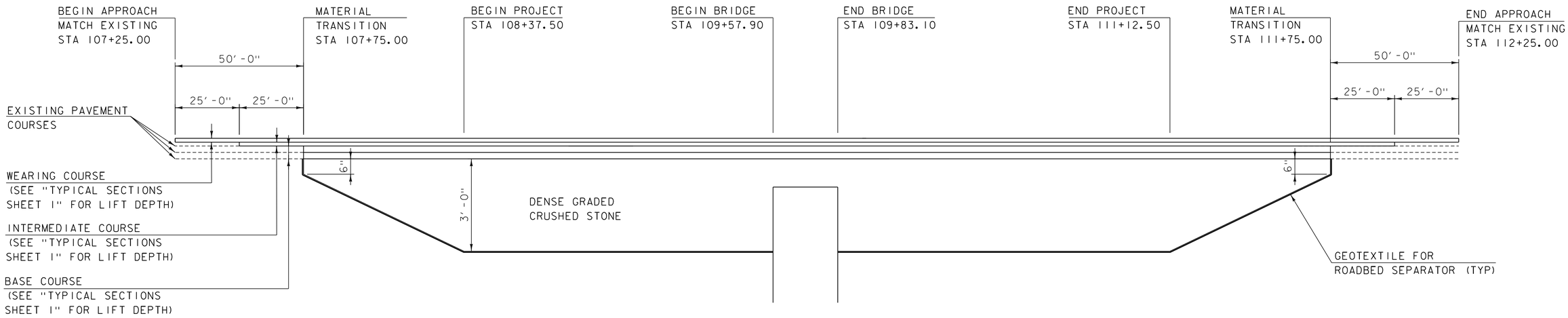
FILE NAME: s21b025pro.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
VT 14 PROFILE SHEET 1	SHEET 10 OF 29



HORIZONTAL SCALE: 1" = 20'-0"
VERTICAL SCALE: 1" = 10'-0"

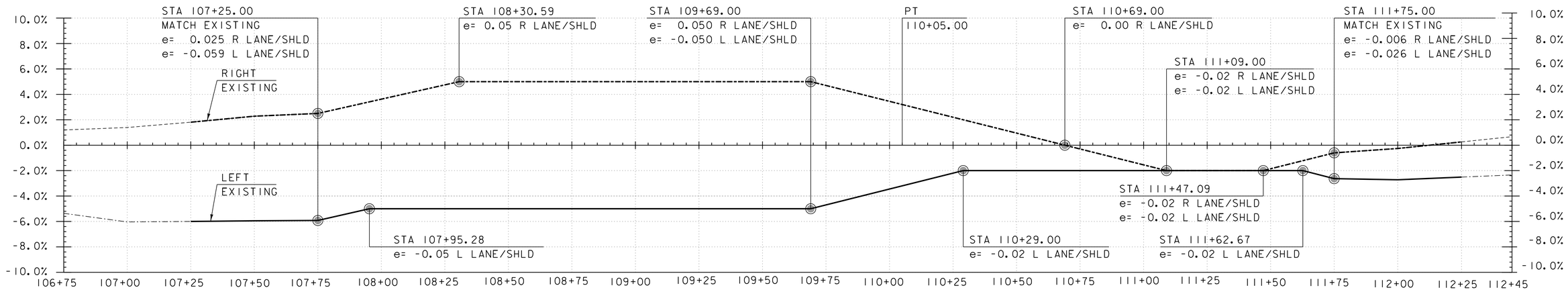
PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 0251(49)

FILE NAME: s21b025pro.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
VT 14 PROFILE SHEET 2	SHEET 11 OF 29



MATERIAL TRANSITION

NOT TO SCALE

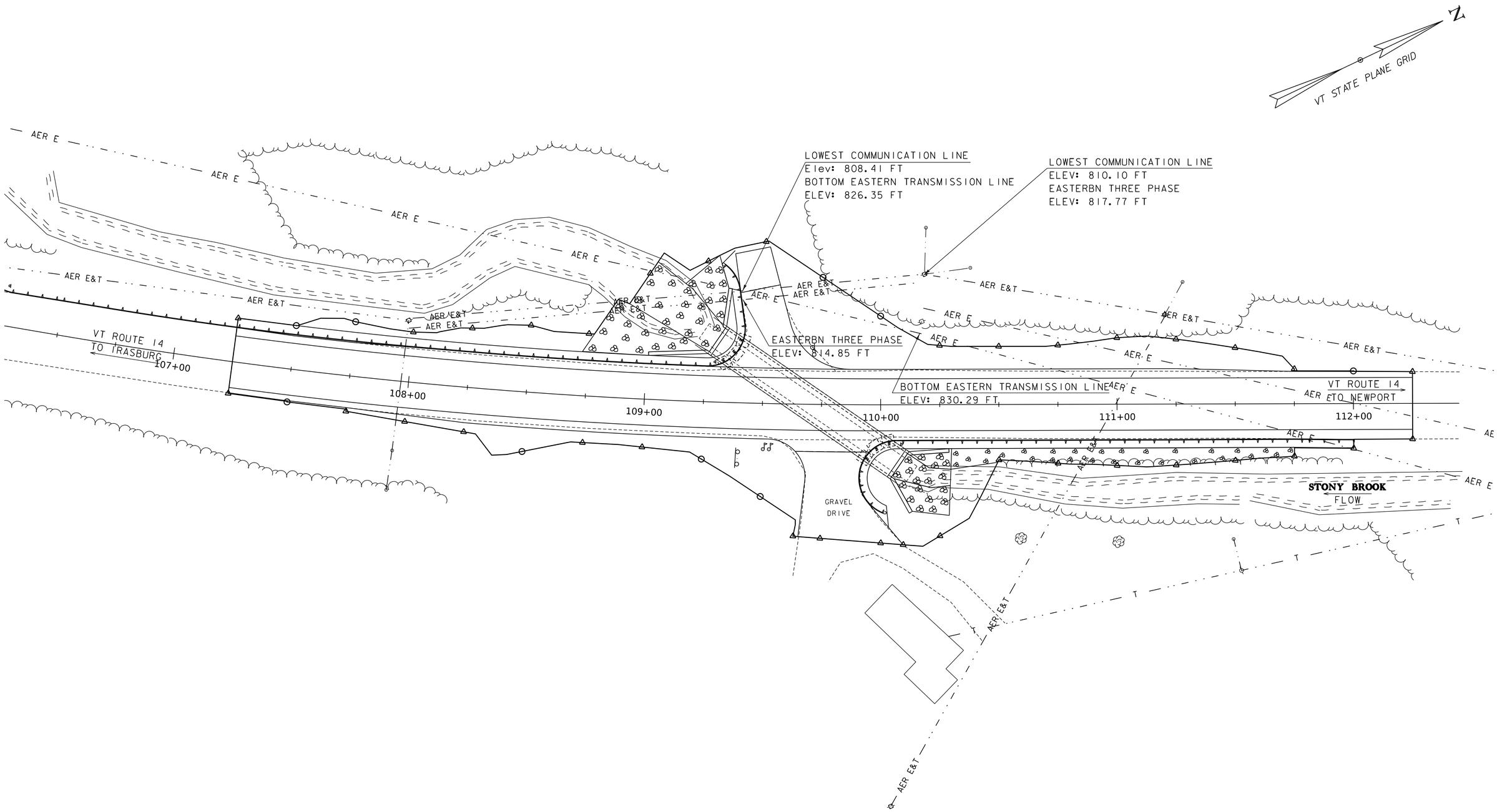


BANKING DIAGRAM

HOR. SCALE 1" =20'-0"
NO VER. SCALE

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)
FILE NAME: s2lb025superelevation.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
MATERIAL TRANSITION & BANKING DIAGRAM	SHEET 12 OF 29

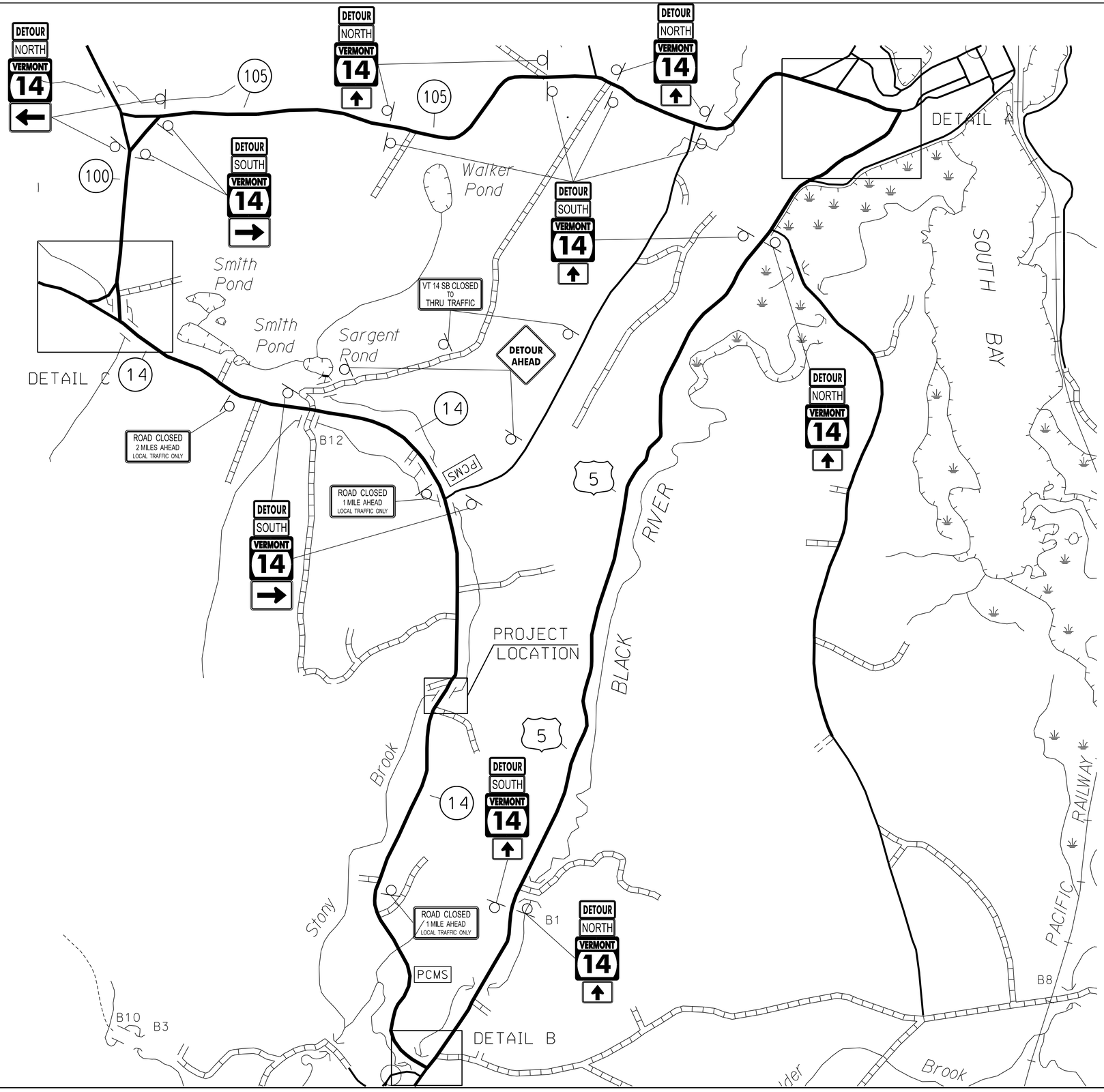
UTILITY ELEVATIONS WERE SURVEYED ON 05/25/2023.



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

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)

FILE NAME: s2Ib025bdr_util.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
UTILITY LAYOUT SHEET	SHEET $S#$ OF $T#$



PCMS

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS)

MESSAGE 1	MESSAGE 2
VT 14	****DATE****
ROAD	**THRU**
CLOSED	****DATE****

SEE CONTRACT DOCUMENTS FOR CLOSURE DATES.

LOCATIONS ARE ON THIS SHEET AND REGIONAL DETOUR DETAILS SHEET.

