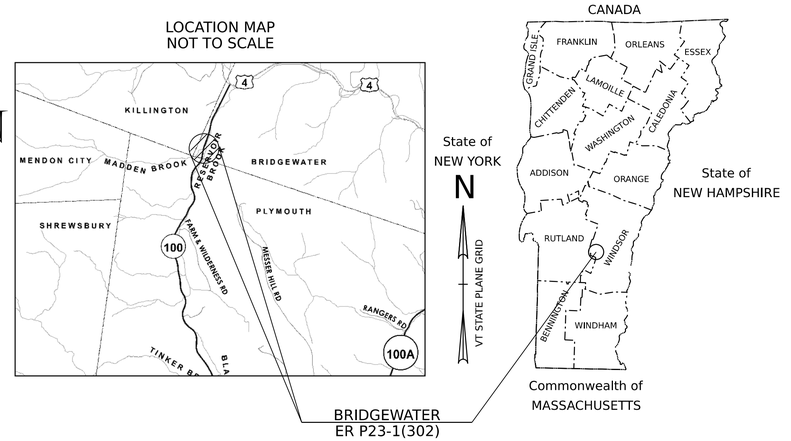
REVIEWER NOTES:

1. RELOCATION FOR KILLINGTON SNOW-MAKING WATERLINE TO BE DETERMINED.
2. PROJECT WILL BE CONSTRUCTED DURING A BRIDGE CLOSURE PERIOD. BRIDGE CLOSURE PERIOD WILL BE BETWEEN 28 - 45 DAYS. TRAFFIC WILL PRIMARILY BE MAINTAINED VIA AN OFFSITE DETOUR DURING THE BRIDGE CLOSURE PERIOD
3. BOTH PERMANENT AND TEMPORARY RIGHT-OF-WAY WILL NEED TO BE ACQUIRED.
4. FINAL HYDRAULICS HAS NOT YET BEEN COMPLETED.
5. GEOTECHNICAL BORINGS HAVE NOT BEEN TAKEN AND THE SUBSTRUCTURE TYPE HAS NOT YET BEEN DETERMINED. INTEGRAL ABUTMENTS HAVE BEEN ASSUMED FOR THE PURPOSES OF DEVELOPING PRELIMINARY PLANS.
7. TOPOGRAPHIC SURVEY WAS COMPLETED PRIOR TO THE COMPLETION OF THE EMERGENCY REPAIRS. ACTUAL LOCATIONS OF EXISTING FEATURES MAY VARY TO WHAT IS SHOWN ON THE PLANS.
8. THE EXISTING TEMPORARY BRIDGE IS PROPERTY OF VTRANS AND IS TO BE DISMANTLED AND DELIVERED TO THE DISTRICT.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

LOCATION MAP
NOT TO SCALE



PROPOSED IMPROVEMENT
BRIDGE PROJECT

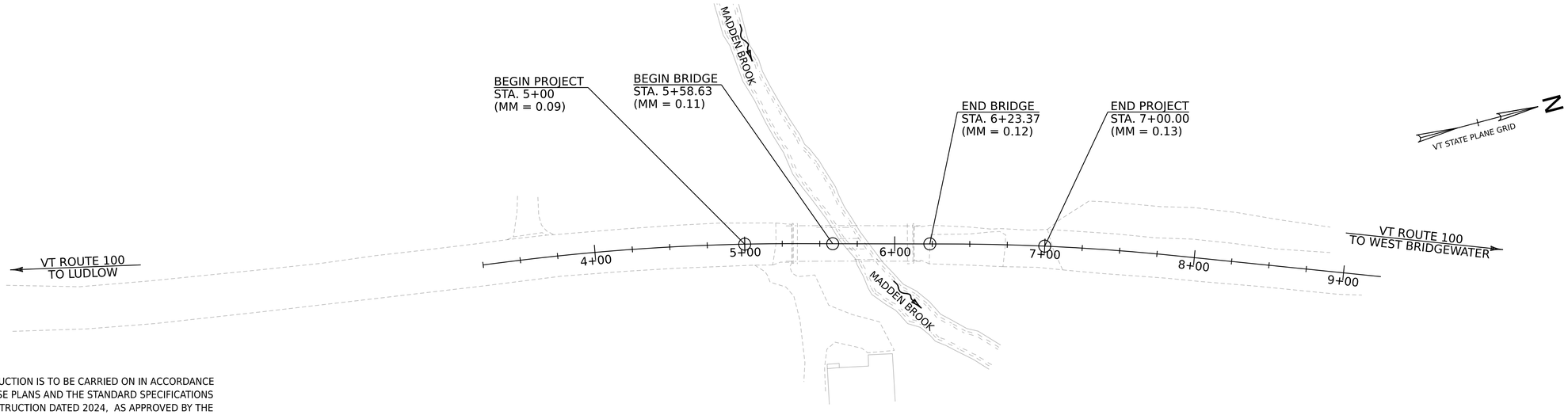
TOWN OF BRIDGEWATER
WINDSOR COUNTY

ROUTE NO: VT ROUTE 100, (MINOR ARTERIAL), BRIDGE NO. 116

PROJECT LOCATION: IN THE TOWN OF BRIDGEWATER, ON VT ROUTE 100, BRIDGE NO. 116 OVER THE MADDEN BROOK, APPROXIMATELY 4.0 MILE NORTH OF THE INTERSECTION WITH VT ROUTE 100A.

PROJECT DESCRIPTION: FULL REPLACEMENT OF THE EXISTING BRIDGE ALONG WITH THE RELATED ROADWAY APPROACH AND CHANNEL WORK.

LENGTH OF STRUCTURE: 64.74 FEET
LENGTH OF ROADWAY: 135.26 FEET
LENGTH OF PROJECT: 200.00 FEET



CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2024, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 27, 2023 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 : 07/2023

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (2011)

0 40 80
SCALE IN FEET

Stantec
Stantec Consulting Services Inc.
193 Tilley Drive, Suite 1
South Burlington VT U.S.A. 05403
Phone: (802) 864-0223
www.stantec.com

PRELIMINARY PLANS
2-OCT-2024

HIGHWAY DIVISION, CHIEF ENGINEER
APPROVED _____ DATE _____

PROJECT MANAGER : GARY LAROCHE, P.E.

PROJECT NAME : BRIDGEWATER
PROJECT NUMBER : ER P23-1(302)

SHEET 1 OF 36 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

STANDARDS LIST

DETAIL SHEETS

FINAL HYDRAULIC REPORT

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:	2.5 INCH
3. DESIGN SPAN	L:	63.00 FT
4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS)	Δ:	- - -
5. PRESTRESSING STRAND (0.60 INCH DIAMETER - LOW RELAX)	f_y:	270 KSI
6. PRESTRESSED CONCRETE STRENGTH	f'_c:	8.0 KSI
7. PRESTRESSED CONCRETE RELEASE STRENGTH	f'_{ci}:	6.0 KSI
8. HIGH PERFORMANCE CONCRETE, CLASS PCD	f'_c:	4.0 KSI
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	f_y:	- - -
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 SEMI
TONNAGE	20	36	36	66	30	34.5	38
INVENTORY							
POSTING							
OPERATING							
COMMENTS:							

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2024	1061	240	68	1.1	63
2044	1148	240	68	1.8	116

20 year ESAL for flexible pavement from 2024 to 2044 : 340500

40 year ESAL for flexible pavement from 2024 to 2064 : 797000

Design Speed : 50 mph

AS BUILT "REBAR" DETAIL

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

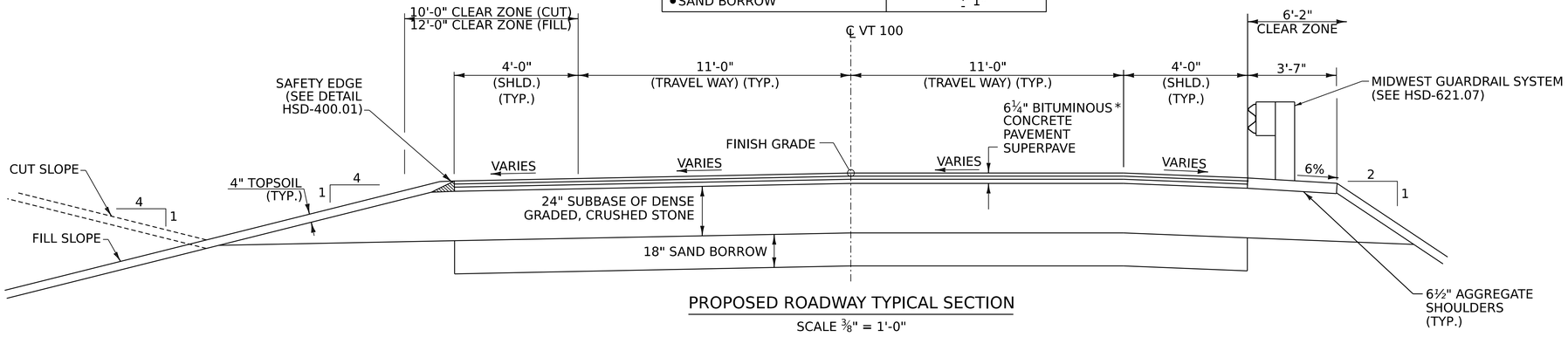
Stantec

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

FILE NAME:z23b754_pi.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: J. GRIGAS
PRELIMINARY INFORMATION SHEET

PLOT DATE: 2-OCT-2024
DRAWN BY: S. VERITY
CHECKED BY: T. KNIGHT
SHEET 2 OF 36

MATERIAL ITEM	TOLERANCE
SURFACE	
• PAVEMENT (TOTAL THICKNESS)	± ¼"
• AGGREGATE SURFACE COURSE	± ½"
• SUBBASE	± 1"
• SAND BORROW	± 1"

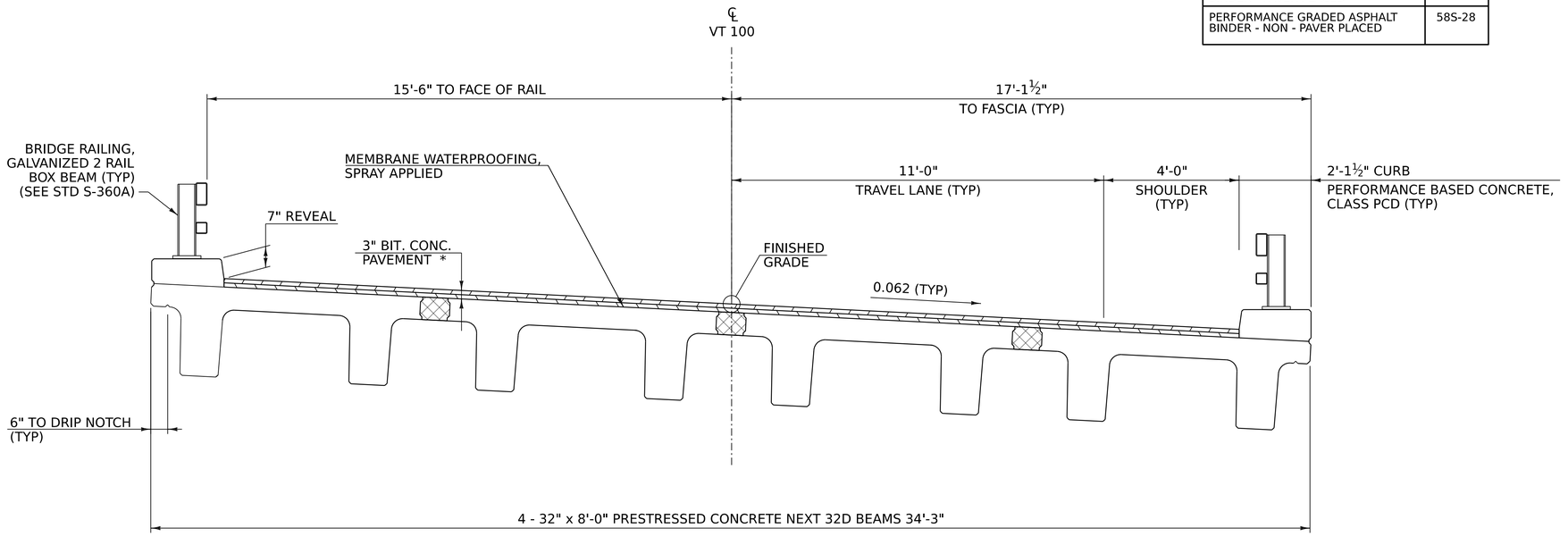


PROPOSED ROADWAY TYPICAL SECTION

SCALE ⅜" = 1'-0"

1½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVSB, QA TIER III OVER
1½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVSB, QA TIER III OVER
3¼" BITUMINOUS CONCRETE PAVEMENT, TYPE IIS, QA TIER III

BITUMINOUS CONCRETE PAVEMENT MIXTURE DESIGN CRITERIA	
DESIGN LANE/DESIGN LIFE ESALs	797,000
DESIGN NUMBER OF GYRATIONS (ALL OTHER MIX TYPES)	65
PERFORMANCE GRADED ASPHALT BINDER - PAVER PLACED	58E-28
PERFORMANCE GRADED ASPHALT BINDER - NON - PAVER PLACED	58S-28



* 1 ½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVSB, QA TIER III
1 ½" BITUMINOUS CONCRETE PAVEMENT, TYPE IVSB, QA TIER III

BRIDGE TYPICAL SECTION

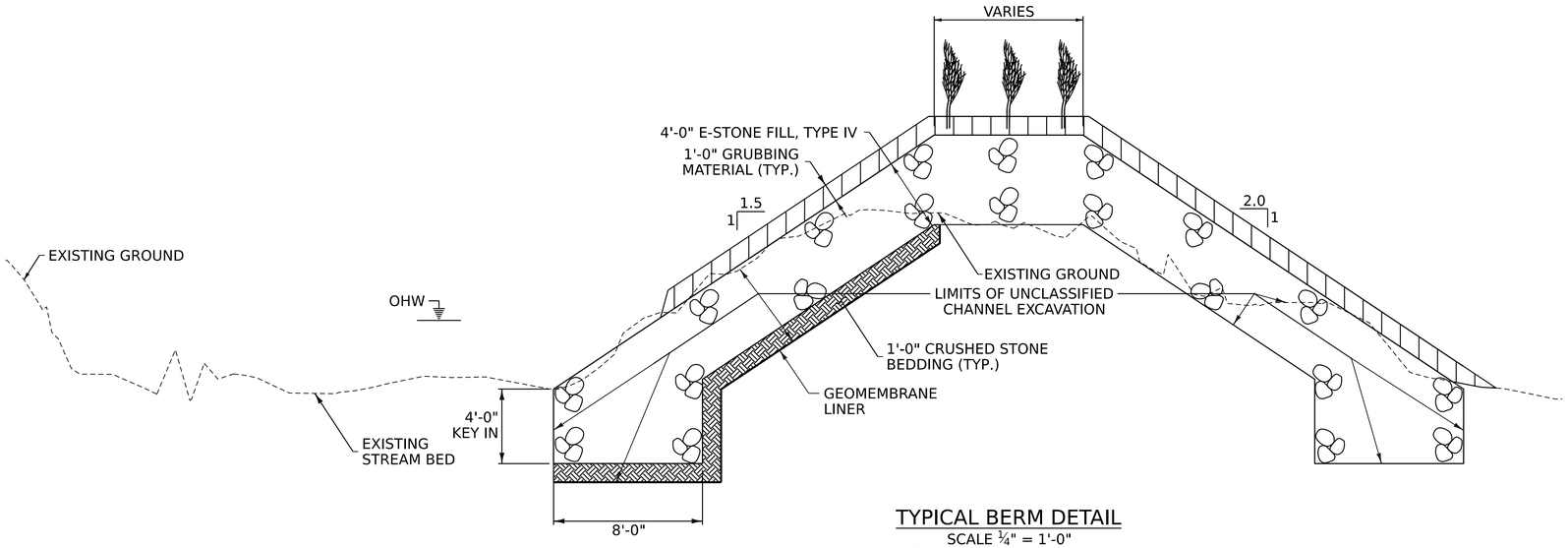
SCALE ½" = 1'-0"

Stantec

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

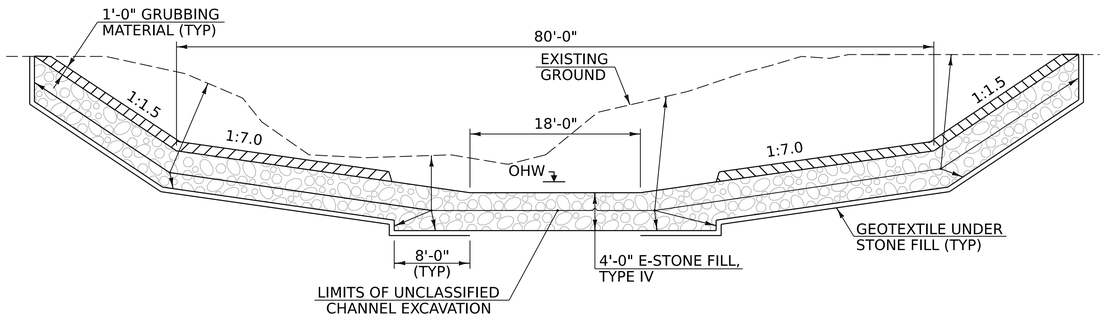
FILE NAME:z23b754_typical.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: J. GRIGAS
TYPICAL SECTION SHEET 1

PLOT DATE: 2-OCT-2024
DRAWN BY: D. BARNES
CHECKED BY: J. GRIGAS
SHEET 3 OF 36



TYPICAL BERM DETAIL

SCALE ¼" = 1'-0"
STA. 55+00.00 - 55+58.11

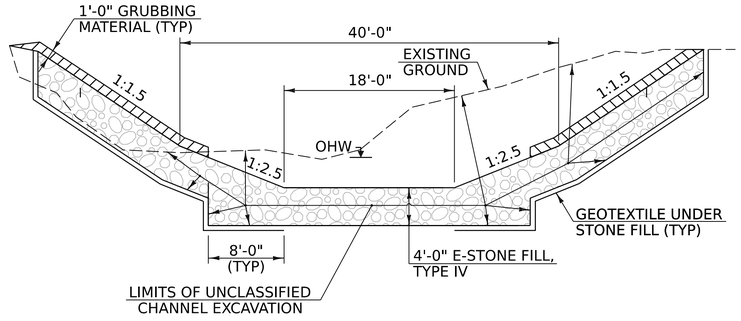


MINI-FAN CHANNEL SECTION

SCALE ⅛" = 1'-0"
STA. 50+25 - 51+90

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.



TYPICAL CHANNEL SECTION

SCALE ⅛" = 1'-0"
STA. 51+90 - 56+25

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

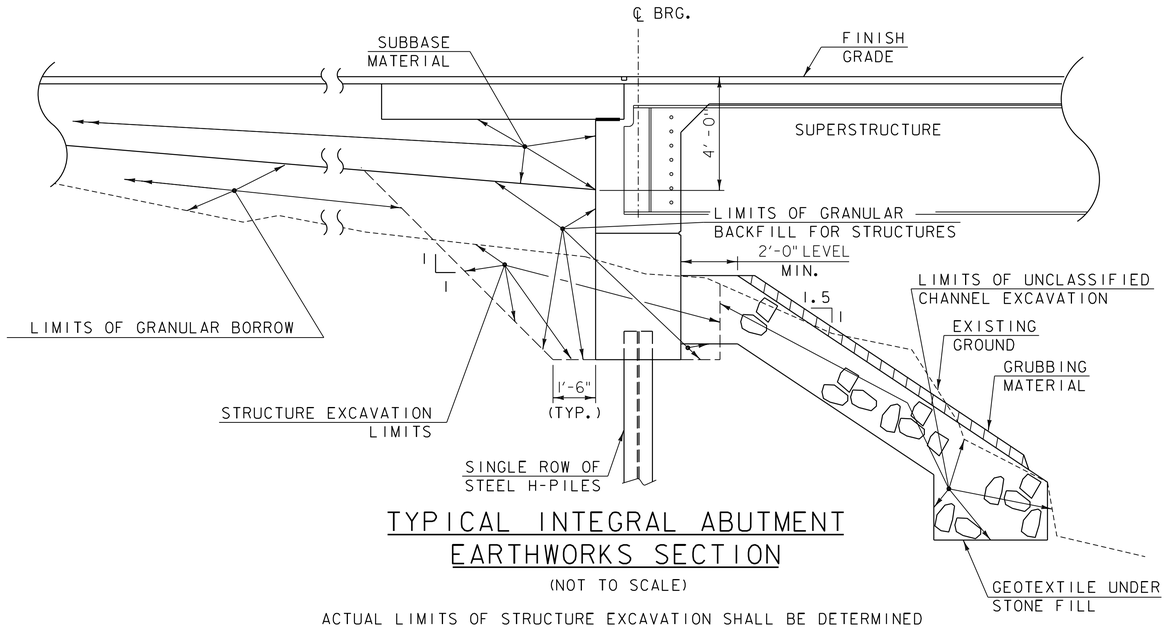
2. THE CONTRACTOR SHALL CREATE A LOW FLOW CHANNEL IN THE STREAM BED MATERIAL AS DIRECTED BY THE ENGINEER.

Stantec

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

FILE NAME:z23b754_typical.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: J. GRIGAS
TYPICAL SECTION SHEET 2

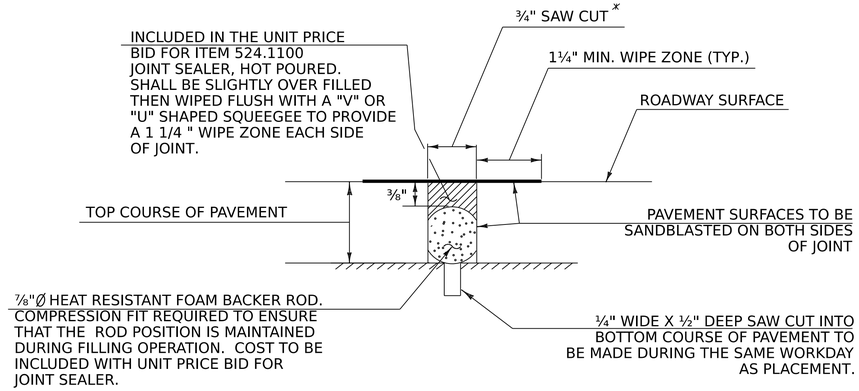
PLOT DATE: 2-OCT-2024
DRAWN BY: D. BARNES
CHECKED BY: J. GRIGAS
SHEET 4 OF 36



TYPICAL INTEGRAL ABUTMENT EARTHWORKS SECTION

(NOT TO SCALE)

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



SAWED PAVEMENT JOINT DETAIL

NOT TO SCALE

* JOINT IS TO BE LOCATED ACCURATELY BY STRING LINING, OR OTHER MEANS, PRIOR TO PAVING, SO THAT THE SAW CUTS WILL BE MADE DIRECTLY OVER THE END OF CONCRETE DECK. JOINT SHALL BE CUT DRY IN A SINGLE PASS AND BE SEALED WITHIN 24 HOURS OR PRIOR TO EXPOSURE TO TRAFFIC. JOINT SHALL BE CLEANED PRIOR TO APPLYING THE JOINT SEALER.

