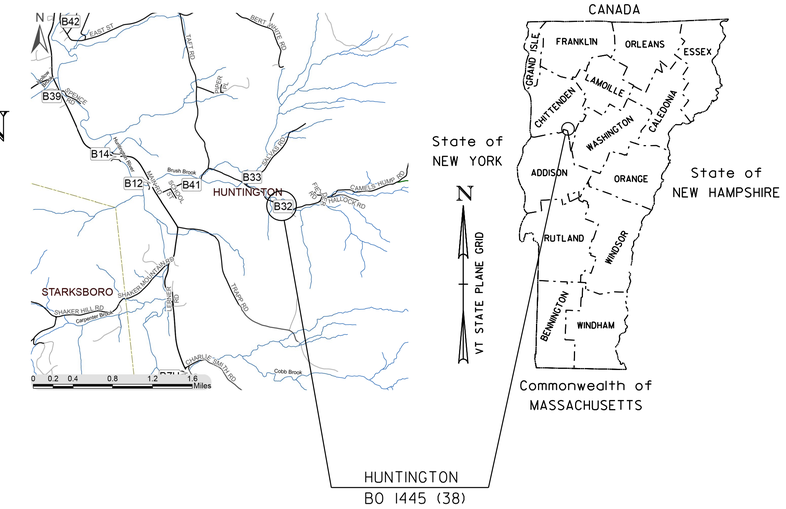
REVIEWER NOTES:

1. TRAFFIC TO BE MAINTAINED ON A ONE WAY TEMPORARY BRIDGE.
2. TH 2 (CAMELS HUMP ROAD) WILL BE CLOSED TO TRAFFIC FOR 48 HOURS TO MOVE THE EXISTING TEMPORARY BRIDGE TO ITS NEW LOCATION FOR THE MAINTAINING TRAFFIC.

STATE OF VERMONT
AGENCY OF TRANSPORTATION



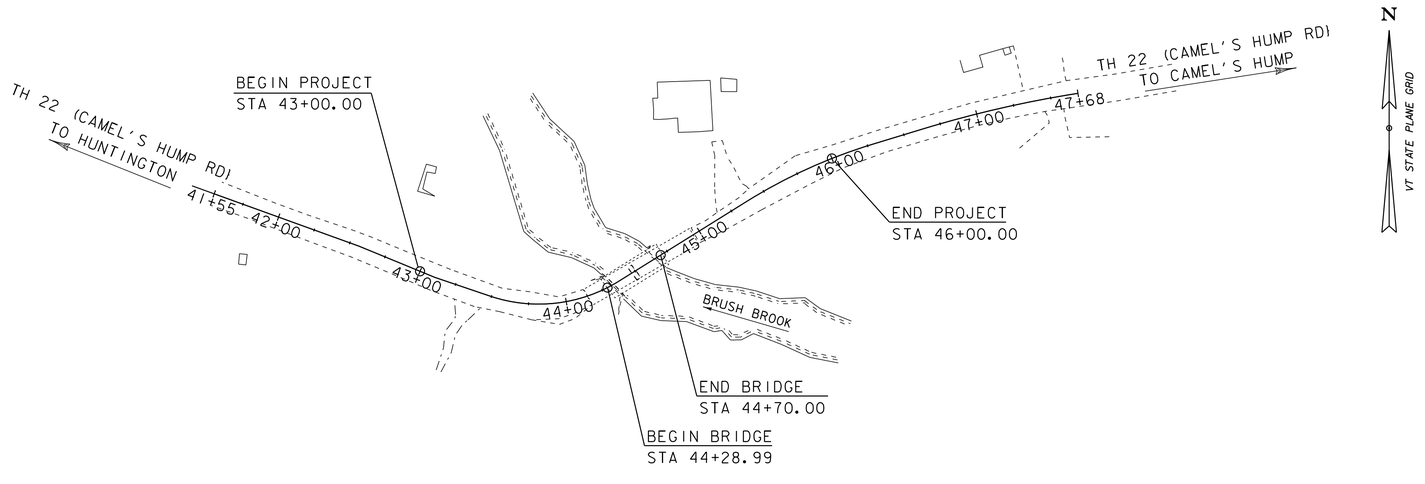
PROPOSED IMPROVEMENT
BRIDGE PROJECT

TOWN OF HUNTINGTON
COUNTY OF CHITTENDEN

ROUTE NO : TOWN HIGHWAY 22, (CAMELS HUMP ROAD), CLASS 3, LOCAL BRIDGE NO : 32
PROJECT LOCATION: - 0.9 MILES EAST OF JUNCTION WITH TOWN HIGHWAY 4 (TAFT ROAD) (CLASS 3)

PROJECT DESCRIPTION: REPLACEMENT OF EXISTING BRIDGE WITH A NEW BRIDGE ON EXISTING ALIGNMENT, WITH RELATED CHANNEL AND ROADWAY WORK.

LENGTH OF STRUCTURE:	41.11 FEET
LENGTH OF ROADWAY:	341.11 FEET
LENGTH OF PROJECT:	300.00 FEET



SCALE 1" = 50'-0"
50 0 50

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 :	R. GILMAN
SURVEYED DATE :	12/29/2016
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (92)

FINAL PLANS
12-JUL-2021

HIGHWAY DIVISION, CHIEF ENGINEER
APPROVED _____ DATE _____

PROJECT MANAGER : ROB YOUNG P.E.

PROJECT NAME : HUNTINGTON
PROJECT NUMBER : BO 1445(38)

SHEET 1 OF 50 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET (BRIDGE)

Version
LRFD

INDEX OF SHEETS

PLAN SHEETS

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E-11	CHECK DAM, TYPE I	04-07-2020
E-12	STABILIZED CONSTRUCTION ENTRANCE	04-07-2020
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S-367A	BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING	02-02-2017
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S-500	CONCRETE DETAILS AND NOTES	04-07-2020
S-501	CONCRETE DETAILS AND NOTES	04-07-2020
T-42	BRIDGE NUMBER PLAQUE	04-09-2014

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2018	230	55	61	7.9	15
2038	260	60	61	11.3	30

20 year ESAL for flexible pavement from 2018 to 2038 : 81000
40 year ESAL for flexible pavement from 2018 to 2058 : 189000
Design Speed : 30 mph

AS BUILT "REBAR" DETAIL

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

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: 7/20/20

DRAINAGE AREA : 5.73 sq. mi.
CHARACTER OF TERRAIN : Woody and Mountainous
STREAM CHARACTERISTICS : Straight with narrow floodplain
NATURE OF STREAMBED : Cobble with boulder and ledge outcrops

PEAK FLOW DATA - ANNUAL EXCEEDANCE PROBABILITY (AEP)

43% =	490 cfs	2% =	1,500 cfs
10% =	920 cfs	1% =	1,900 cfs
4% =	1,300 cfs	0.2% =	2,800 cfs

DATE OF FLOOD OF RECORD : Unknown
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : @ 43% AEI= 7.1 fps
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Unknown
IS ORDINARY RISE RAPID? Unknown
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: 0% HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Single Span Rolled Beam with Timber Deck
YEAR BUILT: 1925
CLEAR SPAN(NORMAL TO STREAM): 28 ft
VERTICAL CLEARANCE ABOVE STREAMBED: 11.27 ft
WATERWAY OF FULL OPENING: 324.1 sq. ft. +/-
DISPOSITION OF STRUCTURE: Replacement
TYPE OF MATERIAL UNDER SUBSTRUCTURE: Ledge and Glacial Till (See Borings)

WATER SURFACE ELEVATIONS AT:

43% AEP =	943.8 ft	VELOCITY =	8.3 fps
10% AEP =	945.1 ft	"	10.6 fps
4% AEP =	946.2 ft	"	12.3 fps
2% AEP =	946.7 ft	"	13.1 fps
1% AEP =	947.6 ft	"	14.1 fps

LONG TERM STREAMBED CHANGES: Unknown

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
FREQUENCY: No
RELIEF ELEVATION: N/A
DISCHARGE OVER ROAD @ 1% AEP: N/A

UPSTREAM STRUCTURE

TOWN: Huntington DISTANCE: 1,630 ft
HIGHWAY # : 22 STRUCTURE #: BR 31
CLEAR SPAN: 36.0 ft CLEAR HEIGHT: Unknown
YEAR BUILT: 2001 FULL WATERWAY: Unknown
STRUCTURE TYPE: Single Span Cast-in-Place Concrete Deck

DOWNSTREAM STRUCTURE

TOWN: Huntington DISTANCE: 3,250 ft
HIGHWAY # : 21 STRUCTURE #: BR 34
CLEAR SPAN: 31.0 ft CLEAR HEIGHT: Unknown
YEAR BUILT: 2004 FULL WATERWAY: Unknown
STRUCTURE TYPE: Single Span Cast-in-Place Concrete Deck

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	2.1	1.34					
POSTING							
OPERATING	2.72	1.73	2.91	1.51	2.04	1.88	2.57
COMMENTS:							

PROPOSED STRUCTURE

STRUCTURE TYPE: Single Span Steel Beam with Cast-in-Place Concrete Deck

CLEAR SPAN(NORMAL TO STREAM): 35.6 ft
VERTICAL CLEARANCE ABOVE STREAMBED: 12.2 ft
WATERWAY OF FULL OPENING: 355.5 sq. ft. +/-

WATER SURFACE ELEVATIONS AT:

43% AEP =	943.8 ft	VELOCITY=	7.1 fps
10% AEP =	945.1 ft	"	9.7 fps
4% AEP =	946.1 ft	"	11.6 fps
2% AEP =	946.7 ft	"	12.4 fps
1% AEP =	947.6 ft	"	13.8 fps

IS THE ROADWAY OVERTOPPED BELOW 1% AEP: No
FREQUENCY: N/A
RELIEF ELEVATION: N/A
DISCHARGE OVER ROAD @ 1% AEP: N/A

BRIDGE LOW CHORD ELEVATION: 950.19 ft
FREEBOARD: @ 4% AEP = 4.1 ft

SCOUR: 14.5-ft of Total Scour is estimated*

REQUIRED CHANNEL PROTECTION: Stone Fill Type IV**

PERMIT INFORMATION

AVERAGE DAILY FLOW:	-	DEPTH OR ELEVATION:
ORDINARY LOW WATER:	-	-
ORDINARY HIGH WATER:	-	-

TEMPORARY BRIDGE REQUIREMENTS

STRUCTURE TYPE: N/A
CLEAR SPAN (NORMAL TO STREAM): N/A
VERTICAL CLEARANCE ABOVE STREAMBED: N/A
WATERWAY AREA OF FULL OPENING: N/A

ADDITIONAL INFORMATION

*Calculations does not account for variable ledge. An additonal boring may be necessary to determine bottom of footing or pile elevation.
**E-Stone, Type IV should be used for all in channel work.

TRAFFIC MAINTENANCE NOTES

1. MAINTAIN ONE-WAY TRAFFIC ON A TEMPORARY BRIDGE.
2. INSTALL AND MAINTAIN TRAFFIC SIGNALS.
3. SIDEWALKS ARE NOT NECESSARY
4. THE APPROACHES FOR THE TEMPORARY BRIDGE SHALL NOT BE PAVED.

DESIGN VALUES

1. DESIGN LIVE LOAD		- - -
2. FUTURE PAVEMENT	d_p:	N/A INCH
3. DESIGN SPAN	L:	38.00 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:	4.0 KSI
9. HIGH PERFORMANCE CONCRETE, CLASS PCS	f'_c:	3.5 KSI
10. CONCRETE HIGH PERFORMANCE, CLASS SCC	f'_c:	- - -
11. CONCRETE, CLASS C	f'_c:	3.0 KSI
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:	20.0 KSF
17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD)	ϕ:	0.45
18. PILE RESISTANCE FACTOR	ϕ:	N/A
19. LATERAL PILE DEFLECTION	Δ:	N/A INCH
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.		- - -

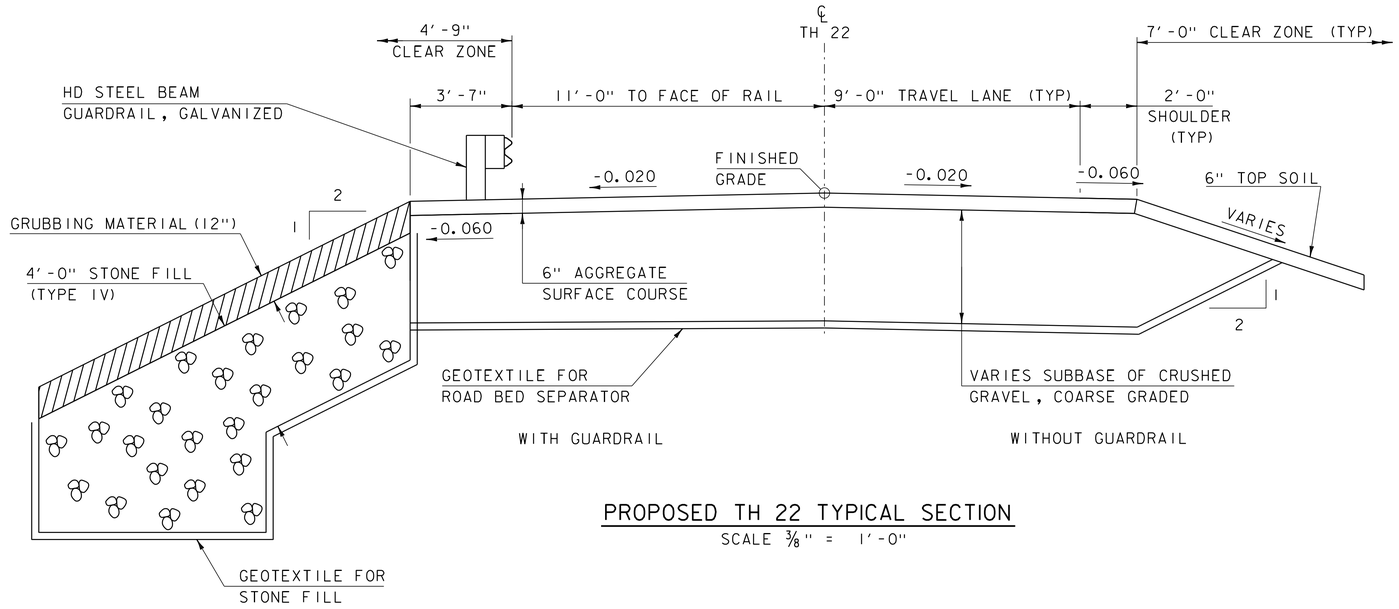
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630pi.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
PERLIMINARY INFORMATION SHEET

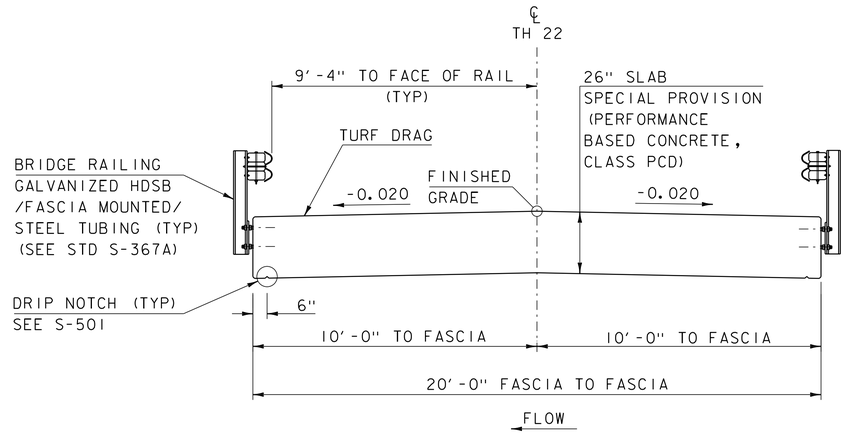
PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: D. PETERSON
SHEET 2 OF 50

MATERIAL TOLERANCES
(IF USED ON PROJECT)

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

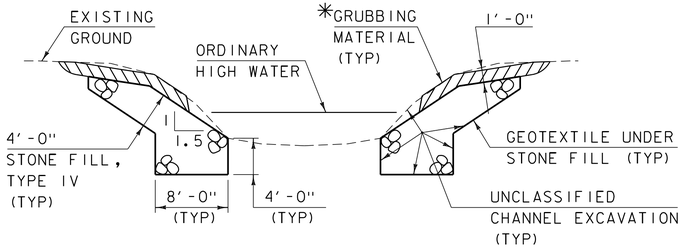


PROPOSED TH 22 TYPICAL SECTION
SCALE 3/8" = 1'-0"



PROPOSED BRIDGE TYPICAL SECTION
SCALE 3/8" = 1'-0"

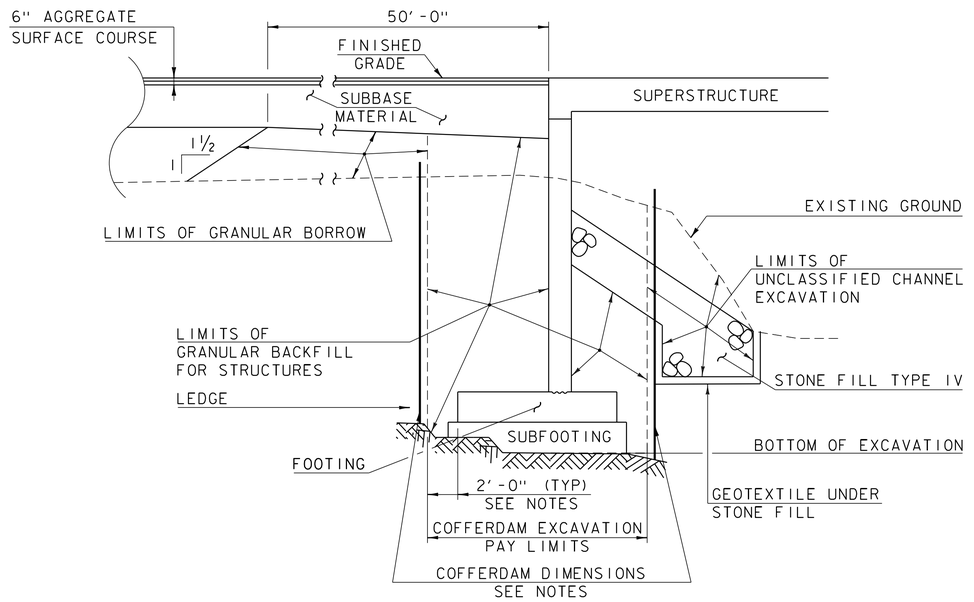
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: sl2j630typ.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
TYPICAL SECTIONS 1	SHEET 3 OF 50



TYPICAL CHANNEL SECTION

(NOT TO SCALE)

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



COFFERDAM AND EARTHWORK SECTION

(NOT TO SCALE)

COFFERDAM NOTES

1. COFFERDAM DIMENSIONS TO BE DETERMINED BY THE CONTRACTOR.

2. THE PAY LIMITS OF "COFFERDAM EXCAVATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK" SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING AND FROM BOTTOM OF EXCAVATION UP TO THE EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.

3. IF A COFFERDAM IS CONSTRUCTED WHICH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION. NO MEASUREMENT AND PAYMENT WILL BE MADE FOR COFFERDAM EXCAVATION AND GRANULAR BACKFILL FOR STRUCTURES OUTSIDE THE PAY LIMITS DEFINED IN NOTE 2.

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: sl2j630typ.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
TYPICAL SECTIONS 2	SHEET 4 OF 50

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION 2018 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 9th EDITION, AND THEIR LATEST REVISIONS.

EARTHWORK AND RELATED ITEMS

2. ITEM 529.15 “REMOVAL OF STRUCTURE” SHALL INCLUDE REMOVAL OF THE ENTIRE SUPERSTRUCTURE, EXISTING PIER BENT AND FOOTING AND ANY PORTIONS OF THE EXISTING ABUTMENTS THAT FALL OUTSIDE THE LIMITS OF COFFERDAM EXCAVATION, STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION.

3. THE EXISTING MABEY TEMPORARY BRIDGE SHALL BE RELOCATED AND USED AS THE OFF ALIGNMENT TEMPORARY BRIDGE FOR THE DURATION OF THE PROJECT. THE RELOCATION AND REMOVAL WILL BE PAID UNDER ITEM 900.645 SPECIAL PROVISION (RELOCATE AND REMOVE EXISTING TEMPORARY BRIDGE).

4. GEOTEXTILE LANDSCAPE FABRIC MEETING THE REQUIREMENTS OF SECTION 720, SHALL BE PLACED UNDER ANY TEMPORARY APPROACH FILL REQUIRED FOR THE TEMPORARY BRIDGE. PAYMENT SHALL BE INCIDENTAL TO 900.645 SPECIAL PROVISON (REMOVE AND RELOCATE EXISTING TEMPORARY BRIDGE).

5. ANY BEDROCK ENCOUNTERED IN A LOCATION WHERE SUBBASE MATERIAL IS TO BE PLACED, SHALL BE REMOVED AND PAID FOR UNDER ITEM 205.20 “DRILLING AND BLASTING OF SOLID ROCK SUBGRADE”.

TRAFFIC CONTROL

6. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE-SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. THE PLAN SHALL CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED. THE PLAN SHALL SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE-WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE, AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. ALL COST WILL BE INCLUDED IN ITEM 641.11, “TRAFFIC CONTROL, ALL-INCLUSIVE”.

7. FULL ACCESS TO ALL DRIVES AND SIDE ROADS WITHIN PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. WHEN THE CONTRACTOR MUST TEMPORARILY RESTRICT ACCESS TO THE DRIVES, THE CONTRACTOR SHALL GIVE THE PROPERTY OWNERS 24 HOUR ADVANCE NOTICE. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.11, TRAFFIC CONTROL, ALL-INCLUSIVE.

8. ITEM 900.640, “SPECIAL PROVISION (FABRIC SCREENING FENCE)” SHALL BE INSTALLED PRIOR TO THE START OF THE WORK.

9. THE CONTRACTOR SHALL MINIMIZE IMPACTS TO THE MAPLE TREES ON THE HELEN KEITH PROPERTY IN THE DESIGN OF THE TEMPORARY BRIDGE. THE ERECTION AND APPROACH ROADWAY CONSTRUCTION SHALL MINIMIZE IMPACTS TO THE ROOT SYSTEM AND OVERHEAD BRANCHES. THE SUBMITTAL SHALL INCLUDE PROPOSED IMPACTS OF EACH NUMBERED TREE SHOWN ON THE PLANS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (REMOVE AND RELOCATE EXISTING TEMPORARY BRIDGE.).

EPSC

10. THIS PROJECT WILL UTILIZE THE VT DEC LOW RISK SITE HANDBOOK FOR EPSC. NO SITE-SPECIFIC EPSC PLAN IS INCLUDED. THE CONTRACTOR SHALL SUBMIT A SITE-SPECIFIC EPSC PLAN, IN ACCORDANCE WITH SECTION 653 OF THE STANDARD SPECIFICATIONS, FOR CONSTRUCTION. ESTIMATED QUANTITIES FOR EPSC WORK HAVE BEEN INCLUDED IN THE CONTRACT FOR BIDDING PURPOSES. IF THE CONTRACTORS EPSC PLAN REQUIRES ITEMS OF WORK THAT ARE NOT INCLUDED IN THE PLANS, IT SHALL BE PAID FOR AS PART OF ITEM 653.03 MAINTENANCE OF EPSC PLAN.

11. TOTAL EARTH DISTURBANCE IS 0.41 ACRES.

12. THE EXISTING CONDITIONS SHEET HAS BEEN INCLUDED FOR THE CONTRACTOR TO USE FOR SUBMITTALS.

CONCRETE

13. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE SUPERSTRUCTURE BETWEEN DRIP NOTCHES.

14. THE CORK BETWEEN THE ABUTMENT CHEEK WALLS AND THE BRIDGE SUPERSTRUCTURE SHALL BE INCLUDED IN THE UNIT PRICE FOR THE ADJACENT CONCRETE ITEM. THE CORK SHALL BE COVERED WITH POLYURETHANE JOINT SEALER MEETING THE REQUIREMENTS OF 707.05. PAYMENT FOR JOINT SEALER SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE PAY ITEM.

15. ALL CONCRETE FOR THE ABUTMENTS SHALL MEET THE REQUIREMENTS FOR AND BE PAID FOR UNDER ITEM 900.608, SPECIAL PROVISION (PERFORMANCE-BASED CONCRETE, CLASS PCS).

16. ALL CONCRETE FOR THE CAST IN PLACE DECK SLAB SHALL MEET THE REQUIREMENTS FOR AND BE PAID FOR UNDER ITEM 900.608, SPECIAL PROVISION (PERFORMANCE-BASED CONCRETE CLASS PCD).

17. THE DECK SLAB SHALL BE POURED IN ONE CONTINUOUS POUR WITH A MAXIMUM DURATION OF EIGHT HOURS. IF CIRCUMSTANCES BEYOND THE CONTRACTOR’S CONTROL PREVENT THIS FROM BEING ACCOMPLISHED, A TRANSVERSE CONSTRUCTION JOINT SHALL BE USED BETWEEN ADJACENT POURS. A MINIMUM 96 HOUR DELAY BETWEEN ADJACENT POURS SHALL BE OBSERVED.

18. ALL CORNERS OF CONCRETE SHALL BE CHAMFERED 1” UNLESS NOTED OTHERWISE.

19. THE DECK SLAB SHALL BE CAST TO AN INITIAL THICKNESS OF 26 INCHES. AFTER THE DECK SLAB HAS BEEN CURED AND THE BRIDGE RAIL INSTALLED THE ENTIRE BRIDGE DECK SLAB SURFACE SHALL BE DIAMOND GROUND A NOMINAL 0.5 INCH FOR A RESULTING DECK THICKNESS OF 25.5 INCHES. PAYMENT WILL BE MADE UNDER ITEM 900.670, “SPECIAL PROVISION (CONCRETE BRIDGE DECK SURFACE PREPARATION)”.

REINFORCING STEEL

20. ALL REINFORCING STEEL IN THE DECK SLAB SHALL BE CORROSION PROTECTION LEVEL I (EPOXY COATED) ITEM 507.11 REINFORCING STEEL, LEVEL I (EPOXY COATED)

21. ALL REINFORCING IN THE ABUTMENTS AND WINGWALL SHALL BE CORROSION PROTECTION LEVEL I, ITEM 507.11 REINFORCING STEEL, LEVEL I.

SUBSTRUCTURE ON BEDROCK

22. THE SUBFOOTING FOR ABUTMENTS AND WINGWALLS WILL BE FOUNDED ON BEDROCK AND SHALL BE PLACED ON CLEAN COMPETENT ROCK FREE OF LOOSE ROCK AND DEBRIS.

23. BEDROCK SHOWN IN THE PLANS IS NOT REPRESENTATIVE OF ACTUAL CONDITIONS BUT AN EXAMPLE OF HOW THE FOUNDATIONS CAN BE CONSTRUCTED ON BEDROCK. THE CONTRACTOR WILL BE RESPONSIBLE FOR ESTABLISHING ACTUAL ELEVATIONS.

24. UPON COMPLETION OF EXCAVATION FOR SUBSTRUCTURES FOUNDED ON BEDROCK AND PRIOR TO PLACING FORMWORK, THE ENGINEER SHALL NOTIFY THE PROJECT MANAGER AND THE VTRANS STATE GEOLOGIST. THE GEOLOGIST WILL DETERMINE IF THE BEDROCK IS COMPETENT TO OBTAIN THE REQUIRED NOMINAL BEARING RESISTANCE. THE CONTRACTOR SHALL NOTIFY THE ENGINEER 72 HOURS PRIOR TO WHEN THE ANALYSIS WILL BE NEEDED.

25. THE SUBSTRUCTURES HAVE BEEN DESIGNED FOR THE FOOTING ELEVATIONS SHOWN ON THE PLANS. THE INTENTION IS TO USE SUBFOOTINGS OF CONCRETE, CLASS "C" IN AREAS WHERE THE LEDGE IS MORE THAN 1 FOOT BELOW THE DESIGN BOTTOM OF FOOTING ELEVATIONS. AFTER THE BEDROCK HAS BEEN EXPOSED, ADJUSTMENTS TO THE BOTTOM OF FOOTING ELEVATIONS MAY BE NECESSARY TO MINIMIZE THE BEDROCK REMOVAL AND/OR REDUCE THE AMOUNT OF SUBFOOTING CONCRETE. CONTACT THE PROJECT MANAGER FOR POSSIBLE REDESIGN IF THE BEDROCK PROFILES DIFFER FROM THOSE SHOWN ON THE PLANS. NO FURTHER WORK SHALL BE DONE ON THE SUBFOOTINGS UNTIL A REPLY IS RECEIVED FROM THE PROJECT MANAGER. A TURN-AROUND TIME OF UP TO FIVE BUSINESS DAYS MAY BE EXPECTED.

26. ANY BEDROCK THAT NEEDS TO BE REMOVED, ACCORDING TO THE ENGINEER OR THE GEOLOGIST, WILL BE PAID FOR WITH THE CORRESPONDING EXCAVATION ITEM INCLUDED IN THE CONTRACT. OVERBREAK EXCEEDING THE AVERAGE MAXIMUM ALLOWANCE SPECIFIED IN SUBSECTION 204.06 (B) (1) WILL BE AT THE CONTRACTOR'S EXPENSE. ALL OVERBREAK SHALL BE REPLACED WITH "CONCRETE, CLASS C" AT THE CONTRACTORS EXPENSE.

27. DOWELS SHALL BE DRILLED AND GROUTED INTO THE BEDROCK AS SHOWN ON THE PLANS. THE DOWELS SHALL HAVE A 2'-0" MINIMUM EMBEDMENT INTO BEDROCK. DRILLING AND GROUTING OF DOWELS SHALL BE PAID UNDER ITEM 507.16 "DRILLING AND GROUTING DOWELS".

28. ANY EXPOSED SUBFOOTING FACES EXCEEDING 5 FEET IN HEIGHT SHALL BE REINFORCED WITH #5 REINFORCING STEEL BARS SPACED AT 12 INCHES EACH WAY. AN ESTIMATED QUANTITY FOR THESE BARS HAS BEEN INCLUDED IN ITEM 507.11, "REINFORCING STEEL, LEVEL I".