VT 14 ROAD CLOSED IN COVENTRY, TRUCKS USE VT 58 TO VT 100

PLACE AT INTERSECTIONS OF US 5/VT 58, VT 14/VT 58, VT 101/VT 100

VT 14 ROAD CLOSED IN COVENTRY, TRUCKS USE VT 100 TO VT 58

PLACE AT INTERSECTIONS OF VT 101/VT 100, VT 100/VT 105

DETOUR ROUTE SIGNS

DETOUR SOUTH VERMONT 14

DETOUR NORTH VERMONT 14

DETOUR SOUTH

DETOUR NORTH

N

VT STATE PLANE GRID

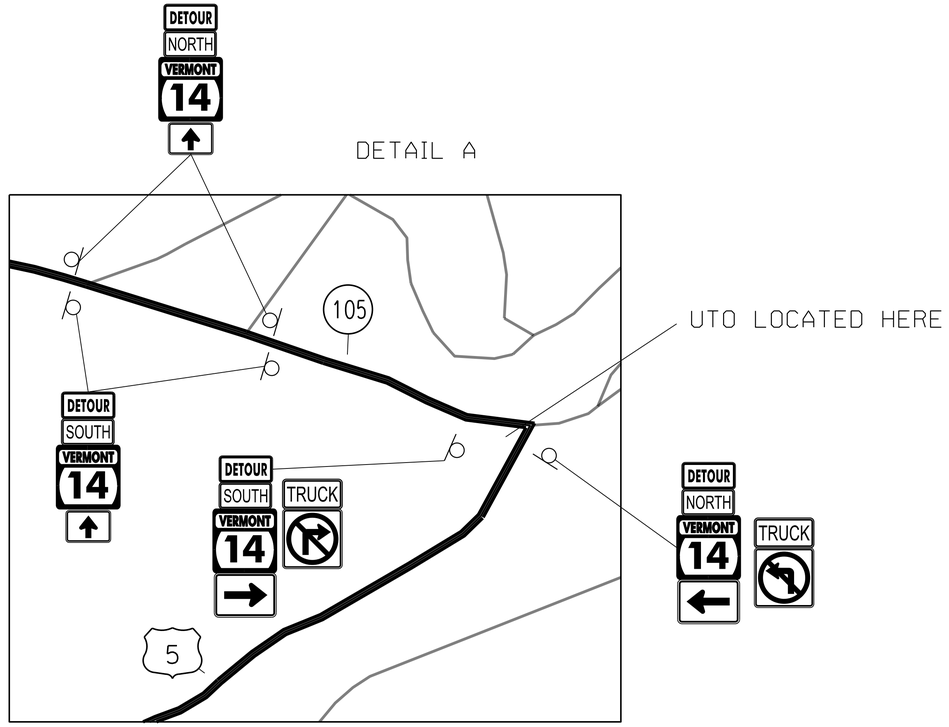
DETOUR ROUTE

DETOUR ROUTE SIGNS

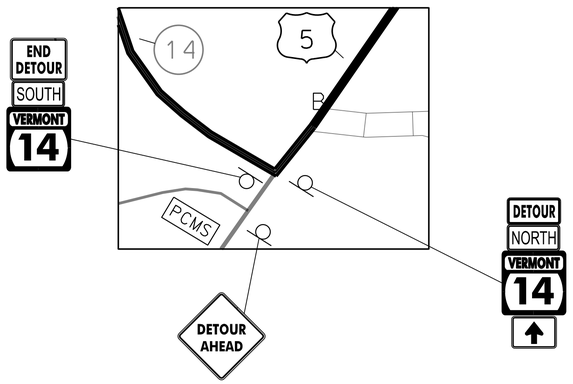
PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)

FILE NAME: s21b025detour.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
REGIONAL DETOUR	SHEET 14 OF 29

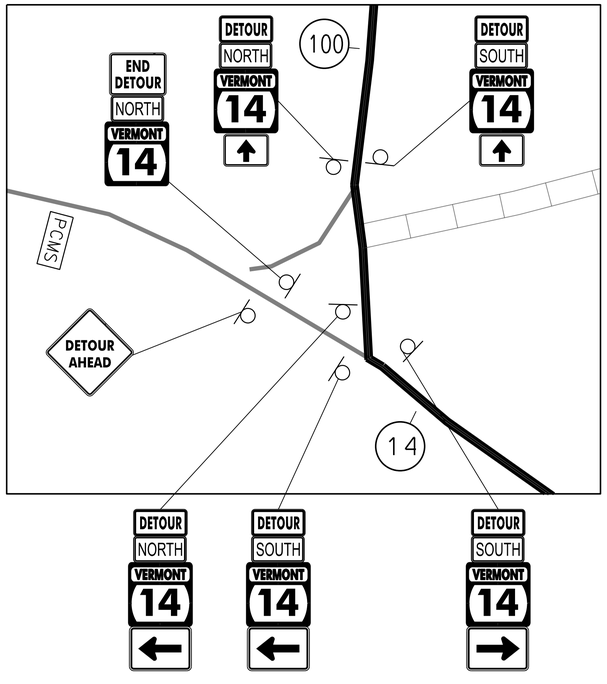
DETAIL A

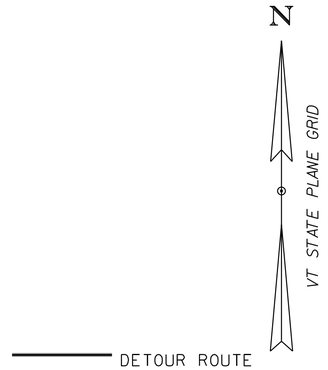


DETAIL B



DETAIL C





DETOUR ROUTE

DETOUR ROUTE SIGNS

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 0251(49)

FILE NAME: s21b025detour.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
REGIONAL DETOUR DETAILS

PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 15 OF 29

SOIL CLASSIFICATION

AASHTO	
A1	Gravel and Sand
A3	Fine Sand
A2	Silty or Clayey Gravel and Sand
A4	Silty Soil - Low Compressibility
A5	Silty Soil - Highly Compressible
A6	Clayey Soil - Low Compressibility
A7	Clayey Soil - Highly Compressible

ROCK QUALITY DESIGNATION

R.Q.D. (%)	ROCK DESCRIPTION
<25	Very Poor
25 to 50	Poor
51 to 75	Fair
76 to 90	Good
>90	Excellent

SHEAR STRENGTH

UNDRAINED SHEAR STRENGTH IN P.S.F.	CONSISTENCY
<250	Very Soft
250-500	Soft
500-1000	Med. Stiff
1000-2000	Stiff
2000-4000	Very Stiff
>4000	Hard

CORRELATION GUIDE OF "N" TO DENSITY/CONSISTENCY

DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

COMMONLY USED SYMBOLS

▼	Water Elevation
⊕	Standard Penetration Boring
⊕	Auger Boring
⊙	Rod Sounding
S	Sample
N	Standard Penetration Test Blow Count Per Foot For: 2" O.D. Sampler 1 3/8" I.D. Sampler Hammer Weight Of 140 Lbs. Hammer Fall Of 30"
VS	Field Vane Shear Test
US	Undisturbed Soil Sample
B	Blast
DC	Diamond Core
MD	Mud Drill
WA	Wash Ahead
HSA	Hollow Stem Auger
AX	Core Size 1 1/8"
BX	Core Size 1 5/8"
NX	Core Size 2 1/8"
M	Double Tube Core Barrel Used
LL	Liquid Limit
PL	Plastic Limit
PI	Plasticity Index
NP	Non Plastic
w	Moisture Content (Dry Wgt. Basis)
D	Dry
M	Moist
MTW	Moist To Wet
W	Wet
Sat	Saturated
Bo	Boulder
Gr	Gravel
Sa	Sand
Si	Silt
Cl	Clay
HP	Hardpan
Le	Ledge
NLTD	No Ledge To Depth
CNPF	Can Not Penetrate Further
TLOB	Top of Ledge Or Boulder
NR	No Recovery
Rec.	Recovery
%Rec.	Percent Recovery
RQD	Rock Quality Designation
CBR	California Bearing Ratio
<	Less Than
>	Greater Than
R	Refusal (N > 100)
VTSPG	NAD83 - See Note 7

COLOR			
blk	Black	pnk	Pink
bl	Blue	pu	Purple
brn	Brown	rd	Red
dk	Dark	tn	Tan
gry	Gray	wh	White
gn	Green	yel	Yellow
lt	Light	mltc	Multicolored
or	Orange		

DEFINITIONS (AASHTO)

BEDROCK (LEDGE) - Rock in its native location of indefinite thickness.

BOULDER - A rock fragment with an average dimension > 12 inches.

COBBLE - Rock fragments with an average dimension between 3 and 12 inches.

GRAVEL - Rounded particles of rock < 3" and > 0.0787" (#10 sieve).

SAND - Particles of rock < 0.0787" (#10 sieve) and > 0.0029" (#200 sieve).

SILT - Soil < 0.0029" (#200 sieve), non or slightly plastic and exhibits no strength when air-dried.

CLAY - Fine grained soil, exhibits plasticity when moist and considerable strength when air-dried.

VARVED - Alternate layers of silt and clay.

HARDPAN - Extremely dense soil, cemented layer, not softened when wet.

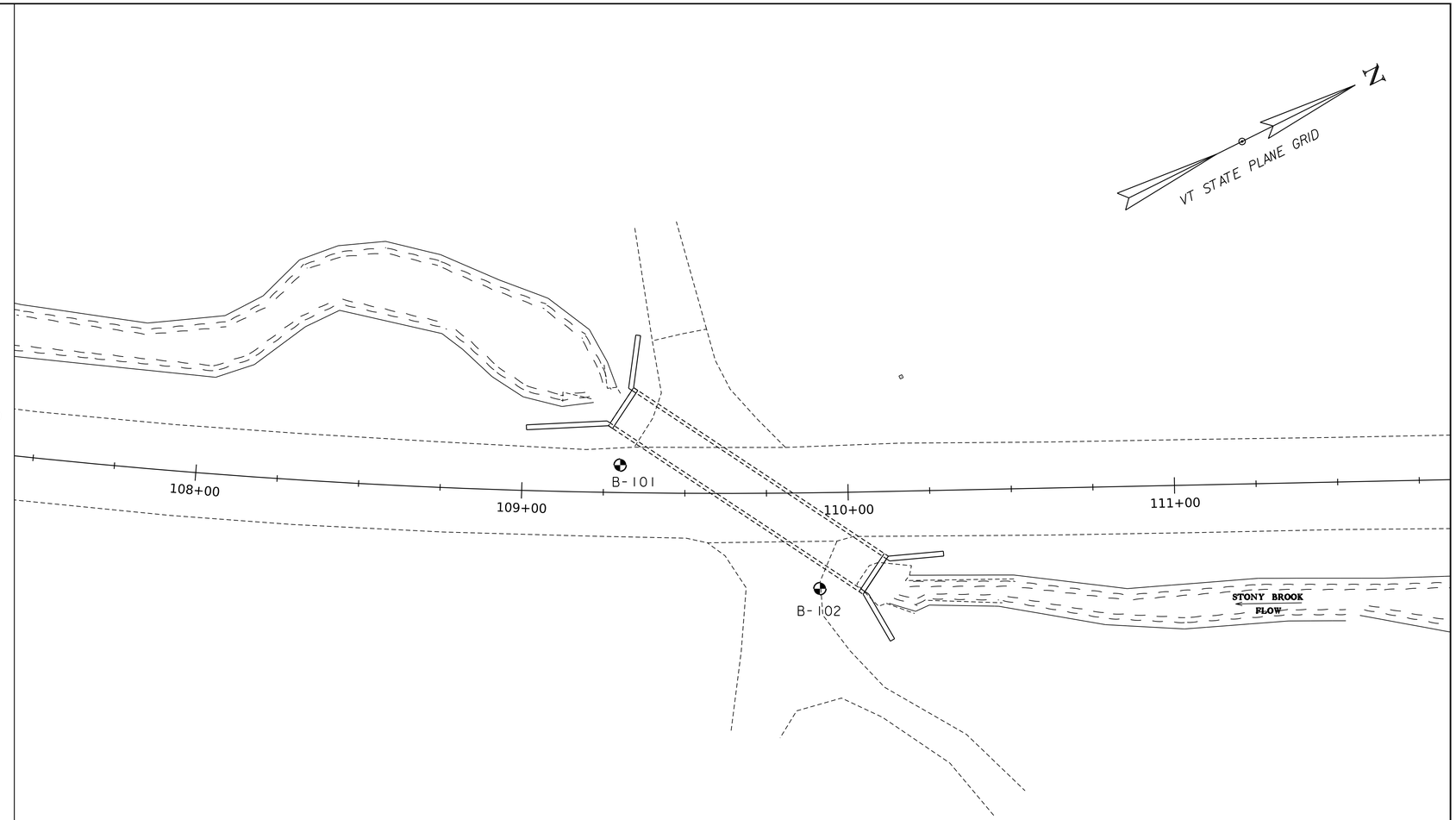
MUCK - Soft organic soil (containing > 10% organic material.

MOISTURE CONTENT - Weight of water divided by dry weight of soil.

FLOWING SAND - Granular soil so saturated (loose) that it flows into drill casing during extraction of wash rod.

STRIKE - Angle from magnetic north to line of intersection of bed with a horizontal plane.

DIP - Inclination of bed with a horizontal plane.



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

GENERAL NOTES

1. The subsurface explorations shown herein were made between 6/14/2021 and 6/15/2021 by the Agency.
2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
4. Engineering judgment was exercised in preparing the subsurface information presented herein. Analysis and interpretation of subsurface data was performed and interpreted for Agency design and estimating purposes. Presentation of the information in the Contract is intended to provide the Contractor access to the same data available to the Agency. The subsurface information is presented in good faith and is not intended as a substitute for personal investigation, independent interpretation, independent analysis or judgment by the Contractor.
5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.
6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.
7. Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.

BORING CHART

HOLE NO.	SURV. STATION	OFFSET	NORTHING	EASTING
B-101	109+30.05	8.42' LT	1702928.16	872327.29
B-102	109+90.95	29.39' RT	1702988.24	872366.86

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb025bor.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
BORING INFORMATION SHEET

PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 16 OF 29

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

Coventry
BF 0251(49)
VT 14 Bridge No. 132

Boring No.: **B-101**
Page No.: 1 of 1
Pin No.: 21b025
Checked By: AJA

Boring Crew: Judkins, Arles, Emerson, Brochu
Date Started: 6/14/21 Date Finished: 6/14/21
VTSPG NAD83: N 872327.29 ft E 1702928.16 ft
Station: 109+26 Offset: 8.4 LT
Ground Elevation: 788.7 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 55 TRACK	C_E = 1.52

Groundwater Observations

Date	Depth (ft)	Notes
06/14/21	5.1	WT After Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note, Asphalt 0.0'-0.2'	12-10-16 (22)				
		Visual Description:, SaGr, brn, Moist, Rec. = 0.5 ft, Field Note: NXDC Cleanout 1.3'-2.0'. Rock in end of sampler					
		Visual Description:, SaGr, brn, Moist, Rec. = 0.6 ft, Field Note: NXDC Cleanout 3.0'-4.0'. Rock in end of sampler	20-15-18-12 (33)				
5		A-1-b, SaGr, brn, Moist, Rec. = 0.8 ft, Field Note: NXDC Cleanout 5.1'-6.0'	11-10-16-12 (26)	8.6	46.9	39.2	13.9
		Visual Description:, SaGr, brn, Moist, Rec. = 0.6 ft, Field Note: NXDC Cleanout 7.2'-8.0'	8-9-8-12 (17)				
		A-1-b, SaGr, brn, Moist, Rec. = 0.5 ft, Field Note: NXDC Cleanout 9.1'-10.0'	21-10-17-19 (27)	10.3	53.2	43.6	3.2
10		Visual Description:, Gr, brn, Moist, Rec. = 0.4 ft, Field Note: Refusal @ 11.9' 100 blows. NXDC Cleanout 10.9'-12.0'. Rock in end of sampler	28-30-27-R@5" (57)				
		A-1-b, GrSa, brn, Moist, Rec. = 0.8 ft, Field Note: Refusal @ 13.6' 100 blows. NXDC Cleanout 12.9'-14.0'	30-31-28-R@1" (59)	12.1	52.9	47.1	0.0
15		A-1-a, SaGr, brn, Moist, Rec. = 0.8 ft, Field Note: NXDC Cleanout 18.9'-20.0'	18-26-5-13 (31)	7.6	59.6	29.9	10.5
20		Field Note, No Recovery, NXDC Cleanout 4.2'-25.0'					
25		A-1-b, SaGr, brn, Moist, Rec. = 0.8 ft	14-16-16-18 (32)	9.3	48.8	41.2	10.0
		Hole stopped @ 27.0 ft					
30		Remarks: Hole Collapsed @ 5.8'.					

