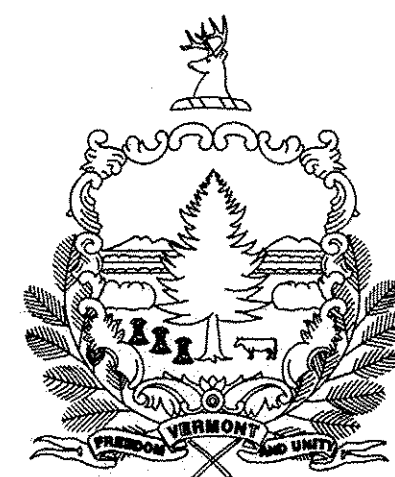


INDEX OF SHEETS

SEE PRELIMINARY INFORMATION SHEET, SHEET 2

STATE OF VERMONT AGENCY OF TRANSPORTATION



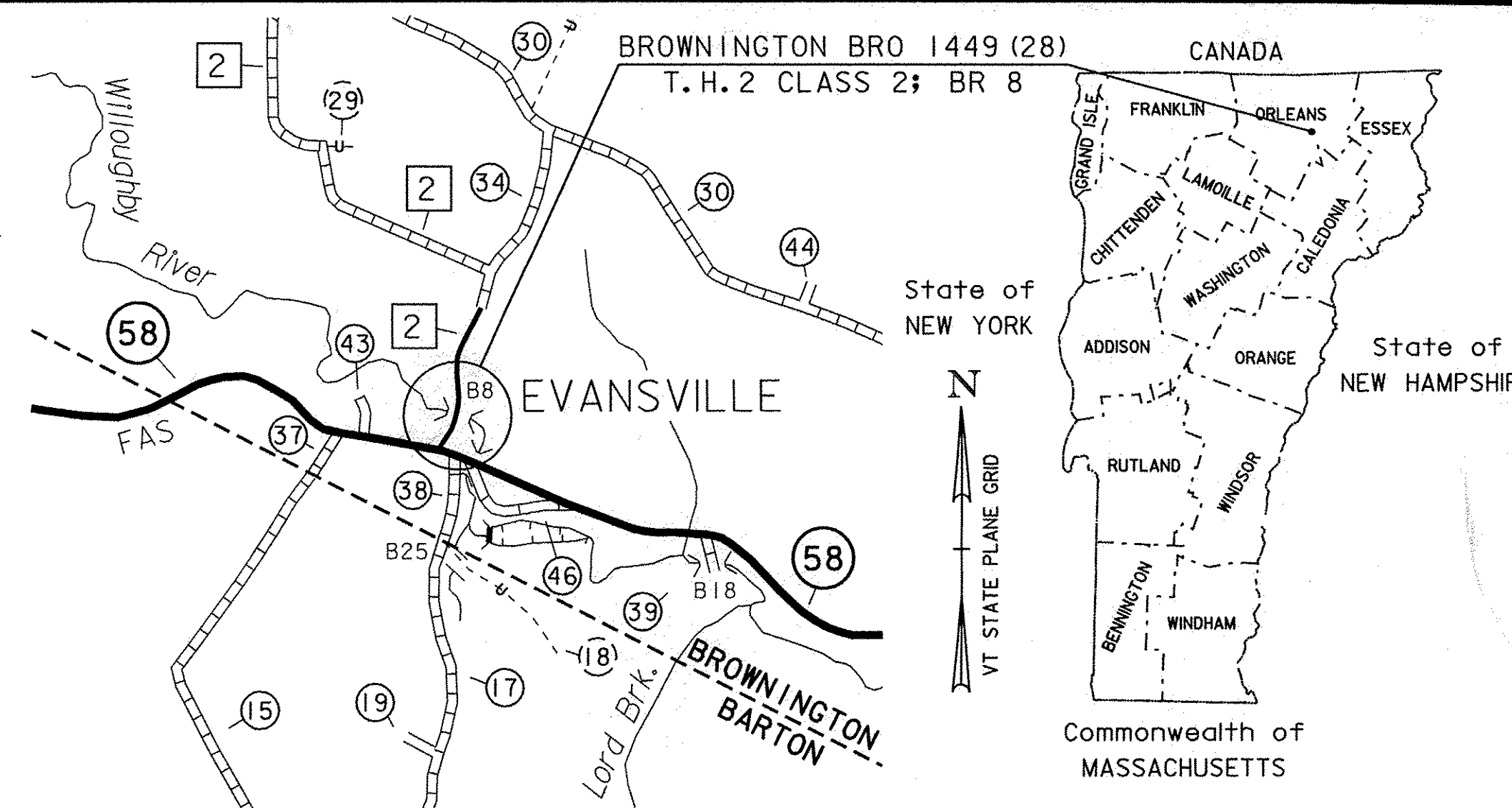
PROPOSED IMPROVEMENT BRIDGE PROJECT TOWN OF BROWNINGTON COUNTY OF ORLEANS

ROUTE NO : T.H. 2 CL.2 BRIDGE NO : BR 8

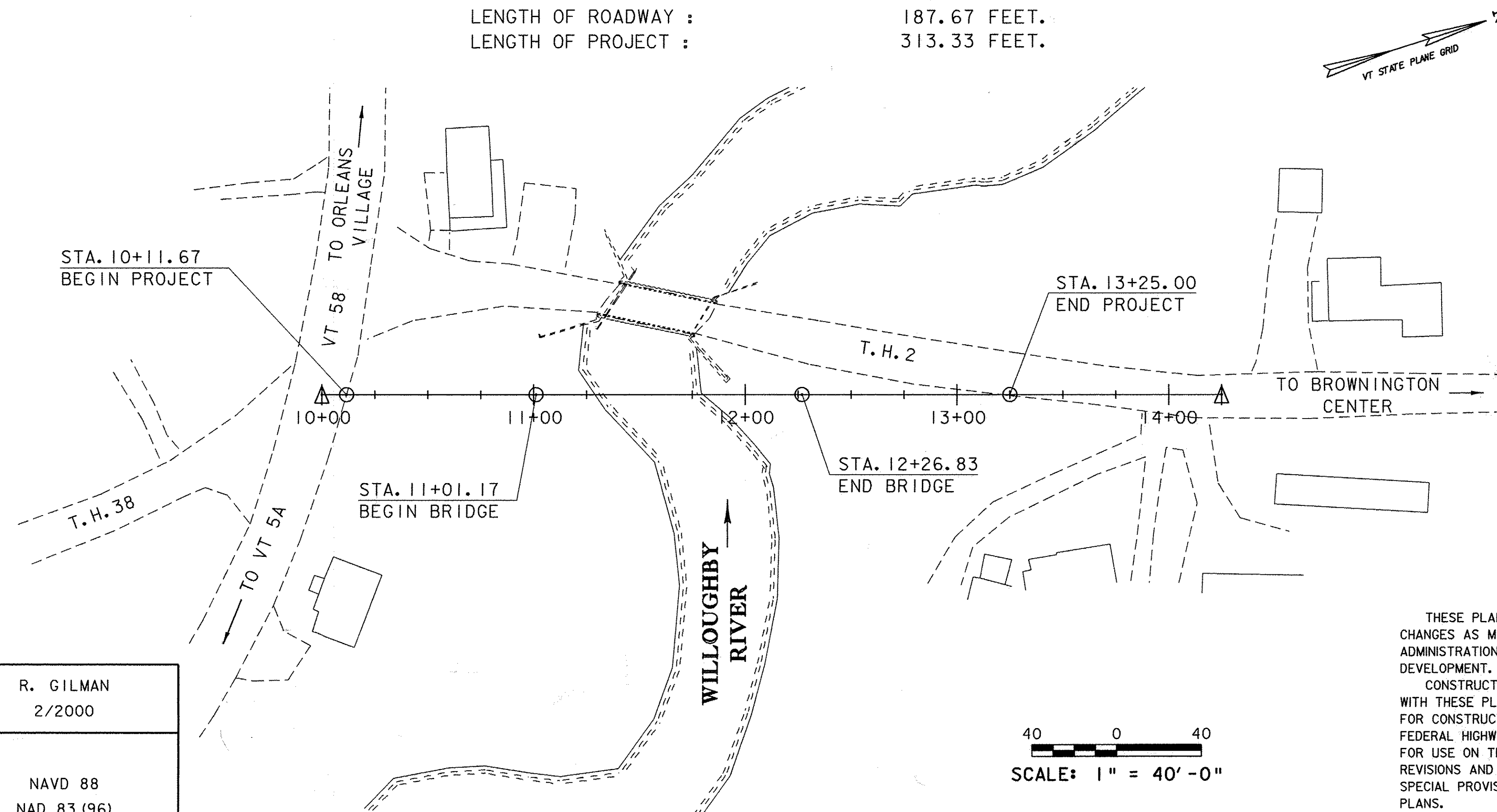
PROJECT LOCATION : BEGINNING AT THE INTERSECTION OF T.H. 2 AND VT 58 AND
EXTENDING NORTHERLY ALONG T.H. 2 FOR 0.06 MILES.

PROJECT DESCRIPTION : REPLACEMENT OF THE EXISTING BRIDGE WITH A NEW STRUCTURE,
INCLUDING RELATED CHANNEL AND APPROACH ROADWAY WORK.

LENGTH OF STRUCTURE : 125.66 FEET.
LENGTH OF ROADWAY : 187.67 FEET.
LENGTH OF PROJECT : 313.33 FEET.



LOCATION MAP

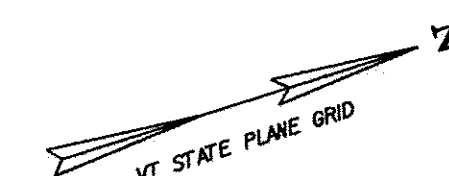


CONVENTIONAL SYMBOLS

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

SURVEYED BY : R. GILMAN
SURVEYED DATE : 2/2000

DATUM
VERTICAL NAVD 88
HORIZONTAL NAD 83 (96)

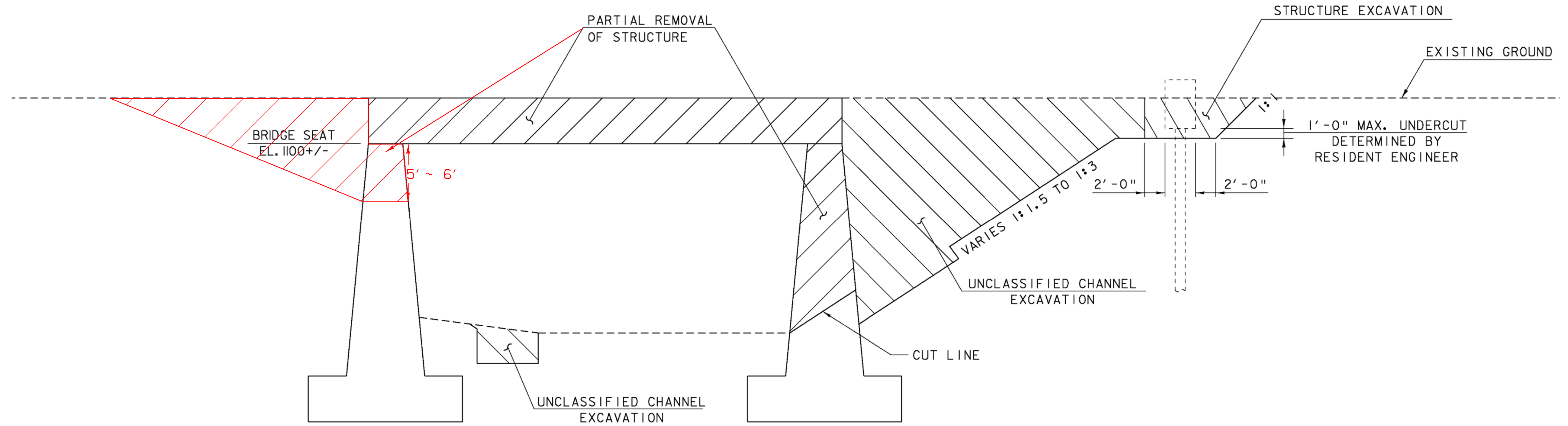


SCALE: 1" = 40'-0"

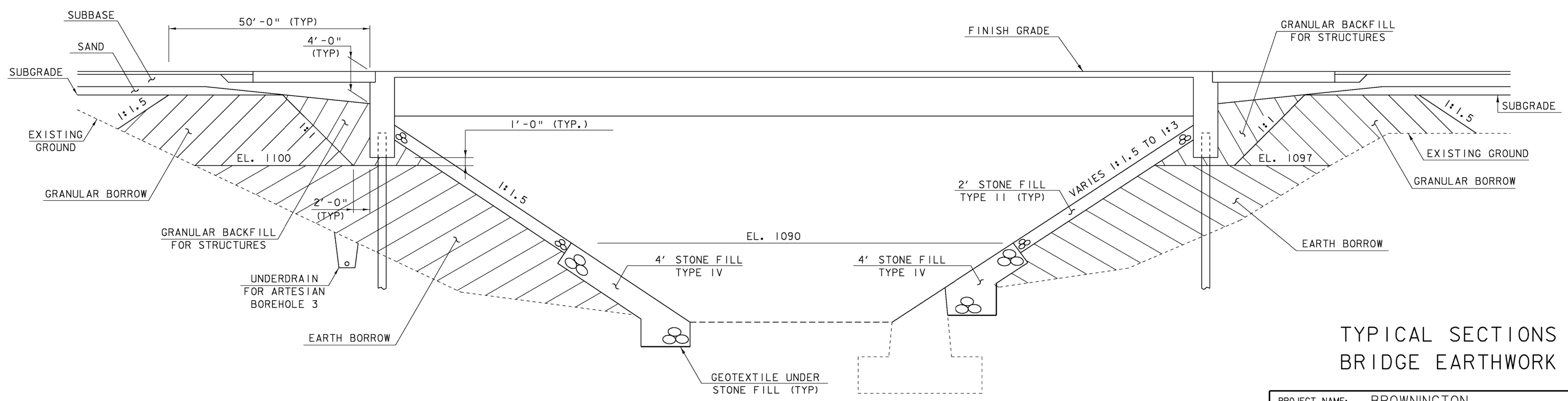
RECORD PLANS	
CONTRACTOR:	AUSTIN CONSTRUCTION INC.- CONCORD, VT
RESIDENT ENGINEER:	SHANE MORIN
CONSTRUCTION BEGAN:	JULY 1, 2009
CONSTRUCTION COMPLETE:	AUGUST 12, 2010
RECORD PLANS BY:	SHANE MORIN & AMOS KEMPTON
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY	RESIDENT ENGINEER
DATE	8/2/2011
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.	

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED	DATE 12.22.08
PROJECT MANAGER : R.R. WHITCOMB	
PROJECT NAME : BROWNINGTON	
PROJECT NUMBER : BRO 1449 (28)	
SHEET 1 OF 58 SHEETS	



EXISTING ABUTMENT EXCAVATIONS & REMOVALS
(NOT TO SCALE)



NEW ABUTMENT FILLS
(NOT TO SCALE)

TYPICAL SECTIONS
BRIDGE EARTHWORK

PROJECT NAME:	BROWNINGTON	PLOT DATE:	19-DEC-2008
PROJECT NUMBER:	BRO 1449 (28)	DRAWN BY:	T. LACKEY
FILE NAME:	sj246ty3.1	CHECKED BY:	R. WHITCOMB
PROJECT MANAGER:	R. WHITCOMB	SHEET	6 OF 58
DESIGNED BY:	T. LACKEY		
99J246/str/sj246typ.dgn			

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES

TOTALS

DESCRIPTIONS

DETAILED SUMMARY OF QUANTITIES

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	1	LS	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	201.10				EARTHWORK SUMMARY
							480				480		CY	COMMON EXCAVATION	203.15		1,281	CY	FILL REQUIRED COMMON FILL (1.15*1114 CY)
							10				10	0	CY	SOLID ROCK EXCAVATION	203.16				FILL AVAILABLE
									1320		1320		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27		96	CY	COMMON EXCAVATION (0.2*480 CY)
							670				670	779.13	CY	EARTH BORROW	203.30		1	CY	SOLID ROCK EXCAVATION (0.1*10 CY)
							220				220	248.76	CY	SAND BORROW	203.31		396	CY	UNCLASSIFIED CHANNEL EXCAVATION (0.3*1320 CY)
							810				810	641.73	CY	GRANULAR BORROW	203.32		84	CY	TRENCH EXCAVATION OF EARTH (0.3*280 CY)
							280	10			290	258.12	CY	TRENCH EXCAVATION OF EARTH	204.20		40	CY	STRUCTURE EXCAVATION (0.5*80 CY)
							10				10	18.2	CY	TRENCH EXCAVATION OF ROCK	204.21		--		TOTAL
							1				1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22		617	CY	FILL REQUIRED
									80		80	47.38	CY	STRUCTURE EXCAVATION	204.25		617	CY	FILL AVAILABLE
									220		220	162.42	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30		--		EARTH BORROW, CALC.
							390				390	398.67	SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10		20	CY	EARTH BORROW, MN.
							660	30			690	635.47	CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35		--		EARTH BORROW, CALC.
							40				40	28.7	CY	AGGREGATE SURFACE COURSE	401.10		664	CY	EARTH BORROW, ROUND
							3				3	3	CWT	EMULSIFIED ASPHALT	404.65				
							1				1	-488.22	LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50				
									66		66	61.9	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34				
									1		1	1	LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10				
									796		796	568.34	LF	STEEL PILING FOR INTEGRAL ABUTMENTS, HP 12 X 84	505.265				
									2		2	3	EACH	DYNAMIC PILE LOADING TEST	505.45				
									115850		115850	115392	LB	STRUCTURAL STEEL, PLATE GIRDER	506.55				
									46541		46541	47332	LB	EPOXY COATED REINFORCING STEEL	507.17				
									1		1	1	LS	SHEAR CONNECTORS (752 - 7/8" DIA. x 7")	508.15				
									41		41	45	GAL	WATER REPELLENT, SILANE	514.10				
									44		44	44	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10				
									262.5		262.5	262.5	LF	BRIDGE RAILING, GALVANIZED HD STEEL BEAM/FASCIA MOUNTED	525.41				
							1				1	1	LS	MAINTENANCE OF STRUCTURES AND APPROACHES	527.10				
									90		90	89.56	SY	REMOVAL OF BRIDGE PAVEMENT	529.10				
									1		1	1	EACH	PARTIAL REMOVAL OF STRUCTURE	529.20				
														BEGIN OPTION AA					
							236				236	240	LF	24" CAAP .105 (2-2/3 X 1/2)	601.0227				
							236				236		LF	24" PCCSP .109 (2-2/3 X 1/2)	601.0427				
														END OPTION AA					
							2				2	2	EACH	PRECAST REINFORCED CONCRETE PIPE DI WITH CAST IRON GRATE	604.25				
							46				46	75	LF	6 INCH UNDERDRAIN PIPE	605.10				
								10			10		HR	ALL PURPOSE EXCAVATOR RENTAL, TYPE I	608.25				
							1				1	0	MGAL	DUST CONTROL WITH WATER	609.10				
							1				1	0	TON	DUST AND ICE CONTROL WITH CALCIUM CHLORIDE	609.15				
							20	10			30	21.7	CY	STONE FILL, TYPE I	613.10				

PROJECT NAME: **BROWNINGTON**
 PROJECT NUMBER: **BRO 1449 (28)**
 FILE NAME: sj246qty.xls PLOT DATE: 01/05/2009
 PROJECT MANAGER: R. Whitcomb DRAWN BY: T. Lackey
 DESIGNED BY T. Lackey CHECKED BY: R. Whitcomb
 QUANTITY SHEET #1 SHEET 7 OF 58

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
									570		570		CY	STONE FILL, TYPE II	613.11				
									770		770	676.37	CY	STONE FILL, TYPE IV	613.13				
							2				2	0	EACH	RELOCATE MAILBOX, SINGLE SUPPORT	617.10				
							5				5	0	EACH	WOOD MARKER POSTS	619.15				
							1				1	0	EACH	REMOVING AND RESETTING PROPERTY MARKERS	619.20				
							88				88	0	LF	CHAIN-LINK FENCE, 6 FEET	620.12				
							51				51	32	LF	REMOVING AND RESETTING FENCE	620.50				
							332.5				332.5	373.95	LF	HD STEEL BEAM GUARDRAIL, GALVANIZED	621.21				
							3				3	4	EACH	ANCHOR FOR STEEL BEAM RAIL	621.60				
							390				390		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80				
							64				64	0	LF	SLEEVES FOR UTILITIES (1 X 24")	625.10				
							1				1	0	EACH	HYDRANT	629.28				
							1				1	0	EACH	REMOVE HYDRANT	629.30				
							100				100	0	HR	UNIFORMED TRAFFIC OFFICERS	630.10				
							700				700		HR	FLAGGERS	630.15				
										1	1		LS	FIELD OFFICE, ENGINEERS	631.10				
										1	1	1	LS	TESTING EQUIPMENT, CONCRETE	631.16				
										1	1	1	LS	TESTING EQUIPMENT, BITUMINOUS	631.17				
										1	1		LU	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.25				
							1				1		LS	MOBILIZATION/DEMOBILIZATION	635.11				
							1				1	1	LS	TRAFFIC CONTROL	641.10				
							1020				1020	1182	LF	4 INCH YELLOW LINE	646.21				
							28				28	21	LF	24 INCH STOP BAR	646.26				
							100				100	20	EACH	LINE STRIPING TARGETS	646.76				
							260				260	0	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85				
							30		1300		1330	1276.26	SY	GEOTEXTILE UNDER STONE FILL	649.31				
									80		80	100	SY	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	649.41				
								40			40	0	SY	GEOTEXTILE FOR SILT FENCE	649.51				
								200			200	0	SY	GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED	649.515				
								110			110	0	SY	GEOTEXTILE FOR FILTER CURTAIN	649.61				
								20			20	26	LB	SEED	651.15				
								10			10		LB	SEED, WINTER RYE	651.17				
								200			200	162.5	LB	FERTILIZER	651.18				
								1			1	0.65	TON	AGRICULTURAL LIMESTONE	651.20				
								1			1		TON	HAYMULCH	651.25				
								60			60	6.25	CY	TOPSOIL	651.35				
									760		760	1129.31	SY	GRUBBING MATERIAL	651.40				
								1			1	1	LS	EPSC PLAN	652.10				
								100			100		HR	MONITORING EPSC PLAN	652.20				
								1			1	1.043	LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				

PROJECT NAME: **BROWNINGTON**
PROJECT NUMBER: **BRO 1449 (28)**
FILE NAME: sj246qty.xls
PROJECT MANAGER: R. Whitcomb
DESIGNED BY: T. Lackey
QUANTITY SHEET #2
PLOT DATE: 01/05/2009
DRAWN BY: T. Lackey
CHECKED BY: R. Whitcomb
SHEET 8 OF 58

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES

TOTALS

DESCRIPTIONS

DETAILED SUMMARY OF QUANTITIES

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
								420			420	1379.96	SY	TEMPORARY EROSION MATTING	653.20				
								30			30	0	CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25				
								100			100	112	CY	VEHICLE TRACKING PAD	653.35				
								2			2	2	EACH	INLET PROTECTION DEVICE, TYPE I	653.40				
								550			550	492	LF	BARRIER FENCE	653.50				
								225			225	111	LF	PROJECT DEMARCATION FENCE	653.55				
							35				35	34.16	SF	TRAFFIC SIGNS, TYPE A	675.20				
							96				96	111	LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341				
							7				7	6	EACH	REMOVING SIGNS	675.50				
									151		151	148.76	CY	SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT)	900.608				
							1				1	1	LS	SPECIAL PROVISION (REMOVE AND RELOCATE EXISTING TIMBER DECK AND STAIRWAY)	900.645				
							1				1	0	LS	SPECIAL PROVISION (REMOVE AND RELOCATE EXISTING TIMBER STAIRWAY)	900.645				
							1				1	0	LU	SPECIAL PROVISION (MAT DENSITY PAY ADJUSTMENT, SMALL QUANTITY) (N.A.B.I.)	900.650				
							1				1	-2286.04	LU	SPECIAL PROVISION (MIXTURE PAY ADJUSTMENT) (N.A.B.I.)	900.650				
							224				224	325.55	TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	900.680				

QUANTITY SHEET 4

SUMMARY OF BRIDGE QUANTITIES

TOTALS

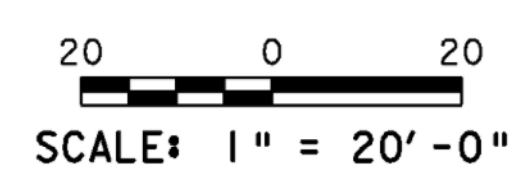
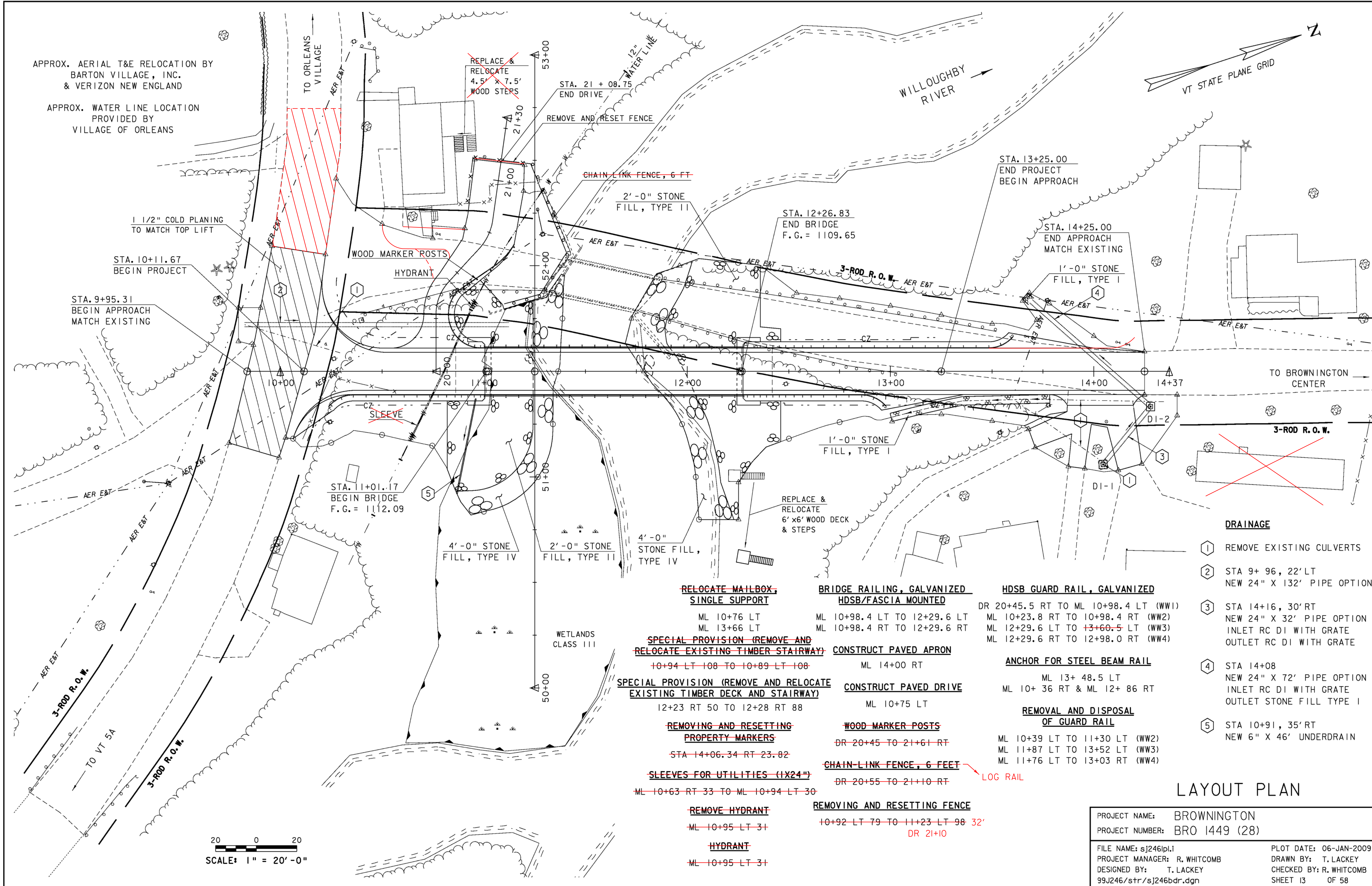
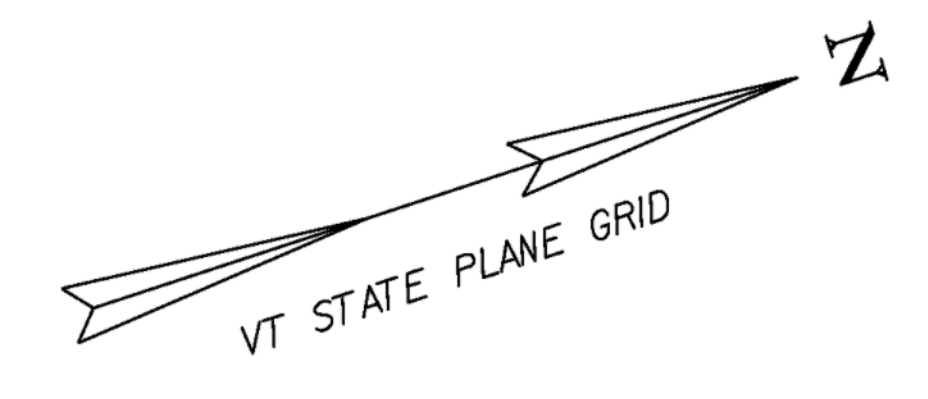
DESCRIPTIONS

DETAILED SUMMARY OF QUANTITIES

SUMMARY OF BRIDGE QUANTITIES										TOTALS		DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES				
						DECK	APP SLAB 1	APP SLAB 2	ABUT 1	ABUT 2	BRIDGE TOTAL		UNIT	ITEMS	ITEM NUMBER		QUANTITIES	UNIT	ITEMS
									180	1140	1320 686.18		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27				
										80	80 59.21		CY	STRUCTURE EXCAVATION	204.25				
									100	120	220 162.42		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30				
							15	15	17	19	66 61.9		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34				
									1		1		LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10				
									488	308	796 568.34		LF	STEEL PILING FOR INTEGRAL ABUTMENTS, HP 12 X 84	505.265				
									1	1	2 3		EACH	DYNAMIC PILE LOADING TEST	505.45				
						115850					115850 115392		LB	STRUCTURAL STEEL, PLATE GIRDER	506.55				
						26739	2155	2155	7683	7809	46544 47332		LB	EPOXY COATED REINFORCING STEEL	507.17				
						1					1		LS	SHEAR CONNECTORS (752 - 7/8" DIA. x 7")	508.15				
						27	3	3	4	4	44 45		GAL	WATER REPELLENT, SILANE	514.10				
							22	22			44 44		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10				
						262.5					262.5 262.5		LF	BRIDGE RAILING, GALVANIZED HD STEEL BEAM/FASCIA MOUNTED	525.41				
						90					90 89.56		SY	REMOVAL OF BRIDGE PAVEMENT	529.10				
						1					1		EACH	PARTIAL REMOVAL OF STRUCTURE	529.20				
									260	310	570 581.23		CY	STONE FILL, TYPE II	613.11				
									340	430	770 677.3		CY	STONE FILL, TYPE IV	613.13				
									850	450	1300 1212.01		SY	GEOTEXTILE UNDER STONE FILL	649.31				
									80		80 100		SY	GEOTEXTILE FOR UNDERDRAIN TRENCH LINING	649.41				
									350	410	760 1262.60		SY	GRUBBING MATERIAL	651.40				
						93			29	29	151 148.76		CY	SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT)	900.608				

APPROX. AERIAL T&E RELOCATION BY
BARTON VILLAGE, INC.
& VERIZON NEW ENGLAND

APPROX. WATER LINE LOCATION
PROVIDED BY
VILLAGE OF ORLEANS

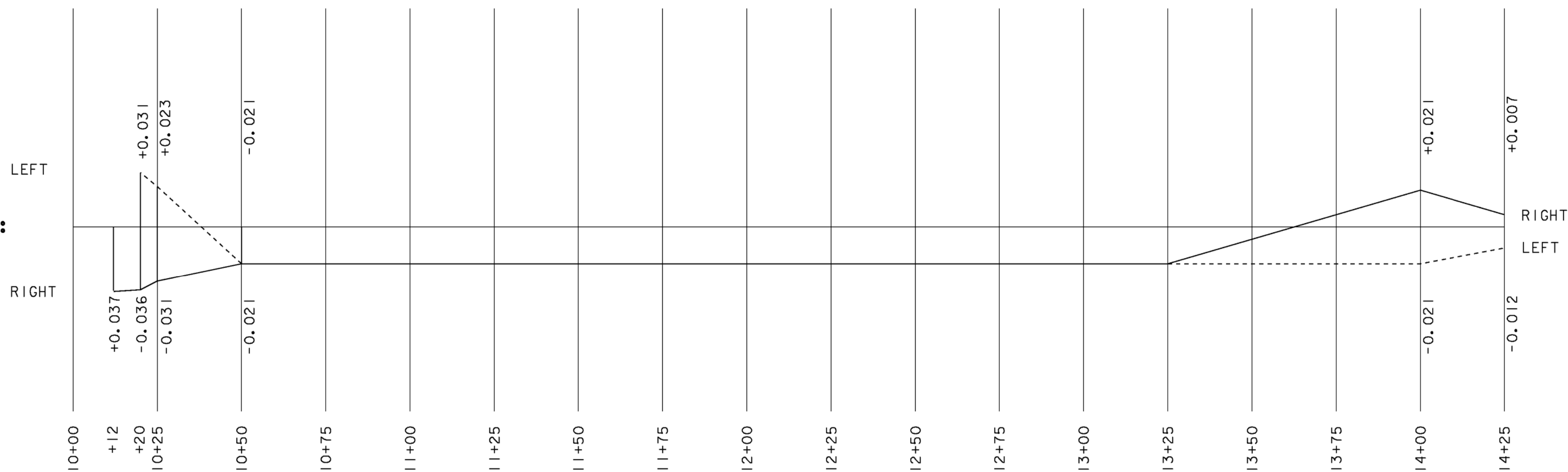


- | | | | |
|---|---|--|---|
| <p>RELOCATE MAILBOX, SINGLE SUPPORT
ML 10+76 LT
ML 13+66 LT</p> <p>SPECIAL PROVISION (REMOVE AND RELOCATE EXISTING TIMBER STAIRWAY)
10+94 LT 108 TO 10+89 LT 108</p> <p>SPECIAL PROVISION (REMOVE AND RELOCATE EXISTING TIMBER DECK AND STAIRWAY)
12+23 RT 50 TO 12+28 RT 88</p> <p>REMOVING AND RESETTING PROPERTY MARKERS
STA 14+06.34 RT 23.82</p> <p>SLEEVES FOR UTILITIES (1X24")
ML 10+63 RT 33 TO ML 10+94 LT 30</p> <p>REMOVE HYDRANT
ML 10+95 LT 31</p> <p>HYDRANT
ML 10+95 LT 31</p> | <p>BRIDGE RAILING, GALVANIZED HDSB/FASCIA MOUNTED
ML 10+98.4 LT TO 12+29.6 LT
ML 10+98.4 RT TO 12+29.6 RT</p> <p>CONSTRUCT PAVED APRON
ML 14+00 RT</p> <p>CONSTRUCT PAVED DRIVE
ML 10+75 LT</p> <p>WOOD MARKER POSTS
DR 20+45 TO 21+61 RT</p> <p>CHAIN-LINK FENCE, 6 FEET
DR 20+55 TO 21+10 RT</p> <p>REMOVING AND RESETTING FENCE
10+92 LT 79 TO 11+23 LT 98 32'
DR 21+10</p> | <p>HDSB GUARD RAIL, GALVANIZED
DR 20+45.5 RT TO ML 10+98.4 LT (WW1)
ML 10+23.8 RT TO 10+98.4 RT (WW2)
ML 12+29.6 LT TO 13+60.5 LT (WW3)
ML 12+29.6 RT TO 12+98.0 RT (WW4)</p> <p>ANCHOR FOR STEEL BEAM RAIL
ML 13+ 48.5 LT
ML 10+ 36 RT & ML 12+ 86 RT</p> <p>REMOVAL AND DISPOSAL OF GUARD RAIL
ML 10+39 LT TO 11+30 LT (WW2)
ML 11+87 LT TO 13+52 LT (WW3)
ML 11+76 LT TO 13+03 RT (WW4)</p> | <p>DRAINAGE</p> <ol style="list-style-type: none"> ① REMOVE EXISTING CULVERTS ② STA 9+ 96, 22' LT
NEW 24" X 132' PIPE OPTION ③ STA 14+16, 30' RT
NEW 24" X 32' PIPE OPTION
INLET RC DI WITH GRATE
OUTLET RC DI WITH GRATE ④ STA 14+08
NEW 24" X 72' PIPE OPTION
INLET RC DI WITH GRATE
OUTLET STONE FILL TYPE I ⑤ STA 10+91, 35' RT
NEW 6" X 46' UNDERDRAIN |
|---|---|--|---|

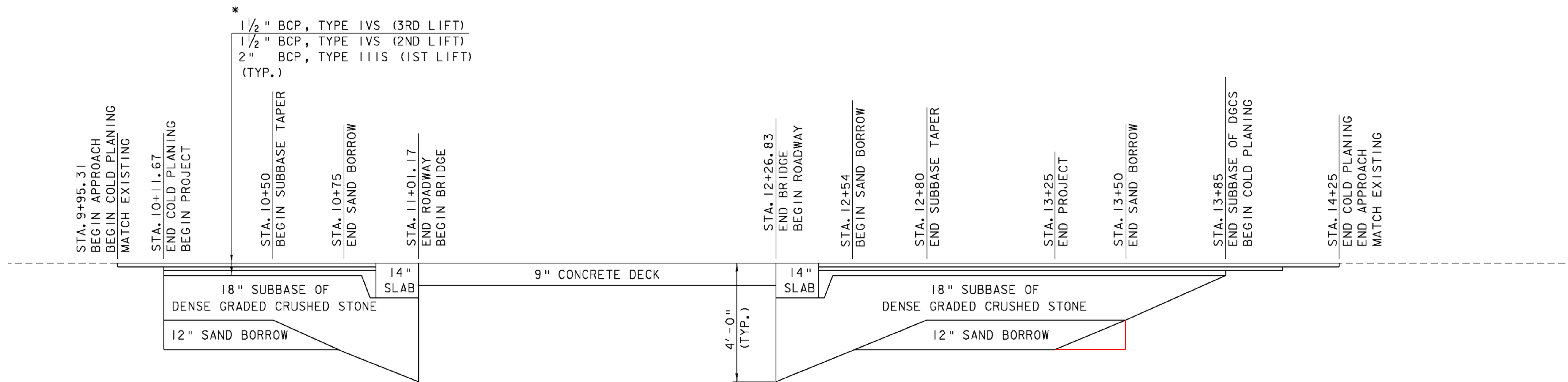
LAYOUT PLAN

PROJECT NAME:	BROWNINGTON	PLOT DATE:	06-JAN-2009
PROJECT NUMBER:	BRO 1449 (28)	DRAWN BY:	T. LACKEY
FILE NAME:	sj246pl1	CHECKED BY:	R. WHITCOMB
PROJECT MANAGER:	R. WHITCOMB	SHEET	13 OF 58
DESIGNED BY:	T. LACKEY		
99J246/str/sj246bdr.dgn			

