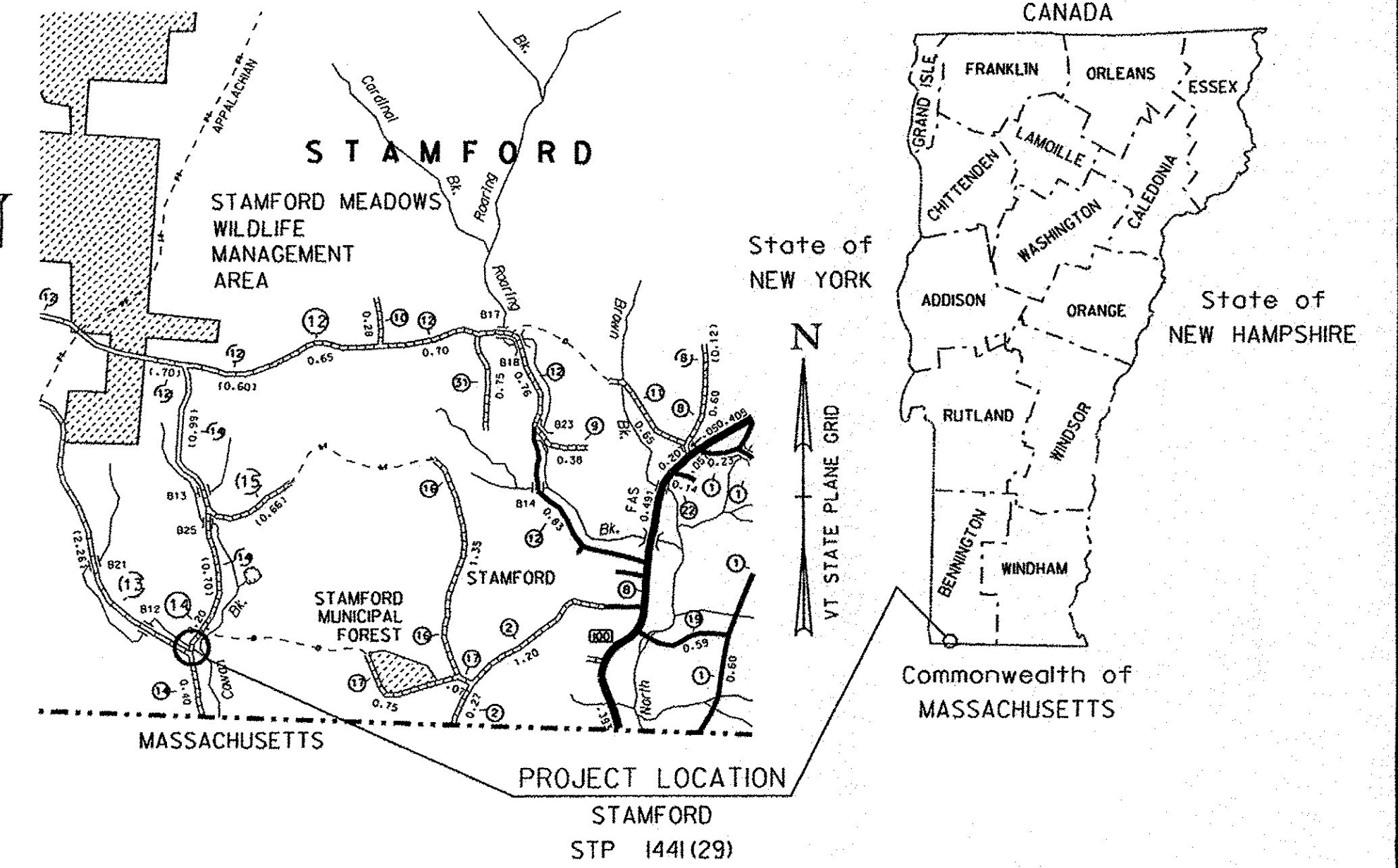


STATE OF VERMONT AGENCY OF TRANSPORTATION



PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF STAMFORD COUNTY OF BENNINGTON



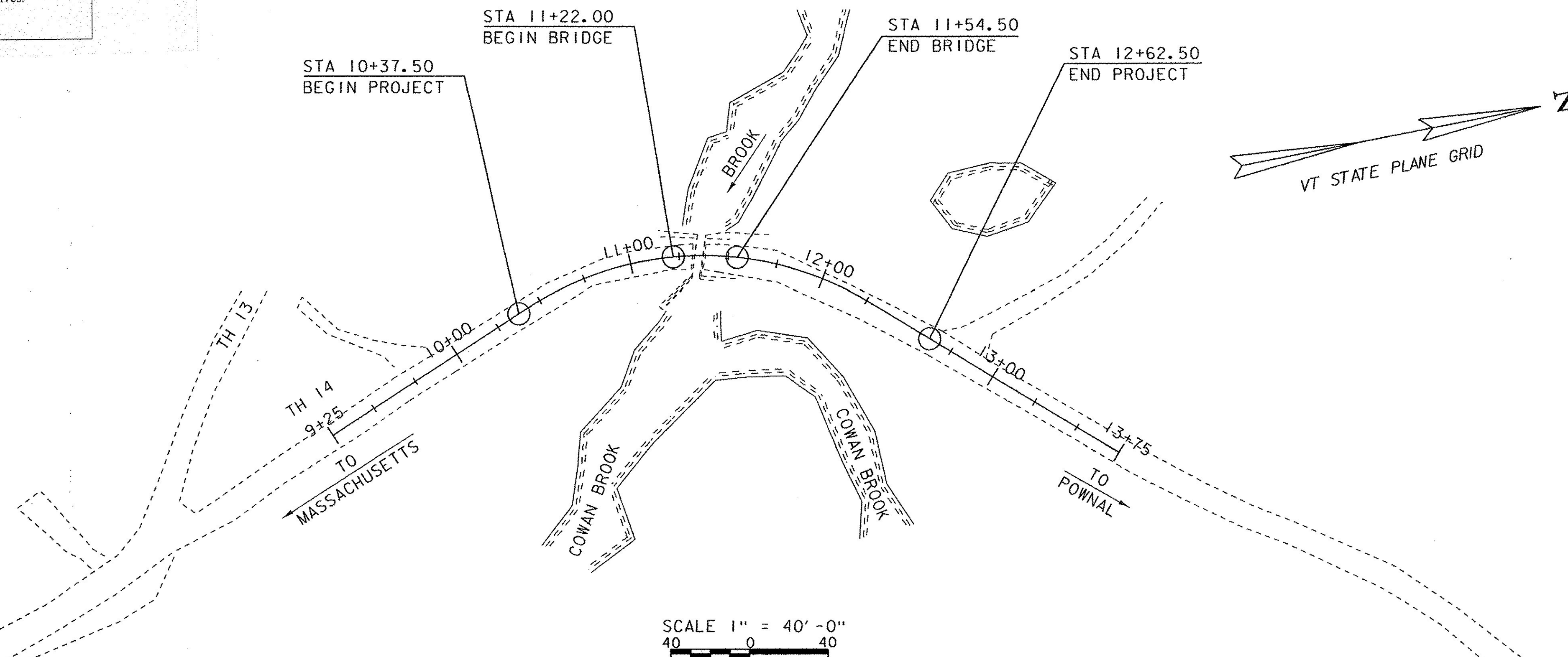
RECORD PLANS	
CONTRACTOR:	NORTHERN CONSTRUCTION SERVICE - WEYMOUTH, MA
RESIDENT ENGINEER:	RON LEMAIRE
CONSTRUCTION BEGAN:	JUNE 17, 2016
CONSTRUCTION COMPLETE:	JUNE 21, 2017
RECORD PLANS BY:	RON LEMAIRE & AARON WEAVER
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY <u>Judy A. Lemaire</u>	RESIDENT ENGINEER
DATE <u>7/4/18</u>	
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.	

ROUTE NO : TH 14 CLASS III BRIDGE NO : 26

PROJECT LOCATION : BEGINNING AT A POINT ON TH 14 APPROXIMATELY 650 FEET NORTH OF THE INTERSECTION OF TOWN HIGHWAY 13 AND TOWN HIGHWAY 14 OVER AN UNNAMED BROOK.

PROJECT DESCRIPTION : THIS PROJECT WILL CONSIST OF THE REPLACEMENT OF THE EXISTING STRUCTURE WITH RELATED ROADWAY APPROACH AND CHANNEL WORK.

LENGTH OF STRUCTURE : 32.5 FEET.
 LENGTH OF ROADWAY : 192.5 FEET.
 LENGTH OF PROJECT : 225.0 FEET.



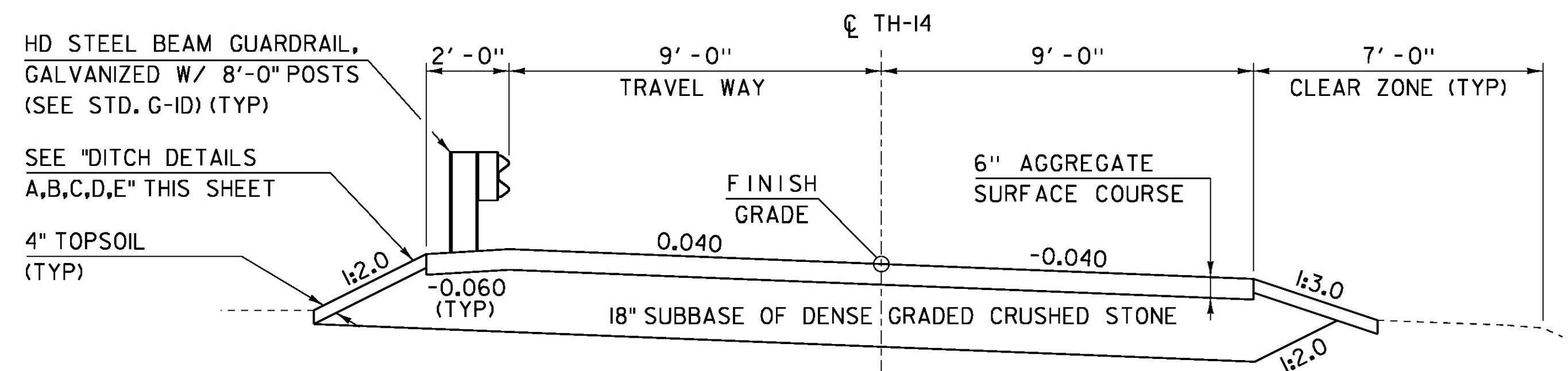
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS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

QUALITY ASSURANCE PROGRAM : LEVEL 2	
SURVEYED BY :	L. ORVIS
SURVEYED DATE :	AUGUST 1997
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (1992)

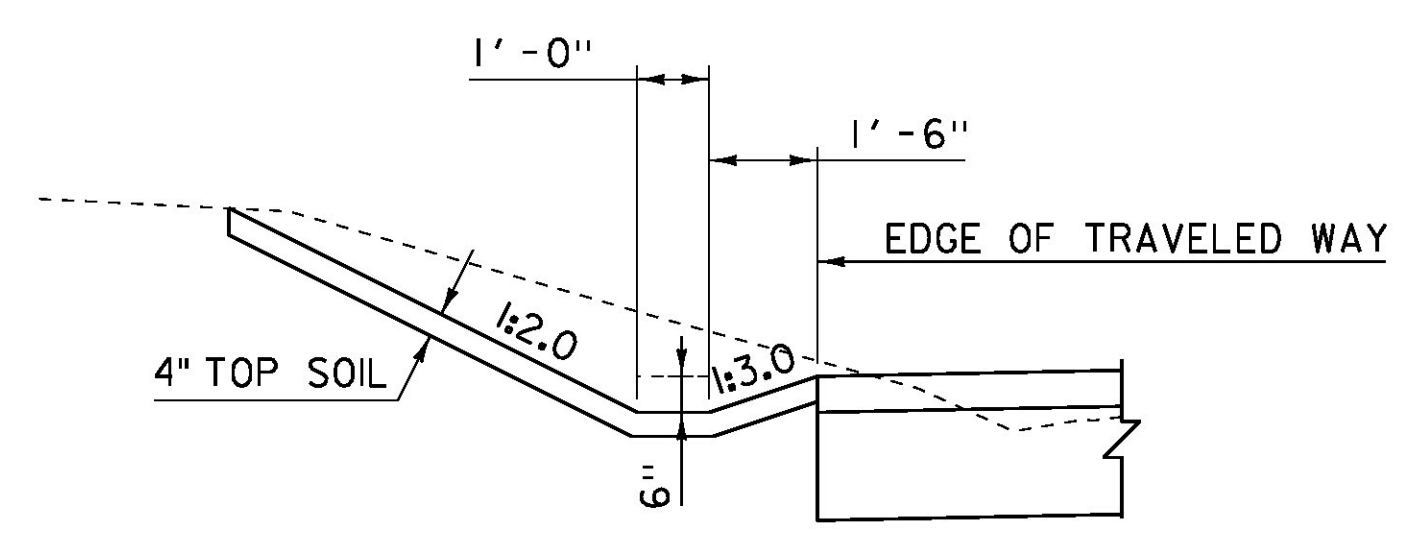
DIRECTOR OF PROJECT DELIVERY	
APPROVED <u>[Signature]</u>	DATE <u>12/7/2015</u>
PROJECT MANAGER : CAROLYN W. CARLSON, P. E.	
PROJECT NAME : STAMFORD	
PROJECT NUMBER : STP 1441 (29)	
SHEET 1 OF 44 SHEETS	

PRELIMINARY INFORMATION SHEET (BRIDGE)

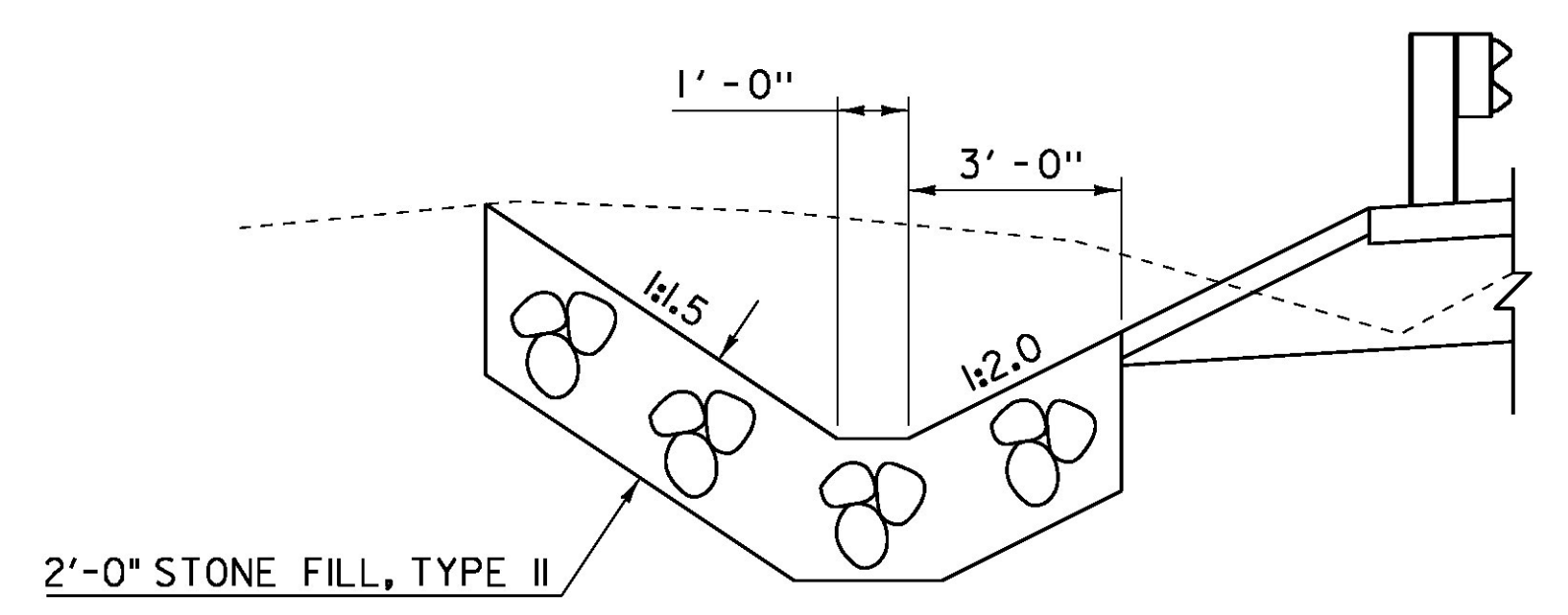
INDEX OF SHEETS		STANDARDS LIST		FINAL HYDRAULIC REPORT			
PLAN SHEETS				HYDROLOGIC DATA		PROPOSED STRUCTURE	
1	TITLE	G-1	STEEL BEAM GUARDRAIL DETAILS (POST, DELINEATOR, TYPICALS)	Date: March 2014		STRUCTURE TYPE: Single span cast-in-place concrete slab bridge	
2	PRELIMINARY INFORMATION SHEET	G-1D	STEEL BEAM GUARDRAIL DETAILS (END TERMINAL, ANCHOR, MEDIAN)	DRAINAGE AREA: 1.6 sq. mi.		CLEAR SPAN(NORMAL TO STREAM): 27.7'	
3-4	TYPICAL SECTIONS	S-367A	BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING	CHARACTER OF TERRAIN: Steep, mountainous, mostly forested		VERTICAL CLEARANCE ABOVE STREAMBED: ~10'	
5	PROJECT NOTES	S-367B	GUARDRAIL APPROACH SECTION, GALVANIZED HD STEEL BEAM	STREAM CHARACTERISTICS: Sinuous, alluvial		WATERWAY OF FULL OPENING: 350 sq. ft.	
6-7	QUANTITY SHEETS	T-1	TRAFFIC CONTROL GENERAL NOTES	NATURE OF STREAMBED: Sand, gravel, cobbles		WATER SURFACE ELEVATIONS AT:	
8	BRIDGE QUANTITY SHEET	T-10	CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING	PEAK FLOW DATA		Q2.33 = 1783.8' VELOCITY= 5.6 fps	
9	CONVENTIONAL SYMBOLOLOGY LEGEND	T-28	CONSTRUCTION SIGN DETAILS	Q 2.33 = 100 cfs Q 50 = 340 cfs		Q10 = 1784.6' " 7.0 fps	
10-11	TIE SHEET	T-30	CONSTRUCTION SIGN DETAILS	Q 10 = 225 cfs Q 100 = 390 cfs		Q25 = 1784.9' " 7.4 fps	
12	LAYOUT			Q 25 = 290 cfs Q 500 = 550 cfs		Q50 = 1785.1' " 7.8 fps	
13	PROFILE			DATE OF FLOOD OF RECORD: Unknown		Q100 = 1785.3' " 8.2 fps	
14	UTILITY LAYOUT			ESTIMATED DISCHARGE: Unknown		IS THE ROADWAY OVERTOPPED BELOW Q100: No	
15	BORING LAYOUT			WATER SURFACE ELEV.: Unknown		FREQUENCY: N/A	
16-17	BORING LOGS			NATURAL STREAM VELOCITY: @ Q25 = 7.9 fps		RELIEF ELEVATION: 1795.7'	
18	PLAN AND ELEVATION			ICE CONDITIONS: Moderate		DISCHARGE OVER ROAD @Q100: N/A	
19	DECK TYPICAL			DEBRIS: Moderate		AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 1793.4'	
20	DECK REINFORCING PLAN			DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? Yes		VERTICAL CLEARANCE: @ Q25 = 8.5'	
21	ABUTMENT #1 PLAN, ELEVATIONS & DETAILS			IS ORDINARY RISE RAPID? Yes		SCOUR: Contraction scour 2.5' up to Q500	
22	ABUTMENT #2 PLAN, ELEVATION & DETAILS			IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No		REQUIRED CHANNEL PROTECTION: Stone Fill Type II @ inlet, Type IV @ outlet	
23	ABUTMENT #1 FOOTING & SUBFOOTING PLAN			IF YES, DESCRIBE:		PERMIT INFORMATION	
24	ABUTMENT #2 FOOTING PLAN & DETAILS			WATERSHED STORAGE: <1% HEADWATERS: UNIFORM: X IMMEDIATELY ABOVE SITE:		AVERAGE DAILY FLOW: 3 cfs DEPTH OR ELEVATION:	
25	WINGWALLS			EXISTING STRUCTURE INFORMATION		ORDINARY LOW WATER: 2 cfs ~-0.5'	
26	REINFORCING STEEL SCHEDULE			STRUCTURE TYPE: Laid-up stone box		ORDINARY HIGH WATER: 45 cfs ~-2.0'	
27-32	TH14 CROSS SECTIONS			YEAR BUILT: Unknown		TEMPORARY BRIDGE REQUIREMENTS	
33	BANKING & MATERIAL TRANSITION			CLEAR SPAN(NORMAL TO STREAM): ~4.7'		STRUCTURE TYPE: None required. Road will be closed during construction	
34-36	CHANNEL CROSS SECTIONS			VERTICAL CLEARANCE ABOVE STREAMBED: ~7.5'		CLEAR SPAN (NORMAL TO STREAM):	
37	EPSC NARRATIVE			WATERWAY OF FULL OPENING: 36.5 sq. ft.		VERTICAL CLEARANCE ABOVE STREAMBED:	
38	EPSC EXISTING SITE PLAN			DISPOSITION OF STRUCTURE: Remove and replace		WATERWAY AREA OF FULL OPENING:	
39	EPSC CONSTRUCTION SITE PLAN			TYPE OF MATERIAL UNDER SUBSTRUCTURE: See boring logs		ADDITIONAL INFORMATION	
40	EPSC FINAL SITE PLAN			WATER SURFACE ELEVATIONS AT:			
41-42	EPSC DETAILS			Q2.33 = 1781.5' VELOCITY = 11.6 fps			
43	R.O.W. LAYOUT SHEET			Q10 = 1786.4' " 13.0 fps			
44	R.O.W. DETAIL SHEET			Q25 = 1787.9' " 14.1 fps			
				Q50 = 1790.1' " 15.0 fps			
				Q100 = 1791.2' " 15.6 fps			
				LONG TERM STREAMBED CHANGES: None noted			
				IS THE ROADWAY OVERTOPPED BELOW Q100: No			
				FREQUENCY: N/A			
				RELIEF ELEVATION: 1794.1'			
				DISCHARGE OVER ROAD @Q100: N/A			
				UPSTREAM STRUCTURE			
				TOWN: Stamford DISTANCE: 4000'			
				HIGHWAY #: TH 13 STRUCTURE #: 12			
				CLEAR SPAN: 7.5' CLEAR HEIGHT: 7.5'			
				YEAR BUILT: Unknown FULL WATERWAY: 44.2 sq. ft.			
				STRUCTURE TYPE: Boiler pipe			
				DOWNSTREAM STRUCTURE			
				TOWN: Stamford DISTANCE: 0'			
				HIGHWAY #: STRUCTURE #:			
				CLEAR SPAN: CLEAR HEIGHT:			
				YEAR BUILT: FULL WATERWAY:			
				STRUCTURE TYPE: Confluence with Cowan Brook			
				LRFR LOAD RATING FACTORS			
				LOADING LEVELS			
				H-20 HL-93 3S2 6 AXLE 3A STR. 4A STR. 5A SEM			
				TONNAGE 20 36 36 66 30 34.5 38			
				INVENTORY 2.25 1.2			
				POSTING			
				OPERATING 2.91 1.56 2.67 1.35 1.91 1.7 2.53			
				COMMENTS:			
				AS BUILT "REBAR" DETAIL			
				LEVEL I LEVEL II LEVEL III			
				TYPE: TYPE: TYPE:			
				GRADE: GRADE: GRADE:			
				YEAR 20 year ESAL for flexible pavement from 2005 to 2025 : <50,000			
				2005			
				2025			
				TRAFFIC DATA 40 year ESAL for flexible pavement from 2005 to 2045 : <50,000			
				ADT DHV % D % T ADTT			
				Design Speed: 25 mph			
				TRAFFIC MAINTENANCE NOTES			
				1. MAINTAIN TRAFFIC ON AN OFF SITE DETOUR.			
				2. TRAFFIC SIGNALS ARE NOT NECESSARY.			
				3. SIDEWALKS ARE NOT NECESSARY			
				DESIGN VALUES			
				1. DESIGN LIVE LOAD HL-93			
				2. FUTURE PAVEMENT dp: 3.0 INCH			
				3. DESIGN SPAN L: 32.5			
				4. MIN. MID-SPAN POS. CAMBER @ RELEASE (PRESTRESSED UNITS) Δ: ---			
				5. PRESTRESSING STRAND fy: ---			
				6. PRESTRESSED CONCRETE STRENGTH f'c: ---			
				7. PRESTRESSED CONCRETE RELEASE STRENGTH f'ci: ---			
				8. CONCRETE, HIGH PERFORMANCE CLASS AA f'c: ---			
				9. CONCRETE, HIGH PERFORMANCE CLASS A f'c: ---			
				10. CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3.5 KSI			
				11. CONCRETE, CLASS C f'c: 3.0 KSI			
				12. REINFORCING STEEL fy: 60 KSI			
				13. STRUCTURAL STEEL AASHTO M270 fy: ---			
				14. NOMINAL BEARING RESISTANCE OF SOIL qn: 15.0 KSF			
				15. SOIL BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: 0.45			
				16. NOMINAL BEARING RESISTANCE OF ROCK qn: 20.0 KSF			
				17. ROCK BEARING RESISTANCE FACTOR (REFER TO AASHTO LRFD) φ: ---			
				18. PILE RESISTANCE FACTOR φ: ---			
				19. LATERAL PILE DEFLECTION Δ: ---			
				20. BASIC WIND SPEED V3s: ---			
				21. MINIMUM GROUND SNOW LOAD pg: ---			
				22. SEISMIC DATA PGA: 0 Ss: --- S1: ---			
				23. ---			
				24. ---			
				25. ---			
				26. ---			
				PROJECT NAME: STAMFORD			
				PROJECT NUMBER: STP 1441(29)			
				FILE NAME: s96j226pi.dgn PLOT DATE: 12/30/2015			
				PROJECT LEADER: C. W. CARLSON DRAWN BY: D. KARABEGOVIC			
				DESIGNED BY: H. SALLS CHECKED BY: H. SALLS			
				PRELIMINARY INFORMATION SHEET SHEET 2 OF 44			



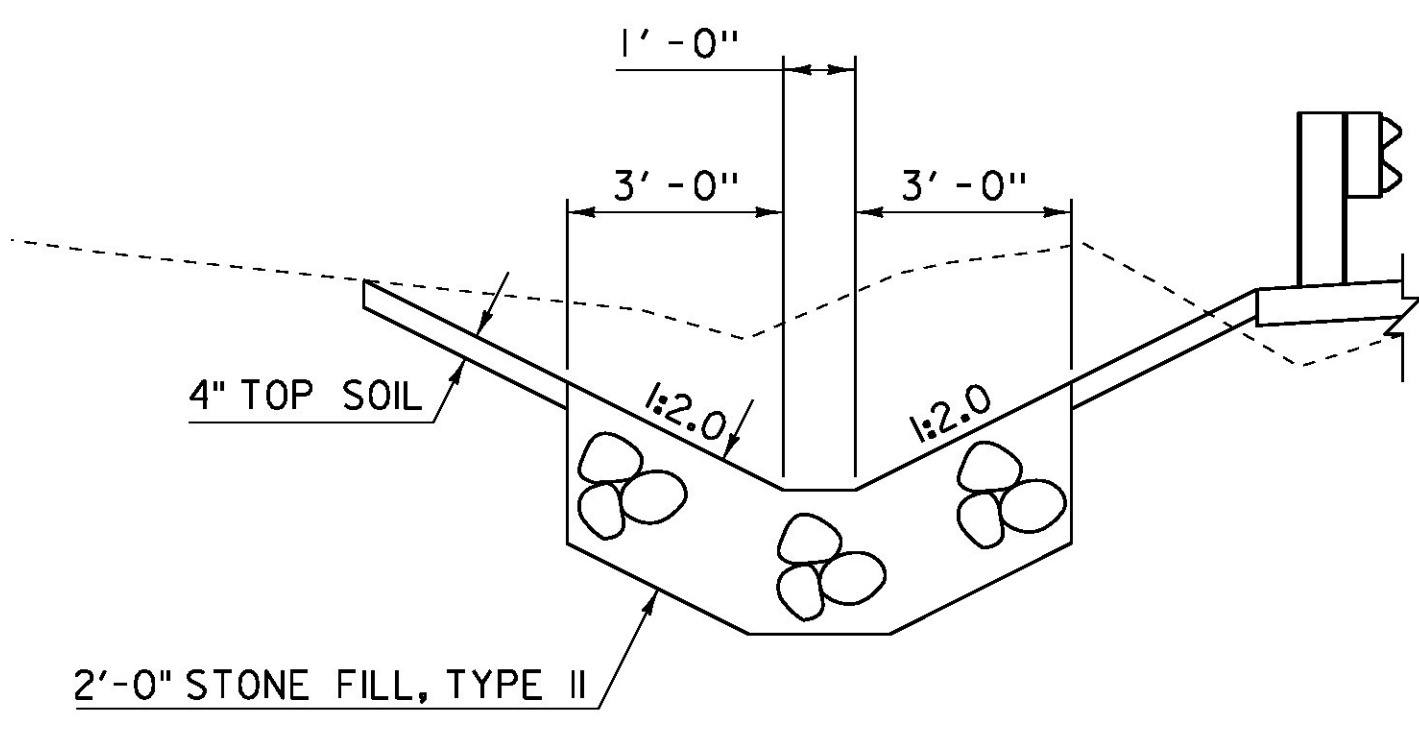
ROADWAY TYPICAL SECTION
SCALE 3/8" = 1'-0"



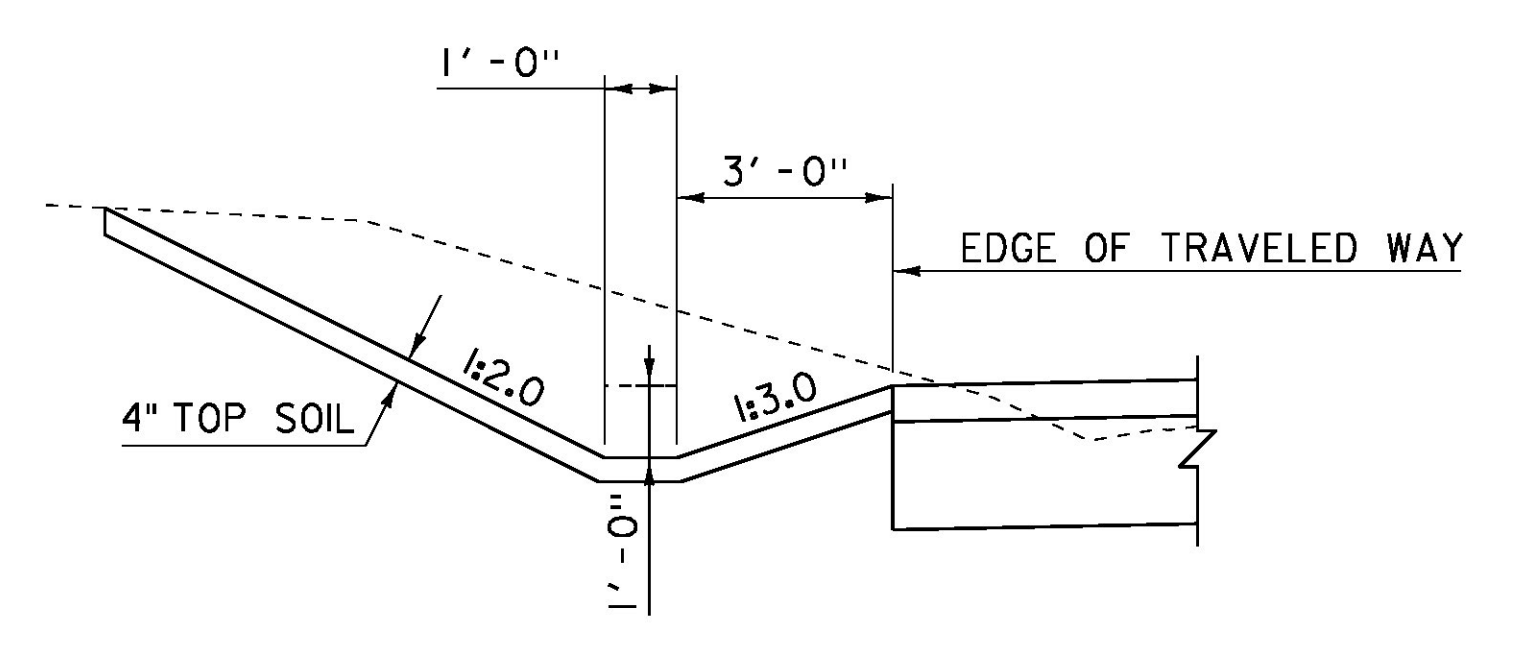
DITCH TYPICAL A
SCALE 3/8" = 1'-0"
(STA. 9+75.00 LT TO 10+76.50 LT)



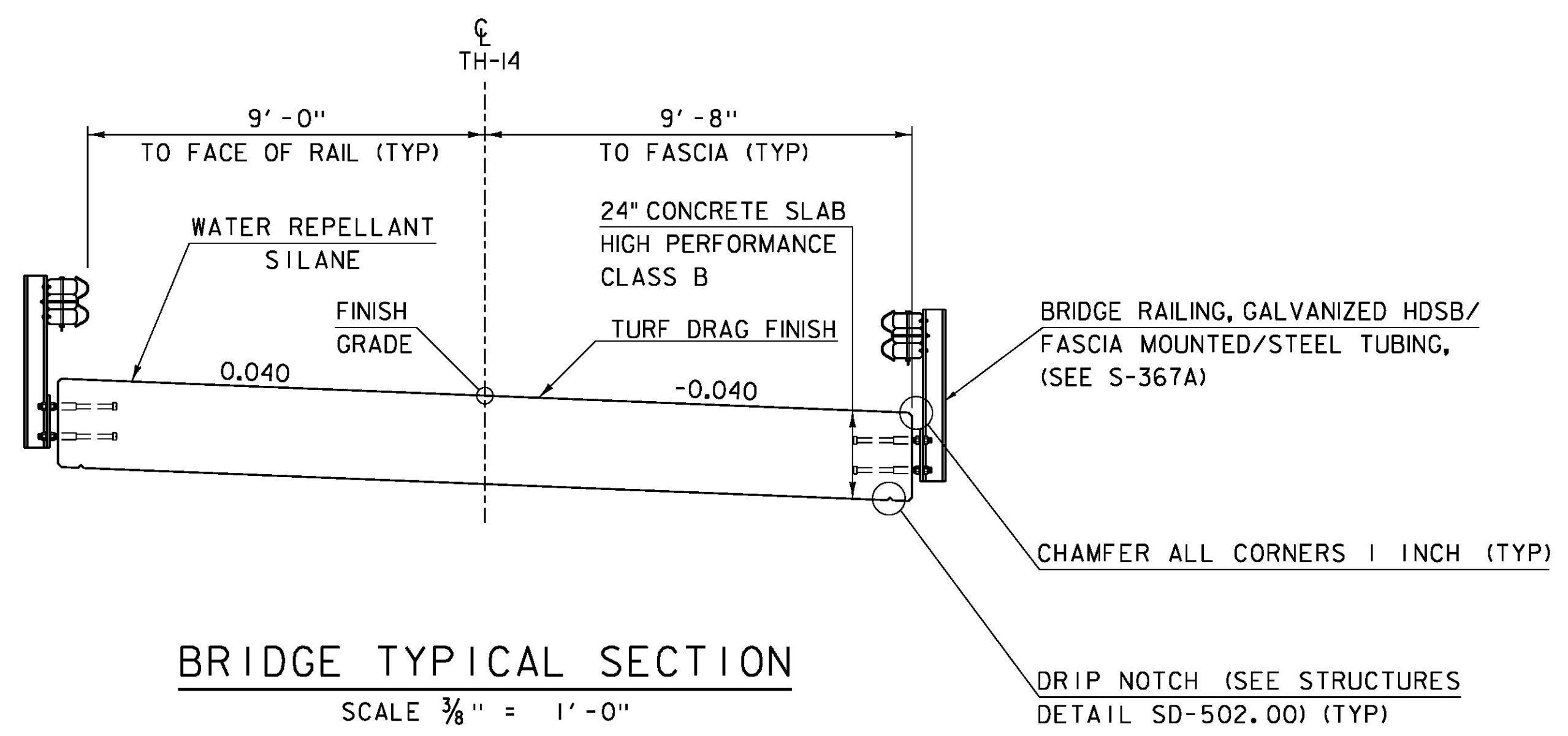
DITCH TYPICAL B
SCALE 3/8" = 1'-0"
(STA. 10+76.50 LT TO 11+25.00 LT)



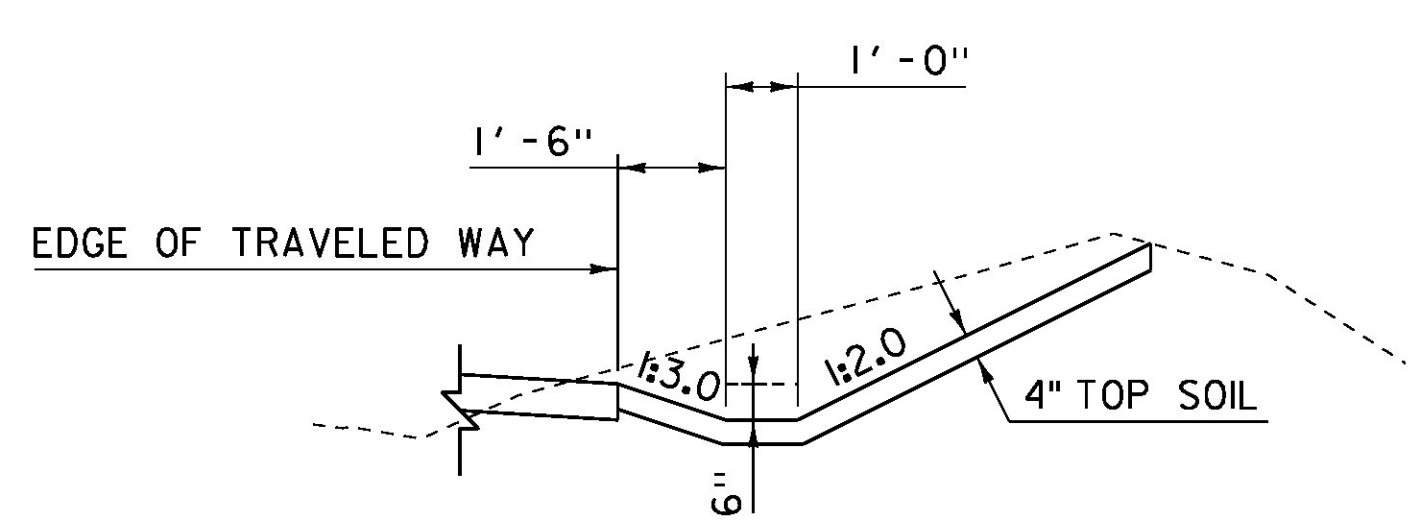
DITCH TYPICAL C
SCALE 3/8" = 1'-0"
(STA. 11+69.00 LT TO 11+91.75 LT)



DITCH TYPICAL D
SCALE 3/8" = 1'-0"
(STA. 11+91.75 LT TO 12+79.00 LT)



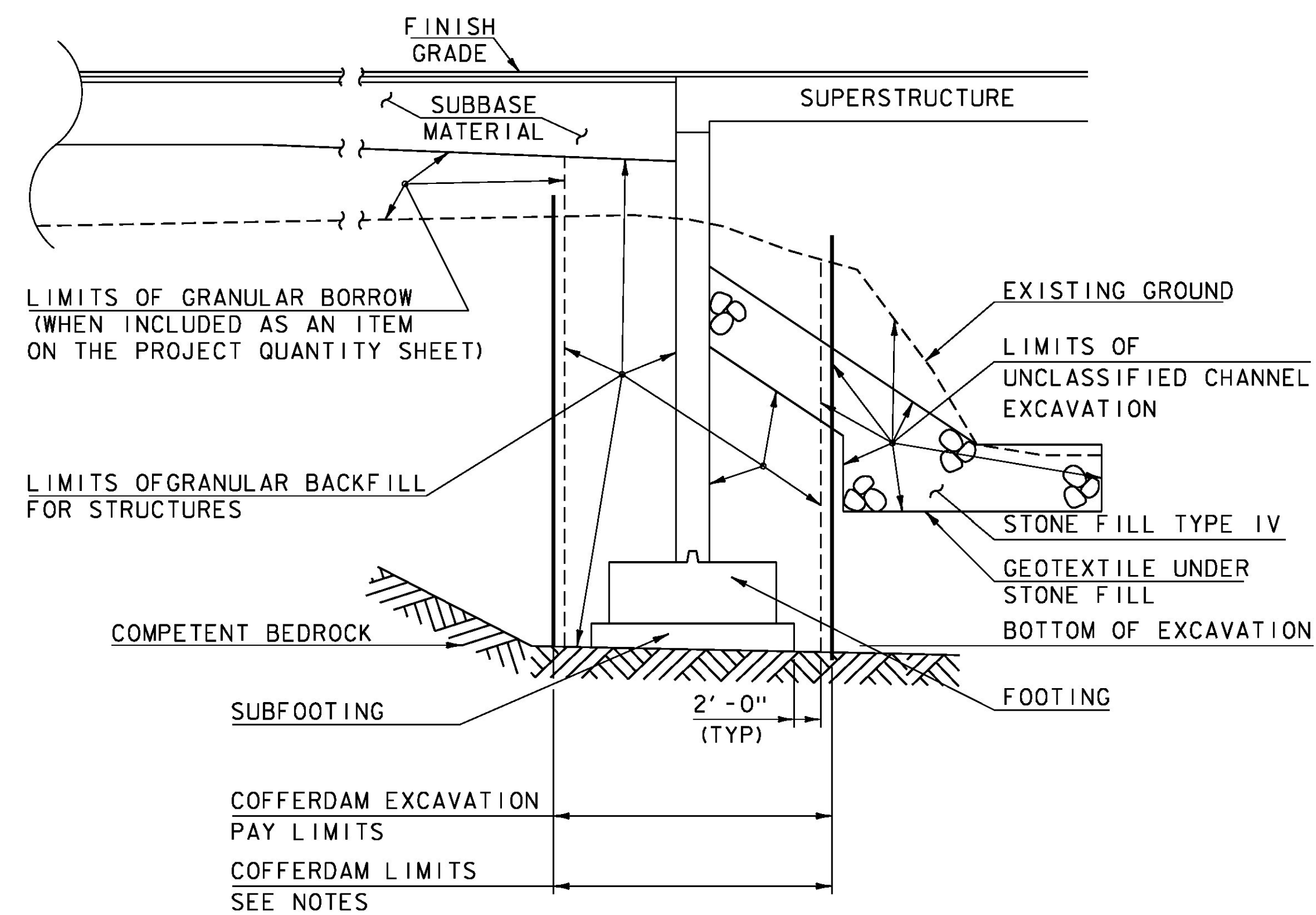
BRIDGE TYPICAL SECTION
SCALE 3/8" = 1'-0"



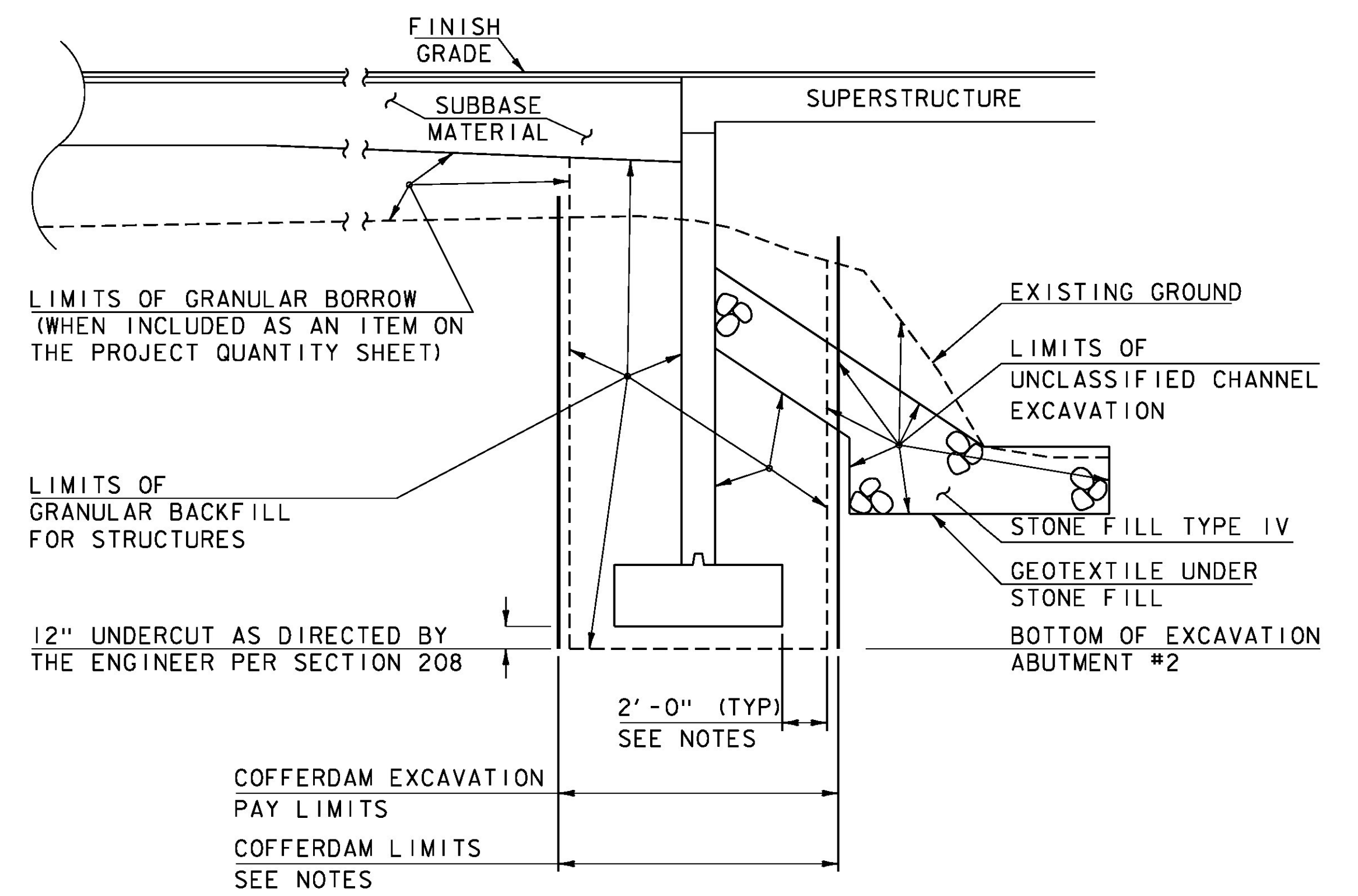
DITCH TYPICAL E
SCALE 3/8" = 1'-0"
(STA. 10+35.00 RT TO 10+75.00 RT)

MATERIAL TOLERANCES (IF USED ON PROJECT)	
SURFACE	
- PAVEMENT (TOTAL THICKNESS)	+/- 1/4"
- AGGREGATE SURFACE COURSE	+/- 1/2"
SUBBASE	
- SAND BORROW	+/- 1"

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 144(29)
FILE NAME:	s96j226typ.dgn
PROJECT LEADER:	C. W. CARLSON
DESIGNED BY:	H. SALLS
TYPICAL SECTIONS 1	
PLOT DATE:	24-DEC-2015
DRAWN BY:	G. ROKES
CHECKED BY:	H. SALLS
SHEET	3 OF 44



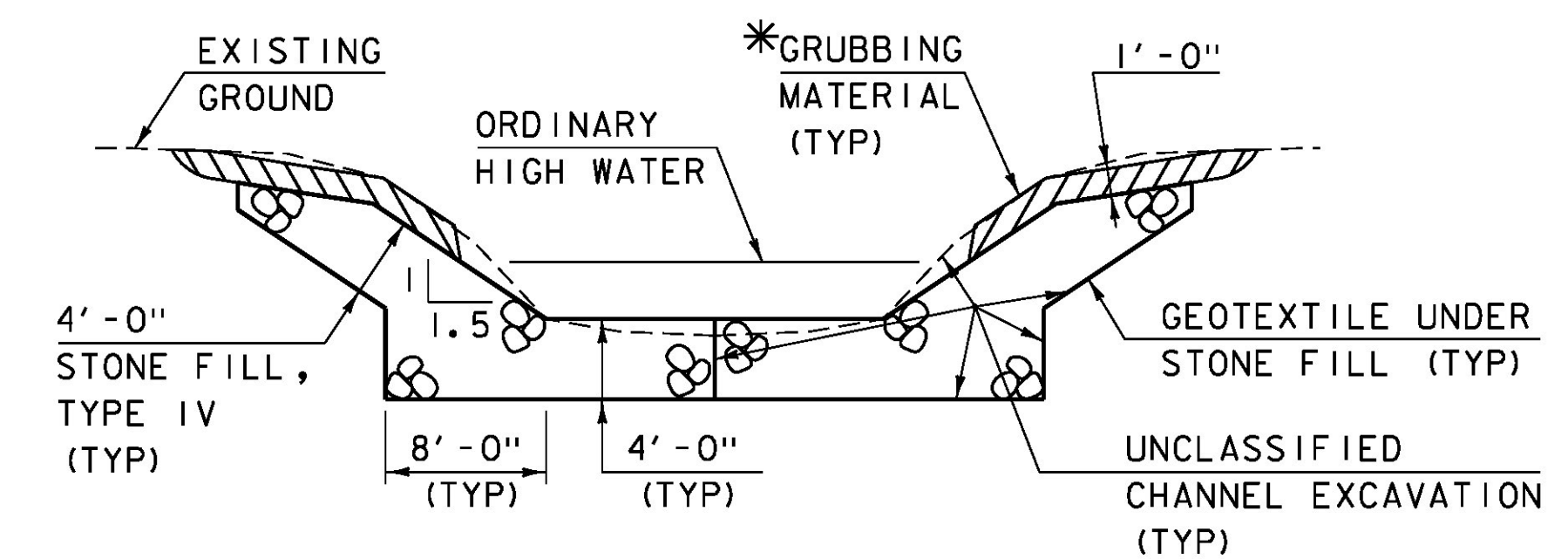
ABUTMENT #1 EARTHWORK SECTION
(NOT TO SCALE)



ABUTMENT #2 EARTHWORK SECTION
(NOT TO SCALE)

COFFERDAM NOTES

1. COFFERDAM DIMENSIONS SHALL 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.



TYPICAL CHANNEL SECTION
(NOT TO SCALE)

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

PROJECT NAME: STAMFORD	PLOT DATE: 03-DEC-2015
PROJECT NUMBER: STP 144I(29)	DRAWN BY: D. KARABEGOVIC
FILE NAME: s96j226typ.dgn	DESIGNED BY: H. SALLS
PROJECT LEADER: C.W. CARLSON	CHECKED BY: H. SALLS
TYPICAL SECTIONS 2	SHEET 4 OF 44

GENERAL

- 1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2011 AND ITS LATEST REVISIONS, THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FIFTH EDITION, DATED 2012 AND ITS LATEST REVISIONS AND THE AASHTO LRFD BRIDGE CONSTRUCTION SPECIFICATIONS THIRD EDITION, DATED 2010 AND ITS LATEST REVISIONS.
- 2. THE BRIDGE IS DESIGNED FOR HL-93 LIVE LOAD.
- 3. TOWN HIGHWAY 14 WILL BE CLOSED TO THROUGH TRAFFIC DURING CONSTRUCTION OF THE NEW BRIDGE.
- 4. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
- 5. THE TOWN OF STAMFORD IS REQUESTING 2 LARGE BOULDERS TO BE PLACED AT THE END OF WOODS DRIVE. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO ALL OTHER CONTRACT ITEMS. SEE LAYOUT SHEET FOR DETAILS. THE CONTRACTOR SHALL CONTACT THE TOWN OF STAMFORD TO DETERMINE THE PLACEMENT OF ROCKS.
- 6. 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 NOTIFY THE PROPERTY OWNERS GIVE 24 HOUR ADVANCE NOTICE.
- 7. THE CONTRACTOR SHALL MAINTAIN THE FLOW OF WATER WHILE THE STREAM BED IS BEING RECONSTRUCTED. PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 900.645 SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM).

EARTHWORK AND RELATED ITEMS

- 8. ITEM 529.15 "REMOVAL OF STRUCTURE" (100 SF - EST) WILL INCLUDE THE REMOVAL OF THE EXISTING SUPERSTRUCTURE, ANY PORTION OF THE EXISTING LAID UP STONE ABUTMENTS, AND CONCRETE WINGWALLS NOT REMOVED UNDER THE ITEM COFFERDAM EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION.
- 9. THE "STONE FILL, TYPE IV" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE SLAB IS POURED.
- 10. THE BACKFILL BEHIND EACH ABUTMENT SHALL NOT BE PLACED HIGHER THAN TWO FEET BELOW THE BRIDGE SEAT UNTIL THE CONCRETE SLAB HAS BEEN POURED.

CONCRETE

- 11. ALL CONCRETE FOR THE SUPERSTRUCTURE AND SUBSTRUCTURE, EXCLUDING THE SUBFOOTINGS, WILL BE PAID FOR UNDER ITEM 501.34 "CONCRETE, HIGH PERFORMANCE CLASS B".
- 12. CONCRETE FOR SUBFOOTING WILL BE PAID FOR UNDER ITEM 541.30, "CONCRETE, CLASS C". PAYMENT FOR SUBFOOTING CONCRETE WILL BE MADE ONLY FOR CONCRETE WITHIN THE LIMITS FOR SUBFOOTING SHOWN ON THE PLANS.
- 13. THE CONCRETE DECK SHALL BE GIVEN A SUITABLE TEXTURE WITH A TURF DRAG FINISH IN ACCORDANCE WITH SUBSECTION 501.16, "CONCRETE FINISHING".
- 14. THE TOP SURFACE OF SUBFOOTING POURS SHALL BE ROUGHENED TO A RAKE FINISH TO HELP PREVENT SLIDING AT THE SUBFOOTING/FOOTING INTERFACE. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO ITEM 541.30 "CONCRETE, CLASS C".
- 15. THE SLAB IS TO 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.
- 16. ITEM 514.10, "WATER REPELLENT, SILANE", SHALL BE SUPPLIED TO ALL EXPOSED CONCRETE ON THE BRIDGE SUPERSTRUCTURE, INCLUDING THE CURBS, AND SUBSTRUCTURE, WITH THE EXCEPTION OF THE BOTTOM OF THE DECK BETWEEN DRIP NOTCHES.
- 17. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER, SEE DETAIL SHEET SD 501.00.

18. ALL REINFORCING STEEL IN THE CONCRETE SLAB SHALL BE COROROSION PROTECTION LEVEL I (EPOXY COATED) ITEM 507.11 REINFORCING STEEL, LEVEL I (EPOXY COATED), ALL OTHER REINFORCING STEEL SHALL BE ITEM 507.11 REINFORCING STEEL, LEVEL I.

19. THE MINIMUM COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURE SHALL BE THREE INCHES UNLESS DETAILED OTHERWISE.

20. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:
SPACING: +/- 1 INCH
CLEARANCE: +/- 1/4 INCH

SUBSTRUCTURES ON BEDROCK

- 21. THE SUBFOOTING FOR THE ABUTMENT 1 AND WINGWALLS 1 AND 2 WILL BE FOUNDED ON BEDROCK AND SHALL BE PLACED ON CLEAN COMPETENT ROCK. ALL LOOSE ROCK AND DEBRIS SHALL BE REMOVED.
- 22. ONCE THE CONTRACTOR HAS EXCAVATED FOR THE SUBFOOTINGS, THE RESIDENT ENGINEER SHALL CONTACT THE PROJECT MANAGER AND GEOTECHNICAL ENGINEERING MANAGER TO DETERMINE IF THE BEDROCK IS COMPETENT. THREE (3) WORKING DAYS FROM NOTIFICATION WILL BE ALLOWED TO MAKE THE INSPECTION AND THE DETERMINATION FOR THE COMPETENCY OF THE BEDROCK.
- 23. ANY BEDROCK THAT NEEDS TO BE REMOVED WILL BE PAID FOR WITH THE CORRESPONDING EXCAVATION ITEM INCLUDED IN THE CONTRACT. OVERBREAKAGE EXCEEDING THE AVERAGE MAXIMUM ALLOWANCE SPECIFIED IN SUBSECTION 204.09 (B) (1) WILL BE AT THE CONTRACTOR'S EXPENSE.
- 24. DOWELS, ITEM 507.11 REINFORCING STEEL, LEVEL I, SHALL BE DRILLED AND GROUTED INTO BEDROCK AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE DOWELS SHALL HAVE A 2'-0" MINIMUM EMBEDMENT IN THE BEDROCK AND SHALL EXTEND IN THE SUBFOOTING A MINIMUM OF 9".
- 25. THE SUBSTRUCTURES HAVE BEEN DESIGNED FOR THE FOOTING ELEVATIONS SHOWN ON THE PLANS. ON ABUTMENT #1 THE INTENTION IS TO USE SUBFOOTINGS OF CONCRETE, CLASS "C" IN AREAS WHERE THE LEDGE IS MORE THAN 6 INCHES 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 FOOTINGS UNTIL A REPLY IS RECEIVED FROM THE PROJECT MANAGER. A TURN-AROUND TIME OF UP TO FIVE BUSINESS DAYS MAY BE EXPECTED.

TRAFFIC CONTROL

- 26. THE TOWN WILL BE RESPONSIBLE FOR SIGNING THE DETOUR; THE CONTRACTOR SHALL GIVE THE TOWN 21 DAYS NOTICE PRIOR TO ANY ROAD CLOSURE.
- 27. ALL ON PROJECT SIGNS AND BARRICADES AS REQUIRED FOR TRAFFIC CONTROL OR AS ORDERED BY THE RESIDENT ENGINEER WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE PAID FOR UNDER THE ITEM 641.10 "TRAFFIC CONTROL". ALL SIGNS AND BARRICADES SHALL BE INSPECTED DAILY AND REPLACED AS NECESSARY. ALL SIGNS AND BARRICADES SHALL BE CLEARED OF DUST AND DEBRIS WEEKLY.

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 1441 (29)
FILE NAME: s96j226qty.dgn	PLOT DATE: 30-DEC-2015
PROJECT LEADER: C.W. CARLSON	DRAWN BY: D.KARABEGOVIC
DESIGNED BY: H. SALLS	CHECKED BY: H. SALLS
PROJECT NOTES	SHEET 5 OF 44

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
							ROADWAY	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
							1				1		LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10				
							540				540		CY	COMMON EXCAVATION	203.15				
									300		300		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27				
							10				10		CY	TRENCH EXCAVATION OF EARTH	204.20				
							1				1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22				
									940		940		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30				
									1250		1250		CY	COFFERDAM EXCAVATION, EARTH	208.30				
									400		400		CY	COFFERDAM EXCAVATION, ROCK	208.35				
									1		1		LS	COFFERDAM (ABUTMENT #1)	208.40				
									1		1		LS	COFFERDAM (ABUTMENT #2)	208.40				
							300				300		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35				
							140				140		CY	AGGREGATE SURFACE COURSE	401.10				
									375		375		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34				
									6760		6760		LB	REINFORCING STEEL, LEVEL I (EPOXY COATED)	507.11				
									38690		38690		LB	REINFORCING STEEL, LEVEL I	507.11				
									100		100		LF	DRILLING AND GROUTING DOWELS	507.16				
									30		30		GAL	WATER REPELLENT, SILANE	514.10				
									76		76		LF	BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING	525.44				
									1		1		EACH	REMOVAL OF STRUCTURE (100 SF - EST)	529.15				
									61		61		CY	CONCRETE, CLASS C	541.30				
														BEGIN OPTION AA					
							37				37		LF	15" CAAP .060 (2-2/3 X 1/2)	601.0210				
							37				37		LF	15" PCCSP .064 (2-2/3 X 1/2)	601.0410				
							37				37		LF	15" CPEP(SL)	601.2610				
														END OPTION AA					
								1			1		TON	DUST AND ICE CONTROL WITH CALCIUM CHLORIDE	609.15				
							10				10		CY	STONE FILL, TYPE I	613.10				
							100				100		CY	STONE FILL, TYPE II	613.11				
									340		340		CY	STONE FILL, TYPE IV	613.13				
							200				200		LF	HD STEEL BEAM GUARDRAIL, GALVANIZED W/8 FEET POSTS	621.215				
							4				4		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60				
							4				4		EACH	GUARDRAIL APPROACH SECTION, GALV HD STEEL BEAM W/ 8FT POSTS	621.738				
							143				143		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80				
							100				100		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 TELEPHONE (N.A.B.I.)	631.26				
							1				1		LS	MOBILIZATION / DEMOBILIZATION	635.11				
							1				1		LS	TRAFFIC CONTROL	641.10				
									460		460		SY	GEOTEXTILE UNDER STONE FILL	649.31				

PROJECT NAME: STAMFORD
PROJECT NUMBER: STP 1441 (29)
FILE NAME: s96.226qty.dgn PLOT DATE: 24-DEC-2015
PROJECT LEADER: C.W. CARLSON DRAWN BY: D. KARABEGOVIC
DESIGNED BY: H. SALLS CHECKED BY: H. SALLS
QUANTITY SHEET 1 SHEET 6 OF 44

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
							ROADWAY	EROSION CONTROL	BRIDGE	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
								85			85		SY	GEOTEXTILE FOR SILT FENCE	649.51				
								128			128		SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515				
								51			51		SY	GEOTEXTILE FOR FILTER CURTAIN	649.61				
								10			10		LB	SEED	651.15				
								10			10		LB	SEED-WINTER RYE	651.17				
								100			100		LB	FERTILIZER	651.18				
								0.25			0.25		TON	AGRICULTURAL LIMESTONE	651.20				
								1			1		TON	HAY MULCH	651.25				
								32			32		CY	TOPSOIL	651.35				
									140		140		SY	GRUBBING MATERIAL	651.40				
								1			1		LS	EPSC PLAN	652.10				
								5			5		HR	MONITORING EPSC PLAN	652.20				
								1			1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				
								600			600		SY	TEMPORARY EROSION MATTING	653.20				
								30			30		CY	VEHICLE TRACKING PAD	653.35				
								400			400		LF	BARRIER FENCE	653.50				
								370			370		LF	PROJECT DEMARCATION FENCE	653.55				
							4				4		EACH	SPECIAL PROVISION (CPM SCHEDULE)	900.620				
							1				1		LS	SPECIAL PROVISION (TEMPORARY RELOCATION OF STREAM)	900.645				

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 1441 (29)
FILE NAME:	s96j226qty.dgn
PROJECT LEADER:	C.W. CARLSON
DESIGNED BY:	H. SALLS
QUANTITY SHEET 2	
PLOT DATE:	24-DEC-2015
DRAWN BY:	D.KARABEGOVIC
CHECKED BY:	H. SALLS
SHEET	7 OF 44

BRIDGE QUANTITY SHEET

SUMMARY OF BRIDGE QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES			
							CHANNEL	ABUTMENT #1	SUPER STRUCTURE	ABUTMENT #2	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
							300				300		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27				
								425		515	940		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30				
								600		650	1250		CY	COFFERDAM EXCAVATION, EARTH	208.30				
								400			400		CY	COFFERDAM EXCAVATION, ROCK	208.35				
								1			1		LS	COFFERDAM (ABUTMENT #1)	208.40				
										1	1		LS	COFFERDAM (ABUTMENT #2)	208.40				
								158	47	170	375		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34				
								120	6520	120	6760		LB	REINFORCING STEEL, LEVEL I (EPOXY COATED)	507.11				
								18000		20690	38690		LB	REINFORCING STEEL, LEVEL I	507.11				
										100	100		LF	DRILLING AND GROUTING DOWELS	507.16				
								10	8	12	30		GAL	WATER REPELLENT, SILANE	514.10				
								6	64	6	76		LF	BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING	525.44				
									1		1		EACH	REMOVAL OF STRUCTURE (100 SF - EST)	529.15				
										61	61		CY	CONCRETE, CLASS C	541.30				
							340				340		CY	STONE FILL, TYPE IV	613.13				
							460				460		SY	GEOTEXTILE UNDER STONE FILL	649.31				
							140				140		SY	GRUBBING MATERIAL	651.40				

PROJECT NAME:	STAMFORD	PLOT DATE:	24-DEC-2015
PROJECT NUMBER:	STP 1441 (29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96.226qty.dgn	CHECKED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	DESIGNED BY:	H. SALLS
BRIDGE QUANTITY SHEET		SHEET	8 OF 44

GPS CONTROL POINTS

HVCTRL #1

DOLLE
 NORTH = 91188.78
 EAST = 1474488.03
 ELEV. = 1832.05

TO REACH FROM THE INTERSECTION OF VT ROUTES 8 AND 100 AND THE VERMONT/MASSACHUSETTS STATE LINE GO NORTH ALONG VT ROUTES 8 AND 100 FOR 1.1 MI (1.8 KM) TO THE INTERSECTION OF MILL ROAD LEFT, JUST NORTH OF THE STAMFORD COMMUNITY CHURCH. TURN LEFT AND GO WEST AND NORTH ALONG MILL ROAD FOR 1.8 MI (2.9 KM) TO THE BRIDGE OVER ROARING BROOK AND THE POINT WHERE MILL ROAD BECOMES COUNTY ROAD. BEAR LEFT AND GO WEST ALONG COUNTY ROAD FOR 2.0 MI (3.2 KM) TO THE INTERSECTION OF KLONDIKE ROAD LEFT. TURN LEFT AND GO SOUTH AND SOUTHWEST ALONG KLONDIKE ROAD FOR 1.7 MI (2.7 KM) TO THE INTERSECTION OF THE FIELD DRIVE LEFT. THE MARK IS SET IN THE TOP OF A 7.5 M (24.6 FT) X 3.2 M (10.5 FT) ROCK OUTCROP WHICH PROJECTS ABOUT 2.0 M (6.6 FT) ABOVE GROUND SURFACE. \$ IT IS 37.7 M (123.7 FT) SOUTH OF POLE NO.6, 53.7 M (176.2 FT) SOUTHWEST OF THE SOUTH CORNER OF A SHED, 3.3 M (10.8 FT) NORTHWEST OF THE SOUTHEAST END OF THE ROCK OUTCROP, AND 1.4 M (4.6 FT) WEST OF A FIBERGLASS WITNESS POST.