Stantec

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

FILE NAME:z23b754_typical.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: J. GRIGAS
TYPICAL SECTION SHEET 3

PLOT DATE: 2-OCT-2024
DRAWN BY: D. BARNES
CHECKED BY: J. GRIGAS
SHEET 5 OF 36

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

- UGU — UTILITY (GENERIC-UNKNOWN)
- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- AGU — UTILITY (GENERIC-UNKNOWN)
- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- 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
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE 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
- P/L — PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6f — 6f — 6F PROPERTY BOUNDARY
- 4f — 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- ISOLATION BARRIER
- 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
- 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

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

Stantec

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

FILE NAME:z23b754_legend.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: VTRANS
CONVENTIONAL SYMBOLOGY LEGEND SHEET

PLOT DATE: 2-OCT-2024
DRAWN BY: VTRANS
CHECKED BY: T. KNIGHT
SHEET 6 OF 36

PRIMARY CONTROL

HVCTRL 58 AND HVCTRL 59 FROM PROJECT 13B172

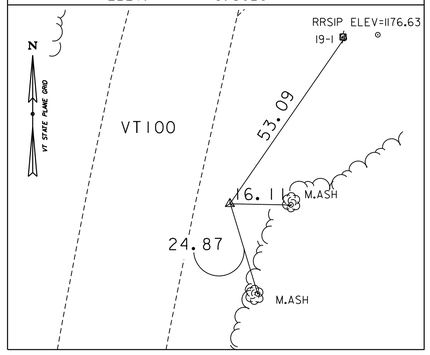
HVCTRL #58
NORTH = 395502.6240
EAST =1572093.9300
ELEV. = 1223.557

HVCTRL #59
NORTH = 396250.0160
EAST =1572659.2860
ELEV. = 1213.9950

SECONDARY CONTROL

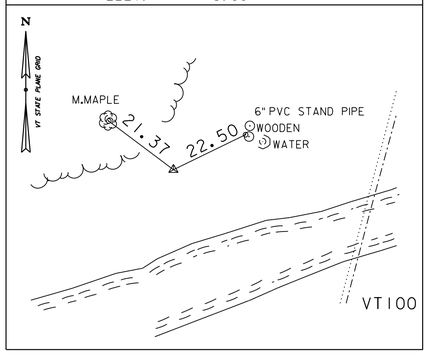
HVCTRL #1

NORTH = 396739.0764
EAST = 1572754.6534
ELEV. = 1179.3626



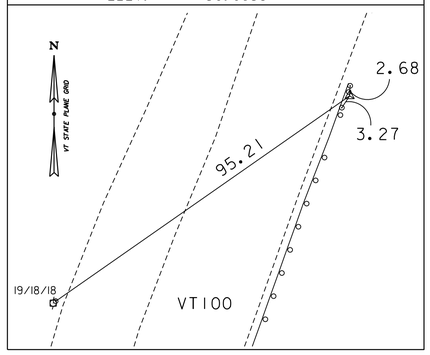
HVCTRL #2

NORTH = 396867.4380
EAST = 1572695.2853
ELEV. = 1173.8944



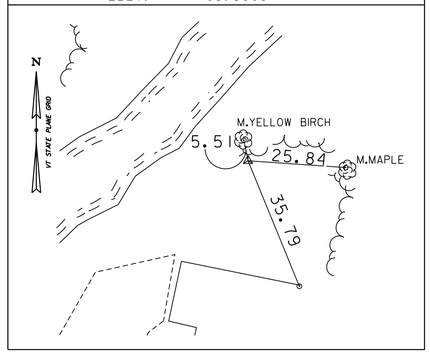
HVCTRL #3

NORTH = 397136.8444
EAST = 1572870.1582
ELEV. = 1150.0638



HVCTRL #100

NORTH = 396888.7716
EAST = 1572854.7059
ELEV. = 1165.3909



NORTH =
EAST =
ELEV. =

ALIGNMENT TIES

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

NORTH =
EAST =
ELEV. =

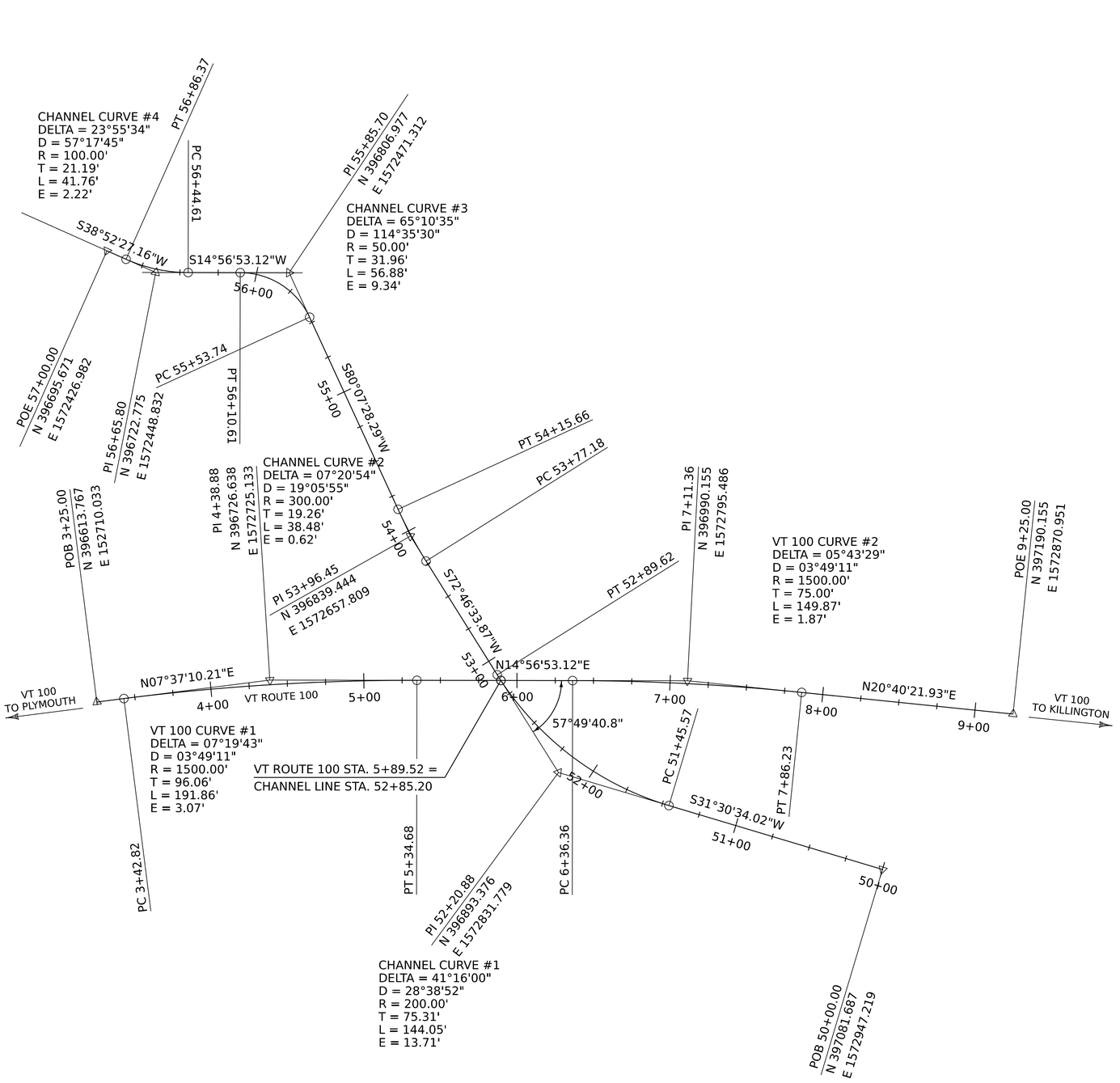
TRAVERS COMPLETED 7/18/2023 BY B.HERRING T.BABCZAK

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD83 (2011)
ADJUSTMENT COMPASS

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER E23-1(302)

FILE NAME: x23m266ti.dgn
PROJECT LEADER: G. LAROCHE
DESIGNED BY: VTRANS
TIE SHEET

PLOT DATE: 2-OCT-2024
DRAWN BY: H.MCGOWAN
CHECKED BY: R. GILMAN
SHEET 7 OF 36



0 40 80
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_bdr_align.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
ALIGNMENT SHEET	SHEET 8 OF 36

AGGREGATE SURFACE COURSE DRIVE
STA. 5+11 RT

CAST-IN-PLACE CONCRETE CURB, TYPE B
STA. 5+15.87 TO 5+48.44 LT
STA. 5+37.43 TO 5+66.00 RT
STA. 6+16.20 TO 6+47.42 LT
STA. 6+33.51 TO 6+66.57 RT

YIELDING MARKER POSTS
STA. 4+87 RT
STA. 5+38 RT
STA. 6+73 LT
STA. 7+01 RT

REMOVAL OF GUARDRAIL
STA 7+39.5 - STA 8+38.5 RT

PROPOSED DRAINAGE

1 NEW 12" CPEP (SL) X 56'-7" W/ FLARED END SECTION
INLET: STA = 4+89.0, OFFSET = 27.25' RT, INVERT ELEV = 1175.50'
OUTLET: STA = 5+46.4, OFFSET = 29.69' RT, INVERT ELEV = 1171.00'

N/F
OZSVATH, SIGMUND
&
OZSVATH, DAVID

VT STATE PLANE GRID

MATCHLINE STA. 54+25

CLEARING LIMITS

APPROXIMATE LOCATION OF EXISTING 24" PVC WATER SUPPLY PIPE

P L

END PROJECT
STA 7+00.00

END BRIDGE
STA 6+23.37

BEGIN PROJECT
STA 5+00.00

BEGIN BRIDGE
STA 5+58.63

RETAIN EXISTING POLE (BY OTHERS)

END APPROACH
STA 8+50.00

UTILITY EASEMENT
B: 33 P: 120

UTILITY EASEMENT
B: 33 P: 120

GRAVEL DRIVE

AER E&T

15" CPEP

COMB 19 / 19

GUY POLE

HVCTRL 24

6" PVC STAND PIPE @WOODEN DK. WMH

COMB 19 / 18 / 18

EXISTING R.O.W.

VT 100 TO PLYMOUTH

VT ROUTE 100

WW 1

BRIDGE #116

WW 3

WW 2

WW 4

53+00

54+00

4+00

5+00

6+00

7+00

8+00

9+00

R = 8'-0"

NEW AERIAL SERVICE LINES (BY OTHERS)

HVCTRL 51

15" CGMP

66" CGMP

6" PVC

EXISTING STONE FILL

COMB 19

BEGIN APPROACH
STA 4+00.00

GRAVEL DRIVE

REMOVE EXISTING POLE AND SERVICE LINES (BY OTHERS)

MADDEN BROOK

52+00

HVCTRL 100

VT 100 TO KILLINGTON

HVCTRL 3

EXISTING R.O.W.

CLEARING LIMITS

BEGIN CHANNEL
STA 50+25.00

4X4 CONC VTHD UP 1'

NEW SERVICE POLE W/ 15' GUY TO ANCHOR (BY OTHERS)

1

CHANNEL RIGHTS
PROJECT S 0147 (2)

51+00

UTILITY EASEMENT
B: 36 P: 85

(2)

50+00

N/F
CALABRESE, THOMAS J.

RESERVOIR BROOK

TEMPORARY CONSTRUCTION LIMITS (TYP.)

CLEARING LIMITS

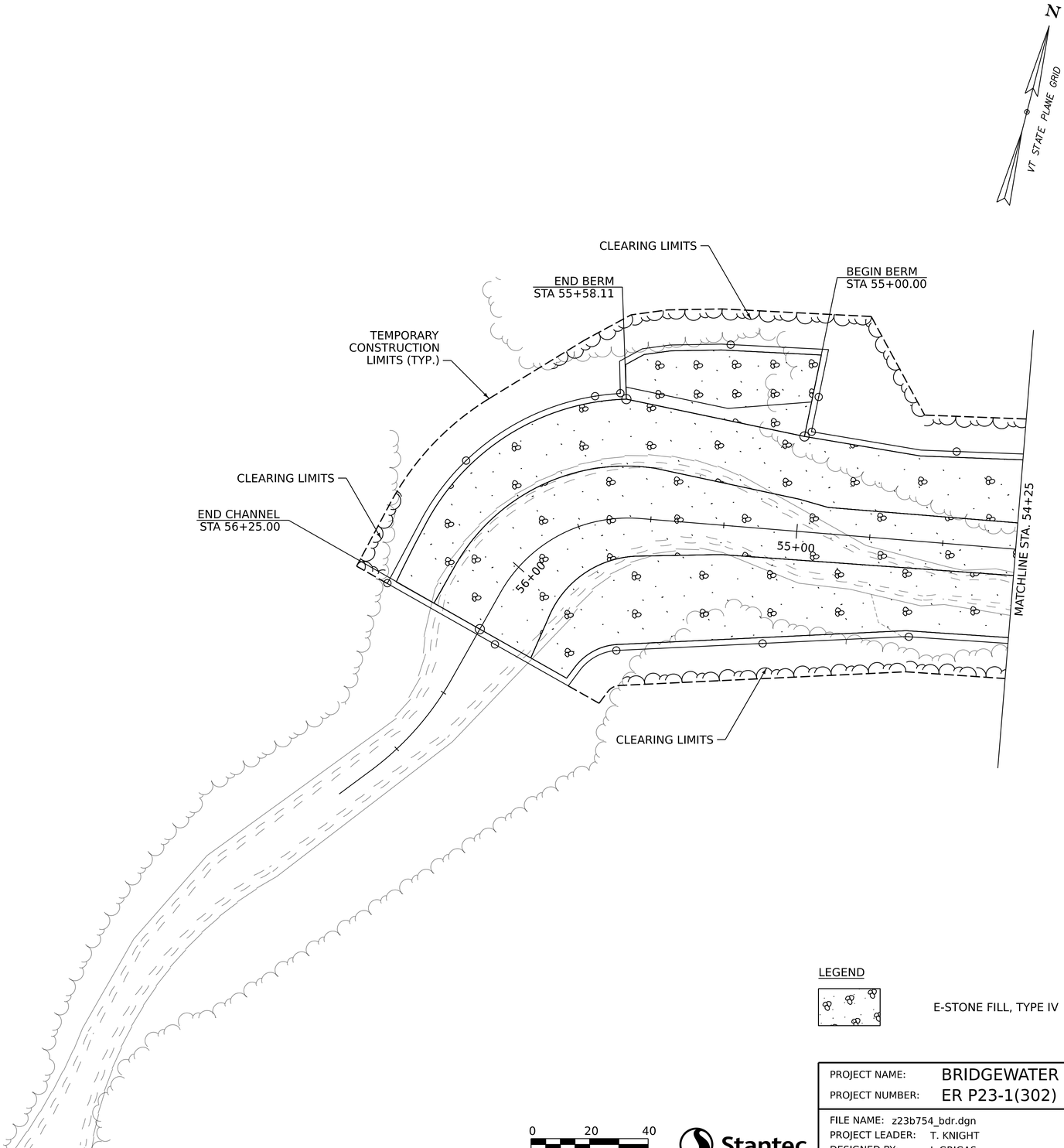
LEGEND

E-STONE FILL, TYPE IV

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER		
PROJECT NUMBER:	ER P23-1(302)		
FILE NAME: z23b754_bdr.dgn		PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
LAYOUT PLAN SHEET 1		SHEET	9 OF 36



LEGEND

E-STONE FILL, TYPE IV

0 20 40

SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

FILE NAME:	z23b754_bdr.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
LAYOUT PLAN SHEET 2		SHEET	10 OF 36

L = 100.00 FT
K = 167
HSSD = INF FT
G1 = -7.9000% ; G2 = -7.3000%

L = 150.00 FT
K = 214
SSD = 1617 FT
G1 = -7.3000% ; G2 = -8.0000%

L = 200.00 FT
K = 80
HSSD = 601 FT
G1 = -8.0000% ; G2 = -5.5000%

VPC 3+50.00
ELEV 1190.45

BEGIN APPROACH
STA 4+00.00

VPT 4+50.00
ELEV 1182.85

BEGIN PROJECT
STA 5+00.00

FG=VPI 5+91.00
ELEV 1172.55

BEGIN BRIDGE
STA 5+58.63
ELEV 1174.87'

END BRIDGE
STA 6+23.37
ELEV 1169.92'

VPC 7+25.00
ELEV 1161.83

END APPROACH
STA 8+50.00

VPT 9+25.00
ELEV 1148.33

FG=VPI 3+25.00
ELEV 1192.42

VPI 4+00.00
ELEV 1186.50

-7.9000%

-7.3000%

-8.0000%

ELEV. 1162.70

ELEV. 1157.70

PROPOSED CHANNEL

VPC 5+16.00
ELEV 1178.03

VPT 6+66.00
ELEV 1166.55

END PROJECT
STA 7+00.00

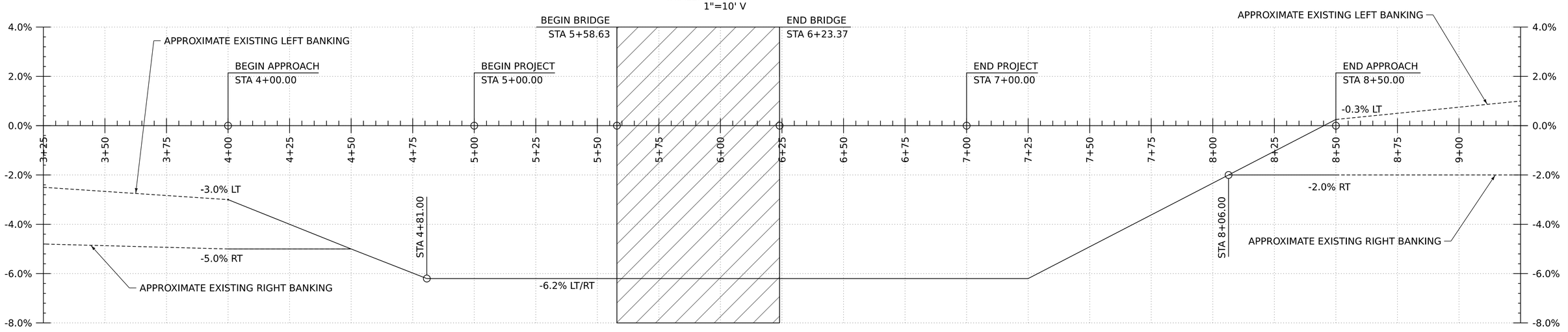
VPI 8+25.00
ELEV 1153.83

1192.3 1192.42 | 1190.5 1190.45 | 1188.6 1188.49 | 1186.6 1186.57 | 1184.6 1184.69 | 1182.6 1182.85 | 1180.7 1181.02 | 1178.8 1179.19 | 1176.7 1177.37 | 1169.2 1175.52 | 1162.4 1173.64 | 1166.0 1171.73 | 1168.5 1169.79 | 1166.5 1167.83 | 1164.4 1165.83 | 1162.5 1163.83 | 1160.6 1161.83 | 1158.9 1159.87 | 1157.4 1157.99 | 1155.8 1156.18 | 1154.3 1154.46 | 1152.8 1152.81 | 1151.3 1151.24 | 1149.7 1149.75

3+25 3+50 3+75 4+00 4+25 4+50 4+75 5+00 5+25 5+50 5+75 6+00 6+25 6+50 6+75 7+00 7+25 7+50 7+75 8+00 8+25 8+50 8+75 9+00

VT 100 PROFILE

SCALE: 1"=20' H
1"=10' V

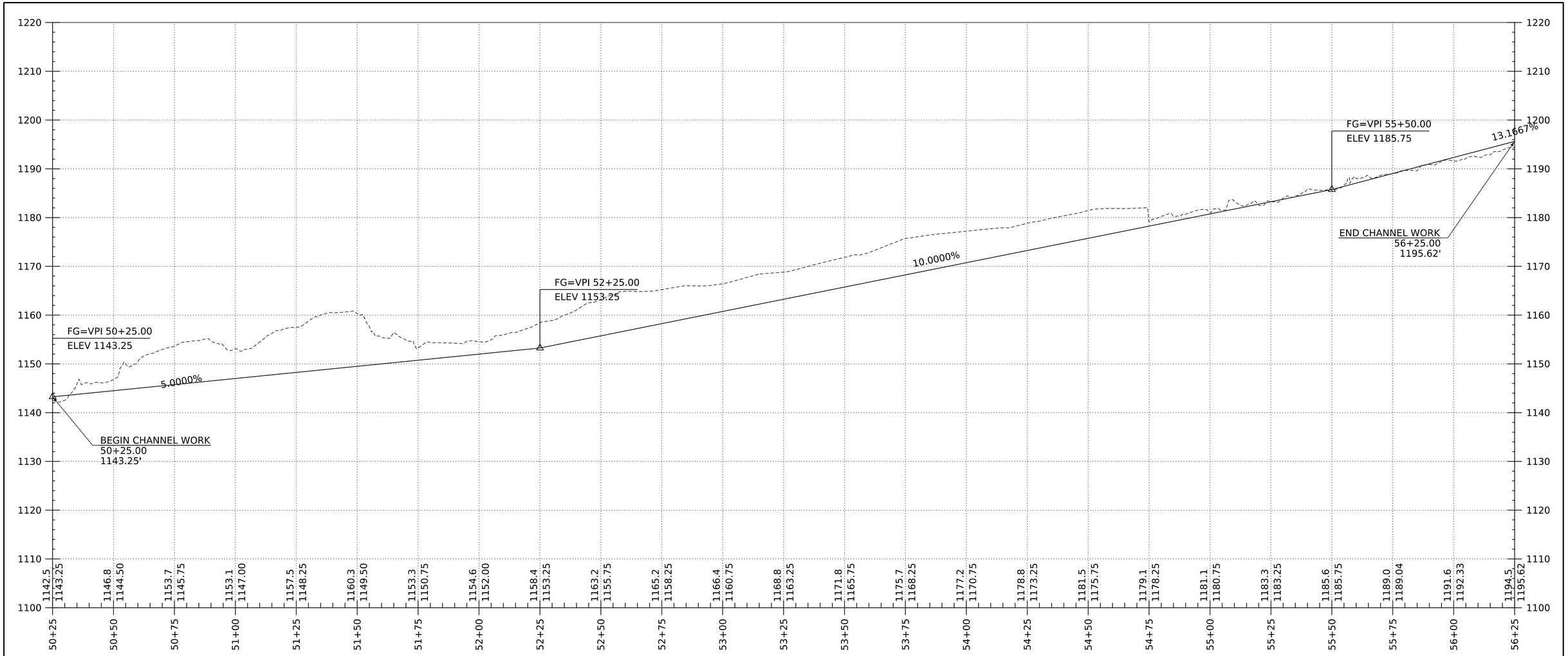


VT 100 BANKING DIAGRAM

SCALE: 1"=20' H
1"=2% V

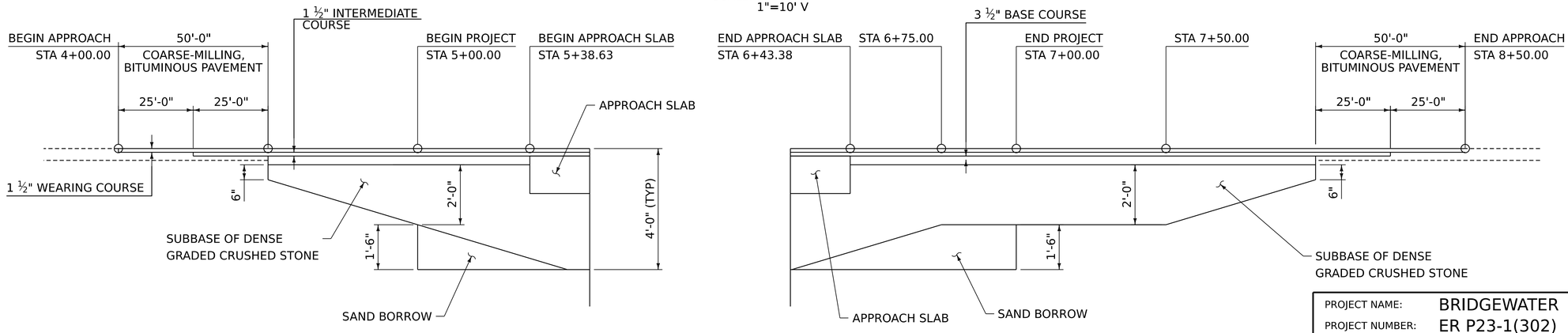
Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_pro.dgn	PLOT DATE: 7-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
ROADWAY PROFILE SHEET	SHEET 11 OF 36