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 may occur due to other factors than those present at the time measurements were made.

BORING LOG COVENTRY BF 0251(49).GPJ VERMONT.AOT.GDT 9/13/21

STATE OF VERMONT
AGENCY OF TRANSPORTATION
CONSTRUCTION AND
MATERIALS BUREAU
CENTRAL LABORATORY

BORING LOG

Coventry
BF 0251(49)
VT 14 Bridge No. 132

Boring No.: **B-102**
Page No.: 1 of 1
Pin No.: 21b025
Checked By: AJA

Boring Crew: Judkins, Arles, Emerson
Date Started: 6/15/21 Date Finished: 6/15/21
VTSPG NAD83: N 872366.86 ft E 1702988.24 ft
Station: 109+87 Offset: 29.2 RT
Ground Elevation: 789.05 ft

	Casing	Sampler
Type:	WASH BORE	SS
I.D.:	4 in	1.5 in
Hammer Wt:	N.A.	140 lb.
Hammer Fall:	N.A.	30 in.
Hammer/Rod Type:	Auto/AWJ	
Rig:	CME 55 TRACK	C_E = 1.52

Groundwater Observations

Date	Depth (ft)	Notes
06/15/21	7.3	WT After Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Visual Description:, Sa, brn, Dry, Rec. = 0.7 ft	4-7-8-9 (15)				
		Visual Description:, GrSa, brn, Dry, Rec. = 0.8 ft, Field Note: NXDC Cleanout 2.8'-4.0'	14-14-8-7 (22)				
5		A-1-b, SaGr, brn, Moist, Rec. = 0.6 ft, Field Note: NXDC Cleanout 5.0'-6.0'	8-10-15-19 (25)	9.3	44.7	40.9	14.4
		Field Note, No Recovery, NXDC Cleanout 7.0'-8.0'. Rock in end of sampler	14-12-15-18 (27)				
		Field Note, No Recovery, Refusal @ 8.4'. NXDC Cleanout 8.4'-10.0'. Cobbles and Boulders 8.4'-10.0'. Rock in end of sampler	R@5" (R)				
10		Visual Description:, SaGr, brn, Moist, Rec. = 0.3 ft, Field Note: Refusal @ 10.4' 100 blows no movement. NXDC Cleanout 10.3'-12.0'. Rock in end of sampler	R@5" (R)				
		A-1-b, GrSa, brn, Moist, Rec. = 0.6 ft, Field Note: NXDC Cleanout 13.0'-14.0'	24-13-7-8 (20)	13.0	40.5	53.4	6.1
15		A-1-b, SaGr, brn, Moist, Rec. = 0.5 ft, Field Note: NXDC Cleanout 19.1'-20.0'	8-12-15-12 (27)	10.1	49.0	40.4	10.6
20		A-1-b, SaGr, brn, Moist, Rec. = 0.9 ft, Field Note: NXDC Cleanout 23.7'-25.0'	9-14-13-19 (27)	9.6	49.1	41.0	9.9
25		A-1-b, SaGr, brn, Moist, Rec. = 0.5 ft	23-24-20-20 (44)	11.3	45.7	40.7	13.6
		Hole stopped @ 27.0 ft					
30		Remarks: Hole Collapsed @ 7.2'					

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 may occur due to other factors than those present at the time measurements were made.

BORING LOG COVENTRY BF 0251(49).GPJ VERMONT.AOT.GDT 9/13/21

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 0251(49)

FILE NAME: s21b025bor.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
BORING LOGS

PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 17 OF 29

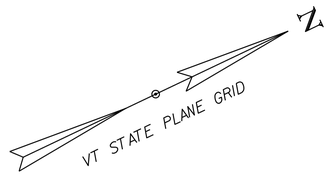
REMOVAL AND DISPOSAL OF GUARDRAIL
STA 108+47.5 TO 109+40.4 LT
STA 109+97.5 TO 112+00.0 RT

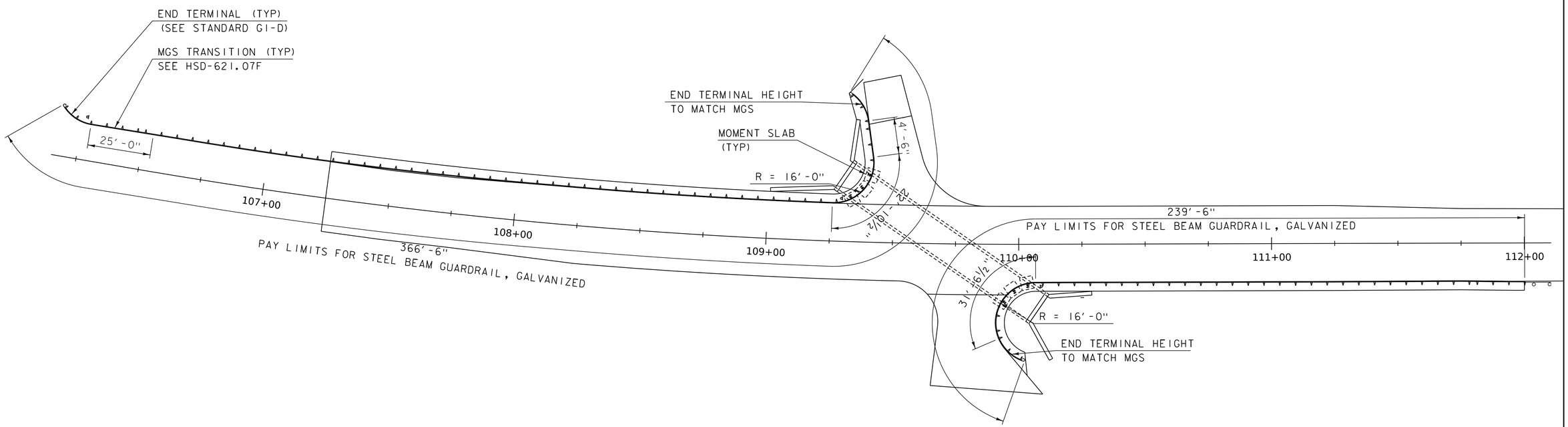
STEEL BEAM GUARDRAIL, GALVANIZED
STA 106+16.6 TO 109+42.0 LT
STA 109+90.9 TO 112+00.0 RT

ANCHOR FOR STEEL BEAM RAIL
STA 106+24.0 LT
STA 109+37.0 LT
STA 109+96.0 RT

MOMENT SLAB
STA 109+33.5 LT
STA 109+38.3 LT
STA 109+41.3 LT
STA 109+93.3 RT
STA 109+97.6 RT
STA 110+03.3 RT

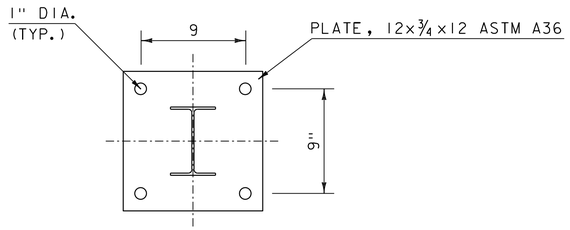
DELINEATOR WITH STEEL POST
STA 106+26.8 LT (GREEN)
STA 109+29.3 LT (BLUE)
STA 110+08.9 RT (GREEN)



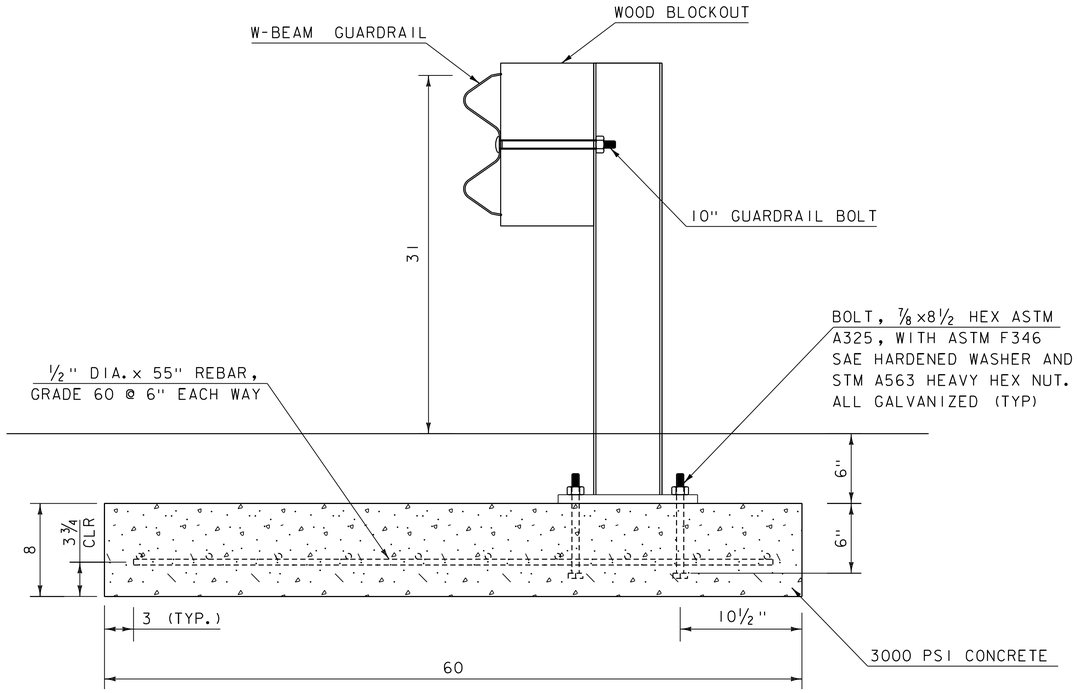


SCALE 1" = 20'-0"
20 0 20

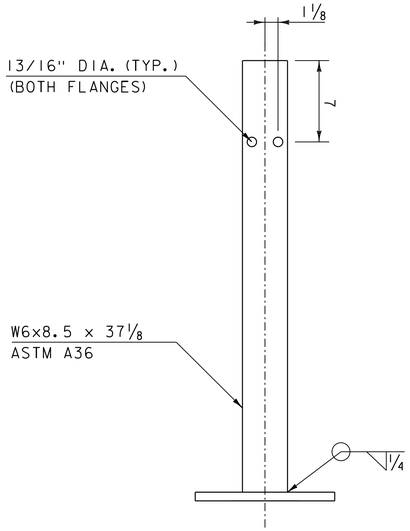
PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 0251(49)
FILE NAME: s21b025bdr_rail.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
RAIL LAYOUT SHEET	SHEET 18 OF 29



