INDEX OF SHEETS
SEE SHEET 2

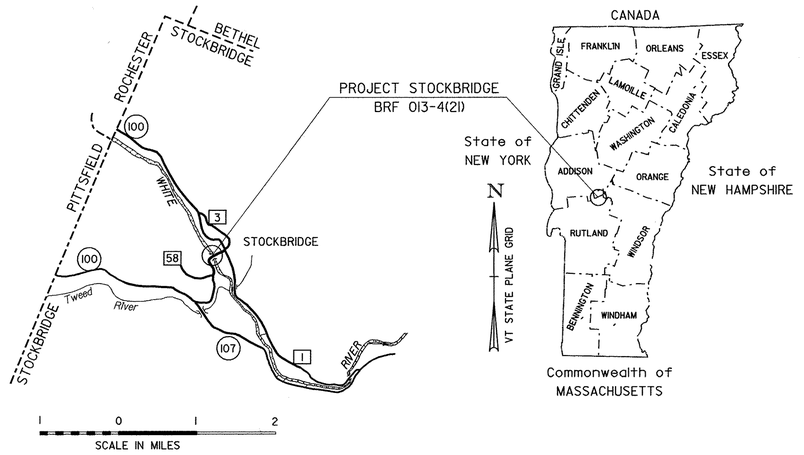
STATE OF VERMONT
AGENCY OF TRANSPORTATION

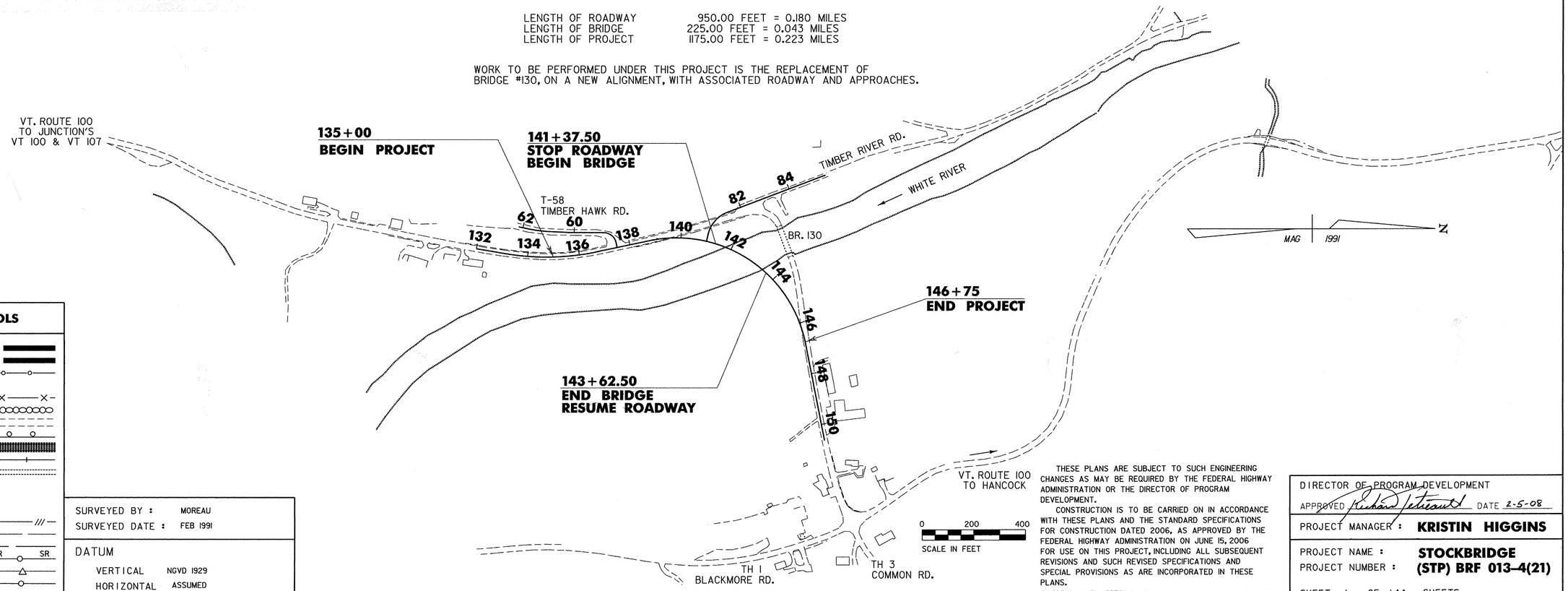
PROPOSED IMPROVEMENT
BRIDGE PROJECT
TOWN OF STOCKBRIDGE
COUNTY OF WINDSOR
VT. ROUTE 100 (MINOR ARTERIAL)

BEGINNING IN STOCKBRIDGE AT A POINT 2.577 MILES NORTHERLY OF THE PITTSFIELD - STOCKBRIDGE TOWNLINE AND EXTENDING NORTHERLY ALONG VT ROUTE 100 FOR A DISTANCE OF 0.223 MILES TO MILEMARKER 2.780.

LENGTH OF ROADWAY	950.00 FEET = 0.180 MILES
LENGTH OF BRIDGE	225.00 FEET = 0.043 MILES
LENGTH OF PROJECT	1175.00 FEET = 0.223 MILES

WORK TO BE PERFORMED UNDER THIS PROJECT IS THE REPLACEMENT OF BRIDGE #130, ON A NEW ALIGNMENT, WITH ASSOCIATED ROADWAY AND APPROACHES.





RECORD PLANS

CONTRACTOR:	WINTERSET, INC.– LYNDONVILLE, VT
RESIDENT ENGINEER:	DARYL BASSETT
CONSTRUCTION BEGAN:	JULY 28, 2008
CONSTRUCTION COMPLETE:	JUNE 18, 2010
RECORD PLANS BY:	DARYL BASSETT & AMOS KEMPTON

I HEREBY CERTIFY THAT ALL THE CONSTUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Dal Bassett RESIDENT ENGINEER

DATE 4/18/12

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.

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 (SR SR SR)
TOP OF CUT
TOE OF SLOPE

SURVEYED BY : MOREAU
SURVEYED DATE : FEB 1991

DATUM
VERTICAL NGVD 1929
HORIZONTAL ASSUMED

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.

78f238\str5\sf238bdr.dgn 05-FEB-2008

DIRECTOR OF PROGRAM DEVELOPMENT
APPROVED Richard Jeteaunt DATE 2-5-08

PROJECT MANAGER : **KRISTIN HIGGINS**

PROJECT NAME : **STOCKBRIDGE**
PROJECT NUMBER : **(STP) BRF 013-4(21)**

SHEET 1 OF 144 SHEETS

STATE OF VERMONT
AGENCY OF TRANSPORTATION

PRELIMINARY INFORMATION SHEET

INDEX OF SHEETS

1.	TITLE SHEET		
2.	PRELIMINARY INFORMATION SHEET		
3.	MAINLINE TYPICAL SECTIONS	LIST OF STANDARDS	
4.	TOWN HIGHWAY TYPICAL SECTIONS		
5.	BRIDGE TYPICAL SECTIONS	B-5	6/1/1994
6. - 9.	QUANTITY SHEETS	B-11	6/1/1994
10.	BLANK	B-71	7/8/2005
11.	EARTHWORK SHEET	C-1	1/3/2000
12. - 13.	RIGHT-OF-WAY DETAIL SHEETS	D-4	8/13/2007
14. - 17.	RIGHT-OF-WAY LAYOUT SHEETS	D-9	6/1/2004
18.	TIE SHEET	D-15	6/1/1994
19. - 22.	LAYOUT SHEETS	D-30	8/13/2007
23. - 26.	MAINLINE PROFILE SHEETS	E-100	1/2/2004
27.	PROFILE TIMBER HAWK ROAD SHEET	E-100A	1/2/2004
28.	PROFILE TIMBER RIVER ROAD SHEET	E-101	5/30/2003
29.	DRAINAGE DETAIL SHEET	E-102	6/30/2003
30.	PRECAST DROP INLET & PRECAST CATCH BASIN DETAILS	E-102A	5/1/2004
31. - 34.	SIGNS & PAVEMENT MARKINGS LAYOUT SHEETS	E-106	3/1/2004
35. - 36.	TRAFFIC SIGN SUMMARY SHEETS	E-107	6/30/2003
37.	EROSION CONTROL NOTES	E-107A	8/8/1995
38. - 41.	EPSC PRE-CONSTRUCTION PLAN SHEETS	E-108	8/18/1995
42. - 45.	EPSC CONSTRUCTION PLAN SHEETS	E-110	8/8/1995
46. - 49.	EPSC SITE STABILIZATION PLAN SHEETS	E-121	8/8/1995
50. - 53.	EPSC DETAILS SHEETS	E-127	8/8/1995
54.	BLANK	E-134	8/8/1995
55.	LIVE FASCINE DETAIL SHEET	E-136B	8/8/1995
56.	BORING INFORMATION SHEET	E-138	5/30/2003
57. - 63.	BORING LOG SHEETS	E-141	9/20/1995
64.	BLANK	E-142	9/20/1995
65.	GEOTECHNICAL LAYOUT SHEET	E-143	6/15/2004
66.	INSTRUMENTATION LAYOUT SHEET	E-150	5/1/2004
67.	ABUTMENT AND PILE INSTRUMENTATION	E-151	5/1/2004
68.	MISCELLANEOUS INSTRUMENTATION DETAILS	E-155	5/1/2004
69.	SETTLEMENT PLATFORM, TYPE IV	E-160	5/20/1999
70.	PLAN AND ELEVATION	E-191	2/1/1999
71.	GENERAL NOTES SHEET	E-192	10/12/2000
72.	BLANK	E-193	8/18/1995
73.	DECK TYPICAL & DETAILS	G-1	1/3/2000
74.	DECK PLAN SHEET	G-1D	1/3/2000
75.	FRAMING PLAN & GIRDER DETAILS	G-19	11/15/2002
76.	CROSSFRAME & BRACING DETAILS	J-1	6/1/1994
77.	MISCELLANEOUS DETAILS	L-1	3/9/1995
78.	DEAD LOAD & CAMBER DIAGRAMS	L-2	7/24/1995
79. - 80.	SPLICE DETAIL SHEETS		
81.	GUIDED POT BEARINGS AT PIER - GIRDERS 1, 2 & 3		
82.	FIXED POT BEARINGS AT PIER - GIRDERS 4 & 5		
83. - 85.	BLANK		
86.	INTEGRAL ABUTMENT BEARING DETAILS		
87.	APPROACH SLAB DETAILS		
88.	ABUTMENT 1 DETAILS		
89.	ABUTMENT 2 DETAILS		
90.	WINGWALL DETAILS		
91.	PIER DIMENSION PLAN		
92.	PIER REINFORCING		
93.	PIER FOOTING REINFORCING & PILE LAYOUT		
94.	BLANK		
95.	RETAINING WALL DETAILS		
96.	NETC 2-RAIL BRIDGE RAILING DETAILS		
97.	NETC 2-RAIL BRIDGE APPROACH RAILING DETAILS		
98.	NETC 2-RAIL BRIDGE RAIL DETAILS - THRIE BEAM		
99.	REINFORCING STEEL SCHEDULE		
100. - 107.	BLANK		
108.	BANKING DIAGRAM & MATERIAL TRANSITION DIAGRAM		
109. - 125.	MAINLINE CROSS SECTIONS		
126. - 128.	TIMBER HAWK ROAD CROSS SECTIONS		
129. - 132.	TIMBER RIVER ROAD CROSS SECTIONS		
133. - 144.	CHANNEL CROSS SECTIONS		

FINAL HYDRAULIC REPORT

HYDROLOGIC DATA

Date: 9/12/2007

DRAINAGE AREA : 143 sq mi.
CHARACTER OF TERRAIN : Mountainous, rolling hills to farm lands
STREAM CHARACTERISTICS : Perennial, medium size, moderate relief,straight
NATURE OF STREAMBED : Gravel to cobble bottom

PEAK FLOW DATA

Q 2.33 =	5600 cfs	Q 50 =	21000 cfs
Q 10 =	12300 cfs	Q 100 =	25500 cfs
Q 25 =	17000 cfs	Q 500 =	36000 cfs

DATE OF FLOOD RECORD : November, 1927
ESTIMATED DISCHARGE: Unknown
WATER SURFACE ELEV.: Unknown
NATURAL STREAM VELOCITY : @ Q50 = 8.2 fps
ICE CONDITIONS : Moderate
DEBRIS: Moderate
DOES THE STREAM REACH MAXIMUM HIGHWATER ELEV. RAPIDLY? No
IS ORDINARY RISE RAPID? No
IS STAGE AFFECTED BY UPSTREAM OR DOWNSTREAM CONDITIONS? No
IF YES, DESCRIBE:

WATERSHED STORAGE: 1% HEADWATERS:
UNIFORM: X
IMMEDIATELY ABOVE SITE:

EXISTING STRUCTURE INFORMATION

STRUCTURE TYPE: Single Span Steel Truss Bridge
YEAR BUILT: 1928
CLEAR SPAN(NORMAL TO STREAM): 107 ft
VERTICAL CLEARANCE ABOVE STREAMBED: 15 ft
WATERWAY OF FULL OPENING: 1590 sf
DISPOSITION OF STRUCTURE: Remove
TYPE OF MATERIAL UNDER SUBSTRUCTURE: Unknown

WATER SURFACE ELEVATIONS AT:

Q2.33 =	730.4 ft	VELOCITY =	5.7 fps
Q10 =	733.6 ft	"	10.0 fps
Q25 =	737.5 ft	"	10.1 fps
Q50 =	738.2 ft	"	11.6 fps
Q100 =	739.0 ft	"	11.8 fps

LONG TERM STREAMBED CHANGES: None noted

IS THE ROADWAY OVERTOPPED BELOW Q100: Yes
FREQUENCY: Below Q25
RELIEF ELEVATION: 735.4 ft
DISCHARGE OVER ROAD @Q100: 7000 cfs

UPSTREAM STRUCTURE

TOWN: Rochester DISTANCE: 5.5 mi
HIGHWAY# : TH-42 STRUCTURE #: Bridge 35
CLEAR SPAN: 121 ft (three span) CLEAR HEIGHT: 15 ft
YEAR BUILT: 1983 FULL WATERWAY: Unknown
STRUCTURE TYPE: Three Span Steel Beam Bridge with Concrete Deck

DOWNSTREAM STRUCTURE

TOWN: Stockbridge DISTANCE: 2.6 mi
HIGHWAY# : TH-1 STRUCTURE #: Bridge 6
CLEAR SPAN: 168 ft (three span) CLEAR HEIGHT: 25 ft
YEAR BUILT: 1988 FULL WATERWAY: Unknown
STRUCTURE TYPE: Three Span Plate Girder Bridge with Concrete Deck

LOAD FACTOR - LOAD RATING (TONS)

LOADING LEVELS	TRUCK						
	H	HS	3S2	6 AXLE	3A. STR.	4A. STR.	5A. SEMI
INVENTORY	35	64					
POSTED	49	89	111		93	95	106
OPERATING		106	132	144	111	114	

COMMENTS: STRENGTH CONTROLS. LANE LOAD CONTROLS FOR H & HS

TRAFFIC DATA

YEAR	ADT	DHV	% D	% T	ADTT
2007	1700	240	53	10	170
2027	2300	300	53	15	350

20 year ESAL for flexible pavement from 2007 to 2027 : 1,173,000
40 year ESAL for flexible pavement from 2007 to 2047 : 2,958,000
Design Speed : 40 mph

PROPOSED STRUCTURE

STRUCTURE TYPE: Two Span Plate Girder Bridge with Concrete Deck

CLEAR SPAN(NORMAL TO STREAM): 136 ft
VERTICAL CLEARANCE ABOVE STREAMBED: 19 ft
WATERWAY OF FULL OPENING: 2,260 sf

WATER SURFACE ELEVATIONS AT:

Q2.33 =	730.9 ft	VELOCITY=	4.8 fps
Q10 =	733.7 ft	"	8.2 fps
Q25 =	735.0 ft	"	10.6 fps
Q50 =	736.5 ft	"	11.5 fps
Q100 =	738.0 ft	"	11.4 fps

IS THE ROADWAY OVERTOPPED BELOW Q100: Yes
FREQUENCY: Below Q50
RELIEF ELEVATION: 735.6 ft
DISCHARGE OVER ROAD @Q100: 3,670 cfs

AVERAGE LOW ELEVATION OF SUPERSTRUCTURE: 739.3 ft @ pier location
VERTICAL CLEARANCE: @ Q100 2.6 ft on the west side, inundated on the east side

SCOUR: Maximum total scour at the pier is 10 ft. This amount of scour occurs at all flows from Q10 up to Q500.
REQUIRED CHANNEL PROTECTION: Type IV Stone Fill

PERMIT INFORMATION

AVERAGE DAILY FLOW:	300 cfs	DEPTH OR ELEVATION:
ORDINARY LOW WATER:	130 cfs	1 ft
ORDINARY HIGH WATER:	2400 cfs	3 ft

TEMPORARY BRIDGE REQUIREMENTS

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

ADDITIONAL INFORMATION

The existing bridge will be removed once new bridge is completed and the roadway approaches will be excavated and graded to match up and downstream channel banks.

DESIGN CRITERIA

1. DESIGN LIVE LOAD AASHTO HS-25
2. DESIGN SPAN 222.0 ft
3. ALLOWABLE LOAD FOR SPREAD FOOTINGS ON SOIL
   ON LEDGE
4. ALLOWABLE LOAD FOR PILING SEE GENERAL NOTES (SHEET 71)
   TYPE
   ESTIMATED LENGTH 80' +/-
5. STRUCTURAL STEEL AASHTO M270M/M270 GRADE 50W
6. REINFORCING STEEL GRADE 60
7. CONCRETE, HIGH PERFORMANCE CLASS A f'c: 4000 psi
   CONCRETE, HIGH PERFORMANCE CLASS B f'c: 3500 psi
8. DESIGN SOIL UNIT WEIGHT 140 pcf
9. DESIGN LOAD FOR SPREAD FOOTINGS ON SOIL

TRAFFIC MAINTENANCE

1. IS TRAFFIC TO BE MAINTAINED? YES
   IF YES, ON EXISTING STRUCTURE? EXISTING STRUCTURE
   OR ON TEMPORARY BRIDGE?
   ONE OR TWO-WAY TRAVEL? TWO WAY
2. TRAFFIC CONTROL SIGNALS REQUIRED? NO
3. ARE SIDEWALKS REQUIRED? NO
   IF SO, ON WHAT SIDE?

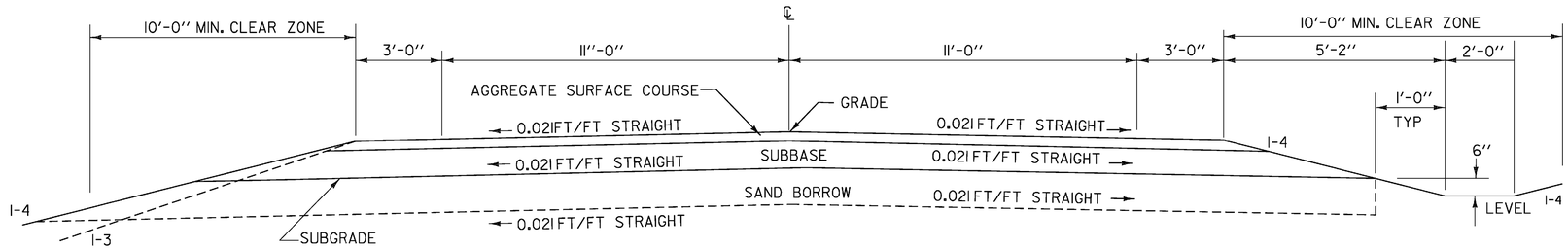
PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78b238/str5/sf238pi.xls PLOT DATE: 1/28/2008
PROJECT MANAGER: K. HIGGINS DRAWN BY: R. PELLETT
DESIGNED BY: T. FILLBACH CHECKED BY: T. SUMNER
PRELIMINARY INFORMATION SHEET SHEET 2 OF 144

TIMBER HAWK ROAD - TH#58

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

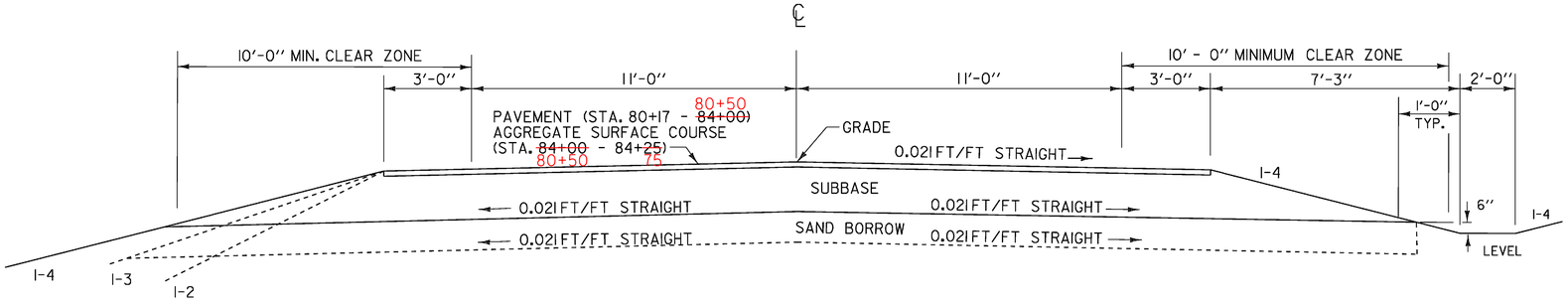
3" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34) (1 1/2" TYPE IVS OVER 1 1/2" TYPE IVS) OR
3" AGGREGATE SURFACE COURSE
18" SUBBASE OF DENSE GRADED CRUSHED STONE
24" SAND BORROW



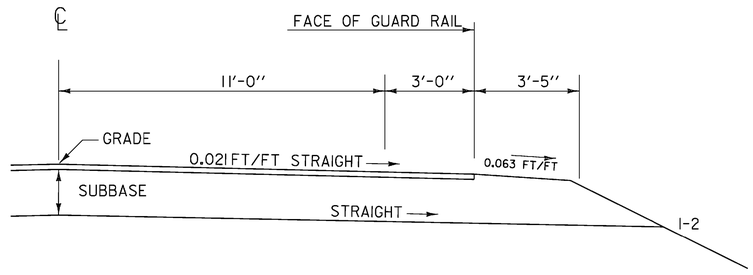
NORMAL SECTION
(NOT TO SCALE)

TIMBER RIVER ROAD SECTION

3" SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34) (1 1/2" TYPE IVS OVER 1 1/2" TYPE IVS) OR
3" AGGREGATE SURFACE COURSE
18" SUBBASE OF DENSE GRADED CRUSHED STONE
24" SAND BORROW
SHOULDERS SAME AS ROADWAY



NORMAL SECTION
(NOT TO SCALE)

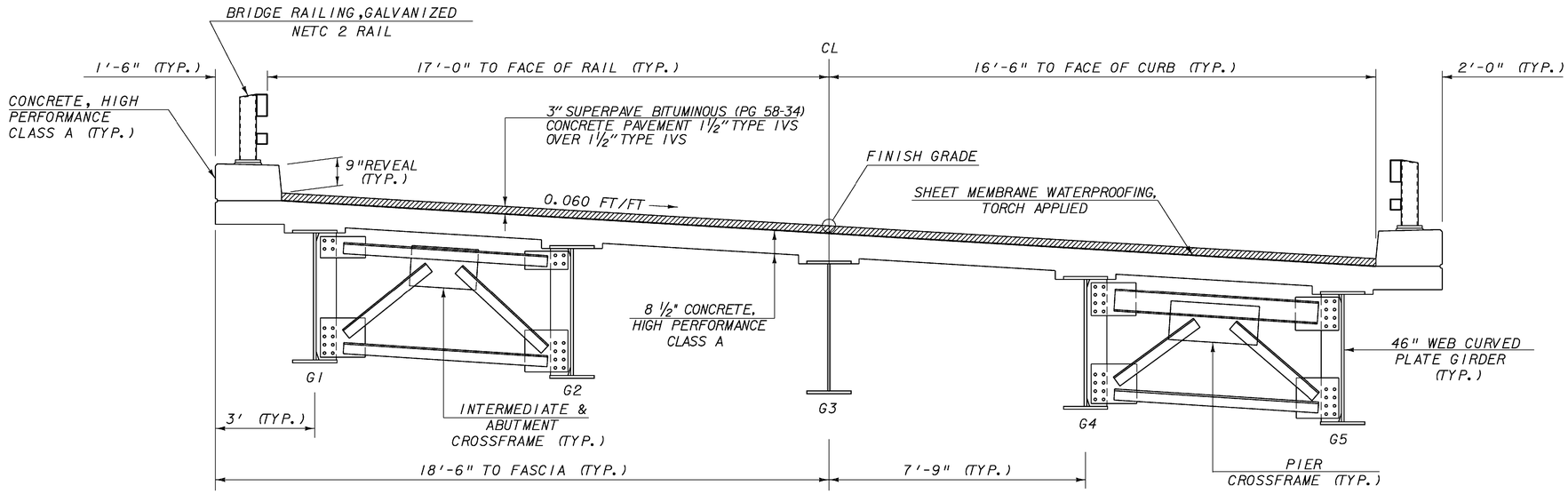


NORMAL SECTION WITH GUARDRAIL
(NOT TO SCALE)

TOWN HIGHWAY TYPICAL SECTIONS

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

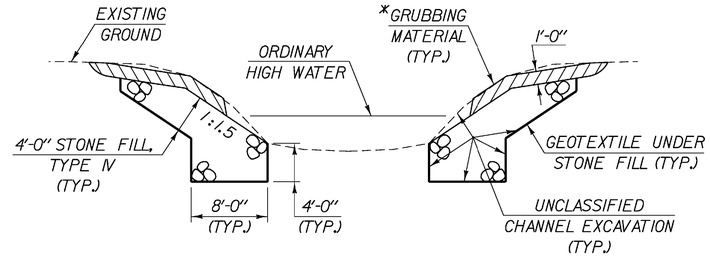
FILE NAME: /78f238/str5/sf238typ.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238ty2.i
PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 4 OF 144



ALL HORIZONTAL DIMENSIONS ARE RADIAL

TYPICAL BRIDGE SECTION

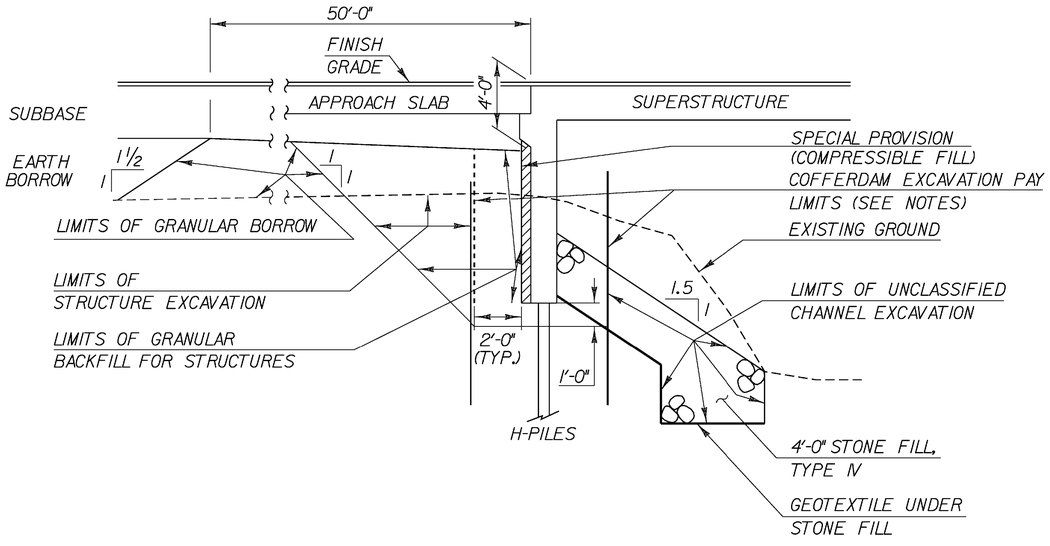
(NOT TO SCALE)



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.