CHANNEL PROFILE

SCALE: 1"=20' H
1"=10' V



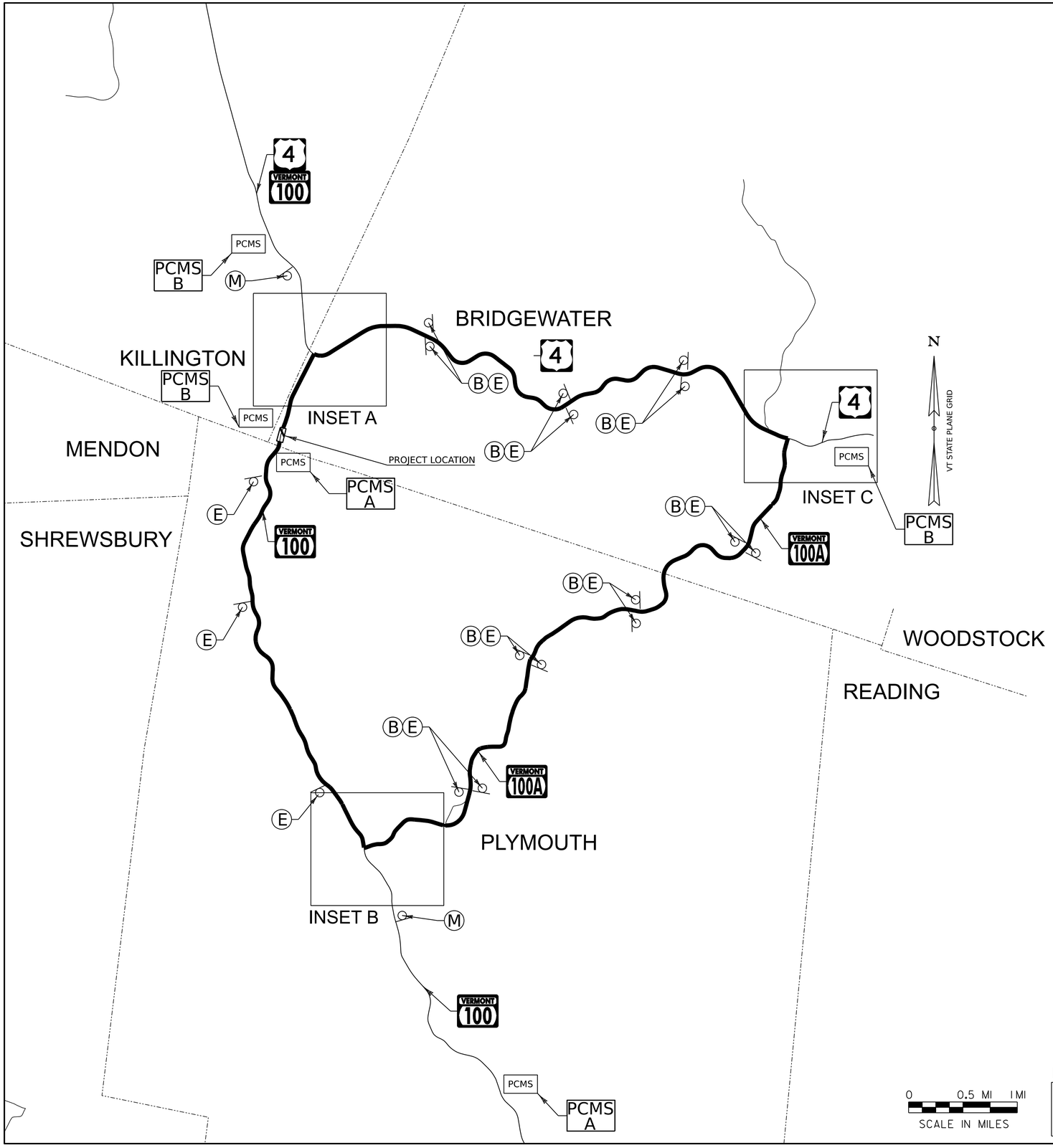
MATERIAL TRANSITION DIAGRAM

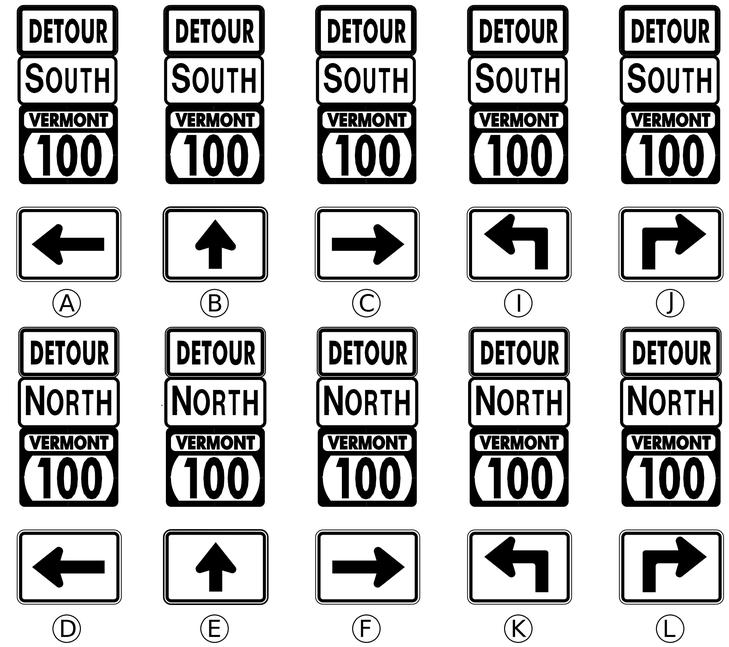
NTS

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

FILE NAME:	z23b754_pro_channel.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
CHANNEL PROFILE SHEET		SHEET	12 OF 36





PCMS A

VT 100	MM/DD -
NORTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

PCMS B

VT 100	MM/DD -
SOUTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

0 0.5 MI 1MI
SCALE IN MILES

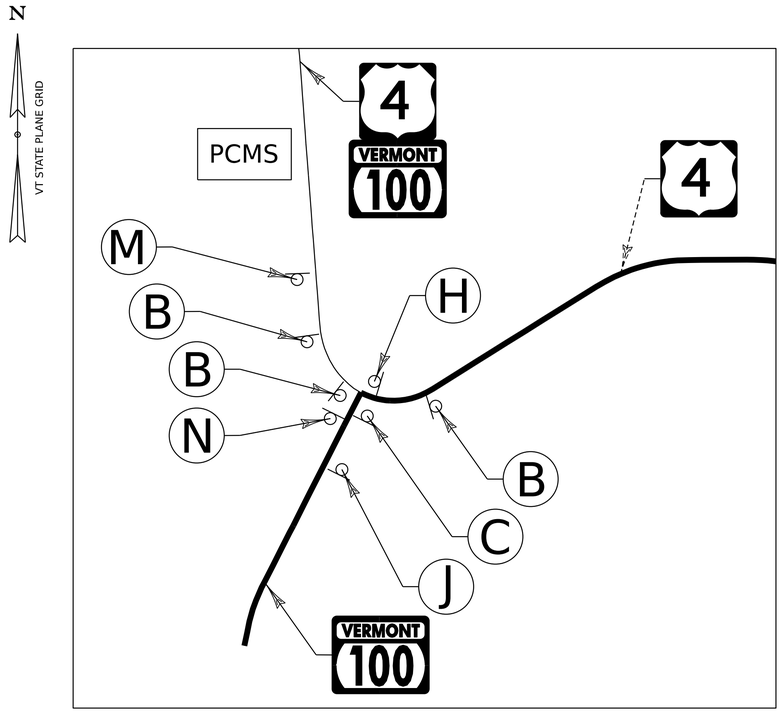
LEGEND
PCMS PORTABLE CHANGING MESSAGE SIGN
DETOUR

Stantec

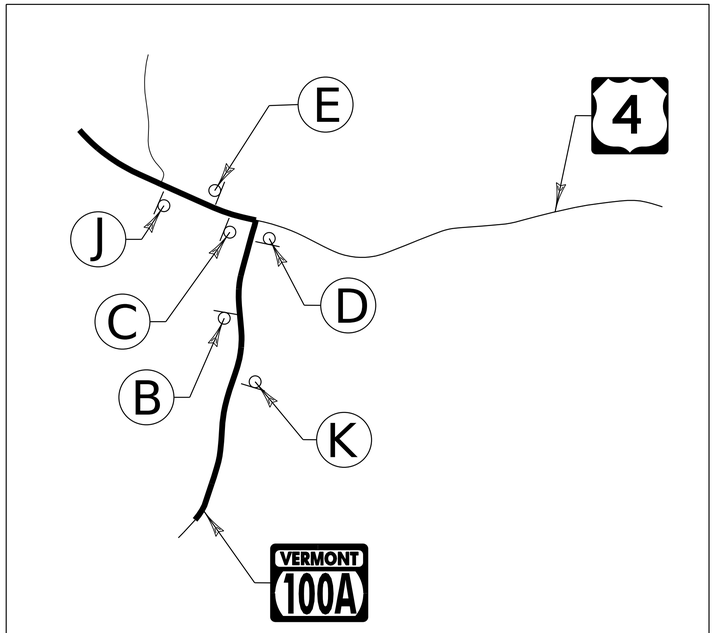
PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

FILE NAME: z23b754_detour.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: S.WINES
DETOUR PLAN SHEET 1

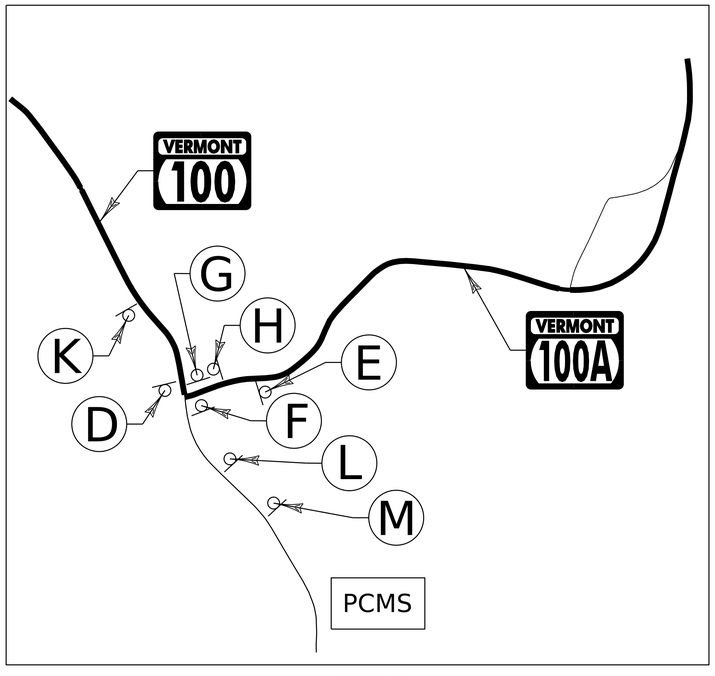
PLOT DATE: 7-OCT-2024
DRAWN BY: D. BARNES
CHECKED BY: D. YOULEN
SHEET 13 OF 36



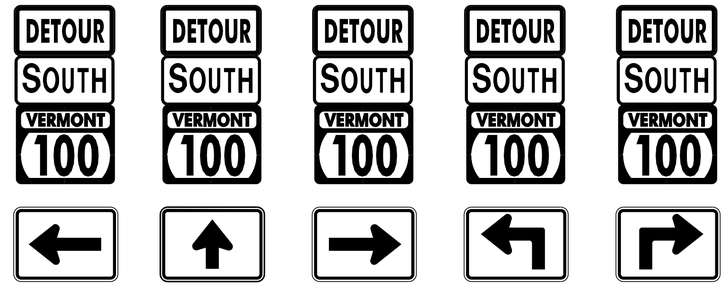
INSET A

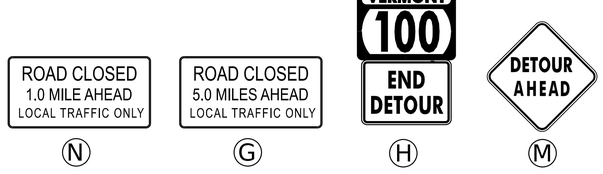


INSET C



INSET B





PCMS A

VT 100	MM/DD -
NORTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

PCMS B

VT 100	MM/DD -
SOUTH	MM/DD
CLOSED	

PCMS DETAIL - MESSAGE 7DAYS PRIOR TO ROAD CLOSURE AND DURING ROAD CLOSURE

NOT TO SCALE

LEGEND

PCMS — PORTABLE CHANGING MESSAGE SIGN

DETOUR

Stantec

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

FILE NAME: z23b754_detour.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: S.WINES
DETOUR PLAN SHEET 2

PLOT DATE: 2-OCT-2024
DRAWN BY: D. BARNES
CHECKED BY: D. YOULEN
SHEET 14 OF 36

TRAFFIC CONTROL NOTES:

1. THE FOLLOWING TRAFFIC CONTROL INFORMATION IS INTENDED TO BE A GENERAL OUTLINE FOR HOW THE WORK COULD PROCEED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SITE SPECIFIC DETAILS TO THE PAVEMENT DESIGN UNIT VIA THE ENGINEER TO ADDRESS SPECIFIC SITUATIONS. THIS RESPONSIBILITY INCLUDES PROVIDING A PLAN DETAILING THE USE AND PLACEMENT OF SIGNS, CHANNELING DEVICES, ARROW PANELS, FLAGGERS AND UNIFORMED TRAFFIC OFFICERS (UTO'S) DURING LANE CLOSURES. THE CONTRACTOR MUST ALLOW AT LEAST FOUR WEEKS FOR REVIEW AND APPROVAL OF THE COMPREHENSIVE PLAN AND TWO WEEKS FOR REVIEW AND APPROVAL OF MINOR CHANGES/DETAILS. ALL TRAFFIC CONTROL DETAILS MUST BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE MUTCD AND VTRANS STANDARDS T-1, T-11, T-12, T-13, T-17, T-22, T-23, T-28, T-29, T-30, T-31, T-35 AND T-36. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

2. THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND LATEST REVISIONS SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC DEVICES ARE ERECTED OR PLACED, OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED, THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM WITH SUCH STANDARDS.

3. CONSTRUCTION ZONE SIGN LAYOUT SHALL BE IN ACCORDANCE WITH SECTION 6 OF THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND IT'S LATEST REVISIONS AND CURRENT STATE STANDARDS.

4. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR APPROVAL BY THE PROJECT MANAGER PER SECTION 105.06 OF THE VTRANS SPECIFICATIONS. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE. THE TRAFFIC CONTROL PLAN SHALL BE IN COMPLIANCE WITH VTRANS STANDARDS AND THE LATEST EDITION OF THE MUTCD. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

5. THE BID PRICE FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE SHALL INCLUDE ALL OF THE FOLLOWING, AS NEEDED: APPROACHES AND RAMPS, ON AND OFF PROJECT CONSTRUCTION SIGNING, PORTABLE FLASHING ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VTRANS STANDARDS. ALL ADJUSTING, RELOCATING AND REMOVING OF THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED.

6. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) WILL BE PROVIDED FOR USE ALONG THIS PROJECT AND ARE TO BE USED AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL POSITION PORTABLE CHANGEABLE MESSAGE SIGNS WARNING MOTORISTS OF THE EXPECTED ROADWAY CONDITIONS AHEAD. THE MESSAGE TO BE DISPLAYED SHALL BE SUBMITTED TO THE ENGINEER IN ADVANCE FOR APPROVAL. MESSAGES SHOULD AVOID REPEATING THOSE COVERED BY STATIC SIGNS AND SHOULD BE UPDATED PERIODICALLY TO DESCRIBE THE WORK ACTIVITY OCCURRING SO THAT THE PCMS CONTINUES TO COMMAND THE ATTENTION OF MOTORISTS. THE COST OF PROVIDING THESE MESSAGE SIGNS SHALL BE PAID UNDER ITEM 641.1500 PORTABLE CHANGEABLE MESSAGE SIGN.

7. CONSTRUCTION SIGNS SHALL BE IN NEW OR LIKE NEW CONDITION PER VTRANS STANDARDS. REFER TO VTRANS STANDARDS, SPECIAL PROVISIONS, THE SHSM HANDBOOK, AND THE MUTCD FOR TEMPORARY TRAFFIC CONTROL SIGN DIMENSIONS AND COLORS.

8. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND TOWN HIGHWAYS. ALL VEGETATION THAT INTERFERES WITH THE VISIBILITY OF THE SIGNS SHALL BE REMOVED.

9. ALL PERMANENT SIGNS THAT CONFLICT WITH TEMPORARY TRAFFIC CONTROL SHALL BE COMPLETELY COVERED, THE PAYMENT FOR WHICH WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE. SIGN COVERING SHALL NOT DAMAGE THE RETRO-REFLECTIVITY OF THE SIGN FACE AND THE SIGN COVER SHALL NOT BE ALLOWED TO DETERIORATE FOR THE DURATION THAT THE SIGN NEEDS COVERING.

10. IF FLAGGERS ARE TO BE USED ON RAMPS, ADDITIONAL ADVANCE WARNING CONSTRUCTION SIGNS (FLAGGER SYMBOL, BE PREPARED TO STOP, ETC.) SHALL BE REQUIRED. AS THE PAVING OPERATION MOVES, FLAGGER SIGNS SHALL BE MOVED ACCORDINGLY. AT NO TIME SHOULD THE FLAGGER SYMBOL SIGN BE MORE THAN 500 FEET FROM THE FLAGGER STATION. FLAGGER SIGNS SHALL BE COVERED OR TURNED AWAY FROM TRAFFIC WHEN FLAGGING OPERATIONS CEASE FOR LONGER THAN 15 MINUTES. FLAGGERS ARE NOT RECOMMENDED TO BE USED ALONG I-89.

11. THE CONTRACTOR SHALL PROVIDE ACCESS THROUGH THE WORK ZONE FOR EMERGENCY VEHICLES AT ALL TIMES OR COORDINATE EMERGENCY ROUTES PRIOR TO THE START OF CONSTRUCTION.

12. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH VTRANS STANDARDS. PAYMENT FOR PROVIDING THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE. ADD G20-5ap "WORK ZONE" PLAQUE AND R2-6ap "FINES DOUBLED" PLAQUE TO SPEED LIMIT SIGNS (SEE FIG. 6F-3 OF THE MUTCD). OMIT VR-355 "FINES DOUBLED FOR SPEEDING IN WORK ZONE" SIGN.

13. WHEN LANE WIDTHS ARE REDUCED TO LESS THAN 11 FEET DMV SHALL BE NOTIFIED TO REROUTE SUPER LOADS PERMITS. IT SHOULD BE NOTED THAT ONCE A PERMIT IS ISSUED, THE APPLICANT/HAULER HAS 10 DAYS TO MOVE THEIR LOAD. THIS REQUIRES ADDITIONAL NOTICE TIME TO CAPTURE THAT 10-DAY WINDOW.

14. WHEN MILLED BITUMINOUS PAVEMENT IS OPEN TO TRAFFIC, A "MOTORCYCLES USE CAUTION" SIGN, AS PER VTRANS STANDARDS T-17 AND T-28, SHALL BE PROVIDED. SIGN DETAILS FOR SIGN FABRICATION PROVIDED ON T-28.

15. IF LONGITUDINAL DROP-OFFS ARE TO BE LEFT DURING THE OVERNIGHT HOURS, THEY SHALL BE CONSTRUCTED USING THE HSD-400.01 SAFETY EDGE DETAIL AND CONFORM TO VTRANS STANDARD T-36.

16. WHEN NIGHT WORK OCCURS, A LIGHTING PLAN IS REQUIRED AND SHALL INCLUDE THE FOLLOWING:

    - LAYOUT SHOWING LOCATION OF LIGHT TOWERS, INCLUDING SPACING, LATERAL PLACEMENT AND MOUNTING HEIGHT, AND CLEARLY SHOW THE LOCATION OF ALL
    - LIGHTS NECESSARY FOR ALL WORK TO BE DONE AT NIGHT, INCLUDING ISO-FOOTCANDLE DIAGRAM FOR EACH UNIT OVERLAY ONTO EXISTING PROJECT PLANS.
    - DESCRIPTION OF LIGHT TOWERS TO BE USED AND ELECTRICAL POWER SOURCE.
    - SPECIFIC TECHNICAL DATA ON ALL LIGHTING EQUIPMENT, INCLUDING BRAND NAMES, MODEL NUMBERS, POWER RATING, AND PHOTOMETRIC DATA.
    - DETAILS OF ANY HOODS, LOUVERS, SHIELDS OR OTHER MEANS TO BE USED TO CONTROL GLARE.
    - ATTACHMENT AND MOUNTING DETAILS FOR LIGHTING TO BE ATTACHED TO EQUIPMENT.
    - LIGHTING CALCULATIONS CONFIRMING THAT THE ILLUMINATION REQUIREMENTS WILL BE MET BY THE LAYOUT.

17. EXISTING SPEED LIMIT SIGNS SHALL BE COVERED WHEN REDUCED SPEED SIGNS ARE POSTED. KEEP RECORDS WHEN POSTING THE WORK ZONE SPEED LIMIT FOR LEGAL PURPOSES; DOCUMENTING DATES, TIMES AND LOCATIONS OF SIGNS. WHEN WORK ZONE SPEED LIMIT IS NOT IN USE, ALL ASSOCIATED SIGNS SHALL BE COVERED, TURNED AND/OR LAID FLAT SO AS THE MOTORING PUBLIC CANNOT READ THESE SIGNS. A SIGNED AND APPROVED TEMPORARY SPEED CERTIFICATE WILL BE REQUIRED FOR A TEMPORARY SPEED LIMIT REDUCTION.

18. IN ADVANCE OF THE PROPOSED DETOUR, THE CONTRACTOR SHALL SUBMIT A PLAN THAT WILL DEPICT HOW ADVANCED WARNING TO THE TRAVELLING PUBLIC WILL BE ACCOMMODATED DURING THE DETOUR AND ROAD CLOSURE. ADVANCED WARNING SHALL BE DEFINED AS PROVIDING ADVANCED WARNING SIGNS, BOTH STATIC AND PCMS, THAT PROVIDE INFORMATION FOR MOTORISTS TO SAFELY UTILIZE THE REGIONALLY ACCEPTABLE OPPORTUNITIES FOR SEEKING AN ALTERNATIVE ROUTE PRIOR TO PROJECT LOCATION. THE PLAN WILL NEED TO BE SUBMITTED FOR REVIEW AND COMMENT BY THE PROJECT MANAGER A MINIMUM OF FOURTEEN (14) CALENDAR DAYS AHEAD OF ANY PLANNED CLOSURE IN ACCORDANCE WITH SECTION 105.

19. INSTALLATION OF THE PCMS NETWORK SHALL BE DONE SEVEN (7) DAYS BEFORE WORK MAY BEGIN. ELEMENTS OF THE PLAN SHALL INCLUDE BUT WILL NOT BE LIMITED TO THE LOCATION OF PCMS AND ASSOCIATED MESSAGES, ANY OTHER NECESSARY SIGNAGE, LOCATIONS FOR DEPLOYMENT OF UNIFORMED TRAFFIC OFFICERS AND FLAGGERS, AND SEQUENCING AND DURATION OF CLOSURE FOR EACH RAMP WITHIN THE RESPECTIVE INTERCHANGE. NO MORE THAN ONE INTERCHANGE PER WORK PERIOD MAY HAVE RAMP CLOSURES. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.1100 TRAFFIC CONTROL, ALL-INCLUSIVE.