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1448(38)

FILE NAME: sl2j630notes.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: J. PAQUETTE
PROJECT NOTES

PLOT DATE: 12-JUL-2021
DRAWN BY: J. PAQUETTE
CHECKED BY: C. MOONEY

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES

1011 - ROADWAY	1031 - TRAINING	1051 - EROSION CONTROL	1211 - BRIDGE NO. 1	1999 - FULL C.E. ITEMS	TOTALS GRAND TOTAL	TOTALS FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
1					1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10	
5					5		EACH	REMOVING LARGE TREES	201.16	
660					660		CY	COMMON EXCAVATION	203.15	
20			30		50		CY	SOLID ROCK EXCAVATION	203.16	
100			130		230		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	
1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	
			210		210		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	
10					10		SY	DRILLING AND BLASTING OF SOLID ROCK SUBGRADE	205.20	
630			620		1250		CY	COFFERDAM EXCAVATION, EARTH	208.30	
100			100		200		CY	COFFERDAM EXCAVATION, ROCK	208.35	
			1		1		LS	COFFERDAM (ABUTMENT #1)	208.40	
			1		1		LS	COFFERDAM (ABUTMENT #2)	208.40	
500					500		CY	SUBBASE OF CRUSHED GRAVEL, COARSE GRADED	301.25	
90					90		CY	AGGREGATE SURFACE COURSE	401.10	
			11182		11182		LB	REINFORCING STEEL, LEVEL I (EPOXY COATED)	507.11	
			27376		27376		LB	REINFORCING STEEL, LEVEL I	507.11	
			120		120		LF	DRILLING AND GROUTING DOWELS	507.16	
			30		30		GAL	WATER REPELLENT, SILANE	514.10	
			107		107		LF	BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING	525.44	
			1		1		EACH	REMOVAL OF STRUCTURE (400 SF - EST)	529.15	
			51		51		CY	CONCRETE, CLASS C	541.30	
20					20		MGAL	DUST CONTROL WITH WATER	609.10	
1					1		TON	DUST AND ICE CONTROL WITH CALCIUM CHLORIDE	609.15	
11					11		CY	STONE FILL, TYPE I	613.10	
50					50		CY	STONE FILL, TYPE II	613.11	
			170		170		CY	STONE FILL, TYPE IV	613.13	
1					1		EACH	REMOVE AND RESET MAILBOX, SINGLE SUPPORT	617.10	
132					132		LF	HD STEEL BEAM GUARDRAIL, GALVANIZED	621.21	
4					4		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	
3					3		EACH	GUARDRAIL APPROACH SECTION, GALV HD STEEL BEAM	621.737	
52					52		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	
150					150		HR	FLAGGERS	630.15	
				1	1		LS	FIELD OFFICE, ENGINEERS	631.10	
				1	1		LS	TESTING EQUIPMENT, CONCRETE	631.16	
				3000	3000		DL	FIELD OFFICE COMMUNICATIONS (N.A.B.I.)	631.26	
3					3		EACH	CPM SCHEDULE	633.10	
	520				520		HR	EMPLOYEE TRAINEESHIP	634.10	
1					1		LS	MOBILIZATION/DEMOBILIZATION	635.11	
1					1		LS	TRAFFIC CONTROL, ALL-INCLUSIVE	641.11	
800					800		SY	GEOTEXTILE FOR ROADBED SEPARATOR	649.11	
80			180		260		SY	GEOTEXTILE UNDER STONE FILL	649.31	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		EARTHWORKS SUMMARY
		FILL AVAILABLE
396	CY	COMMON EXCAVATION (660 x 0.6)
69	CY	UNCLASSIFIED CHANNEL EXCAVATION (230 x 0.3)
0	CY	STRUCTURE EXCAVATION (0 x 0.3)
3	CY	ROUNDING
470	**CY**	**TOTAL FILL AVAILABLE**
		FILL REQUIRED
0	CY	FACTORED FILL (0 x 1.15)
0	CY	ROUNDING
0	**CY**	**TOTAL FILL REQUIRED**
		BITUMINOUS CONCRETE PAVEMENT
0	TON	BASE COURSE
0	TON	INTERMEDIATE COURSE
0	TON	WEARING COURSE

N.A.B.I. = NOT A BID ITEM

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630qty.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: J. PAQUETTE
QUANTITY SHEET 1

PLOT DATE: 12-JUL-2021
DRAWN BY: J. PAQUETTE
CHECKED BY: C. MOONEY
SHEET 6 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES

1011 - ROADWAY	1031 - TRAINING	1051 - EROSION CONTROL	1211 - BRIDGE NO. 1	1999 - FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
		80			80		SY	GEOTEXTILE FOR FILTER CURTAIN	649.61	
		20			20		LB	SEED	651.15	
		20			20		LB	SEED, WINTER RYE	651.17	
		100			100		LB	FERTILIZER	651.18	
		1			1		TON	AGRICULTURAL LIMESTONE	651.20	
		110			110		CY	TOPSOIL	651.35	
			138		138		SY	GRUBBING MATERIAL	651.40	
		50			50		SY	GRUBBING MATERIAL (12 INCH)	651.40	
		1			1		LS	EPSC PLAN	653.01	
		50			50		HR	MONITORING EPSC PLAN	653.02	
		1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	653.03	
		1			1		TON	HAY MULCH	653.10	
		80			80		SY	ROLLED EROSION CONTROL PRODUCT, TYPE I	653.20	
		150			150		CY	CHECK DAM, TYPE I	653.25	
		30			30		CY	STABILIZED CONSTRUCTION ENTRANCE	653.35	
		110			110		LF	BARRIER FENCE	653.50	
		584			584		LF	PROJECT DEMARCATION FENCE	653.55	
1					1		EACH	EVERGREEN TREES (PINUS STROBUS)(B&B)(2.13-2.44 M HT)	656.20	
4					4		EACH	DECIDUOUS TREES (ACER SACCHARUM 'GREEN MOUNTAIN')(GREEN MOUNTAIN SUGAR	656.30	
3					3		EACH	DECIDUOUS TREES (BETULA PAPYRIFERA)(B&B)(2.44 - 3.05 M HT)	656.30	
1					1		LS	TREE PROTECTION	656.85	
31					31		SF	TRAFFIC SIGN, TYPE A	675.20	
80					80		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	
2					2		EACH	REMOVING SIGNS	675.50	
			89		89		CY	SPECIAL PROVISION (PERFORMANCE-BASED CONCRETE, CLASS PCD)	900.608	
			159		159		CY	SPECIAL PROVISION (PREFORMANCE-BASED CONCRETE, CLASS PCS)	900.608	
85					85		LF	SPECIAL PROVISION (FABRIC SCREENING FENCE)	900.640	
			1		1		LS	SPECIAL PROVISION (RELOCATE AND REMOVE EXISTING TEMPORARY BRIDGE)	900.645	

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

N.A.B.I. = NOT A BID ITEM

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630qty.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: J. PAQUETTE
QUANTITY SHEET 2

PLOT DATE: 12-JUL-2021
DRAWN BY: J. PAQUETTE
CHECKED BY: C. MOONEY
SHEET 7 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

BRIDGE QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
					CHANNEL	DECK	ABUTMENT #1	ABUTMENT #2	LUMP SUM	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
							15	15		30		CY	SOLID ROCK EXCAVATION	203.16				
							65	65		130		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27				
							70	140		210		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30				
							207	413		620		CY	COFFERDAM EXCAVATION, EARTH	208.30				
							50	50		100		CY	COFFERDAM EXCAVATION, ROCK	208.35				
					1					1		LS	COFFERDAM (ABUTMENT #1)	208.40				
					1					1		LS	COFFERDAM (ABUTMENT #2)	208.40				
						11006	88	88		11182		LB	REINFORCING STEEL, LEVEL I (EPOXY COATED)	507.11				
							10211	17165		27376		LB	REINFORCING STEEL, LEVEL I	507.11				
							72	48		120		LF	DRILLING AND GROUTING DOWELS	507.16				
						16	7	7		30		GAL	WATER REPELLENT, SILANE	514.10				
						107				107		LF	BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING	525.44				
									1	1		EACH	REMOVAL OF STRUCTURE	529.15				
							20	31		51		CY	CONCRETE, CLASS C	541.30				
							90	80		170		CY	STONE FILL, TYPE IV	613.13				
							120	60		180		SY	GEOTEXTILE UNDER STONE FILL	649.31				
					138					138		SY	GRUBBING MATERIAL	651.40				
						76	6	7		89		CY	SPECIAL PROVISION (CONCRETE HIGH PERFORMANCE, CLASS PCD)	900.608				
							88	71		159		CY	SPECIAL PROVISION (CONCRETE HIGH PERFORMANCE, CLASS PCS)	900.608				
									1	1		LS	SPECIAL PROVISION (RELOCATE AND REMOVE EXISTING TEMPORARY BRIDGE)	900.645				

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630qty.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: J. PAQUETTE
BRIDGE QUANTITY SHEET

PLOT DATE: 12-JUL-2021
DRAWN BY: J. PAQUETTE
CHECKED BY: C. MOONEY
SHEET 8 OF 50

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+TELEPHONE
- 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+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
- 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

- 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
- 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

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2J630legend.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
CONVENTIONAL SYMBOLOGY LEGEND

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 9 OF 50

GPS CONTROL POINTS

THUMPER

NORTH = 655889.449
EAST = 1517698.644
ELEV. =

GENERAL LOCATION - THE STATION IS LOCATED IN HUNTINGTON CENTER, VT, 2.1 MI (3.4 KM) SOUTH OF HUNTINGTON VILLAGE, 7.4 MI (11.9 KM) SOUTH OF RICHMOND, AND 10.8 MI (17.4 KM) WEST OF WATERBURY. TO REACH FROM THE JUNCTION OF THE MAIN ROAD (TH1) AND CAMELS HUMP ROAD (TH4) , PROCEED NORTHWESTERLY ALONG TH1 FOR 0.1 MI (0.2 KM) TO A BRIDGE OVER BRUSH BROOK AND THE MARK SET IN THE SOUTHEAST CORNER OF THE BRIDGE. ALSO 2.45 MI (3.94 KM) SOUTHEASTERLY ALONG TH1 FROM ITS INTERSECTION WITH EAST STREET IN HUNTINGTON VILLAGE TO THE MARK ON THE LEFT. IT IS LOCATED 64 FT (19.5 M) NORTHEAST OF POLE 86/122, 17 FT (5.2 M) EAST OF THE CENTERLINE OF TH1, AND 1.5 FT (0.5 M) EAST OF A STEEL GUARDRAIL. OWNERSHIP IS THE TOWN OF HUNTINGTON.

BAMBI

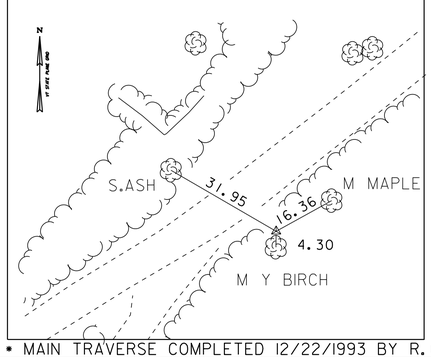
NORTH = 657332.336
EAST = 1515932.398
ELEV. =

GENERAL LOCATION - THE STATION IS LOCATED IN HUNTINGTON CENTER, VT, 1.7 MI (2.7 KM) SOUTH OF HUNTINGTON VILLAGE, 7.1 MI (11.4 KM) SOUTH OF RICHMOND, AND 11 MI (17.7 KM) WEST OF WATERBURY. TO REACH FROM THE JUNCTION OF THE MAIN ROAD (TH1) AND CAMELS HUMP ROAD (TH4) , PROCEED 0.6 MI (1.0 KM) TO A BRIDGE OVER THE HUNTINGTON RIVER AND THE MARK ON THE RIGHT. THE MARK IS A STATE OF VERMONT DISK SET IN THE NORTHEAST BRIDGE ABUTMENT.
ALSO 2.45 MI (3.94 KM) SOUTHEASTERLY ALONG TH1 FROM ITS INTERSECTION WITH EAST STREET IN IT IS LOCATED 15.5 FT (4.7 M) NORTH OF THE CENTERLINE OF TH 1 AND 2 FT (0.6 M) NORTH OF A BOX BEAM GUARDRAIL.
OWMERSHIP TOWN OF HUNTINGTON.

TRAVERSE TIES

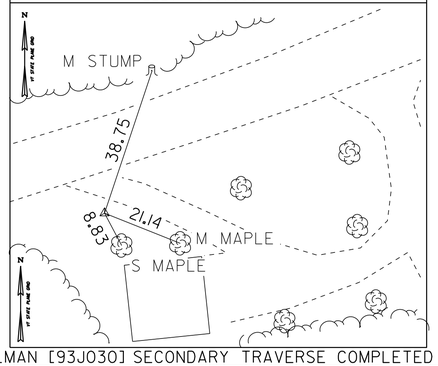
HVCTRL #1

NORTH = 655043.780
EAST = 1526912.200
ELEV. = 1041.574



HVCTRL #2

NORTH = 654865.920
EAST = 1526467.69
ELEV=1003.990



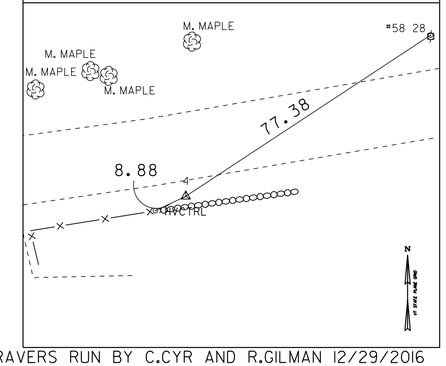
HVCTRL #3

NORTH = 654752.349
EAST = 1525861.871
ELEV. = 974.248

NOT TIED

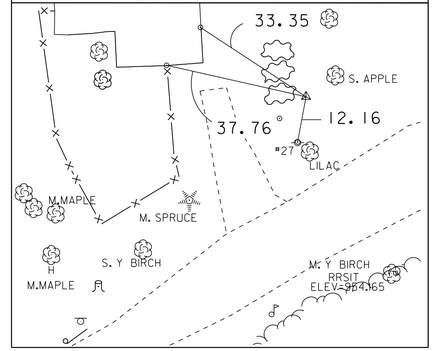
HVCTRL #4

NORTH = 654648.511
EAST = 1525582.523
ELEV. = 962.795



HVCTRL #5

NORTH = 654622.649
EAST = 1525334.004
ELEV. = 951.292



• MAIN TRAVERSE COMPLETED 12/22/1993 BY R. GILMAN [93J030] SECONDARY TRAVERSE COMPLETED 3/20/2012 BY R.GILMAN P.C. & P.WINTERS THIRD TRAVERS RUN BY C.CYR AND R.GILMAN 12/29/2016

ALIGNMENT TIES

CONTROL LINE DATA - TH22_prop_emergency_temp

POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
38	S 70°08'00.00" E	50.96 '	654574.54	1525020.117		75+00.00					
	S 67°38'00.00" E	44.69 '	654555.3678	1525073.177	75+50.96		75+61.87	2°30'00.00"	250.00 '	10.91 '	5.46 '
	S 71°17'00.00" E	45.39 '	654534.7248	1525123.343	76+01.10		76+20.22	3°39'00.00"	-300.00 '	19.11 '	9.56 '
	N 64°45'38.17" E	118.03 '	654509.7983	1525196.915	76+56.05		77+17.42	43°57'21.83"	-80.00 '	61.37 '	32.29 '
	N 54°21'24.42" E	38.47 '	654567.889	1525320.143	78+03.16		78+39.48	10°24'13.75"	-200.00 '	36.32 '	18.21 '
	N 73°05'00.00" E	100.06 '	654614.3279	1525384.905	78+59.74		79+41.45	18°43'35.58"	250.00 '	81.71 '	41.22 '
59			654643.4445	1525480.639		80+00.29					

CONTROL LINE DATA - TH22_prop

POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
38	S 70°08'00.00" E	50.96 '	654574.54	1525020.117		42+00.00					
	S 67°38'00.00" E	44.69 '	654555.3678	1525073.177	42+50.96		42+61.87	2°30'00.00"	250.00 '	10.91 '	5.46 '
	S 71°17'00.00" E	38.41 '	654534.7248	1525123.343	43+01.10		43+20.22	3°39'00.00"	-300.00 '	19.11 '	9.56 '
	N 58°03'00.00" E	146.62 '	654507.2072	1525204.563	43+49.07		44+37.50	50°40'00.00"	-100.00 '	88.43 '	47.34 '
	N 73°05'00.00" E	117.57 '	654609.2341	1525368.157	45+36.78		46+28.61	15°02'00.00"	350.00 '	91.83 '	46.18 '
59			654643.4445	1525480.639		47+00.00					

CONTROL LINE DATA - Br32channel

POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
12	N 46°52'27.67" W	200.00 '	654470.5139	1525328.324		50+00.00					
13			654607.234	1525182.353		52+00.00					

CONTROL LINE DATA - Driveway

POINT ID	BEARING	DISTANCE (FEET)	NORTHING (Y)	EASTING (X)	PC	PI	PT	DELTA	R	L	T
104	N 17°59'58.47" W	54.59 '	654572.6862	1525326.374		10+00.00					
105			654624.6044	1525309.505		10+54.59					

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (92)
ADJUSTMENT COMPASS

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630tie.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
TIE SHEET

PLOT DATE: 12-JUL-2021
DRAWN BY: H. McGOWAN
CHECKED BY: C. MOONEY
SHEET 10 OF 50

TEMP - CURVE (1)
DELTA = 43°37'05"
D = 57°17'45"
R = 100.00'
T = 40.02'
L = 76.13'
E = 7.71'

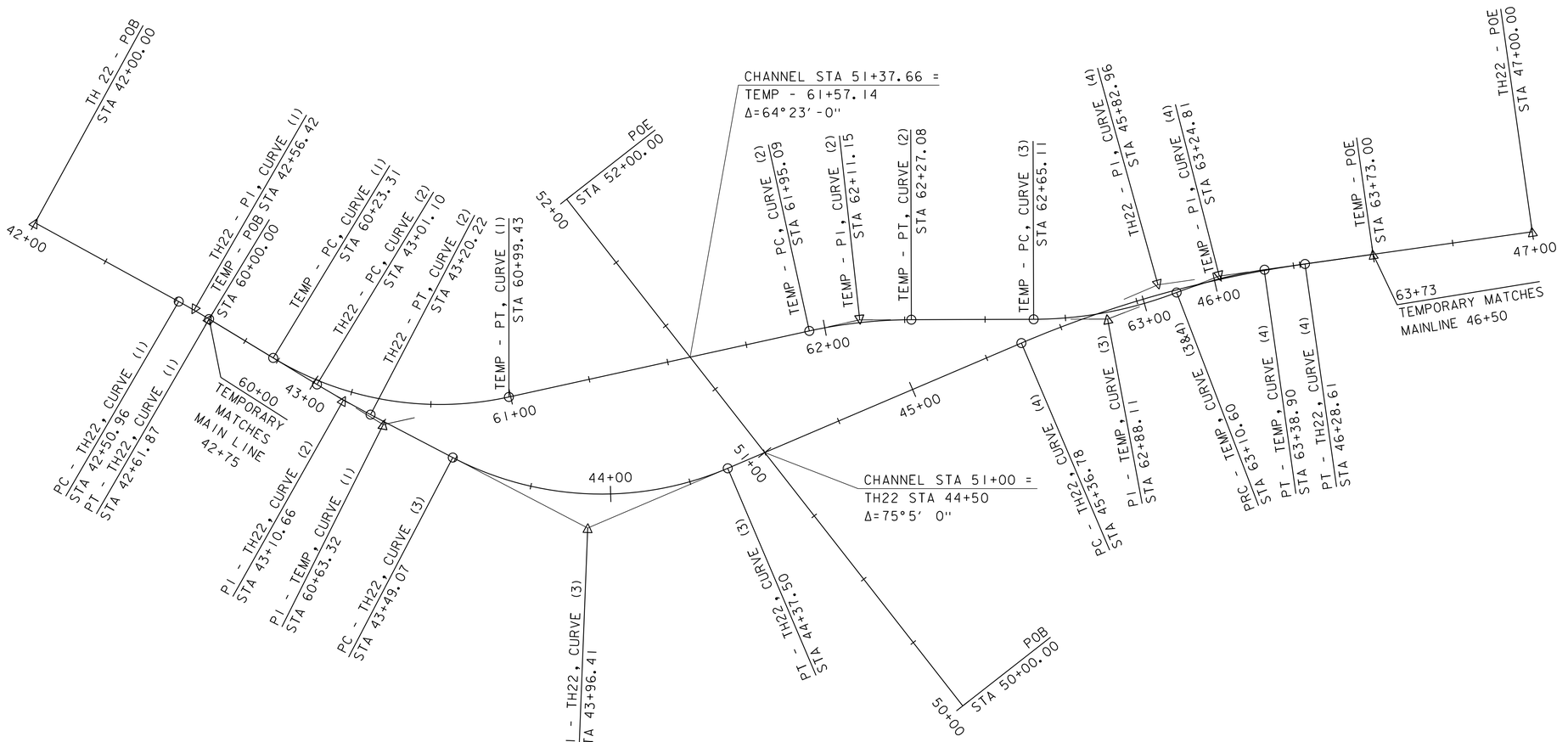
TEMP - CURVE (2)
DELTA = 12°13'04"
D = 38°11'50"
R = 150.00'
T = 16.05'
L = 31.99'
E = 0.86'

TEMP - CURVE (3)
DELTA = 20°51'12"
D = 45°50'12"
R = 125.00'
T = 23.00'
L = 45.50'
E = 2.10'

TEMP - CURVE (4)
DELTA = 12°58'13"
D = 45°50'12"
R = 125.00'
T = 14.21'
L = 28.30'
E = 0.81'

N

VT STATE PLANE GRID



TH 22 - CURVE (1)
DELTA = 2°30'00"
D = 22°55'06"
R = 250.00'
T = 5.46'
L = 10.91'
E = 0.06'

TH 22 - CURVE (2)
DELTA = 3°39'00"
D = 19°05'55"
R = 300.00'
T = 9.56'
L = 19.11'
E = 0.15'

TH 22 - CURVE (3)
DELTA = 50°40'00"
D = 57°17'45"
R = 100.00'
T = 47.34'
L = 88.43'
E = 10.64'

TH 22 - CURVE (4)
DELTA = 15°02'00"
D = 16°22'13"
R = 350.00'
T = 46.18'
L = 91.83'
E = 3.03'

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

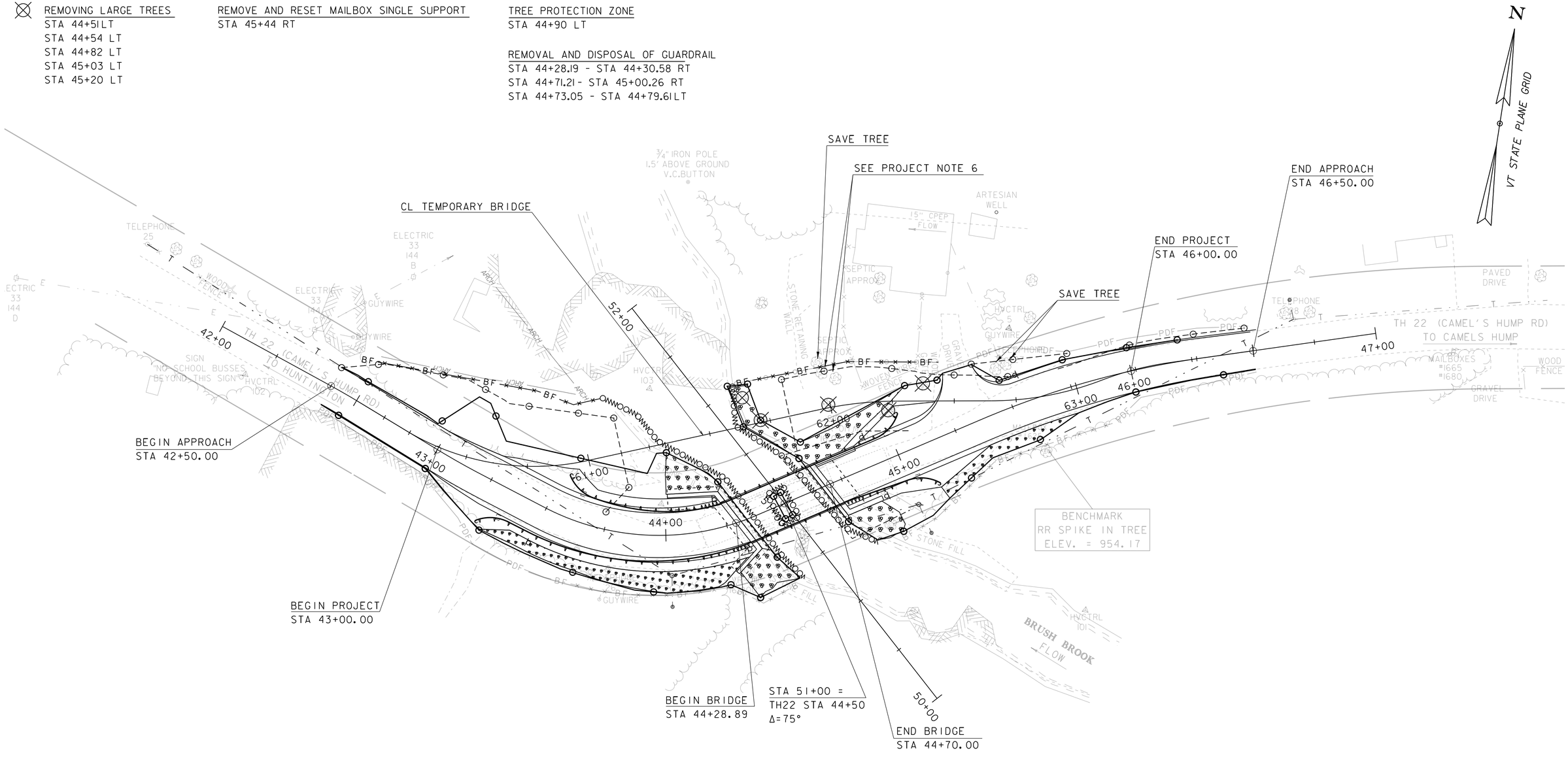
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630align.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
ALIGNMENT SHEET	SHEET 11 OF 50

REMOVING LARGE TREES
STA 44+51LT
STA 44+54 LT
STA 44+82 LT
STA 45+03 LT
STA 45+20 LT

REMOVE AND RESET MAILBOX SINGLE SUPPORT
STA 45+44 RT

TREE PROTECTION ZONE
STA 44+90 LT

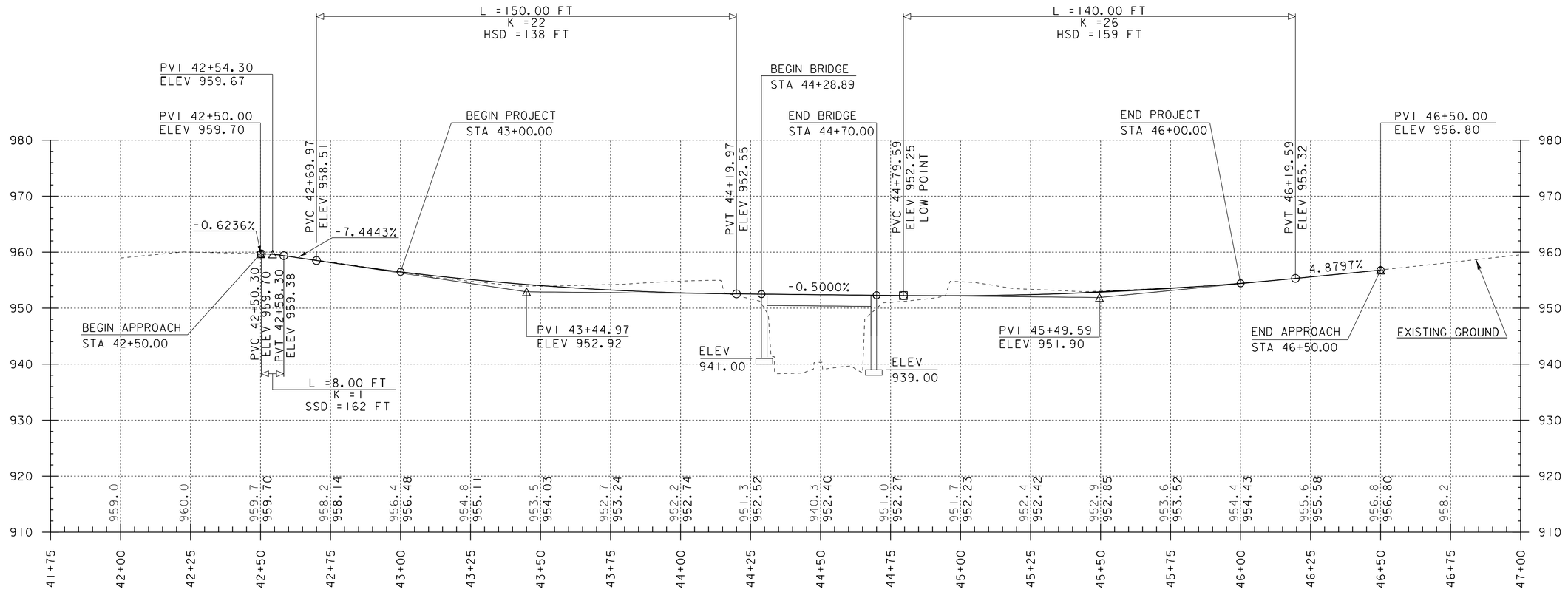
REMOVAL AND DISPOSAL OF GUARDRAIL
STA 44+28.19 - STA 44+30.58 RT
STA 44+71.21 - STA 45+00.26 RT
STA 44+73.05 - STA 44+79.61LT



EXISTING BRIDGE INFORMATION
SINGLE SPAN, BUILT 1925
ROLLED BEAM WITH TIMBER DECK
45' STRUCTURE LENGTH
16'-3" FASCIA TO FASCIA WIDTH

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

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630bdr.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
LAYOUT SHEET	SHEET 12 OF 50

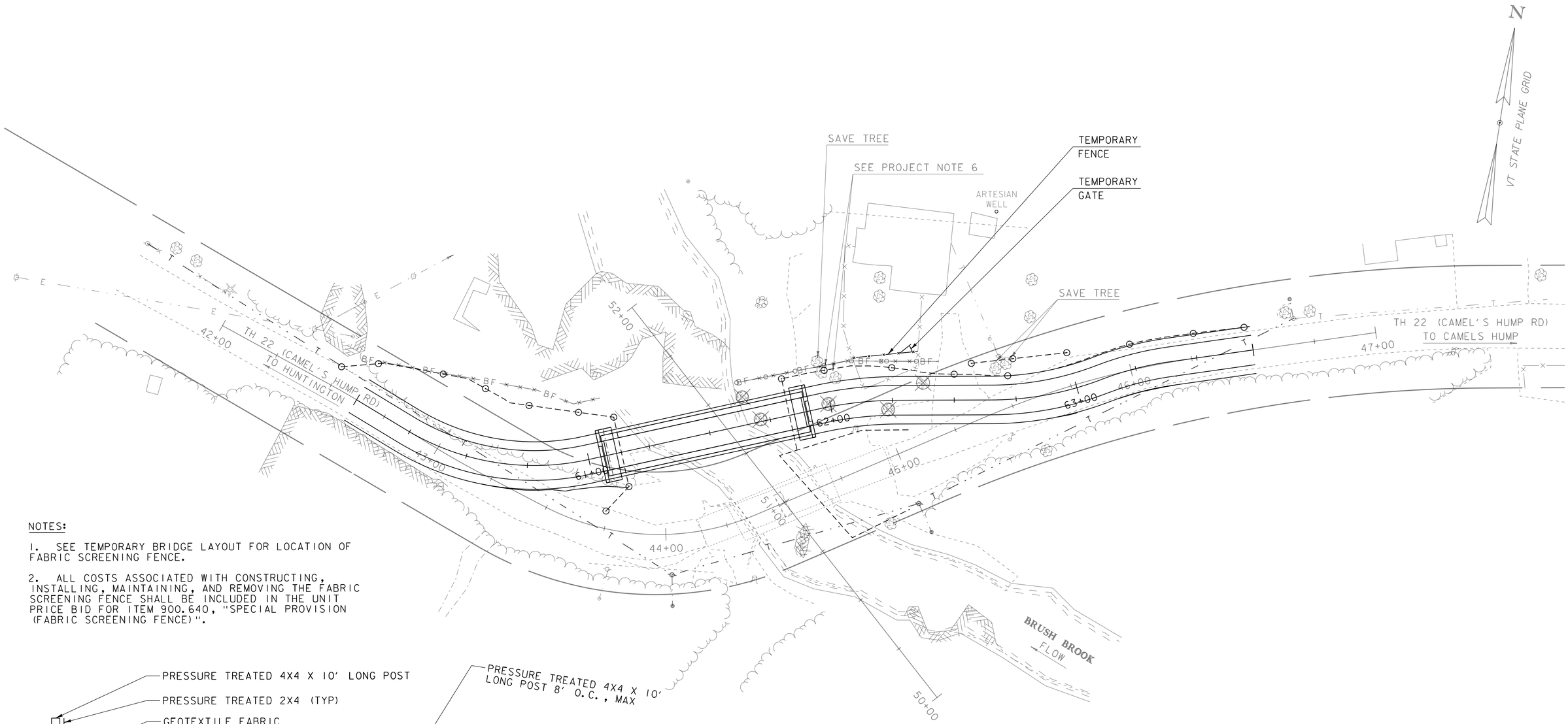


TH-22 PROFILE

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

NOTE:
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄

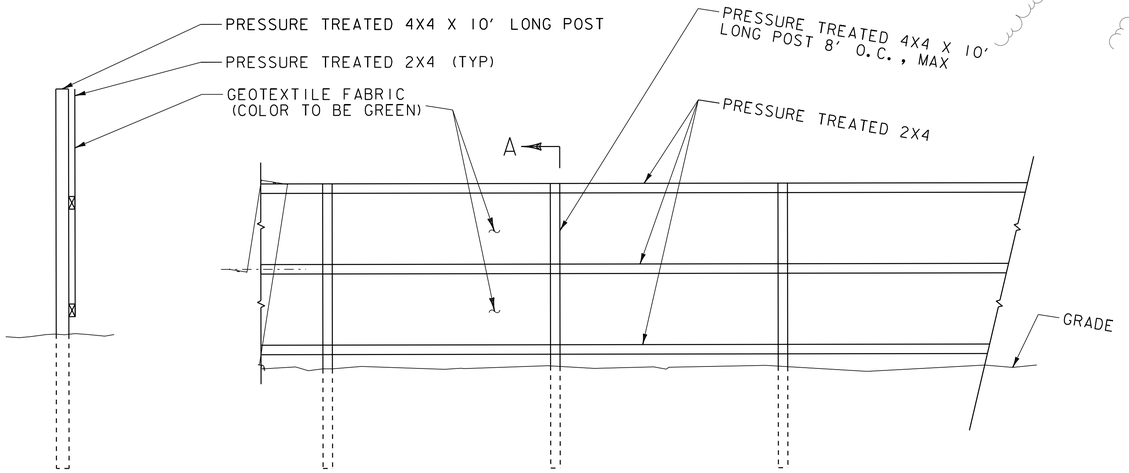
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: sl2j630profile.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
PROFILE SHEET	SHEET 13 OF 50



NOTES:

1. SEE TEMPORARY BRIDGE LAYOUT FOR LOCATION OF FABRIC SCREENING FENCE.

2. ALL COSTS ASSOCIATED WITH CONSTRUCTING, INSTALLING, MAINTAINING, AND REMOVING THE FABRIC SCREENING FENCE SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.640, "SPECIAL PROVISION (FABRIC SCREENING FENCE)".