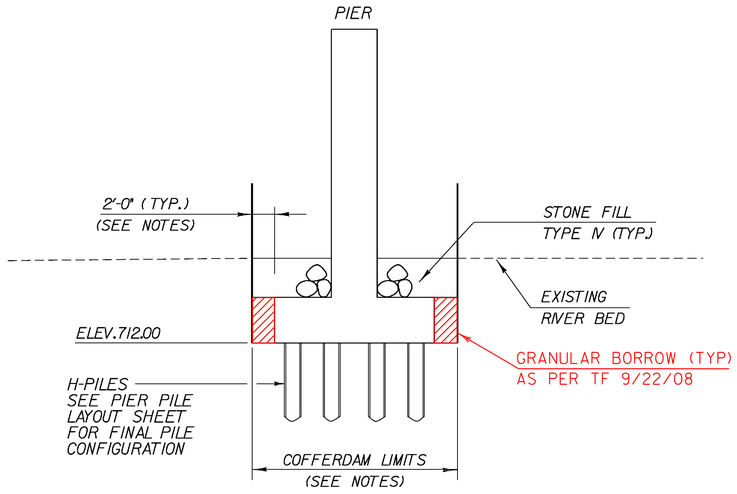


TYPICAL ABUTMENT SECTION

(NOT TO SCALE)

NOTES

1. COFFERDAM LIMITS TO BE DETERMINED BY THE CONTRACTOR.
2. THE PAY LIMITS OF "COFFERDAM EXCAVATION, EARTH" AND "COFFERDAM EXCAVATION, ROCK", SHALL BE 2'-0" OUTSIDE THE PERIMETER OF THE FOOTING FOR THE PIER, AND AS SHOWN IN THE TYPICAL ABUTMENT SECETION, UP TO EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.
3. IF A COFFERDAM IS CONSTRUCTED WHCIH IS LARGER THAN THE INDICATED COFFERDAM EXCAVATION PAY LIMITS, PAYMENT FOR ALL UNCLASSIFIED CHANNEL EXCAVATION AND STRUCTURE EXCAVATION, INCLUDING THAT PORTION WHICH IS INSIDE THE COFFERDAM BUT OUTSIDE THE COFFERDAM EXCAVATION PAY LIMITS, WILL BE MADE AT THE CONTRACT UNIT PRICE FOR UNCLASSIFIED CHANNEL EXCAVATION AND STRUCTURE EXCAVATION.
4. THE PAY LIMITS OF STRUCTURE EXCAVATION, SHALL BE 2'-0" BEHIND THE COMPRESSIBLE FILL, UP TO EXISTING GROUND OR BOTTOM OF SUBBASE, WHICHEVER IS LOWER.
5. ONE FOOT (1'-0") UNDERCUT AS DETERMINED NECESSARY BY THE RESIDENT ENGINEER.
6. EXCAVATIONS MADE BELOW THE VERTICAL LIMITS SHOWN FOR COFFERDAM SEALS OR THE CONVENIENCE OF THE CONTRACTOR, WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE 208.40, COFFERDAM ITEM.



PIER EARTH WORK TYPICAL

(NOT TO SCALE)

BRIDGE TYPICAL SECTIONS

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238typ.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER	CHECKED BY: T. FILLBACH
sf238tp3.i	SHEET 5 OF 144

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES									TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
				ROADWAY	TRAINING	EROSION CONTROL	BRIDGE	100% STP FUNDS	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	–			COMMON EXCAVATION
				6000						6000		CY	COMMON EXCAVATION	203.15	88	3415	CY	MAINLINE (INCLUDES EXISTING ROAD BED UNDER FILL AREAS)
				60						60		CY	SOLID ROCK EXCAVATION	203.16	EST	434	CY	TOWN HIGHWAY 58
							2700			2700		CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27	34	2063	CY	TIMBER RIVER ROAD
				7300						7300		CY	EARTH BORROW	203.30	54	88	CY	ROUNDING
				3700						3700		CY	SAND BORROW	203.31	30	6000	CY	TOTAL
				1900						1900		CY	GRANULAR BORROW	203.32	23			SUBBASE OF DENSE GRADED CRUSHED STONE
				405		25				430		CY	TRENCH EXCAVATION OF EARTH	204.20	5	3510	CY	MAINLINE
				20						20		CY	TRENCH EXCAVATION OF ROCK	204.21	8	282	CY	TOWN HIGWAY 58
				100						100		CY	STRUCTURE EXCAVATION	204.25	4	792	CY	TIMBER RIVER ROAD
							325			325		CY	GRANULAR BACKFILL FOR STRUCTURES	204.30	1	125	CY	TEMPORARY EROSION CONTROL
							480			480		CY	COFFERDAM EXCAVATION, EARTH	208.30	12	66	CY	ROUNDING
							50			50		CY	COFFERDAM EXCAVATION, ROCK	208.35	EST	4775	CY	TOTAL
							1			1		LS	COFFERDAM (ABUTMENT #1)	208.40	–			SUPERPAVE BITUMINOUS CONCRETE PAVEMENT
							1			1		LS	COFFERDAM (ABUTMENT #2)	208.40	–	2170	TON	MAINLINE
							1			1		LS	COFFERDAM (PIER)	208.40	–			1310 TON - TYPE IS (BASE)
				500						500		SY	COLD PLANING, BITUMINOUS PAVEMENT	210.10	2			419 TON - TYPE IVS (BINDER)
				4650		125				4775		CY	SUBBASE OF DENSE GRADED CRUSHED STONE	301.35	66			441 TON - TYPE IVS (TOP)
				75						75		CY	AGGREGATE SURFACE COURSE	401.10	2	22	TON	TOWN HIGWAY 58
				32						32		CWT	EMULSIFIED ASPHALT	404.65	0.4			11 TON - TYPE IVS (BINDER)
				2264			156			2420		TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	490.30	50			11 TON - TYPE IVS (TOP)
							528			528		CY	CONCRETE, HIGH PERFORMANCE CLASS A	501.33	3	22	TON	TIMBER RIVER ROAD
							83			83		CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34	0.5			11 TON - TYPE IVS (BINDER)
							1			1		LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10	–			11 TON - TYPE IVS (TOP)
							1300			1300		LF	STEEL PILING, HP 14 X 117	505.20	EST.	156	TON	BRIDGE
							850			850		LF	STEEL PILING FOR INTEGRAL ABUTMENTS, HP 14 X 117	505.30	EST.			78 TON - TYPE IVS (BINDER)
							3			3		EACH	DYNAMIC PILE LOADING TEST	505.45	–			78 TON - TYPE IVS (TOP)
							353000			353000		LB	STRUCTURAL STEEL, CURVED PLATE GIRDER	506.56	104	50	TON	ROUNDING
							102200			102200		LB	REINFORCING STEEL	507.15	443	2420	TON	TOTAL
							85900			85900		LB	EPOXY COATED REINFORCING STEEL	507.17	329			
							1			1		LS	SHEAR CONNECTORS (3288 - 7/8" x 7")	508.15	–			
							40			40		GAL	WATER REPELLENT, SILANE	514.10	–			
							66			66		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	–			
							825			825		SY	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	519.20				
							450			450		LF	BRIDGE RAILING, GALVANIZED NETC 2 RAIL	525.33				
				1						1		LS	MAINTENANCE OF STRUCTURES AND APPROACHES	527.10	–			
				280						280		SY	REMOVAL OF BRIDGE PAVEMENT	529.10	EST.			
				1						1		EACH	REMOVAL OF STRUCTURE (2976 SF - EST.)	529.15	–			
							5			5		EACH	BEARING DEVICE ASSEMBLY, POT	531.12	–			
							10			10		EACH	BEARING DEVICE ASSEMBLY, INTEGRAL ABUTMENT	531.14	–			

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: i78b238/str5/VAOT_quant_78f238
PROJECT MANAGER: K. HIGGINS
DESIGNED BY: T. FILLBACH
QUANTITY SHEET #1

PLOT DATE: 02/05/2008
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES								TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
ROADWAY	TRAINING	EROSION CONTROL	BRIDGE	100% STP FUNDS	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
									BEGIN OPTION AA					
40						40		LF	24" CSP .064 (2-2/3 X 1/2)	601.0025				
40						40		LF	24" CPEP(SL)	601.2620				
									END OPTION AA					
									BEGIN OPTION BB					
312						312		LF	18" CAAP .060 (2-2/3 X 1/2)	601.0215				
312						312		LF	18" CPEP(SL)	601.2615				
									END OPTION BB					
									BEGIN OPTION CC					
3						3		EACH	18" CAAPES .060 (2-2/3 X 1/2)	601.6215				
3						3		EACH	18" CPEPES	601.7015				
									END OPTION CC					
1						1		EACH	PRECAST REINFORCED CONCRETE DROP INLET WITH CAST IRON GRATE	604.18				NOTE: THE PRECAST DROP INLET REQUIRES ONE TYPE 'E' GRATE. THE PRECAST CATCH BASIN REQUIRES TWO TYPE 'D' GRATES.
1						1		EACH	PRECAST REINFORCED CONCRETE CATCH BASIN WITH CAST IRON GRATE	604.20				
520						520		LF	6 INCH UNDERDRAIN PIPE	605.10	8			
70						70		LF	6 INCH UNDERDRAIN CARRIER PIPE	605.20	3			
3						3		EACH	UNDERDRAIN FLUSHING BASIN	605.95	–			
		225				225		MGAL	DUST CONTROL WITH WATER	609.10	EST.			
		2				2		TON	DUST AND ICE CONTROL WITH CALCIUM CHLORIDE	609.15	EST.			
160		15				175		CY	STONE FILL, TYPE II	613.11	14			
			1600			1600		CY	STONE FILL, TYPE IV	613.13	34			
160						160		LF	CAST-IN-PLACE CONCRETE CURB, TYPE B	616.28	–			
12						12		EACH	STEEL MARKER POSTS	619.16	–			
1210						1210		LF	STEEL BEAM GUARDRAIL, GALVANIZED	621.20	–			
6						6		EACH	ANCHOR FOR STEEL BEAM RAIL	621.60	–			
4						4		EACH	GUARDRAIL APPROACH SECTION, GALVANIZED NETC 2 RAIL	621.72	–			
400						400		LF	REMOVAL AND DISPOSAL OF GUARDRAIL	621.80	EST.			
					1	1		LS	FIELD OFFICE, ENGINEERS	631.10	–			
					1	1		LS	TESTING EQUIPMENT, CONCRETE	631.16	–			
					1	1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	–			
	1040					1040		HR	EMPLOYEE TRAINEESHIP	634.10	–			
1						1		LS	MOBILIZATION/DEMOBILIZATION	635.11	–			
4170						4170		LF	DURABLE 4 INCH WHITE LINE, THERMOPLASTIC	646.402				
4020						4020		LF	DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC	646.412				
28						28		LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482				
8						8		EACH	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492				
		1900				1900		SY	GEOTEXTILE UNDER STONE FILL	649.31	38			
		200				200		SY	GEOTEXTILE FOR SILT FENCE	649.51				
		350				350		SY	GEOTEXTILE FOR FILTER CURTAIN	649.61				
		130				130		LB	SEED	651.15	EST.			

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78b238/str5/VAOT_quant_78f238 PLOT DATE: 02/05/2008
PROJECT MANAGER: K. HIGGINS DRAWN BY: R. PELLETT
DESIGNED BY: T. FILLBACH CHECKED BY: T. SUMNER
QUANTITY SHEET #2 SHEET 7 OF 144

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 3

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
				ROADWAY	TRAINING	EROSION CONTROL	BRIDGE	100% STP FUNDS	FULL C.E. ITEMS	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
						130				130		LB	SEED, WINTER RYE	651.17	EST.			
						1000				1000		LB	FERTILIZER	651.18	EST.			
						4				4		TON	AGRICULTURAL LIMESTONE	651.20	EST.			
						4				4		TON	HAY MULCH	651.25	EST.			
						25				25		CY	TOPSOIL	651.35	EST.			
						670				670		SY	GRUBBING MATERIAL	651.40				
						1				1		LS	EPSC PLAN	652.10	–			
						250				250		HR	MONITORING EPSC PLAN	652.20				
						1				1		LU	MAINTENANCE OF EPSC PLAN (N.A.B.I.)	652.30				
						20				20		EACH	HAY BALES	653.15				
						5500				5500		SY	TEMPORARY EROSION MATTING	653.20				
						10				10		CY	TEMPORARY STONE CHECK DAM, TYPE I	653.25				
						80				80		CY	VEHICLE TRACKING PAD	653.35				
						5				5		EACH	INLET PROTECTION DEVICE, TYPE I	653.40				
						4				4		EACH	FILTER BAG	653.45				
						3200				3200		LF	PROJECT DEMARCATION FENCE	653.55				
						705				705		LF	LIVE FASCINE	653.65	–			
				60						60		SF	TRAFFIC SIGNS, TYPE A	675.20				
													BEGIN OPTION DD					
				225						225		LF	FLANGED CHANNEL SIGN POST	675.301	3			
				225						225		LF	SQUARE TUBE SIGN POST AND ANCHOR	675.341	3			
													END OPTION DD					
				22						22		EACH	REMOVING SIGNS	675.50				
				5						5		EACH	ERECTING SALVAGED SIGNS	675.60				
							50			50		CY	SPECIAL PROVISION (COMPRESSIBLE FILL)	900.608				
							105			105		CY	SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, MASS POUR)	900.608				
									6000	6000		DL	SPECIAL PROVISION (FIELD OFFICE TELEPHONE) (N.A.B.I.)	900.615				
				2						2		EACH	SPECIAL PROVISION (SETTLEMENT PLATFORM, TYPE I)	900.620				
				2						2		EACH	SPECIAL PROVISION (SETTLEMENT PLATFORM, TYPE IV)	900.620				
				1						1		LS	SPECIAL PROVISION (ALL-INCLUSIVE TRAFFIC CONTROL)	900.645				
								1		1		LS	SPECIAL PROVISION (BRIDGE INSTRUMENTATION FOR INTEGRAL ABUTMENTS)	900.645				
				1						1		LS	SPECIAL PROVISION (SURCHARGING)	900.645				
				415						415		SF	SPECIAL PROVISION (CONCRETE RETAINING WALL)	900.670				
						600				600		SY	SPECIAL PROVISION (GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED)	900.675				

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78b238/str5/VAOT_quant_78f238 | PLOT DATE: 02/05/2008
PROJECT MANAGER: K. HIGGINS | DRAWN BY: R. PELLETT
DESIGNED BY: T. FILLBACH | CHECKED BY: T. SUMNER
QUANTITY SHEET #3 | SHEET 8 OF 144

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 4

SUMMARY OF BRIDGE QUANTITIES							TOTALS	DESCRIPTIONS			DETAILED SUMMARY OF QUANTITIES		
SUPER-STRUCTURE	APPROACH SLAB #1	APPROACH SLAB #2	ABUTMENT #1	PIER	ABUTMENT #2	BRIDGE TOTAL	UNIT	ITEMS	ITEM NUMBER	QUANTITIES	UNIT	ITEMS
			1200		1500	2700	CY	UNCLASSIFIED CHANNEL EXCAVATION	203.27			
			150		175	325	CY	GRANULAR BACKFILL FOR STRUCTURES	204.30			
			50	285	145	480	CY	COFFERDAM EXCAVATION, EARTH	208.30			
				50		50	CY	COFFERDAM EXCAVATION, ROCK	208.35			
			1			1	LS	COFFERDAM (ABUTMENT #1)	208.40			
					1	1	LS	COFFERDAM (ABUTMENT #2)	208.40			
				1		1	LS	COFFERDAM (PIER)	208.40			
156						156	TON	SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34)	490.30			
257			110	49	112	528	CY	CONCRETE, HIGH PERFORMANCE CLASS A	501.33			
	31	31		21		83	CY	CONCRETE, HIGH PERFORMANCE CLASS B	501.34			
				1		1	LS	FURNISHING EQUIPMENT FOR DRIVING PILING	504.10			
				1300		1300	LF	STEEL PILING, HP 14 X 117	505.20			
			425		425	850	LF	STEEL PILING FOR INTEGRAL ABUTMENTS, HP 14 X 117	505.30			
			1	1	1	3	EACH	DYNAMIC PILE LOADING TEST	505.45			
				353000		353000	LB	STRUCTURAL STEEL, CURVED PLATE GIRDER	506.56			
			25500	50000	26700	102200	LB	REINFORCING STEEL	507.15			
78000	4200	3700				85900	LB	EPOXY COATED REINFORCING STEEL	507.17			
1						1	LS	SHEAR CONNECTORS (3288 - 7/8" x 7")	508.15			
14			9	8	9	40	GAL	WATER REPELLENT, SILANE	514.10			
			33		33	66	LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10			
825						825	SY	SHEET MEMBRANE WATERPROOFING, TORCH APPLIED	519.20			
450						450	LF	BRIDGE RAILING, GALVANIZED NETC 2 RAIL	525.33			
				5		5	EACH	BEARING DEVICE ASSEMBLY, POT	531.12			
			5		5	10	EACH	BEARING DEVICE ASSEMBLY, INTEGRAL ABUTMENT	531.14			
			670	30	900	1600	CY	STONE FILL, TYPE IV	613.13			
			25		25	50	CY	SPECIAL PROVISION (COMPRESSIBLE FILL)	900.608			
				105		105	CY	SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, MASS POUR)	900.608			

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78b238/str5/VAOT_quant_78f238
PROJECT MANAGER: K. HIGGINS
DESIGNED BY: T. FILLBACH
QUANTITY SHEET #4

PLOT DATE: 02/05/2008
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER

STATE OF VERMONT
AGENCY OF TRANSPORTATION

EARTHWORKS

		TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT			
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.
MAINLINE									
13200		3.21				0.00			
	50		12.40				0.29		
13250		10.18				0.31			
	50		25.78				1.20		
13300		17.66				0.99			
	50		33.74				11.35		
13350		18.78				11.27			
	50		74.86				15.33		
13400		62.07				5.29			
	50		141.32				19.68		
13450		90.56				15.96		CUT	840
	50		202.40				32.43	ROCK	0
13500		128.03				19.06		R.FAC	.495
	50		191.12				34.03	FILL	732
13550		78.38				17.69		F.FAC	1.15
	50		91.80				101.72	EX. F	2
13600		20.76				92.17			
	50		24.81				210.67		
13650		6.03				135.35			
	25		22.33				140.66		
13675		42.21				168.47			
	25		19.54				165.14		
137+00		0.00				188.24			
	50						401.36		
137+50		0.00				245.23			
	40						427.12		
137+90		0.00				331.38			
	10						125.97		
138+00		0.00				348.84			
	50						748.31		
138+50		0.00				459.33			
	50						843.67		
139+00		0.00				451.83			
	50						1,135.65		
139+50		0.00				774.67		CUT	0
	50						1,608.37	ROCK	0
140+00		0.00				962.37		R.FAC	.495
	50						1,945.20	FILL	9029
140+50		0.00				1,138.45		F.FAC	1.15
	12						492.10	EX. F	10384
140+62		0.00				1,076.00			
	20						398.52		
140+82		0.00				0.00			
	18						292.84		
141+00		0.00				878.51			
	38						610.08		
141+38		0.00				0.00			
143+63.25		90.00				0.00			
	37		362.20				3.11		
144+00		442.21				4.57			
	13		202.75				1.10		
144+13		400.00				0.00			
	7		100.46				10.37		
144+20		375.00				80.00			
	30		397.60				105.60		
144+50		273.47				185.51			
	50		321.61				218.32		
145+00		73.87				50.28			
	50		205.08				46.56		
145+50		147.62				0.00			
	50		304.36				0.09		
146+00		181.09				0.10		CUT	2575
	50		311.11				0.29	ROCK	0
146+50		154.91				0.21		R.FAC	.495
	25		143.44				0.19	FILL	418
146+75		154.91				0.21		F.FAC	1.15
	25		101.15				0.10	EX. C	2094
147+00		63.57				0.00			
	50		75.80				2.57		
147+50		18.29				2.78			
	50		27.61				8.93		
148+00		11.53				6.86			
	50		13.32				13.69		
148+50		2.86				7.93			
	50		5.62				7.34		
149+00		3.21				0.00			
	50		2.97				0.00		
149+50		0.00				0.00			

		TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT			
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.
TIMBER RIVER									
80+17		0.00				0.00			
	33		0.00				313.21		
80+50		0.00				512.53			
	50		0.00				1,161.37		
81+00		0.00				741.75			
	50		0.00				1,079.65		
81+50		0.00				424.27			
	50		0.00				527.37		
82+00		0.00				145.29			
	50		86.66				134.53		
82+50		93.59				0.00		CUT	2063
	50		821.80				0.00	ROCK	0
83+00		793.95				0.00		R.FAC	.495
	50		853.14				0.00	FILL	3216
83+50		127.44				0.00		F.FAC	1.15
	50		156.30				0.00	EX. F	1636
84+00		41.36				0.00			
	50		106.76				0.00		
84+50		73.94				0.00			
	25		36.20				0.00		
84+75		4.26				0.00			
	25		1.97				0.00		
85+00		0.00				0.00			
TIMBER HAWK									
58+17		0.00				0.00			
	16		0.00				21.89		
58+33		0.00				73.89			
	17		0.00				59.33		
58+50		0.00				114.56			
	50		1.07				125.48		
59+00		1.16				20.96			
	50		46.25				21.74	CUT	434
59+50		48.79				2.52		ROCK	0
	50		111.85				2.33	R.FAC	.495
60+00		72.01				0.00		FILL	231
	50		125.46				0.00	F.FAC	1.15
60+50		63.49				0.00		EX. C	169
	50		117.83				0.00		
61+00		63.77				0.00			
	25		31.84				0.00		
61+25		5.01				0.00			

		TOTAL EXCAVATION EARTH AND ROCK		ROCK EXCAVATION		EMBANKMENT			
STATION	DIST	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME	AREA	VOLUME
	FT.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.	S.F.	C.Y.

SUMMARY AND BALANCES

STATION TO STATION		TOT EXC EARTH & ROCK C.Y.	ROCK EXCAV C.Y.	EMBANK C.Y.	EXCESSES		ACUMULATIVE EXCESSES	
					CUT	FILL	CUT	FILL
MAINLINE								
132+00	137+00	840		732		2		2
137+50	141+38	0		9029		10384		10386
141+50	143+63							
144+00	149+50	2575		418	2094			8292
TIMBER RIVER								
80+17	85+00	2063		3216		1636		9928
TIMBER HAWK								
58+17	61+25	434		231	169			9759
	TOTALS	5912		13626				9758

REMARKS

EARTH AND ROCK EXCAVATION	5912
SOLID ROCK EXCAVATION	
EARTH EXCAVATION	5912
PLANIMETERED FILL	13626
LESS FACTORED SOLID ROCK	
LESS DISPLACEMENT OF ANY LARGE STRUCTURES	
NET PLANIMETERED FILL	13626
FACTOR	2044
PLANIMETERED FILL INCLUDING FACTOR	15670
MATERIALS AVAILABLE FOR FILLS	
EARTH EXCAVATION	5912
UNCLASSIFIED CHANNEL EXCAVATION (2666 x 75%)	2000
UNDERDRAIN EXCAVATION (401 x 80%)	321
COFFERDAM EXCAVATION (468 x 75%)	351
TOTAL MATERIAL AVAILABLE FOR FILL	8584
TOTAL FILL INCLUDING FACTOR	15670
TOTAL MATERIAL FOR FILL	8584
BORROW	7086
EXCESS EXCAVATION	

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238ew 3.xls
PROJECT LEADER: K. HIGGINS
DESIGNED BY: G. SHANGRAW
EARTHWORK SHEET

PLOT DATE: 10/25/2007
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER
SHEET 11 OF 144

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
1A	FORBES, R. JEFFREY	14,15	133+02.5 RT.	135+06.0 RT.	1024 S.F.±					STOCKBRIDGE			
			133+02.5 RT.	135+06.2 RT.			CONST. (T) 0.07A±						INCLUDES EROSION CONTROL,
													2954 S.F.±
			134+81.3 RT.	135+06.3 RT.			SLOPE (T) 46 S.F.±						
1B		14,15	133+02.5 CL.	135+05.6 RT.	0.11A±		ALL R. T. & I.						ROUTE 100 HWY. EASE.
2A	TIMBER HAWK	14,15	135+00.0 LT.	137+16.8 LT.	345 S.F.±			QCD	06-23-04	STOCKBRIDGE	64	330-	
	OWNERS ASSOCIATION INC.		133+55.1 LT.	136+91.0 LT.			CONST. (T) 1712 S.F.±					332	INCLUDES EROSION CONTROL,
			133+77.9 LT.	137+14.5 LT.			SLOPE (T) 0.10A±						4329 S.F.±
			136+20.0 LT.	136+70.0 LT.			CULVERT (P)						
			136+75 LT.				CULVERT (P)						
2B		15,16	135+05.6 RT.	142+00.9 LT.	0.27A±								
			135+06.0 RT.	140+94.0 RT.			SLOPE (P) 0.17A±						
			135+06.2 RT.	140+79.9 RT.			CONST. (T) 0.16A±						INCLUDES EROSION CONTROL
			136+70.0 RT.	136+75 RT.			CUL'S., DIT. & DR. (P) 35 S.F.±						
			137+49.0 RT.				REMOVE (T)						CULVERT
			137+90 RT.				CUL., DIT. & DR. (P) 18 S.F.±						
			140+45 RT.				CUL., DIT. & DR. (P) 18 S.F.±						
			140+74.3 RT.	140+94.0 RT.			REMOVE (T)						CULVERT
			140+79.9 RT.	141+42.8 RT.			CHANNEL (P) 976 S.F.±						
2C		15,16	137+71.5 LT.	138+89.6 LT.	176.0 S.F.±								
			TH 58 59+33.3 RT.	140+55.9 LT.			CONST. (T) 2033 S.F.±						INCLUDES EROSION CONTROL
			TH 58 59+07.5 RT.	140+39.9 LT.			SLOPE (T) 0.12A±						
			137+90.0 LT.				CUL., DIT. (P)						
			140+45 LT.				CUL. (P)						
			TRR 80+51.7 LT.	TRR 82+56.3 LT.			DRIVE (T)						
	•TRR = TIMBER RIVER RD		TRR 81+02.0 LT.	TRR 81+75.0 LT.			INSTALL (T)						GUARDRAIL
			TRR 82+00.0 LT.	TRR 82+41.9 LT.			CULVERT (T)						
2D		16	141+00.0 LT.				DRIVE (T)						22.0' WIDE MM 0268
			141+46.3 LT.	142+79.7 LT.			CONST. (T) 0.24A±						INCLUDES EROSION CONTROL
			141+36.0 LT.	141+50.0 LT.			CHANNEL (P) 123 S.F.±						
			TRR 80+27.9 RT.	TRR 80+58.1 RT.			INSTALL (T)						GUARDRAIL
			142+61.6 LT.	142+94.1 LT.			CHANNEL (P) 655 S.F.±						
			141+22.5 LT.	141+38.1 LT.			INSTALL & MAINTAIN (P) 80 S.F.±						WINGWALL, ABUTMENT & BRIDGE FOOTING
2E		14,15 16	132+00.0 CL.	143+05.3 LT.	1.09A±		ALL R. T. & I.						ROUTE 100 & TH58 HWY. EASE.
2F		15	137+14.5 LT.	137+72.5 LT.	157 S.F.±		ALL R.T. & I.						TH 58

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY
1	13	ADD TWO UTILITIES TO PROJECT. VERIZON NEW ENGLAND, INC. AND ROCHESTER ELECTRIC LIGHT & POWER CO. PER C.O. 9306.	06-26-03	M.J.R.	R.P.D.
2	12	PARCEL NO. 1B FORBES. CHANGE ENDING STA. OF ALL R.T. & I. FROM 135+06.0 CL. TO 135+05.6 RT. PER C.O. 9309.	08-11-03	M.J.R.	R.P.D.
3	12,15	PARCEL NO. 2 TIMBER HAWK OWNERS ASSOCIATION INC. MOVE TAKING TO FIRST LINE OF PARCEL 2A. MOVE SQUARE FOOTAGE OF 4,329 TO CORRECT LINE. REMOVE ALL R.T. & I. FROM PARCEL 2A AND MAKE IT PARCEL 2F. PER C.O. 9310.	08-11-03	M.J.R.	R.P.D.
4	16	PARCEL NO. 3 UNITED STATES OF AMERICA. ADD A LINE THAT IS PARALLEL TO THE CENTERLINE AND IS BETWEEN STA. 141+42.8 AND 142+43.6 CHANGE THE OFFSET DISTANCE FROM 190.4' TO 139.8' ON THE FLAG LOCATED AT STA. 143+40.8 PER C.O. 9311.	08-11-03	M.R.R.	R.P.D.
5	13	PARCEL NO. 4 GREEN. MOVE THE TAKING TO THE FIRST LINE. CHANGE ENDING STATION OF TAKE ON PARCEL NO. 4A FROM STA. 147+50.0 RT. TO STA. 149+00.0 RT. PER C.O. 9312.	08-11-03	M.J.R.	R.P.D.
6	1,15	GENERAL. REMOVE THE REFERANCE TO 11.0' WITHIN THE BEGIN MAINTENANCE AGREEMENT NOTE. REMOVE THE REFERENCE TO 28.1' WITHIN THE END MAINTENANCE AGREEMENT NOTE. SHOW MAINTENANCE AGREEMENTS ON TITLE PAGE. PER C.O. 9313.	08-11-03	M.J.R.	R.P.D.
7	13	PARCEL NO. 3 UNITED STATES OF AMERICA. CHANGE THE BEGINNING STATION OF THE DRIVE RIGHT FROM TRR 82+00.0 CL TO TRR 81+55.9 RT.	09-08-03	G.J.F.	R.P.D.
8	13,16	PARCEL NO. 4C GREEN. DELETE THIS PARCEL. PER C.O. 9322.	10-02-03	G.J.F.	R.P.D.
9	13	PARCEL NO. 8 ROCHESTER ELECTRIC LIGHT AND POWER COMPANY. CHANGE NAME TO CENTRAL VERMONT PUBLIC SERVICE CORPORATION. PER C.O. 9339.	02-27-04	M.J.R.	R.P.D.

DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
W- WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
(P) PERMANENT EASEMENT
(T) TEMPORARY EASEMENT

LEGEND
C&T (P) CLEARING & TRIMMING
CZ (P) CLEAR ZONE
CONST. (T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
PROPERTY LINE
TOP OF CUT
TOE OF SLOPE
UE (P) PERMANENT UTILITY EASEMENT

APPROVED: ROGER P. DUMAS DATE: 03/22/01
CHIEF, PLANS & TITLES

R.O.W. PLANS
STOCKBRIDGE
BRF 013-4(21)
R.O.W. SHEET 12 OF 17 SHEETS
SHEET 12 OF 144

ACCT. jsalvator1
M:\Projects\78f238\RightOfWay\rf238d.dgn
DATE PLOTTED 06-FEB-2008

STATE OF VERMONT
AGENCY OF TRANSPORTATION
RIGHT OF WAY PLANS
DETAIL SHEET

TABLE OF PROJECT PROPERTY ACQUISITION

PARCEL NO.	GRANTOR	SHEET NO.	BEGINNING STATION	ENDING STATION	TAKING	REM.	RIGHTS	TITLE TAKEN	DATE	TOWN OR CITY RECORDED	BK.	PG.	REMARKS
3A	UNITED STATES OF AMERICA	16,17	142+43.6 RT.	144+25.6 LT.	0.36A±			HED	06-07-05	STOCKBRIDGE	66	435-	
	DEPARTMENT OF AGRICULTURE,		143+07.5 RT.	143+50.5 RT.			CONST. (T) 388 S.F.±					442	INCLUDES EROSION CONTROL
	FOREST SERVICE		143+15.7 RT.	143+77.0 RT.			DITCH (P) 1395 S.F.±						
			143+26.9 RT.	143+31.5 RT.			INSTALL (T) 6 S.F.±						EROSION CONTROL
			143+29.8 RT.	143+81.8 RT.			CHANNEL (P) 243 S.F.±						
3B		16,17	143+30.9 LT.	144+34.3 LT.	3133 S.F.±		ALL R. T. & I.						ROUTE 100 HWY. EASE.
3C	•TRR = TIMBER RIVER RD	16	TRR 81+55.4 RT.	TRR 83+38.5 RT.	0.14A±		ALL R. T. & I.						ROUTE 100 HWY. EASE.
			TRR 81+55.9 RT.	TRR 84+75.0 CL.			DRIVE (T)						
			TRR 82+91.9 RT.	TRR 82+95.2 RT.			REMOVE (T)						GUARDRAIL
			TRR 82+98.6 RT.	TRR 83+27.0 RT.			SLOPE (T) 399 S.F.±						
			TRR 83+21.0 RT.	TRR 83+92.6 RT.			CONST. (T) 3627 S.F.±						INCLUDES EROSION CONTROL
			TRR 83+33.0 CL.				REMOVE (T)						CULVERT
			TRR 83+38.1 RT.	TRR 83+73.3 RT.			CHANNEL (P) 711 S.F.±						
			TRR 84+00.0 LT.	TRR 84+00.0 RT.			CUL., DIT. (T)						INCLUDES D.I.
			TRR 82+41.9 LT.	TRR 84+00.0 LT.			CULVERT (T)						
4A	GREEN, THEODORE J.W., JR. &	16,17	143+81.8 RT.	149+00.0 RT.	0.27A±					STOCKBRIDGE			
	BARBARA S.		143+46.4 RT.	147+48.4 RT.			CONST. (T) 1880 S.F.±						INCLUDES EROSION CONTROL
			143+50.5 RT.	146+27.0 RT.			DITCH (P) 0.14A±						
			146+27.0 RT.	147+45.9 RT.			SLOPE (T) 1510 S.F.±						
			147+75.1 RT.	148+71.0 RT.			CONST. (T) 209 S.F.±						
			148+06.1 RT.	148+53.1 RT.			SLOPE (T) 20 S.F.±						
4B		17	144+25.6 LT.	149+00.0 RT.	0.28A±		ALL R. T. & I.						ROUTE 100 HWY. EASE.
5	KETCHUM, ROBERT A. & GAIL J.	16,17	143+76.1 LT.	149+00.0 CL.	0.32A±		ALL R. T. & I.			STOCKBRIDGE			ROUTE 100 HWY. EASE.
			143+93.0 LT.	144+02.4 LT.			CHANNEL (P) 59 S.F.±						
			143+97.0 LT.	145+08.1 LT.			CONST. (T) 1001 S.F.±						INCLUDES EROSION CONTROL
			144+28.0 LT.	144+59.5 LT.			SLOPE (T) 50 S.F.±						
6A	TOWN OF STOCKBRIDGE	14,15	137+14.5 LT.	137+72.5 LT.	157 S.F.±			QCD	04-21-04	STOCKBRIDGE	64	6-7	
			TH 58 58+28.1 CL.	TH 58 61+25.0 CL.			APPROACH (T)						TH 58
6B		15	137+16.8 LT.	137+72.5 LT.	1375 S.F.±		ALL R. T. & I.						ROUTE 100 HWY. EASE.
7	VERIZON NEW ENGLAND, INC.												UTILITY
8	CENTRAL VERMONT PUBLIC SERVICE												UTILITY
	CORPORATION												
	MAINTENANCE AGREEMENT ZONE NO. 1	15	TH 58 58+11.0 CL.	TH 58 58+28.1 CL.									TH 58 LENGTH 17.1'±

REVISION NO.	SHEET	DESCRIPTION OF REVISION	DATE	MADE BY	APPROVED BY

ACCT. jsalvatori
M:\Projects\78f238\RightOfWay\rf238d.dgn
DATE PLOTTED 06-FEB-2008

DR.(P)- DRAINAGE RIGHT
DIT.(P)- DITCHING RIGHT
CH.(P)- CHANNEL RT.
DRIVE (T)- DRIVE RIGHT
CUL.(P)- CULVERT RIGHT
W- WATER SOURCES

PRESENT R.O.W.
TAKING WITHOUT ACCESS
TAKING WITHOUT ACCESS ALONG PROPERTY LINE
TAKING WITH ACCESS
PERMANENT EASEMENT
TEMPORARY EASEMENT

LEGEND
C&T (P) CLEARING & TRIMMING
CZ (P) CLEAR ZONE
CONST.(T) CONSTRUCTION EASEMENT
SR SR SLOPE RIGHTS
P L PROPERTY LINE
TOP OF CUT
TOE OF SLOPE
UE (P) PERMANENT UTILITY EASEMENT

APPROVED: ROGER P. DUMAS DATE: 03/22/01
CHIEF, PLANS & TITLES

R. O. W. PLANS

STOCKBRIDGE
BRF 013-4(21)
R.O.W. SHEET 13 OF 17 SHEETS
SHEET 13 OF 144

THIS PLAN IS FOR RIGHT-OF-WAY PURPOSES ONLY

VT 100
CURVE DATA #1
△ = 21°31′ 40.98″ LT
D = 6° 00′
R = 954.93′
T = 181.54′
L = 358.80′
E = 17.10′
BANK = 0.050 FT / FT

MAG 1991 N

TH-58
CURVE DATA #5
△ = 10° 52′ 44.71″ RT
D = 9° 32′ 57.47″
R = 600.00′
T = 57.13′
L = 113.93′
E = 2.71′
BANK = NORMAL CROWN

STA. 61+25
END TIMBER HAWK
ROAD CONSTRUCTION

PT#5 62+01.15

TH 58
TIMBER HAWK RD.
GRAVEL

62+16.29

62+00

PC#5 60+87.22

APPROACH (T)

6A

61+00

PI#5 61+44.35 BK =
61+44.02 AHD

TIMBER HAWK
OWNERS ASSOCIATION, INC.

2A

STA. 135+00
END APPROACH
BEGIN PROJECT
BRF 013-4(21)

TO R.O.W. SHEET 15 OF 17 SHEETS

135+00

MATCH LINE STA. 135+00

135+00

STA. 132+00.00
BEGIN APPROACH

Tel Pole #13-5

Underground Telephone goes from here to Pole # 2½

18"E
18"M

132+00.0
24.75 LT.

24.75'

TO JUNCTION
VT ROUTES 100 & 107

133+02.5 ℄

133+00

RIGHT-OF-WAY
300′

PC#1 133+13.83

VT RTE 100
100′

133+02.5 ℄

CONST. (T)
CONSTRUCTION
LIMITS (TYP)

SR(T)

135+00.0
28.0′ LT.

0.9′

2

2E

1B

[201.7′]

134+00

135+00.0
27.1′ LT.

N 9-34-33.93″ E

[203.1′]

[156.0′]

23.8′

47.5′

133+02.5
23.8′ RT.

CONST. (T)

133+50.0
28.00′ RT.

1A

FORBES, R. JEFFREY

GARDEN

PI#1 134+95.37 BK =
134+91.09 AHD

CONST. (T)

SR(T)

BEGIN R.O.W. PROJECT
BRF 013-4(21) STA. 132+00.0 ℄

CONSTRUCTION NOTES

1. THE REMOVAL & DISPOSAL OF EXISTING BITUMINOUS CONCRETE PAVEMENT SURFACES SHALL BE PAID FOR UNDER COMMON EXCAVATION. THE REMOVAL & DISPOSAL OF BITUMINOUS CONCRETE PAVEMENT ON THE BRIDGE SHALL BE PAID UNDER ITEM 529.10, REMOVAL OF BRIDGE PAVEMENT.
2. AN ACTIVE UNDERGROUND TELEPHONE LINE EXISTS BETWEEN STATIONS ML 131+77 LT. AND TIMBER RIVER ROAD 82+36 RT. THE EXACT LOCATION OF THIS BURIED LINE IS UNKNOWN.
3. ALL DRAINAGE FEATURES ARE FLAGGED WITH A NUMBERED HEXAGON. SEE DRAINAGE DETAIL SHEET FOR DISPOSITION OF EACH DRAINAGE ITEM.

EXAMPLE HEXAGON ⟨1⟩

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.

WHITE RIVER

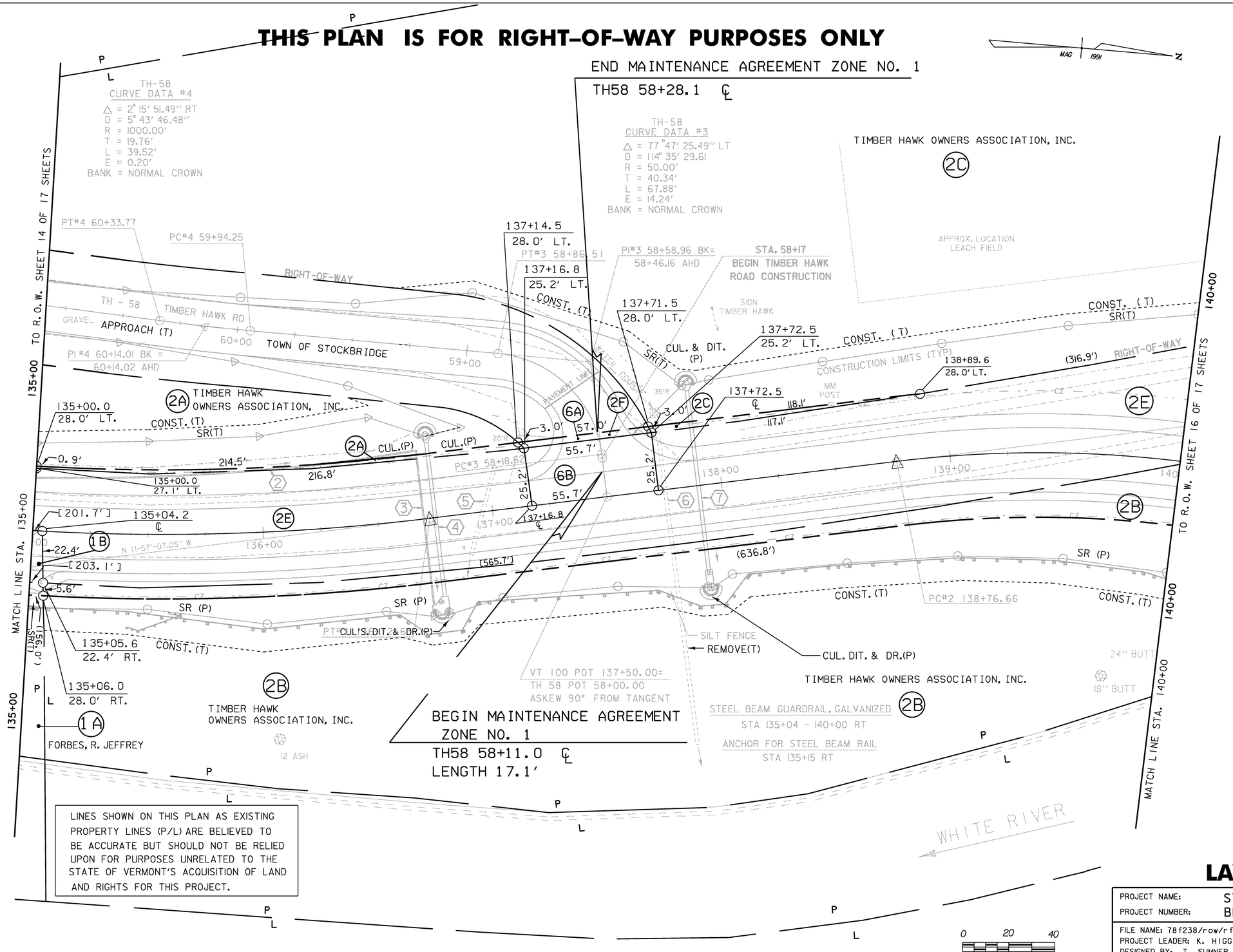
0 20 40
SCALE IN FEET

RIGHT-OF-WAY LAYOUT SHEET (1)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: 78f238/row/rf238zzz.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
R.O.W. SHEET 14 OF 17 SHEETS
PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 14 OF 144

THIS PLAN IS FOR RIGHT-OF-WAY PURPOSES 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.

RIGHT-OF-WAY LAYOUT SHEET (2)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: 78f238/row/rf238zzz.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
R.O.W. SHEET 15 OF 17 SHEETS

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T.FILLBACH
SHEET 15 OF 144

THIS PLAN IS FOR RIGHT-OF-WAY PURPOSES ONLY

TIMBER RIV. RD.
CURVE DATA #6
R = 120.00'
T = 63.95'
L = 117.51'
E = 15.98'
BANK = NORMAL CROWN
PC#6 80+28.27

TIMBER HAWK
OWNERS ASSOCIATION, INC.

2C

141+47.6
140.5' LT.

PI#6 80+92.21 BK =
80+81.82 AHD

APPROX. LOCATION
LEACH FIELD

INSTALL(T)

CONSTRUCTION LIMITS (TYP)

STA. 80+17
BEGIN TIMBER RIVER
ROAD CONSTRUCTION

DRIVE (T)
(316.9')

CONST. (T)
SR(T)
CUL.(P)

140+00

140+71.3
28.0' LT.

35'R

2E

CZ

N 11-57'-07.05" W
313.9'

141+58.8
120.4' LT.

INSTALL(T)

INSTALL &
MAINTAIN(P)

CHANNEL(P)

DRIVE(T)
129.6'

DRIVE (T)
CONST.(T)

2D

TIMBER HAWK
OWNERS ASSOCIATION,
INC.

(565.7')

TO R.O.W. SHEET 15 OF 17 SHEETS

8

9

2B

(636.8')

CUL. DIT.
& DR. (P)

SR(P)

CHANNEL(P)

CONST.(T)

REMOVE(T)

141+42.8
28.0' RT.

95.2'

142+43.6
28.0' RT.

130.6'

MATCH LINE STA. 140+00

140+00

2B

TIMBER HAWK
OWNERS ASSOCIATION,
INC.

VT 100 STA 141+00.00 =
TIMBER RIVER RD. 80+00.00
ASKEW 90° FROM
TANGENT TO CURVE

VT 100
CURVE DATA #2
△ = 90° 47' 58.62" RT
D = 11° 15'
R = 509.30'
T = 516.46'
L = 807.11'
E = 216.04'
BANK = 0.060 FT / FT

RETAINING WALL

STONE FILL, TYPE IV

WHITE RIVER

VT 100 143+61.25=
CHANNEL 111+86.98
ASKEW 63°-17'-28"
FROM TANGENT TO CURVE

CHANNEL(P)
INSTALL(T)

UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE
FOREST SERVICE

3A

CHANNEL LINE

GREEN, THEODORE J.W., JR. &
BARBARA S.

CONST.(T)

DITCH
(P)

143+81.8
28.0' RT

(285.4')
CONST.(T)
DITCH (P)

144+00

MATCH LINE STA. 144+00

4A

10

11

WOODS

REMOVE

STA 141+37.50
END ROADWAY
BEGIN BRIDGE

SILT FENCE

CONST.(T)

142+94.1
147.5' LT.

143+05.3
167.4' LT.

142+00.9
28.0' LT.

TEMPORARY CAUSEWAY TO PIER.
THE CORPS OF ENGINEERS SHALL
BE NOTIFIED OF ANY PROPOSED
CHANGES TO THE CONFIGURATION
AND/OR LOCATION OF THE CAUSEWAY
PRIOR TO BEGINNING WORK.

143+30.9
118.3' LT.

174.0'

UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE
FOREST SERVICE

STA 143+62.50
END BRIDGE
RESUME ROADWAY

3A

TIMBER RIVER RD.

CUL.(T)

DRIVE (T)

12

13

14

REMOVE(T)

CUL. DIT. (T)

83+00

82+00

81+00

84+00

85+00

85+50

STA. 84+75
END TIMBER RIVER
ROAD CONSTRUCTION

PI#2 143+93.12 BK =
141+67.31 AHD

252.1'

245'

218.8'

SR(T)

RIGHT-OF-WAY

EXIST.
VT RTE 100

CRAV
DR

2 CGR

CONST.(T)

3C

UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE,
FOREST SERVICE

CHANNEL(P)

25.1'

143+12.7
190.4' LT.

STONE FILL, TYPE IV

143+40.8
139.8' LT.

53.8'

[54.8']

[119.3']

24.8'

49.6'

143+76.1
117.3' LT.

STONE FILL, TYPE IV

143+93.0
139.8' LT.

34.7'

[124.8']

12" Ash

CHANNEL LINE
S20°43'40.6"E

10+00

9+00

8" Yellow
Birch

24"
Hemlock

5

KETCHUM, ROBERT A. & GAIL J.

(77.1')

(565.3')

CONST.(T)

SR (T)

SILT FENCE

3B

Tel
Pole

TO R.O.W. SHEET 17 OF 17 SHEETS

Underground
Telephone goes
from here to
Pole # 13-5

Tel
Pole
#13

Tel
Pole
#2½

BRIDGE RAILING, GALVANIZED NETC 2-RAIL
STA 141+37.5 - STA 143+62.5 LT
STA 141+37.5 - STA 143+65.5 RT

GUARD RAIL APPROACH SECTION, GALVANIZED NETC 2-RAIL
STA 141+07.5 - STA 141+37.5 RT
TIM. RIV. RD. STA 80+32.4 RT - ML STA 141+37.5 LT
STA 143+62.5 - STA 143+92.5 RT
STA 143+62.5 - STA 143+90.4 LT

STEEL BEAM GUARDRAIL, GALVANIZED
MAINLINE STA 140+00 RT - 141+38 RT
MAINLINE STA 143+91 LT - 144+00 LT
MAINLINE STA 143+92 RT - 144+00 RT
TIM. RIV. RD. STA 80+50 LT - TIM. RIV. RD. STA 81+73 LT
TIM. RIV. RD. STA 80+43 RT - TIM. RIV. RD. STA 81+16 RT

CAST-IN-PLACE CURB, TYPE B
ML 140+96.1 ~ 141+37.5 RT.
TIM. RIV. RD. 80+44.1 RT. ~ ML 141+37.5 LT.
ML 143+62.4 ~ 144+01.2 LT.
ML 143+62.6 ~ 144+03.9 RT.

ANCHOR FOR STEEL BEAM RAIL
TIM. RIV. RD. STA 80+60 LT
TIM. RIV. RD. STA 81+05 RT
TIM. RIV. RD. STA 81+63 LT

REMOVAL & DISPOSAL
OF GUARD RAIL
142+00 LT (139') ~ 142+94 LT (164')
142+32 LT (220') ~ 143+03 LT (182')
143+82 LT (102') ~ 144+39 LT (67')
143+89 LT (122') ~ 144+46 LT (95')

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.

0 20 40
SCALE IN FEET

MAG 1991

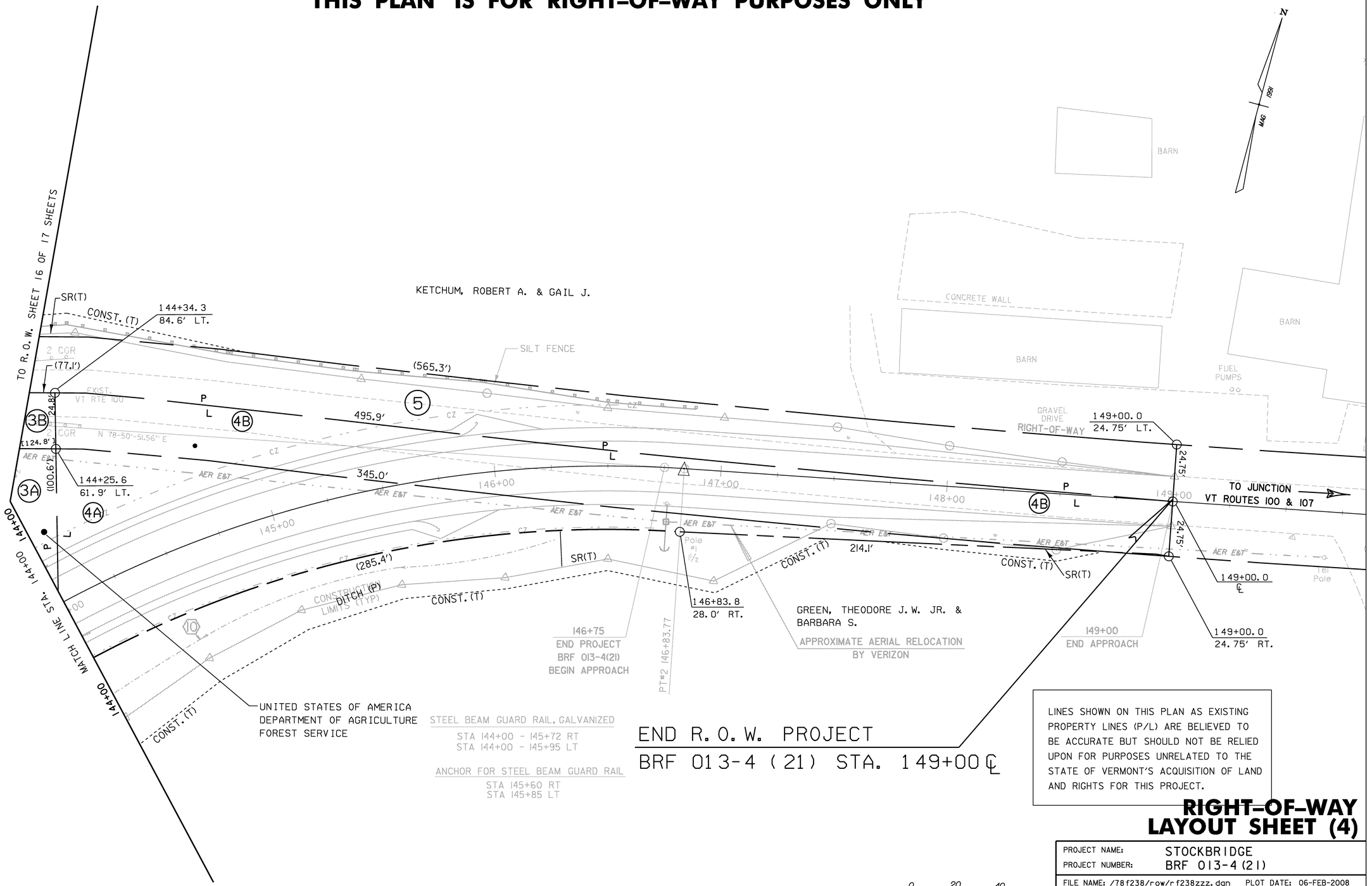
RIGHT-OF-WAY LAYOUT SHEET (3)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: 78f238/row/rf238zzz.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH

R.O.W. SHEET 16 OF 17 SHEETS
SHEET 16 OF 144

THIS PLAN IS FOR RIGHT-OF-WAY PURPOSES ONLY



STEEL BEAM GUARD RAIL, GALVANIZED
STA 144+00 - 145+72 RT
STA 144+00 - 145+95 LT

ANCHOR FOR STEEL BEAM GUARD RAIL
STA 145+60 RT
STA 145+85 LT

END R. O. W. PROJECT
BRF 013-4(21) STA. 149+00 ℄

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.

0 20 40
SCALE IN FEET

RIGHT-OF-WAY LAYOUT SHEET (4)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/row/rf238zzz.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH

R. O. W. SHEET 17 OF 17 SHEETS
SHEET 17 OF 144

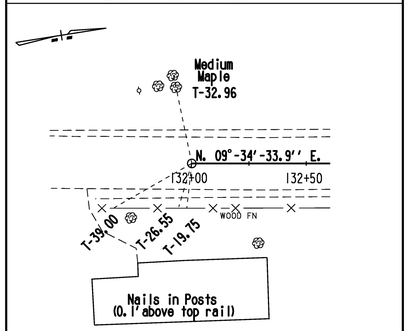
GPS CONTROL POINTS

ALL HORIZONTAL COORDINATES ARE ASSUMED.
THERE ARE NO TIES TO GPS CONTROL POINTS.