20. PLEASE NOTE THAT THE UNIFORMED TRAFFIC OFFICER (UTO'S), UNDER AUTHORITY GRANTED BY LAW (TITLE 23 VSA) MAY DIRECT AND CONTROL TRAFFIC. SUITABLE EXAMPLES IN WORK MIGHT INCLUDE THE DIRECTION AND CONTROLS OF TRAFFIC AT INTERSECTIONS WHERE SIGNALS ARE NOT FUNCTIONING OR ARE MALFUNCTIONING. IN THESE CASES, THE PRESENCE OF A VEHICLE WITH A BLUE LIGHT MAY NOT BE SUITABLE OR NECESSARY. THE WEARING OF DEPARTMENTALLY REQUIRED AND APPROVED REFLECTIVE GARMENTS IS REQUIRED. UTO VEHICLE TO BE PARKED WHERE IT DOES NOT PROMOTE BACK LIGHTING OF THE FLAGGER/UTO STATION BLINDING APPROACHING TRAFFIC AND WASHING OUT THE VISIBILITY OF THE UTO/FLAGGER STANDING THERE. FOR LANE CLOSURE WITH WORK ACTIVITY AREA LESS THAN 1 MILE FROM THE MERGING TAPER THE POLICE VEHICLE SHOULD BE POSITIONED UPSTREAM OF THE LAST ADVANCE WARNING SIGN. VEHICLE SHOULD FACE IN THE DIRECTION MUTUALLY AGREED UPON BY THE HIGHWAY AND ENFORCEMENT AGENCY.

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

FILE NAME:	z23b754_detour.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	D. BARNES
DESIGNED BY:	S.WINES	CHECKED BY:	D. YOULEN
DETOUR PLAN SHEET 3		SHEET	15 OF 36

DELINEATOR WITH STEEL POSTS
STA 4+33 LT (GREEN)
STA 7+60 LT (BLUE)

WOOD MARKER POSTS
STA 5+30 RT

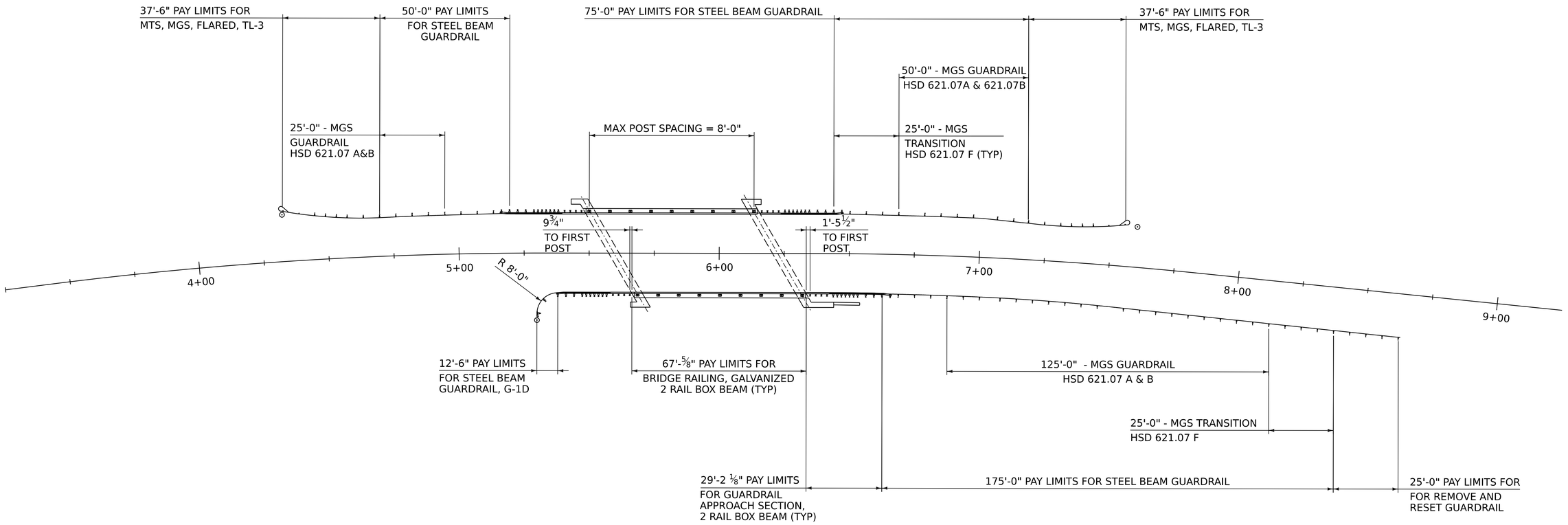
ANCHOR FOR STEEL BEAM GUARDRAIL
STA 5+30 RT

MTS, MGS, FLARED, TL-3
STA 4+33.3 - STA 4+70.0 LT
STA 7+18.0 - STA 7+55.0 LT

STEEL BEAM GUARDRAIL
STA 4+70.0 - STA 5+19.5 LT
STA 6+44.0 - STA 7+18.0 LT
STA 5+30.0 - STA 5+38.0 RT
STA 6+63.0 - STA 8+38.5 RT

BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM
STA 5+48.49 - STA 6+15.54 LT
STA 5+66.46 - STA 6+33.51 RT

GUARDRAIL APPROACH SECTION, 2 RAIL BOX BEAM
STA 5+19.5 - STA 5+48.49 LT
STA 6+15.54 - STA 6+44.0 LT
STA 5+38.0 - STA 5+66.46 RT
STA 6+33.51 - STA 6+63.0 RT

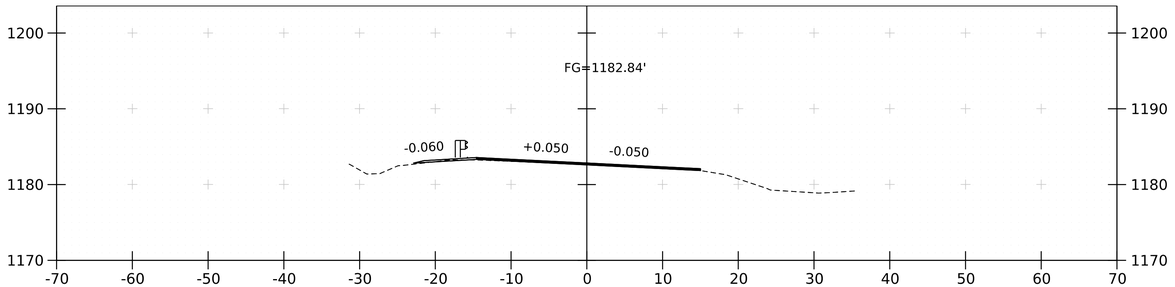


NOTES:
1. SEE STANDARDS G-1, G-1D, S-360A, S-360B, AND S-360C AND HSD DETAILS 621.06 - 621.07F FOR ADDITIONAL DETAILS.

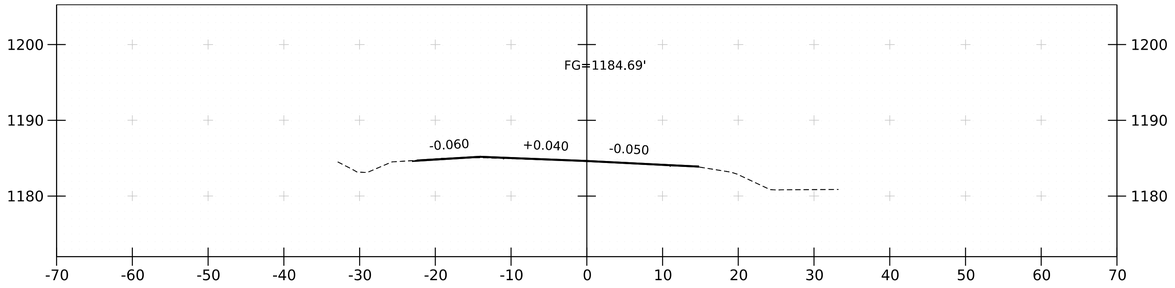
0 20 40
SCALE IN FEET

Stantec

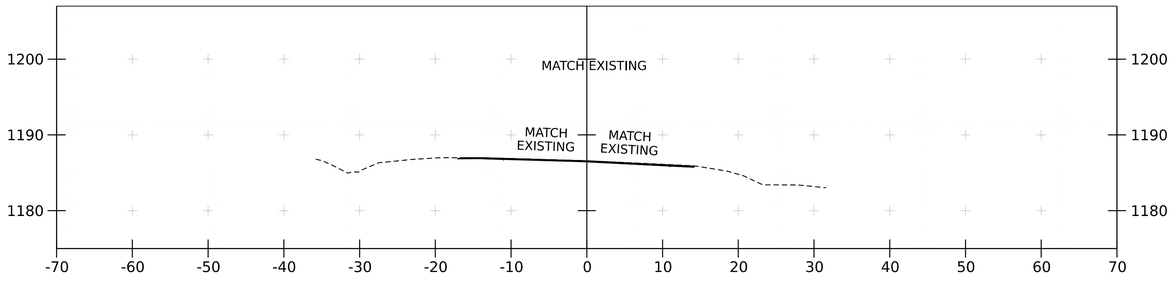
PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_bdr_rail.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
GUARDRAIL LAYOUT SHEET	SHEET 16 OF 36



4+50

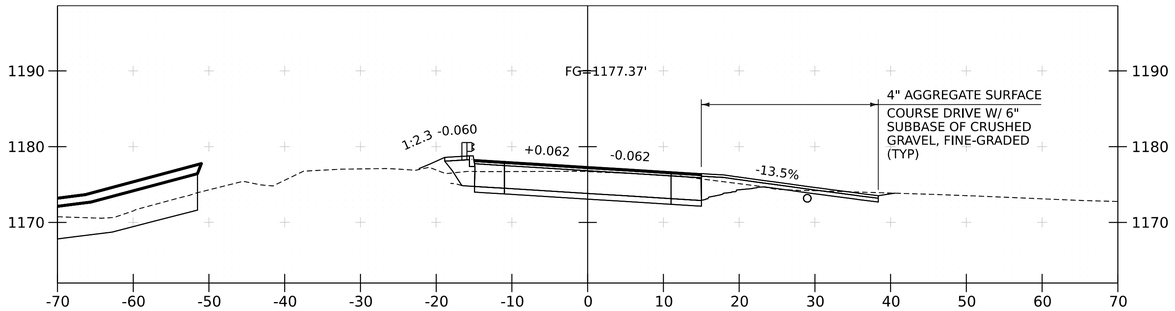


4+25

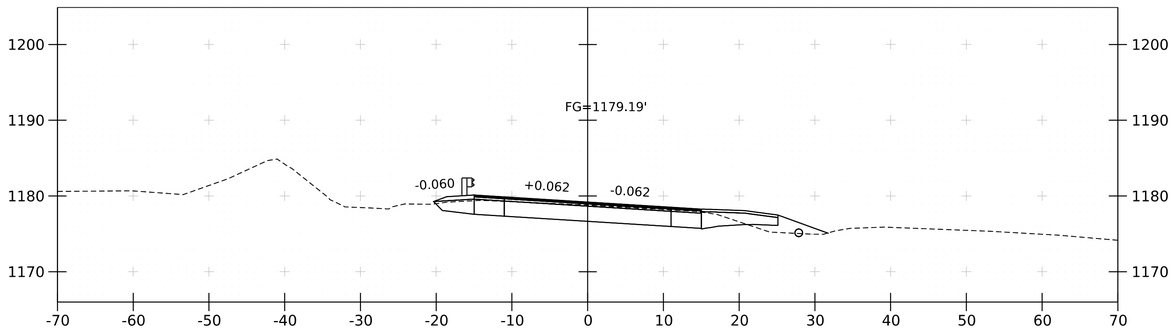


BEGIN APPROACH

4+00

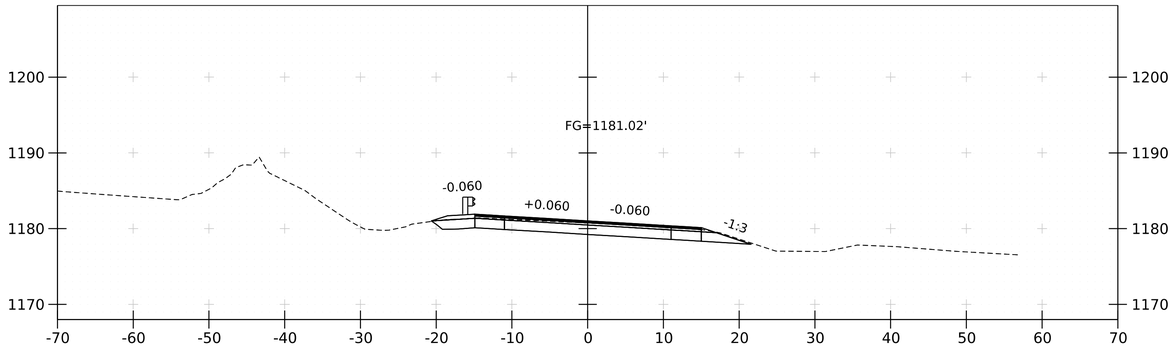


5+25



BEGIN PROJECT

5+00



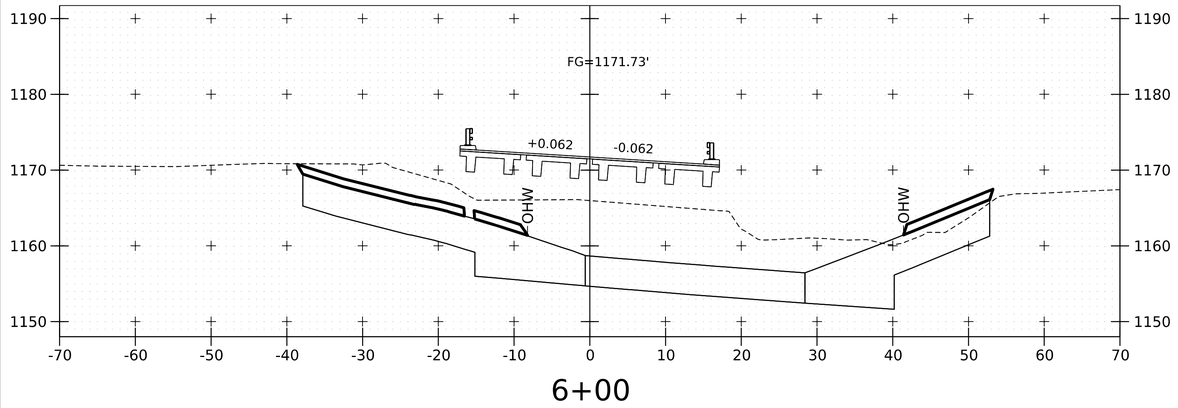
4+75

0 10 20

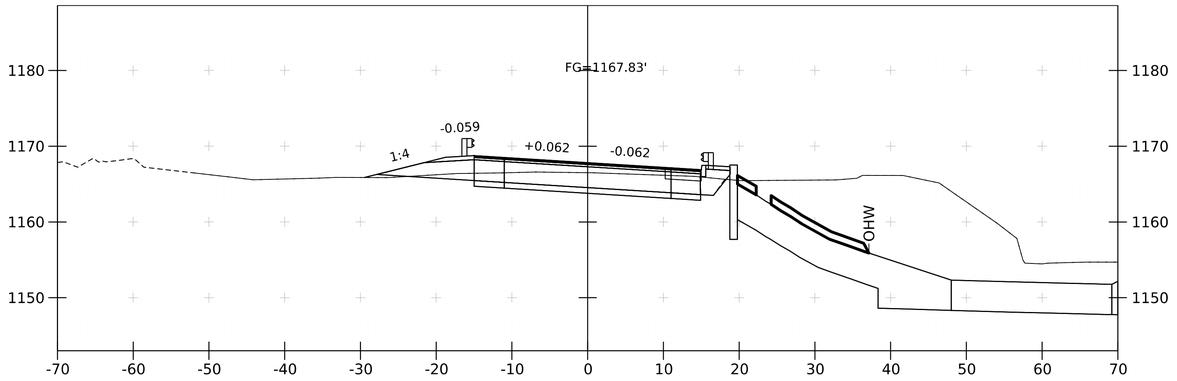
SCALE IN FEET

Stantec

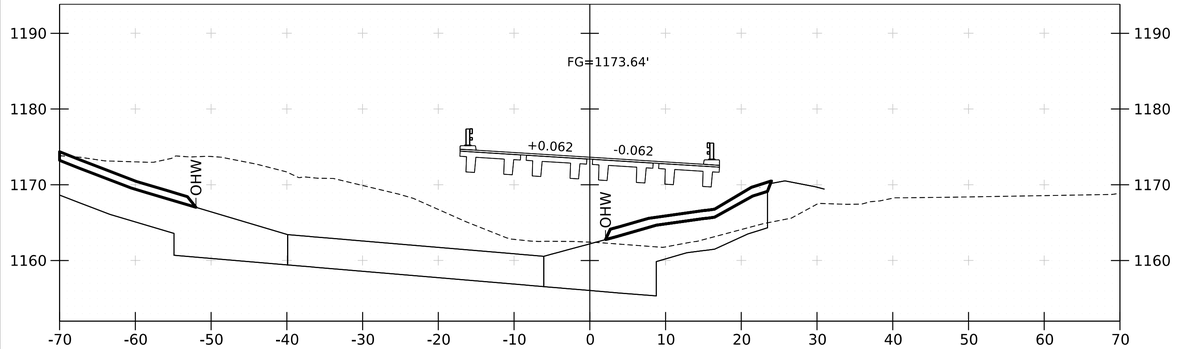
PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754xs_mainline.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
ROADWAY CROSS SECTION SHEET 1	SHEET 17 OF 36



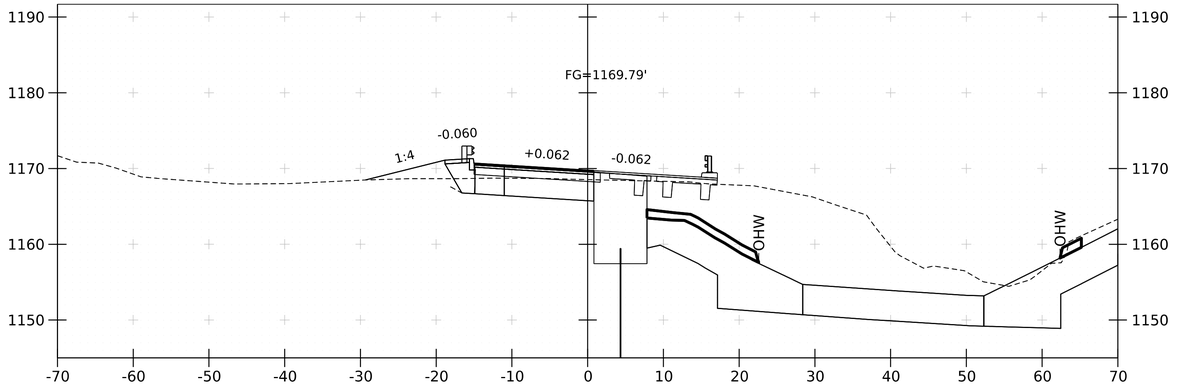
6+00



6+50

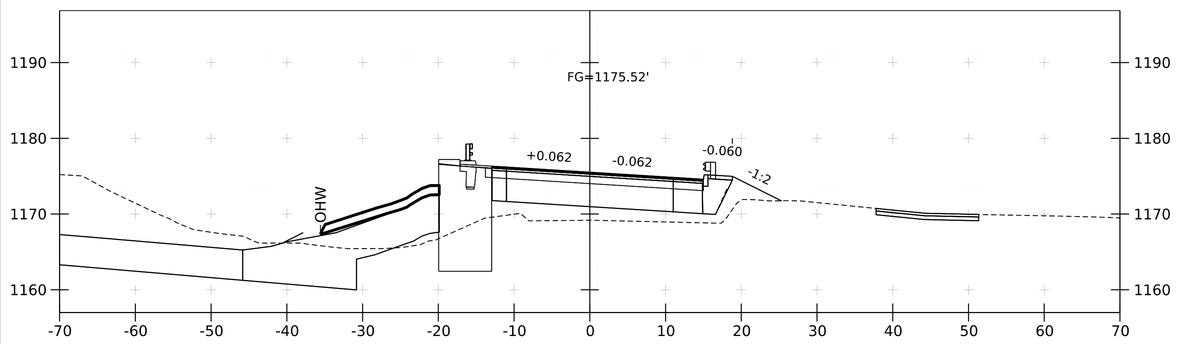


5+75



6+25

END BRIDGE STA 6+23.37



5+50

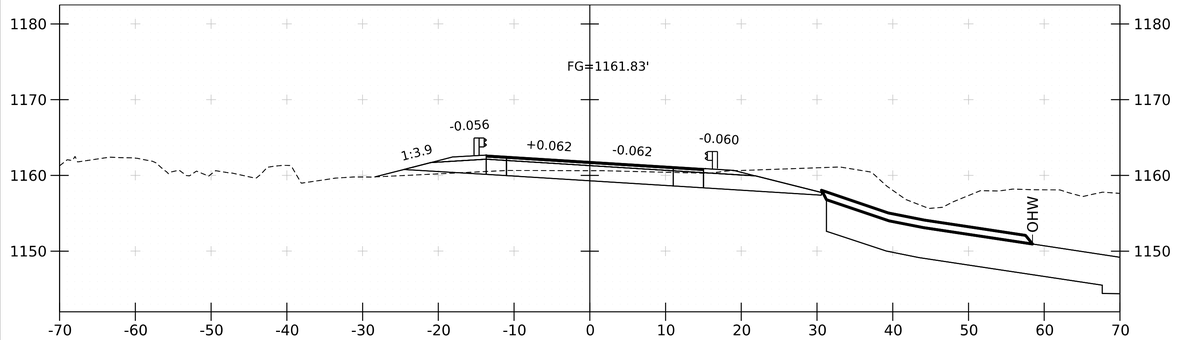
BEGIN BRIDGE 5+58.63

0 10 20

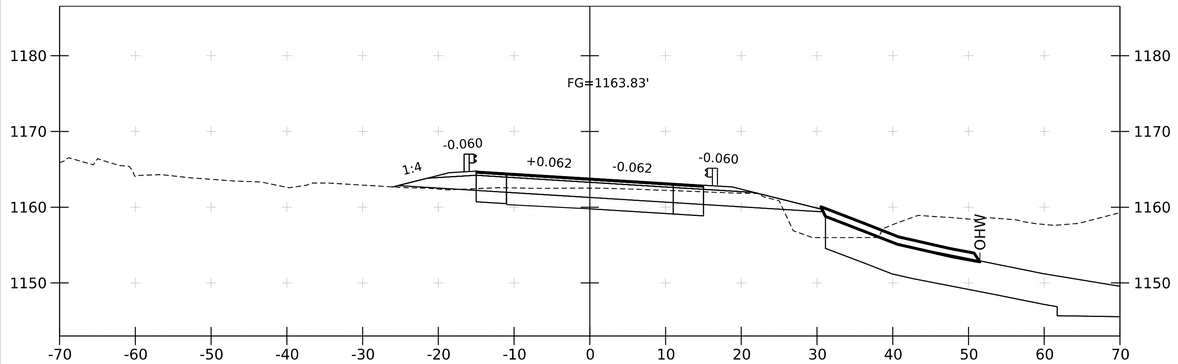
SCALE IN FEET

Stantec

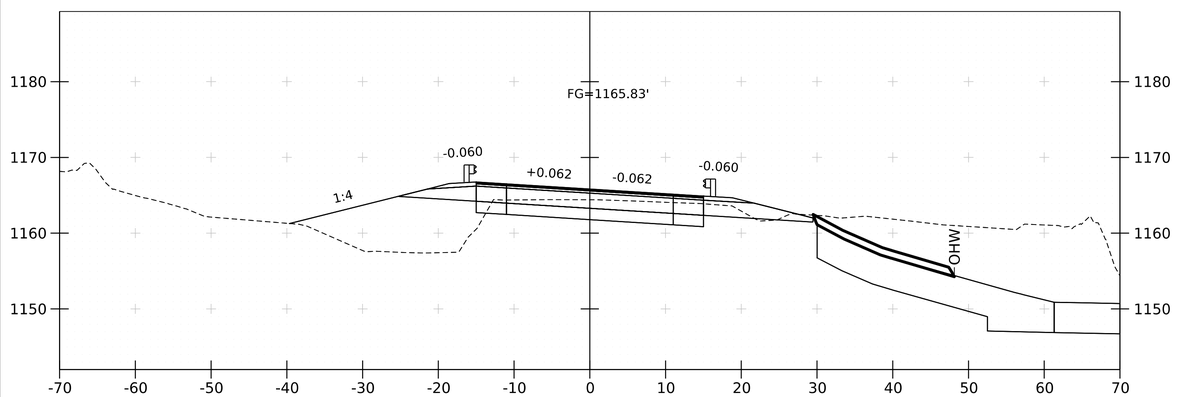
PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754xs_mainline.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
ROADWAY CROSS SECTION SHEET 2	SHEET 18 OF 36