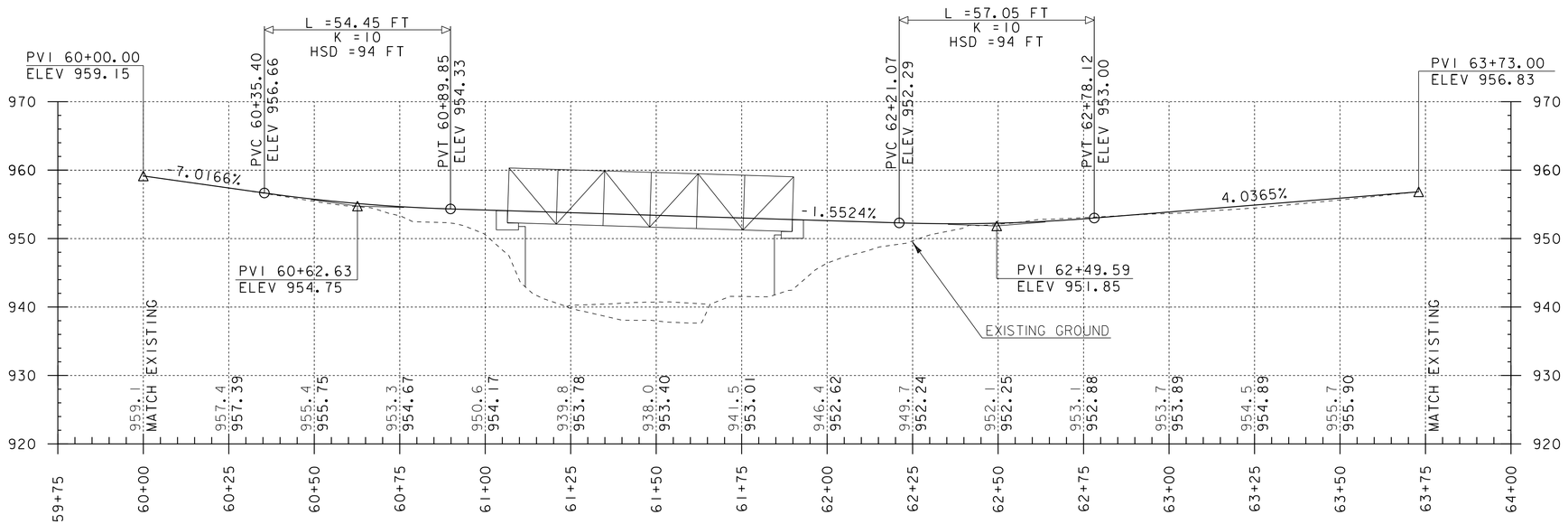


SECTION A-A
NOT TO SCALE

FABRIC SCREENING FENCE
NOT TO SCALE

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

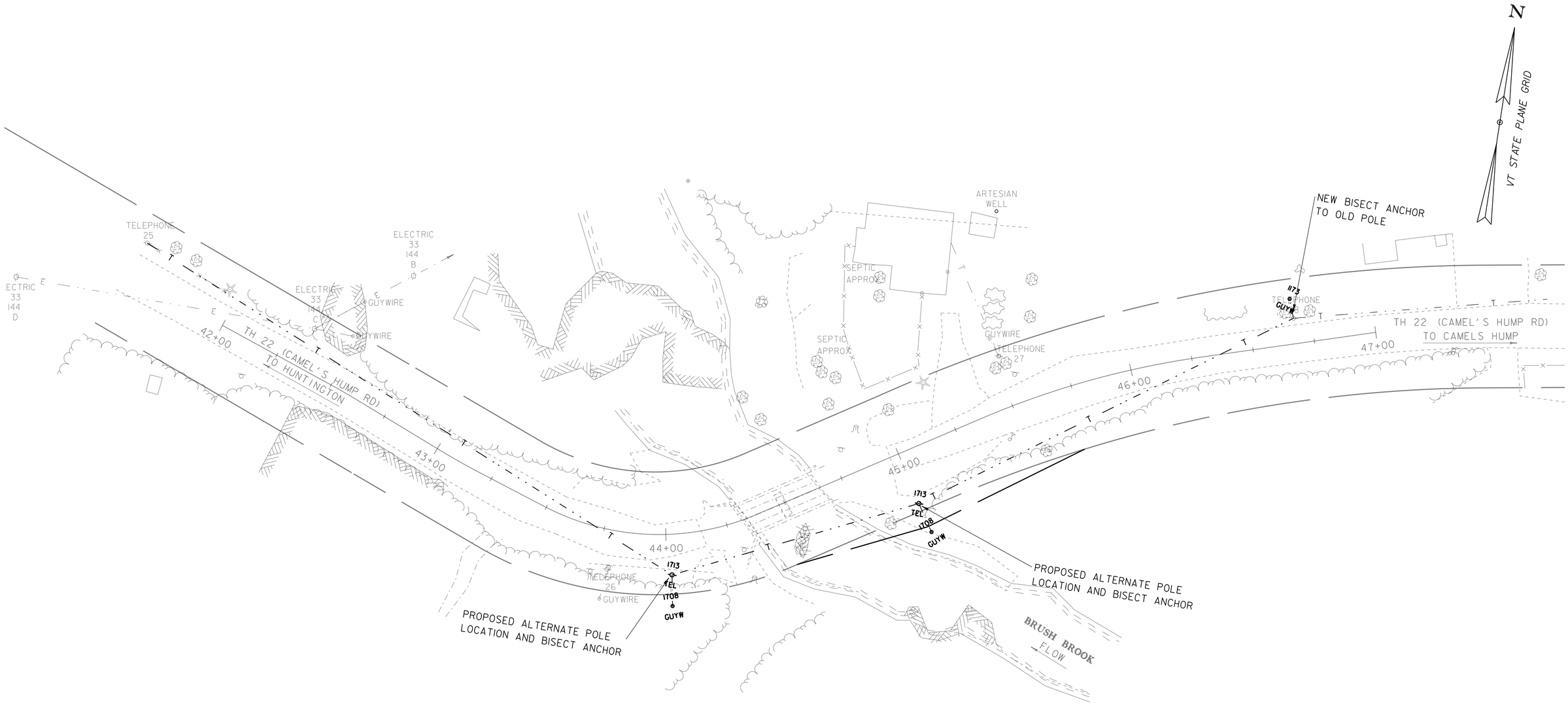
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630Temporary.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
TEMPORARY BRIDGE LAYOUT	SHEET 14 OF 50



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

NOTE:
GRADES SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG ℄
GRADES SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADE ALONG ℄

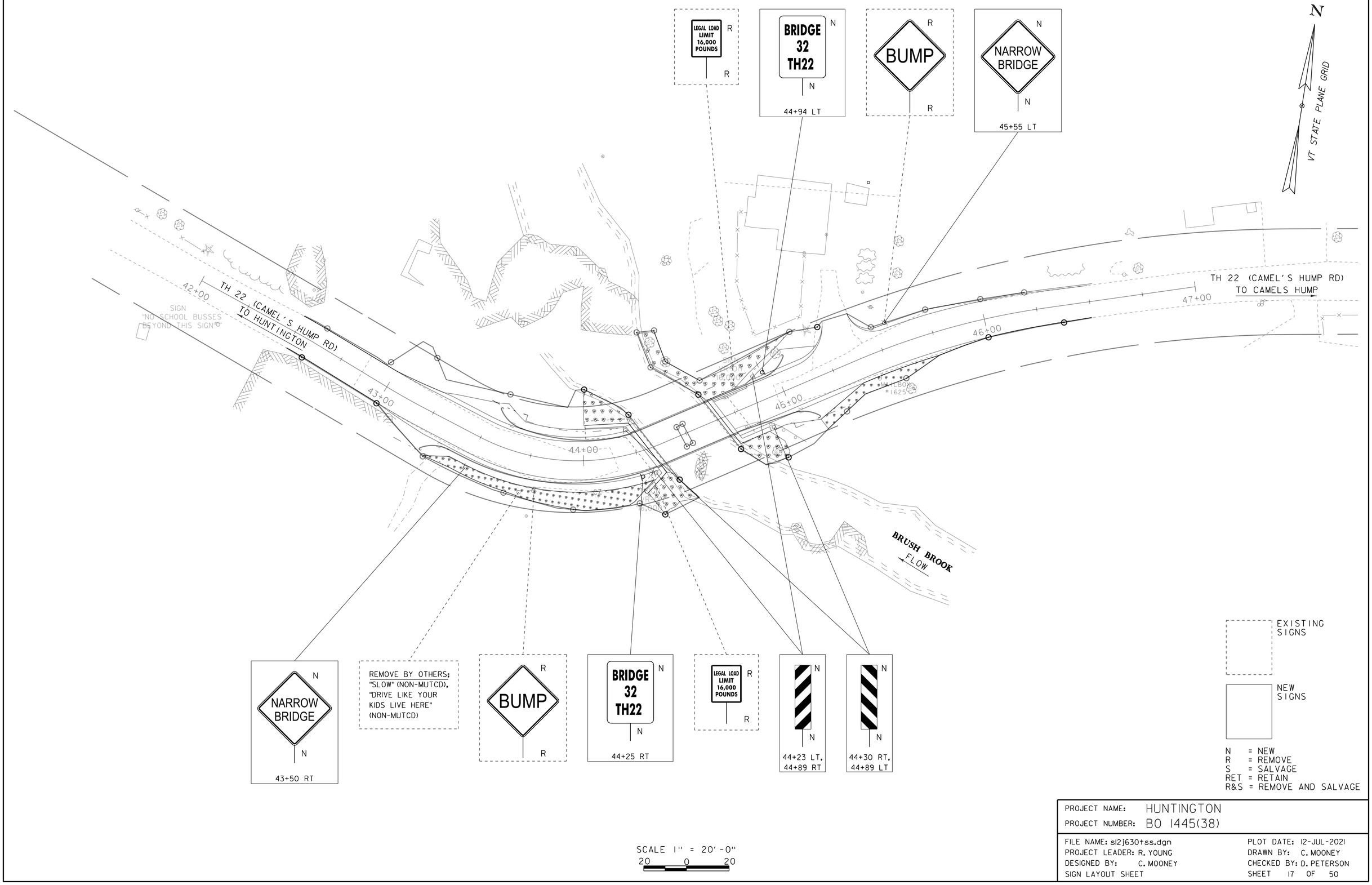
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630Temporary.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
TEMPORARY PROFILE	SHEET 15 OF 50



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

THERE WILL BE NO EXTRA COMPENSAETION PAID TO THE CONTRACTOR FOR INCONVENIENCE CAUSE BY WORKING AROUND AND WITH THE COMPANIES, OR THEIR FACILITIES. SHOULD THE CONTRACTOR DESIRE ADDITIONAL ADJUSTMENTS OF THE UTILITY FACILITIES FOR THEIR CONVENIENCE, PROPER ARRANGEMENTS SHALL BE MADE IN CONFORMANCE WITH SUBSECTION 105.07 OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630utility.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
UTILITY LAYOUT SHEET	SHEET 16 OF 50



PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)

FILE NAME: sl2j630tss.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. MOONEY
DESIGNED BY: C. MOONEY	CHECKED BY: D. PETERSON
SIGN LAYOUT SHEET	SHEET 17 OF 50

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS		NEW & SALVAGED SIGN		EXIST POST		NEW SIGN POSTS							REMARKS	SIGN DETAIL		
									SQUARE STEEL (in)									
		WIDTH (in)	HEIGHT (in)	"A"	SALV SIGN	RETAIN	SALVAGE	NO. OF POSTS	1.75 / 1.88	2.0 / 2.42 lb/ft	2.5 / 3.35	ANCHOR	SLEEVE			• SHSM	DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
43+50 RT, 45+55 LT	NARROW BRIDGE	36	36	9.00				1		12.12		X				W5-2		
44+23 LT, 44+89 RT		12	36	3.00				1		9.50		X				OM-3L		
44+30 RT, 44+89 LT		12	36	3.00				1		9.50		X				OM-3R		
44+25 RT, 44+94 LT	BRIDGE 32 TH22	6	10	0.42				1		8.42		X						T-42 (VD-701)
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."									FT	FT 79.08	FT		EA					
	TOTALS			SF 30.84	EACH					FT 79.08				*SHSM = STANDARD HIGHWAY SIGNS AND MARKINGS BOOK				

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: sl2j630tss.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. MOONEY
DESIGNED BY: C. MOONEY	CHECKED BY: D. PETERSON
SIGN SUMMARY SHEET	SHEET 18 OF 50

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

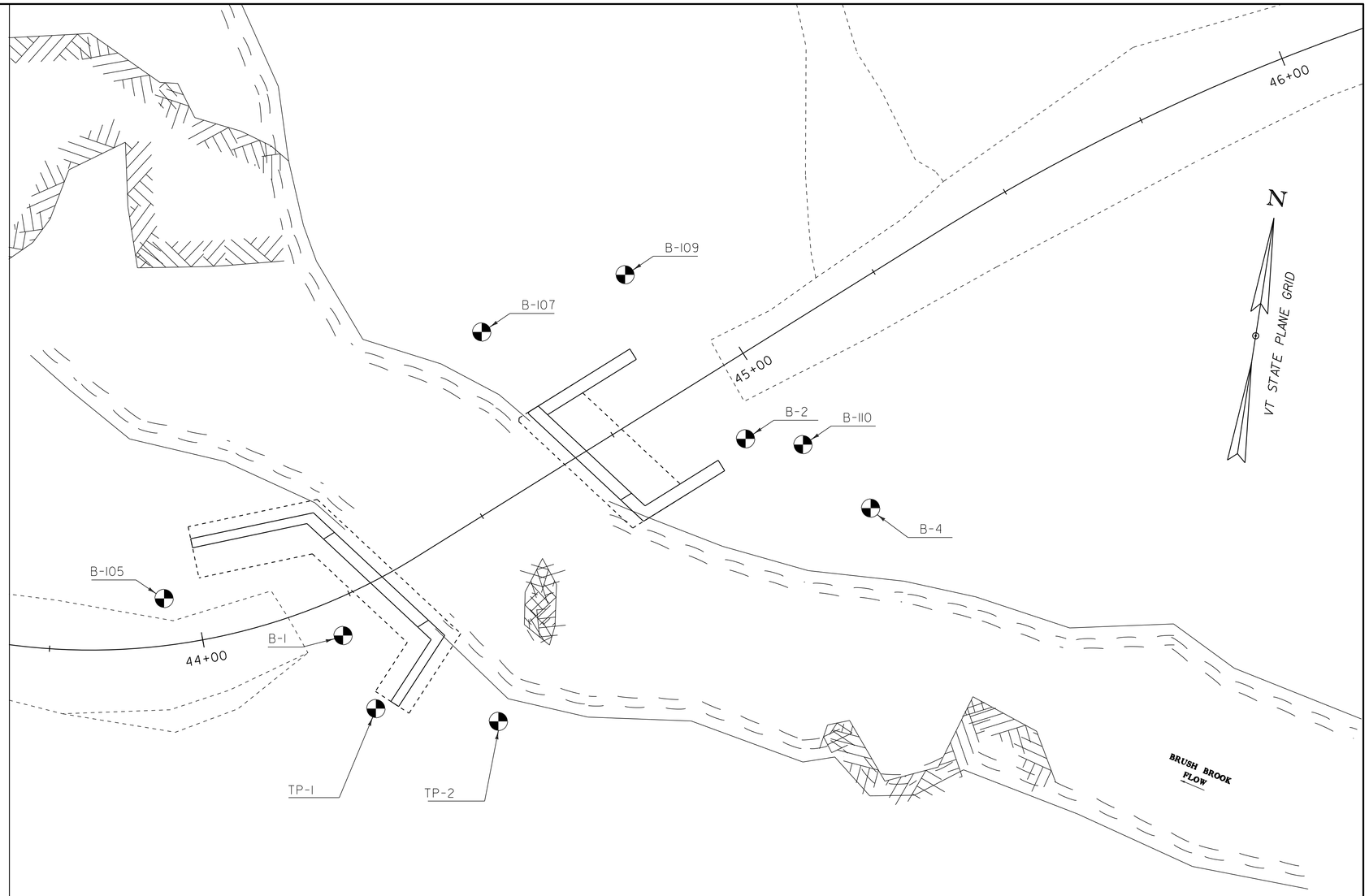
DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

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
ROD	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		



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

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.

GENERAL NOTES

1. The subsurface explorations shown herein were made between 11/12/2013 and 12/06/2013 by Terracon (consultant).
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	BEDROCK ELEV.	OFFSET	NORTHING	EASTING
B-1	44+24	938.0 FT	8.5 R	1525232.77	654519.47
B-2	44+93	934.0 FT	12.0 R	1525258.01	654505.53
B-4	45+90	929.0 FT	36.5 R	1525318.49	654540.18
B-105	43+95	933.3 FT	7.6 L	1525203.60	654524.10
B-107	44+63	929.7 FT	25.4 L	1525255.30	654567.40
B-109	44+90	928.6 FT	21.0 L	1525278.60	654576.30
B-110	45+00	934.7 FT	17.7 R	1525307.40	654549.10
TP-1	44+24	943.6 FT	21.8 R	1525238.11	654507.60
TP-2	44+38	942.0 FT	33.4 R	1525258.01	654505.53

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
BORING INFORMATION SHEET

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 19 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

Huntington BO 1445(38)

Boring No.: B-1
Page No.: 1 of 1
Pin No.: 12j630
Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR
Date Started: 11/14/13 Date Finished: 11/15/13
VTSPG NAD83: N 1525232.77 ft E 654519.47 ft
Station: 44+24 Offset: 8.5 R
Ground Elevation: 950.0 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4.25	1.38 in
Hammer Wt:	N.A.	N.A.
Hammer Fall:	N.A.	N.A.
Hammer/Rod Type:	Manual	
Rig:	CME 45C SKID	CE = 1.3

Groundwater Observations

Date	Depth (ft)	Notes
11/14/13	7.5	WS
11/15/13	8.0	ACR
11/15/13	8.3	BCR

TOP ABUT #1
FOOTING
ELEV 945.00

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Rec. = 0.5 ft, 0.0 ft – 0.33 ft, 4-inches topsoil			2-3-6-7 (9)				
		A-1-b, SaGrSi, brn, Moist, FILL							
		A-2-4, GrSiSa, brn, Moist Rec. = 0.5 ft			4-3-4-5 (7)				
5		A-4, SiSaGr, brn, Wet, Rec. = 0.75 ft			3-3-16-15 (19)				
		A-2-4, SaGrSi, red-brn, with organics from 6-8 feet Rec. = 1.16 ft			15-16-8-28 (24)				
		A-2-4, SaSiGr, brn-gry, Rec. = 0.5 ft			5-9-12-20 (21)				
10		A-1-b, GrSaSi, gry-brn, Rec. = 0.75 ft			25-50/3" (50+)				
		A-1-b, GrSaSi, brn, Weathered bedrock 10.75 ft – 12.0 ft, Weathered bedrock							
		12.0 ft – 17.0 ft, Bedrock. Gray, greenish gray muscovite-quartz SCHIST, magnetite rich zone at 14.5'. moderately hard, moderately weathered from 15' to 16', remainder of run unweathered	1	90 (51.9)	Top of Bedrock @ 12.0 ft				
15									
		17.0 ft – 22.0 ft, Bedrock. Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	2	100 (78.3)					
20		Hole stopped @ 22.0 ft							
25		Remarks: Elevations are approximate.							
30									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

J113515g.GPJ VERMONT AOT.GDT 1/10/20
2010 COPY

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

Huntington BO 1445(38)

Boring No.: B-2
Page No.: 1 of 1
Pin No.: 12j630
Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR
Date Started: 11/11/13 Date Finished: 11/12/13
VTSPG NAD83: N 1525258.01 ft E 654505.53 ft
Station: 44+93 Offset: 12.0 R
Ground Elevation: 950.0 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4.25	1.38 in
Hammer Wt:	N.A.	N.A.
Hammer Fall:	N.A.	N.A.
Hammer/Rod Type:	Manual	
Rig:	CME 45C SKID	CE = 1.3

Groundwater Observations

Date	Depth (ft)	Notes
11/12/13	5.0	ACR
11/13/13	8.0	16 hrs

TOP ABUT #1
FOOTING
ELEV 939.00

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		A-2-4, SaGrSi, brn, Moist, Rec. = 1.5 ft, FILL			6-6-7-9 (13)				
		A-2-4, GrSaSi, brn, Moist, Rec. = 0.7 ft			10-6-7-8 (13)				
5		A-1-a, GrSaSi, brn-gry, Moist, Rec. = 0.8 ft			5-4-21-42 (25)				
		A-1-b, GrSaSi							
		A-1-a, GrSaSi, Rec. = 1.3 ft			23-39-44-50 (83)				
		A-1-a, GrSaSi, Rec. = 1.0 ft			40-40-20-41 (60)				
10		A-1-a, GrSaSi, Rec. = 0.5 ft, same as above with probable cobbles or boulder 10.58 ft – 12.0 ft			13-50/1" (50+)				
		A-4, SiGrSa, brn-gry, Moist, Rec. = 0.8 ft			22-34-36-100/20" (70)				
		A-4, GrSiSa, Rec. = 0.4 ft			35-25/0" (25+)				
15		14.5 ft – 16.0 ft, Probable weathered bedrock							
		16.0 ft – 21.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	1	100 (100)	Top of Bedrock @ 16.0 ft				
20		21.0 ft – 26.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	2	85 (90.2)					
		Hole stopped @ 26.0 ft							
25		Remarks: Elevations are approximate.							
30									

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

J113515g.GPJ VERMONT AOT.GDT 1/10/20
2010 COPY

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
BORING LOG SHEET 1

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 20 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

Huntington BO 1445(38)

Boring No.: B-4
Page No.: 1 of 1
Pin No.: 12j630
Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR
Date Started: 11/13/13 Date Finished: 11/13/13
VTSPG NAD83: N 1525318.49 ft E 654540.18 ft
Station: 45+90 Offset: 36.5 R
Ground Elevation: 948.0 ft

	Casing	Sampler
Type:	WB	SS
I.D.:	4.25	1.38 in
Hammer Wt:	N.A.	N.A.
Hammer Fall:	N.A.	N.A.
Hammer/Rod Type:		Manual
Rig:	CME 45C SKID	CE = 1.3

Groundwater Observations

Date	Depth (ft)	Notes
11/13/13	7.0	ACR
11/14/13	7.0	16 hrs

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run	Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Rec. = 1.2 ft, 0.0 ft – 0.33 ft, 4-inches topsoil				2-6-8-4 (14)				
		A-4, SaSiGr, brn, Moist								
		A-1-b, SaGrSi, brn, Rec. = 0.9 ft				3-6-37-22 (43)				
5		A-1-a, GrSaSi, gry-brn, Rec. = 0.5 ft				27-27-19-100 (46)				
		A-1-b, GrSaSi, gry-brn, Rec. = 0.3 ft				8-17-17-34 (34)				
		A-1-b, GrSaSi, brn, Rec. = 1.3 ft				23-35-40-100 (75)				
10		A-1-a, GrSaSi, gry-brn, Rec. = 0.5 ft				22-24-33-45 (57)				
		A-4, SiSaGr, gry-brn, Rec. = 0.4 ft				50 (50+)				
		A-4, SiSaGr, brn, Rec. = 0.4 ft				35-50-100 (150+)				
15		A-4, SiSaGr, gry-brn, Rec. = 0.2 ft, Soil classification for this sample based on visual observation				49-50 (50+)				
		A-1-a, GrSaSi, brn, Rec. = 0.2 ft, Probable weathered bedrock				50 (50+)				
20		19.0 ft – 24.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, unweathered	1	57	(68.4)	Top of Bedrock @ 19.0 ft				
25		24.0 ft – 29.0 ft, Gray, greenish gray muscovite-quartz SCHIST, moderately hard, slight weathering along foliation	2	46	(41.3)					
30		Hole stopped @ 29.0 ft								

Remarks:
Elevations are approximate.

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
3. Water level readings have been made at times and under conditions stated.
Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

2010 COPY J1135159.GPJ VERMONT AOT.GDT 1/10/20

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
BORING LOG SHEET 2

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 21 OF 50

TOP ABUT #1
FOOTING
ELEV 945.00

STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

Huntington BO 1445(38)

Boring No.: TP-1
Page No.: 1 of 1
Pin No.: 12j630
Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, RJF
Date Started: 12/06/13 Date Finished: 12/06/13
VTSPG NAD83: N 1525238.11 ft E 654507.60 ft
Station: 44+24 Offset: 21.8 R
Ground Elevation: 949.0 ft

	Casing	Sampler
Type:		
I.D.:		
Hammer Wt:	N.A.	N.A.
Hammer Fall:	N.A.	N.A.
Hammer/Rod Type:		
Rig:	KX71-3 Excavator	CE =

Groundwater Observations

Date	Depth (ft)	Notes
12/06/13		None observed

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		0.0 ft – 0.8 ft, Topsoil/roots/organics, moist to wet					
		A-4, SiSaGr, brn, trace roots, soil classification for this sample based on visual observation					
		A-4, SiSaGr, olive-brn, trace weathered rock and occasional boulders ~12", soil classification for this sample based on visual observation					
5		5.3 ft, Apparent weathered rock					
		Hole stopped @ 5.4 ft					
		Top of Bedrock @ 5.4 ft					

Remarks:
Test pit excavated by New Hampshire Boring.
Excavator: Kubota KX71-3
Operator: Mike

Although water was present within excavation, there did not appear to be a static GWL encountered. Water present in excavation appeared to be from surface run-off.

Ground surface elevation at top of test pit 3.5 feet below bridge deck based on visual observation.

10
15
20
25
30

Notes:
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3. Water level readings have been made at times and under conditions stated.
Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

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STATE OF VERMONT
AGENCY OF TRANSPORTATION
MATERIALS & RESEARCH SECTION
SUBSURFACE INFORMATION

BORING LOG

Huntington BO 1445(38)

Boring No.: TP-2
Page No.: 1 of 1
Pin No.: 12j630
Checked By: ASP

Boring Crew: New Hampshire Boring, Derry, NH, CBR
Date Started: 11/15/13 Date Finished: 11/15/13
VTSPG NAD83: N 1525258.01 ft E 654505.53 ft
Station: 44+38 Offset: 33.4 R
Ground Elevation: 946.0 ft

	Casing	Sampler
Type:		
I.D.:		
Hammer Wt:	N.A.	N.A.
Hammer Fall:	N.A.	N.A.
Hammer/Rod Type:		
Rig:	Hand dug	CE =

Groundwater Observations

Date	Depth (ft)	Notes
11/15/13		None observed

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		0.0 ft – 0.5 ft, 6-inches topsoil, organics, moist, brown					
		A-4, SiSaGr, brn					
		A-4, SiSaGr, gray, Moist, weathered bedrock					
5		Hole stopped @ 4.0 ft					
		Top of Bedrock @ 4.0 ft					

Remarks:
Hand dug by New Hampshire Boring.
Metal rod probed throughout approximate 10-foot radius around TP-2, rod hit probable bedrock at approximately 4 feet.
Elevations are approximate.

10
15
20
25
30

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE is the hammer energy correction factor. CE is an estimated value.
3. Water level readings have been made at times and under conditions stated.
Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.
4. Ground surface elevations indicated on the boring logs were estimated based on the grading plan provided by VAOT.

Terracon

2010 COPY J1135159.GPJ VERMONT AOT.GDT 1/10/20

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
BORING LOG SHEET 3

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 22 OF 50

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

BORING LOG

Huntington
BO 1445 (38)
Bridge 32 TH-22

Boring No.: B-105
Page No.: 1 of 1
Pin No.: 12j630
Checked By: AJA

Boring Crew: Gonyaw, Emerson
Date Started: 9/04/20 Date Finished: 9/04/20
VTSPG NAD83: N 654524.10 ft E 1525203.60 ft
Station: 43+95 Offset: -7.60
Ground Elevation: 953.9 ft

	Casing	Sampler
Type:	WB	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	CE = 1.52

Groundwater Observations

Date	Depth (ft)	Notes
09/04/20	6.4	WT After Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note, Advanced Casing to Top of Bedrock. No Soil Sampling Performed.								
10		Field Note, Advanced Casing to 11.5'. Cleanout 10.1'-11.5'								
		Field Note, Boulder 11.5'-14.3'								
15		Field Note, Advanced Casing to 18.3'. Cleanout NXDC 17.9'-18.3'								
20		20.6 ft - 21.2 ft, Massive Quartz vein with Mica flakes. Fair rock, NXMDC, RMR = 60 21.2 ft - 25.6 ft, Greenish gray, SCHIST, Quartz veins and rare vugs. Quartz veins disrupt foliation. Biotite grains visible by eye. Rare magnetite strewn throughout. Rock breaks readily along high angle foliation planes. Medium hard, Slightly weathered, Fair rock, RMR = 60	R-1 (70 to 85)	94 (90)	5 6 7 8 6			Top of Bedrock @ 20.6 ft		
25		25.6 ft - 30.6 ft, Silvery greenish-grey, SCHIST, Foliation is readily deformed by quartz veins. Concentrations of fine grained greenish-black chlorite are present along interface of quartz veins and foliation. Moderately hard, Unweathered, Good rock, NXMDC, RMR = 71	R-2 (70 to 85)	92 (92)	3 7 7 7 6					
		Hole stopped @ 30.6 ft								
30										
35		Remarks: Hole Collapsed @ 17.4'								
40										
45										

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE 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 HUNTINGTON BO 1445(38).GPJ VERMONT AOT.GDT 10/22/20

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

BORING LOG

Huntington
BO 1445 (38)
Bridge 32 TH-22

Boring No.: B-107
Page No.: 1 of 1
Pin No.: 12j630
Checked By: AJA

Boring Crew: Brochu, Gonyaw, Emerson
Date Started: 9/02/20 Date Finished: 9/02/20
VTSPG NAD83: N 654567.40 ft E 1525255.30 ft
Station: 44+63 Offset: -25.40
Ground Elevation: 941.7 ft

	Casing	Sampler
Type:	WB	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	CE = 1.52

Groundwater Observations

Date	Depth (ft)	Notes
09/02/20	3.2	WT After Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note, Advanced Casing to Top of Bedrock. No Soil Sampling Performed.								
10		Field Note, Cleanout NXDC 10.3'-12.0'								
15		12.0 ft - 13.9 ft, Greenish gray, Sulfidic SCHIST, Joints are open, moderately smooth, and heavily stained brown/tan. Soft to medium hard, Moderately weathered, Poor rock, NXMDC, RMR = 35 13.9 ft - 17.0 ft, Greenish gray, Sulfidic SCHIST, Moderately hard, Slightly weathered, Poor rock, RMR = 35	R-1 (70)	80 (30)	3 15 44 25 4			Top of Bedrock @ 12.0 ft		
20		17.0 ft - 19.0 ft, Greenish gray, SCHIST, Quartz veins strewn along foliation. Veins are vuggy and some are brown/orange stained. Moderately hard, Slightly to moderately weathered, Fair rock, NXMDC, RMR = 47 19.0 ft - 22.0 ft, Dull gray/brown, SCHIST, Few vuggy quartz veins. Brown granular weathering present on joints. Medium hard, Slightly to moderately weathered, Fair rock, RMR = 47	R-2 (70 to 75)	88 (60)	2 2 2 3 3					
		Hole stopped @ 22.0 ft								
25		Remarks: Hole Collapsed @ 9.2'								
30										
35										
40										
45										

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE 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 HUNTINGTON BO 1445(38).GPJ VERMONT AOT.GDT 10/22/20

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
BORING LOG SHEET 4

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 23 OF 50

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

BORING LOG

Huntington
BO 1445 (38)
Bridge 32 TH-22

Boring No.: B-109
Page No.: 1 of 1
Pin No.: 12j630
Checked By: AJA

Boring Crew: Brochu, Gonyaw
Date Started: 9/03/20 Date Finished: 9/08/20
VTSPG NAD83: N 654576.30 ft E 1525278.60 ft
Station: 44+90 Offset: -21.00
Ground Elevation: 947.6 ft

	Casing	Sampler
Type:	WB	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	CE = 1.52

Groundwater Observations

Date	Depth (ft)	Notes
09/08/20	4.3	WT After Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note, Advanced Casing to Top of Bedrock. No Soil Sampling Performed. Cleanout NXDC 4.0'-5.0'								
5		Field Note, Cleanout NXDC 9.3'-10.0'								
10		Field Note, Cleanout NXDC 14.6'-15.0'								
15		Field Note, Cleanout NXDC 18.9'-19.0'								
20		19.0 ft - 24.0 ft, Greenish gray, Sulfidic SCHIST, Quartz veins strewn throughout, fine grained clusters of sulfides. Faint brown staining along joints. Moderately hard, Very slightly weathered, Good rock, NXMDC, Fresh breaks of core run are silvery gray and lustrous. RMR = 63	R-1 (70 to 85)	100 (90)	5 4 3 3 3			Top of Bedrock @ 19.0 ft		
25		24.0 ft - 29.0 ft, Greenish gray, Sulfidic SCHIST, Foliation is highly deformed and wavy and is moderately dipping to steeply dipping. Slight brown staining on joints. Some vugs are rust and brown stained. Moderately hard, Slightly weathered, Fair rock, NXMDC, RMR = 55	R-2 (65 to 80)	88 (90)	6 5 5					
30		Hole stopped @ 29.0 ft								
		Remarks: Hole Collapsed @ 17.7'								
35										
40										
45										

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE 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 HUNTINGTON BO 1445(38).GPJ VERMONT AOT.GDT 10/22/20

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

BORING LOG

Huntington
BO 1445 (38)
Bridge 32 TH-22

Boring No.: B-110
Page No.: 1 of 1
Pin No.: 12j630
Checked By: AJA

Boring Crew: Brochu, Gonyaw
Date Started: 9/09/20 Date Finished: 9/09/20
VTSPG NAD83: N 954549.10 ft E 1525307.40 ft
Station: 45+00 Offset: 17.70
Ground Elevation: 951.7 ft

	Casing	Sampler
Type:	WB	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	CE = 1.52

Groundwater Observations

Date	Depth (ft)	Notes
09/09/20	5.2	WT During Drilling

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Drill Rate minutes/ft	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
		Field Note, Advanced Casing to Top of Bedrock. No Soil Sampling Performed. NXDC Cleanout 6.8'-8.5'								
5										
10		Field Note, Boulder 8.5'-10.9'								
		Field Note, NXDC Cleanout 14.7'-17.0'								
15										
20		17.0 ft - 22.0 ft, Greenish gray, SCHIST, Massive quatz veins. No vugs along core run. Foliation is highly deformed and wavy although dip is primarily high angle. Moderately hard to hard, Unweathered, Good rock, NXMDC, RMR = 76	R-1 (70 to 85)	94 (94)	5 4 4 3 4			Top of Bedrock @ 17.0 ft		
25		22.0 ft - 27.0 ft, Greenish gray, SCHIST, Quartz veins. Sulfides are readily present in fine grained clusters throughout core run. Foliation is highly deformed and wavy although dip is primary high angle. Faint brown staining noted along joint. Moderately hard, Very slightly weathered, Good rock, NXMDC, RMR = 66	R-2 (70 to 80)	100 (100)	3 3 3 3 3					
		Hole stopped @ 27.0 ft								
30		Remarks: Hole Collapsed @ 9.6'								
35										
40										
45										

Notes:
1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
2. N Values have not been corrected for hammer energy. CE 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.