Superelevation:

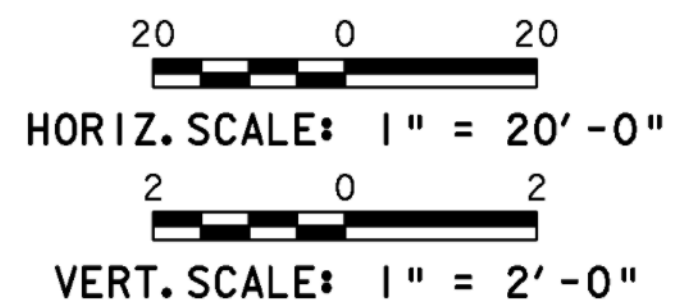


SUPERELEVATION



* BCP SHALL BE READ AS BITUMINOUS CONCRETE PAVEMENT AND SHALL BE PAID FOR UNDER SPECIAL PROVISION BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)

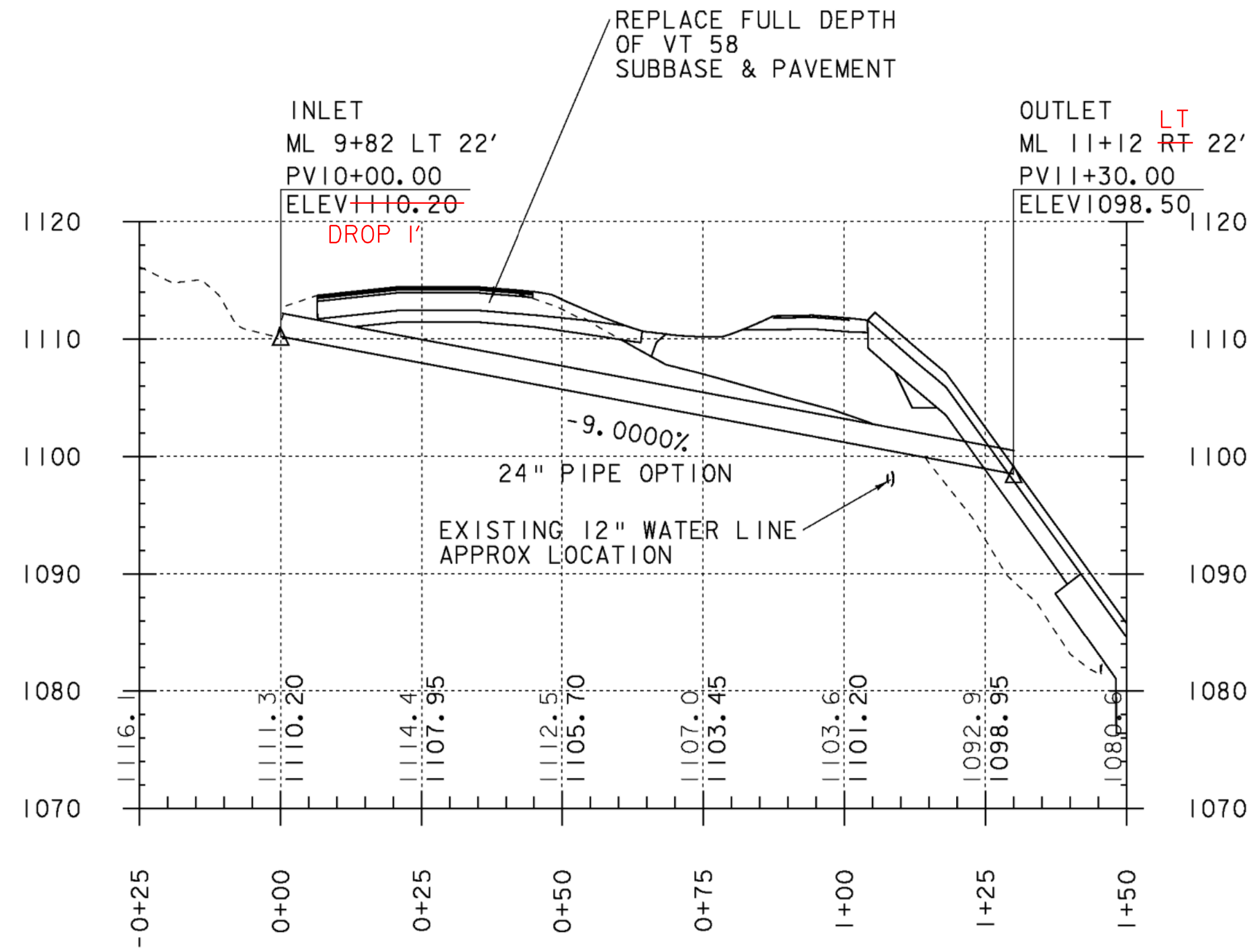
MATERIAL TRANSITION DETAIL



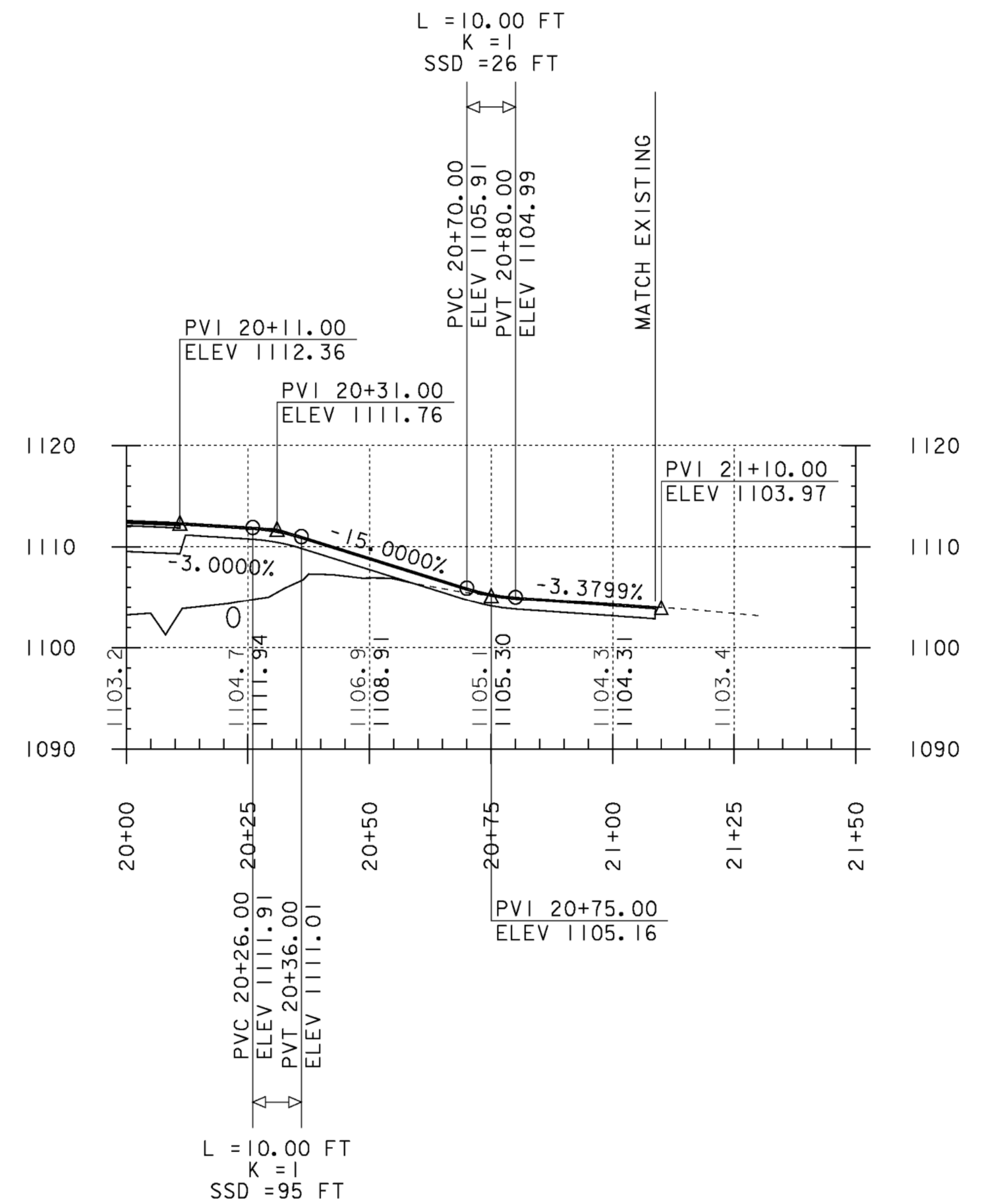
MAINLINE SUPERELEVATION & MATERIAL TRANSITION

PROJECT NAME: BROWNINGTON
 PROJECT NUMBER: BRO 1449 (28)

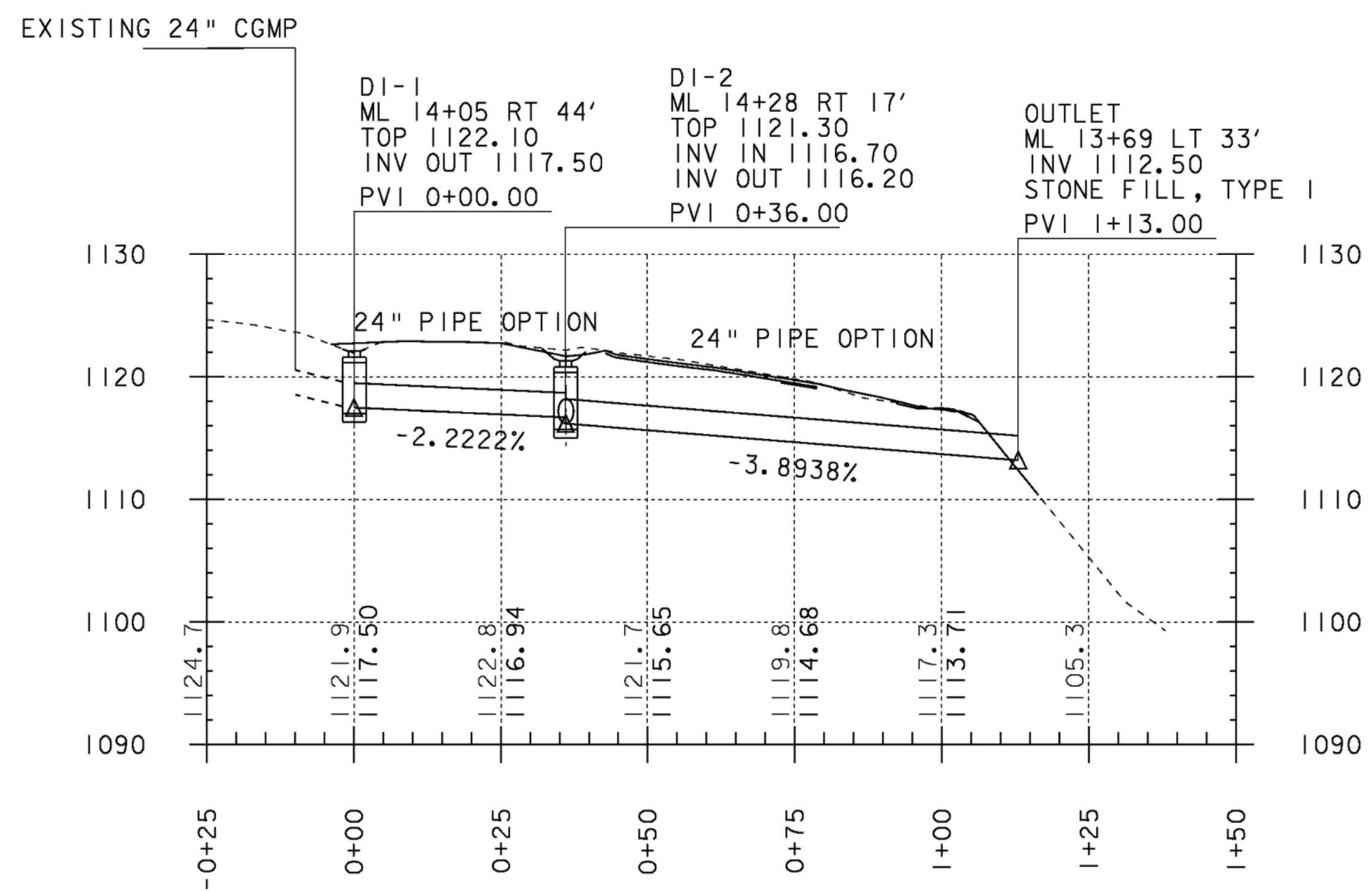
FILE NAME: sj246pf2.1
 PROJECT MANAGER: R. WHITCOMB
 DESIGNED BY: T. LACKEY
 99J246/str/sj246xs.dgn
 PLOT DATE: 19-DEC-2008
 DRAWN BY: T. LACKEY
 CHECKED BY: R. WHITCOMB
 SHEET 15 OF 58



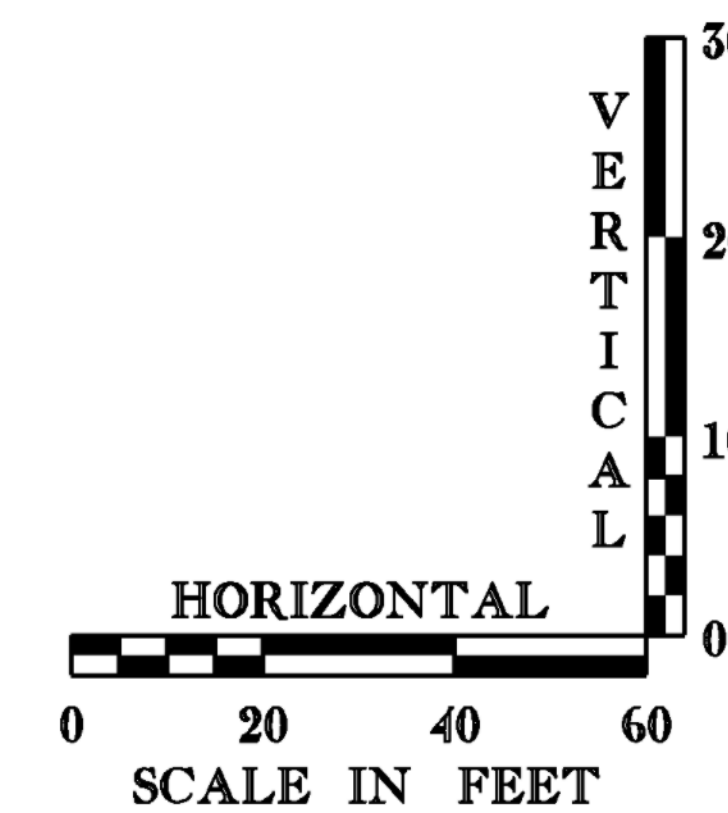
CULVERT 2 PROFILE
DR 20+22



DRIVEWAY PROFILE
ML 10+76



CULVERT 3 & 4 PROFILE
ML 14+08

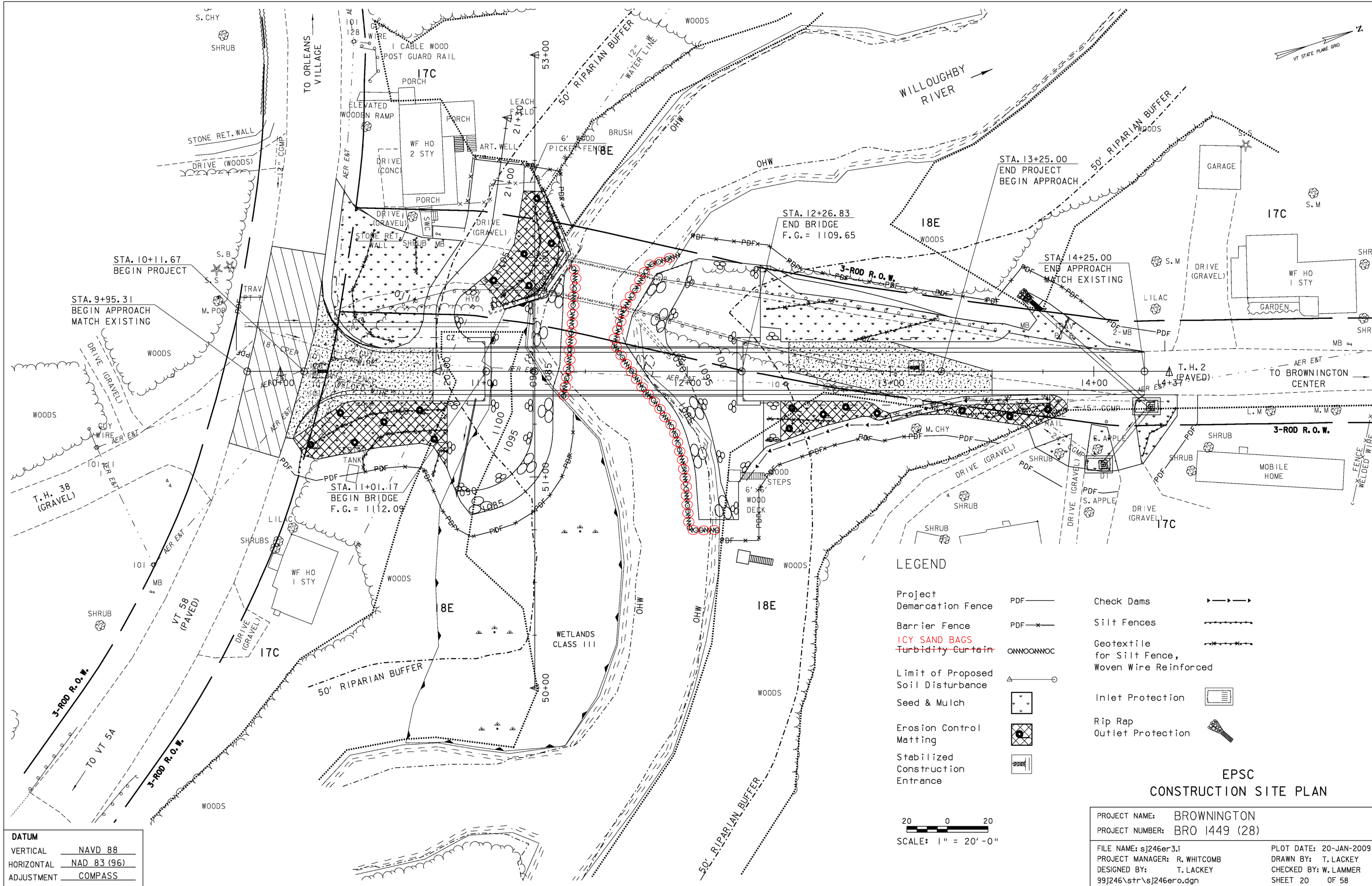


DRIVEWAY & CULVERT
PROFILES

PROJECT NAME: BROWNINGTON
PROJECT NUMBER: BRO 1449 (28)

FILE NAME: sj246pf3.1
PROJECT MANAGER: R. WHITCOMB
DESIGNED BY: T. LACKEY
99j246/str/sj246xs.dgn

PLOT DATE: 19-DEC-2008
DRAWN BY: T. LACKEY
CHECKED BY: R. WHITCOMB
SHEET 16 OF 58



DATUM

VERTICAL	NAVD 88
HORIZONTAL	NAD 83 (96)
ADJUSTMENT	COMPASS

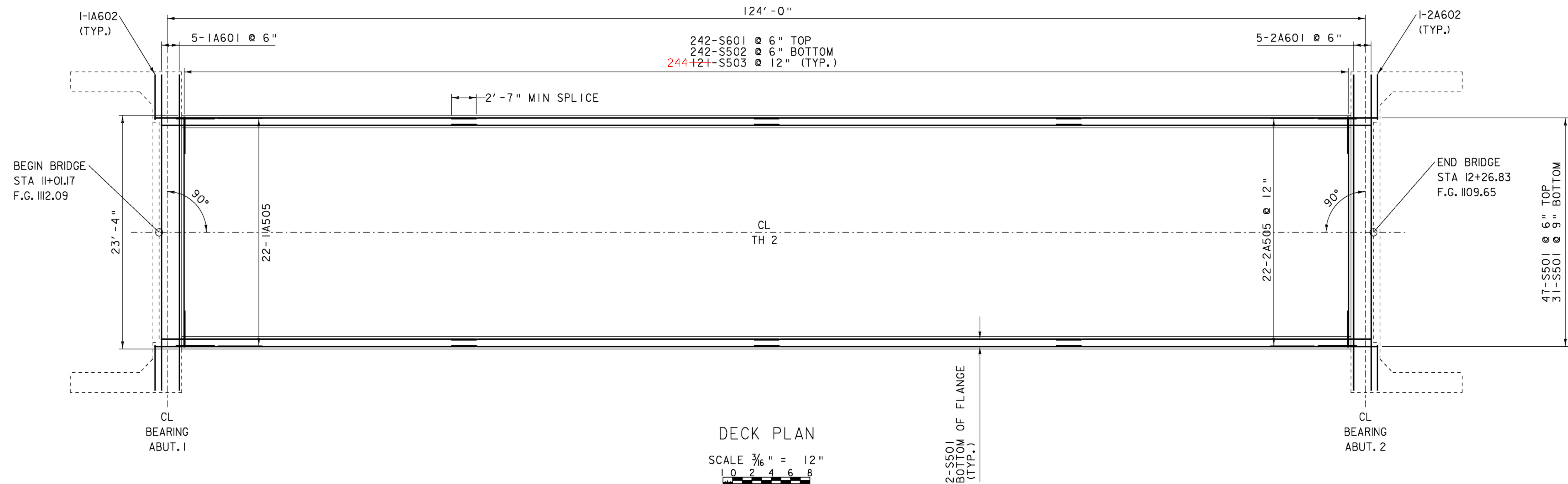
LEGEND

Project Demarcation Fence	PDF	Check Dams	
Barrier Fence	PDF-X	Silt Fences	
ICY SAND BAGS Turbidity Curtain	OMNOONOC	Geotextile for Silt Fence, Woven Wire Reinforced	
Limit of Proposed Soil Disturbance		Inlet Protection	
Seed & Mulch		Rip Rap Outlet Protection	
Erosion Control Matting			
Stabilized Construction Entrance			



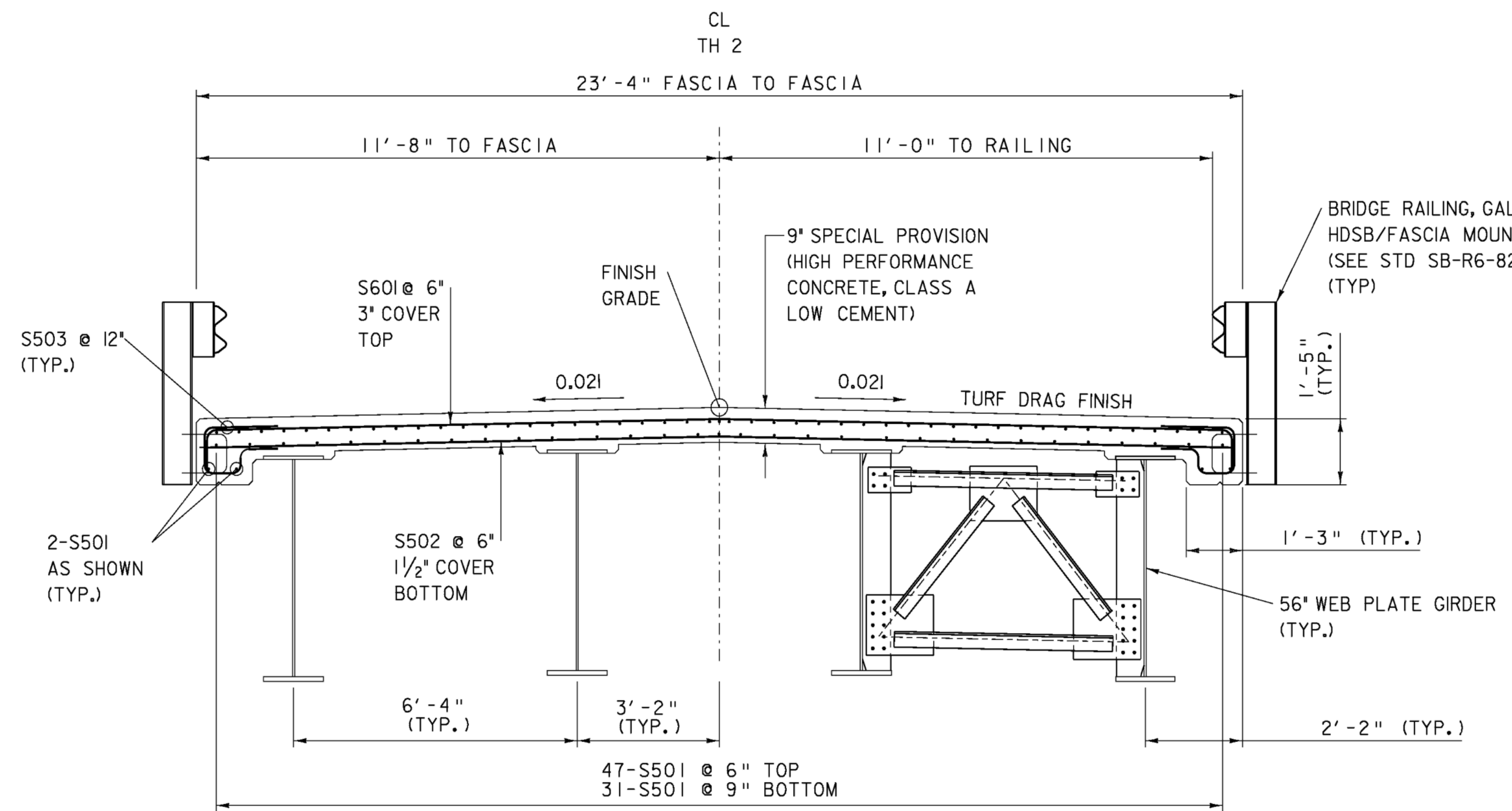
**EPSC
CONSTRUCTION SITE PLAN**

PROJECT NAME:	BROWNINGTON	PLOT DATE:	20-JAN-2009
PROJECT NUMBER:	BRO 1449 (28)	DRAWN BY:	T. LACKEY
FILE NAME:	sj246r31	CHECKED BY:	W. LAMMER
PROJECT MANAGER:	R. WHITCOMB	SHEET	20 OF 58
DESIGNED BY:	T. LACKEY		
99j246\str\sj246ero.dgn			



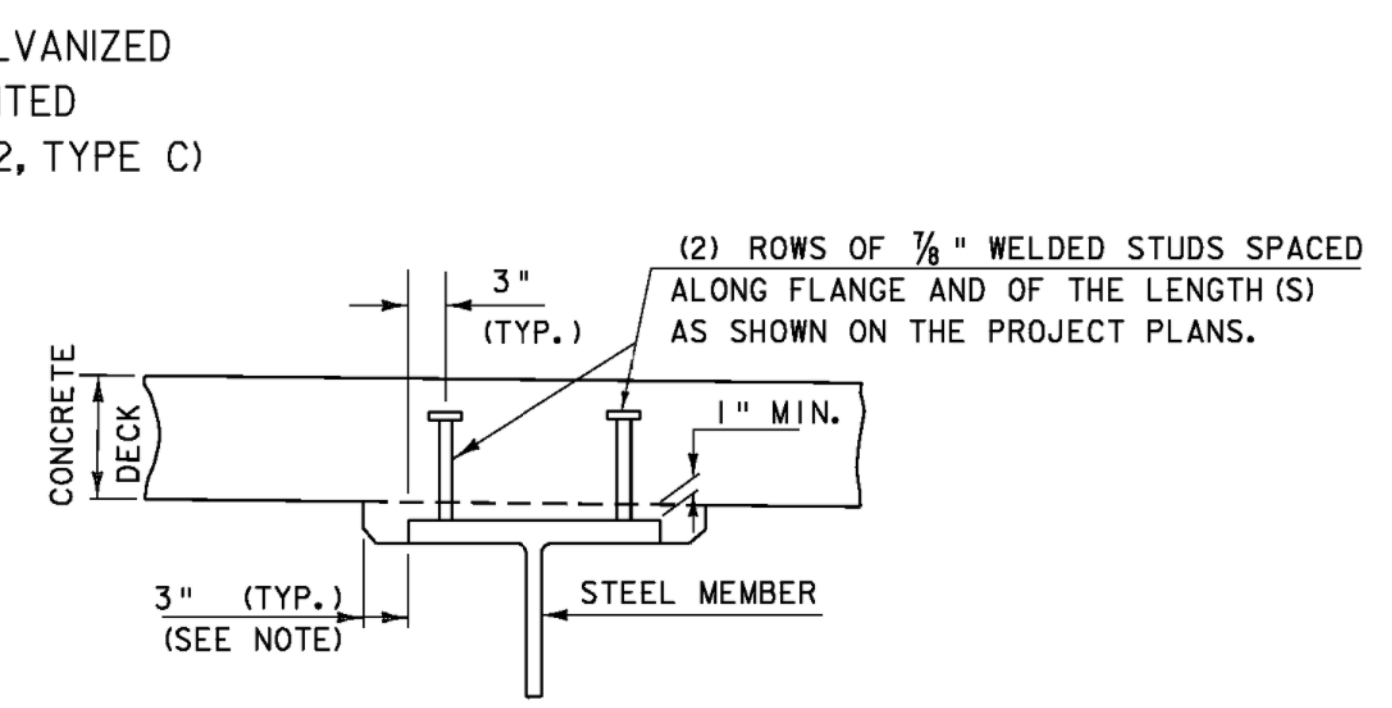
DECK PLAN

SCALE 3/16" = 12"
 0 2 4 6 8



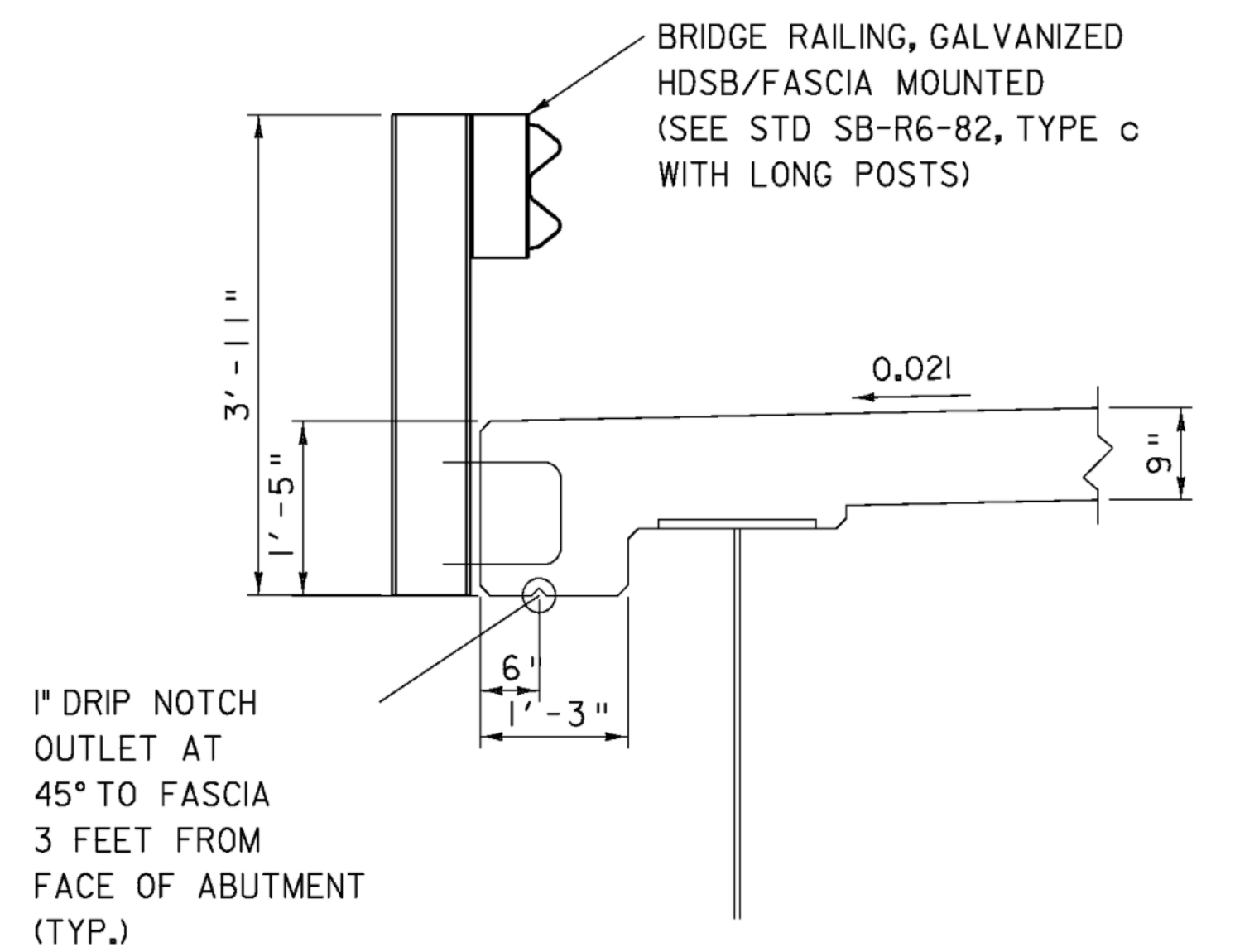
DECK TYPICAL SECTION

SCALE 1/2" = 12"
 0 1 2



HAUNCH AND SHEAR CONNECTOR DETAIL
 (NOT TO SCALE)

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

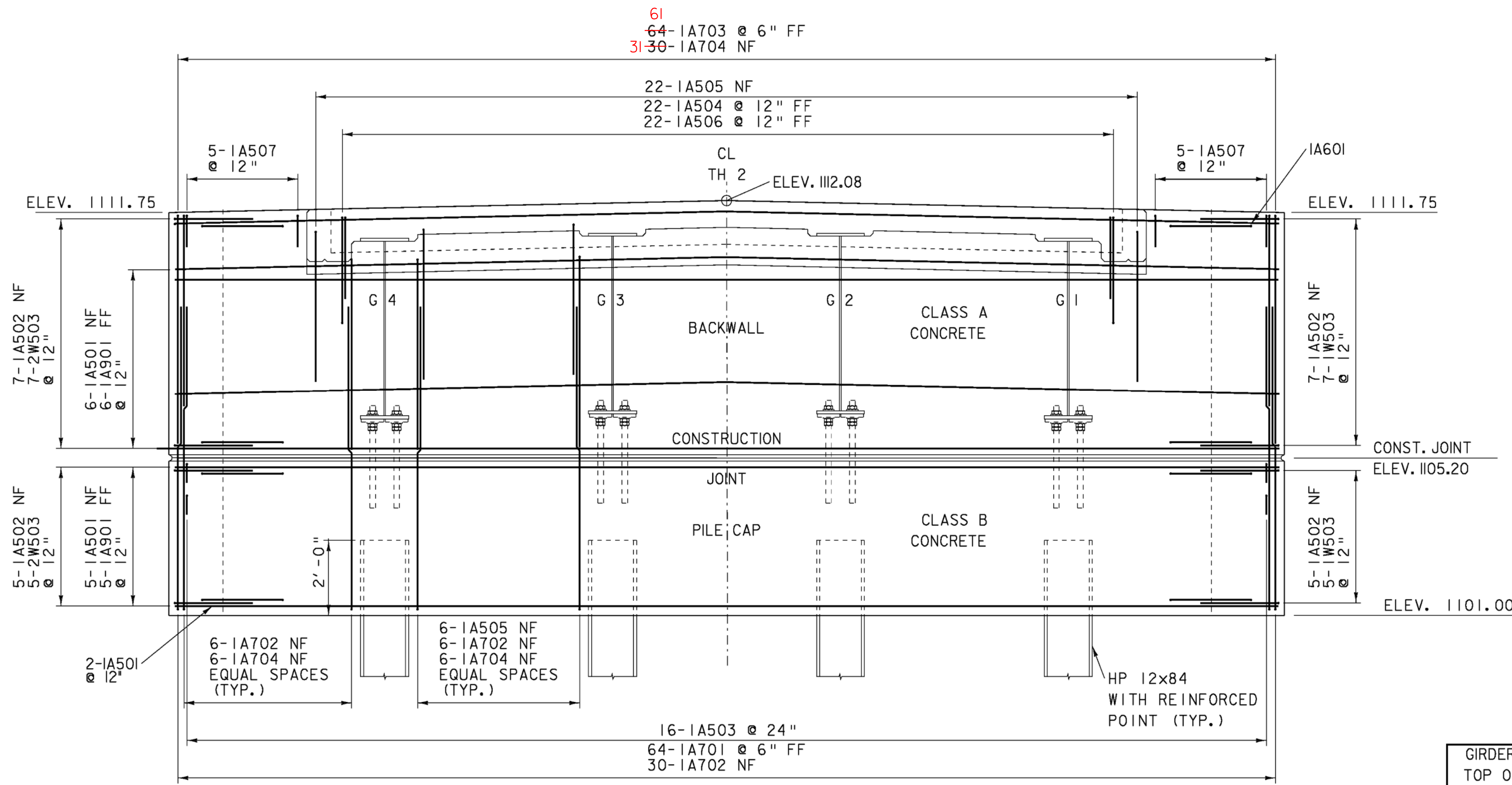


OVERHANG & RAIL DETAIL

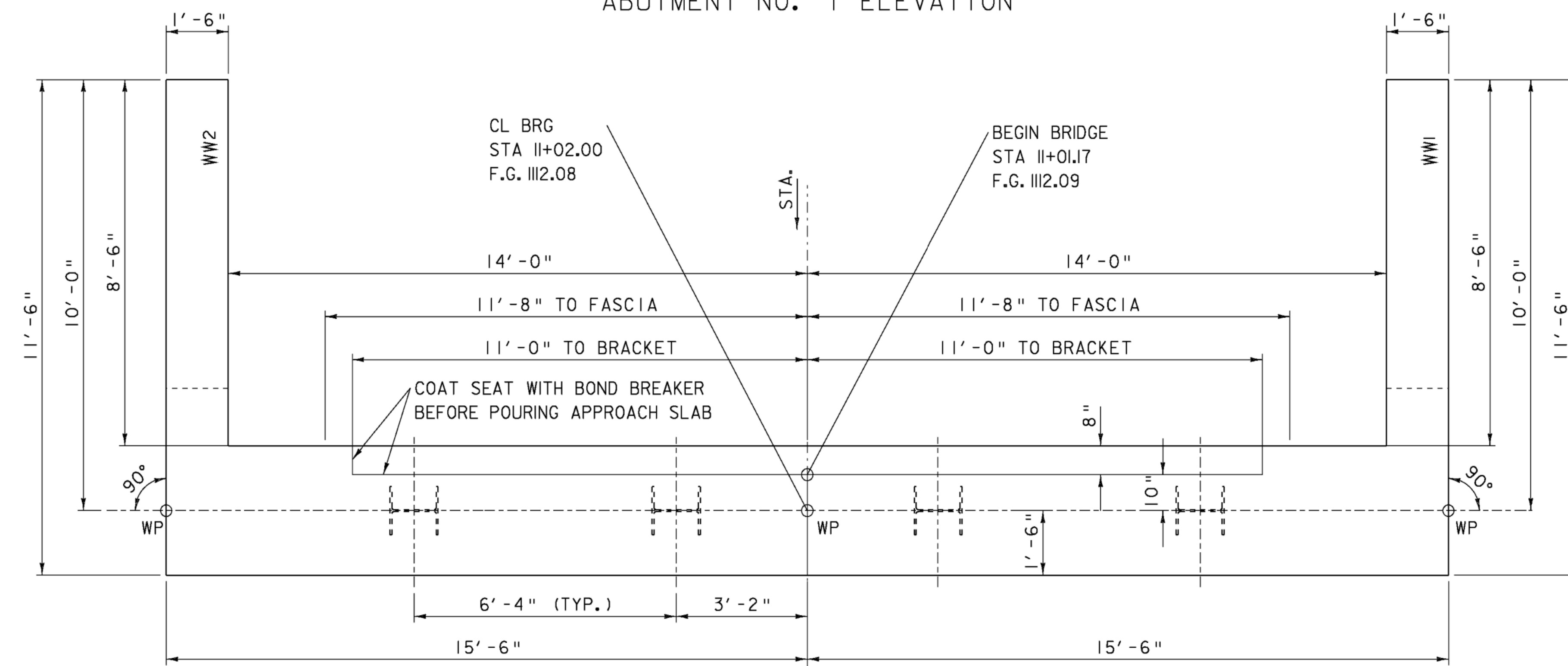
SCALE 3/4" = 12"
 0 2

SUPERSTRUCTURE DECK

PROJECT NAME:	BROWNINGTON	PLOT DATE:	19-DEC-2008
PROJECT NUMBER:	BRO 1449 (28)	DRAWN BY:	C.MOONEY
FILE NAME:	sj246s01.1	DESIGNED BY:	T. LACKEY
PROJECT LEADER:	R. WHITCOMB	CHECKED BY:	R. WHITCOMB
99j246/str/sj246str.dgn			SHEET 32 OF 58