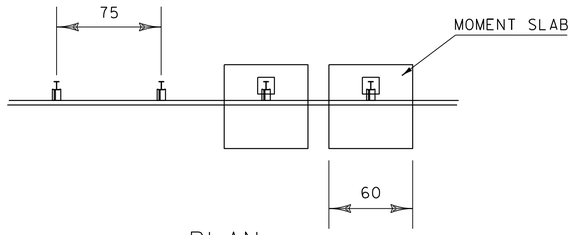
POST PLAN



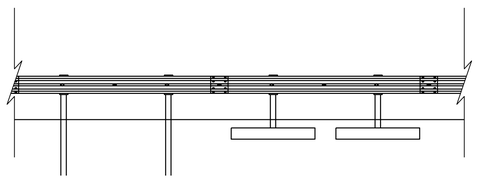
SLAB SECTION



POST ELEVATION



PLAN



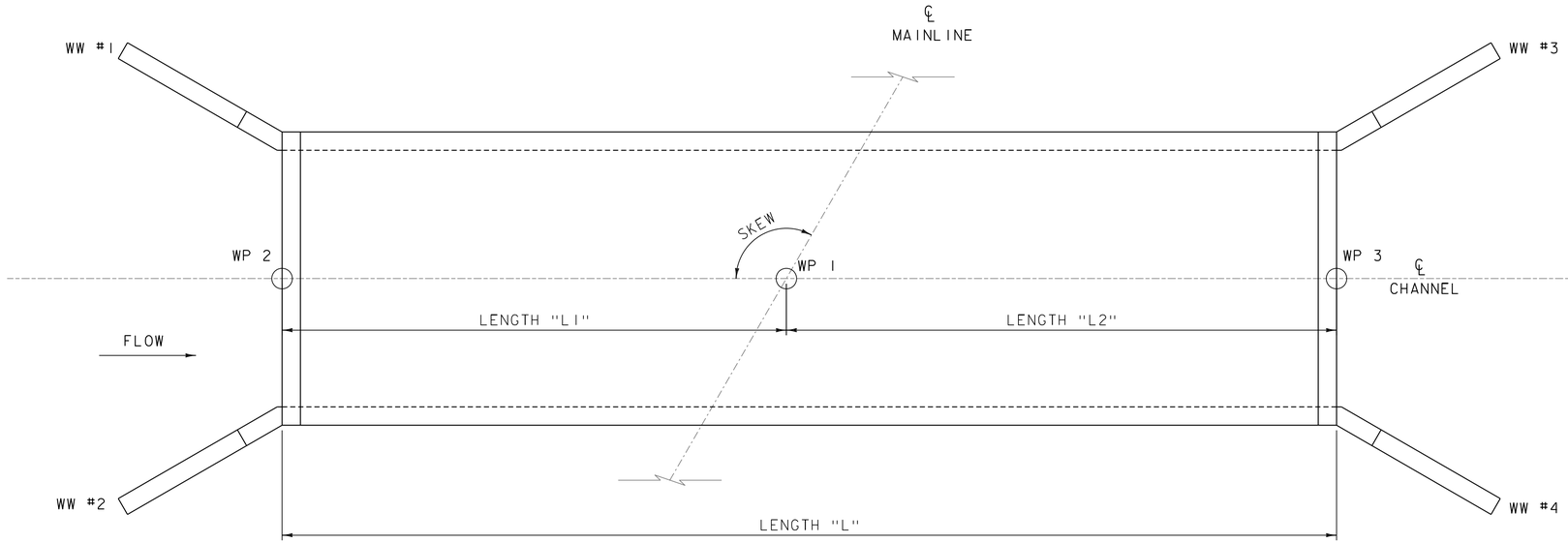
ELEVATION

GENERAL NOTES

1. DESIGNATIONS ARE AS IDENTIFIED IN "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE" AS PUBLISHED BY THE "AMERICAN ASSOCIATION OF STATE AND HIGHWAY TRANSPORTATION OFFICIALS" (AASHTO), "ASSOCIATED GENERAL CONTRACTORS OF AMERICA" (AGC) AND THE "AMERICAN ROAD AND TRANSPORTATION BUILDERS ASSOCIATION" (ARTBA).
2. MATERIALS SHALL BE IN ACCORDANCE WITH SECTION 728 OF THE CURRENT STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ITS LATEST REVISIONS, AS APPLICABLE.
3. ITEM 543.10 CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE (MOMENT SLAB #) INCLUDES ALL PRECAST CONCRETE COMPONENTS INCLUDING REINFORCING STEEL, ANCHOR BOLTS, WASHERS, AND HEX NUTS.
4. GUARDRAIL POSTS PLATES, BLOCKOUTS, AND CONNECTION HARDWARE SHALL BE INCLUDED UNDER ITEM 621.20.
5. THE DYNAMIC DEFLECTION DISTANCE OF 27 INCHES FOR THE MOMENT SLAB SHALL BE MAINTAINED CLEAR OF OBSTACLES, TO BE MEASURED FROM THE BACK OF POST.
6. FOR MASH TEST LEVEL 3 APPLICATIONS, AS APPROVED IN THE FEDERAL HIGHWAY ADMINISTRATION'S ELIGIBILITY LETTER, HSST/B-332, DATED FEBRUARY 27, 2022.
7. ALL DIMENSIONS IN INCHES, UNLESS OTHERWISE NOTED.

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)

FILE NAME: s2lb025rail_det.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
MOMENT SLAB	SHEET 19 OF 29



CULVERT PLAN VIEW

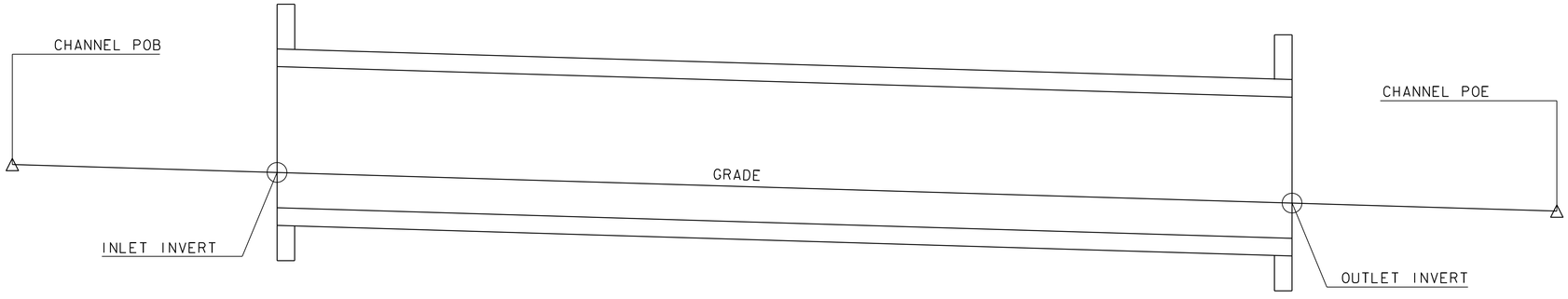
NOT TO SCALE

DESIGN INFORMATION

CULVERT SKEW	146.3°
LENGTH "L"	93'-6"
LENGTH "L1"	45'-5"
LENGTH "L2"	48'-1"

WORKING POINTS

	NORTHING	EASTING	STATION	OFFSET
WP 1	872384.10	1702991.69	110+07.93	25.57' RT
WP 2	872360.27	1702952.99	109+70.55	0.00'
WP 3	872335.05	1702912.06	109+30.04	26.30' LT



CULVERT ELEVATION VIEW

NOT TO SCALE

CHANNEL ALIGNMENT

	STATION	ELEVATION
CHANNEL POB	50+13.30	781.75
INLET INVERT	50+29.96	781.42
OUTLET INVERT	51+23.49	779.55
CHANNEL POE	51+64.30	778.73
GRADE	-0.020	

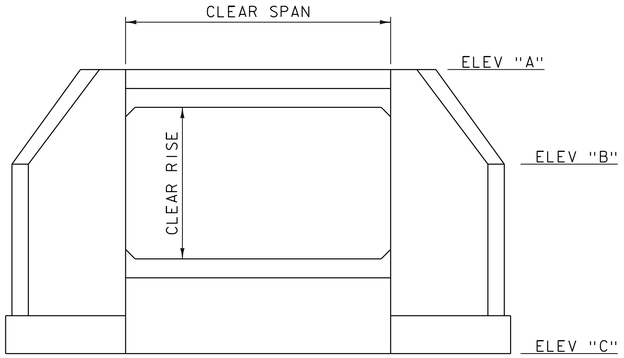
NOTES:

1. PLAN AND ELEVATION VIEWS ARE SCHEMATIC DRAWINGS USED TO REFERENCE INFORMATION PROVIDED IN THE TABLES. THESE VIEWS DO NOT DEPICT THE ACTUAL LAYOUT OF THE STRUCTURE.
2. SEE THE BOX CULVERT END DETAILS SHEET FOR MORE INFORMATION.

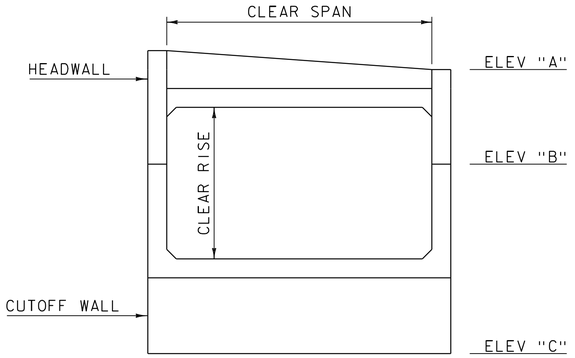
PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb005culvert_det.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
BOX CULVERT PLAN AND ELEVATION

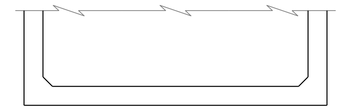
PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 20 OF 29



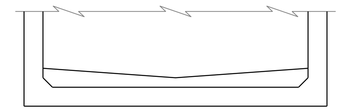
FLARED END SECTION
NOT TO SCALE



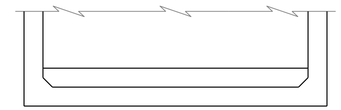
STRAIGHT END SECTION
NOT TO SCALE



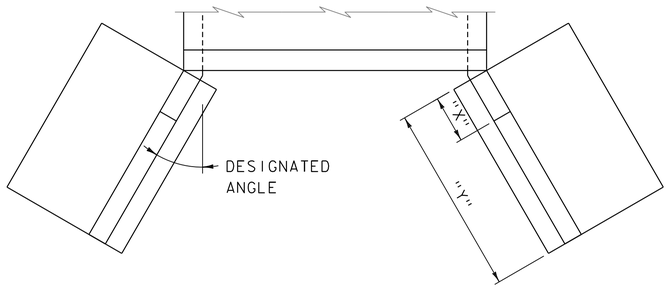
BOTTOM TYPE "A" - FLAT
NOT TO SCALE



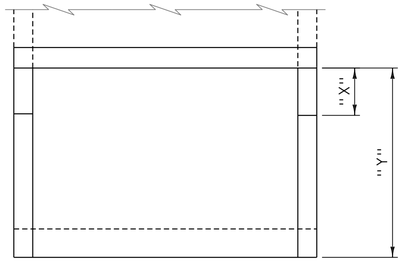
BOTTOM TYPE "B" - LOW FLOW BAFFLE
NOT TO SCALE



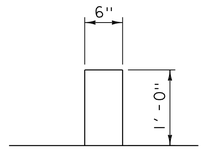
BOTTOM TYPE "C" - STANDARD BAFFLE
NOT TO SCALE



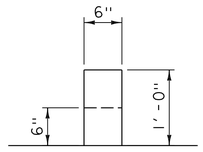
FLARED END PLAN
NOT TO SCALE



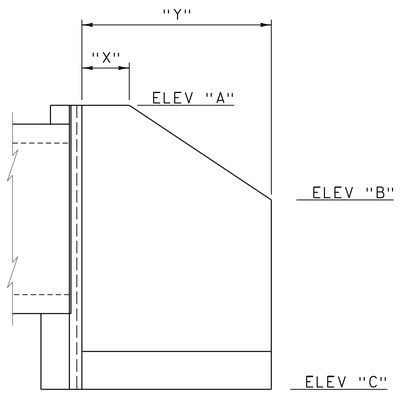
STRAIGHT END PLAN
NOT TO SCALE



STANDARD BAFFLE
NOT TO SCALE



LOW FLOW BAFFLE
NOT TO SCALE



FLARED END ELEVATION
NOT TO SCALE

DESIGN INFORMATION

CLEAR SPAN	12'-0"
CLEAR RISE	8'-0"
END TYPE (INLET)	FLARED
END TYPE (OUTLET)	FLARED
BOTTOM TYPE	TYPE "C"

WINGWALL INFORMATION

LOCATION	ANGLE	ELEV "A"	ELEV "B"	ELEV "C"	DIM "X"	DIM "Y"
WW #1	26°	789.70	788.80	777.42	2'-0"	16'-7"
WW #2	37°	790.10	789.90	777.42	2'-0"	16'-1"
WW #3	36°	789.00	789.00	775.55	2'-0"	25'-1"
WW #4	64°	788.20	787.80	775.55	2'-0"	16'-1"

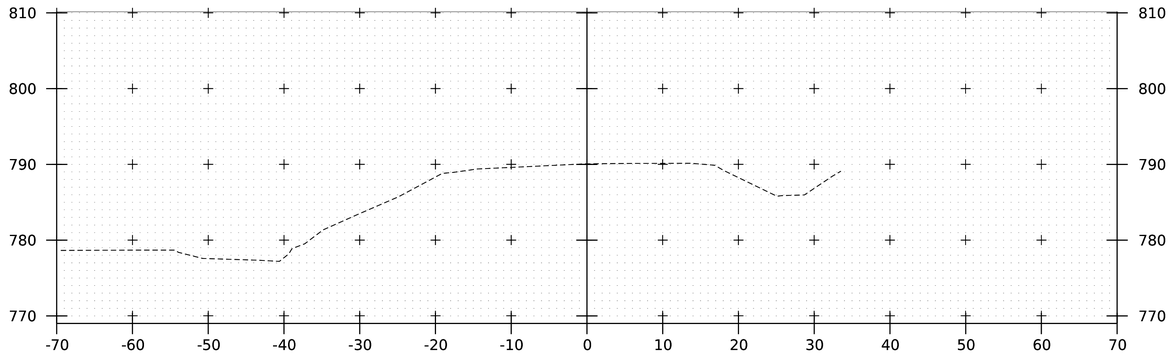
DIMENSIONS MEASURED ALONG FRONT FACE OF WINGWALL.

NOTES:
1. SECTION, PLAN AND ELEVATION VIEWS ARE SCHEMATIC DRAWINGS USED TO REFERENCE INFORMATION PROVIDED IN THE TABLES. THESE VIEWS DO NOT DEPICT THE ACTUAL LAYOUT OF THE STRUCTURE.
2. SEE THE BOX CULVERT PLAN AND ELEVATION SHEET FOR MORE INFORMATION.