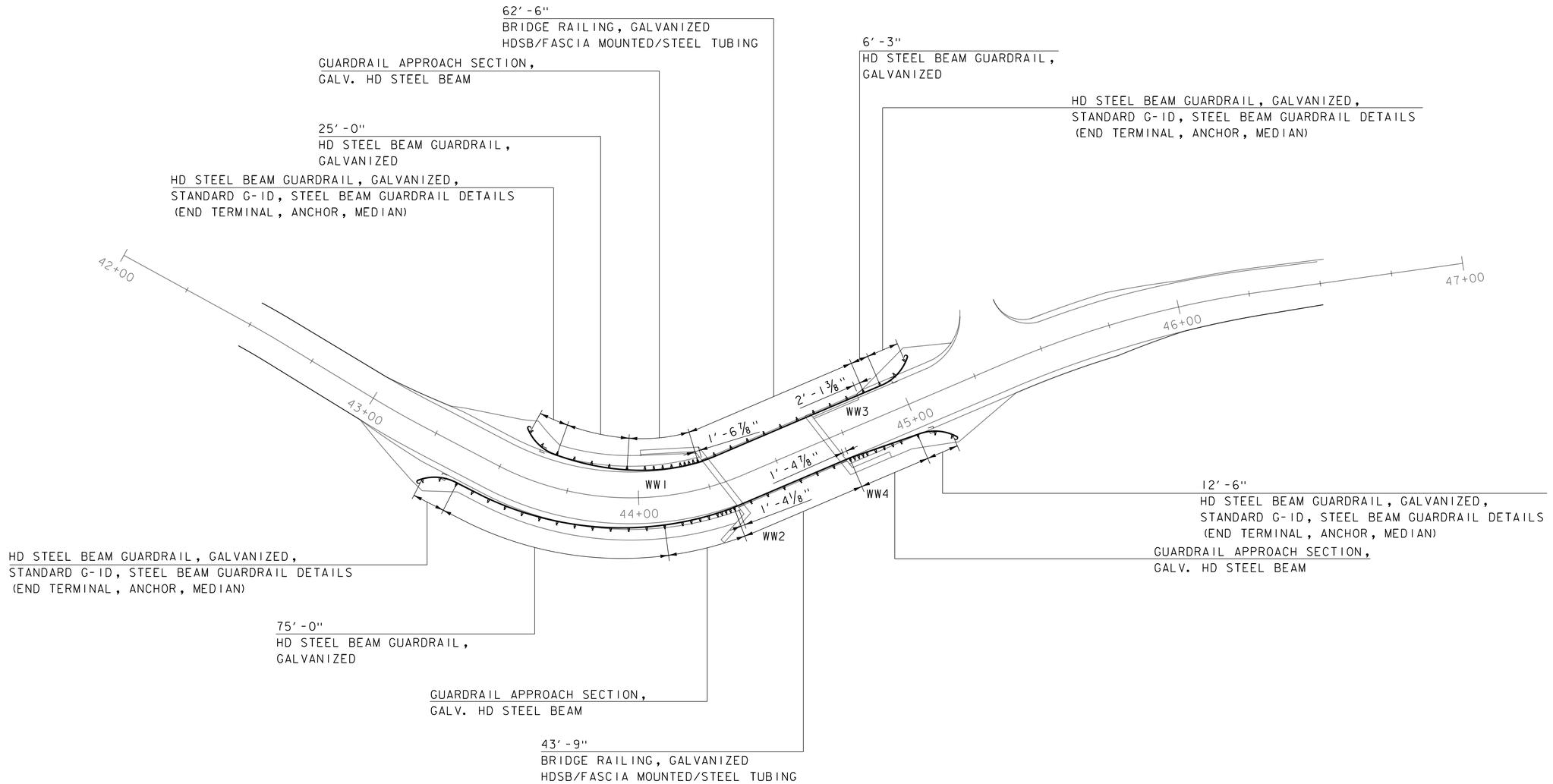
BORING LOG HUNTINGTON BO 1445(38).GPJ VERMONT AOT.GDT 10/22/20

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630bor.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
BORING LOG SHEET 5

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY

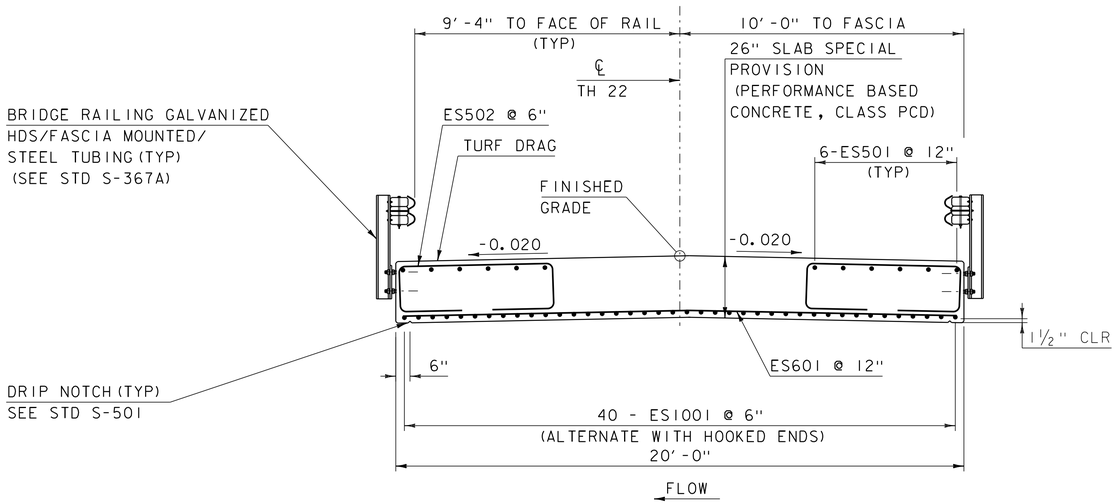
FIRST POST OFF BRIDGE DISTANCE	HDSB GUARDRAIL GALVANIZED	GUARDRAIL APPROACH SECTION GALVANIZED HD STEEL BEAM	BRIDGE RAILING, GALVANIZED, HDSB/FASCIA MOUNTED/STEEL TUBING	ANCHOR FOR STEEL BEAM RAIL
WW1 1′-7″	STA 43+53.00 LT - STA 43+96.00 LT	STA 43+95.81 LT - STA 44+23.75 LT	STA 44+24.00 LT - STA 44+87.00 LT	STA 43+35.00 RT
WW2 1′-4″	STA 43+27.00 RT - STA 44+08.00 RT	STA 44+07.95 RT - STA 44+30.70 RT	STA 44+31.00 RT - STA 44+74.00 RT	STA 43+63.00 LT
WW3 2′-1½″	STA 44+87.00 LT - STA 45+05.00 LT	STA 44+73.82 RT - STA 44+98.78 RT		STA 44+98.00 LT
WW4 1′-5″	STA 44+99.00 RT - STA 45+06.00 RT			STA 45+03.00 RT



SCALE 1″ = 20′-0″
20 0 20

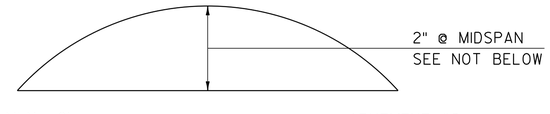
NOTE
BEDROCK HAS BEEN REMOVED FOR CLARITY

PROJECT NAME: HUNTINGTON	
PROJECT NUMBER: BO 1445(38)	
FILE NAME: sl2j630rail.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
GUARDRAIL LAYOUT SHEET	SHEET 25 OF 50



PROPOSED BRIDGE TYPICAL SECTION

SCALE ¾" = 1'-0"

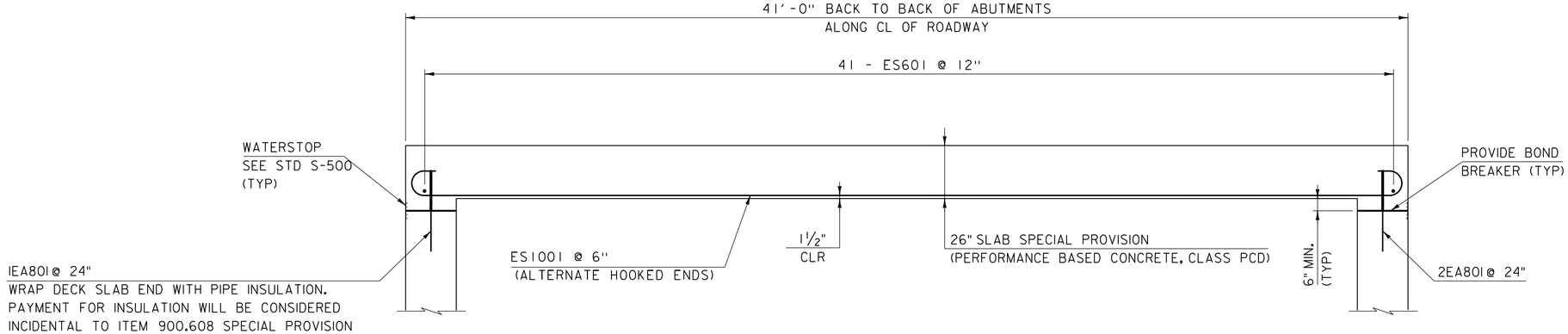


CAMBER DIAGRAM

NOT TO SCALE

NOTE:
BOTTOM OF THE SLAB SHALL BE CAMBERED A TOTAL OF 2" AT MIDPSAN. THIS INITIAL CAMBER SHALL APPROXIMATE A CIRCULAR CURVE. FINISH GRADE OF THE TOP OF SLAB SHALL MATCH PROFILE.

CAMBER INCLUDES 1" OF DEAD LOAD DEFLECTION AND 1" OF RESIDUAL CAMBER.

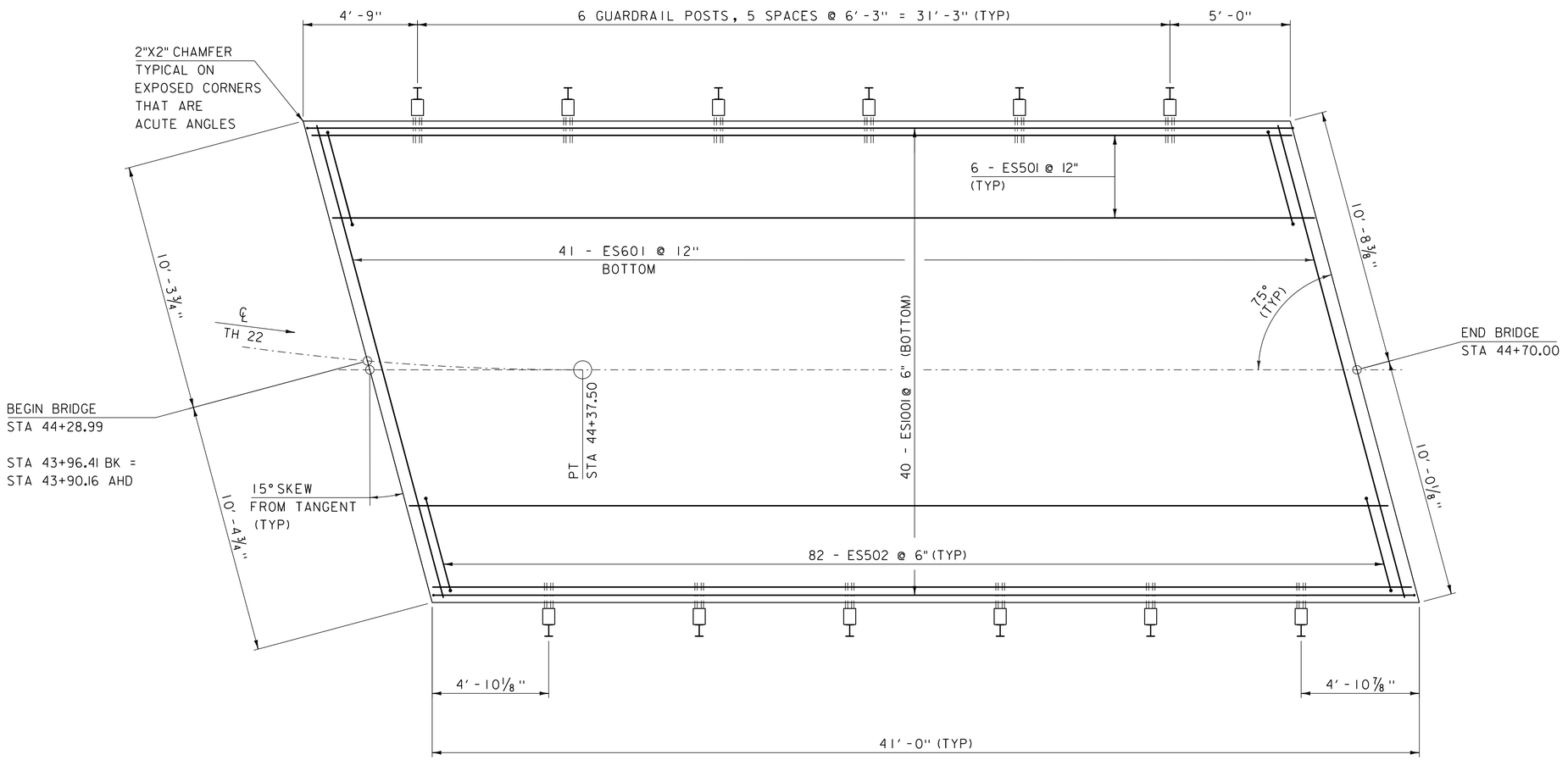


ELEVATION ALONG CENTERLINE

SCALE ¾" = 1'-0"

NOTE:
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: sl2j630sup.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: J. PAQUETTE
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
BRIDGE DECK DETAILS	SHEET 26 OF 50



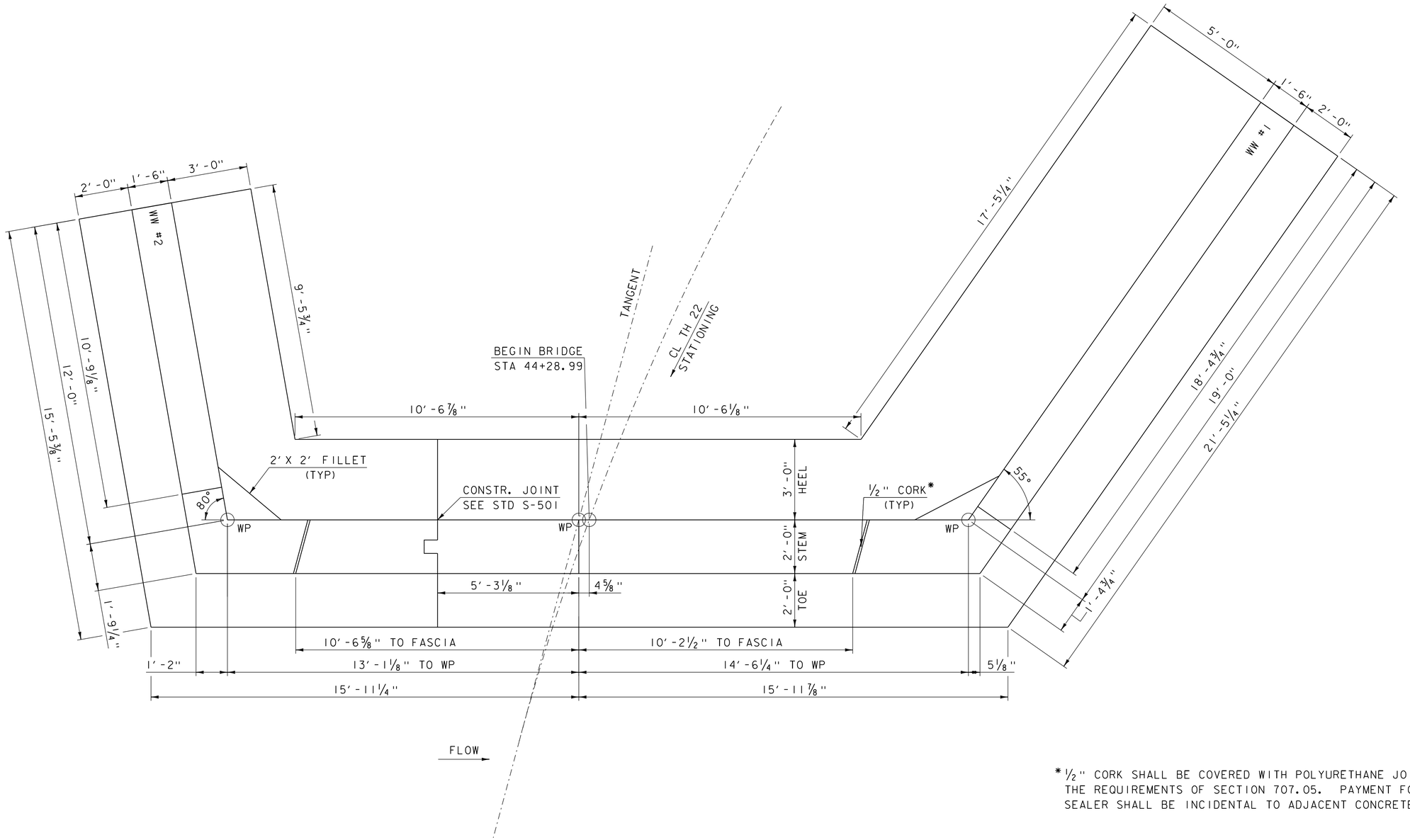
BRIDGE DECK PLAN

SCALE 3/8" = 1'-0"

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630sup.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: J. PAQUETTE
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
BRIDGE DECK PLAN	SHEET 27 OF 50

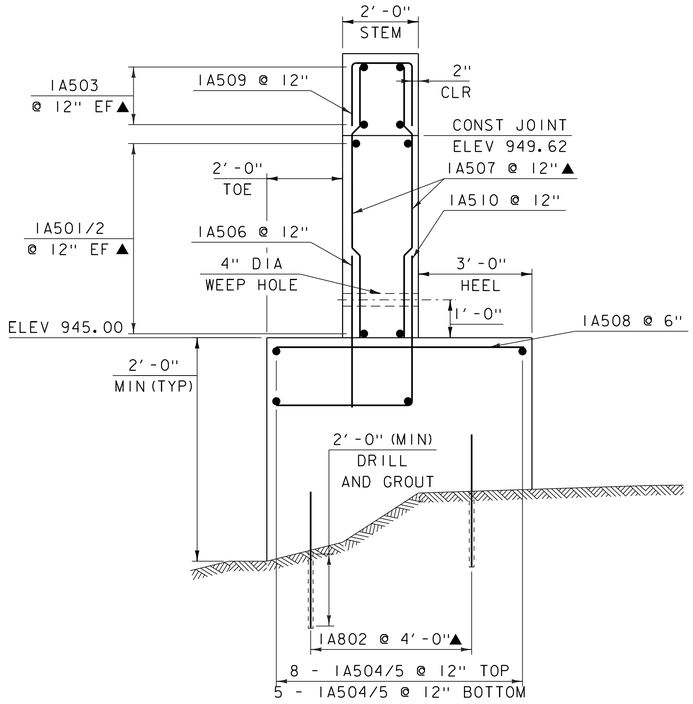


*½" CORK SHALL BE COVERED WITH POLYURETHANE JOINT SEALER MEETING THE REQUIREMENTS OF SECTION 707.05. PAYMENT FOR CORK AND JOINT SEALER SHALL BE INCIDENTAL TO ADJACENT CONCRETE ITEMS.

ABUTMENT #1 PLAN

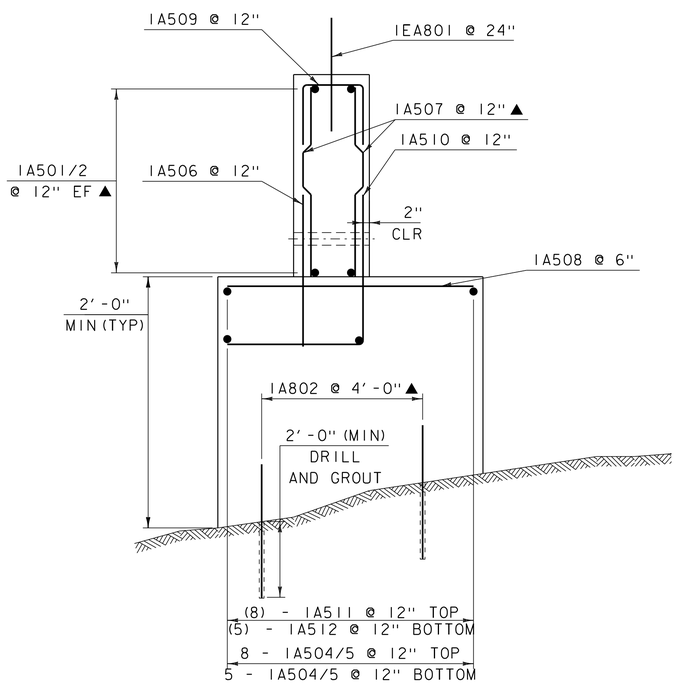
SCALE: ½" = 1'-0"

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: sl2j630sub.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: D. PETERSON
ABUTMENT #1PLAN	SHEET 28 OF 50



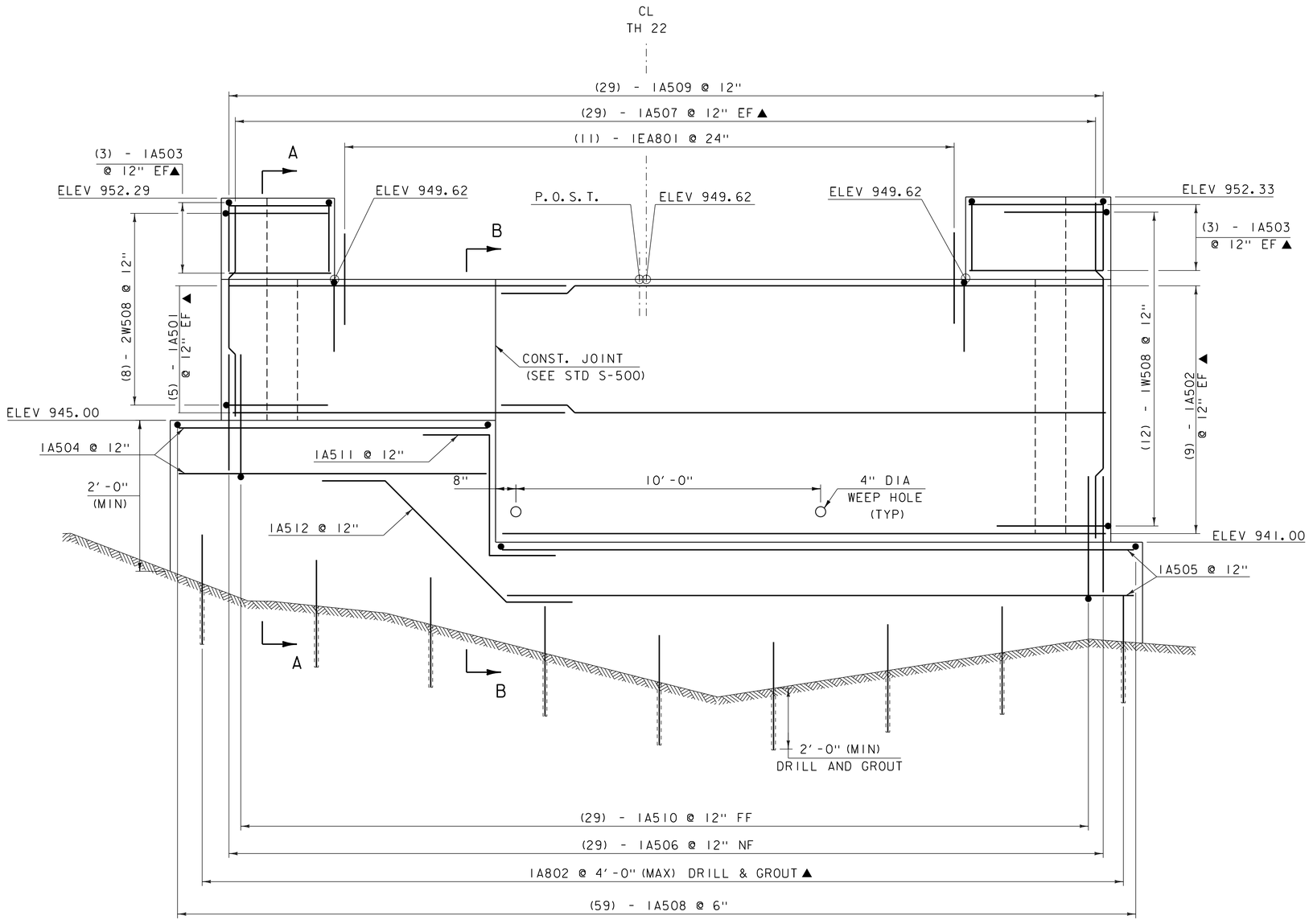
ABUTMENT #1 TYPICAL SECTION A-A

SCALE: 1/2" = 1'-0"



ABUTMENT #1 TYPICAL SECTION B-B

SCALE: 1/2" = 1'-0"



ABUTMENT #1 ELEVATION

SCALE: 1/2" = 1'-0"

NOTE:

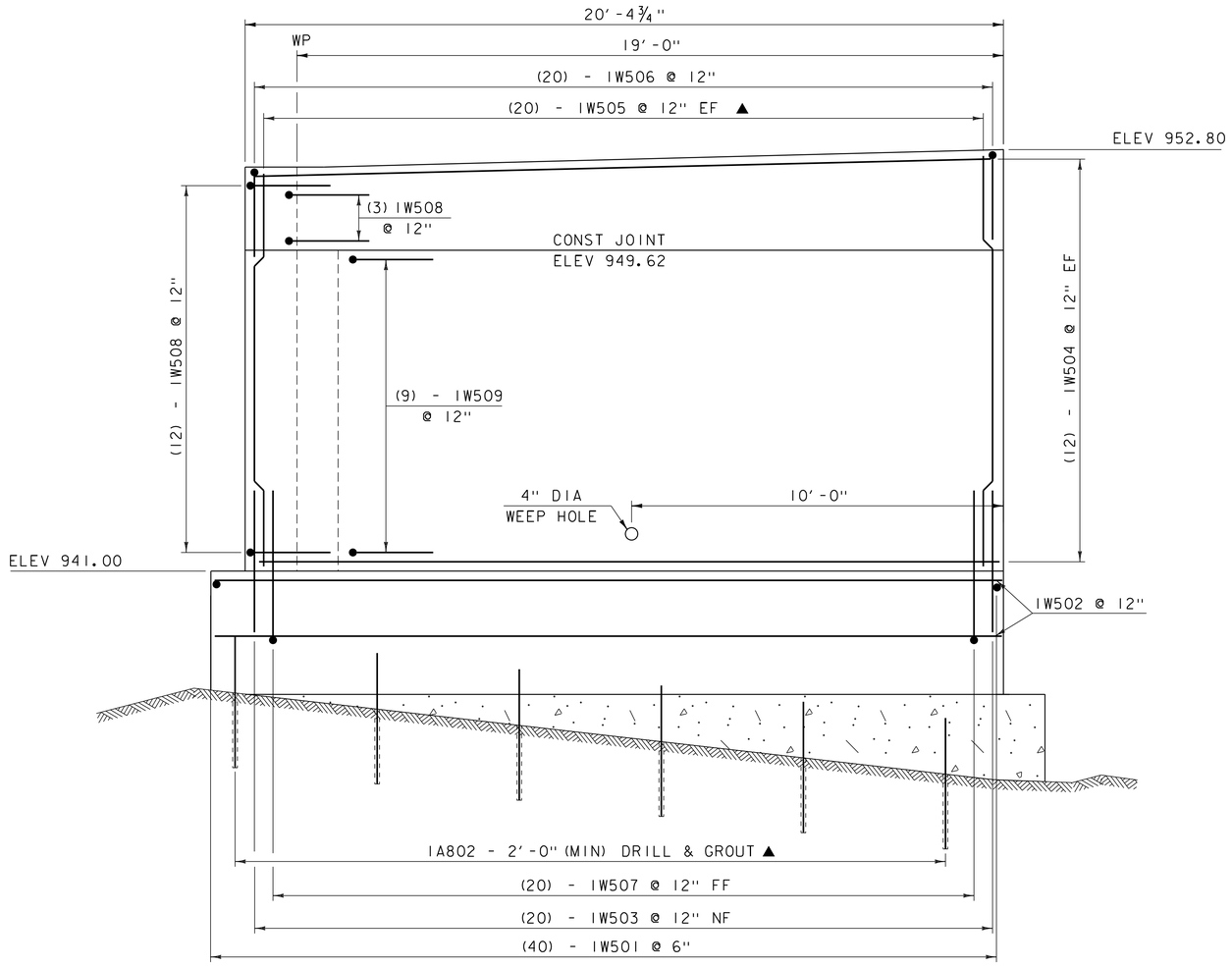
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SEE SHEET "WINGWALL CORNER DETAILS" FOR CORNER DETAILS

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

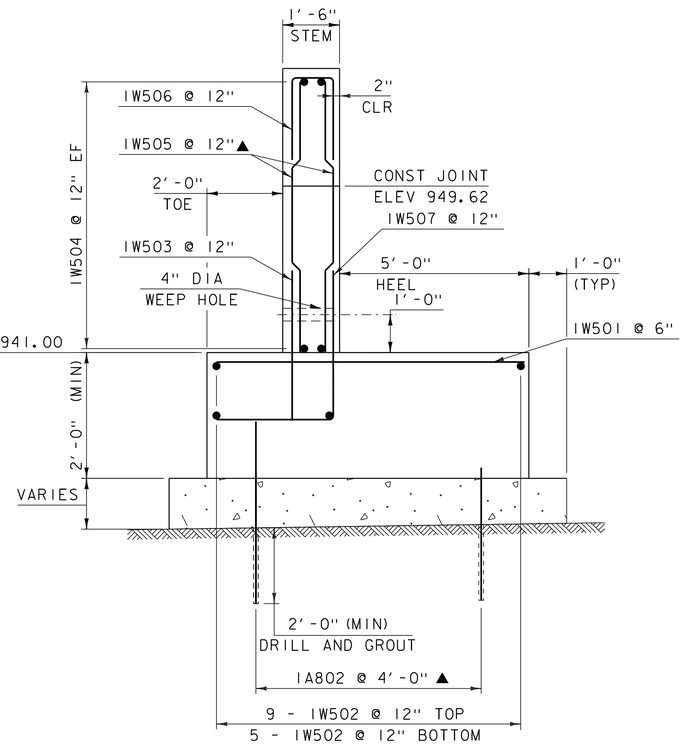
FILE NAME: s12j630sub.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
ABUTMENT #1TYPICAL & ELEVATION

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: D. PETERSON
SHEET 29 OF 50



WING WALL #1 ELEVATION

SCALE: ½" = 1'-0"



WINGWALL #1 TYPICAL SECTION

SCALE: ½" = 1'-0"

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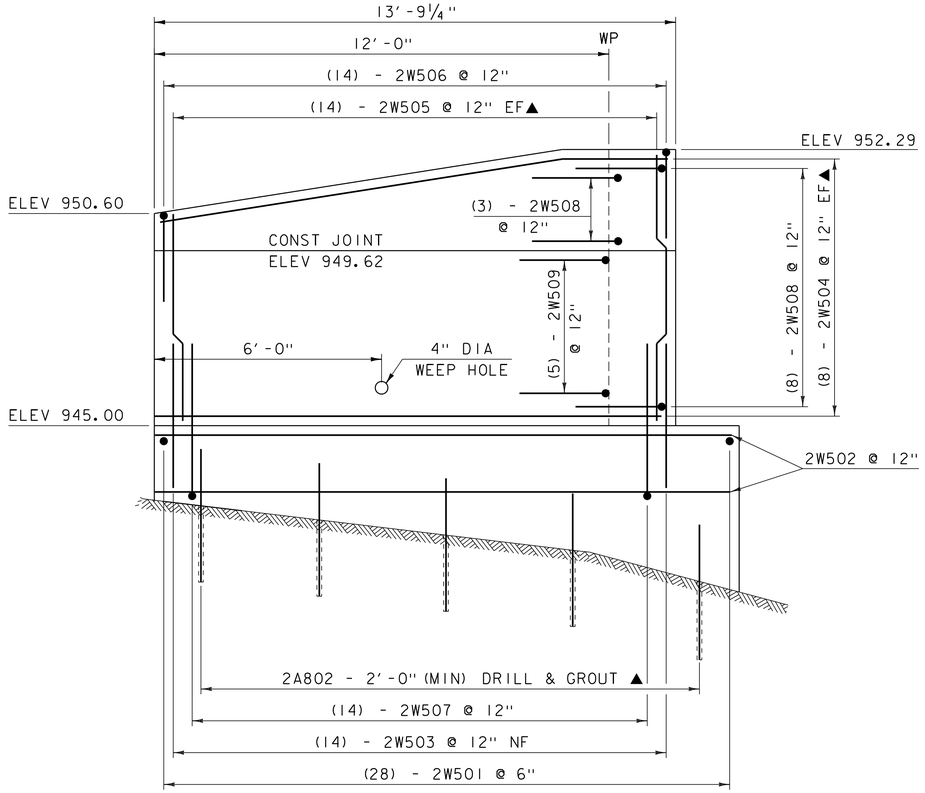
SEE SHEET "WINGWALL CORNER DETAILS" FOR CORNER DETAILS

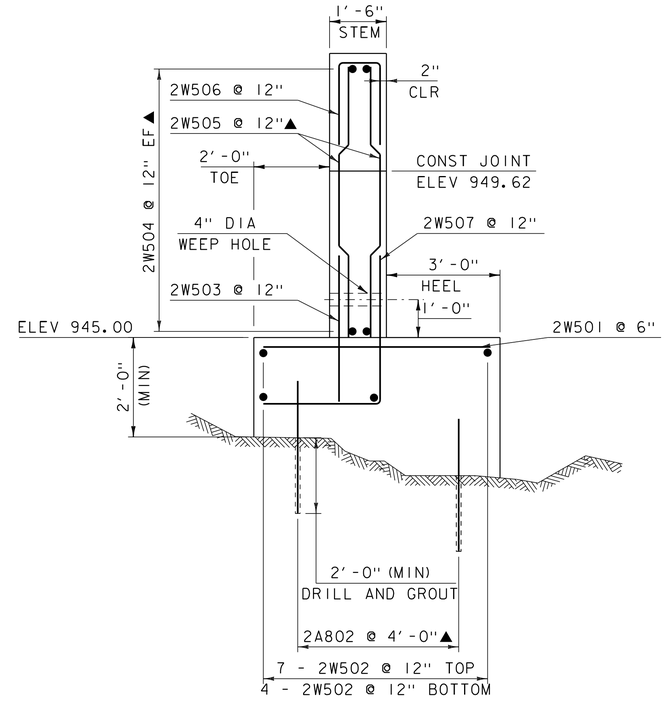
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)