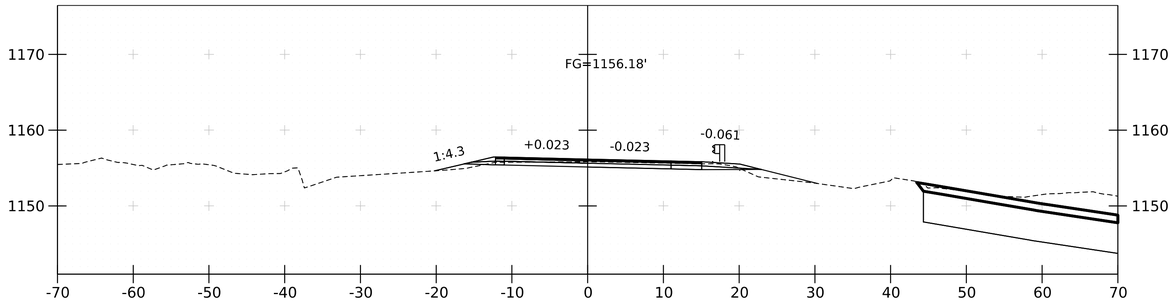
7+25



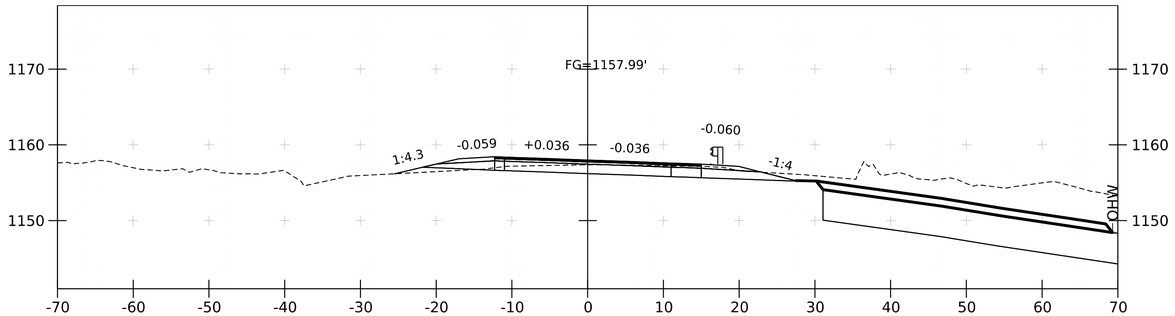
7+00



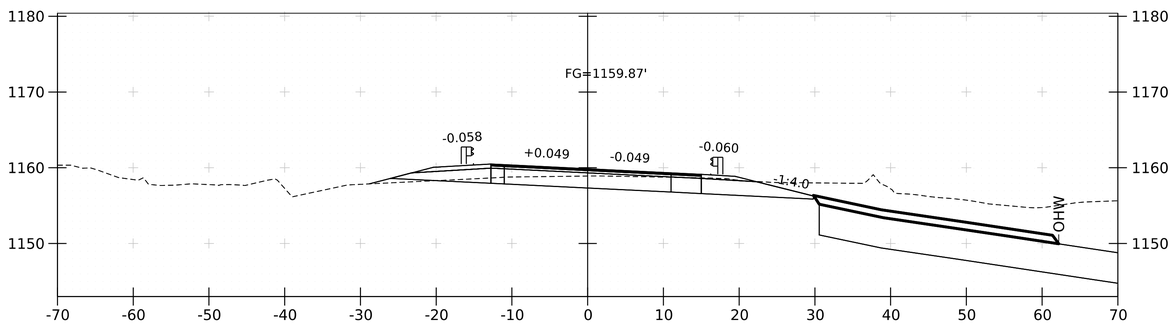
6+75



8+00



7+75



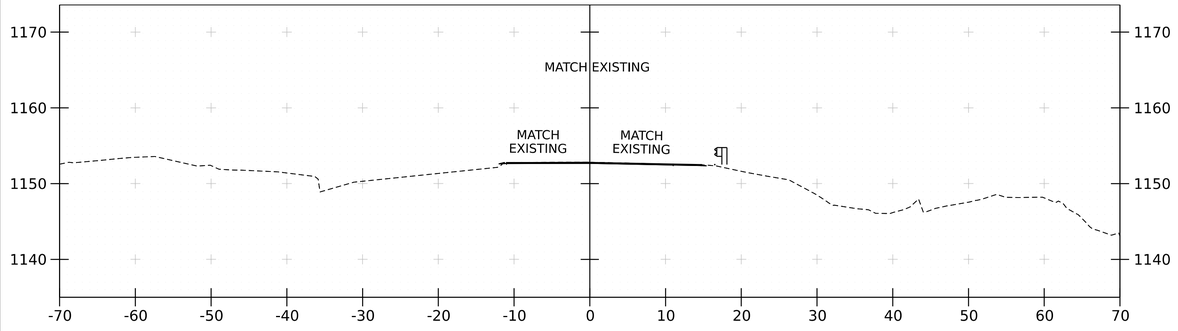
7+50

0 10 20
SCALE IN FEET

Stantec

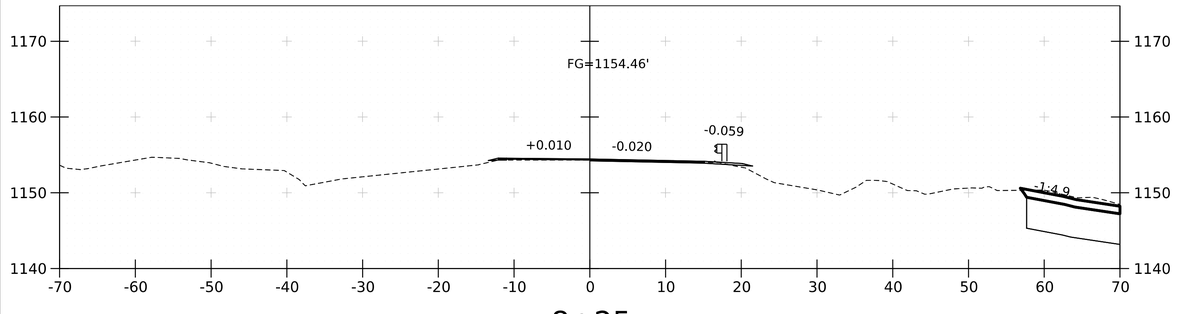
PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

FILE NAME:	z23b754xs_mainline.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
ROADWAY CROSS SECTION SHEET 3		SHEET	19 OF 36



8+50

END APPROACH



8+25

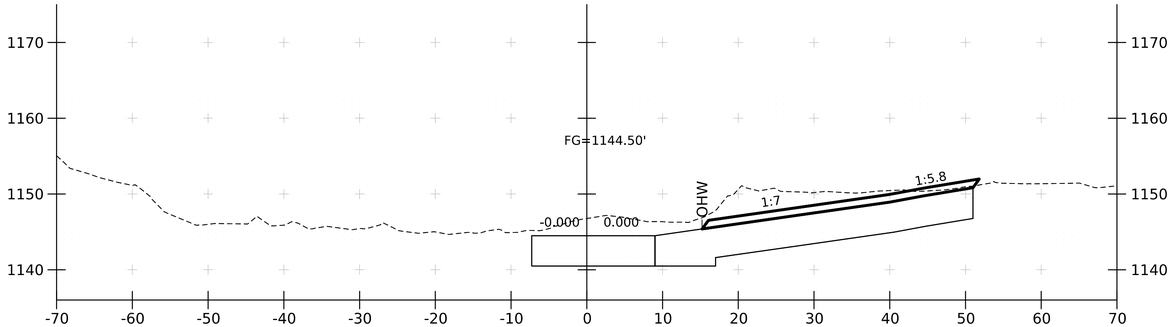
0 10 20

SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754xs_mainline.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
ROADWAY CROSS SECTION SHEET 4	SHEET 20 OF 36

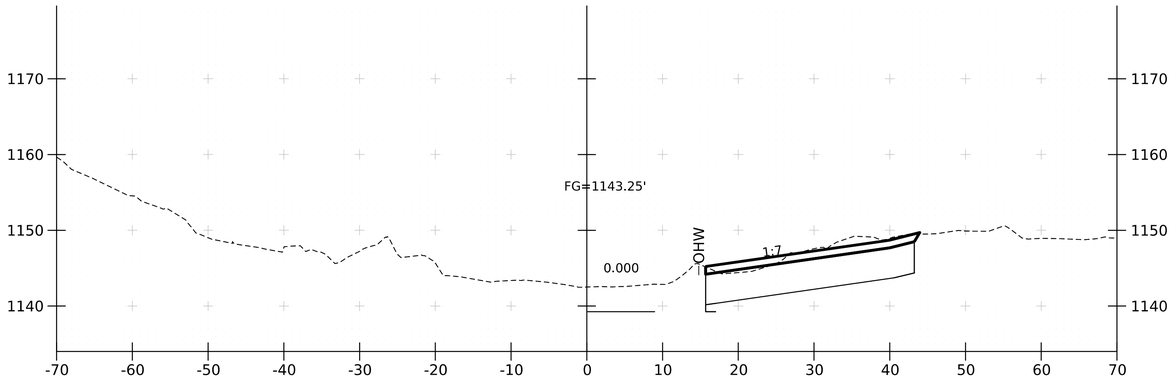
STA 50+60.00 LT
BEGIN GEOTEXTILE UNDER STONE FILL



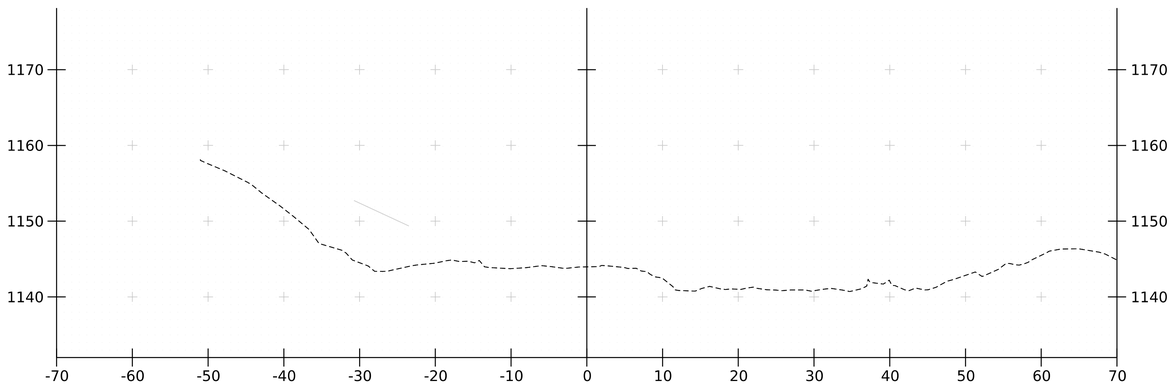
50+50

STA 50+40.00 LT
BEGIN MINI-FAN CHANNEL SECTION
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN E-STONE FILL, TYPE IV

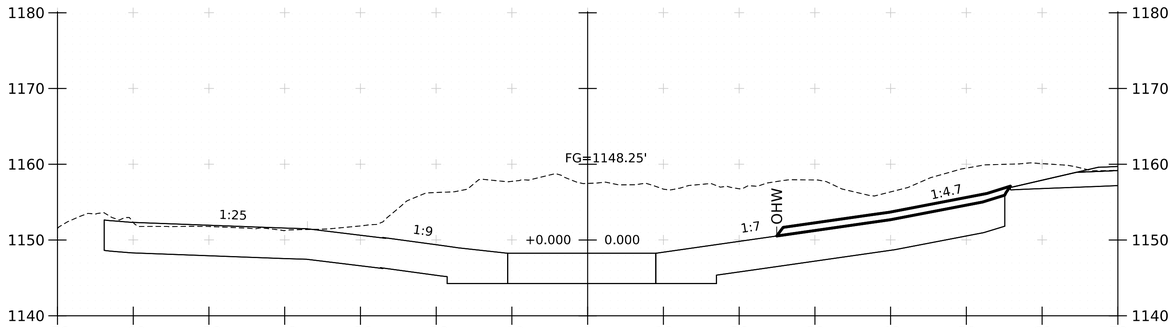
STA 50+25.00 RT
BEGIN MINI-FAN CHANNEL SECTION
BEGIN UNCLASSIFIED CHANNEL EXCAVATION
BEGIN GEOTEXTILE UNDER STONE FILL
BEGIN E-STONE FILL, TYPE IV
BEGIN GRUBBING MATERIAL



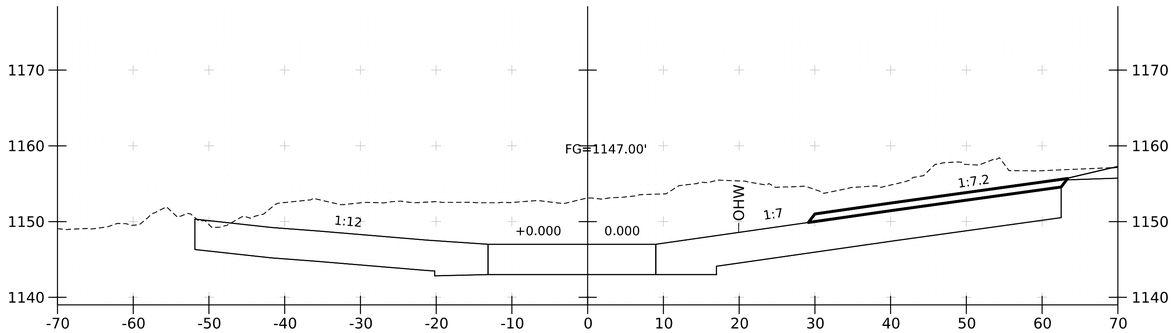
50+25



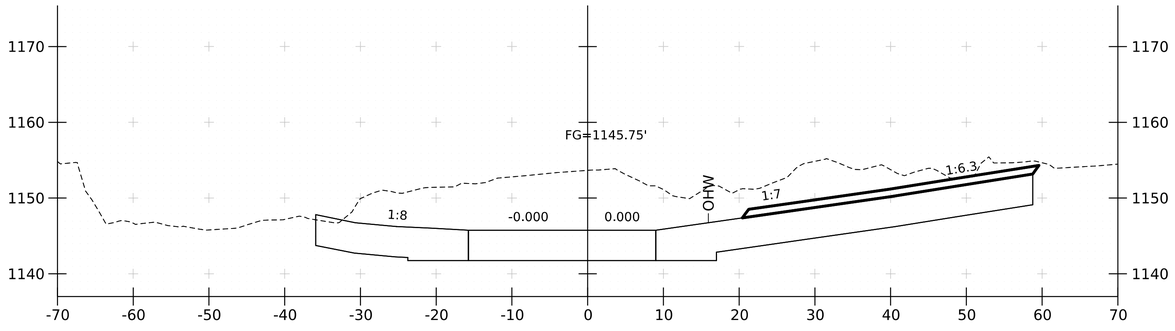
50+00



51+25



51+00



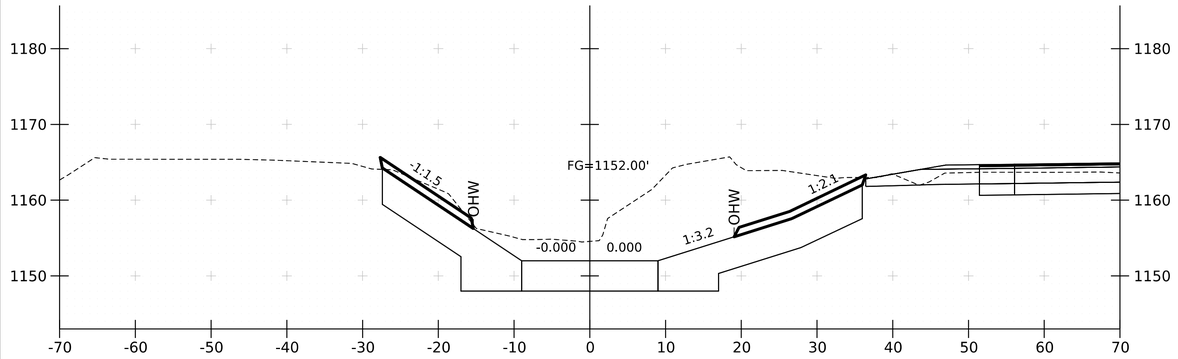
50+75

0 10 20
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

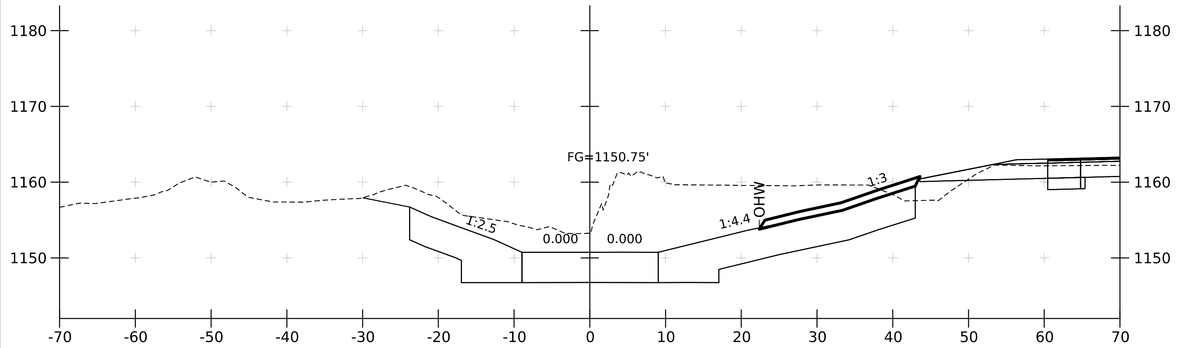
FILE NAME:	z23b754xs_channel.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
CHANNEL CROSS SECTION SHEET 1		SHEET	21 OF 36



STA 51+80.00 LT
BEGIN GRUBBING MATERIAL

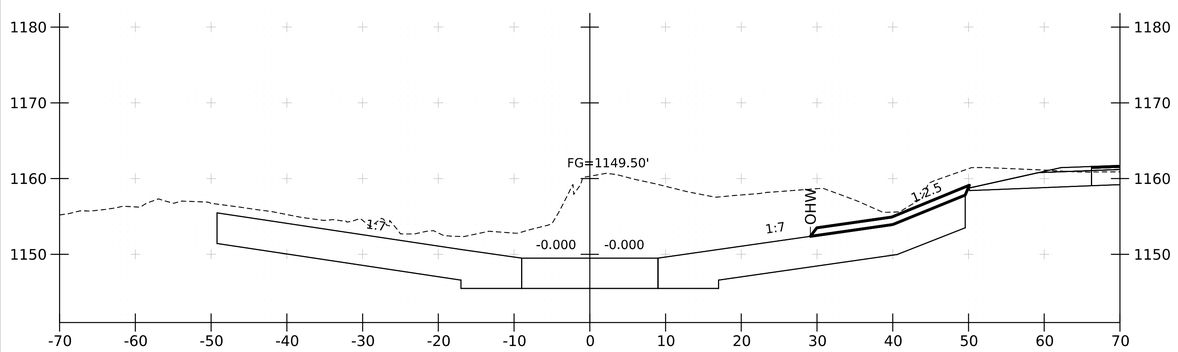
52+00

STA 51+90.00 RT
END MINI-FAN TYPICAL SECTION
BEGIN CHANNEL TYPICAL SECTION

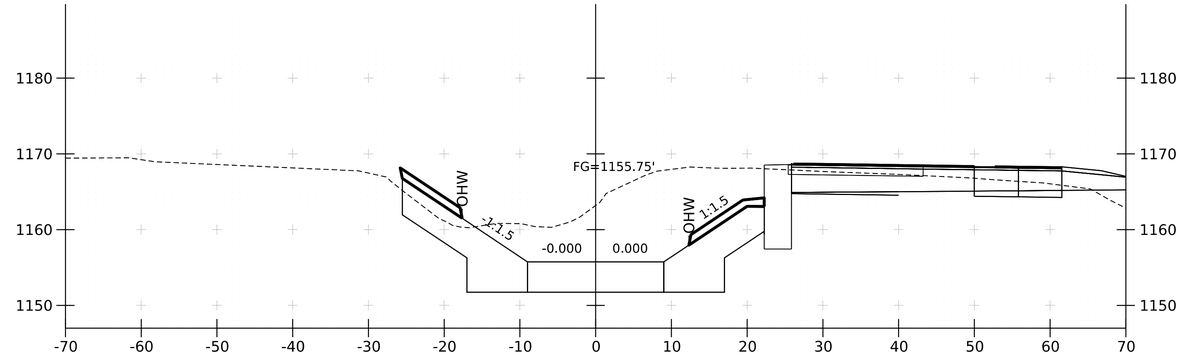


51+75

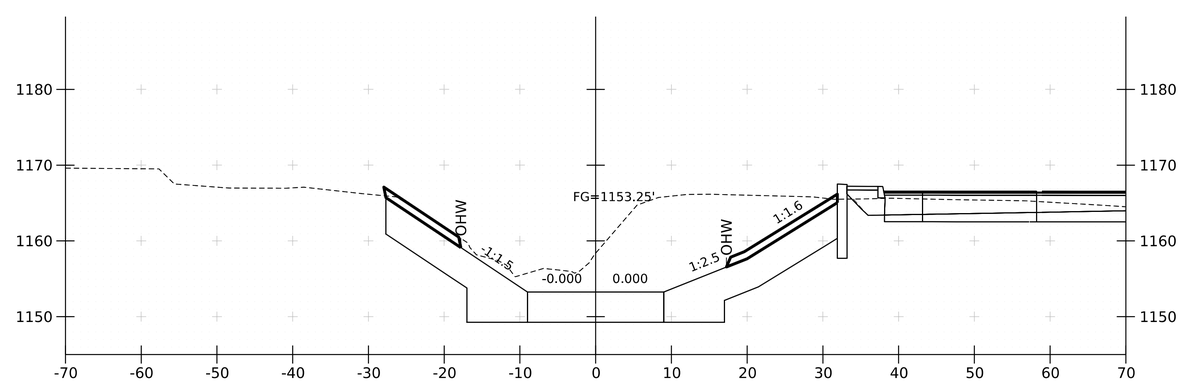
STA 51+66.00 LT
END MINI-FAN TYPICAL SECTION
BEGIN CHANNEL TYPICAL SECTION



51+50



52+50

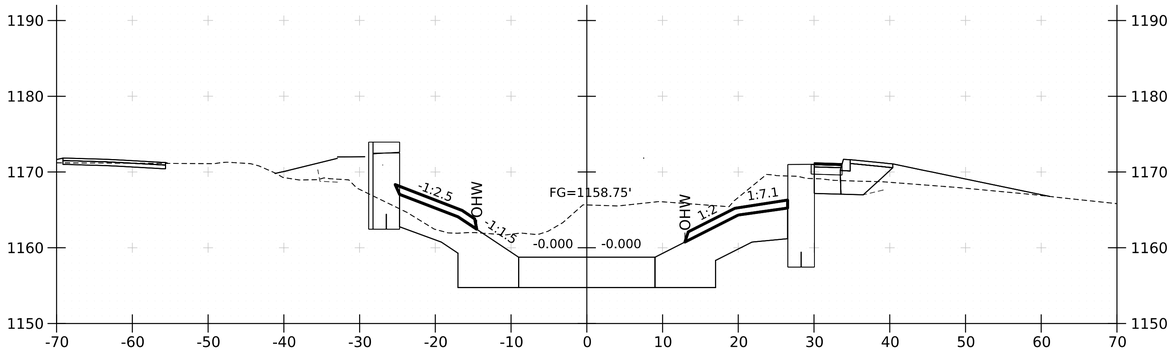


52+25

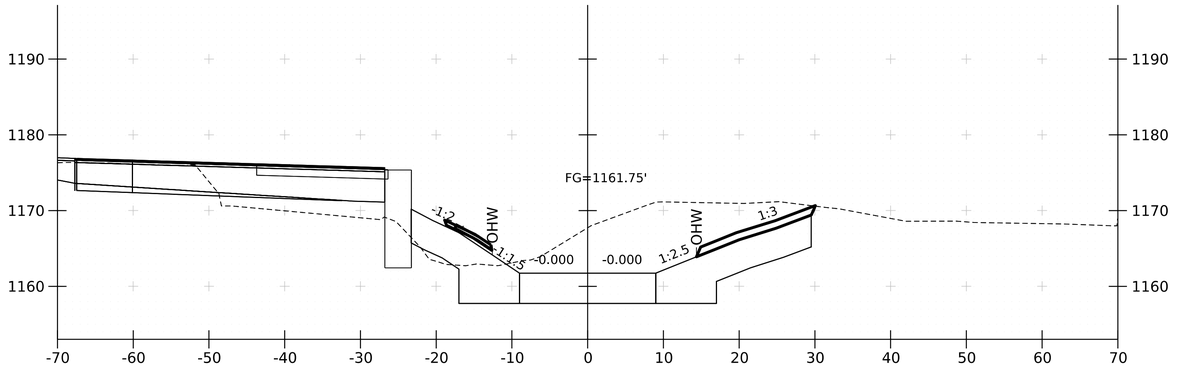
0 10 20
SCALE IN FEET

Stantec

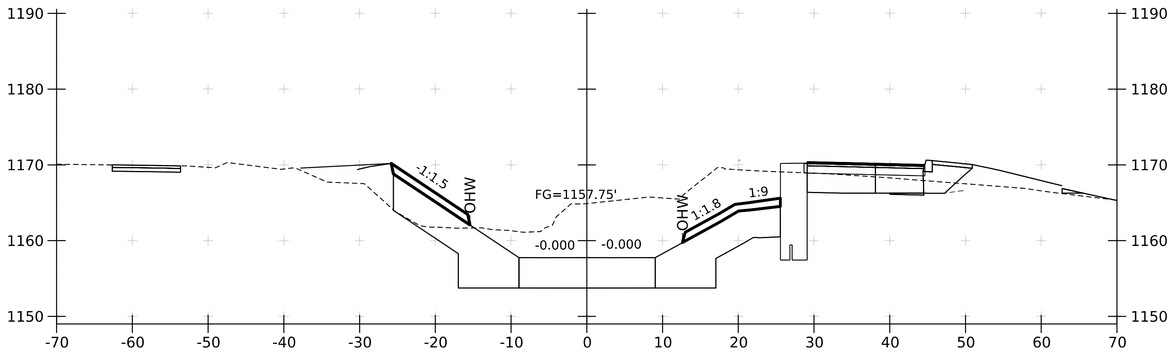
PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754xs_channel.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
CHANNEL CROSS SECTION SHEET 2	SHEET 22 OF 36