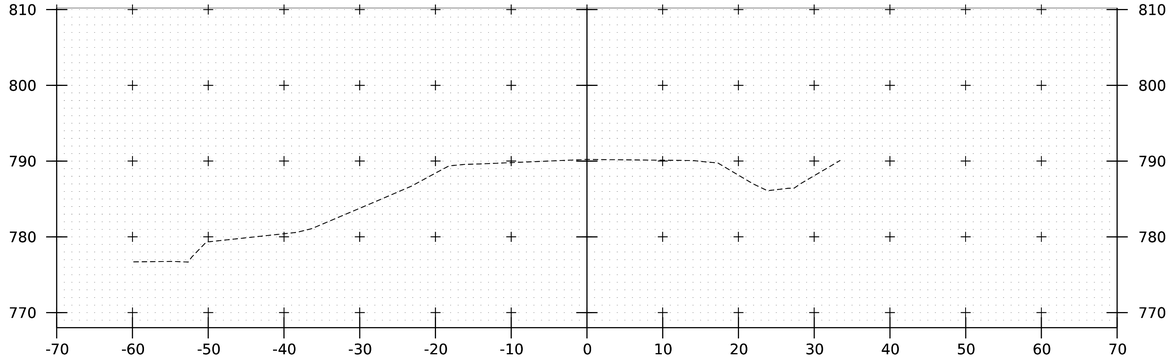
PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb025culvert_det.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
BOX CULVERT END DETAILS

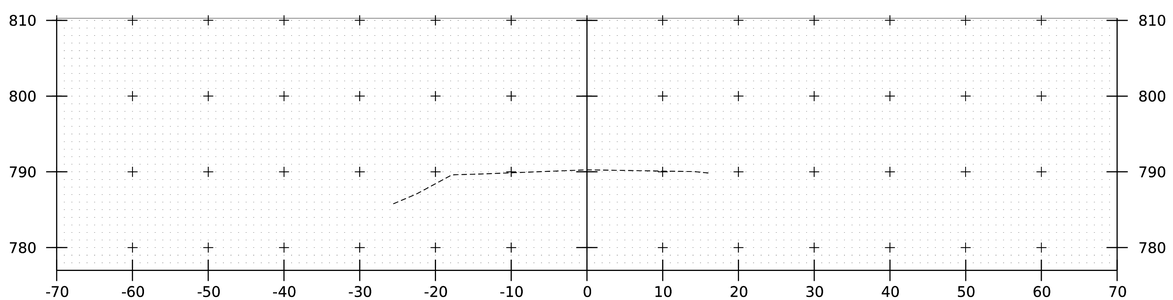
PLOT DATE: 9/5/2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 21 OF 29



106+50



106+25



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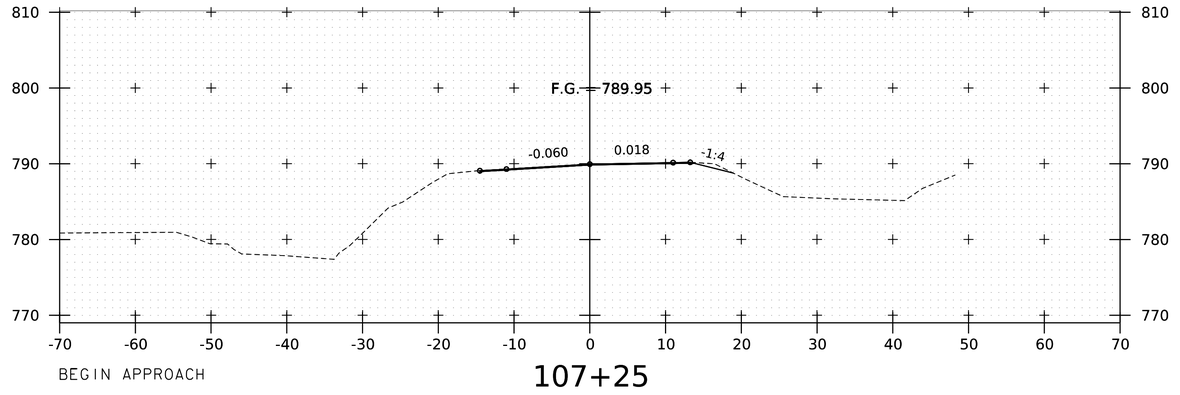
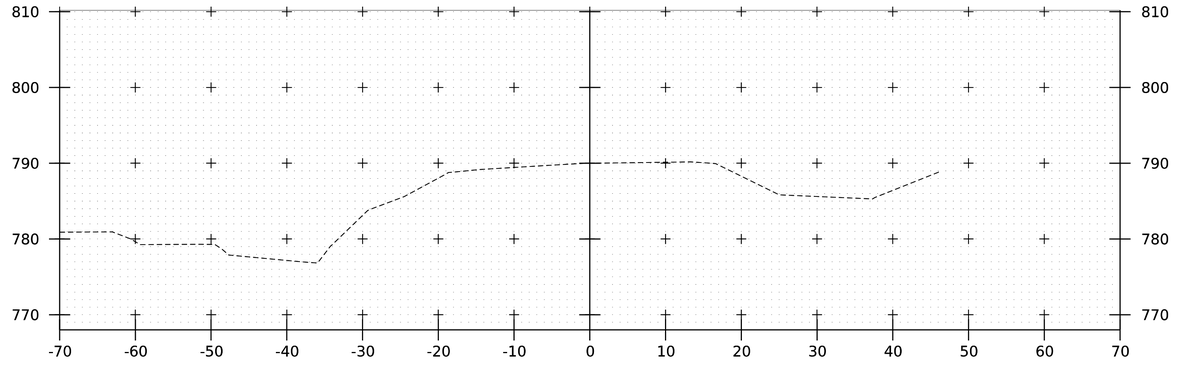


107+25



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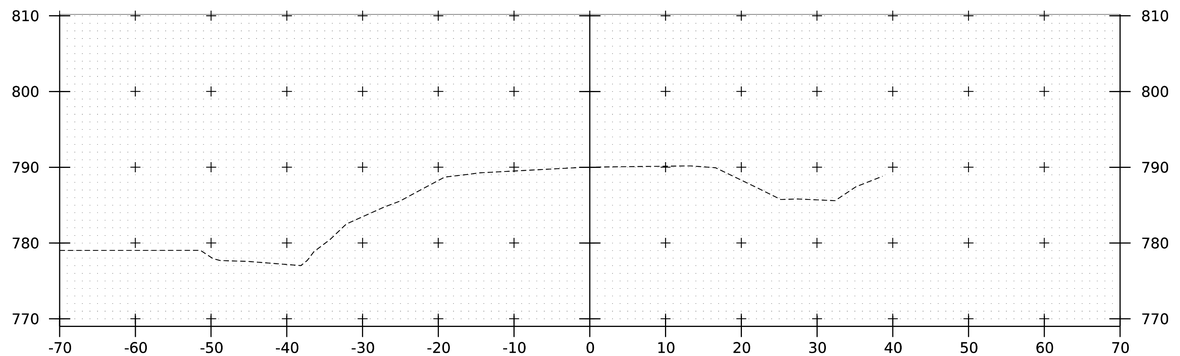
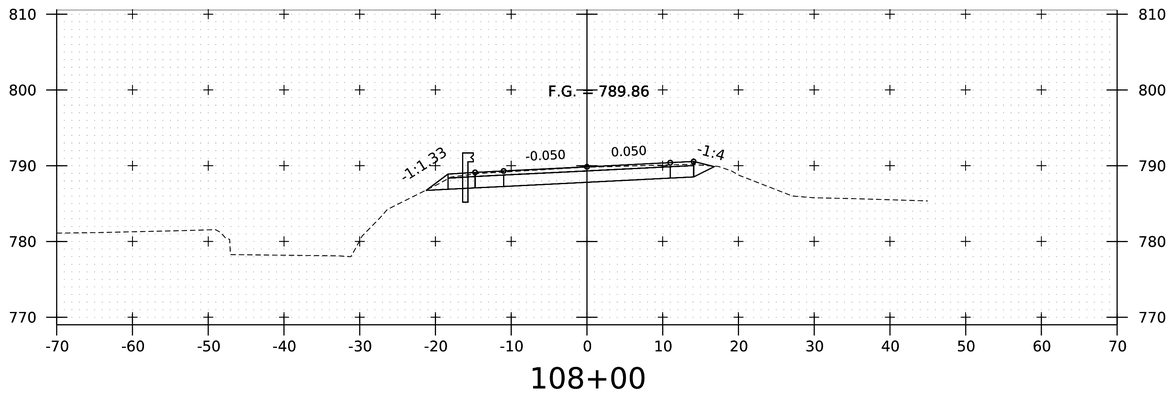


106+75

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)
FILE NAME: s2lb025mainlinexs.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
VT 14 CROSS SECTIONS 1	SHEET 22 OF 29



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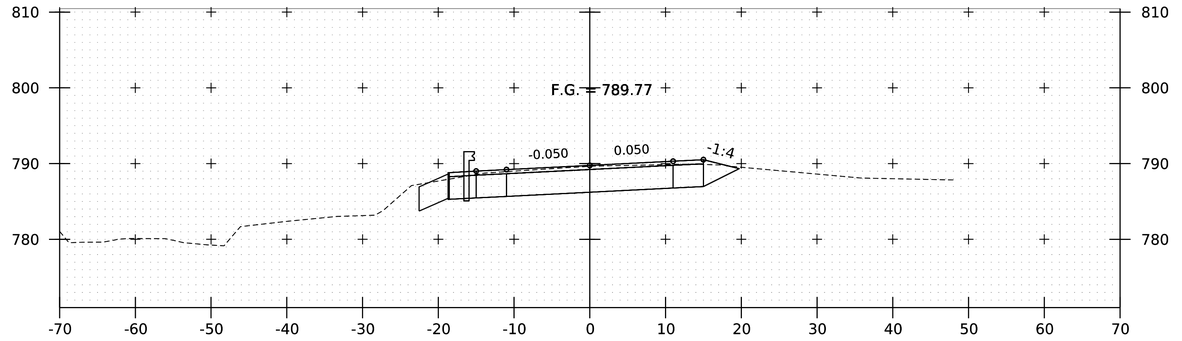

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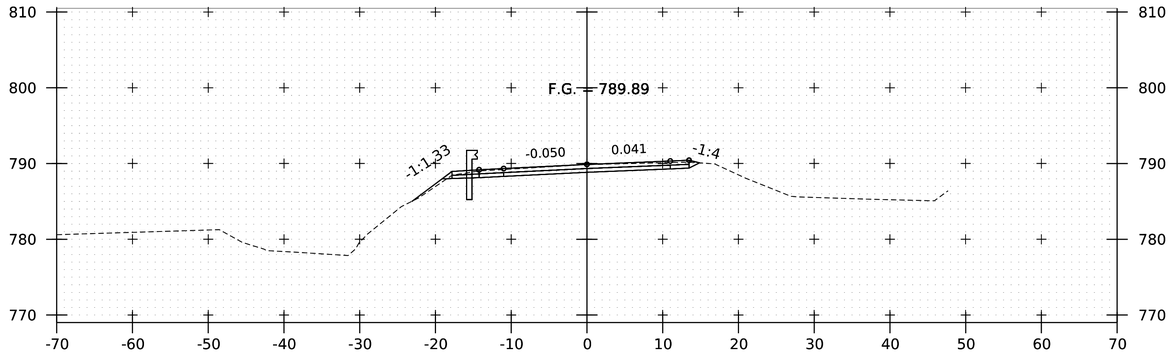

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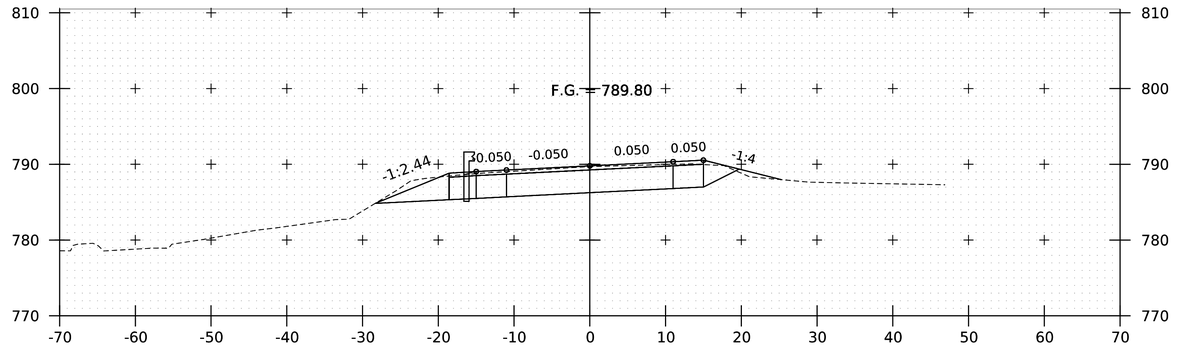

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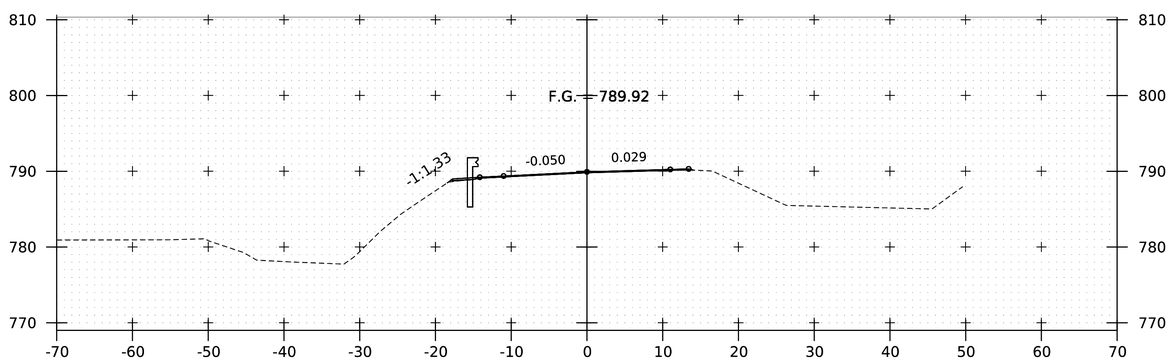

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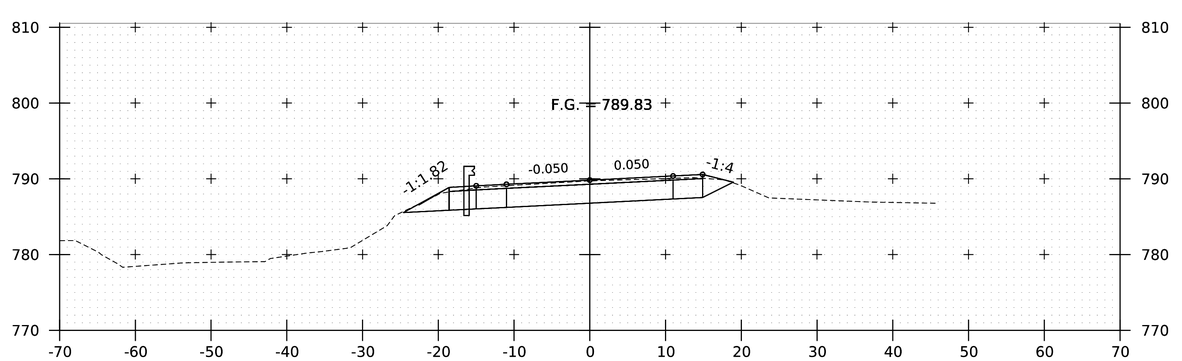