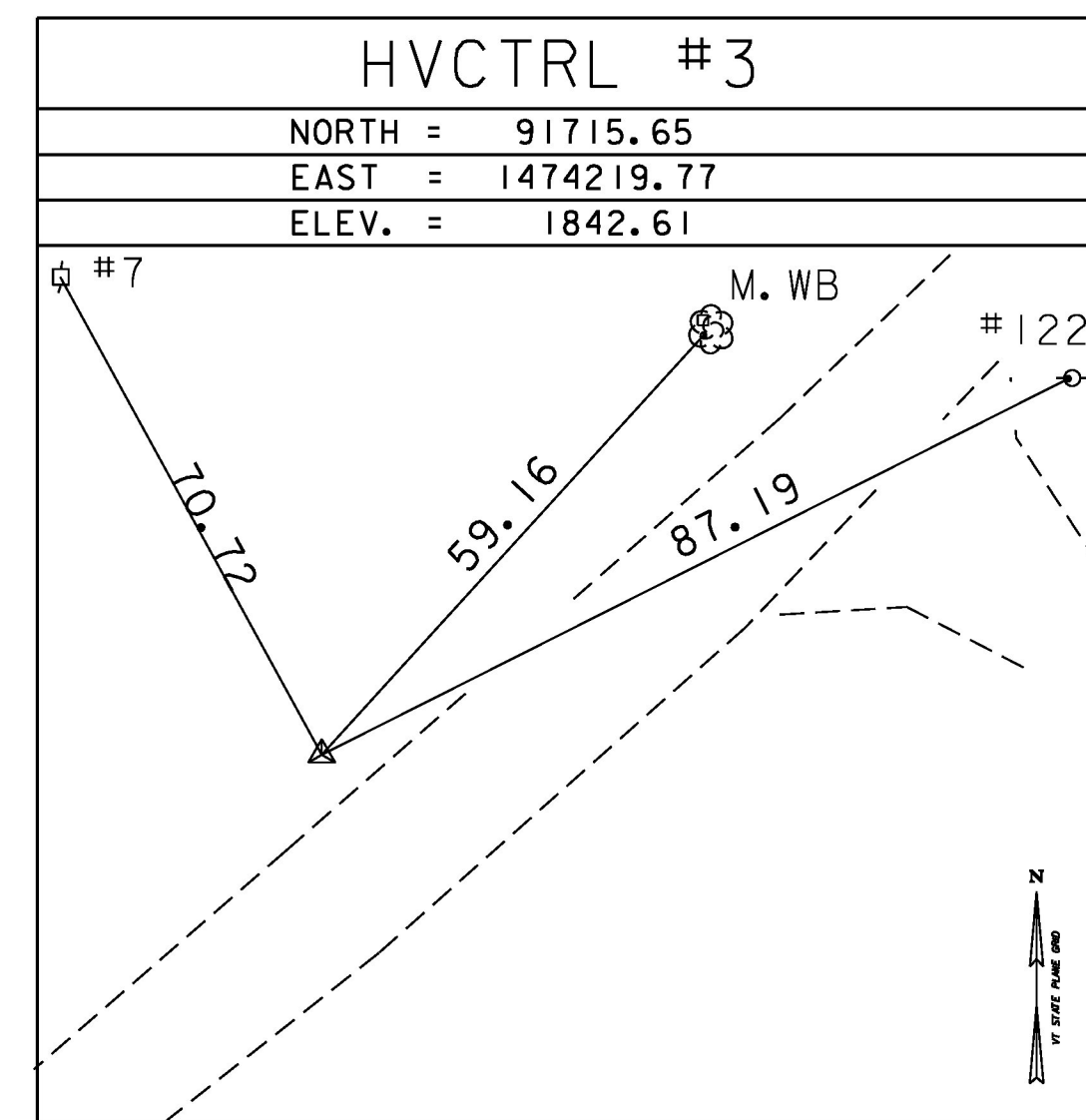
HVCTRL #2

DOLLE AZ MK
 NORTH = 92270.15
 EAST = 1473946.70
 ELEV. = 1931.36

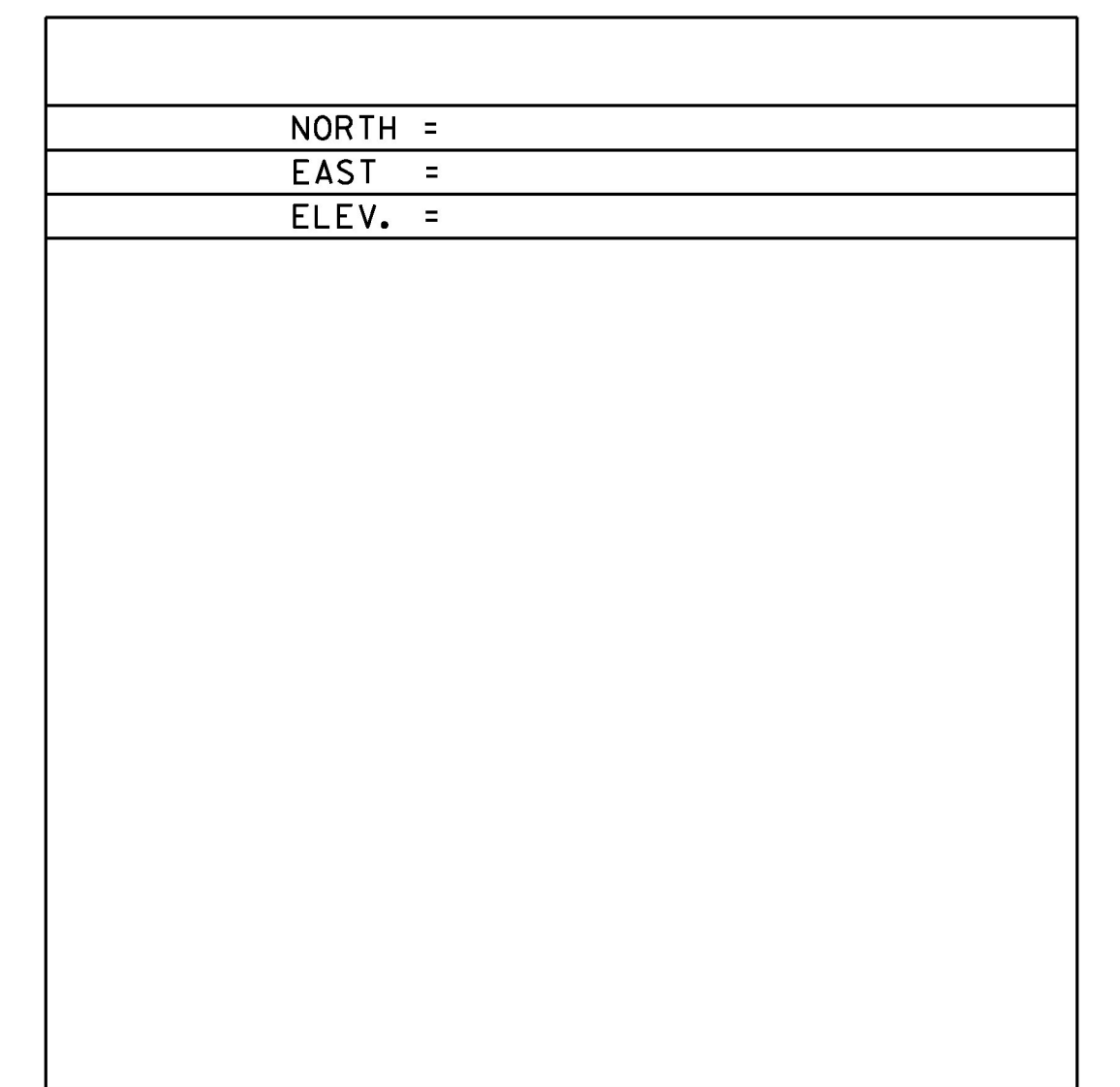
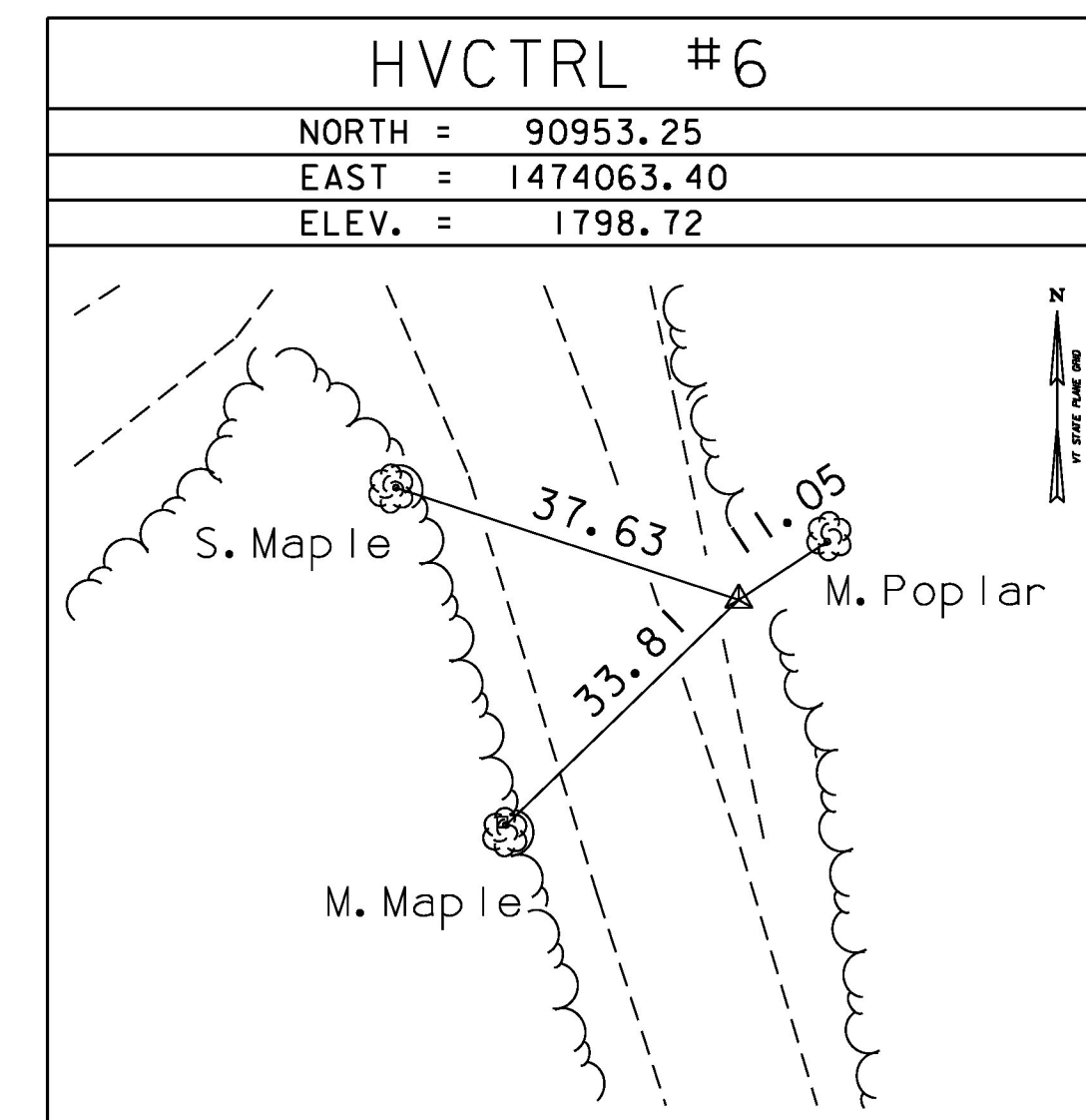
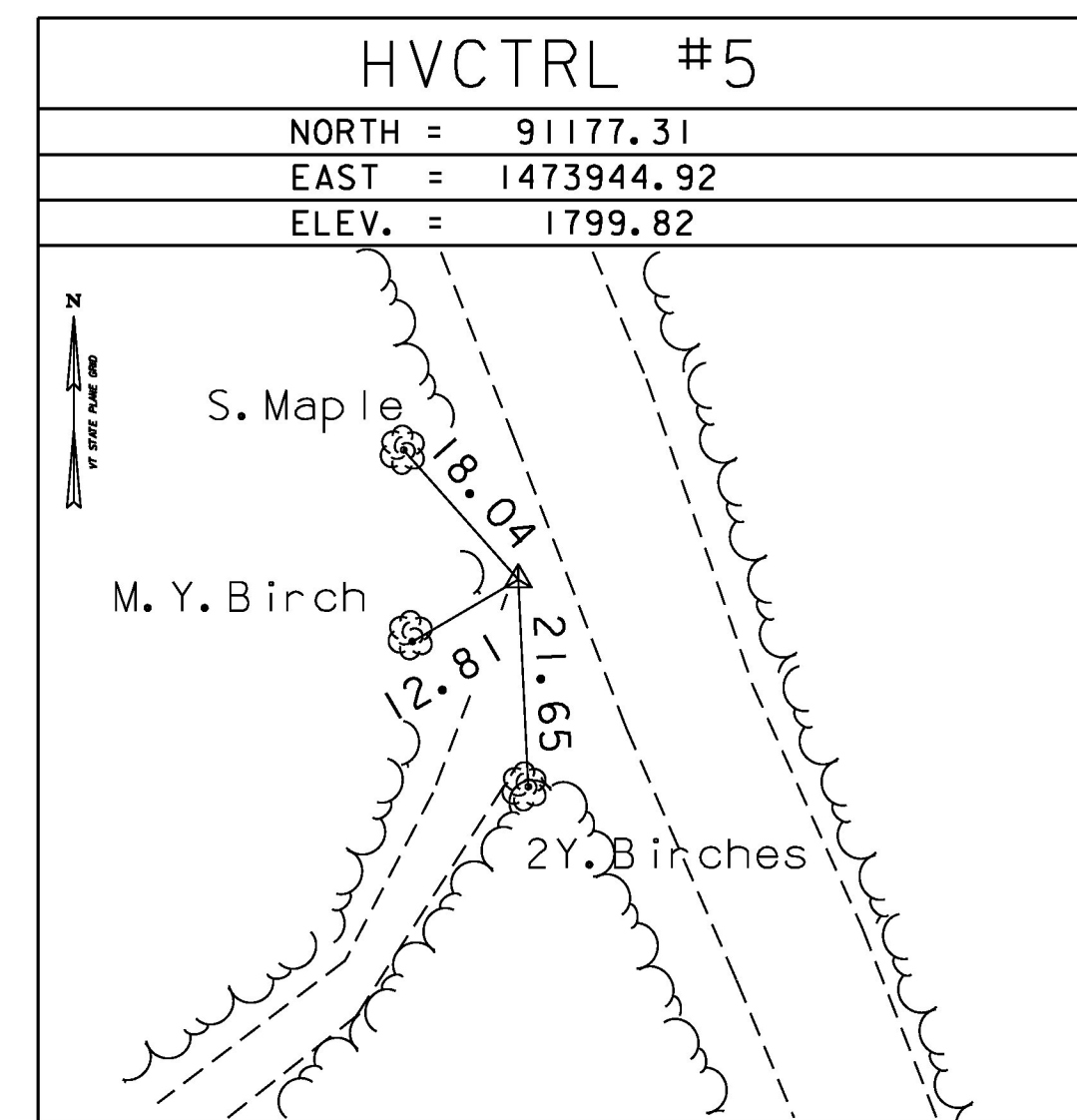
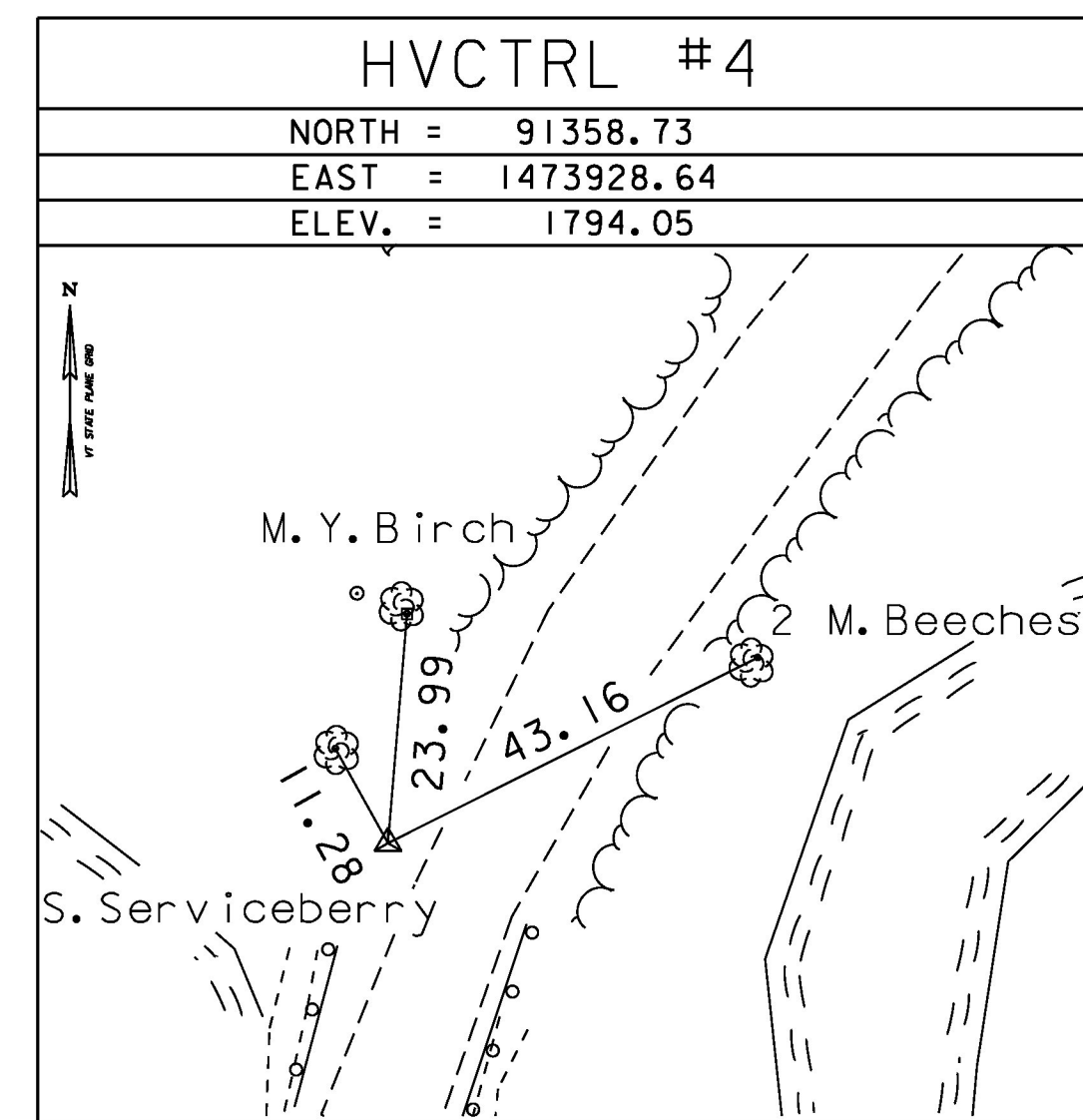
TO REACH FROM THE INTERSECTION OF VT ROUTES 8 AND 100 AND THE VERMONT/MASSACHUSETTS STATE LINE GO NORTH ALONG VT ROUTES 8 AND 100 FOR 1.1 MI (1.8 KM) TO THE INTERSECTION OF MILL ROAD LEFT, JUST NORTH OF THE STAMFORD COMMUNITY CHURCH. TURN LEFT AND GO WEST AND NORTH ALONG MILL ROAD FOR 1.8 MI (2.9 KM) TO THE BRIDGE OVER ROARING BROOK AND THE POINT WHERE MILL ROAD BECOMES COUNTY ROAD. BEAR LEFT AND GO WEST ALONG COUNTY ROAD FOR 2.0 MI (3.2 KM) TO THE INTERSECTION OF KLONDIKE ROAD LEFT. TURN LEFT AND GO SOUTH AND SOUTHWEST ALONG KLONDIKE ROAD FOR 1.7 MI (2.7 KM) TO THE INTERSECTION OF THE POWERLINE . THE MARK IS SET IN THE TOP OF A 12.0 M (39.4 FT) X 4.3 M (14.1 FT) ROCK OUTCROP WHICH PROJECTS ABOUT 1.5 M (4.9 FT) ABOVE GROUND SURFACE. \$ IT IS 57.6 M (189.0 FT) NORTH OF POLE NO.8, 47.1 M (154.5 FT) SOUTH OF POLE NO.9, 6.6 M (21.7 FT) SOUTHWEST OF THE NORTHEAST END OF THE ROCK OUTCROP, 5.6 M (18.4 FT) NORTHEAST OF THE SOUTHWEST END OF THE ROCK OUTCROP, AND 2.6 M (8.5 FT) SOUTHWEST OF A FIBERGLASS WITNESS POST

* Descriptions provided by Vermont Agency of Transportation Geodetic Survey Unit

TRAVERSE TIES



* Main Traverse Completed 08-08-1997 by L.Orvis P.C & R.Bullock



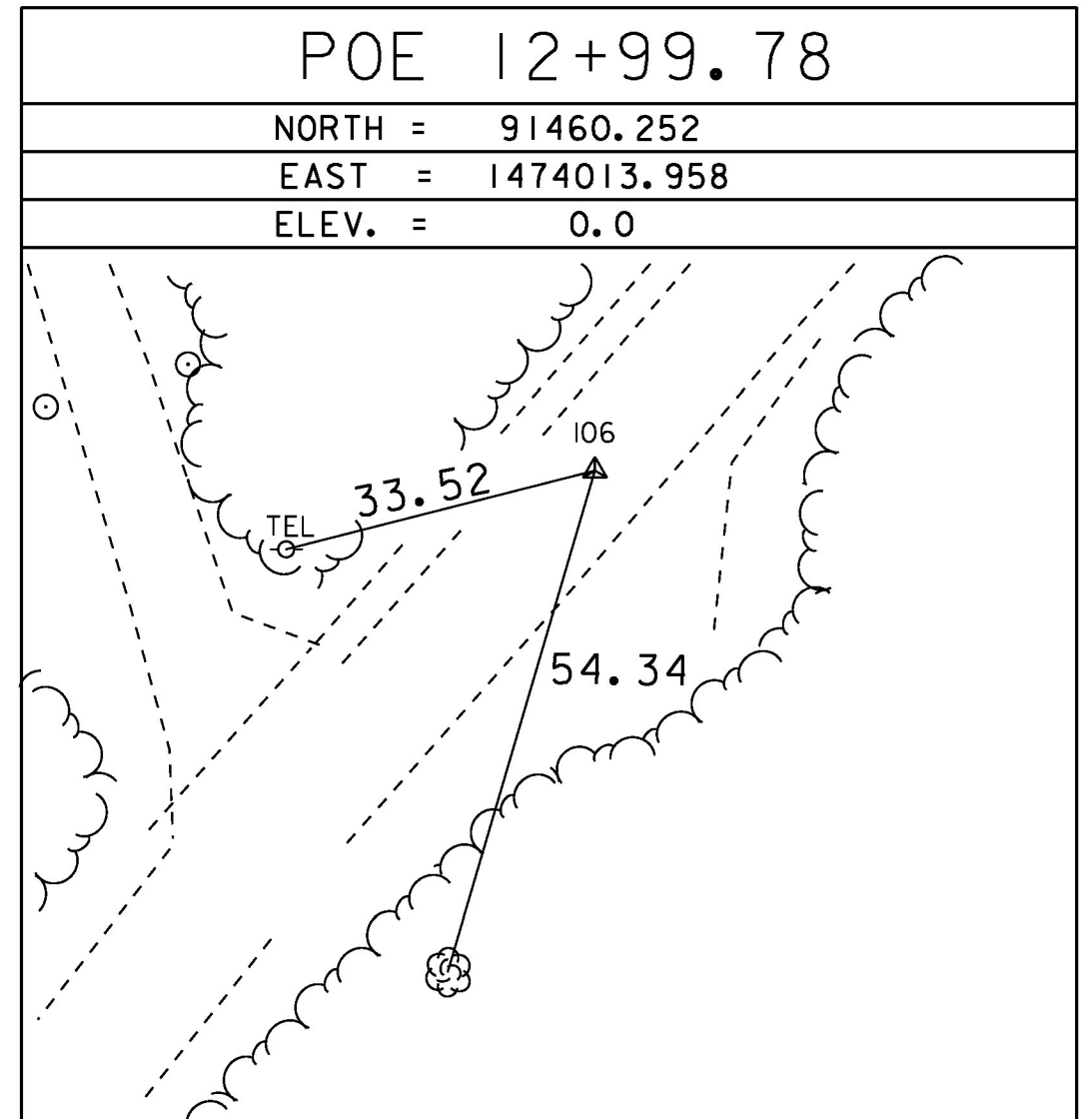
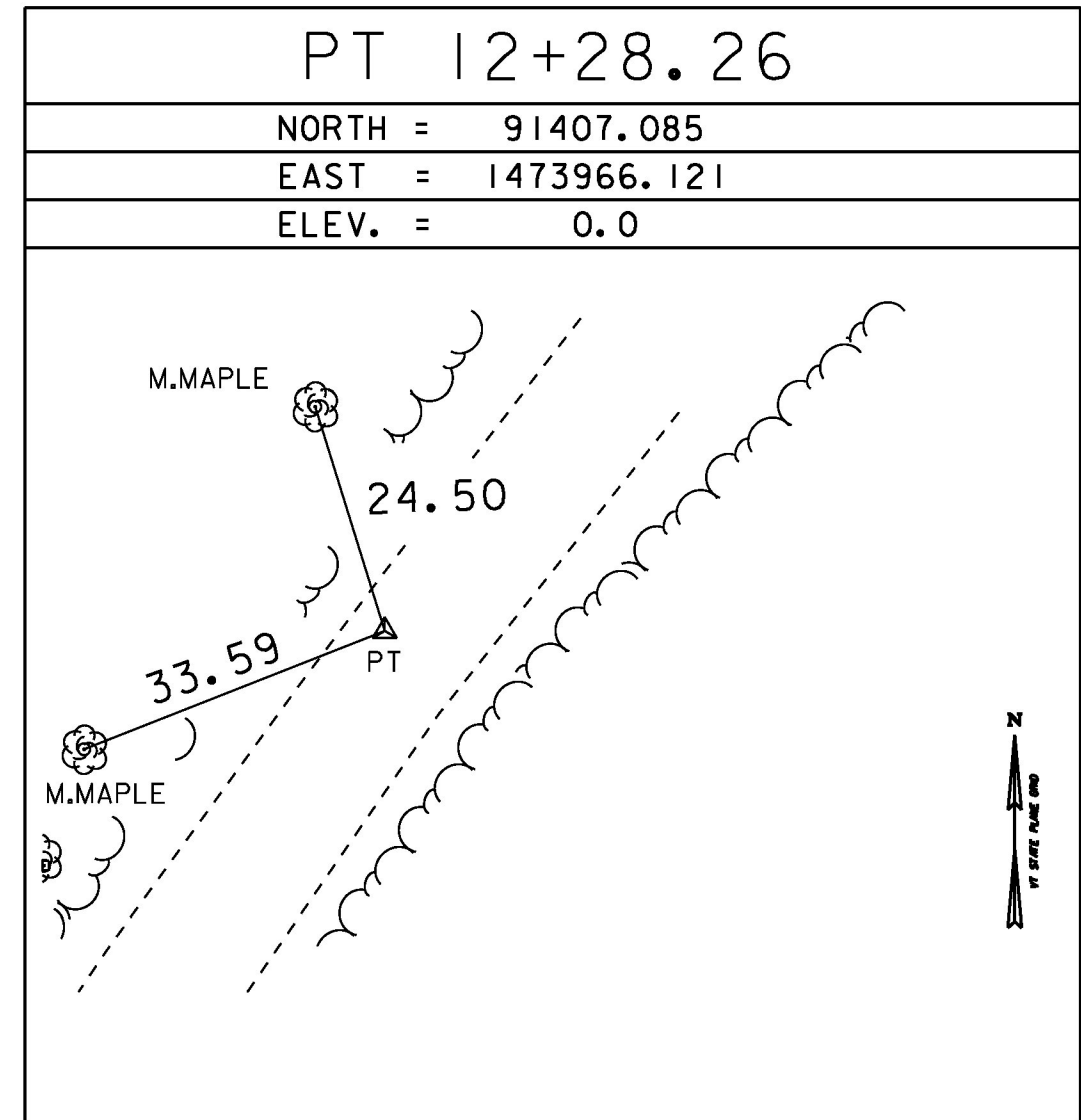
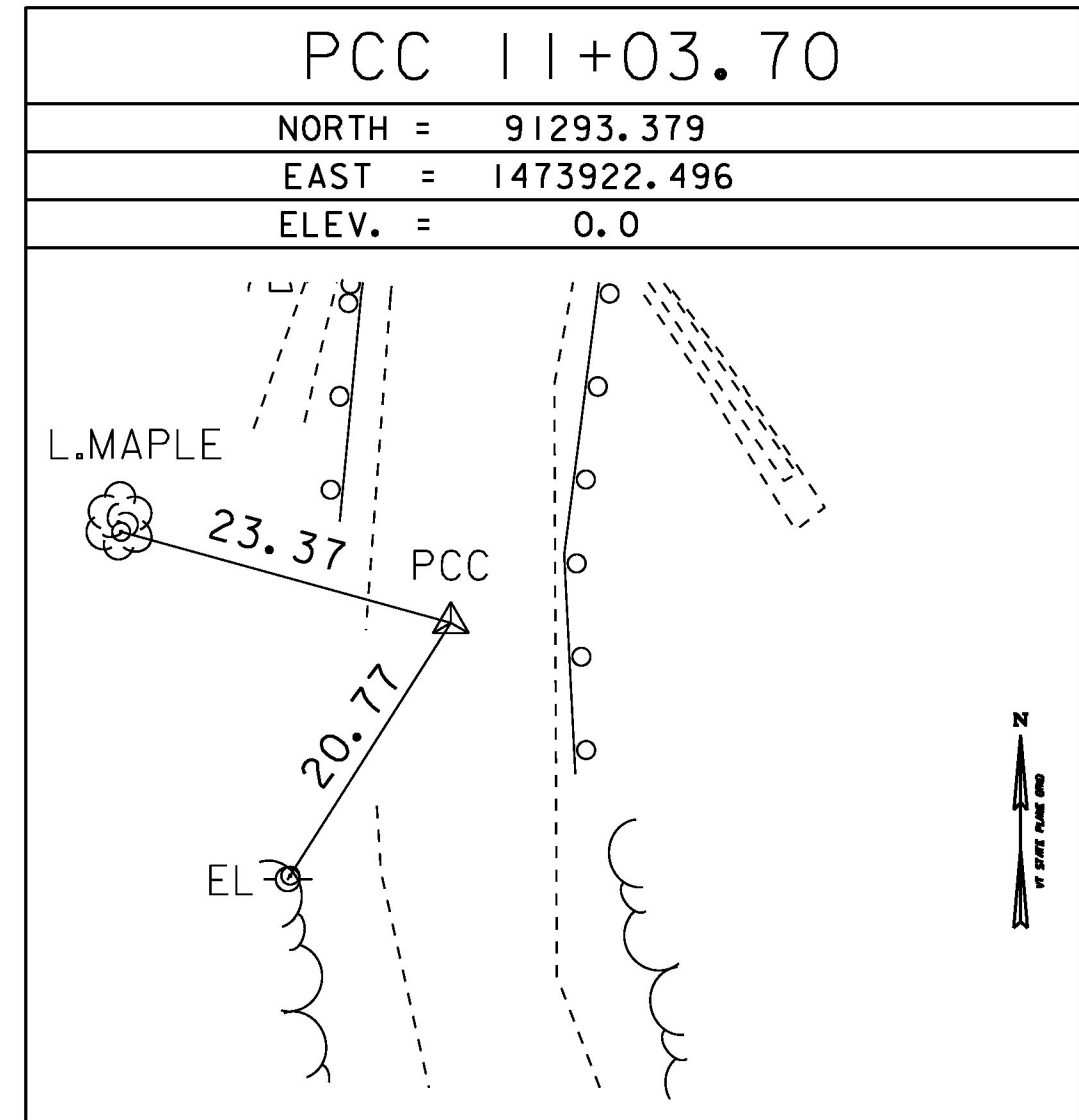
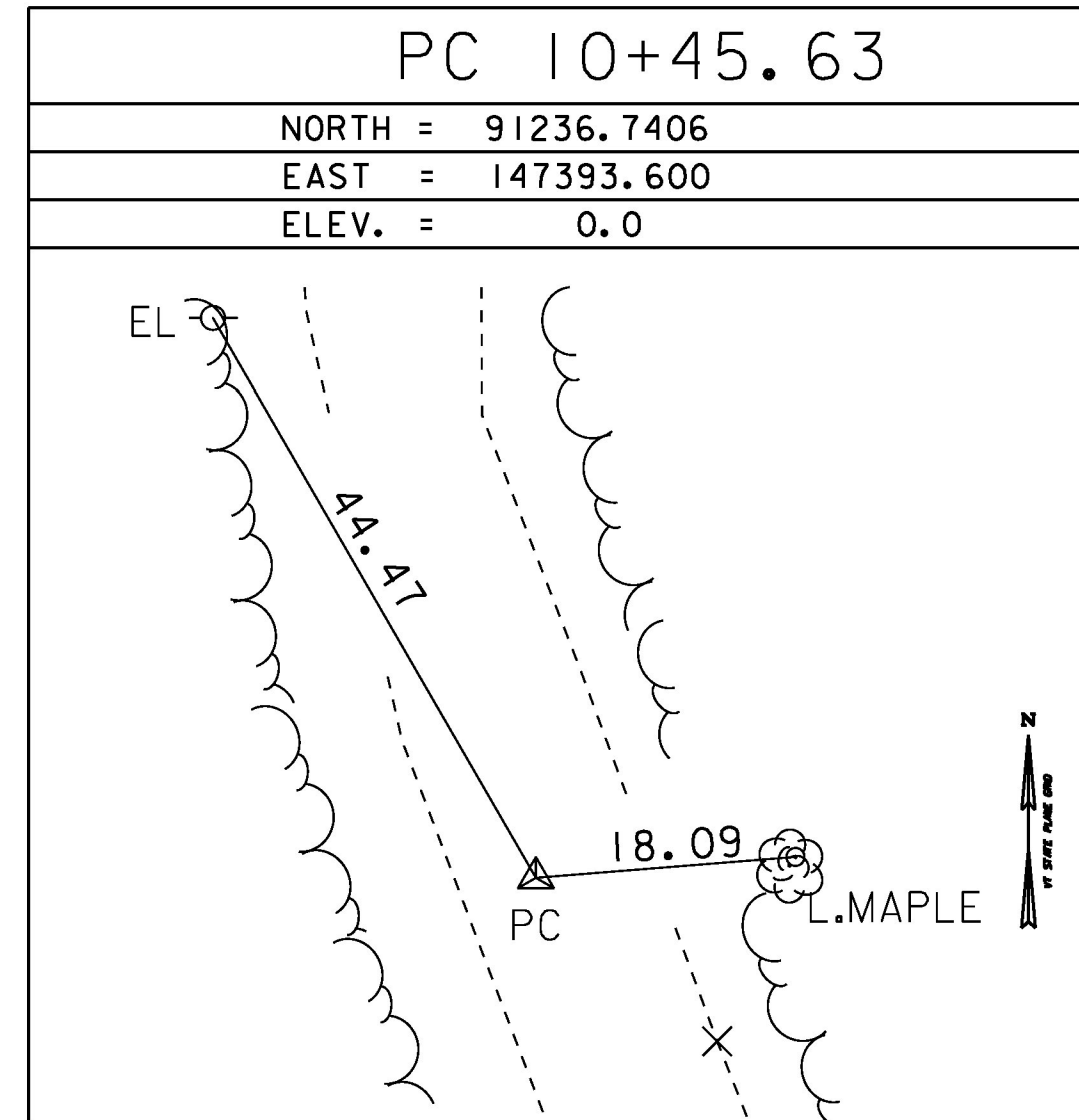
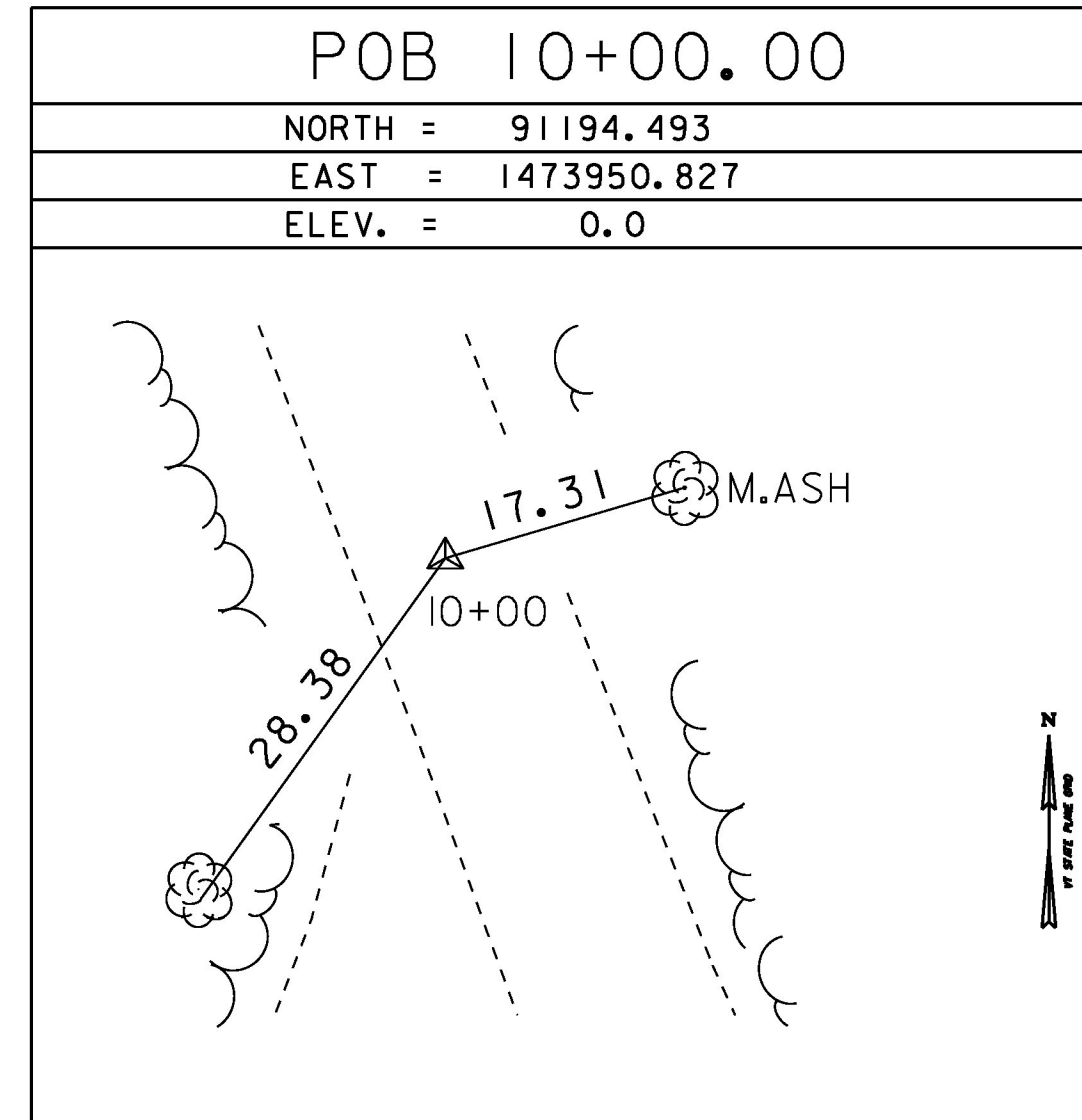
ALIGN. COORDINATES

Point Type	Station	Northing	Easting	Radius	Length	Tangent
Alignment Name:		TH14				
Description:		Klondike Road				
POB	9+25.00	91125.0414	1473979.1461			
PC	10+41.93	91233.3163	1473934.9967			
PC	10+41.93	91233.3163	1473934.9967			
PI	11+45.36	91329.0896	1473895.9448	165.00	184.77	103.43
PT	12+26.70	91405.9776	1473965.1244			
PT	12+26.70	91405.9776	1473965.1244			
POE	13+75.00	91516.2220	1474064.3164			

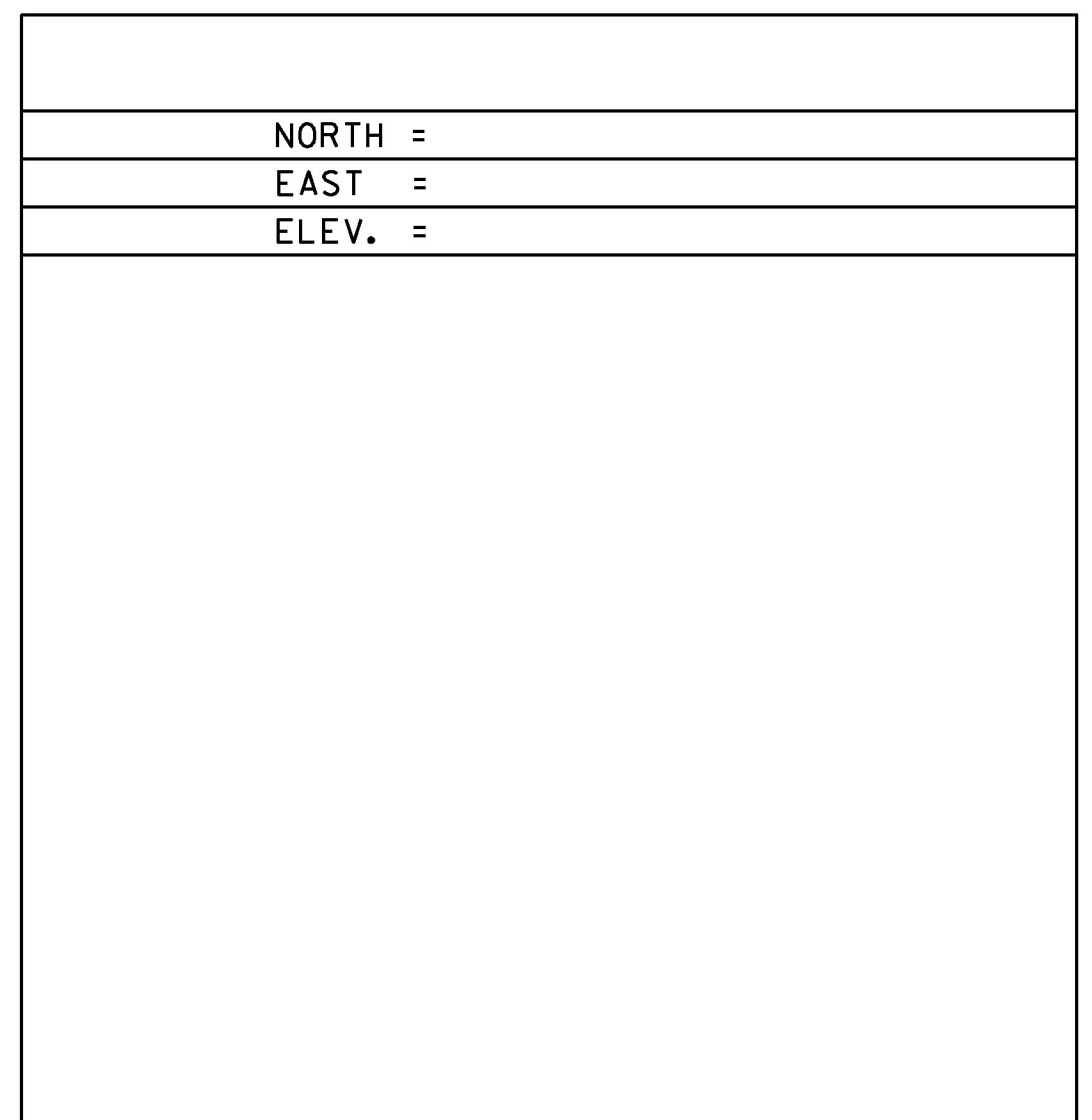
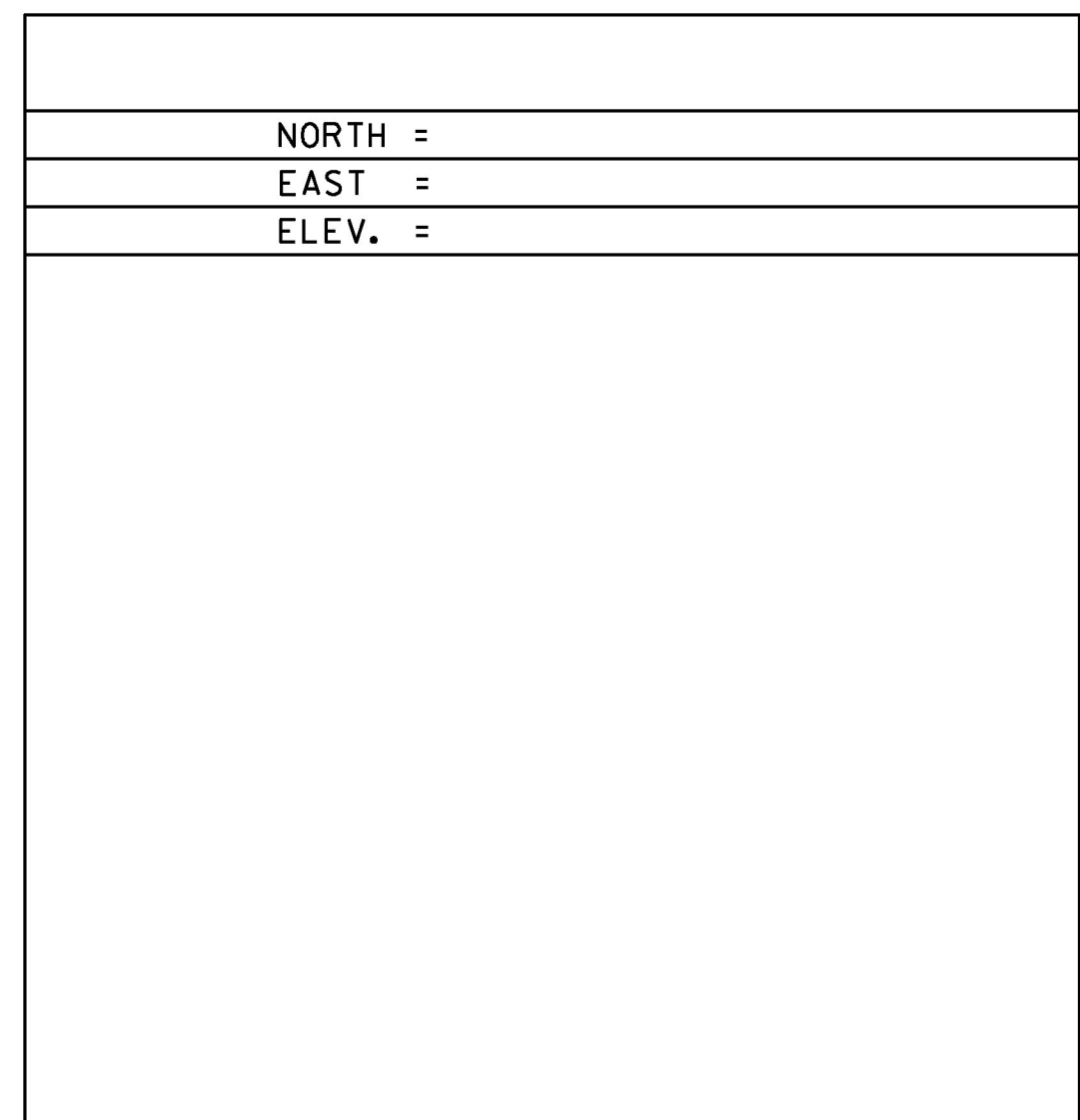
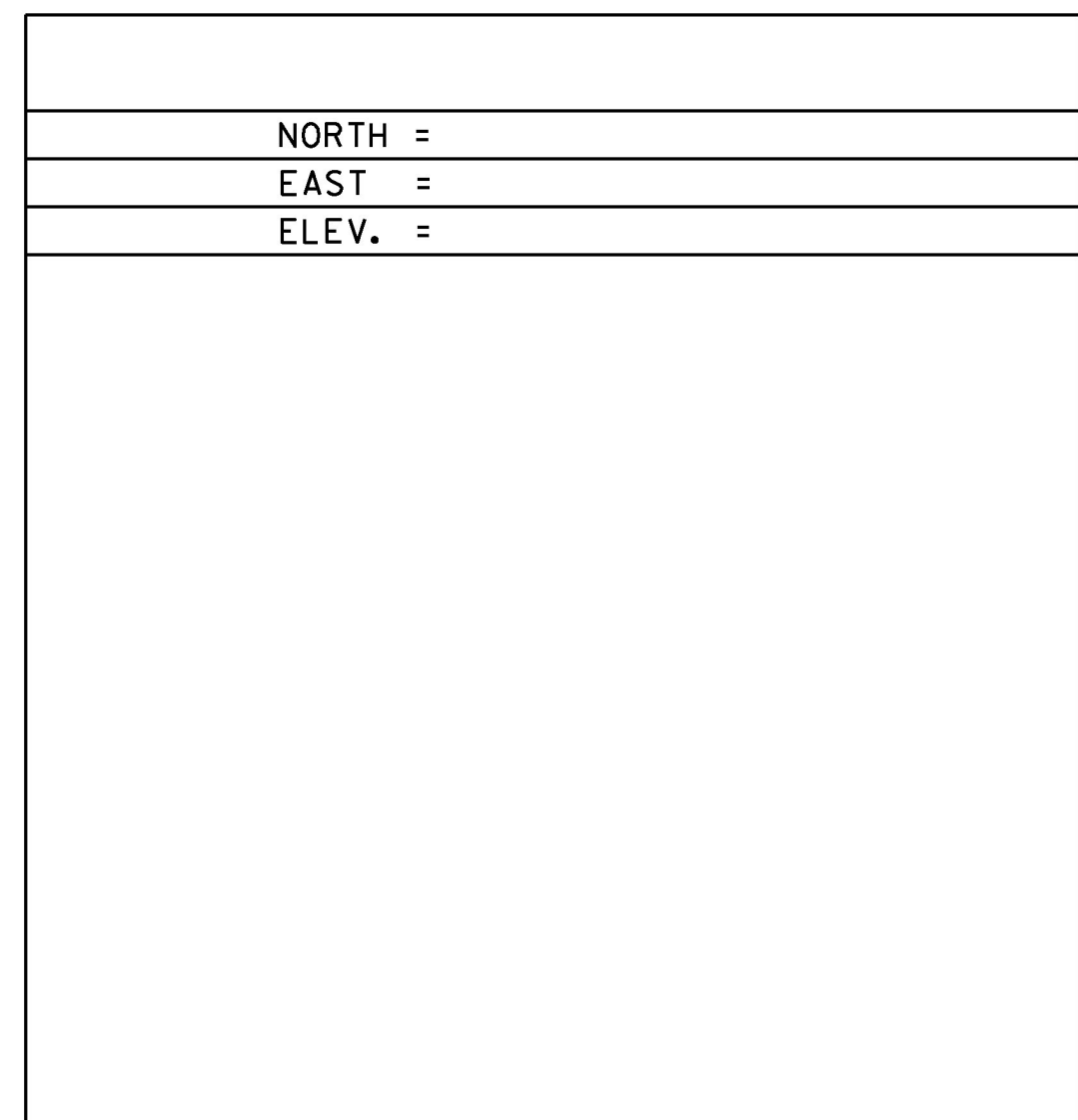
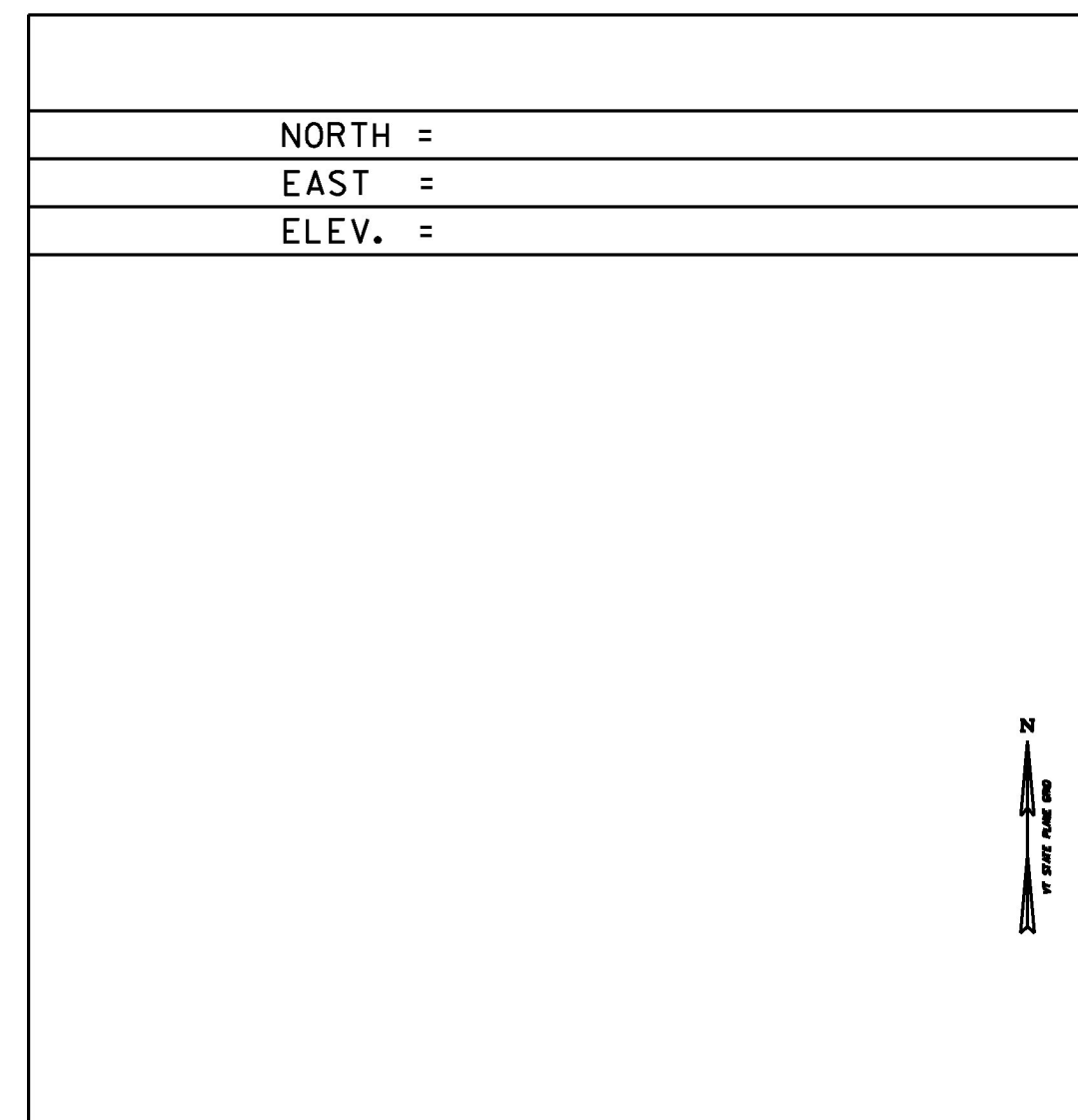
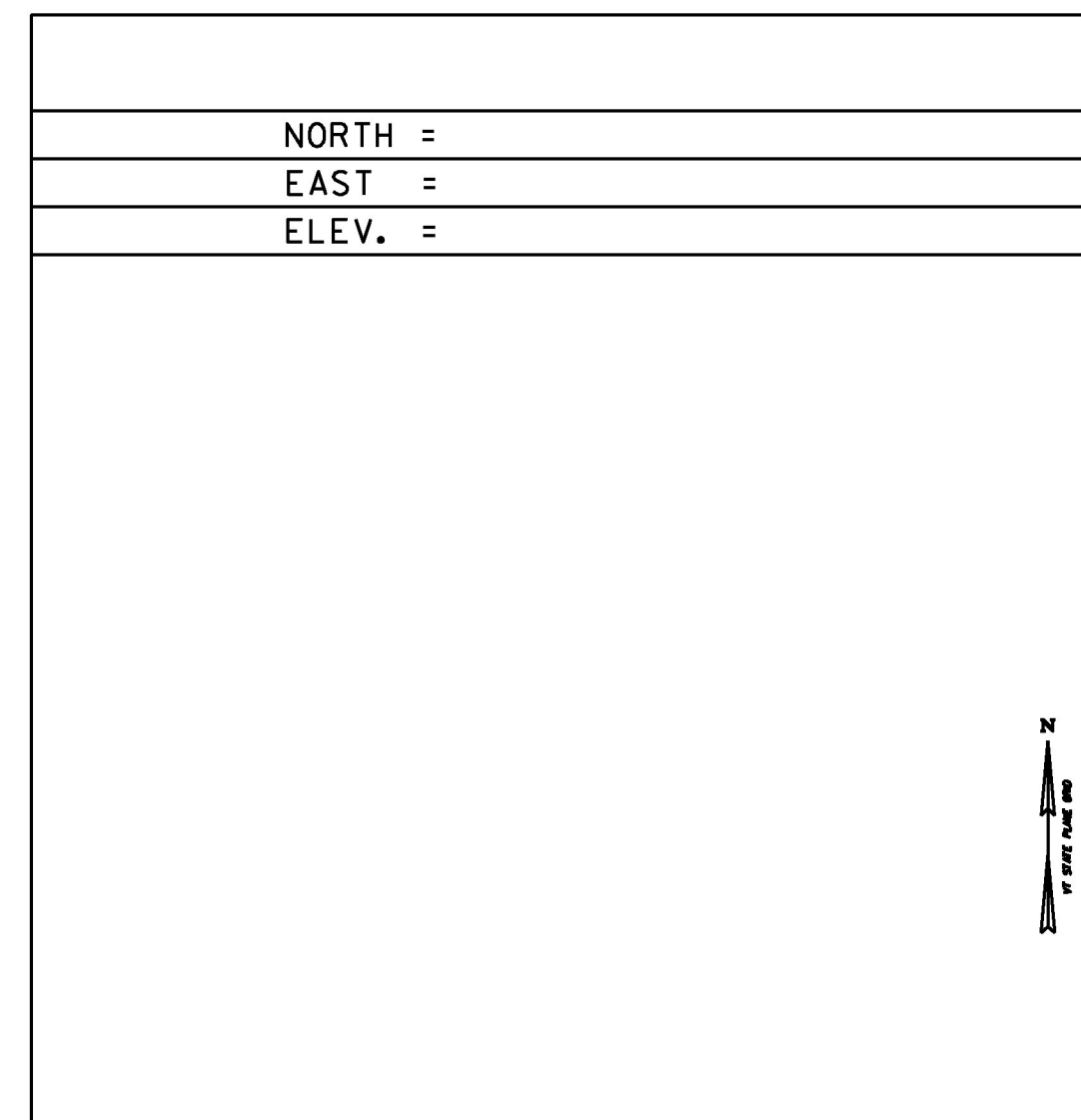
DATUM	
VERTICAL	NAVD 88
HORIZONTAL	NAD 83(92)
ADJUSTMENT	none

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 144I(29)
FILE NAME: s96j226+1e.dgn	PLOT DATE: 03-DEC-2015
PROJECT LEADER: C.W. CARLSON	DRAWN BY: D. KARABEGOVIC
DESIGNED BY: H. SALLS	CHECKED BY: H. SALLS
TIE SHEET 1	SHEET 10 OF 44

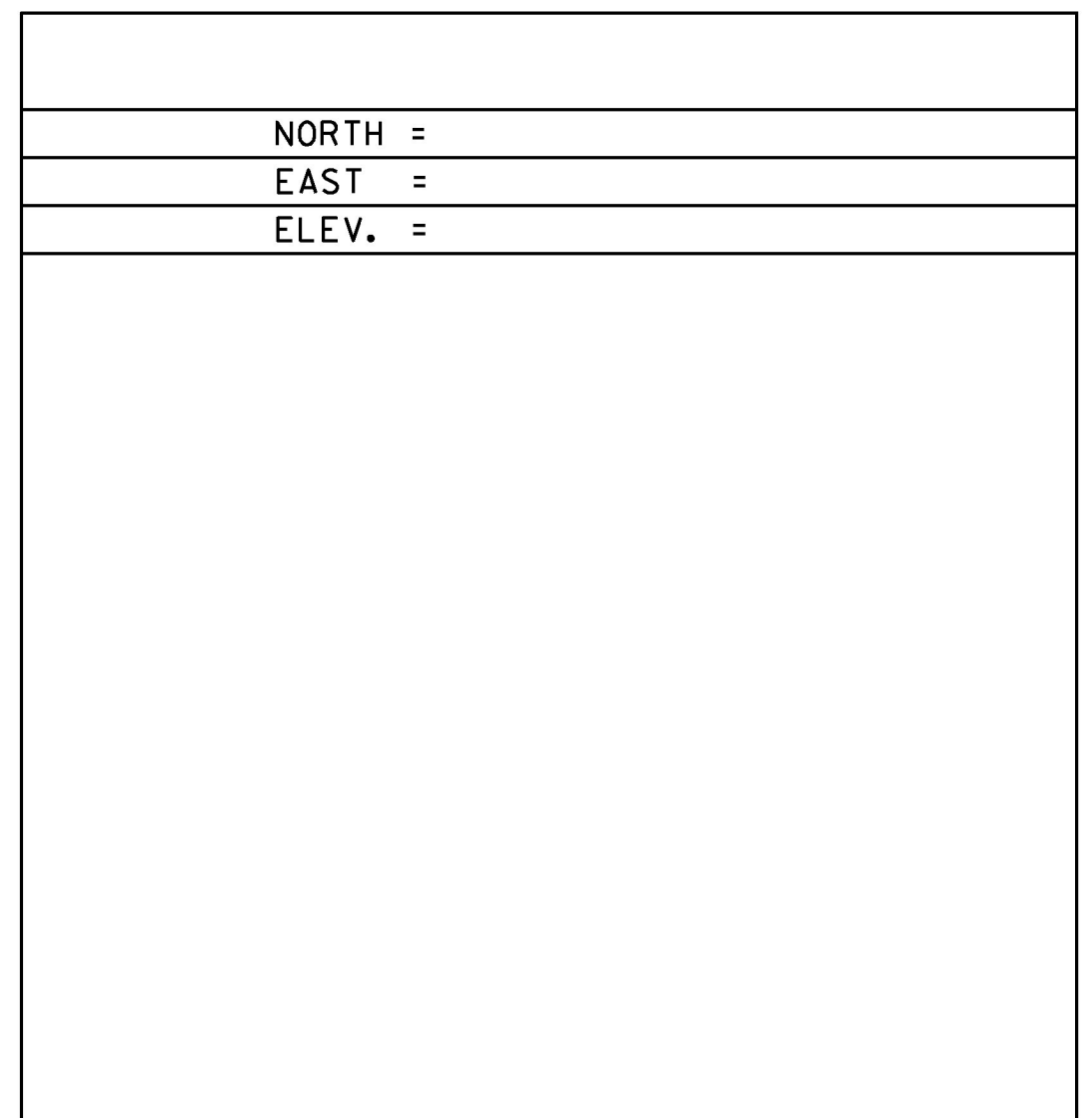
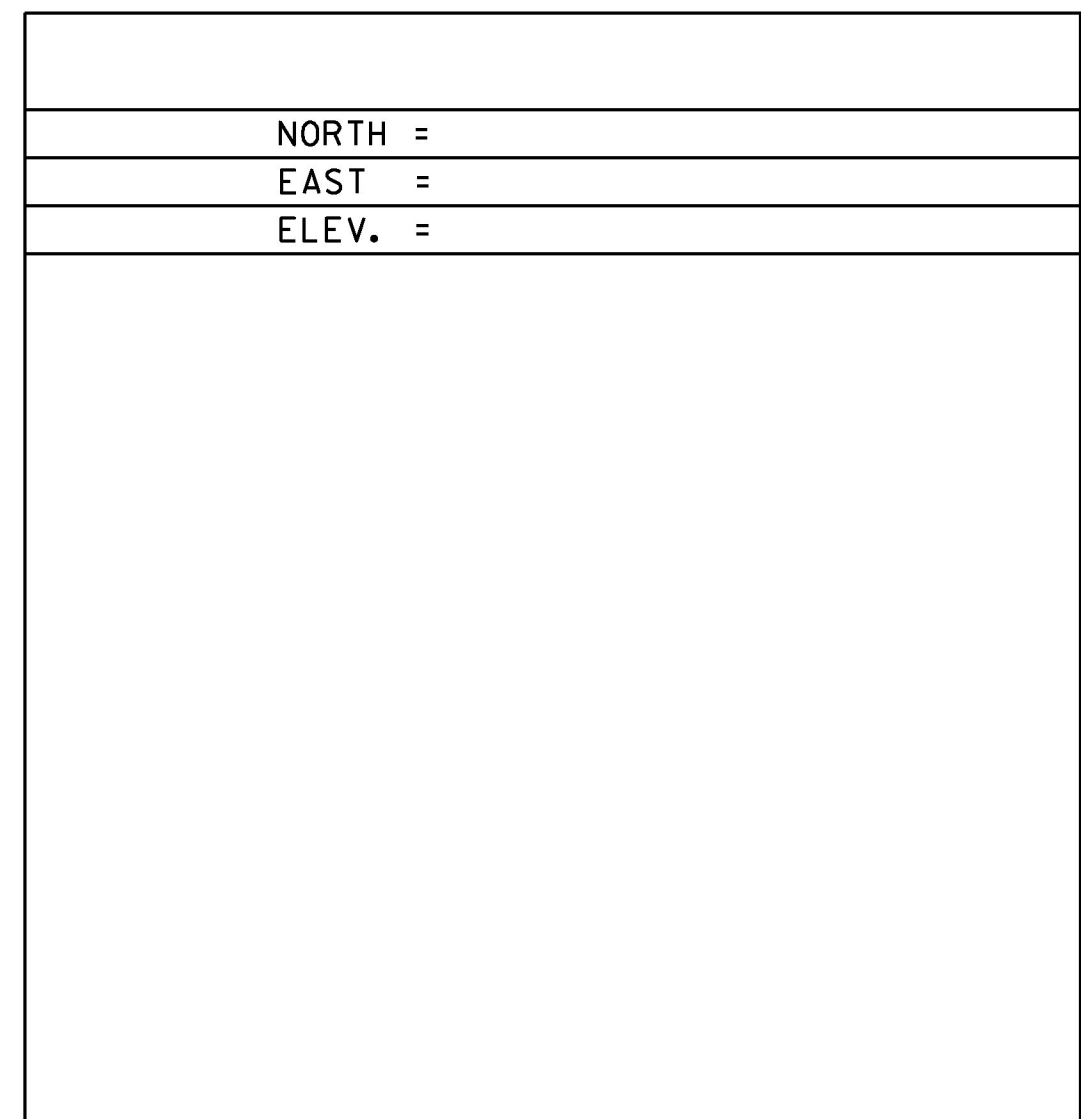
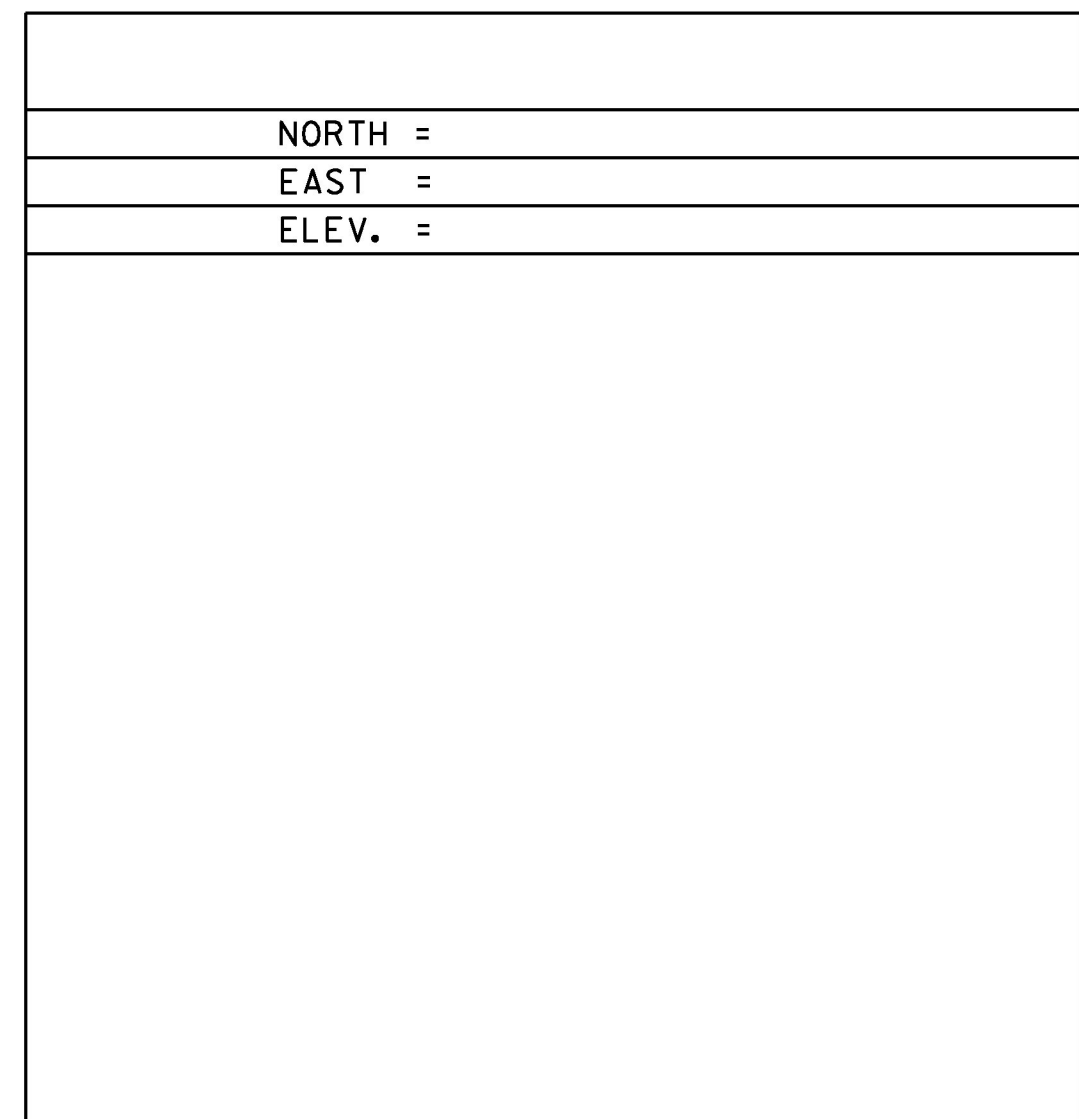
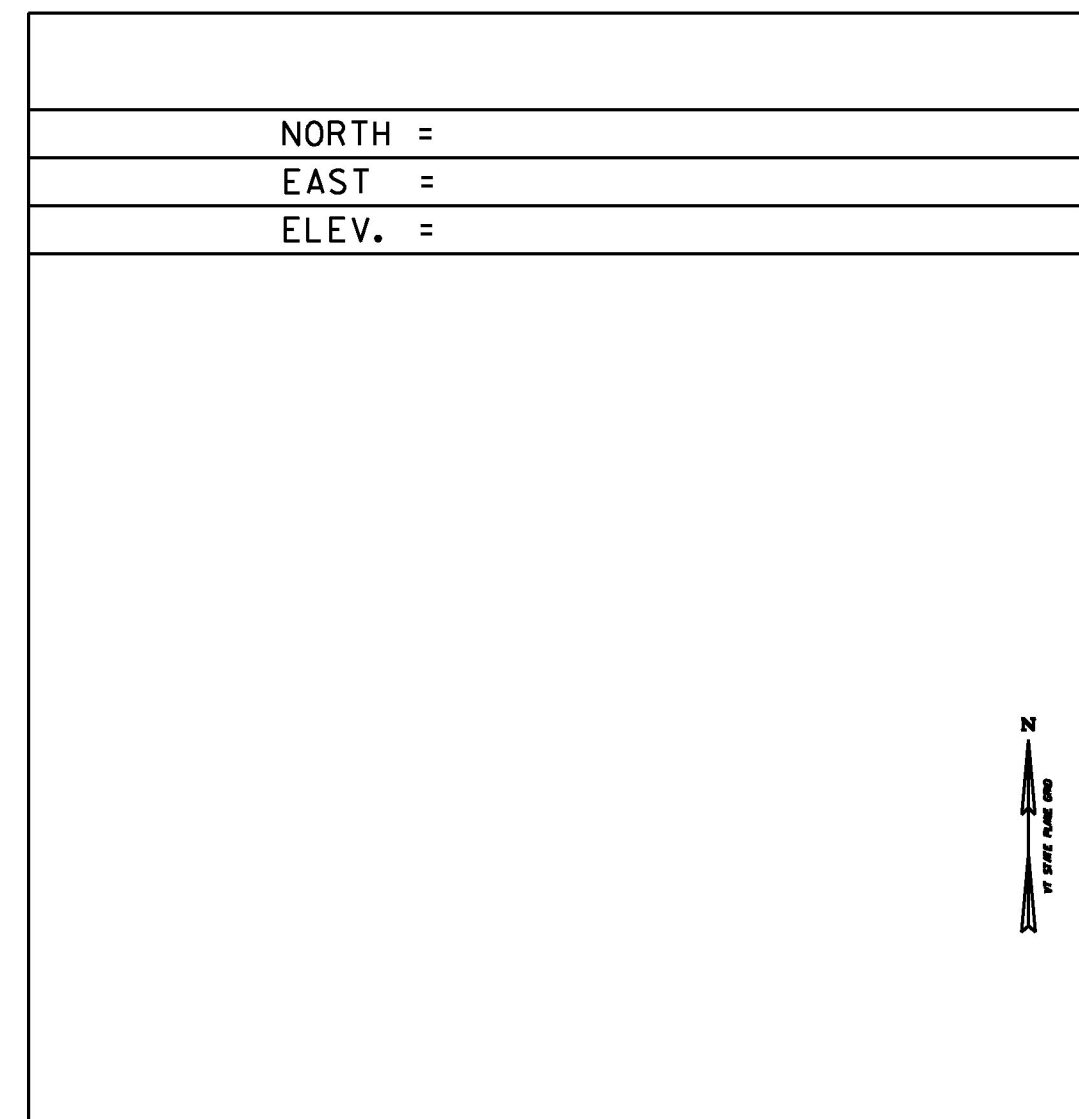
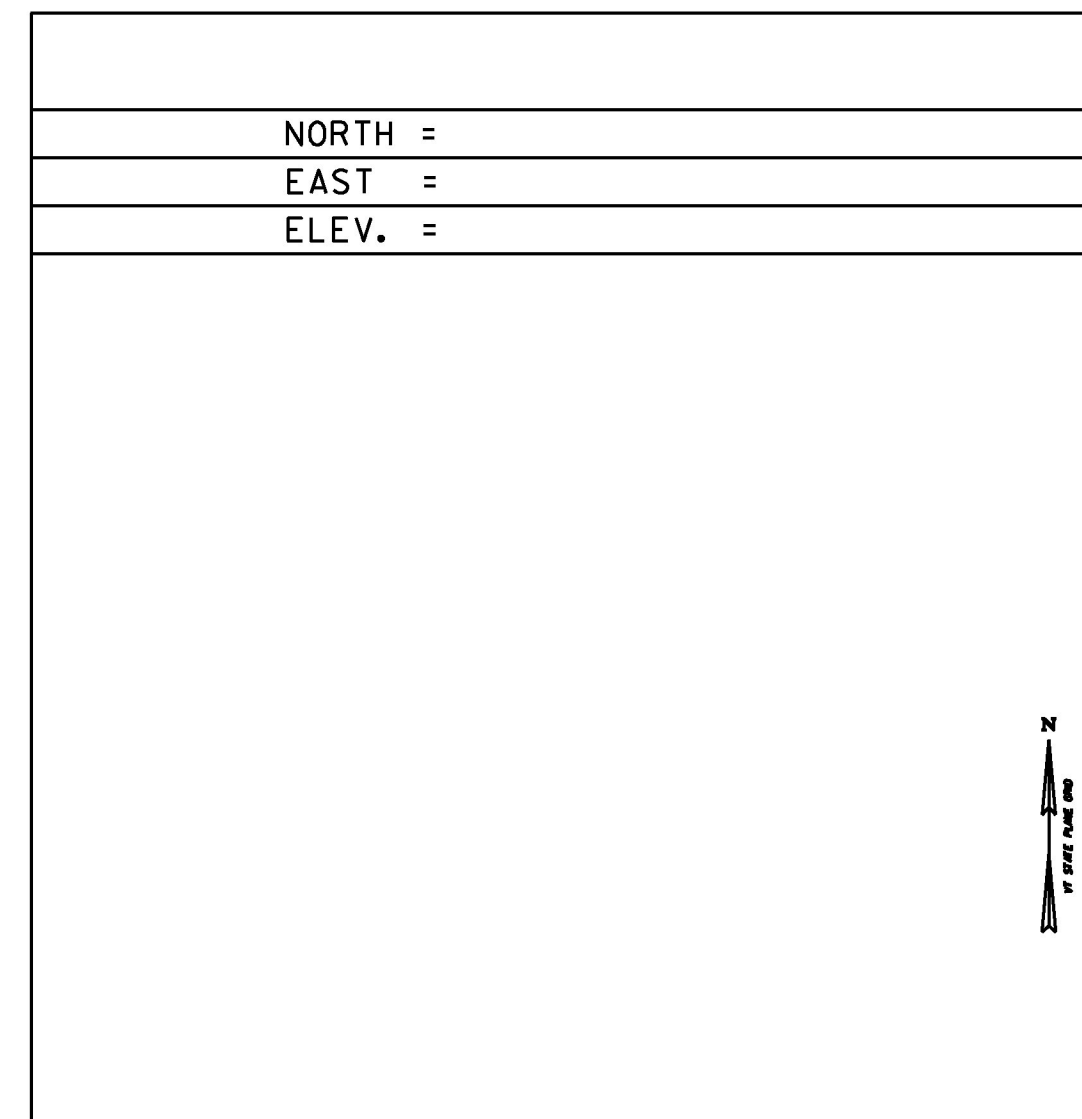
ALIGNMENT TIES