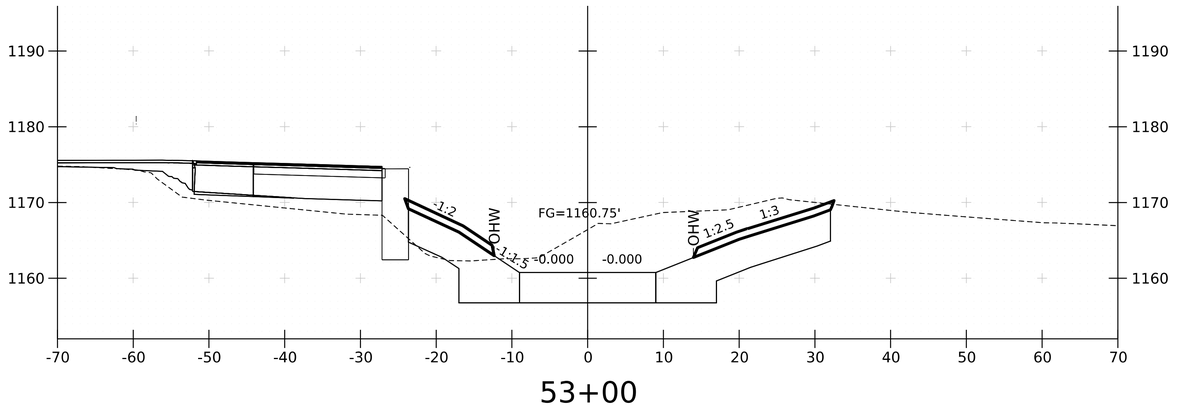
52+80



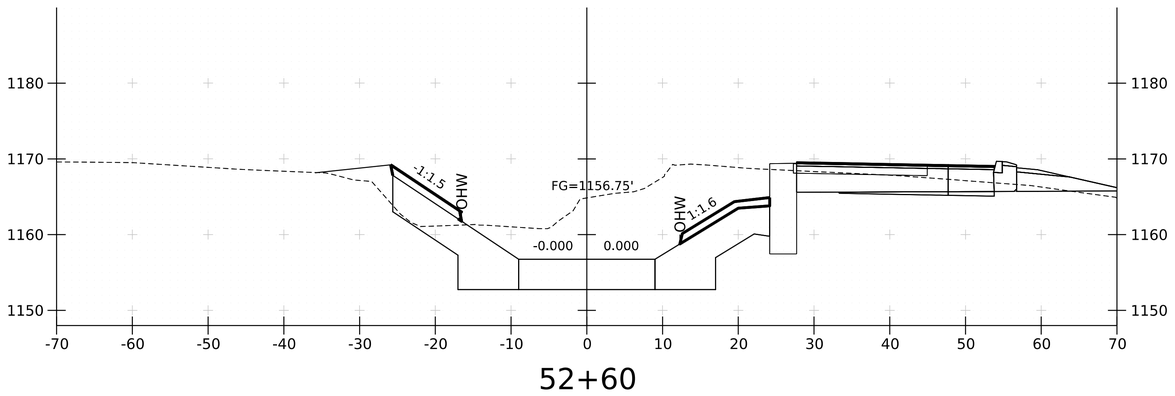
53+10



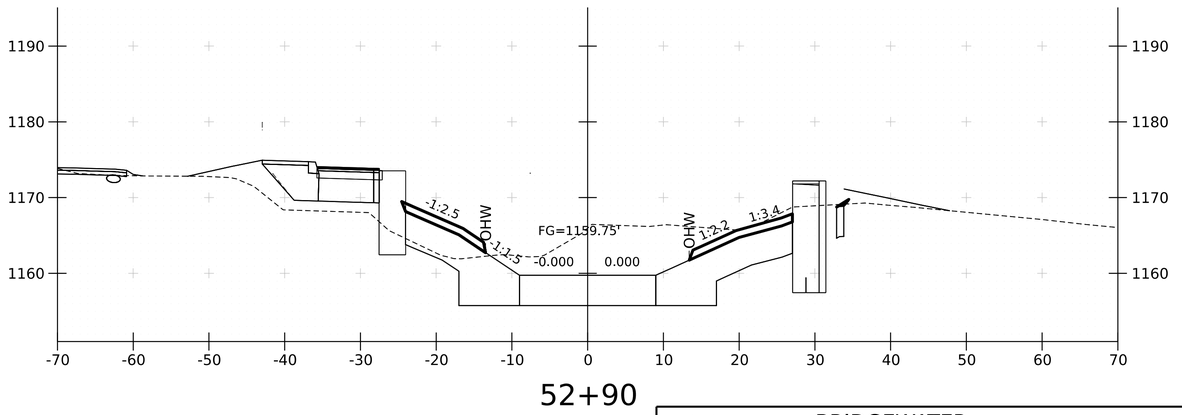
52+70



53+00



52+60

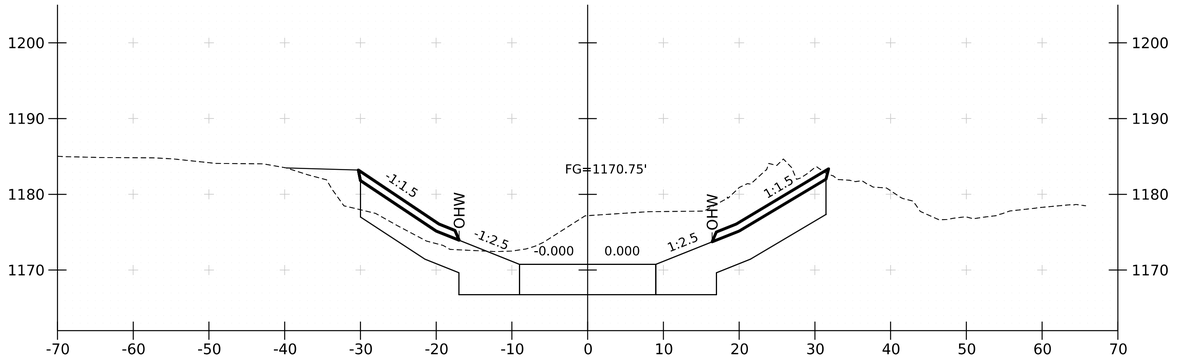


52+90

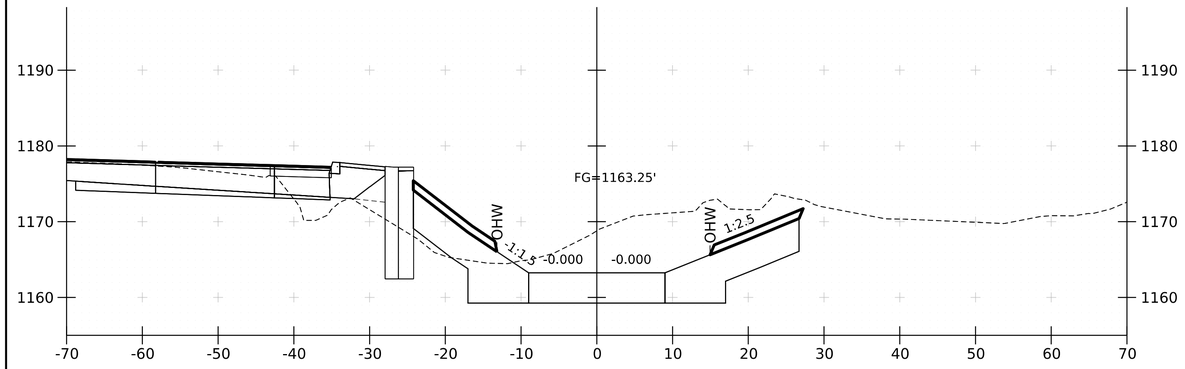
0 10 20
SCALE IN FEET

Stantec

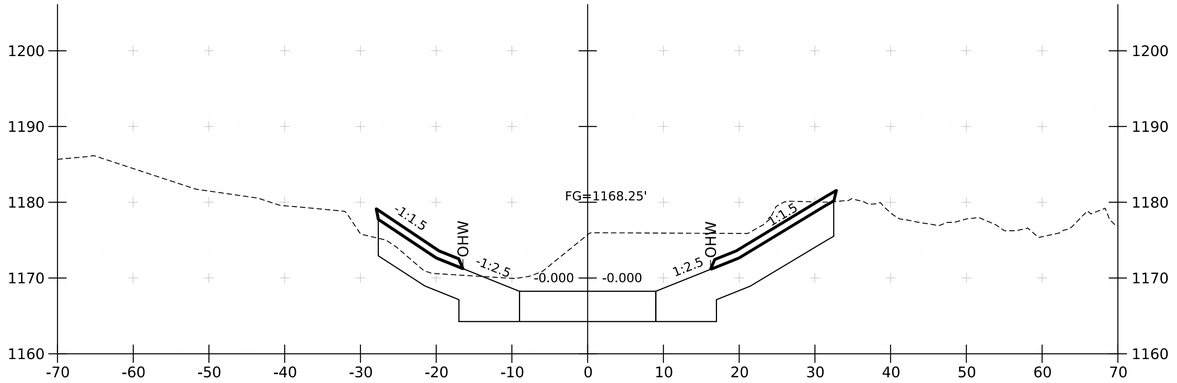
PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754xs_channel.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
CHANNEL CROSS SECTION SHEET 3	SHEET 23 OF 36



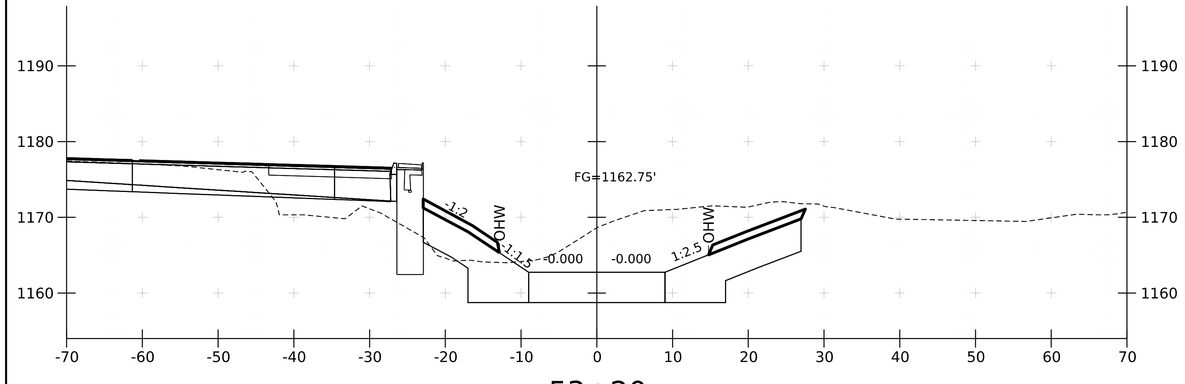
54+00



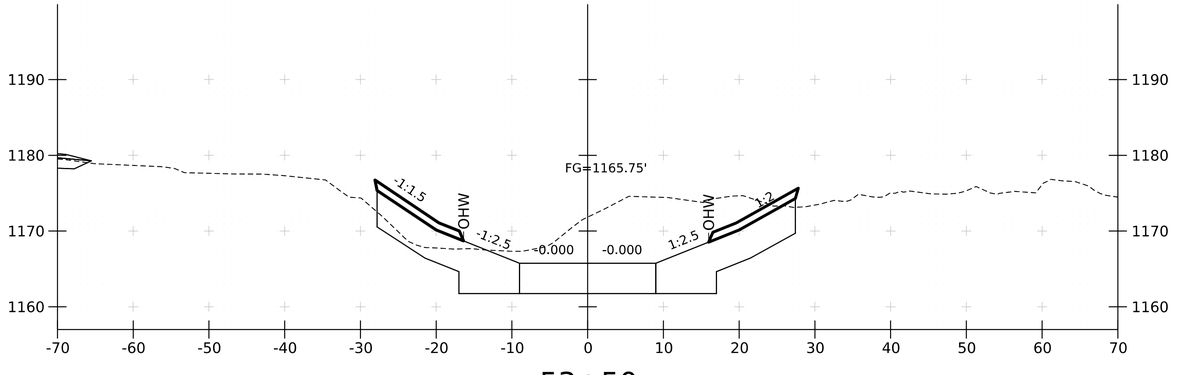
53+25



53+75



53+20



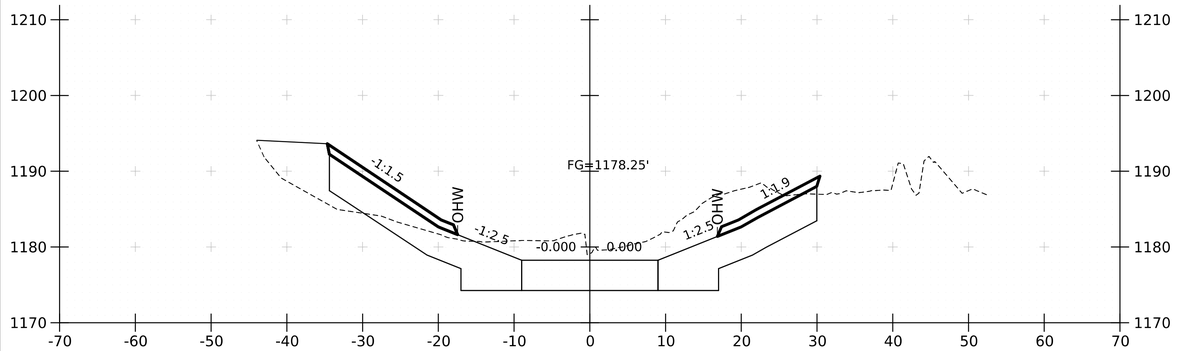
53+50

0 10 20

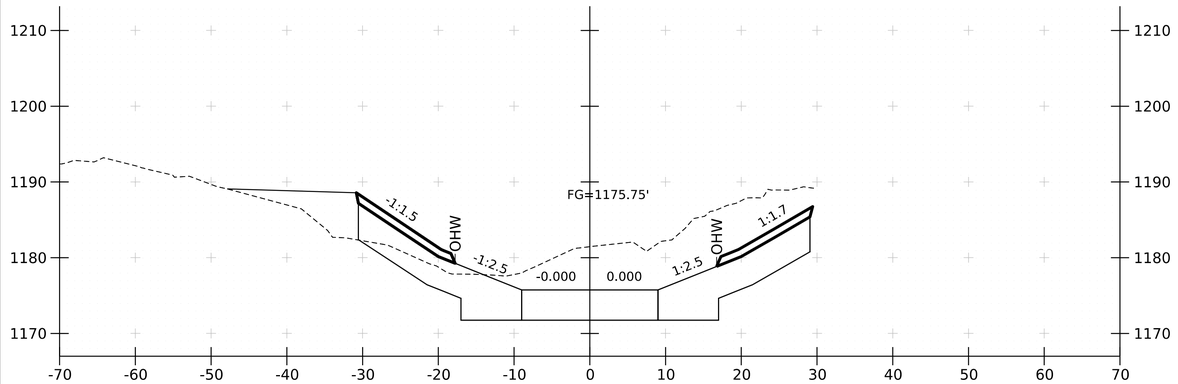
SCALE IN FEET

Stantec

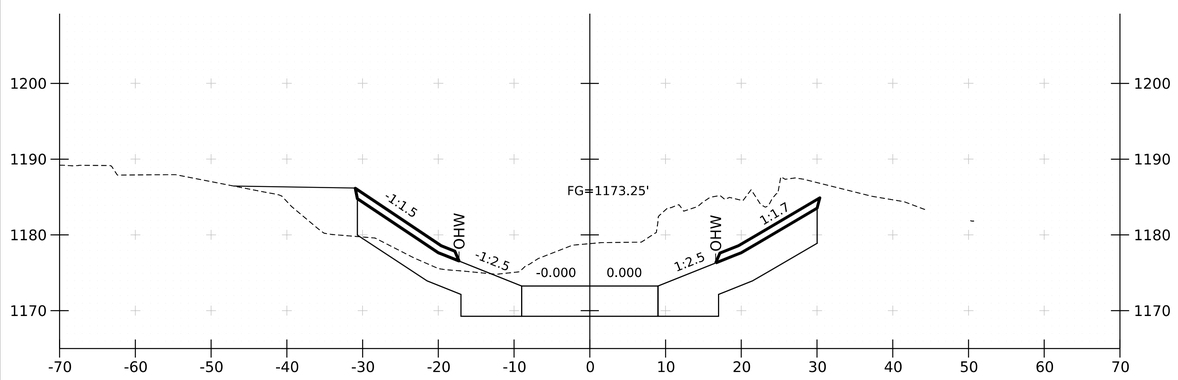
PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754xs_channel.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
CHANNEL CROSS SECTION SHEET 4	SHEET 24 OF 36



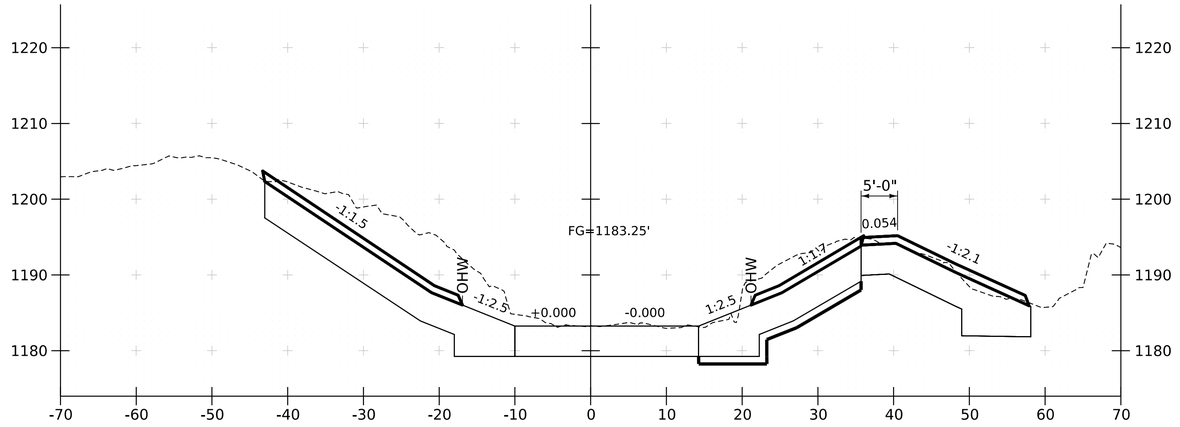
54+75



54+50

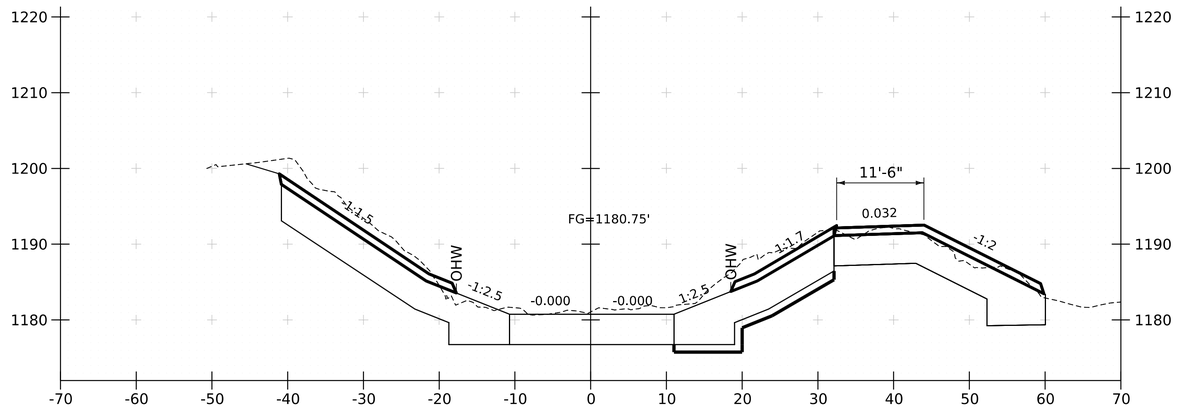


54+25



55+25

STA 55+00.00 RT
END CHANNEL TYPICAL SECTION
END GEOTEXTILE UNDER STONE FILL
BEGIN BERM TYPICAL SECTION
BEGIN GEOMEMBRANE LINER
BEGIN CRUSHED STONE BEDDING