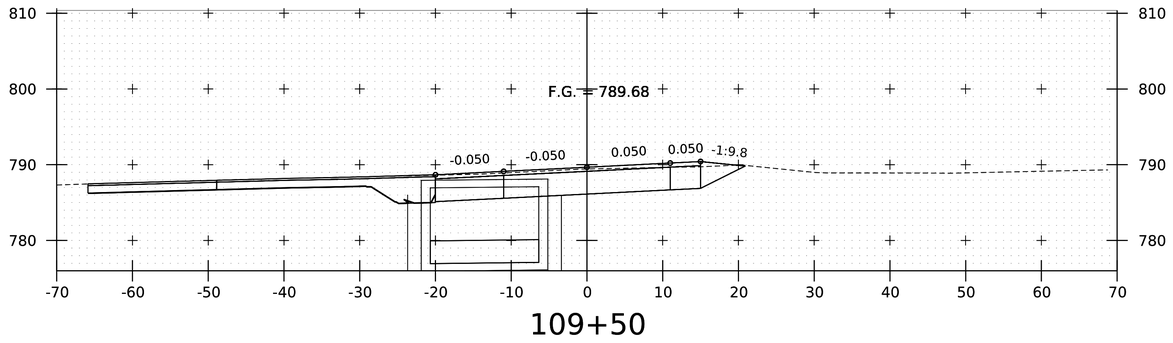
BEGIN PROJECT

108+25

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb025mainlinexs.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
VT 14 CROSS SECTIONS 2

PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 23 OF 29



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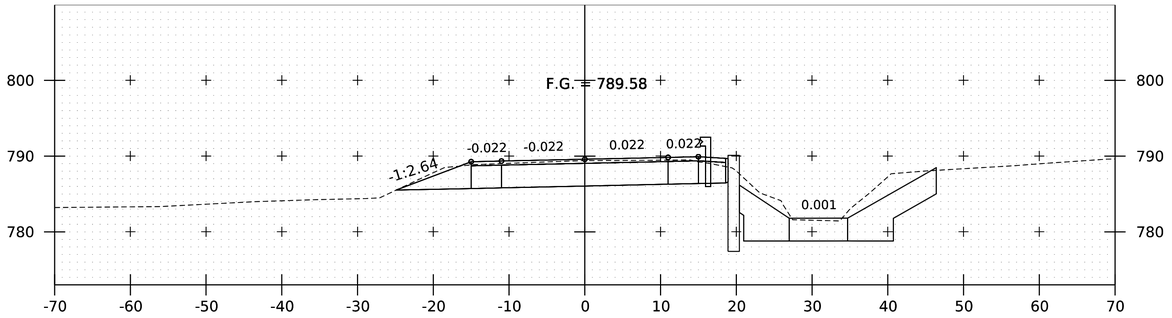

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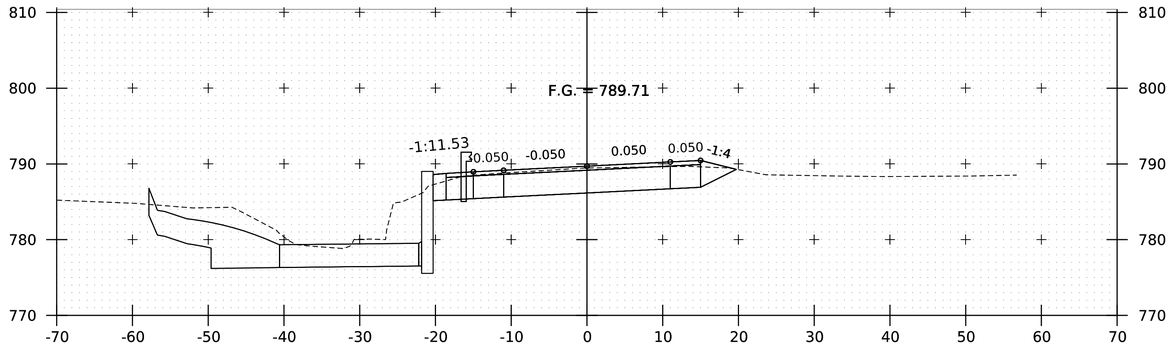

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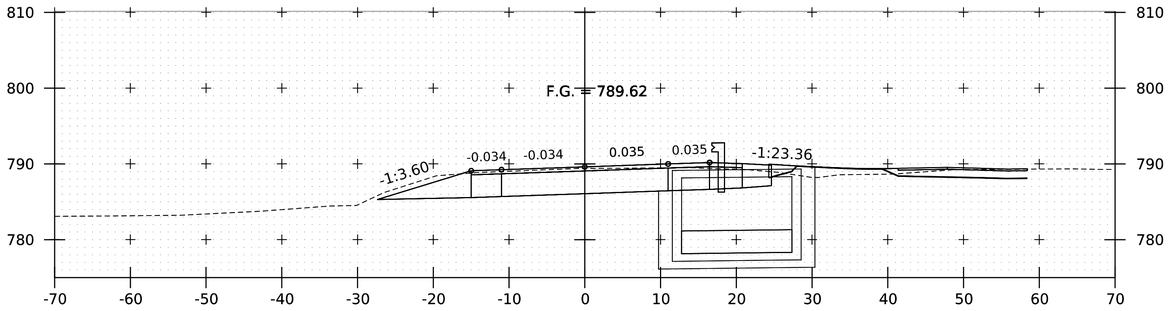

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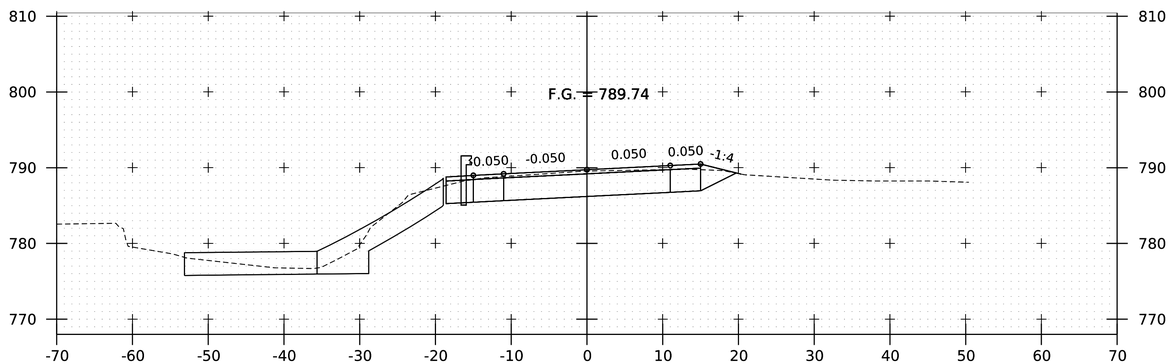

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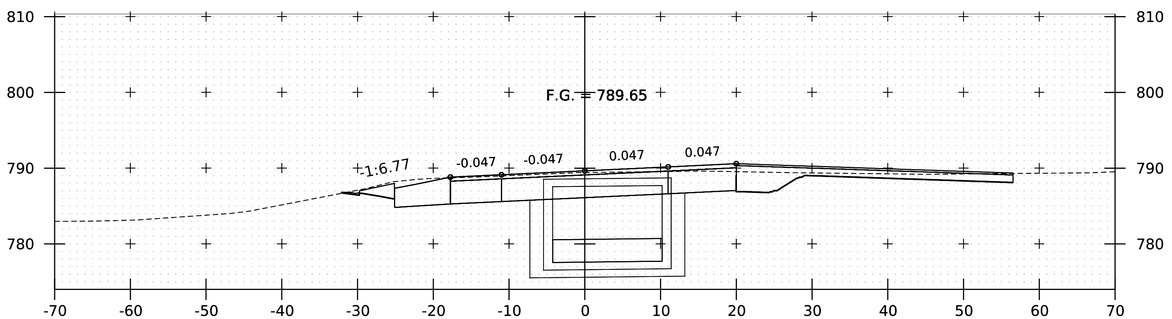
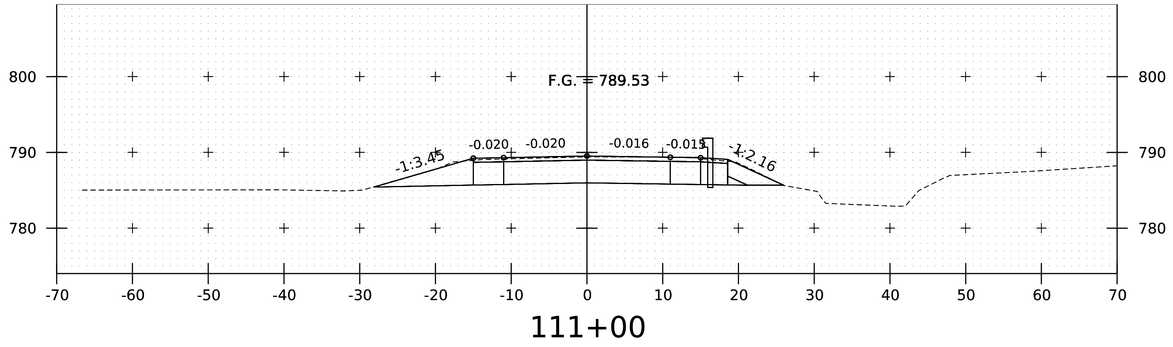


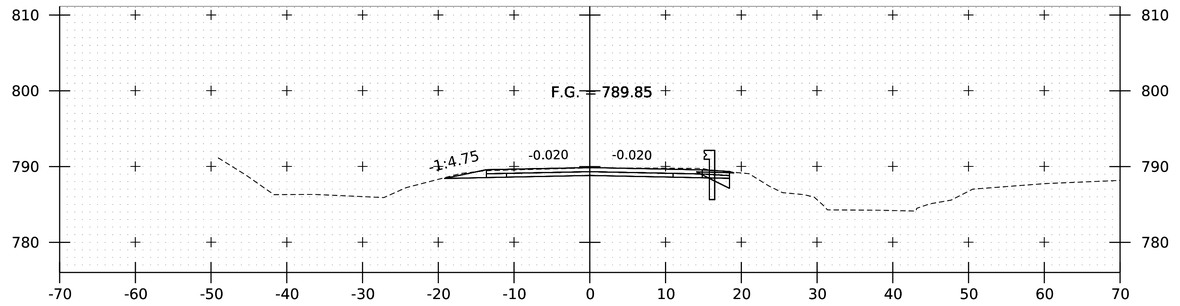
109+75

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)

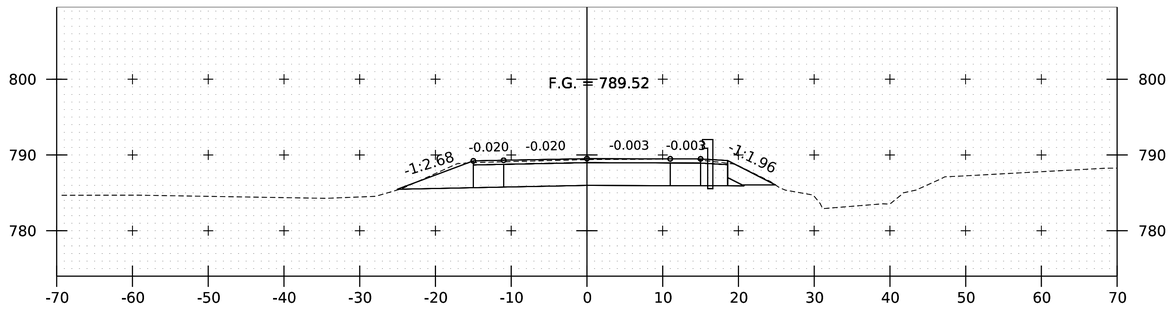
FILE NAME: s2lb025mainlinexs.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
VT 14 CROSS SECTIONS 3	SHEET 24 OF 29