ALIGNMENT TIES

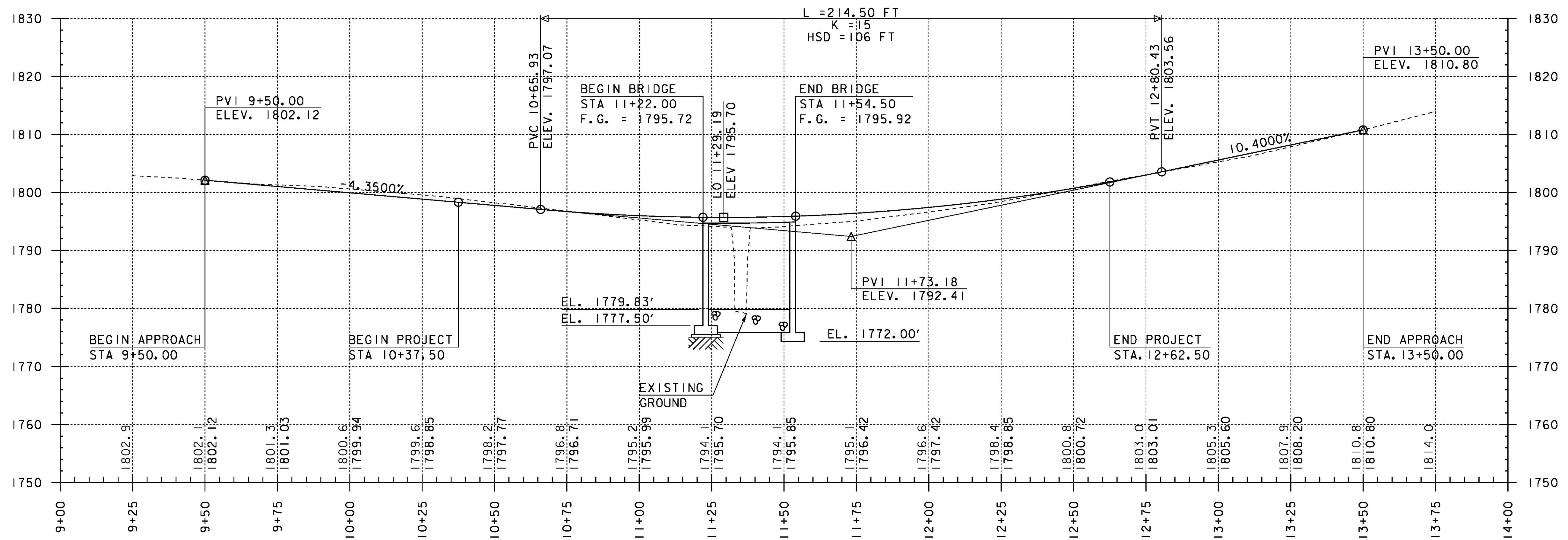


ALIGNMENT TIES



DATUM
VERTICAL <u>NAVD 88</u>
HORIZONTAL <u>NAD 83 (92)</u>
ADJUSTMENT <u>N/A</u>

PROJECT NAME: STAMFORD
PROJECT NUMBER: STP 144(29)
FILE NAME: s96j226+1e.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: H. SALLS
TIE SHEET 2
PLOT DATE: 03-DEC-2015
DRAWN BY: D. KARABEGOVIC
CHECKED BY: H. SALLS
SHEET 11 OF 44



PROFILE ALONG TH-14

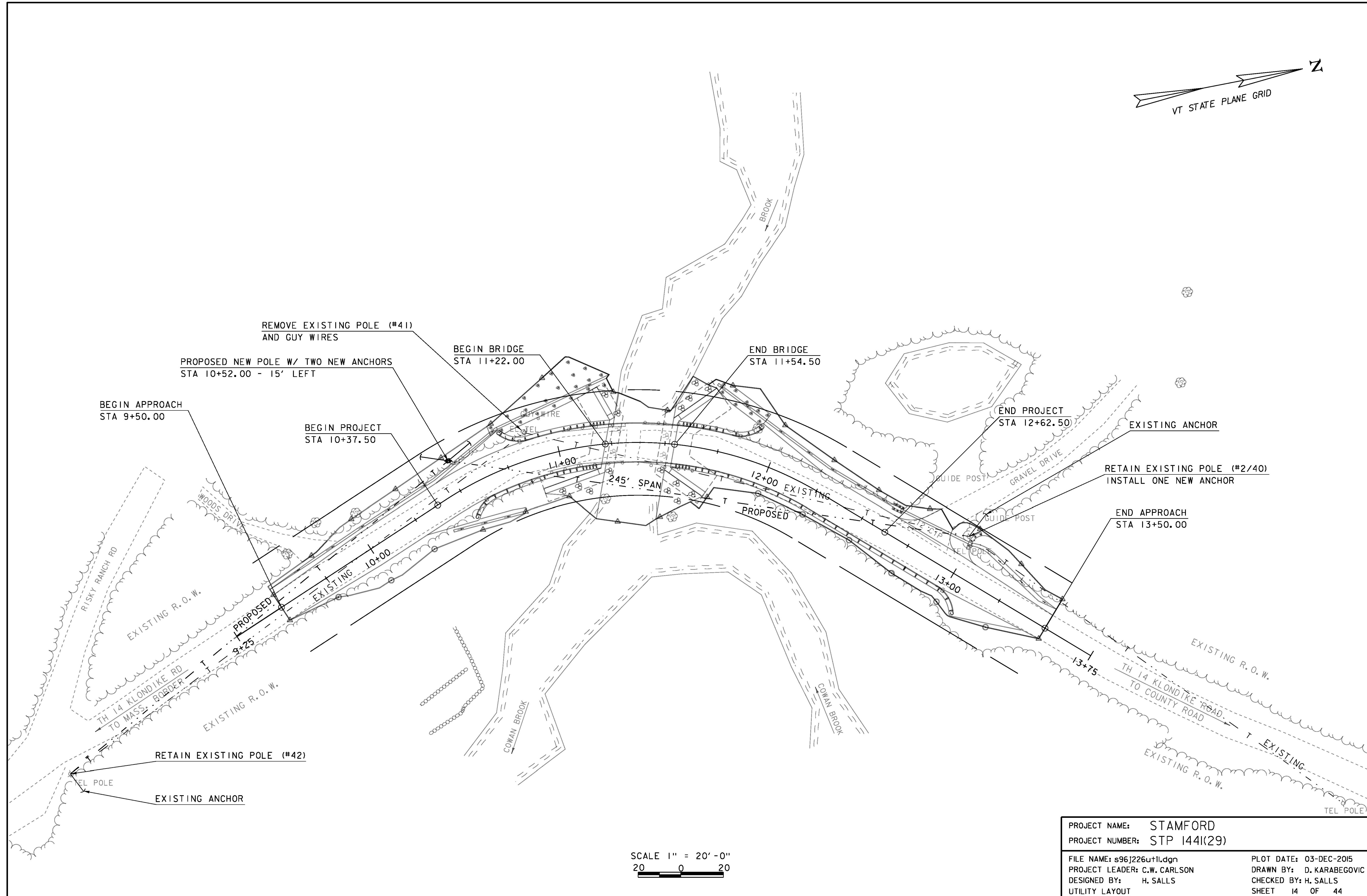
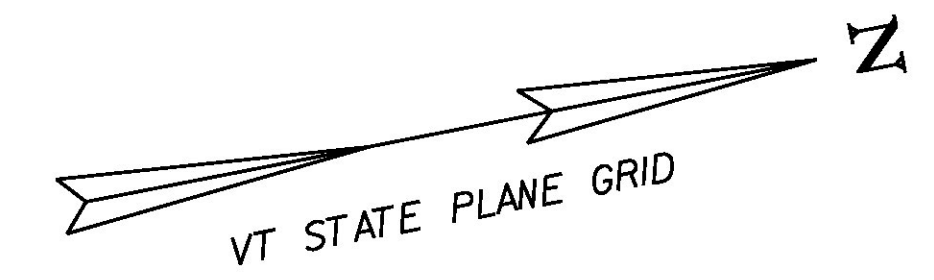
HORIZONTAL SCALE: 1" = 20'-0"
 VERTICAL SCALE: 1" = 10'-0"

NOTE:

ELEVATIONS SHOWN TO THE NEAREST TENTH ARE EXISTING GROUND ALONG PROPOSED CENTERLINE.

ELEVATIONS SHOWN TO THE NEAREST HUNDREDTH ARE FINISH GRADES ALONG PROPOSED CENTERLINE.

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 144I(29)
FILE NAME:	s96j226pro.dgn
PROJECT LEADER:	C. W. CARLSON
DESIGNED BY:	H. SALLS
PROFILE	
PLOT DATE:	03-DEC-2015
DRAWN BY:	D. KARABEGOVIC
CHECKED BY:	H. SALLS
SHEET	13 OF 44



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

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226u+tl.dgn	DESIGNED BY:	H. SALLS
UTILITY LAYOUT		CHECKED BY:	H. SALLS
		SHEET	14 OF 44

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

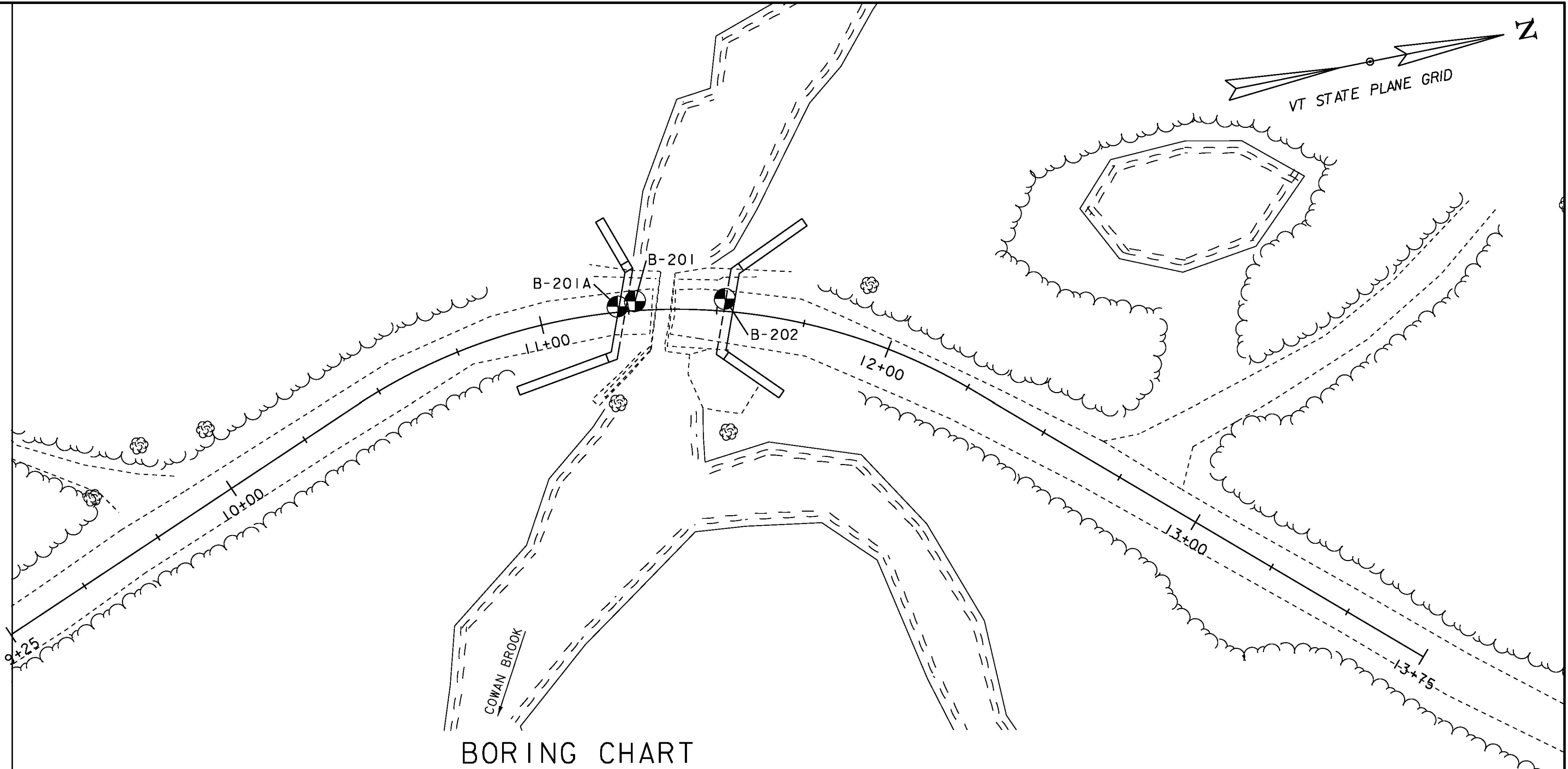
DENSITY (GRANULAR SOILS)		CONSISTENCY (COHESIVE SOILS)	
N	DESCRIPTIVE TERM	N	DESCRIPTIVE TERM
<5	Very Loose	<2	Very Soft
5-10	Loose	2-4	Soft
11-24	Med. Dense	5-8	Med. Stiff
25-50	Dense	9-15	Stiff
>50	Very Dense	16-30	Very Stiff
		31-60	Hard
		>60	Very Hard

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 3/8"
- 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
- 1/2 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		



BORING CHART

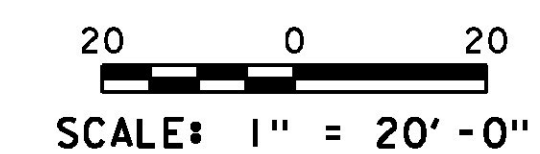
HOLE NO.	STATION	OFFSET	GROUND ELEVATION	ELEV. TLOB	NORTHING	EASTING
B-201	11+27.00	2.7' LT	1794.0	1784.0	91317.45	1473921.54
B-201A	11+22.00	1.6' LT	1794.3	1773.3	91312.22	1473922.01
B-202	11+52.00	3.5' RT	1794.0	1750.0	91341.96	1473925.83

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 > 0.075" (#10 sieve).
- SAND** - Particles of rock < 0.075" (#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

- The subsurface explorations shown herein were made between 09/23/2013 and 09/26/2013 by the Agency.
- 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.
- 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.
- 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.
- 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.
- 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.
- Northing and Easting coordinates are shown in Vermont State Plane Grid North American Datum 1983 in meters and survey feet.




PROJECT NAME: STAMFORD	PLOT DATE: 03-DEC-2015
PROJECT NUMBER: STP 144(29)	DRAWN BY: G. ROKES
FILE NAME: s96j226bor.dgn	CHECKED BY: H. SALLS
PROJECT LEADER: C.W. CARLSON	SHEET 15 OF 44
DESIGNED BY: H. SALLS	
BORING LAYOUT	

 STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-201					
		Stamford STP 1441(29) CHA #27138.1000.32000 Stamford, VT		Page No.: 1 of 1 Pin No.: 96j226 Checked By: _____					
Boring Crew: <u>D. Lyons, D. Spielvogel</u> Date Started: <u>9/23/13</u> Date Finished: <u>9/23/13</u> VTSPG NAD83: <u>N 91317.45 ft E 1473921.54 ft</u> Station: <u>11+27.00</u> Offset: <u>2.7' LT</u> Ground Elevation: <u>1794.0 ft</u>		Casing Type: <u>H.S.A.</u> Sampler: <u>SS</u> I.D.: <u>4.25 in</u> <u>1.38 in</u> Hammer Wt: <u>N.A.</u> <u>140 lb.</u> Hammer Fall: <u>N.A.</u> <u>30 in.</u> Hammer/Rod Type: <u>Auto/AWJ</u> Rig: <u>CME 55 TRUCK</u> <u>CE = 1.3</u>	Groundwater Observations						
			Date	Depth (ft)	Notes				
			09/23/13		None Observed				
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)			Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5	x x x	A-1-a, f.c. SAND , Some f.c. Gravel, little silt, compact, brown, moist, Rec. = 1.7 ft, (FILL)			18-16-16-13 (32)				
	x x x	A-1-a, f.c. SAND , little f.c. gravel, little silt, medium compact, brown, moist, Rec. = 1.0 ft, (FILL)			10-7-4-5 (11)				
	x x x	A-1-a, f.c. GRAVEL , Some f.c. Sand, little silt, medium compact, brown/gray, moist, Rec. = 0.7 ft, (FILL)			4-7-10-11 (17)				
	x x x	A-1-a, f.c. SAND , Some f.c. Gravel, little silt, medium compact, brown/gray, moist, Rec. = 0.5 ft, (FILL)			16-7-14-7 (21)				
	x x x	Poor Recovery, Rec. = 0.2 ft			18-4-5-10 (9)				
10		Hole stopped @ 10.0 ft							
15		Remarks: Auger refusal at a depth of 10' on boulders and cobbles. Boring terminated and offset to location B-201A.							
TOP OF FOOTING EL. - 1777.50'									
20									
25									
30									
35									
40									
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. <<SUB>><<SUB>> is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.									

 STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION		BORING LOG		Boring No.: B-201A							
		Stamford STP 1441(29) CHA #27138.1000.32000 Stamford, VT		Page No.: 1 of 1 Pin No.: 96j226 Checked By: _____							
Boring Crew: <u>D. Lyons, D. Spielvogel</u> Date Started: <u>9/23/13</u> Date Finished: <u>9/24/13</u> VTSPG NAD83: <u>N 91312.22 ft E 1473922.01 ft</u> Station: <u>11+22.00</u> Offset: <u>1.6 LT</u> Ground Elevation: <u>1794.3 ft</u>		Casing Type: <u>FJC</u> Sampler: <u>SS</u> I.D.: <u>5 in</u> <u>1.38 in</u> Hammer Wt: <u>AIR HAMMER</u> <u>140 lb.</u> Hammer Fall: <u>N.A.</u> <u>30 in.</u> Hammer/Rod Type: <u>Auto/NW</u> Rig: <u>CME 55 TRUCK</u> <u>CE = 1.3</u>	Groundwater Observations								
			Date	Depth (ft)	Notes						
			09/23/13	15.3	Beginning of Day						
Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)			Run (Dip deg.)	Core Rec. % (RQD %)	Blows/6" (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
5											
10	x x x	A-1-a, f.c. GRAVEL , Some f.c. Sand, little silt, medium compact, brown/gray, moist, Rec. = 0.5 ft, (FILL)					3-12-11-9 (23)				
	x x x	A-1-a, f.c. GRAVEL , Some f.c. Sand, little silt, trace wood, medium compact, brown/gray, moist, Rec. = 0.6 ft, (FILL)					5-6-6-6 (12)		59.7	27.6	12.7
	x x x	A-1-a, f.c. GRAVEL , Some f.c. Sand, little silt, very compact, gray, moist, Rec. = 0.6 ft, (FILL)					47-21-50/0.4' (R)				
15		A-1-b, f.c. SAND , Some f.c. Gravel, little silt, very compact, brown, wet, (Glacial Till)					50-50/0.1' (R)				
		A-1-b No Recovery, Rec. = 0.0 ft									
		A-1-b No Recovery Rec. = 0.0 ft									
20		No Recovery Rec. = 0.0 ft									
25		27.0 ft - 35.4 ft, Gray, Granite, Hard, Slightly weathered, Fair rock, NXDC			R-1	65.5 (54)					
30											
35											
40		Hole stopped @ 35.4 ft									
40		Remarks: Boring B-201A was offset from B-201 and advanced to a depth of 10' without sampling. At a depth of 21 feet, Symmetrix down hole hammer encountered very hard drilling indicative of bedrock. Sample S-5 attempted at a depth of 22 feet encountered refusal without any penetration. Casing advanced to a depth of 24 with steady, very hard drilling conditions indicative of bedrock. Coring operations would have been attempted at 24 feet however hammer was lodged within casing. Additional casing advancement of 3 feet was required to break the hammer free from the casing. Top of bedrock was interpreted at a depth of 21 feet based on drilling characteristics.									
TOP OF FOOTING EL. - 1777.50'											
Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual. 2. <<SUB>><<SUB>> is the hammer energy correction factor. 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.											

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 1441(29)
FILE NAME:	s96j226bor.dgn
PROJECT LEADER:	C.W. CARLSON
DESIGNED BY:	H. SALLS
BORING LOG 1	
PLOT DATE:	03-DEC-2015
DRAWN BY:	D. KARABEGOVIC
CHECKED BY:	H. SALLS
SHEET	16 OF 44


 STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION	BORING LOG		Boring No.: B-202
	Stamford STP 1441(29) CHA #27138.1000.32000 Stamford, VT		Page No.: 1 of 2 Pin No.: 96j226 Checked By: _____
Boring Crew: D. Lyons, D. Spielvogel Date Started: 9/24/13 Date Finished: 9/26/13 VTSPG NAD83: N 91341.96 ft E 1473925.83 ft Station: 11+52.00 Offset: 3.5 LT Ground Elevation: 1794.0 ft	Casing I.D.: 4.25 in 1.38 in Sampler Type: H.S.A. SS Hammer Wt: N.A. 140 lb. Hammer Fall: N.A. 30 in. Hammer/Rod Type: Auto/AWJ Rig: CME 55 TRUCK CE = 1.3	Groundwater Observations Date: 09/25/13 Depth (ft): 10.0 Notes: Beginning of Day	

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/ft* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0	x x x	A-1-b, f.c. SAND , little silt, little f.c. gravel, medium compact, brown, moist, Rec. = 1.5 ft, (FILL)			21-13-9-8 (32)				
1	x x x	A-1-b, Similar Soil , Rec. = 1.2 ft, (FILL)			8-7-5-5 (12)		24.7	54.7	20.6
2	x x x	A-1-b, becomes loose, Rec. = 1.6 ft, (FILL)			6-5-5-6 (10)				
3	x x x	A-1-b, becomes medium compact, Rec. = 1.6 ft, (FILL)			4-6-5-5 (11)				
4	x x x	A-1-b, becomes loose, Rec. = 1.4 ft, (FILL)			3-3-4-4 (7)				
5	x x x	A-1-b, f.c. SAND , Some Silt, Some Wood, very loose, brown, wet, Rec. = 0.4 ft, (FILL)			1-1-1-1 (2)				
6	x x x	A-1-b, f.c. SAND , Some Silt, little f.c. gravel, medium compact, brown/black, wet, Rec. = 1.6 ft			4-3-12-41 (15)				
7	x x x	A-1-b, f.c. SAND , Some f.c. Gravel, little silt, medium compact, brown, wet, Rec. = 0.4 ft, (Glacial Till)			19-5-6-7 (11)		32.0	43.1	24.9
8	x x x	A-1-b, becomes compact, Rec. = 1.3 ft, (Glacial Till)			18-19-22-24 (41)				
9	x x x	A-1-b, becomes very compact, Rec. = 1.6 ft, (Glacial Till)			36-37-30-29 (67)				
10	x x x	A-1-b, Similar Soil , Rec. = 1.5 ft, (Glacial Till)			18-35-29-29 (64)				
11	x x x	A-1-b, Similar Soil , Rec. = 1.0 ft, (Glacial Till)			36-32-26-22 (58)				
12	x x x	A-1-b, Similar Soil , Rec. = 0.5 ft, (Glacial Till)			26-50/0.2 (R)				
13	x x x	A-1-b, Similar Soil , Rec. = 1.0 ft, (Glacial Till)			29-42-50/0.3 (R)				
14	x x x	44.0 ft - 54.0 ft, Gray, Granite, Hard, Slightly weathered, Excellent rock,	R-1	100	Top of Bedrock @ 44.0 ft				

BOTTOM OF FOOTING
EL. - 1772.00'

2010 COPY 27138_LOGS.GPJ VERMONT AOT.GDT 2/7/14

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
 2. <<SUB>><<SUB>> is the hammer energy correction factor.
 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

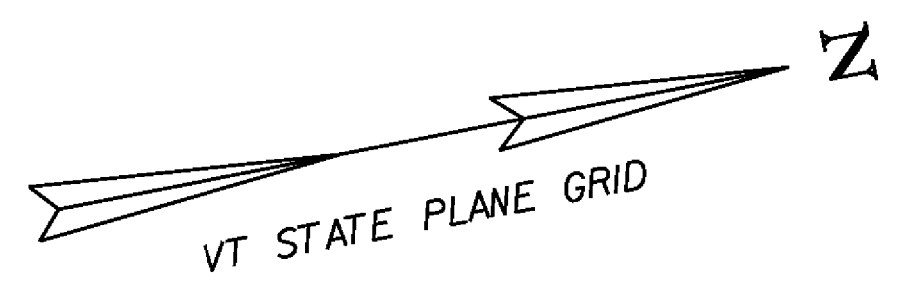
 STATE OF VERMONT AGENCY OF TRANSPORTATION MATERIALS & RESEARCH SECTION SUBSURFACE INFORMATION	BORING LOG		Boring No.: B-202
	Stamford STP 1441(29) CHA #27138.1000.32000 Stamford, VT		Page No.: 2 of 2 Pin No.: 96j226 Checked By: _____
Boring Crew: D. Lyons, D. Spielvogel Date Started: 9/24/13 Date Finished: 9/26/13 VTSPG NAD83: N 91341.96 ft E 1473925.83 ft Station: 11+52.00 Offset: 3.5 LT Ground Elevation: 1794.0 ft	Casing I.D.: 4.25 in 1.38 in Sampler Type: H.S.A. SS Hammer Wt: N.A. 140 lb. Hammer Fall: N.A. 30 in. Hammer/Rod Type: Auto/AWJ Rig: CME 55 TRUCK CE = 1.3	Groundwater Observations Date: 09/25/13 Depth (ft): 10.0 Notes: Beginning of Day	

Depth (ft)	Strata (1)	CLASSIFICATION OF MATERIALS (Description)	Run (Dip deg.)	Core Rec. % (RQD %)	Blows/ft* (N Value)	Moisture Content %	Gravel %	Sand %	Fines %
0		NXDC			(92)				
50									
55		Hole stopped @ 54.0 ft							
60									
65									
70									
75									
80									
85									

2010 COPY 27138_LOGS.GPJ VERMONT AOT.GDT 2/7/14

Notes: 1. Stratification lines represent approximate boundary between material types. Transition may be gradual.
 2. <<SUB>><<SUB>> is the hammer energy correction factor.
 3. Water level readings have been made at times and under conditions stated. Fluctuations of groundwater may occur due to other factors than those present at the time measurements were made.

PROJECT NAME: STAMFORD	PLOT DATE: 03-DEC-2015
PROJECT NUMBER: STP 1441(29)	DRAWN BY: D. KARABEGOVIC
FILE NAME: s96j226bor.dgn	CHECKED BY: H. SALLS
DESIGNED BY: H. SALLS	SHEET 17 OF 44
BORING LOG 2	



BEGIN PROJECT
STA 10+37.50

BEGIN BRIDGE
STA 11+22.00
FG = 1795.72'

TH 14 STA 11+34.85 =
CHANNEL STA 40+75.00
 $\Delta = 80^\circ$ RT

END BRIDGE
STA 11+54.50
FG = 1795.92'

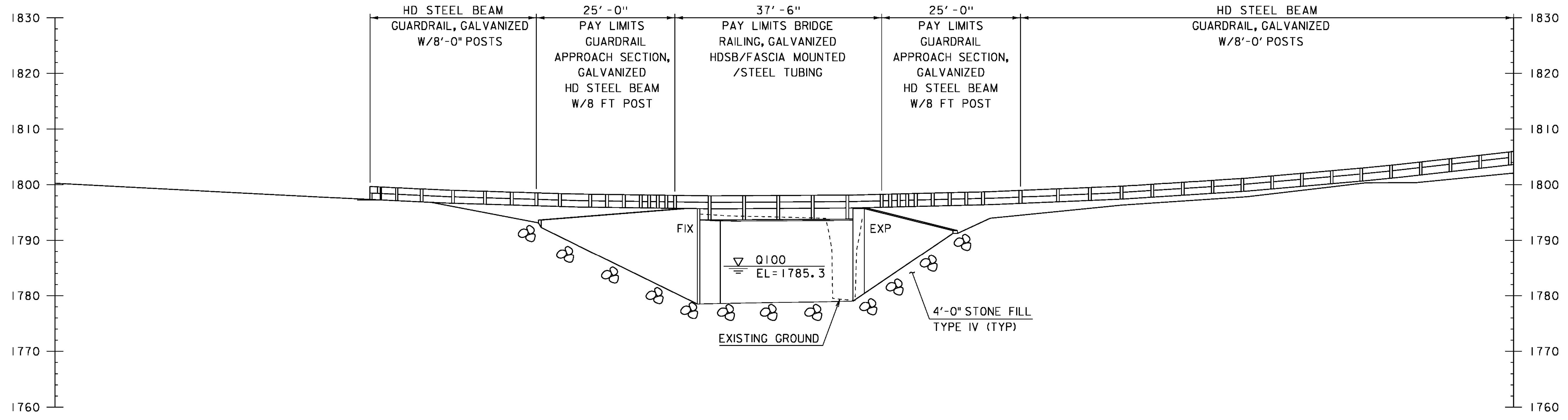
END PROJECT
STA 12+62.50

DRAINAGE
DITCH

DRAINAGE
DITCH

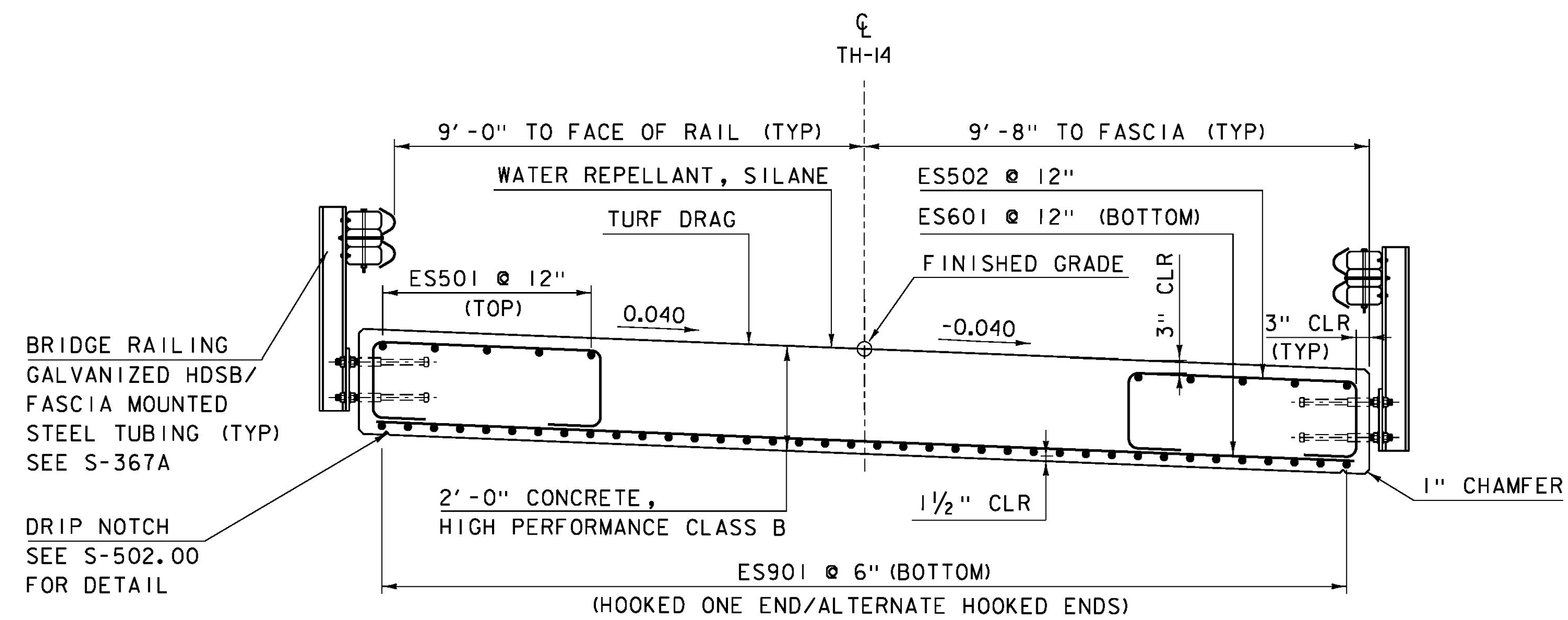
DRAINAGE
DITCH

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



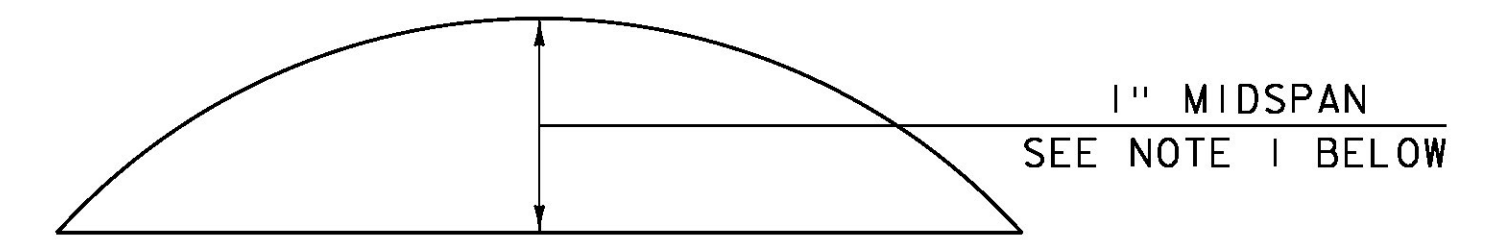
ELEVATION
SCALE 1" = 10' - 0"
0 10

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 1441(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226pe.dgn	DESIGNED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
PLAN AND ELEVATION		SHEET	18 OF 44



TYPICAL SECTION

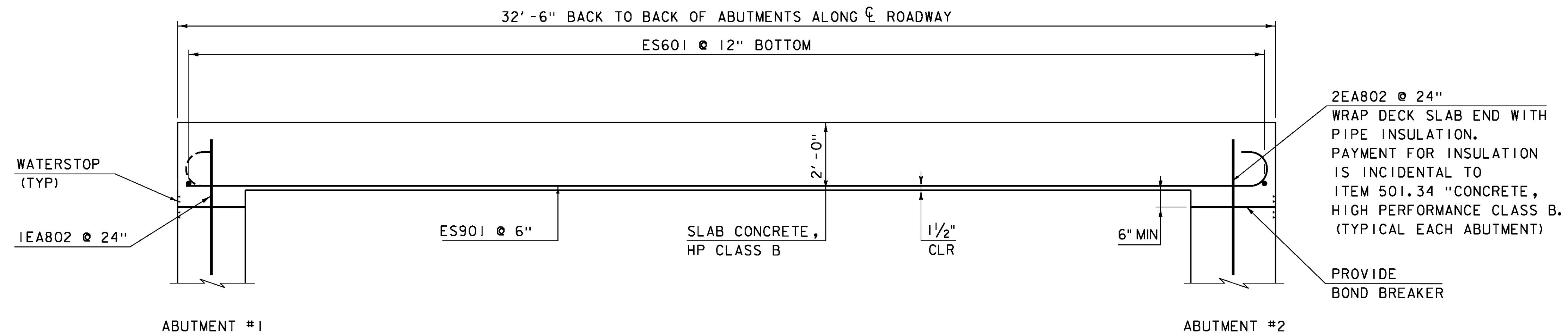
SCALE 1/2" = 1'-0"



CAMBER DIAGRAM

NOT TO SCALE

NOTE 1:
THE SLAB SHALL BE CAMBERED A TOTAL OF 1" AT MIDSPAN.
THIS INITIAL CAMBER SHALL APPROXIMATE A CIRCULAR CURVE.

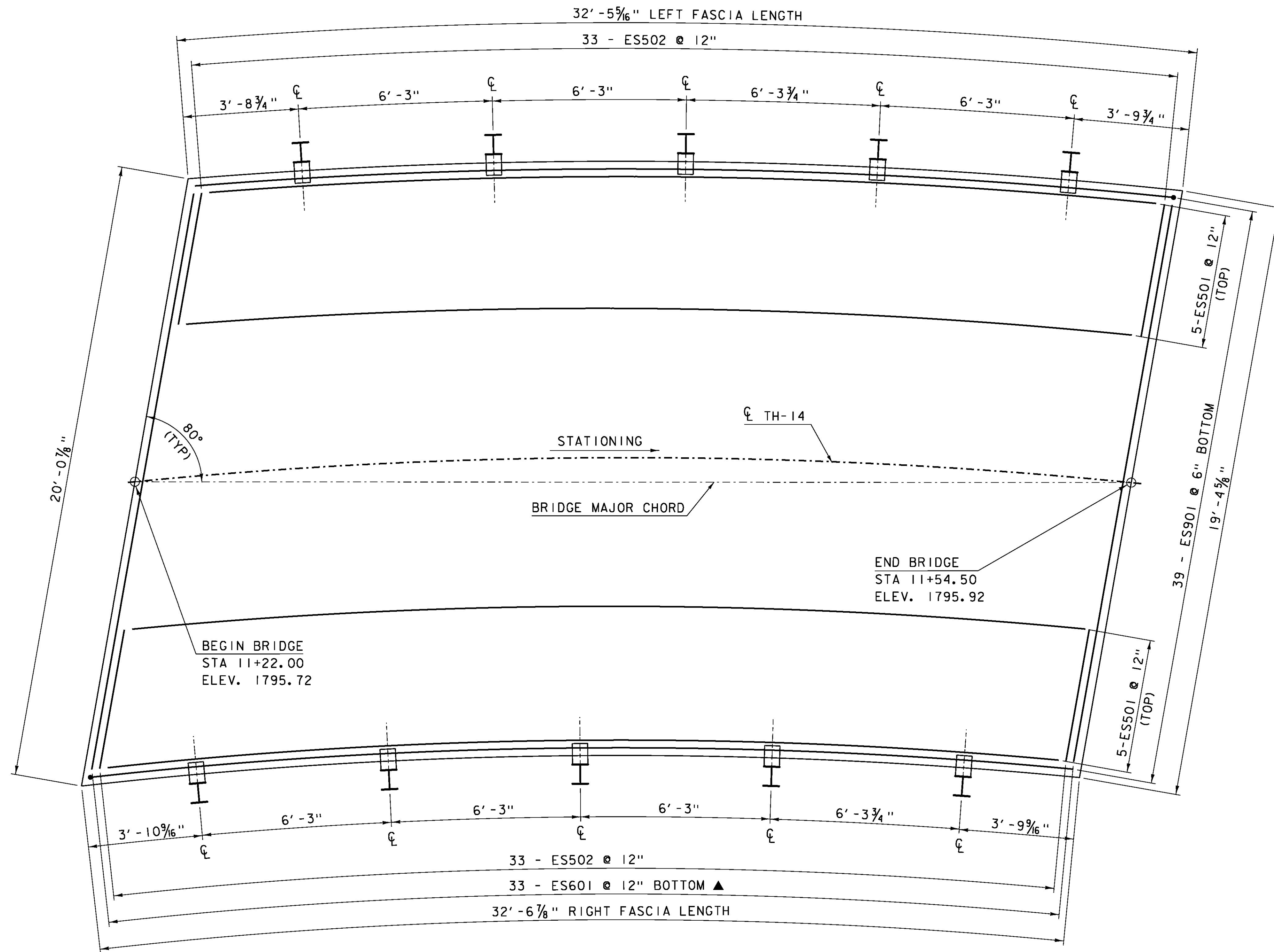


ELEVATION ALONG CENTERLINE

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.

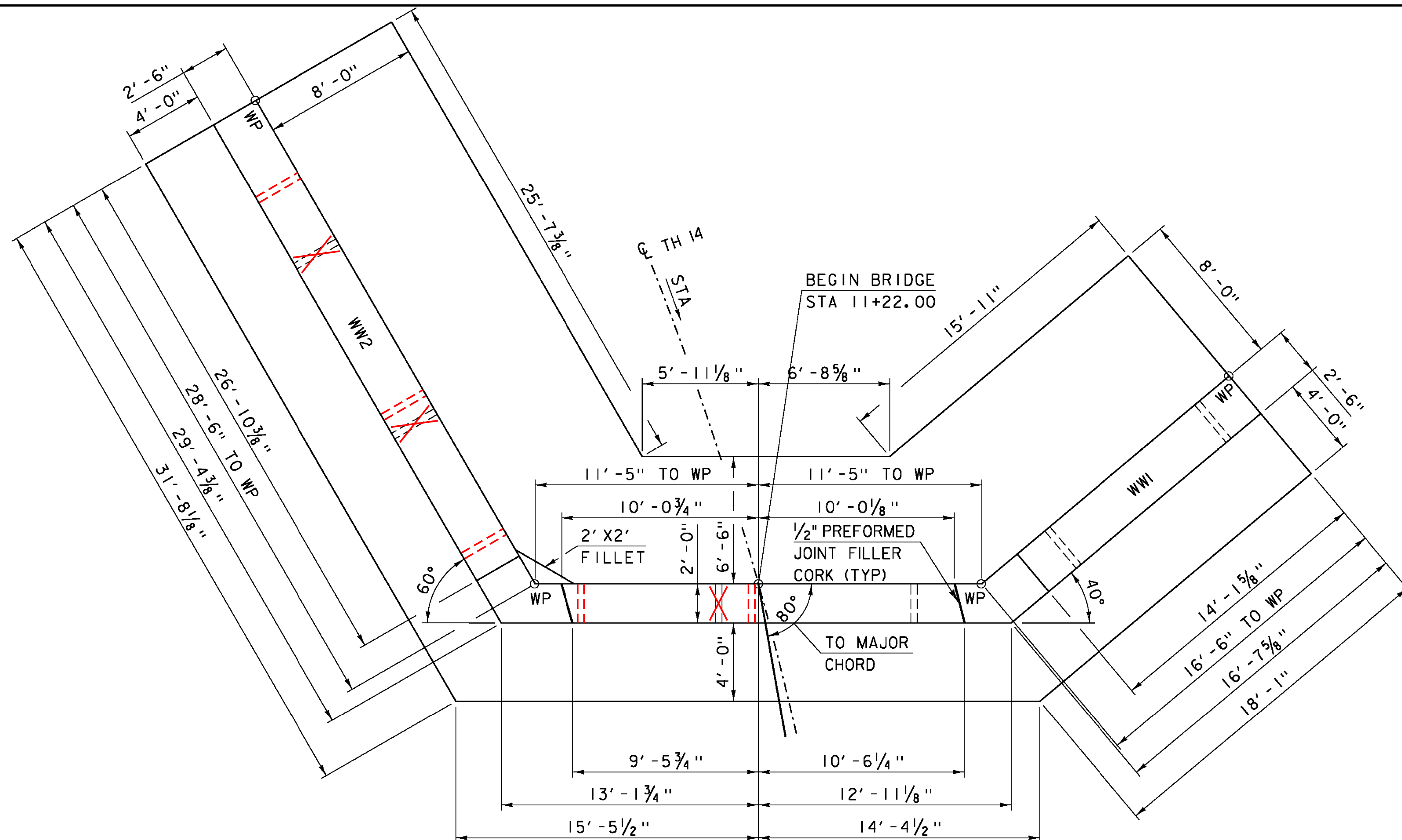
PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 144(29)
FILE NAME: s96j226sup.dgn	PLOT DATE: 24-DEC-2015
PROJECT LEADER: C. W. CARLSON	DRAWN BY: D. KARABEGOVIC
DESIGNED BY: F. BARROWS	CHECKED BY: H. SALLS
DECK TYPICAL	SHEET 19 OF 44



DECK REINFORCING PLAN
SCALE 1/2" = 1'-0"

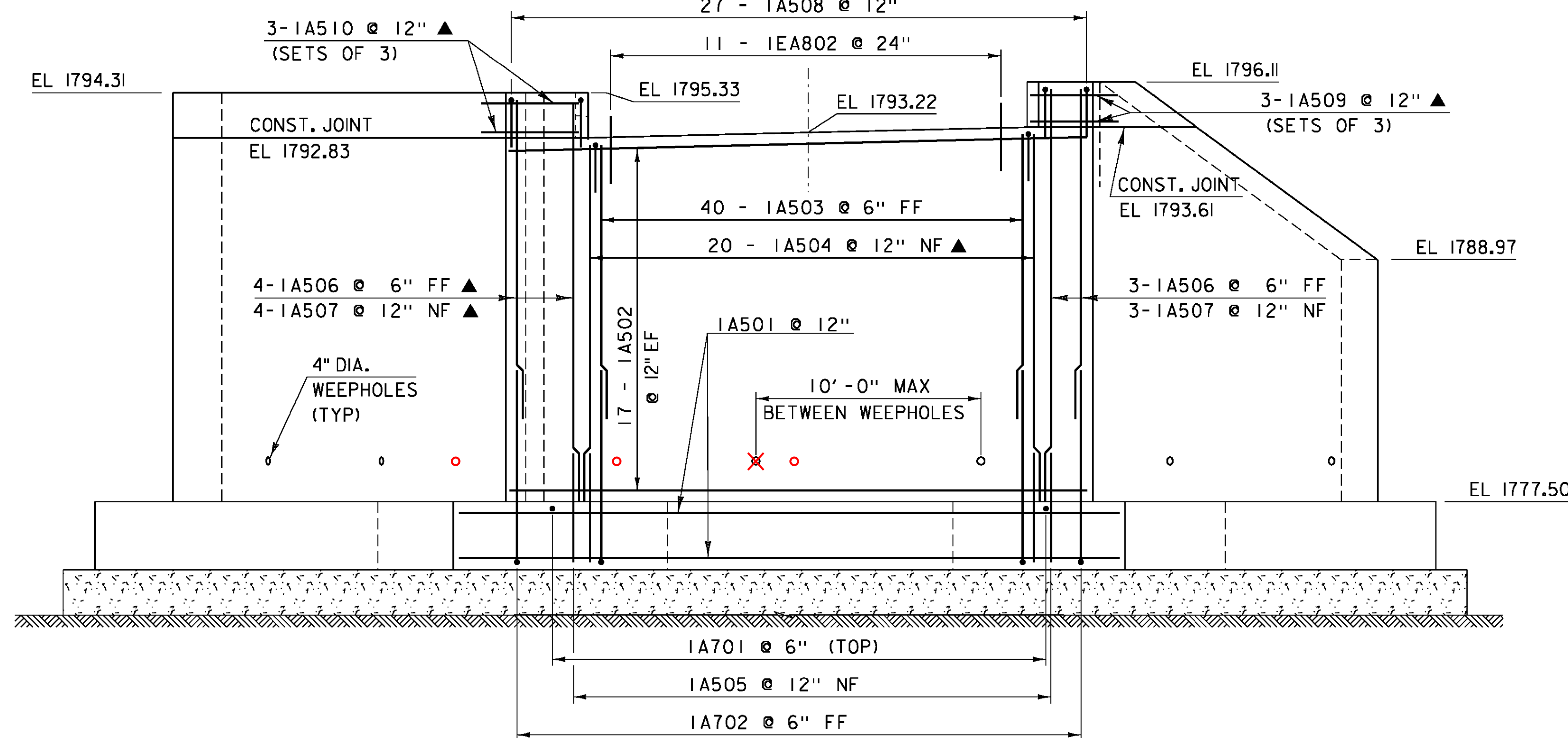
NOTE:
 NF = NEAR FACE
 FF = FAR FACE
 EF = EACH FACE
 ▲ = CUT TO FIT IN FIELD
 3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	STAMFORD	PLOT DATE:	24-DEC-2015
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96J226sup.dgn	DESIGNED BY:	F. BARROWS
PROJECT LEADER:	C. W. CARLSON	CHECKED BY:	H. SALLS
DECK REINFORCING PLAN		SHEET	20 OF 44



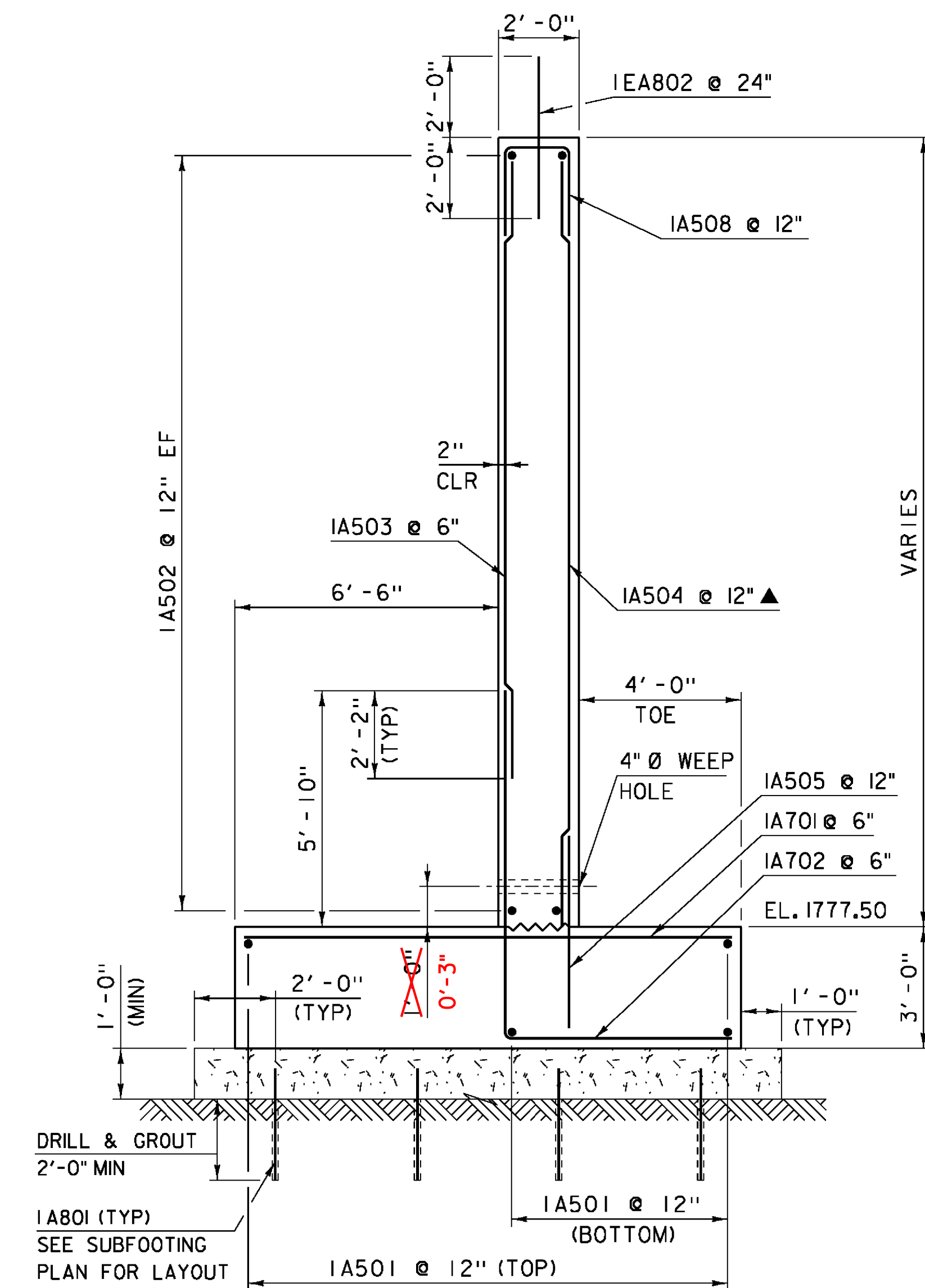
ABUTMENT #1 PLAN

SCALE: 1/4" = 1'-0"



ABUTMENT #1 ELEVATION

SCALE: 1/4" = 1'-0"



ABUTMENT #1 SECTION

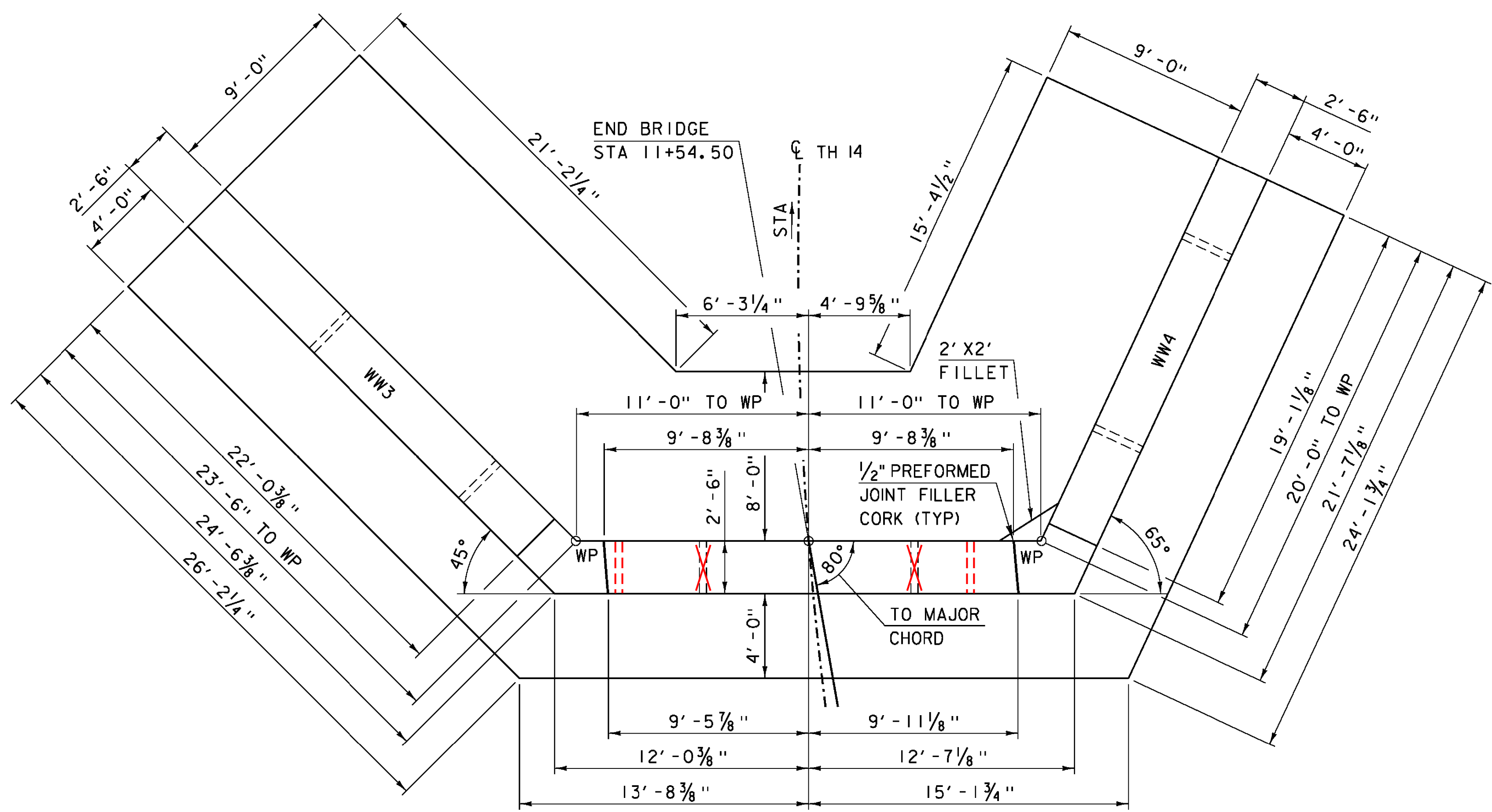
NOTE:

- 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: STAMFORD
PROJECT NUMBER: STP 1441(29)

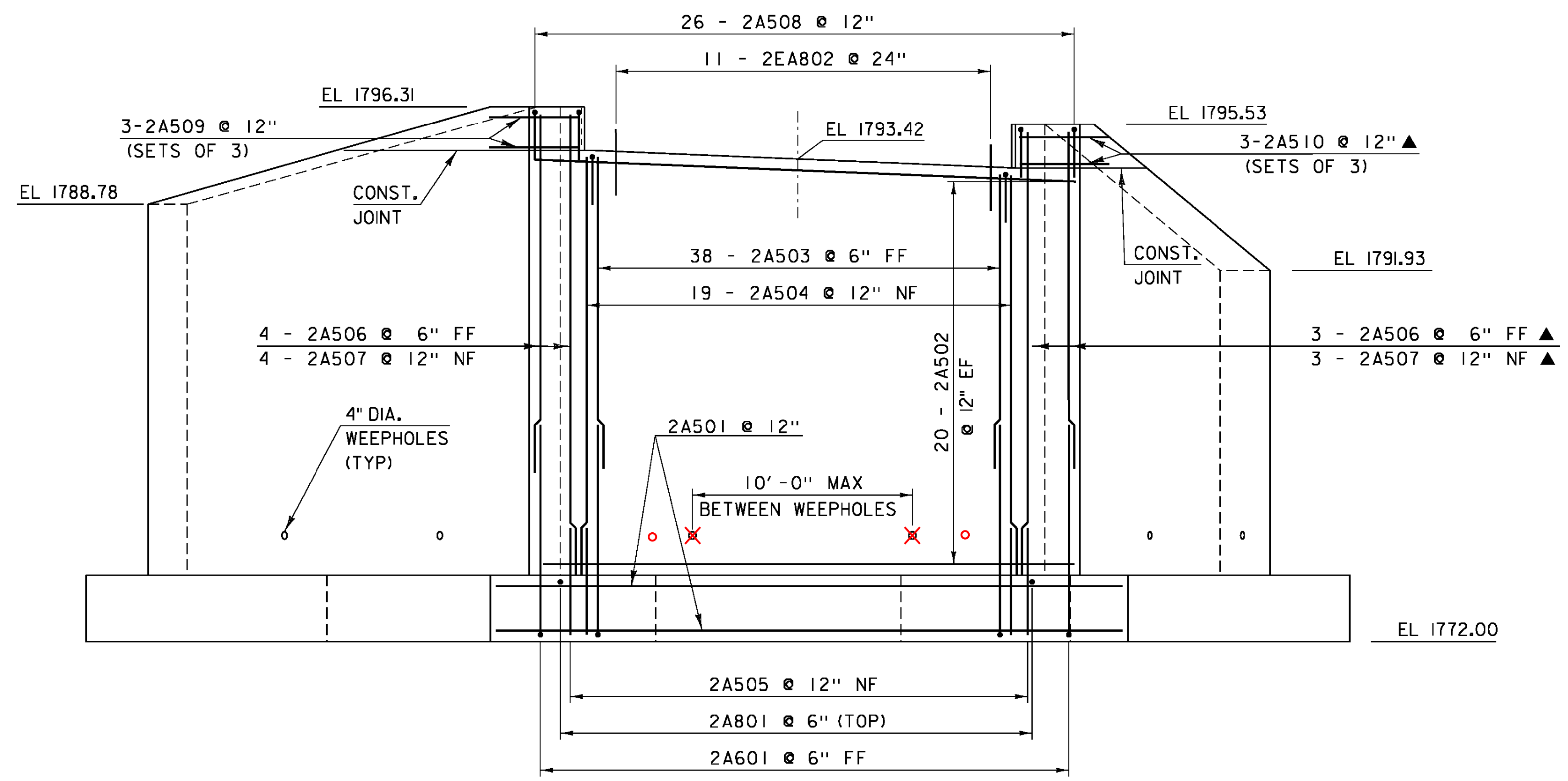
FILE NAME: s96j226sub.dgn
PROJECT LEADER: C.W. CARLSON
DESIGNED BY: F. BARROWS
ABUTMENT #1 PLAN, ELEVATION & DETAILS

PLOT DATE: 24-DEC-2015
DRAWN BY: D. KARABEGOVIC
CHECKED BY: H. SALLS
SHEET 21 OF 44



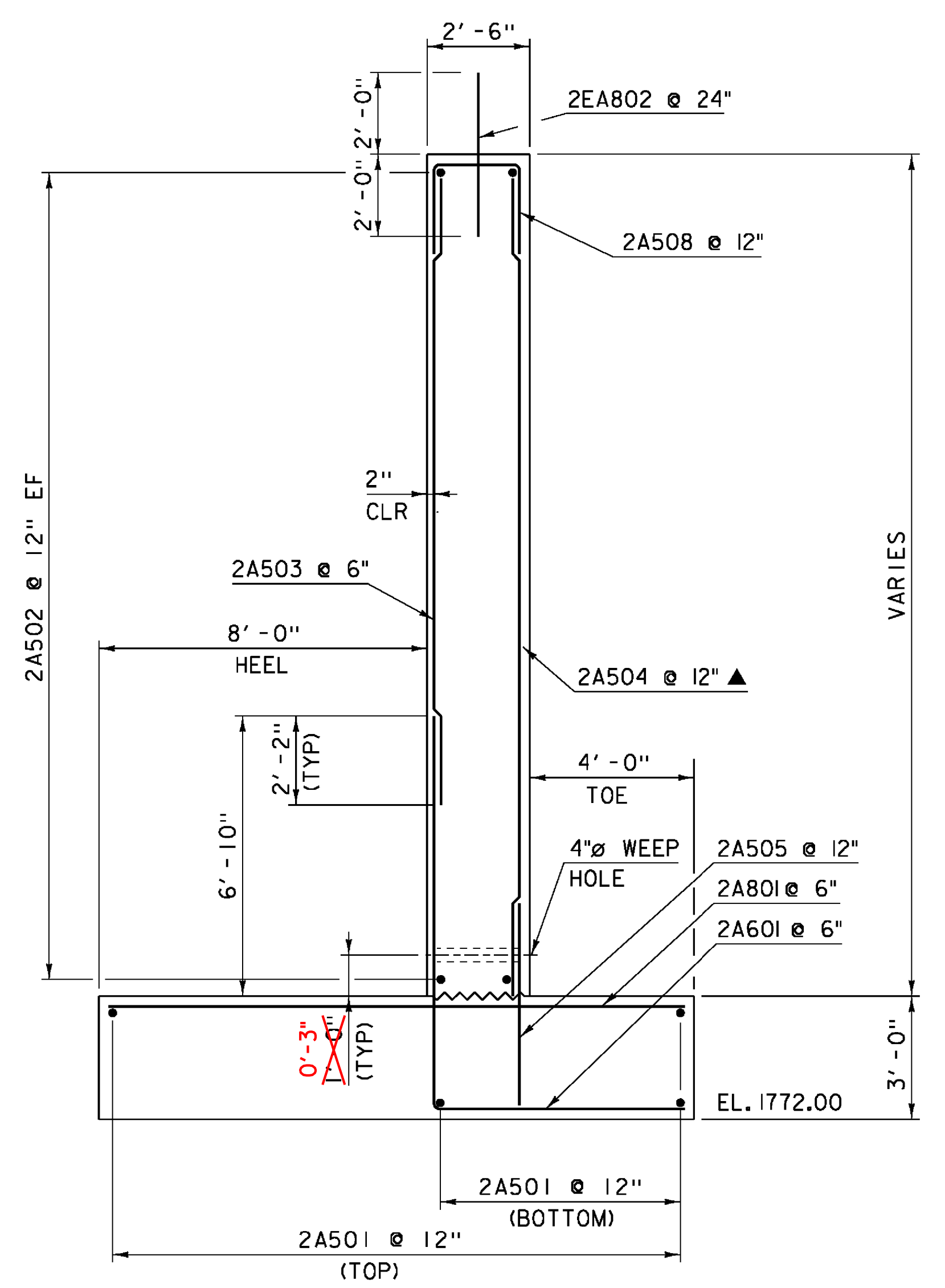
ABUTMENT #2 PLAN

SCALE: 1/4" = 1'-0"



ABUTMENT #2 ELEVATION

SCALE: 1/4" = 1'-0"



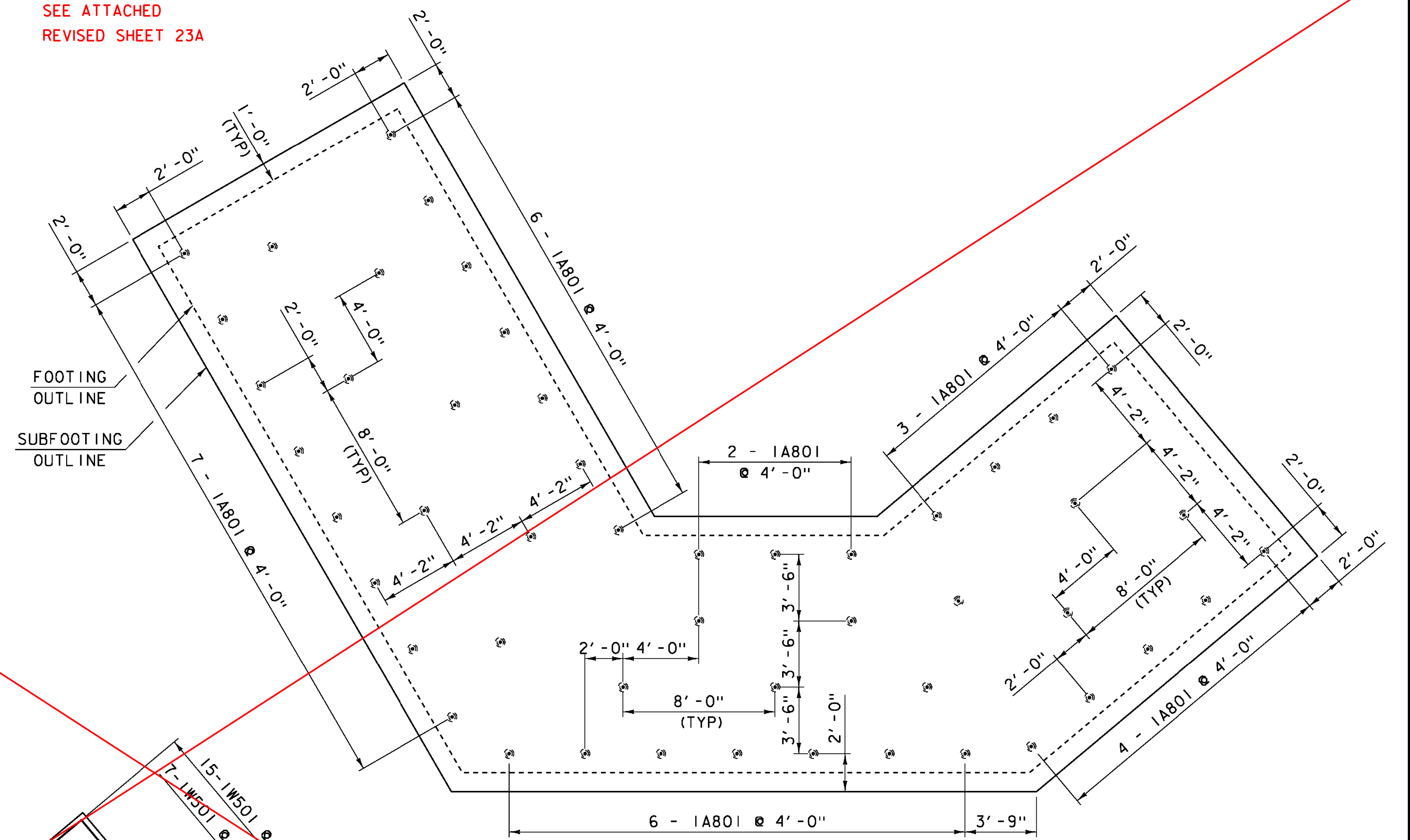
ABUTMENT #2 SECTION

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.