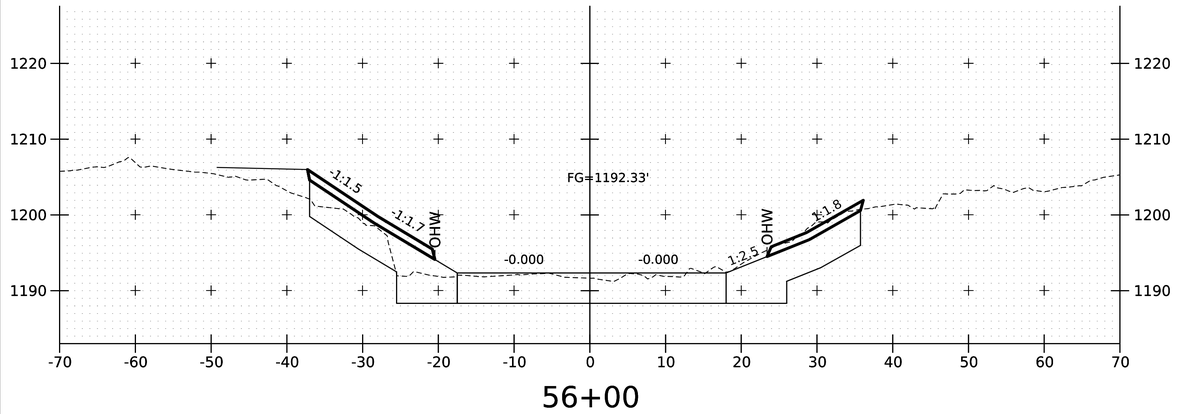
55+00

0 10 20
SCALE IN FEET

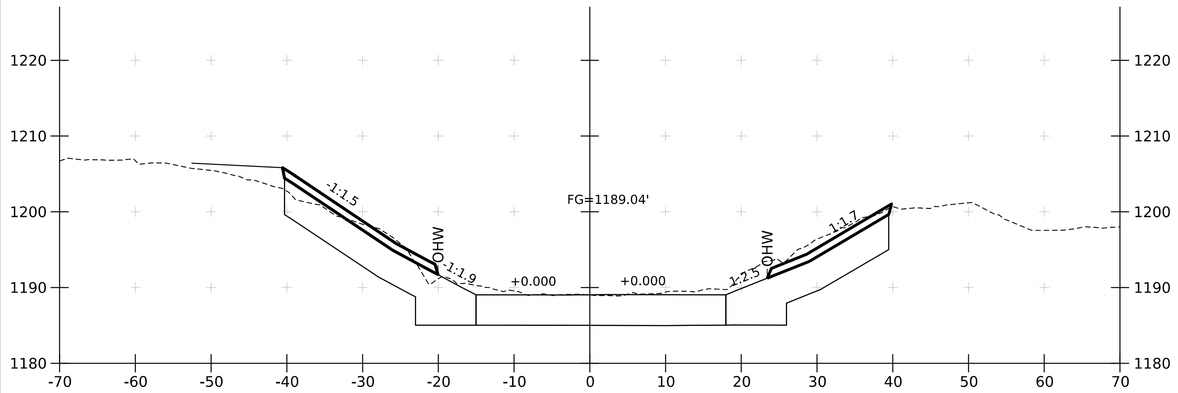
Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

FILE NAME:	z23b754xs_channel.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	J. GRIGAS
DESIGNED BY:	J. GRIGAS	CHECKED BY:	T. KNIGHT
CHANNEL CROSS SECTION SHEET 5		SHEET	25 OF 36

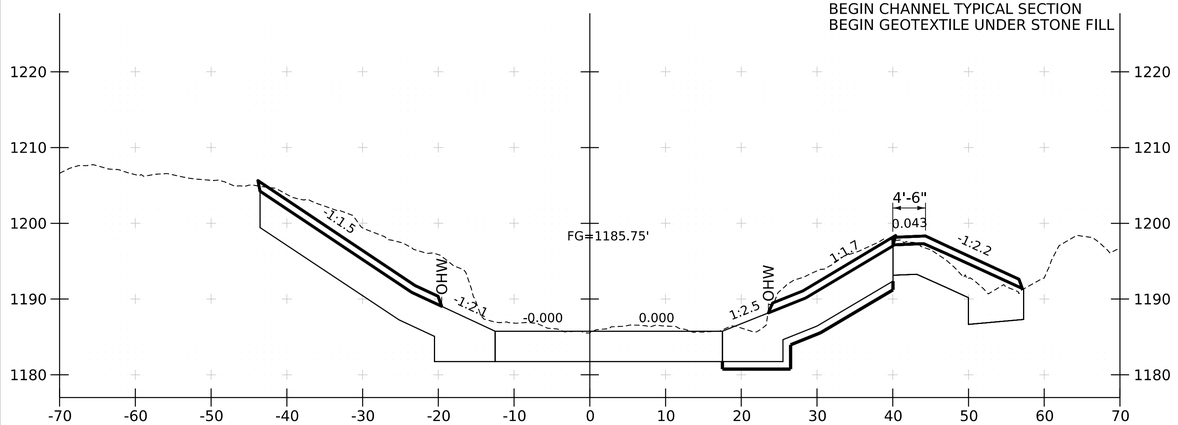


56+00

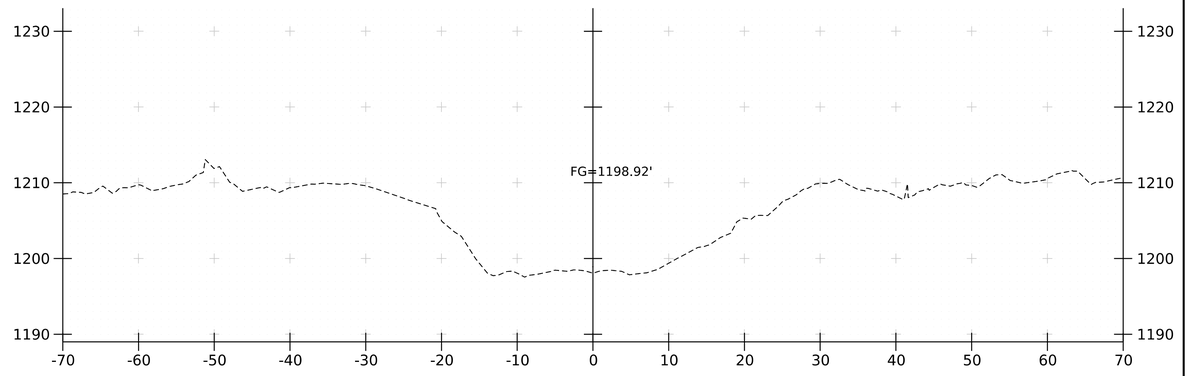


55+75

STA 55+58.11 RT
END BERM TYPICAL SECTION
END GEOMEMBRANE LINER
END CRUSHED STONE BEDDING
BEGIN CHANNEL TYPICAL SECTION
BEGIN GEOTEXTILE UNDER STONE FILL

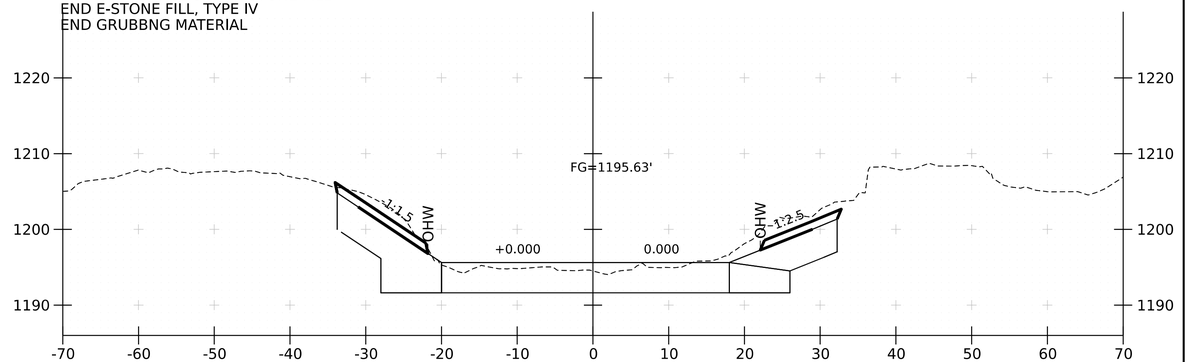


55+50



56+50

STA 56+25.00 LT/RT
END CHANNEL TYPICAL SECTION
END UNCLASSIFIED CHANNEL EXCAVATION
END GEOTEXTILE UNDER STONE FILL
END E-STONE FILL, TYPE IV
END GRUBBNG MATERIAL



56+25

0 10 20
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754xs_channel.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: J. GRIGAS
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
CHANNEL CROSS SECTION SHEET 6	SHEET 26 OF 36

EPSC PLAN NARRATIVE

1. PROJECT DESCRIPTION

THIS PROJECT INVOLVES FULL REPLACEMENT OF THE EXISTING BRIDGE ALONG WITH THE RELATED ROADWAY APPROACH AND CHANNEL WORK.

IT IS ANTICIPATED THAT CONSTRUCTION WILL LAST ONE SEASON.

2. AMOUNT OF DISTURBANCE & RISK EVALUATION

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 1.85 ACRES.

THE MAXIMUM CONCURRENT EARTH DISTURBANCE USED TO SCORE THIS PROJECT IN APPENDIX A RISK ASSESSMENT IS 1.85 ACRES.

THIS PROJECT REQUIRES COVERAGE UNDER GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES FOR MODERATE RISK PROJECTS.

ANY MODIFICATIONS TO THE PROJECT THAT INCREASE THE RISK TO ENVIRONMENTAL RESOURCES SHALL BE EVALUATED IN ACCORDANCE WITH THE PERMIT REQUIREMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

3. MAJOR COMPONENTS & SEQUENCING

THE CONTRACTOR SHALL SEQUENCE CONSTRUCTION ACTIVITIES TO MINIMIZE THE EXTENT OF DISTURBED SOILS LEFT OPEN TO EROSION AT ANY GIVEN TIME.
THE MAJOR COMPONENTS OF THE PROJECT AND A PROPOSED GENERAL SEQUENCE IS AS FOLLOWS:

CONSTRUCTION OF THE PROJECT WILL BE BROKEN INTO FOUR MAIN PHASES THAT CONSIST OF WIDENING THE EXISTING CHANNEL, DEMOLISHING THE EXISTING BRIDGE, CONSTRUCTING THE NEW BRIDGE AND ROADWAY APPPROACHES ON THE EXISTING ALIGNMENT AND THEN FINAL SITE GRADING AND CLEANUP TASKS.

PHASE 1
- ESTABLISH PERIMETER CONTROLS AND MARK PROJECT BOUNDARIES
- INSTALL SEDIMENT CONTROL MEASURES
- CLEARING
- WIDEN STREAM CHANNEL TO THE NORTH
- STABILIZE CHANNEL WITH STONE FILL AS INDICATED ON THE PLANS.

PHASE 2
- ADJUST PERIMETER CONTROLS AND PROJECT DEMARCATION, AS NECESSARY
- INSTALL OR ADJUST SEDIMENT CONTROL MEASURES
- REMOVE EXISTING SUPERSTRUCTURE
- REMOVE EXISTING ABUTMENTS AS SHOWN ON PLANS

PHASE 3
- ADJUST PERIMETER CONTROLS AND PROJECT DEMARCATION, AS NECESSARY
- INSTALL OR ADJUST SEDIMENT CONTROL MEASURES
- CONSTRUCT ABUTMENTS AND WINGWALLS
- BUILD FINAL EMBANKMENTS AND PLACE STONE FILL
- ERECT SUPERSTRUCTURE AND POUR BRIDGE DECK
- CONSTRUCT APPROACH SLABS
- PLACE ROADWAY SUBBASE
- PAVE ROADWAY AND BRIDGE DECK

PHASE 4
- ADJUST PERIMETER CONTROLS AND PROJECT DEMARCATION, AS NECESSARY
- INSTALL OR ADJUST SEDIMENT CONTROL MEASURES
- REMOVE ACCESS ROADS AND SHAPE FINAL SLOPES
- INSTALL PERMANENT STABILIZATION MEASURES

4. SITE DESCRIPTION
4.1 VEGETATED BUFFERS

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

THIS PROJECT DOES NOT RELY ON VEGETATED BUFFERS AS A MITIGATING RISK FACTOR. SINCE THIS PROJECT IS RECONSTRUCTION OF AN EXISTING STREAM CROSSING MAINTAINING BUFFERS IS NOT POSSIBLE.

4.2 STREAM CROSSINGS

THIS PROJECT INCLUDES 1 STREAM CROSSING, AS DESCRIBED IN SECTION 5.1 BELOW. WORK WITHIN THE WATER IS BEING AUTHORIZED THROUGH THE VANR DEC RIVER MANAGEMENT PROGRAM AND THE US ARMY CORPS OF ENGINEERS.

4.3 WETLANDS

THERE ARE NO WETLANDS OR WETLAND BUFFERS BEING IMPACTED WITHIN THE PROJECT LIMITS.

4.4 TOPOGRAPHY

THE TOPOGRAPHY OF THE PROJECT AREA IS WOODED IN A RURAL SETTING WITH ONE ADJACENT RESIDENCE

4.5 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF GRASSES ALONG THE ROADWAY AND WOODLANDS ADJACENT TO THE STREAM. IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY THE PROJECT. UPON COMPLETION, THE DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES AS DESCRIBED IN THE TURF ESTABLISHMENT DETAIL, UNLESS NOTED OTHERWISE.

4.6 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE. SOILS ON THE PROJECT SITE INCLUDE:
BERKSHIRE-TUNBRIDGE COMPLEX, VERY STONY, 35% TO 50% SLOPES, “K FACTOR” = 0.55]

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:
0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

4.7 OTHER SENSITIVE RESOURCES

THE PROJECT REQUIRES CHANNEL WORK IN MADDEN BROOK WITH CLEARING FOR THE NEW CHANNEL ALIGNMENT. BARRIER FENCE WILL BE USED TO LIMIT IMPACTS TO THE MINIMUM NECESSARY.

5. DRAINAGE
5.1 RECEIVING WATERS

MADDEN BROOK IS THE ONLY WATER SOURCE ON THE PROJECT SITE. RESIDENCES AND BUSINESSES WATER SUPPLIES ARE FROM MUNICIPAL WATER. THE BROOK IS CLASSIFIED AS STEEP, NARROW, WITH A CONFINED AND ARMORED CHANNEL AT THE SITE. THE STREAM BED CONSISTS OF GRAVEL, COBBLES AND BOULDERS. THE TRIBUTARY AREA AT THE BRIDGE CROSSING IS 2.17 MILES^2.

5.2 DISCHARGE POINTS

DUE TO THE NATURE OF A BRIDGE PROJECT BEING LOCATED DIRECTLY OVER THE RECEIVING WATER, THERE ARE NO DISCRETE DISCHARGE POINTS. ALL WATER FROM THE PROJECT AREA DRAINS TOWARD THE BROOK AND ENTERS THE RECEIVING WATER IN MULTIPLE LOCATIONS IN THE AREAS DIRECTLY ADJACENT TO THE BRIDGE.

5.3 CONVEYANCE/FLOW PATH FROM PROJECT TO WATERS

THE MAJORITY OF THE PROJECT IS NOT CURBED AND RUNOFF DRAINS OVERLAND ACROSS ADJACENT VEGETATED SIDE SLOPES BEFORE REACHING THE RECEIVING WATER.

6. EROSION PREVENTION AND SEDIMENT CONTROL MEASURES

THE MEASURES INCLUDED IN THIS PLAN ARE PROVIDED AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. IT IS EXPECTED THAT THE CONTRACTOR MAY USE THIS PLAN, WITH ADJUSTMENTS AS NECESSARY, BASED ON THEIR SPECIFIC MEANS AND METHODS OF CONSTRUCTION.

APPLYING THESE MEASURES THROUGHOUT CONSTRUCTION IS CRITICIAL TO THEIR SUCCESS IN MINIMIZING SEDIMENT TRANSPORT TO THE RECEIVING WATERS. REFER TO THE DETAILS INCLUDED IN THESE PLANS AND THE DEPARTMENT OF ENVIRONMENTAL CONSERVATION’S VERMONT STANDARDS AND SPECIFICATIONS FOR EROSION PREVENTION AND SEDIMENT CONTROL FOR SPECIFIC GUIDANCE.

6.1 IDENTIFY LIMITS OF DISTURBANCE

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED. PROJECT DEMARCATION FENCING (PDF) SHALL BE USED TO PHYSICALLY MARK SITE BOUNDARIES. BARRIER FENCE SHALL BE USED INSTEAD OF PROJECT DEMARCATION FENCE WITHIN 100 FEET OF A WATER RESOURCE (STREAM, BROOK, LAKE, POND, WETLAND, ETC).

6.2 LIMIT CONCURRENT DISTURBANCE

LIMITING THE AMOUNT OF SOIL EXPOSED AT ONE TIME REDUCES THE POTENTIAL EROSION ON SITE. CONCURRENT EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY AND EMPLOYING STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE.

6.3 STABILIZE DISTURBED AREAS
6.3.1 ACCESS POINTS/ENTRANCE/EXITS

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

STABILIZED CONSTRUCTION ENTRANCES ARE ANTICIPATED ON THIS PROJECT AND SHALL BE LOCATED AS SHOWN ON THIS EPSC PLAN AND ANYWHERE EQUIPMENT WILL BE GOING FROM AREAS OF EXPOSED SOILS TO PAVED SURFACES.

6.3.2 TEMPORARY MEASURES FOR EXPOSED AREAS DURING CONSTRUCTION

ALL AREAS OF EARTH DISTURBANCE MUST HAVE STABILIZATION IN PLACE WITHIN 14 DAYS OF INITIAL DISTURBANCE. AFTER THIS TIME, DISTURBED AREAS MUST BE STABILIZED IN ADVANCE OF ANY RUNOFF PRODUCING EVENT.

SEEDING OF TEMPORARY SLOPES AND STOCKPILES, AND STANDARD MULCHING PRACTICES DESCRIBED IN SPECIFICATION SECTION 653.07 SHALL BE UTILIZED TO TEMPORARILY STABILIZE DISTURBED AREAS.

6.3.3 PERMANENT STABILIZATION AT FINAL GRADE

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

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, ROLLED EROSION CONTROL PRODUCT, TYPE I SHALL BE USED INSTEAD OF MULCH.

6.4 DIVERT UPLAND RUNOFF

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

THE PROJECT AREA IS RELATIVELY FLAT; HOWEVER, ROUTE 100 SOUTH OF THE PROJECT AREA DRAINS TOWARD THE PROJECT AREA. RUNOFF FROM THESE AREAS MAY NEED TO BE DIVERTED AWAY FROM THE PROJECT AREA. THE CONTRACTOR SHALL REFER TO THE LOW RISK HANDBOOK FOR GUIDANCE.

6.5 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED ON THE DOWNHILL SIDE OF CONSTRUCTION ACTIVITIES, PRIOR TO ANY UP-SLOPE WORK.

FIBER ROLLS WILL BE INSTALLED ALONG THE CONTOURS AND AS PROPOSED ON THE EPSC PLAN.

6.6 SLOW DOWN CHANNELIZED RUNOFF

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

TEMPORARY STONE CHECK DAMS WILL BE INSTALLED AS SHOWN ON THE PLANS.

7. CONSTRUCT PERMANENT CONTROLS

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

PERMANENT STORMWATER TREATMENT DEVICES ARE NOT ANTICIPATED TO BE NEEDED AS DESIGNED.

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

FILE NAME: z23b754_det.dgn		PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	I. MAYNARD
DESIGNED BY:	I. MAYNARD	CHECKED BY:	J. GRIGAS
EPSC NARRATIVE SHEET 1		SHEET	27 OF 36

8. DEWATERING

DISCHARGE FROM DEWATERING ACTIVITIES THAT FLOWS OFF OF THE CONSTRUCTION SITE MUST NOT CAUSE OR CONTRIBUTE TO A VIOLATION OF THE VERMONT WATER QUALITY STANDARDS. DEWATERED STORMWATER OR GROUNDWATER MUST BE FILTERED AND ROUTED IN A MANNER THAT DOES NOT RESULT IN VISIBLY TURBID DISCHARGES TO WATERS.

DEWATERING OF SURFACE WATER WITHIN THE COFFERDAM IS ANTICIPATED. THE FILTER BAG DETAIL AND PAY ITEM HAVE BEEN INCLUDED AS A POTENTIAL TREATMENT MEASURE FOR THIS PURPOSE, HOWEVER THE SPECIFIC MEANS FOR TREATMENT OF DISCHARGE SHALL BE PROVIDED BY THE CONTRACTOR. ALL COSTS FOR TREATMENT OF DISCHARGE SHALL BE PAID FOR UNDER CONTRACT ITEM 653.4500.

9. OFF-SITE AREAS

OFF-SITE WASTE AND BORROW AREAS HAVE NOT BEEN IDENTIFIED FOR THIS PROJECT. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND PERMIT, AS NECESSARY, ANY OFF-SITE AREAS THAT ARE NEEDED IN ACCORDANCE WITH STANDARD SPECIFICATIONS 105.25 - 105.28. ALL EROSION PREVENTION AND SEDIMENT CONTROL MEASURES NECESSARY FOR WASTE, BORROW, AND STAGING AREAS OUTSIDE THE PROJECT LIMITS SHALL BE PAID FOR PER 105.29 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION.

VEHICLE AND EQUIPMENT STORAGE AREAS OR AREAS ADJACENT TO CONSTRUCTION TRAILERS OR OTHER HIGH TRAFFIC AREAS SHALL BE COVERED WITH GEOTEXTILE FABRIC AND 12" OF GRAVEL. FOLLOWING COMPLETION OF CONSTRUCTION, ALL NON-NATIVE MATERIALS SHALL BE REMOVED FROM THE STAGING AREA. COMPACTED, RUTTED, OR OTHERWISE DISTURBED SOILS SHALL BE TILLED, RAKED, SEEDED AND MULCHED.

ERODIBLE MATERIALS STOCKPILED WITHIN THE MATERIAL STORAGE AREAS SHALL BE ISOLATED WITH SILT FENCE OR OTHER ACCEPTABLE SEDIMENT BARRIER. SOIL STOCKPILED ON THE SITE SHALL BE SEEDED AND MULCHED.

10. WINTER CONSTRUCTION

CONSTRUCTION ACTIVITIES MAY CONTINUE INTO THE WINTER CONSTRUCTION SEASON, DEPENDING ON ACTUAL FIELD AND WEATHER CONDITIONS. IF ACTIVITIES ARE ON-GOING BETWEEN OCTOBER 15 AND APRIL 15, THE CONTRACTOR SHALL FOLLOW REQUIREMENTS FOR WINTER CONSTRUCTION, AS DEFINED IN SPECIFIC PERMIT CONDITIONS AND AS FOLLOWS:

- ENLARGED ACCESS POINTS, STABILIZED TO PROVIDE FOR SNOW STOCKPILING.
- LIMITS OF DISTURBANCE MOVED OR REPLACED TO REFLECT BOUNDARY OF WINTER WORK.
- DEVELOPMENT OF A SNOW MANAGEMENT PLAN THAT INCLUDES:
  - ADEQUATE STORAGE AND CONTROL OF MELT-WATER
  - STORAGE OF CLEARED SNOW TO BE PLACED DOWN SLOPE OF DISTURBED AREAS AND OUT OF STORMWATER TREATMENT STRUCTURES
- AREAS OF DISTURBANCE WITHIN 100 FT OF A WATERBODY MUST HAVE REINFORCED (WOVEN WIRE) SILT FENCE INSTALLED ACROSS THE SLOPE, DOWNGRADIENT OF THE EARTH DISTURBANCE. ALTERNATIVELY, REGULAR, NON-WOVEN WIRE SILT FENCE MAY BE USED IF COMBINED WITH EROSION CONTROL BERM, EROSION LOG, OR STRAW WATTLE.
- DRAINAGE STRUCTURES MUST BE KEPT OPEN AND FREE OF SNOW AND ICE DAMS.
- SILT FENCE AND OTHER PRACTICES REQUIRING EARTH DISTURBANCE MUST BE INSTALLED AHEAD OF FROZEN GROUND.
- MULCH TO BE APPLIED AT A MINIMUM OF 2 INCHES DEPTH WITH 80-90% COVERAGE.
- AREAS OF DISTURBED SOILS MUST BE STABILIZED PRIOR TO ANY RUNOFF-PRODUCING EVENT, WITH THE FOLLOWING EXCEPTION:
  - STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURRING IN A SELF-CONTAINED EXCAVATION WITH NO OUTLET AND A DEPTH OF 2 FT OR GREATER (OPEN UTILITY TRENCHES), PROVIDED THAT ANY DEWATERING, IF NECESSARY, IS CONDUCTED AS REQUIRED.
- PRIOR TO STABILIZATION, SNOW OR ICE MUST BE REMOVED TO LESS THAN 1" THICKNESS.
- USE STONE TO STABILIZE AREAS WHERE CONSTRUCTION VEHICLE TRAFFIC IS ANTICIPATED.