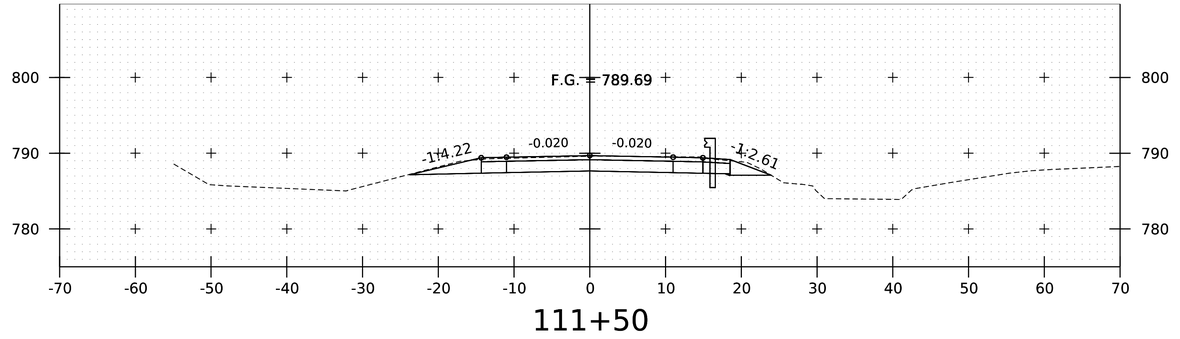
111+00



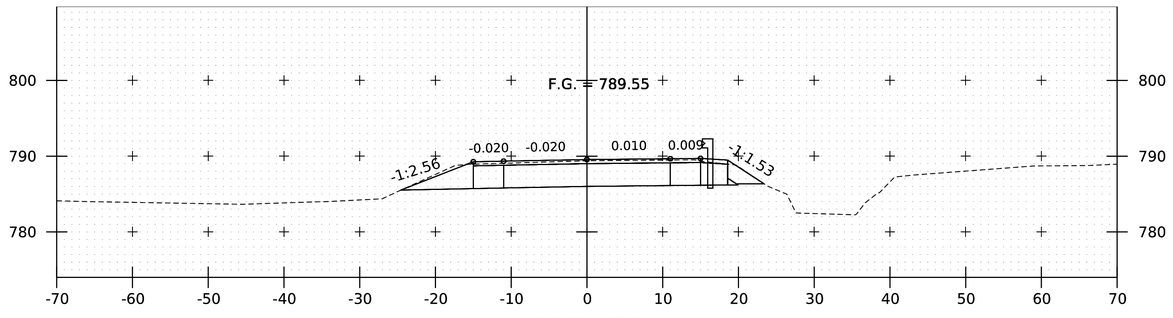
111+75



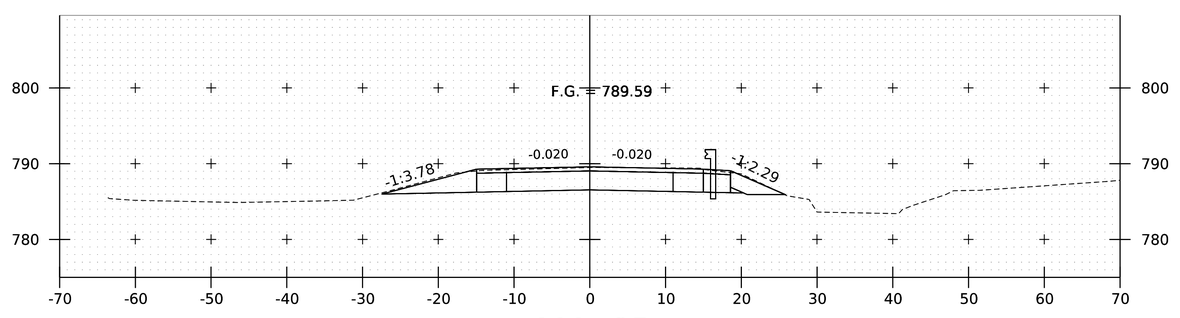
110+75



111+50



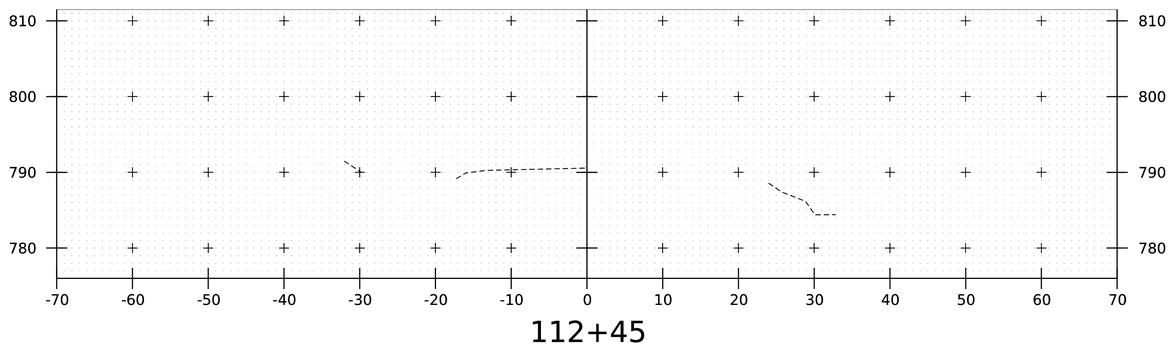
110+50



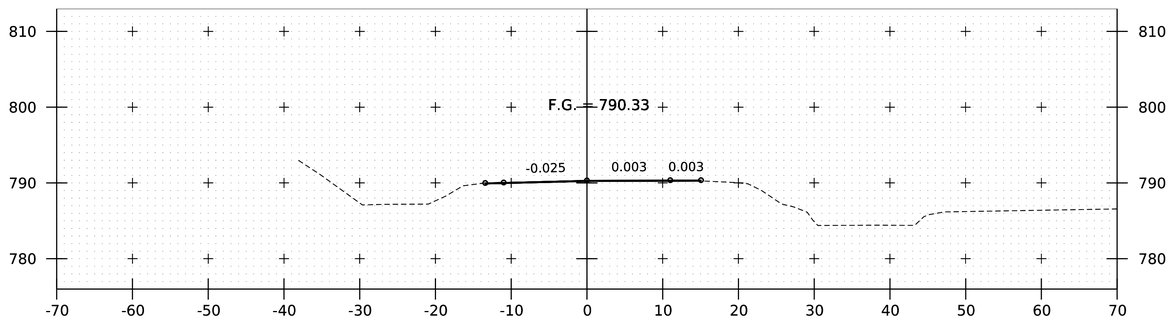
111+25

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)

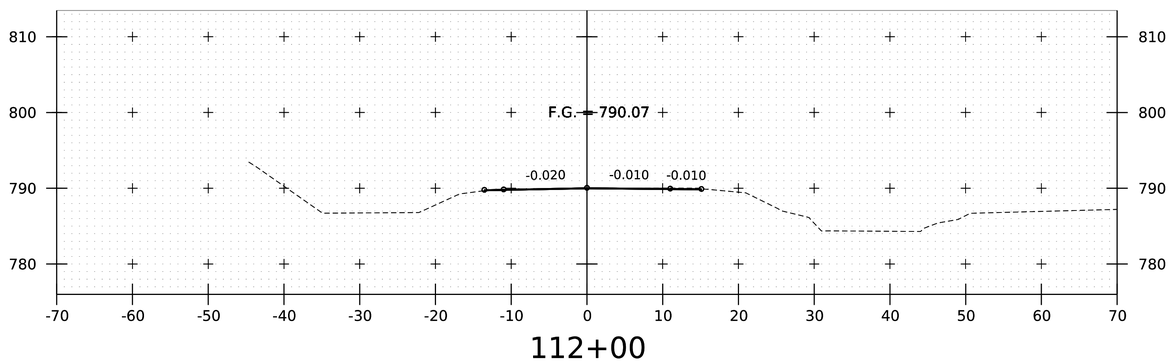
FILE NAME: s2lb025mainlinexs.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
VT 14 CROSS SECTIONS 4	SHEET 25 OF 29



112+45

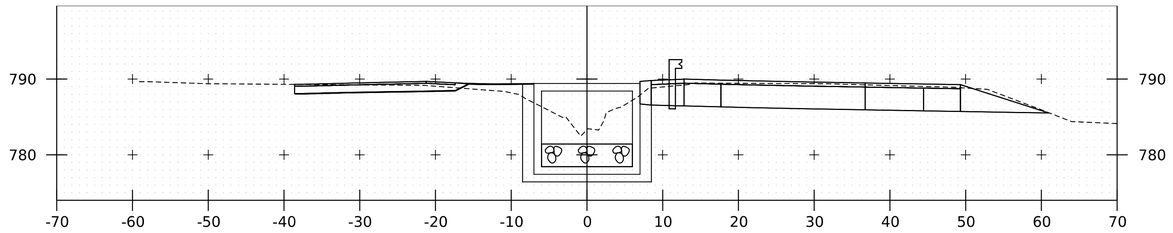


112+25



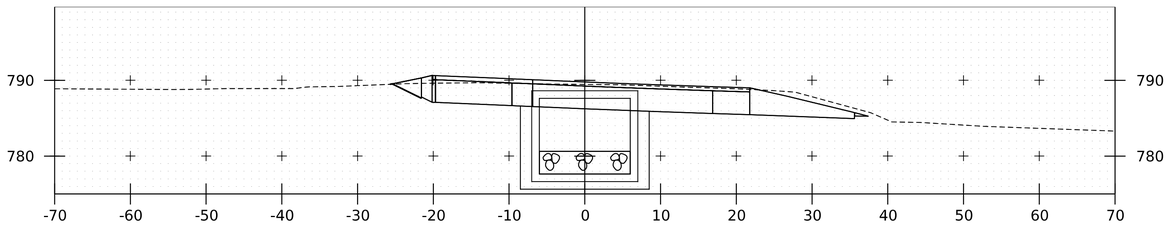
112+00

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)
FILE NAME: s2lb025mainlinexs.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
VT 14 CROSS SECTIONS 5	SHEET 26 OF 29



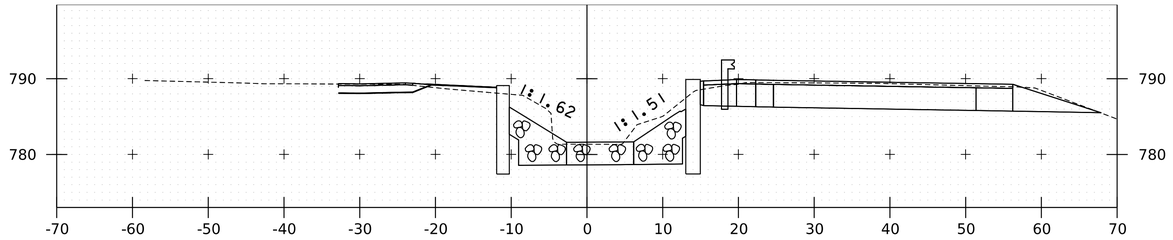
50+30

STA 50+28.60
END: UNCLASSIFIED CHANNEL EXCAVATION
STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL



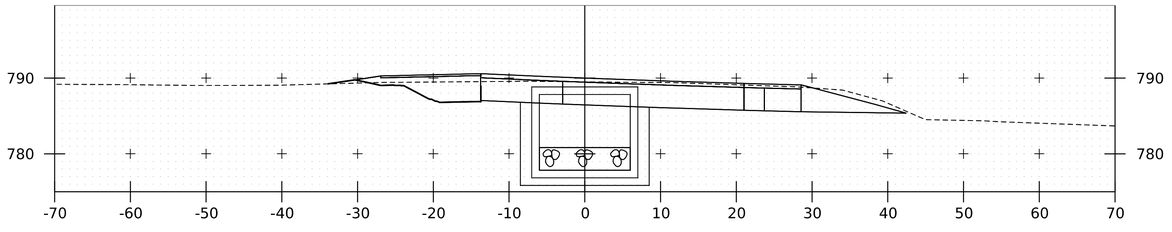
50+70

STA 50+28.60
END: STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL

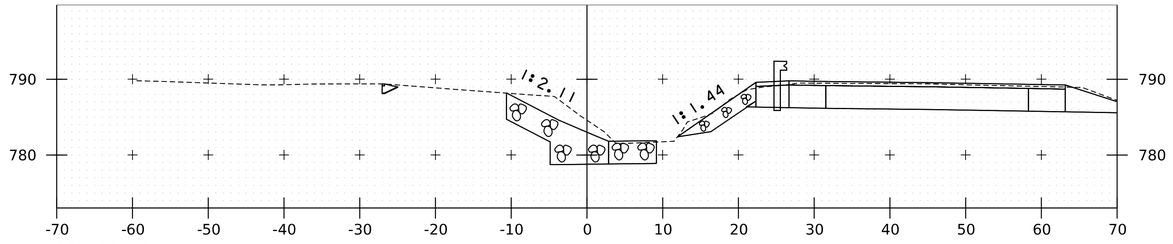


50+20

STA 50+11.10
BEGIN: STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL



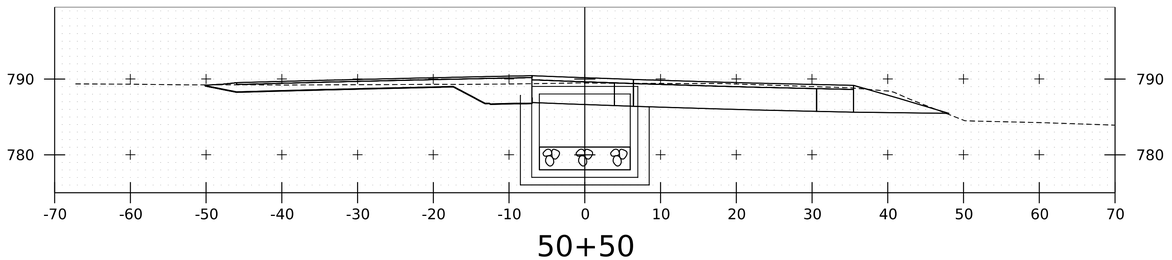
50+60



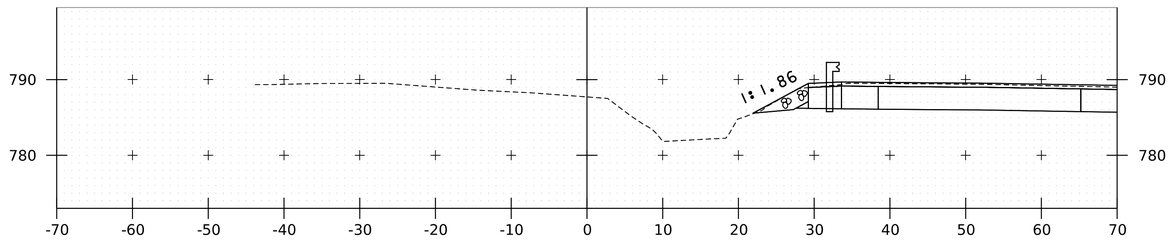
50+10

STA 50+00.61
BEGIN: UNCLASSIFIED CHANNEL EXCAVATION
STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL

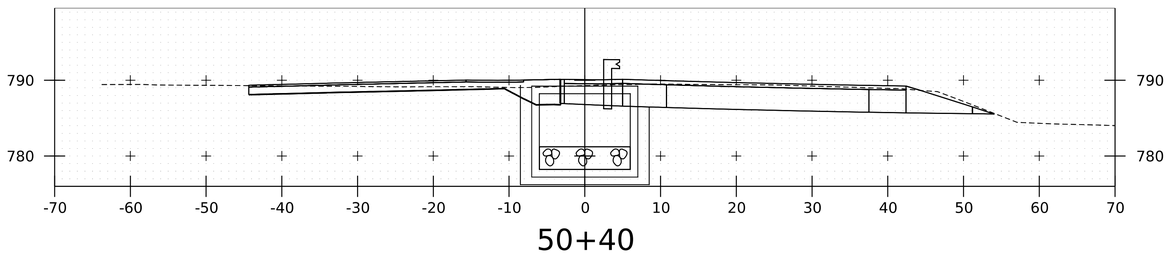
STA 50+07.40
BEGIN: STONE FILL (STREAM BED MATERIAL)