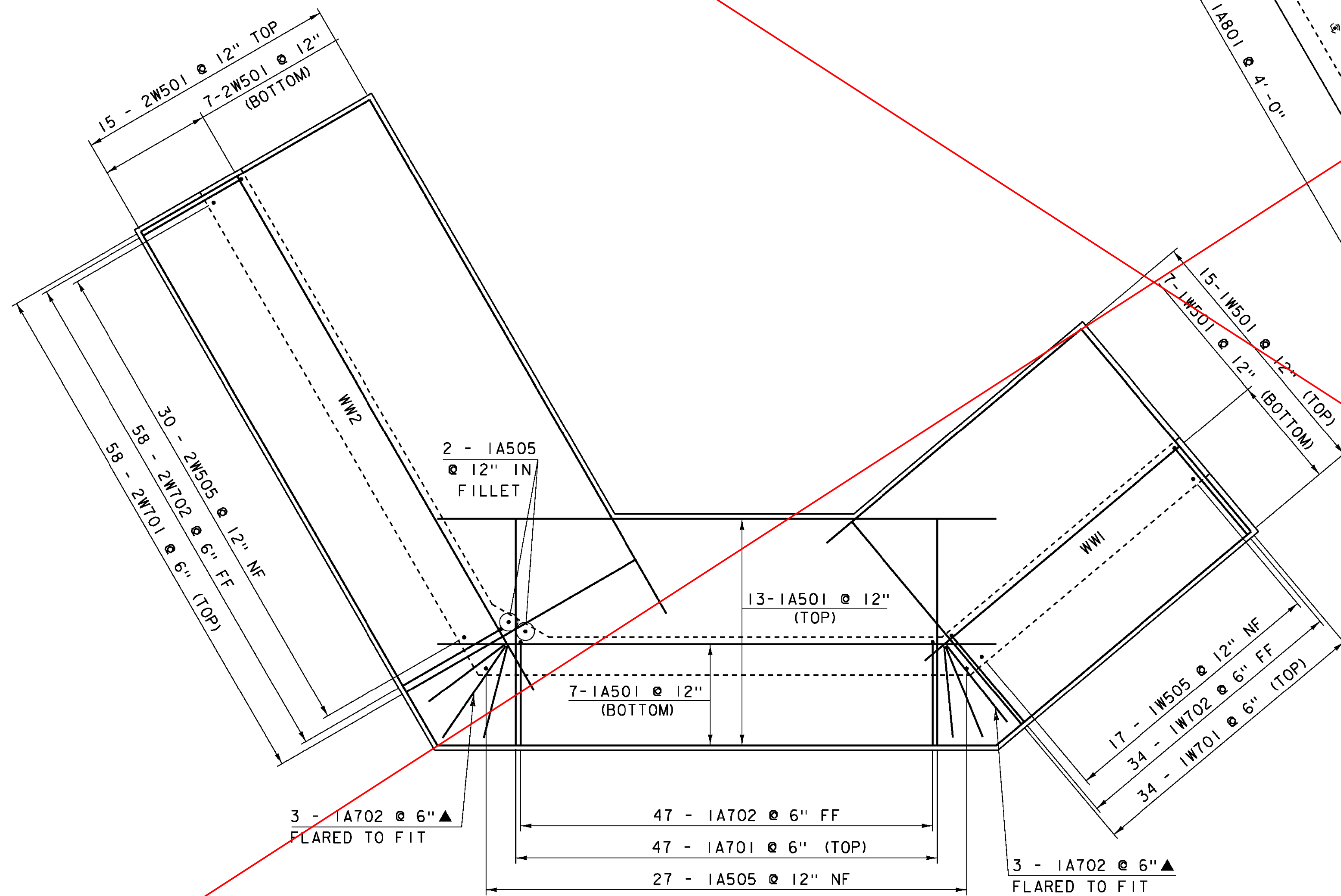
PROJECT NAME: STAMFORD	PLOT DATE: 24-DEC-2015
PROJECT NUMBER: STP 1441(29)	DRAWN BY: D. KARABEGOVIC
FILE NAME: s96j226sub.dgn	CHECKED BY: H. SALLS
PROJECT LEADER: C.W. CARLSON	SHEET 22 OF 44
DESIGNED BY: F. BARROWS	
ABUTMENT #2 PLAN, ELEVATION & DETAILS	

SEE ATTACHED
REVISED SHEET 23A



ABUTMENT #1 SUBFOOTING REINFORCING PLAN

SCALE: 1/4" = 1'-0"



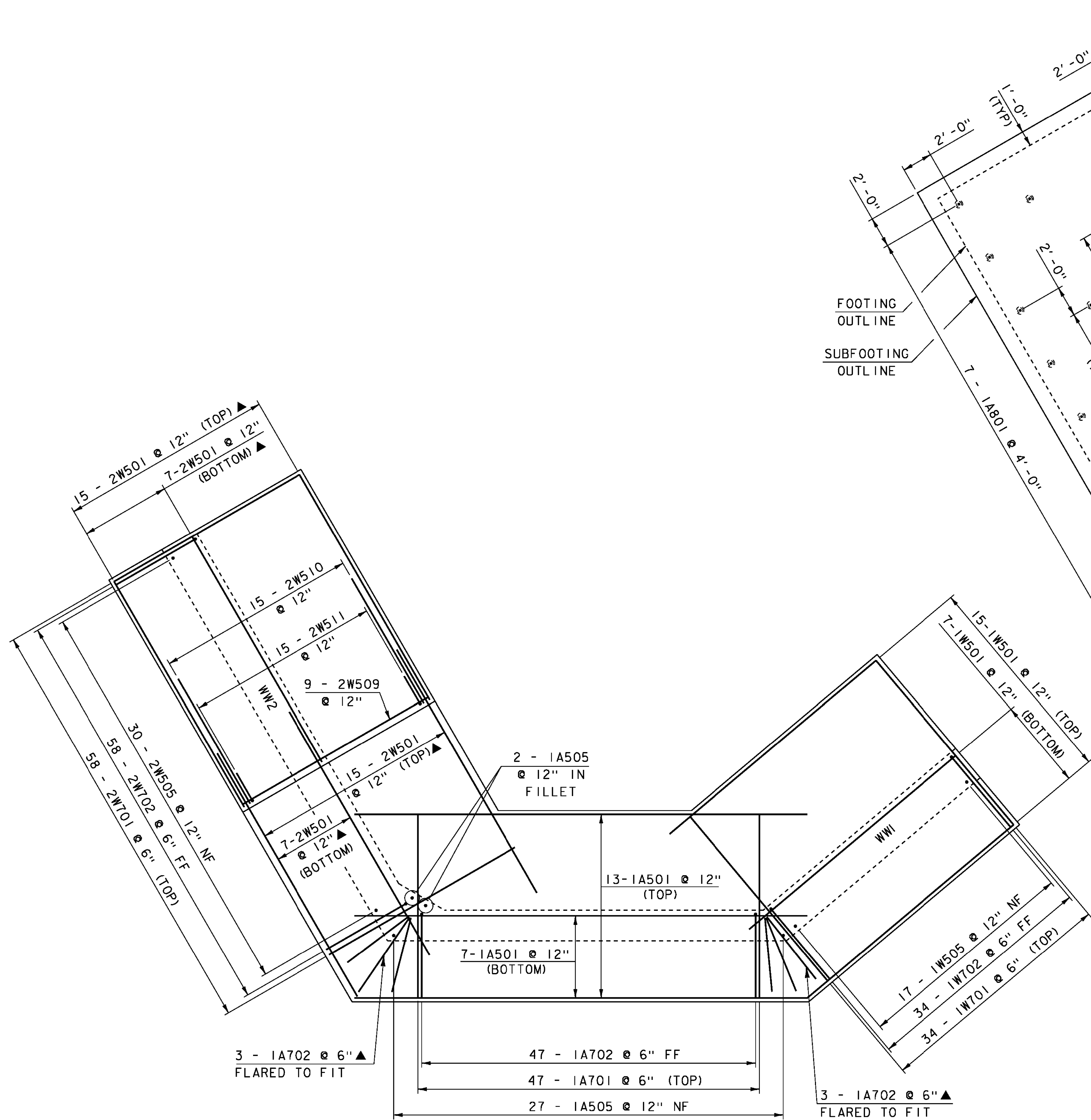
ABUTMENT #1 FOOTING REINFORCING PLAN

SCALE: 1/4" = 1'-0"

NOTE:

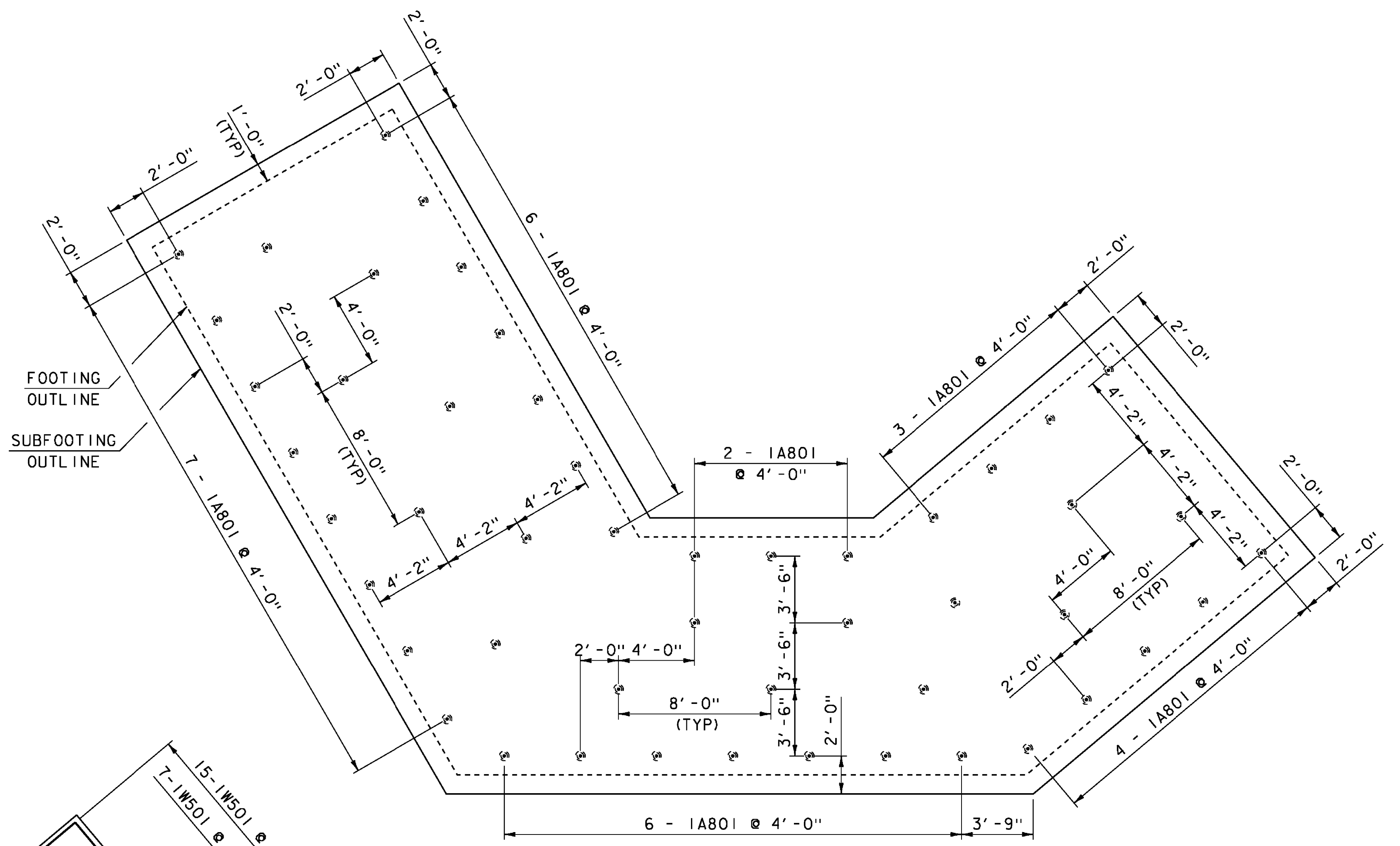
- NF = NEAR FACE
- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- 3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	STAMFORD	PLOT DATE:	24-DEC-2015
PROJECT NUMBER:	STP 1441(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226sub.dgn	DESIGNED BY:	F. BARROWS
PROJECT LEADER:	C. W. CARLSON	CHECKED BY:	H. SALLS
ABUTMENT #1 FOOTING & SUBFOOTING PLAN		SHEET 23 OF 44	



ABUTMENT #1 FOOTING REINFORCING PLAN Δ

SCALE: 1/4" = 1'-0"



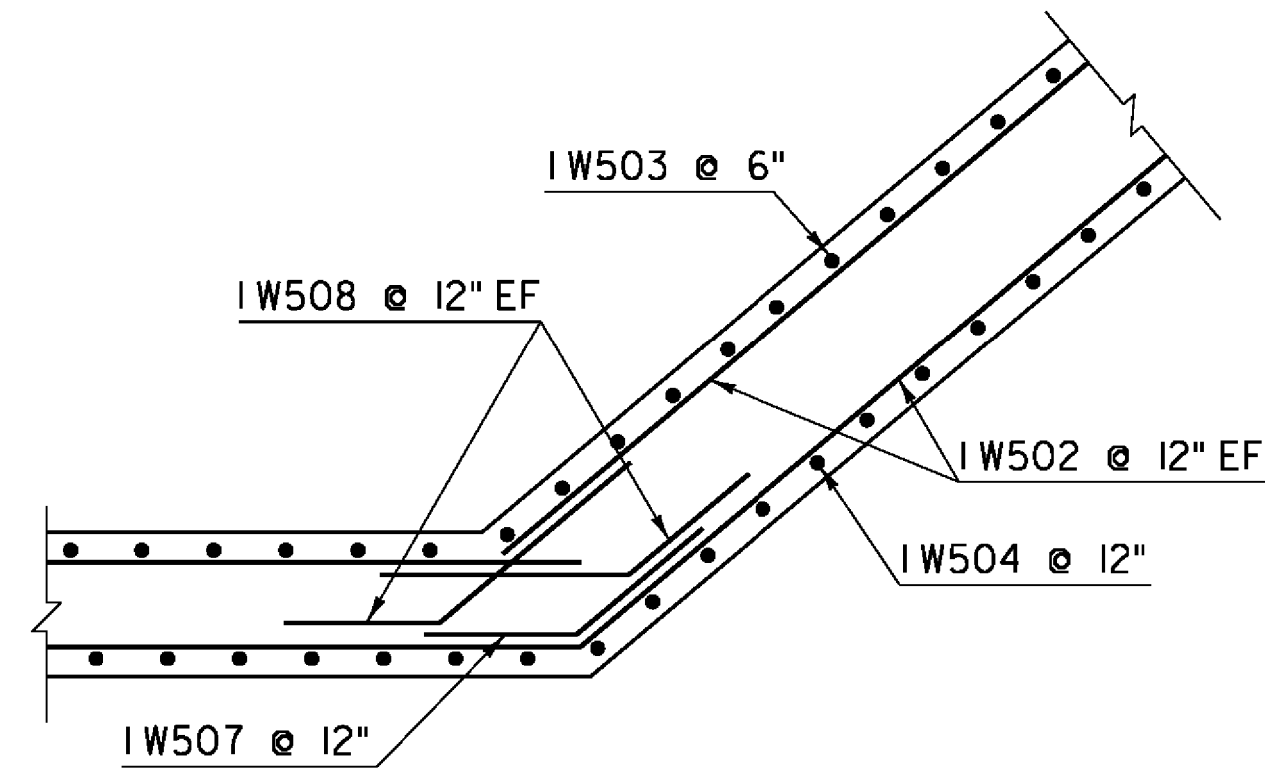
ABUTMENT #1 SUBFOOTING REINFORCING PLAN

SCALE: 1/4" = 1'-0"

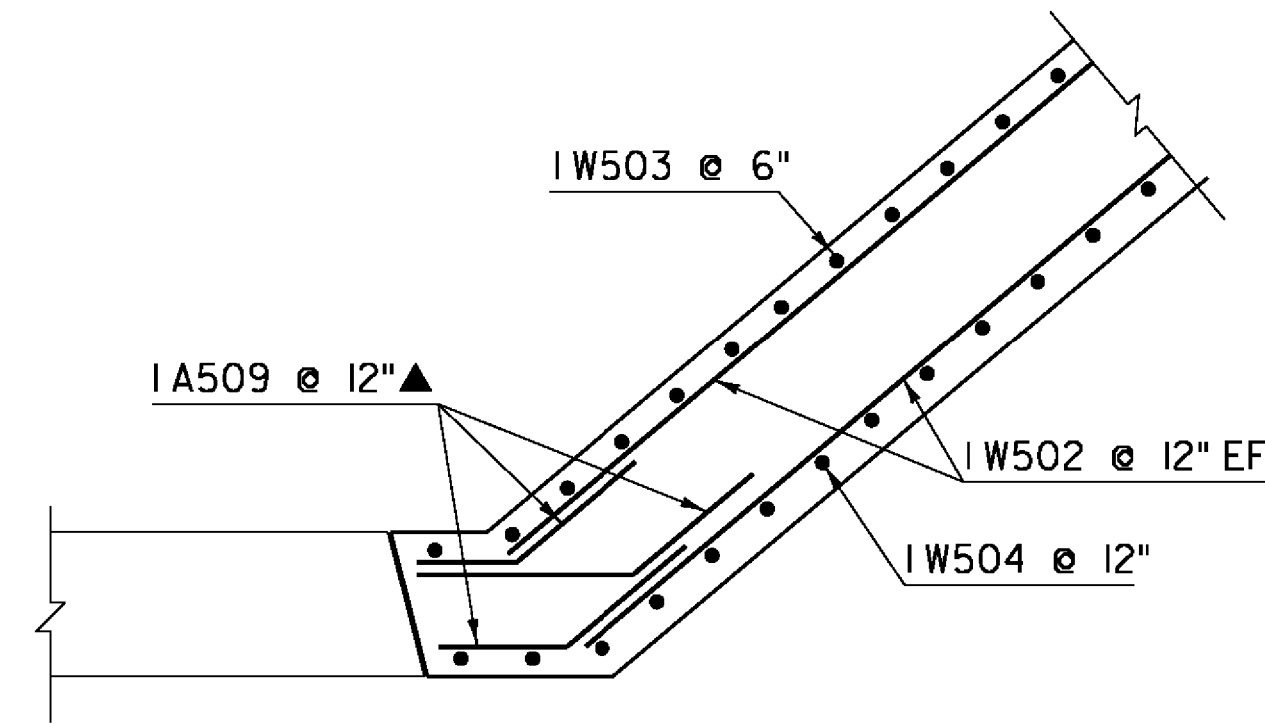
NOTE:
 NF = NEAR FACE
 FF = FAR FACE
 EF = EACH FACE
 ▲ = CUT TO FIT IN FIELD
 3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 1441(29)
FILE NAME:	s96j226sub.dgn
PROJECT LEADER:	C. W. CARLSON
DESIGNED BY:	F. BARROWS
ABUTMENT #1 FOOTING & SUBFOOTING PLAN	
PLOT DATE:	12-AUG-2016
DRAWN BY:	D. KARABEGOVIC
CHECKED BY:	H. SALLS
SHEET	23A OF 44

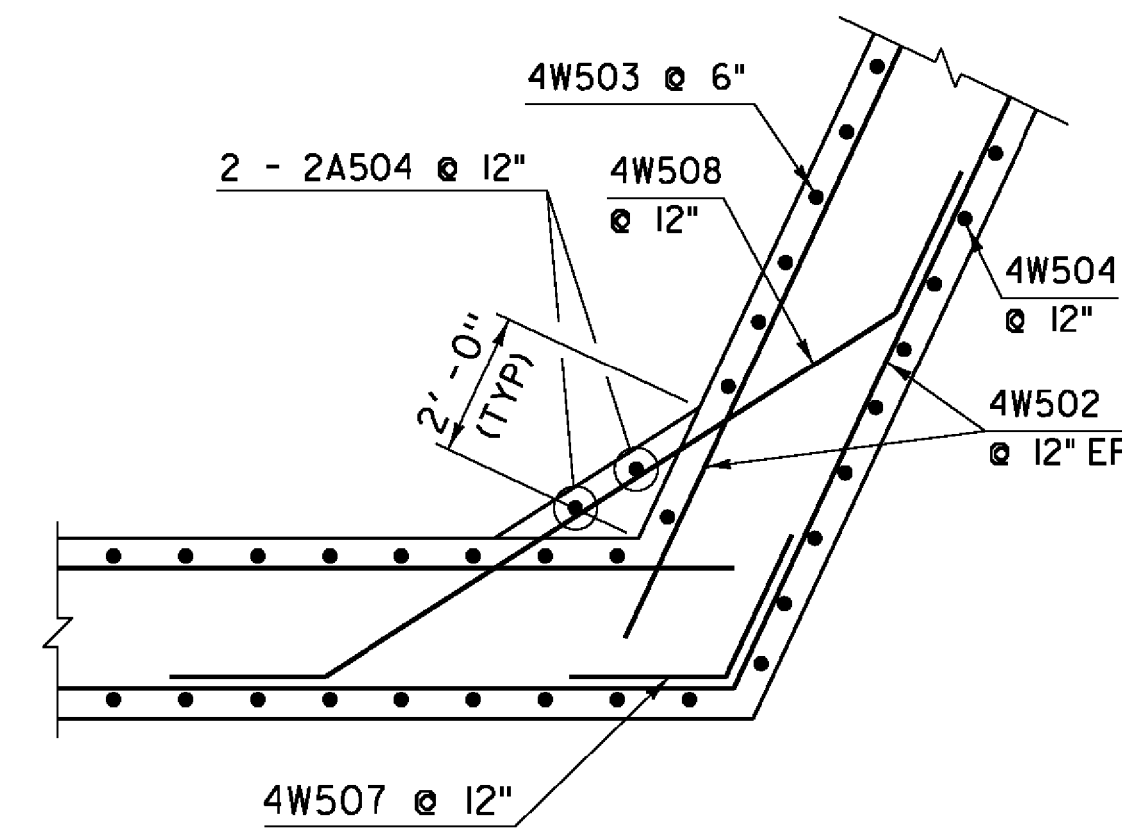
KEY	DATE	BY	REVISION
Δ	08/12/2016	VAOT	MODIFIED WINGWALL #2.



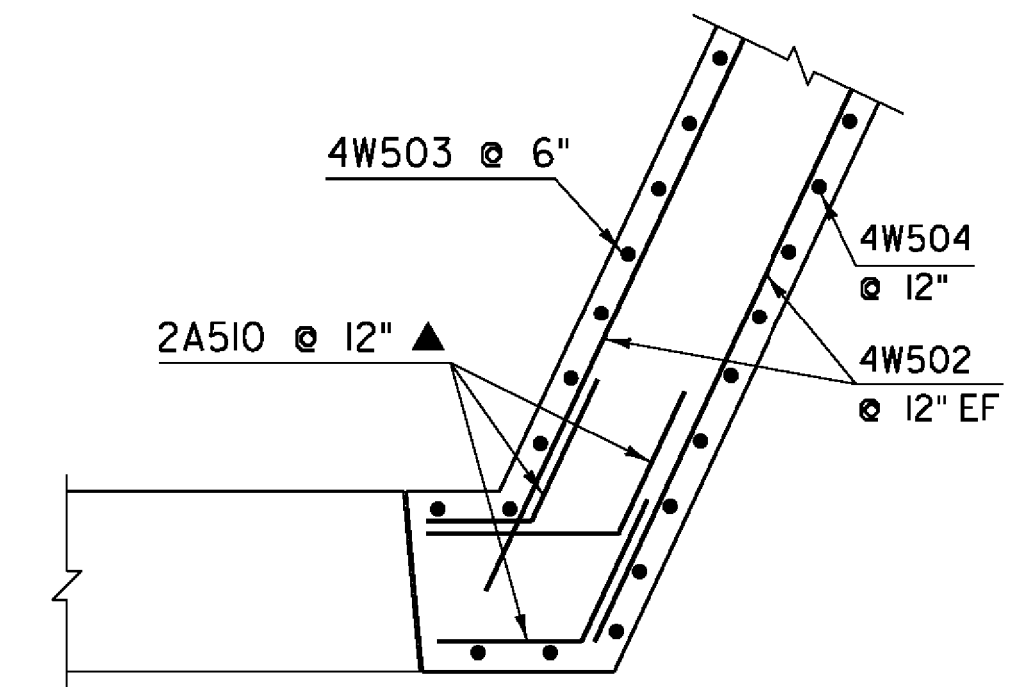
CORNER DETAILS BELOW
BRIDGE SEAT AT WINGWALL #1
SCALE: 3/8" = 1'-0"
(WINGWALL #3 SIMILAR)



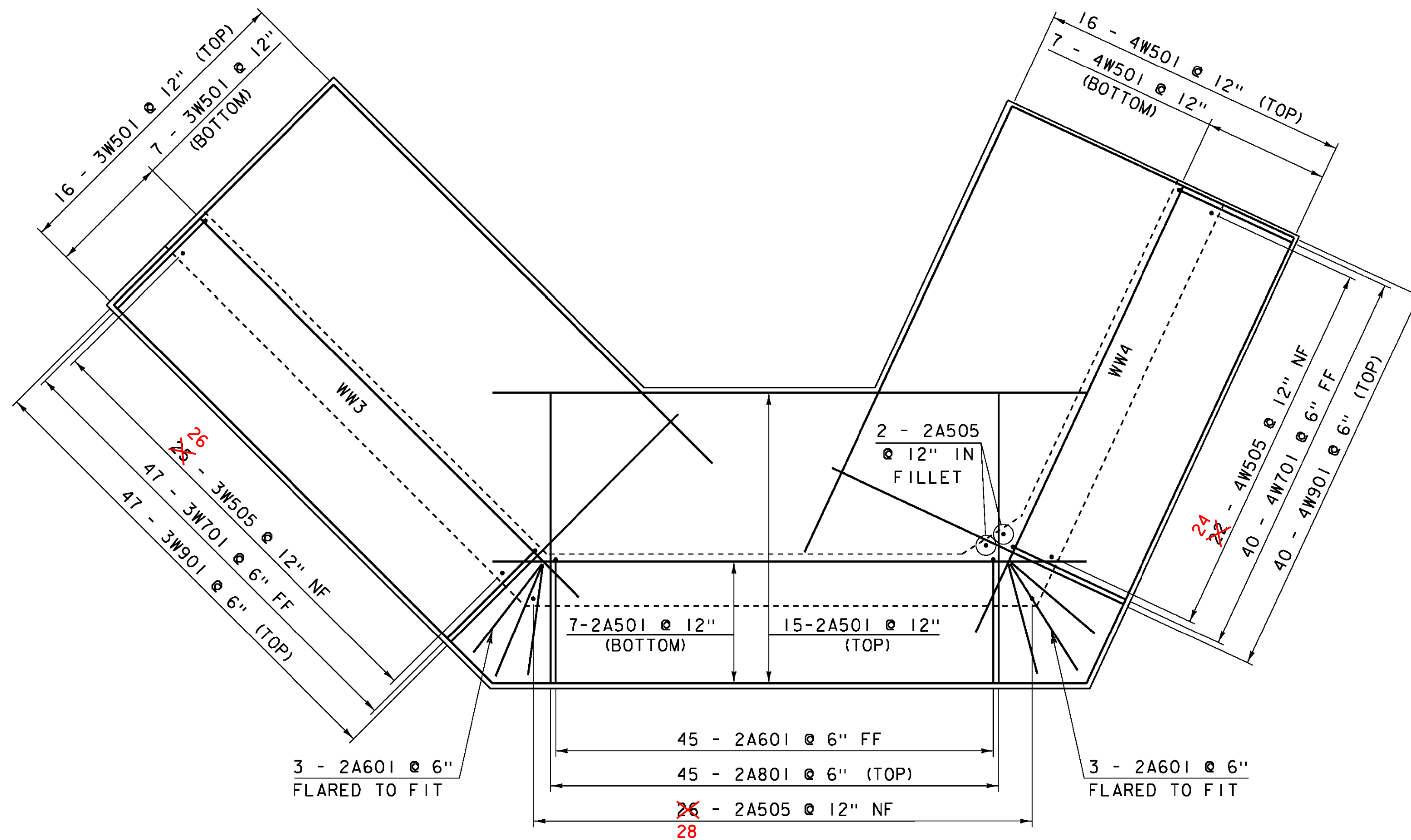
CORNER DETAILS ABOVE
BRIDGE SEAT AT WINGWALL #1
SCALE: 3/8" = 1'-0"
(WINGWALL #3 SIMILAR)



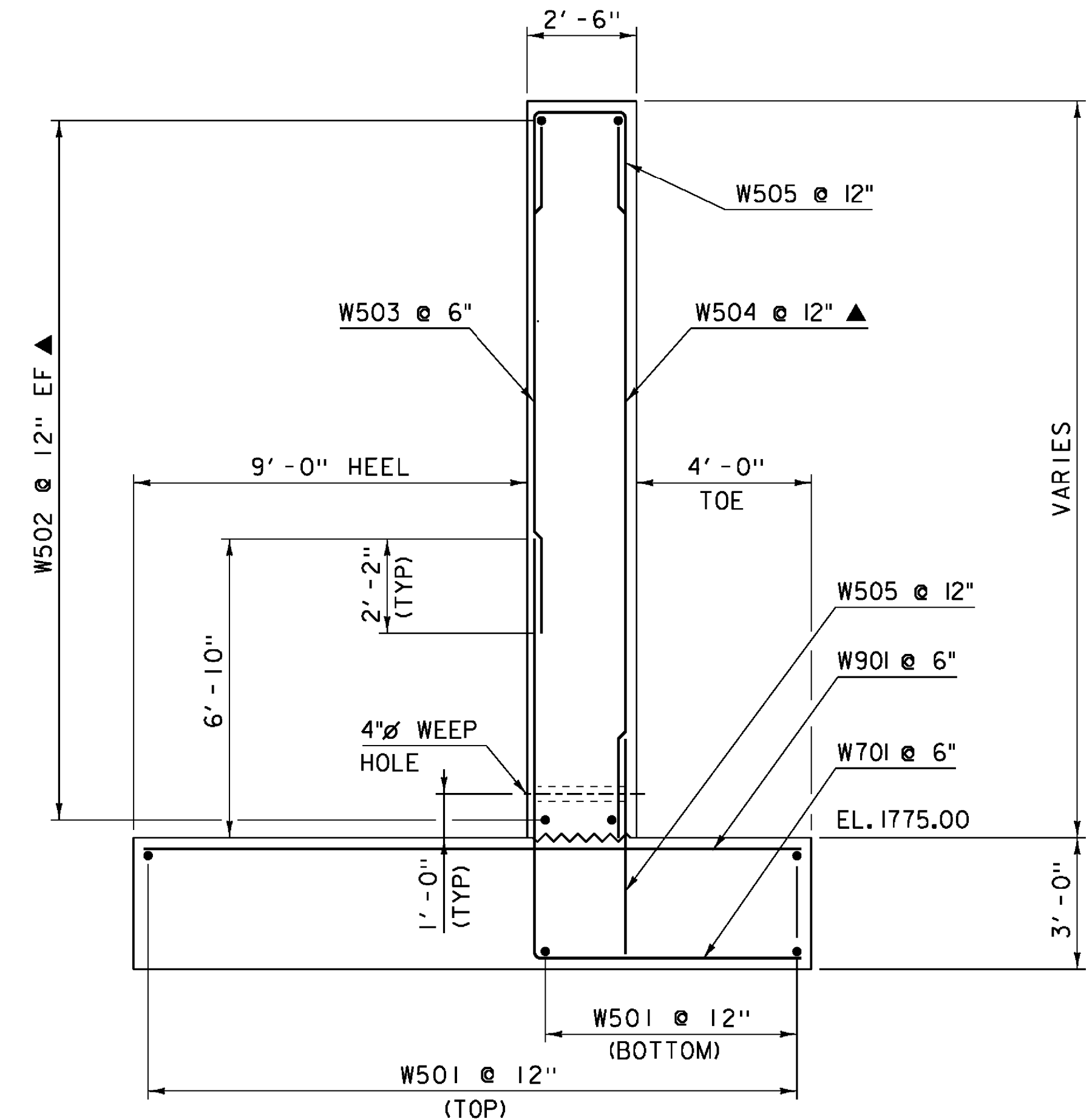
CORNER DETAILS BELOW
BRIDGE SEAT AT WINGWALL #4
SCALE: 3/8" = 1'-0"
(WINGWALL #2 SIMILAR)



CORNER DETAILS ABOVE
BRIDGE SEAT AT WINGWALL #4
SCALE: 3/8" = 1'-0"
(WINGWALL #2 SIMILAR)



ABUTMENT #2 FOOTING REINFORCING PLAN
SCALE: 1/4" = 1'-0"



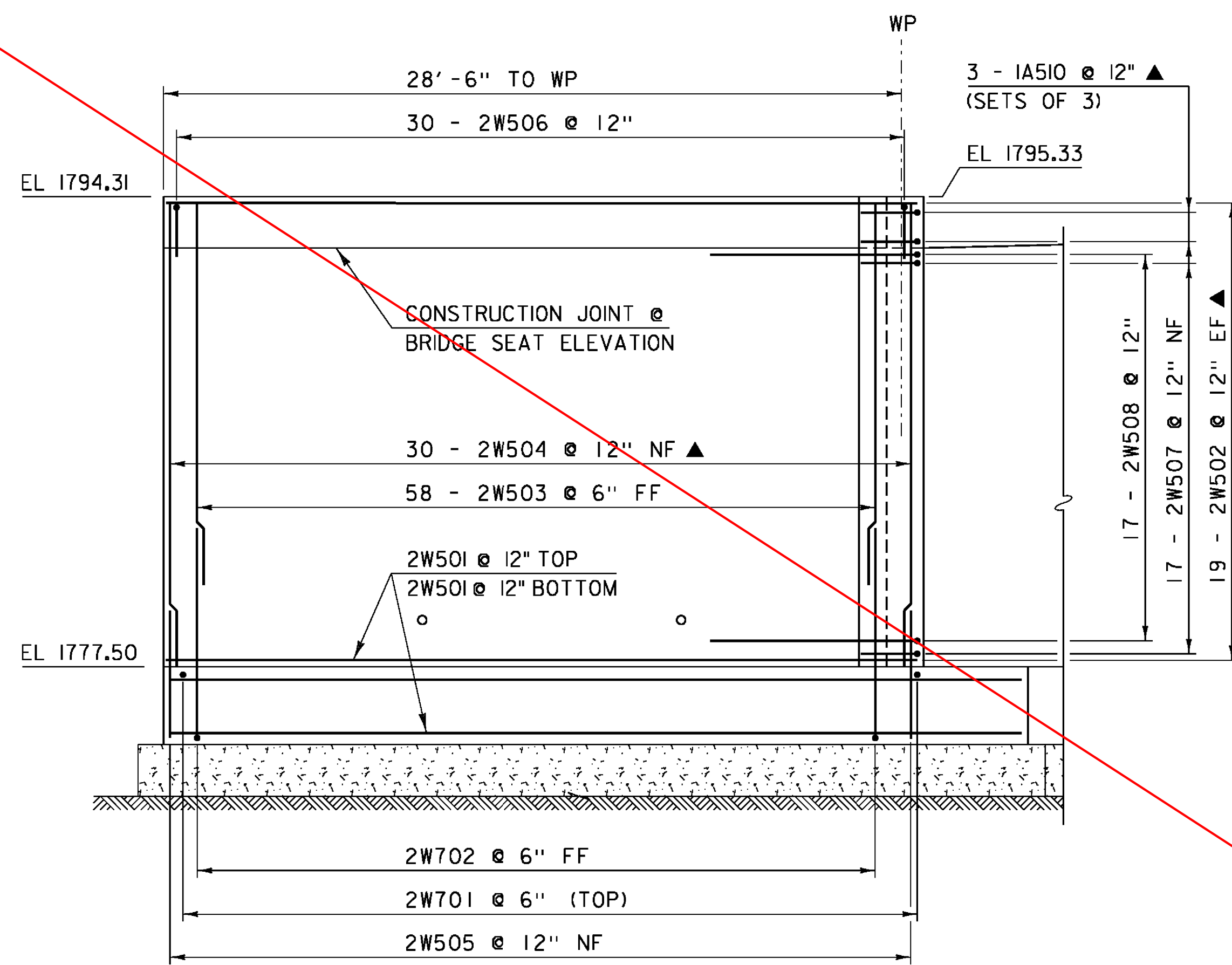
WINGWALL #3 & 4 SECTION (TYP)
SCALE: 3/8" = 1'-0"

NOTE:

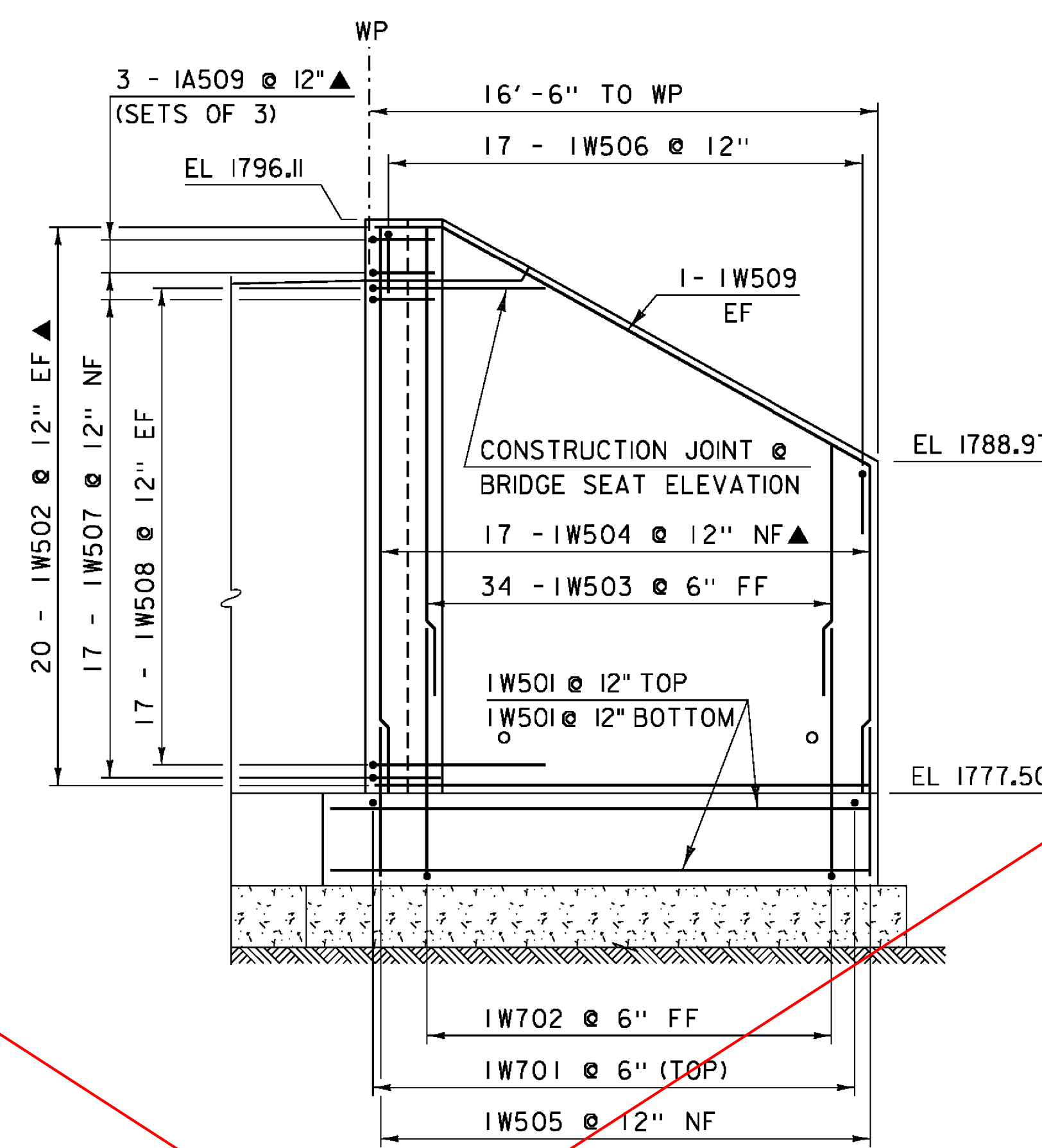
- NF = NEAR FACE
- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- 3" CLEAR, UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PROJECT NAME:	STAMFORD	PLOT DATE:	24-DEC-2015
PROJECT NUMBER:	STP 1441(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226sub.dgn	DESIGNED BY:	F. BARROWS
PROJECT LEADER:	C. W. CARLSON	CHECKED BY:	H. SALLS
ABUTMENT #2 FOOTING PLAN & DETAILS		SHEET 24 OF 44	

SEE ATTACHED
REVISED SHEET 25A

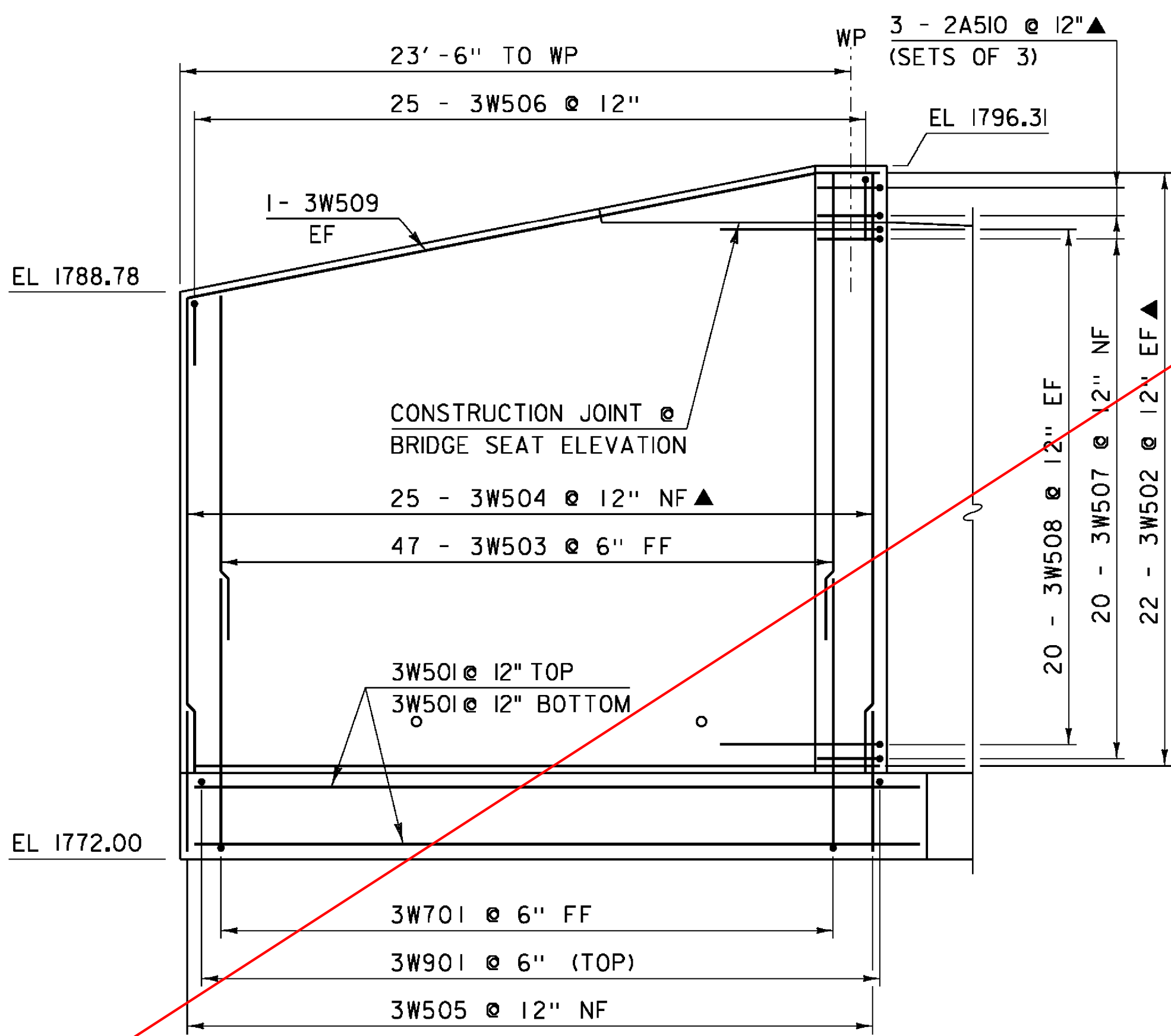


WINGWALL #2 ELEVATION



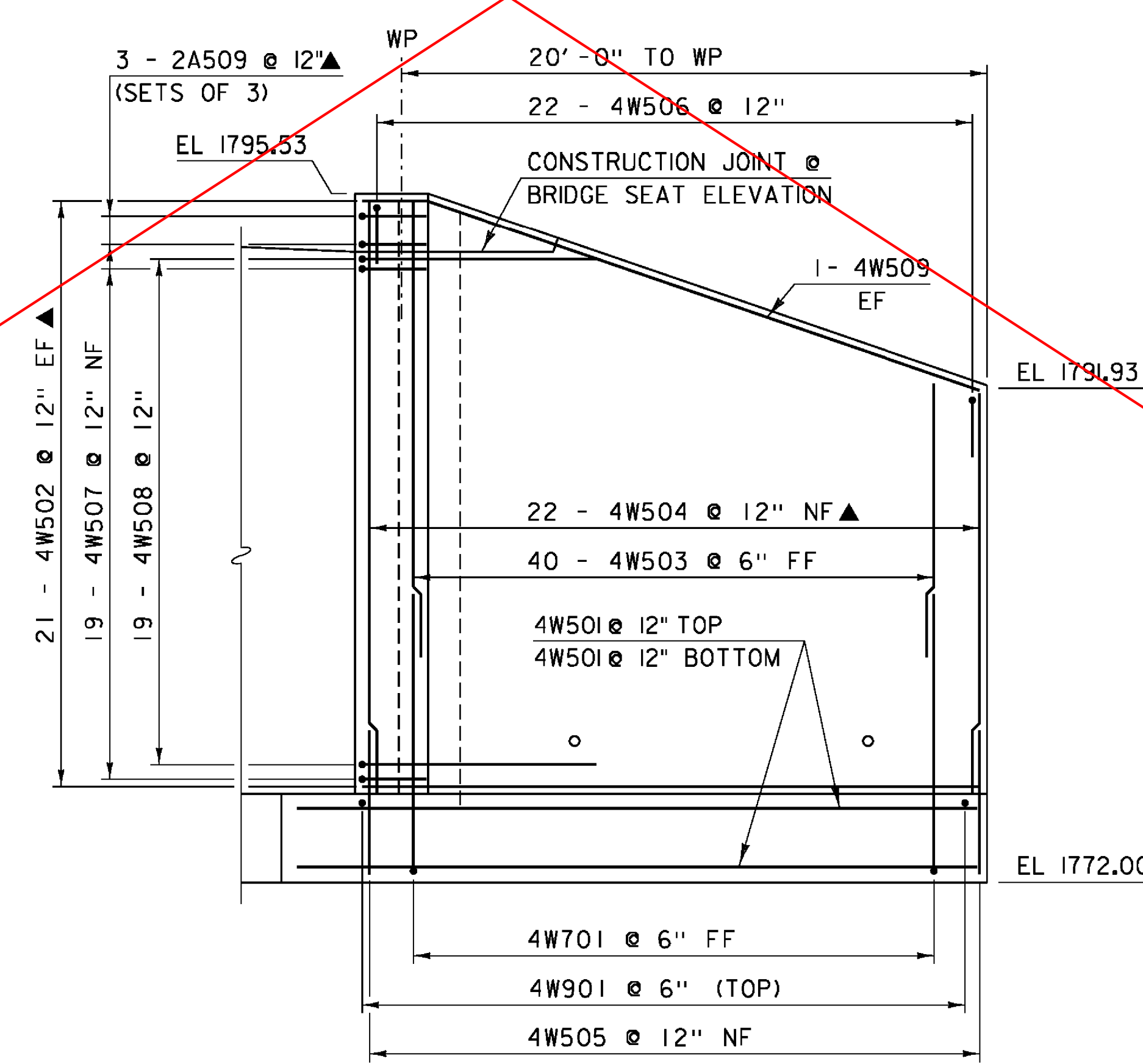
WINGWALL #1 ELEVATION

SCALE: 1/4" = 1'-0"



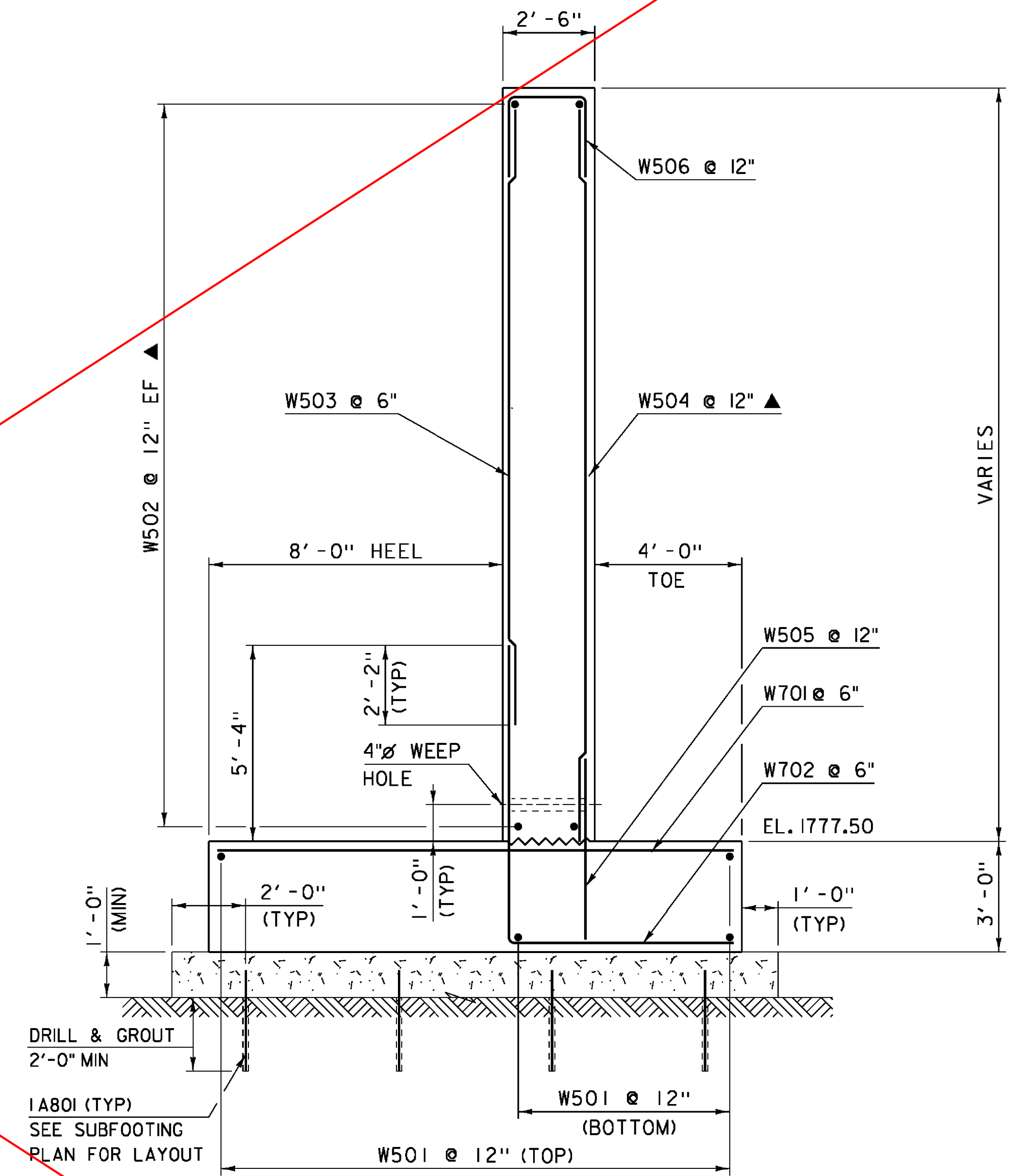
WINGWALL #3 ELEVATION

SCALE: 1/4" = 1'-0"



WINGWALL #4 ELEVATION

SCALE: 1/4" = 1'-0"

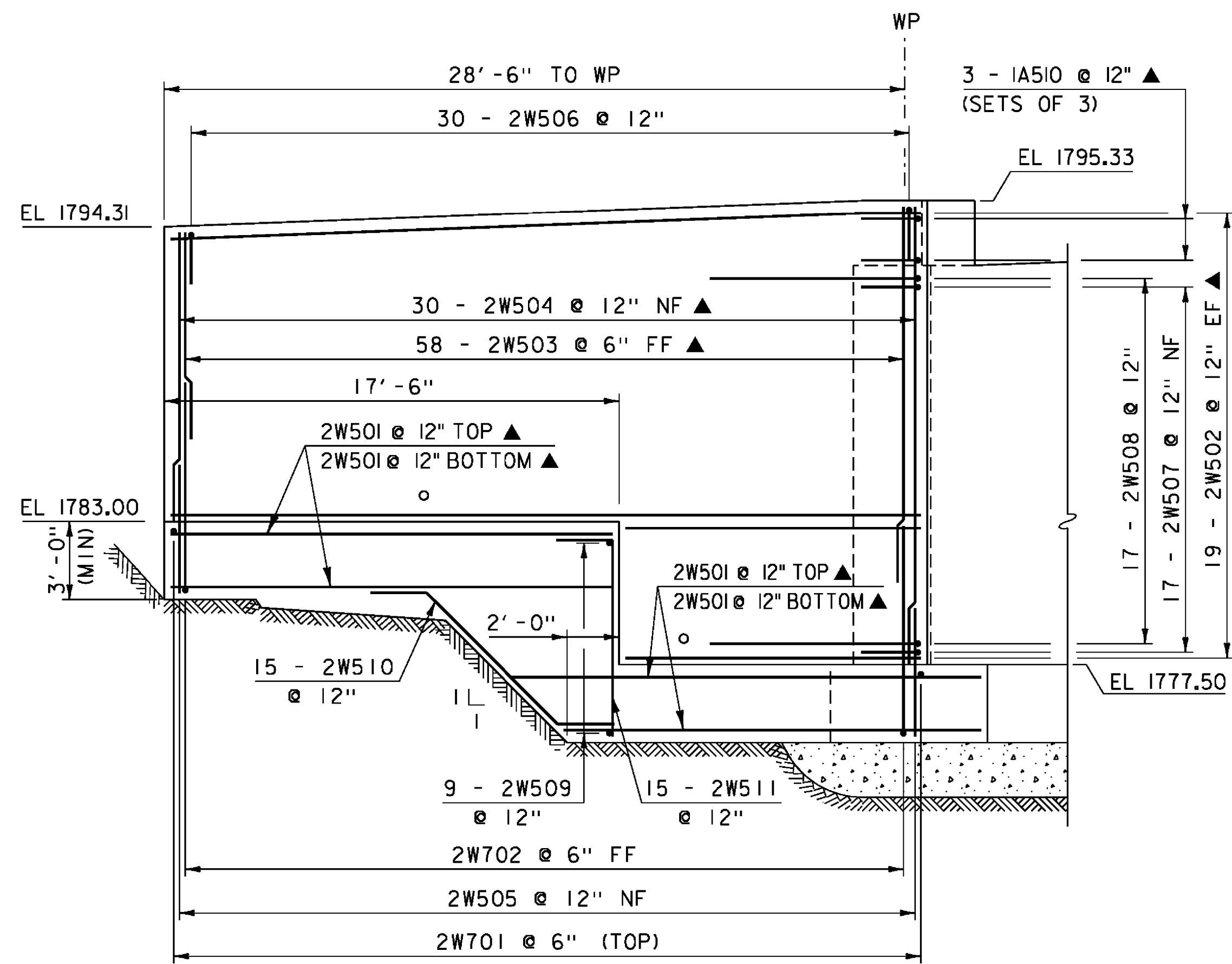


WINGWALL #1&2 SECTION (TYP)

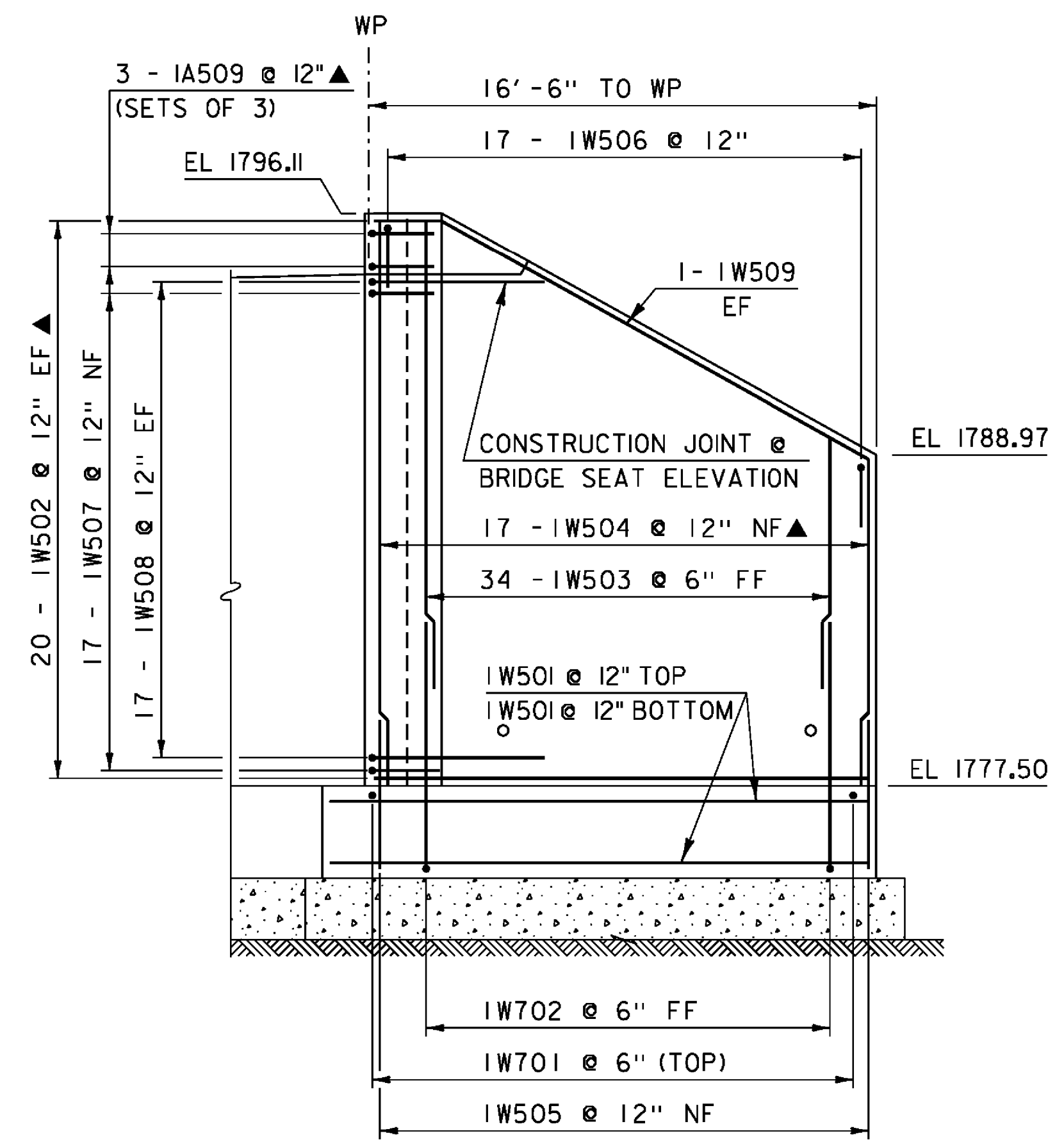
SCALE: 3/8" = 1'-0"

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:	STAMFORD	PLOT DATE:	24-DEC-2015
PROJECT NUMBER:	STP 1441(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226sub.dgn	DESIGNED BY:	F. BARROWS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
WINGWALLS		SHEET	25 OF 44

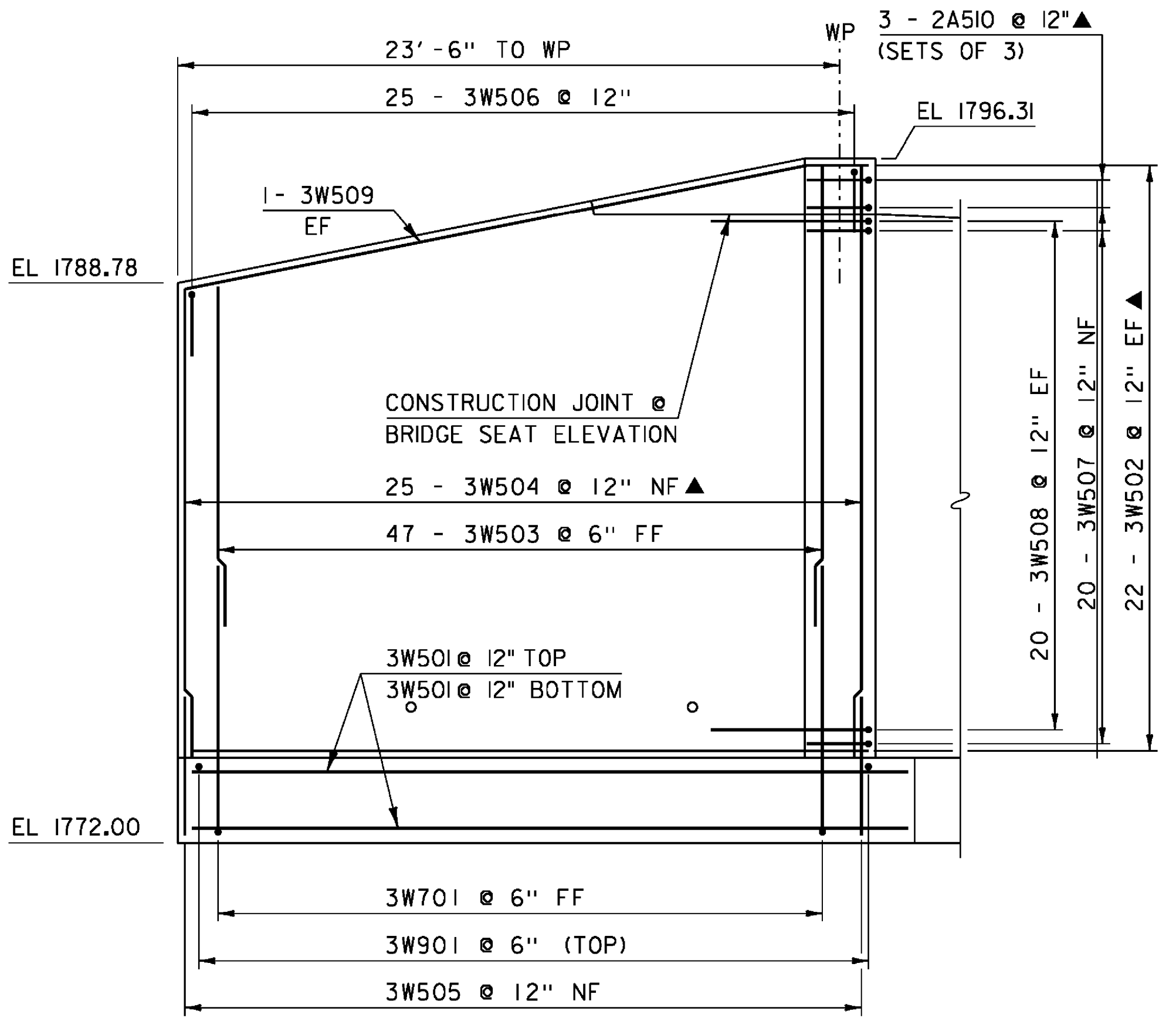


WINGWALL #2 ELEVATION Δ



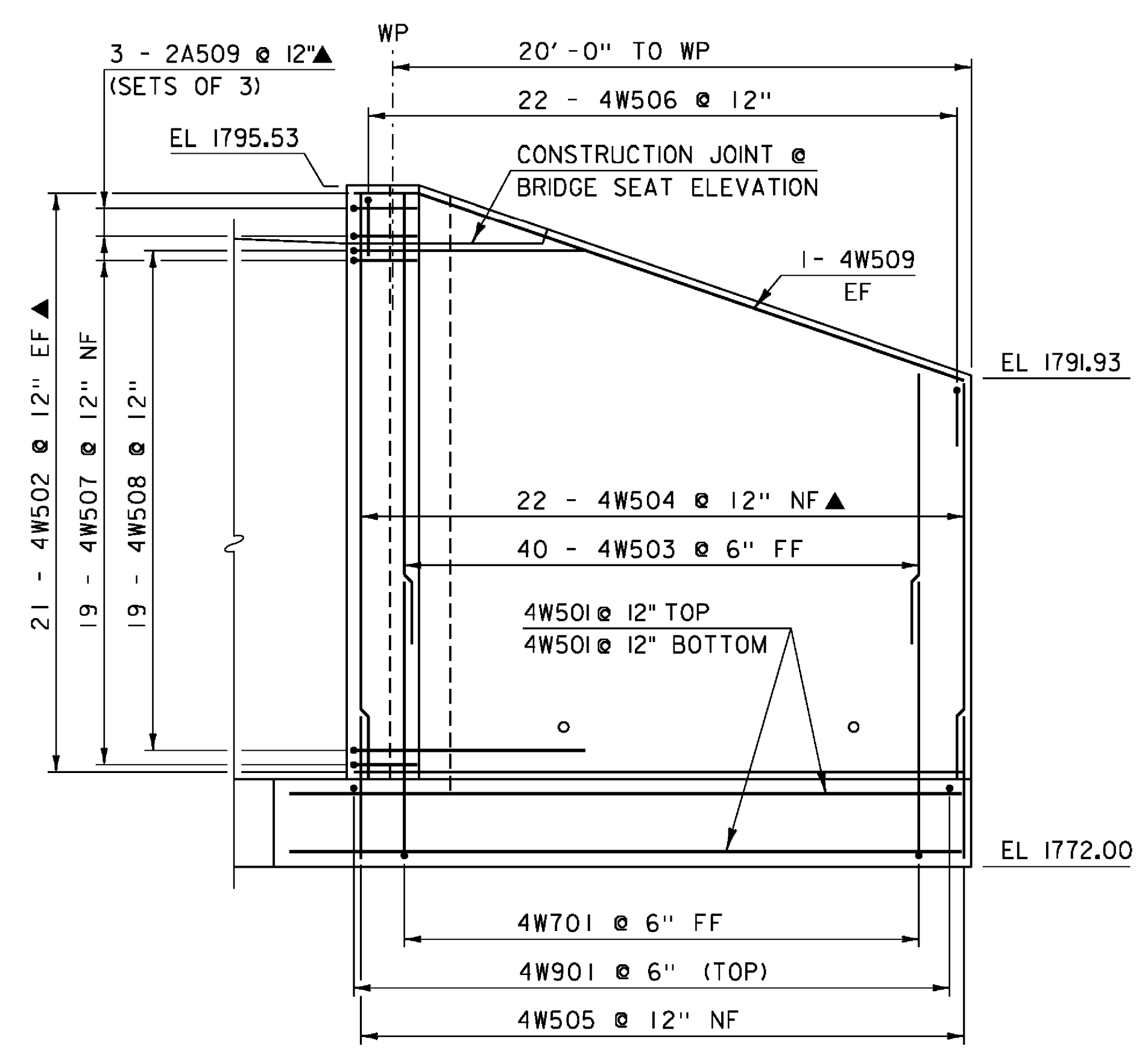
WINGWALL #1 ELEVATION

SCALE: 1/4" = 1'-0"



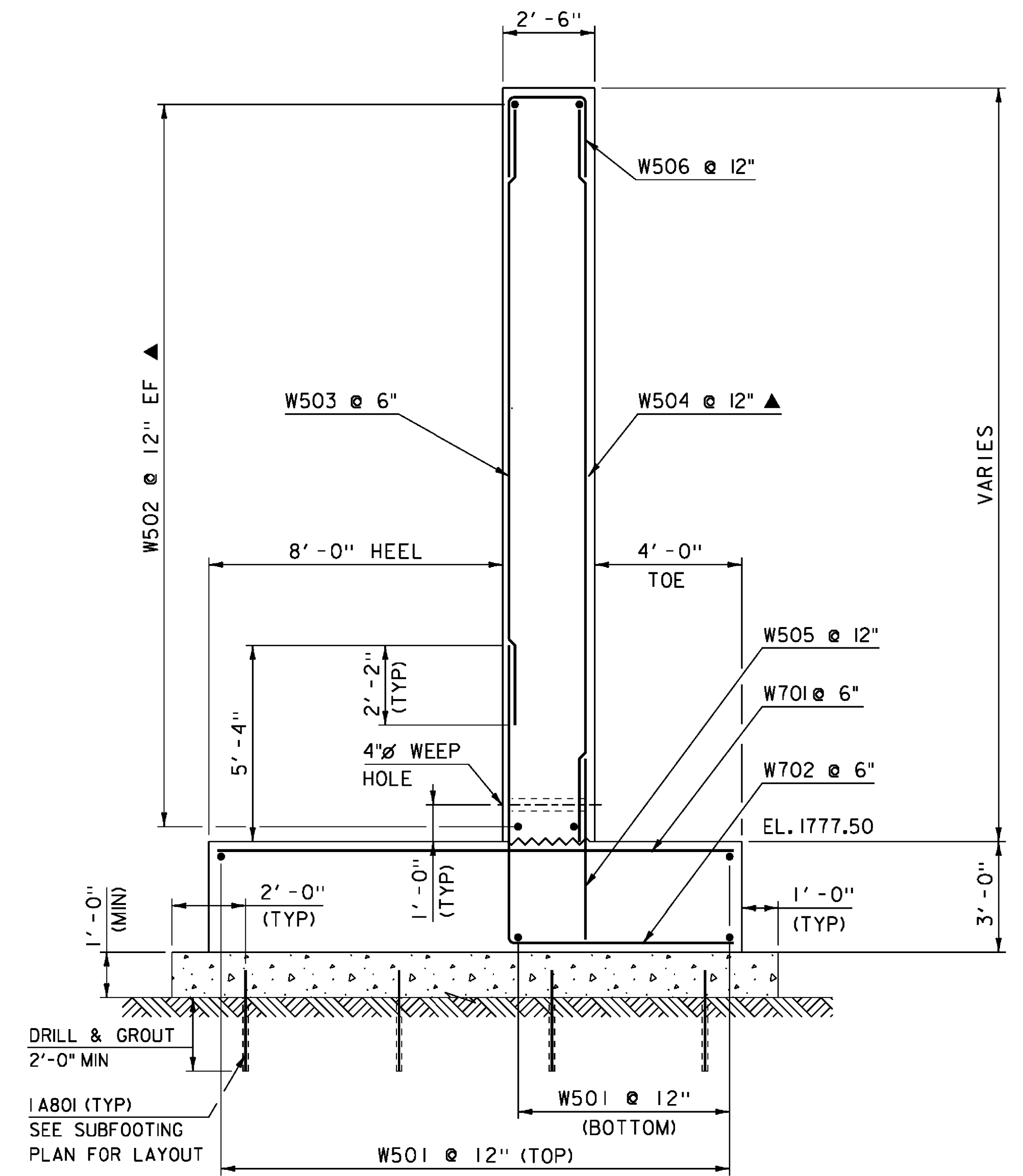
WINGWALL #3 ELEVATION

SCALE: 1/4" = 1'-0"



WINGWALL #4 ELEVATION

SCALE: 1/4" = 1'-0"



WINGWALL #1&2 SECTION (TYP)

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.