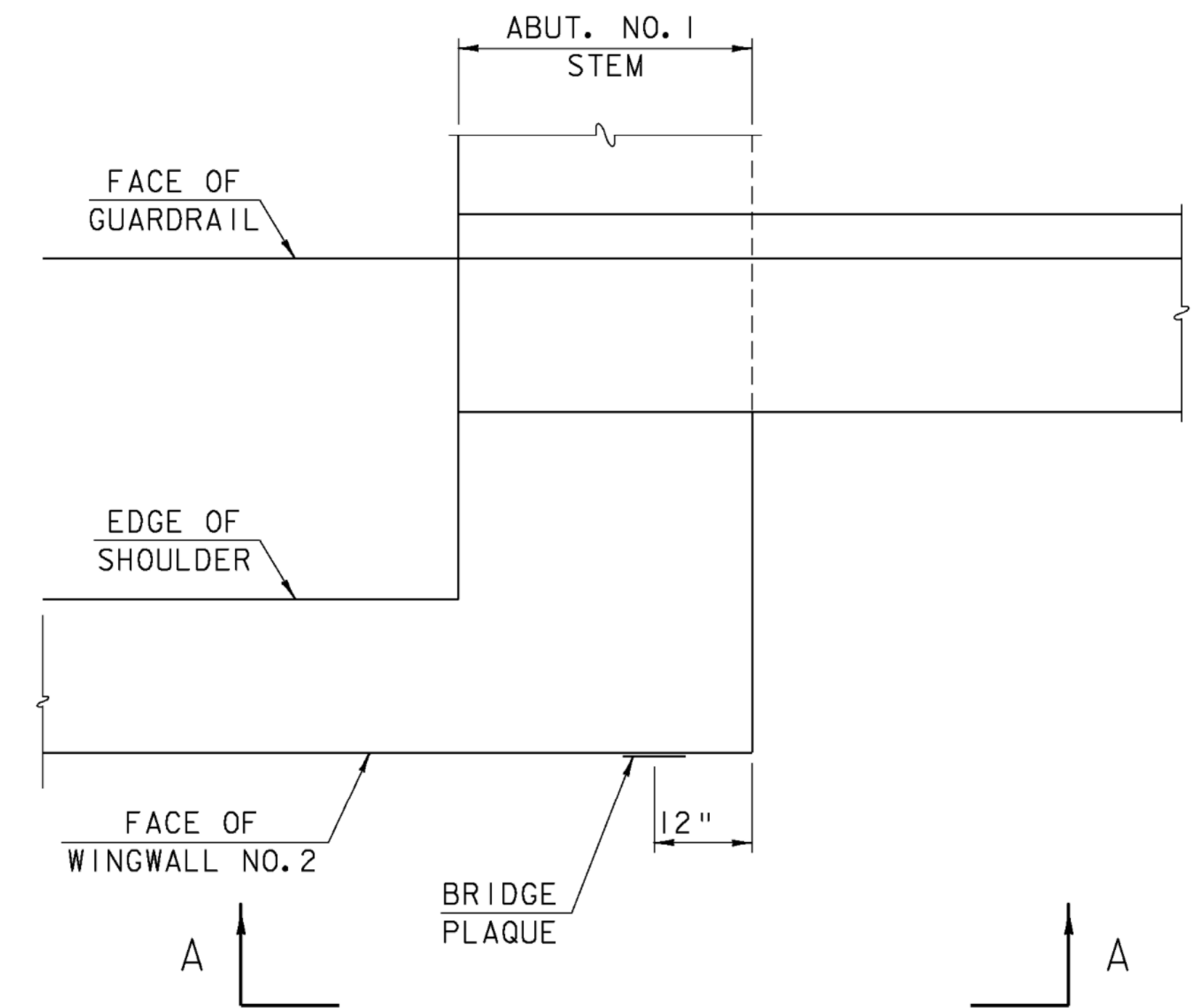
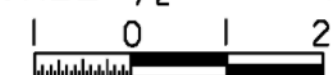


ABUTMENT NO. 1 ELEVATION



ABUTMENT NO. 1 PLAN

SCALE 1/2" = 12"

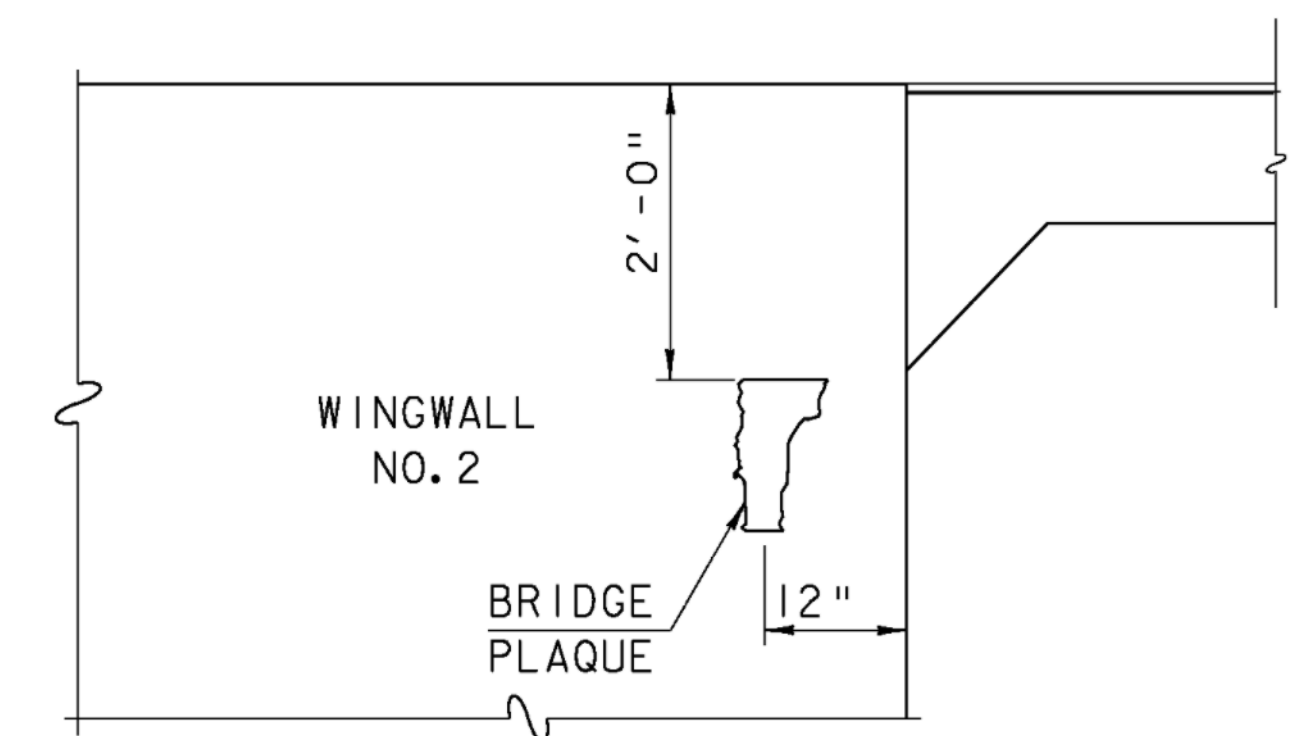


BRIDGE PLAQUE PLAN

NOT TO SCALE

GIRDER SEAT ELEVATIONS
TOP OF LEVELING PLATES

- GIRDER 1 - 1105.91
- GIRDER 2 - 1106.04
- GIRDER 3 - 1106.04
- GIRDER 4 - 1105.91



BRIDGE PLAQUE VIEW "A-A"

NOT TO SCALE

BRIDGE PLAQUE NOTES

1. VTRANS WILL SUPPLY THE BRIDGE PLAQUE.
2. INSTALL THE PLAQUE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
3. INCLUDE PAYMENT FOR INSTALLATION IN ITEM 900.608, SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT).

NOTE:

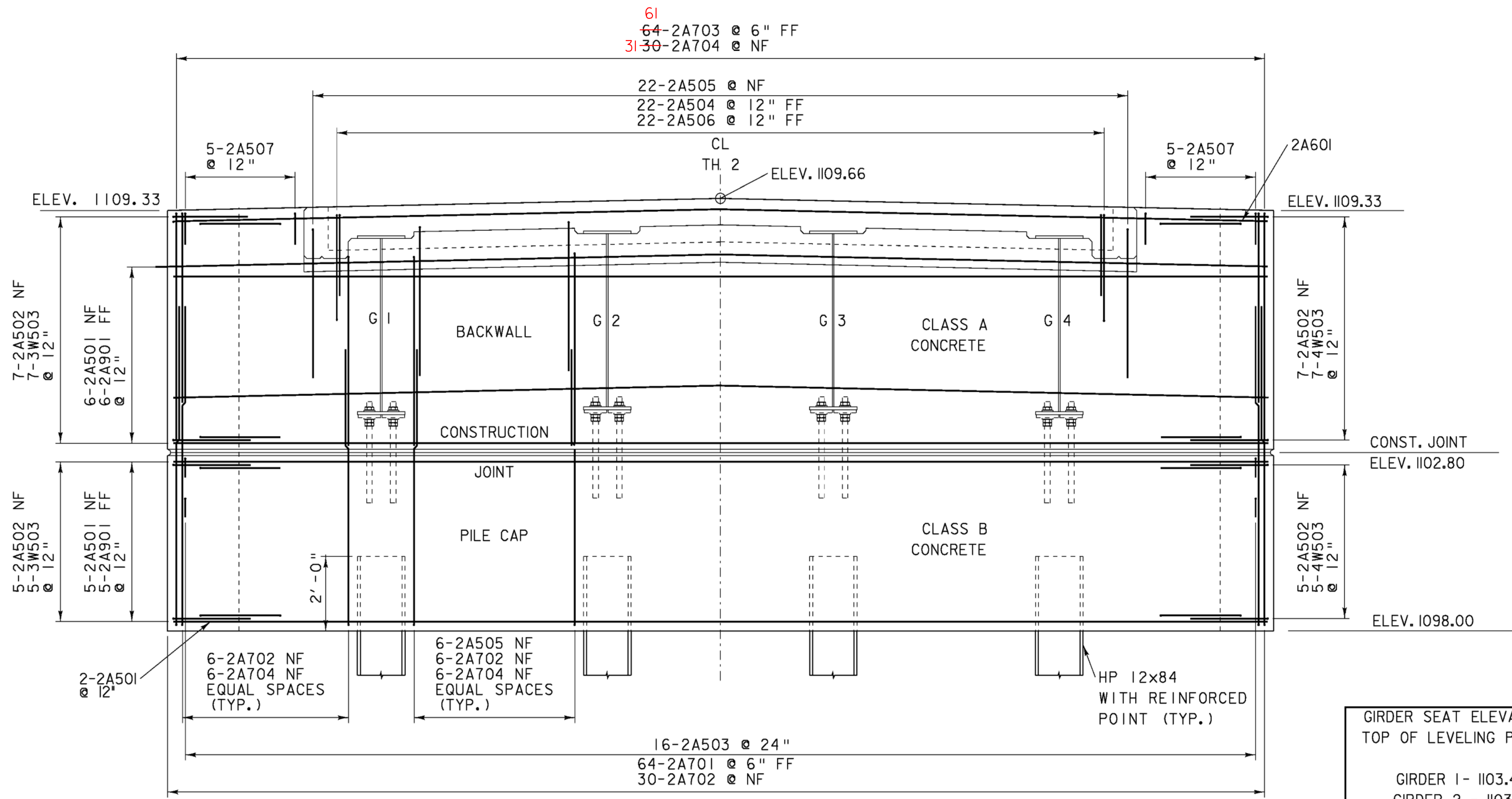
- NF = NEAR FACE
- FF = FAR FACE
- EF = EACH FACE
- ▲ = CUT TO FIT IN FIELD
- 3" COVER UNLESS OTHERWISE SPECIFIED ON THE PLANS.
- 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SUBSTRUCTURE ABUTMENT 1

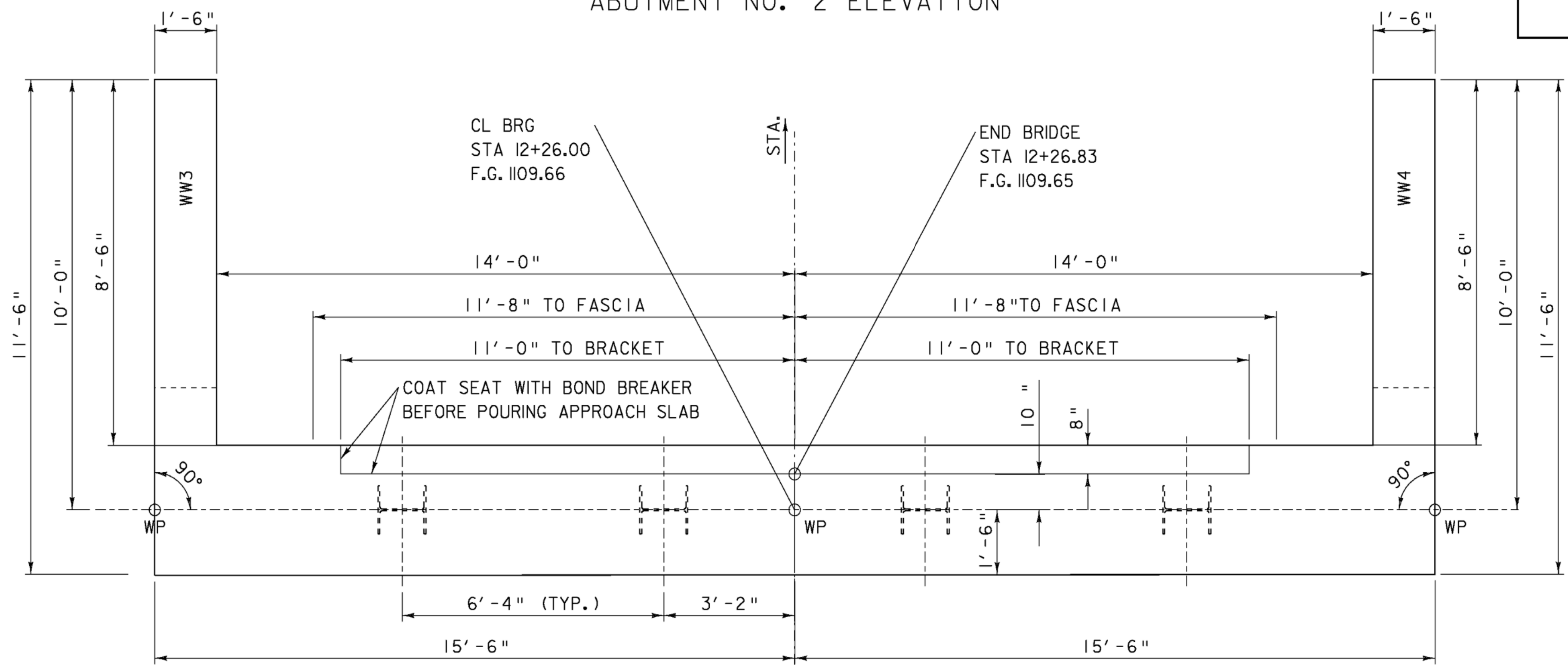
PROJECT NAME: BROWNINGTON
PROJECT NUMBER: BRO 1449 (28)

FILE NAME: sj246s07.1
PROJECT LEADER: R. WHITCOMB
DESIGNED BY: T. LACKEY
99J246/str/sj246str.dgn

PLOT DATE: 19-DEC-2008
DRAWN BY: C. MOONEY
CHECKED BY: R. WHITCOMB
SHEET 38 OF 58

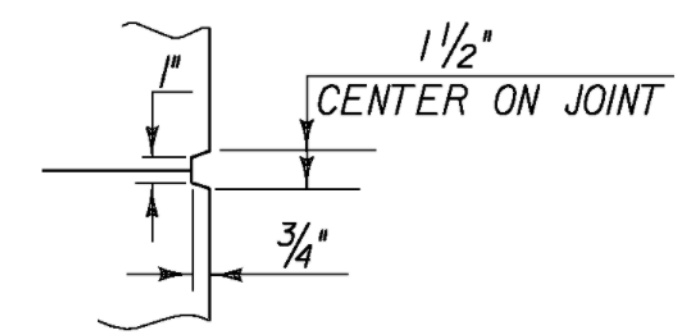


ABUTMENT NO. 2 ELEVATION

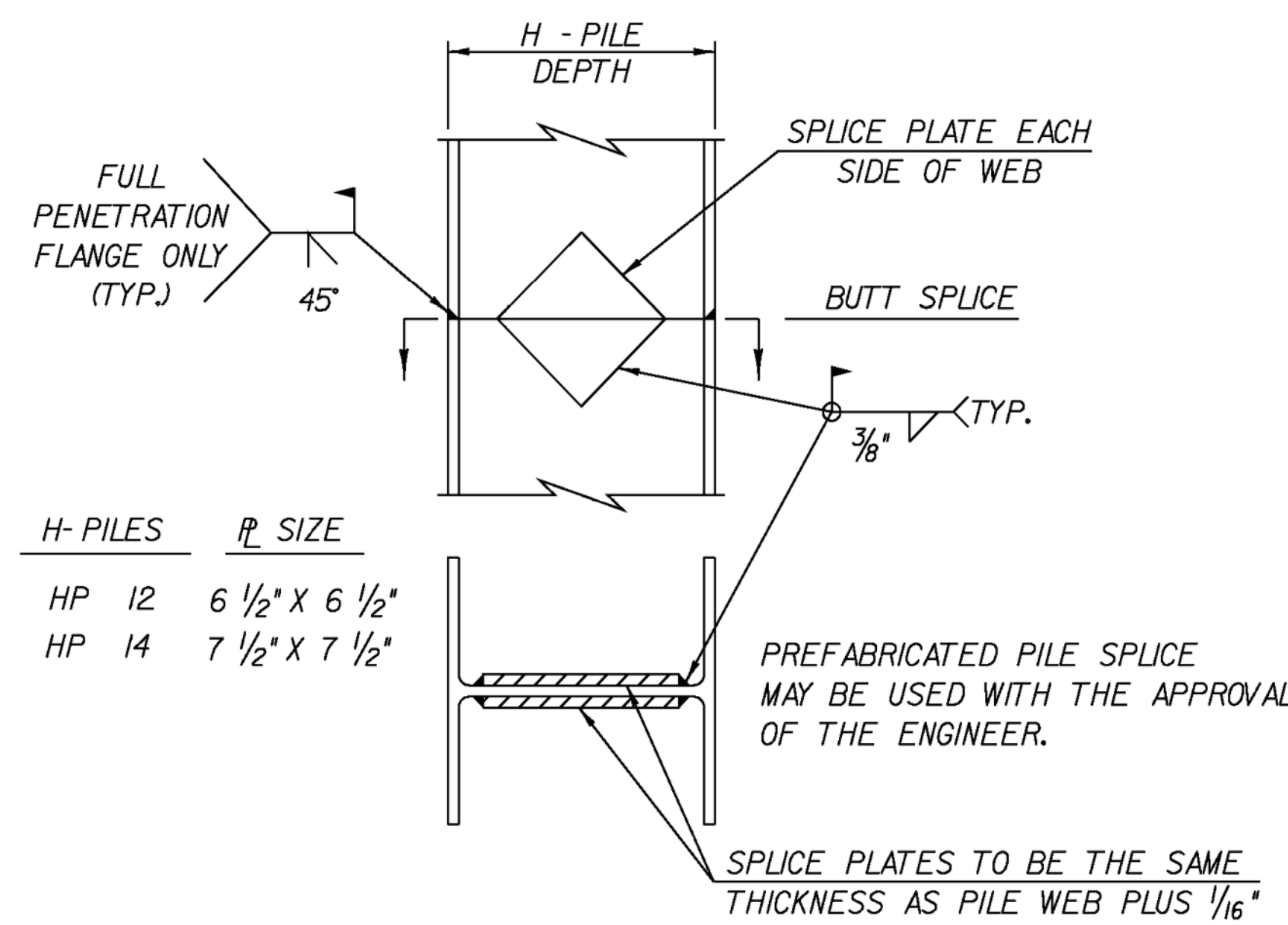


ABUTMENT NO. 2 PLAN

SCALE 1/2" = 12"



SCORE MARK DETAIL

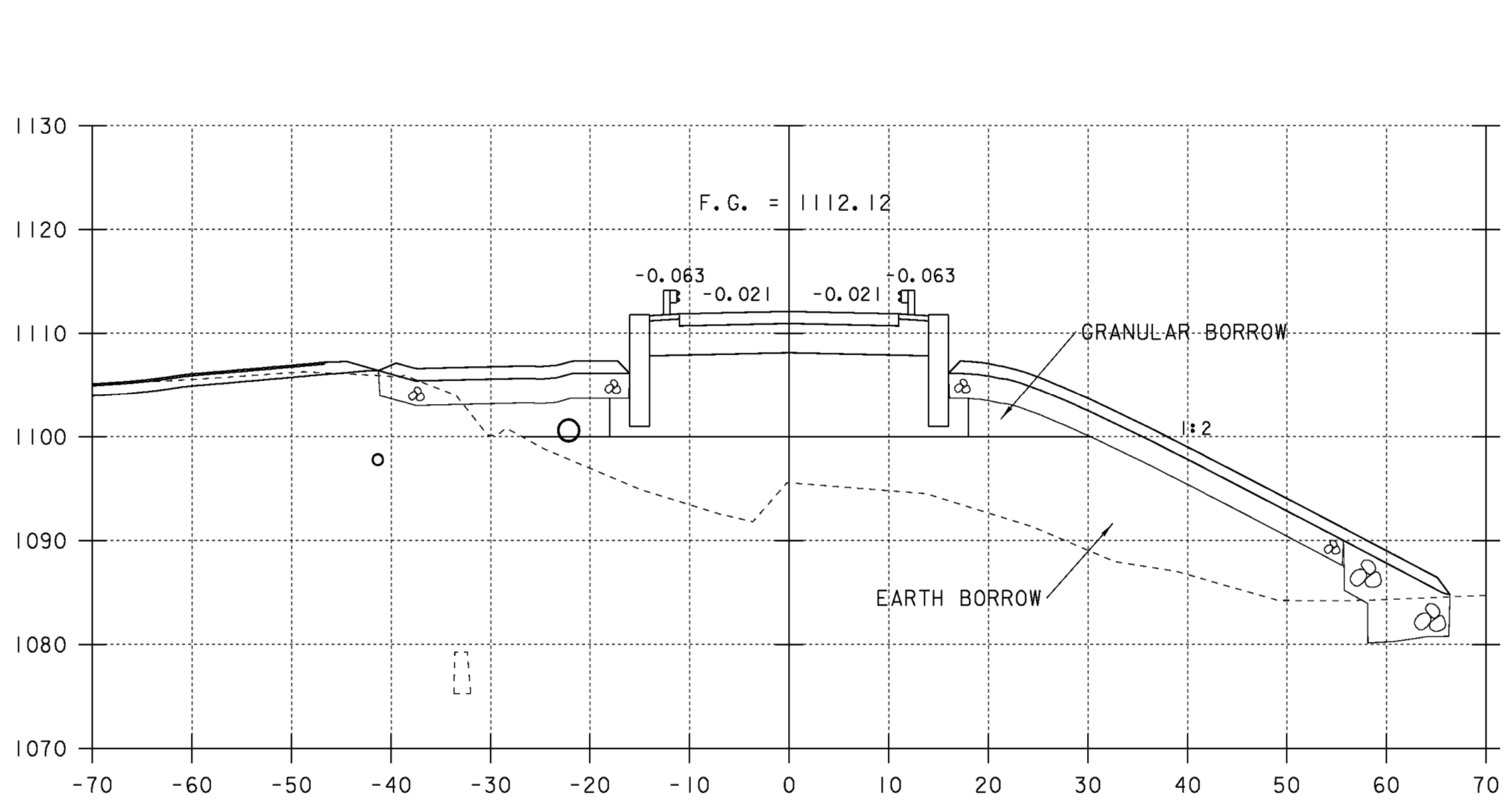


DETAIL OF PILE SPLICE

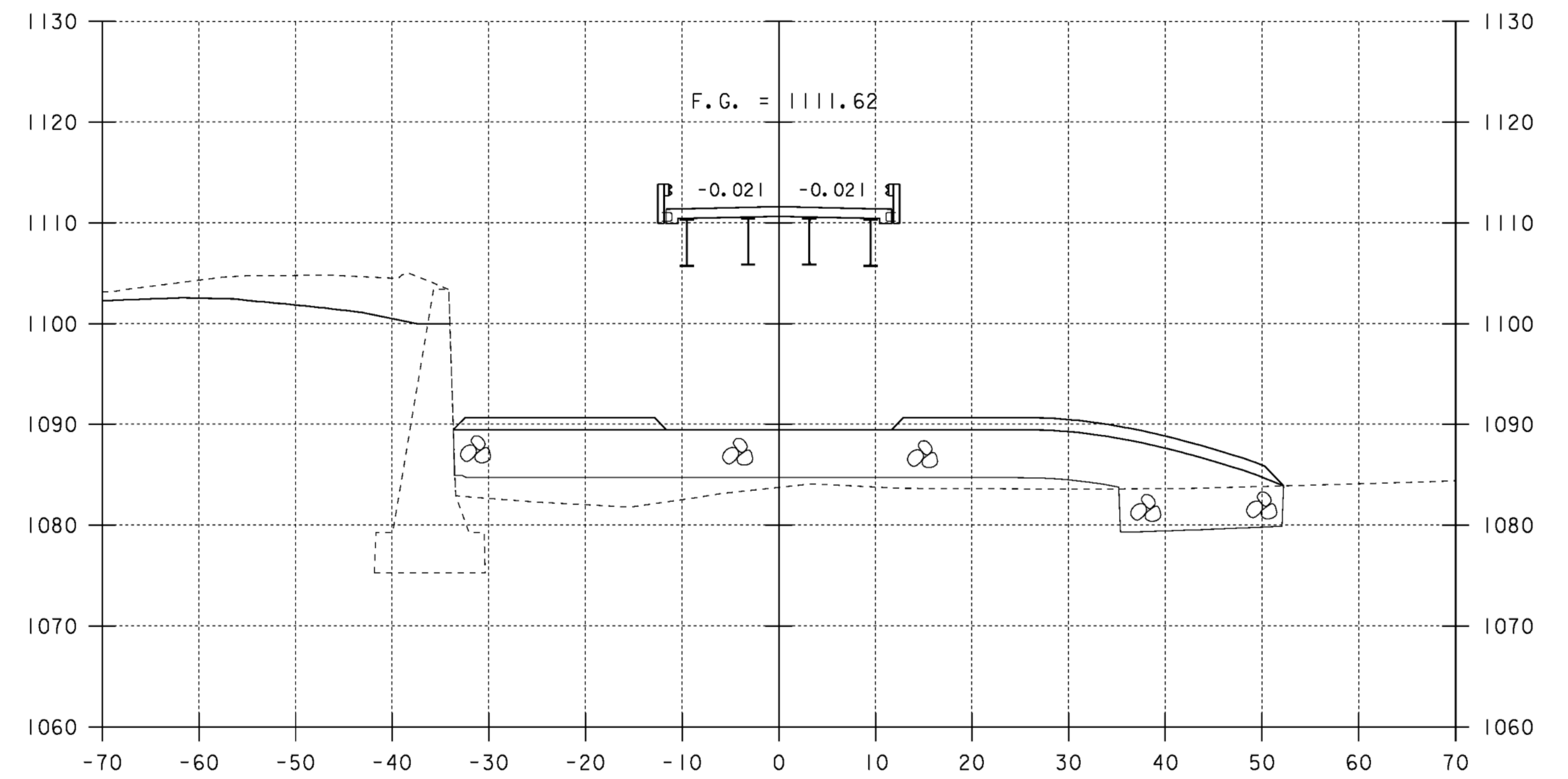
NOTE:
 NF = NEAR FACE
 FF = FAR FACE
 EF = EACH FACE
 ▲ = CUT TO FIT IN FIELD
 3" COVER UNLESS OTHERWISE SPECIFIED ON THE PLANS.
 2'-2" BAR LAP UNLESS OTHERWISE SPECIFIED ON THE PLANS.

SUBSTRUCTURE ABUTMENT 2

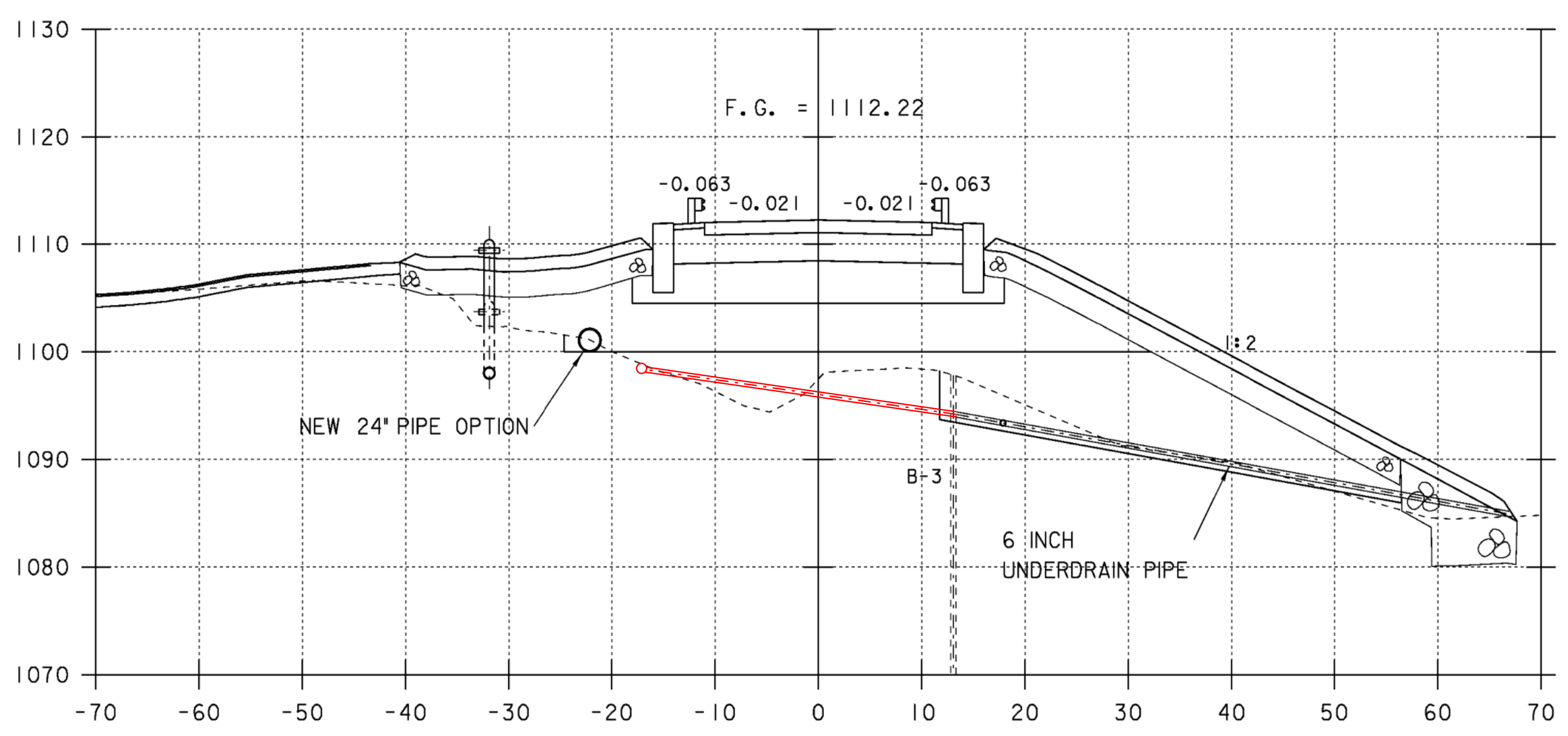
PROJECT NAME: BROWNINGTON	PLOT DATE: 06-JAN-2009
PROJECT NUMBER: BRO 1449 (28)	DRAWN BY: C.MOONEY
FILE NAME: sj246s08.1	CHECKED BY: R. WHITCOMB
PROJECT LEADER: R. WHITCOMB	SHEET 39 OF 58
DESIGNED BY: T. LACKEY	
99J246/str/sj246str.dgn	



11+00



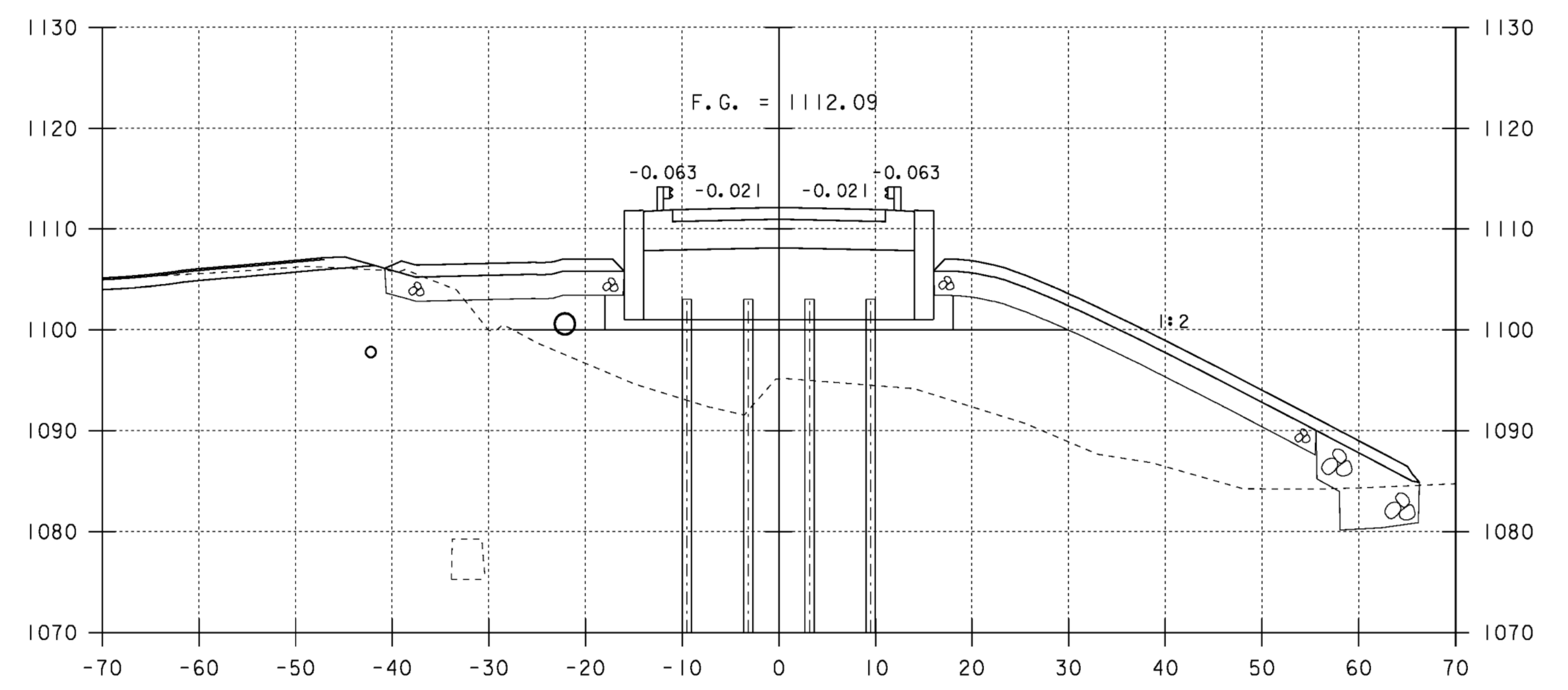
11+25



10+95

NEW HYDRANT
STA 10+95

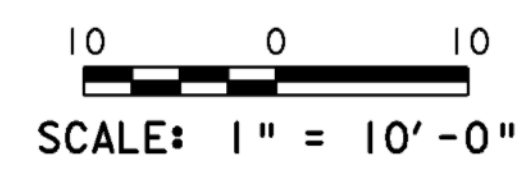
10+87 TO 10+96
6 INCH UNDERDRAIN PIPE
FOR ARTESIAN BORE HOLE 3