FILE NAME: s12j630sub.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: D. PETERSON
WINGWALL #1 TYPICAL & ELEVATION	SHEET 30 OF 50



WING WALL #2 ELEVATION

SCALE: ½″ = 1′-0″



WINGWALL #2 TYPICAL SECTION

SCALE: ½″ = 1′-0″

NOTE:

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EF = EACH FACE
▲ = CUT TO FIT IN FIELD
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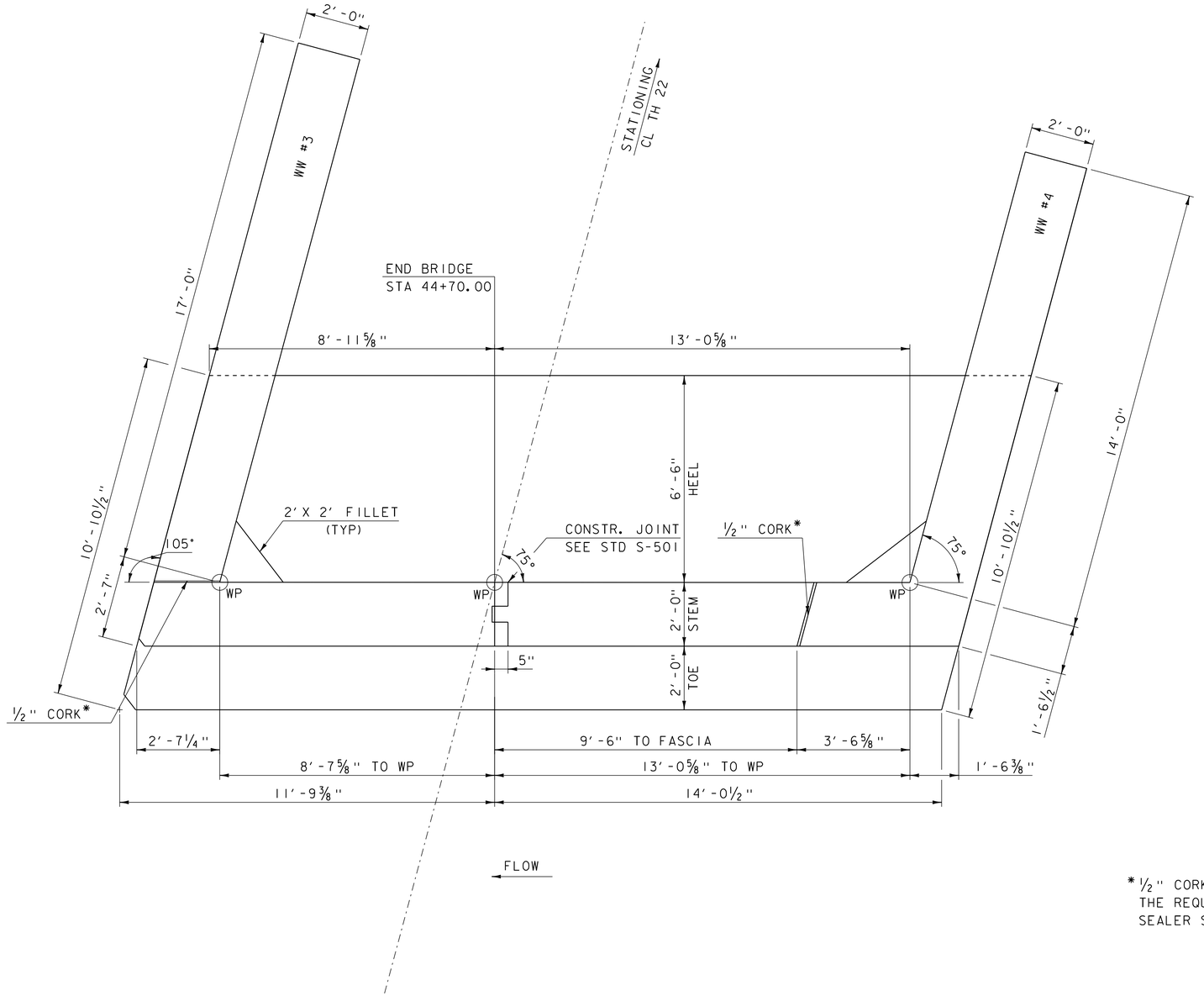
2′-2″ BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SEE SHEET "WINGWALL CORNER DETAILS" FOR CORNER DETAILS

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630sub.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
WINGWALL #2 TYPICAL & ELEVATION

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: D. PETERSON
SHEET 31 OF 50

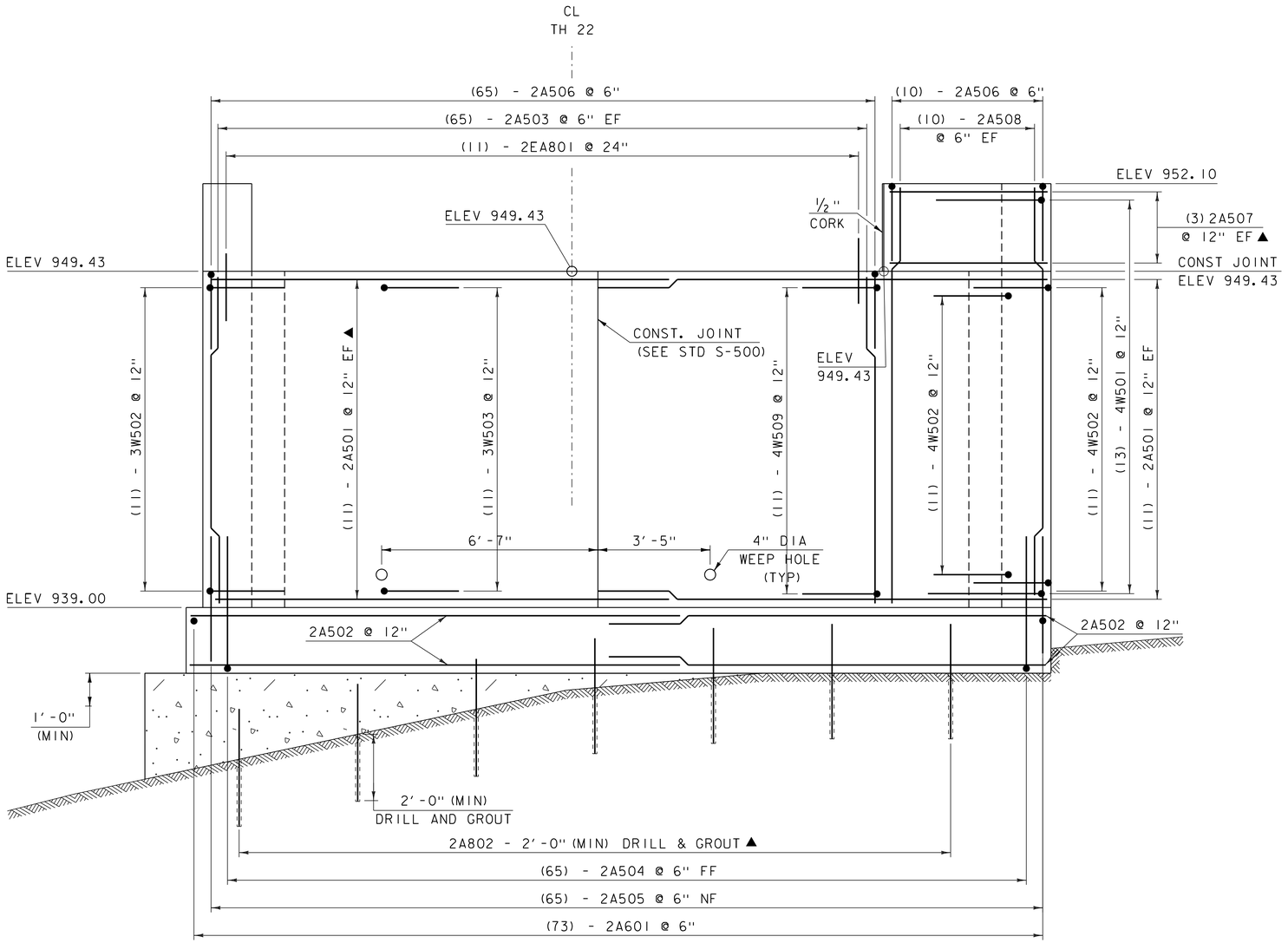


ABUTMENT #2 PLAN

SCALE: ½" = 1'-0"

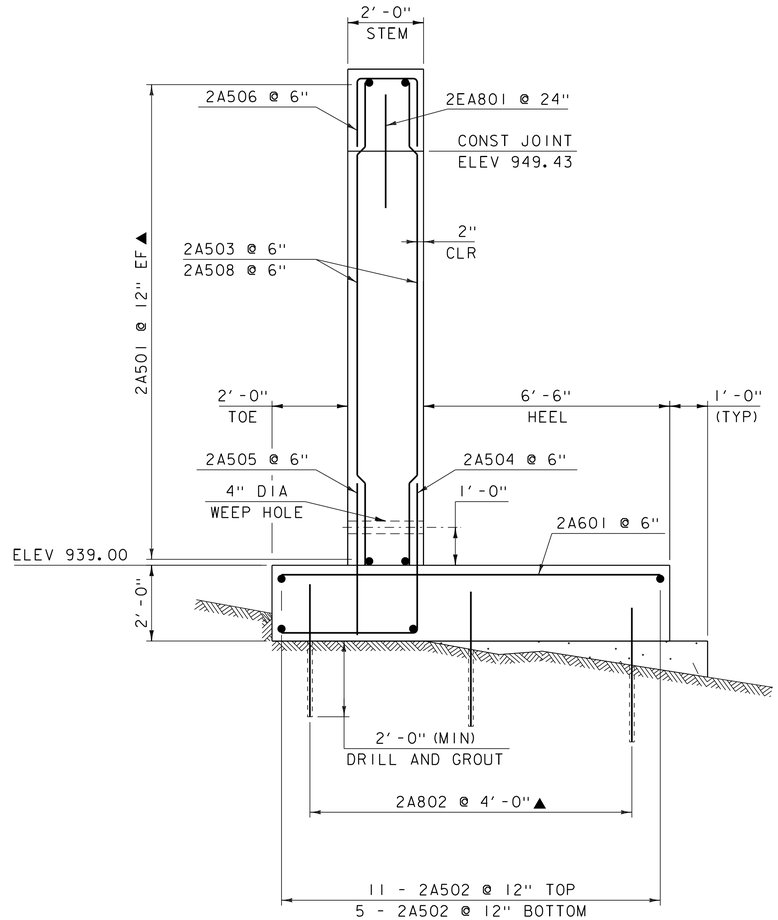
*½" CORK SHALL BE COVERED WITH POLYURETHANE JOINT SEALER MEETING THE REQUIREMENTS OF SECTION 707.05. PAYMENT FOR CORK AND JOINT SEALER SHALL BE INCIDENTAL TO ADJACENT CONCRETE ITEMS.

PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630sub.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FERNCH
DESIGNED BY: C. FRENCH	CHECKED BY: D. PETERSON
ABUTMENT #2 PLAN	SHEET 32 OF 50



ABUTMENT #2 ELEVATION

SCALE: 1/2" = 1'-0"



ABUTMENT #2 TYPICAL SECTION

SCALE: 1/2" = 1'-0"

*1/2" CORK SHALL BE COVERED WITH POLYURETHANE JOINT SEALER MEETING THE REQUIREMENTS OF SECTION 707.05. PAYMENT FOR CORK AND JOINT SEALER SHALL BE INCIDENTAL TO ADJACENT CONCRETE ITEMS.

NOTE:

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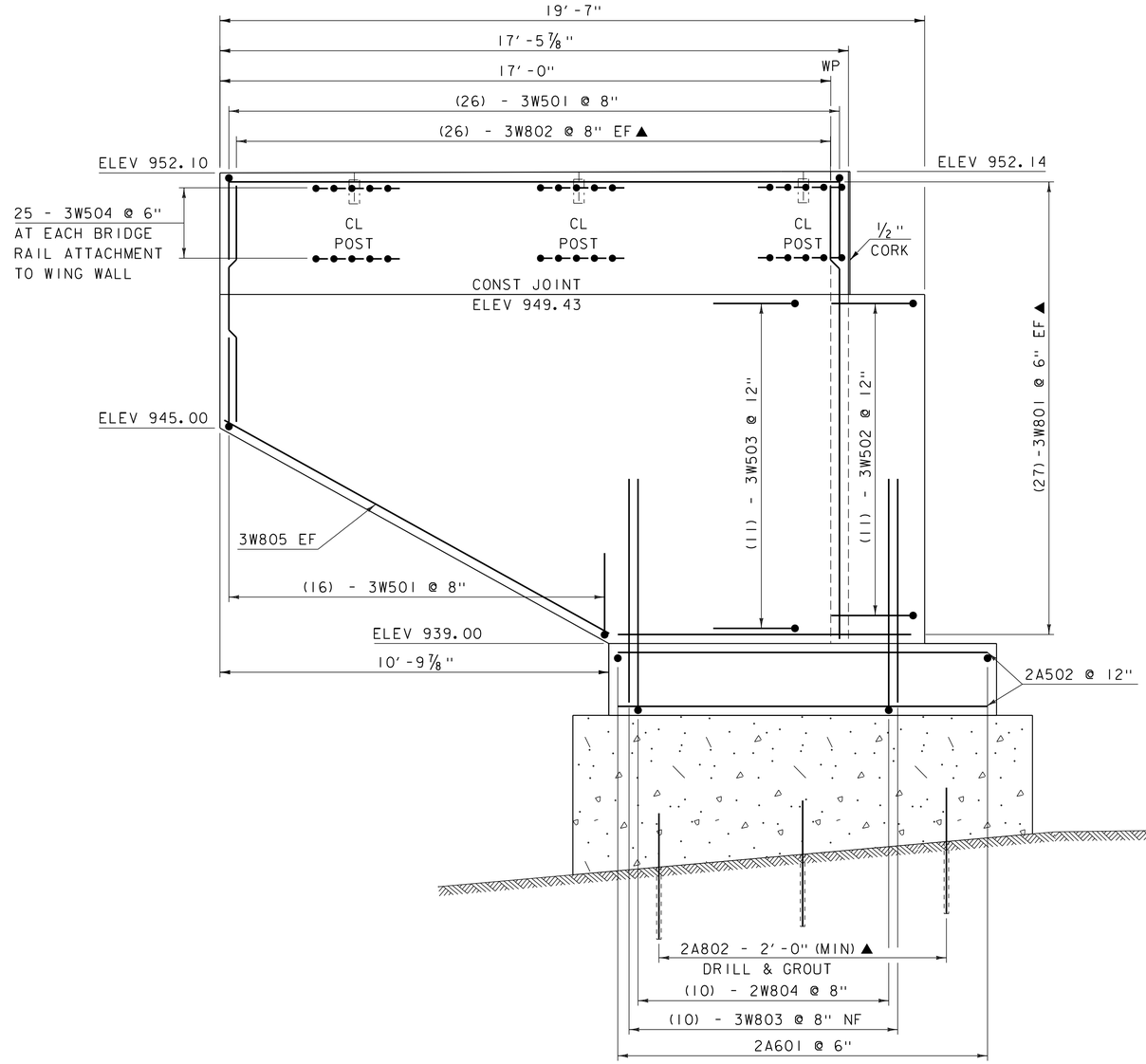
SEE SHEET "WINGWALL CORNER DETAILS" FOR CORNER DETAILS

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

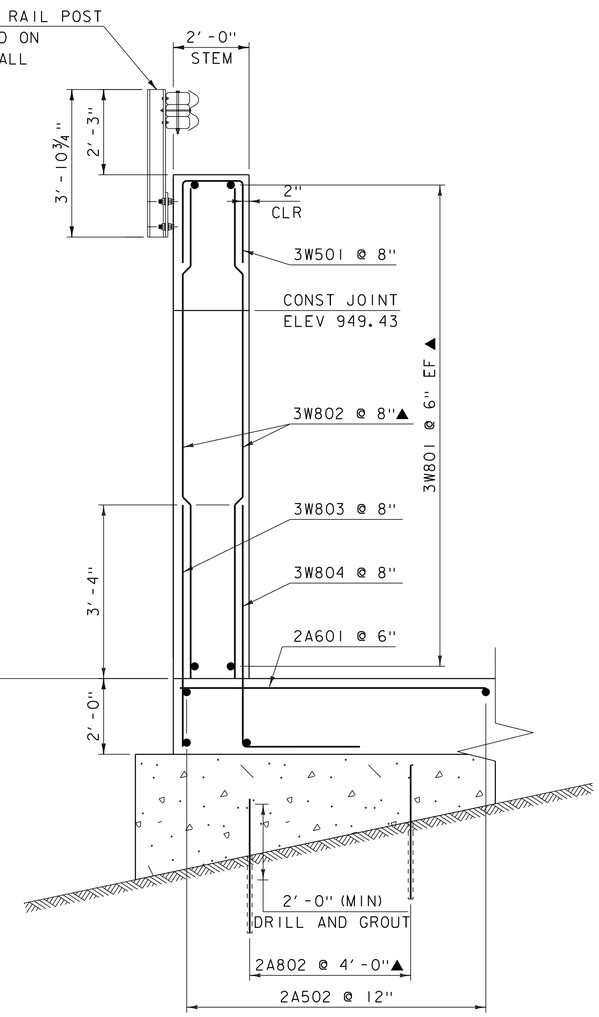
FILE NAME: sl2j630sub.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
ABUTMENT #2 TYPICAL & ELEVATION

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: D. PETERSON
SHEET 33 OF 50



WING WALL #3 ELEVATION

SCALE: ½″ = 1′-0″



WINGWALL #3 TYPICAL SECTION

SCALE: ½″ = 1′-0″

*½″ CORK SHALL BE COVERED WITH POLYURETHANE JOINT SEALER MEETING THE REQUIREMENTS OF SECTION 707.05. PAYMENT FOR CORK AND JOINT SEALER SHALL BE INCIDENTAL TO ADJACENT CONCRETE ITEMS.

NOTE:

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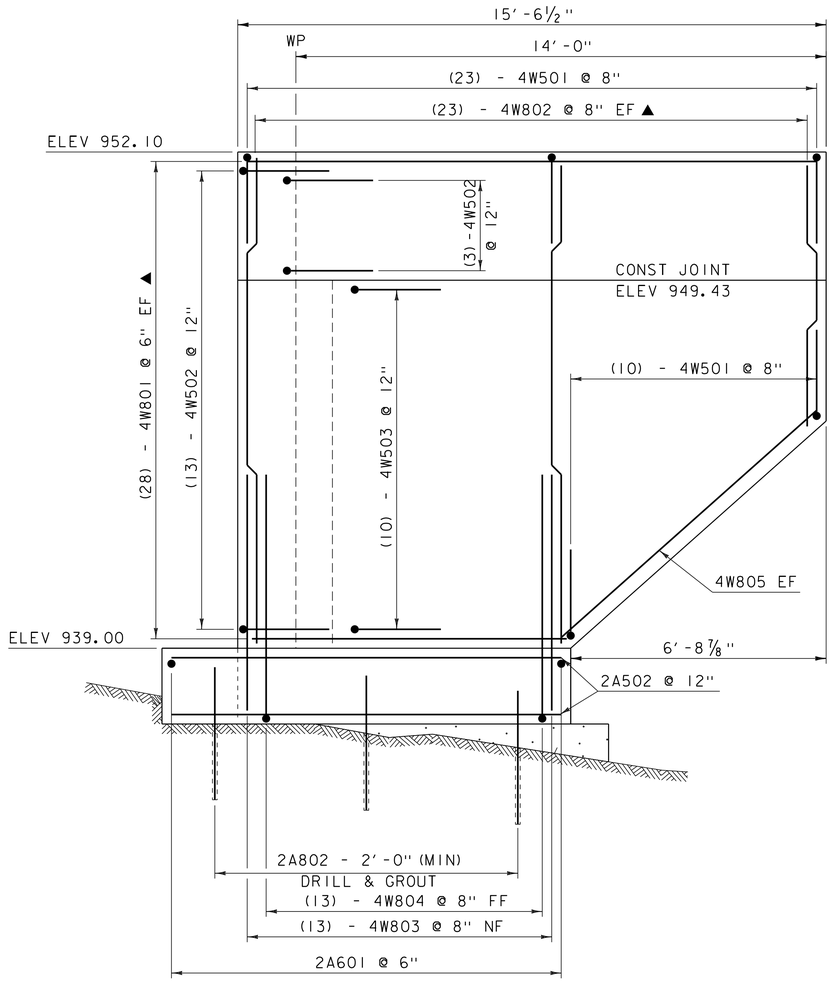
2′-2″ BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SEE SHEET "WINGWALL CORNER DETAILS" FOR CORNER DETAILS

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

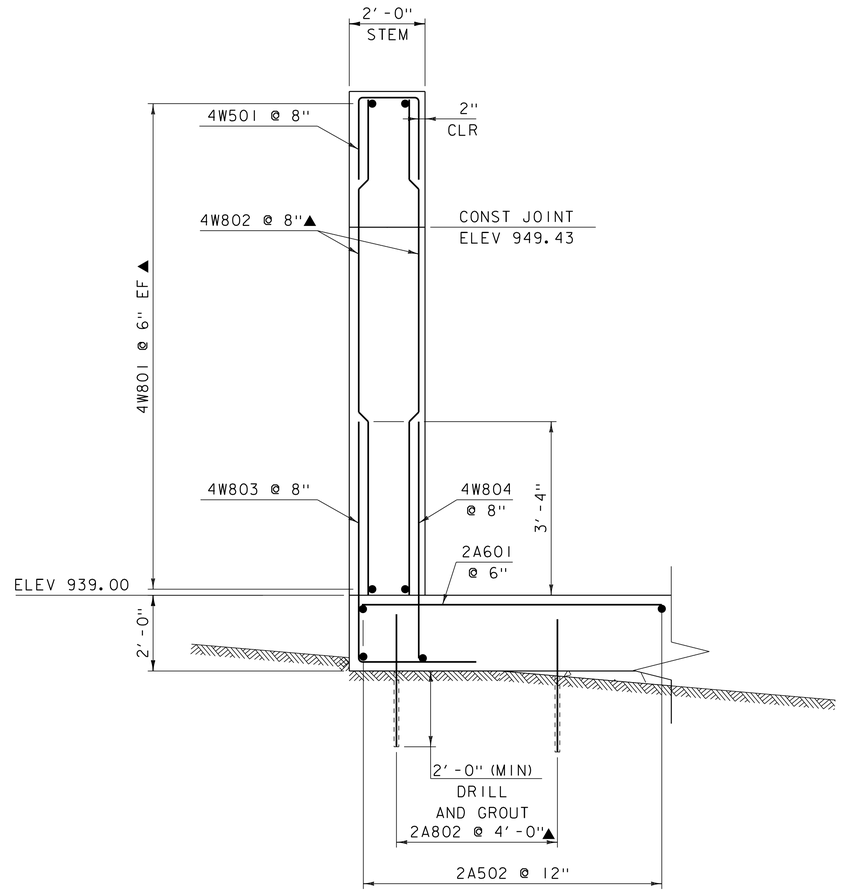
FILE NAME: sl2j630sub.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
WINGWALL #3 TYPICAL & ELEVATION

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: D. PETERSON
SHEET 34 OF 50



WINGWALL #4 ELEVATION

SCALE: ½″ = 1′-0″



WINGWALL #4 TYPICAL SECTION

SCALE: ½″ = 1′-0″

NOTE:

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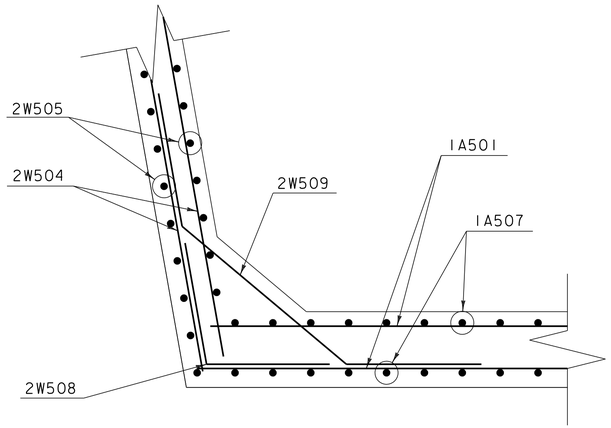
2′-2″ BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SEE SHEET "WINGWALL CORNER DETAILS" FOR CORNER DETAILS

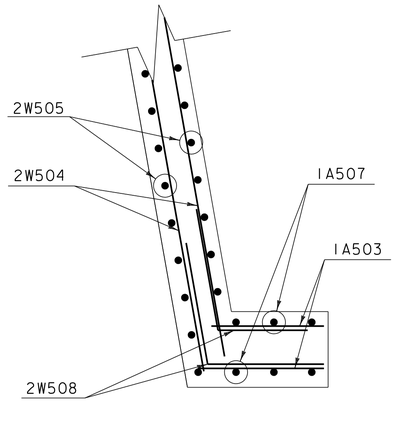
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630sub.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
WINGWALL #4 TYPICAL & ELEVATION

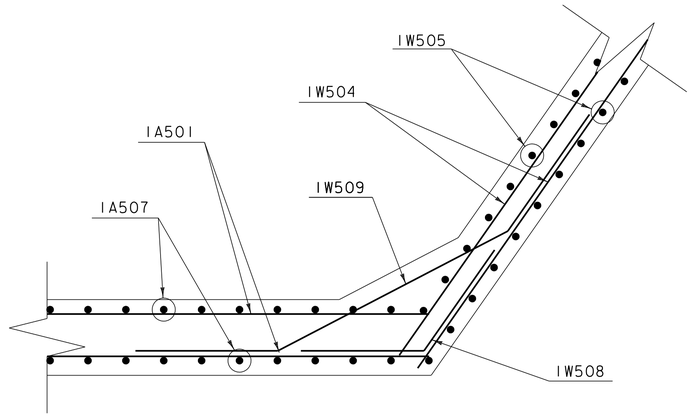
PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: D. PETERSON
SHEET 35 OF 50



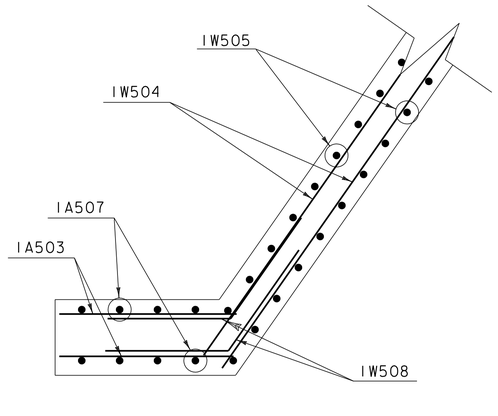
WINGWALL #2 CORNER
DETAIL BELOW SEAT
SCALE ½" = 1'-0"



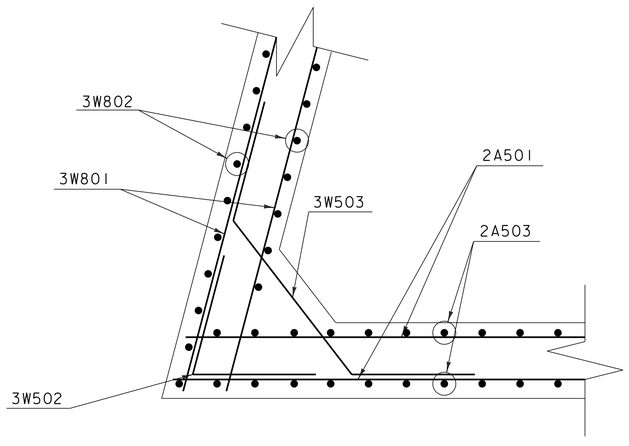
WINGWALL #2 CORNER
DETAIL ABOVE SEAT
SCALE ½" = 1'-0"



WINGWALL #1 CORNER
DETAIL BELOW SEAT
SCALE ½" = 1'-0"

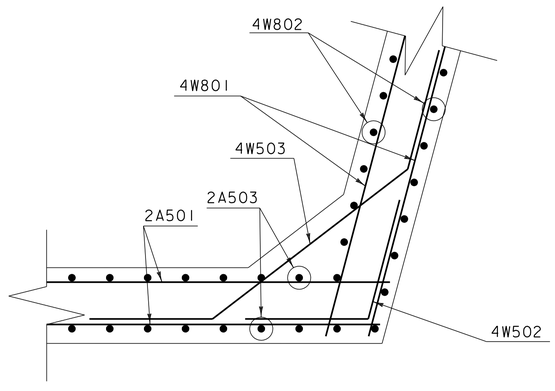


WINGWALL #1 CORNER
DETAIL ABOVE SEAT
SCALE ½" = 1'-0"

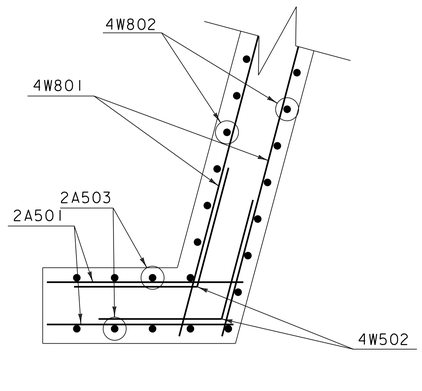


WINGWALL #3 CORNER
DETAIL BELOW SEAT
SCALE ½" = 1'-0"

WINGWALL #3
NO CORNER ABOVE BRIDGE SEAT



WINGWALL #4 CORNER
DETAIL BELOW SEAT
SCALE ½" = 1'-0"



WINGWALL #4 CORNER
DETAIL ABOVE SEAT
SCALE ½" = 1'-0"

NOTE:

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PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630sub.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
WINGWALL CORNER DETAILS

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: D. PETERSON
SHEET 36 OF 50

STATE OF VERMONT
AGENCY OF TRANSPORTATION

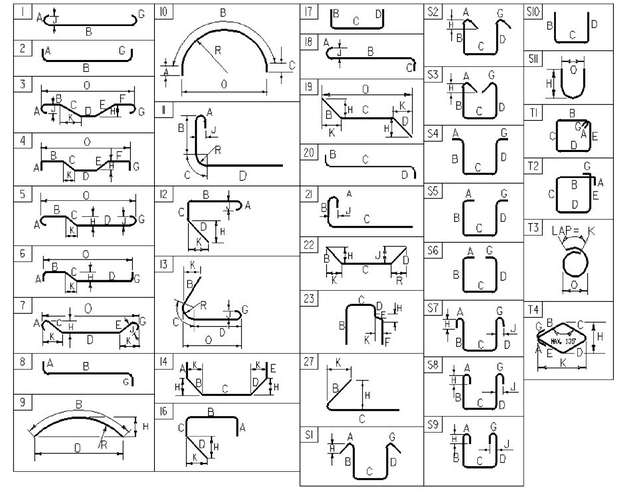
REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	DECK																
	12	5	40'- 6"	ES501	STR	40'- 6"											
	164	5	9'- 9"	ES502	S6	0'- 7"	1'- 7"	5'- 5"	1'- 7"	0'- 7"							
	41	6	20'- 2"	ES601	STR	20'- 2"											
	40	10	41'- 11"	ES1001	1	1'- 5"	40'- 6"					---		1'- 1"			
	ABUTMENT 1																
	10	5	12'- 0"	1A501	STR												
	18	5	20'- 0"	1A502	STR												
▲	12	5	4'- 1"	1A503	STR												
	13	5	8'- 6"	1A504	STR												
	13	5	21'- 0"	1A505	STR												
	29	5	5'- 0"	1A506	STR												
▲	58	5	10'- 11"	1A507	STR												
	59	5	6'- 6"	1A508	STR												
	29	5	5'- 11"	1A509	S10		2'- 2"	1'- 7"	2'- 2"								
	29	5	8'- 7"	1A510	17		0'- 0"	3'- 7"	5'- 0"								
	8	5	8'- 4"	1A511	19		2'- 2"	4'- 0"	2'- 2"				2'- 2"		0'- 0"		4'- 0"
	5	5	10'- 0"	1A512	19		2'- 2"	5'- 8"	2'- 2"				1'- 6"		1'- 6"		8'- 8"
	11	8	3'- 0"	1EA801	STR												
	36	8	3'- 6"	1A802	STR												
	WINGWALL 1																
	40	5	8'- 1"	1W501	STR												
	14	5	20'- 11"	1W502	STR												
	20	5	5'- 0"	1W503	STR												
	24	5	19'- 11"	1W504	STR												
▲	40	5	11'- 7"	1W505	STR												
	20	5	5'- 5"	1W506	S10		2'- 2"	1'- 1"	2'- 2"								
	20	5	8'- 1"	1W507	17		---	3'- 1"	5'- 0"								
	15	5	4'- 4"	1W508	19		2'- 2"	2'- 2"	---				1'- 9"		1'- 3"		
	9	5	13'- 2"	1W509	22		2'- 2"	8'- 10"	2'- 2"				1'- 0"	1'- 0"	1'- 11"	1'- 11"	
	WINGWALL 2																
	28	5	6'- 0"	2W501	STR												
	11	5	14'- 11"	2W502	STR												
	14	5	5'- 0"	2W503	STR												
	16	5	13'- 3"	2W504	STR												
▲	28	5	7'- 0"	2W505	STR												
	14	5	5'- 5"	2W506	S10		2'- 2"	1'- 1"	2'- 2"								
	14	5	8'- 1"	2W507	17		---	3'- 1"	5'- 0"								
	11	5	4'- 4"	2W508	19		2'- 2"	2'- 2"	---				0'- 5"		2'- 1"		
	5	5	11'- 4"	2W509	22		2'- 2"	7'- 0"	2'- 2"				1'- 5"	1'- 5"	1'- 8"	1'- 8"	
	ABUTMENT 2																
	44	5	14'- 0"	2A501	STR												
	32	5	14'- 0"	2A502	STR												
	90	5	10'- 2"	2A503	STR												
	65	5	8'- 9"	2A504	17		---	3'- 9"	5'- 0"								
	65	5	5'- 0"	2A505	STR												
	65	5	5'- 11"	2A506	S10		2'- 2"	1'- 7"	2'- 2"								
	6	5	4'- 6"	2A507	STR												
	65	6	10'- 0"	2A601	STR												
	11	8	3'- 0"	2EA801	STR												
▲	24	8	3'- 6"	2A802	STR												
	40	5	12'- 10"	2A508	STR												
	WINGWALL 3																
	11	5	4'- 4"	3W502	S10		2'- 2"	2'- 2"	---				2'- 1"		0'- 7"		
	42	5	4'- 4"	3W501	27		1'- 1"	1'- 7"	2'- 2"								
	11	5	10'- 11"	3W503	22		2'- 2"	6'- 4"	2'- 2"				1'- 9"	1'- 9"	1'- 4"	1'- 4"	
	75	5	3'- 1"	3W504	T9		0'- 8"	1'- 7"				0'- 10"					
▲	54	8	19'- 1"	3W801	STR												
▲	52	8	12'- 11"	3W802	STR												
	10	8	5'- 4"	3W803	STR												
	10	8	9'- 1"	3W804	17		---	3'- 9"	5'- 4"								
	2	8	12'- 3"	3W805	STR												
	WINGWALL 4																
	16	5	4'- 4"	4W502	S10		---	2'- 2"	2'- 2"				2'- 1"		0'- 7"		
	33	5	4'- 4"	4W501	19		2'- 2"	1'- 7"	2'- 2"								
	10	5	12'- 10"	4W503	22		2'- 2"	8'- 0"	2'- 2"				1'- 4"	1'- 4"	1'- 9"	1'- 9"	
▲	52	8	15'- 0"	4W801	STR												
▲	46	8	12'- 10"	4W802	STR												
	13	8	5'- 4"	4W803	STR												
	13	8	6'- 11"	4W804	17		---	1'- 7"	5'- 4"								
	2	8	8'- 6"	4W805	STR												

~ NOTES ~

1. UNLESS OTHERWISE DESIGNATED, ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING NO. 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET-STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M 31 (ASTM A 615-SI). ALL BARS SHALL BE GRADE 60, UNLESS OTHERWISE DESIGNATED.
2. FOR TYPICAL BENDING DETAILS, RECOMMENDED PIN DIAMETER "D" OF BENDS AND HOOKS, AND OTHER STANDARD PRACTICE, SEE CURRENT CONCRETE REINFORCING STEEL INSTITUTE "MANUAL OF STANDARD PRACTICE".
3. BARS WHICH REQUIRE MORE ACCURATE BENDING THAN STANDARD PRACTICES SHOULD HAVE LIMITS INDICATED.
4. ALL DIMENSIONS ARE OUT TO OUT OF BAR EXCEPT "A" AND "G" ON STANDARD 180 DEGREE AND 135 DEGREE HOOKS.
5. "J" DIMENSION ON 180 DEGREE HOOKS TO BE SHOWN ONLY WHERE NECESSARY TO RESTRICT HOOK SIZE. OTHERWISE, STANDARD HOOKS ARE TO BE USED.
6. "H" DIMENSION ON STIRRUPS TO BE SHOWN ONLY WHEN NECESSARY TO MAINTAIN CLEARANCES.
7. WHERE SLOPE DIFFERS FROM 45 DEGREES, DIMENSIONS "H" AND "K" MUST BE SHOWN.