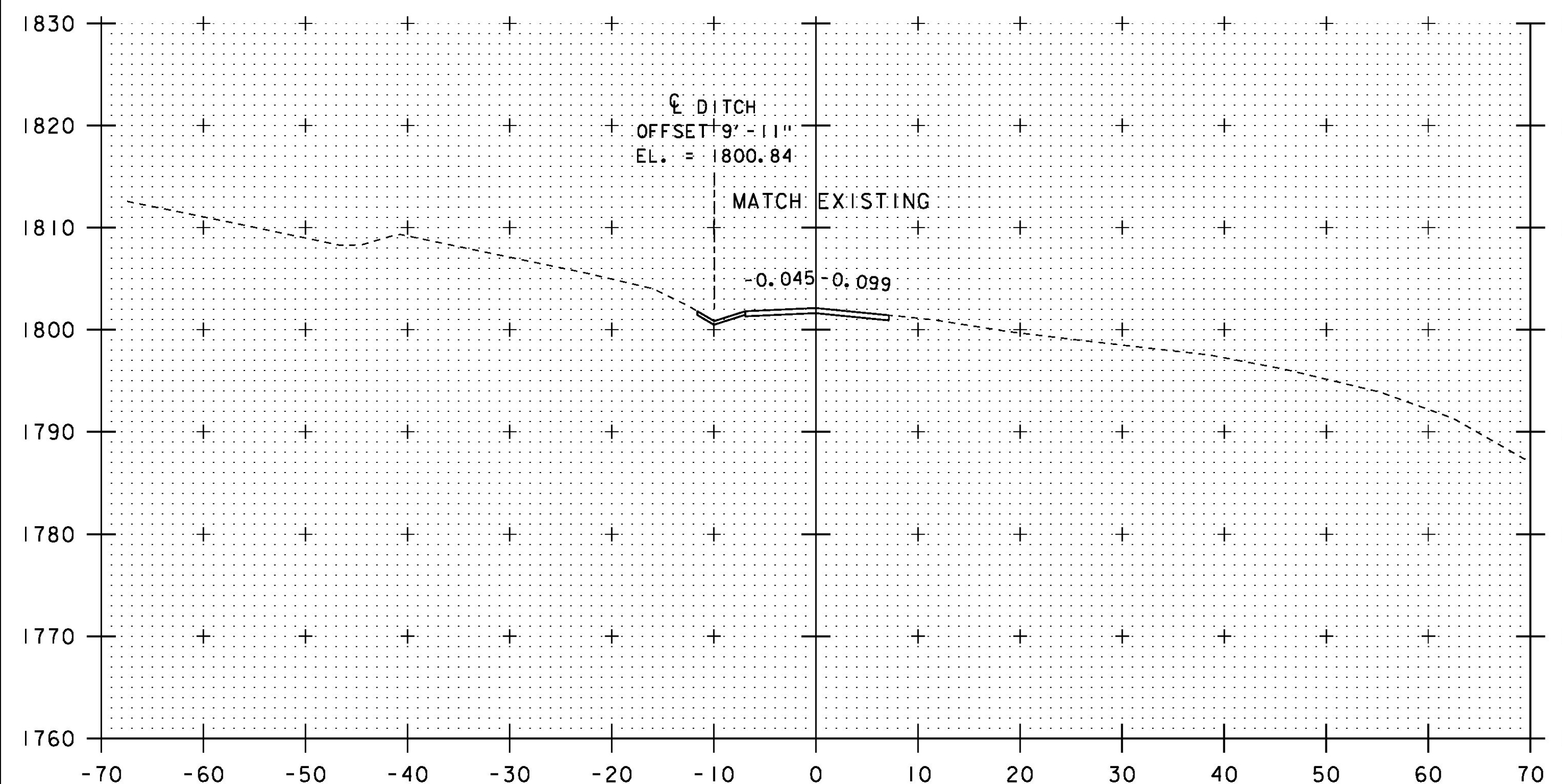
KEY	DATE	BY	REVISION
Δ	08/12/2016	VAOT	MODIFIED WINGWALL #2.

PROJECT NAME:	STAMFORD	PLOT DATE:	12-AUG-2016
PROJECT NUMBER:	STP 1441(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226sub.dgn	DESIGNED BY:	F. BARROWS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
DESIGNED BY:	F. BARROWS	SHEET	25A OF 44
WINGWALLS			

STATE OF VERMONT
AGENCY OF TRANSPORTATION

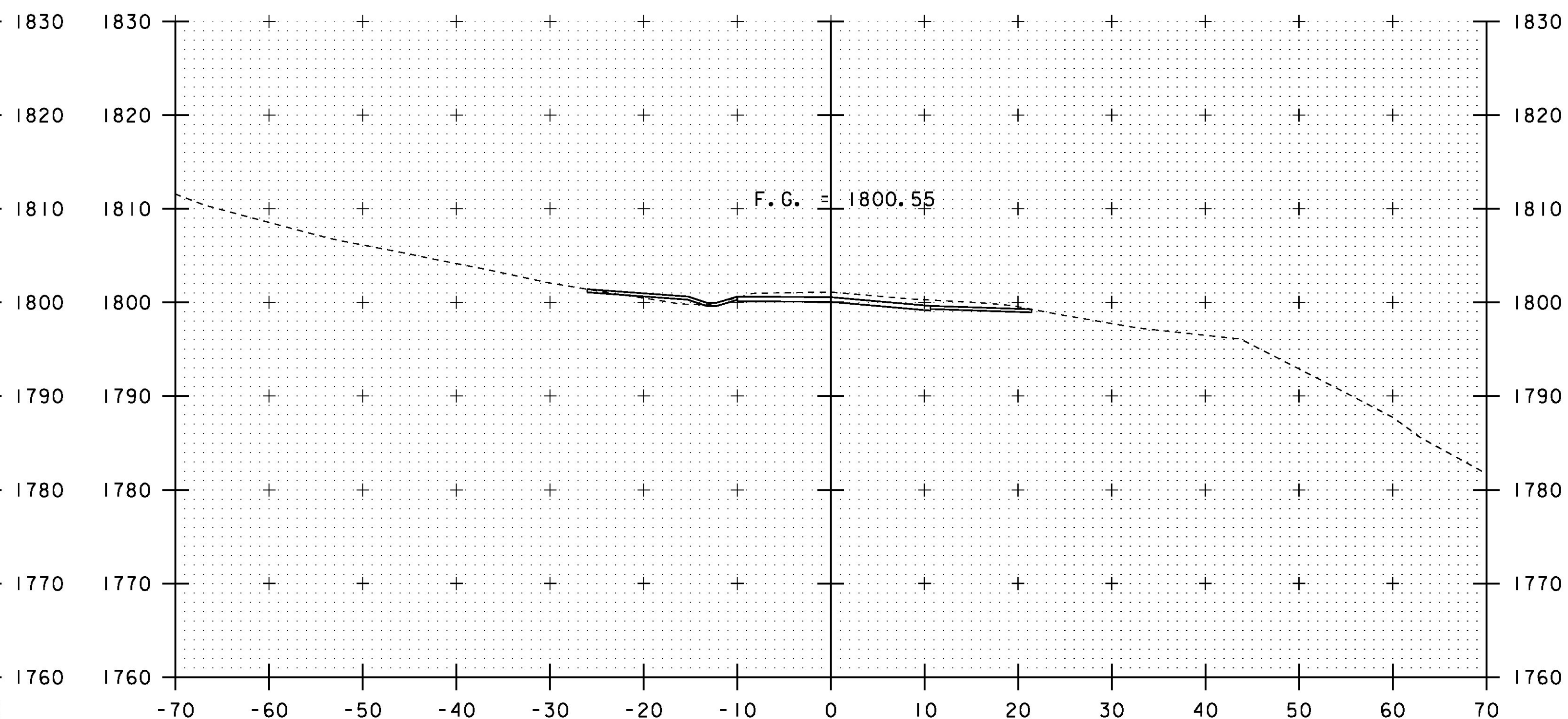
REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O	ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O			
DECK																																						
*	11	5	32'-0"	ES501	STR													22	5	28'-7"	2A501	STR																
*	▲	34	6	19'-3"	ES601	STR												40	5	24'-4"	2A502	STR																
																		38	5	14'-5"	2A503	STR																
																		* ▲	22	5	19'-0"	2A504	STR															
																		28	5	4'-11"	2A505	STR																
*	40	9	33'-11"	ES901	1	1'-3"	32'-0"										---	▲	7	5	16'-5"	2A506	STR															
																		▲	7	5	21'-0"	2A507	STR															
ABUTMENT #1																																						
																		*	46	8	14'-0"	2A801	STR															
																		26	5	6'-5"	2A508	17			2'-2"	2'-1"	2'-2"											
																		▲	9	5	6'-1"	2A509	19			2'-2"	3'-11"											
																		▲	9	5	5'-6"	2A510	19			2'-2"	3'-4"											
* ▲	23	5	16'-4"	1A504	STR													*	52	6	15'-8"	2A601	17			9'-7"	6'-1"	---										

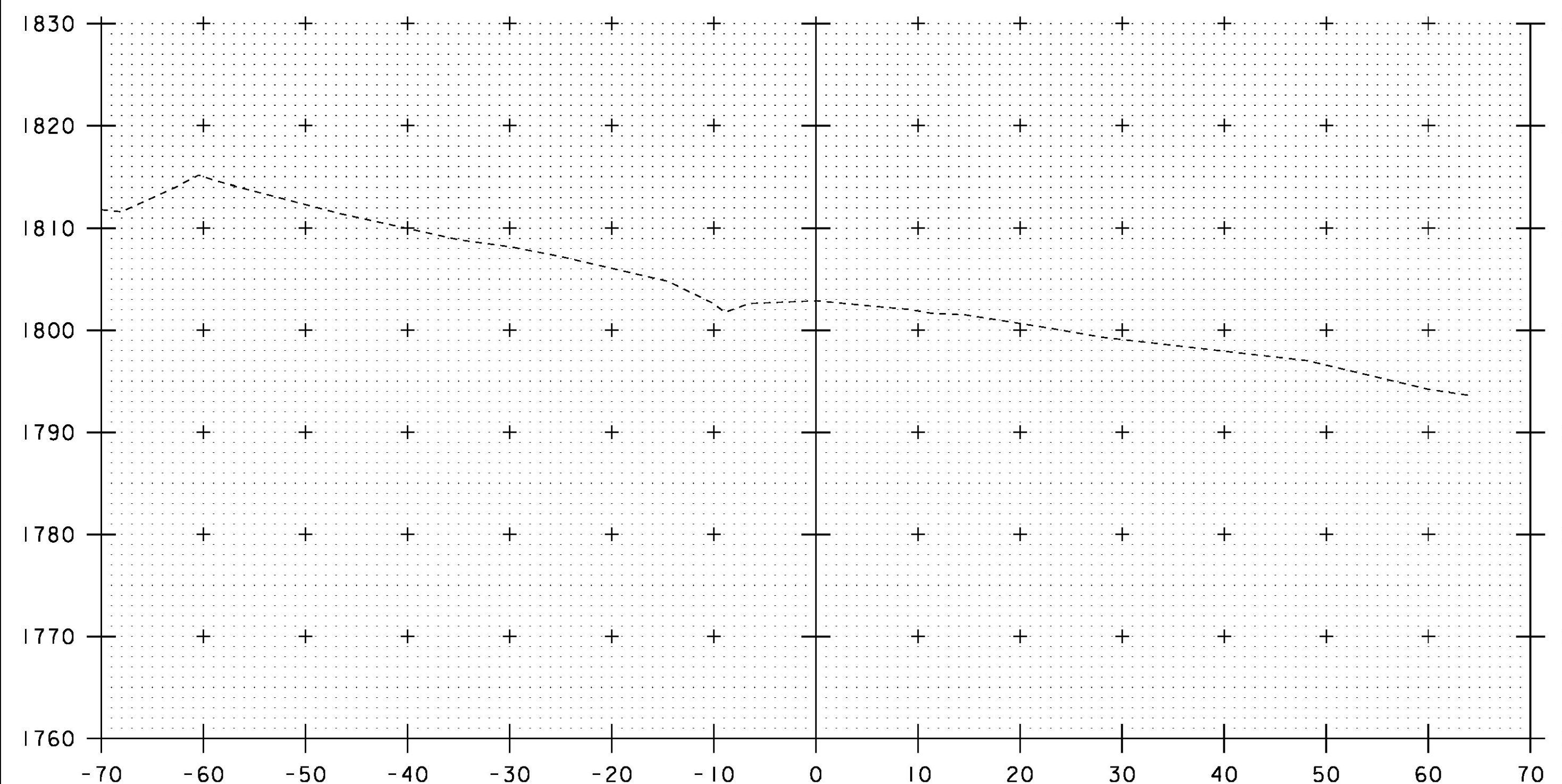


BEGIN APPROACH STA. 9+50.00

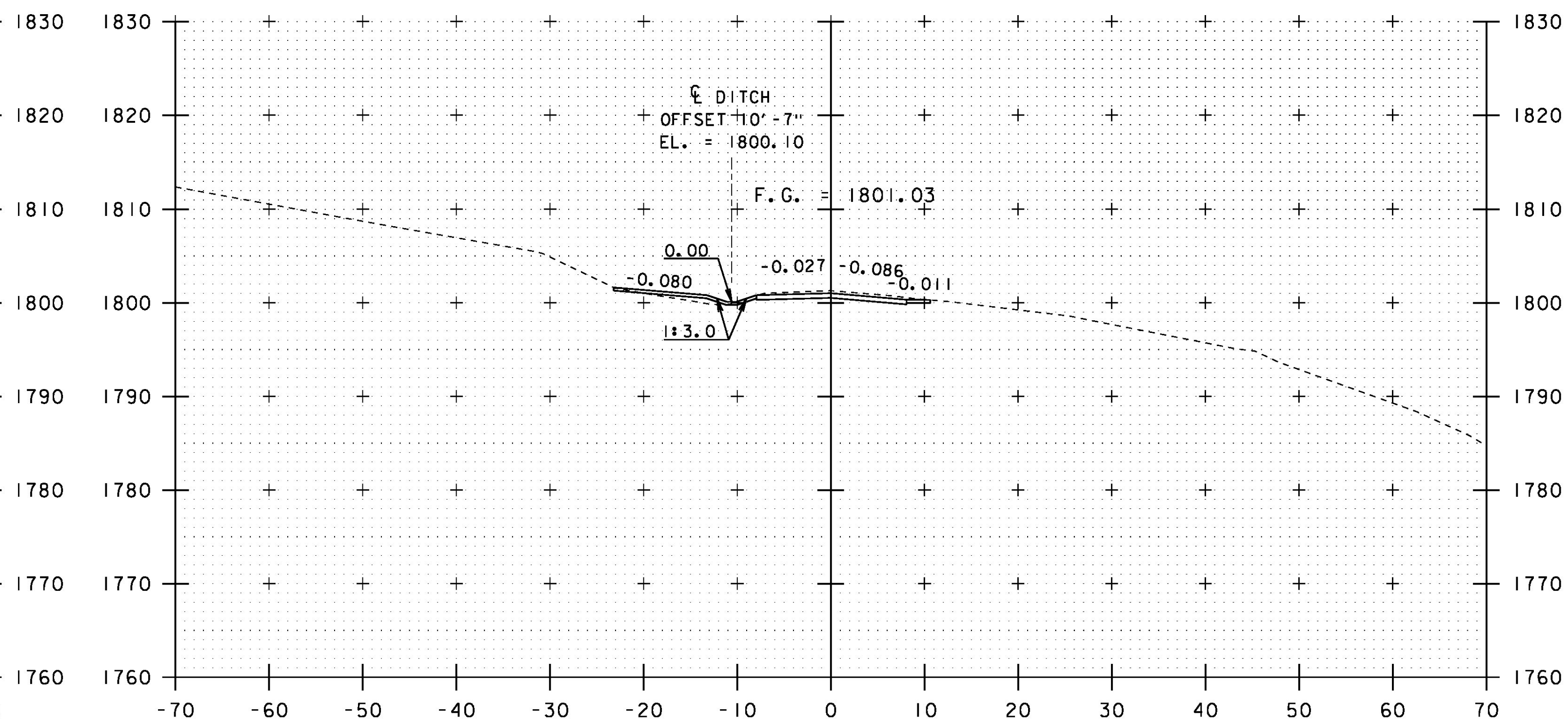
9+50



9+86 (125° SKEW)



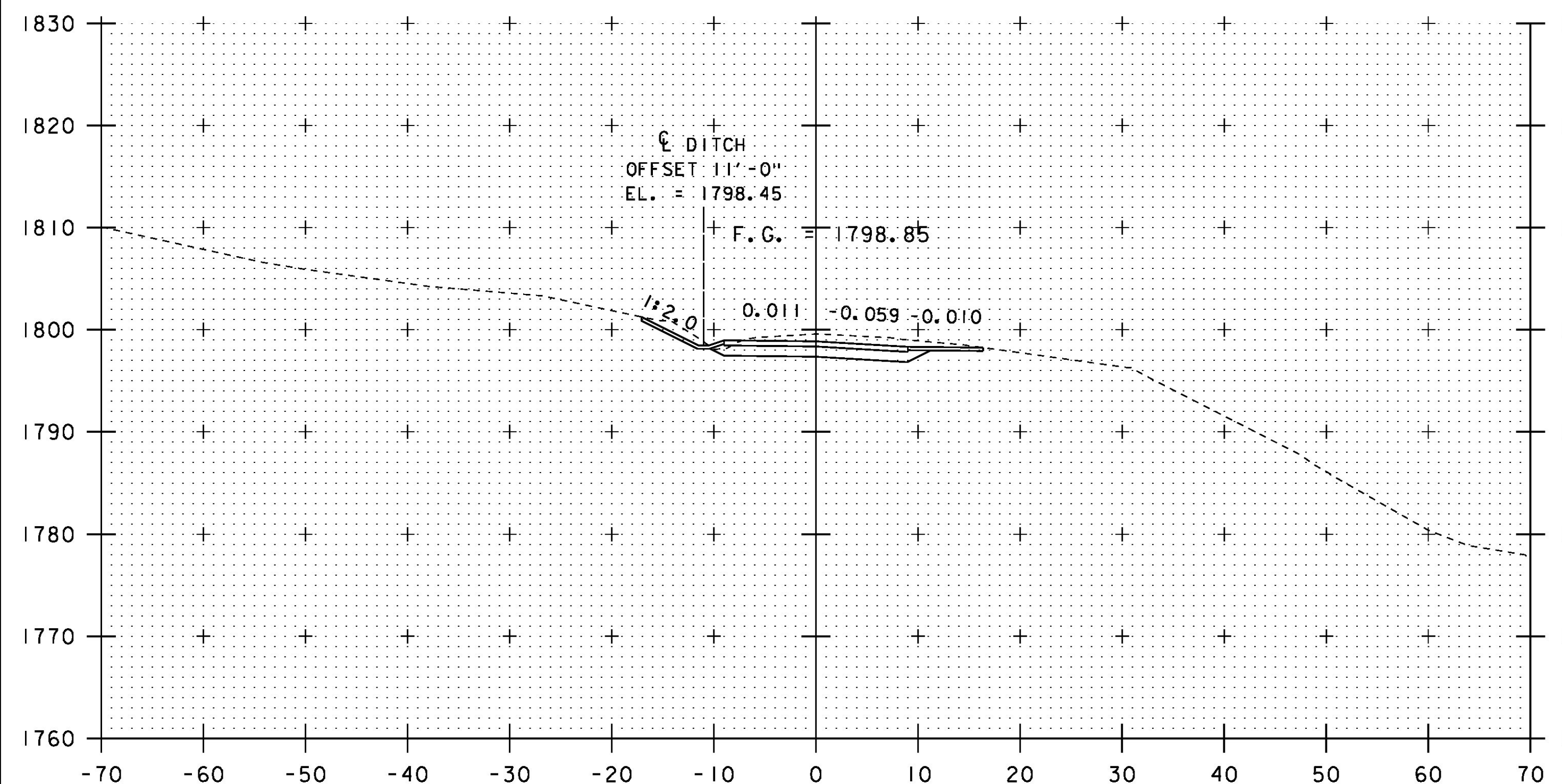
9+25



9+75

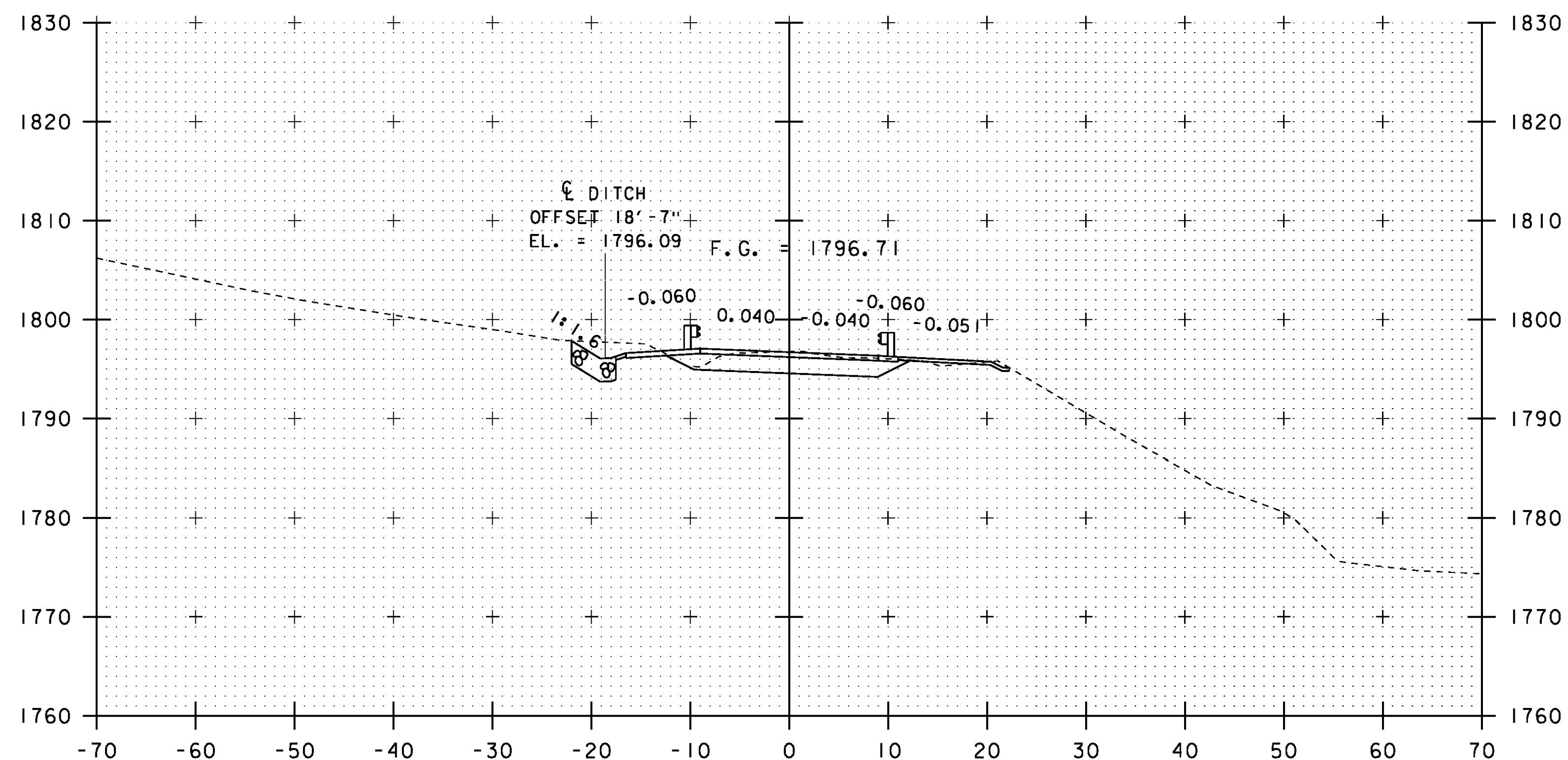
PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIĆ
FILE NAME:	s96j226xs.dgn	DESIGNED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
TH4 CROSS SECTIONS I			SHEET 27 OF 44

STA. 9+25 TO STA. 9+86

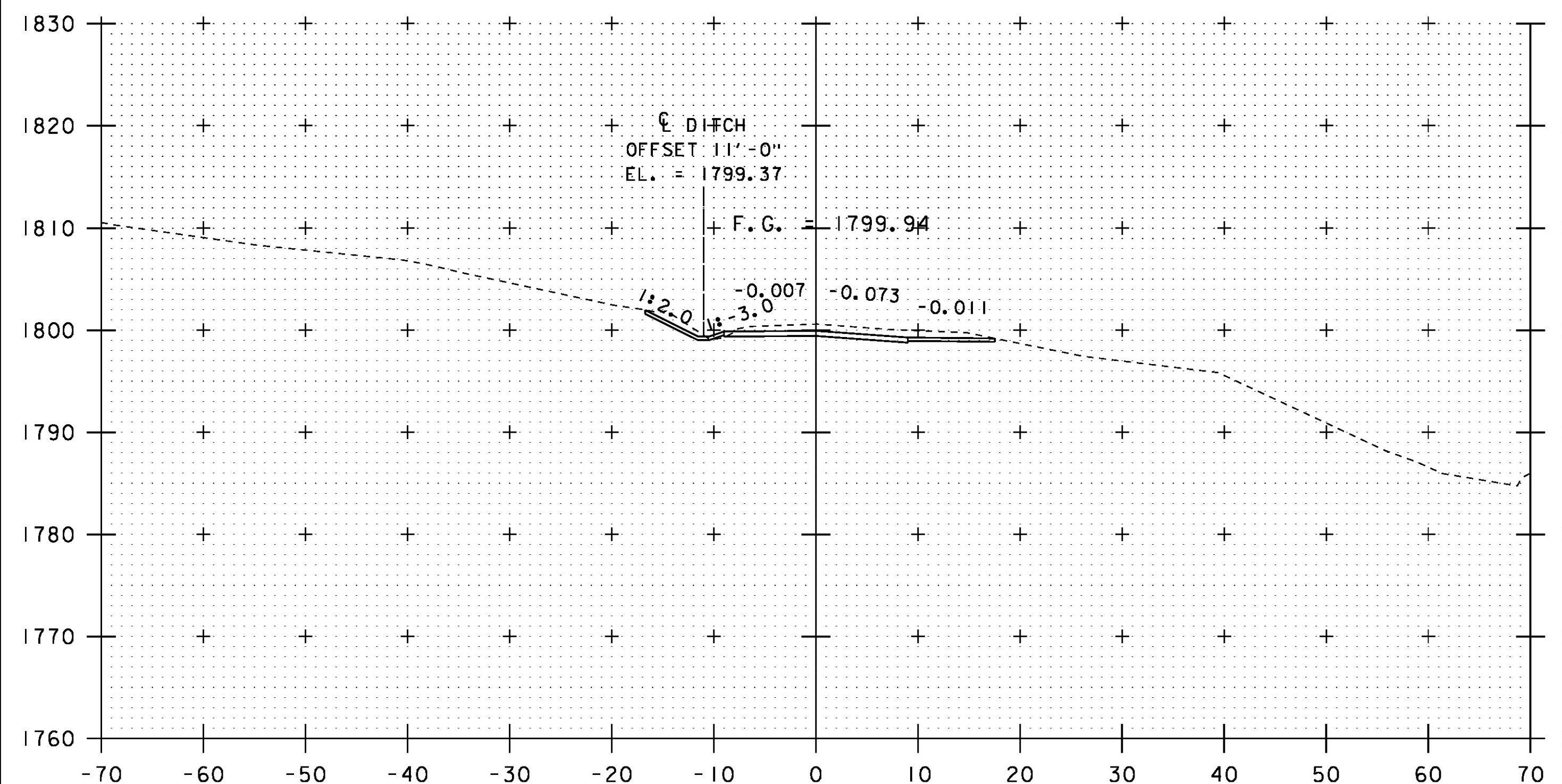


BEGIN PROJECT STA. 10+37.50

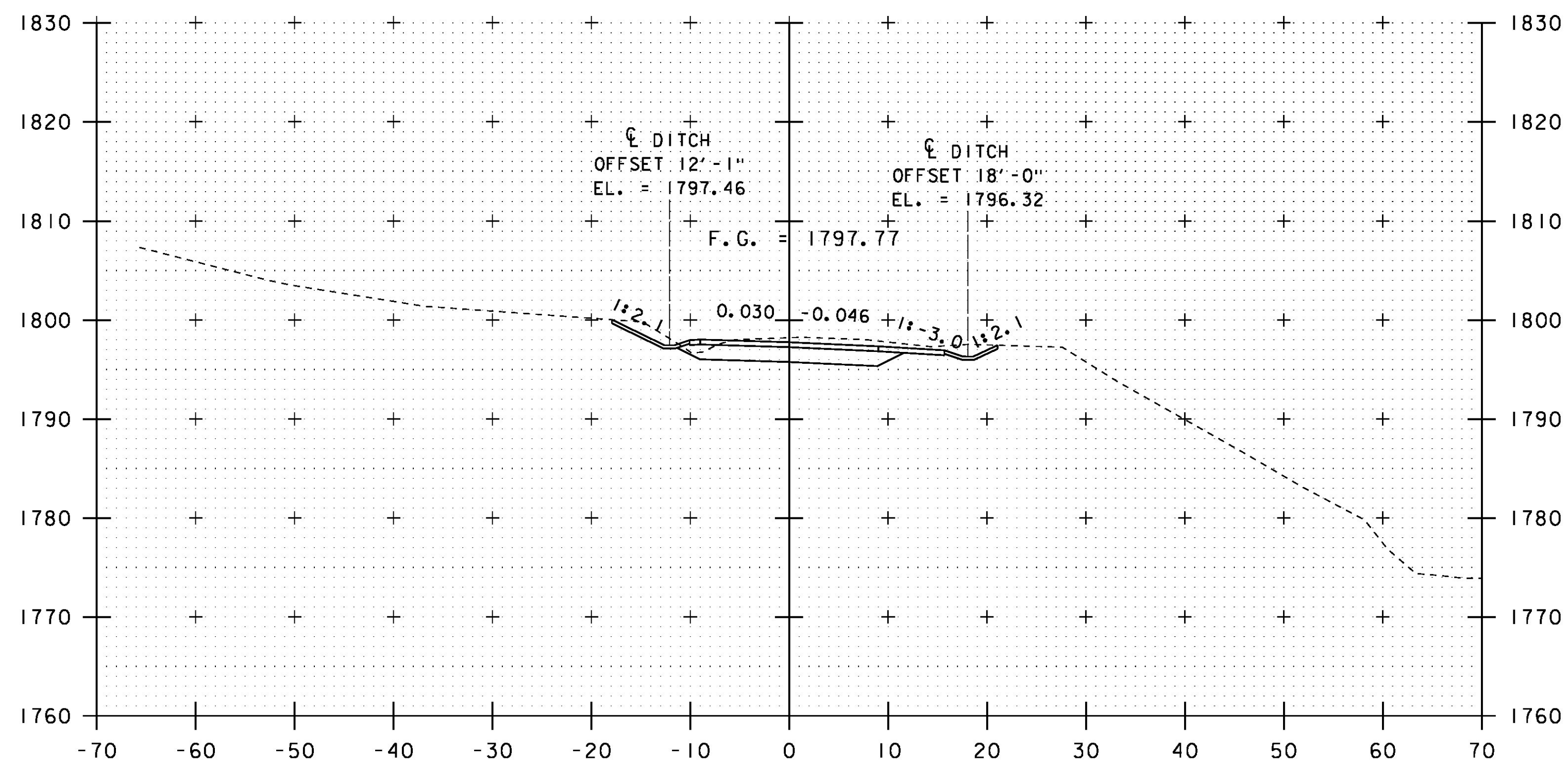
10+25



10+75



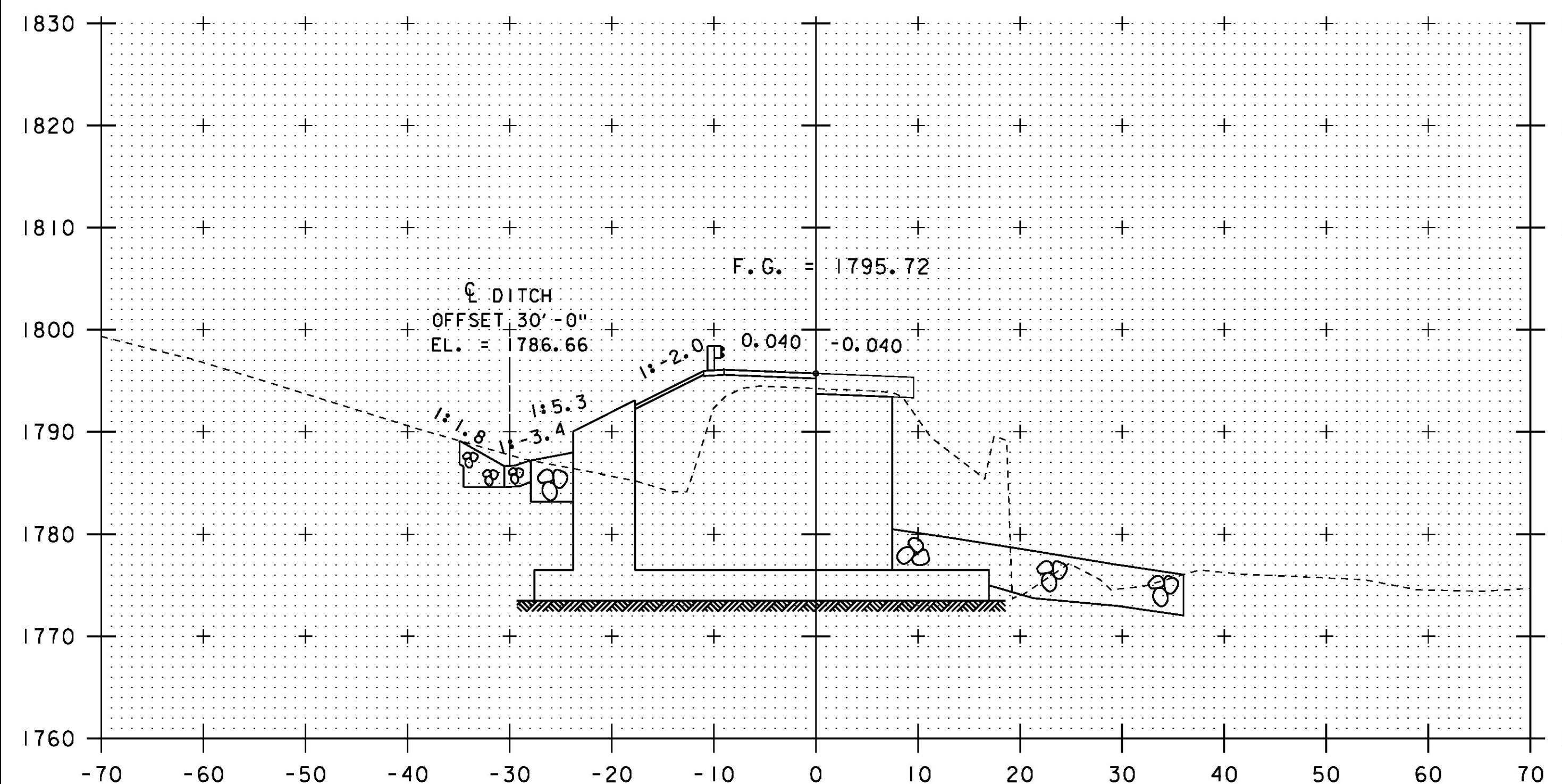
10+00



10+50

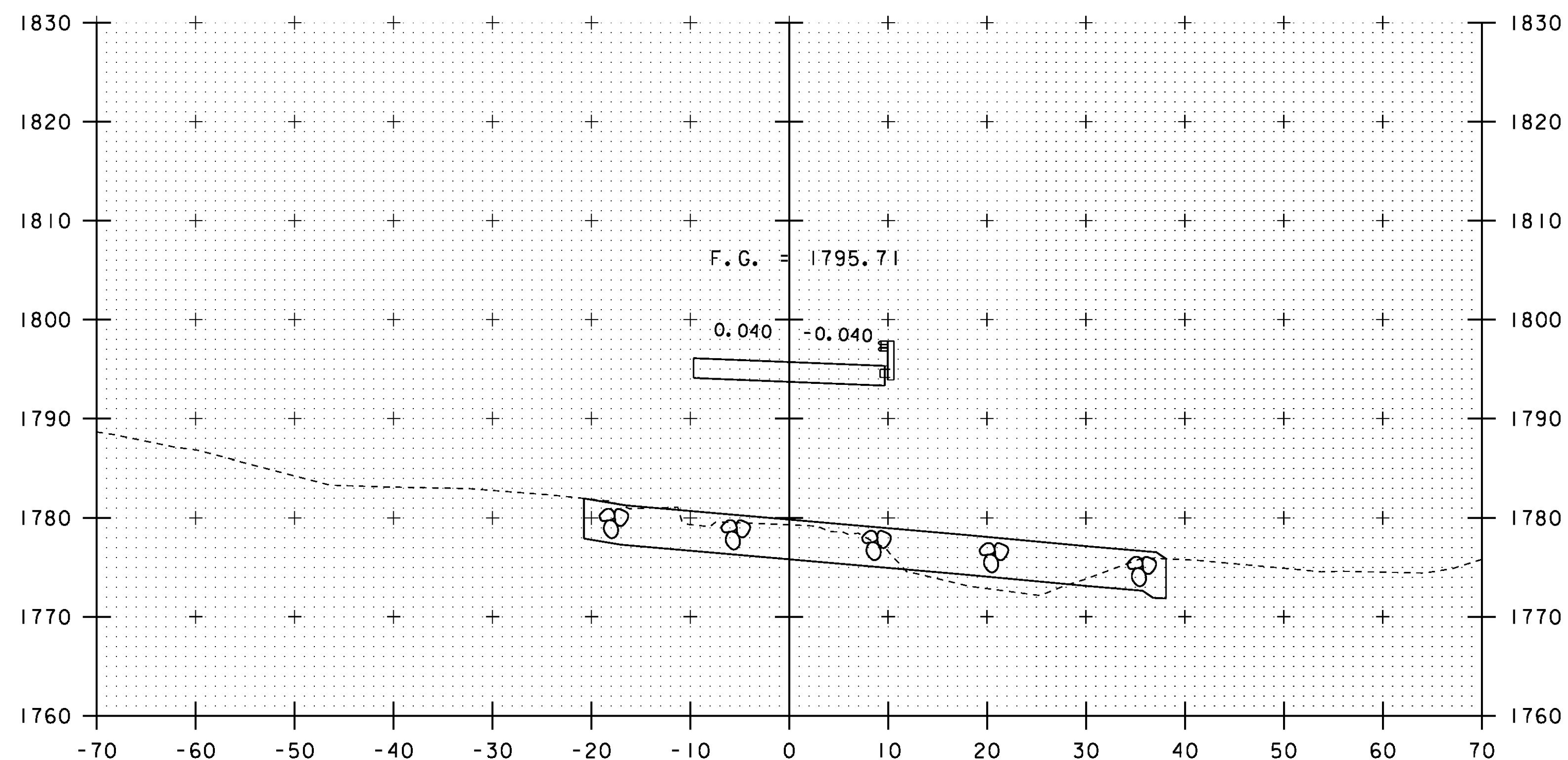
PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226xs.dgn	DESIGNED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
TH4 CROSS SECTIONS 2		SHEET	28 OF 44

STA. 10+00 TO STA. 10+75

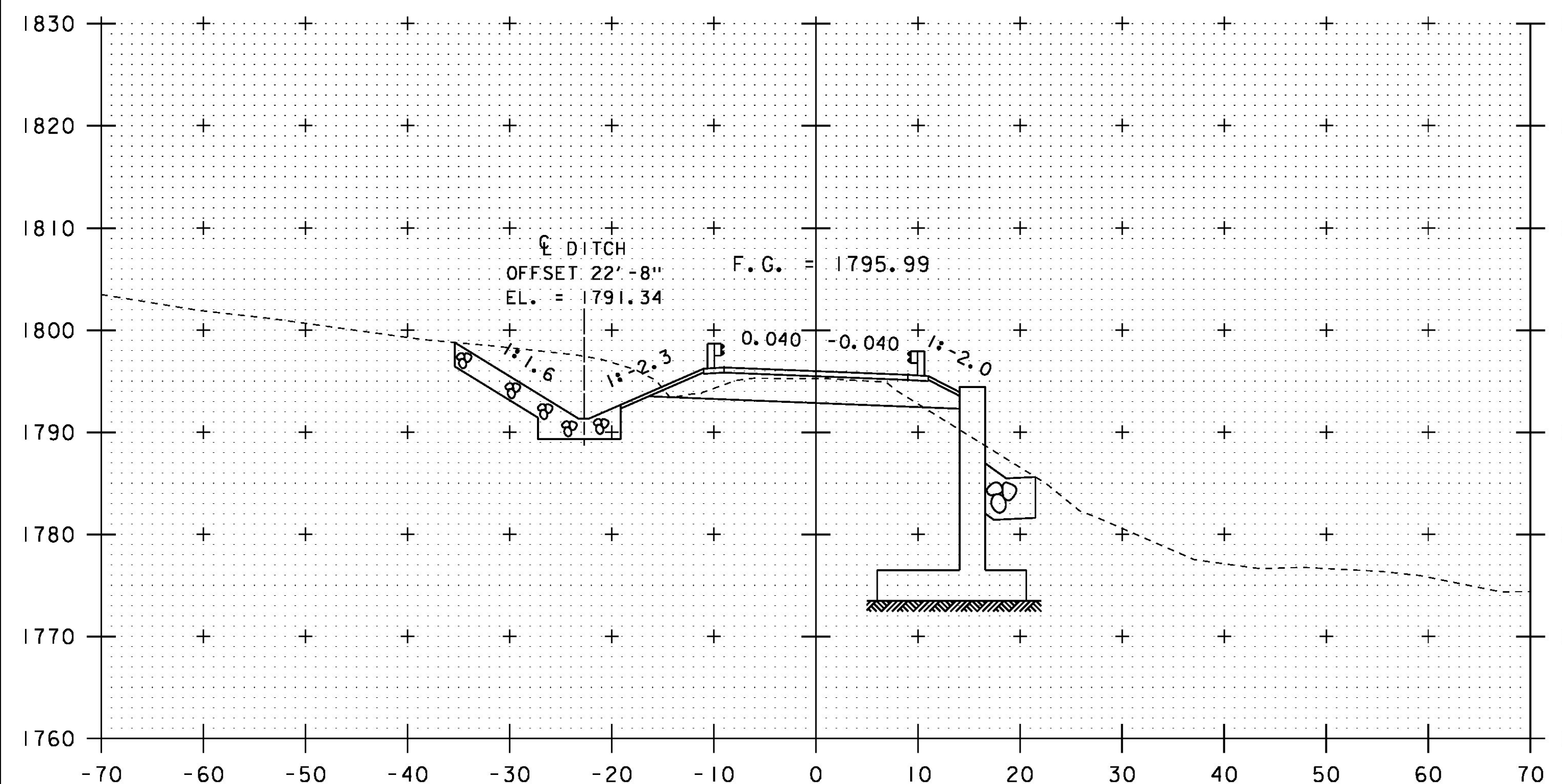


BEGIN BRIDGE STA. 11+22.00

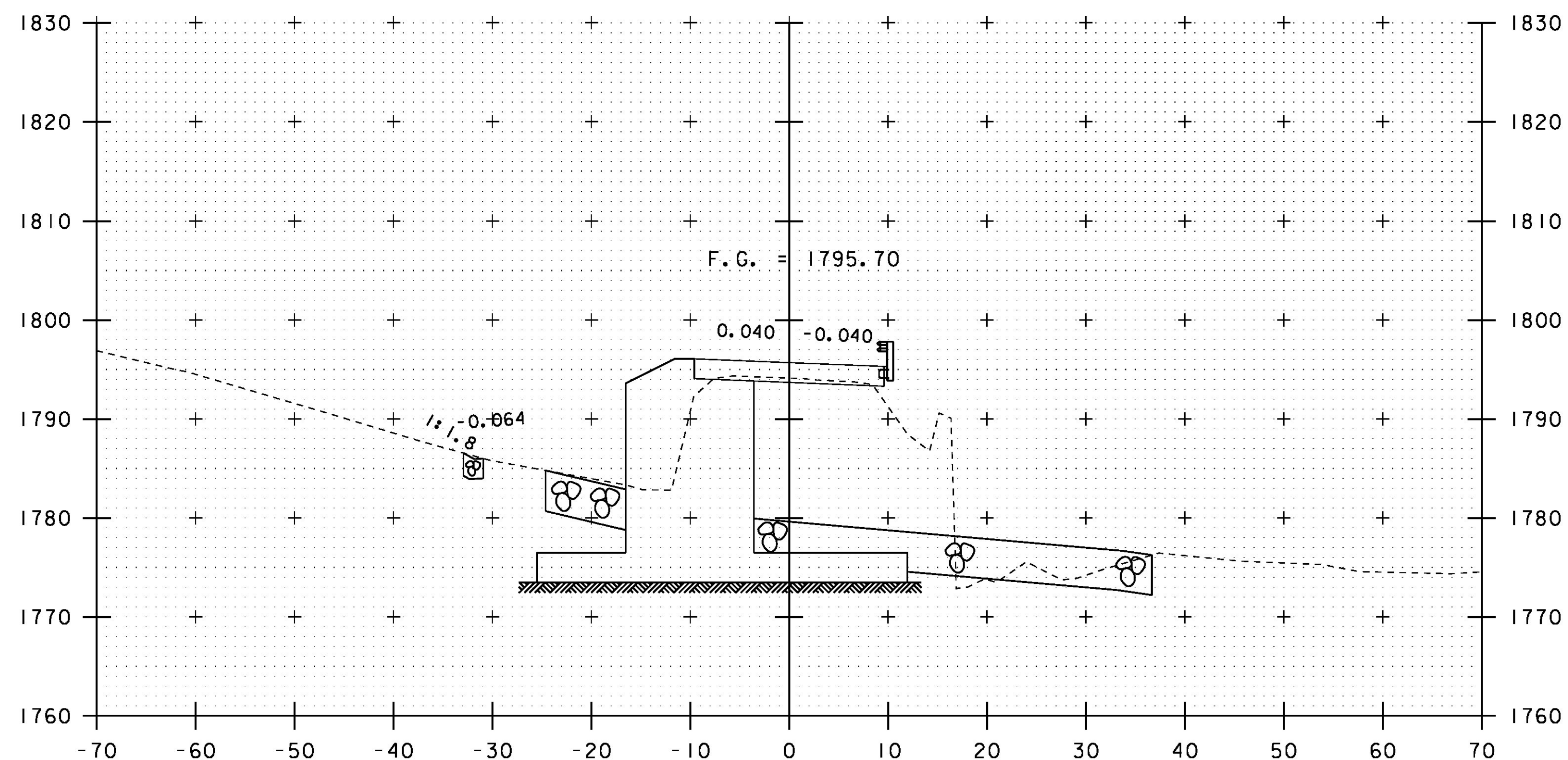
11+22



11+35



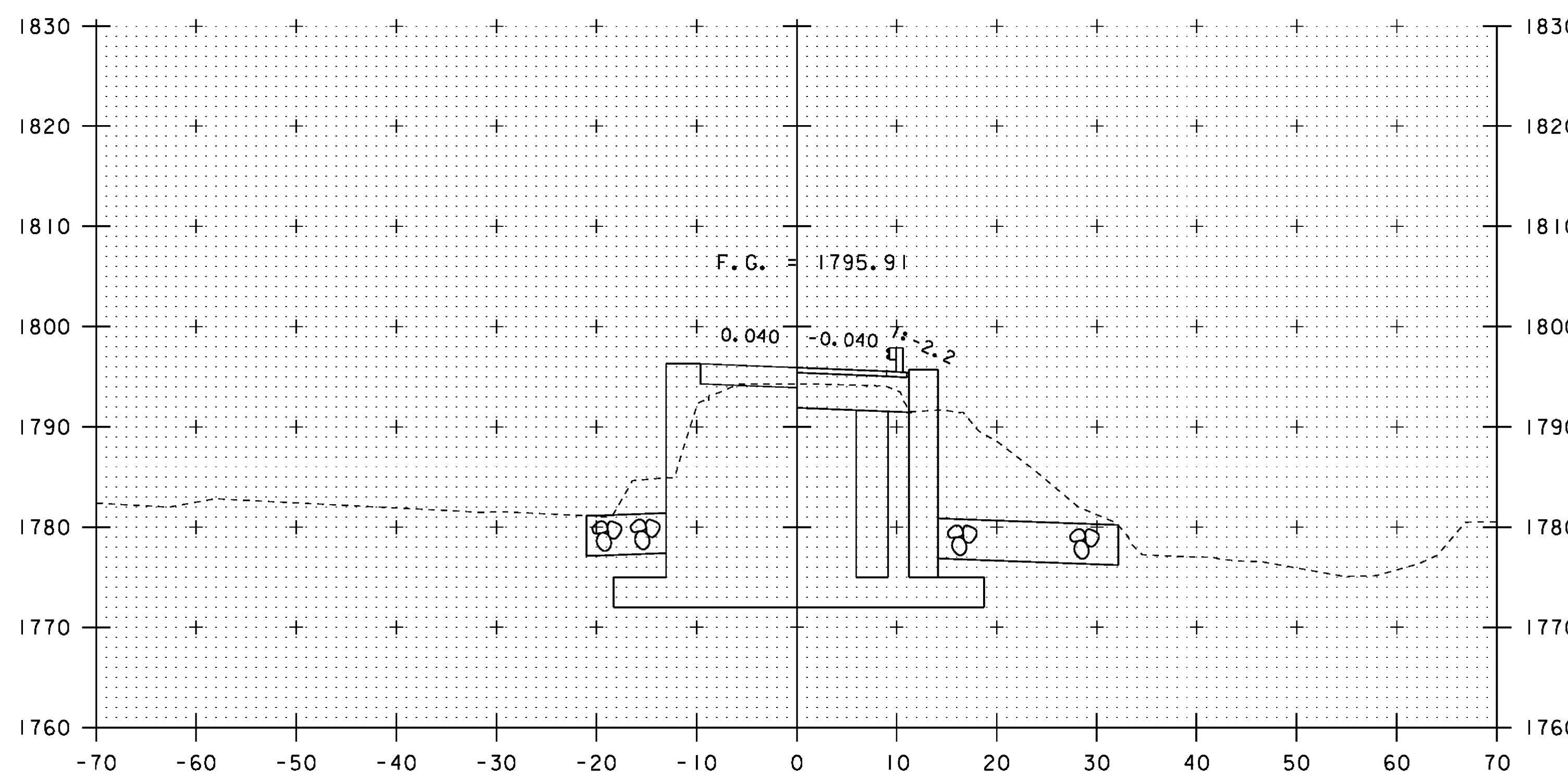
11+00



11+25

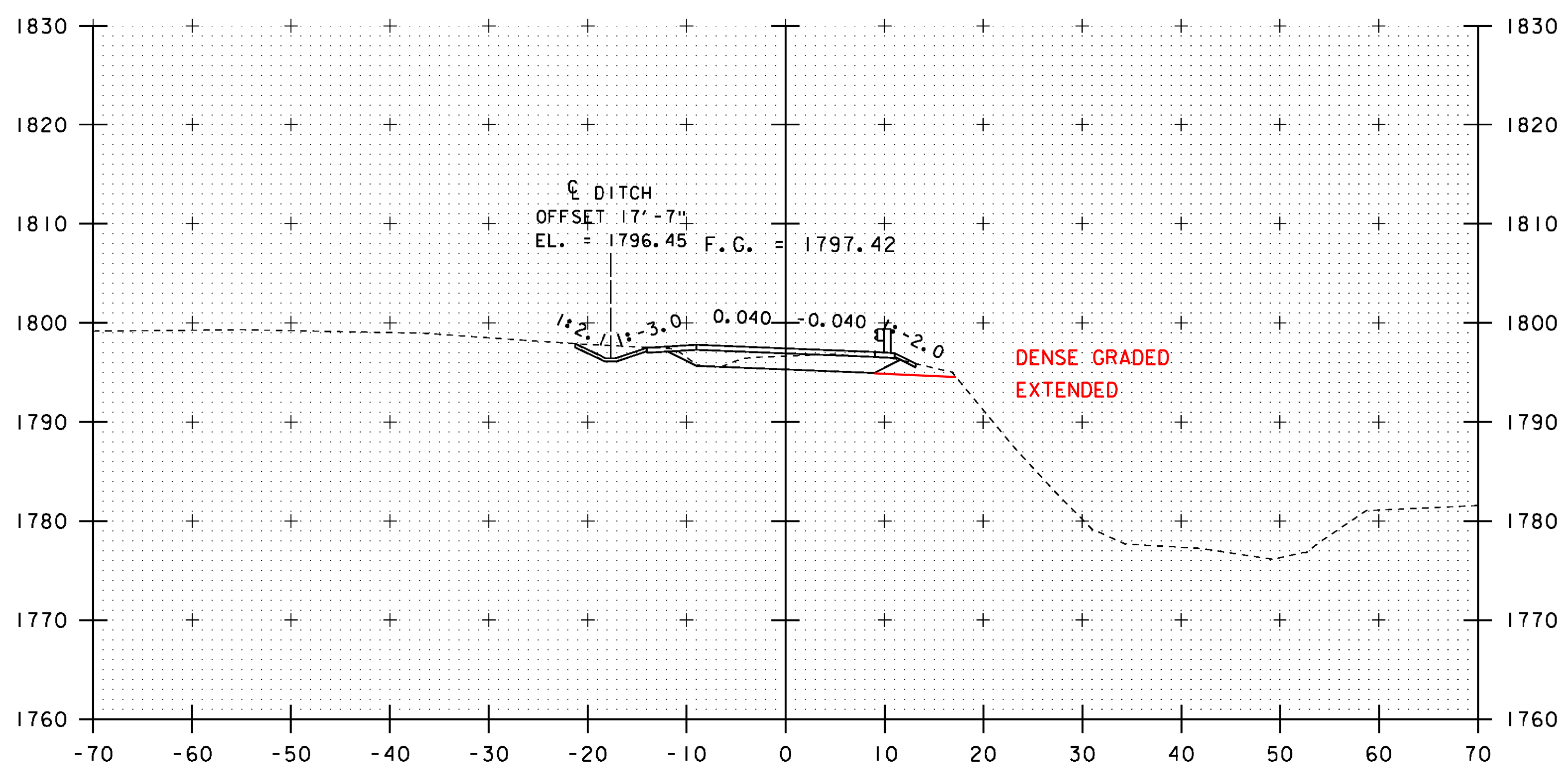
PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 144I(29)
FILE NAME:	s96j226xs.dgn
PROJECT LEADER:	C.W. CARLSON
DESIGNED BY:	H. SALLS
TH4 CROSS SECTIONS 3	
PLOT DATE:	03-DEC-2015
DRAWN BY:	D. KARABEGOVIĆ
CHECKED BY:	H. SALLS
SHEET	29 OF 44

STA. 11+00 TO STA. 11+35

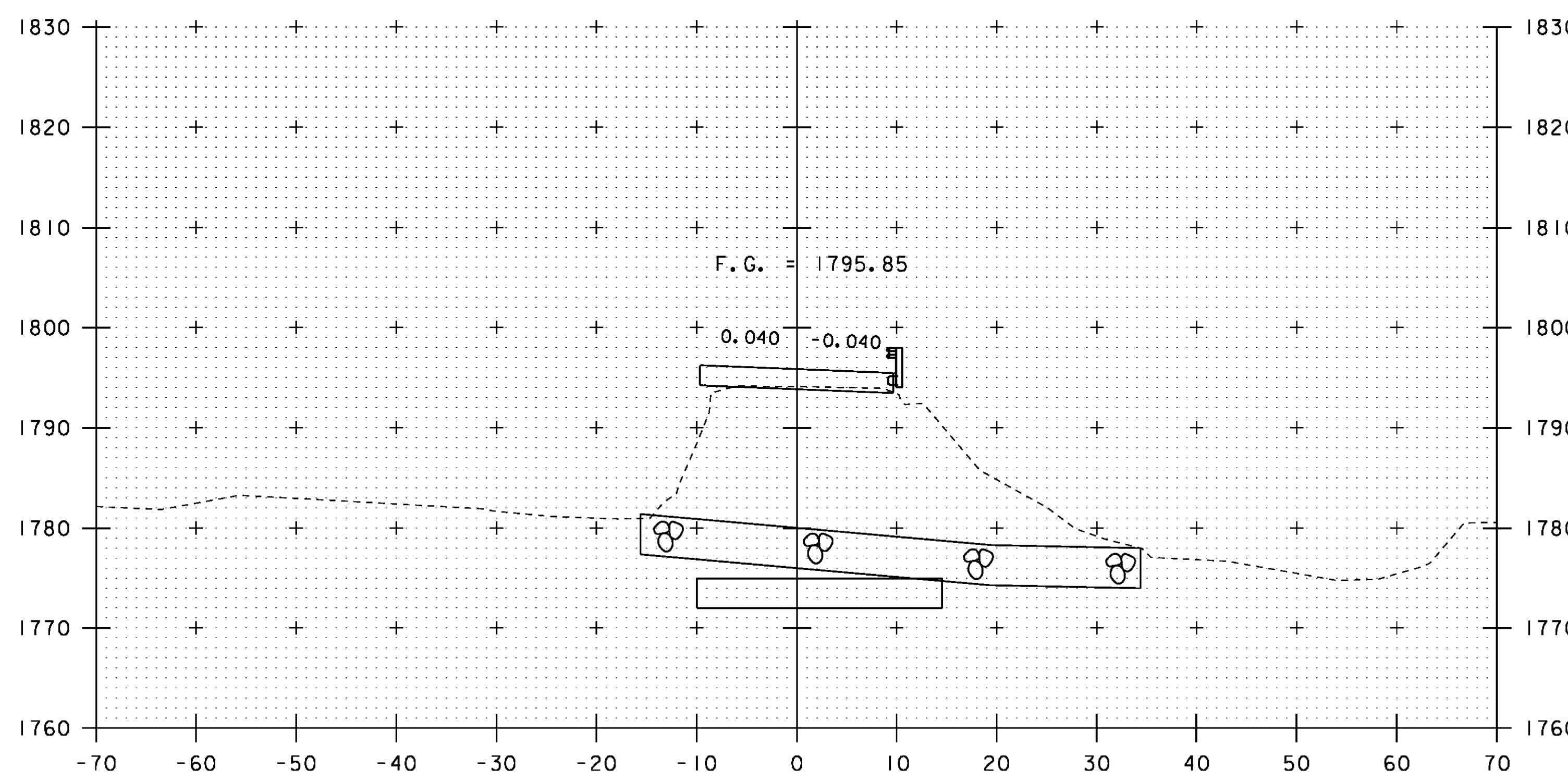


END BRIDGE STA. 11+54.50

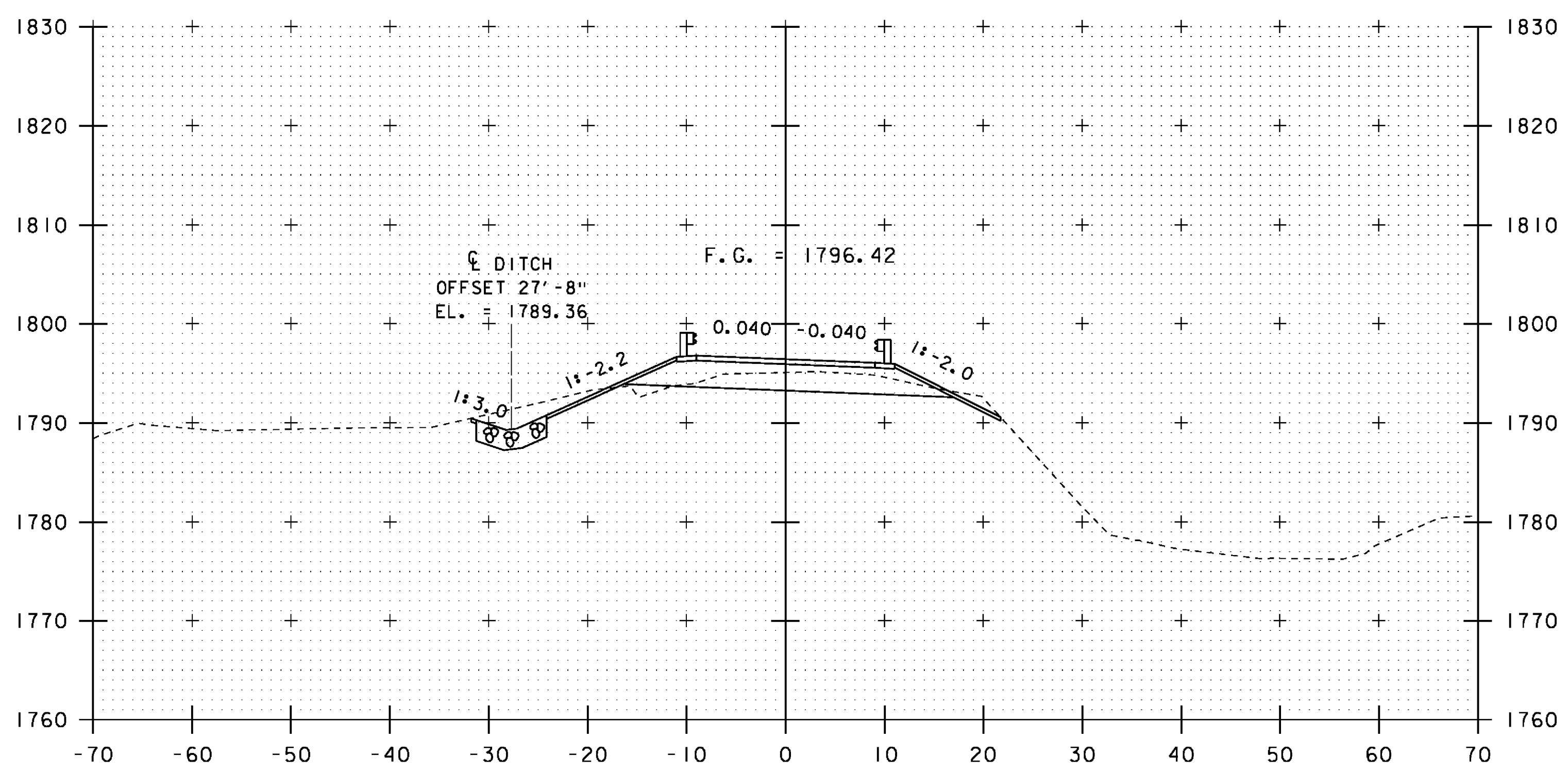
11+54



12+00



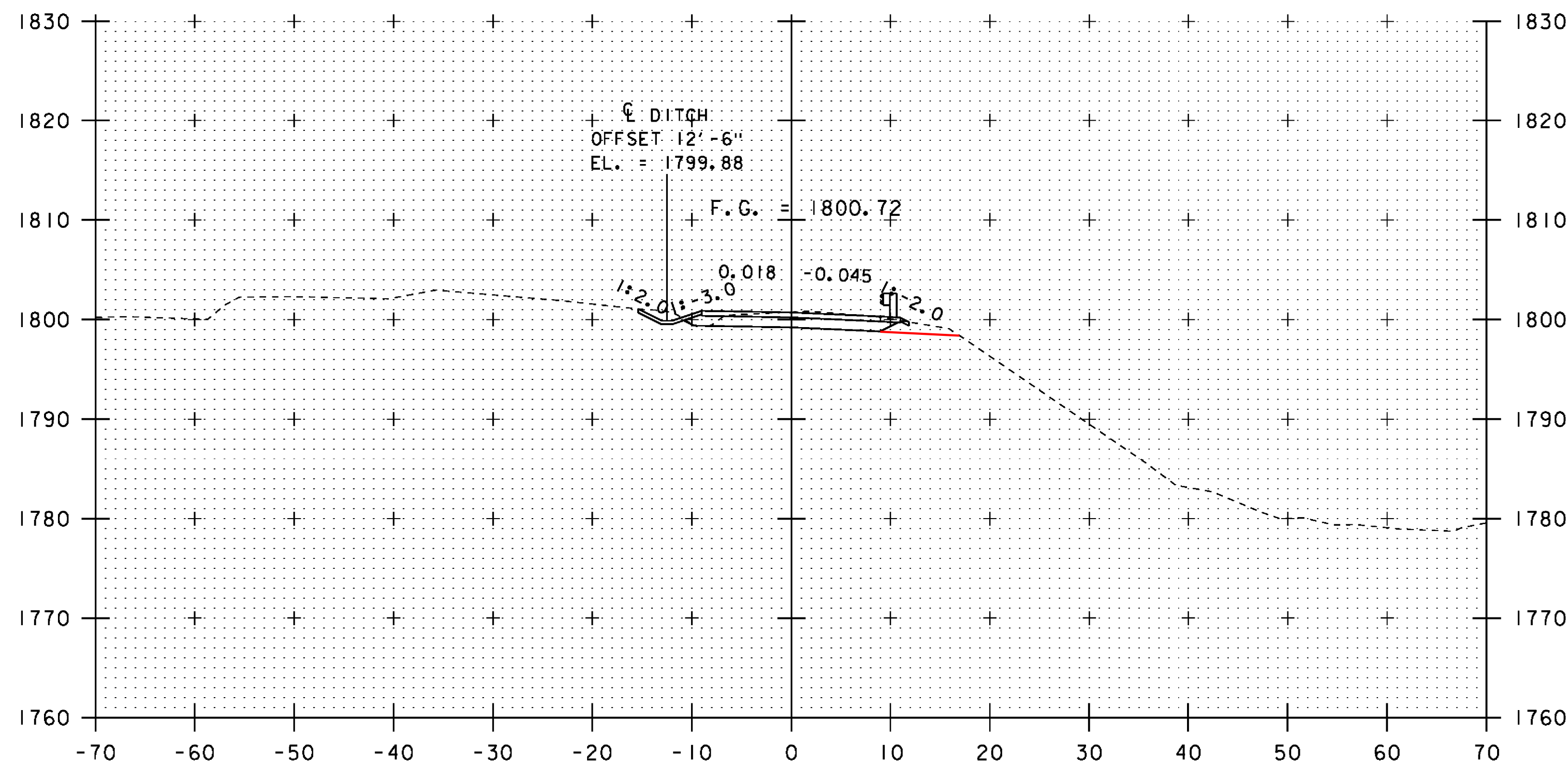
11+50



11+75

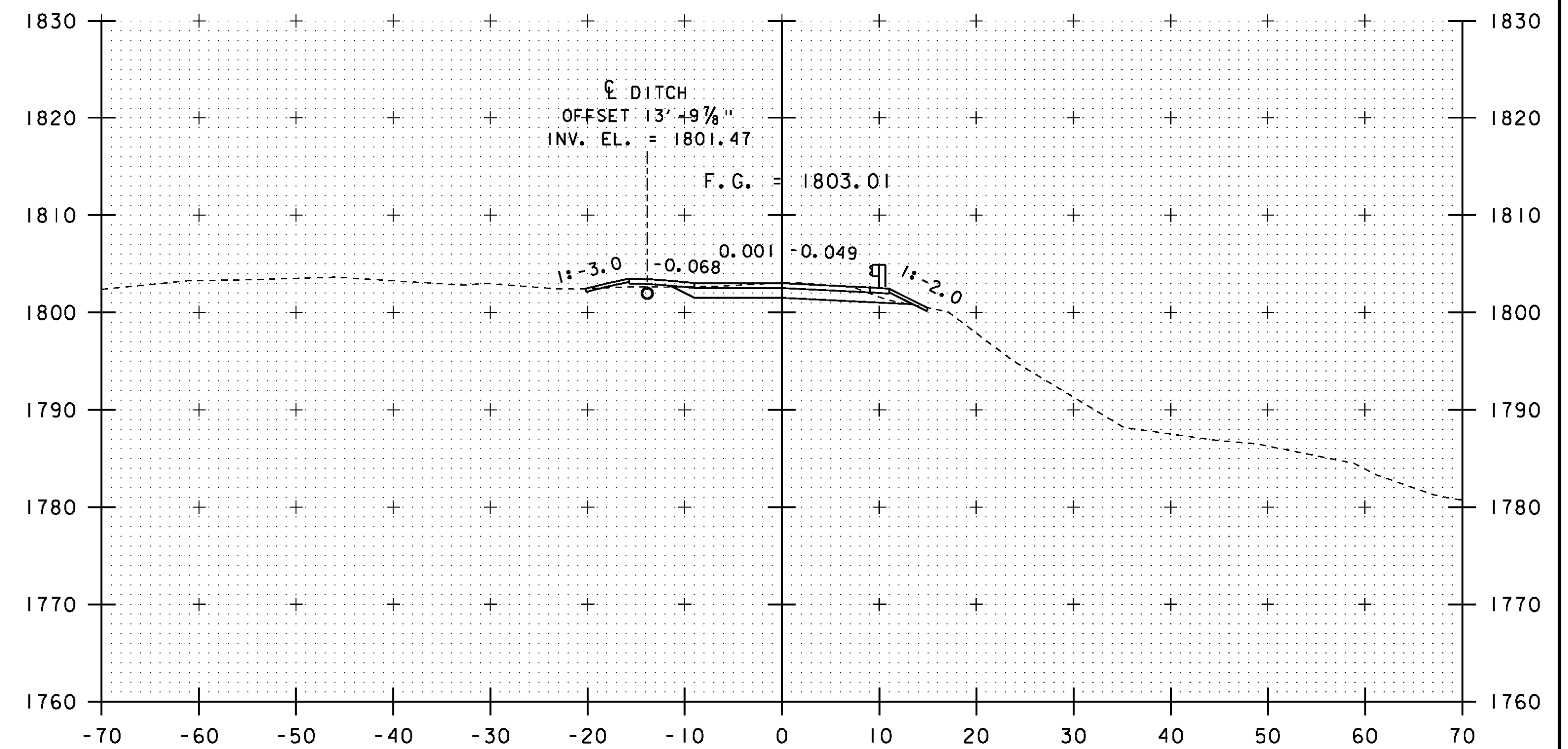
STA. 11+50 TO STA. 12+00

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226xs.dgn	DESIGNED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
TH4 CROSS SECTIONS 4		SHEET	30 OF 44