ALIGNMENT TIES

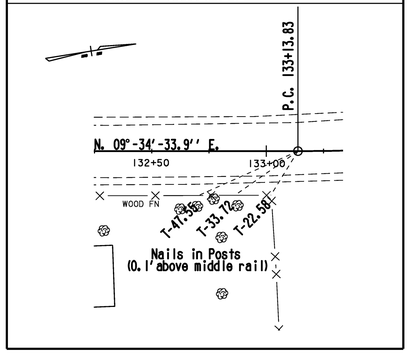
POT 132+00.00

NORTH = 8826.1040
EAST = 50113.1882



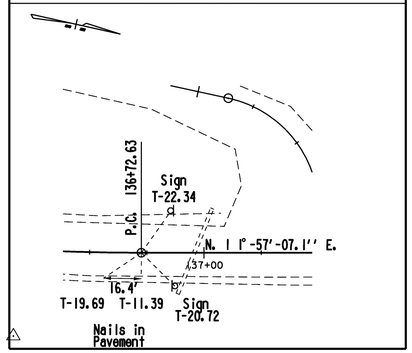
P.C. 133+13.83

NORTH = 8938.3454
EAST = 50132.1242



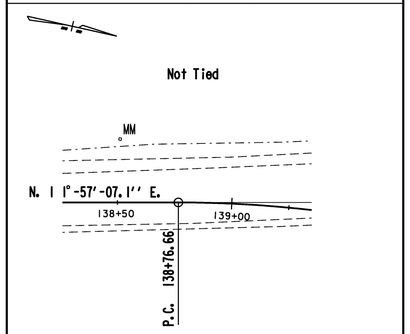
P.T. 136+72.63

NORTH = 9294.9628
EAST = 50124.7293



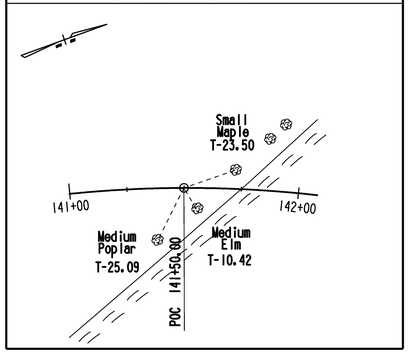
P.C. 138+76.66

NORTH = 9494.5684
EAST = 50082.4767



POC 141+50.00

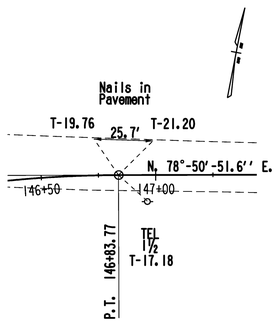
NORTH = 9764.1605
EAST = 50098.6041



ALIGNMENT TIES

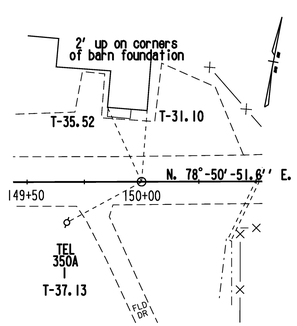
P.T. 146+83.77

NORTH = 10099.7227
EAST = 50482.2279



POT 150+00.00

NORTH = 10160.8871
EAST = 50792.4848



DATUM

VERTICAL NGVD 1929
HORIZONTAL ASSUMED
ADJUSTMENT

NOT TO SCALE

TIE SHEET

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238tie.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238tie.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T.FILLBACH
SHEET 18 OF 144

VT 100
CURVE DATA #1

△ = 21°31′ 40.98″ LT
D = 6° 00′
R = 954.93′
T = 181.54′
L = 358.80′
E = 17.10′
BANK = 0.050 FT / FT

MAG 1991

TH-58
CURVE DATA #5

△ = 10° 52′ 44.71″ RT
D = 9° 32′ 57.47″
R = 600.00′
T = 57.13′
L = 113.93′
E = 2.71′
BANK = NORMAL CROWN

STA. 131+25
END TIMBER HAWK
ROAD CONSTRUCTION

PT#5 62+01.15

TH 58
TIMBER HAWK RD.
GRAVEL

62+16.29

62+00

PC#5 60+87.22

61+00

PI#5 61+44.35 BK =
61+44.02 AHD

STA. 135+00
END APPROACH
BEGIN PROJECT
BRF 013-4(21)

12″APP

135+00

STA. 132+00.00
BEGIN APPROACH

Tel Pole #13-5

Underground Telephone goes from here to Pole # 2½

18″E
18″M

RIGHT-OF-WAY

PC#1 133+13.83

VT RTE 100

132+00

133+00

134+00

N 9-34′-33.93″ E

135+

CONSTRUCTION LIMITS (TYP)

2

AER E&T

DITCH ℄

SM SPR

WOOD FN

GRAV DR

GR DR

BARN

IP

3-3

6 WB

6″APP

6″ WB

2 SWFH

12″POP

SHED

GARDEN

PI#1 134+95.37 BK=
134+91.09 AHD

WHITE RIVER

0 20 40
SCALE IN FEET

CONSTRUCTION NOTES

1. THE REMOVAL & DISPOSAL OF EXISTING BITUMINOUS CONCRETE PAVEMENT SURFACES SHALL BE PAID FOR UNDER COMMON EXCAVATION. THE REMOVAL & DISPOSAL OF BITUMINOUS CONCRETE PAVEMENT ON THE BRIDGE SHALL BE PAID UNDER ITEM 529.10, REMOVAL OF BRIDGE PAVEMENT.

2. AN ACTIVE UNDERGROUND TELEPHONE LINE EXISTS BETWEEN STATIONS ML 131+77 LT. AND TIMBER RIVER ROAD 82+36 RT. THE EXACT LOCATION OF THIS BURIED LINE IS UNKNOWN.

3. ALL DRAINAGE FEATURES ARE FLAGGED WITH A NUMBERED HEXAGON. SEE DRAINAGE DETAIL SHEET FOR DISPOSITION OF EACH DRAINAGE ITEM.

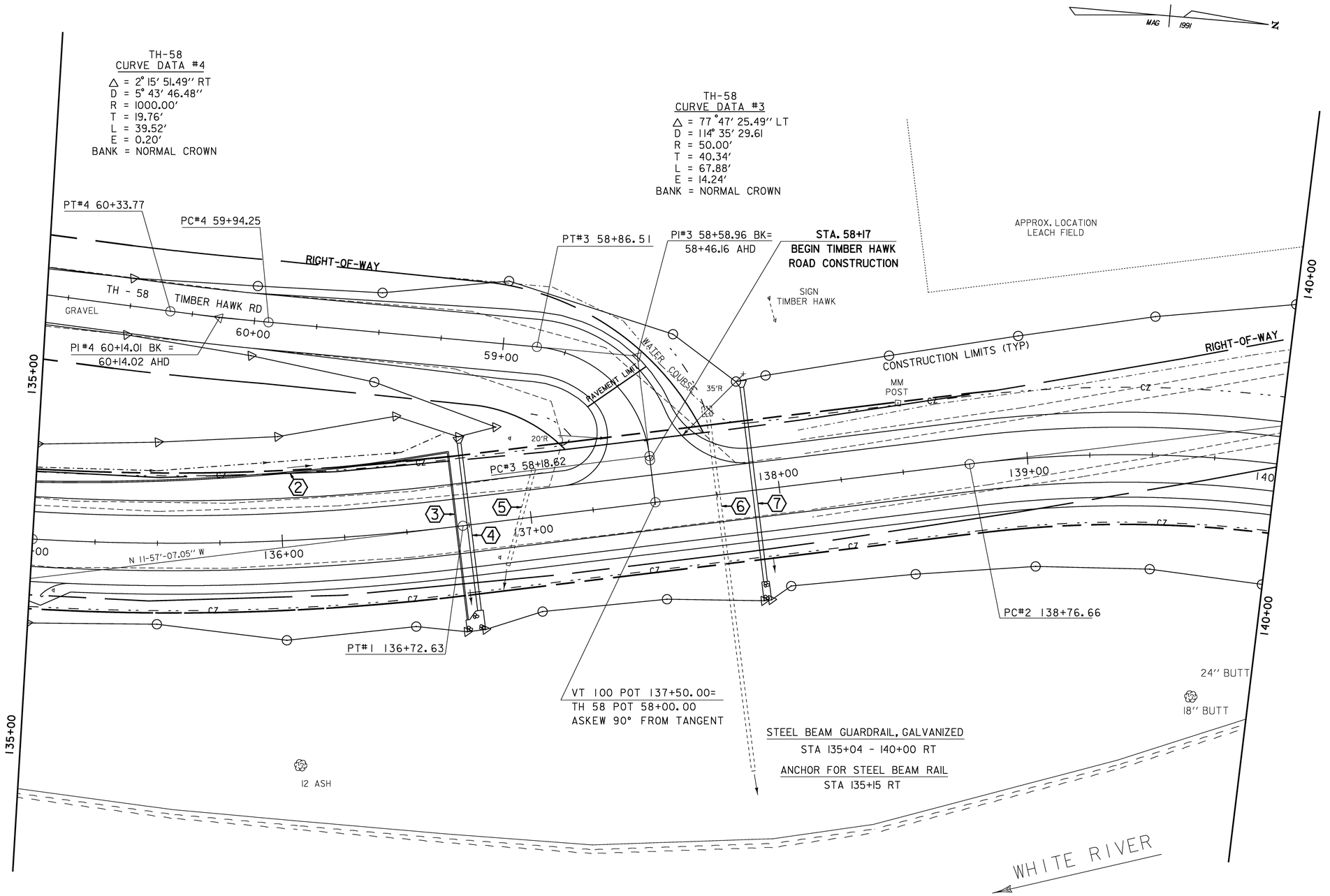
EXAMPLE HEXAGON ⟨1⟩

LAYOUT SHEET (1)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238bdr.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lal.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 19 OF 144



LAYOUT SHEET (2)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238bdr.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238la2.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH

TIMBER RIV. RD.
CURVE DATA #6
△ = 56° 06′29.30″ RT
D = 47° 44′ 47.34″
R = 120.00′
T = 63.95′
L = 117.51′
E = 15.98′
BANK = NORMAL CROWN
PC#6 80+28.27

ELIMINATED DO TO CONFLICT WITH EXISTING FORCE MAIN

WOODS

Tel Pole #3

PI#6 80+92.21 BK = 80+81.82 AHD

APPROX. LOCATION LEACH FIELD

STA. 80+17
BEGIN TIMBER RIVER ROAD CONSTRUCTION

CONSTRUCTION LIMITS (TYP)

TIMBER RIVER RD.

140+00

81+00

82+00

83+00

84+00

85+00

85+50

PT#6 81+45.77

N 11-57′-07.05″ W

35′R

30′R

CZ

RAVEMENT LIMIT

EXIST. VT RTE 100

AER EAT

RIGHT-OF-WAY

2 CGR

GRAV DR

PI#2 143+93.12 BK = 141+67.31 AHD

STA. 84+75
END TIMBER RIVER ROAD CONSTRUCTION

Tel Pole #2½

Underground Telephone goes from here to Pole # 13-5

REMOVE

STA 141+37.50
END ROADWAY
BEGIN BRIDGE

12″ ASH

24″ POP

18″POP

24″ POP

TEMPORARY CAUSEWAY TO PIER.
THE CORPS OF ENGINEERS SHALL BE NOTIFIED OF ANY PROPOSED CHANGES TO THE CONFIGURATION AND/OR LOCATION OF THE CAUSEWAY PRIOR TO BEGINNING WORK.

RETAINING WALL

STONE FILL, TYPE IV

VT 100 STA 141+00.00 =
TIMBER RIVER RD. 80+00.00
ASKEW 90° FROM
TANGENT TO CURVE

VT 100
CURVE DATA #2
△ = 90° 47′ 58.62″ RT
D = 11° 15′
R = 509.30′
T = 516.46′
L = 807.11′
E = 216.04′
BANK = 0.060 FT / FT

WHITE RIVER

VT 100 143+61.25=
CHANNEL 11+86.98
ASKEW 63°-17′-28″
FROM TANGENT TO CURVE

STA 143+62.50
END BRIDGE
RESUME ROADWAY

STONE FILL, TYPE IV

STONE FILL, TYPE IV

8″ Yellow Birch

24″ Hemlock

12″ Ash

CHANNEL LINE
S20^43′40.6″E

9+00

10+00

12+00

13+00

14+00

141+00

142+00

143+00

144+00

N 78-50′-51.56″ E

Tel Pole

IP

IP

BRIDGE RAILING, GALVANIZED NETC 2-RAIL
STA 141+37.5 - STA 143+62.5 LT
STA 141+37.5 - STA 143+65.5 RT

GUARD RAIL APPROACH SECTION, GALVANIZED NETC 2-RAIL
STA 141+07.5 - STA 141+37.5 RT
TIM. RIV. RD. STA 80+32.4 RT - ML STA 141+37.5 LT
STA 143+62.5 - STA 143+92.5 RT
STA 143+62.5 - STA 143+90.4 LT

STEEL BEAM GUARDRAIL, GALVANIZED
MAINLINE STA 140+00 RT - 141+38 RT
MAINLINE STA 143+91 LT - 144+00 LT
MAINLINE STA 143+92 RT - 144+00 RT
TIM. RIV. RD. STA 80+50 LT - TIM. RIV. RD. STA 81+73 LT
TIM. RIV. RD. STA 80+43 RT - TIM. RIV. RD. STA 81+16 RT

CAST-IN-PLACE CURB, TYPE B
ML 140+96.1 ~ 141+37.5 RT.
TIM. RIV. RD. 80+44.1 RT. ~ ML 141+37.5 LT.
ML 143+62.4 ~ 144+01.2 LT.
ML 143+62.6 ~ 144+03.9 RT.

ANCHOR FOR STEEL BEAM RAIL
TIM. RIV. RD. STA 80+60 LT
TIM. RIV. RD. STA 81+05 RT
TIM. RIV. RD. STA 81+63 LT

REMOVAL & DISPOSAL OF GUARD RAIL
142+00 LT (139′) ~ 142+94 LT (164′)
142+32 LT (220′) ~ 143+03 LT (182′)
143+82 LT (102′) ~ 144+39 LT (67′)
143+89 LT (122′) ~ 144+46 LT (95′)

MAG 1991

N

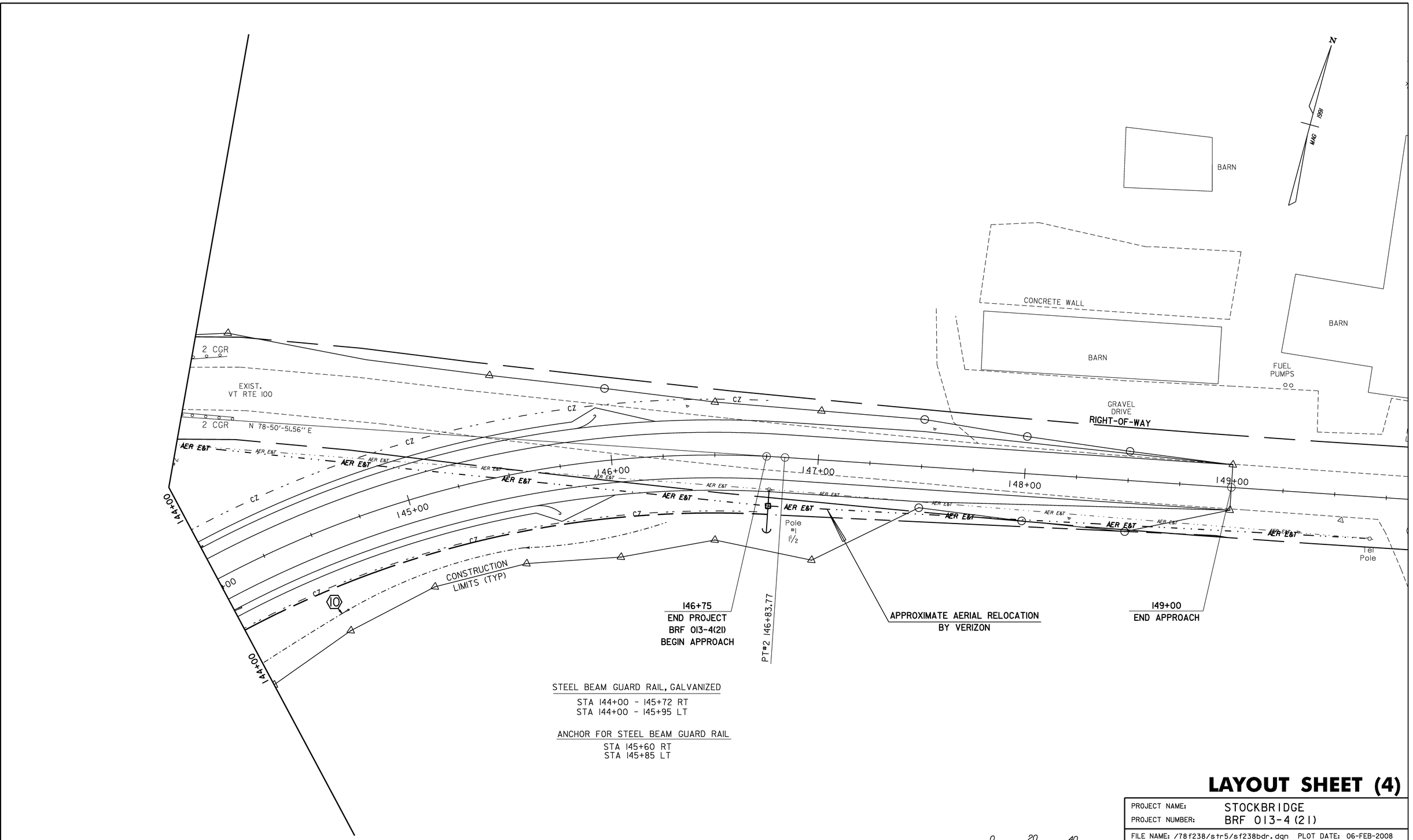
0 20 40
SCALE IN FEET

LAYOUT SHEET (3)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238bdr.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238la3.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH



STEEL BEAM GUARD RAIL, GALVANIZED

STA 144+00 - 145+72 RT
STA 144+00 - 145+95 LT

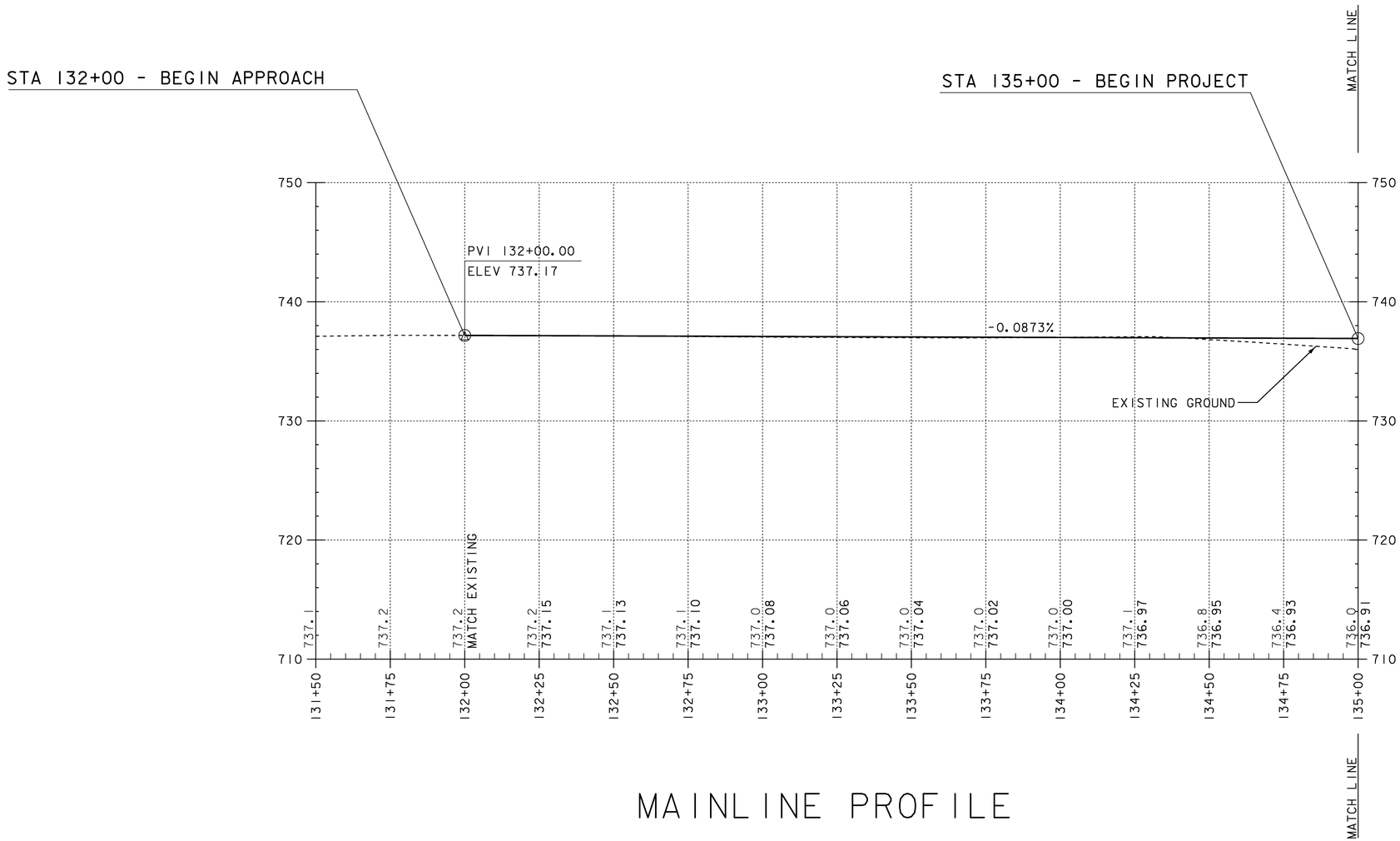
ANCHOR FOR STEEL BEAM GUARD RAIL

STA 145+60 RT
STA 145+85 LT

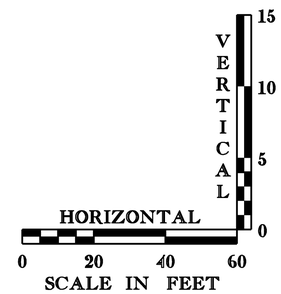
LAYOUT SHEET (4)

0 20 40
SCALE IN FEET

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)
FILE NAME: /78f238/str5/sf238bdr.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER	CHECKED BY: T. FILLBACH
sf238la4.i	SHEET 22 OF 144



MAINLINE PROFILE



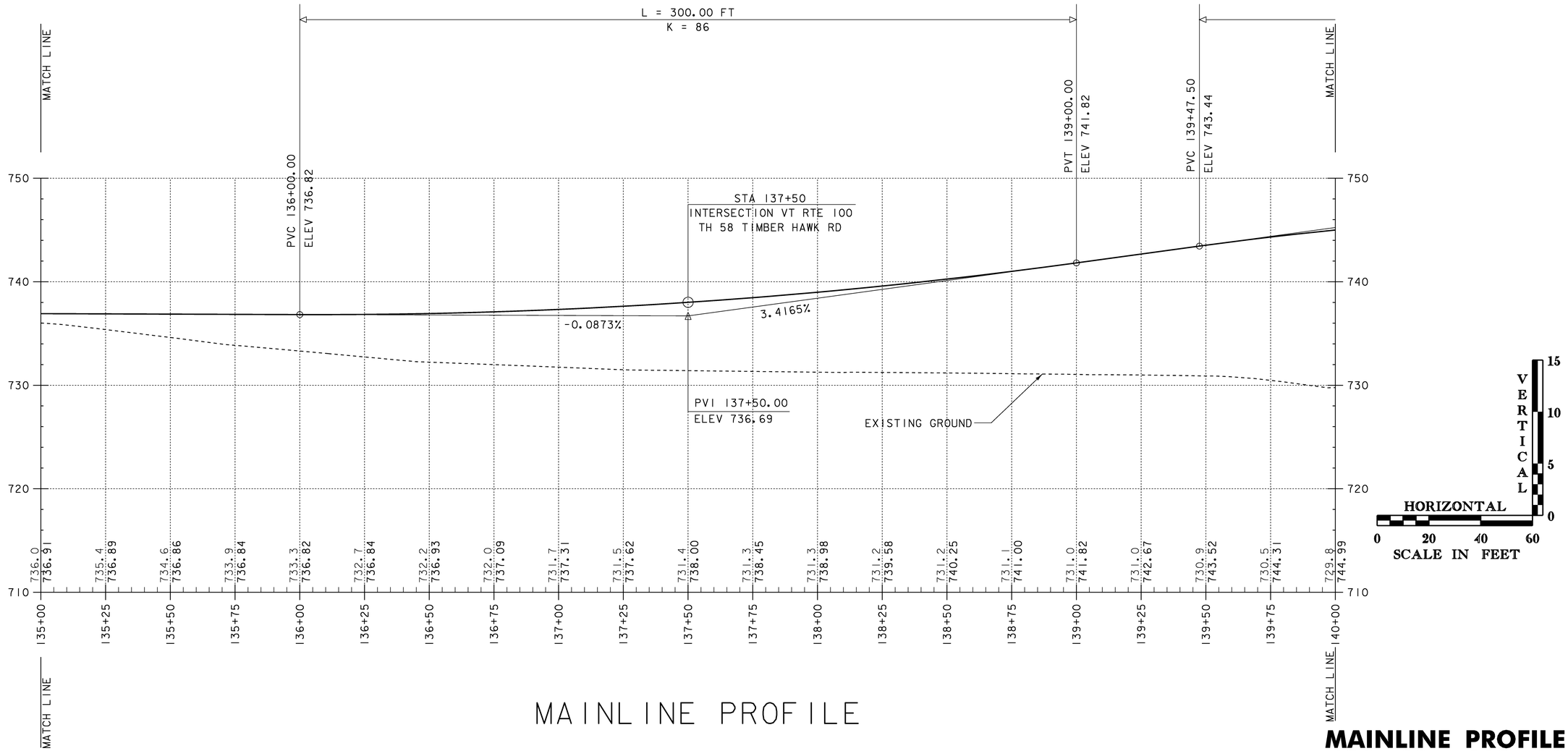
THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GRADES FOR THE NEW ALIGNMENT.