8. ▲ DENOTES BARS TO BE CUT IN FIELD.
9. ✳ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.
10. △ DENOTES TWO EXTRA BARS ADDED FOR TESTING PURPOSES.
11. E IN BAR MARK PREFIX DENOTES EPOXY COATED REINFORCING STEEL.



ASTM STANDARD REINFORCING BARS

BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION DIAMETER INCHES	AREA INCHES 2	PERIMETER INCHES
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.142
#9	3.400	1.128	1.00	3.544
#10	4.303	1.270	1.27	3.990
#11	5.313	1.410	1.56	4.430
#14	7.65	1.693	2.25	5.32
#18	13.60	2.257	4.00	7.09

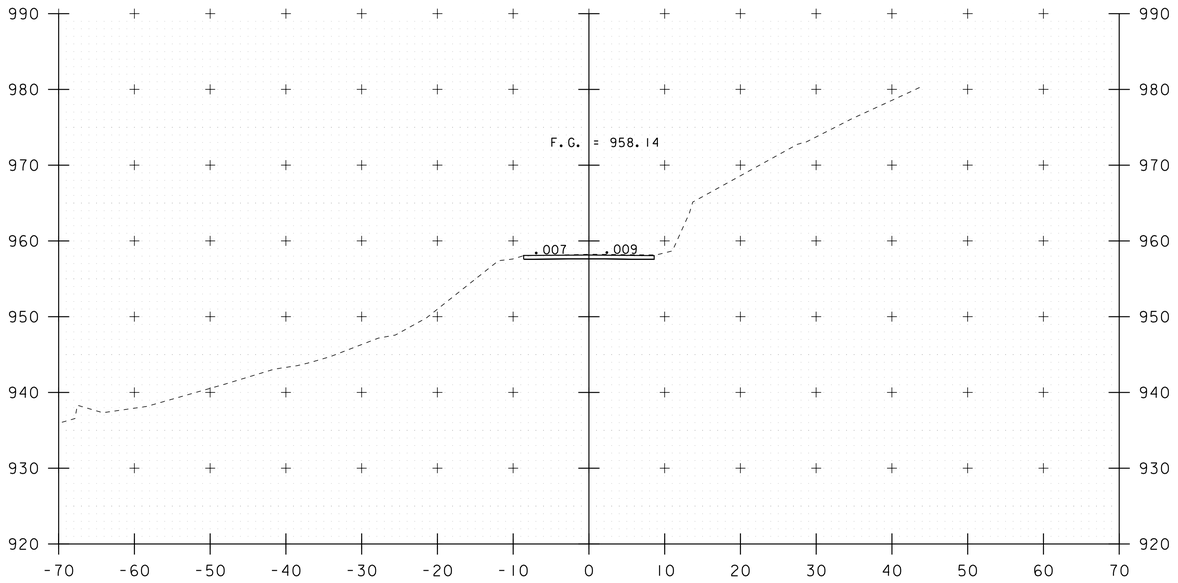
~ REINFORCING STEEL CORROSION RESISTANCE LEVEL ~

THE REINFORCING STEEL MARKS IN THIS SCHEDULE INDICATE THE REQUIRED BAR CORROSION RESISTANCE LEVEL. CORROSION RESISTANCE LEVEL IS DENOTED WITH A .2 FOR LEVEL TWO SUFFIX OR .3 FOR LEVEL THREE SUFFIX, .1 FOR LEVEL ONE IS TO BE OMITTED. THE BAR MATERIAL TYPE AND BAR STEEL GRADE PROVIDED FOR EACH CORROSION LEVEL WILL BE RECORDED ON THE PLAN SET PI SHEET FOR AS-BUILT RECORD PLAN ARCHIVES.

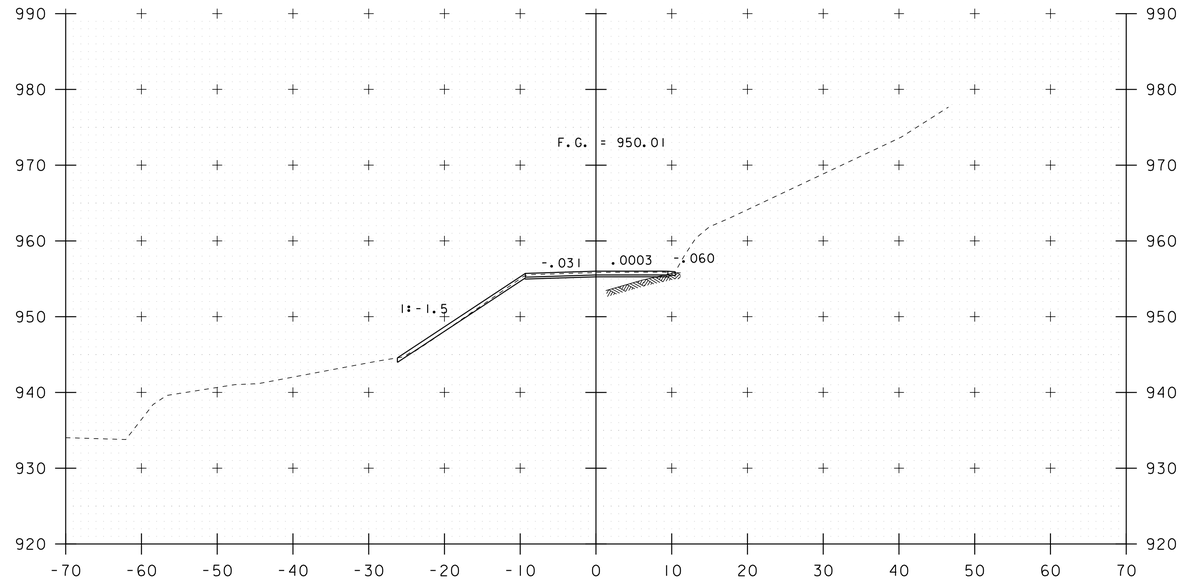
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630rss.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: J. PAQUETTE
REINFORCING STEEL SCHEDULE

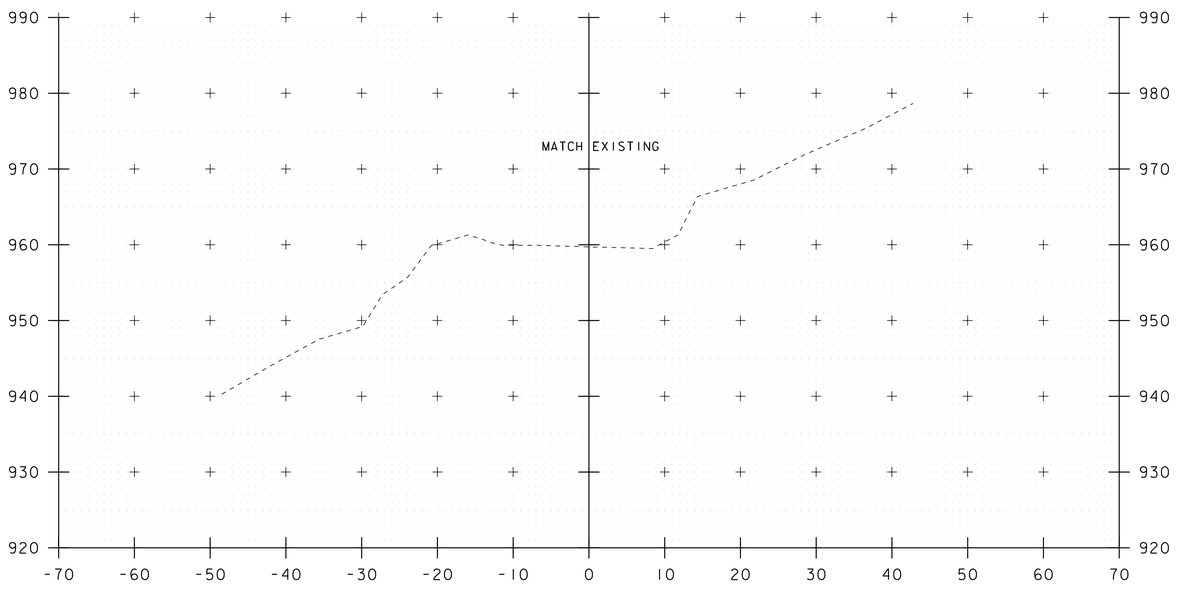
PLOT DATE: 12-JUL-2021
DRAWN BY: J. PAQUETTE
CHECKED BY: D. PETERSON
SHEET 37 OF 50



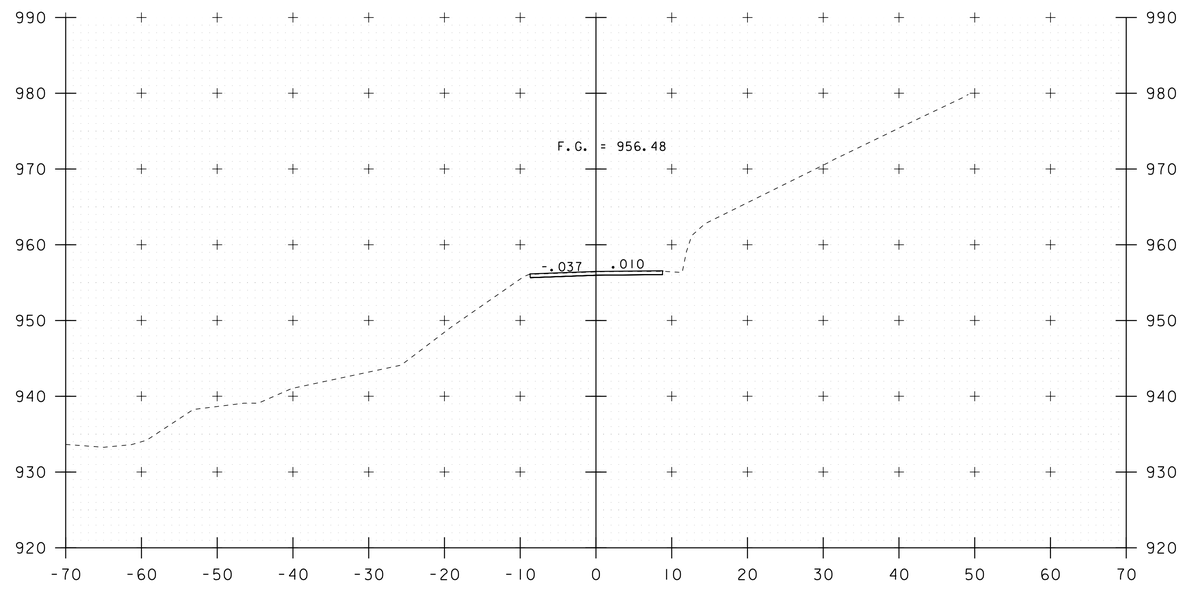
42+75



43+08



42+50
BEGIN APPROACH



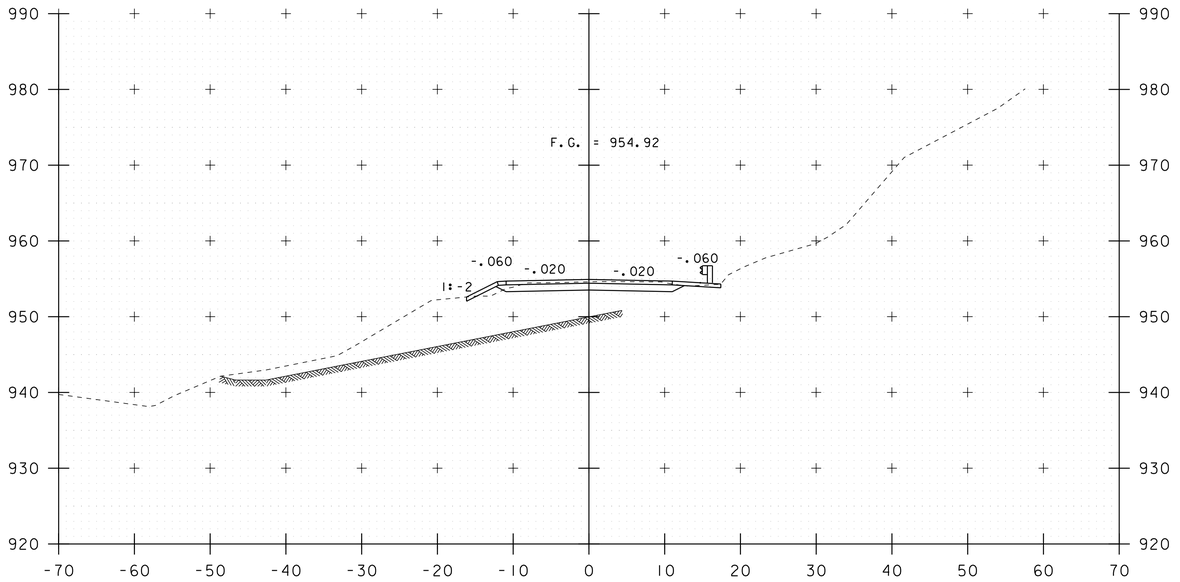
43+00
BEGIN PROJECT

STA. 42+50 TO STA. 43+08

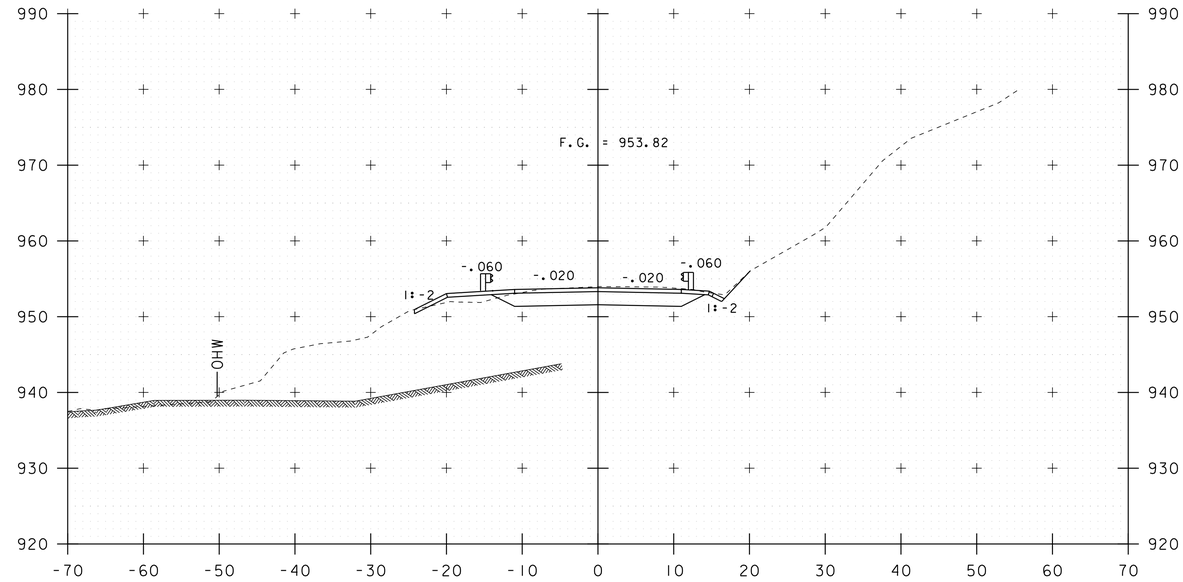
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630xs.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
CROSS SECTIONS 1

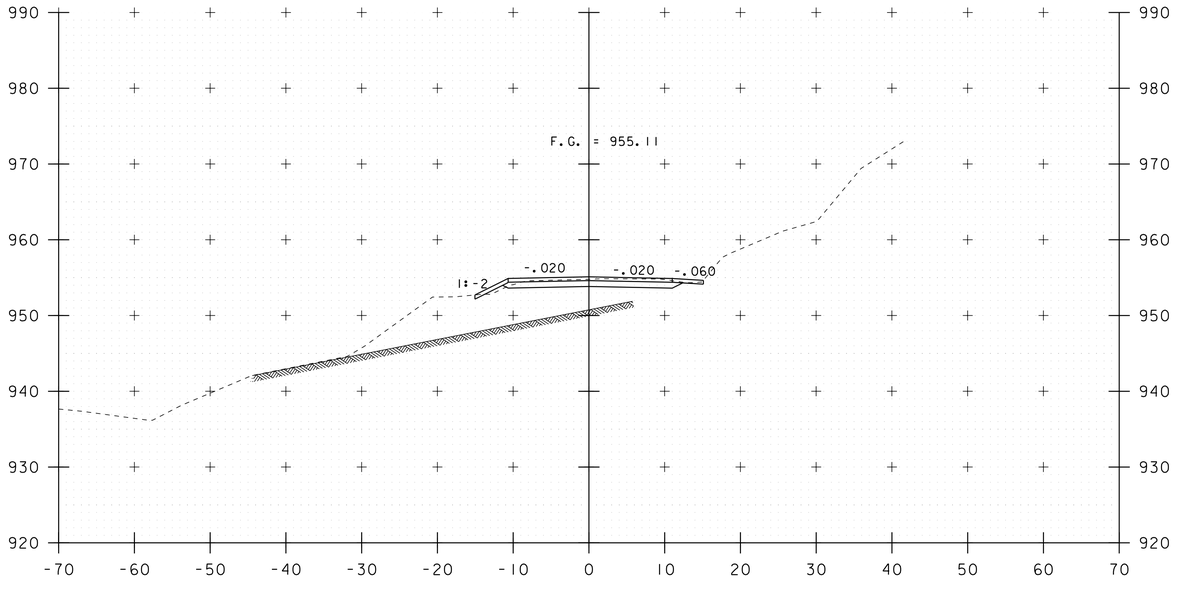
PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 38 OF 50



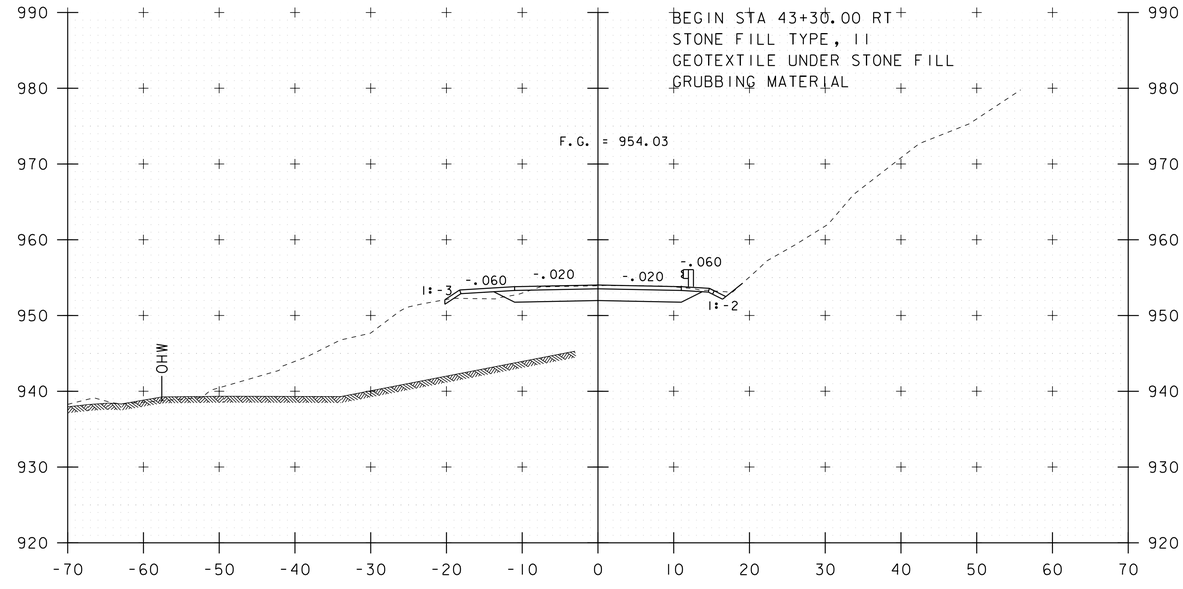
43+29



43+56



43+25



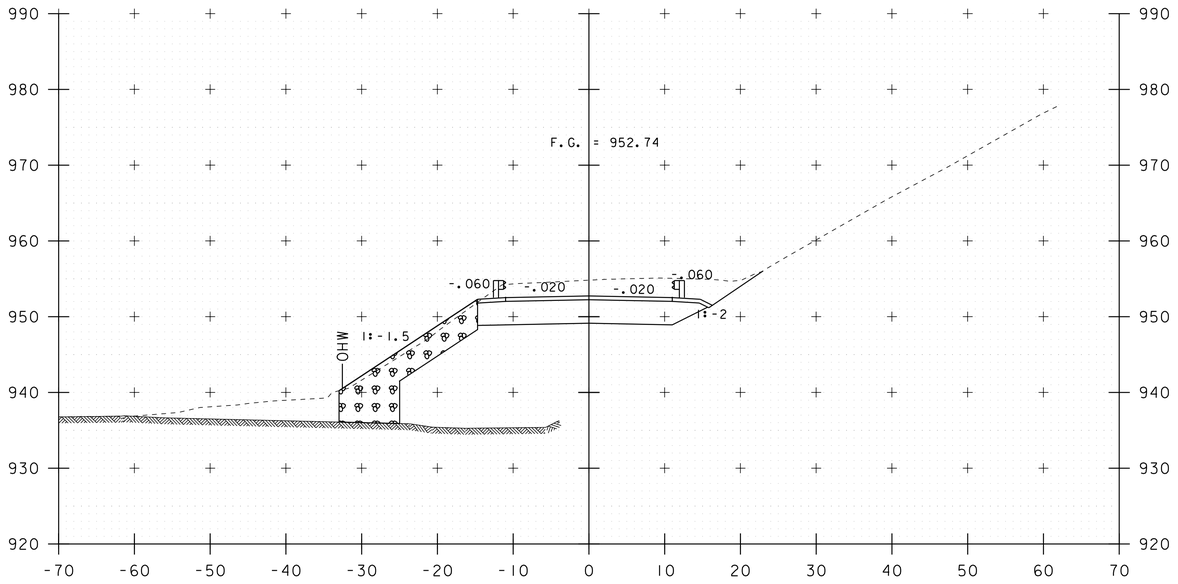
43+50

STA. 43+25 TO STA. 43+56

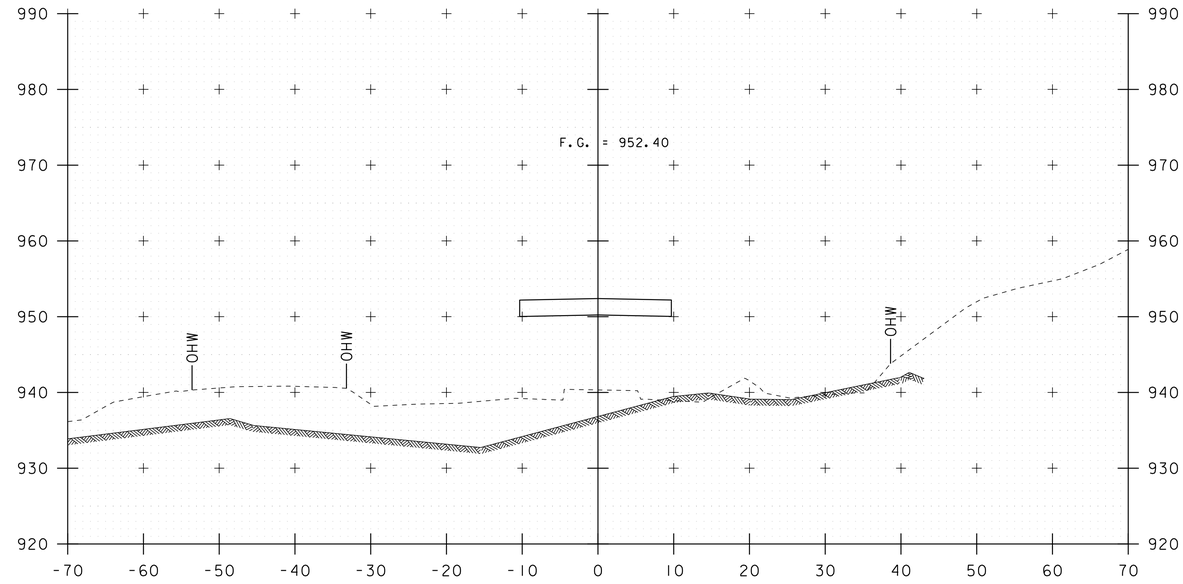
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630xs.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
CROSS SECTIONS 2

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 39 OF 50



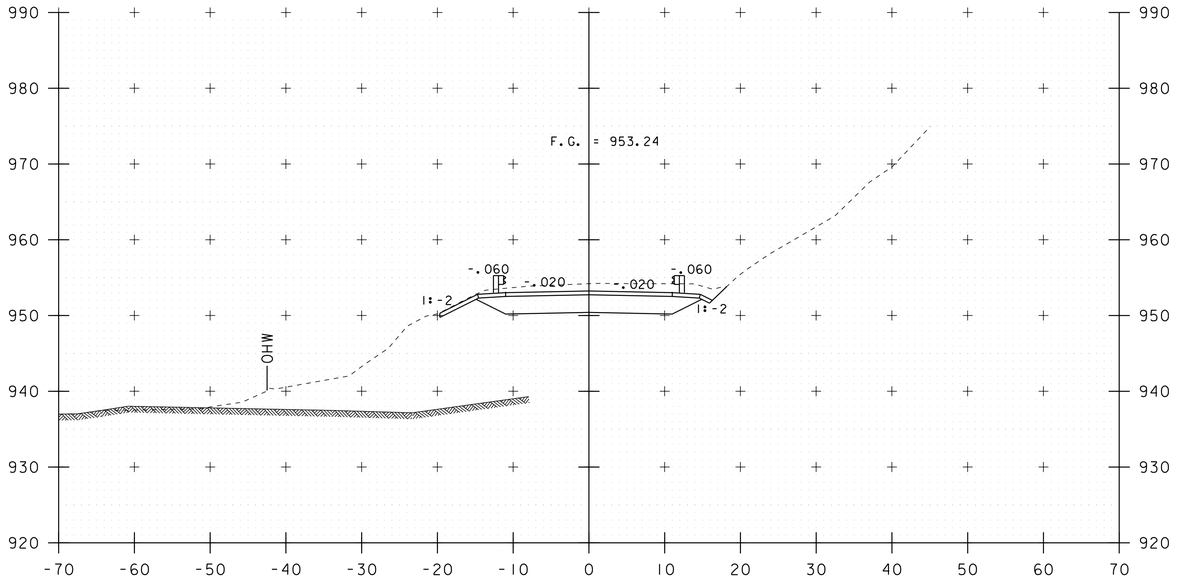
44+00



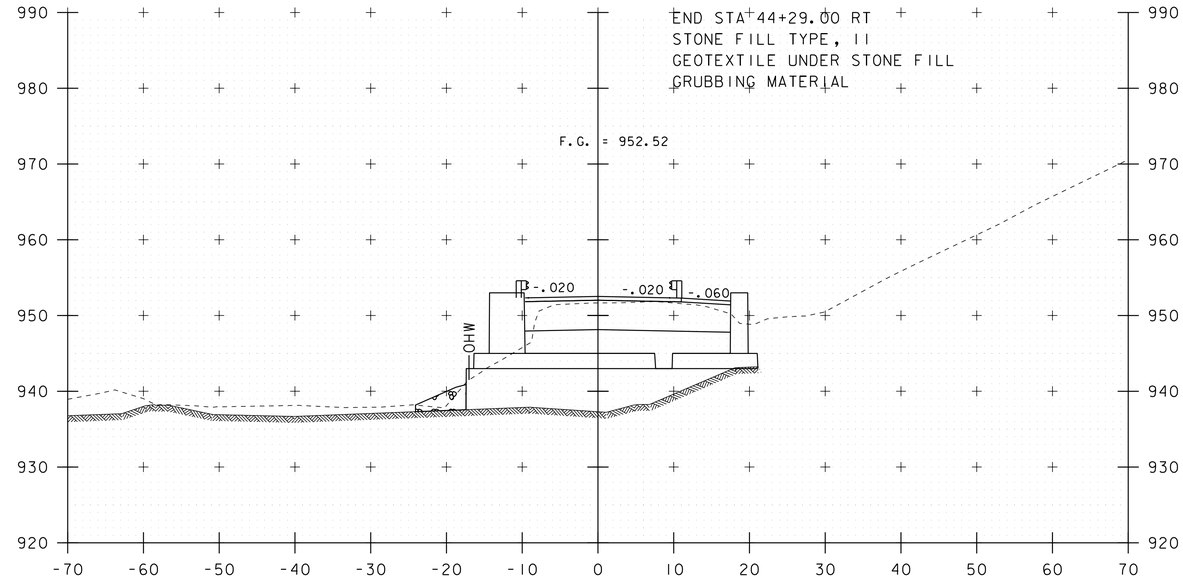
44+50

BEGIN BRIDGE 44+28.89

END STA 44+29.00 RT
STONE FILL TYPE, II
GEOTEXTILE UNDER STONE FILL
GRUBBING MATERIAL



43+75



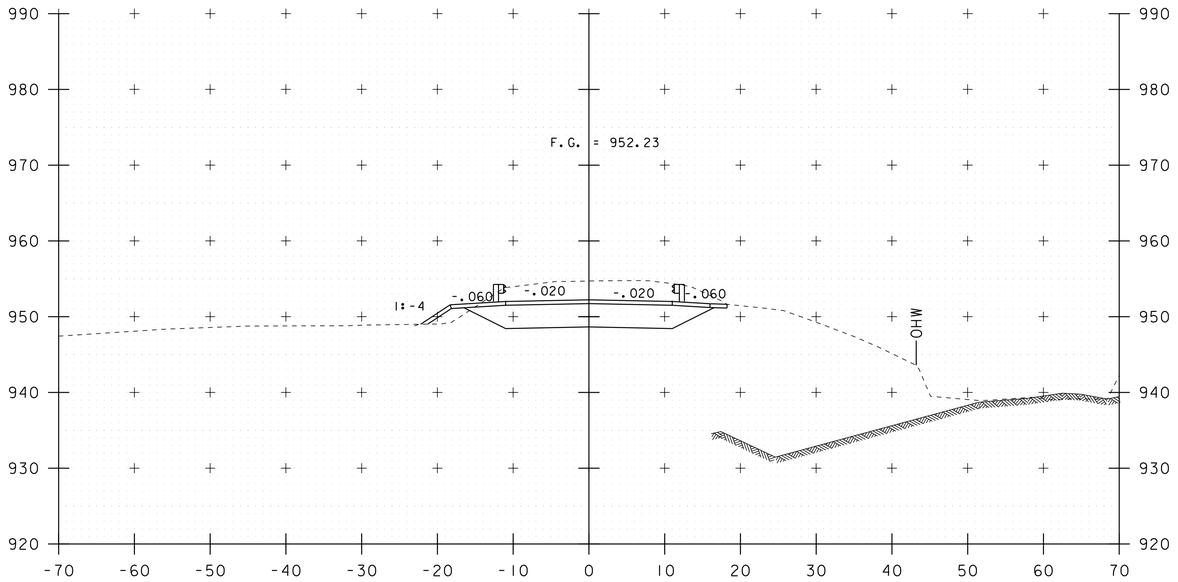
44+25

STA. 43+75 TO STA. 44+50

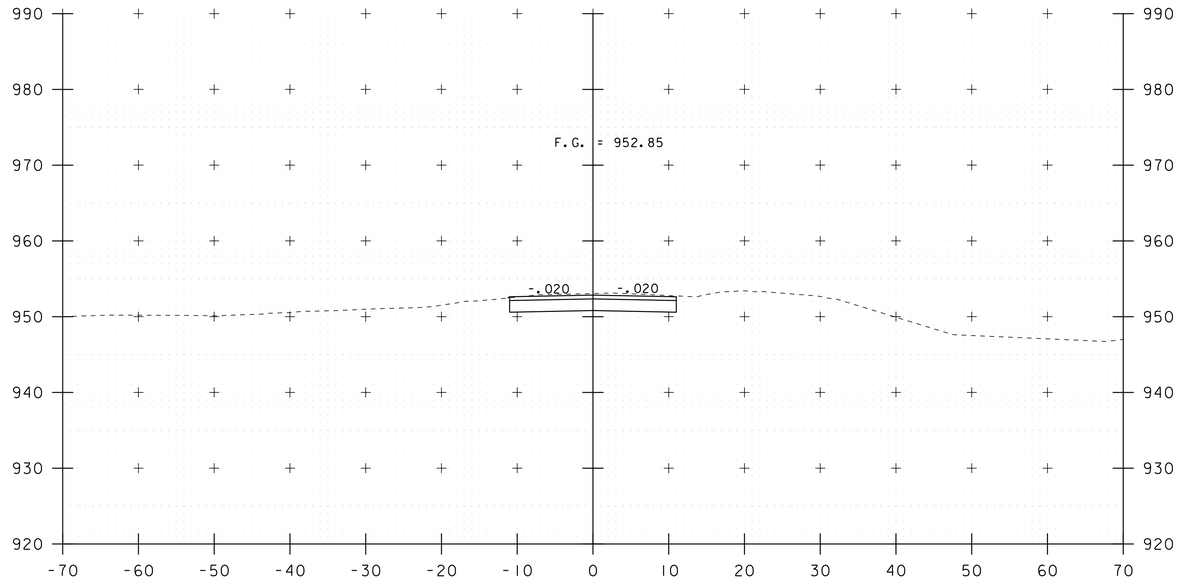
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630xs.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
CROSS SECTIONS 3