11+01.17

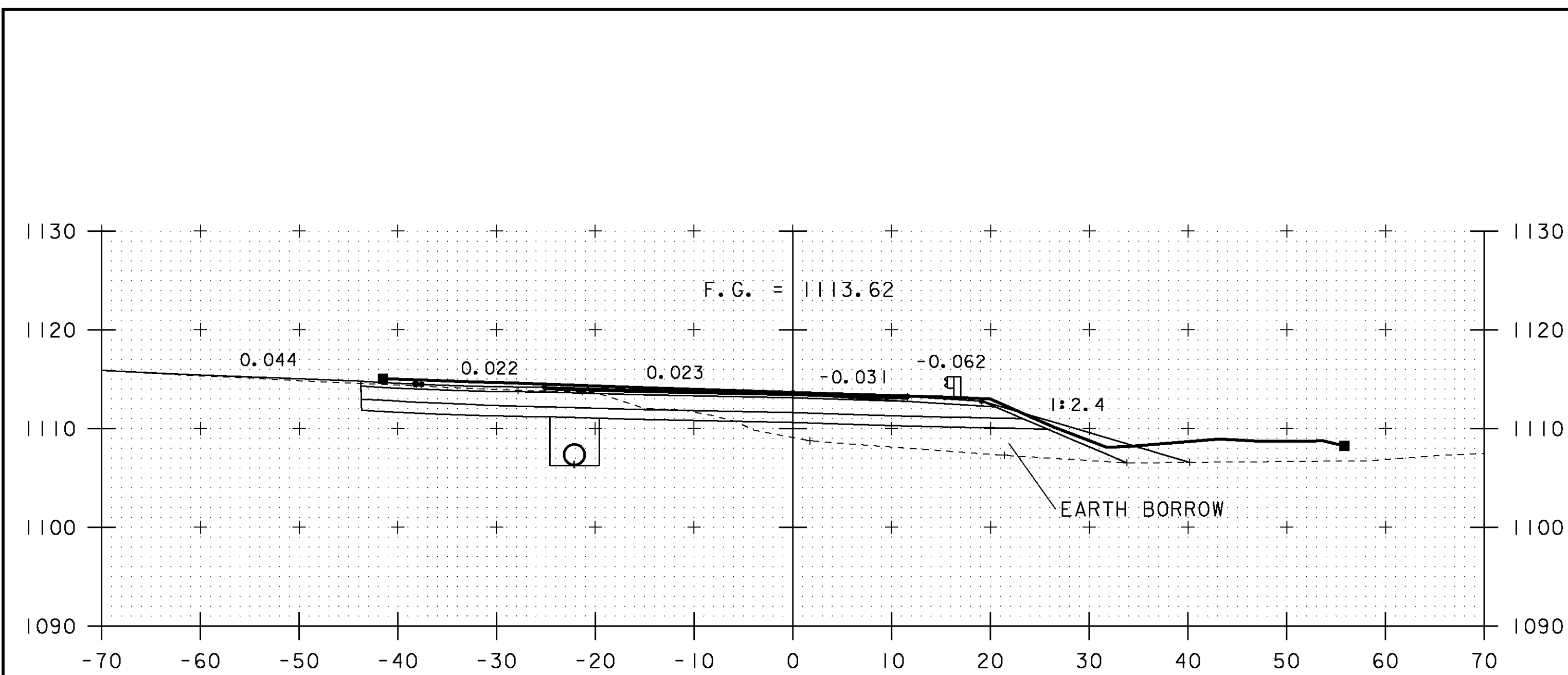
11+01.17 BEGIN BRIDGE

ROADWAY CROSS SECTIONS 2

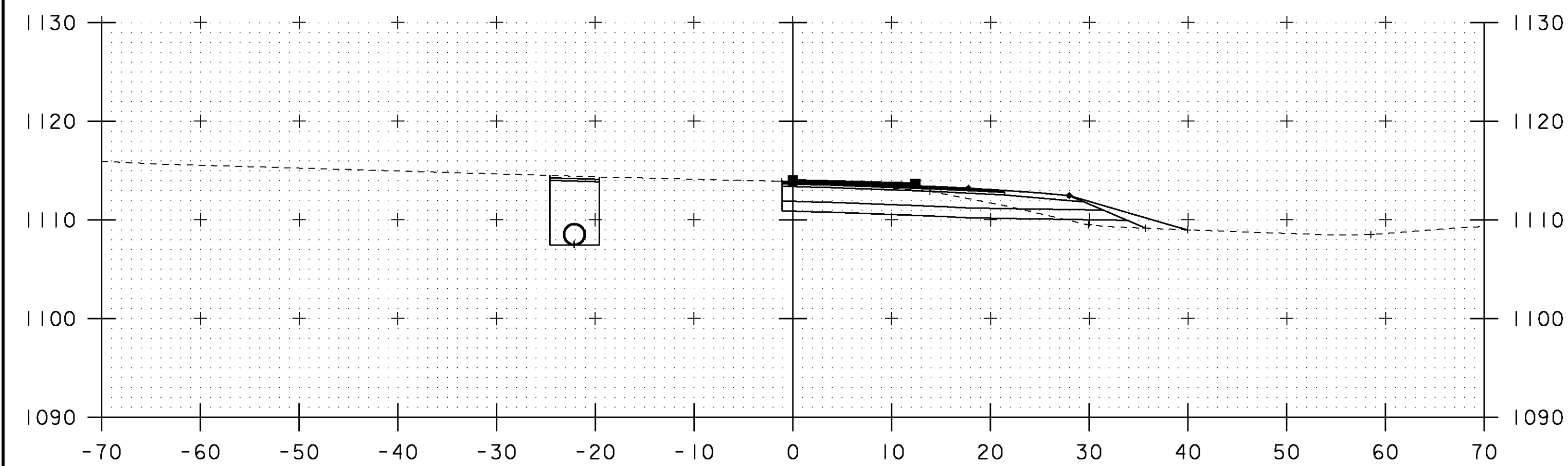


PROJECT NAME: BROWNINGTON	
PROJECT NUMBER: BRO 1449 (28)	
FILE NAME: sj246m02.i	PLOT DATE: 19-DEC-2008
PROJECT LEADER: R. WHITCOMB	DRAWN BY: T. LACKEY
DESIGNED BY: T. LACKEY	CHECKED BY: R. WHITCOMB
99J246/str/sj246xs.dgn	SHEET 43 OF 58

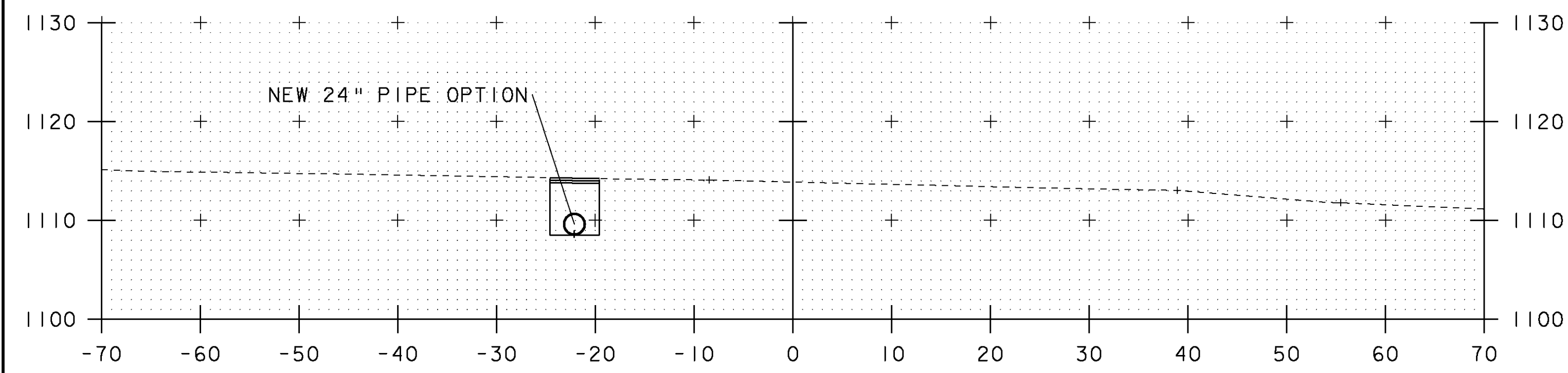
STA. 10+95 TO STA. 11+25



10+25

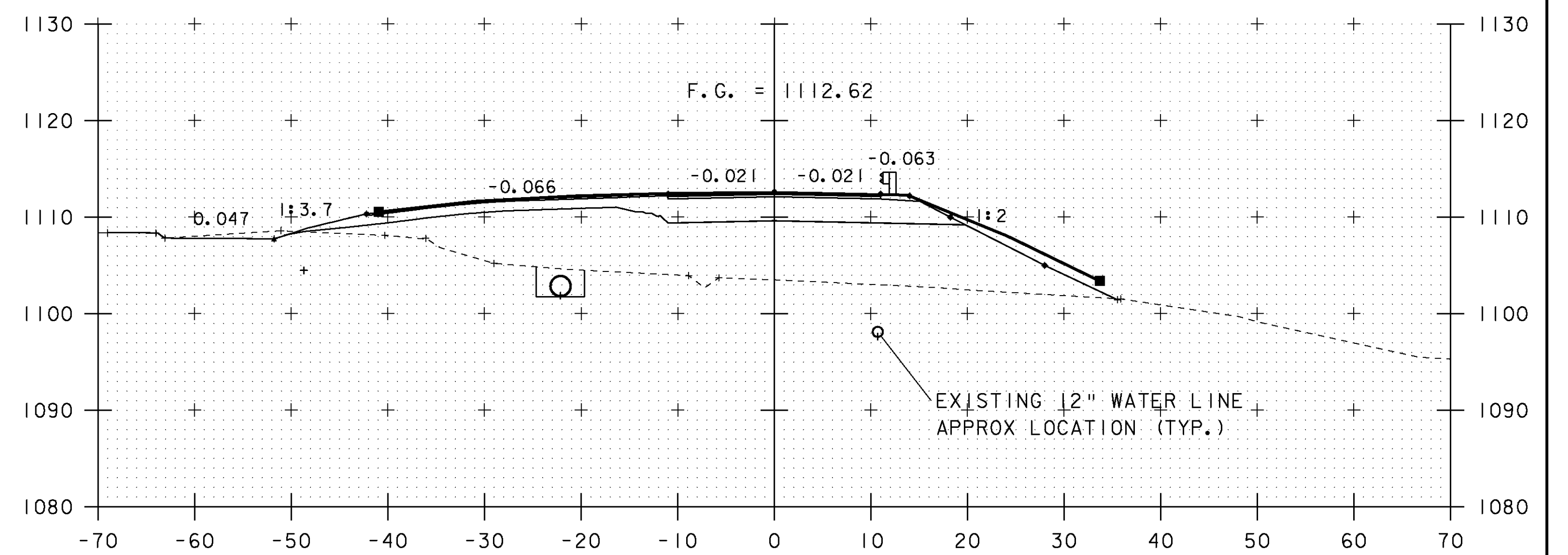
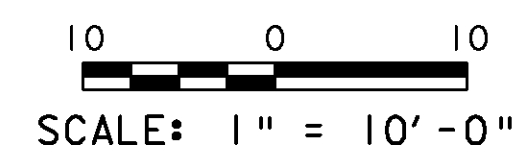


10+12

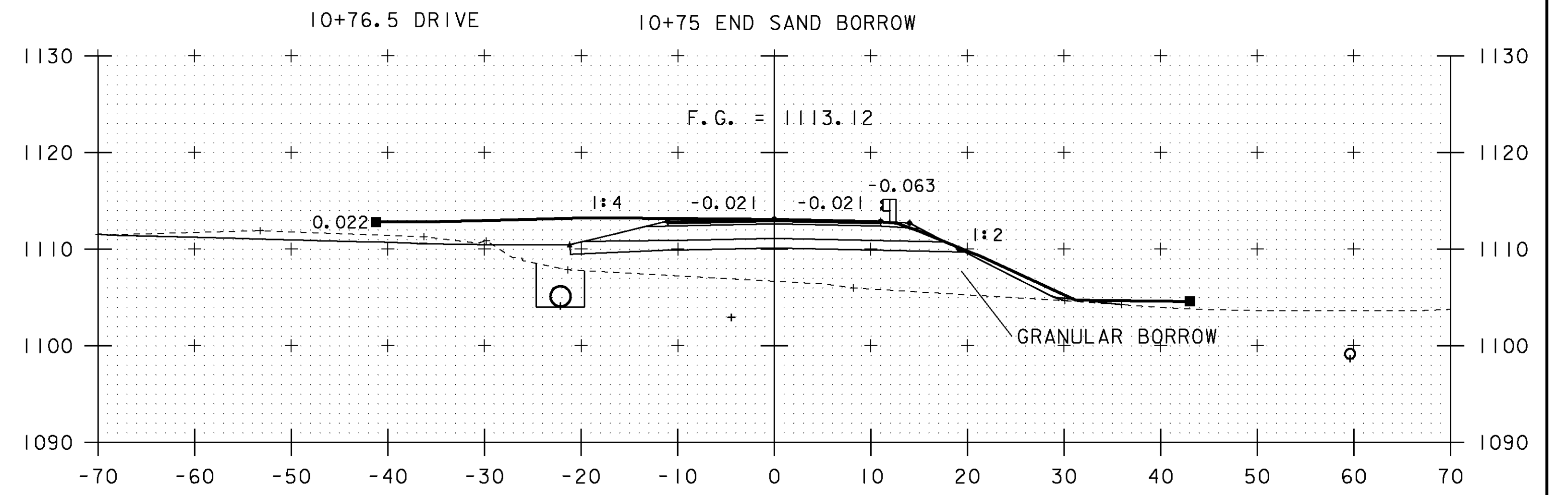


10+00

9+95.31 BEGIN APPROACH
 BEGIN COLD PLANING
 MATCH EXISTING



10+75



10+50

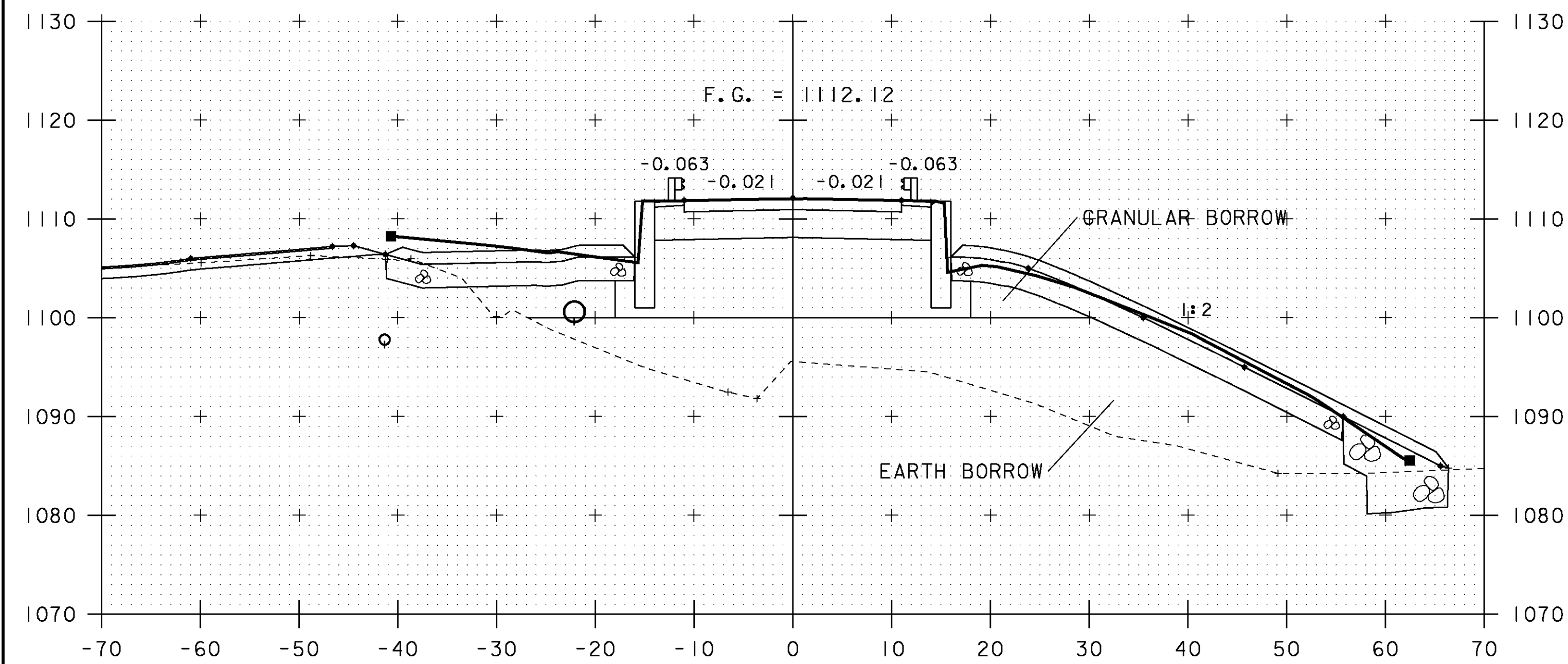
10+46 BEGIN GRANULAR BORROW

PROJECT NAME: BROWNINGTON
 PROJECT NUMBER: BRO 1449 (28)

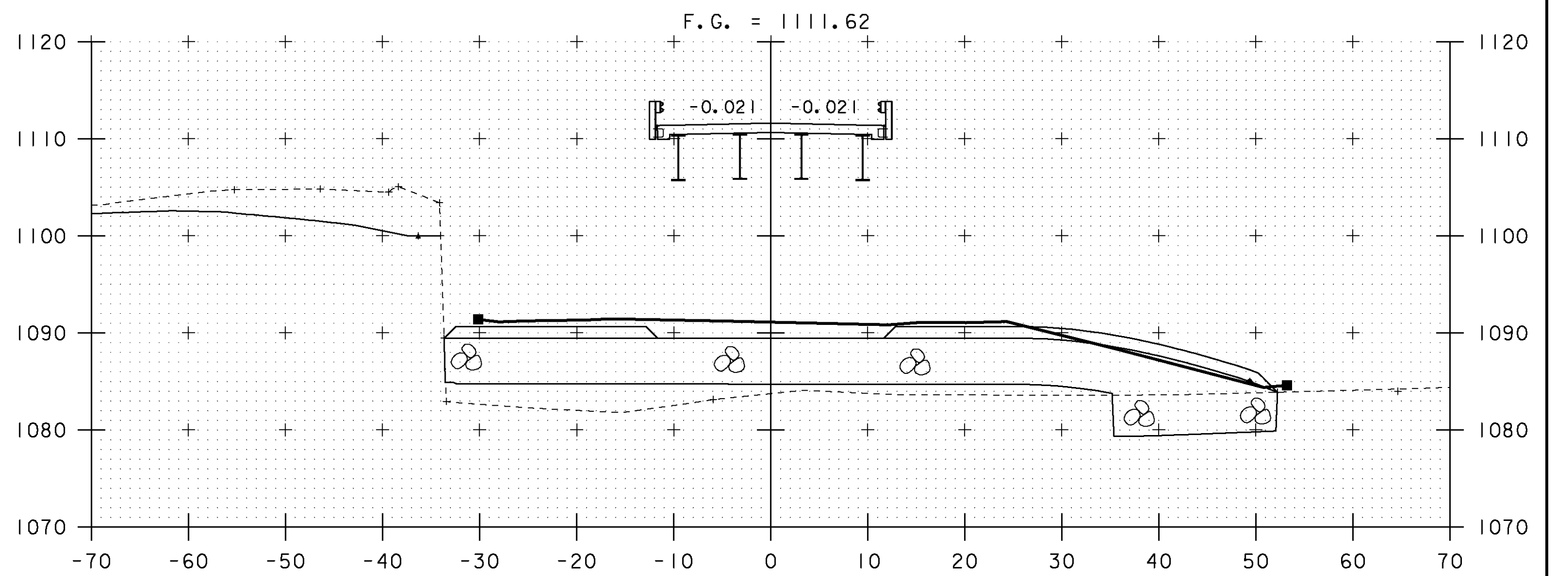
FILE NAME: sj246Final
 PROJECT LEADER: C. MOONEY
 DESIGNED BY: T. LACKEY
 ROADWAY SECTIONS - I

PLOT DATE: 23-FEB-2010
 DRAWN BY: C. MOONEY
 CHECKED BY: -----
 SHEET 1 OF 14

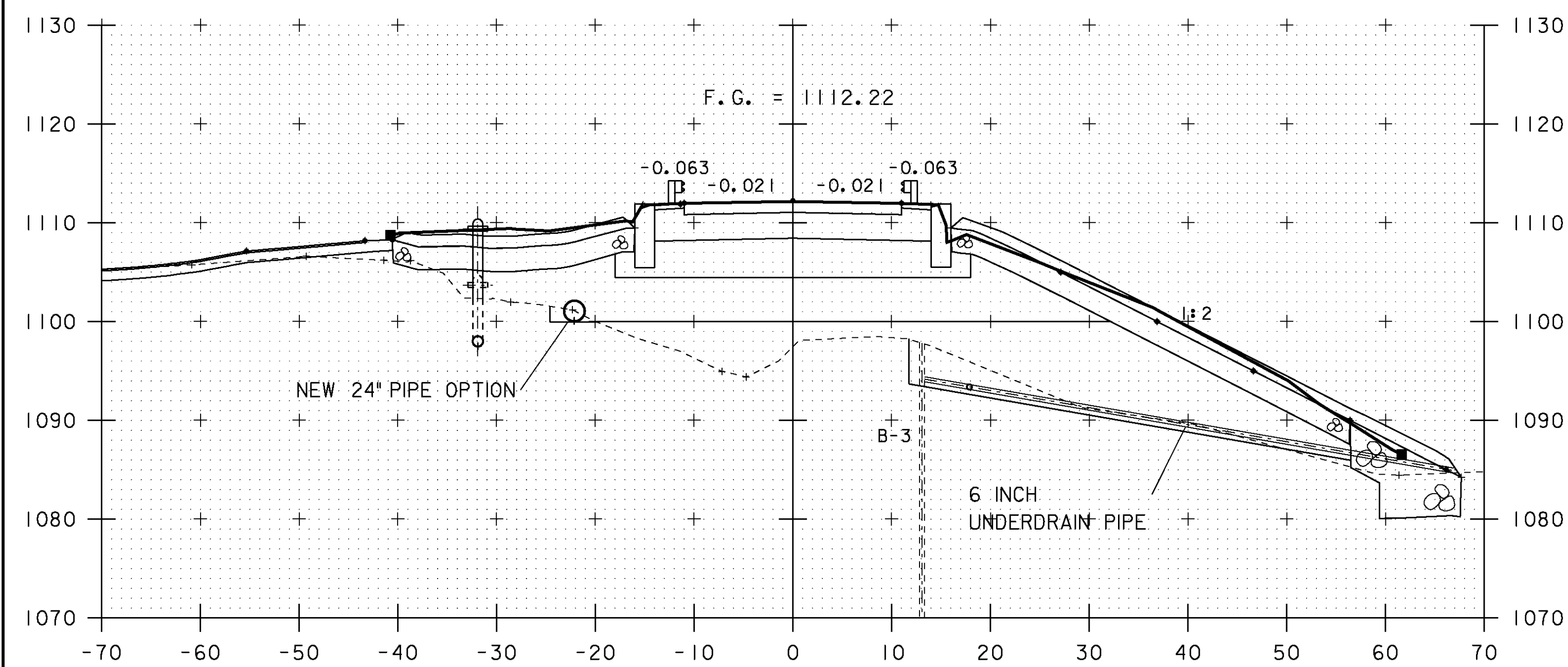
STA. 10+00 TO STA. 10+75



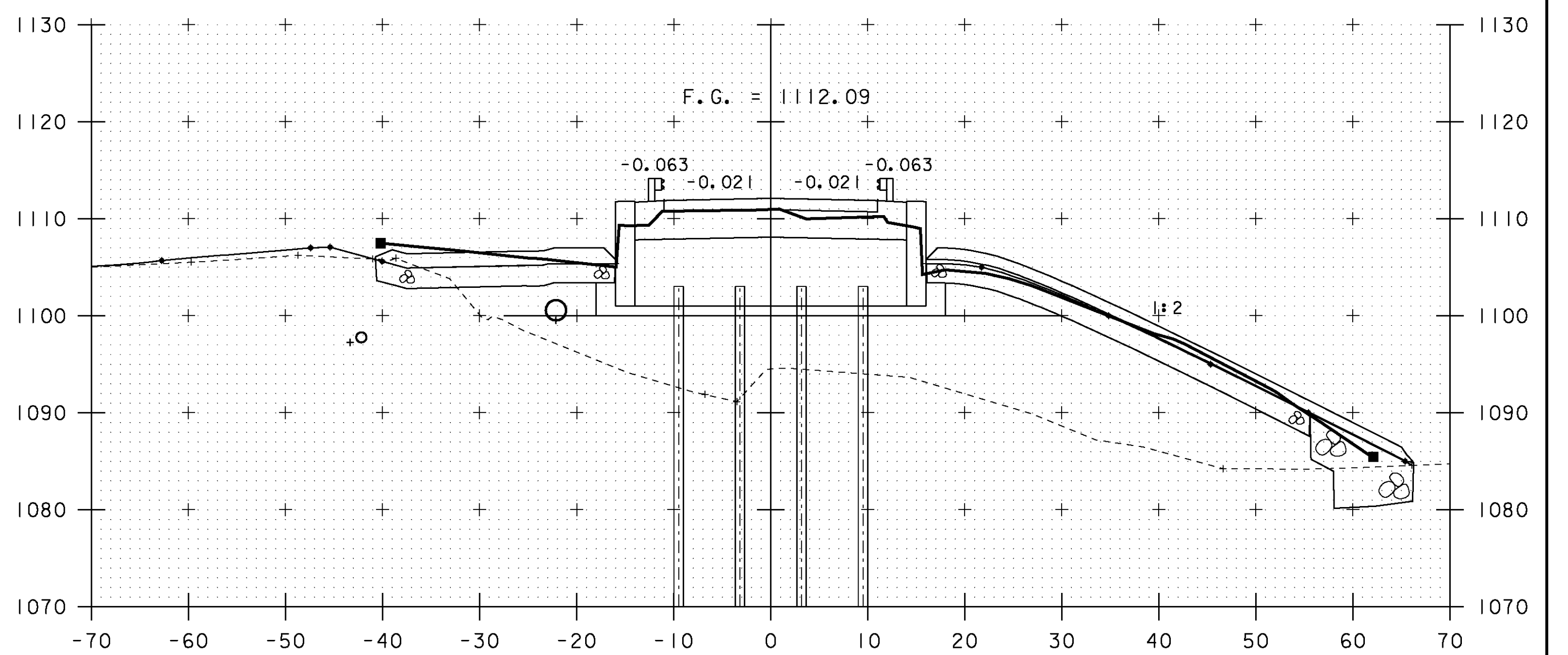
11+00



11+25



10+95



11+01 BEGIN BRIDGE

NEW HYDRANT
STA 10+95

10+87 TO 10+96
6 INCH UNDERDRAIN PIPE
FOR ARTESIAN BORE HOLE 3

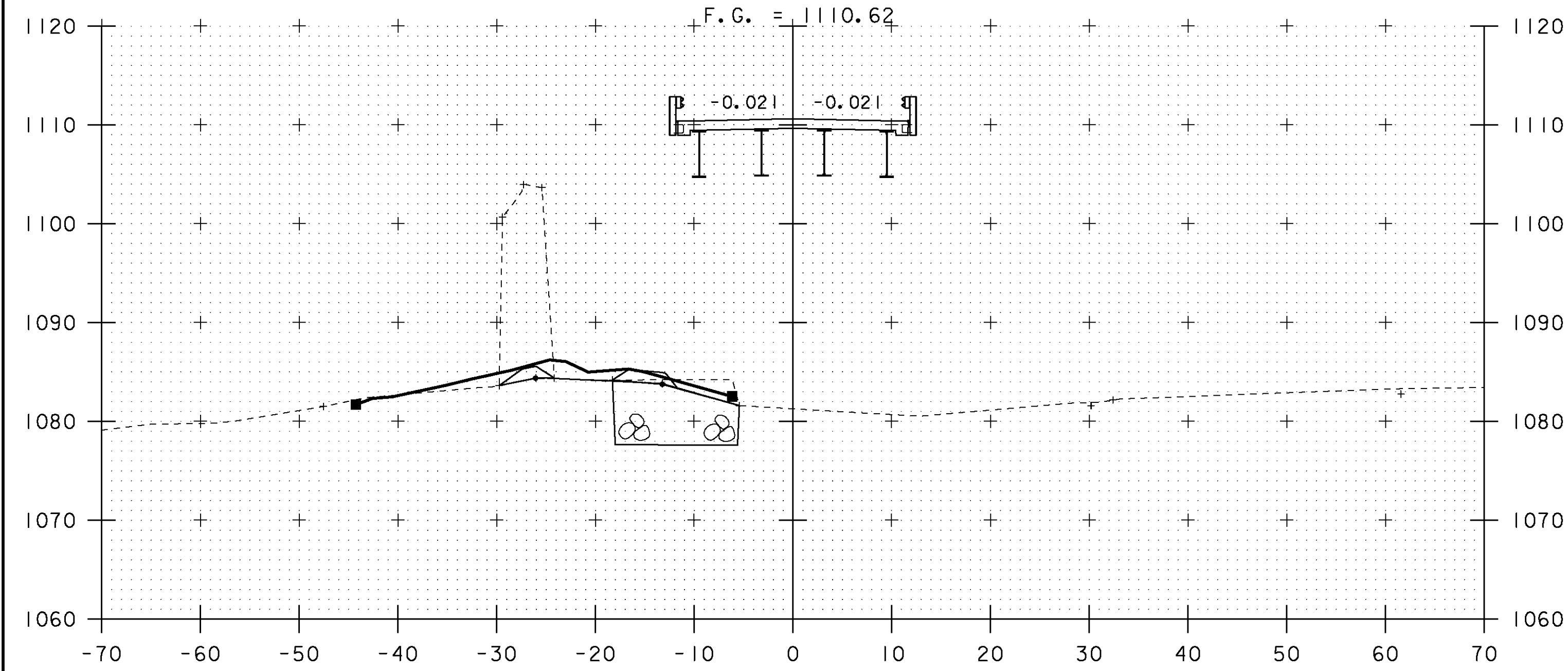
10 0 10
SCALE: 1" = 10'-0"

STA. 10+95 TO STA. 11+25

PROJECT NAME: BROWNINGTON
PROJECT NUMBER: BRO 1449 (28)

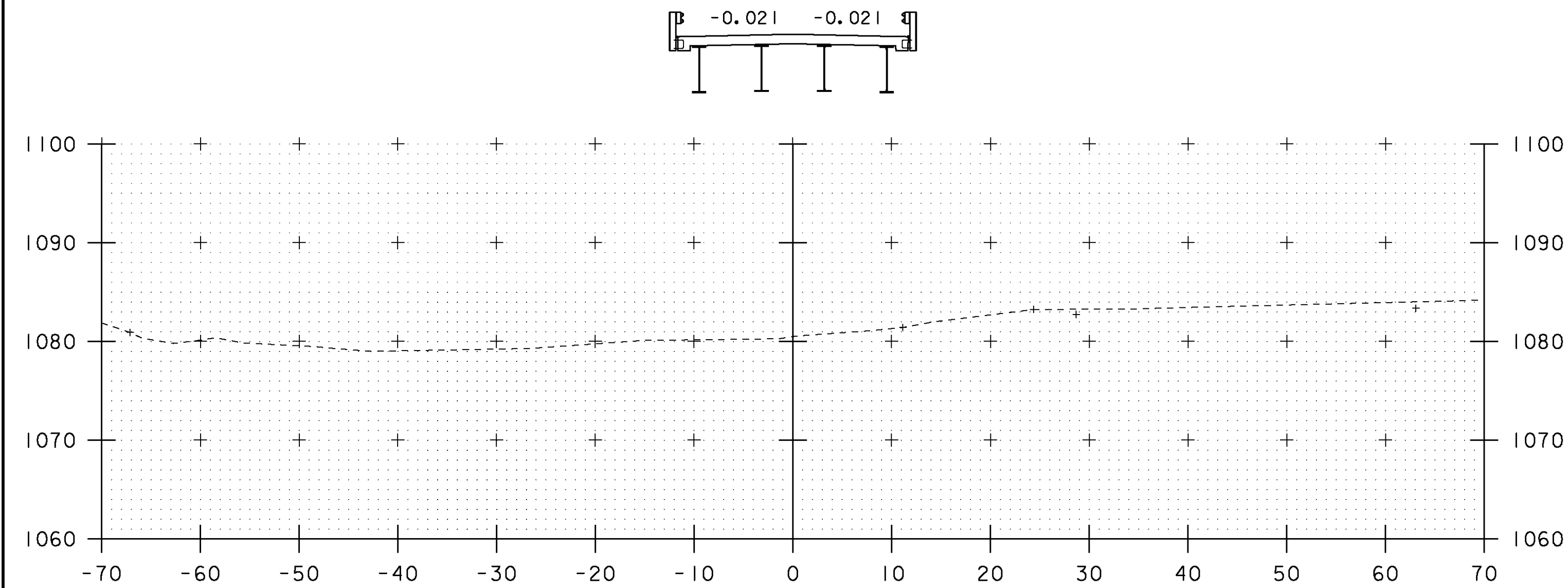
FILE NAME: sj246Final
PROJECT LEADER: C. MOONEY
DESIGNED BY: T. LACKEY
ROADWAY SECTIONS - 2