MAINLINE PROFILE
131+50 – 135+00

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/df238xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
df238p01.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: G. SHANGRAW
SHEET 23 OF 144



MAINLINE PROFILE

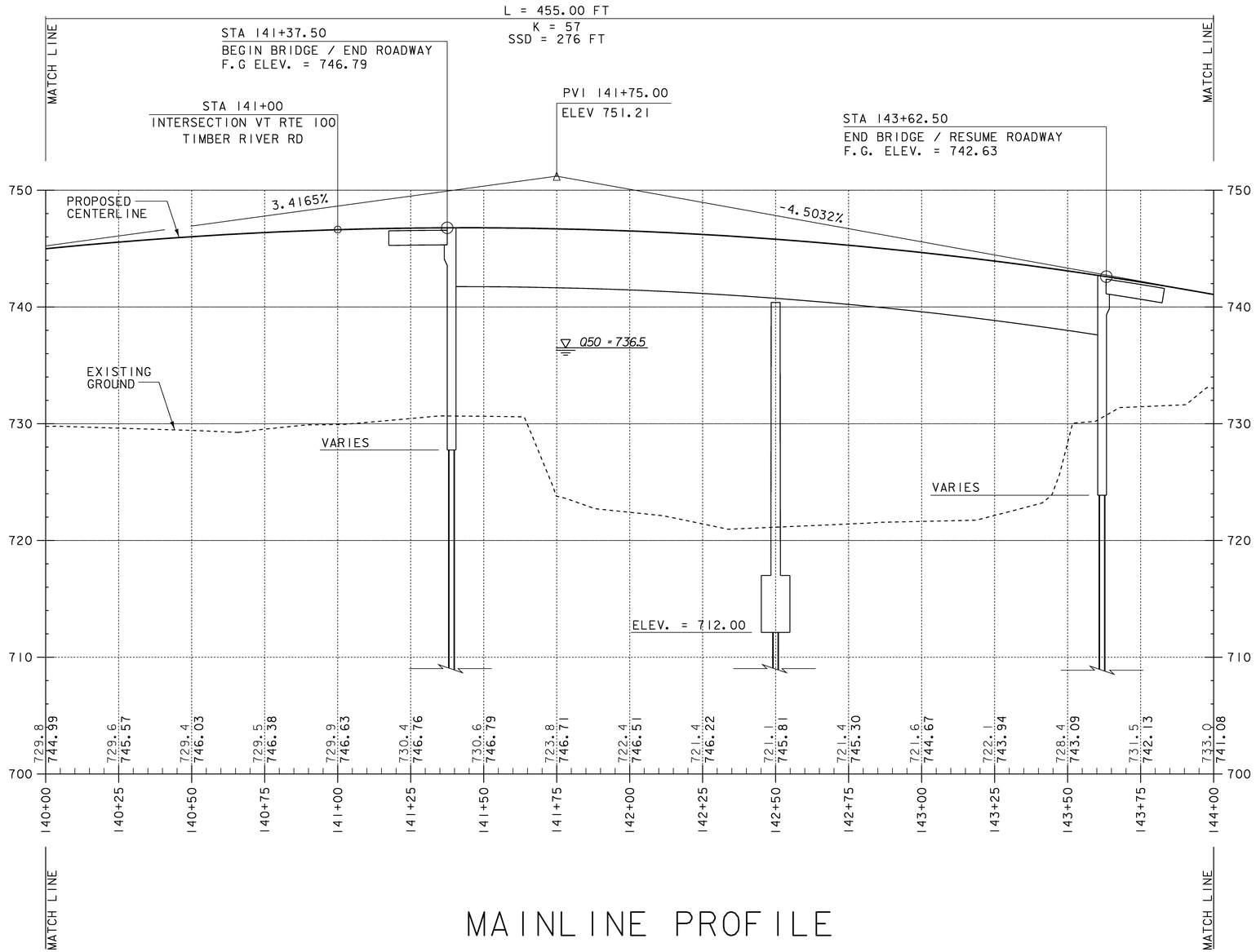
MAINLINE PROFILE 135+00 – 140+00

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GRADES FOR THE NEW ALIGNMENT.

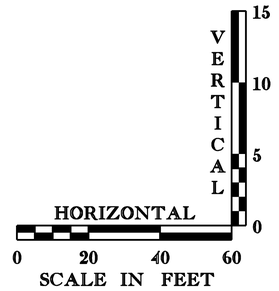
PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/df238xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
df238p02.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: G. SHANGRAW



MAINLINE PROFILE



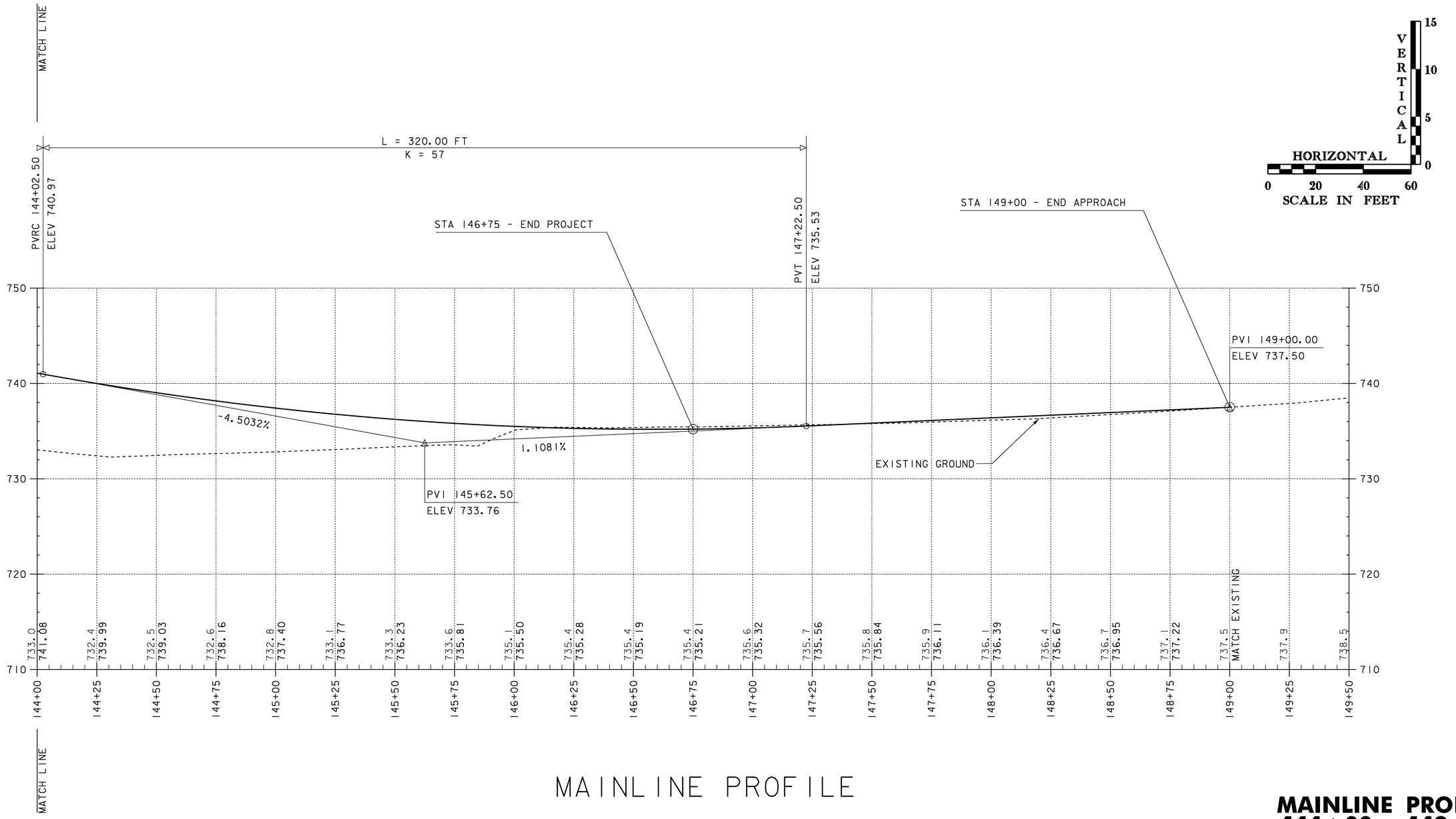
MAINLINE PROFILE
140+00 – 144+00

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GRADES FOR THE NEW ALIGNMENT.

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/df238xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
df238p03.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: G. SHANGRAW
SHEET 25 OF 144



MAINLINE PROFILE

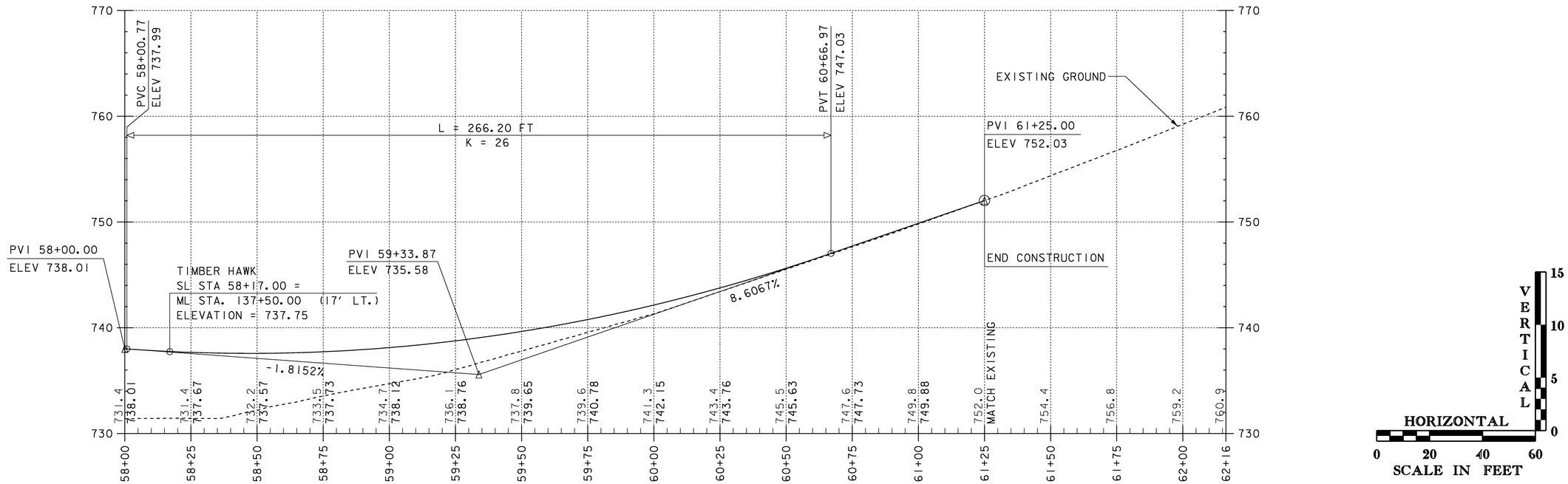
THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GRADES FOR THE NEW ALIGNMENT.

MAINLINE PROFILE
144+00 – 149+50

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/df238xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
df238p04.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: G. SHANGRAW
SHEET 26 OF 144



TH-58 TIMBER HAWK ROAD

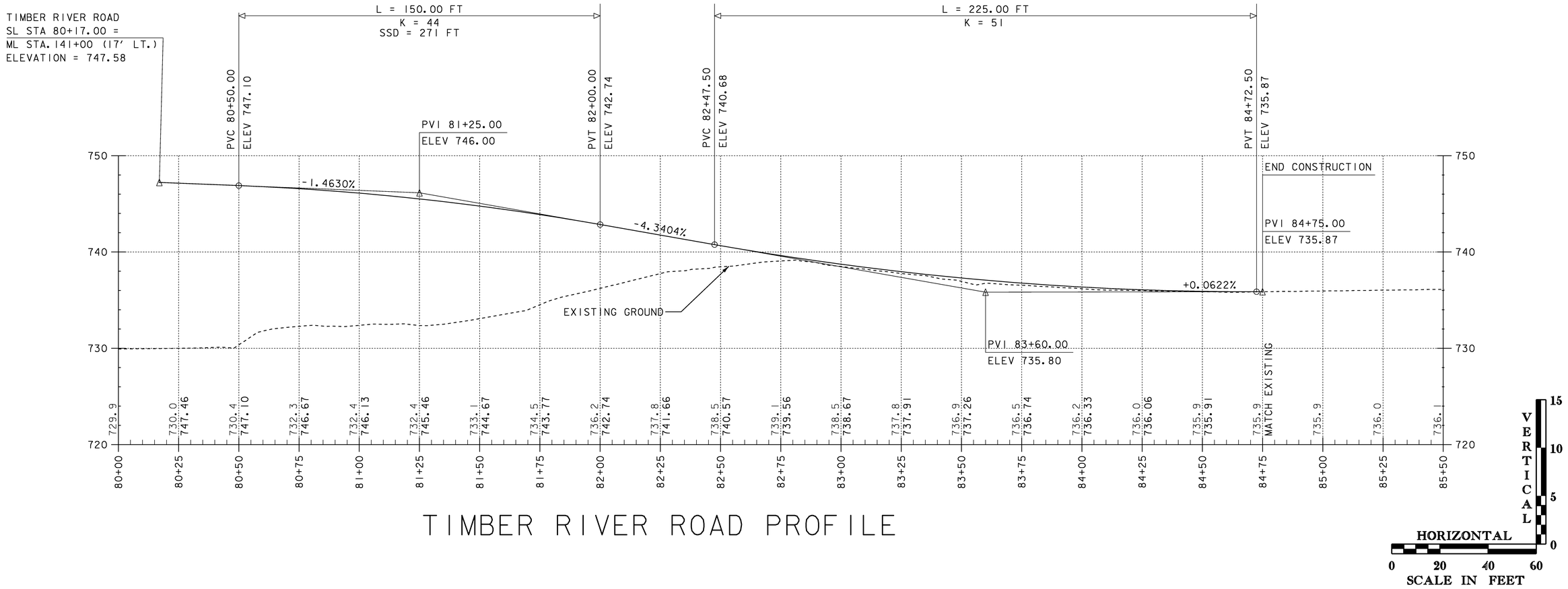
THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GRADES FOR THE NEW ALIGNMENT.

PROFILE TIMBER HAWK ROAD

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/df238xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
df238p1l.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: G. SHANGRAW
SHEET 27 OF 144



TIMBER RIVER ROAD PROFILE

THE GRADES SHOWN TO THE NEAREST TENTH ARE THE ORIGINAL GROUND ELEVATIONS ALONG THE PROPOSED ALIGNMENT. THE GRADES SHOWN TO THE NEAREST HUNDREDTH ARE THE PROPOSED GRADES FOR THE NEW ALIGNMENT.

PROFILE TIMBER RIVER ROAD

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/df238xsl.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
df238prl.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: G. SHANGRAW

STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET

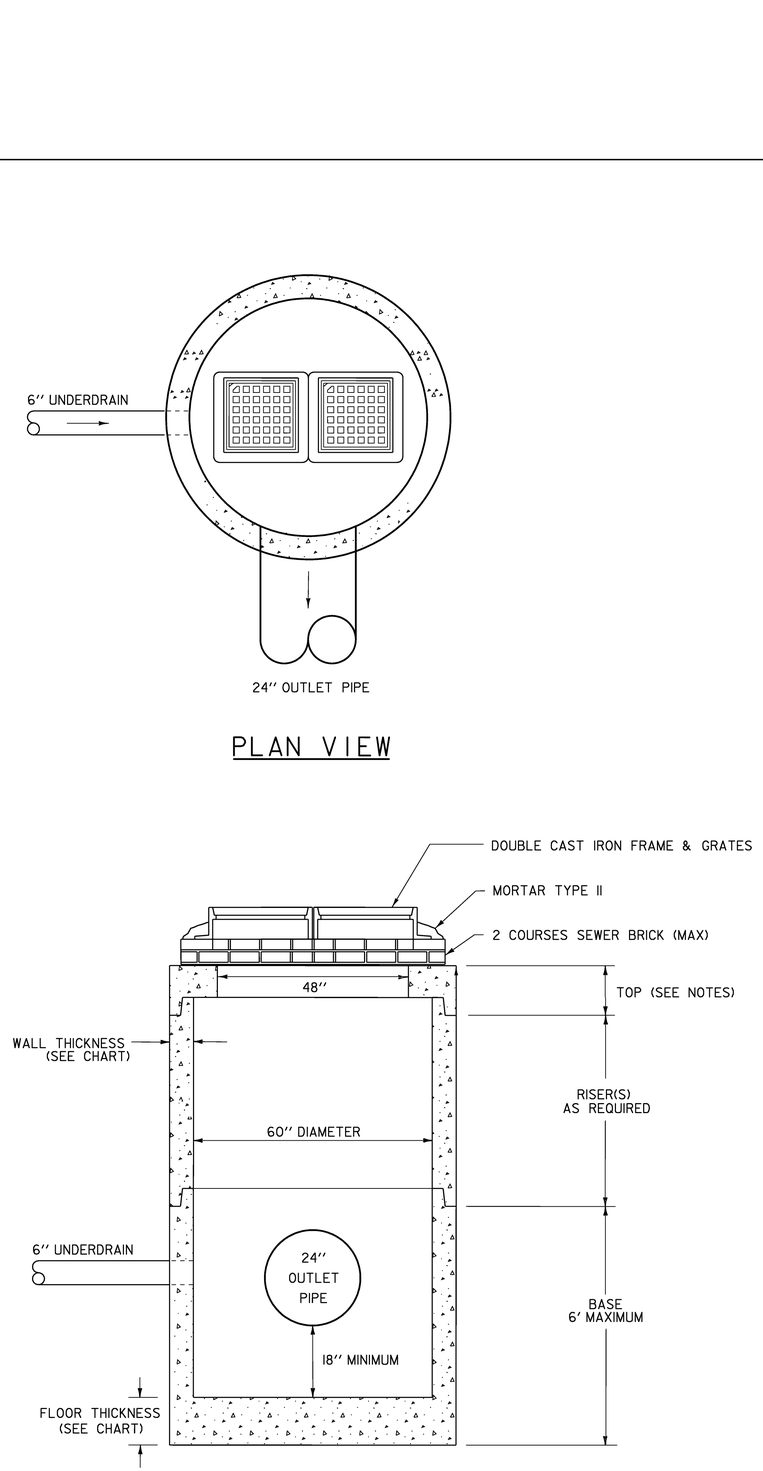
STATION	STATION	POS.	FLAG NUMBER	INLET/OUTLET TYPE		DITCH		PIPE ARCH			PIPE		ALLOWABLE OPTIONS						PIPE ELBOW	ES	CB	PRCDI	DEPTH DI	CONC CLASS B	REINF STEEL	DI GRATE	CHAN ELEV	CRM	TRENCH EXCAVATION		COMM EXC	UNC CHAN EXC	STRUCT EXCAV	GRAN BKFILL STRUCT	GRAN BORR	GEOTEX UNDER STONE	STONE FILL		MARKER POSTS		UNDER-DRAIN	FLUSH-ING BASIN	REMARKS
				INLET	OUTLET	IN	OUT	SPAN IN	RISE IN	L FT	D IN	L FT	PCCSP TH	CAAP TH	RCP CL	CSP TH	CPEP SL	PCCSP PI TH	NO. DEG	EA	EA		FT	CY	LBS	TYPE	EA	CY	EARTH CY	ROCK CY	CY	CY	CY	CY	CY	CY	SY	CY	TYPE	LT EA	RT EA	LF	EA	
130+50		CL	1																																								EXISTING 18" CGMP - DO NOT DISTURB
133+50	136+70	LT	2																									114.0											1		320	1	6" UNDERDRAIN W/ FLUSHING BASIN AT 133+50 LT.
136+70		LT - RT	3																									11.0											1		68	1	6" UNDERDRAIN CARRIER PIPE W/ FLUSHING BASIN AT 136+70 LT
136+75		LT - RT	4	ES	SF-II						18	68		0.060			X			1								8.0								19.0	5.0	II	1	1			OPTION PIPE W/ END SECTION @ INLET AND 7' X 9' STONE PAD TYPE II @ OUTLET
136+90	137+04	RT - LT	5																									13.0															EXISTING 15" CGMP - REMOVE
137+75		LT - RT	6																									79.0	12.0														EXISTING 18" ACCGMP & RCDI - REMOVE
137+90		LT - RT	7	ES	SF-II						18	78		0.060			X			1								3.0								12.0	3.0	II	1	1			OPTION PIPE W/ END SECTION @ INLET AND 3 'X 7' STONE PAD TYPE II @ OUTLET
140+50		LT - RT	8	ES	SF-II						18	114		0.060			X			1								2.0								11.0	3.0	II	1	1			OPTION PIPE W/ END SECTION @ INLET AND 3' X 7' STONE PAD TYPE II @ OUTLET
140+42	140+93	LT - RT	9																									59.0															EXISTING 18" ACCGMP - REMOVE
143+25	146+25	RT	10																									0.0															SPECIAL DITCH - PAID UNDER COMMON EXCAVATION
143+96		RT - LT	11	PCDI	SF-II						18	52		0.060			X					1-DI				1-E		7.0								23.0	3.0	II	1				OPTION PIPE W/ PRECAST DROP INLET @ INLET 3' X 7' STONE PAD TYPE II @ OUTLET
82+00	84+00	LT.	12	ELIMINATED																								77.0											1		200	1	6" UNDERDRAIN - OUTLET INTO PRECAST DROP INLET AT 84+00 LT
83+31	83+36	LT- RT	13																									9.0															EXISTING 24" CGMP - REMOVE
84+00		LT - RT	14	PCCB	SF-II						24	40		0.060			X					1-CB				2-D		19.0								8.0	4.0	II	1	1			OPTION PIPE W/ PRECAST CATCH BASIN @ INLET WITH TWO (2) CAST IRON GRATES - TYPE D AND 5'X7' STONE PAD TYPE II @ OUTLET
											18 24	312 40		0.060 0.060			X X			3		1-DI 1-CB				1-E 2-D		401.0	12.0							73.0	18.0	II	8	4	520 U 68 C	3	

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/df238drg.xls
PROJECT LEADER: K. HIGGINS
DESIGNED BY: G. SHANGRAW
DRAINAGE DETAIL SHEET

PLOT DATE: 1/11/2008
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER

PLAN VIEW

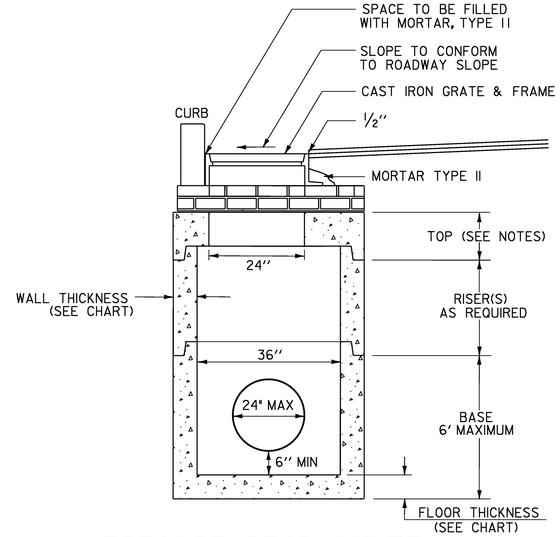


PRECAST CATCH BASIN WITH DOUBLE GRATES

N. T. S.

NOTES

1. ALL PRECAST CONCRETE DROP INLETS AND CATCH BASINS SHALL BE DESIGNED AND MANUFACTURED IN ACCORDANCE WITH SUBSECTION 705.04.
2. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL INVERT ELEVATIONS, PIPE SIZES AND LOCATIONS SHOWN PRIOR TO ORDERING THE PRECAST COMPONENTS.
3. SEE STANDARDS D-9 AND D-15 FOR CAST IRON FRAME AND GRATE DETAILS.
4. THE TOP SECTIONS MAY BE EITHER THE FLAT TOPS AS SHOWN OR CONE SECTIONS. IF CONE SECTIONS ARE USED THEY MAY EITHER BE CONCENTRIC OR ECCENTRIC. PIPES ARE NOT PERMITTTED TO ENTER CONE SECTIONS.
5. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROVE JOINT 4" HIGH AT AN ANGLE OF 11 DEGREES CENTERED IN THE WIDTH OF THE JOINT. ALL SECTIONS SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT.
6. ALL SECTIONS WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 1'-0" OF OUTSIDE SURFACE BETWEEN HOLES. NO MORE THAN 75% OF A HORIZONTAL CROSS SECTION SHALL BE HOLES. HOLES SHALL BE NO CLOSER THAN 3" TO A JOINT.



PRECAST DROP INLET
W/ VERTICAL CURB

N. T. S.

SIZING CHART

DIAMETER	WALL THICKNESS	FLOOR THICKNESS
48" OR SMALLER	5"	6"
60"	6"	8"
72"	7"	8"
84"	8"	10"
96"	9"	10"

Not To Scale

PRECAST DROP INLET & PRECAST CATCH BASIN DETAILS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-1(21)

FILE NAME: /78f238/str5/precastDI.dgn
PROJECT LEADER: K, HIGGINS
DESIGNED BY: W. SYMONDS
sf238precastdi.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G, SHANGRAW
CHECKED BY: T. SUMNER
SHEET 30 OF 144

MAG 1991

N

STA. 132+00.00
BEGIN APPROACH

RIGHT-OF-WAY

VT RTE 100

132+00

133+00

134+00

135

CONSTRUCTION LIMITS (TYP)

STA. 135+00
END APPROACH
BEGIN PROJECT
BRF 013-4(21)

135+00

STA. 61+25
END TIMBER HAWK
ROAD CONSTRUCTION

62+16.29

62+00

61+00

135+00

AER EBT

DURABLE 4'' WHITE LINE, THERMOPLASTIC
STA 132+00 - 135+00 RT & LT
DURABLE 4'' YELLOW LINE, THERMOPLASTIC
STA 132+00 - 135+00 (DBL)

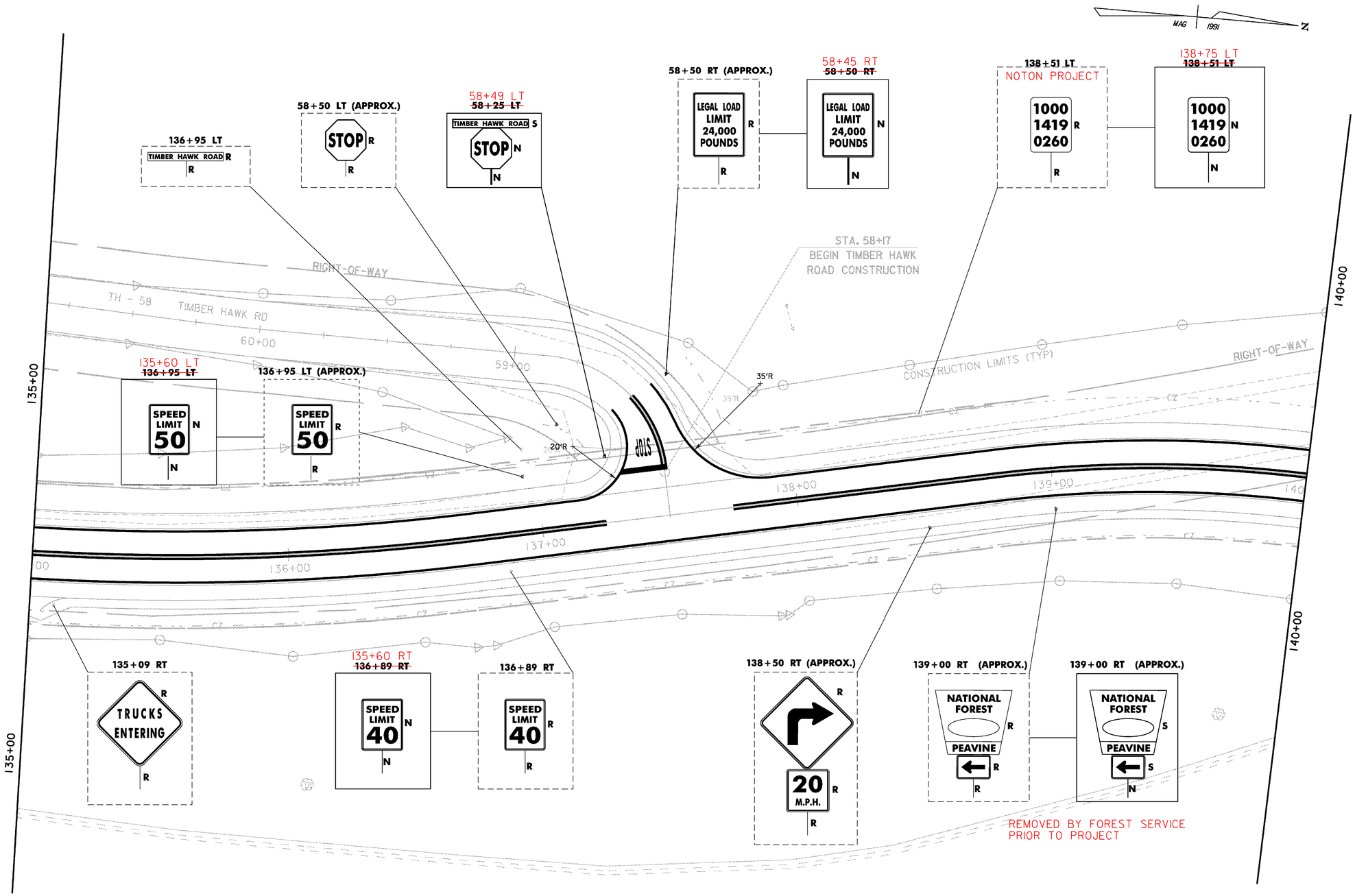
SIGN LEGEND
N = NEW
R = REMOVE
S = SALVAGE

0 20 40
SCALE IN FEET

SIGNS & PAVEMENT MARKINGS LAYOUT (1)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str/sf238sgnbdr.dgn PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER CHECKED BY: T. FILLBACH
sf238sign1.i SHEET 31 OF 144



DURABLE 4 INCH WHITE LINE, THERMOPLASTIC

STA 135+00 RT - 140+00 RT
STA 135+00 LT - 58+50 LT
STA 58+50 RT - 140+00 LT

DURABLE 24 INCH STOP BAR, THERMOPLASTIC

T.H. 58 STA 58+19 LT

DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC

STA 135+00 - 137+25 ℄ (DBL)
STA 137+75 - 140+00 ℄ (DBL)
T.H. 58 58+18 - 58+50 LT (DBL)

DURABLE LETTER OR SYMBOL, THERMOPLASTIC

T.H. 58 STA 58+28 LT

SIGN LEGEND

N =	NEW
R =	REMOVE
S =	SALVAGE

0 20 40
SCALE IN FEET

SIGNS & PAVEMENT MARKINGS LAYOUT (2)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str/sf238sgnbdr.dgn PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER CHECKED BY: T. FILLBACH
sf238sign2.i SHEET 32 OF 144

80+27 LT
~~80+25 LT~~
STOP N
N

82+65 LT
~~82+75 LT~~
N
N N

82+88 LT
STOP R
R
NOT ON PROJECT

MAG 1991
N

STA. 80+17
BEGIN TIMBER RIVER
ROAD CONSTRUCTION

CONSTRUCTION LIMITS (TYP)

TIMBER RIVER RD.