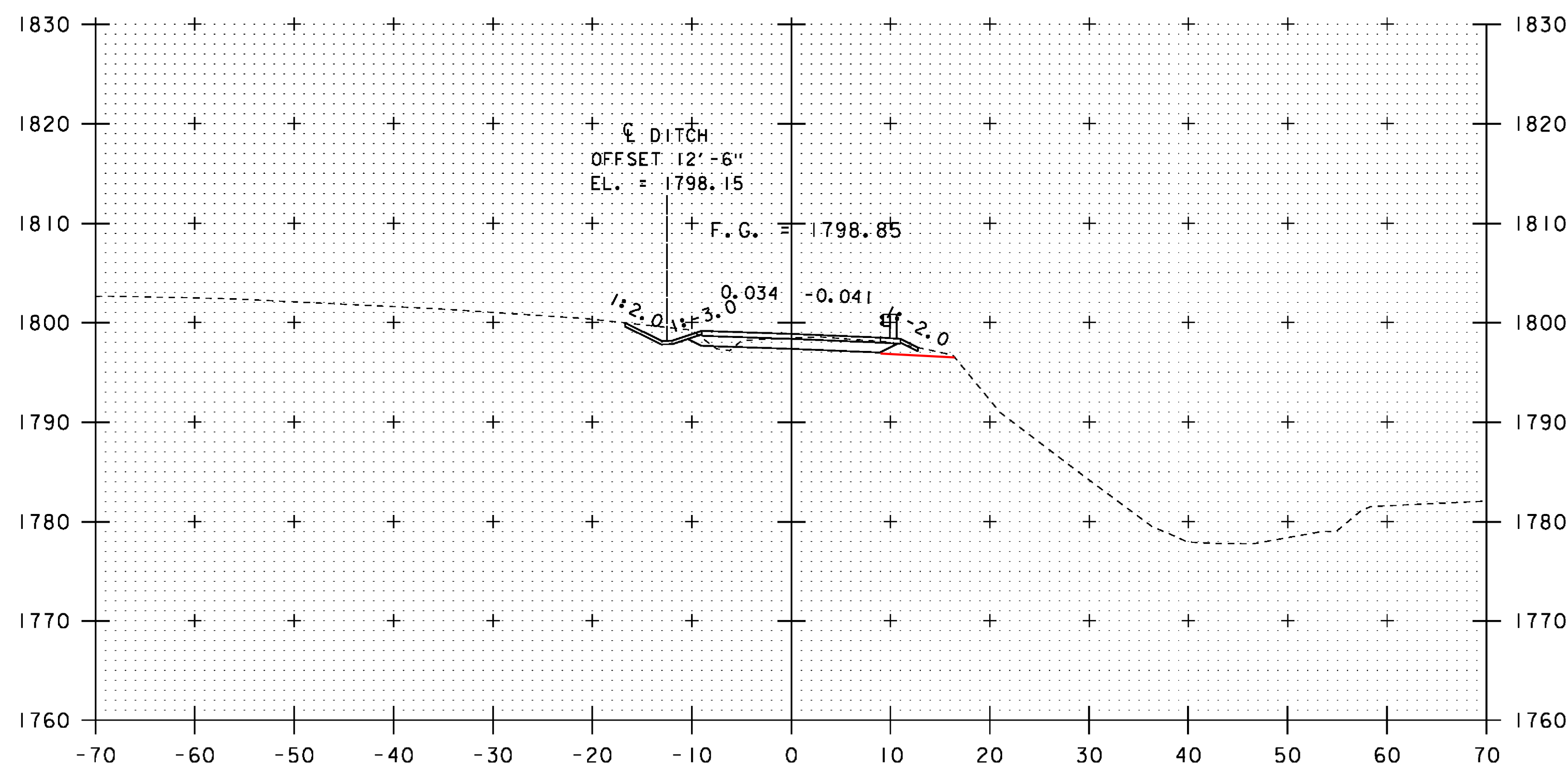


END PROJECT STA. 12+62.50

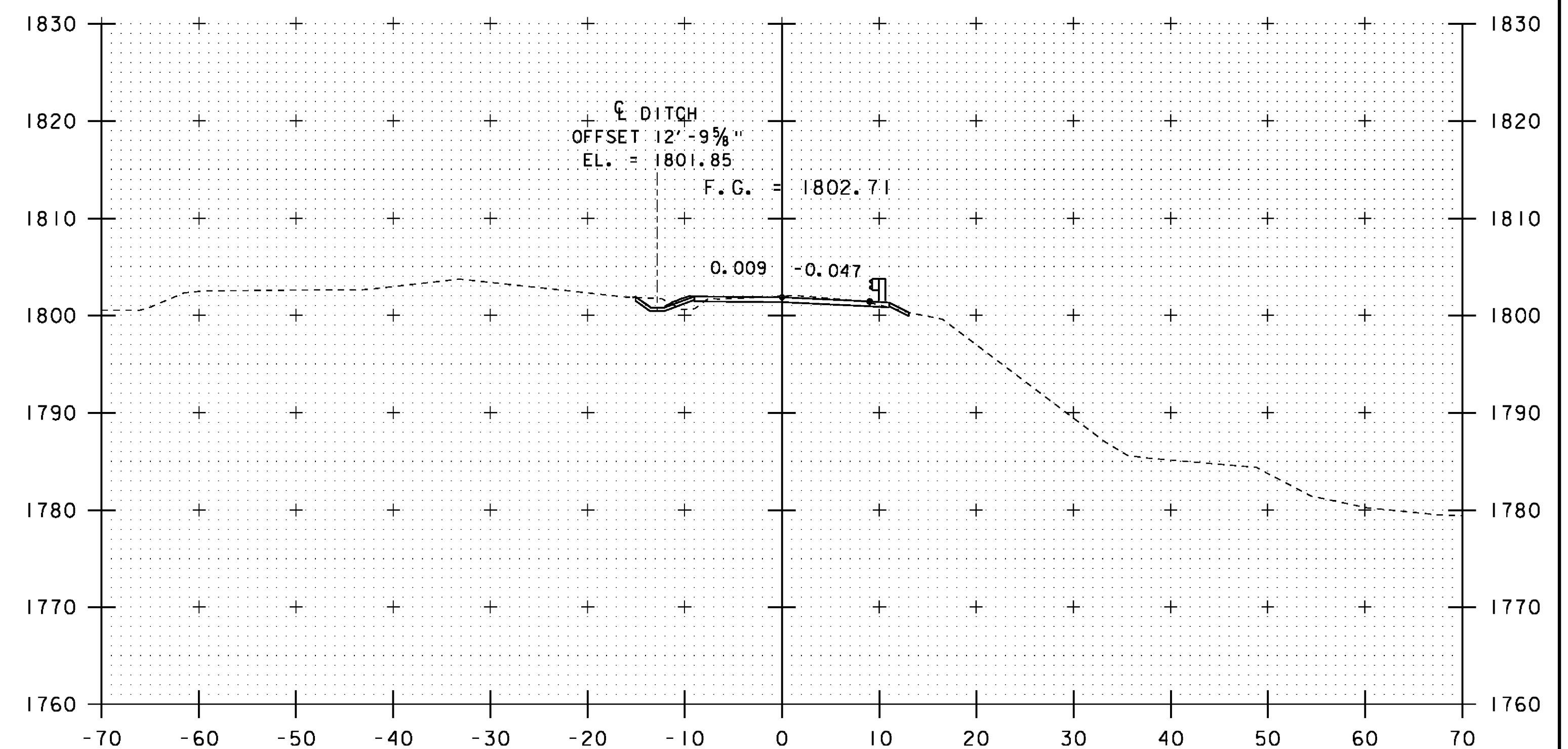
12+50



12+75



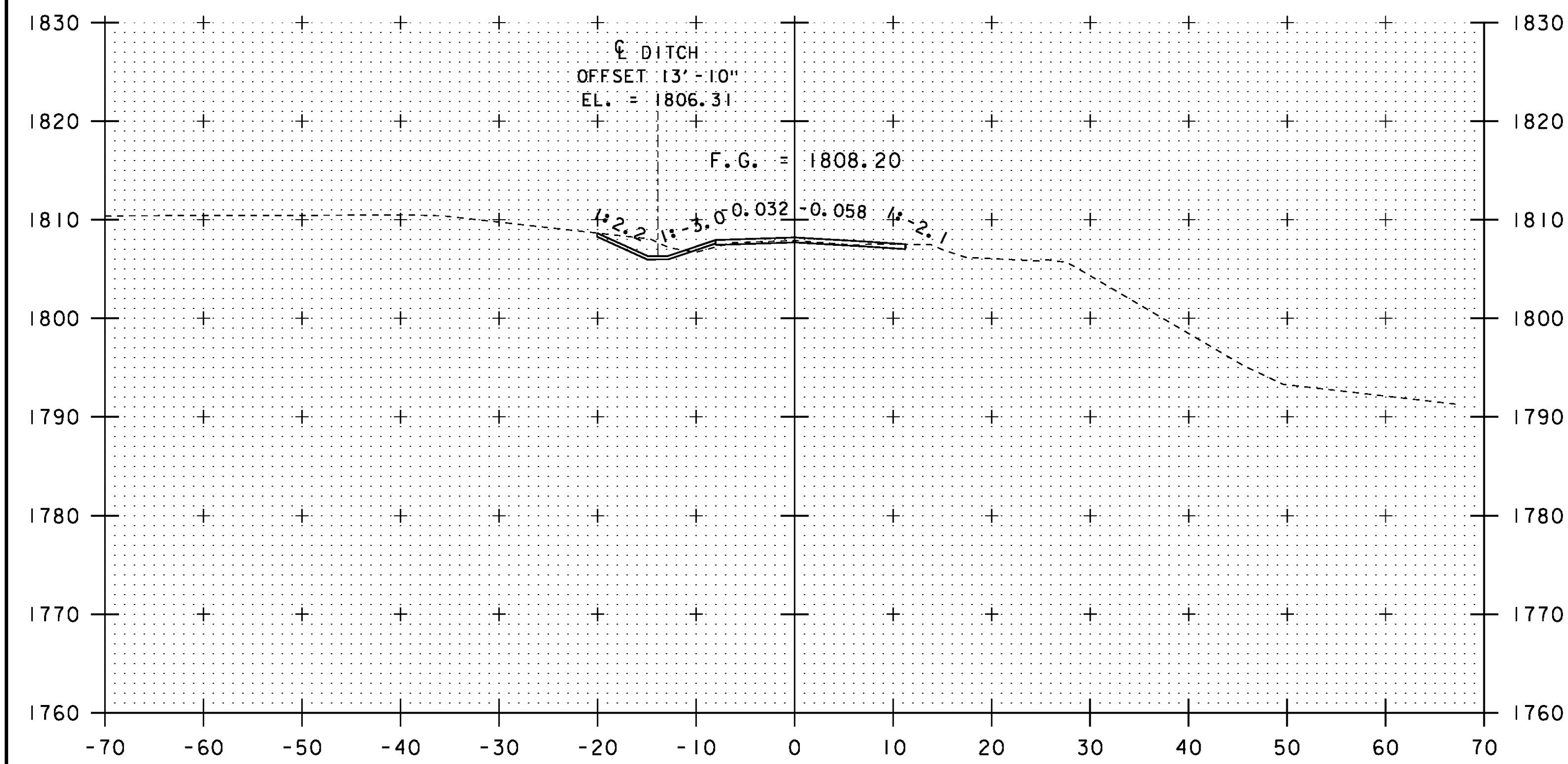
12+25



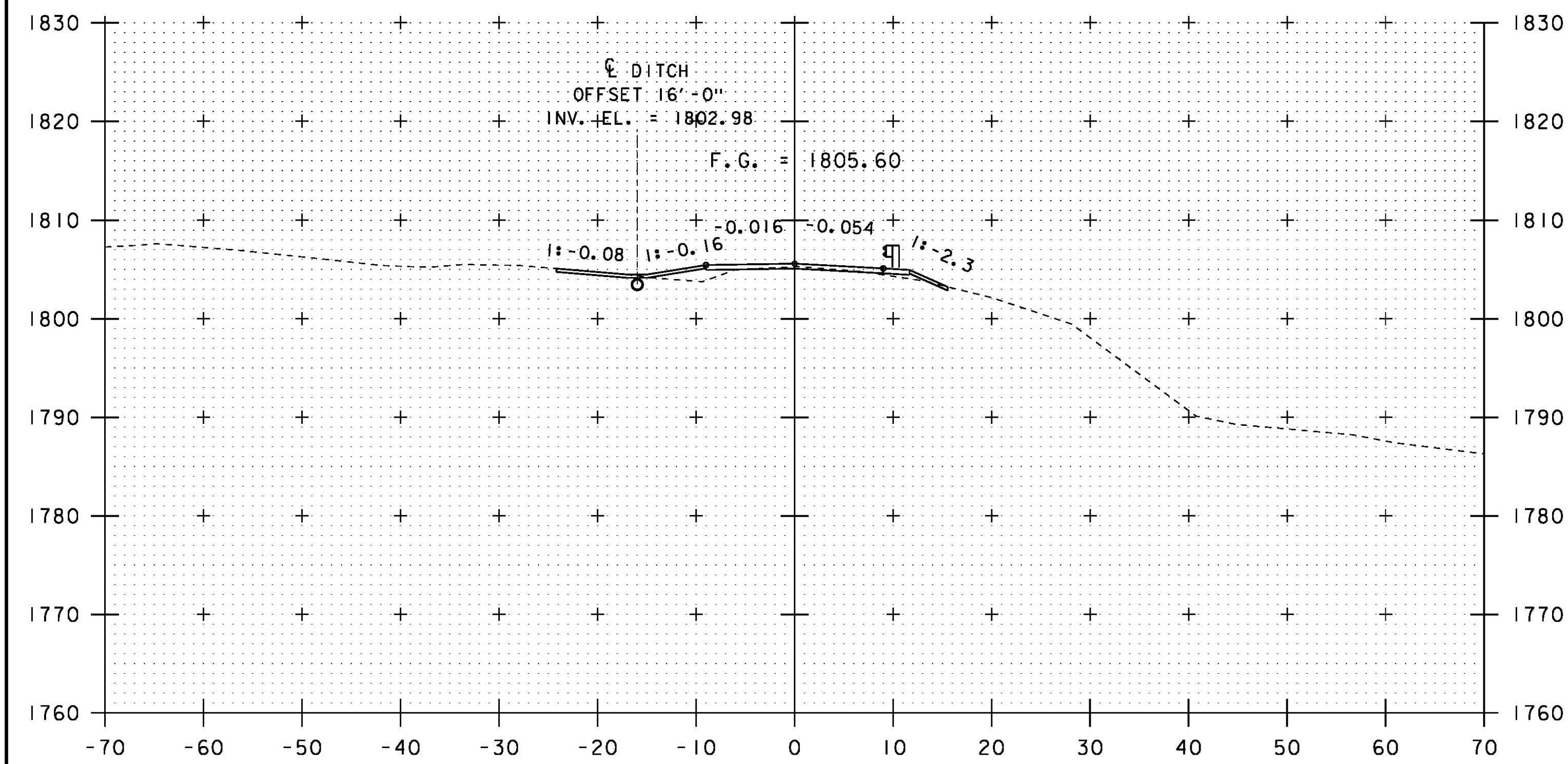
12+63

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226xs.dgn	CHECKED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	TH4 CROSS SECTIONS	SHEET 31 OF 44
DESIGNED BY:	H. SALLS		

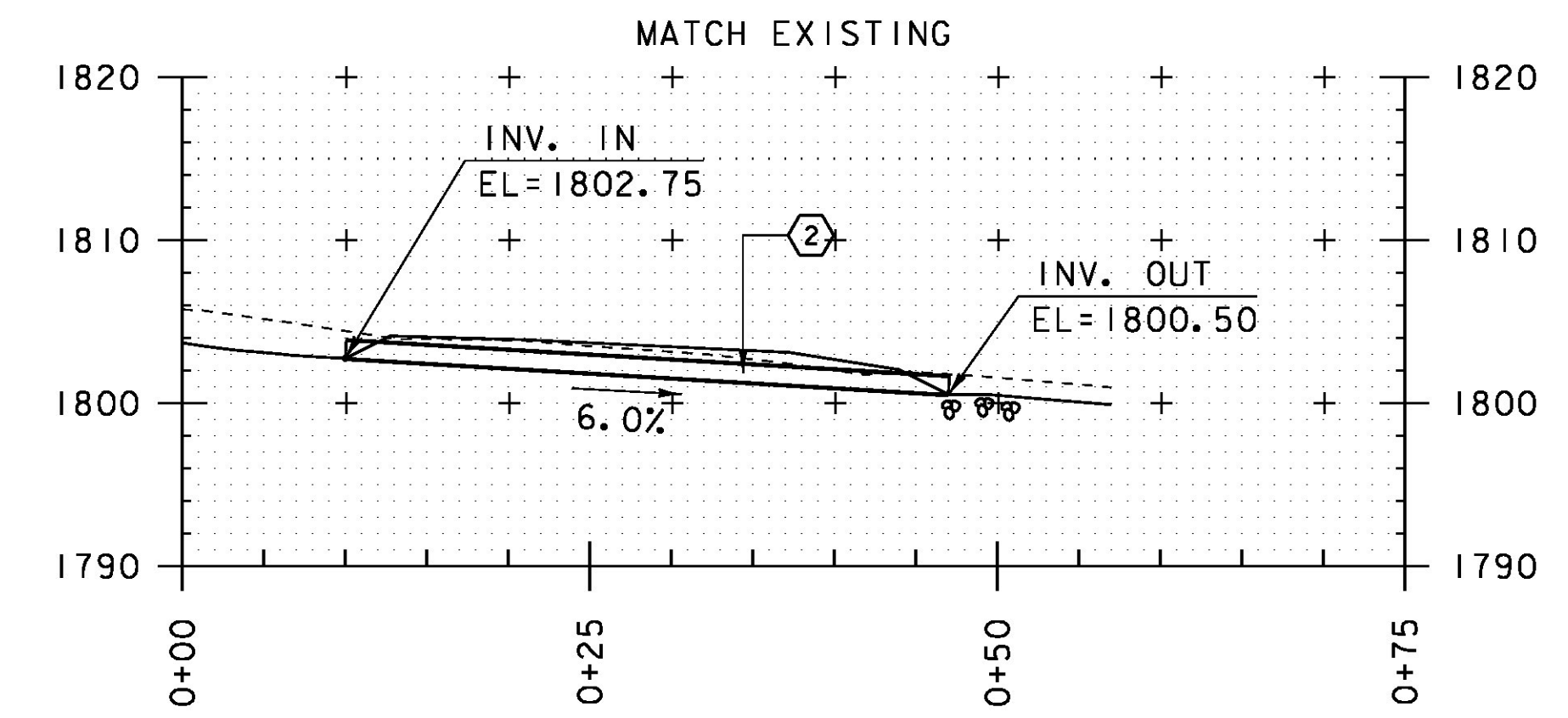
STA. 12+25 TO STA. 12+75



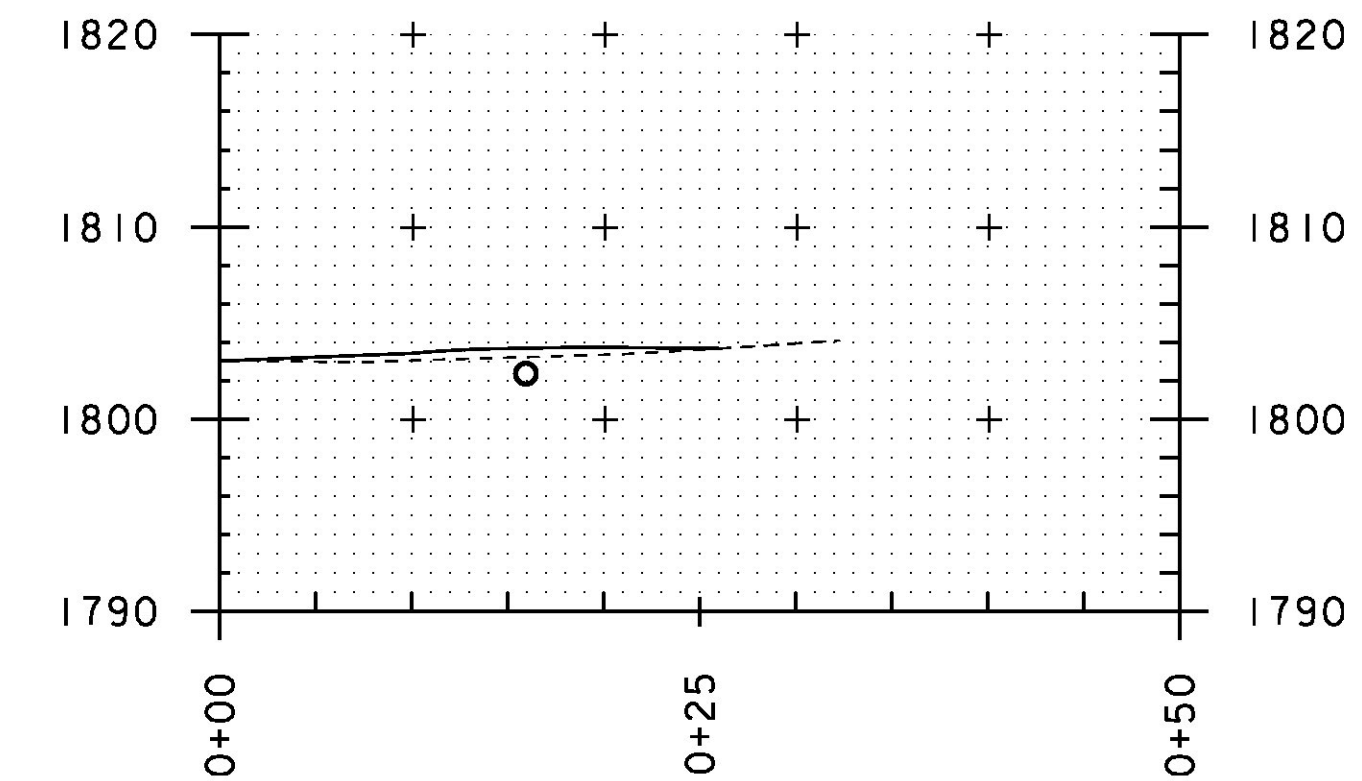
13+25



13+00

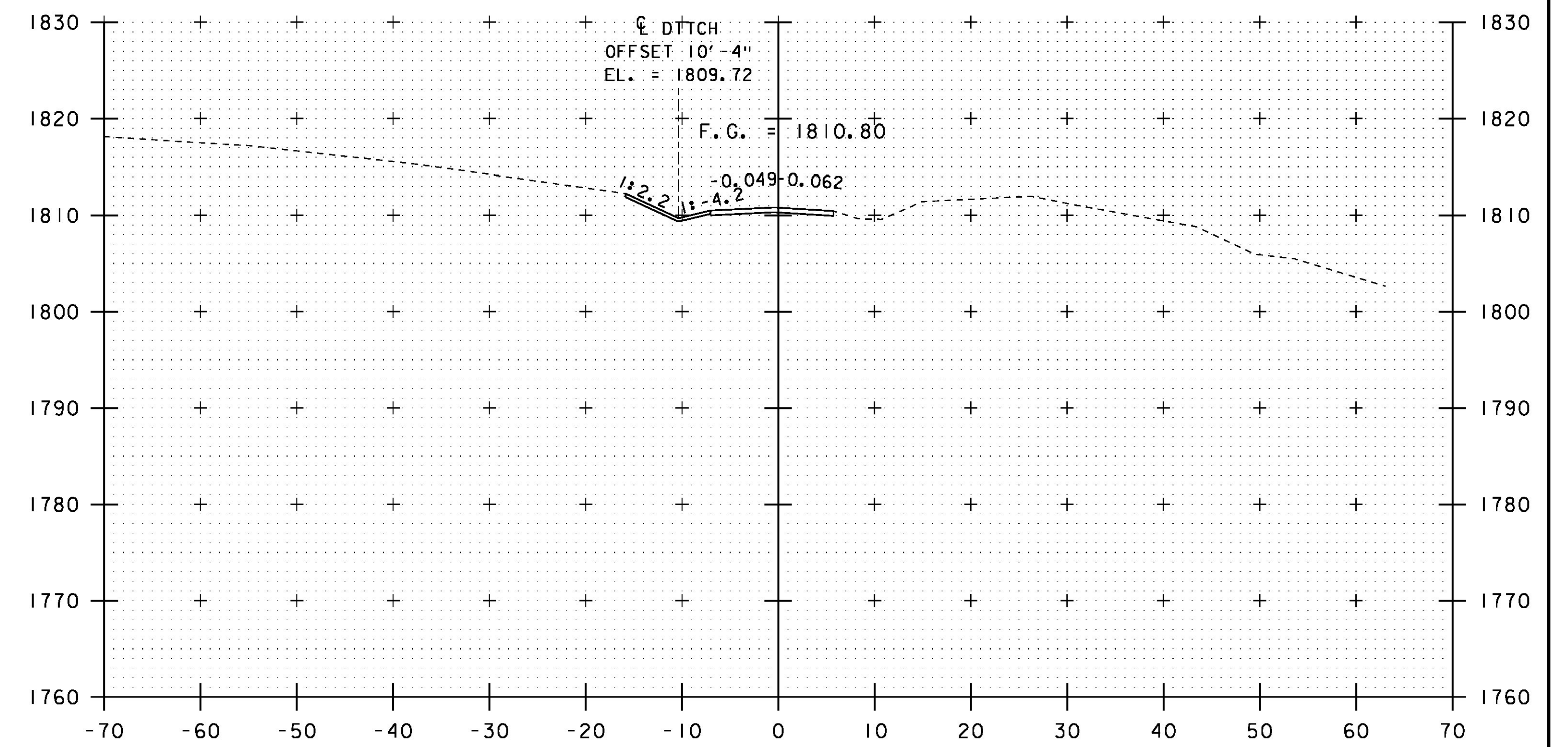


DRAINAGE PIPE



CL DRIVE

MATCH EXISTING

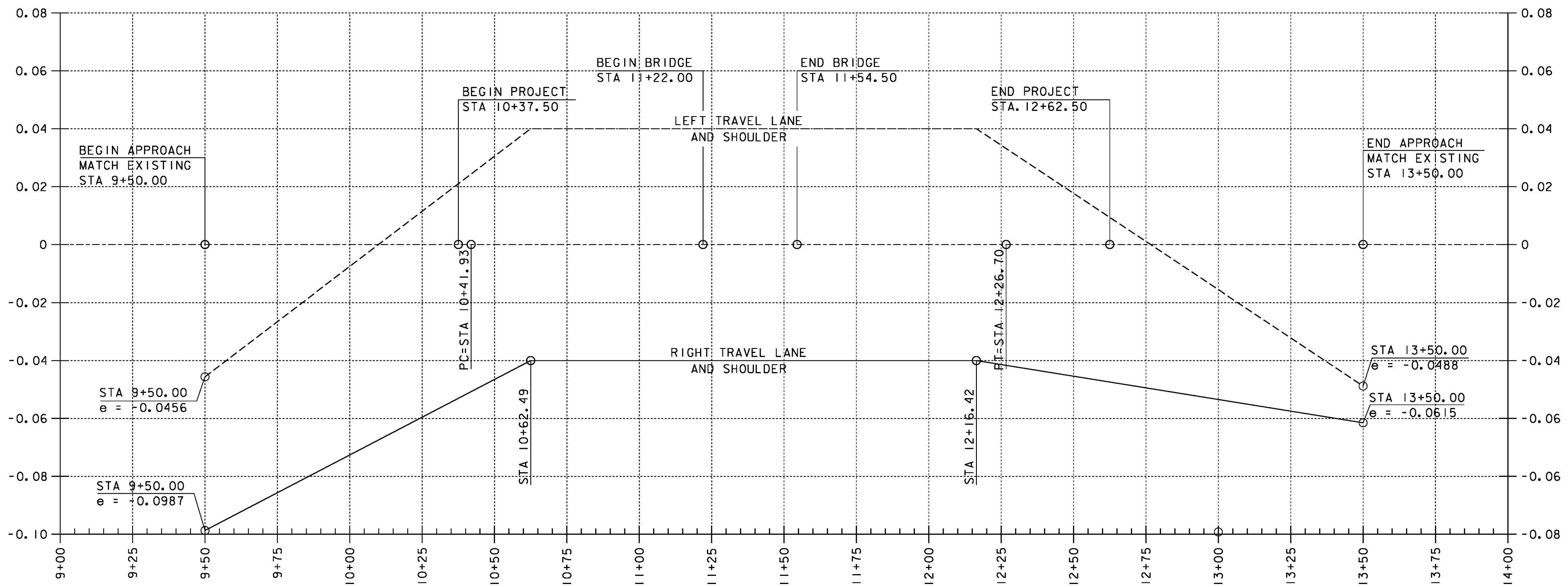


END APPROACH STA. 13+50.00

13+50

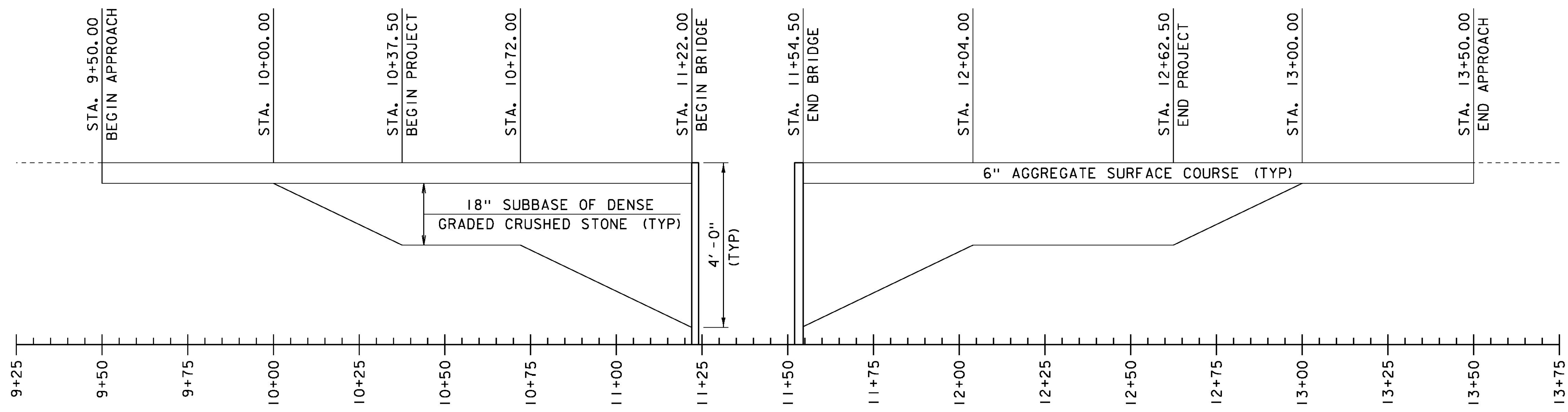
STA. 12+95 TO STA. 13+50

PROJECT NAME: STAMFORD	PLOT DATE: 03-DEC-2015
PROJECT NUMBER: STP 144(29)	DRAWN BY: D. KARABEGOVIĆ
FILE NAME: s96j226xs.dgn	DESIGNED BY: H. SALLS
PROJECT LEADER: C.W. CARLSON	CHECKED BY: H. SALLS
TH4 CROSS SECTIONS 6	SHEET 32 OF 44



TH-14 BANKING DIAGRAM

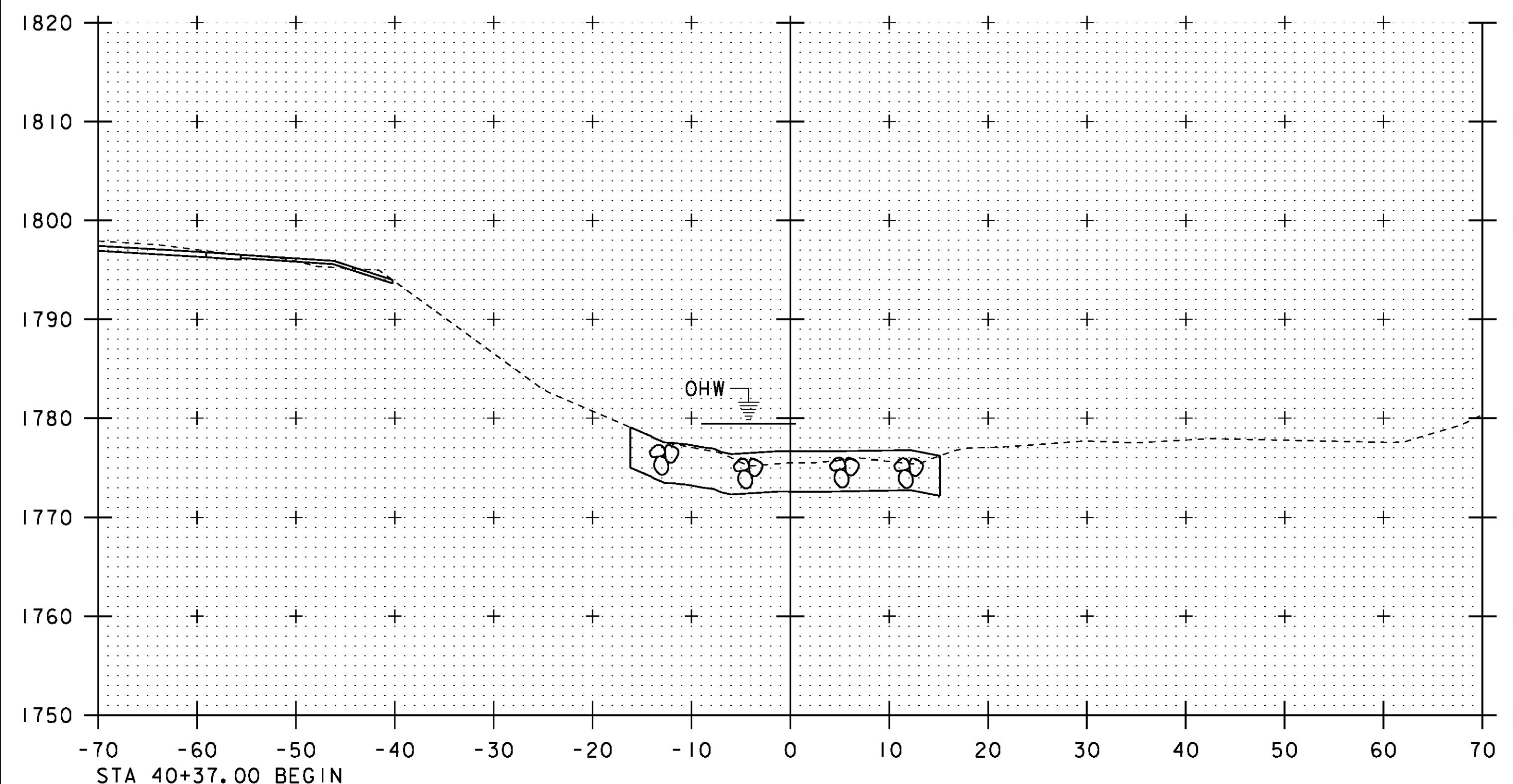
HORIZONTAL SCALE: 1" = 20'-0"
 VERTICAL SCALE: 1" = 0.02 ' / ' /



TH-14 MATERIAL TRANSITION

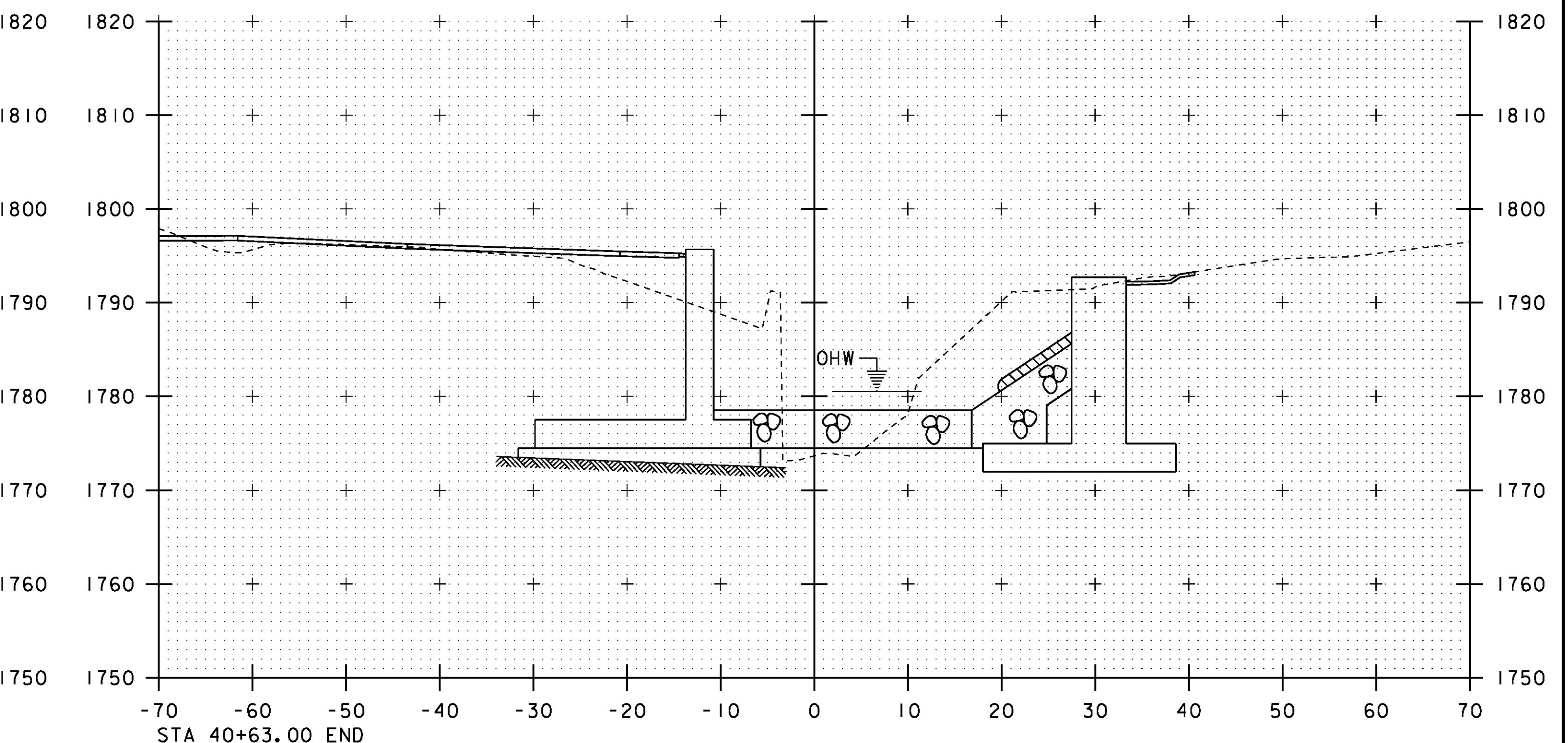
HORIZONTAL SCALE: 1" = 20'-0"
 VERTICAL SCALE: 1" = 20'-0"

PROJECT NAME: STAMFORD	PLOT DATE: 03-DEC-2015
PROJECT NUMBER: STP 144I(29)	DRAWN BY: D. KARABEGOVIC
FILE NAME: s96j226pro.dgn	CHECKED BY: H. SALLS
PROJECT LEADER: C. W. CARLSON	SHEET 33 OF 44
DESIGNED BY: H. SALLS	
BANKING & MATERIAL TRANSITION	



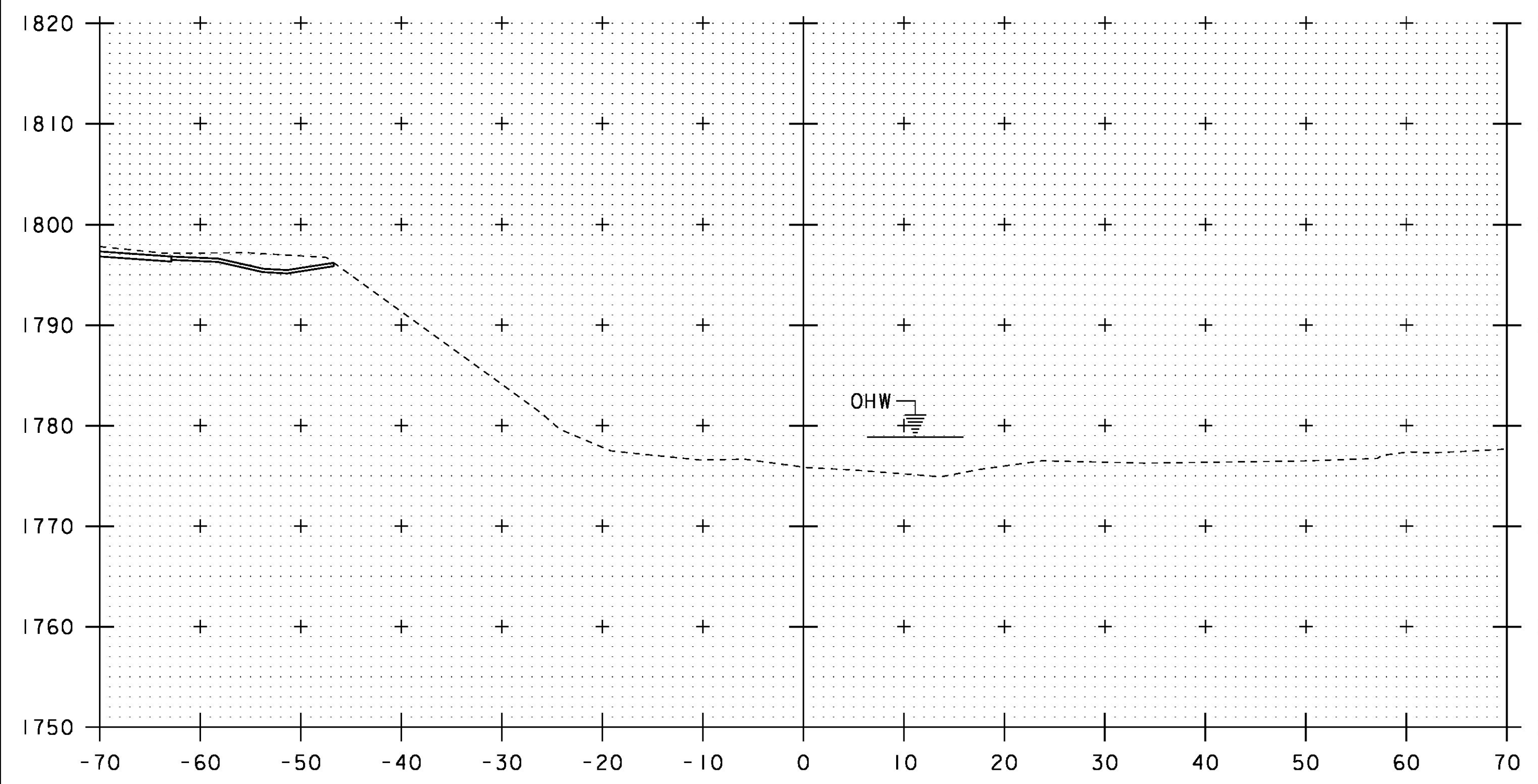
STA 40+37.00 BEGIN
 UNCLASSIFIED CHANNEL EXCAVATION
 GEOTEXTILE UNDER STONE FILL
 STONE FILL, TYPE IV
 GRUBBING MATERIAL

40+40

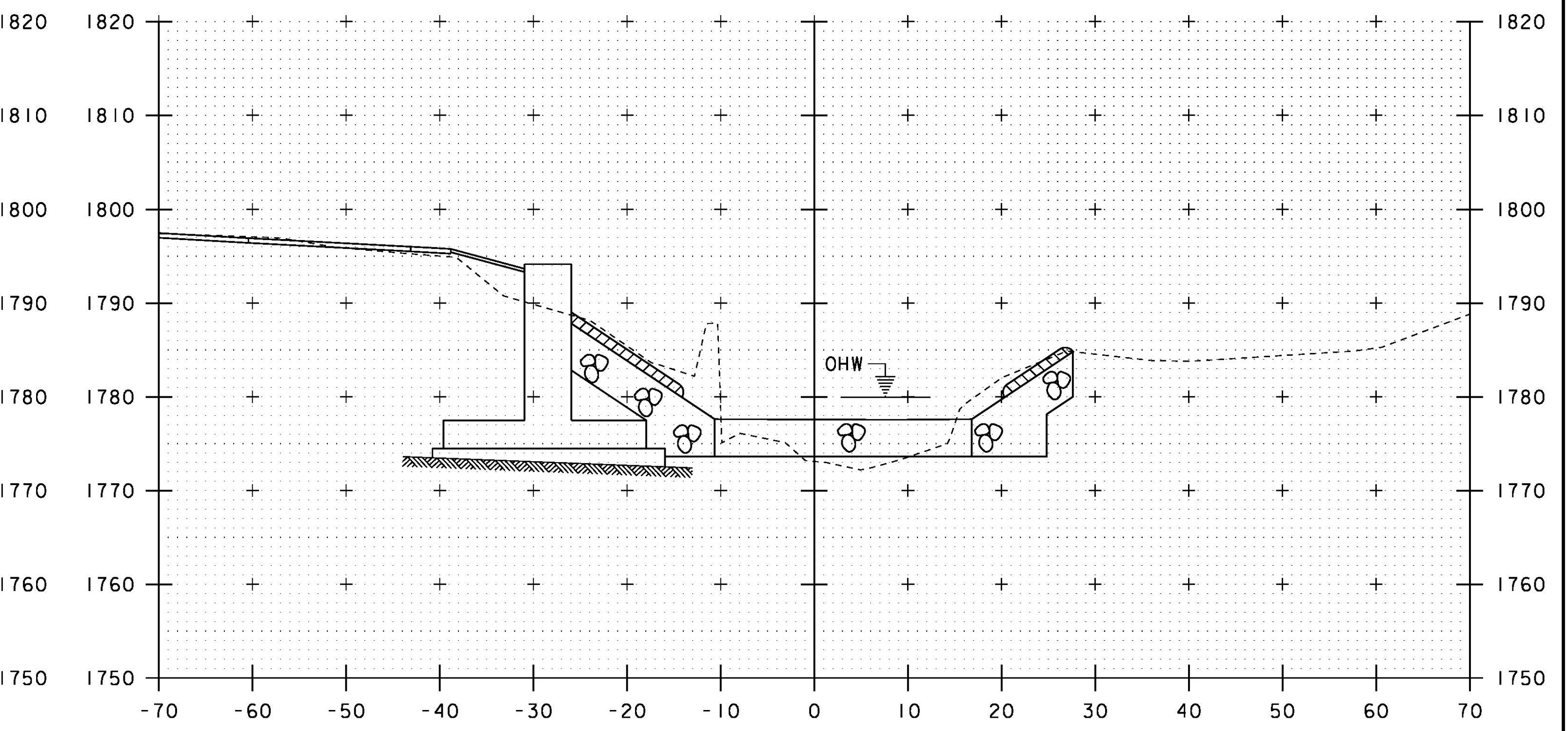


STA 40+63.00 END
 GRUBBING MATERIAL

40+60



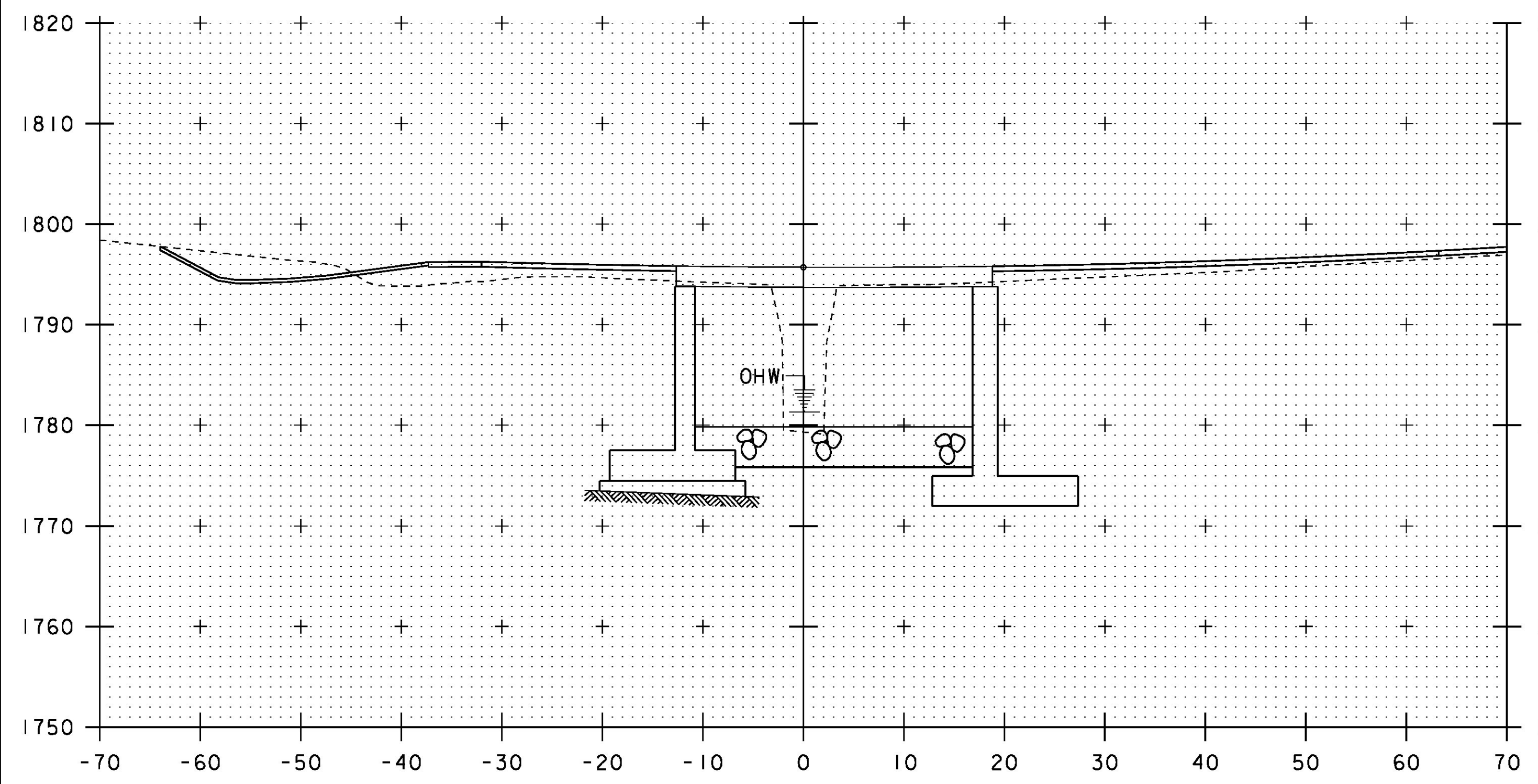
40+30



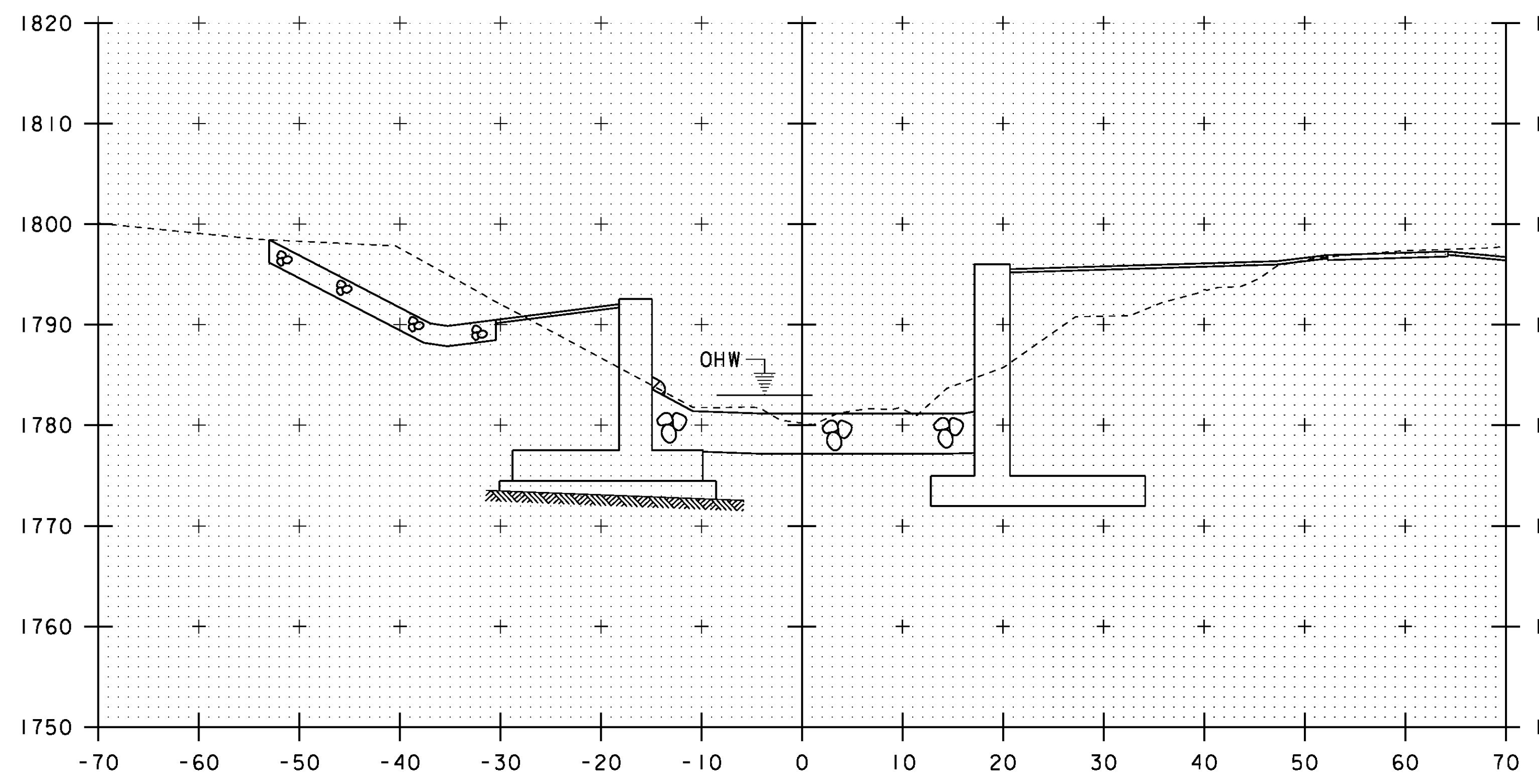
40+50

STA. 40+30 TO STA. 40+60

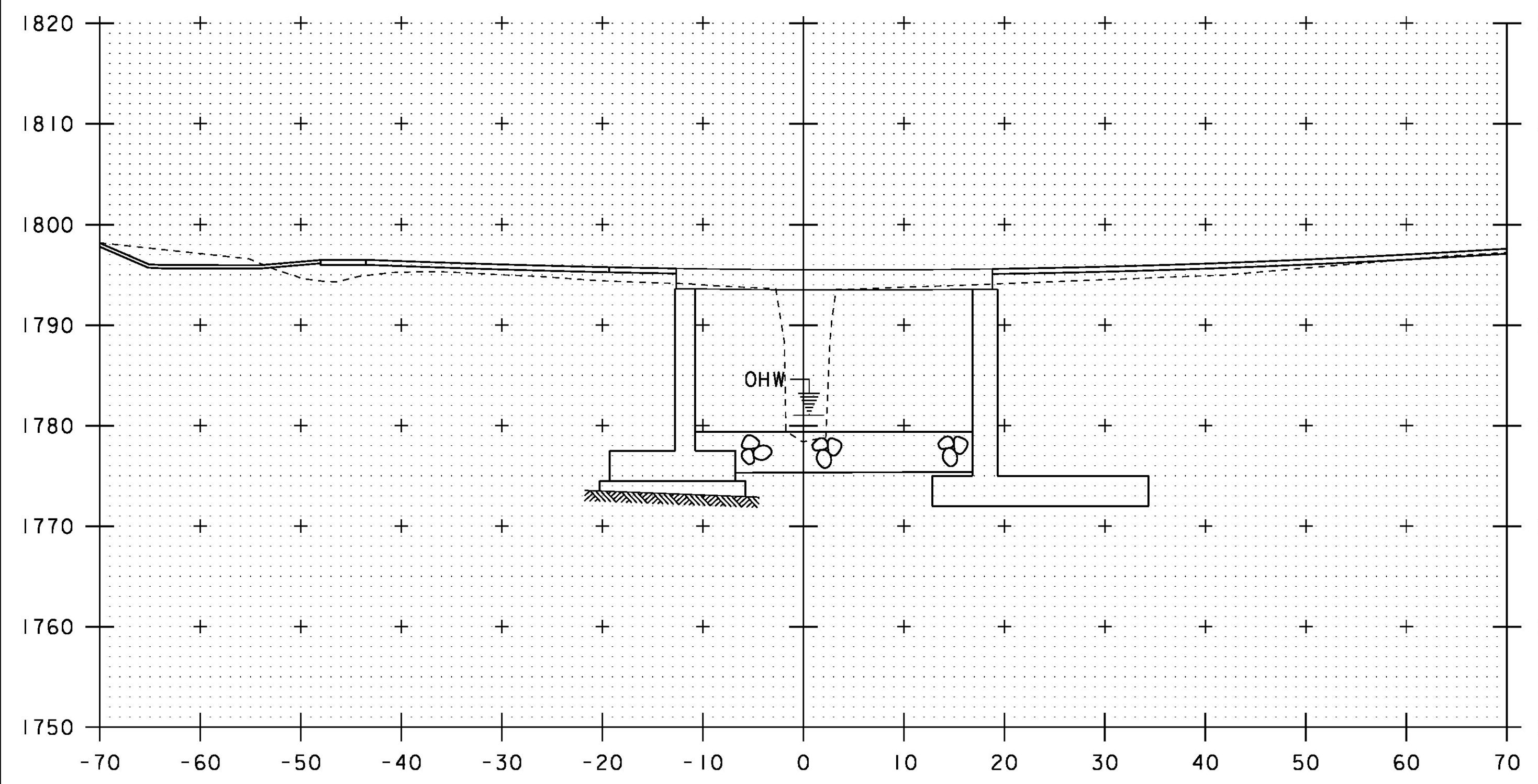
PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIĆ
FILE NAME:	s96j226xs.dgn	DESIGNED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
CHANNEL CROSS SECTIONS I			SHEET 34 OF 44



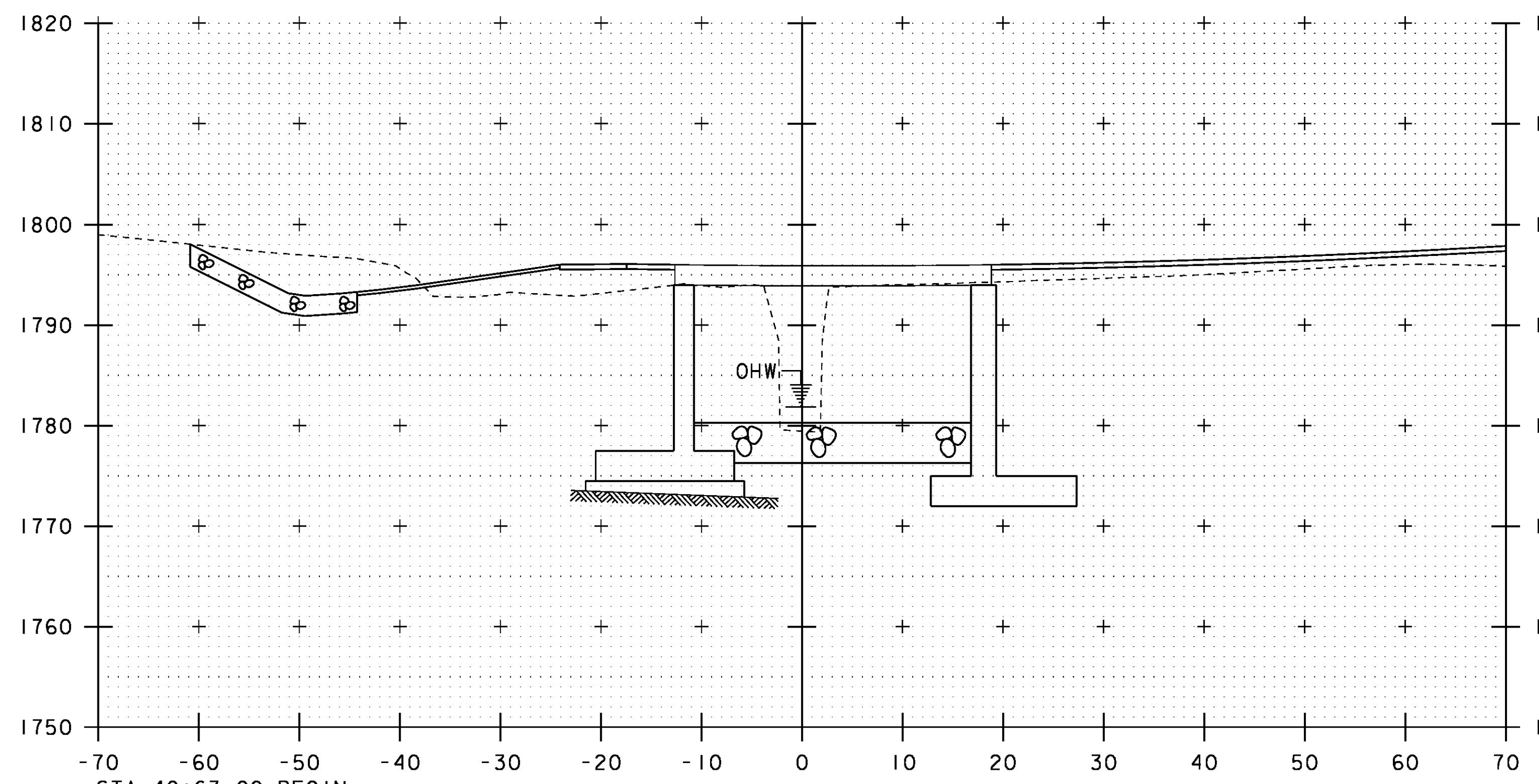
40+75



40+90



40+70

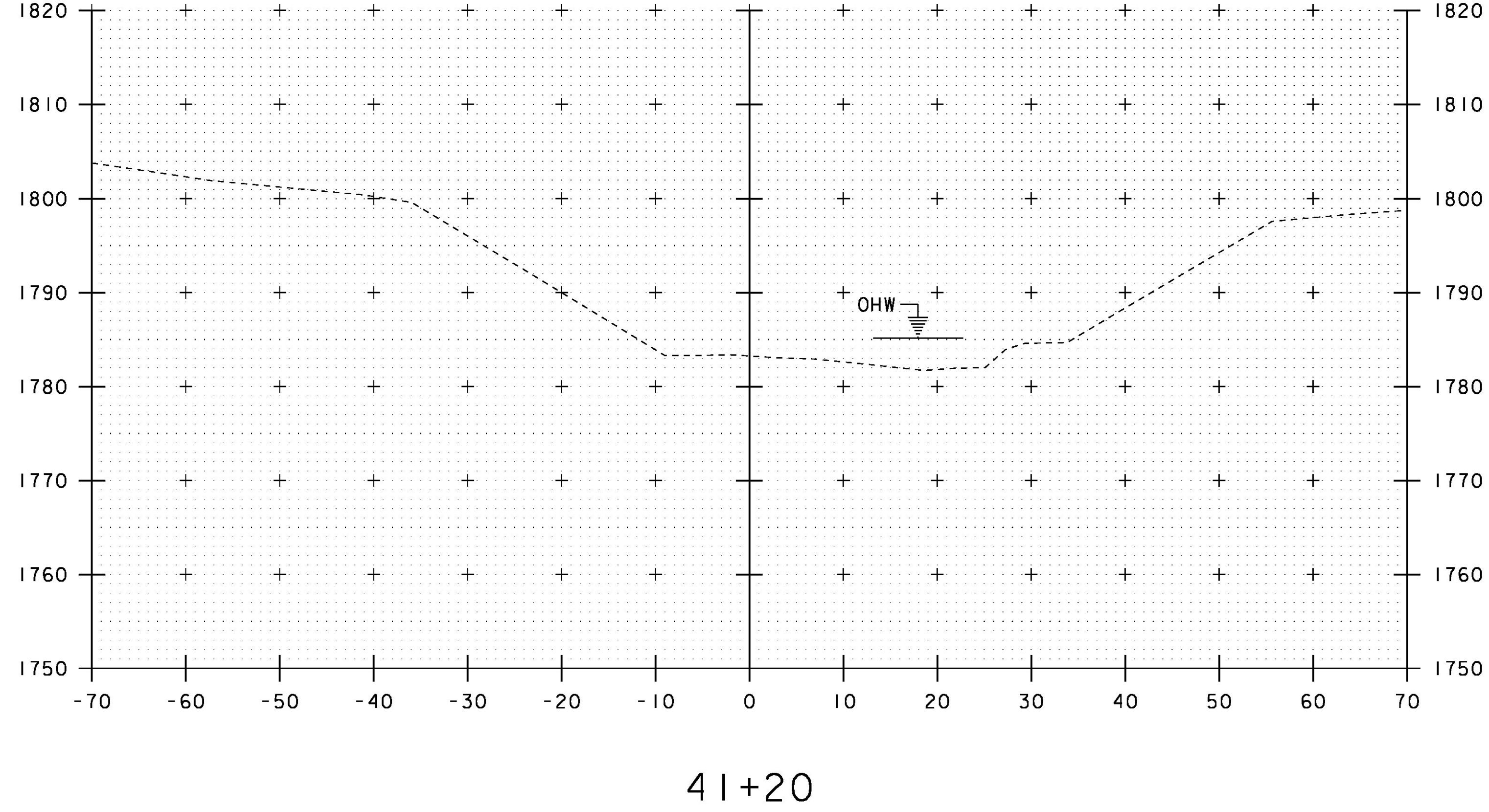
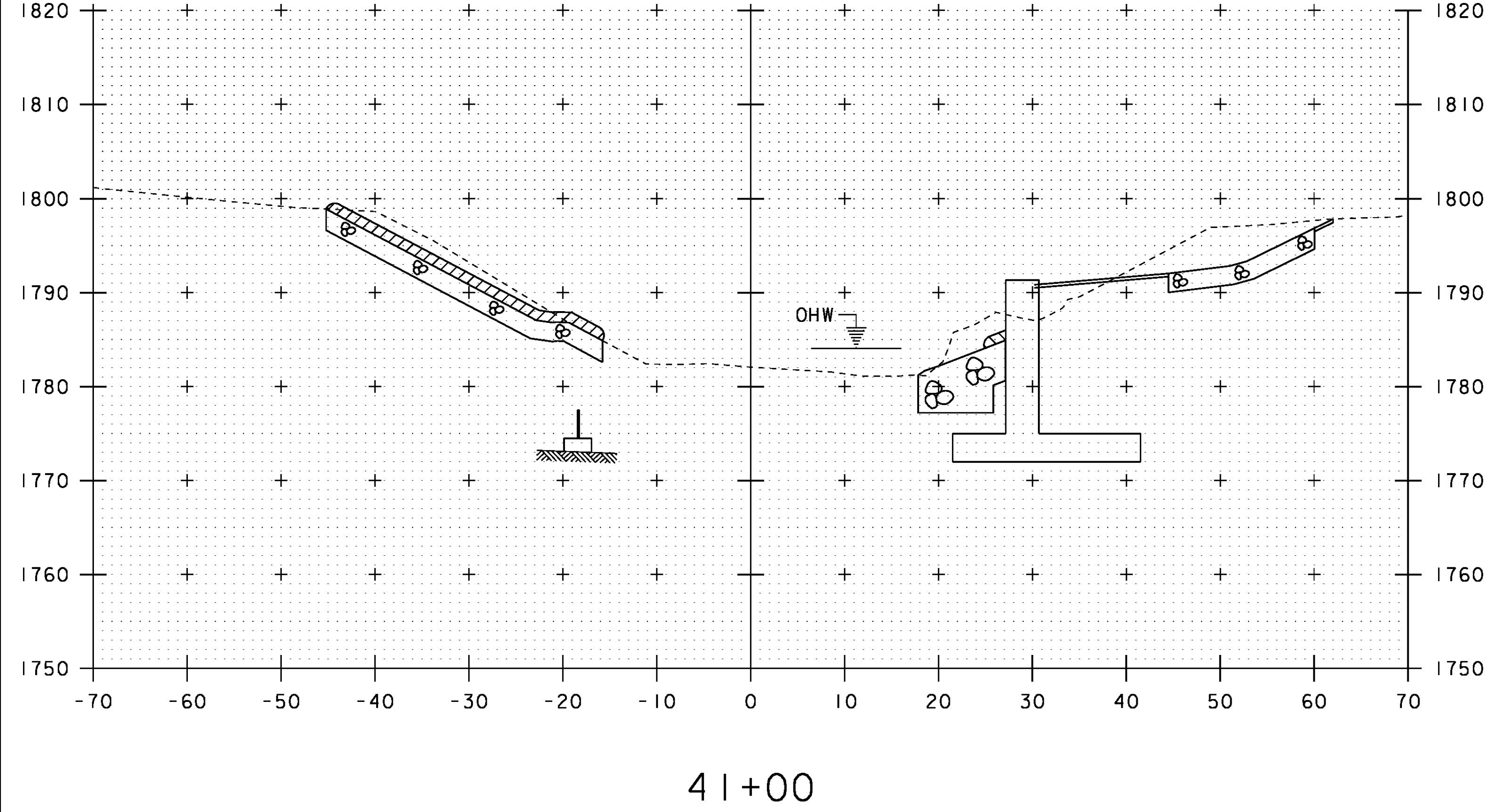
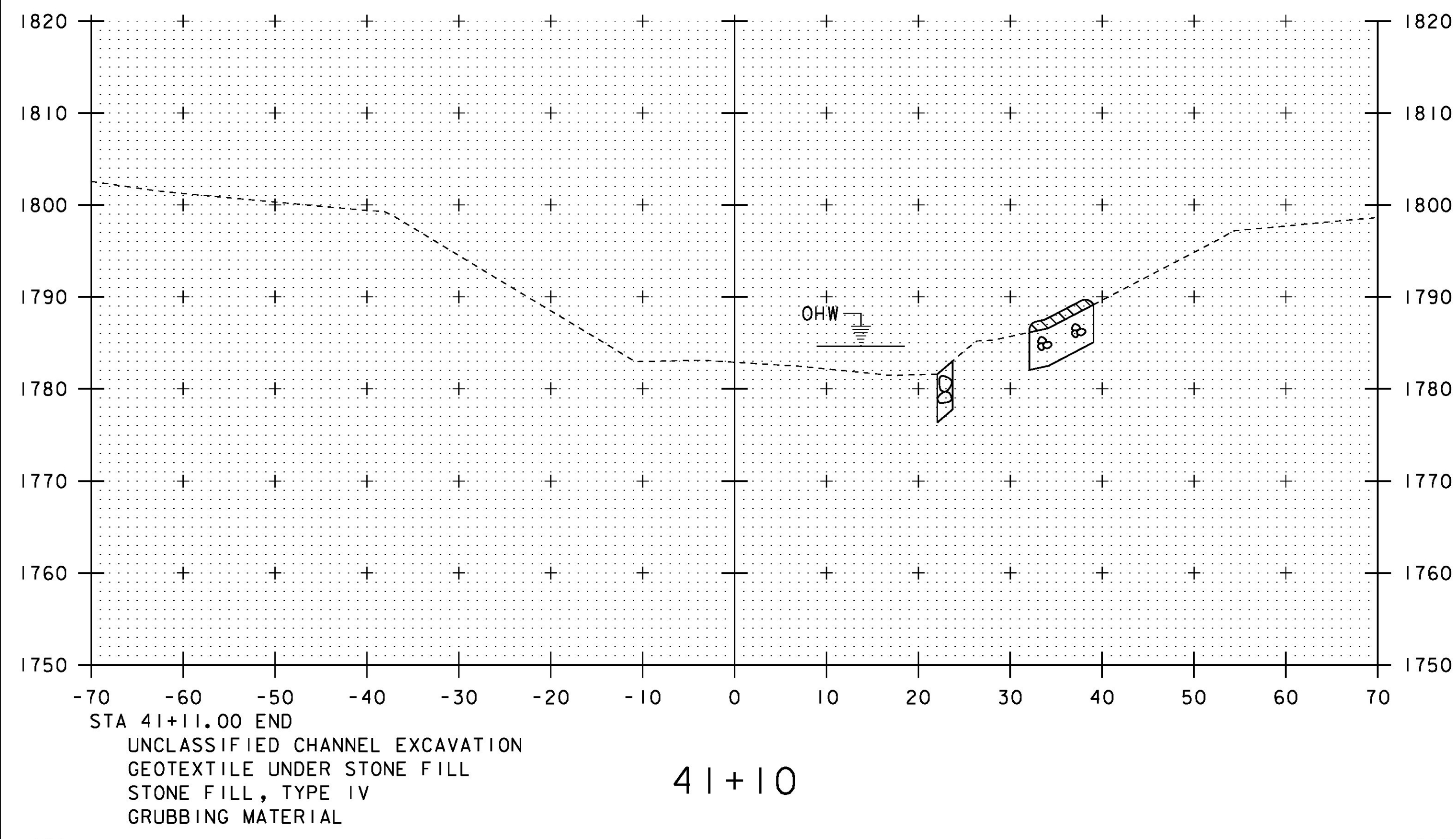


40+80

STA 40+63.00 BEGIN
GRUBBING MATERIAL

STA. 40+70 TO STA. 40+90

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIĆ
FILE NAME:	s96j226xs.dgn	DESIGNED BY:	H. SALLS
PROJECT LEADER:	C.W. CARLSON	CHECKED BY:	H. SALLS
CHANNEL CROSS SECTIONS 2		SHEET	35 OF 44



STA. 41+00 TO STA. 41+20

PROJECT NAME: STAMFORD	PLOT DATE: 03-DEC-2015
PROJECT NUMBER: STP 144(29)	DRAWN BY: D. KARABEGOVIC
FILE NAME: s96j226xs.dgn	DESIGNED BY: H. SALLS
PROJECT LEADER: C.W. CARLSON	CHECKED BY: H. SALLS
CHANNEL CROSS SECTIONS 3	SHEET 36 OF 44

EPSC PLAN NARRATIVE

1.1 PROJECT DESCRIPTION

STAMFORD STP 1441 (29) INVOLVES THE REPLACEMENT OF THE EXISTING STRUCTURE. THE EXISTING STRUCTURE WILL BE REPLACED ON THE EXISTING ALIGNMENT WITH A CAST IN PLACE SLAB; SPANNING 32 FEET OVER AN UNNAMED BROOK, ON A NEW SUBSTRUCTURE. THE BRIDGE IS LOCATED IN THE TOWN OF STAMFORD ON TOWN HIGHWAY 14, APPROXIMATELY 650 FEET NORTH OF THE INTERSECTION OF TOWN HIGHWAY 13 AND TOWN HIGHWAY 14 AND EXTENDS NORTHERLY ALONG TH 14 FOR 225 FEET.