PLOT DATE: 23-FEB-2010
DRAWN BY: C. MOONEY
CHECKED BY: -----
SHEET 2 OF 14

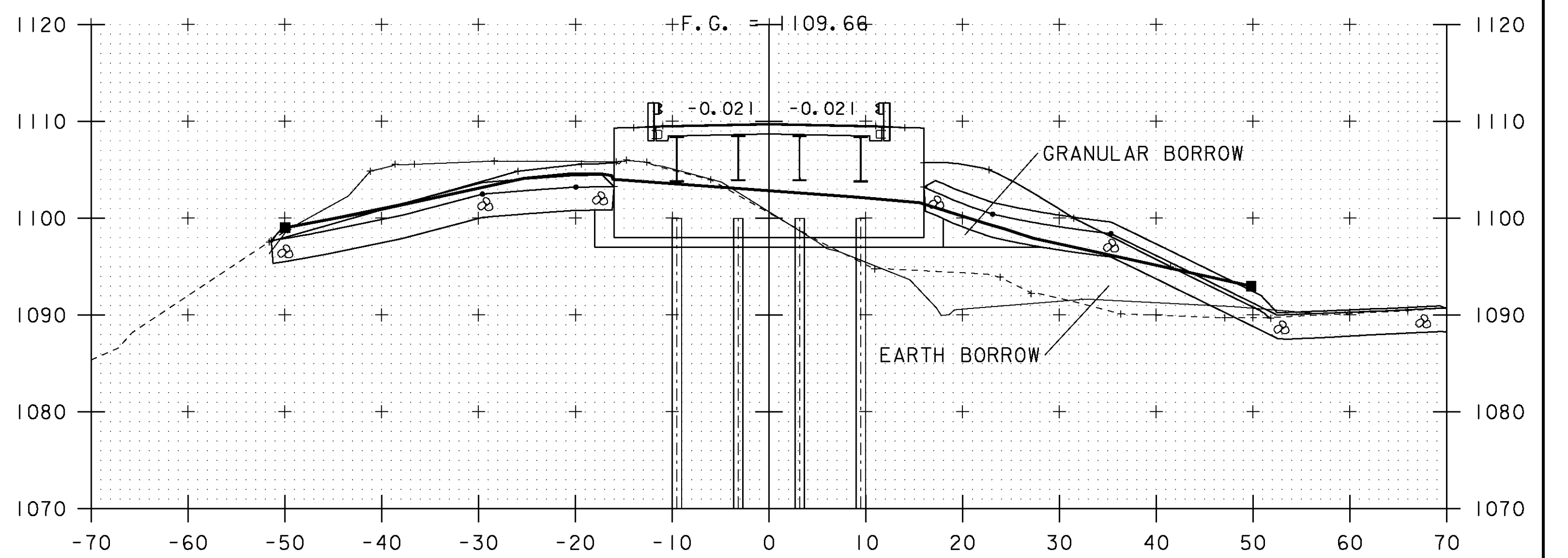


11+75

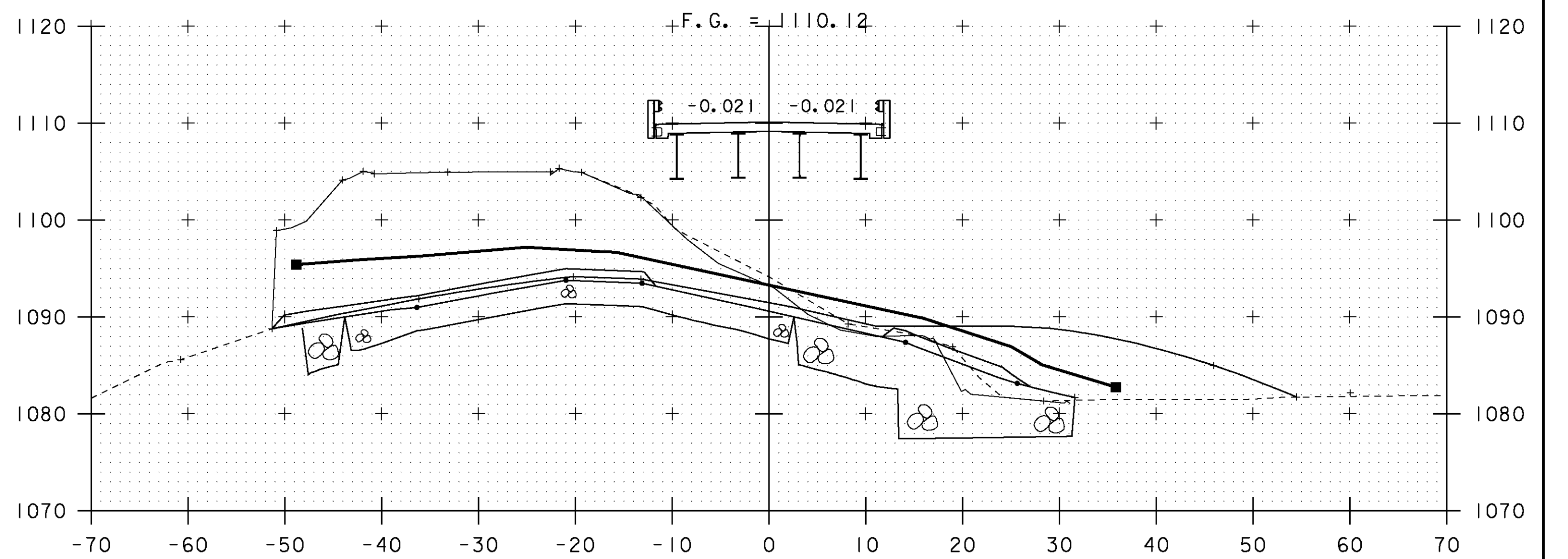
F.G. = 1111.12



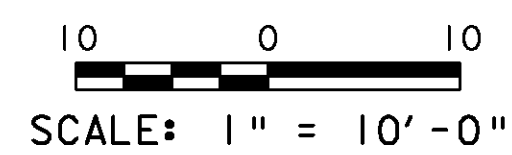
11+50



12+25

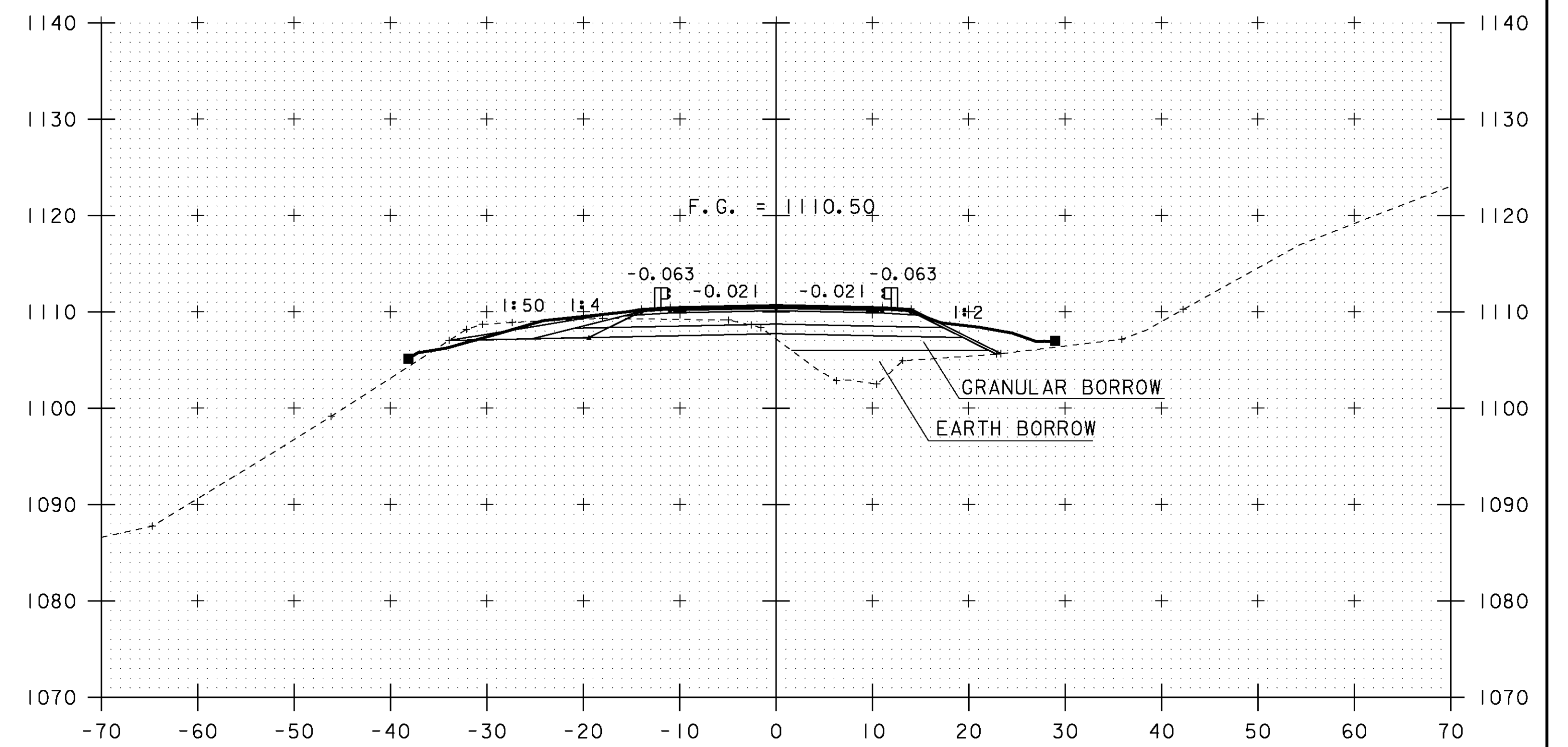
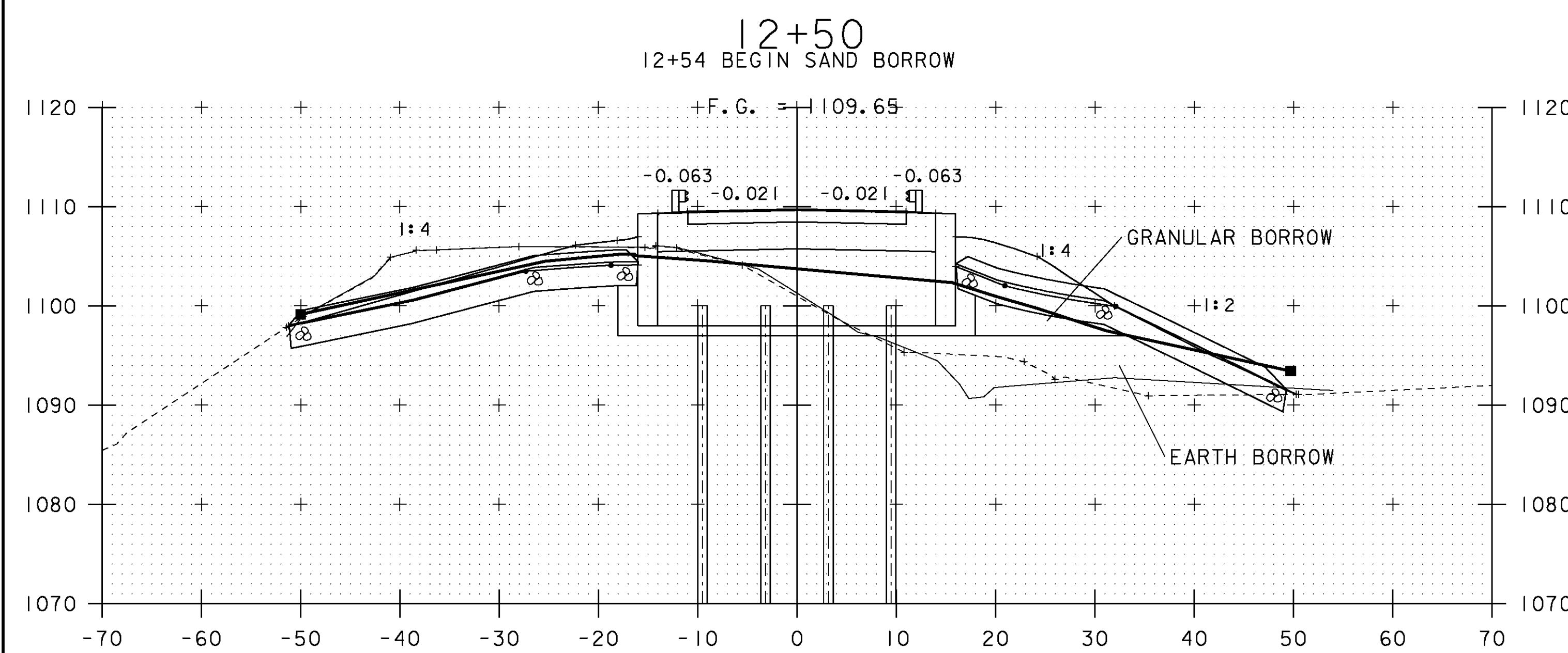
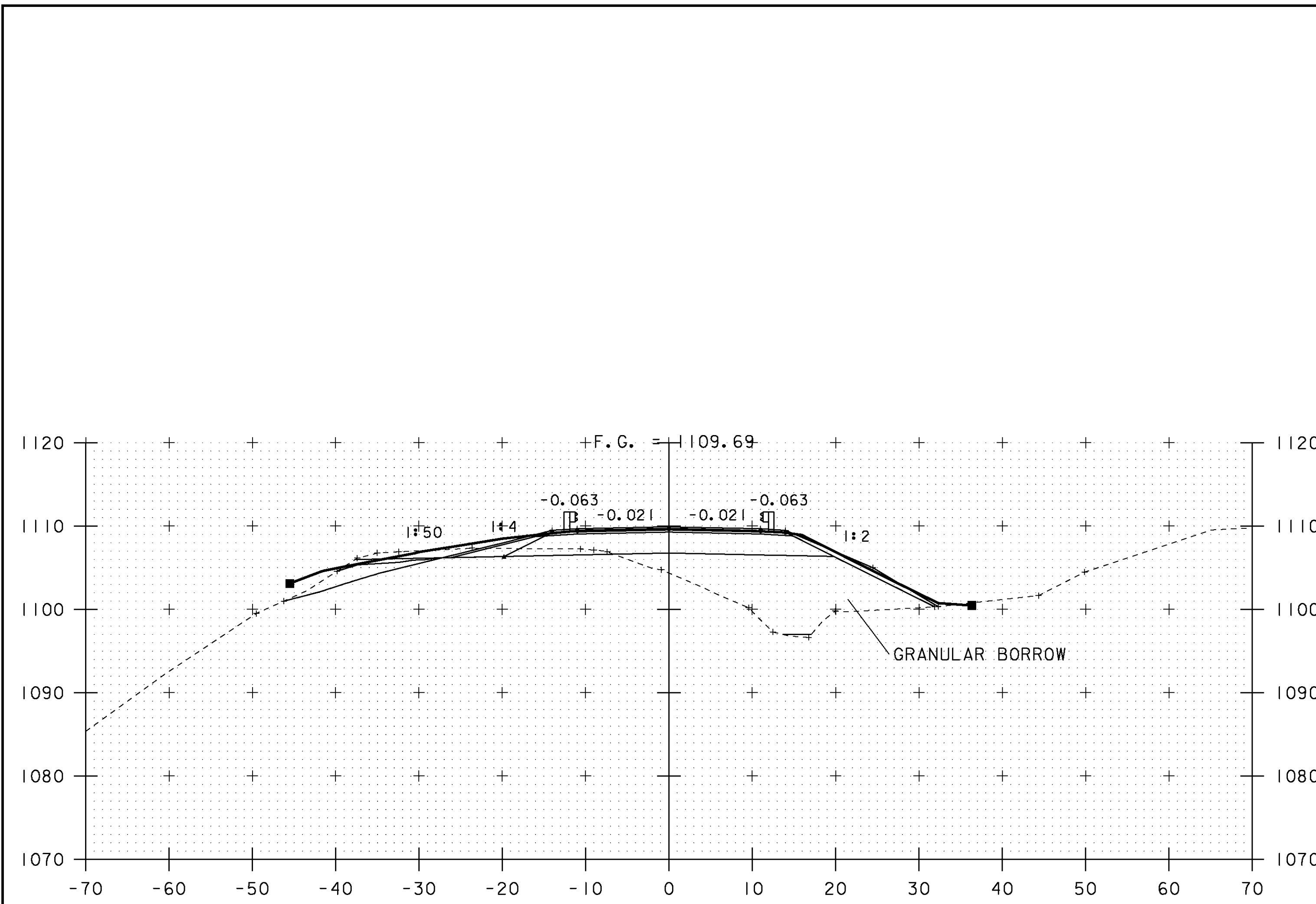


12+00

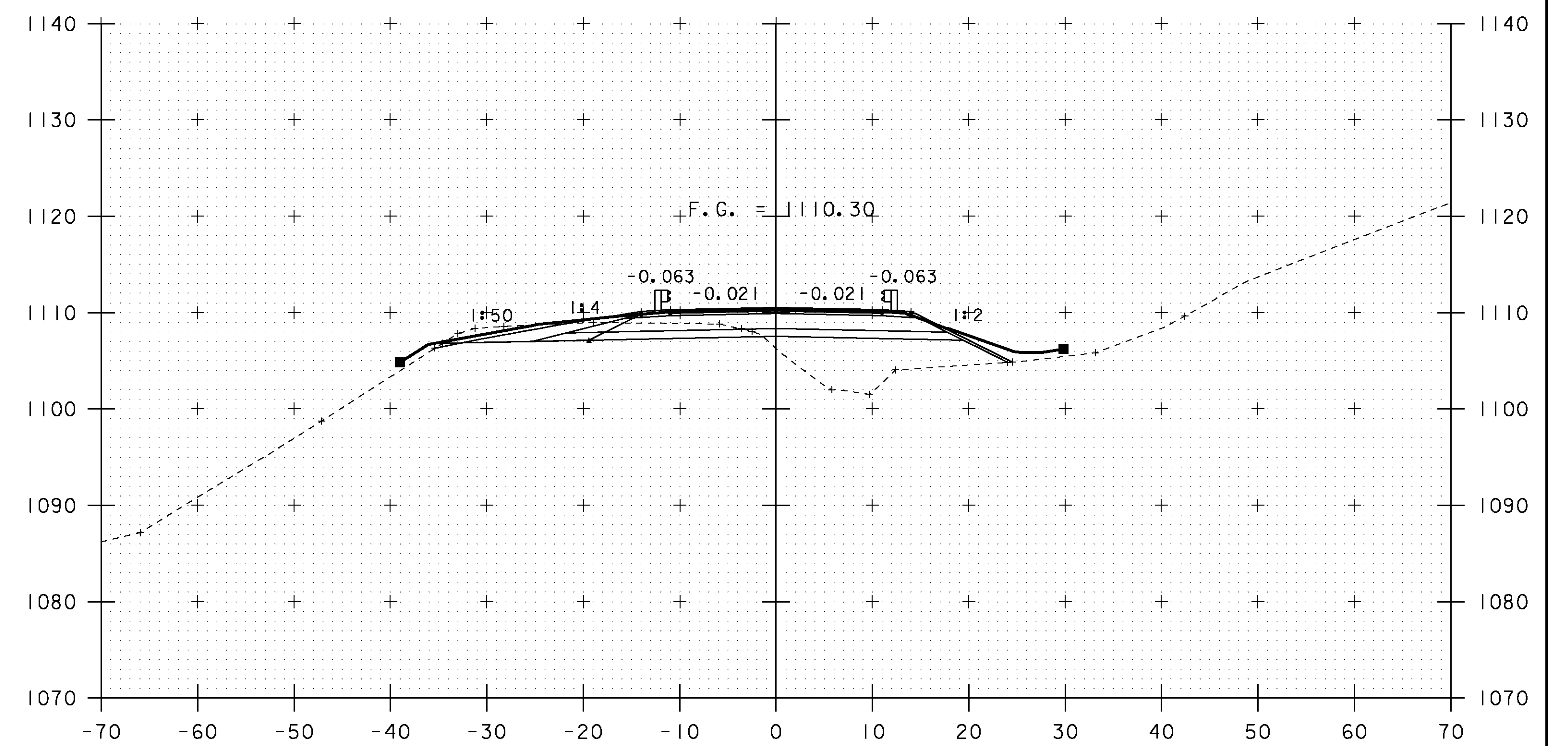


STA. 11+50 TO STA. 12+25

PROJECT NAME: BROWNINGTON	PROJECT NUMBER: BRO 1449 (28)
FILE NAME: sj246Final	PLOT DATE: 23-FEB-2010
PROJECT LEADER: C. MOONEY	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: -----
ROADWAY SECTIONS - 3	SHEET 3 OF 14



12+80
12+83 END GRANULAR BORROW



12+75

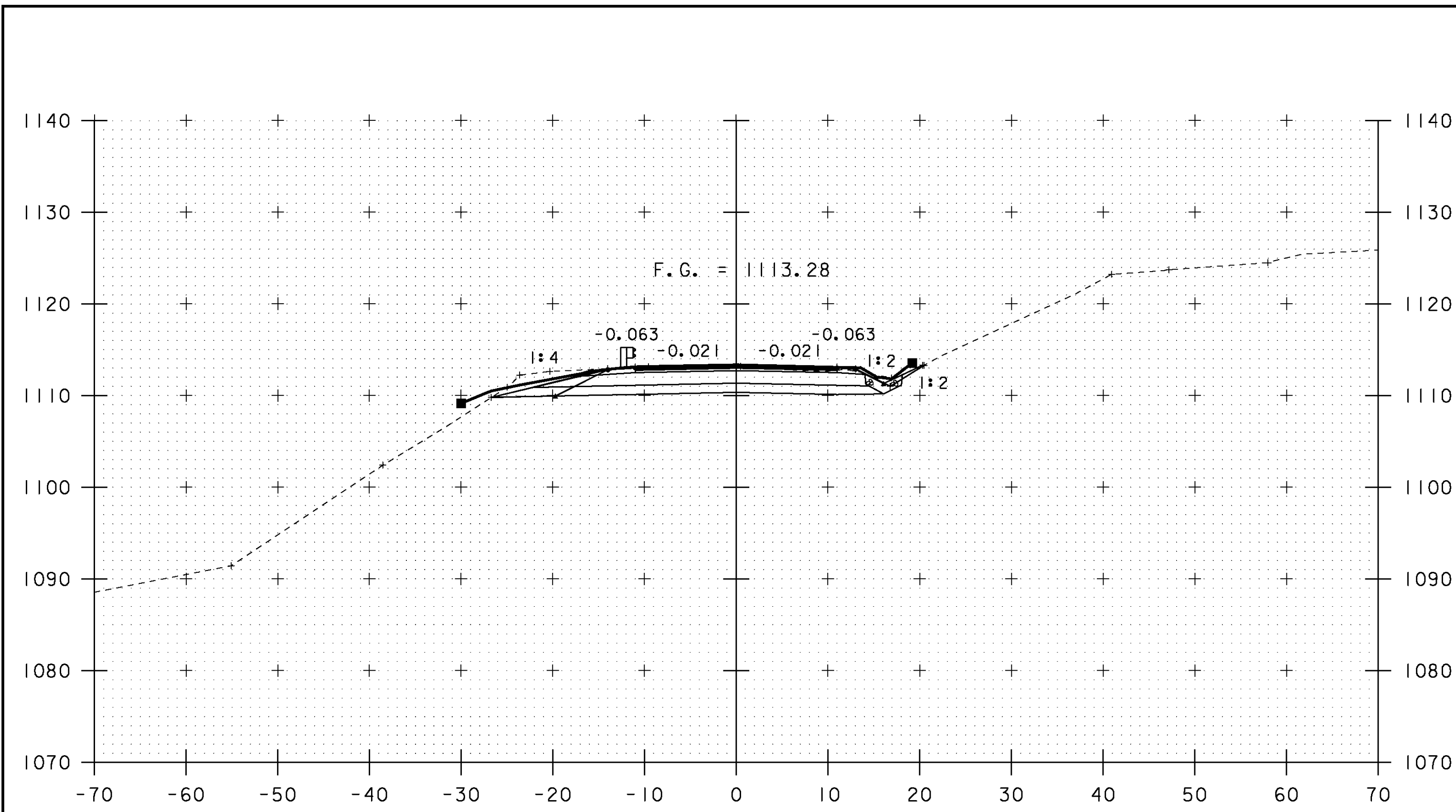


STA. 12+27 TO STA. 12+80

PROJECT NAME: BROWNINGTON
PROJECT NUMBER: BRO 1449 (28)

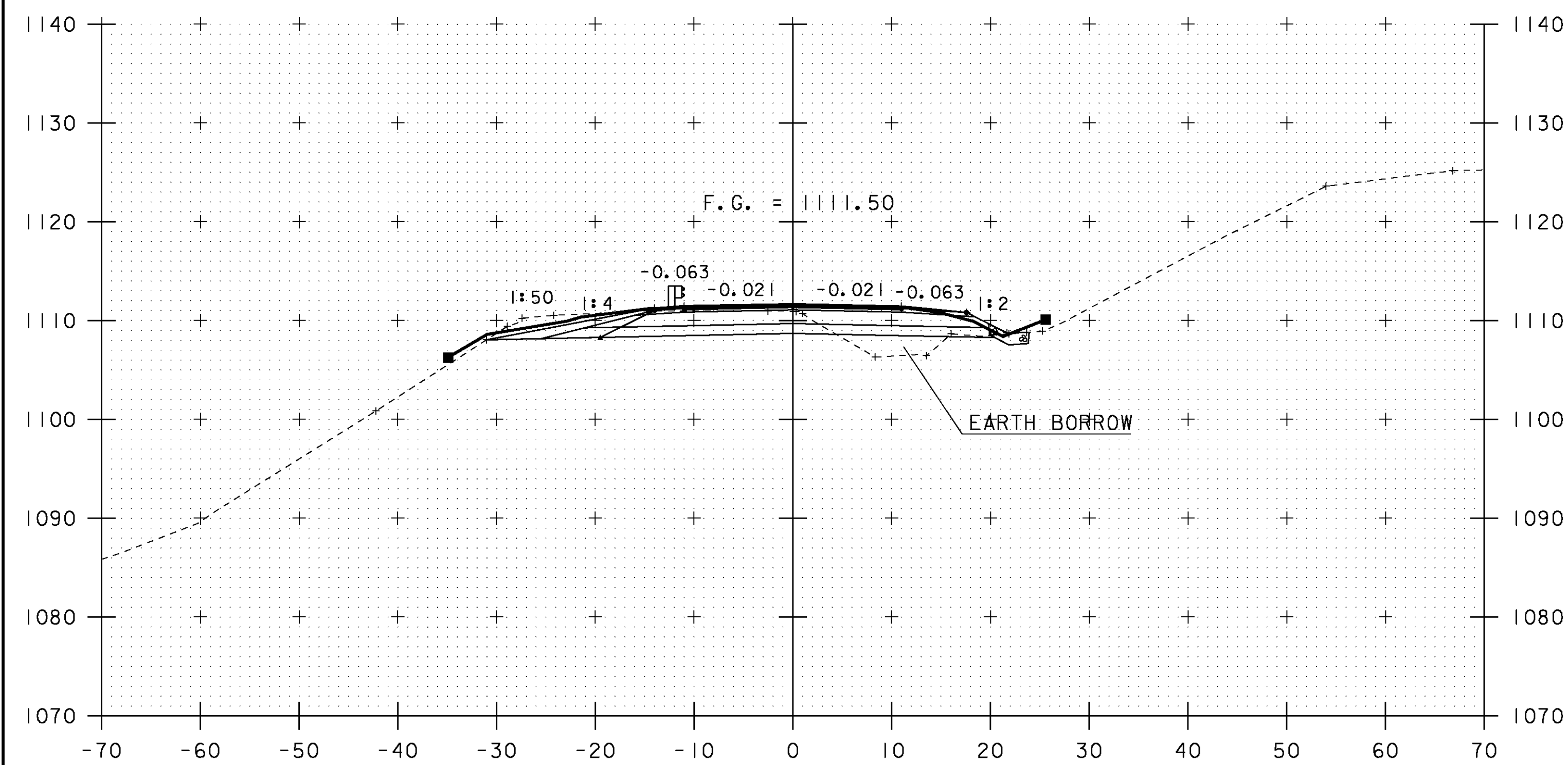
FILE NAME: sj246-final
PROJECT LEADER: C. MOONEY
DESIGNED BY: T. LACKEY
ROADWAY SECTIONS - 4

PLOT DATE: 23-FEB-2010
DRAWN BY: C. MOONEY
CHECKED BY: -----
SHEET 4 OF 14

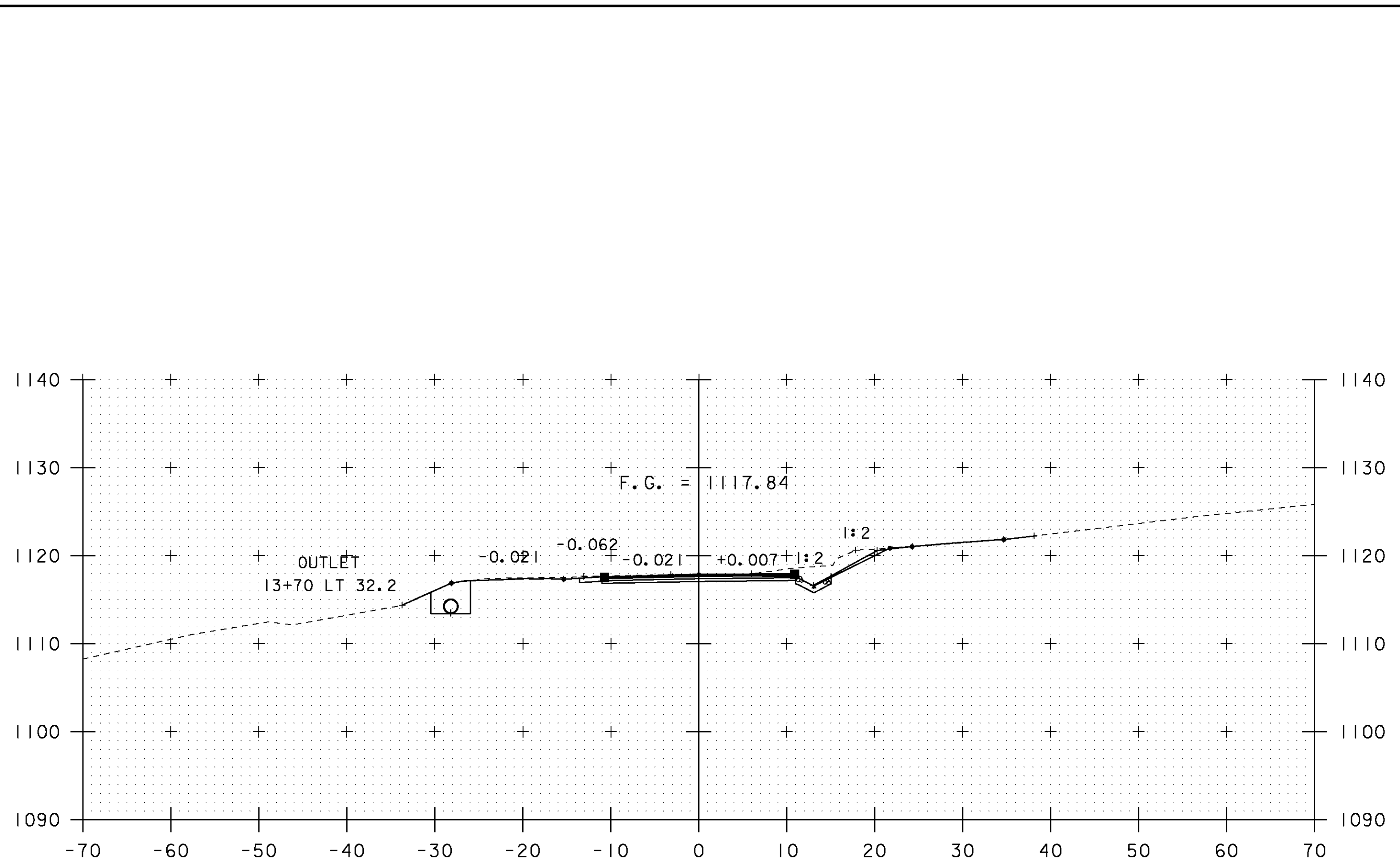


13+25

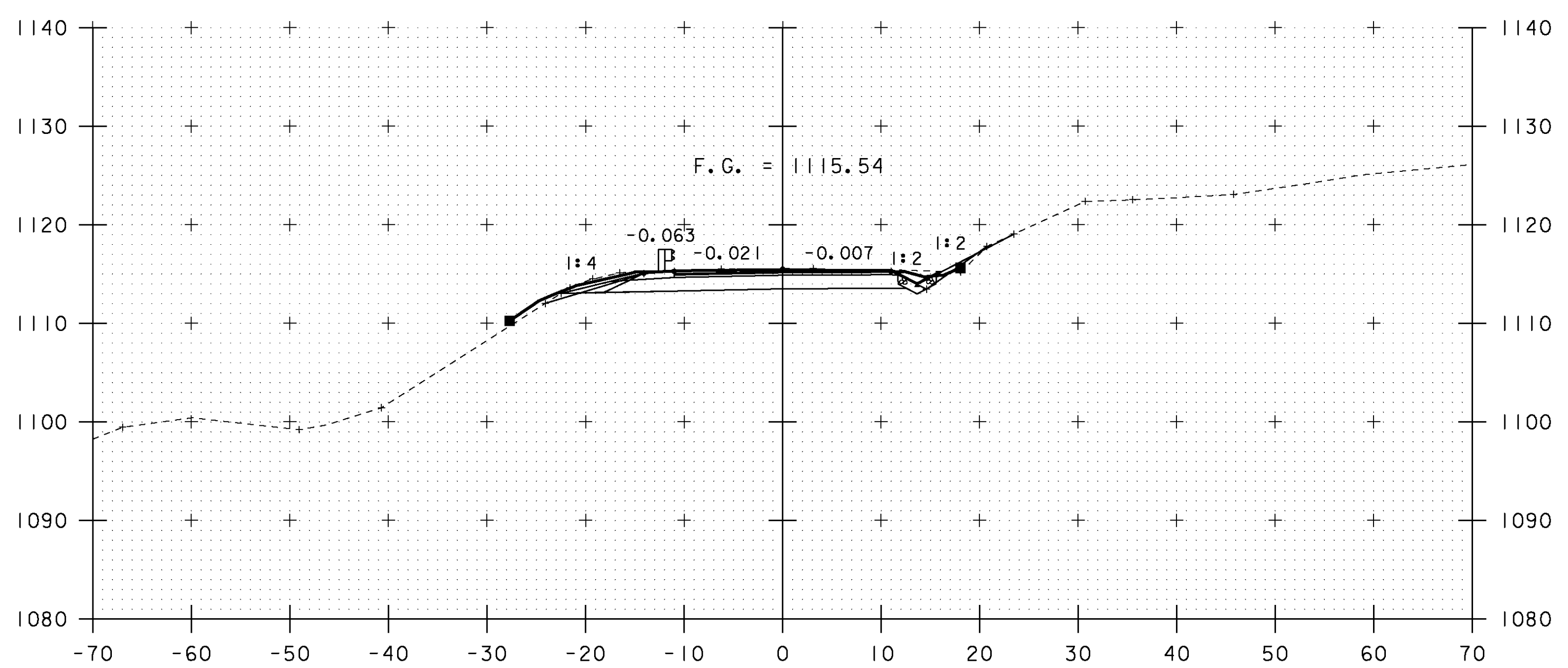
13+25 END PROJECT



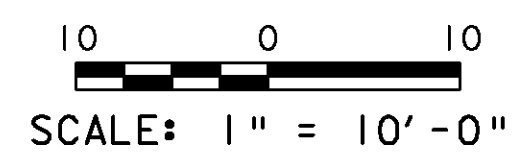
13+00



13+75

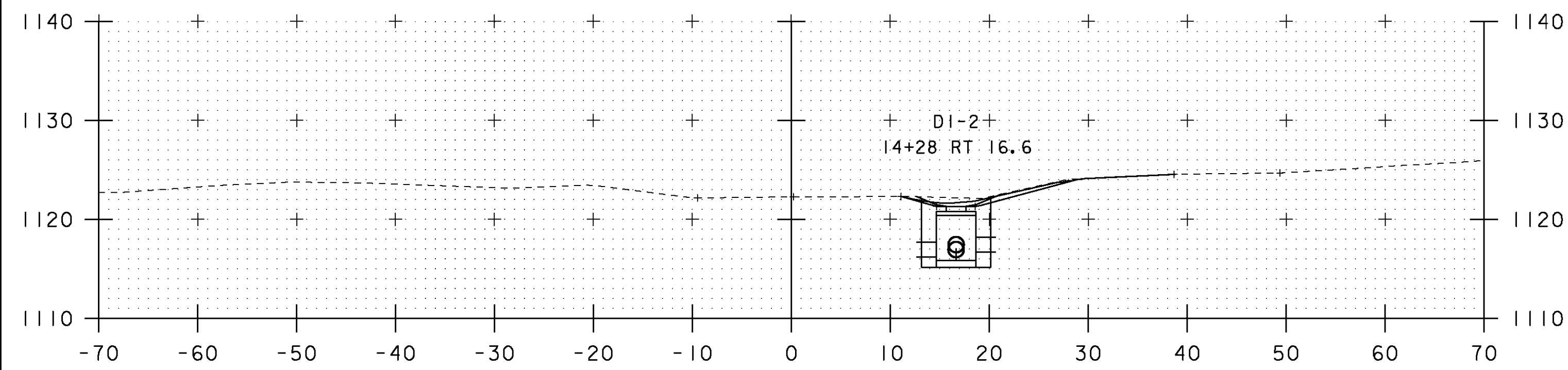


13+50

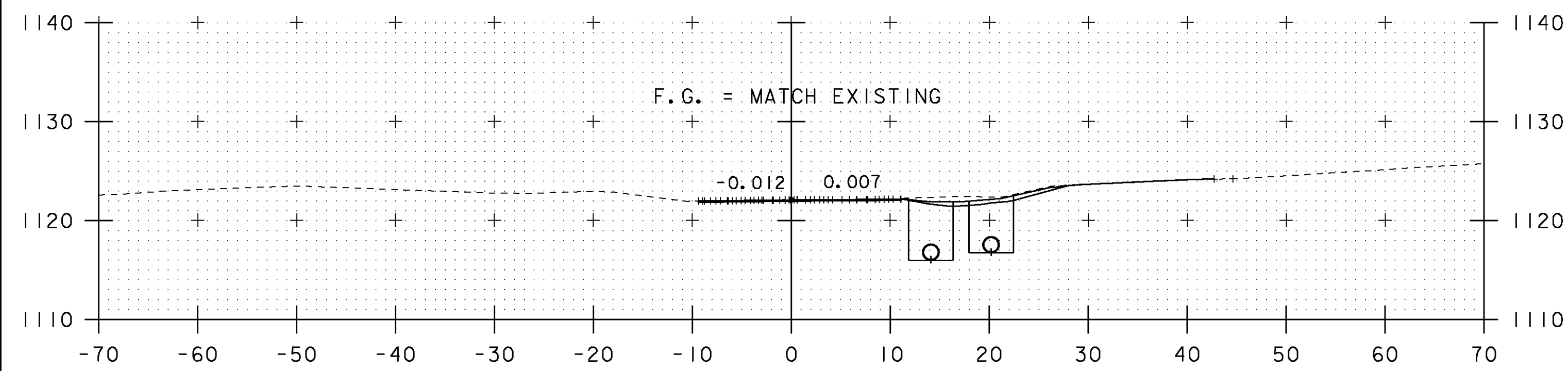


STA. 13+00 TO STA. 13+75

PROJECT NAME: BROWNINGTON	PLOT DATE: 23-FEB-2010
PROJECT NUMBER: BRO 1449 (28)	DRAWN BY: C. MOONEY
FILE NAME: sj246-final	CHECKED BY: -----
PROJECT LEADER: C. MOONEY	SHEET 5 OF 14
DESIGNED BY: T. LACKEY	
ROADWAY SECTIONS - 5	

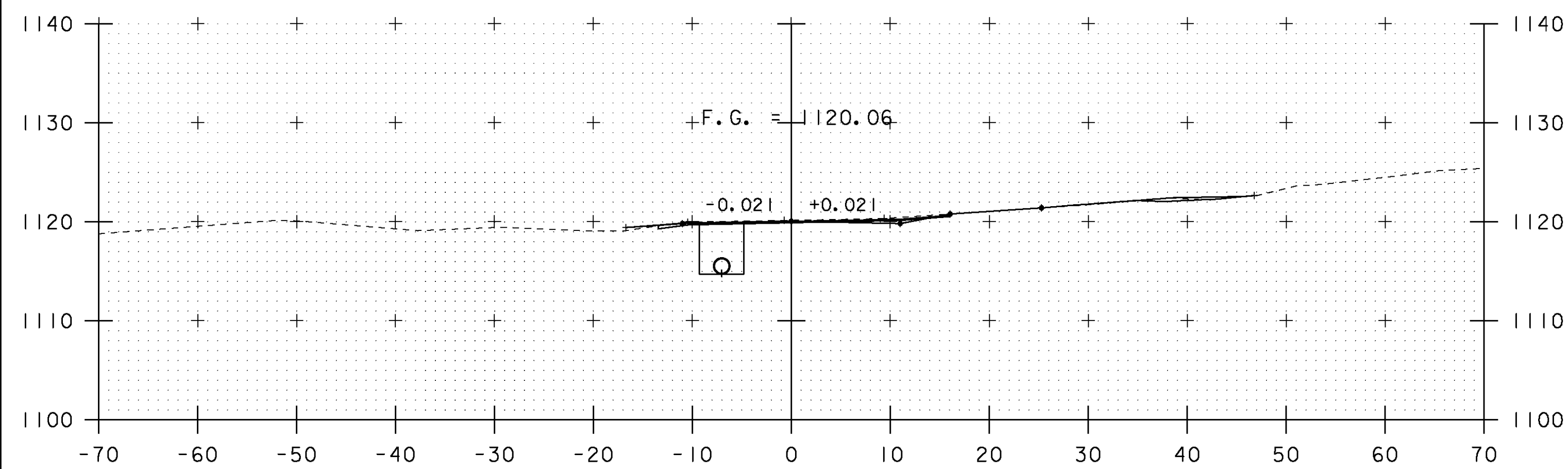


14+28

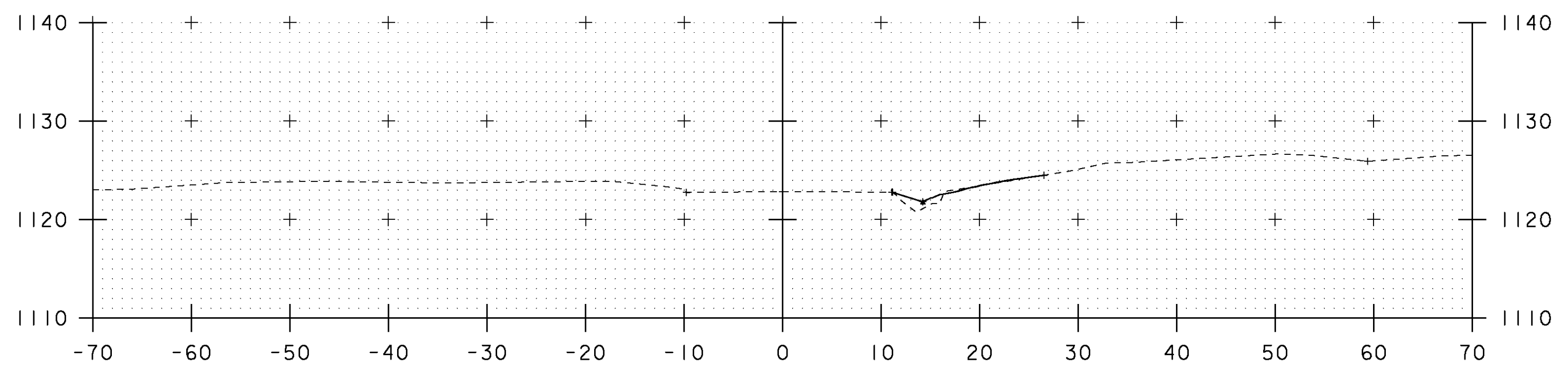


14+25

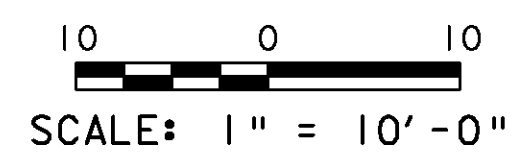
14+25
END COLD PLANING
END APPROACH



14+00

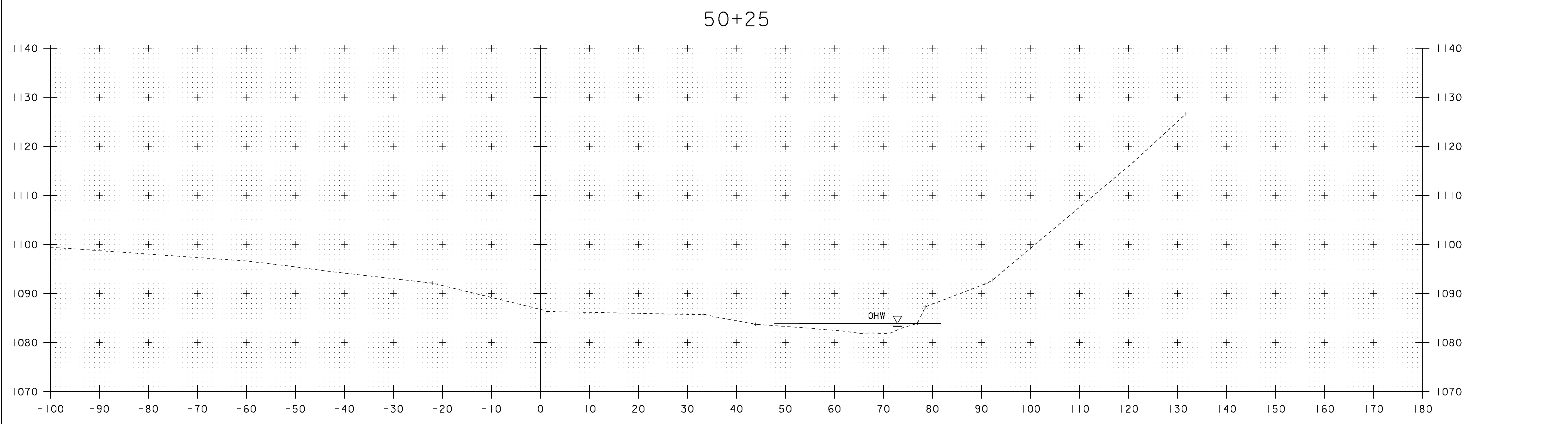
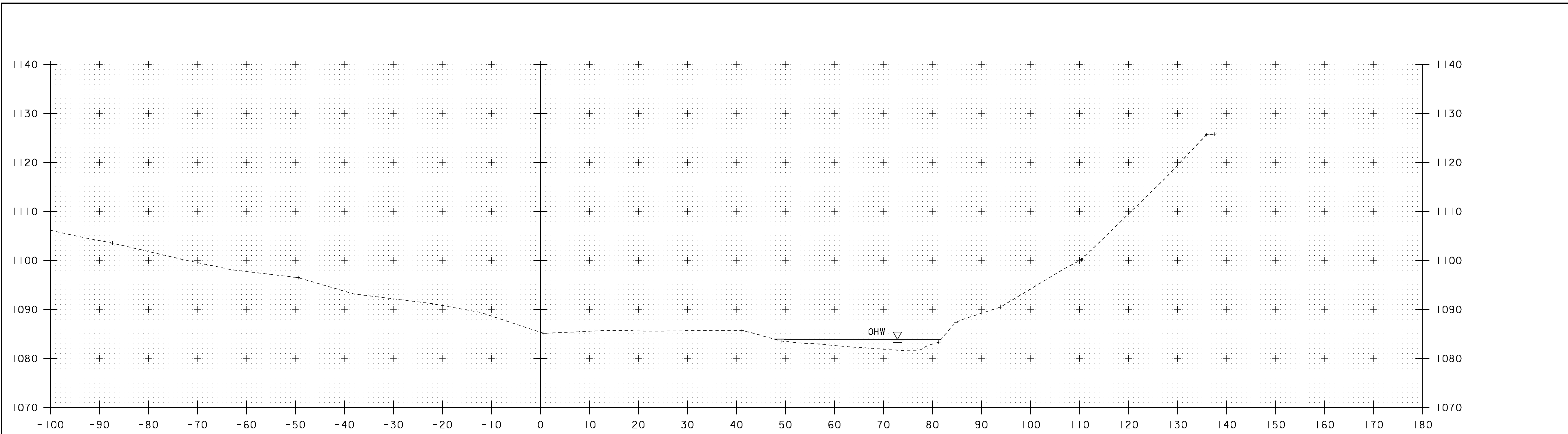