STA. 84+75
END TIMBER RIVER
ROAD CONSTRUCTION

142+55 LT & 142+59 LT
R(2)
R(2) R(2)

RIGHT-OF-WAY

142+70 LT (APPROX)
BRIDGE
130
VT 100
R
R

80+68 RT
~~80+75 RT~~
LEGAL LOAD
LIMIT
24,000
POUNDS
N
N

REMOVE

35'R
30'R
60'S

STA 141+37.50
END ROADWAY
BEGIN BRIDGE

144+22 LT
~~143+75 LT~~
BRIDGE
130
VT 100
N
N

143+92 LT
BRIDGE
130
VT 100
R
R
NOT ON PROJECT

141+25 RT
BRIDGE
130
VT 100
N
N

143+85 RT
~~143+83 RT~~
SPEED
LIMIT
40
N
N

STA 143+62.50
END BRIDGE
RESUME ROADWAY

CHANNEL LINE
S20°43'40.6"E

140+00
141+00
142+00
143+00
144+00
80+00
81+00
82+00
83+00
84+00
85+00
85+50
9+00
10+00
11+00
12+00
13+00
14+00

DURABLE 4 INCH WHITE LINE, THERMOPLASTIC
STA 140+00 RT - 144+00 RT
STA 140+00 LT - 80+50 LT
STA 80+50 RT - 144+00 LT

DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC
STA 140+00 - 140+75℄ (DBL)
STA 141+25 - 144+00 ℄ (DBL)
TIM. RIV. RD. 80+18 - 80+50 (DBL)

DURABLE 24 INCH STOP BAR, THERMOPLASTIC
TIM. RIV. RD. STA 80+19 LT

DURABLE LETTER OR SYMBOL, THERMOPLASTIC
TIM. RIV. RD. STA 80+25 LT

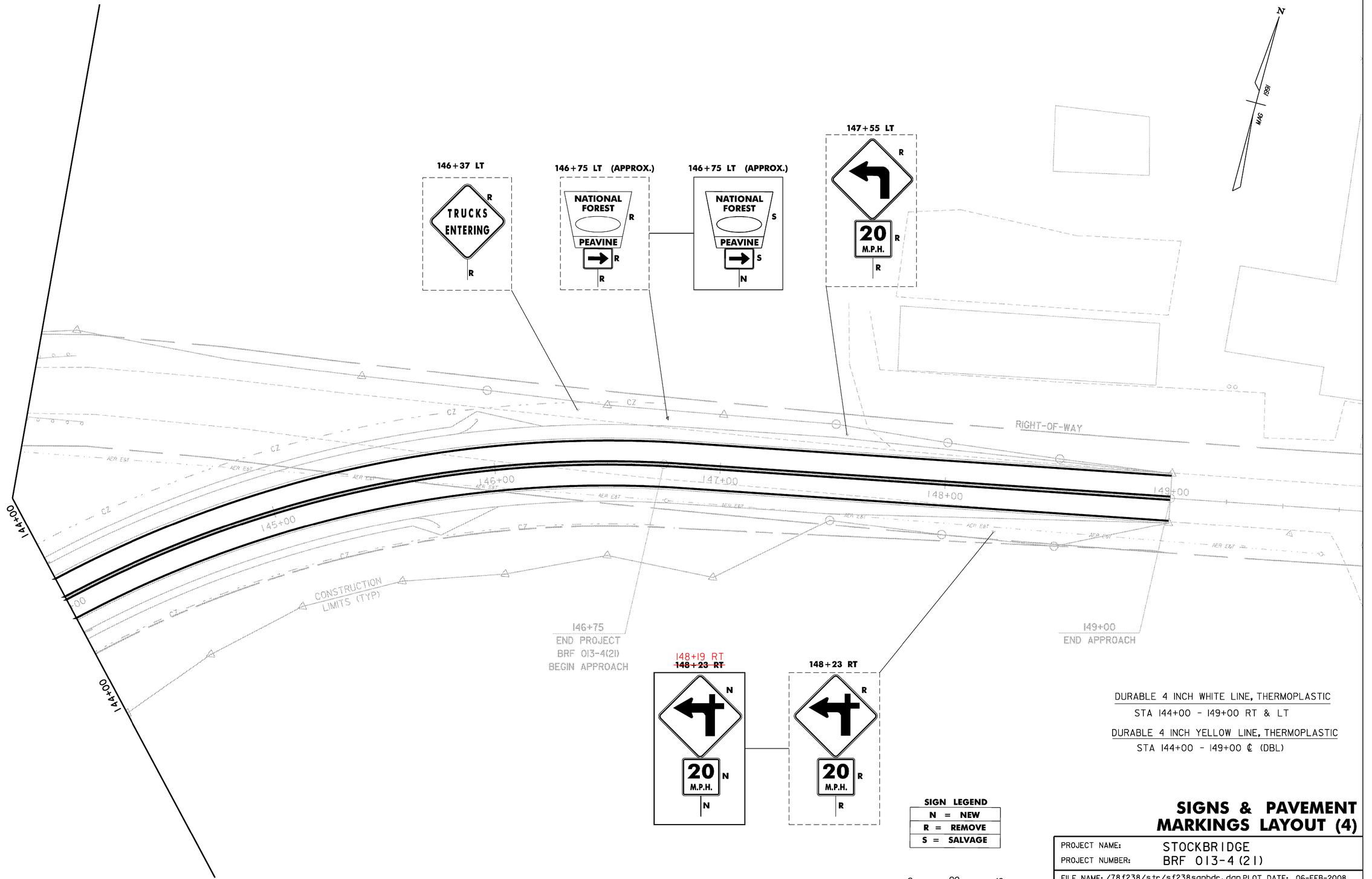
SIGN LEGEND
N = NEW
R = REMOVE
S = SALVAGE

0 20 40
SCALE IN FEET

SIGNS & PAVEMENT MARKINGS LAYOUT (3)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str/sf238sgnbdr.dgn PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER CHECKED BY: T. FILLBACH
sf238sign3.i SHEET 33 OF 144



DURABLE 4 INCH WHITE LINE, THERMOPLASTIC

STA 144+00 - 149+00 RT & LT

DURABLE 4 INCH YELLOW LINE, THERMOPLASTIC

STA 144+00 - 149+00 ℄ (DBL)

SIGN LEGEND
N = NEW
R = REMOVE
S = SALVAGE

SIGNS & PAVEMENT MARKINGS LAYOUT (4)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str/sf238sgnbdr.dgn PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER CHECKED BY: T. FILLBACH
sf238sign4.i SHEET 34 OF 144

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (in)	HEIGHT (in)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (in) lb/ft 1.75 1.88	2.0 2.16	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (in) lb/ft 3.0 1.3	4.0 1.7	4.0 MOD 1.7	TUBULAR STEEL Ø (in) FOUND-ATION	lb/ft 3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REMOVED REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
											OPTION ITEMS																									
136+89 RT	SPEED LIMIT 40		24	30	5.0						1			14' X																			R2-1		E-142
136+95 LT	SPEED LIMIT 50		24	30	5.0						1			14' X																			R2-1		E-142
138+51 LT	1000 1419 0260		6	10	0.42						1		9' X																			---		E-138
139+00 RT	NATIONAL FOREST PEAVINE		---	---			0 ~~+~~				0 ~~+~~			0 ~~X~~																			---		---
139+00 RT	←		---	---			0 ~~+~~				---			0 ~~X~~																			---		---
141+25 RT	BRIDGE 130 VT 100		6	8	0.33 ~~0.34~~						1		9' X																			VD-701		E-134
143+75 LT	BRIDGE 130 VT 100		6	8	0.33 ~~0.34~~						1		9' X																			VD-701		E-134
143+83 RT	SPEED LIMIT 40		24	30	5.0						1			14' X																			R2-1		E-142
146+75 LT	NATIONAL FOREST PEAVINE		---	---			1				1			14' X																			---		---
146+75 LT	→		---	---			1				---			X																			---		---
148+23 RT			30	30	6.25						1			14' X																			WI-1Mc L		---
148+23 RT	20 M.P.H.		18	18	2.25						---			---																			WI3-1		E-155

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE ROADWAY, TRAFFIC & SAFETY SECTION'S "SIGN POST DESIGN GUIDELINE."

	SF	SF	EA.	SF		FT	FT	FT	FT	FT	FT	EA	LB	LB	LB	EA.	LB	LB	LB	LB	EA.	EA.	LB
SUB TOTAL	~~24.6~~	24.58	~~4~~ 2				27	70 ~~104~~															
GRAND TOTAL							~~13~~ 97																

TRAFFIC SIGN SUMMARY SHEET #1

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sgn.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. FILLBACH
sf238ssum1.i

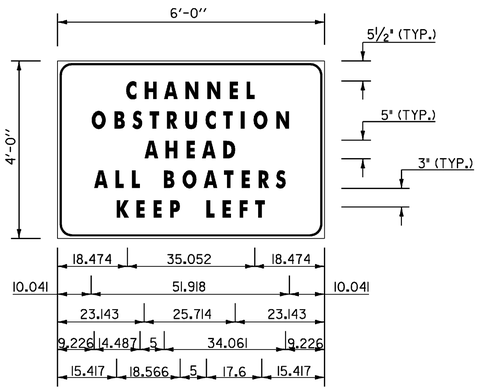
PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: J. LACROIX
SHEET 35 OF ~~44~~

STATE OF VERMONT
AGENCY OF TRANSPORTATION

TRAFFIC SIGN SUMMARY SHEET

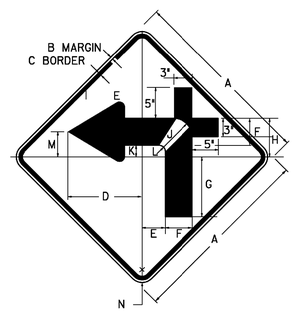
MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS EA	WIDTH (In)	HEIGHT (In)	NEW & SALVAGED SIGNS "A"	"B"	SALV SIGN	SALV TIS	EXIST POST RETAIN	EXIST POST SALVAGE	NEW SIGN POSTS NO. OF POSTS	FLANGED CHANNEL lb/ft 1.12	2.0	3.0	SQUARE STEEL (In) lb/ft 1.75 1.88	2.0 2.16	2.5 3.35	ANCHOR	SLEEVE	TUBULAR ALUMINUM Ø (In) lb/ft 3.0 1.3	4.0 1.7	4.0 MOD 1.7	TUBULAR STEEL Ø (In) FOUND-ATION	lb/ft 3.0 7.6	3.5 9.0	4.0 10.8	5.0 14.6	W-SHAPE STEEL FTG. SIZE 24"	30"	WEIGHT	POST SIZE	SIGN REQUIRED	REMARKS	SIGN DETAIL DETAIL ON SHEET NUMBER	STD. SHEET NUMBER
														OPTION ITEMS																							
58+25 LT	TIMBER HAWK ROAD		---	---	---		I				0 ~~+~~			0 ~~X~~																					---		---
58+25 LT	STOP		30	30	6.25						I			14′ X																					RI-I		E-143
58+50 RT	LEGAL LOAD LIMIT 24,000 POUNDS		24	30	5.0						I			14′ X																					WR-017		E-141
80+25 LT	STOP		30	30	6.25						I			14′ X																					RI-I		E-143
80+75 RT	LEGAL LOAD LIMIT 24,000 POUNDS		24	30	5.0						I			14′ X																					VR-017		E-141
82+75 LT			36	36	9.0						2			28′ X																					W3-1A		E-150
					SF	SF	EA.	SF			FT	FT	FT		FT	FT	FT	EA		LB	LB	LB	EA.	LB	LB	LB	LB	EA.	EA.	LB						
					SUB TOTAL 31.50		I				~~9I~~ 84																										
					GRAND TOTAL ~~56.1~~	56.08	~~53~~				~~222~~ 181																										

FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE ROADWAY, TRAFFIC & SAFETY SECTION'S "SIGN POST DESIGN GUIDELINE."



NOTES

1. SIGN TO BE FIRMLY ATTACHED TO UPSTREAM FASCIA OF THE EXISTING STEEL TRUSS, AS APPROVED BY THE RESIDENT ENGINEER. THE BOTTOM EDGE OF THE SIGN SHALL NOT PROTRUDE BELOW THE LOW STEEL ELEVATION OF THE EXISTING TRUSS.
2. SIGN SHALL BE BLACK TEXT ON ORANGE BACKGROUND, AND SHALL MEET ALL THE CRITERIA OF CONSTRUCTION SIGNING.
3. SIGN, INSTALLATION, HARDWARE, AND REMOVAL SHALL BE INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (ALL-INCLUSIVE TRAFFIC CONTROL).



WI-IMc L

SIGN	DIMENSIONS (INCHES) A	B	C	D	E	F	G	H	J	K	L	M	N
BIKE	18	3/8	5/8	7 1/4	2 1/4	2 5/8	5 7/8	3 3/4	1 7/8	I	5/8	2 1/2	1 1/2
MIN.	24	3/8	5/8	9 5/8	3	3 1/2	7 3/4	5	2 1/2	1 1/2	13/16	3 1/4	1 1/2
STD.	30	1/2	3/4	12	3 3/4	4 3/8	9 11/16	6 1/4	3	1 7/8	I	4 1/16	1 7/8
EXPWY.	36	5/8	7/8	14 3/8	4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	2 1/4	1 1/4	4 7/8	2 1/4
SPECIAL	48	3/4	1 1/4	19 3/16	6	7	15 1/2	10	4 7/8	3	1 5/8	6 1/2	3

TRAFFIC SIGN SUMMARY SHEET #2

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sgn.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. FILLBACH
sf238ssum2.i

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: J. LACROIX
SHEET 36 OF 144

PROJECT DISCRIPTION

LOCATED ON VT ROUTE 100, BEGINNING IN STOCKBRIDGE AT A POINT 2.577 MILES NORTHERLY OF THE PITTSFIELD STOCKBRIDGE TOWNLINE AND EXTENDING NORTHERLY ALONG VT ROUTE 100 FOR A DISTANCE OF 0.223 MILES TO MILE MARKER 2.780.

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES REPLACEMENT OF BRIDGE #130, ON A NEW ALIGNMENT, WITH ASSOCIATED ROADWAY AND APPROACHES.

THE PROPOSED BRIDGE IS A TWO SPAN BRIDGE WITH A PIER IN THE RIVER. A TEMPORARY CAUSE WAY SHALL BE INSTALLED FOR THE PURPOSE OF CONSTRUCTION OF THE PIER AT MID-STREAM AND BE COMPRISED OF CLEAN STONE FILL ONLY.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST TWO CONSTRUCTION SEASONS.

ALL MAJOR GRADING AND EARTHWORKS OPERATIONS SHALL BE CONDUCTED IN DRY-WEATHER CONDITIONS BETWEEN APRIL 15TH AND OCTOBER 15TH WHENEVER PRACTICAL. NO MAJOR GRADING WORK SHALL BE PERFORMED BY THE CONTRACTOR IN THE WINTER BETWEEN OCTOBER 15TH AND APRIL 15th WHEN SOILS ARE TYPICALLY SATURATED WITH WATER OR ARE FROZEN IN THE COLDER MONTHS.

SITE INVENTORY

OFF SITE DRAINAGE CHARACTERISTICS:
THE PROPERTY SURROUNDING THE PROJECT SITE CONSISTS OF WELL ESTABLISHED VEGETATION, WITH STEEP SLOPES OF VARIOUS GRASSES, SHRUBS AND TREES. THE DRAINAGE WAYS ARE WELL DEFINED AND RUNOFF WATER ENTERING THE PROJECT SITE WILL BE PRIMARILY LIMITED TO THAT WHICH IS CONVEYED ALONG ROADWAY DITCHES, AND CULVERTS.

DRAINAGE, WATERWAYS, BODIES OF WATER, PROXIMITY TO NATURAL OR MAN-MADE FEATURES:
THE WHITE RIVER IS THE ONLY BODY OF WATER LOCATED WITHIN THE PROJECT AREA. THERE ARE EXISTING CULVERTS AT STATIONS 136+70, 137+49, 140+31 ON ROUTE 100 AND STATION 83+33 ON TIMBER RIVER ROAD WHICH ARE TO BE REMOVED. THE EXISTING CULVERT AT STATION 130+25 ON ROUTE 100 WILL REMAIN AND NOT BE AFFECTED.

DISTURBANCE OF SOILS NEAR NATURAL OR MAN-MADE WATERWAYS CONSISTS OF THAT WHICH IS NECESSARY TO REMOVE TWO CONCRETE ABUTMENTS AND BUILD TWO NEW ABUTMENTS. STABILIZATION OF DISTURBANCE TO STREAM BANKS WILL BE ACCOMPLISHED WITH STONE FILL, TYPE IV.

TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES:
THE TOPOGRAPHY OF THE PROJECT SITE IS FLAT TO MOUNTAINOUS, WITH A MIXTURE OF FORESTED AND OPEN AREAS.

THE PROJECT IMPACTS STEEP SLOPES. THE SLOPES ARE WELL VEGETATED. THE EXISTING SHAPE OF THE PROJECT AREA CAN BE SEEN BY LOOKING AT THE EPSC PRE-CONSTRUCTION SITE PLANS" (SHEETS 38-41) WHERE THE EXISTING CONTOURS ARE SHOWN.

THERE ARE SOME RESIDENCES AND BUSINESSES FOUND WITHIN THE PROJECT.

OVERHEAD UTILITIES SERVICE FOLLOWS ALONG VERMONT ROUTE #100 WITH THE NEED FOR RELOCATION OF A UTILITY POLE AT STATION 146+78 RT.

VEGETATION
THE VEGETATION SURROUNDING THE PROJECT SITE CONSISTS OF VARIOUS GRASSES, SHRUBS AND WOODED AREAS. IMPACTS TO VEGETATION WILL BE LIMITED TO THAT EFFECTED BY THE CONSTRUCTION OF THE NEW BRIDGE ON THE NEW ALIGNMENT.

FOLLOWING THE CONSTRUCTION OF THE NEW BRIDGE, THE SLOPES WILL BE STABILIZED WITH STONE FILL AND VEGETATION WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

SOILS
ALL SOIL INFORMATION CAME FROM THE USDA NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY FOR THE COUNTY OF WINDSOR, VERMONT.

SOIL NAME	DEPTH	ERODIBILITY	K-VALUE
AGWAM FINE SANDY LOAM (8A)	0-60"	SLIGHT	0.28
HINKLEY FINE SANDY LOAM (14B)	0-60"	SLIGHT	0.20
ONDAWA FINE SANDY LOAM (23)	0-60"	SLIGHT	0.24

AGAWAM CONSISTS OF VERY DEEP, WELL DRAINED SOILS, LOCATED ON OUTWASH PLAINS AND HIGH STREAM TERRACES. 0-3% SLOPE

HINKLEY CONSISTS OF VERY DEEP, EXCESSIVELY DRAINED SOILS, LOCATED ON OUTWASH PLAINS, TERRACES AND DELTAS. 0-8% SLOPE

ONDAWA CONSISTS OF VERY DEEP, WELL DRAINED SOILS FORMED IN RECENT ALLUVIUM ON FLOOD PLAINS.

SENSITIVE RESOURCE AREAS:
NO "THREATENED & ENDANGERED SPECIES" HAVE BEEN IDENTIFIED WITHIN THE PROJECT LIMITS AND THERE WILL BE NO ADVERSE EFFECT TO HISTORIC OR ARCHEOLOGICAL FEATURES.

THERE ARE NO KNOWN WETLANDS LOCATED WITHIN THE PROJECT LIMITS.

RISK ELVALUATION

TOTAL DISTURBED AREA (EXCLUDING WASTE, BORROW AND STAGING AREAS): 4.0 ACRES .

THE OVERALL SCORE FOR THE DETAILED RISK EVALUATION ON THIS PROJECT IS 1. THEREFORE, THIS PROJECT IS ELIGIBLE FOR THE CONSTRUCTION GENERAL PERMIT AS A MODERATE RISK PROJECT PROVIDED THAT THE REQUIRMENTS OF SUBPART 3 OF THE CONSTRUCTION GENERAL PERMIT ARE MET. IF THESE REQUIRMENTS CANNOT BE MET, CONTACT DAN MASON OF THE VERMONT DEPARTMENT OF ENVIRONMETAL CONSERVATION AT (802) 241-3679 TO DETERMINE IF THE PROJECT SHOULD SEEK COVERAGE AS AN INDIVIDUAL DISCHARGE PERMIT.

THE EPSC PLANS WERE DEVELOPED IN ACCORDANCE WITH THE CONSTRUCTION GENERAL PERMIT REQUIREMENTS TO MINIMIZE IMPACTS TO THE RECEIVING WATERS.

GENERAL EROSION & SEDIMENT CONTROL GUIDELINES

THE TOTAL DISTURBED AREA SHALL BE LIMITED TO 2.0 ACRES OR LESS AT ALL TIMES.

THE EROSION CONTROL PLANS ARE INTENDED AS A GUIDE FOR PREVENTING SOIL EROSION AND CONTROLLING SEDIMENT. THE WORK OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE DURATION OF THE PROJECT TO PREVENT EROSION AND CONTAIN ERODED SEDIMENT ON-SITE.

THE CONTRACTOR WILL USE OTHER TEMPORARY OR PERMANENT EROSION CONTROL DEVICES AS NECESSITATED BY THE SEQUENCE OF CONSTRUCTION AND AS DIRECTED BY THE RESIDENT ENGINEER, IN ACCORDANCE WITH THE VERMONT STANDARD SPECIFICATIONS FOR CONSTRUCTION SPECIFIED FOR THIS PROJECT.

THE CONTRACTOR SHALL COORDINATE THE INSTALLATION, USE, AND REMOVAL OF EROSION AND SEDIMENT CONTROL MEASURES WITH CONSTRUCTION ACTIVITIES TO ASSURE ECONOMICAL, EFFECTIVE, AND CONTINUOUS EROSION AND SEDIMENT CONTROL. THE CONTRACTOR SHALL EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES AS CONSTRUCTION ACTIVITIES PROCEED.

THE RESIDENT ENGINEER MAY DIRECT THE INSTALLATION OF CERTAIN EROSION CONTROL MEASURES IN ORDER TO FORESTALL OR MITIGATE POTENTIAL OR EXISTING EROSION PROBLEMS, OR TO RESPOND TO STORM EVENTS OR DAMAGE BY CONSTRUCTION OPERATIONS.

THE CONTRACTOR SHALL INSTALL EROSION AND SEDIMENT CONTROL MEASURES AS SEQUENCED ON THE EPSC PLAN, OR AS DIRECTED BY THE RESIDENT ENGINEER. THE TYPE, SIZE, AND LOCATION OF ANY EROSION CONTROL DEVICE SHALL NOT BE CHANGED UNLESS PRIOR APPROVAL IS OBTAINED FROM THE RESIDENT ENGINEER. ANY APPROVED CHANGES SHALL BE NOTED ON THE EPSC PLANS AND RECORDED IN THE WEEKLY REPORT. THE RESIDENT ENGINEER' S APPROVAL SHOULD BE OBTAINED PRIOR TO INSTALLING ANY EROSION CONTROLS NOT SPECIFIED IN THE EPSC PLANS. HOWEVER, IN EMERGENCY SITUATIONS WHERE THE RESIDENT ENGINEER IS NOT IMMEDIATELY AVAILABLE, THE CONTRACTOR SHOULD REPAIR OR INSTALL THE EROSION CONTROLS AS HE/SHE DEEMS NECESSARY AND REPORT THE INCIDENT TO THE RESIDENT ENGINEER AS SOON AS IT IS PRACTICAL.

CONSTRUCTION EQUIPMENT WILL NOT BE ALLOWED TO OPERATE ON THE OUTSIDE OF THE PERIMETER CONTROL MEASURES.

AS CONSTRUCTION PROGRESSES, IMPLEMENTATION OF ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE ON-SITE COORDINATOR AND AS APPROVED BY THE RESIDENT ENGINEER.

EROSION PREVENTION AND SEDIMENT CONTROL (EPSC)

MARK SITE BOUNDARIES
PRIOR TO ANY CONSTRUCTION ACTIVITIES, THE PROJECT DEMARCATION FENCING (PDF) SHALL BE PLACED ALONG THE PERIMETER OF THE PROJECT AS SHOWN ON THE EPSC PRE-CONSTRUCTION SITE PLANS (SHEETS 38-41). THE INSTALLATION OF THE PDF WILL BE PERFORMED SUCH THAT NO VEGETATION ON THE OUTSIDE OF THE FENCING IS DISTURBED.

LIMIT DISTURBANCE AREA
PRESERVE EXISTING VEGETATION, SHRUBS, AND TREES WHENEVER POSSIBLE.

STABILIZE CONSTRUCTION ENTRANCE
PRIOR TO ANY CONSTRUCTION OR STAGING, THE CONTRACTOR WILL INSTALL STABILIZED CONSTRUCTION ENTRANCE LEADING TO STAGING AREAS AND THE PROJECT SITE TO PREVENT THE TRACKING OF SILTS AND SEDIMENTS OFFSITE. THE CRUSHED STONE PRODUCT USED FOR THE CONSTRUCTION OF THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE MONITORED FOR SEDIMENT ACCUMULATION AND REPLACED AS NECESSARY AS DIRECTED BY THE RESIDENT ENGINEER. STABILIZED CONSTRUCTION ENTRANCE SHALL ALSO BE ESTABLISHED AND MAINTAINED AT ALL OFFSITE WASTE AND BORROW AREAS.

INSTALL SILT FENCE
SILT FENCE SHALL BE PLACED ALONG CONTOUR LINE AT LOCATIONS ILLUSTRATED ON THE EPSC CONSTRUCTION SITE PLANS (SHEETS 42-45).

SILT FENCE SHALL BE PLACED AT THE TOES OF ALL FILL SLOPES AND SHALL BE CONSTRUCTED SO THAT FLOWS CANNOT BYPASS THE ENDS. AREAS DIRECTLY BELOW (DOWNHILL) OF THE SILT FENCES MUST BE UN-DISTURBED AND VEGETATED.

DIVERT UPLAND RUNOFF

THE CONTRACTOR SHALL CONTROL ALL SEDIMENT-LADEN RUNOFF WITHIN THE PROJECT SITE. CLEAN RUNOFF FROM OUTSIDE THE PROJECT SITE SHALL BE ROUTED AROUND THE PROJECT SITE USING DIVERSION BERMS, DIVERSION CHANNELS, AND TEMPORARY OR PERMANENT CULVERTS IF PRACTICAL.