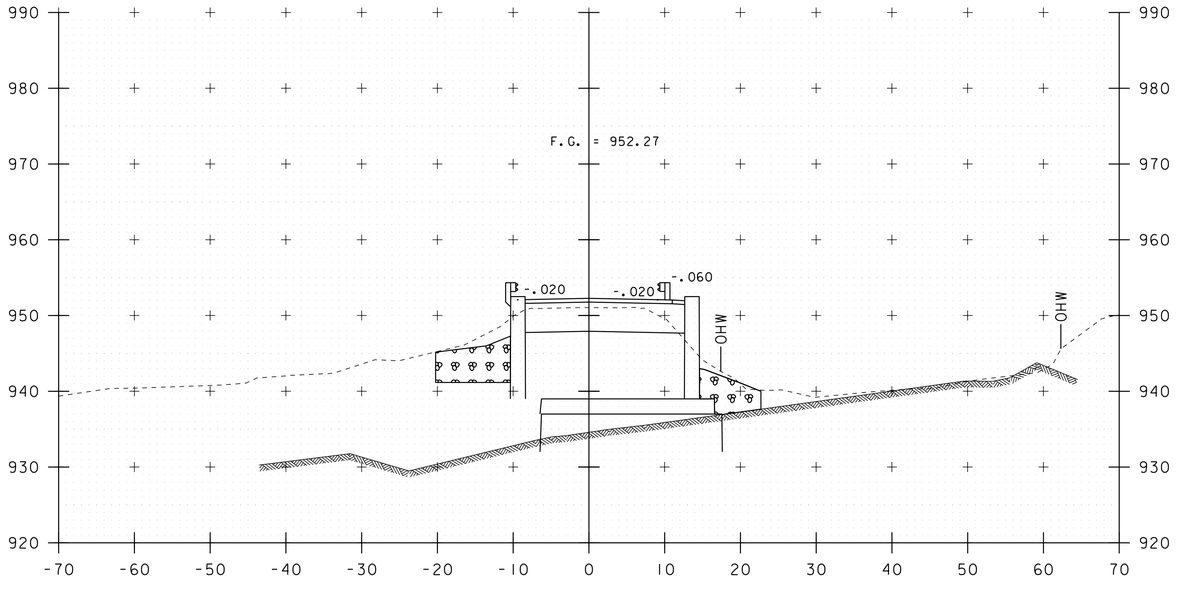
PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 40 OF 50



45+00

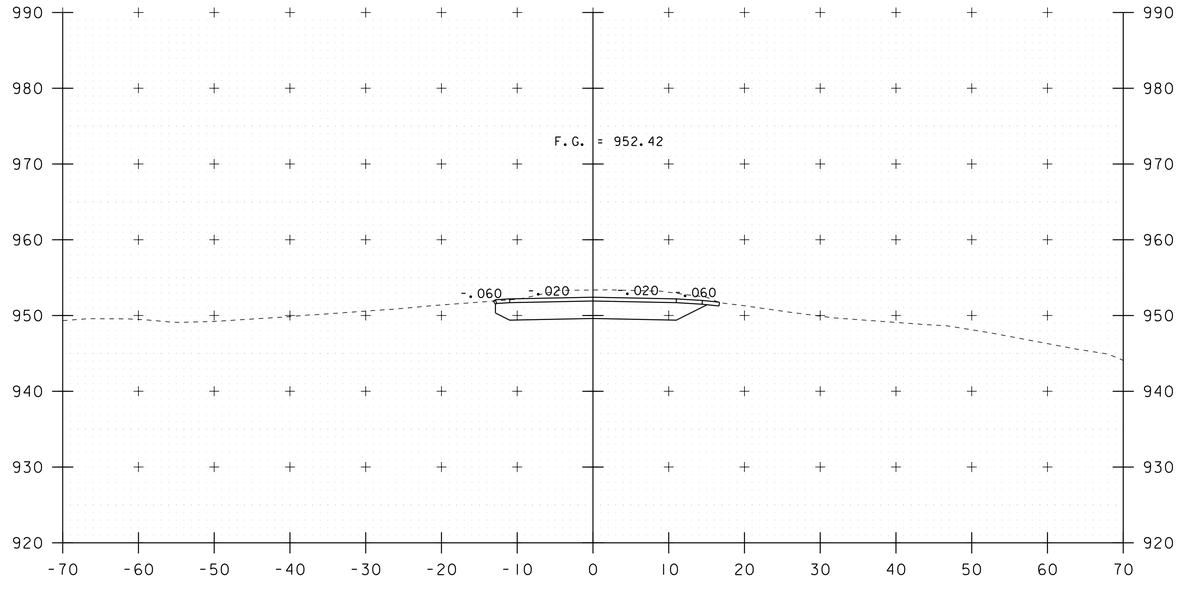


45+50



44+75

END BRIDGE 44+70.00



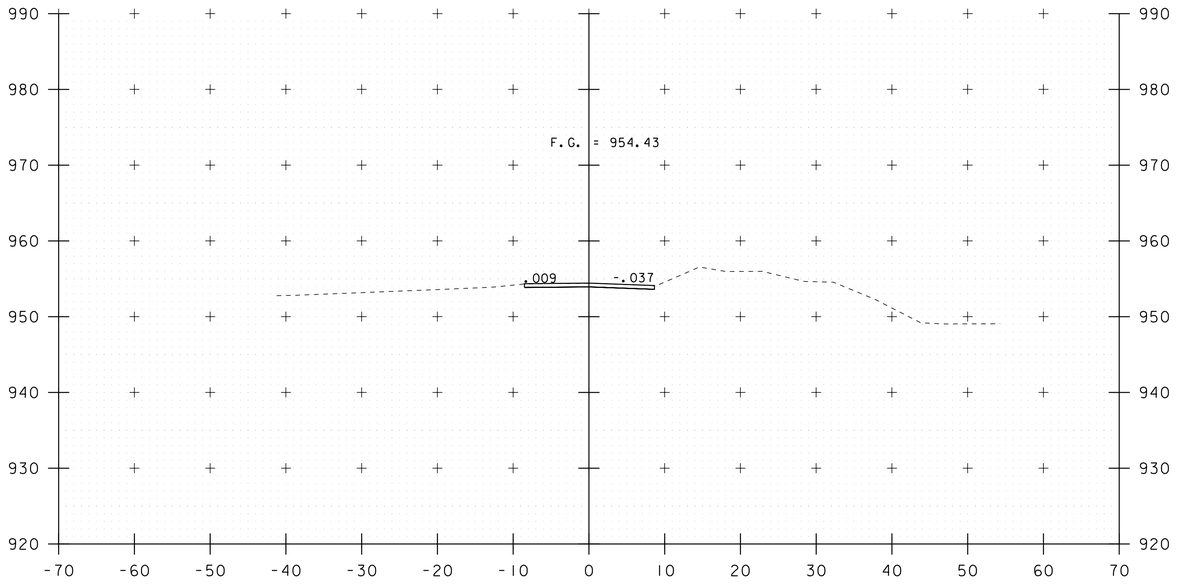
45+25

STA. 44+75 TO STA. 45+50

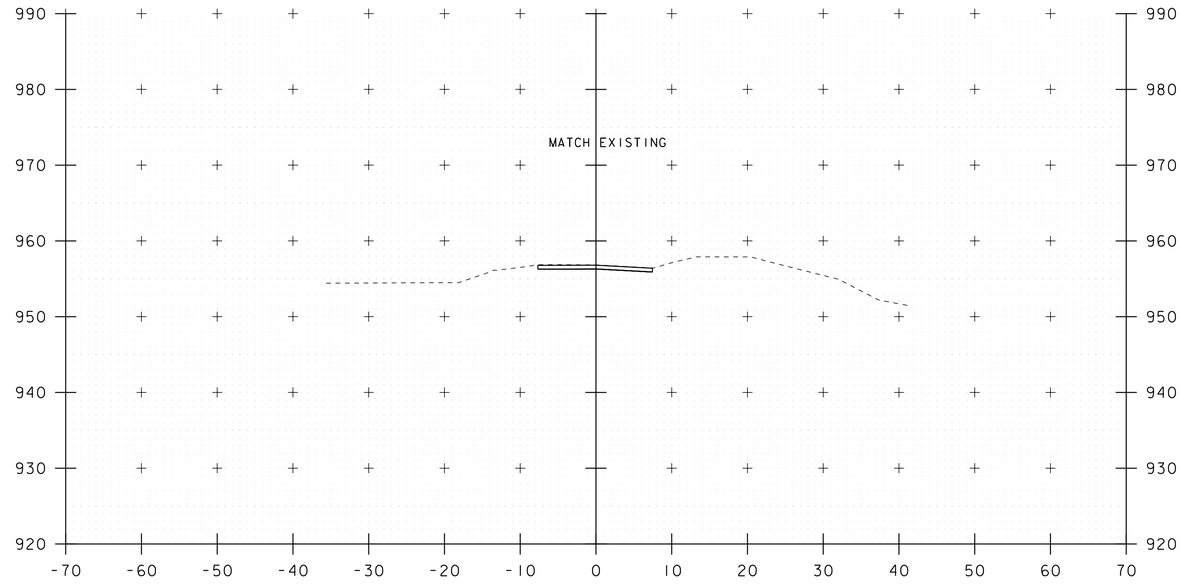
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630xs.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
CROSS SECTIONS 4

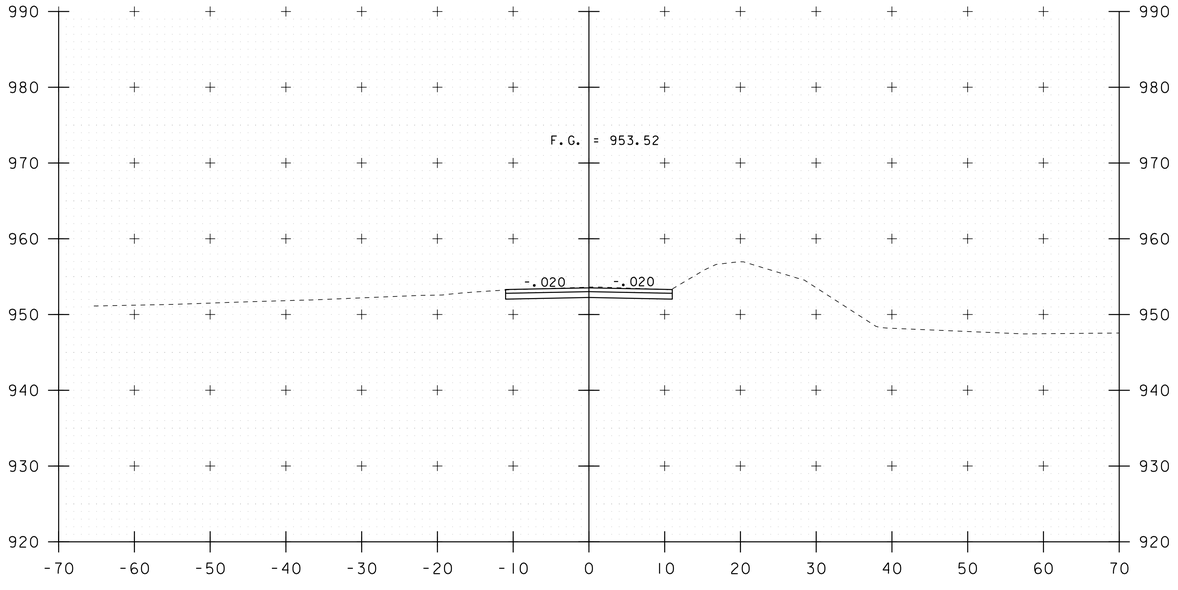
PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 41 OF 50



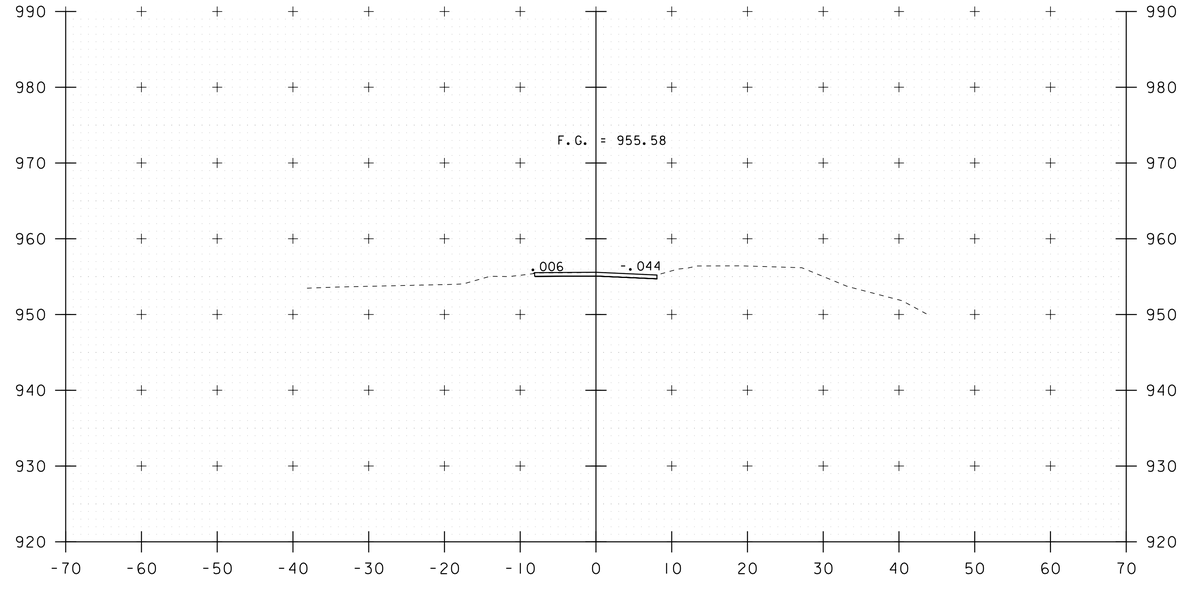
46+00
END PROJECT



46+50
END APPROACH



45+75



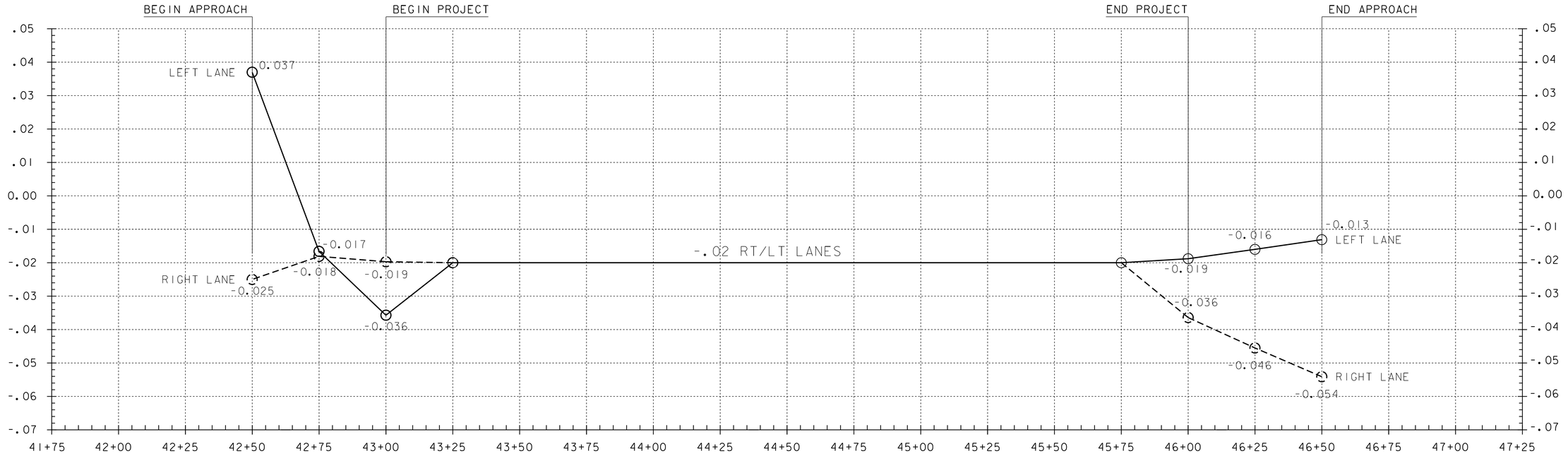
46+25

STA. 45+75 TO STA. 46+50

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

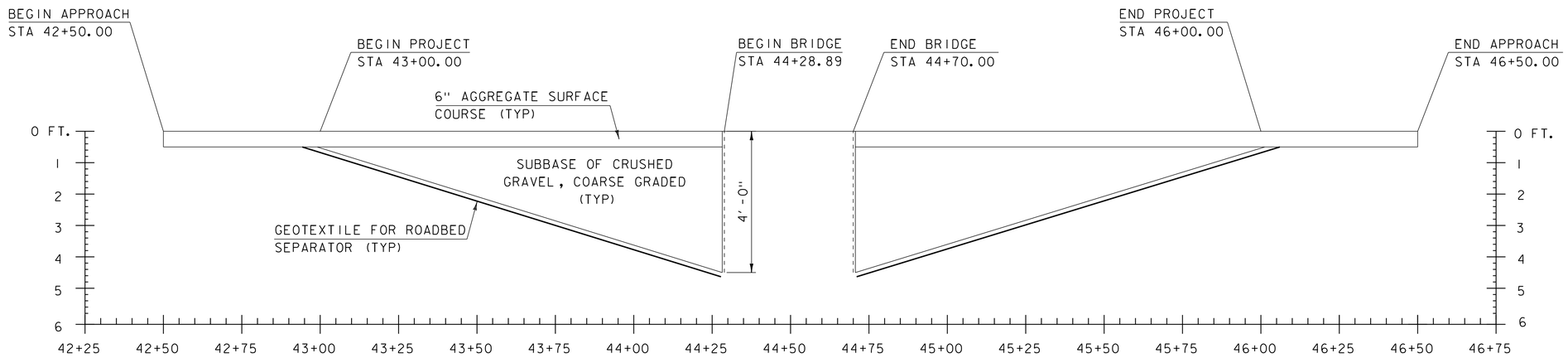
FILE NAME: sl2j630xs.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
CROSS SECTIONS 5

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 42 OF 50



BANKING DIAGRAM

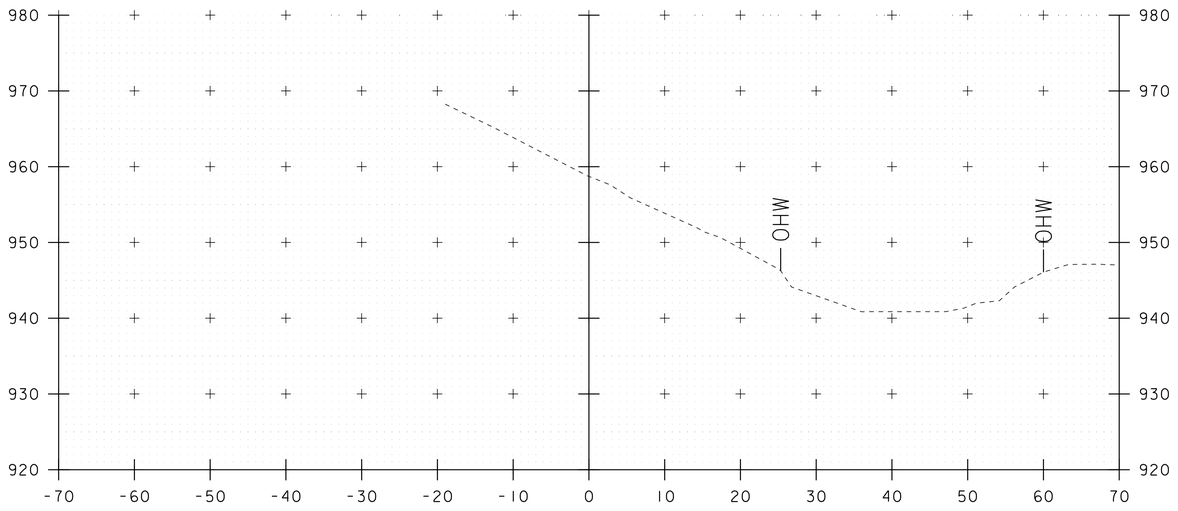
NOT TO SCALE



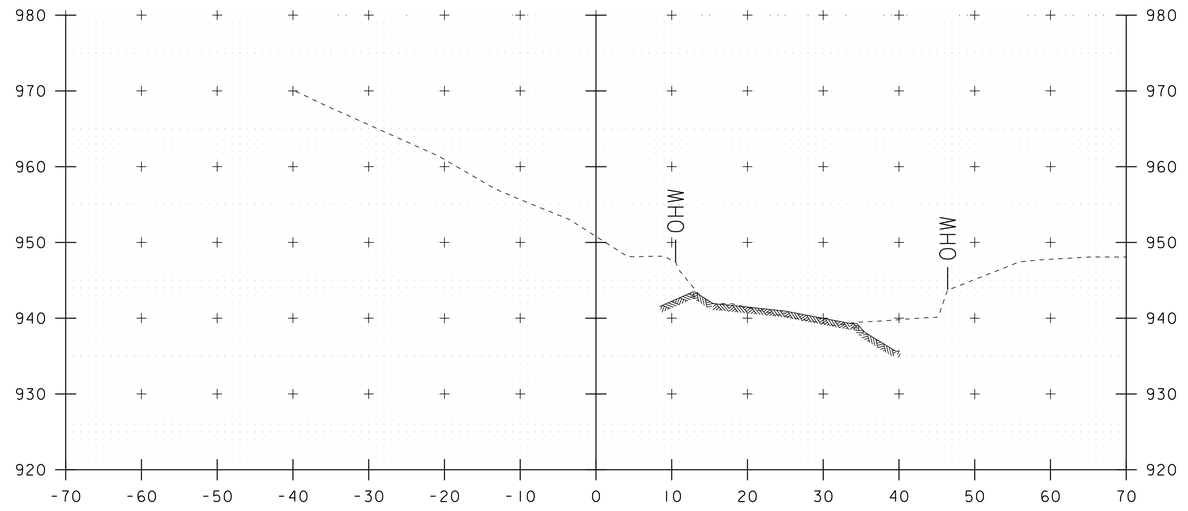
MATERIAL TRANSITION

NOT TO SCALE

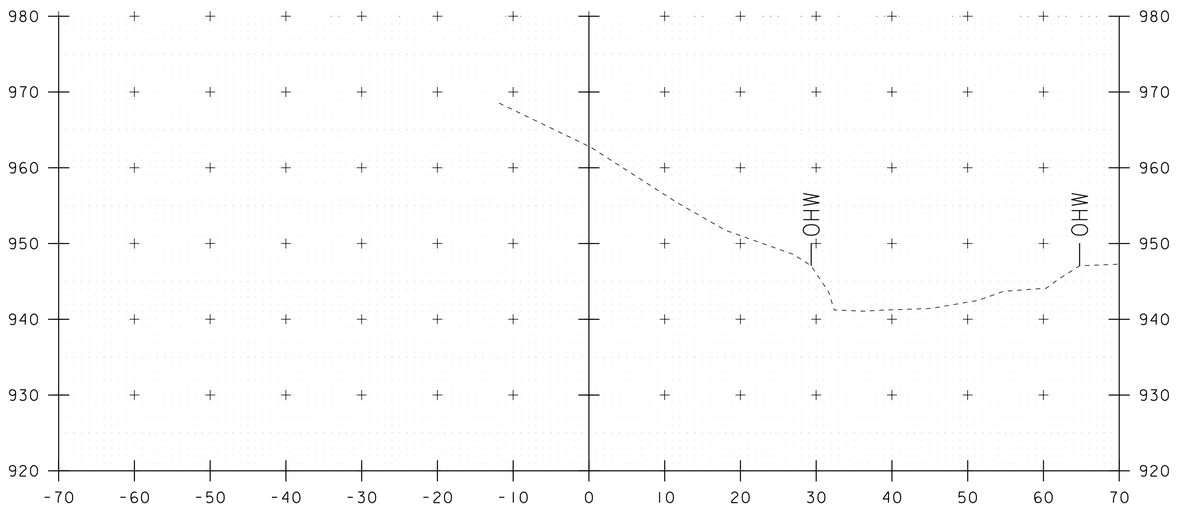
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: sl2J630BankingMaterial.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
BANKING & MATERIAL TRANSITION SHEET	SHEET 43 OF 50



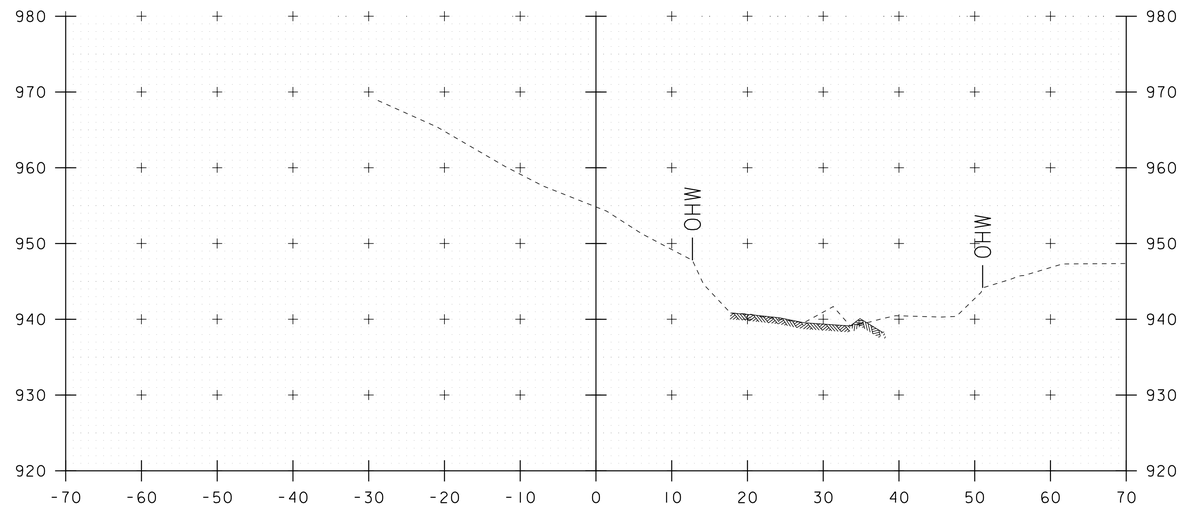
50+10



50+30



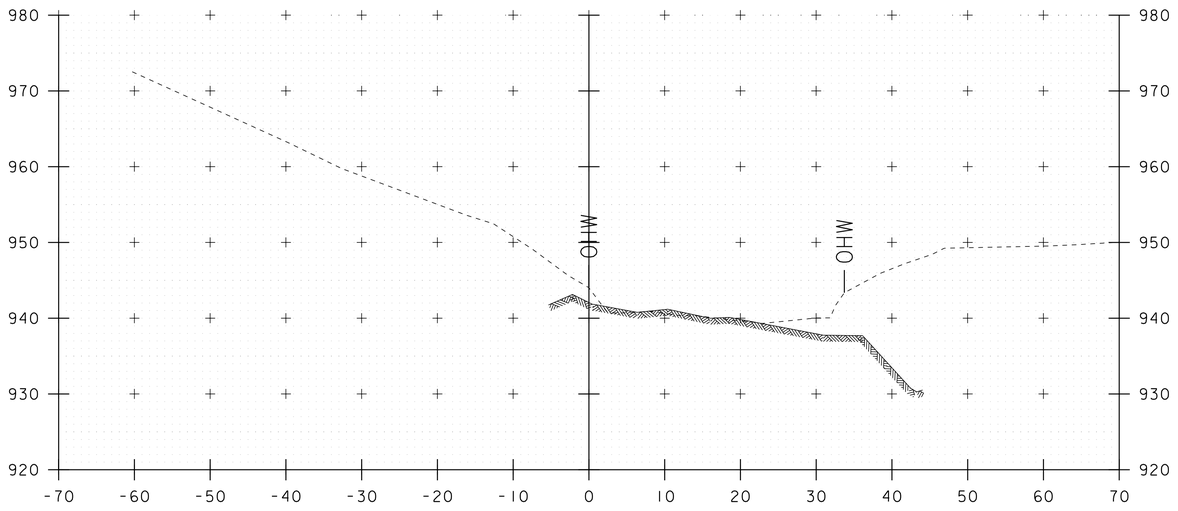
50+00



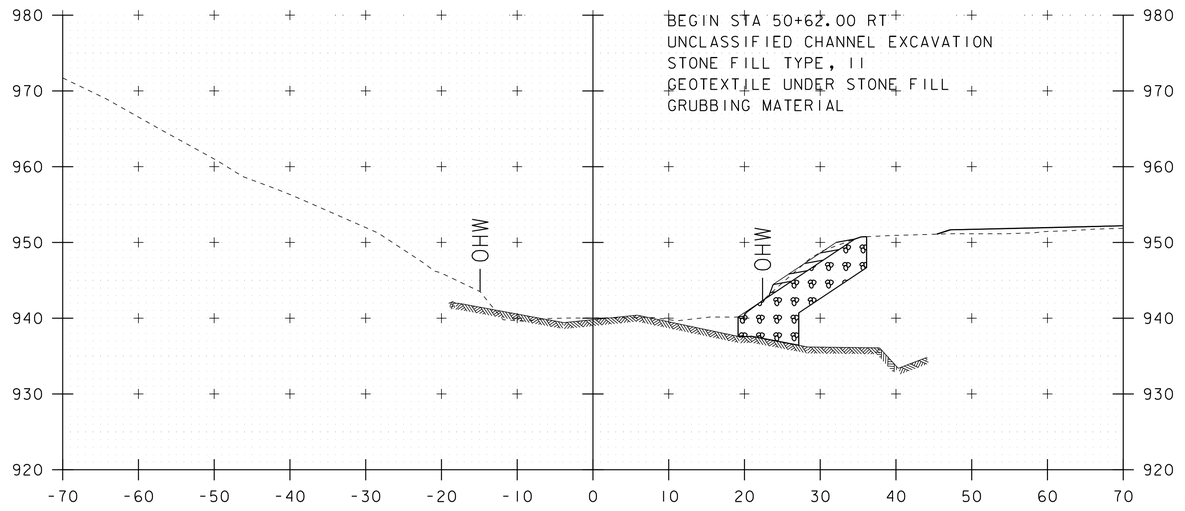
50+20

STA. 50+00 TO STA. 50+30

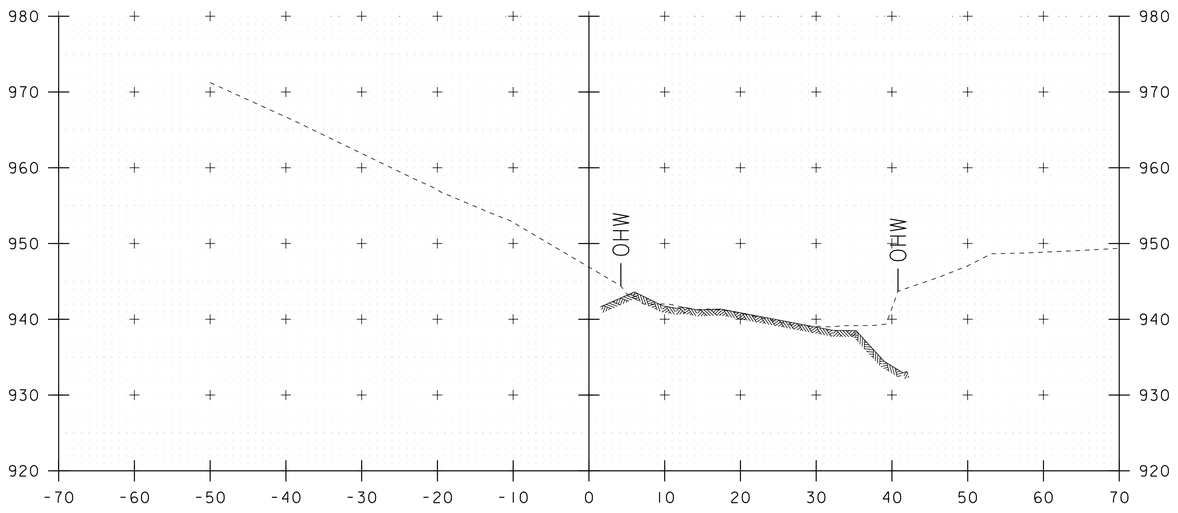
PROJECT NAME:	HUNTINGTON
PROJECT NUMBER:	BO 1445(38)
FILE NAME: s12j630xs.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
CHANNEL CROSS SECTIONS 1	SHEET 44 OF 50