11. INSPECTION & MAINTENANCE

INSPECTION AND MONITORING OF THE PROJECT'S EPSC MEASURES SHALL BE CONDUCTED IN ACCORDANCE WITH STANDARD SPECIFICATION 653.04 MONITORING EROSION PREVENTION AND SEDIMENT CONTROL PLAN, ALONG WITH PERMIT SPECIFIC INSPECTION REQUIREMENTS.

THE CONTRACTOR SHALL PROVIDE A COPY OF THEIR INSPECTION FORM AS PART OF THEIR EPSC PLAN.

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

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_det.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: J. GRIGAS
EPSC NARRATIVE SHEET 2	SHEET 28 OF 36

58E WINDSOR
BERKSHIRE-TUNBRIDGE COMPLEX
WITH 35%-50% SLOPES, VERY STONY
K FACTOR = 0.55

MATCHLINE STA. 54+25

N/F
OZSVATH, SIGMUND
&
OZSVATH, DAVID

P
L

VT STATE PLANE GRID

UTILITY EASEMENT
B: 33 P: 120

UTILITY EASEMENT
B: 33 P: 120

GUY POLE
COMB 19 / 19
MADDEN BROOK
HVCTRL 24
6" PVC STAND PIPE @WOODEN
BRIDGE #116
GRAVEL DRIVE
AER E&T
15" CPEP
VT 100 TO PLYMOUTH
VT ROUTE 100
54+00
53+00
4+00
5+00
6+00
7+00
8+00
9+00
COMB 19 / 18 / 18
EXISTING R.O.W.
VT 100 TO KILLINGTON
HVCTRL 3
HVCTRL 51
15" CGMP
6" PVC COMB 19 - 1
EXISTING STONE FILL
66" CGMP
GUY POLE
4X4 CONC VTHD UP 1'
HVCTRL 100
MADDEN BROOK
B7500
CHANNEL RIGHTS
PROJECT S 0147 (2)
51+00
50+00
EXISTING R.O.W.
(2)
UTILITY EASEMENT
B: 36 P: 85
N/F
CALABRESE, THOMAS J.
RESERVOIR BROOK

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_bdr_ex cond.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: S. VERITY
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
EXISTING CONDITIONS PLAN SHEET 1	SHEET 29 OF 36

131E WINDSOR
LYMAN-TUNBRIDGE- ROCK OUTROCK COMPLEX
WITH 35%-60% SLOPES
K FACTOR = 0.37

42F
LYMAN - ROCK OUTROCK COMPLEX
WITH 35%-60% SLOPES
K FACTOR = 0.37

58E WINDSOR
BERKSHIRE-TUNBRIDGE COMPLEX
WITH 35%-50% SLOPES, VERY STONY
K FACTOR = 0.55

N

VT STATE PLANE GRID

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_bdr_ex cond.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: S. VERITY
DESIGNED BY: J. GRIGAS	CHECKED BY: T. KNIGHT
EXISTING CONDITIONS PLAN SHEET 2	SHEET 30 OF 36

58E WINDSOR
BERKSHIRE-TUNBRIDGE COMPLEX
WITH 35%-50% SLOPES, VERY STONY
K FACTOR = 0.55

N/F
OZSVATH, SIGMUND
&
OZSVATH, DAVID

UTILITY EASEMENT
B: 33 P: 120

UTILITY EASEMENT
B: 33 P: 120

EXISTING R.O.W.

EXISTING R.O.W.

MATCHLINE STA. 54+25

54+00

53+00

5+00

6+00

7+00

8+00

9+00

4+00

BRIDGE #116

GUY POLE

COMB
19 / 19

COMB
19 / 18 / 18

6" PVC STAND PIPE
@WOODEN

HVCTRL
54

HVCTRL
51

HVCTRL
3

HVCTRL
100

15"
CPEP

15"
CGMP

66"
CGMP

PVC
COMB
19

EXISTING
STONE FILL

GRAVEL
DRIVE

GRAVEL
DRIVE

VT 100
TO PLYMOUTH

VT ROUTE 100

VT 100
TO KILLINGTON

AER E&T

PDF

FR

BF

P

L

4X4 CONC
VTHD UP 1'

MADDEN BROOK

MARDEN BROOK

CHANNEL RIGHTS
PROJECT S 0147 (2)

51+00

50+00

UTILITY EASEMENT
B: 36 P: 85

(2)

N/F
CALABRESE, THOMAS J.

RESERVOIR BROOK

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_bdr_ero_const.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: J. GRIGAS
EPSC CONSTRUCTION PLAN SHEET 1	SHEET 31 OF 36

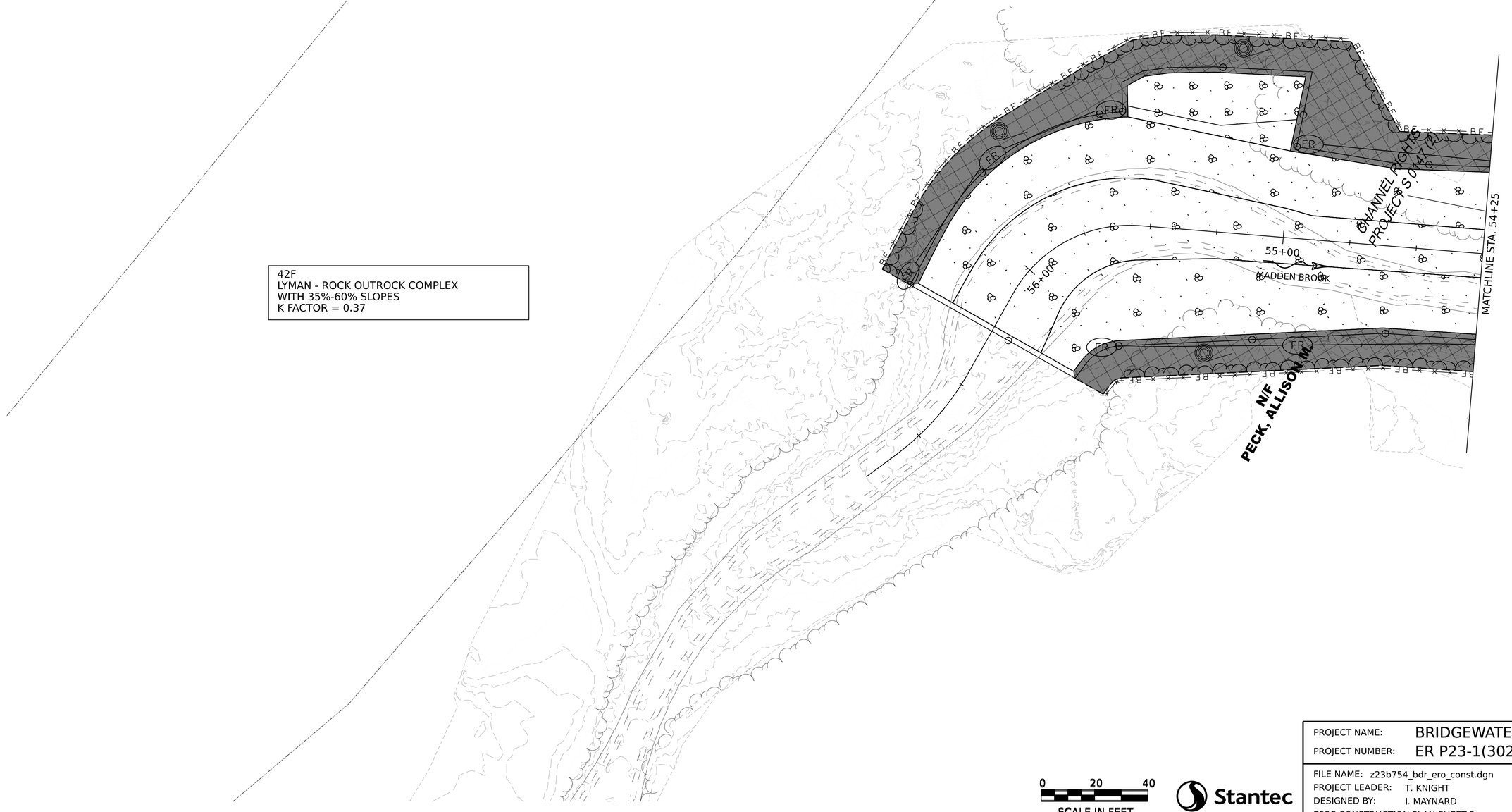
131E WINDSOR
LYMAN-TUNBRIDGE- ROCK OUTROCK COMPLEX
WITH 35%-60% SLOPES
K FACTOR = 0.37

42F
LYMAN - ROCK OUTROCK COMPLEX
WITH 35%-60% SLOPES
K FACTOR = 0.37

58E WINDSOR
BERKSHIRE-TUNBRIDGE COMPLEX
WITH 35%-50% SLOPES, VERY STONY
K FACTOR = 0.55

N

VT STATE PLANE GRID



0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)

FILE NAME:	z23b754_bdr_ero_const.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	I. MAYNARD
DESIGNED BY:	I. MAYNARD	CHECKED BY:	J. GRIGAS
EPSC CONSTRUCTION PLAN SHEET 2		SHEET	32 OF 36

58E WINDSOR
BERKSHIRE-TUNBRIDGE COMPLEX
WITH 35%-50% SLOPES, VERY STONY
K FACTOR = 0.55

N
VT STATE PLANE GRID

MATCHLINE STA. 54+25

1180'
54+00
1170'
1160'
53+00
5+00
4+00
6+00
7+00
8+00
9+00
1150'
51+00
50+00

FR

GUY POLE
COMB 19 / 19
AER E&T
GRAVEL DRIVE
15" CPEP
VT 100 TO PLYMOUTH
VT ROUTE 100
HVCTRL 54
6" PVC STAND PIPE SWOLLEN
BRIDGE #116
COMB 19 / 18 / 18
HVCTRL 51
15" CGMP
6" PVC COMB 19
EXISTING STONE FILL
GRAVEL DRIVE
66" CGMP
VT 100 TO KILLINGTON
HVCTRL 3
4X4 CONC VTHD UP 1'
GUY POLE
MADDEN BROOK
HADGEN BROOK
HVCTRL 100
RESERVOIR BROOK

0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER
PROJECT NUMBER:	ER P23-1(302)
FILE NAME: z23b754_bdr_ero_final.dgn	PLOT DATE: 2-OCT-2024
PROJECT LEADER: T. KNIGHT	DRAWN BY: I. MAYNARD
DESIGNED BY: I. MAYNARD	CHECKED BY: J. GRIGAS
EPSC FINAL PLAN SHEET 1	SHEET 33 OF 36

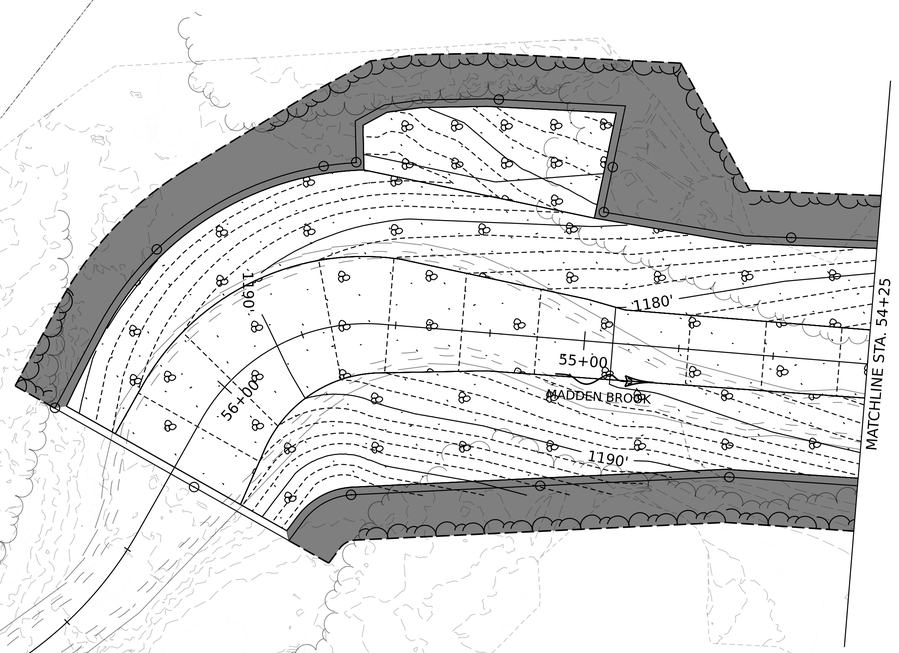
131E WINDSOR
LYMAN-TUNBRIDGE- ROCK OUTROCK COMPLEX
WITH 35%-60% SLOPES
K FACTOR = 0.37

42F
LYMAN - ROCK OUTROCK COMPLEX
WITH 35%-60% SLOPES
K FACTOR = 0.37

58E WINDSOR
BERKSHIRE-TUNBRIDGE COMPLEX
WITH 35%-50% SLOPES, VERY STONY
K FACTOR = 0.55

N

VT STATE PLANE GRID



0 20 40
SCALE IN FEET

Stantec

PROJECT NAME:	BRIDGEWATER		
PROJECT NUMBER:	ER P23-1(302)		
FILE NAME:	z23b754_bdr_ero_final.dgn	PLOT DATE:	2-OCT-2024
PROJECT LEADER:	T. KNIGHT	DRAWN BY:	I. MAYNARD
DESIGNED BY:	I. MAYNARD	CHECKED BY:	J. GRIGAS
EPSC FINAL PLAN SHEET 2		SHEET	34 OF 36

VAOT POLLINATOR DRY			
% OF MIX	LATIN NAME	COMMON NAME	CULTIVAR/ ECOTYPE
6	AGROSTIS PERENNANS	AUTUMN BENTGRASS,	APB (NY)
25.2	ANDROPOGON GERARDII	BIG BLUESTEM	APB (NY)
0.5	ASCLEPIAS SYRIACA	COMMON MILKWEED	ANY
0.8	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	PA
25	ELYMUS VIRGINICUS	VIRGINIA WILDRYE	MADISON OR PA
0.6	MONARDA FISTULOSA	WILD BERGAMOT	FIG (PA)
20	PANICUM CLANDESTINUM	DEERTONGUE	TIOGA
1.5	RUDBECKIA HIRTA	BLACK EYED SUSAN	ANY
20	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	ANY
0.2	SOLIDAGO JUNCEA	EARLY GOLDENROD	PA
0.2	SOLIDAGO RUGOSA	WRINKLE LEAF GOLDENROD	PA
100%			

SEED RATE: 60 LBS/ACRE PURE LIVE SEED (PLS)
30 LBS/ACRE OF NURSE CROP
30 LBS/ACRE OF BULKING AGENT

*PREFERRED SEEDING PERIOD FOR POLLINATOR SEED MIX IS BEFORE MAY 1 (AFTER SNOWMELT) AND AFTER SEPTEMBER 15 (BEFORE SNOWPACK). IF SEEDING OCCURS DURING THE PREFERRED PERIOD, SEEDING RATE SHALL BE REDUCED BY 30%. NO ADJUSTMENT IS REQUIRED FOR NURSE CROPS OR BULKING AGENTS).

DESIGN GUIDANCE

1. THIS SEED MIX SHALL BE USED IN AREAS THAT WILL NATURALIZE, RECEIVING MOWING ONCE EVERY 3 YEARS OR LESS.
2. USE SEED MIX FOR AREAS THAT ARE SLOPED OR FLAT, WITH NORMAL TO DRY CONDITIONS, OR AS INDICATED IN THE PLANS.

CONSTRUCTION GUIDANCE

1. SEE VAOT POLLINATOR SEED CONSTRUCTION GUIDANCE DETAIL FOR MORE INFORMATION ON INSTALLATION AND BULKING AGENT.

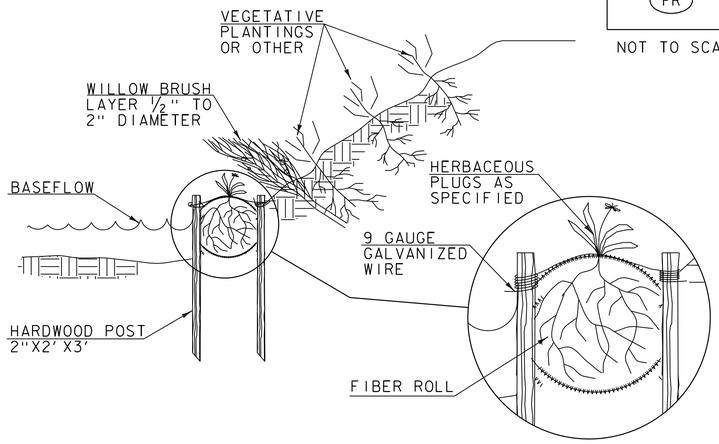
TURF ESTABLISHMENT

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.1600 TURF ESTABLISHMENT, SPECIALTY SEED)

REVISIONS	
JUNE 21, 2023	BKD

SYMBOL: FR

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. EXCAVATE A SHALLOW TRENCH SLIGHTLY BELOW BASEFLOW OR A 4" TRENCH ON SLOPE CONTOURS
2. PLACE THE ROLL IN THE TRENCH AND ANCHOR WITH 2"X2" POSTS PLACED ON BOTH SIDES FO THE ROLL AND SPACED LATERALLY ON 2' TO 4' CENTERS. TRIM THE TOP OF THE POSTS EVEN WITH THE EDGE OF THE ROLL, IF NECESSARY.
3. NOTCH THE POSTS AND TIE TOGETHER, ACROSS THE ROLL, WITH 9 GAUGE GALVANIZED WIRE OR 1/8" DIAMETER BRAIDED NYLON ROPE.
4. PLACE SOIL EXCAVATED FROM THE TRENCH BEHIND THE ROLL AND HAND TAMP. PLANT WITH SUITABLE HERBACEOUS OR WOODY VEGETATION AS SPECIFIED ELSEWHERE IN THE CONTRACT DOCUMENTS. VEGETATION SHALL BE PLACED IMMEDIATELY ADJACENT TO THE ROLL TO PROMOTE ROOT GROWTH INTO THE FIBER. HERBACEOUS VEGETATION, IF SPECIFIED, SHALL BE PLANTED INTO THE FIBER ROLL.

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

FIBER ROLL (EROSION LOG)

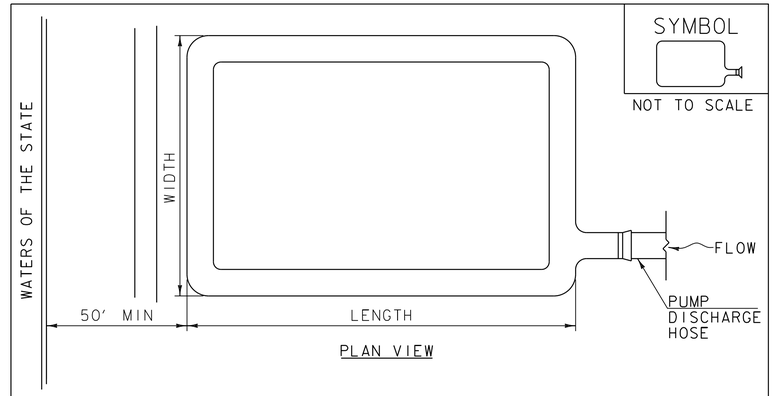
NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006- " FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 FOR EROSION LOG (PAY ITEM 653.60)

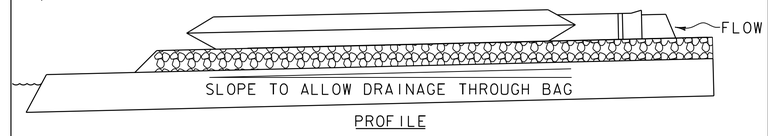
REVISIONS	
MARCH 21, 2008	WHF
JANUARY 13, 2009	WHF

SYMBOL

NOT TO SCALE



PLAN VIEW



PROFILE

CONSTRUCTION SPECIFICATIONS

1. THE PRIMARY PURPOSE OF FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS.
2. FILTER BAGS SHALL BE INSTALLED ON A VEGETATED SLOPE GRADED TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG.
3. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.
4. FILTER BAGS SHALL BE LOCATED A MINIMUM OF 50' FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.
5. THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.
6. A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE.
7. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSC PLAN OR AS DIRECTED BY THE ENGINEER.

FILTER BAG

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 FILTER BAG (PAY ITEM 653.45) AND AS SPECIFIED IN THE CONTRACT.

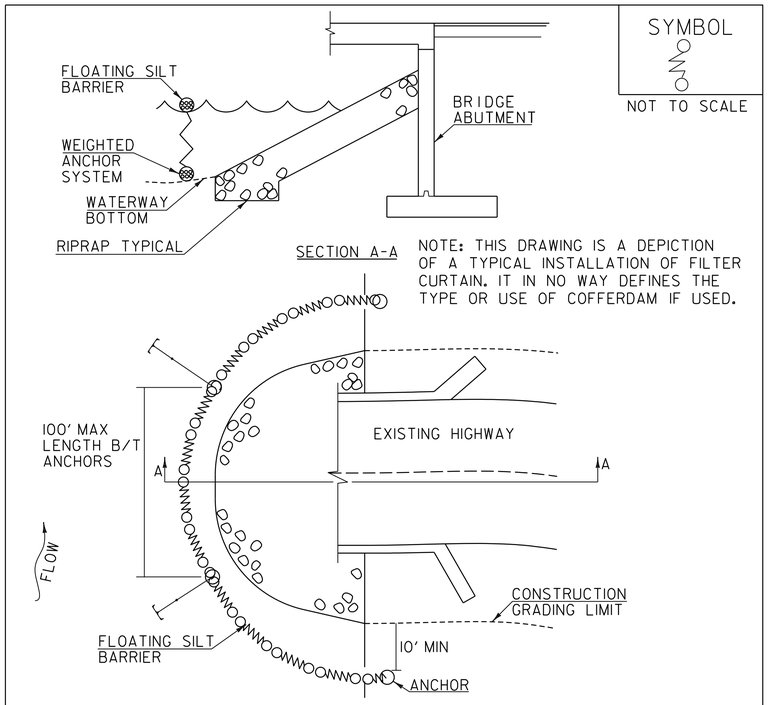
REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF

Stantec

PROJECT NAME: BRIDGEWATER
PROJECT NUMBER: ER P23-1(302)

FILE NAME: z23b754_det.dgn
PROJECT LEADER: T. KNIGHT
DESIGNED BY: J. GRIGAS
EPSC DETAIL SHEET 1

PLOT DATE: 2-OCT-2024
DRAWN BY: D. BARNES
CHECKED BY: T. KNIGHT
SHEET 35 OF 36



SECTION A-A

NOTE: THIS DRAWING IS A DEPICTION OF A TYPICAL INSTALLATION OF FILTER CURTAIN. IT IN NO WAY DEFINES THE TYPE OR USE OF COFFERDAM IF USED.

CONSTRUCTION SPECIFICATIONS

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

FILTER CURTAIN

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

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

Stantec

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EPSC DETAIL SHEET 2	SHEET 36 OF 36