14+37



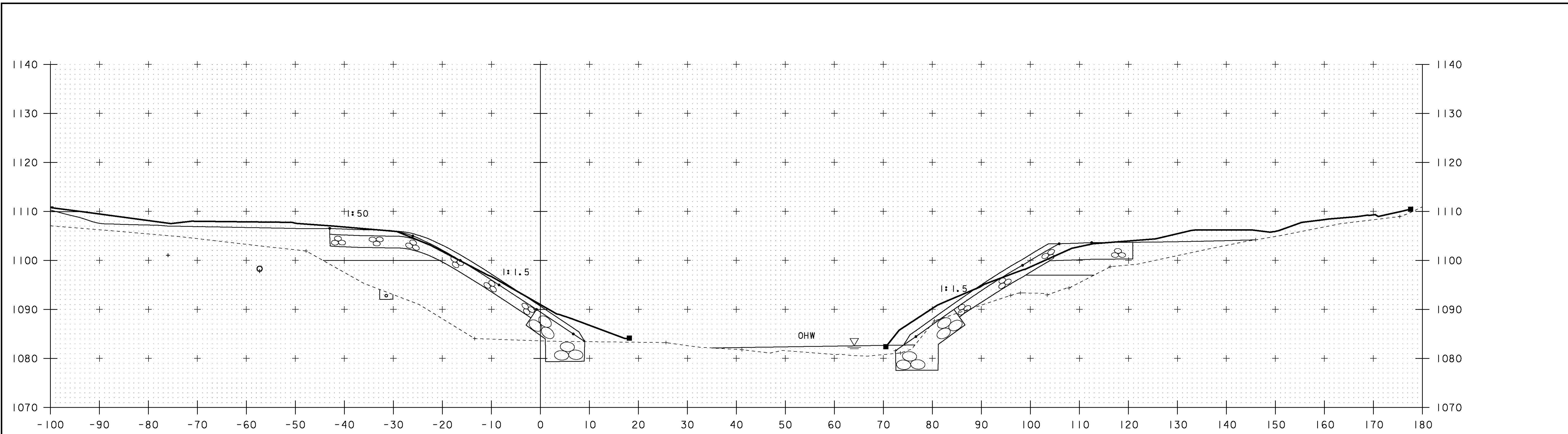
STA. 14+00 TO STA. 14+37

PROJECT NAME: BROWNINGTON	
PROJECT NUMBER: BRO 1449 (28)	
FILE NAME: sj246final	PLOT DATE: 23-FEB-2010
PROJECT LEADER: C. MOONEY	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: -----
ROADWAY SECTIONS - 6	SHEET 6 OF 14

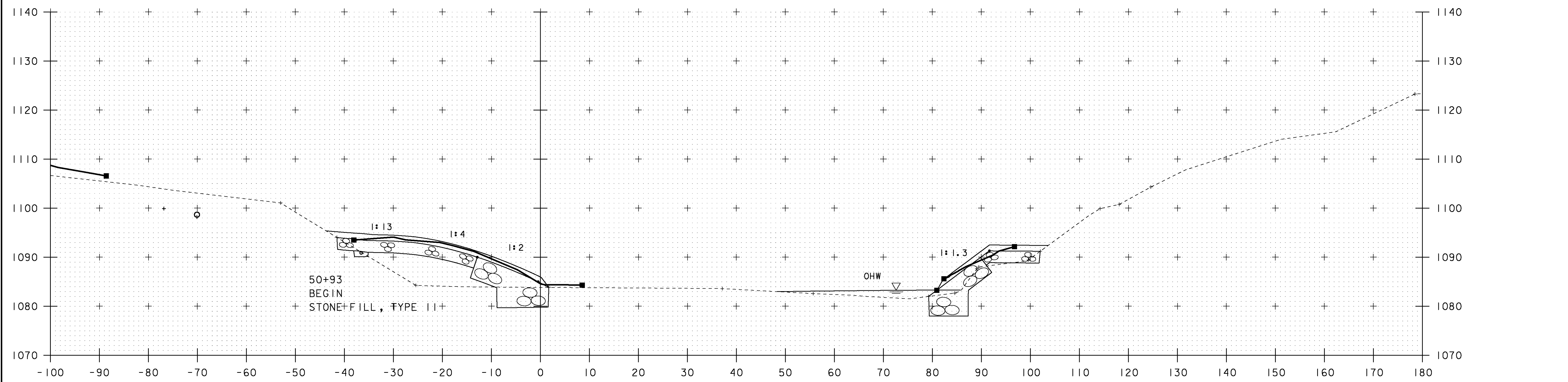


STA. 50+00 TO STA. 50+25

PROJECT NAME:	BROWNINGTON
PROJECT NUMBER:	BRO 1449 (28)
FILE NAME:	sj246final
PROJECT LEADER:	C. MOONEY
DESIGNED BY:	T. LACKEY
CHANNEL SECTIONS:	- 1
PLLOT DATE:	23-FEB-2010
DRAWN BY:	C. MOONEY
CHECKED BY:	-----
SHEET	7 OF 14



51+25



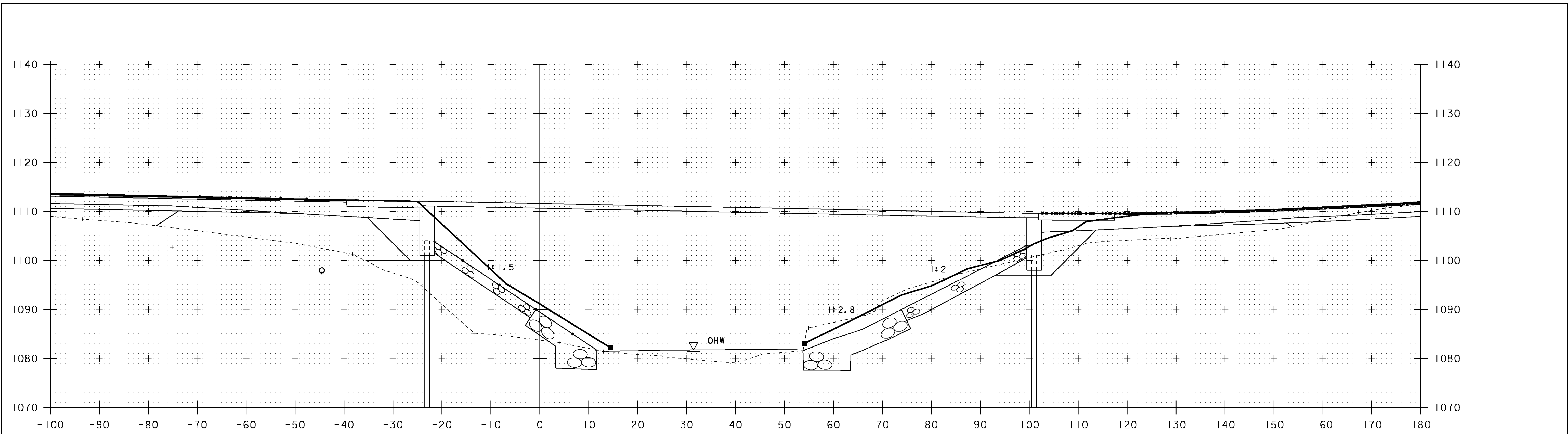
51+00

50+82
 BEGIN
 UNCLASSIFIED CHANNEL EXCAVATION
 STONE FILL, TYPE IV
 GEOTEXTILE UNDER STONE FILL
 GRUBBING MATERIAL

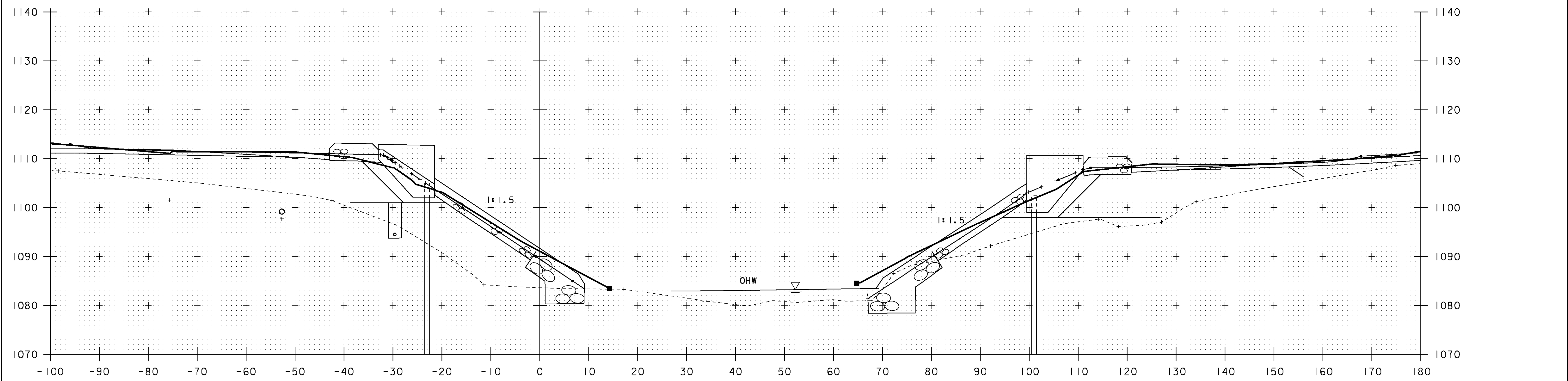
50+80
 BEGIN
 UNCLASSIFIED CHANNEL EXCAVATION
 STONE FILL, TYPE II
 STONE FILL, TYPE IV
 GEOTEXTILE UNDER STONE FILL
 GRUBBING MATERIAL

STA. 51+00 TO STA. 51+25

PROJECT NAME: BROWNINGTON	PLOT DATE: 23-FEB-2010
PROJECT NUMBER: BRO 1449 (28)	DRAWN BY: C. MOONEY
FILE NAME: sj246final	CHECKED BY: -----
PROJECT LEADER: C. MOONEY	SHEET 9 OF 14
DESIGNED BY: T. LACKEY	
CHANNEL SECTIONS - 1	



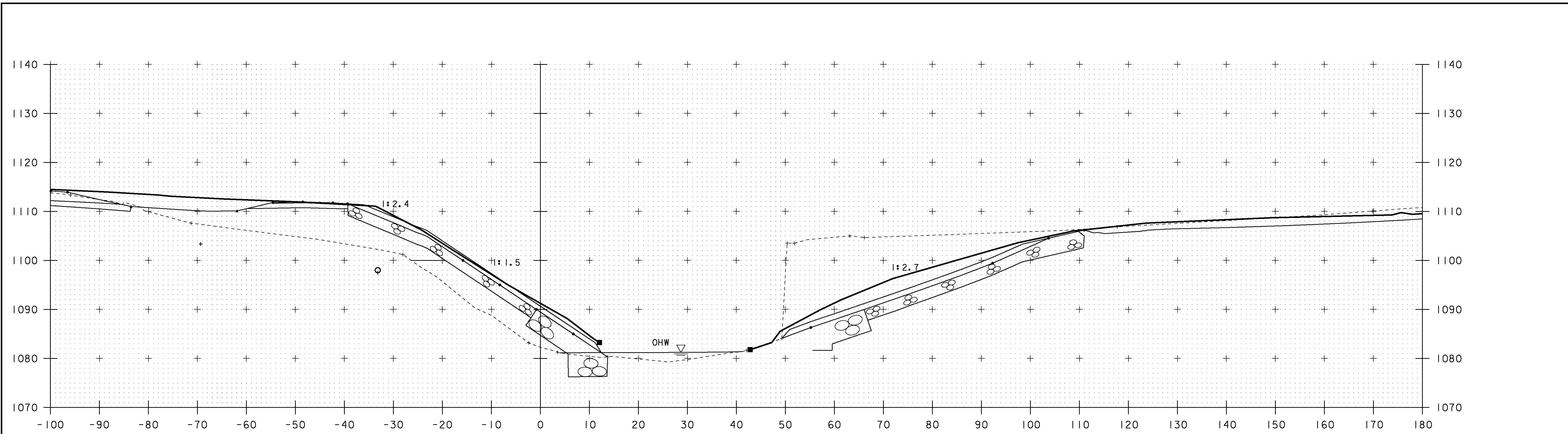
51+50



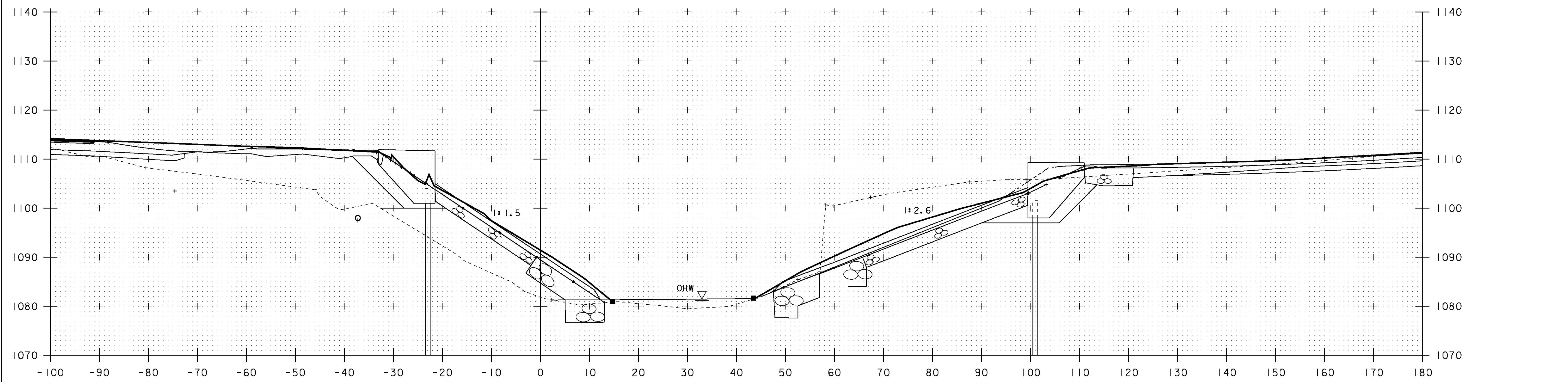
51+34

STA. 51+34 TO STA. 51+50

PROJECT NAME: BROWNINGTON	
PROJECT NUMBER: BRO 1449 (28)	
FILE NAME: sj246-final	PLOT DATE: 23-FEB-2010
PROJECT LEADER: C. MOONEY	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: -----
CHANNEL SECTIONS - 1	SHEET 10 OF 14



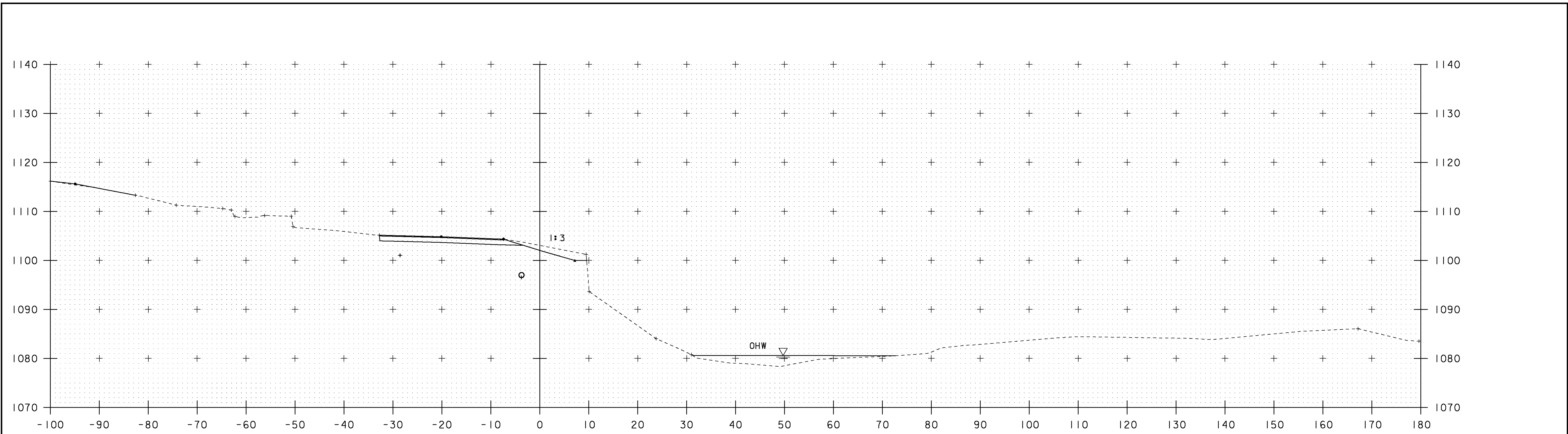
51+75



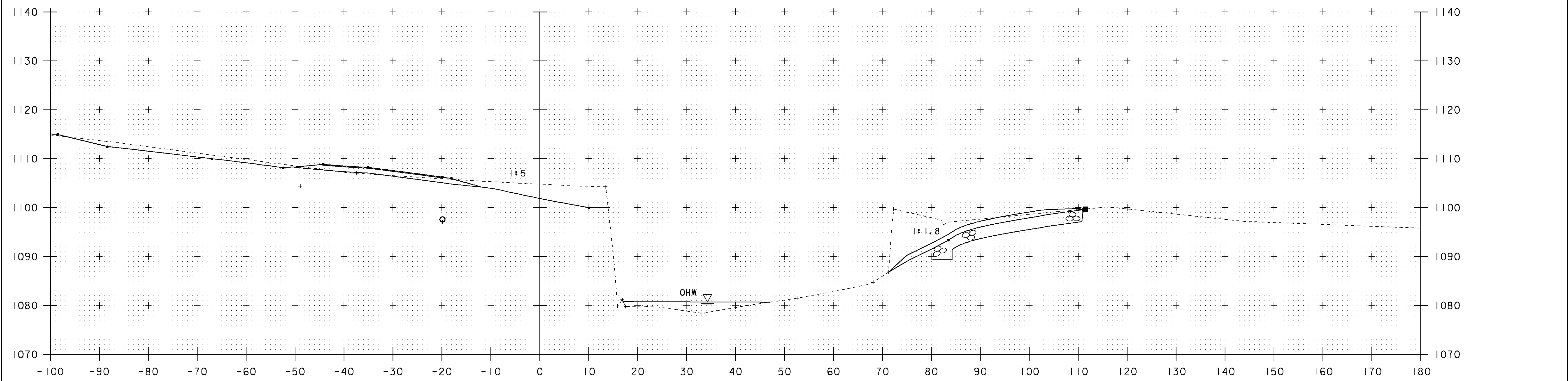
51+66

STA. 51+66 TO STA. 51+75

PROJECT NAME: BROWNINGTON	PROJECT NUMBER: BRO 1449 (28)
FILE NAME: sj246final	PLOT DATE: 23-FEB-2010
PROJECT LEADER: C. MOONEY	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: -----
CHANNEL SECTIONS - I	SHEET II OF 14



52+25



52+00

51+96
 END
 UNCLASSIFIED CHANNEL EXCAVATION
 STONE FILL, TYPE II
 STONE FILL, TYPE IV
 GEOTEXTILE UNDER STONE FILL
 GRUBBING MATERIAL

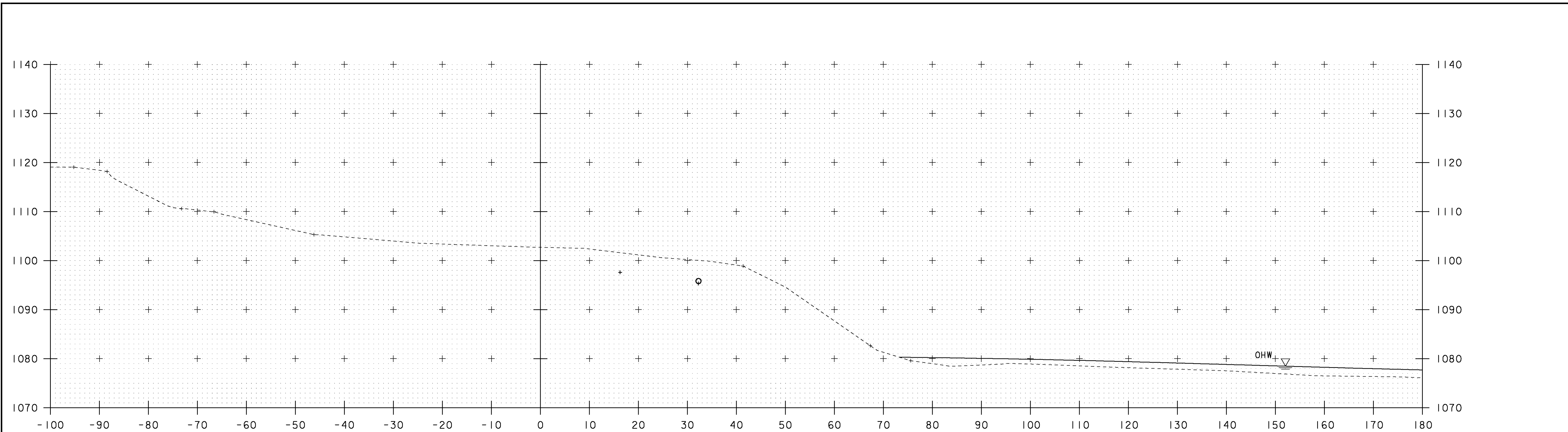
52+02
 END
 UNCLASSIFIED CHANNEL EXCAVATION
 STONE FILL, TYPE II
 STONE FILL, TYPE IV
 GEOTEXTILE UNDER STONE FILL
 GRUBBING MATERIAL

STA. 52+00 TO STA. 52+25

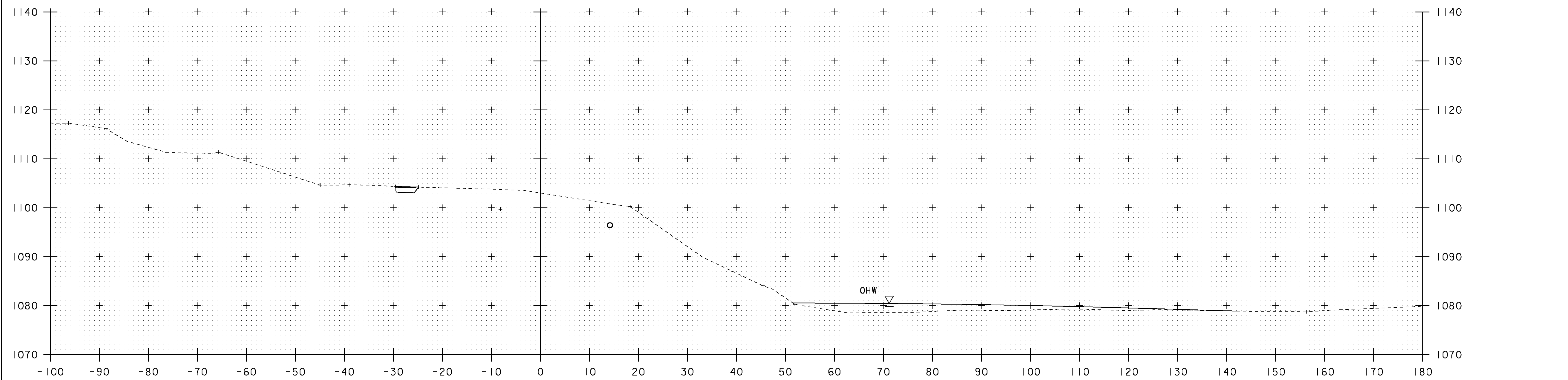
PROJECT NAME: BROWNINGTON
 PROJECT NUMBER: BRO 1449 (28)

FILE NAME: sj246-final
 PROJECT LEADER: C. MOONEY
 DESIGNED BY: T. LACKEY
 CHANNEL SECTIONS - 1

PLOT DATE: 23-FEB-2010
 DRAWN BY: C. MOONEY
 CHECKED BY: -----
 SHEET 12 OF 14



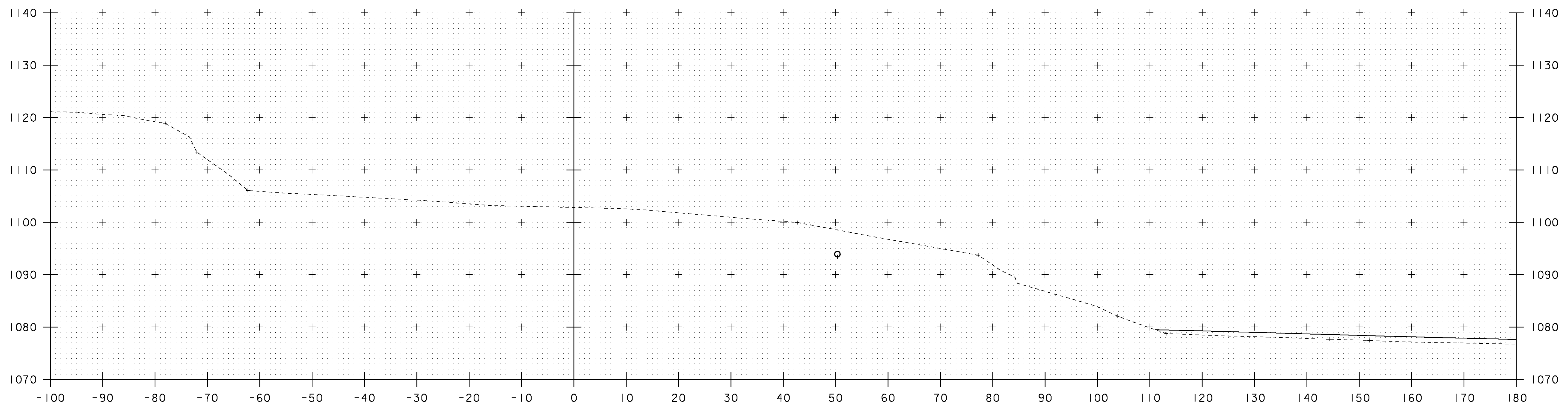
52+75



52+50

STA. 52+50 TO STA. 52+75

PROJECT NAME:	BROWNINGTON	FILE NAME:	sj246final	PLLOT DATE:	23-FEB-2010
PROJECT NUMBER:	BRO 1449 (28)	PROJECT LEADER:	C. MOONEY	DRAWN BY:	C. MOONEY
		DESIGNED BY:	T. LACKEY	CHECKED BY:	-----
		CHANNEL SECTIONS:	- 1	SHEET	13 OF 14



53+00

STA. 53+00 TO STA. 53+00

PROJECT NAME: BROWNINGTON	PROJECT NUMBER: BRO 1449 (28)
FILE NAME: sj246final	PLOT DATE: 23-FEB-2010
PROJECT LEADER: C. MOONEY	DRAWN BY: C. MOONEY
DESIGNED BY: T. LACKEY	CHECKED BY: -----
CHANNEL SECTIONS - 1	SHEET 14 OF 14

Casco Bay Steel Structures, Inc.

5 Industry Road
South Portland, Maine 04106

Phone: (207) 772-2533

Fax: (207) 772-0580

WELDING PROCEDURE SPECIFICATION

Material specification ASTM A109 Gr. B 50-50W (250-345-345W)
 Welding process Shielded Metal Arc Welding (SMAW)
 Manual or machine Manual
 Position of welding Flat (1F), Horizontal (2F)
 Filler metal specification AWS/A51-A5.5
 Filler metal classification E7018-R01A 5/8 - 7/8
 Flux NA
 Shielding gas NA Flow rate NA
 Single or multiple pass Single and multiple
 Single or multiple arc Single
 Welding current AC DC
 Polarity STRAIGHT / Reverse
 Welding progression SEE AWS SPECIFICATION
 Preheat and interpass temperature To 30(1.9) 50(10) 70(14.8) 70(14.8) 100(21.3) 150(31.5) 150(31.5)
 Postheat temperature NA
 Heat Input Min NA Max NA

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed	Joint detail
		Amperes	Volts		
AS	<u>7018</u> 1/8 (3-2)	70-170	22-26	AS	
	<u>5/32</u> 3/8	120-225	22-26		
	<u>3/16</u> 4.8	170-300	24-27		
RFQ	<u>R01B</u> 1/8 (3-2)	90-160	22-26	RFQ	
	<u>5/32</u> 3/8	120-225	22-26		
	<u>3/16</u> 4.8	170-290	24-27		
RFQ	<u>7028</u> 1/8 (3-2)	170-270	22-26	RFQ	
	<u>5/32</u> 3/8	170-270	22-26		
	<u>3/16</u> 4.8	210-330	24-27		

This procedure may vary due to production sequence, fit-up, pass size, etc., within the limitation of variables given in applicable codes or contract specifications.

Procedure no. 401 Contractor Casco Bay Steel
 Revision no. TRANS Authorized By Paul E. Hoodale
 Form 332 **RECEIVED** Date 3/2/00
 CTD BY OKD BY JWC

MAY 1 2009
 RESUBMIT APPROVED

VTADT
 Brownrig Ten
 8155-Prj BR044902
 CB35-396

Casco Bay Steel Structures, Inc.

75 Spring Hill Road
Saco, Maine 04072

Phone: (207) 282-7360

Fax: (207) 282-1179

WELDING PROCEDURE SPECIFICATION

Material specification ASTM A709/A709M Gr 36 (250) -50(45) -50W (345W)
 Welding process Flux Cored Arc Welding
 Manual or machine semi-AUTO
 Position of welding Flat (1F) - Horizontal (2F)
 Filler metal specification AWS-A5-29
 Filler metal classification E81T1-A11
 Flux NA
 Shielding gas 75%AR / 25%CO₂ flow rate 35 CFH ±8.6
 Single or multiple pass single and multiple
 Single or multiple arc single
 Welding current Direct
 Polarity Reverse Electrode Positive
 Welding progression NA
 Post treatment Heat AWS D1.5 specification
 Preheat and interpass temperature 30(19) 50° (10) - 30(19) to 120° (49) to 250° (110) 150° (65)
 Postheat temperature NA
 Heat input Min 2.86 (1.15kcal) Max 4.62 (1.80kcal) P.Q.R. # 409 (115)

Pass no.	Electrode size	Welding current		Travel speed	Notes
		Amps	Volts		
AS	1/16	27.5	28.8	11.6	1F AWS D1.5 - Joint detail F11.1
		24.7 TO 302.5	26.8 TO 30.8	10.4 TO 12.8	
		27.5	28.8	11.6	
Req	1/16	27.5	28.8	11.6	2F To 1/2 (12.7) To 3/8 (9.5)
		24.7 TO 302.5	26.8 TO 30.8	10.4 TO 12.8	
		27.5	28.8	11.6	

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in applicable A.W.S. codes or contract specifications

Procedure no. 101-A Contract Casco Bay Steel
 Revision no. 1 Authorized by [Signature]
 Date 9/20/07

Form 13-2 RECEIVED

OK'D BY JWC

MAY 1 2009

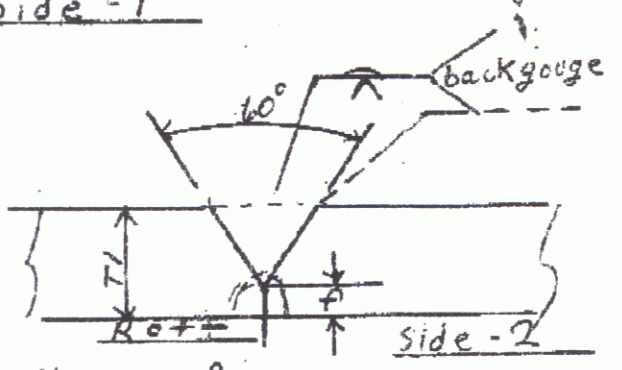
RE-SUBMIT APPROVED

WELDING PROCEDURE SPECIFICATION

Material specification ASTM A209 - Gr 50-50W / A209M - Gr 250-345-345W
 Welding process Submerged Arc Welding (SAW)
 Manual or machine Machine
 Position of welding Flat
 Filler metal specification AWS A5-23
 Filler metal classification E882 - ENLLK - Nil
 Flux Lincoln 760 with LA75 E14C - Elec Ex.
 Shielding gas Ar Flow rate Ar
 Single or multiple pass _____
 Welding current _____
 Polarity DC EN
 Welding progression See detail
 Root treatment Use brush and take free of loose scale, slag, rust and moisture
 Preheat and interpass temperature To 20° (36) to 20° (36) to 40° (100) to 40° (100) to 65° (150)
 Postheat temperature NA
 Heat Input Min 41.1 Max 64.5 PQR-FCM 3A - 58.7 kJ/in

WELDING PROCEDURE

Pass no.	Electrode size	Welding current		Travel speed
		Amps	Volts	
		597	295	18 IPM
	5/32	567	27	16
		70	30	16
		627	31	21

AWS 5-13
 AWS D1-5 Joint detail B-1.2C-5
 Side - 1

 Max heat 420 F

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in applicable A.W.S. codes or contract specifications.

Procedure no. 202 Contractor Casco Bay Steel
 Revision no. 1 - Root of Authorized By Paul G. [Signature]
 Date 12-6-06

Casco Bay Steel Structures, Inc.

75 Spring Hill Road
Saco, Maine 04072

Phone: (207) 282-7360

Fax: (207) 282-1179

WELDING PROCEDURE SPECIFICATION

Material specification ASTM A 709 Gr 50-50W (250-345-345W)
 Welding process Submerged Arc Welding - AUTO (SAW)
 Manual or machine Machine
 Position of welding Flat (H) Horizontal (H)
 Filler metal specification AWS A5.17 AWS A5.23
 Filler metal classification E 7018-1M1 Lincoln
 Filler 9.6 Eux-Lincolnweld - LA-75 Electrode
 Shielding gas Ar Flow rate NA
 Single or multiple pass both
 Single or multiple arc single
 Welding current Direct
 Polarity Reverse Electrode Positive
 Welding progression Meet AWS Specifications
 Root treatment Meet AWS Specifications
 Preheat and interpass temperature To 34(113) to 40(104) 3/16(4.8) 1/8(3.2) 1/4(6.4) 3/8(9.5) 1/2(12.7) 5/8(15.9) 3/4(19.0) 1(25.4) 1 1/8(28.6) 1 1/4(31.8) 1 1/2(38.1) 1 3/4(41.3) 2(50.8) over 2 1/2(63.5) - 2.25(57.1)
 Postheat temperature NA
 Heat input Min 41.65 Max 45.45 PQR 1-59.5 V.T.A.C.T.
 Brownington
 BR 15-173 BR 04449624
 CB 85-376

(METRIC)

Pass no.	Electrode size	Welding current		Travel speed	AWS D1.5 Joint detail
		Amps	Volts		
5/32	605	29.5	18.5	1F	
	544.6	27.4	15.3		
	665.5	31.56	20.7		
3/8	MAT'L	29.5	45.2	2F	
	605	27.4	44.6		
	665.5	31.56	52.8		

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in applicable A.W.S. codes or contract specifications.

Procedure no. 201 Contractor Casco Bay Steel
 Revision RECEIVED Authorized By Paul E. Woodruff
 Date 3/2/09

RESUBMIT _____ APPROVED _____
 BY _____ DATE 4.1.09

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

- 1). ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006 WITH LATEST REVISIONS AND THE SPECIAL PROVISIONS.

MATERIAL SPECIFICATIONS

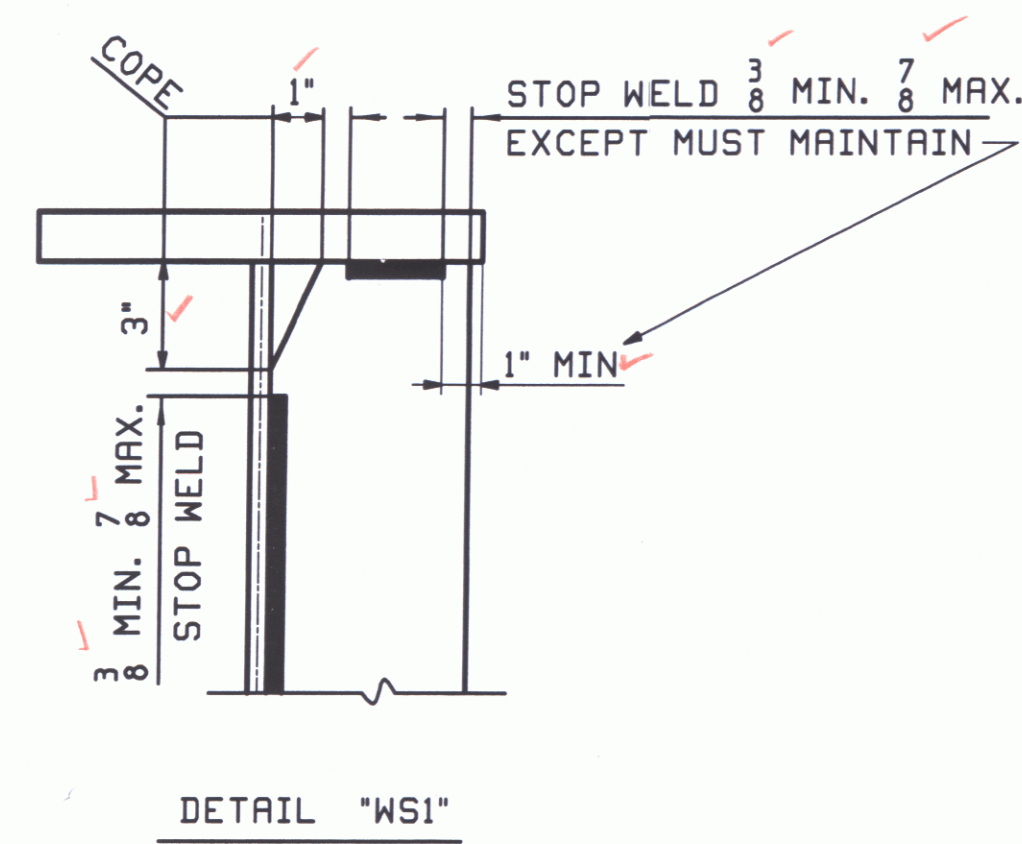
- 1). UNLESS OTHERWISE NOTED, ALL STEEL TO BE AASHTO M270M/M270, GRADE 50W. (UNPAINTED)
- 2). MATERIAL NOTED "CVN" OR "H2-3" ON DETAIL DRAWINGS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS SECTION 714.01.
- 3). HIGH STRENGTH BOLTS: AASHTO M164 7/8" DIAMETER TYPE 3 IN 15/16" DIAMETER HOLES, UNLESS NOTED OTHERWISE. BOLTS & NUTS SHALL BE ROTATIONAL CAPACITY TESTED. DO NOT MIX NUTS & BOLTS FROM DIFFERENT CONTAINERS UNLESS ALL BOLTS & NUTS HAVE THE SAME LOT NUMBER.