50+50



50+00

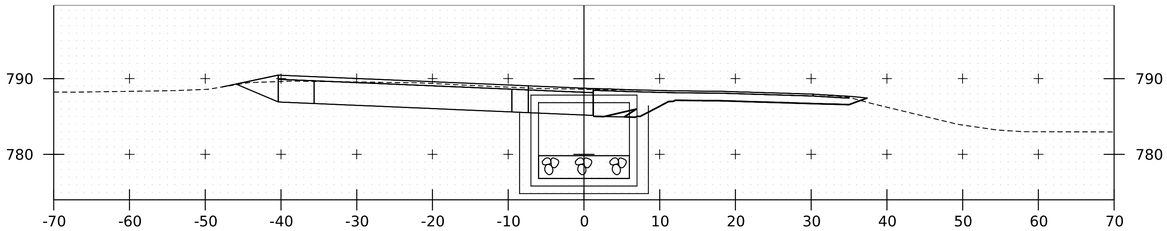


50+40

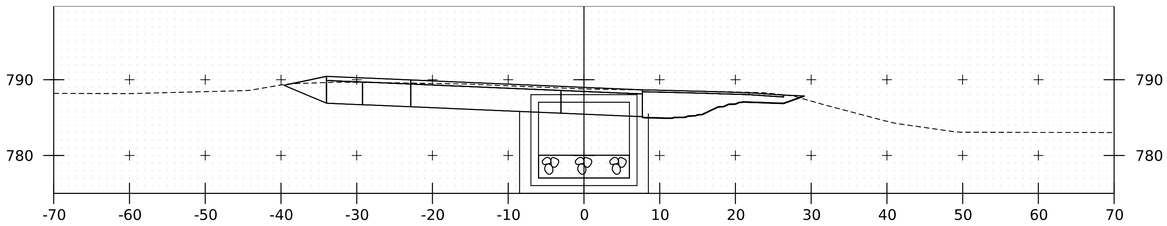
PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb025channelxs.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
CHANNEL CROSS SECTIONS I

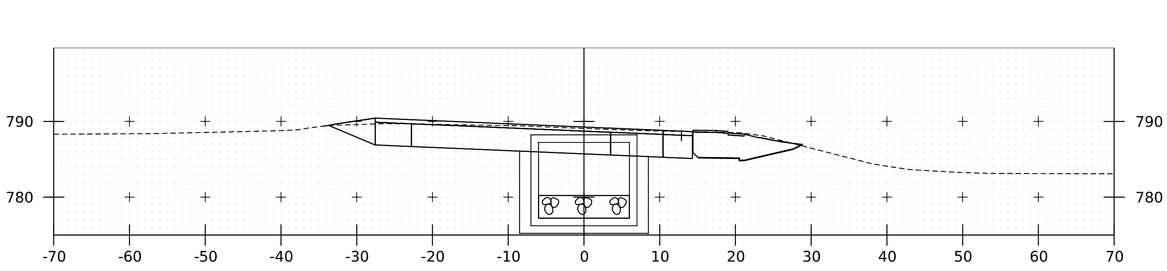
PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 27 OF 29



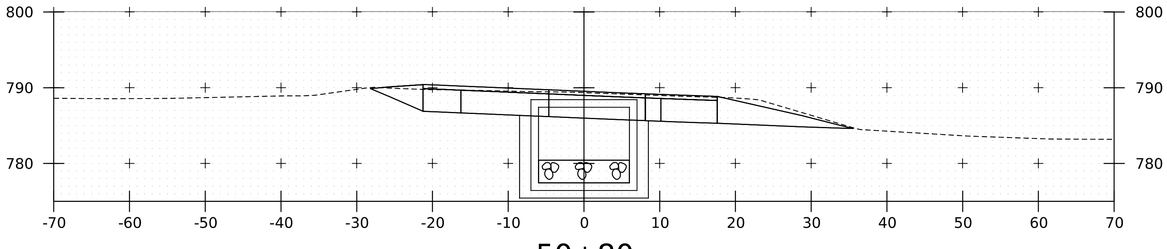
51+10



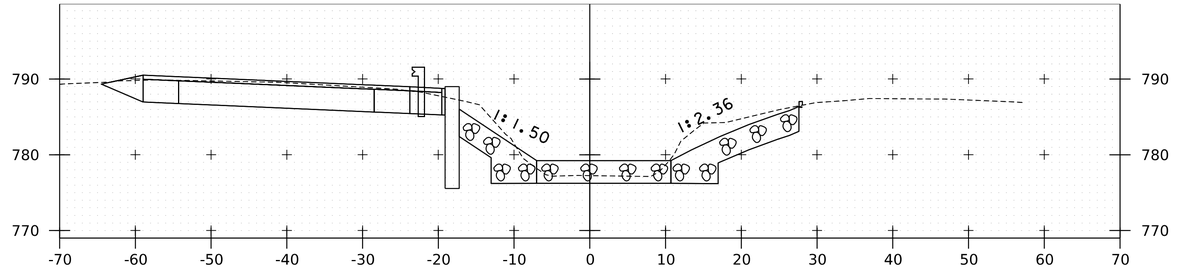
51+00



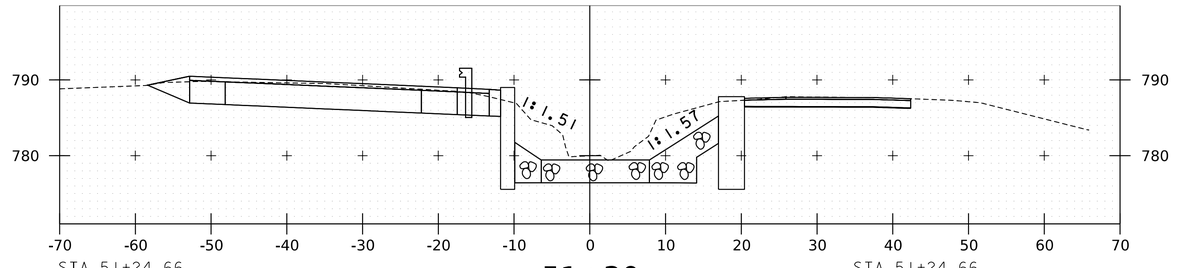
50+90



50+80



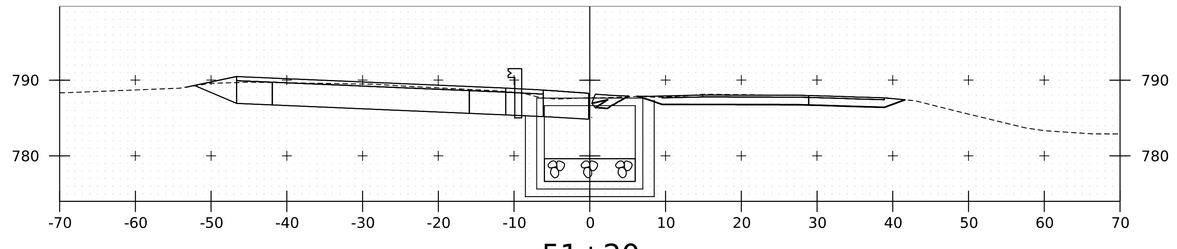
51+40



51+30

STA 51+24.66
BEGIN: UNCLASSIFIED CHANNEL EXCAVATION
STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL

STA 51+24.66
BEGIN: STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL

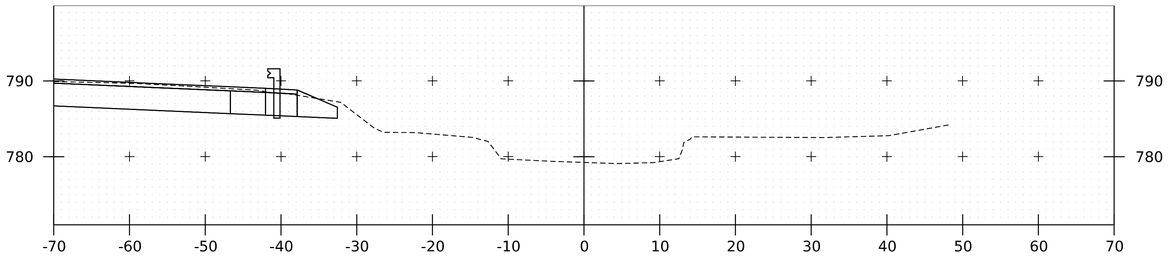


51+20

PROJECT NAME: COVENTRY
PROJECT NUMBER: BF 025I(49)

FILE NAME: s2lb025channelxs.dgn
PROJECT LEADER: R. KLINEFELTER
DESIGNED BY: S. COLEY
CHANNEL CROSS SECTIONS 2

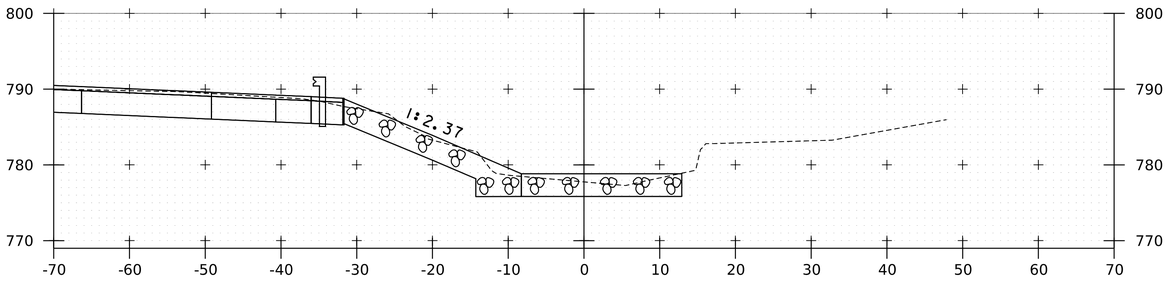
PLOT DATE: 26-JUN-2023
DRAWN BY: S. COLEY
CHECKED BY: R. KLINEFELTER
SHEET 28 OF 29



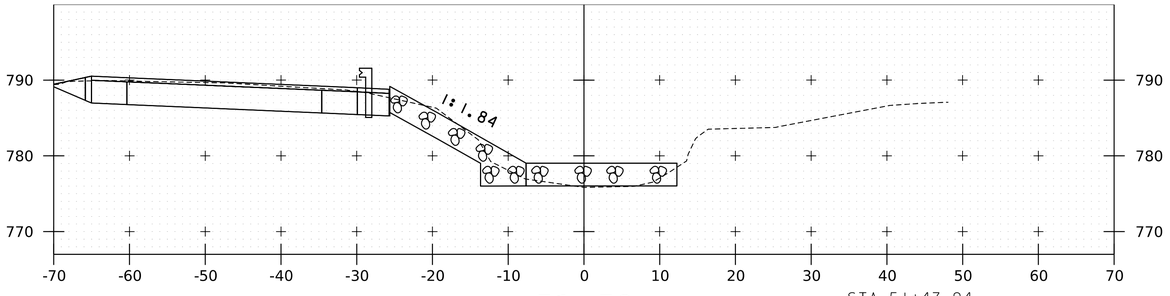
STA 50+67.72
END: UNCLASSIFIED CHANNEL EXCAVATION
STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL

51+70

STA 51+62.72
END: STONE FILL (STREM BED MATERIAL)

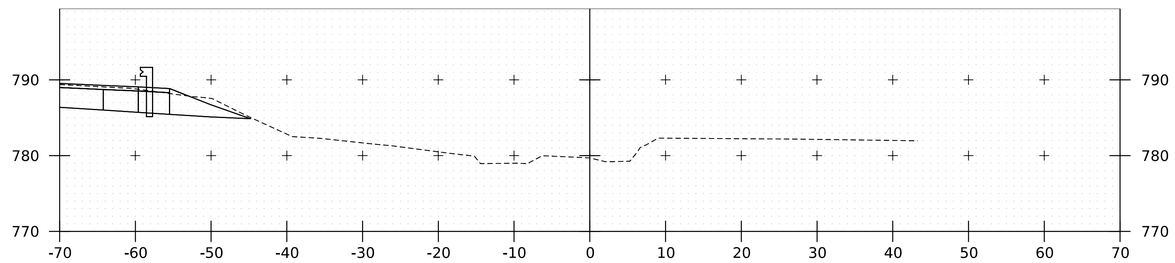


51+60

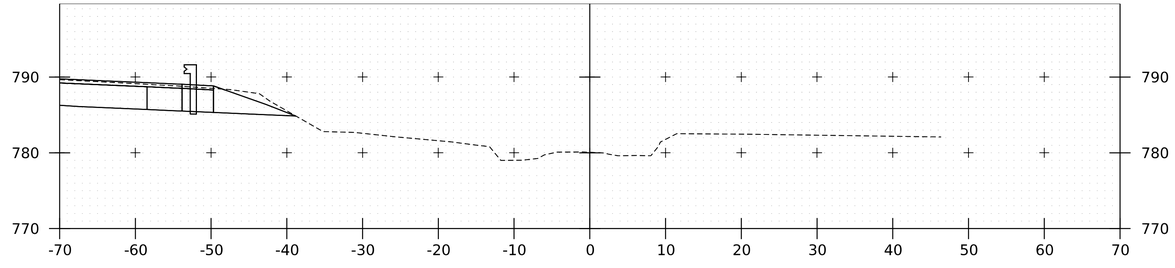


51+50

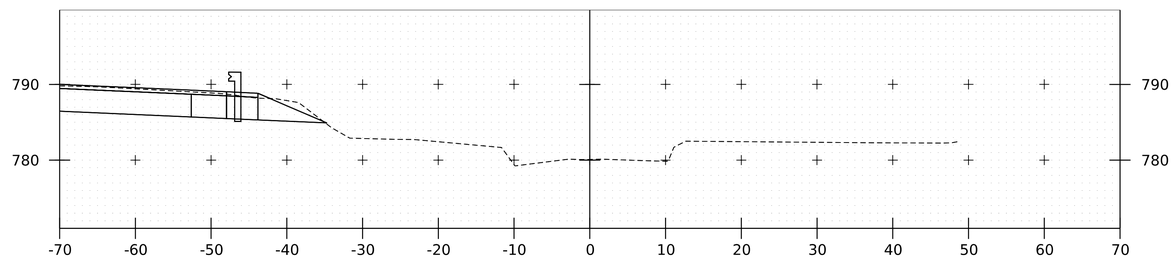
STA 51+47.94
END: STONE FILL TYPE III
GEOTEXTILE FOR STONE FILL
GRUBBING MATERIAL



52+00



51+90



51+80

PROJECT NAME:	COVENTRY
PROJECT NUMBER:	BF 025I(49)

FILE NAME: s21b025channelxs.dgn	PLOT DATE: 26-JUN-2023
PROJECT LEADER: R. KLINEFELTER	DRAWN BY: S. COLEY
DESIGNED BY: S. COLEY	CHECKED BY: R. KLINEFELTER
CHANNEL CROSS SECTIONS 3	SHEET 29 OF 29