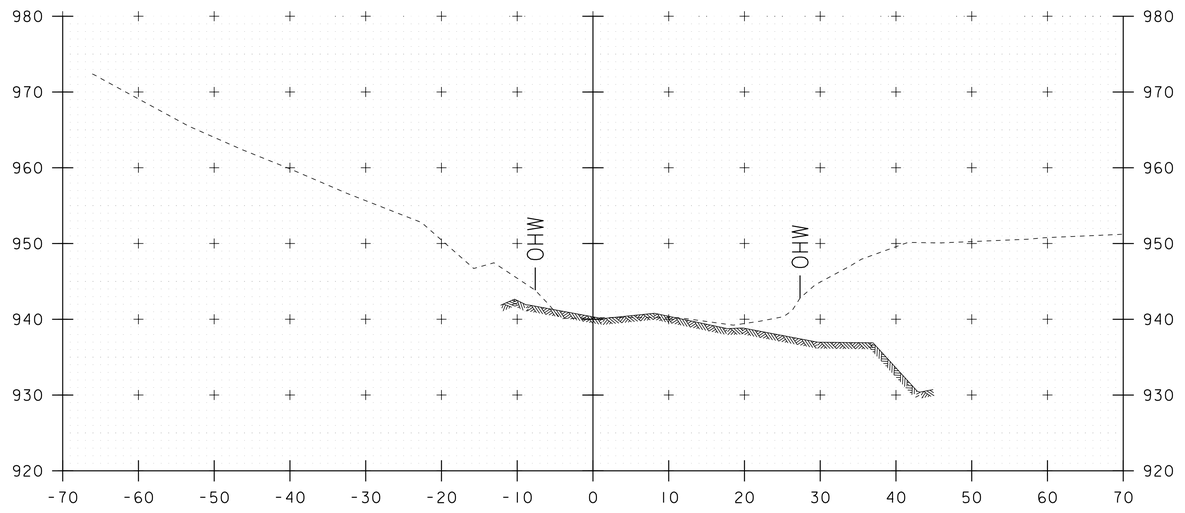
50+50



50+70



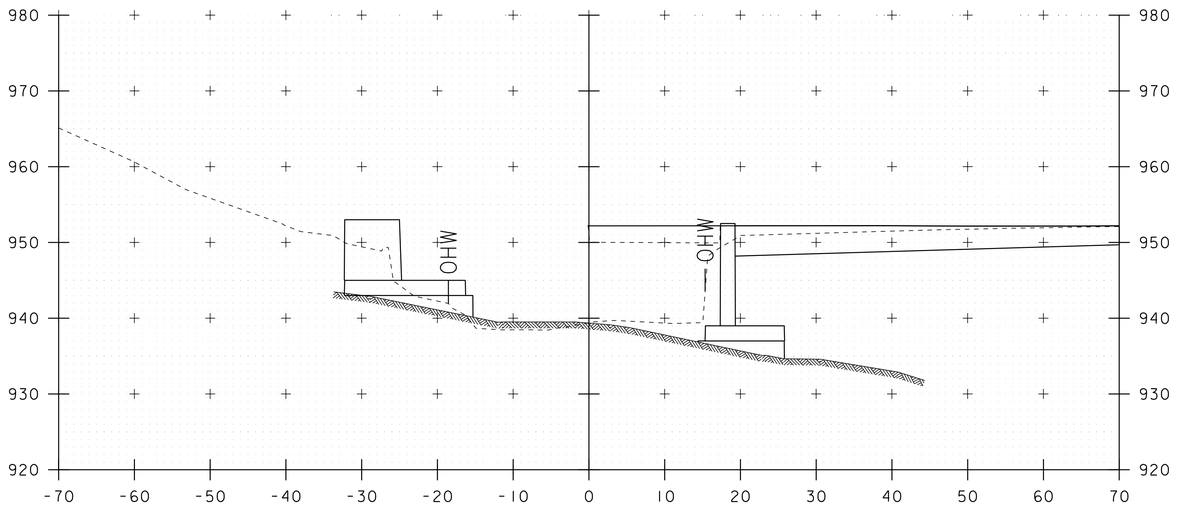
50+40



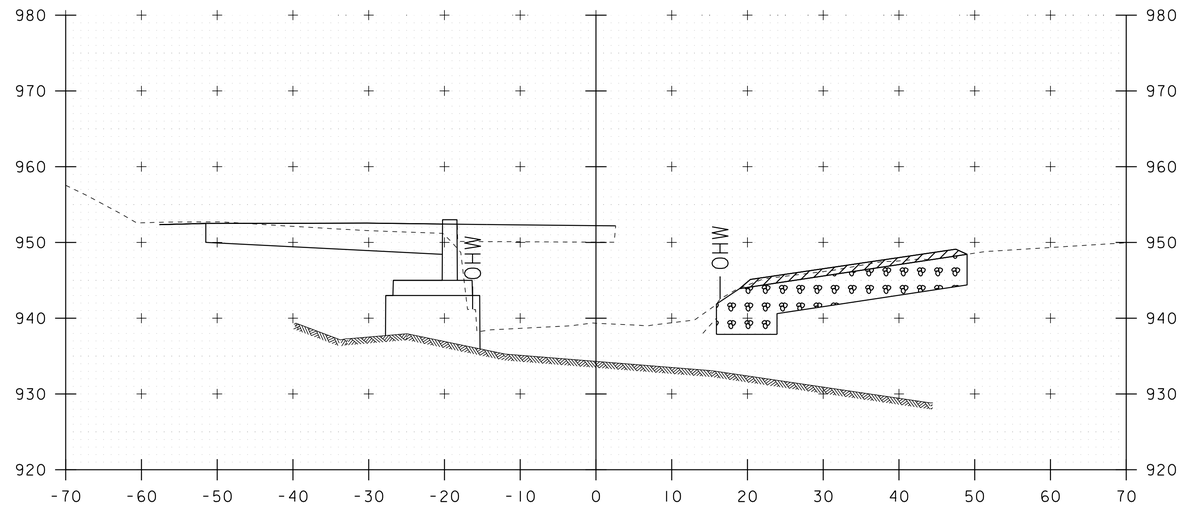
50+60

STA. 50+40 TO STA. 50+70

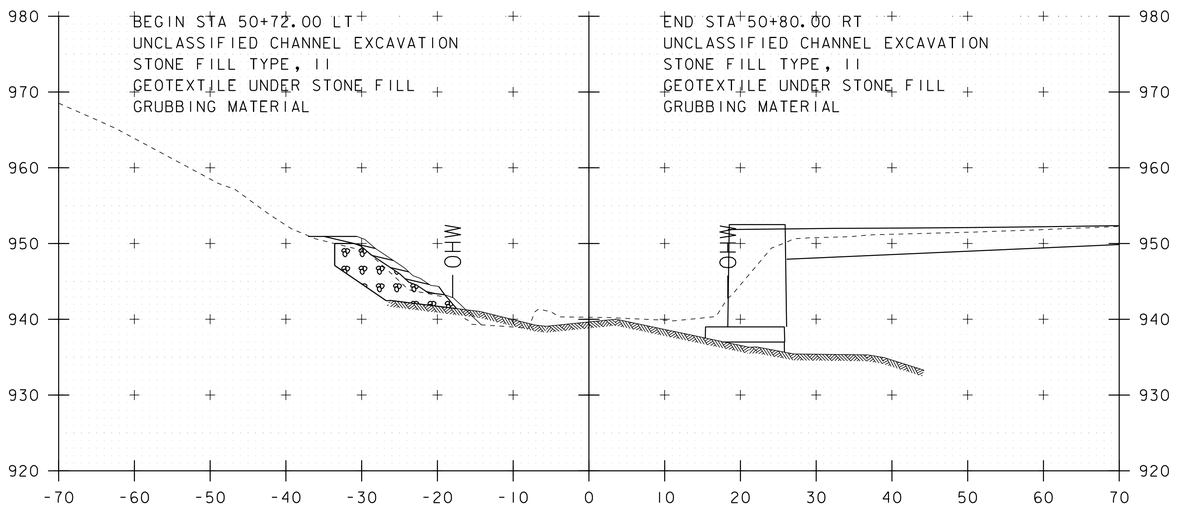
PROJECT NAME: HUNTINGTON	
PROJECT NUMBER: BO 1445(38)	
FILE NAME: s12j630xs.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
CHANNEL CROSS SECTIONS 2	SHEET 45 OF 50



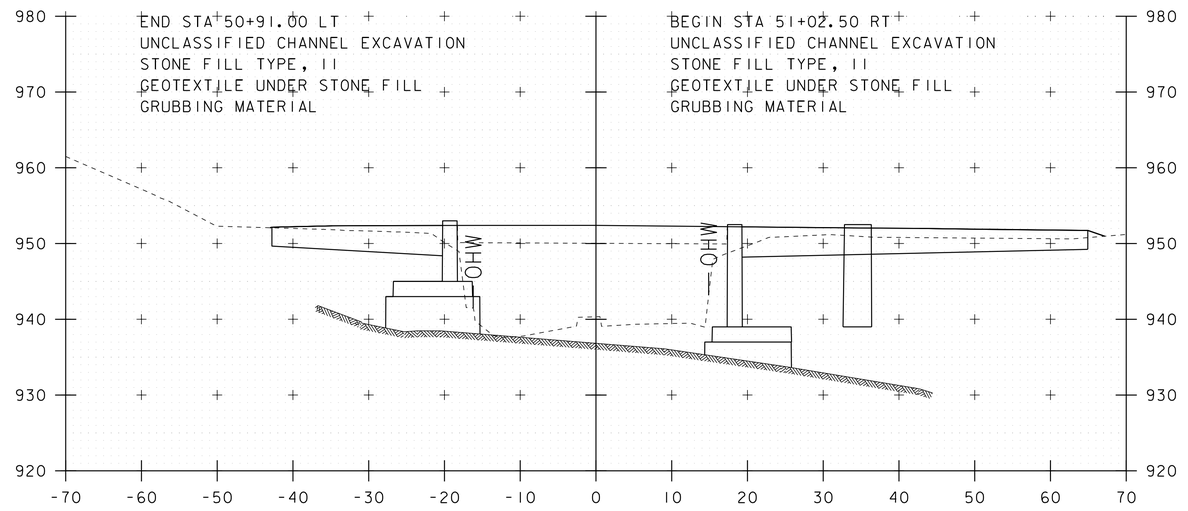
50+90



51+10



50+80



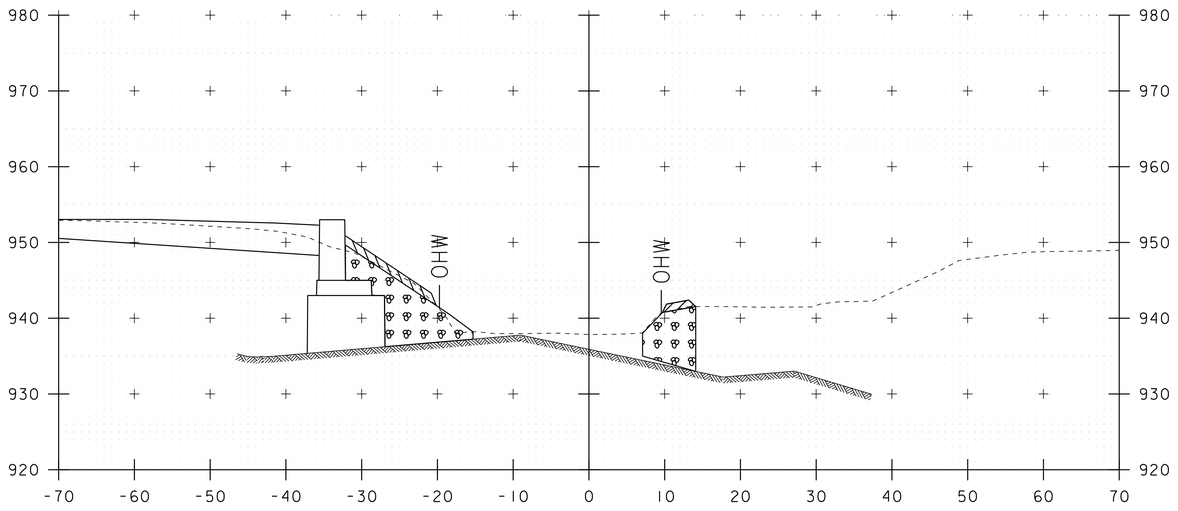
51+00

STA. 50+80 TO STA. 51+10

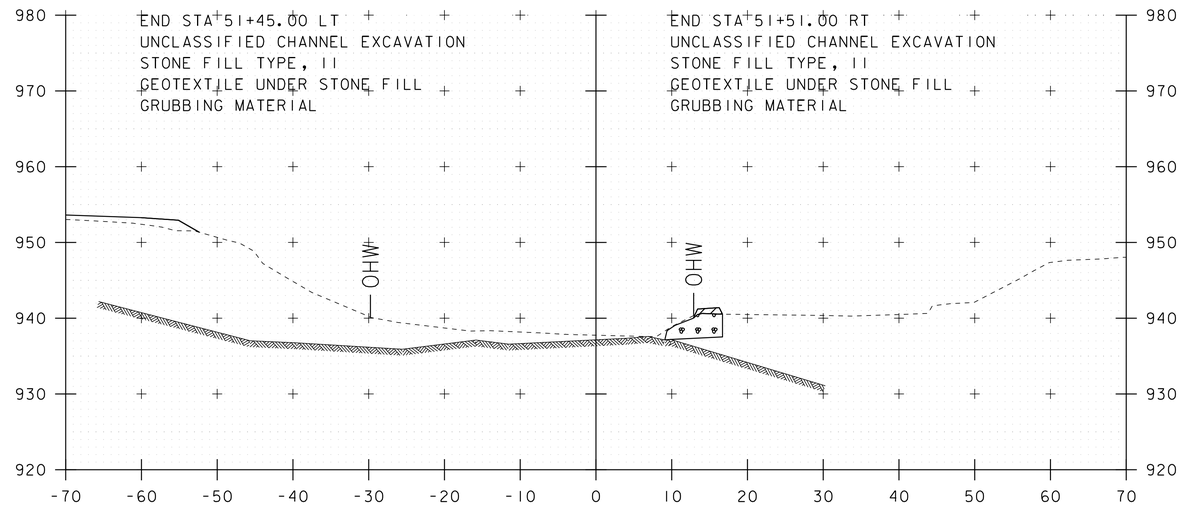
PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630xs.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
CHANNEL CROSS SECTIONS 3

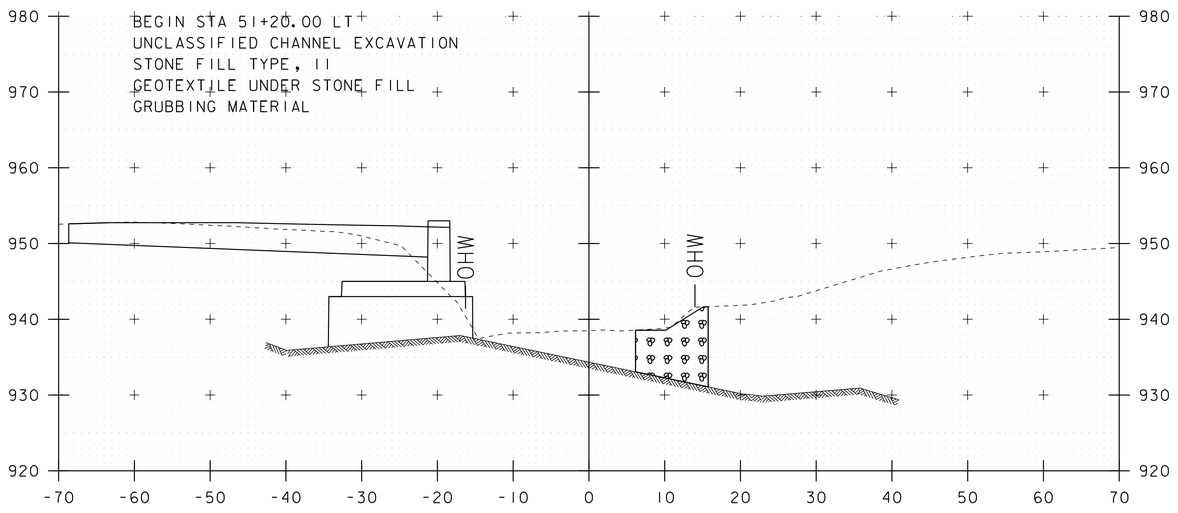
PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 46 OF 50



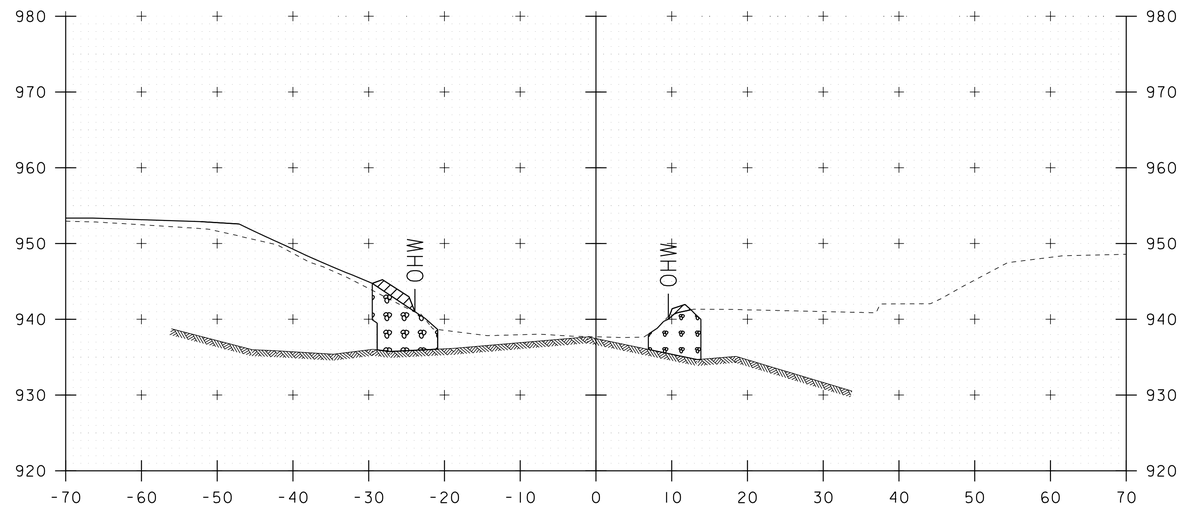
51+30



51+50



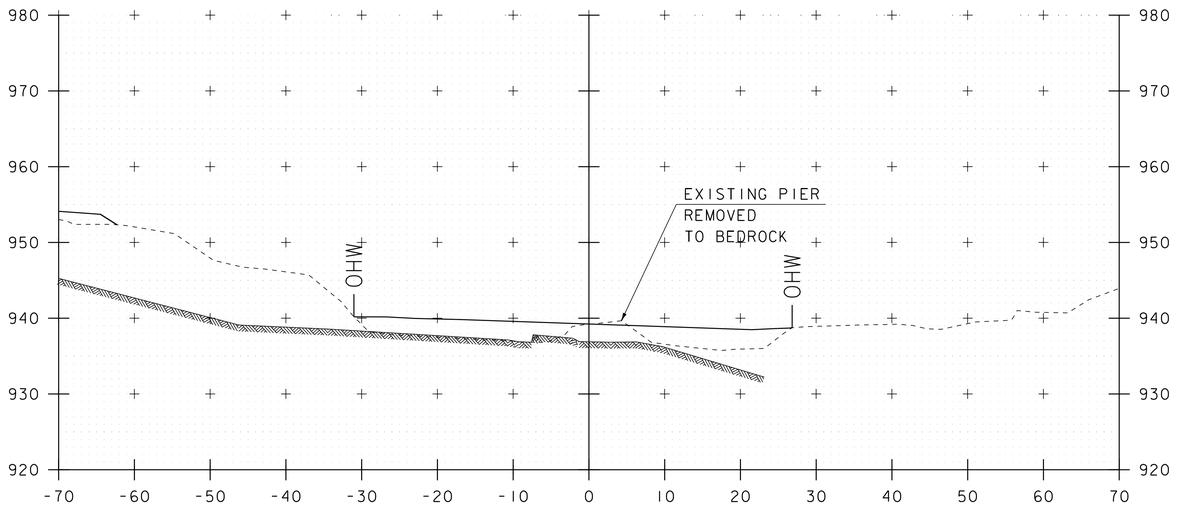
51+20



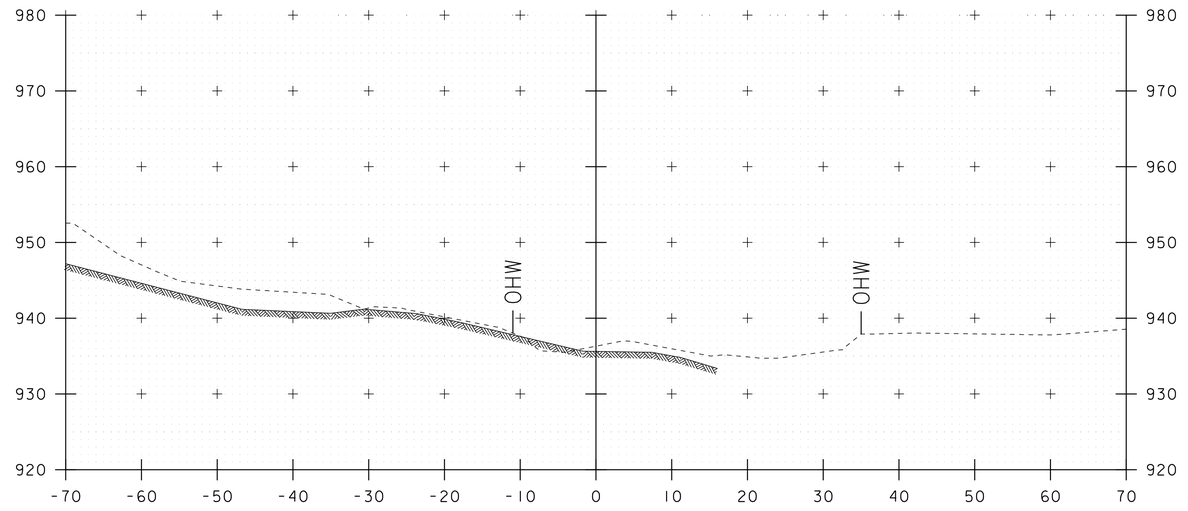
51+40

STA. 51+20 TO STA. 51+50

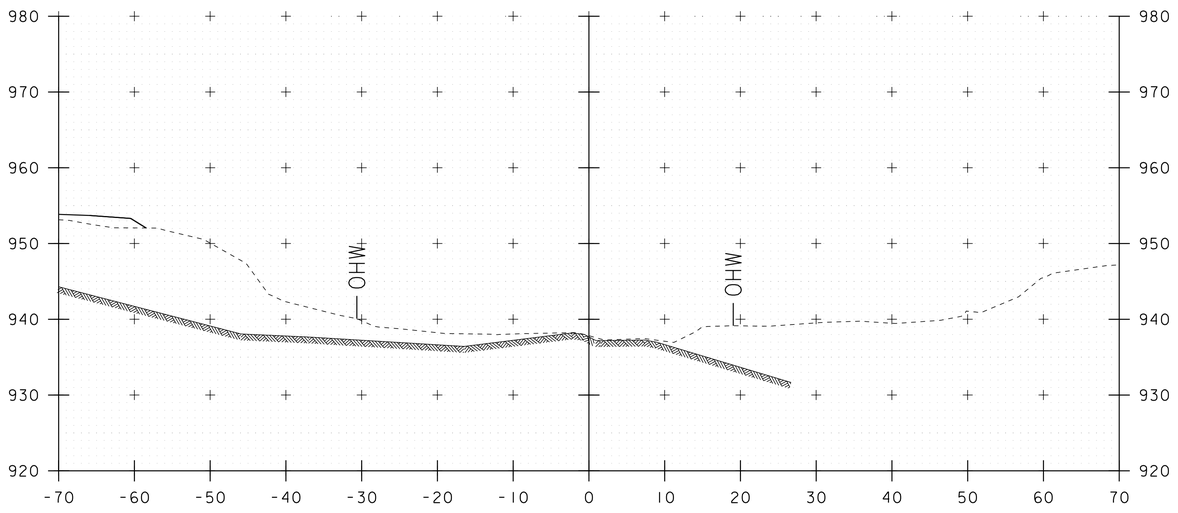
PROJECT NAME: HUNTINGTON	
PROJECT NUMBER: BO 1445(38)	
FILE NAME: s12j630xs.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
CHANNEL CROSS SECTIONS 4	SHEET 47 OF 50



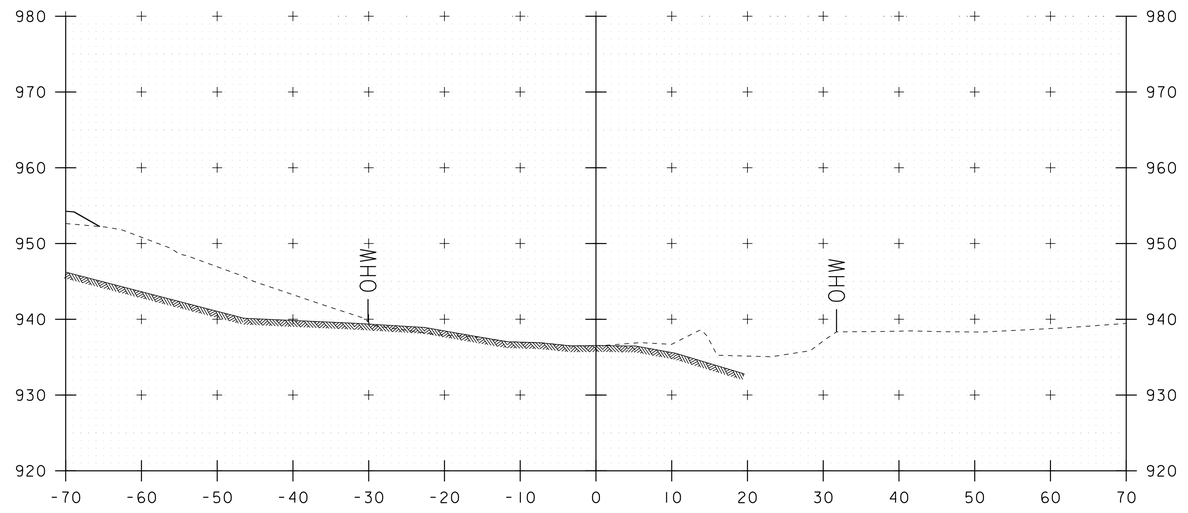
51+70



51+90



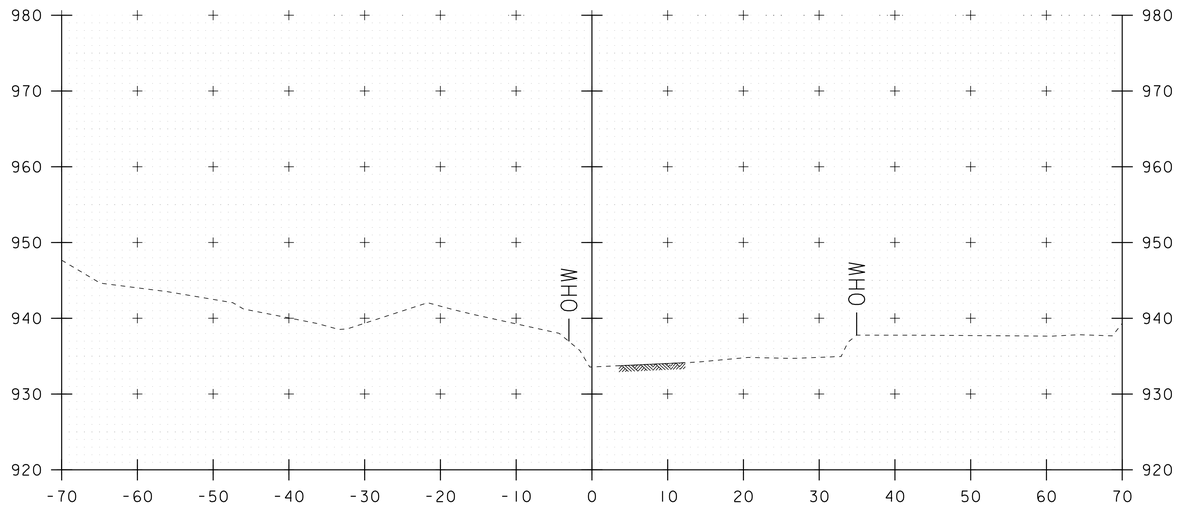
51+60



51+80

STA. 51+60 TO STA. 51+90

PROJECT NAME: HUNTINGTON	
PROJECT NUMBER: BO 1445(38)	
FILE NAME: s12j630xs.dgn	PLOT DATE: 12-JUL-2021
PROJECT LEADER: R. YOUNG	DRAWN BY: C. FRENCH
DESIGNED BY: C. FRENCH	CHECKED BY: C. MOONEY
CHANNEL CROSS SECTIONS 5	SHEET 48 OF 50



52+00

STA. 52+00 TO STA. 52+00

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: sl2j630xs.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. FRENCH
CHANNEL CROSS SECTIONS 6

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: C. MOONEY
SHEET 49 OF 50

SOIL INFORMATION: MARLOW FINE
SANDY LOAM, VERY STONEY
K = 0.24, 20-60% SLOPES
HYDROLOGIC GROUP: C

N/F
HARRIMAN, GREGORY S.;
GOODRICH, ROLINDA

FELONEY,
CHRISTOPHER M.;
HOWER, SOFIA TARA

KEITH, HELEN

N/F
FITZGERALD, DIANE M.
& PATRICK B.

DECARLO, ANJANETTE L.
F/K/A MERINO, ANJANETTE L.

FOUNDATION FOR A
SUSTAINABLE FUTURE

N

VT STATE PLANE GRID

¾" IRON POLE
1.5' ABOVE GROUND
V.C.BUTTON

TELEPHONE
25

ELECTRIC
33
144
B

ELECTRIC
33
144
C

ELECTRIC
33
144
D

GUYWIRE

WOOD FENCE

OLD MONUMENT
FOUND

TH 22 (CAMEL'S HUMP RD)
TO HUNTINGTON

42+00

43+00

44+00

45+00

46+00

47+00

TH 22 (CAMEL'S HUMP RD)
TO CAMELS HUMP

STONE RETAINING WALL

15" CPEP
FLOW

ARTESIAN
WELL

SEPTIC
APPROX

TIE
DIST 33.35

TIE
DIST 37.76

TIE
DIST 42.16

100' YEAR
MAPLE

WOVEN WIRE
FENCE

WOOD
FENCE

GRAVEL
DRIVE

TELEPHONE
27

TELEPHONE
28

PAVED
DRIVE

MAILBOX
#1625

MAILBOXES
#1665
#1680

GRAVEL
DRIVE

STONE FILL

BRUSH BROOK
FLOW

SOIL INFORMATION: PERU FINE
SANDY LOAM, VERY STONEY
K = 0.24, 0-20% SLOPES
HYDROLOGIC GROUP: C/D

SOIL INFORMATION: COLTON
GRAVELLY LOAMY SAND
K = 0.17, 5-12% SLOPES
HYDROLOGIC GROUP: A

SOIL INFORMATION: COLTON
AND STETSON SOILS
K = 0.17, 30-60% SLOPES
HYDROLOGIC GROUP: A

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

PROJECT NAME: HUNTINGTON
PROJECT NUMBER: BO 1445(38)

FILE NAME: s12j630epsc.dgn
PROJECT LEADER: R. YOUNG
DESIGNED BY: C. MOONEY
EXISTING CONDITIONS

PLOT DATE: 12-JUL-2021
DRAWN BY: C. FRENCH
CHECKED BY: J. PAQUETTE
SHEET 50 OF 50