FABRICATION

- 1). ALL HOLES SHALL BE PUNCHED OR DRILLED FULL SIZE (UN).

WELDING

- 1). THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS D1.5-02 BRIDGE WELDING CODE AND IN ADDITION TO SPECIFICATIONS SHOWN ABOVE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.
- 2). WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGED ARC & SHIELDED METAL ARC PROCESSES. ALL WELDS ARE CONTINUOUS U.N.
- 3). NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.
- 4). SEE DETAIL "WS1" ON THIS DRAWING FOR WELD TERMINATION DETAIL.



CLEANING & PAINTING:

- 1). ALL STEEL SHALL BE BLAST CLEANED AS PER SSPC-SP-10 PER SPEC. 506.14(a)
- 2). ALL STEEL SHALL BE UNPAINTED.

FIELD CONNECTIONS

- 1). ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH AASHTO M164 BOLTS (UN), INSTALLED PER SECTION 506.19(c). SEE DWG E1 FOR FIELD BOLT SIZES.
- 2). BOLTS SHALL HAVE HEAVY HEX NUT, HEX HEAD, AND AT LEAST ONE FLAT WASHER EACH. WASHER TO BE PLACED UNDER TURNED ELEMENT.
- 3). PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWINGS.

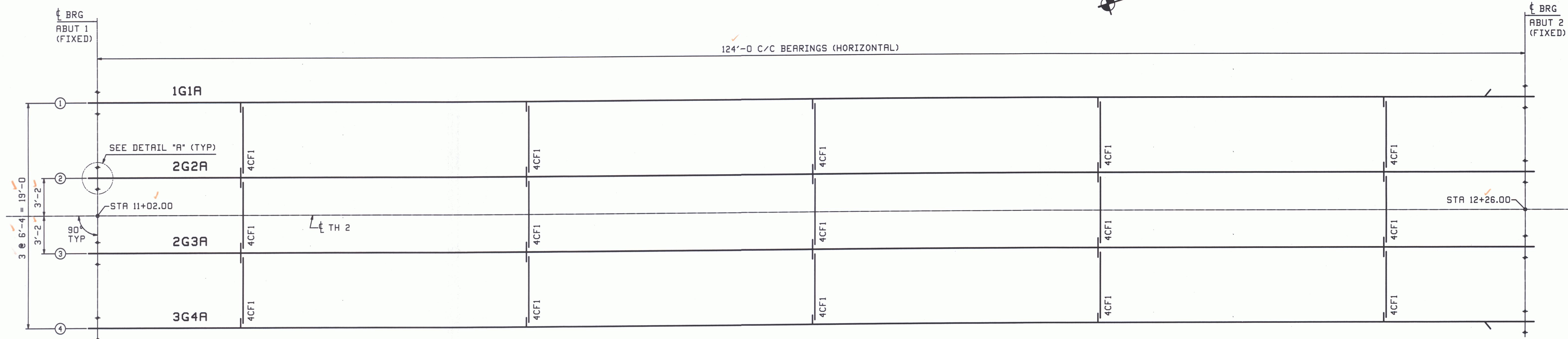
STRUCTURES COPY

RECEIVED
 CK'D BY: CAM OK'D BY: JML
 MAY 1 2009
 RESUBMIT APPROVED AS NOTED
 BY: RW DATE 5-12-09

APR 23 2009					
REV. DATE	REMARKS	DWN	CHK	APVL	SHOP
MATERIAL:	SURFACE PREP. & PAINT:	HOLES:		SHOP BOLTS:	
DESCRIPTION: GENERAL NOTES					
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179					
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER		BRIDGE NO. BR 8	DRAWN: LWD	DATE: 03/10	
TOWN OF BROWNINGTON		COUNTY OF ORLEANS, VERMONT	CHKD: PCP	DATE: 04/16	
CONTRACTOR: AUSTIN CONSTRUCTION					
LOCATION: Town of Brownington			JOB NO. 396	DWG NO. GN1	
PROJ NO. BRO 1449 (2B)					
CUSTOMER: VERMONT ROT					

NOTE TO ENGINEER:
 THESE NOTES ARE NOT INTENDED TO BE ALL INCLUSIVE AND COMPLIANCE WITH RELEVANT SPECIFICATIONS REMAIN UNCHANGED.

PCP Thu Apr 21 2009 09:50:00 PM

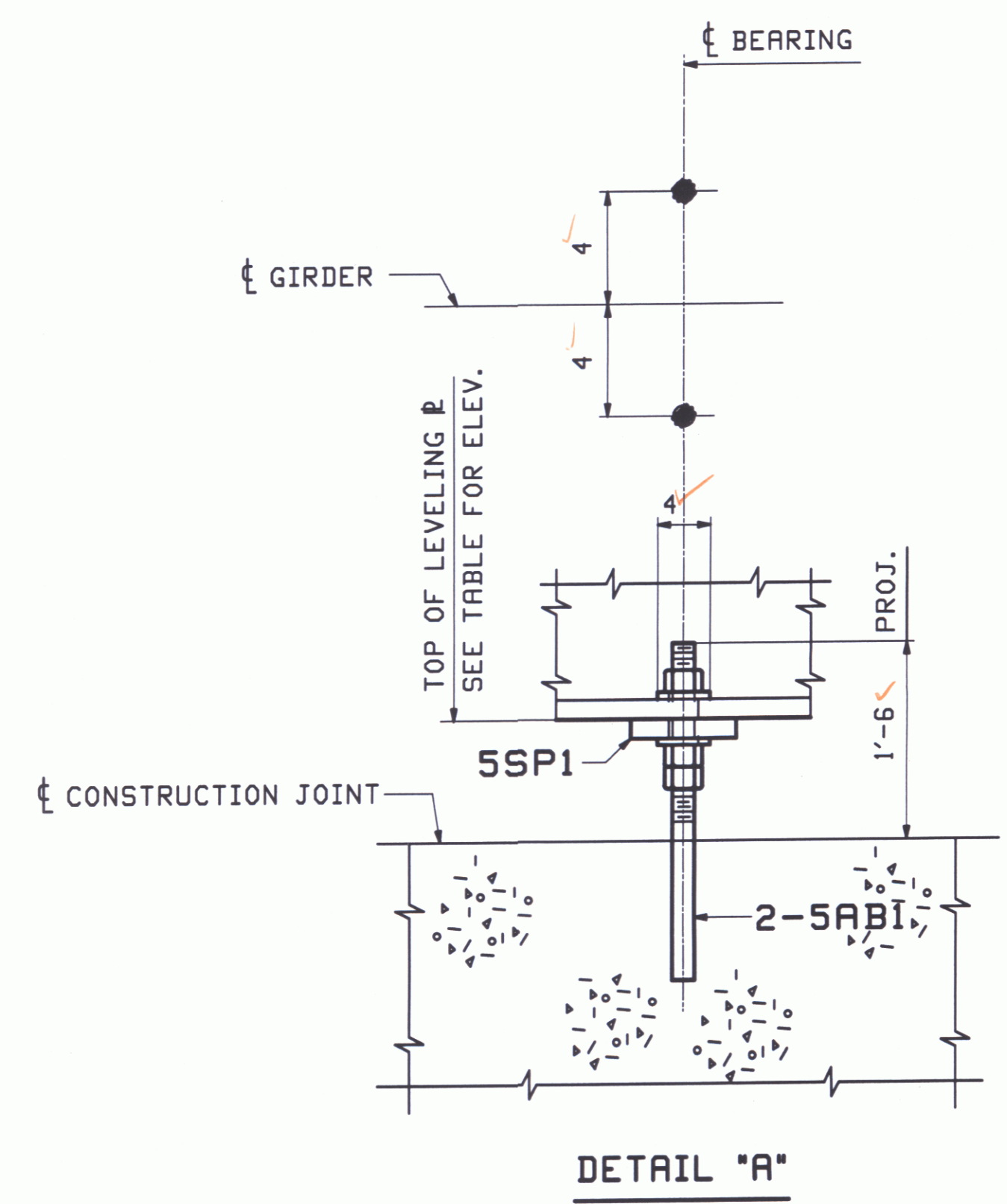


FRAMING & AB PLAN

FIELD BOLT LIST										A325 Type 3 BOLTS		WASH CODE	PIECES CONNECTED AND REMARKS
LINE	NO. REQ'D.	BOLT DIA.	BOLT LEN.	BOLTS OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED							
1													INT. CROSSFRAMES
2	120	7/8	2 1/2	4	30	1	1/2	1/2					1 TOP GUSS TO CONN PLATE
3	300	7/8	2 1/2	10	30	1	1/2	1/2					1 BTM GUSS TO CONN PLATE
4													

WASHER CODES
1: 1 Hard Flat Washer

FIELD BOLT SUMMARY						EXACT COUNT - NONE EXTRA		REMARKS
LINE	NO. OF BOLTS	BOLT DIAM.	TYPE	BOLT LEN.	ACTUAL COUNT			
1	420	7/8	A325 Type 3	2 1/2	420			
2								
3	420		Hard Flat Washers for 7/8" BOLT		F436-3			
4								
5								
6								

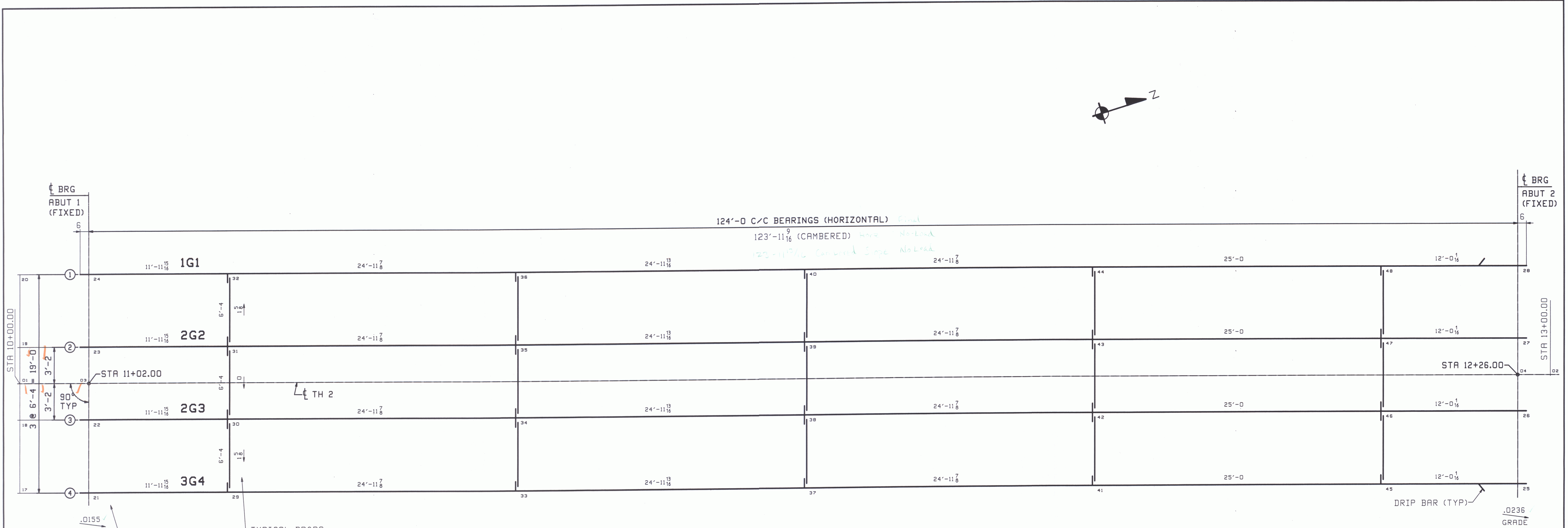


GIRDER LINE	ELEVATION	
	ABUT 1	ABUT 2
1	1105.91	1103.48
2	1106.04	1103.61
3	1106.04	1103.61
4	1105.91	1103.48

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 CR'D BY Cam OK'D BY JHL
 MAY 1 2009
 RESUBMIT APPROVED
 BY PRW DATE 5-12-09

NOTE:
 FOR GENERAL NOTES SEE DRAWING GNI.

0				APR 22 2009		
REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:		SHOP BOLTS:
DESCRIPTION: FRAMING & AB PLAN AND FIELD BOLTS						
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179						
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER BRIDGE NO. BR 8 TOWN OF BROWNINGTON COUNTY OF ORLEANS, VERMONT CONTRACTOR: AUSTIN CONSTRUCTION				DRAWN: LWD	DATE: 03/11	
				CHKD: PCP	DATE: 04/16	
LOCATION: Town of Brownington				JOB NO. 396	DWG NO. E1	
PROJ NO. BRO 1449 (28)					REV. Δ	
CUSTOMER: VERMONT ROT						



CALCULATION PLAN

DETAILER NOTE:
 HOLES IN WEB FOR
 RE-BAR, TYPICAL
 BOTH ENDS ALL GIRDS.

Grade Slope = -0.0196
Fall DL Slope ≈ $\frac{2.46" - 1.90"}{12' + 12"} = +0.0038$
Vertical Curve @ 12.4' = 2.46"
Fall DL Defl @ 12.4' = 1.90"
Grade Slope = Fall DL Slope = -0.0158

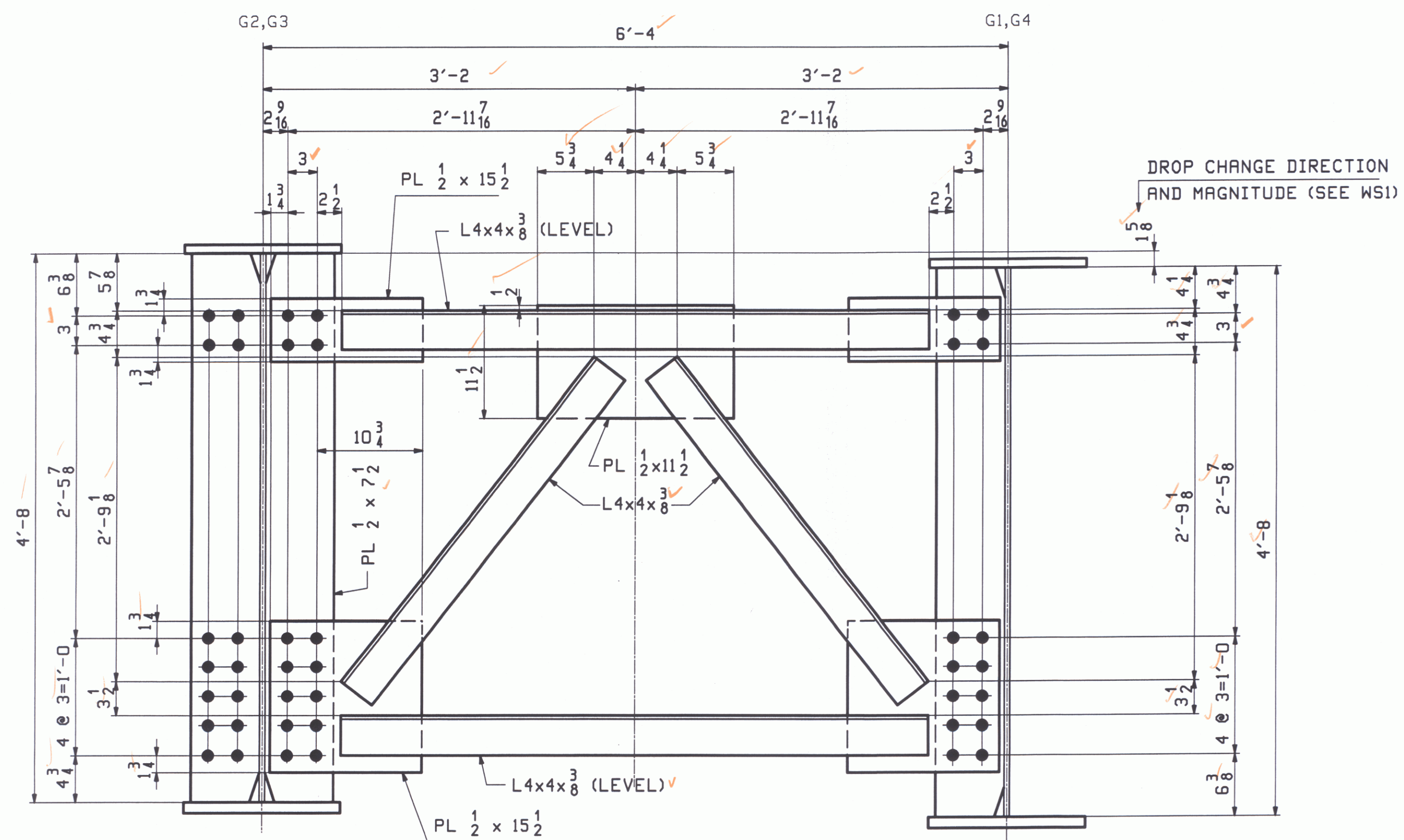
Grade Slope = Fall DL Slope = -0.0224

**** NOTE ****
 THE PURPOSE OF THIS DRAWING IS TO COORDINATE GEOMETRIC CONTROL INFORMATION. THIS DWG IS SUBMITTED FOR INFORMATION ONLY AND IS NOT INTENDED FOR SHOP FABRICATION.

- NOTES
1. LONGITUDINAL DIMENSIONS ARE SLOPING ALONG BOTTOM OF WEBS WITH CORRECTIONS MADE FOR DL CAMBER & VERT. CURVE (UN).
 2. TRANSVERSE DIMENSIONS ARE IN A HORIZONTAL PLANE (UN).
 3. ARROW POINTS TOWARD LOW END OF MEMBER.
 4. ENDS OF GIRDS ARE VERTICAL AFTER DL ROTATION.
 5. CROSSFRAME STIFFENERS ARE NORMAL TO GRADE.
 6. BOTTOM POINT NUMBERS = TOP POINT NUMBERS + 100
 7. FOR LAYOUTS SEE DRAWING TDI.

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 MAY 1 2009
 APPROVED
 BY *PCP* DATE *5-12-09*

REV. DATE		REMARKS		DWN	CHK	APVL	SHOP
0							
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:		SHOP BOLTS:	
M270-50W		SEE GNI		15/16" Ø		NONE	
DESCRIPTION: CALCULATION PLAN							
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179							
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER BRIDGE NO. BR 8 TOWN OF BROWNINGTON COUNTY OF ORLEANS, VERMONT CONTRACTOR: AUSTIN CONSTRUCTION				DRAWN: LWD	DATE: 03/10		
				CHKD: PCP	DATE: 04/16		
LOCATION: Town of Brownington				JOB NO. 396		DWG NO. WS1	
PROJ NO. BRO 1449 (28)				CUSTOMER: VERMONT AOT		REV.	



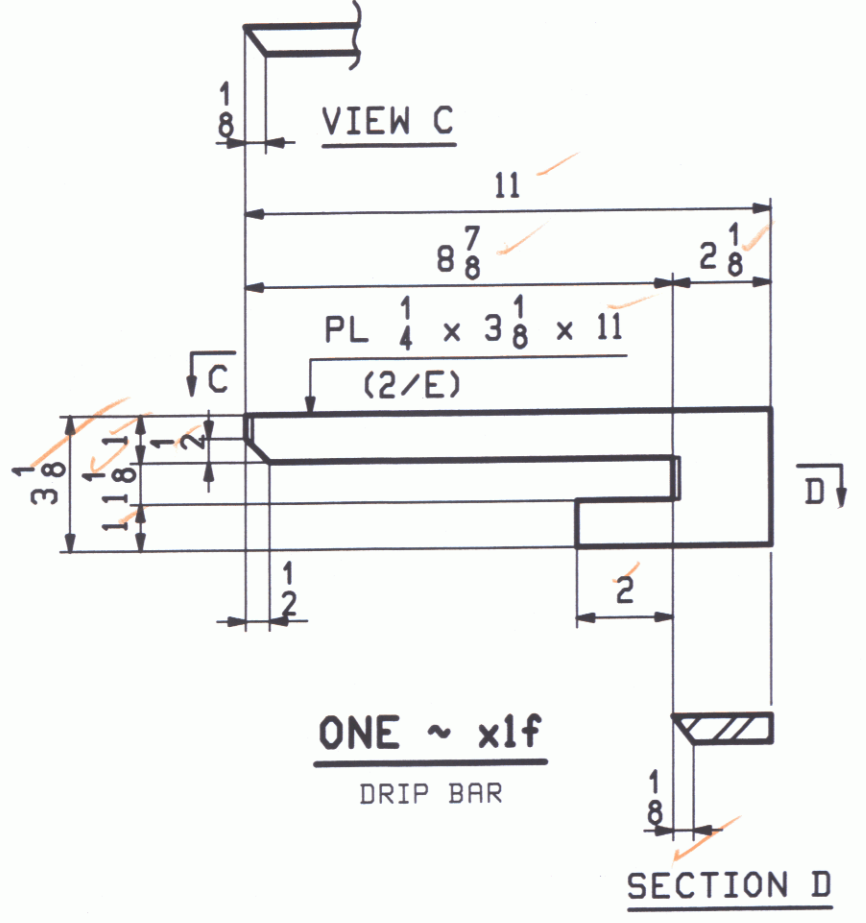
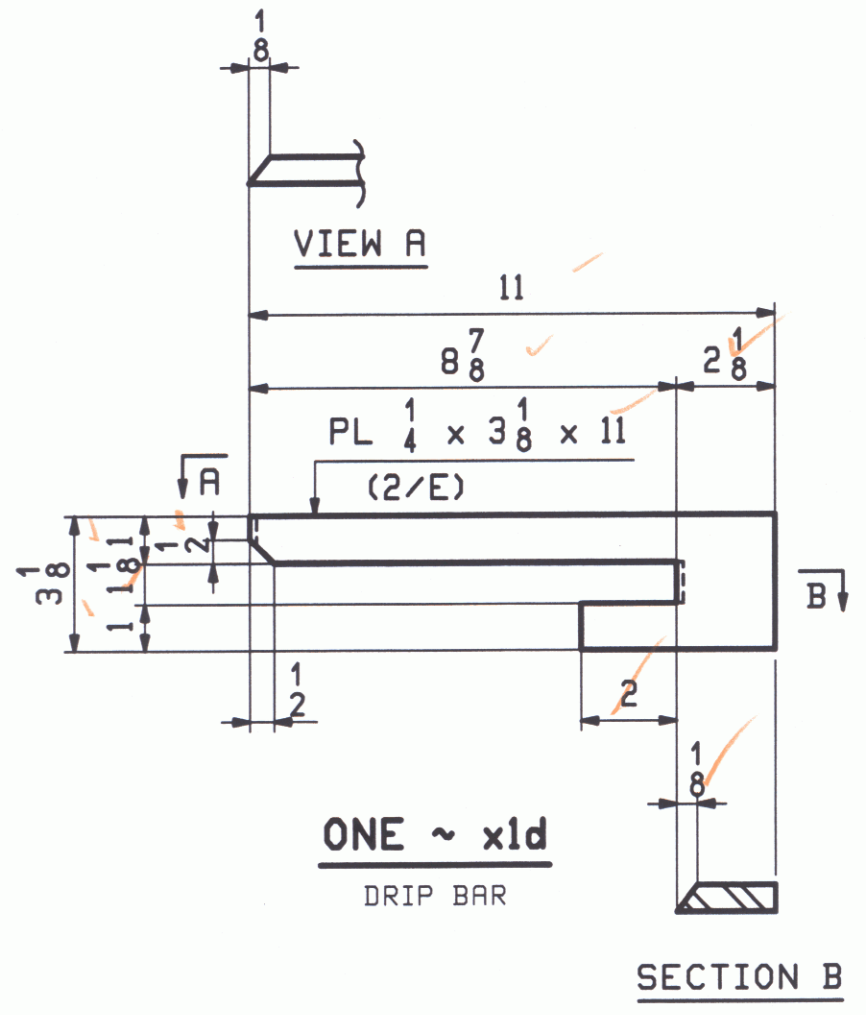
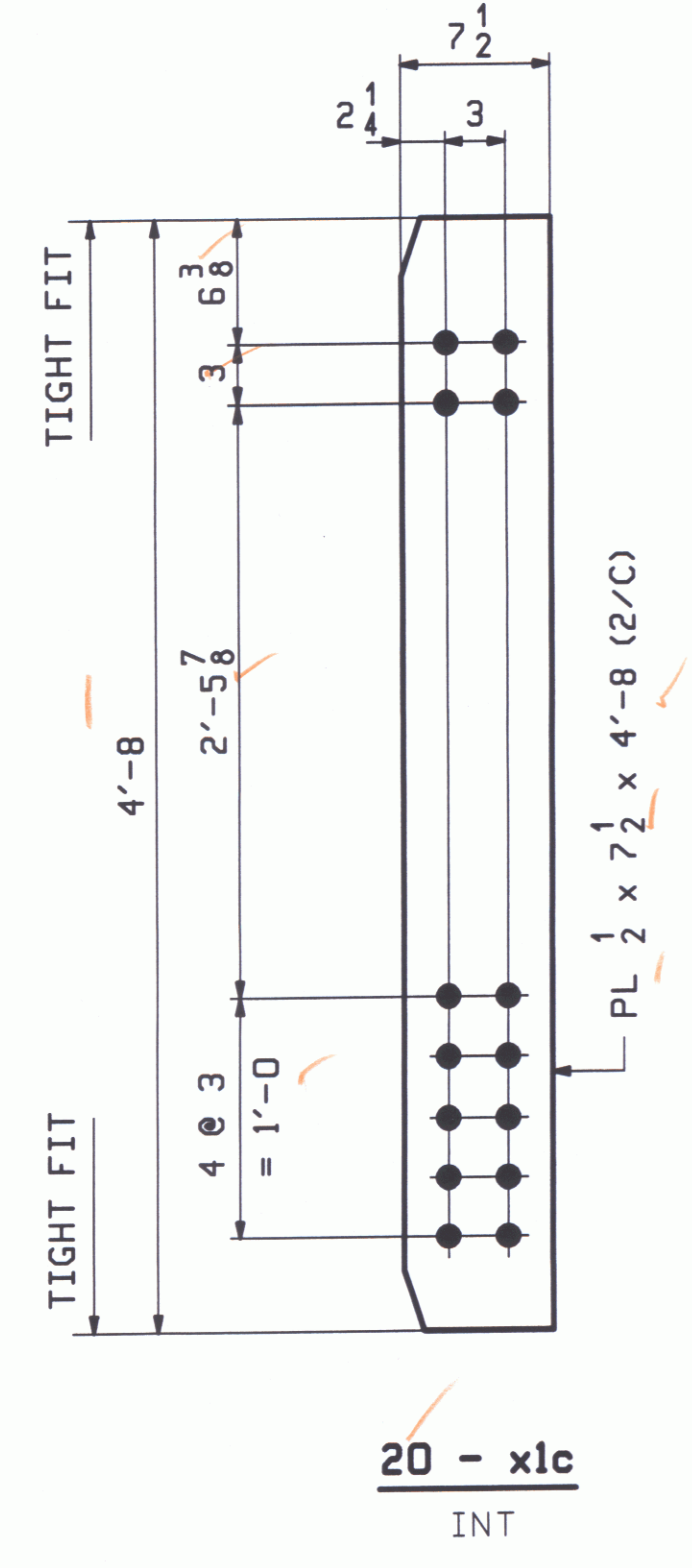
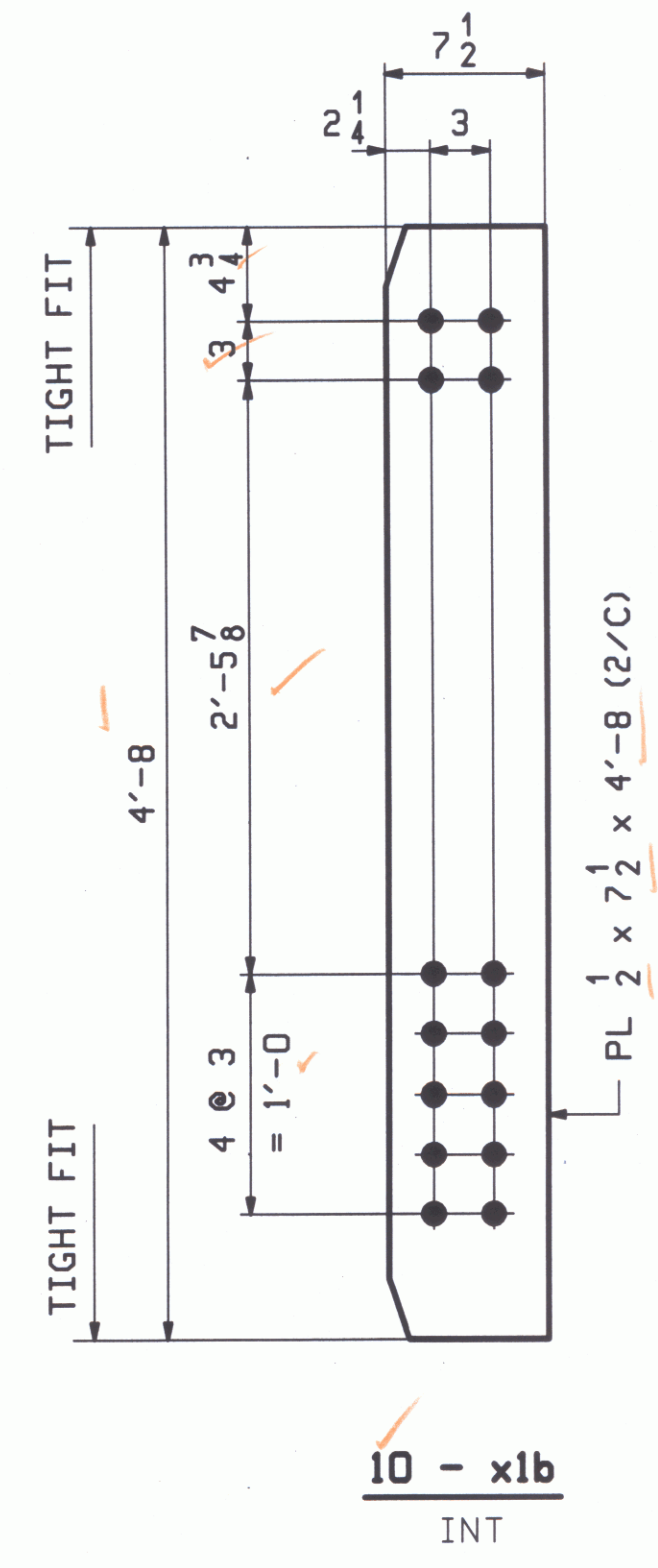
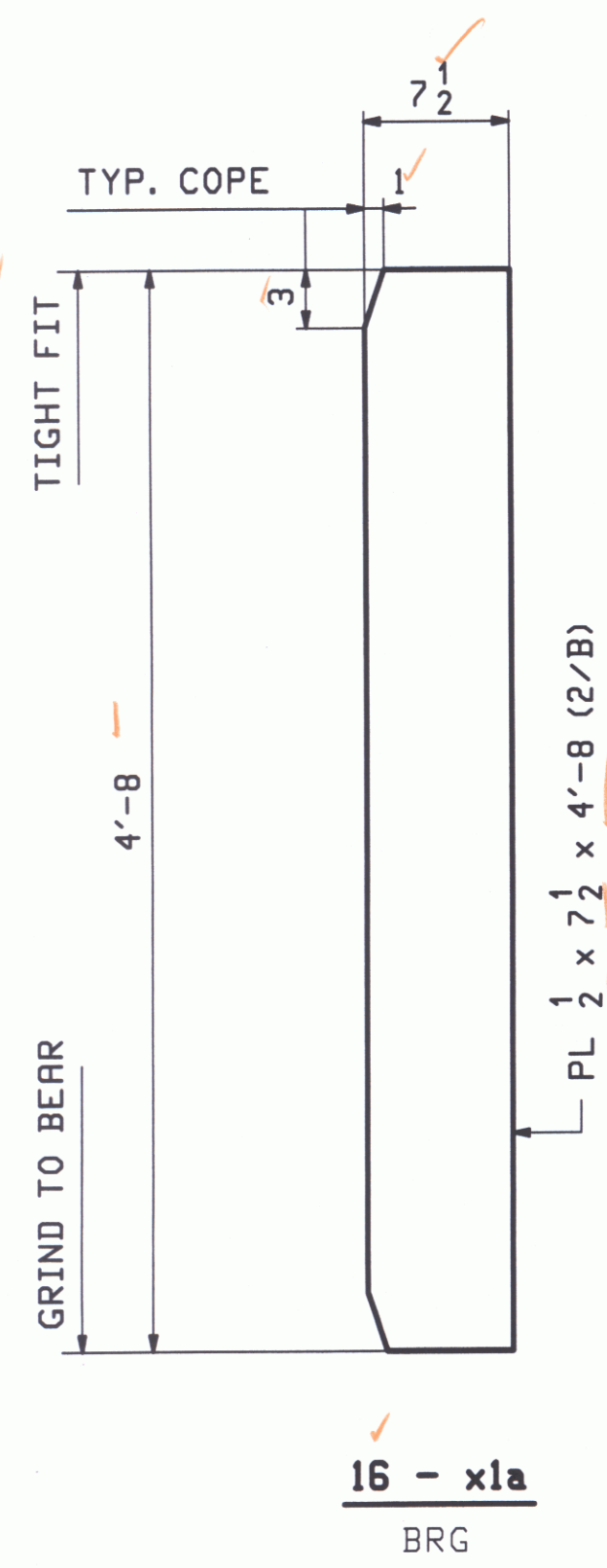
TYPICAL INT. CROSSFRAME
LOOKING BACK STATION (RE: DES 34/58)

RECEIVED
 CK'D BY CAM OK'D BY THL
 MAY 1 2009
 RESUBMIT APPROVED
 BY RKA DATE

0					APR 22 2009	
REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
		MATERIAL: M270-50W				SHOP BOLTS: NONE
		SURFACE PREP. & PAINT: SEE GNI				
		HOLES: 15/16" Ø				
DESCRIPTION: LAYOUTS						
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179						
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER			DRAWN:	DATE:		
BRIDGE NO. BR 8			LWD	03/10		
TOWN OF BROWNINGTON			CHKD:	DATE:		
COUNTY OF ORLEANS, VERMONT			PCP	04/16		
CONTRACTOR: AUSTIN CONSTRUCTION						
LOCATION: Town of Brownington			JOB NO.	DWG NO.		
PROJ NO. BRO 1449 (28)			396	TD1		
CUSTOMER: VERMONT AOT				REV. ▲		

**** NOTE ****
 THE PURPOSE OF THIS DRAWING IS TO COORDINATE GEOMETRIC CONTROL INFORMATION AND CONNECTION SPACING. THIS DWG IS SUBMITTED FOR INFORMATION ONLY & IS NOT INTENDED FOR SHOP FABRICATION. DETAIL DWGS WILL SHOW ALL WELDING AND DIMENSIONS REQ'D FOR FABRICATION.

PCP Tom, Apr 21, 2009 03:50:07 PM C:\msdcs\apps\pcep\td1.dwg

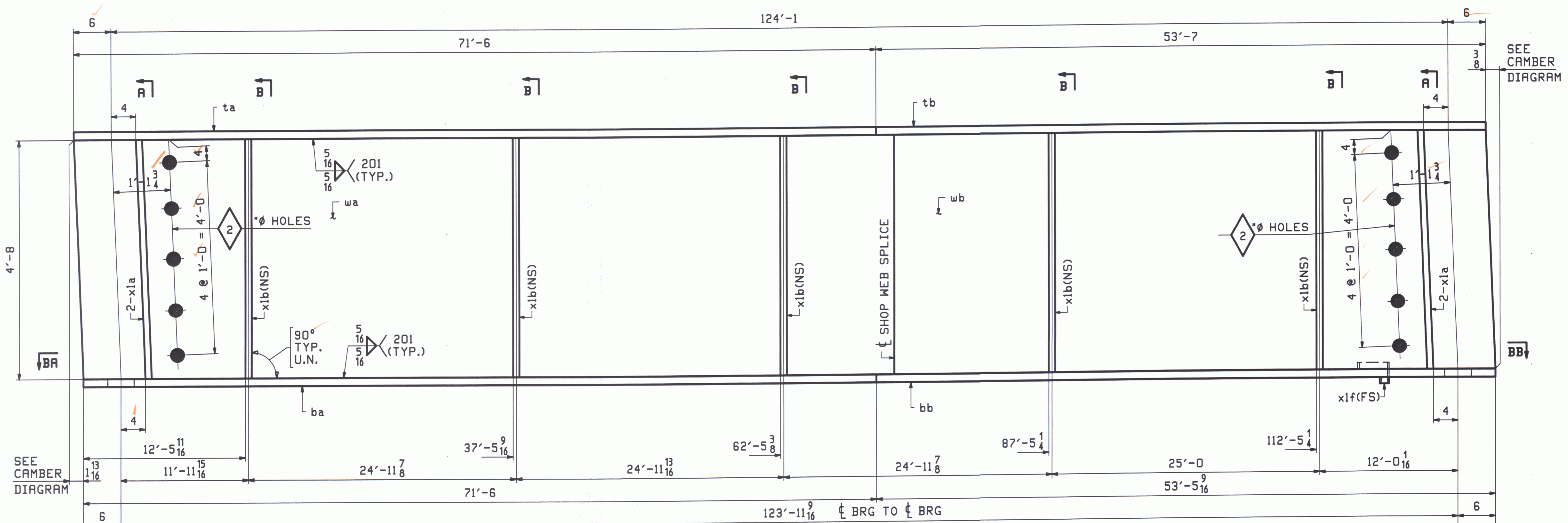


NOTES:
FOR GENERAL NOTES SEE DRAWING GNI.