ALL SEDIMENTS REMOVED FROM EROSION AND SEDIMENT CONTROL MEASURES SHALL BE DEPOSITED IN AN UPLAND PORTION OF THE PROJECT SITE OR DEPOSITED OFF SITE IN THE DESIGNATED PROJECT WASTESITE.

SLOW DOWN CHANNELIZED RUNOFF

CHECK DAMS SHALL BE INSTALLED AS SHOWN AND DESCRIBED ON THE EPSC DETAILS-1 (SHEET 50).

TEMPORARY INLET PROTECTION SHALL BE PLACED AT CULVERT ENTRANCE AT LOCATIONS ILLUSTRATED ON THE EPSC CONSTRUCTION SITE PLANS (SHEETS 42-45). TEMPORARY INLET PROTECTION SHALL BE INSTALLED AS SHOWN AND DESCRIBED ON EPSC DETAILS-3 (SHEET 52).

CONSTRUCT PERMANENT CONTROLS

THREE OPTIONAL PIPES SHALL BE INSTALLED ON ROUTE 100 AT STATIONS 136+75 CL, 137+90 CL AND 140+50 CL. SEE EPSC CONSTRUCTION PLANS (SHEETS 42-45) FOR PIPE SIZE AND PLACEMENT. ALL PIPE INSTALLATION SHALL START WITH STONE PAD AND WORK BACK TOWARDS INLET. SEE MAINLINE SECTIONS FOR ELEVATIONS.

STONE PADS WILL BE PLACED ON THE DISCHARGE ENDS OF ALL PROPOSED PIPES. SEE EPSC CONSTRUCTION PLANS (SHEETS 42-45) FOR PAD SIZE AND PLACEMENT. ALL PADS TO BE CONSTRUCTED OF TYPE II STONE.

UNDERDRAIN SHALL BE INSTALLED ON VT ROUTE 100, BEGINNING AT STATION 133+50 LT AND ENDING AT 136+70. THE UNDERDRAIN SHALL BE 6" IN DIAMETER. FLUSHING BASINS SHALL BE LOCATED AT STATION 133+50 AND 136+70. AT STATION 136+70 THE UNDERDRAIN SHALL TRANSITION INTO SOLID PIPE AND TURN 90 DEGREES FOR 67', WHERE IT WILL DISCHARGE ONTO A 7'x9' STONE PAD.

UNDERDRAIN SHALL BE INSTALLED ON TIMBER RIVER ROAD, BEGINNING AT STATION 82+00 LT AND ENDING AT 84+00 LT. THE UNDERDRAIN SHALL BE 6" IN DIAMETER. A FLUSHING BASIN SHALL BE LOCATED AT STATION 82+00. AT STATION 84+00 THE UNDERDRAIN SHALL EMPTY INTO A CATCH BASIN. A 15" PIPE OUTLETS FOR 40', WHERE IT WILL DISCHARGE ONTO A 3'x7' STONE PAD.

TYPE IV STONE SHALL BE PLACED ALONG THE RIVER BANK TO STABILIZE SLOPES AROUND ABUTMENTS. SEE EPSC STABILIZATION SITE PLAN (SHEETS 46-49) FOR LOCATION. GEOTEXTILE UNDER STONE FILL WILL BE USED TO INCREASE THE EFFECTIVENESS OF THE STONE FILL PREVENTING EROSION.

CONSTRUCT A VEGETATIVE SWALE BEGINNING AT STATION 133+50 LT AND ENDING AT 136+75.

ANOTHER VEGETATIVE SWALE SHALL BE CONSTRUCTED BEGINNING AT STATION 43+00 TO 147+50 AS ILLUSTRATED ON THE EPSC CONSTRUCTION SITE PLANS (SHEET 42-45).

STABILIZE EXPOSED SOILS

ALL AREAS OF DISTURBANCE MUST HAVE TEMPORARY OR FINAL STABILIZATION WITHIN 7 DAYS OF THE INITIAL DISTUBANCE. AFTER THIS TIME, ANY DISTURBANCE IN THE AREA MUST BE STABILIZED AT THE END OF EACH WORK DAY. THE FOLLOWING EXCEPTIONS APPLY:

I. STABILIZATION IS NOT REQUIRED IF WORK IS TO CONTINUE IN THE AREA WITHIN THE NEXT 24 HOURS AND THERE IS NO PRECIPITATION FORECAST FOR THE NEXT 24 HOURS.
II. STABILIZATION IS NOT REQUIRED IF THE WORK IS OCCURING IN A SELF-CONTAINED EXCAVATION (I.E. NO OUTLET) WITH A DEPTH OF 2 FEET OR GREATER.

SURFACE ROUGHNING AND MULCHING WILL BE USED TO TEMPORARILY STABILIZE SLOPES. DRIVE EQUIPMENT ON THE SLOPES TO LEAVE TRACK (SMALL CHECK DAMS) THAT WILL CATCH WATER FLOW. ALL SURFACE ROUGHNING SHALL BE DONE TO THE SATISFACTION OF THE ENGINEER. SEE EPSC DETAIL-4 (SHHET 53) FOR FURTHER INFORMATION.

ROLLED EROSION CONTROL PRODUCT SHALL BE PLACED ALONG THE PROPOSED VEGETATED SWALE FROM STATION 143+00 TO 147+50 RT AS ILLUSTRATED ON THE EPSC CONSTRUCTION PLANS (SHEETS 42-45). ROLLED EROSION CONTROLLED PRODUCT SHALL BE INSTALLED AS SHOWN AND DESCRIBED ON EPSC DETAILS-3 (SHEET 52).

SEED-AND MULCH ALL DISTURBED AREAS TO ESTABLISH PERMANENT VEGETATION. SEE EROSION CONTROL, EPSC STABILIZATION SITE PLANS (SHEETS 46-49) FOR LOCATIONS OF AREAS TO BE RE-VEGETATED. TO ASSURE A VIGOROUS CATCH OF VEGETATIVE COVER, SEEDING AND MULCHING SHALL BE COMPLETE BY SEPTEMBER 15TH. WINTER RYE SEED SHALL BE USED TO ESTBALISH TEMPORARY VEGETATIVE COVER WHENEVER DISTURBED AREAS CAN NOT BE IMMEDIATELY PERMAHENTLY SEEDED.

WINTER STABLIZATION

AFTER SEPTEMBER 15 ALL DISTURBED AREAS ARE SEEDED AND MULCHED TO 3" DEEP OR COVERED WITH ROLLED EROSION CONTROL PRODUCT.

IF THIS PROJECT EXTENDS PAST OCT. 15, THE EPSC PLAN SHALL BE RE-EVALUATED FOR THE PROPER PROCEDURES FOR WINTER CONSTRUCTION.

DEWATERING ACTIVITIES

FILTER BAGS SHALL BE USED DURING DEWATERING PUMPING OPERATIONS. SEE EPSC DETAILS-4 (SHEET 53) FOR FURTHER INFORMATION.

FILTER BAGS SHALL BE PLACED A MINIMUM OF 50 FEET FROM ANY WATERS OF THE STATE AND ON A GRADUAL SLOPE IN ORDER THAT INCOMING WATER FLOWS DOWNHILL THROUGH THE BAG.

DISCHARGE RATES SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS WHEN A FILTER BAG IS FULL AND SHALL BE REPLACED WHEN IT CAN NO LONGER EFFICIENTLY FILTER SEDIMENT OUT OR ALLOW WATER TO PASS AT A REASONABLE RATE. FILTER BAGS SHALL BE DISPOSED OF AT AN APPROVED LOCATION AS DIRECTED BY THE ENGINEER.

REMOVAL OF TEMPORARY EROSION CONTROLS

REMOVE PERIMETER CONTROLS (PDF) ONLY AFTER ALL CONSTRUCTION ACTIVITIES ARE COMPLETED AND ALL SLOPES ARE STABILIZED AND WELL ESTABLISHED.

REMOVAL OF SILT FENCE SHALL COMMENCE ONLY AFTER ALL UPSLOPE AREAS ARE STABILIZED AND WELL ESTABLISHED. THE RESIDENT ENGINEER MUST APPROVE THE REMOVAL.

REMOVAL OF CHECK DAMS CAN OCCUR AFTER VEGETATED DITCHES HAVE ESTABLISHED GROWTH OR STONE LINED DITCHES ARE COMPLETED.

MAINTENANCE PLAN

THE FOLLOWING MAINTENANCE SCHEDULE WILL BE FOLLOWED THROUGHOUT THE DURATION OF THE PROJECT.

A DESIGNATED PERSON KNOWN AS THE ON-SITE PLAN COORDINATOR SHALL BE DIRECTLY RESPONSIBLE FOR ON-SITE IMPLEMENTATION OF THE EPSC PLAN. THE ON-SITE PLAN COORDINATOR SHALL HAVE THE AUTHORITY TO STOP AND/OR MODIFY CONSTRUCTION ACTIVITIES AS NECESSARY TO COMPLY WITH THE EPSC PLAN AND THE TERMS AND CONDITIONS OF CONSTRUCTION GENERAL PERMIT AND SHALL BE RESPONSIBLE FOR INSPECTIONS AND RECORD KEEPING. THE ON-SITE COORDINATOR OR HIS/HER DESIGNEE SHALL BE ON SITE ON A DAILY BASIS DURING ACTIVE CONSTRUCTION. INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WHEN A STORM EVEN RESULTS IN RUNOFF OF STORMWATER FROM THE CONSTRUCTION SITE. INSPECTIONS SHALL INCLUDE ALL AREAS OF THE SITE DISTURBED BY CONSTRUCTION ACTIVITY AND ALL DISCHARGE LOCATIONS, INCLUDING AREAS WITH TEMPORARY STABILIZATION.

AN INSPECTION REPORT SHALL BE COMPLETED FOR EACH INSPECTION AND SIGNED BY THE ON-SITE PLAN COORDINATOR OR THE PERSON ACTING UNDER THE DIRECTION OF THE ON-SITE PLAN COORDINATOR. A COPY OF THE INSPECTION REPORT SHALL BE GIVEN TO THE RESIDENT ENGINEER. SEE SPECIAL PROVISION 652 FOR ADDITIONAL GUIDANCE.

SILT FENCE AND STONE CHECK DAMS WILL BE INSPECTED, AS DESCRIBED BELOW:

I. ANY SILT FENCE OR STONE CHECK DAM THAT IS INEFFECTIVE WILL BE REPAIRED OR REPLACED IMMEDIATELY.
II. SEDIMENT DEPOSITS WILL BE REMOVED WHEN THEY REACH ONE-HALF THE HEIGHT OF THE SEDIMENT CONTROL DEVICE.
III. ALL SEDIMENTS REMOVED WILL BE DEPOSITED IN AN UPLAND PORTION OF THE PROJECT SITE, OR DISPOSED OFF-SITE IN THE DESIGNATED PROJECT WASTE SITE.

ALL SLOPES WILL BE CHECKED FOR ANY ERODED AREAS AND WILL BE IMMEDIATELY REPAIRED. TEMPORARY STABILIZATION METHODS WILL BE USED AS NECESSARY UNTIL FINAL STABILIZATION MEASURES ARE IN PLACE.

BOTH TEMPORARY & PERMANENT SEEDING & MULCHING WILL BE CHECKED FOR VEGETATIVE GROWTH. ANY AREAS REQUIRING RE-VEGETATION WILL BE REPAIRED IMMEDIATELY.

DRAINAGE STRUCTURES WILL BE CLEANED AS NECESSARY TO REMOVE ANY SEDIMENT BUILDUP IN THE SUMP OF THE STRUCTURES OR AT THE INLET OF THE STRUCTURE.

i. ANY INLET CONTROL FOUND TO BE INEFFECTIVE WILL BE REPLACED AS NECESSARY AND WILL BE DONE IMMEDIATELY.

ii. ALL SEDIMENT REMOVED WILL BE DEPOSITED IN AN UPLAND PORTION OF THE PROJECT SITE, OR DISPOSED OF OFF-SITE IN THE DESIGNATED PROJECT WASTE SITE.

STABILIZED CONSTRUCTION ENTRANCE WILL BE MONITORED FOR EFFECTIVENESS AND REPAIRED OR REPLACED WHEN NECESSARY.

ALL TEMPORARY EROSION CONTROL DEVICES WILL STAY IN PLACE UNTIL FINAL GRASS GROWTH HAS BEEN ESTABLISHED AND COMPLETE STABILIZATION OF THE AREA HAS OCCURRED.

ONCE STABILIZATION HAS OCCURRED, ALL TEMPORARY EROSION CONTROL MEASURES WILL BE REMOVED AND ALL DISTURBED AREAS WILL BE STABILIZED WITH EROSION MATTING AND/OR SEED & MULCH

ESTIMATED CONSTRUCTION SEQUENCE

1. INSTALL TEMPORARY EROSION CONTROLS
2. CONSTRUCT PROPOSED BRIDGE
3. PHASED ALIGNMENT WORK
4. REMOVAL OF EXISTING BRIDGE
5. FINAL STABILIZATION
6. REMOVE TEMPORARY EROSION CONTROLS

GENERAL SEED MIX

NAME	Lbs/Acre
CREEPING RED FESCUE	22.5
TALL FESCUE	22.5
RED TOP	3.0
BIRDSFOOT TREFOIL	9.0
ANNUAL RYE GRASS	3.0
TOTAL	60.0 Lbs/Acre

FERTILIZER & LIMESTONE

NAME	Lbs/Acre
FERTILIZER	500
LIMESTONE	2000

EROSION CONTROL NOTES

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: 78f238/str5/sf238eronotes.dgn PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS DRAWN BY: J. SALVATORI
DESIGNED BY: T. FILLBACH CHECKED BY: T. SUMNER
sf238eronotes.I SHEET 37 OF 144

LEGEND

CUT/FILL LIMITS	
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	PDF
SILT FENCE (LINE STYLE)	

MAG 1991

14B - HINKLEY
FINE SANDY LOAM
0-8% SLOPES

STA. 61+25
END TIMBER HAWK
ROAD CONSTRUCTION

TH 58
TIMBER HAWK RD.
GRAVEL

62+16.29

62+00

61+00

STA. 132+00.00
BEGIN APPROACH

Underground Telephone goes from here to Pole # 2½

Tel-Pole #13-5

TIMBER HAWK
OWNERS ASSOCIATION, INC.

STA. 135+00
END APPROACH
BEGIN PROJECT
BRF 013-4(21)

RIGHT-OF-WAY

132+00

VT RTE 100

133+00

134+00

135+00

CONSTRUCTION
LIMITS (TYP)

PDF

135+00

14B - HINKLEY
FINE SANDY LOAM
0-8% SLOPES

BARN

GRAV DR

WOOD FN

SM SPR

2 SWFH

SHED

GARDEN

12"POP

6"APP

6" WB

IP

3-3

FORBES, R. JEFFREY

BUFFER ZONE

IMPACTS WITHIN THE BUFFER ZONE SHALL BE MINIMIZED.

WHITE RIVER

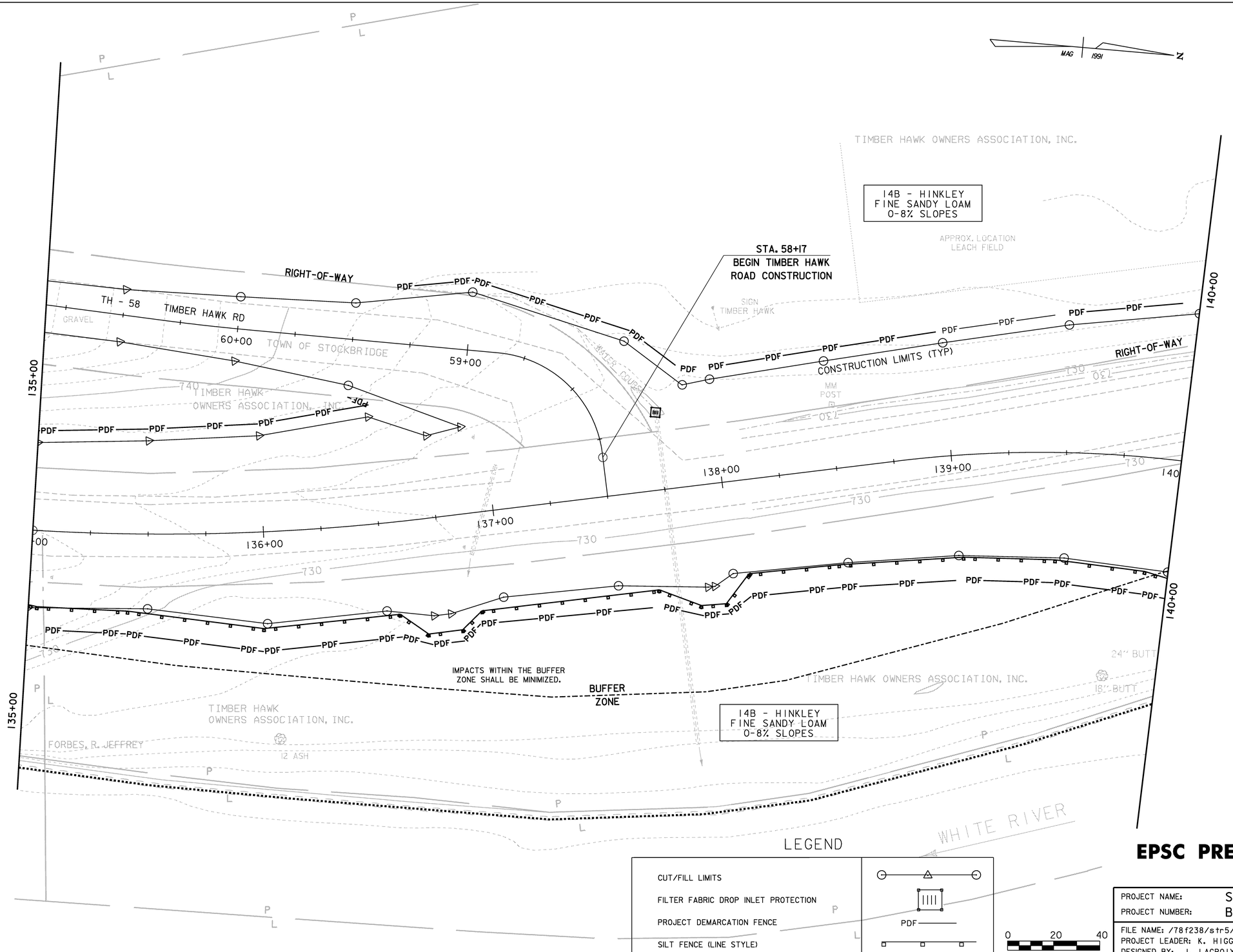
0 20 40
SCALE IN FEET

EPSC PRE-CONSTRUCTION PLAN SHEET (1)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_prel.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH
SHEET 38 OF 144



LEGEND

CUT/FILL LIMITS	PDF
FILTER FABRIC DROP INLET PROTECTION	
PROJECT DEMARCATION FENCE	
SILT FENCE (LINE STYLE)	

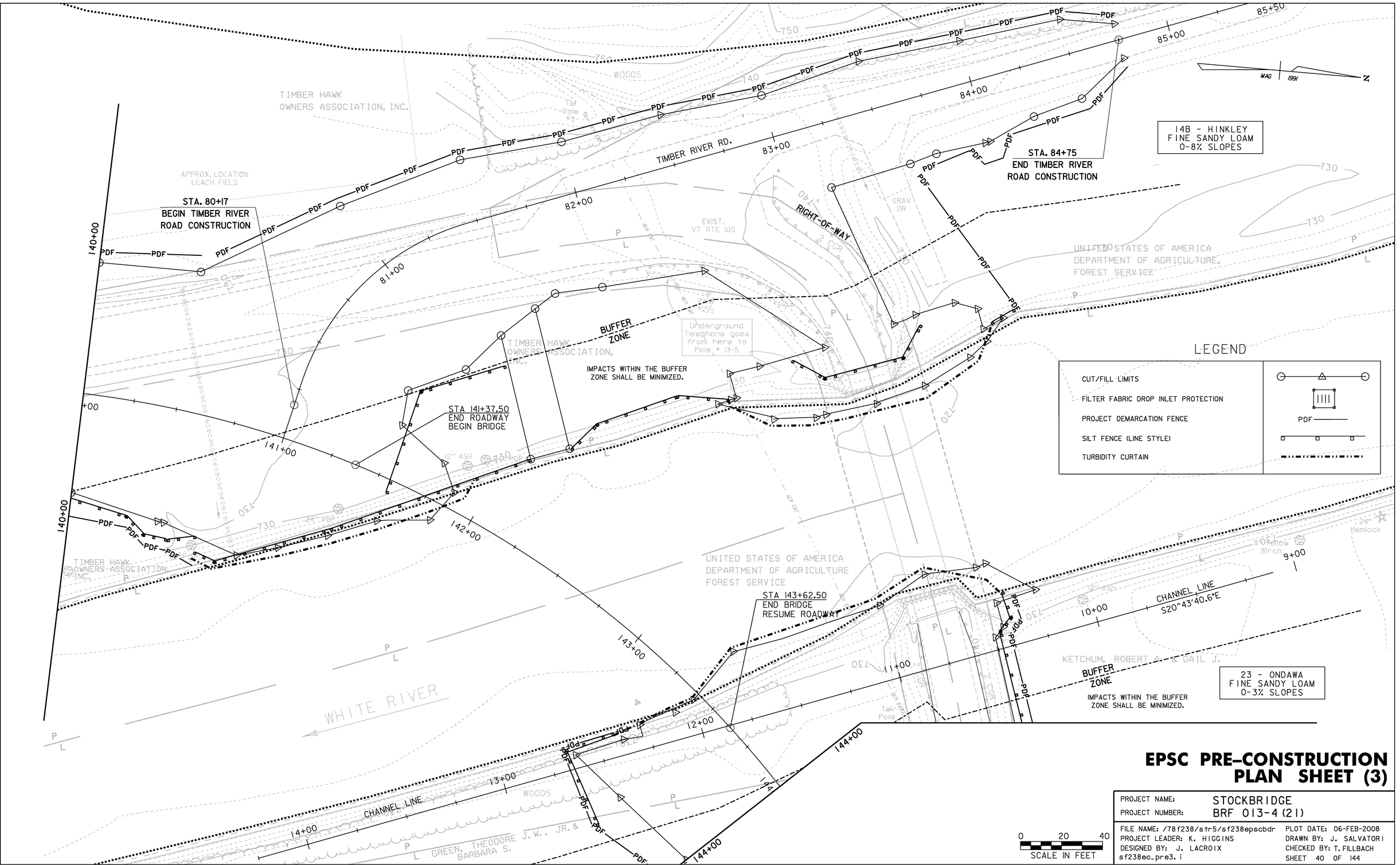
0 20 40
SCALE IN FEET

EPSC PRE-CONSTRUCTION PLAN SHEET (2)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_pre2.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH



EPSC PRE-CONSTRUCTION PLAN SHEET (3)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_pre3.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH

23 - ONDAWA
FINE SANDY LOAM
0-3% SLOPES

8A - AGWAM
FINE SANDY LOAM
0-3% SLOPES

KETCHUM, ROBERT A. & GAIL J.

N

1991

1946

BARN

CONCRETE WALL

BARN

BARN

FUEL PUMPS

GRAVEL DRIVE

RIGHT-OF-WAY

2-CGR

EXIST. VT RTE 100

740

2-CGR

AER E&T

144+00
BUFFER ZONE

145+00

146+00

147+00

148+00

149+00

Pole #1 1/2

Tel Pole

PDF

146+75
END PROJECT
BRF 013-4(21)
BEGIN APPROACH

149+00
END APPROACH

GREEN, THEODORE J.W. JR. &
BARBARA S.

8A - AGWAM
FINE SANDY LOAM
0-3% SLOPES

UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE
FOREST SERVICE

23 - ONDAWA
FINE SANDY LOAM
0-3% SLOPES

LEGEND

CUT/FILL LIMITS

FILTER FABRIC DROP INLET PROTECTION

PROJECT DEMARCATION FENCE

SILT FENCE (LINE STYLE)

PDF

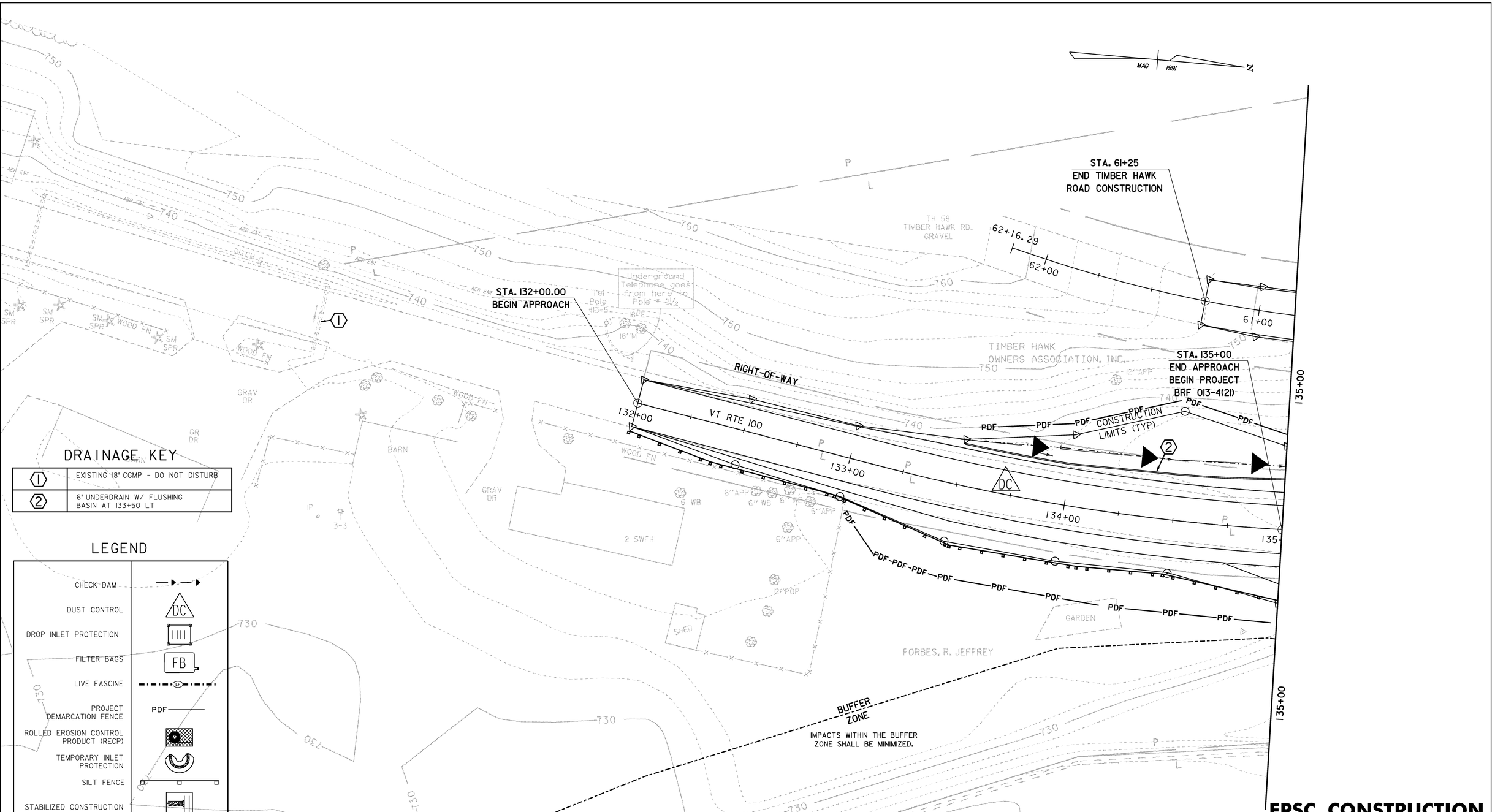
0 20 40
SCALE IN FEET

EPSC PRE-CONSTRUCTION PLAN SHEET (4)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238ec.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_pre4.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH
SHEET 41 OF 144



DRAINAGE KEY

1	EXISTING 18" CGMP - DO NOT DISTURB
2	6" UNDERDRAIN W/ FLUSHING BASIN AT 133+50 LT

LEGEND

- CHECK DAM
- DUST CONTROL (DC)
- DROP INLET PROTECTION
- FILTER BAGS (FB)
- LIVE FASCINE (LF)
- PROJECT DEMARCATION FENCE (PDF)
- ROLLED EROSION CONTROL PRODUCT (RECP)
- TEMPORARY INLET PROTECTION
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- ROCK OUTLET PROTECTION
- SURFACE ROUGHENING
- TURBIDITY CURTAIN

EXISTING CONTOURS ARE SHOWN. SEE CROSS SECTIONS FOR FINAL CONTOURS.