NOTE: AREA OF DISTURBANCE INCLUDES LIMITS OF EARTH DISTURBANCE WITHIN THE PROJECT AREA, AS WELL AS WASTE, BORROW AND STAGING AREAS, AND OTHER EARTH DISTURBING ACTIVITIES WITHIN OR DIRECTLY ADJACENT TO THE PROJECT LIMITS AS SHOWN ON THE ATTACHED EPSC PLAN.

TOTAL AREA OF DISTURBANCE AS SHOWN ON THE ATTACHED EPSC PLAN IS APPROXIMATELY 0.37 ACRES.

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

1.2 SITE INVENTORY

1.2.1 TOPOGRAPHY

THE TOPOGRAPHY OF THE AREA IS A SADDLE THAT IS MOSTLY WELL ESTABLISHED FOREST WITH OCCASIONAL OPEN AREAS. KLONDIKE ROAD (TH 14), RISKY RANCH ROAD (TH13), AND A GRAVEL DRIVE IS WITHIN THE PROJECT LIMITS. THERE ARE NO BUILDINGS AROUND THE PROJECT SITE.

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

THE COWAN BROOK, THE BROOK FEEDING INTO IT AND A POND ARE THE WATER SOURCES ON THE PROJECT SITE. DUE TO THE NATURE OF THE SURROUNDING TERRAIN THE PROJECT SITE COULD RECEIVE RUNOFF WATER FROM A FEW NEARBY SLOPES.

1.2.3 VEGETATION

THE VEGETATION IN THE PROJECT AREA CONSISTS OF HARDWOOD TREES AND UNDERGROWTH. THE IMPACT TO VEGETATION WILL BE LIMITED TO THAT WHICH IS DIRECTLY AFFECTED BY REPLACEMENT OF THE EXISTING STRUCTURE. UPON PROJECT COMPLETION, THE CHANNEL WILL BE ARMORED WITH STONE FILL TYPE IV AS SPECIFIED ON THE PLANS. DISTURBED VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.4 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF BENNINGTON, VERMONT. SOILS ON THE PROJECT SITE ARE BERSHIRE, FINE SANDY LOAM, 25% TO 50% SLOPES, "K FACTOR" = 0.24. THE SOIL IS CONSIDERED HIGHLY ERODIBLE DUE TO SIGNIFICANT SLOPES.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING:

0.0-0.23 = LOW EROSION POTENTIAL
0.24-0.36 = MODERATE EROSION POTENTIAL
0.37 AND HIGHER = HIGH EROSION POTENTIAL

1.2.5 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL OR ARCHEOLOGICAL AREAS: YES ON SOUTHERNLY SIDE OF PROJECT
PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: YES, NEWLY LISTED FEDERALLY AND STATE LISTED BAT SPECIES PRESENT STATE.
WATER RESOURCE: COWAN BROOK AND BROOK
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF GENERAL PERMIT 3-9020 FOR STORMWATER RUNOFF FROM CONSTRUCTION SITES. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL PERMITTING.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE PRINCIPLES OUTLINED IN THIS NARRATIVE CONSIST OF APPLYING MEASURES THROUGHOUT CONSTRUCTION OF THE PROJECT IN ORDER TO MINIMIZE SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION PRACTICES. THEY HAVE BEEN PROPOSED BY THE DESIGNER AS A BASIS FOR PROTECTING RESOURCES AND WILL NEED TO BE BUILT UPON BASED ON THE SPECIFIC MEANS AND METHODS OF THE CONTRACTOR. REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR SPECIFIC GUIDANCE AND CONSTRUCTION DETAILING.

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

1.4.1 MARK SITE BOUNDARIES

SITE BOUNDARIES AND AREAS CONSTRUCTION EQUIPMENT CAN ACCESS SHALL BE DELINEATED.

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

1.4.2 LIMIT DISTURBANCE AREA

PREVENTING INITIAL SOIL EROSION BY MINIMIZING THE EXPOSED AREA IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. EARTH DISTURBANCE CAN BE MINIMIZED THROUGH CONSTRUCTION PHASING BY ONLY OPENING UP EARTH AS NECESSARY. THIS CAN LIMIT THE AREA THAT WILL BE DISTURBED AND EXPOSED TO EROSION. EMPLOY TEMPORARY CONSTRUCTION STABILIZATION PRACTICES IN INCREMENTAL STAGES AS PHASES CHANGE. FOR PROJECTS WHICH FALL UNDER THE CONSTRUCTION GENERAL PERMIT, ONLY THE ACREAGE LISTED ON THE PERMIT AUTHORIZATION MAY BE EXPOSED AT ANY GIVEN TIME.

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

1.4.3 SITE ENTRANCE/EXIT STABILIZATION

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

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

1.4.4 INSTALL SEDIMENT BARRIERS

SEDIMENT BARRIERS SHALL BE UTILIZED TO INTERCEPT RUNOFF AND ALLOW SUSPENDED SEDIMENT TO SETTLE OUT. THEY SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK.

SILT FENCE, WOVEN WIRE REINFORCED WILL BE INSTALLED AS PROPOSED ON THE EPSC PLAN.

1.4.5 DIVERT UPLAND RUNOFF

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

THE PROJECT AREA IS RELATIVELY FLAT. THEREFORE IT IS NOT ANTICIPATED THAT DIVERSION MEASURES WILL BE NECESSARY.

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

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

1.4.7 CONSTRUCT PERMANENT CONTROLS

NOT USED

1.4.8 STABILIZE EXPOSED SOILS DURING CONSTRUCTION

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY STABILIZATION IN PLACE WITHIN 48 HOURS OF DISTURBANCE.

SURFACE ROUGHENING OF ALL EXPOSED SLOPES, COMBINED WITH TEMPORARY MULCHING, SHALL BE UTILIZED ON A REGULAR BASIS. BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED TO STABILIZE ALL SLOPES STEEPER THAN 1:3.

THE FORECAST OF RAINFALL EVENTS SHALL TRIGGER IMMEDIATE PROTECTION OF EXPOSED SOILS.

1.4.9 WINTER STABILIZATION

VARIOUS MEASURES SPECIFIC TO WINTER MAY BE NECESSARY SHOULD THE PROJECT EXTEND INTO WINTER (OCTOBER 15 THROUGH APRIL 15). REFER TO THE LOW RISK SITE HANDBOOK FOR GUIDANCE.

1.4.10 STABILIZE SOIL AT FINAL GRADE

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

SEED, MULCH, FERTILIZER AND LIME SHALL BE USED TO ESTABLISH PERMANENT VEGETATION. FOR SLOPES STEEPER THAN 1:3, BIODEGRADABLE EROSION CONTROL MATTING OR AN EQUIVALENT SHALL BE USED INSTEAD OF MULCH.

1.4.11 DE-WATERING ACTIVITIES

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

1.4.12 INSPECT YOUR SITE

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

1.5 SEQUENCE AND STAGING

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

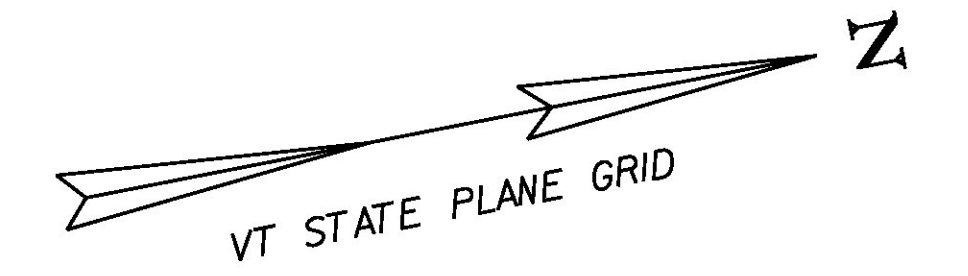
1.5.1 CONSTRUCTION SEQUENCE

NOT USED

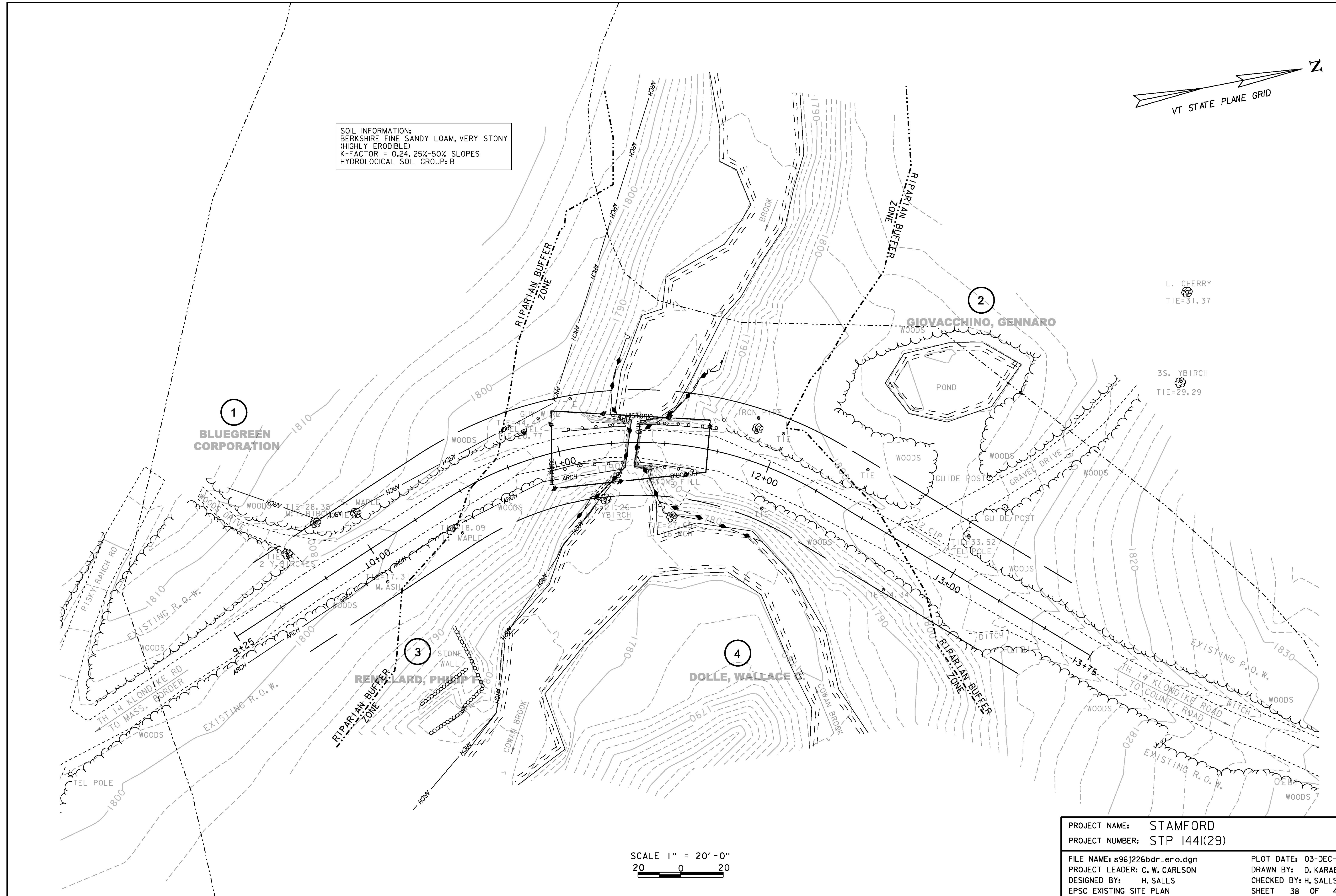
1.5.2 OFF-SITE ACTIVITIES

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

PROJECT NAME:	STAMFORD
PROJECT NUMBER:	STP 1441(29)
FILE NAME: s96j226ero_def.dgn	PLOT DATE: 18-DEC-2015
PROJECT LEADER: C. W. CARLSON	DRAWN BY: D. KARABEGOVIC
DESIGNED BY: H. SALLS	CHECKED BY: H. SALLS
EPSC NARRATIVE	SHEET 37 OF 44



SOIL INFORMATION:
 BERKSHIRE FINE SANDY LOAM, VERY STONY
 (HIGHLY ERODIBLE)
 K-FACTOR = 0.24, 25%-50% SLOPES
 HYDROLOGICAL SOIL GROUP: B



L. CHERRY
 TIE=31.37

3S. YBIRCH
 TIE=29.29

1
 BLUEGREEN CORPORATION

2

GIOVACCHINO, GENNARO

3

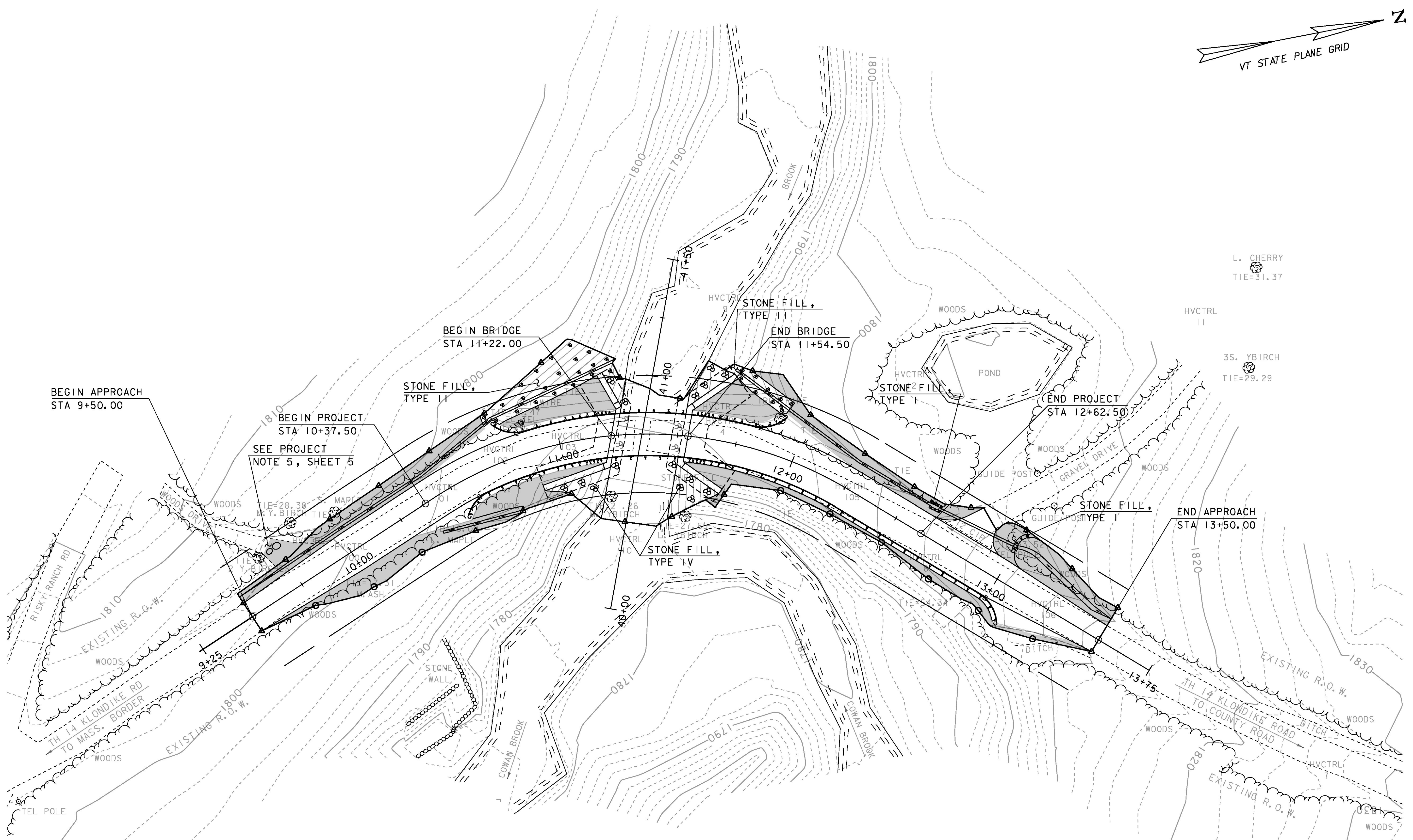
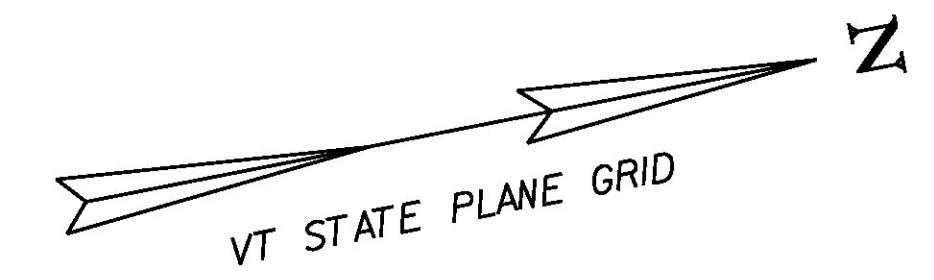
RENE LARD, PHILIP

4

DOLLE, WALLACE

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

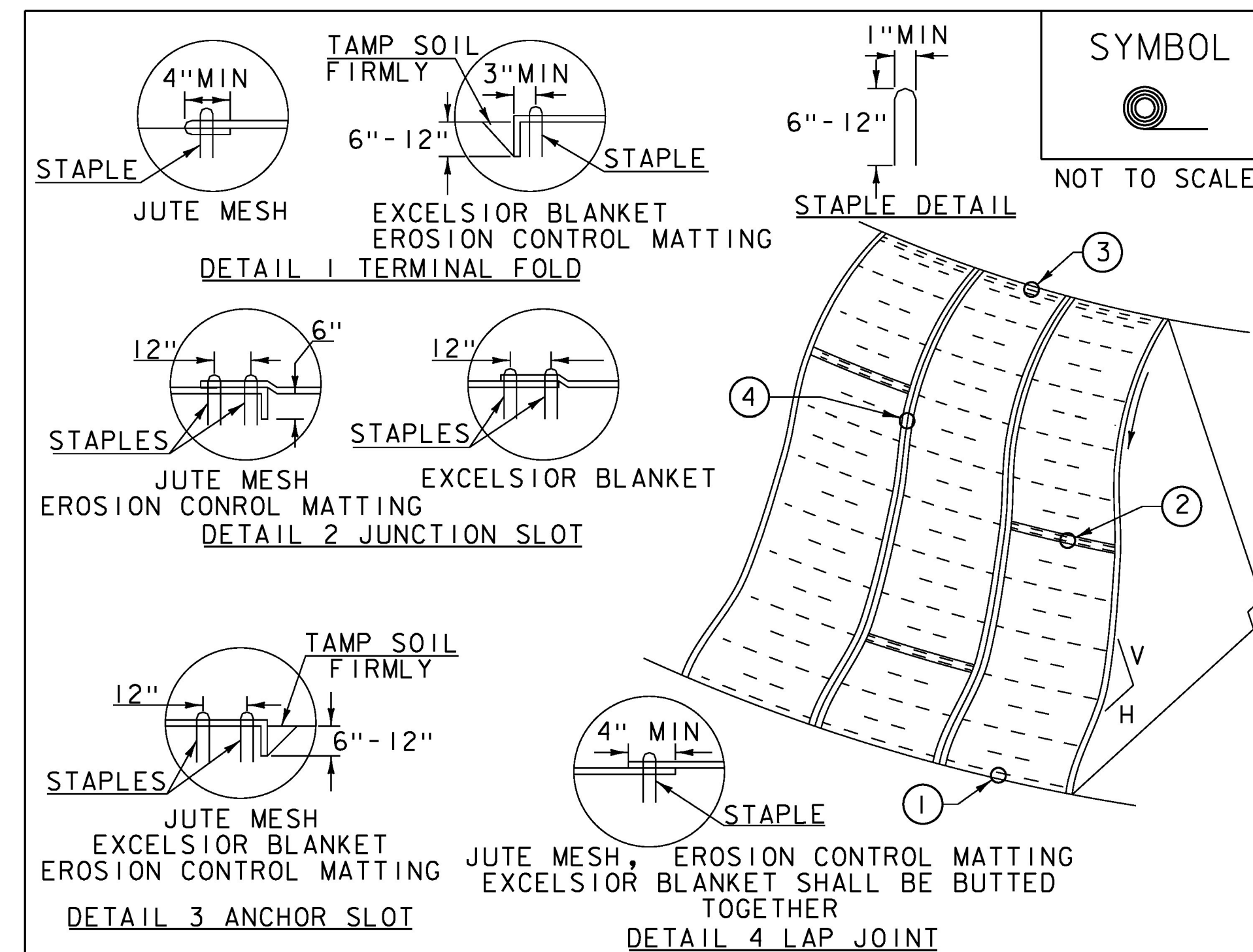
PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226bdr_ero.dgn	CHECKED BY:	H. SALLS
PROJECT LEADER:	C. W. CARLSON	DESIGNED BY:	H. SALLS
EPSC EXISTING SITE PLAN			SHEET 38 OF 44



NOTE:
REFER TO CROSS SECTIONS FOR FINAL GROUND CONTOURS

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

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015	
PROJECT NUMBER:	STP 144I(29)	DRAWN BY:	D. KARABEGOVIC	
FILE NAME:	s96j226bdr_ero.dgn	DESIGNED BY:	H. SALLS	
PROJECT LEADER:	C. W. CARLSON	EPSC FINAL SITE PLAN	CHECKED BY:	H. SALLS
			SHEET	40 OF 44



CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.
2. APPLY FERTILIZER, LIME SEED PRIOR TO PLACING MATTING.
3. STAPLES ARE TO BE PLACED ALTERNATELY, IN COLUMNS APPROXIMATELY 2' APART AND IN ROWS APPROXIMATELY 3' APART. APPROXIMATELY 175 STAPLES ARE REQUIRED PER 4' X 225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4' X 150' ROLL OF MATERIAL.
4. DISTURBED AREAS SHALL BE SMOOTHLY GRADED. EROSION CONTROL MATERIAL SHALL BE PLACED LOOSELY OVER GROUND SURFACE. DO NOT STRETCH.
5. ALL TERMINAL ENDS AND TRANSVERSE LAPS SHALL BE STAPLED AT APPROXIMATELY 12" INTERVALS.

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

ROLLED EROSION CONTROL PRODUCT (RECP) SIDE SLOPE

NOTES:
REFER TO "THE VERMONT STANDARDS & SPECIFICATIONS FOR EROSION PREVENTION & SEDIMENT CONTROL -2006-" FROM THE VT AGENCY OF NATURAL RESOURCES FOR ADDITIONAL GUIDANCE.
THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 653 AND AS SHOWN IN THE PLANS FOR TEMPORARY EROSION MATTING (PAY ITEM 653.20) OR PERMANENT EROSION MATTING (PAY ITEM 653.21).

REVISIONS	
APRIL 16, 2007	JMF
JANUARY 13, 2009	WHF

VAOT LOW GROW/FINE FESCUE MIX						
WEIGHT	LBS/AC		NAME	LATIN NAME	GERM	PURITY
	BROADCAST	HYDROSEED				
38%	57	95	CREeping RED FESCUE	FESTUCA RUBRA VAR. RUBRA	90%	98%
29%	43.5	72.5	HARD FESCUE	FESTUCA LONGIFOLIA	85%	95%
15%	22.5	37.5	CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA	87%	95%
15%	22.5	37.5	ANNUAL RYEGRASS	LOLIUM MULTIFLORUM	90%	95%
3%	4.5	7.5	INERTS			
100%	150	250				

VAOT RURAL AREA MIX						
WEIGHT	LBS/AC		NAME	LATIN NAME	GERM	PURITY
	BROADCAST	HYDROSEED				
37.5%	22.5	45	CREeping RED FESCUE	FESTUCA RUBRA VAR. RUBRA	85%	98%
37.5%	22.5	45	TALL FESCUE	FESTUCA ARUNDINACEA	90%	95%
5.0%	3	6	RED TOP	AGROSTIS GIGANTEA	90%	95%
15.0%	9	18	WHITE FIELD CLOVER	TRIFOLIUM REPENS	85%	98%
5.0%	3	6	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM	85%	95%
100%	60	120				

GENERAL AMENDMENT GUIDANCE		
FERTILIZER	LIME	
10/20/10	AG LIME	PELLITIZED
500 LBS/AC	2 TONS/AC	1 TONS/AC

CONSTRUCTION GUIDANCE

1. SEED MIX: THE CONTRACTOR SHALL COORDINATE WITH THE RESIDENT ENGINEER ON WHICH SEED MIX TO USE.
2. SEED MIX: USE AS INDICATED IN THE PLANS AND/OR FOR ALL ESTABLISHED UPLAND (NON WETLAND) AREAS DISTURBED BY THE CONTRACTOR.
3. ALL SEED MIXTURES: SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS SEED.
4. FERTILIZER AND LIMESTONE: SHALL FOLLOW RATES SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
5. HAY MULCH: TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, ACHIEVE 90% GROUND COVER OR AS DIRECTED BY THE ENGINEER.
6. HYDROSEEDING: ALTHOUGH GUIDANCE IS GIVEN ABOVE THE SITE CONDITIONS AND THE TYPE OF HYDROSEED PROPOSED FOR USE WILL ULTIMATELY DICTATE THE AMOUNTS AND TYPES OF SOIL AMENDMENTS TO BE APPLIED.
7. TURF ESTABLISHMENT: PLACING SEED, FERTILIZER, LIME AND MULCH PRIOR TO SEPTEMBER 15 AND AFTER APRIL 15 CAN BETTER ENSURE A VIGOROUS GROWTH OF GRASS.

ADAPTED FROM VTRANS TECHNICAL LANDSCAPE MANUAL FOR ROADWAYS AND TRANSPORTATION FACILITIES

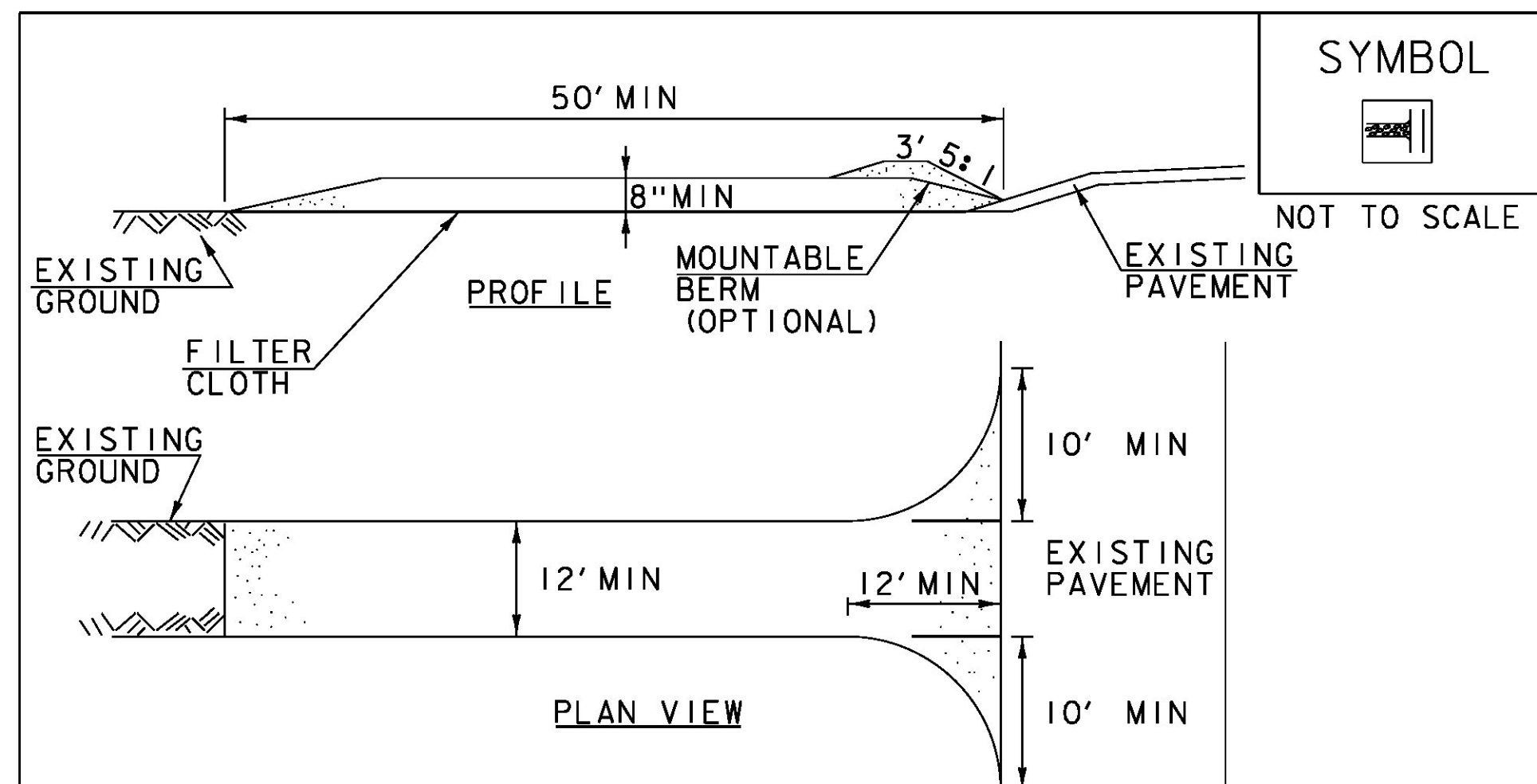
TURF ESTABLISHMENT

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 651 FOR SEED (PAY ITEM 651.15)

REVISIONS	
JANUARY 12, 2015	WHF

PROJECT NAME: STAMFORD
PROJECT NUMBER: STP 1441(29)

FILE NAME: s96j226ero_def.dgn PLOT DATE: 03-DEC-2015
PROJECT LEADER: C. W. CARLSON DRAWN BY: D. KARABEGOVIC
DESIGNED BY: H. SALLS CHECKED BY: H. SALLS
EPSC DETAILS 1 SHEET 41 OF 44



SYMBOL



NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. STONE SIZE- USE 1-4" STONE, RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH- NOT LESS THAN 50' (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30' MINIMUM LENGTH APPLIES).
3. THICKNESS- NOT LESS THAN 8".
4. WIDTH- 12' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. 24' IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE MUST BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING STONE.
6. SURFACE WATER- ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED ACCORDING TO PERMIT REQUIREMENTS.

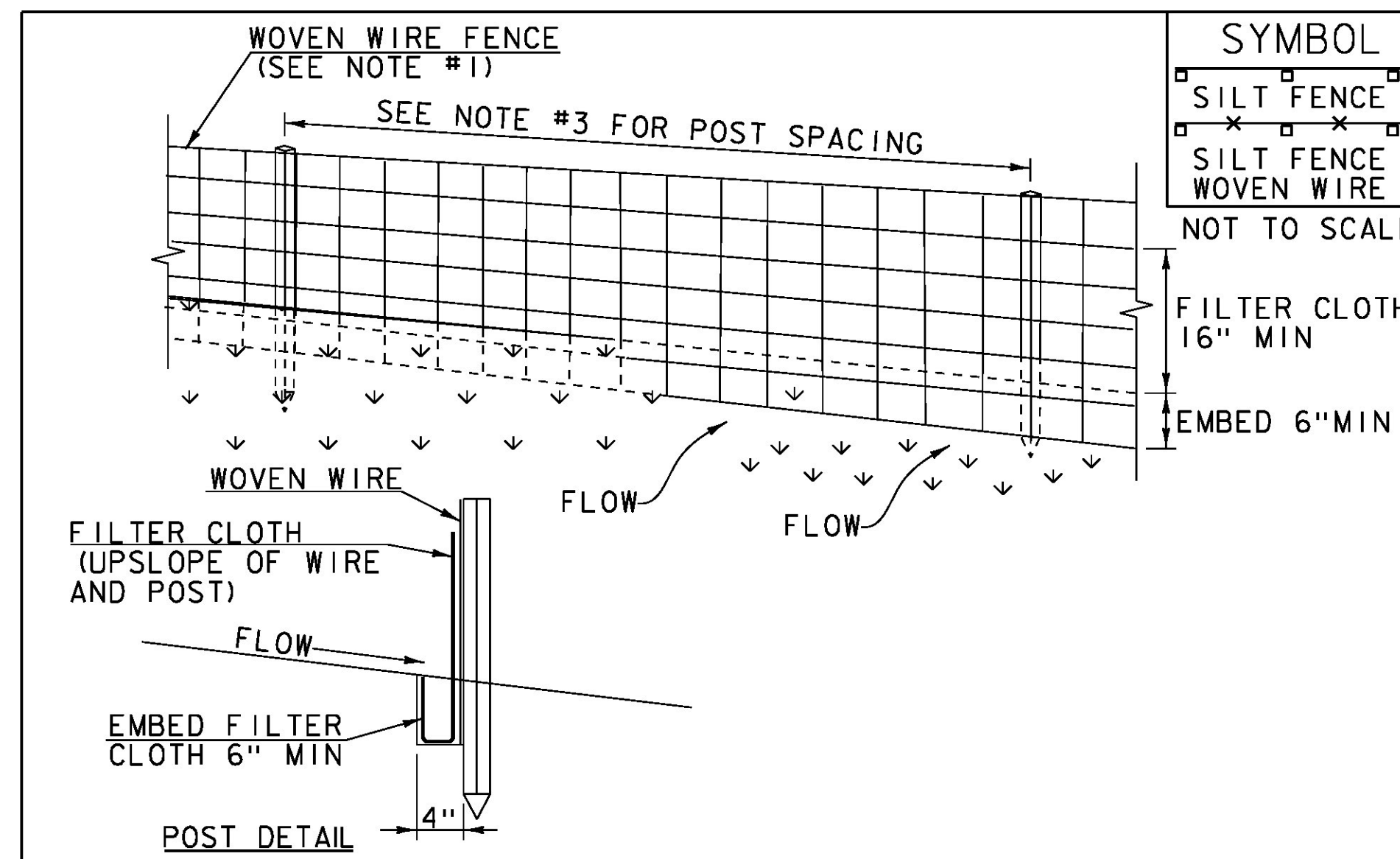
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

STABILIZED
CONSTRUCTION
ENTRANCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH
SECTION 653 FOR VEHICLE TRACKING PAD (PAY ITEM 653.35)
OR AS SPECIFIED IN THE CONTRACT.

REVISIONS	
MARCH 24, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL



NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE REINFORCED FENCE IS REQUIRED WITHIN 100' UPSLOPE OF RECEIVING WATERS WHEN THE PROJECT FALLS UNDER A CONSTRUCTION STORMWATER PERMIT. WOVEN WIRE SHALL BE A MIN. 14 GAUGE WITH A 6" MAX. MESH OPENING.
2. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAF1100X, STABILINKA T140N OR APPROVED EQUIVALENT.
3. POST SPACING FOR WIRE-BACKED FENCE SHALL BE 10' MAXIMUM. FOR FILTER-CLOTH FENCE, WHEN ELONGATION IS >50%, POST SPACING SHALL NOT EXCEED 4' AND WHEN ELONGATION IS <50%, POST SPACING SHALL NOT EXCEED 6'.
4. WOVEN WIRE FENCE IS TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES. FILTER CLOTH IS TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
5. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY 6" AND FOLDED.
6. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN SEDIMENT REACHES HALF OF FABRIC HEIGHT.

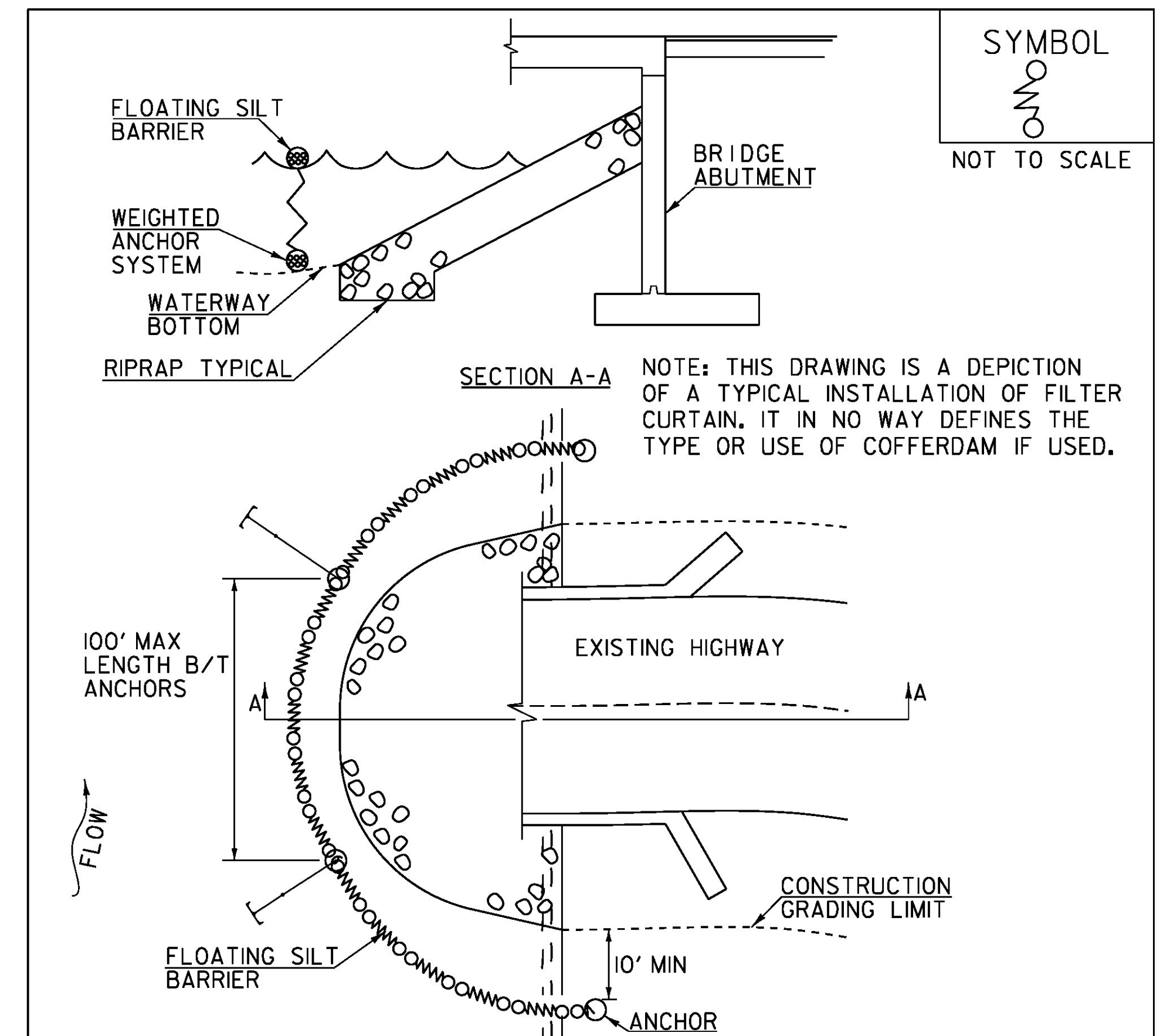
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SILT FENCE

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

THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH
SECTION 649 AND AS SHOWN IN THE PLANS FOR GEOTEXTILE
FOR SILT FENCE (PAY ITEM 649.51) OR GEOTEXTILE FOR
SILT FENCE, WOVEN WIRE REINFORCED (PAY ITEM 649.515).

REVISIONS	
MARCH 21, 2008	WHF
DECEMBER 11, 2008	WHF
JANUARY 13, 2009	WHF



SYMBOL



NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

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

FILTER CURTAIN

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

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

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 144(29)	DRAWN BY:	D. KARABEGOVIC
FILE NAME:	s96j226ero_def.dgn	CHECKED BY:	H. SALLS
PROJECT LEADER:	C. W. CARLSON	DESIGNED BY:	H. SALLS
EPSC DETAILS 2		SHEET	42 OF 44

REMOVAL AND DISPOSAL OF GUARDRAIL
 TH 14 STA 10+92.43 7.84' RT - 11+65.42 10.34' RT
 TH 14 STA 11+03.11 8.75' LT - 11+72.81 9.97' LT

HD STEEL BEAM GUARDRAIL, GALVANIZED W/8 FT POSTS
 TH 14 STA 10+50.33 - 10+90.07 RT
 TH 14 STA 10+75.93 - 10+98.48 LT
 TH 14 STA 11+82.94 - 13+09.53 RT

GUARDRAIL APPROACH SECTION, GALV HD STEEL BEAM W/8 FT POSTS
 TH 14 STA 10+90.08 - 11+16.52 RT
 TH 14 STA 10+98.48 - 11+22.15 LT
 TH 14 STA 11+56.35 - 11+82.94 RT
 TH 14 STA 11+57.57 - 11+81.22 LT

BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED/STEEL TUBING
 TH 14 STA 11+16.52 - 11+56.35 RT
 TH 14 STA 11+22.15 - 11+57.57 LT

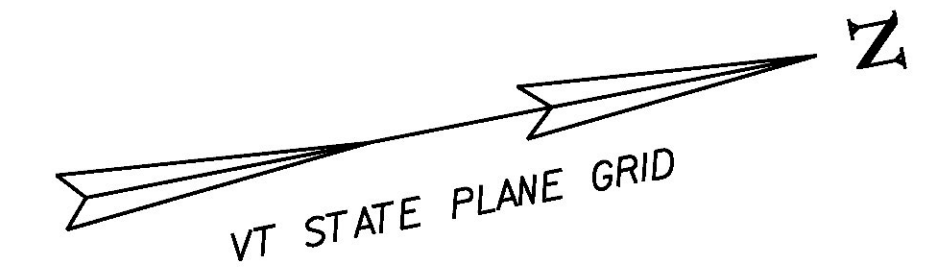
ANCHOR FOR STEEL BEAM GUARDRAIL
 TH 14 STA 10+59.12 RT
 TH 14 STA 10+83.79 LT
 TH 14 STA 11+83.25 LT
 TH 14 STA 12+99.67 RT

CONSTRUCT DRIVE (AGGREGATE SURFACE COURSE)
 TH 14 STA 12+77.11 LT

STONE LINED DITCH
 TH 14 STA 9+75.00 10.50' LT - 10+76.50 19.00' LT
 TH 14 STA 11+91.75 20.33' LT - 12+79.00 14.00' LT
 TH 14 STA 10+35.00 13.5' RT - 10+75.00 22.50' RT

STONE FILL, TYPE II
 TH 14 STA 10+76.50 - 11+25.00 LT
 TH 14 STA 11+69.00 - 11+91.75 LT

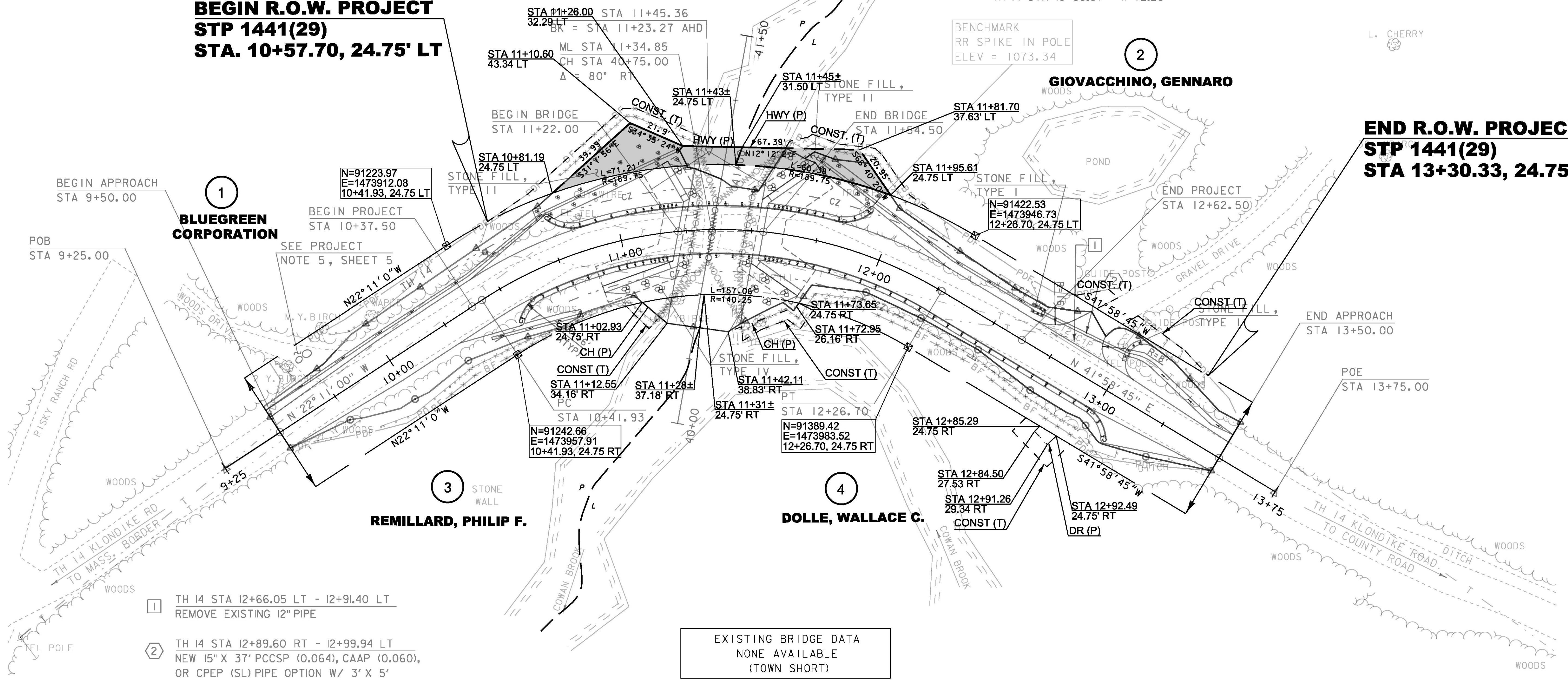
STONE FILL, TYPE IV
 TH 14 STA 10+88.67 - 11+72.26



CURVE (1)
 DELTA = 64°09'45"
 D = 34°43'29"
 R = 165.00'
 T = 103.43'
 L = 184.77'
 E = 29.74'
 BANKING = 0.040

**BEGIN R.O.W. PROJECT
 STP 1441(29)
 STA. 10+57.70, 24.75' LT**

**END R.O.W. PROJECT
 STP 1441(29)
 STA 13+30.33, 24.75' LT**



- 1 TH 14 STA 12+66.05 LT - 12+91.40 LT
REMOVE EXISTING 12" PIPE
- 2 TH 14 STA 12+89.60 RT - 12+99.94 LT
NEW 15" X 37' PCCSP (0.064), CAAP (0.060),
OR CPEP (SL) PIPE OPTION W/ 3' X 5'
STONE FILL PAD, TYPE I @ OUTLET

EXISTING BRIDGE DATA
 NONE AVAILABLE
 (TOWN SHORT)

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

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

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

PROJECT NAME: STAMFORD	PLOT DATE: 03-DEC-2015
PROJECT NUMBER: STP 1441(29)	DRAWN BY: J. BLANCHARD
FILE NAME: r96j226.lay1.DK.dgn	CHECKED BY: H. SALLS
PROJECT LEADER: C. CARLSON	SHEET 43 OF 44
R.O.W. LAYOUT SHEET	

RIGHT - OF - WAY DETAIL SHEET











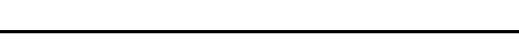
TABLE OF PROPERTY ACQUISITION

PARCEL NO.	PROPERTY OWNER	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKE	REMAINDER	RIGHT			RECORDING DATA					REMARKS
					AREA±	AREA±	TYPE	(T)/(P)	AREA ±	TITLE	DATE	TOWN / CITY	BOOK	PAGE	
1	BLUEGREEN CORPORATION	1	10+81.19 LT 10+57.70 LT	11+45± LT 11+32 LT			HIGHWAY CONSTRUCT	P T	678 SF 475 SF						INCLUDES BF, PDF & EC
2	GIOVACCHINO, GENNARO	1	11+43± LT 11+60 LT 12+70 LT 12+92 LT 12+70.74 LT	11+95.61 LT 12+11 LT 12+86 LT 13+30.33 LT 12+87.96 LT			HIGHWAY CONSTRUCTION CONSTRUCTION CONSTRUCTION	P T T T	497 SF 240 SF 63 SF 137 SF						INCLUDES BF, PDF & EC INCLUDES PDF INCLUDES PDF & EC GRAVEL DRIVE 17.21' WIDE
3	REMILLARD, PHILIP F.	1	10+96 RT 11+02.93 RT	11+09 RT 11+31± RT			CONSTRUCTION CHANNEL	T P	58 SF 194 SF	WDOE	04/02/15	STAMFORD	85	548	INCLUDES BF & EC INCLUDES STONE FILL & EC
4	DOLLE, WALLACE C.	1	11+28± RT 11+50 RT 12+77 RT 12+84.50 RT	11+73.65 RT 11+81 RT 12+99 RT 12+92.49 RT			CHANNEL CONSTRUCTION CONSTRUCTION DRAINAGE	P T T P	347 SF 129 SF 160 SF 27 SF	WDOE	04/02/15	STAMFORD	85	550	INCLUDES STONE FILL & EC INCLUDES BF & EC INCLUDES BF & EC
5	TELEPHONE OPERATING COMPANY OF VERMONT, LLC		10+57.70 LT	13+30.33 LT											UTILITY

TABLE OF REVISIONS

REVISION NO.	SHEET NO.	DESCRIPTION	DATE
1	3, 4	PARCEL 1, PATTEN - CHANGE NAME TO BLUEGREEN CORPORATION. REV. BY: MT C.O. 10003 APPR. BY: RC	05/15/15

PLAN LEGEND

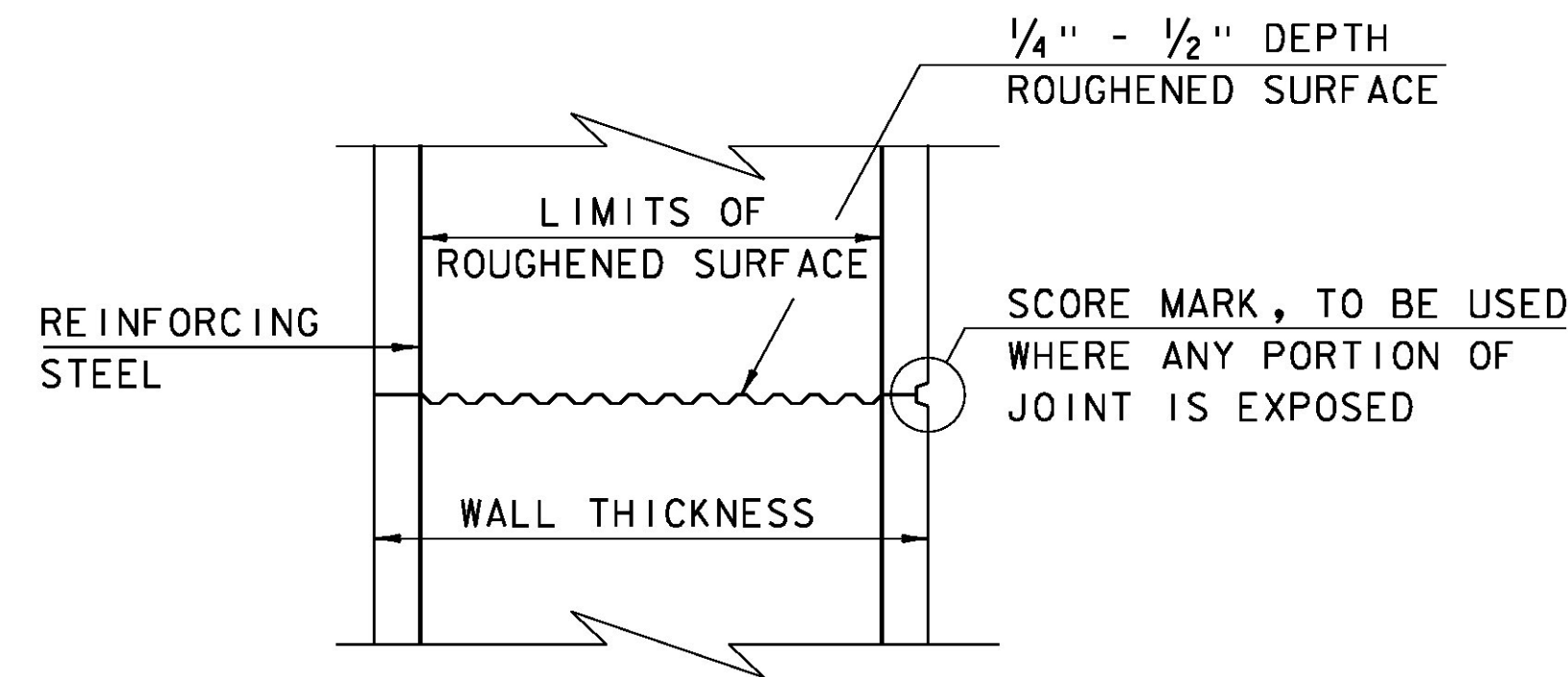
	EXISTING RIGHT-OF-WAY		TOE OF SLOPE	EC	-EROSION CONTROL
	TAKING WITH ACCESS		TOP OF CUT	(P)	-PERMANENT
	TAKING WITHOUT ACCESS		SLOPE RIGHT	(T)	-TEMPORARY
	CLEAR ZONE		CONSTRUCTION RIGHT	DR.	-DRAINAGE RIGHT
	PROPERTY LINE		PROJECT DEMARCATION FENCE	DIT.	-DITCHING RIGHT
				CH.	-CHANNEL RIGHT
				DRIVE	-DRIVE RIGHT
				CUL.	-CULVERT RIGHT
				C&T	-CLEARING & TRIMMING RIGHT
				SR	-SLOPE RIGHT
				UE	-UTILITY EASEMENT

APPROVED: RYAN CLOUTIER DATE: 12-15-14
CHIEF, PLANS & TITLES

PROJECT NAME:	STAMFORD	PLOT DATE:	03-DEC-2015
PROJECT NUMBER:	STP 1441(29)	DRAWN BY:	M. RYAN
FILE NAME:	r96j226detail.xls	CHECKED BY:	R. CLOUTIER
PROJECT LEADER:	C. CARLSON	SHEET	44 OF 44
DESIGNED BY:	J. BLANCHARD		
R.O.W. DETAIL SHEET #1			

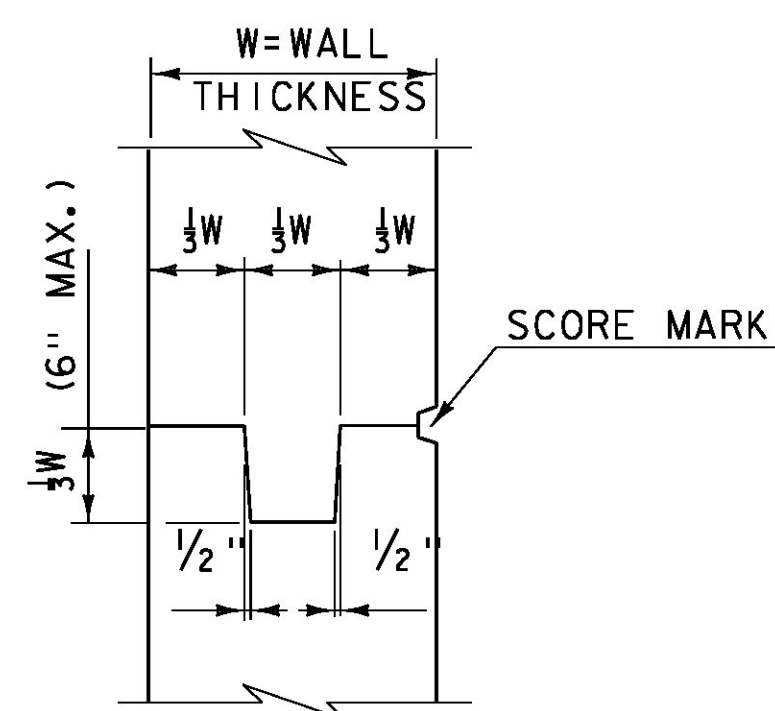
CONCRETE GENERAL NOTES

1. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" x 1"
2. REINFORCING STEEL SIZE AND SPACING SHOWN IN THE PLANS IS BASED ON 60 KSI STEEL, UNLESS NOTED OTHERWISE. WITH THE ENGINEER'S PERMISSION, BAR SIZE AND SPACING MAY BE MODIFIED ACCORDING TO THE LATEST AASHTO LRFD BRIDGE DESIGN SPECIFICATION AND STRUCTURES DESIGN MANUAL WHEN USING HIGHER STRENGTH STEEL.

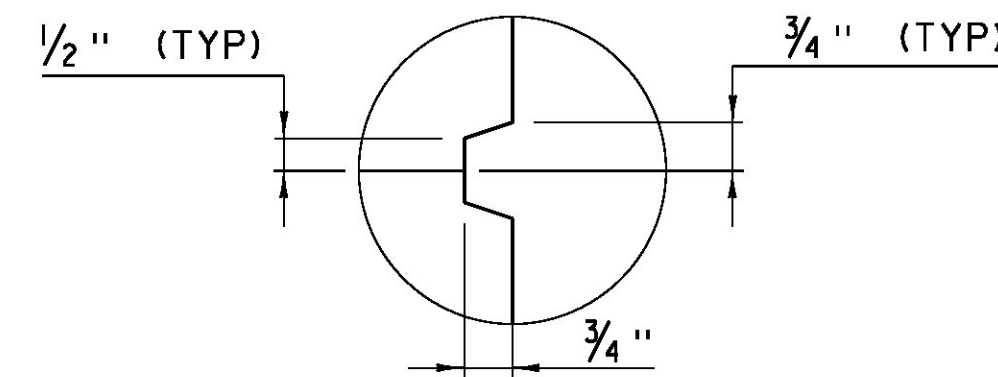


TYPICAL HORIZONTAL CONSTRUCTION JOINT
(NOT TO SCALE)

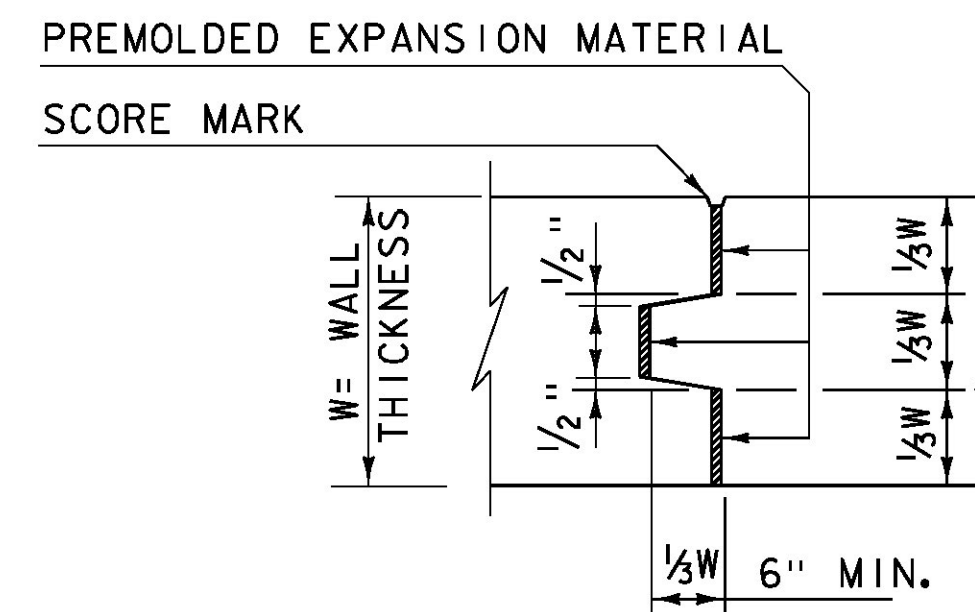
1. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE.
2. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.



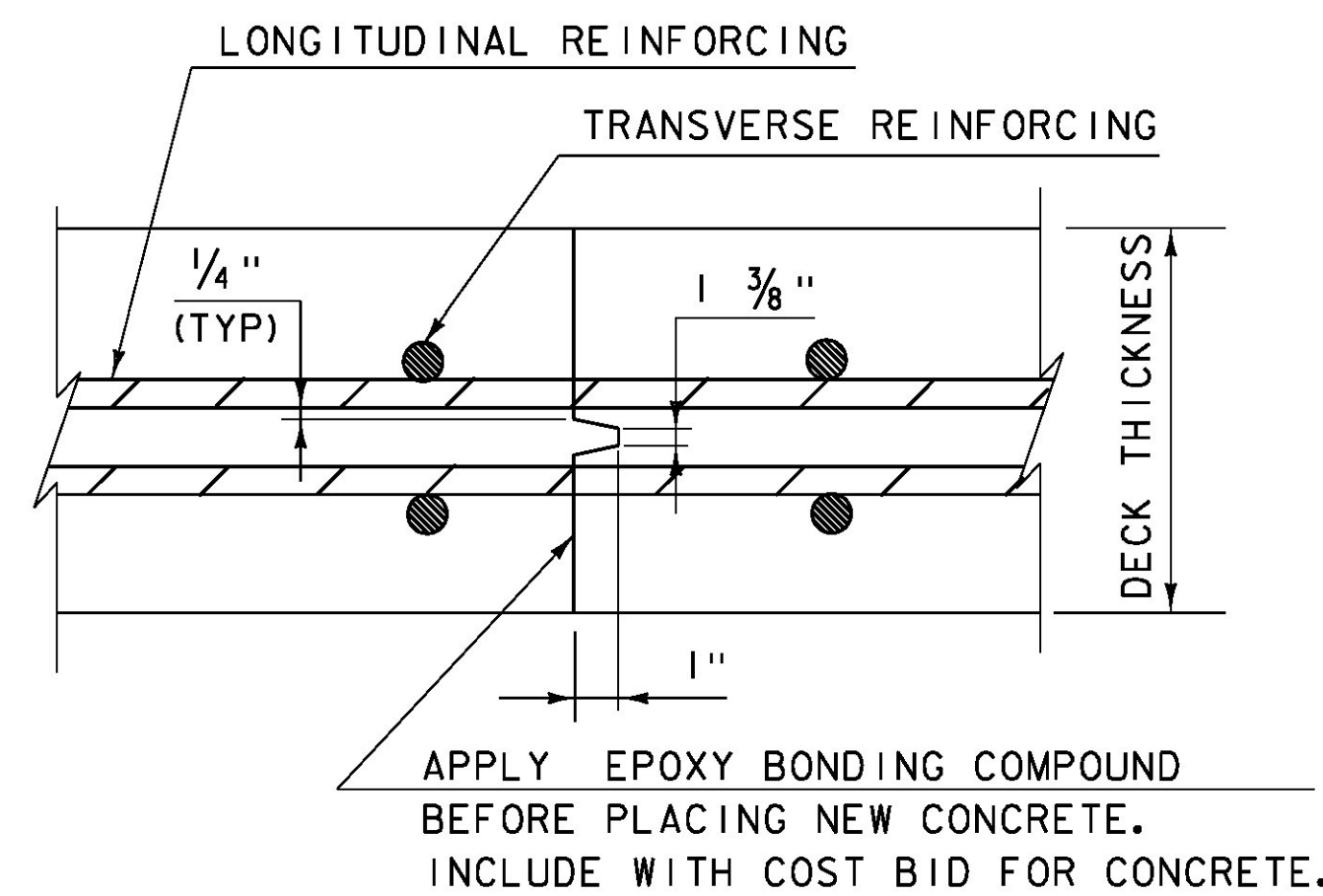
TYPICAL CONCRETE CONSTRUCTION JOINT
(NOT TO SCALE)



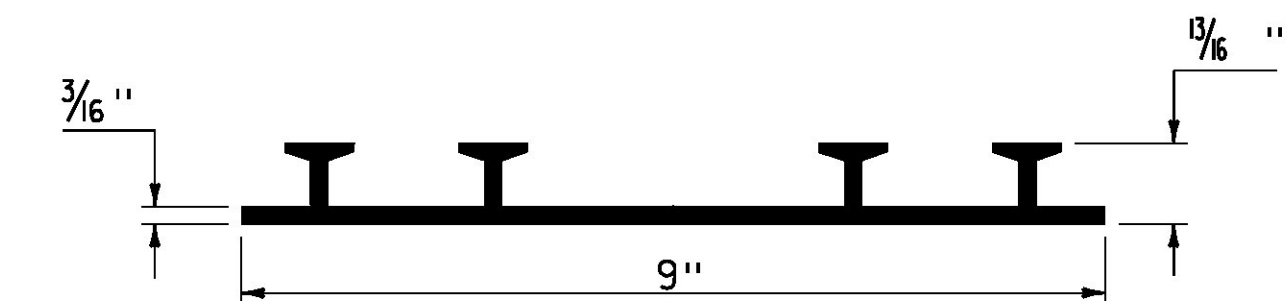
SCORE MARK DETAIL
(NOT TO SCALE)



TYPICAL CONCRETE EXPANSION JOINT
(NOT TO SCALE)



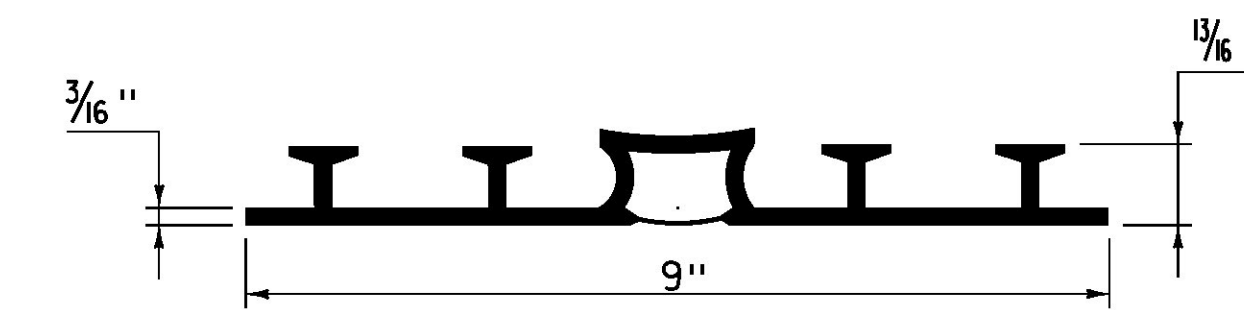
TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAILS
(NOT TO SCALE)



P.V.C. WATERSTOP FOR CONSTRUCTION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

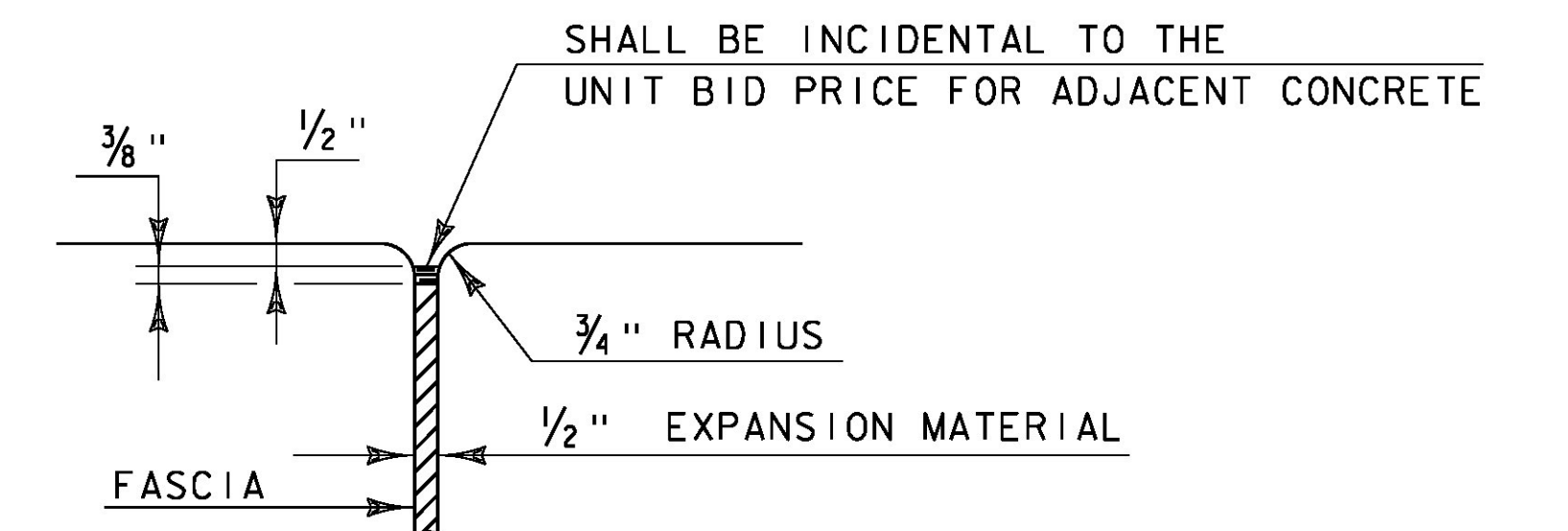
OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.