RECEIVED
CHK'D BY: CAM OK'D BY: T.H.L.
MAY 1 2009
RESUBMIT APPROVED
BY: RKW DATE: 5-12-09

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
0						
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:		SHOP BOLTS:
M270-50W		SEE GNI		15 16"Ø		NONE
DESCRIPTION: GIRDER STANDARDS						
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179						
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER			DRAWN: LWD		DATE: 03/10	
BRIDGE NO. BR 8			CHKD: PCP		DATE: 04/16	
TOWN OF BROWNINGTON						
COUNTY OF ORLEANS, VERMONT						
CONTRACTOR: AUSTIN CONSTRUCTION						
LOCATION: Town of Brownington					JOB NO.	DWG NO.
PROJ NO. BRO 1449 (28)					396	X1
CUSTOMER: VERMONT ROT					REV.	△

ABM INFO		BILL OF MATERIAL				JOB NO.	DRAWING NO.	REV.	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT INCHES	REMARKS	WT	PROCUREMENT NOTES
		1G1A	1		GIRDER			27566	
1	J		1	wa	PL $\frac{9}{16} \times 56$	72 $\frac{13}{16}$	M270-SOWT2 (H2-3)		
1	L		1	wb	PL $\frac{7}{8} \times 56$	52 $\frac{1}{4}$	M270-SOWT2 (H2-3)		
1	E		1	ta	PL $\frac{7}{8} \times 16$	71 6	M270-SOWT2 (H2-3)		
1	G		1	tb	PL $\frac{7}{8} \times 16$	53 7	M270-SOWT2 (H2-3)		
1	A		1	ba	PL $1 \frac{1}{8} \times 16$	71 6	M270-SOWT2 (H2-3)		
1	C		1	bb	PL $1 \frac{1}{8} \times 16$	53 $\frac{9}{16}$	M270-SOWT2 (H2-3)		
2	B		4	x1a	PL $\frac{1}{2} \times 7 \frac{1}{2}$	4 8	MIE		
2	C		5	x1b	PL $\frac{1}{2} \times 7 \frac{1}{2}$	4 8			
2	E		1	x1f	PL $1 \frac{1}{4} \times 3 \frac{1}{8}$	0 11	DRIP BAR		

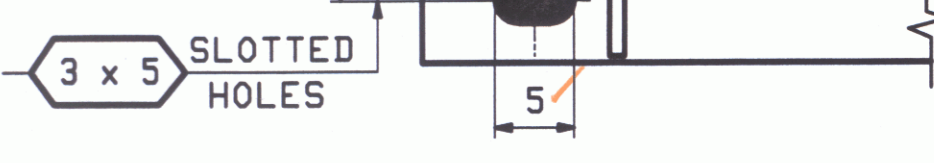
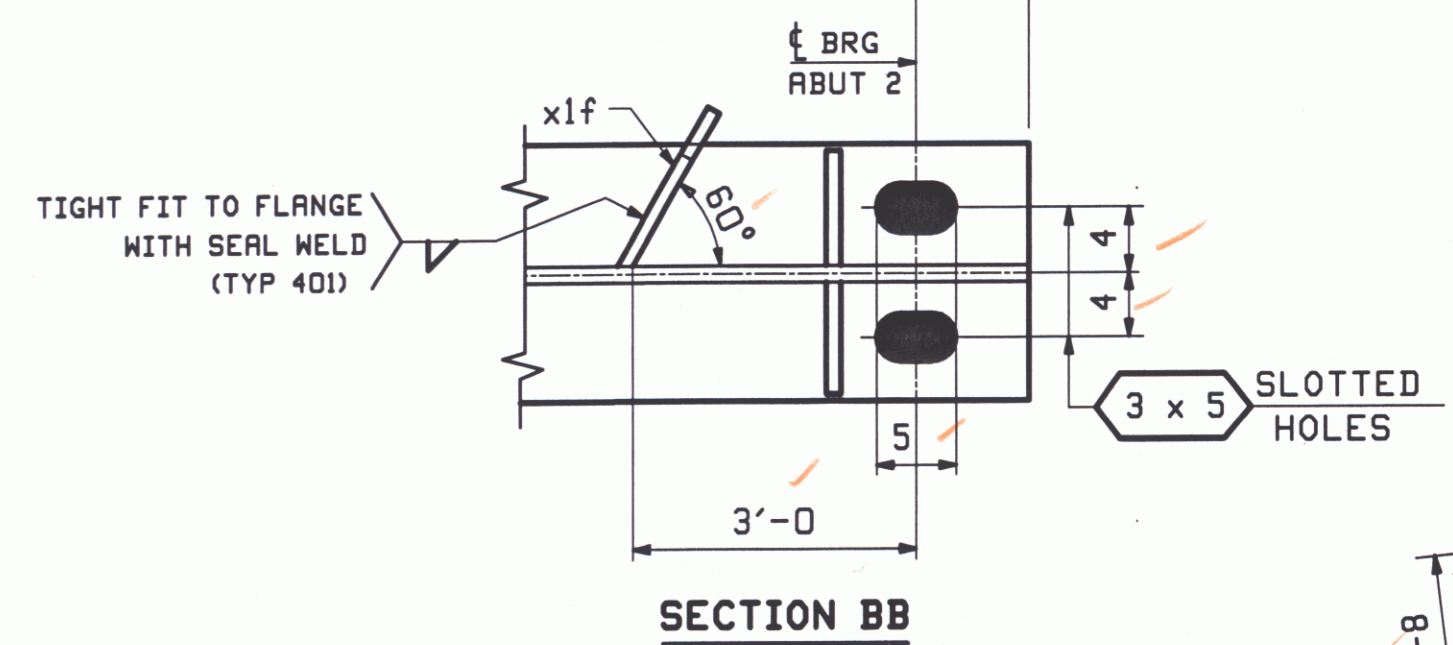


SEE CAMBER DIAGRAM

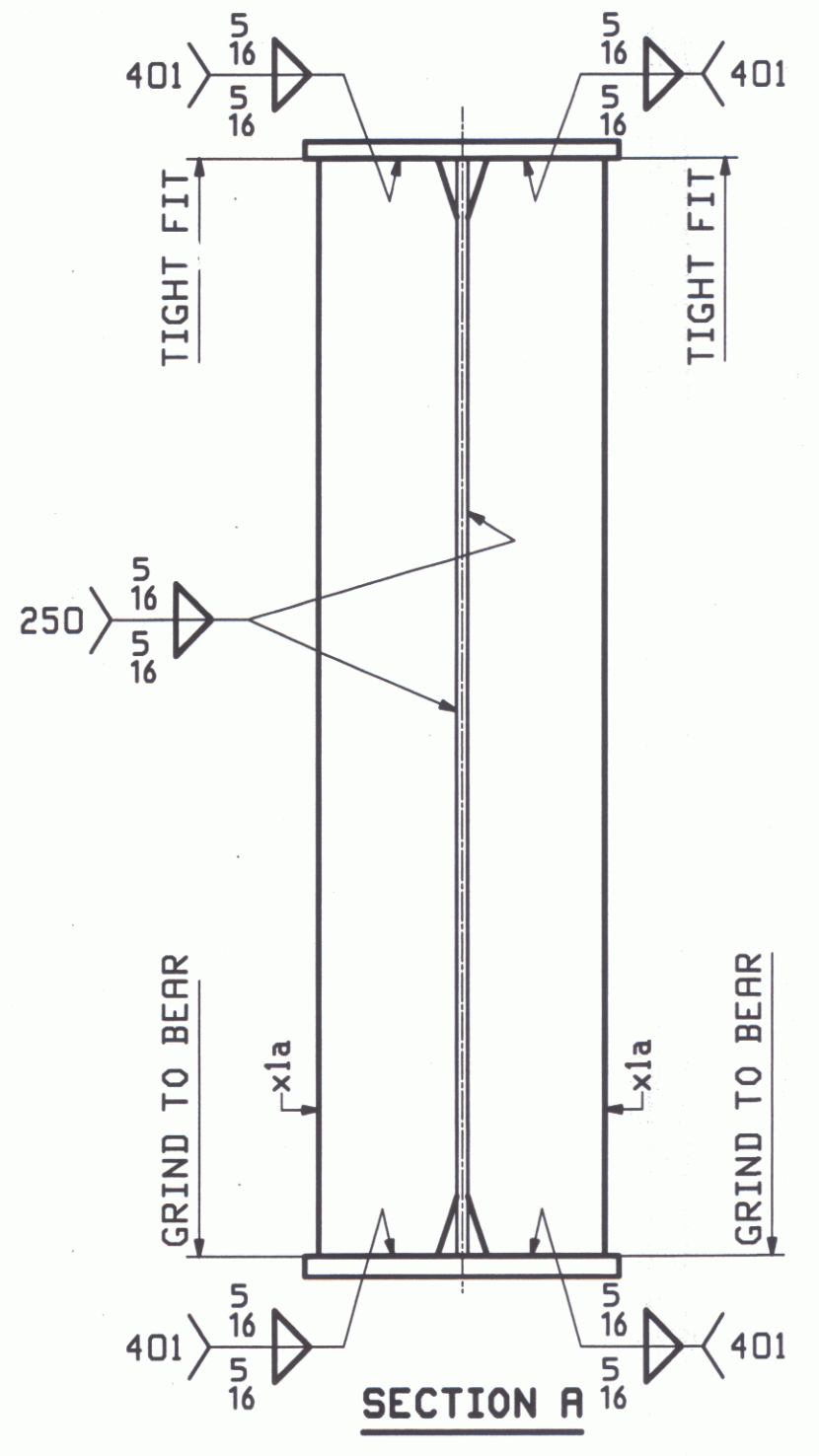
SEE CAMBER DIAGRAM

ONE - GIRDER - 1G1A

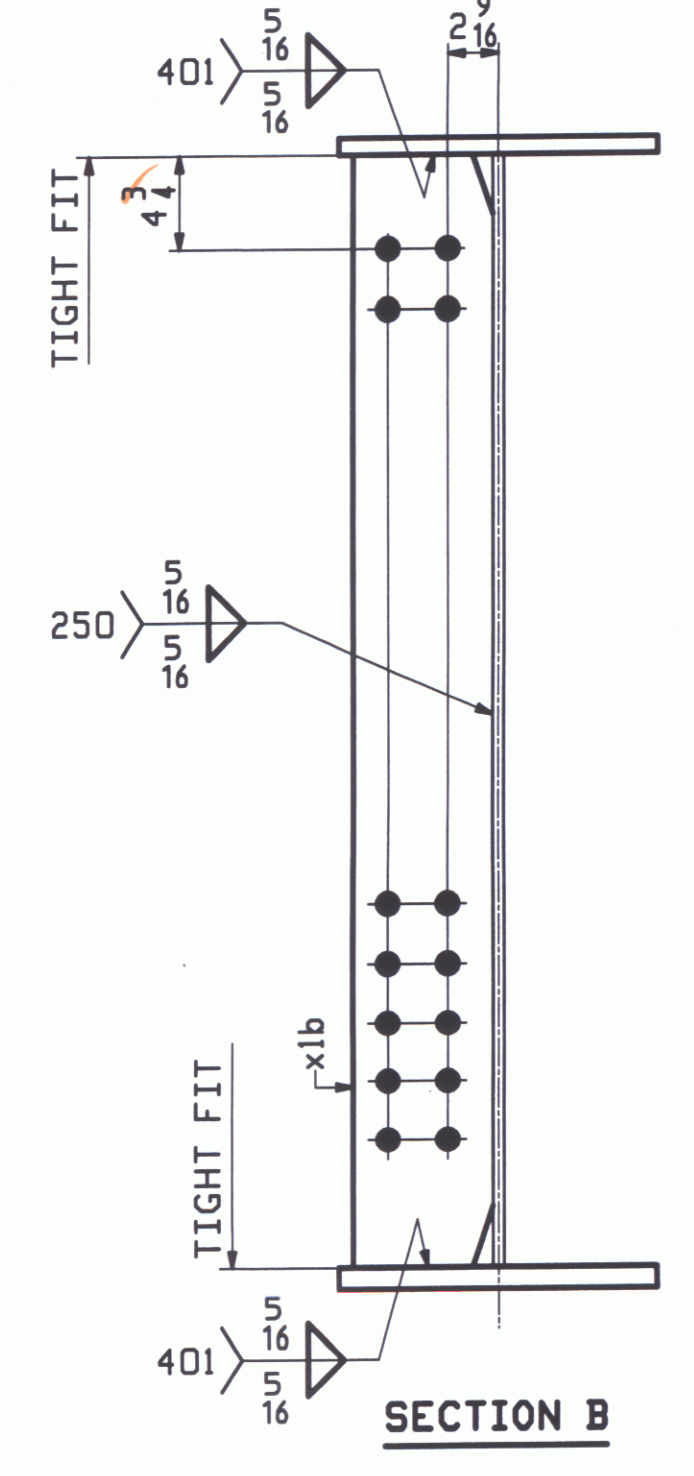
FOR GIRDER STANDARDS SEE DRAWINGS X1
 FOR CAMBER & FLANGE DIAGRAMS SEE DRAWING C1.
 FOR GENERAL NOTES & WELD PROCEDURES SEE DRAWING GNI.
 H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.



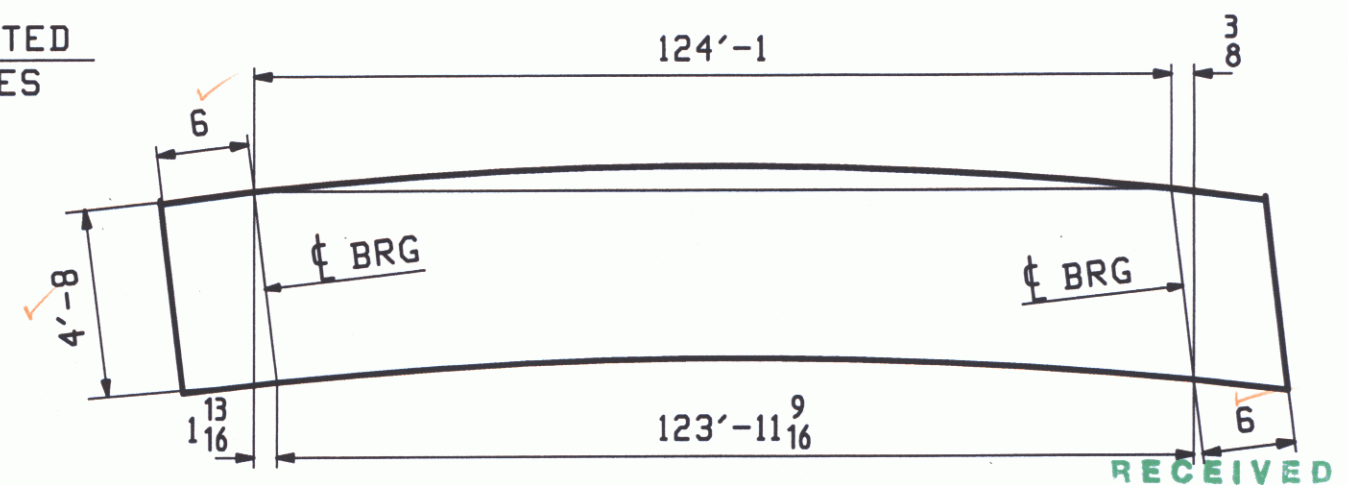
SECTION BA



SECTION A



SECTION B

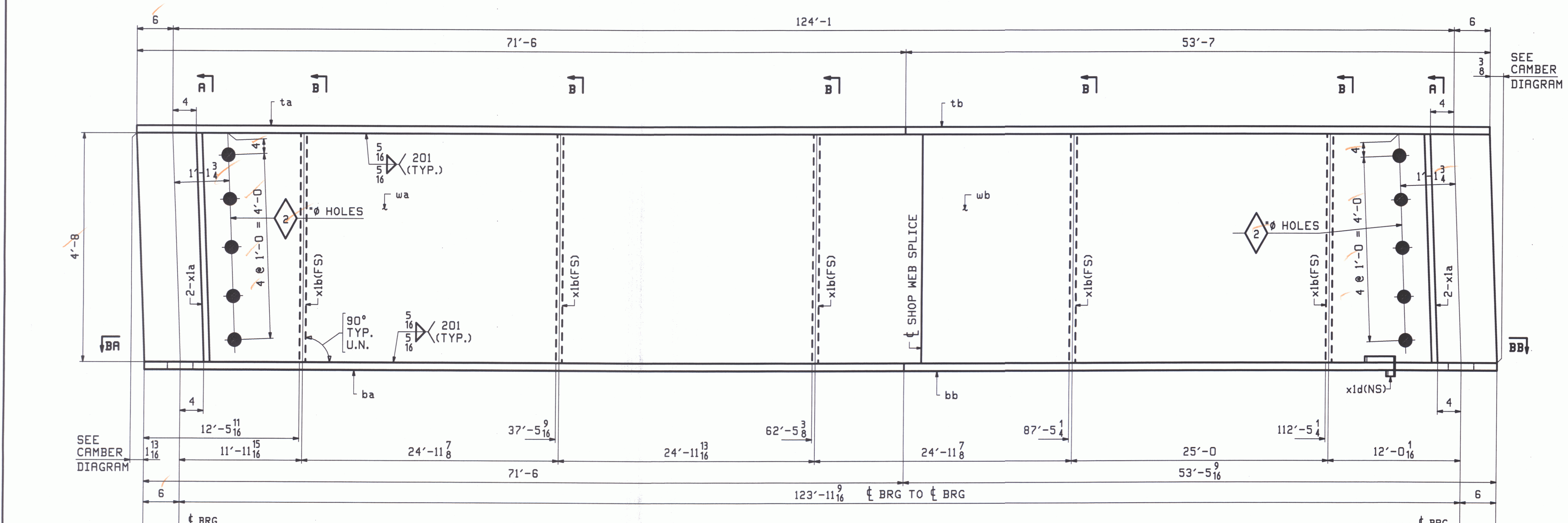


ORIENTATION DIAGRAM FOR CAMBER SEE DWG C1

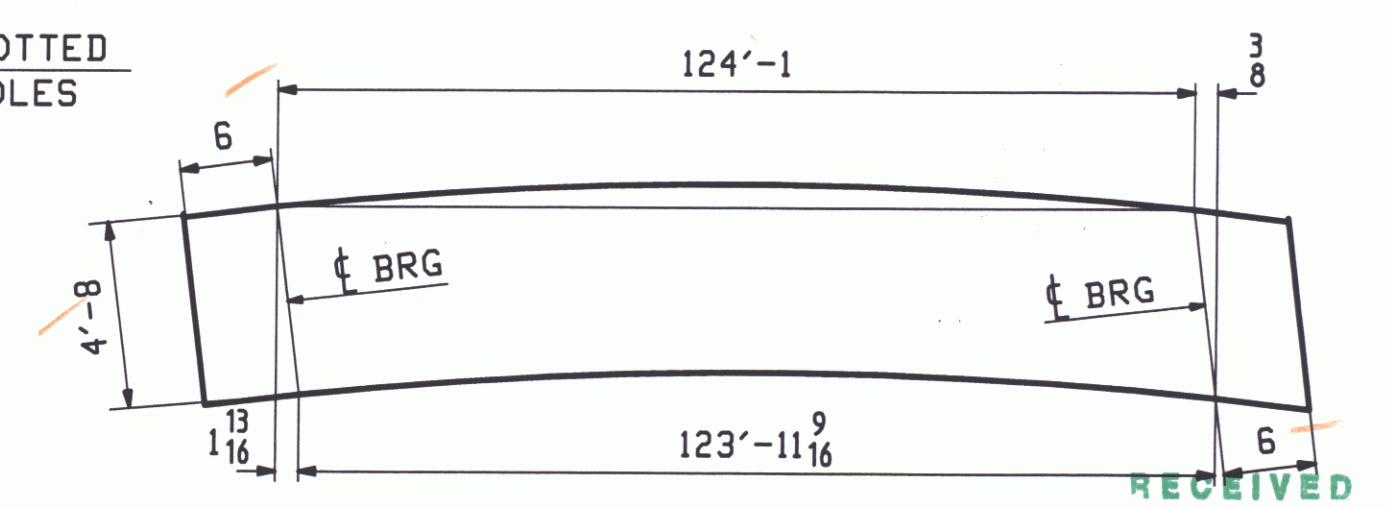
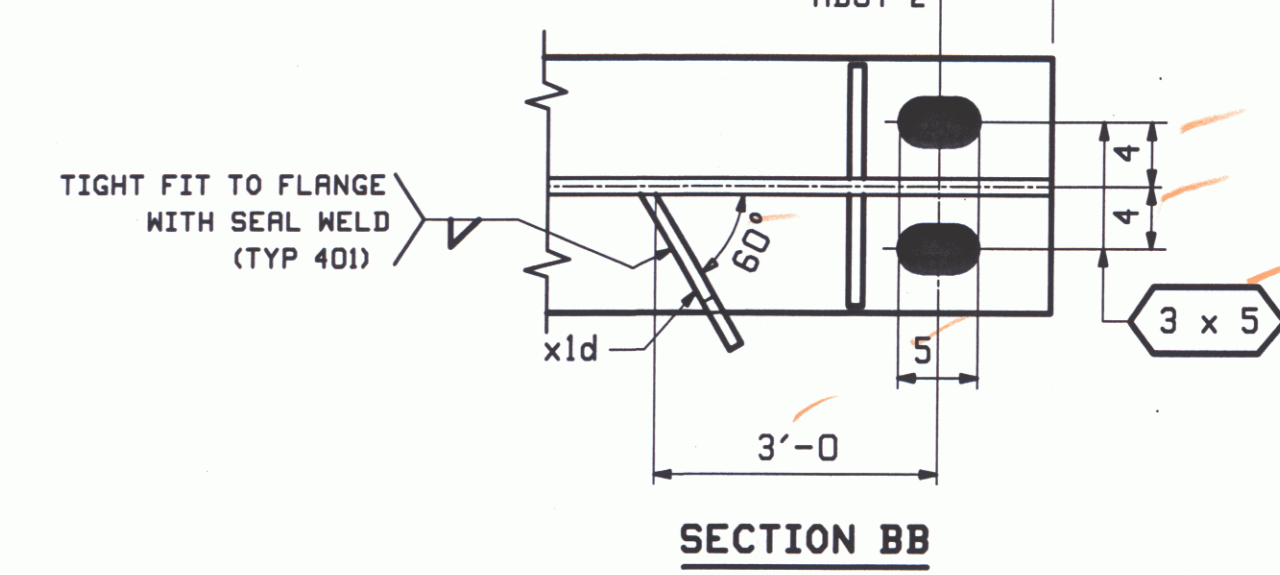
RECEIVED
 CK'D BY CAM OK'D BY TML
 MAY 1 2009
 APPROVED BY Rlu DATE 5-12-09

APR 22 2009						
REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:		SHOP BOLTS:
M270-SOW		SEE GNI		15/16" Ø		NONE
DESCRIPTION: GIRDER - 1G1A						
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179						
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER				DRAWN: LWD		DATE: 03/11
BRIDGE NO. BR 8				CHKD: PCP		DATE: 04/16
TOWN OF BROWNINGTON						
COUNTY OF ORLEANS, VERMONT						
CONTRACTOR: AUSTIN CONSTRUCTION						
LOCATION: Town of Brownington			JOB NO. 396		DWG NO. 1	
PROJ NO. BRO 1449 (28)						
CUSTOMER: VERMONT ROT					REV. 1	

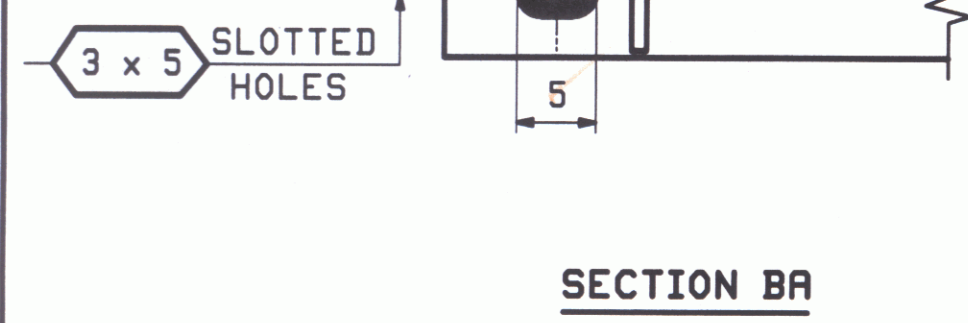
ABM INFO		BILL OF MATERIAL				JOB NO.	DRAWING NO.	REV.	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH	REMARKS	WT	PROCUREMENT NOTES
						FT			
		3G4A	1		GIRDER			27568	
1	J		1	wa	PL $\frac{9}{16} \times 56$	72 $\frac{13}{16}$	M270-50WT2 (H2-3)		
1	L		1	wb	PL $\frac{9}{16} \times 56$	52 $\frac{6}{16}$	M270-50WT2 (H2-3)		
1	E		1	ta	PL $\frac{7}{8} \times 16$	71 $\frac{6}{16}$	M270-50WT2 (H2-3)		
1	G		1	tb	PL $\frac{7}{8} \times 16$	53 $\frac{7}{16}$	M270-50WT2 (H2-3)		
1	A		1	ba	PL $\frac{1}{8} \times 16$	71 $\frac{6}{16}$	M270-50WT2 (H2-3)		
1	C		1	bb	PL $\frac{1}{8} \times 16$	53 $\frac{9}{16}$	M270-50WT2 (H2-3)		
2	B		4	x1a	PL $\frac{1}{2} \times 7 \frac{1}{2}$	4 $\frac{8}{16}$	MIE		
2	C		5	x1b	PL $\frac{1}{2} \times 7 \frac{1}{2}$	4 $\frac{8}{16}$			
2	E		1	x1d	PL $\frac{1}{4} \times 3 \frac{1}{8}$	0 $\frac{11}{16}$	DRIP BAR		



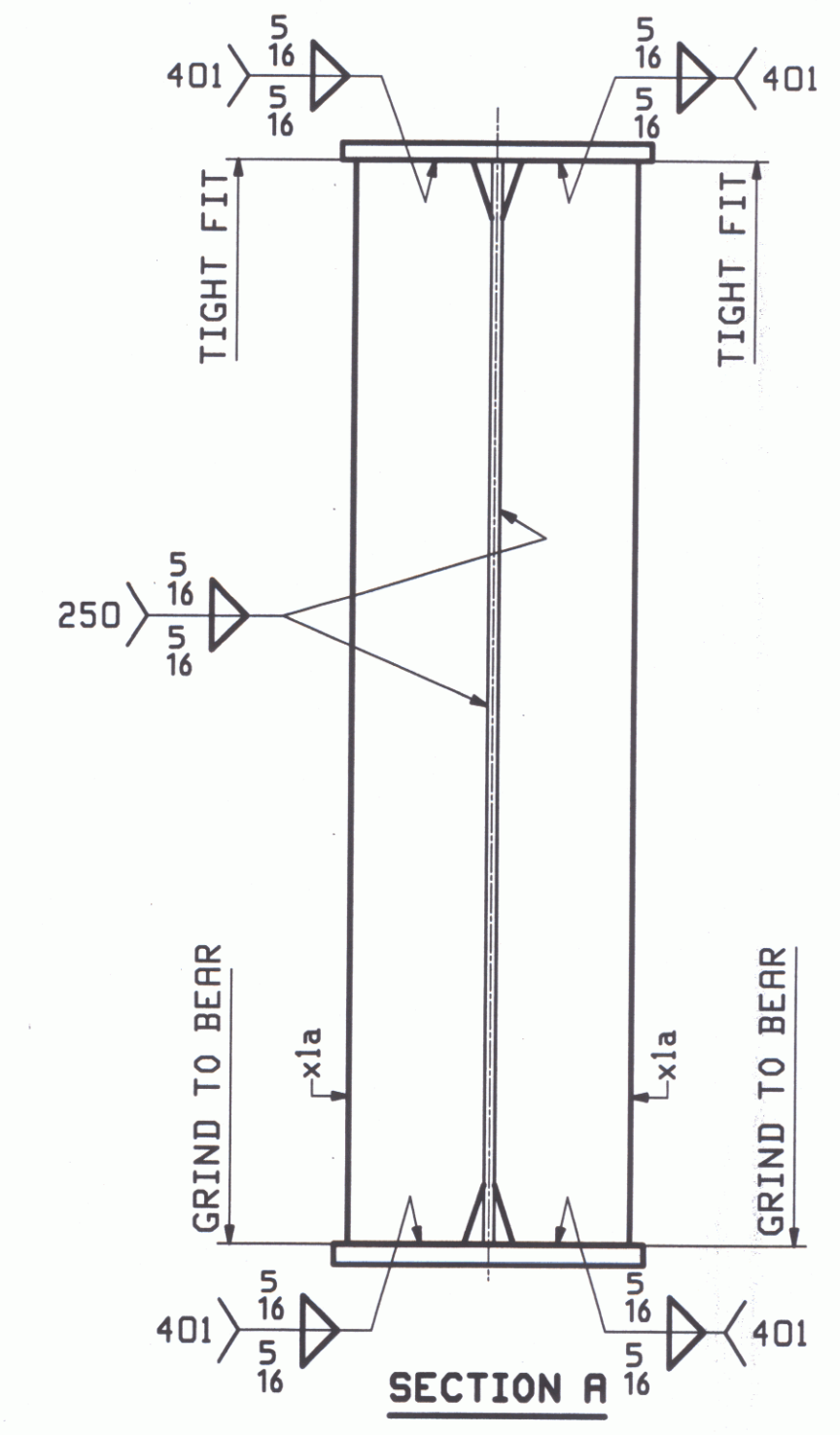
ONE - GIRDER - 3G4A
 FOR GIRDER STANDARDS SEE DRAWINGS X1
 FOR CAMBER & FLANGE DIAGRAMS SEE DRAWING C1.
 FOR GENERAL NOTES & WELD PROCEDURES SEE DRAWING GNI.
 H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.



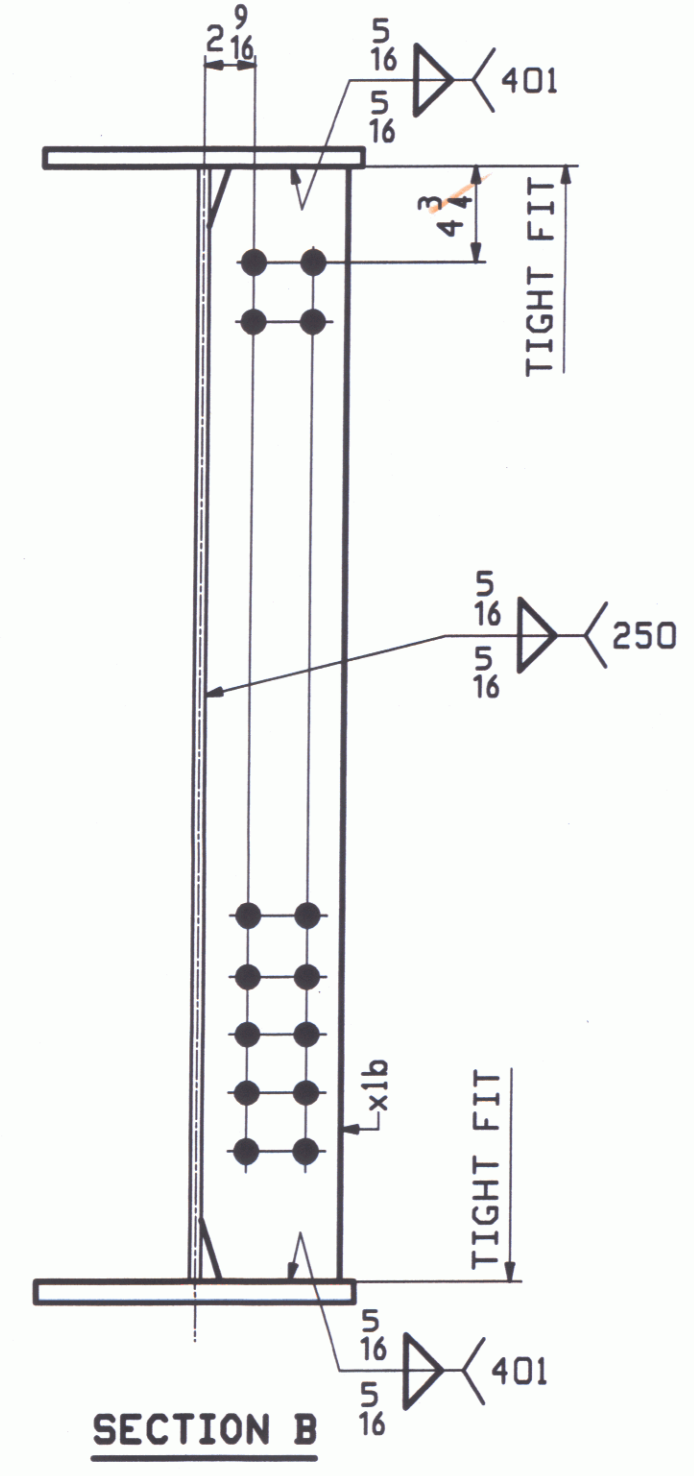
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 MAY 1 2009
 REQUEST APPROVED
 BY RKL DATE 5-12-09



SECTION BA

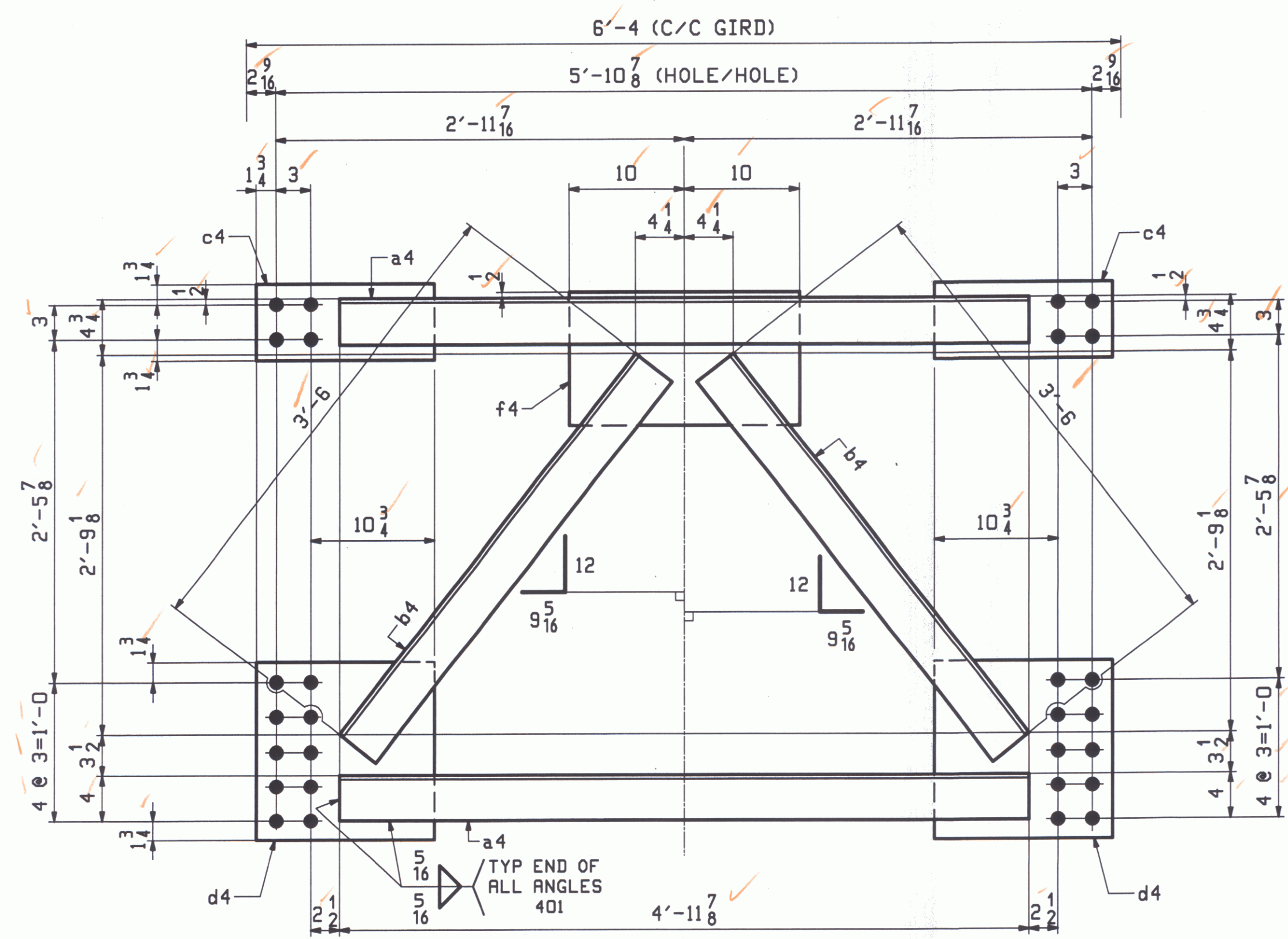


SECTION A



SECTION B

REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
0						
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:		SHOP BOLTS:
M270-50W		SEE GNI		15 16 Ø		NONE
DESCRIPTION: GIRDER - 3G4A						
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179						
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER BRIDGE NO. BR 8 TOWN OF BROWNINGTON COUNTY OF ORLEANS, VERMONT CONTRACTOR: AUSTIN CONSTRUCTION				DRAWN:	DATE:	
				LWD	03/11	
				CHKD:	DATE:	
				PCP	04/16	
LOCATION: Town of Brownington				JOB NO.	DWG NO.	
PROJ NO. BRO 1449 (28)				396	3	
CUSTOMER: VERMONT AOT					REV. Δ	



15 ~ CROSSFRAMES - 4CF1

ABM INFO		SHIP		BILL OF MATERIAL				JOB NO.	DRAWING NO.	REV.
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH		REMARKS	WT	PROCUREMENT NOTES
						FT	INCHES			
		4CF1	15		CROSSFRAMES				302	
2	H		30	a4	L 4x4x3/8	4	11 7/8			
2	J		30	b4	L 4x4x3/8	3	6			
2	K		30	c4	PL 1/2x8 1/2	1	3 1/2			
2	M		30	d4	PL 1/2x15 1/2	1	3 1/2			
2	N		15	f4	PL 1/2x11 1/2	1	8			

NOTE:
FOR STANDARD DETAILS SEE SHEET M1.

RECEIVED
 CK'D BY: cam OK'D BY: JHL
 MAY 12 2009
 RESUBMIT: APPROVED
 BY: RLW DATE: 5-12-09

APR 22 2009						
REV.	DATE	REMARKS	DWN	CHK	APVL	SHOP
MATERIAL:		SURFACE PREP. & PAINT:		HOLES:		SHOP BOLTS:
M270-50W		SEE GNI		15/16 Ø		NONE
DESCRIPTION: CROSSFRAMES						
CASCO BAY STEEL STRUCTURES, INC. 75 SPRING HILL ROAD SACO, MAINE 04072 PHONE (207) 282-7360 FAX. (207) 282-1179						
STRUCTURE: TOWN HIGHWAY #2 OVER WILLOUGHBY RIVER				DRAWN:	DATE:	
BRIDGE NO. BR 8				LWD	03/11	
TOWN OF BROWNINGTON				CHKD:	DATE:	
COUNTY OF ORLEANS, VERMONT				PCP	04/16	
CONTRACTOR: AUSTIN CONSTRUCTION						
LOCATION: Town of Brownington			JOB NO.	DWG NO.		
PROJ NO. BRO 1449 (28)			396	4		
CUSTOMER: VERMONT ROT				REV. <u>△</u>		