P.V.C. WATERSTOP FOR EXPANSION JOINTS
(NOT TO SCALE)

PAYMENT FOR THE P.V.C. WATERSTOP SHALL BE INCIDENTAL TO THE UNIT BID PRICE FOR THE ADJACENT CONCRETE.

OTHER CONFIGURATIONS OF WATERSTOP MAY BE USED UPON APPROVAL OF THE ENGINEER.

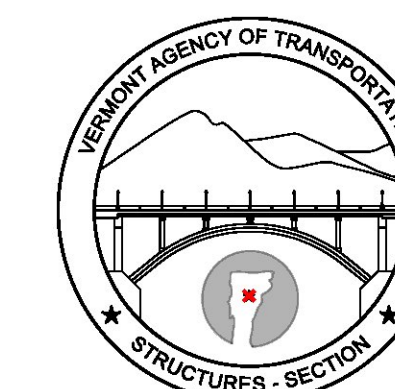


JOINT BETWEEN FASCIA AND WINGWALL
(NOT TO SCALE)

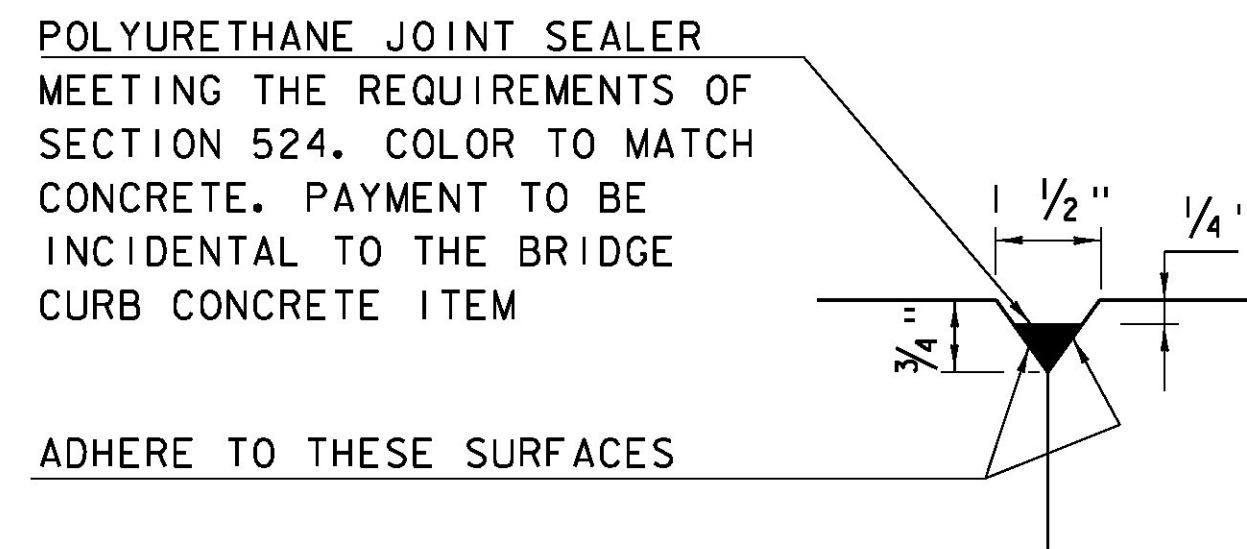
REVISIONS

MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
FEBRUARY 9, 2012	REBAR SUBSTITUTION ALLOWANCE ADDED TO CONCRETE GENERAL NOTES.

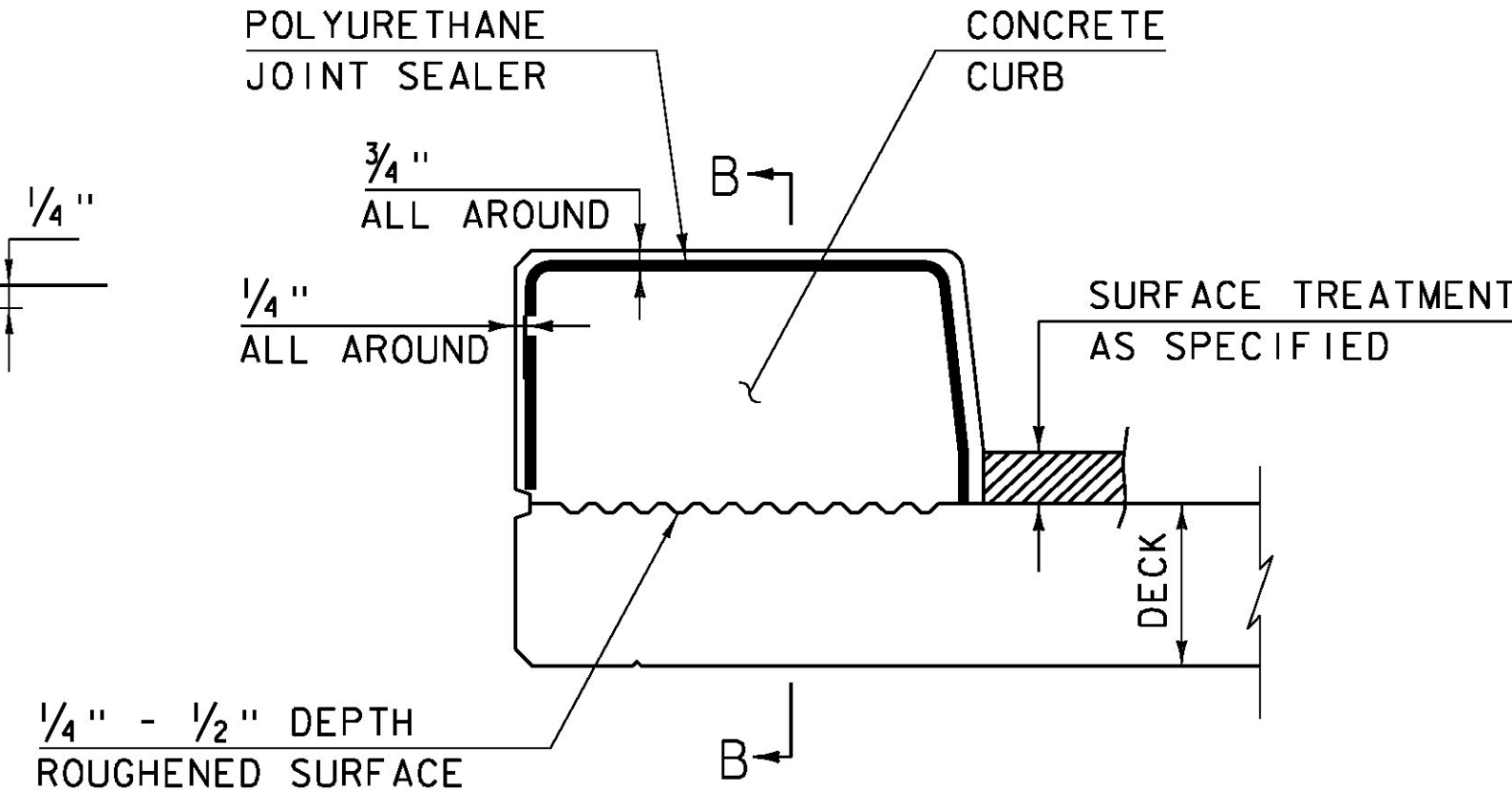
CONCRETE DETAILS AND NOTES



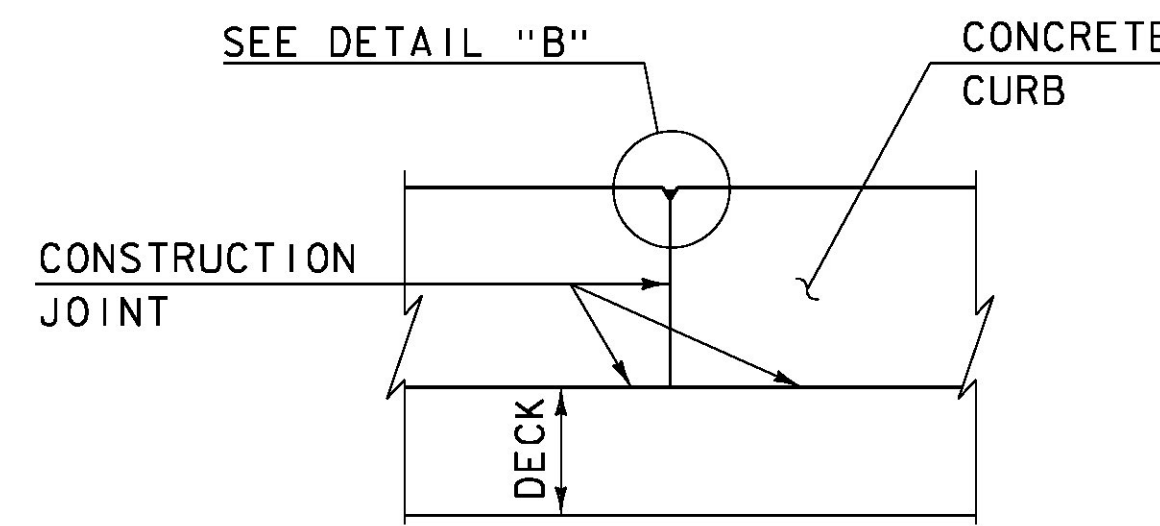
**STRUCTURES
DETAIL
SD-501.00**



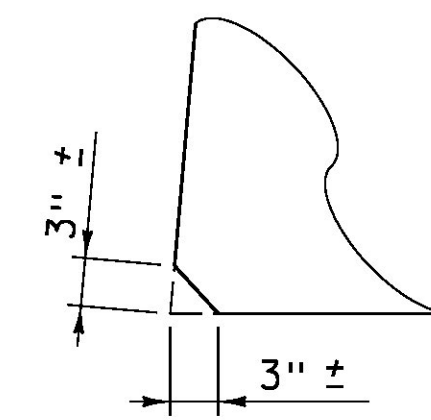
DETAIL "B"
(NOT TO SCALE)



CONCRETE CURB JOINT SECTION
(NOT TO SCALE)

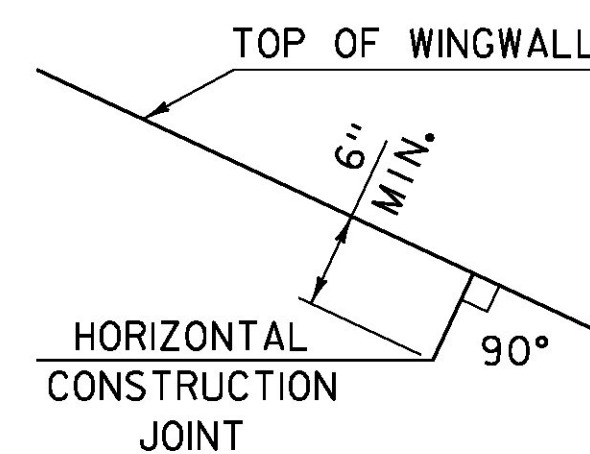


SECTION B - B
(NOT TO SCALE)

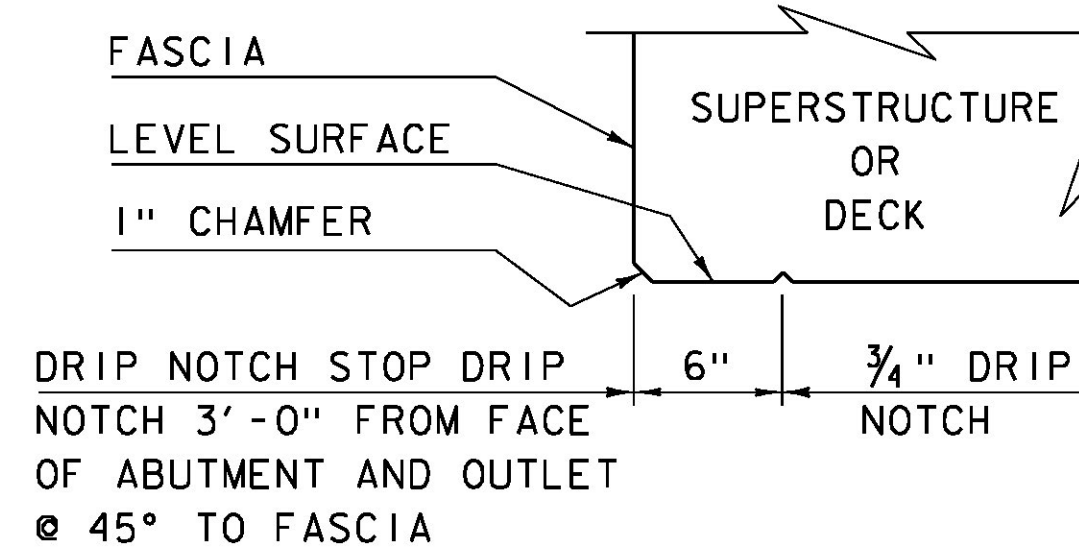


ACUTE ANGLE
CLIP DETAIL
(NOT TO SCALE)

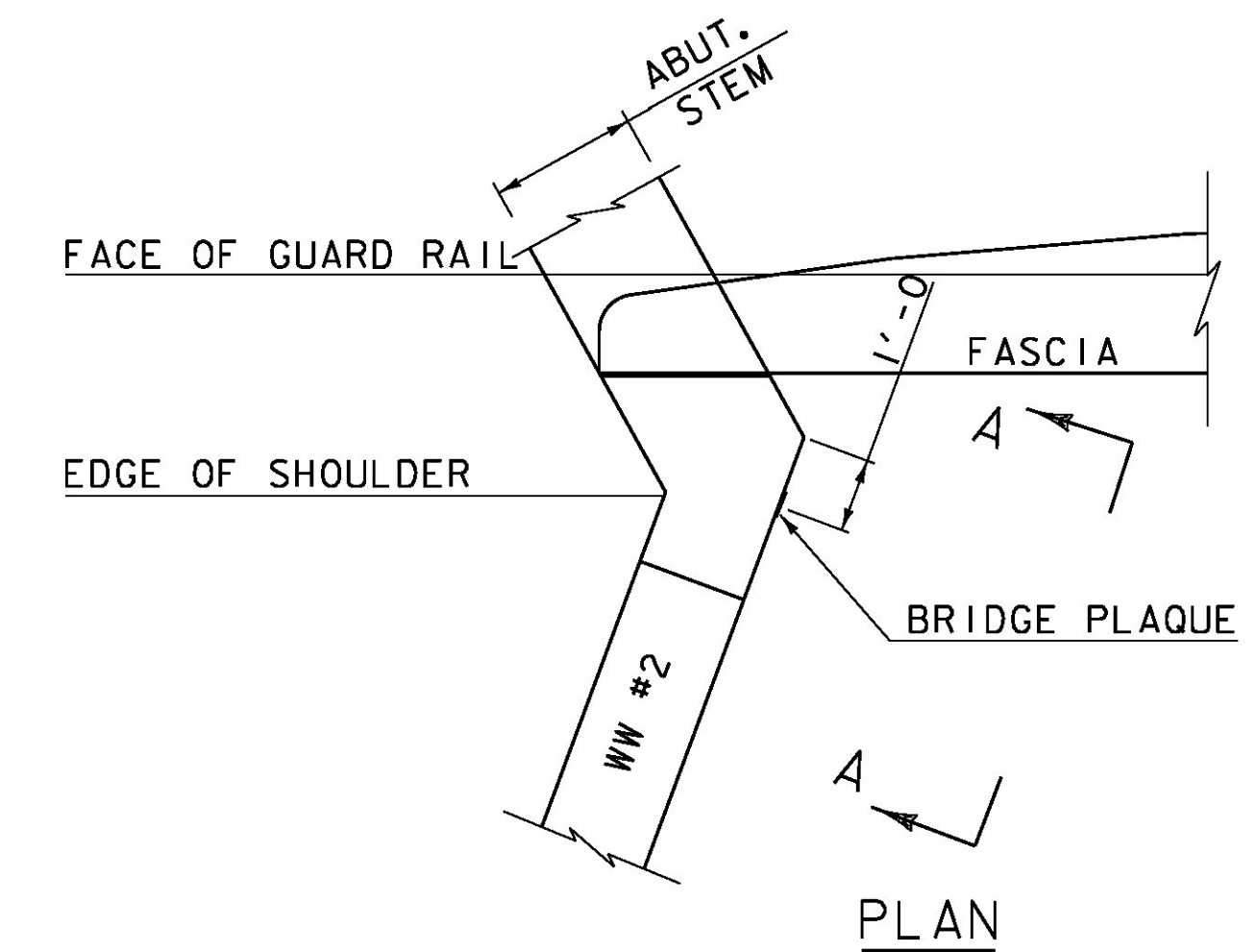
- SEE TYPICAL HORIZONTAL CONSTRUCTION JOINT DETAIL FOR ADDITIONAL INFORMATION



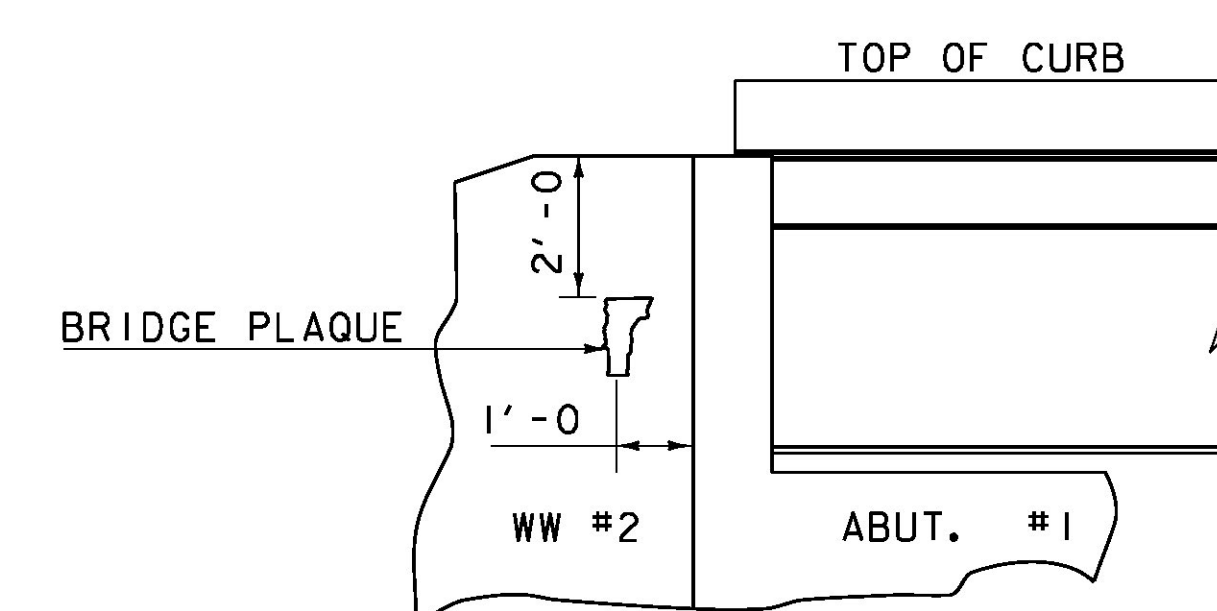
HORIZONTAL WINGWALL
CONSTRUCTION JOINT
(NOT TO SCALE)



DRIP NOTCH DETAIL
(NOT TO SCALE)



PLAN



VIEW "A - A"

BRIDGE PLAQUE
(NOT TO SCALE)

THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.

PAYMENT FOR INSTALLATION OF THE BRIDGE PLAQUE SHALL BE INCIDENTAL TO THE ADJACENT CONCRETE.

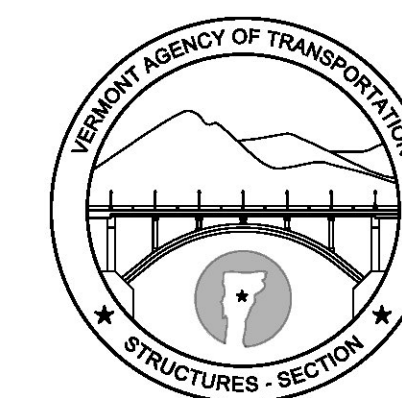
CONCRETE CURB JOINT NOTES

- CONCRETE CURBS MAY BE PLACED IN ONE CONTINUOUS OPERATION IF AN APPROVED SHRINKAGE REDUCING ADMIXTURE LISTED IN THE SPECIAL PROVISIONS IS USED WITH THE CONCRETE MIX DESIGN. PAYMENT FOR THE SHRINKAGE REDUCING ADMIXTURE WILL BE INCIDENTAL TO THE BRIDGE CURB CONCRETE ITEM.
- IF THE CONTRACTOR CHOOSES NOT TO USE AN APPROVED SHRINKAGE REDUCING ADMIXTURE, THE CURBS SHALL BE CONSTRUCTED WITH CONSTRUCTION JOINTS SPACED AT A MAXIMUM OF 15'-0" CENTER TO CENTER AND 2'-0" MINIMUM FROM THE CENTER OF NEAREST BRIDGE RAILING POST.
- ON MULTI-SPAN CONTINUOUS SUPERSTRUCTURES, REGARDLESS OF WHETHER APPROVED SHRINKAGE REDUCING ADMIXTURE IS USED, CURB JOINTS SHALL BE LOCATED OVER THE CENTERLINE OF PIERS AND 7'-0" EACH SIDE OF THE CENTERLINE OF EACH PIER.
- WHEN CURB JOINTS ARE USED THE CURBS SHALL BE PLACED IN ALTERNATE SECTIONS WITH A MINIMUM OF 48 HOUR DELAY BETWEEN ADJACENT PLACEMENTS.
- LONGITUDINAL REINFORCING SHALL BE CONTINUOUS THROUGH CURB CONSTRUCTION JOINTS. CURB STIRRUP BARS SHALL BE TURNED AS NECESSARY TO MAINTAIN COVER IN THE FLARED CURB ENDS.
- THE JOINT SPACING AND DETAILS SHOWN SHALL APPLY TO SIDEWALKS WHEN SHOWN IN THE PLANS.

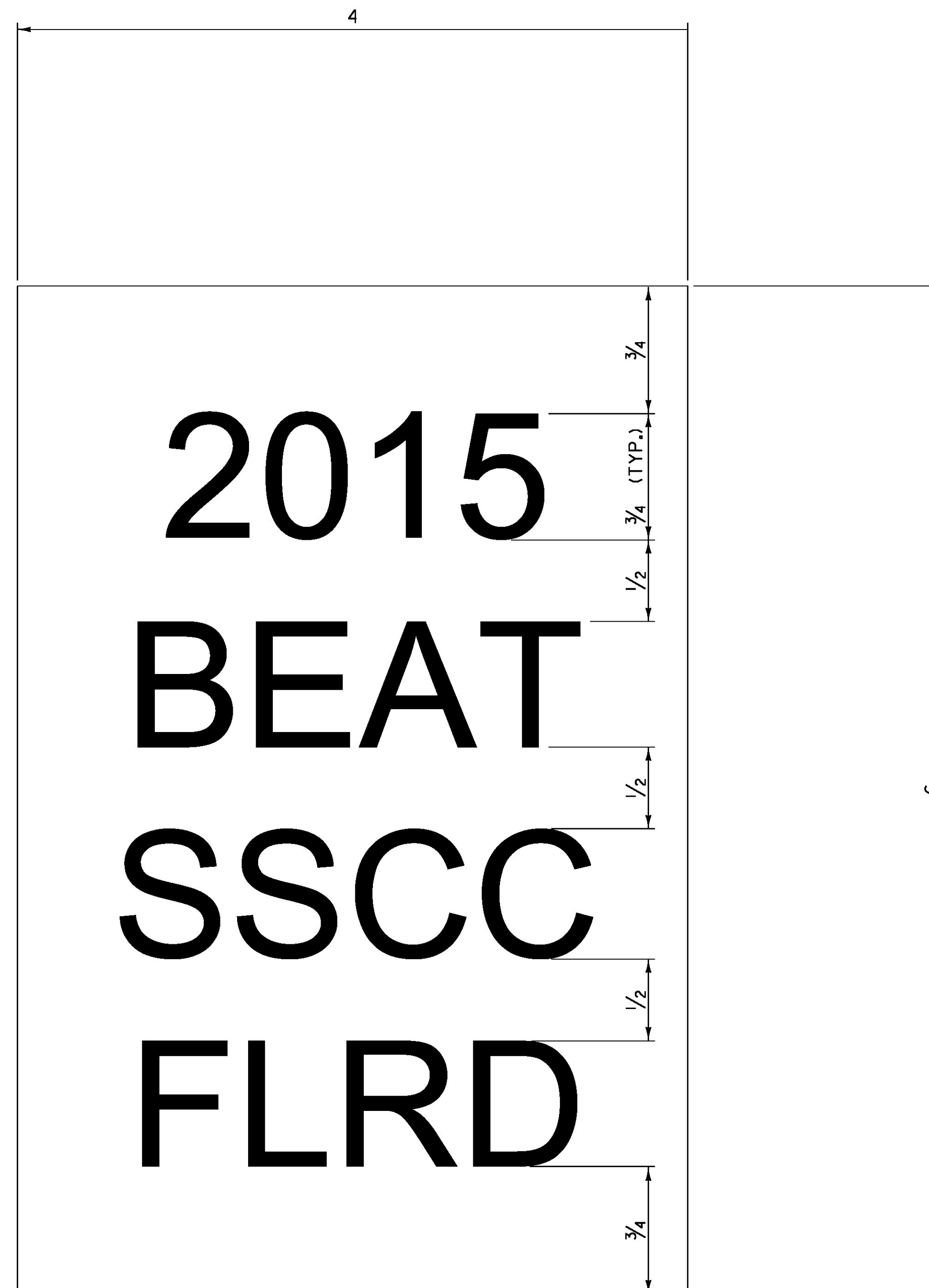
REVISIONS

MAY 7, 2010	APPROVED FOR USE BY VAOT STRUCTURES SECTION
JUNE 4, 2010	MODIFIED AND ADDED TWO DETAILS
OCTOBER 10, 2012	MODIFIED HORZ. JOINT WINGWALL ADD 6" MIN. DIMENSION

CONCRETE
DETAILS AND NOTES



STRUCTURES
DETAIL
SD-502.00



GENERAL NOTES:

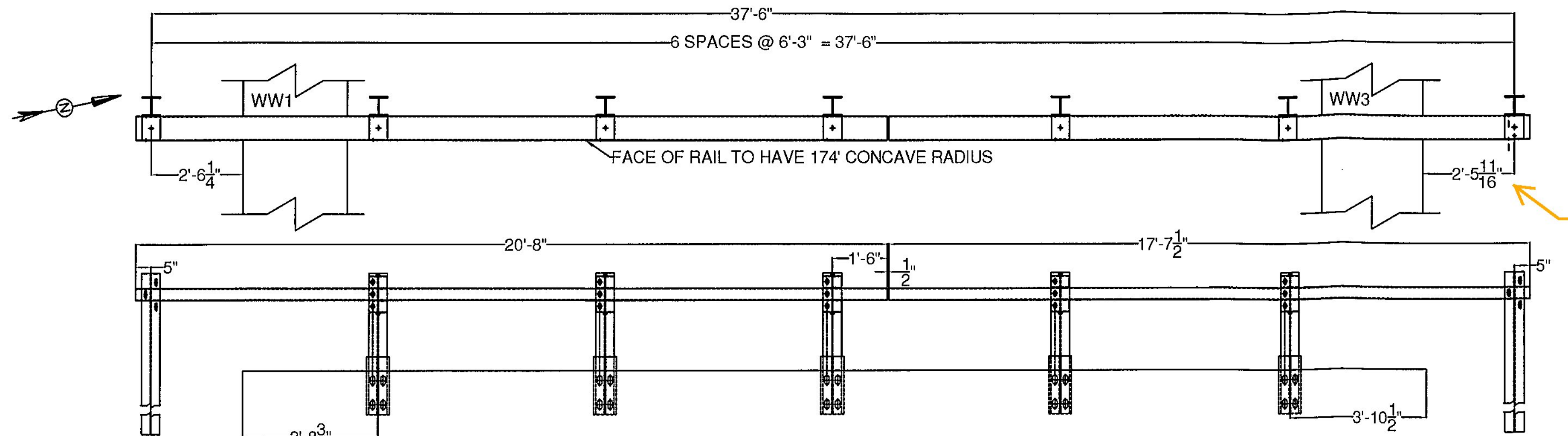
1. LINE ONE SHALL INDICATE THE INSTALLATION YEAR (YYYY).
2. LINE TWO SHALL INDICATE THE MODEL AS IDENTIFIED ON THE APPROVED PRODUCTS LIST. FOR GENERIC INSTALLATIONS THE STANDARD DRAWING DESIGNATION OR NAME AS IDENTIFIED IN THE FHWA ELIGIBILITY LETTER SHALL BE USED.
3. LINE THREE SHALL INDICATE ADDITIONAL MODEL INFORMATION IF NECESSARY.
4. LINE FOUR SHALL INDICATE FLARED (FLRD) OR TANGENT (TANG).
5. LEGEND SHALL BE ONE ARIEL FONT.
6. LEGEND SHALL BE BLACK ON A WHITE BACKGROUND, LEGEND AND BACKGROUND SHALL NOT BE REFLECTIVE.
7. SUITABLE MATERIAL SHALL BE USED SO AS TO NOT DETERIORATE DURING EXPOSURE TO WEATHER.
8. LABELS SHALL BE APPLIED IN SUCH A WAY THAT THEY REMAIN INTACT DURING THE LIFE OF THE TERMINAL.
9. FOR W-BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE TOP OF POST ONE FACING AWAY FROM TRAFFIC.
10. FOR BOX BEAM GUARDRAIL, LABEL SHALL BE PLACED ON THE BOX BEAM ADJACENT TO POST ONE FACING AWAY FROM TRAFFIC.
11. PAYMENT SHALL BE INCIDENTAL TO OTHER TRAFFIC BARRIER ITEMS.
12. ALL DIMENSIONS IN INCHES.

REV.	DATE	DESCRIPTION
0	NOV. 3, 2015	ORIGINAL APPROVAL
OTHER DETAILS REQUIRED: NONE		
DETAILS APPROVED FOR USE BY HIGHWAY SAFETY & DESIGN		

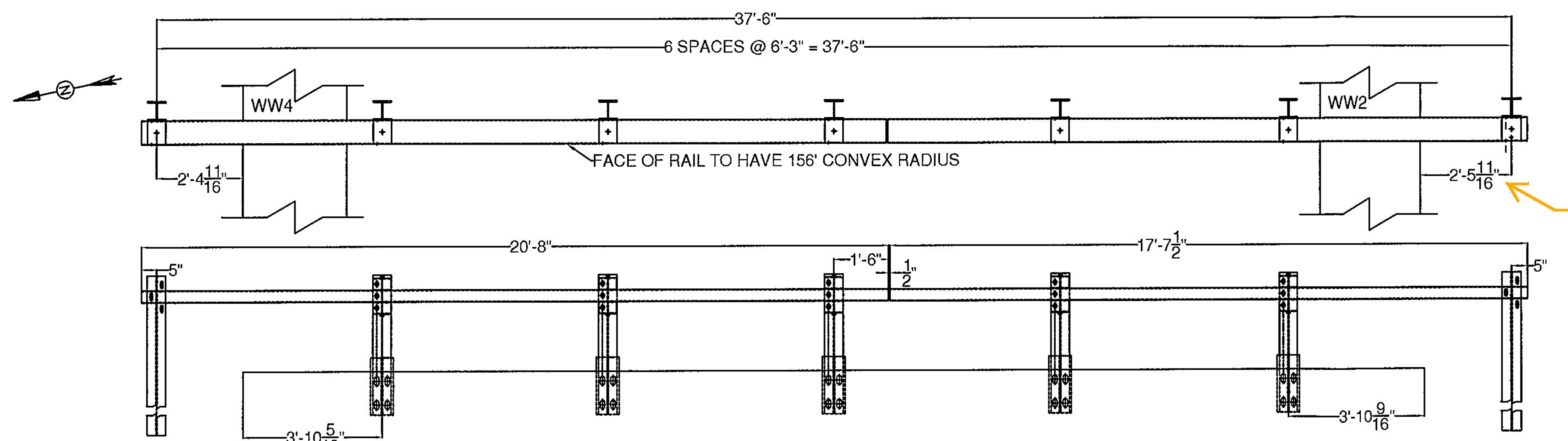
GUARDRAIL TERMINAL LABEL DETAIL



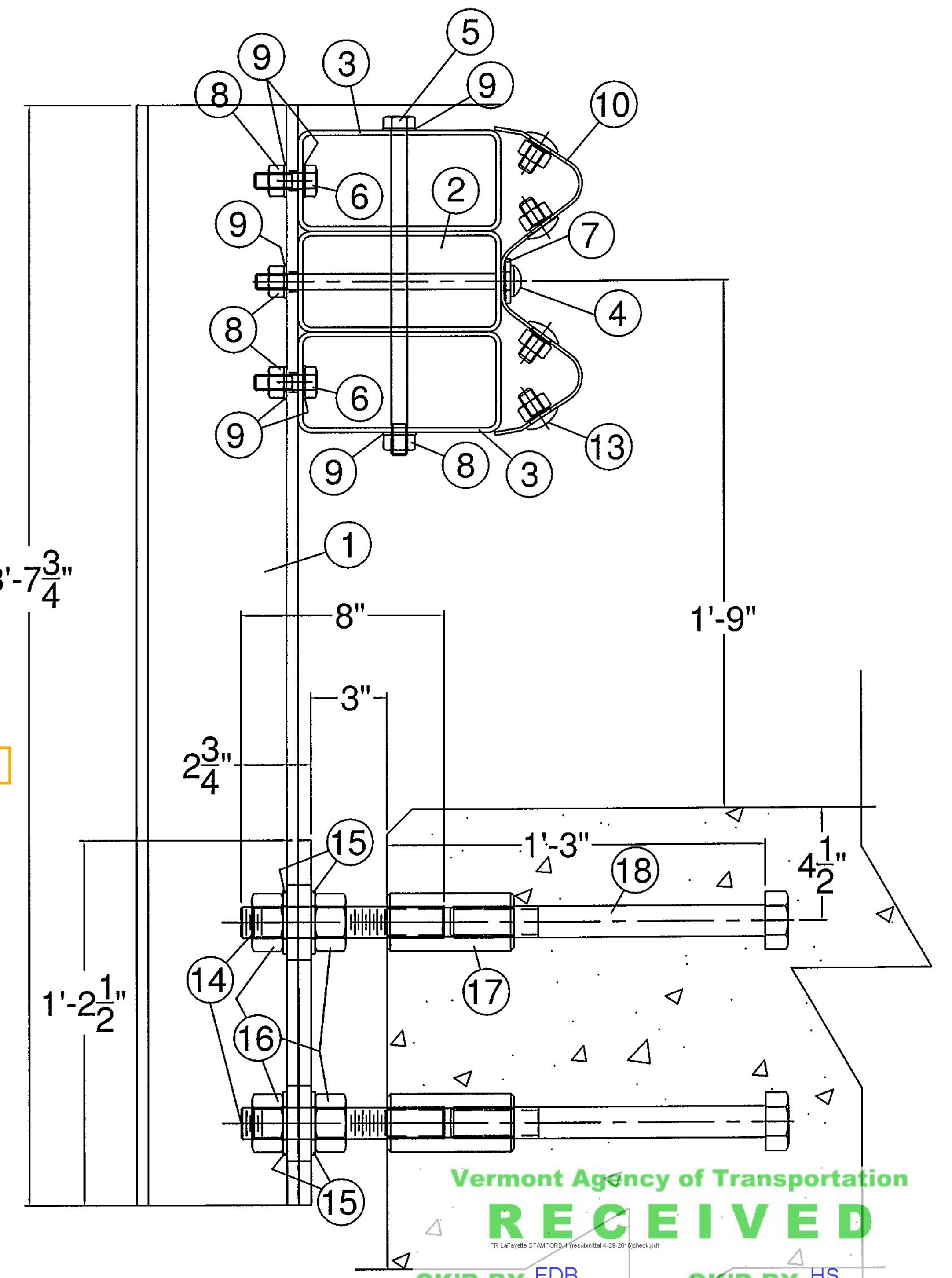
HIGHWAY SAFETY
& DESIGN DETAIL
HSD - 621.06



WEST RAILING, FACING WEST



EAST RAILING, FACING EAST



Vermont Agency of Transportation
RECEIVED

CK'D BY FDB OK'D BY HS

April 29, 2016

RESUBMIT no Approved AsNoted
BY Carolyn Carlson DATE 05/03/2016

BILL OF MATERIAL				
DET#	QTY	PART		ASTM DESIGNATION
1	10	TBD	W6x25, TYPE 1, FASCIA POST @ 3'-7 3/4"	ASTM A572 Gr. 50
2	1	TBD	HSS8x4x3/16" TUBING @ 20'-8" W/ 174' CONCAVE RAD.	ASTM A500 Gr. B
2	1	TBD	HSS8x4x3/16" TUBING @ 17'-7 1/2" W/ 174' CONCAVE RAD.	ASTM A500 Gr. B
2	1	TBD	HSS8x4x3/16" TUBING @ 20'-8" W/ 156' CONVEX RAD.	ASTM A500 Gr. B
2	1	TBD	HSS8x4x3/16" TUBING @ 17'-7 1/2" W/ 156' CONVEX RAD.	ASTM A500 Gr. B
3	28	0033.90045	HSS8x4x3/16" TUBE BLOCKOUT @ 6"	ASTM A500 Gr. B
4	14	0080.05710	5/8"x10" POST BOLT, NUT, & F.W.	ASTM A307
5	14	0080.15595	5/8"x13" HEX BOLT	ASTM A307
6	36	0080.15036	5/8"x2" HEX BOLT	ASTM A307
7	14	0080.15913	3/16"x1 3/4"x3" SPECIAL WASHER	ASTM A36
8	56	0080.15901	5/8" HEX NUT	ASTM A307
9	106	0080.15911	5/8" FLAT WASHER	ASTM A307
10	3	6043.62174	10 GAUGE "W" BEAM @ 12'-6" C.-C. W/174' CONCAVE RAD.	AASHTO M180, CLASS B, TYPE II
10	3	6043.52155	10 GAUGE "W" BEAM @ 12'-6" C.-C. W/156' CONVEX RAD.	AASHTO M180, CLASS B, TYPE II
11	4	0033.90301	W6X25 POST @ 6'-0" O.A. (POST #1)	ASTM A572 Gr. 50
* 12	6	-	DELINATOR - TO BE SUPPLIED BY FR LAFAYETTE	ALUMINUM
13	56	0080.15013	5/8"x1-1/4" SPLICE BOLT (PANEL ASS'Y)	ASTM A307
13	56	0080.15905	5/8"x1-1/4" RECESSED NUT (PANEL ASS'Y)	ASTM A307
** 14	42	0042.21408	1 1/4"x8" STUD	ASTM A449
** 15	84	0080.19922	5/16"x2 1/2"x3 1/2" FASCIA PLATE WASHERS	ASTM A572 Gr. 50
** 16	84	0080.19918	1 1/4" HEX NUT	ASTM A563
** 17	42	0080.19921	1 1/4" x 5" COUPLER NUT W/ RT. HAND MACH. THD.	ASTM A563
** 18	42	0042.21412	1 1/4" x 12" MACHINE BOLT, THREAD LEN. @ 3"	ASTM A449
19	2	0033.90074	C7x9.8 CHANNEL SPLICE @ 2'-6 1/2"	ASTM A36

* - SUPPLIED BY OTHERS ** - TWO ADDITIONAL SETS FOR Vtrans QA TESTING

- NOTES:
- ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
 - GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16", PRIOR TO GALVANIZING.
 - ALL POSTS SHALL BE SET NORMAL TO GRADE.
 - SPLICES FOR THE STEEL BEAM GUARDRAIL SHALL LAP IN THE DIRECTION OF TRAFFIC.
 - A RAILING JOINT SPLICE SHALL BE PROVIDED IN ANY RAIL BAY SPANNING THE END OF AN INTEGRAL ABUTMENT BRIDGE AND AT ALL SUPERSTRUCTURE EXPANSION JOINTS. SEE STANDARD DRAWING G-1 FOR DETAILS OF DELINEATORS. A DELINEATOR SHALL BE INSTALLED AT 30 FOOT SPACING OR THE NEAREST POST. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. FOR ONE WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT.
 - THE 1/2" EXPANSION JOINT SHOWN IN THE RAILING ELEVATION IS DESIGNED FOR BRIDGE LENGTHS UP TO 80 FEET, ANY LONGER SPANS WILL HAVE TO BE MODIFIED TO ACCOUNT FOR THEIR MOVEMENT.
 - FOR RADII LESS THAN 950 FEET, HSS8x4 TUBES SHALL BE SHOP BENT TO FIT THE APPLICABLE CURVE.
 - THE MINIMUM DISTANCE FROM THE LAST POST TO THE END OF SLAB IS 1'-6".
 - FERRULES SHALL BE 12L14 COLD DRAWN CARBON STEEL.
 - HOLES IN RAIL FOR RAIL TUBE ATTACHMENT WILL BE SHOP DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
 - THIS RAILING MEETS THE REQUIREMENTS FOR A TL-2 SERVICE LEVEL.

ITEM #: 525.44

STRUCTURAL STEEL TO COMPLY W/ ASTM A6

GALVANIZING TO BE PER ASTM A123, UNLESS OTHERWISE SPECIFIED.

TOLERANCE UNLESS OTHERWISE NOTED:
HOLES - ± 1/32"
FRACTIONS - ± 1/16"
ANGLES - ± 1/2"

BRIDGE RAIL DETAILS SHEET
ROUTE NO: TOWN HIGHWAY 14, CLASS 3 BRIDGE NO : 26
TOWN OF STAMFORD, COUNTY OF BENNINGTON, VERMONT

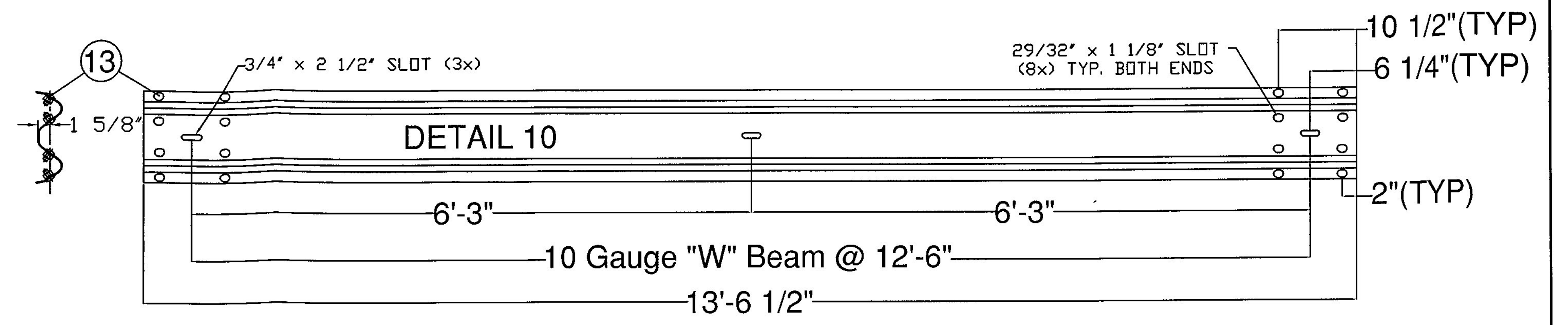
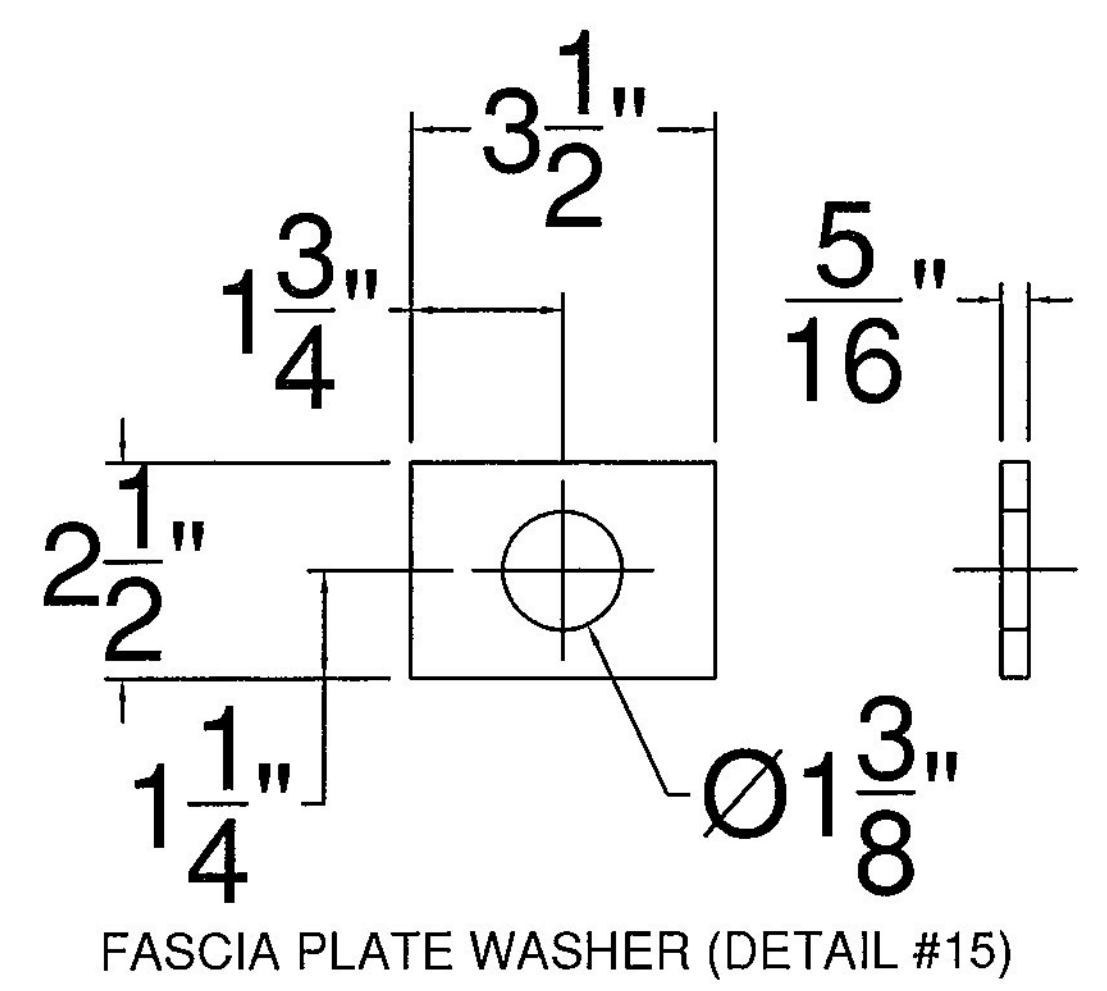
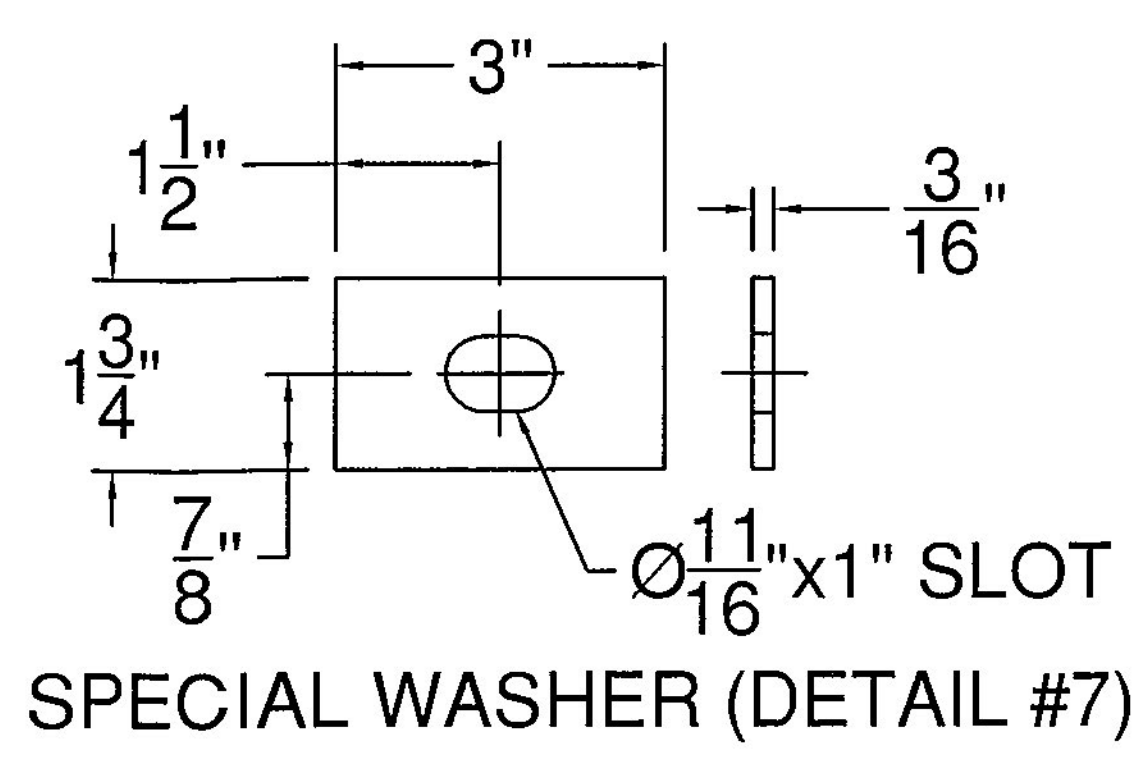
R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
E 1	4/27/16	REVISED WITH NEW LENGTHS	D.K.				

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
email: dlong@elderlee.com / epeak@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

ORTHOGONAL PROJECTION

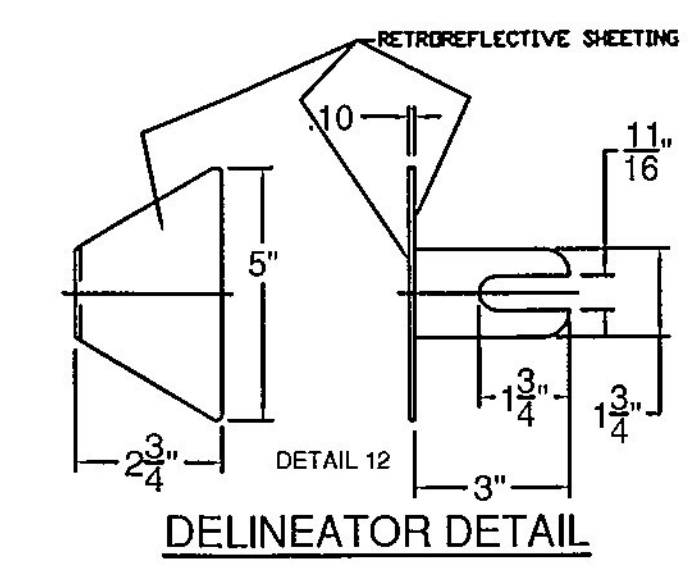
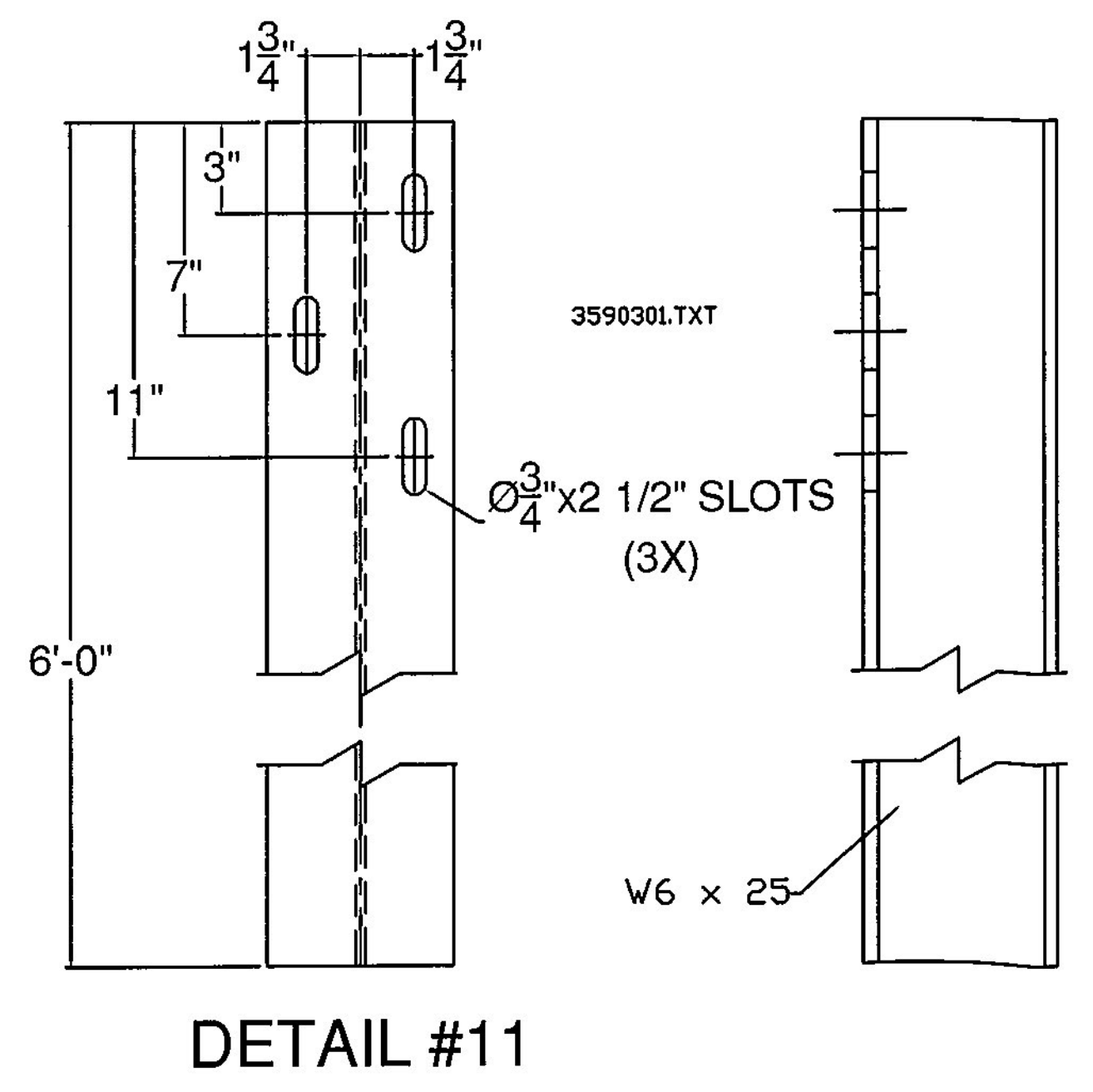
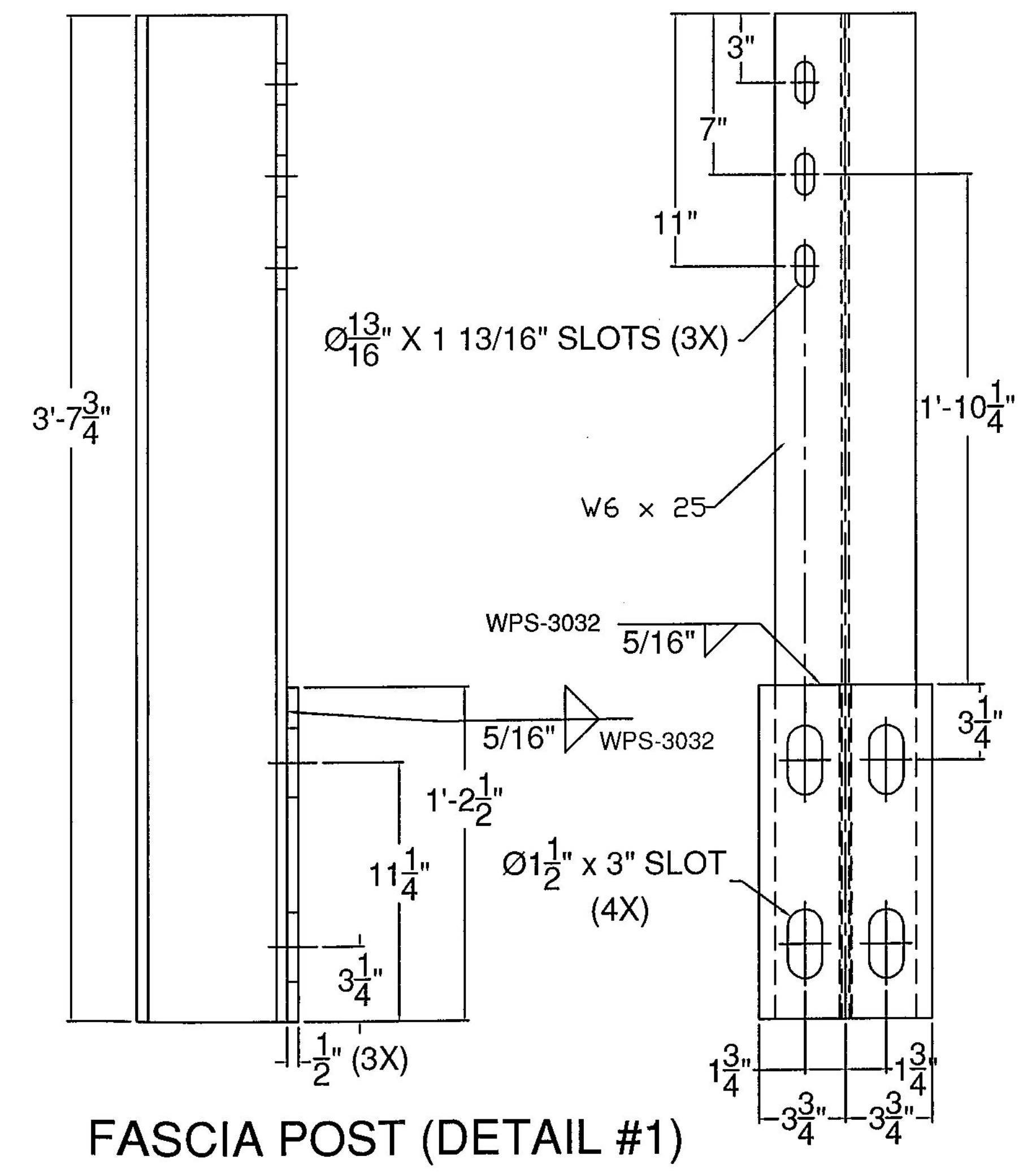
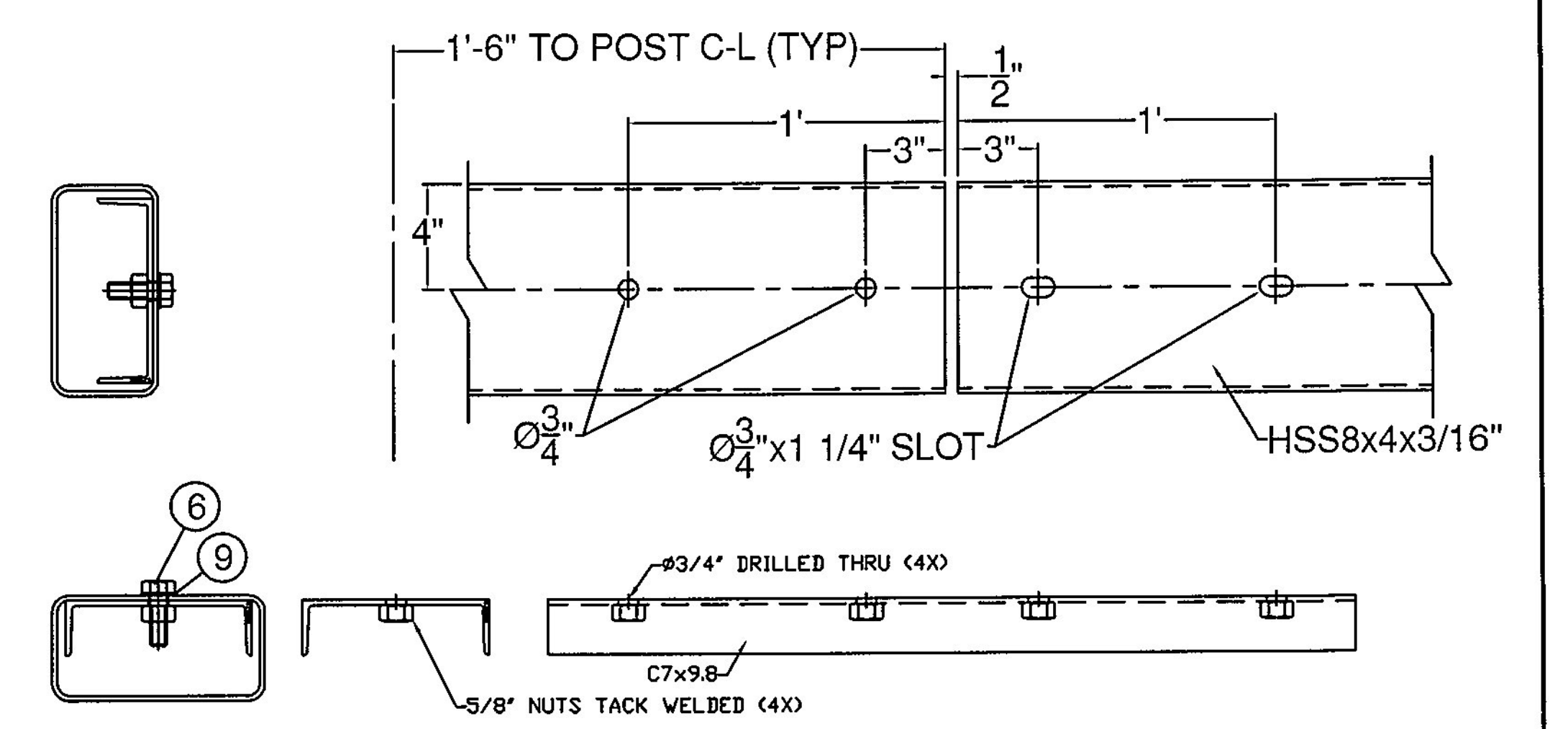
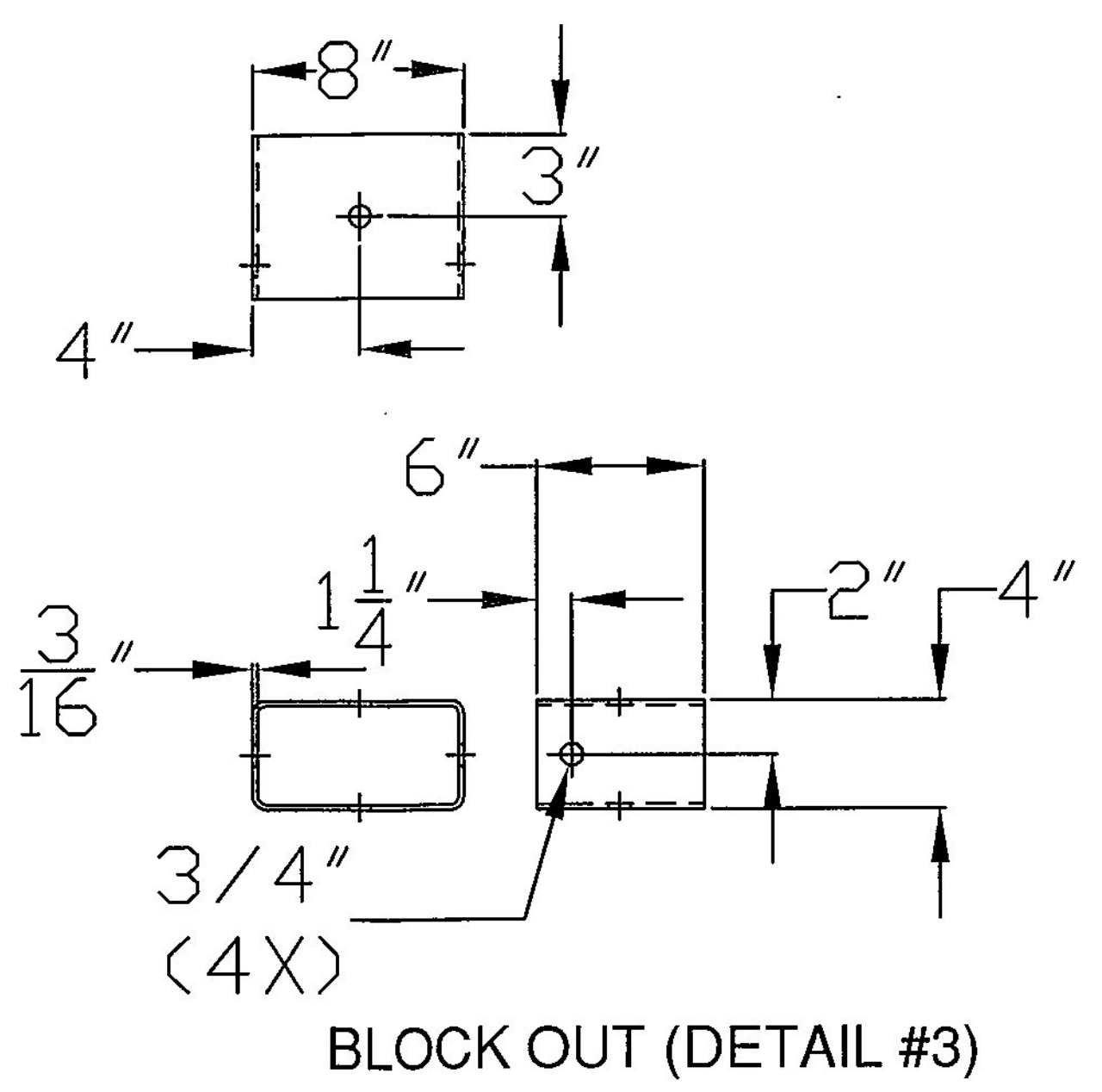
DRAWN	D.K.	DATE
CHECKED	E.P.	04/05/16
APPROVED	D.L.	04/05/16
SCALE	SCHMATIC	

DRAWING NO. FR LAFAYETTE-STAMFORD



3 W/ 174' CONCAVE RADIUS (#6043.62174)
3 W/ 156' CONVEX RADIUS (#6043.52155)

Vermont Agency of Transportation
RECEIVED
CK'D BY FDB OK'D BY HS
April 29, 2016
RESUBMIT no Approved AsNoted
BY Carolyn Carlson DATE 05/03/2016



ITEM #: 525.44
STRUCTURAL STEEL TO COMPLY W/ ASTM A6
GALVANIZING TO BE PER ASTM A123, UNLESS OTHERWISE SPECIFIED.
TOLERANCE UNLESS OTHERWISE NOTED:
HOLES - ± 1/32"
FRACTIONS - ± 1/16"
ANGLES - ± 1/2"

SHEET 2 OF 2

BRIDGE RAIL DETAILS SHEET
ROUTE NO: TOWN HIGHWAY 14, CLASS 3 BRIDGE NO. 26
TOWN OF STAMFORD, COUNTY OF BENNINGTON, VERMONT

R NO.	DATE	DESCRIPTION	BY	R NO.	DATE	DESCRIPTION	BY
E 1	4/27/16	REVISED WITH NEW LENGTHS	D.K.	E			
V				V			

DRAWN	D.K.	04/05/16
CHECKED	E.P.	04/05/16
APPROVED	D.L.	04/05/16
SCALE	SCHEMATIC	
DRAWING NO. FR L&FAYETTE-STAMFORD		

ELDERLEE, INC.
OAKS CORNERS, NEW YORK 14518
email: dlong@elderlee.com / epesk@elderlee.com
Tel: 315-789-6670 Fax: 315-789-6615

CERTIFIED FABRICATOR
ORTHOGONAL PROJECTION

RECEIVED

FR LeFayette STAMFORD-1 Approved As Noted 5-3-2016.pdf

CK'D BY RF OK'D BY HS

April 29, 2016

RESUBMIT NO Approved

BY C. Carlson DATE 05/04/2016

WELDING PROCEDURE SPECIFICATION

PQR ELDERLEE #3

Material Specification A572 GR. 50 TO A572 GR. 50
 Welding Process FCAW-G
 Manual or Machine SEMAUTOMATIC
 Position of Welding FLAT/HORIZONTAL
 Filler Metal Specification A5.29
 Filler Metal Classification E81T1-Ni1C-JH4
 Flux N/A
 Shielding Gas CO 2 Dew Point -40DEG F Flow Rate 50CFH
 Single or Multiple Pass SINGLE
 Single or Multiple Arc SINGLE
 Welding Current DC ELECTRODE POSITIVE
 Polarity REVERSE
 Welding Progression STRINGER
 Root Treatment PER D1.5
 Preheat and Interpass Temperature PER D1.5
 Postheat Temperature NONE
 Heat Input Min _____ Max _____

WELDING PROCEDURE

Pass no.	Electrode size	Welding Current		Travel speed	Joint detail
		Amperes	Volts		
1	1/16	310	25	11	
Variable	LIMITS	341	27	12	
		TO 279	TO 23	TO 10	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No. 3032

Contractor Elderlee, Inc.

Revision No. _____

Authorized By RANDY SCOTT

Date 4/4/2016