0 20 40
SCALE IN FEET

EPSC CONSTRUCTION PLAN SHEET (1)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: J. LACROIX	CHECKED BY: T. FILLBACH
sf238ec_dur1.i	SHEET 42 OF 144

DRAINAGE KEY

②	6" UNDERDRAIN W/ FLUSHING BASIN AT 133+50 LT
③	6" UNDERDRAIN CARRIER PIPE
④	OPTION PIPE W/ END SECTION @ INLET AND 7'x9' ROCK OUTLET PROTECTION
⑤	EXISTING 15" CGMP - REMOVE
⑥	EXISTING 18" ACCGMP & RCDI - REMOVE
⑦	OPTION PIPE W/ END @ INLET AND 3'x7' ROCK OUTLET PROTECTION

MAG 1991 N

TIMBER HAWK OWNERS ASSOCIATION, INC.

APPROX. LOCATION LEACH FIELD

STA. 58+17
BEGIN TIMBER HAWK ROAD CONSTRUCTION

SIGN TIMBER HAWK

RIGHT-OF-WAY

TH - 58 TIMBER HAWK RD

GRAVEL

60+00 TOWN OF STOCKBRIDGE 59+00

135+00

140+00

CONSTRUCTION LIMITS (TYP)

RIGHT-OF-WAY

MM POST

41'-0" MAXIMUM SPACING (6" HIGH CHECK DAM)

PDF

② ③ ④ ⑤ ⑥ ⑦

138+00 139+00 140

137+00

136+00

730

7' X 9' ROCK OUTLET PROTECTION

3' X 7' ROCK OUTLET PROTECTION

IMPACTS WITHIN THE BUFFER ZONE SHALL BE MINIMIZED.

BUFFER ZONE

24" BUTT

18" BUTT

TIMBER HAWK OWNERS ASSOCIATION, INC.

TIMBER HAWK OWNERS ASSOCIATION, INC.

FORBES, R. JEFFREY

12 ASH

WHITE RIVER

P L

EXISTING CONTOURS ARE SHOWN. SEE CROSS SECTIONS FOR FINAL CONTOURS.

0 20 40
SCALE IN FEET

LEGEND

- CHECK DAM
- DUST CONTROL (DC)
- DROP INLET PROTECTION
- FILTER BAGS (FB)
- LIVE FASCINE (LF)
- PROJECT DEMARCATION FENCE (PDF)
- ROLLED EROSION CONTROL PRODUCT (RECP)
- TEMPORARY INLET PROTECTION
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- ROCK OUTLET PROTECTION
- SURFACE ROUGHENING
- TURBIDITY CURTAIN

EPSC CONSTRUCTION PLAN SHEET (2)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_dur2.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH

STA. 80+17
BEGIN TIMBER RIVER
ROAD CONSTRUCTION

STA. 84+75
END TIMBER RIVER
ROAD CONSTRUCTION

TIMBER RIVER RD.

TIMBER HAWK
OWNERS ASSOCIATION, INC.

APPROX. LOCATION
LEACH FIELD

CONSTRUCTION ENTRANCE (TYP.)

5' X 7' ROCK
OUTLET PROTECTION

RIGHT-OF-WAY

STAGE 2 -
REMOVAL

DC

FB

BUFFER
ZONE

IMPACTS WITHIN THE BUFFER
ZONE SHALL BE MINIMIZED.

Underground
Telephone goes
from here to
Pole # 13-5

STAGE 1 -
CONSTRUCTION

STA 141+37.50
END ROADWAY
BEGIN BRIDGE

TEMPORARY CAUSEWAY TO PIER.
THE CORPS OF ENGINEERS SHALL
BE NOTIFIED OF ANY PROPOSED
CHANGES TO THE CONFIGURATION
AND/OR LOCATION OF THE CAUSEWAY
PRIOR TO BEGINNING WORK.

RETAINING WALL

STONE FILL, TYPE IV

3' X 7' ROCK
OUTLET PROTECTION

STA 143+62.50
END BRIDGE
RESUME ROADWAY

STONE FILL, TYPE IV

3' X 7' ROCK
OUTLET PROTECTION

CHANNEL LINE
S20°43'40.6"E

BUFFER
ZONE

IMPACTS WITHIN THE BUFFER
ZONE SHALL BE MINIMIZED.

STONE FILL, TYPE IV

STAGE 1- CONSTRUCTION

INSTALL CONSTRUCTION ENTRANCE IN THIS AREA PRIOR TO BEGINNING CONSTRUCTION OF NEW BRIDGE, ALIGNMENT AND OTHER CONSTRUCTION ACTIVITIES ACCESSED FROM THIS POINT.

STAGE 2 - REMOVAL

INSTALL CONSTRUCTION ENTRANCE IN THIS AREA PRIOR TO BEGINNING DEMOLITION OF EXISTING BRIDGE, ALIGNMENT AND OTHER CONSTRUCTION ACTIVITIES ACCESSED FROM THIS POINT

LEGEND

- CHECK DAM
- DUST CONTROL (DC)
- DROP INLET PROTECTION
- FILTER BAGS (FB)
- LIVE FASCINE (LF)
- PROJECT DEMARCATION FENCE (PDF)
- ROLLED EROSION CONTROL PRODUCT (RECP)
- TEMPORARY INLET PROTECTION
- SILT FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- ROCK OUTLET PROTECTION
- SURFACE ROUGHENING
- TURBIDITY CURTAIN

DRAINAGE KEY

⑧	OPTION PIPE W/ END @ INLET AND 3'x7' ROCK OUTLET PROTECTION
⑨	EXISTING 18" ACCGMP - REMOVE
⑩	SPECIAL DITCH - PAID UNDER COMMON EXCAVATION
⑪	OPTION PIPE W/ PRECAST DI @ INLET AND 7'x9' ROCK OUTLET PROTECTION
⑫	6" UNDERDRAIN - OUTLET INTO PRECAST DI @ 84+00 LT
⑬	EXISTING 24" CGMP - REMOVE
⑭	OPTION PIPE W/ PRECAST CATCH BASIN @ INLET WITH TWO CAST IRON GRATES AND 5'x7' ROCK OUTLET PROTECTION

EXISTING CONTOURS ARE SHOWN. SEE CROSS SECTIONS FOR FINAL CONTOURS.

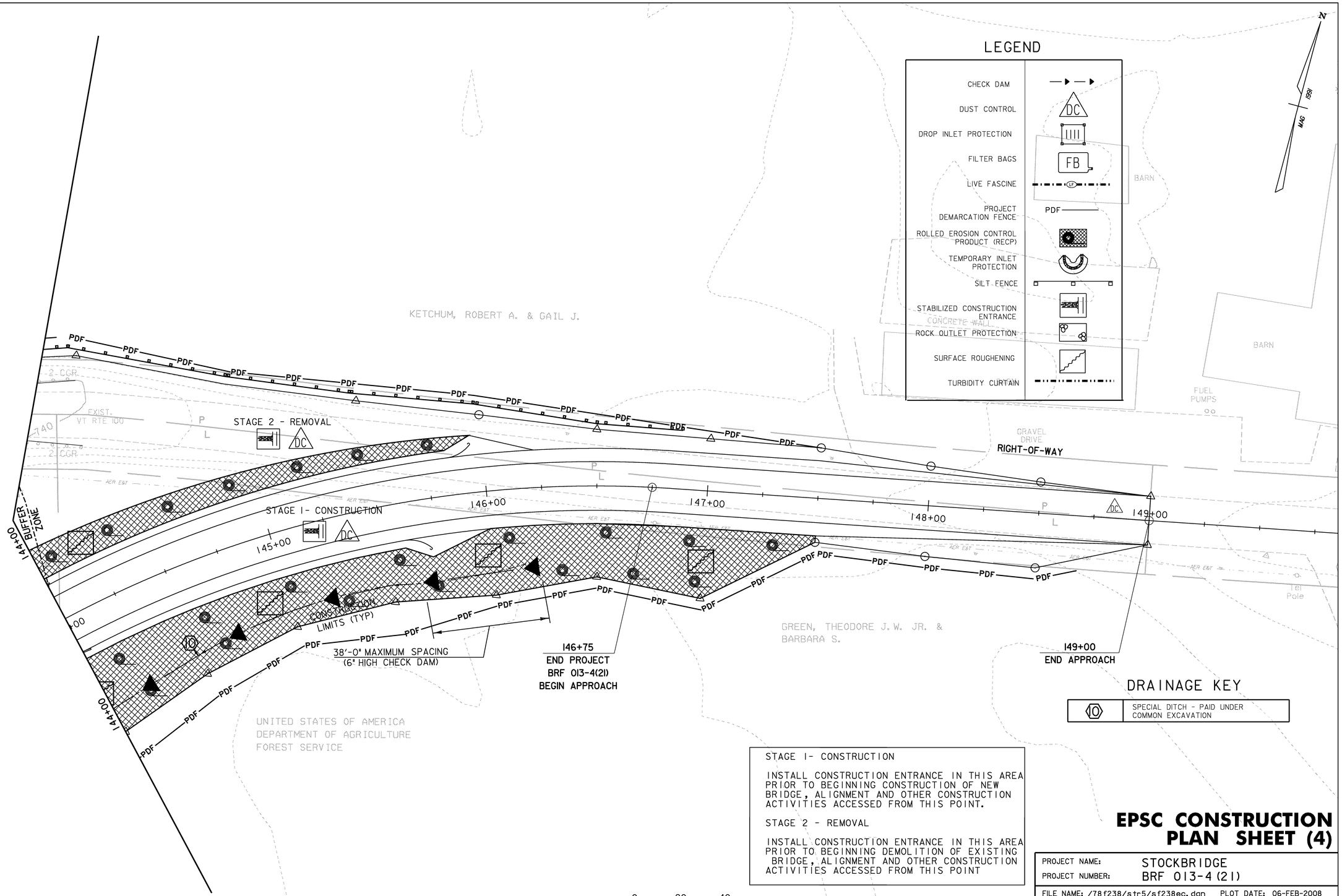
0 20 40
SCALE IN FEET

EPSC CONSTRUCTION PLAN SHEET (3)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_dur3.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH
SHEET 44 OF 144



STAGE 1- CONSTRUCTION

INSTALL CONSTRUCTION ENTRANCE IN THIS AREA PRIOR TO BEGINNING CONSTRUCTION OF NEW BRIDGE, ALIGNMENT AND OTHER CONSTRUCTION ACTIVITIES ACCESSED FROM THIS POINT.

STAGE 2 - REMOVAL

INSTALL CONSTRUCTION ENTRANCE IN THIS AREA PRIOR TO BEGINNING DEMOLITION OF EXISTING BRIDGE, ALIGNMENT AND OTHER CONSTRUCTION ACTIVITIES ACCESSED FROM THIS POINT

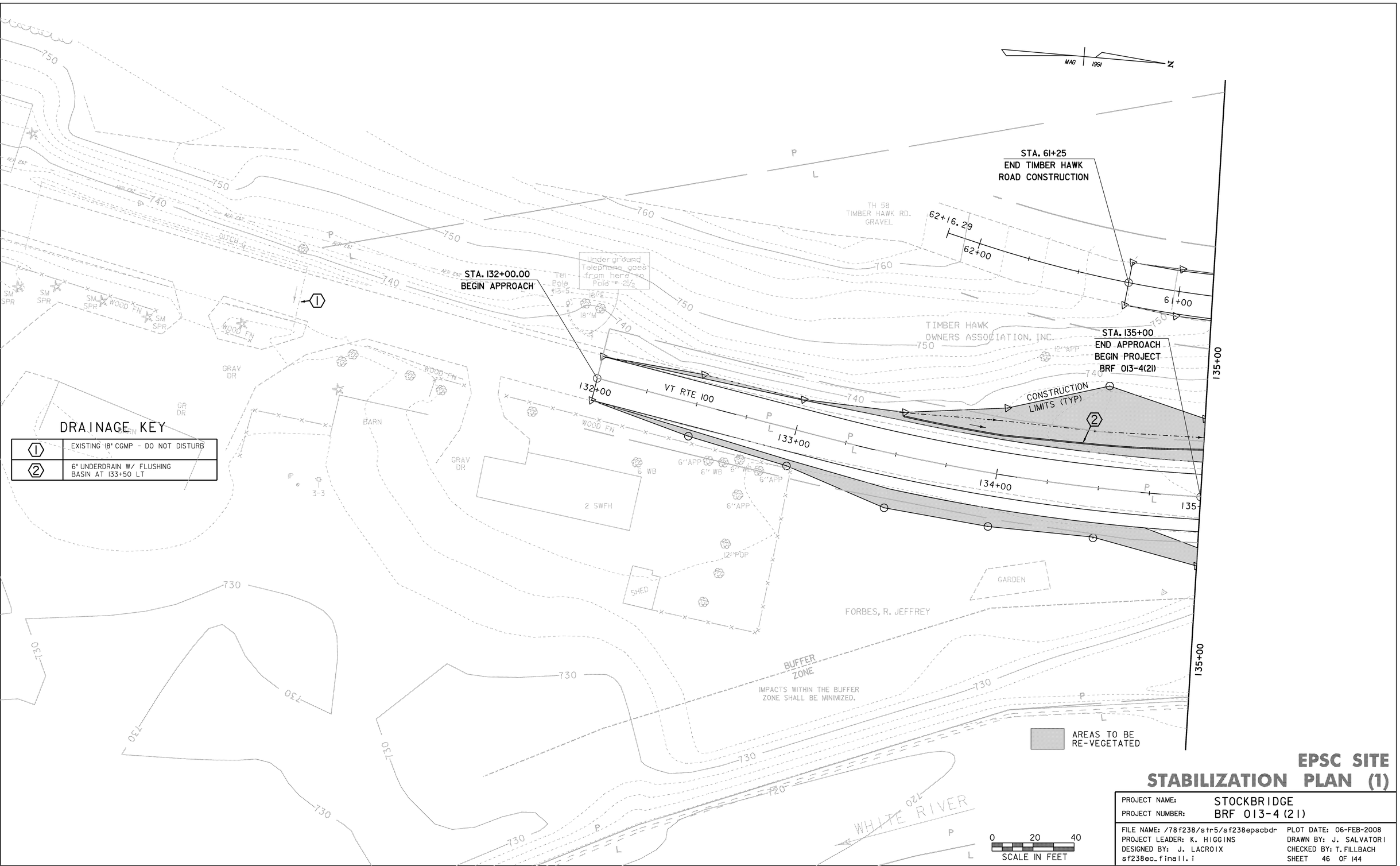
EXISTING CONTOURS ARE SHOWN. SEE CROSS SECTIONS FOR FINAL CONTOURS.

EPSC CONSTRUCTION PLAN SHEET (4)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238ec.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_dur4.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T.FILLBACH
SHEET 45 OF 144



DRAINAGE KEY

①	EXISTING 18" CGMP - DO NOT DISTURB
②	6" UNDERDRAIN W/ FLUSHING BASIN AT 133+50 LT

EPSC SITE STABILIZATION PLAN (1)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: J. LACROIX	CHECKED BY: T. FILLBACH
sf238ec_final1.i	SHEET 46 OF 144

DRAINAGE KEY

⟨2⟩	6" UNDERDRAIN W/ FLUSHING BASIN AT 133+50 LT
⟨3⟩	6" UNDERDRAIN CARRIER PIPE
⟨4⟩	OPTION PIPE W/ END SECTION @ INLET AND 7'x9' ROCK OUTLET PROTECTION
⟨5⟩	EXISTING 15" CGMP - REMOVE
⟨6⟩	EXISTING 18" ACCGMP & RCDI - REMOVE
⟨7⟩	OPTION PIPE W/ END @ INLET AND 3'x7' ROCK OUTLET PROTECTION

MAG 1991

N

TIMBER HAWK OWNERS ASSOCIATION, INC.

STA. 58+17
BEGIN TIMBER HAWK
ROAD CONSTRUCTION

TH - 58 TIMBER HAWK RD

60+00 TOWN OF STOCKBRIDGE 59+00

135+00

140+00

CONSTRUCTION LIMITS (TYP)

TIMBER HAWK
OWNERS ASSOCIATION, INC.

740

730

136+00 137+00 138+00 139+00

IMPACTS WITHIN THE BUFFER
ZONE SHALL BE MINIMIZED.

BUFFER
ZONE

TIMBER HAWK
OWNERS ASSOCIATION, INC.

TIMBER HAWK OWNERS ASSOCIATION, INC.

FORBES, R. JEFFREY

P L

AREAS TO BE
RE-VEGETATED

0 20 40
SCALE IN FEET

EPSC SITE STABILIZATION PLAN (2)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: J. LACROIX	CHECKED BY: T. FILLBACH
sf238ec_final2.i	SHEET 47 OF 144

TIMBER HAWK OWNERS ASSOCIATION, INC.

TIMBER RIVER RD.

CONSTRUCTION LIMITS (TYP)

STA. 80+17
BEGIN TIMBER RIVER
ROAD CONSTRUCTION

STA. 84+75
END TIMBER RIVER
ROAD CONSTRUCTION

STAGE 2
REMOVAL

STAGE 1
CONSTRUCTION

BUFFER ZONE

TIMBER HAWK OWNERS ASSOCIATION, INC.

IMPACTS WITHIN THE BUFFER ZONE SHALL BE MINIMIZED.

UNITED STATES OF AMERICA
DEPARTMENT OF AGRICULTURE,
FOREST SERVICE

STA 141+37.50
END ROADWAY
BEGIN BRIDGE

STA 143+62.50
END BRIDGE
RESUME ROADWAY

STONE FILL, TYPE IV

CHANNEL LINE
S20^43'40.6"E

KETCHUM, ROBERT A. & GAIL J.

GREEN, THEODORE J.W., JR. & BARBARA S.

MAG 1991

N

DRAINAGE KEY

⑧	OPTION PIPE W/ END ⌀ INLET AND 3'x7' ROCK OUTLET PROTECTION
⑨	EXISTING 18" ACCGMP - REMOVE
⑩	SPECIAL DITCH - PAID UNDER COMMON EXCAVATION
⑪	OPTION PIPE W/ PRECAST DI ⌀ INLET AND 7'x9' ROCK OUTLET PROTECTION
⑫	6" UNDERDRAIN - OUTLET INTO PRECAST DI ⌀ 84+00 LT
⑬	EXISTING 24" CGMP - REMOVE
⑭	OPTION PIPE W/ PRECAST CATCH BASIN ⌀ INLET WITH TWO CAST IRON GRATES AND 5'x7' ROCK OUTLET PROTECTION

LF — LIVE FASCINE

AREAS TO BE RE-VEGETATED

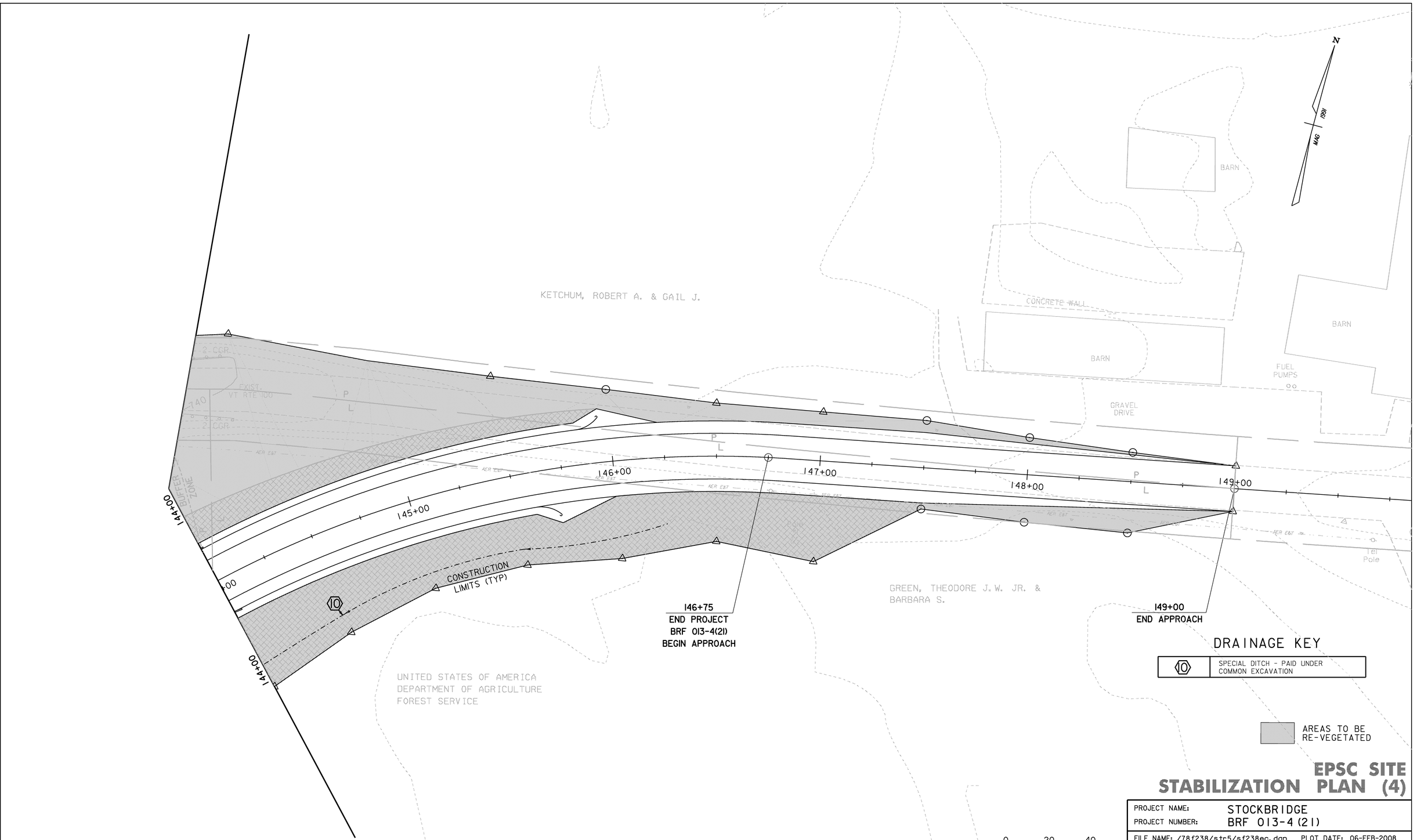
0 20 40
SCALE IN FEET

EPSC SITE STABILIZATION PLAN (3)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238epscbdr
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238ec_final3.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH

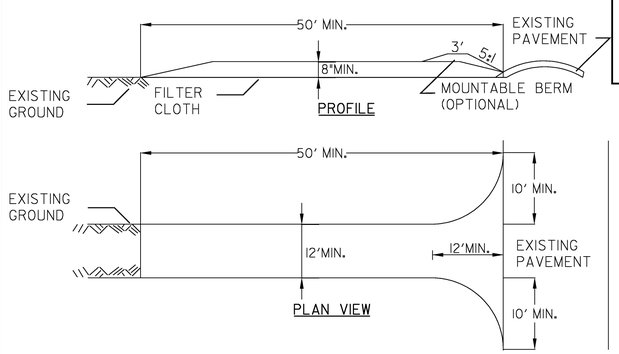


EPSC SITE STABILIZATION PLAN (4)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238ec.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: J. LACROIX	CHECKED BY: T.FILLBACH
sf238ec_final4.i	SHEET 49 OF144

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. STONE SIZE - USE 1-4" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH APPLIES).
3. THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT 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

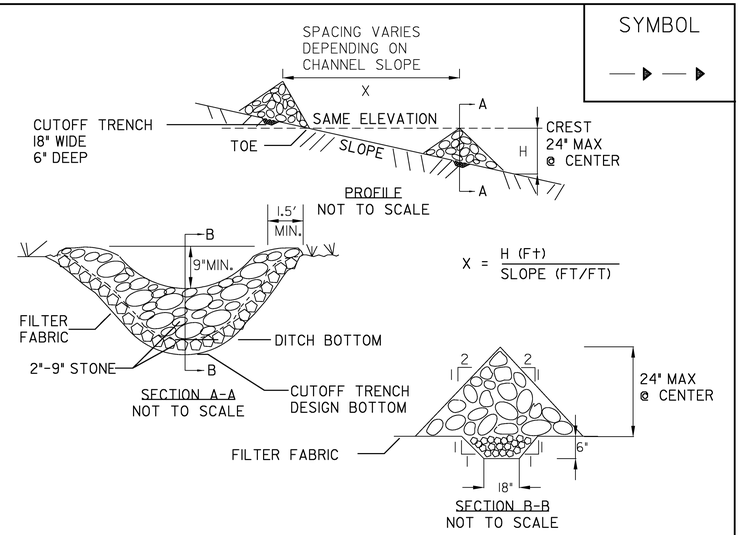
STABILIZED CONSTRUCTION ENTRANCE

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

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.35 VEHICLE TRACKING PAD

REVISIONS	
FEBRUARY 9, 2007	WHF
MARCH 8, 2007	JMF

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. SET SPACING OF CHECK DAMS SO THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION AS THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

MAXIMUM DRAINAGE AREA 2 ACRES.

ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DECORIGINALLY DEVELOPED BY USDA-NRCSVERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CHECK DAM

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

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.25 TEMPORARY STONE CHECK DAM, TYPE I

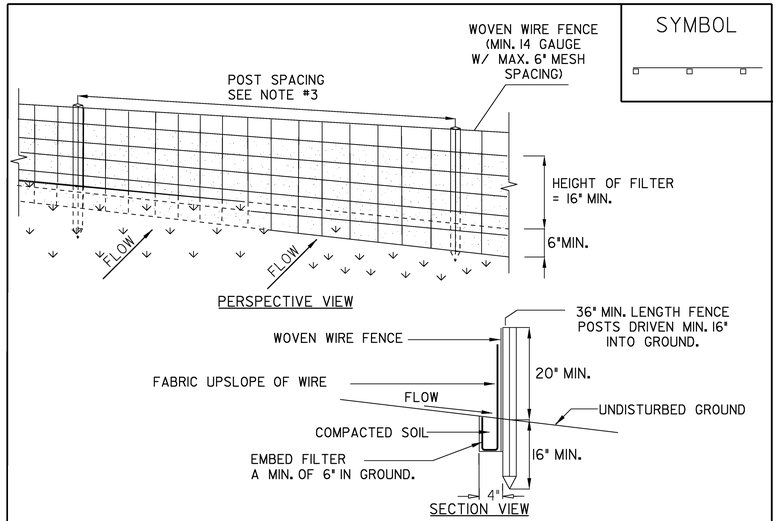
REVISIONS	
MARCH 8, 2007	JMF

STONE CHECK DAM
PLACEMENT CHART

DITCH SLOPE	CHECK DAM HEIGHT					
	0'-6"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"
1%	50	100	150	200	250	300
2%	25	50	67	100	125	150
3%	17	33	50	65	83	100
4%	13	25	37	50	63	75
5%	10	20	30	40	50	60
6%	8	17	25	33	42	50
8%	7	13	19	25	31	38
10%	5	10	15	20	25	30

* ALL INTERVALS IN FEET *

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. WOVEN WIRE FENCE REINFORCEMENT IS ONLY REQUIRED WITHIN 100 FT UPSLOPE OF RECEIVING WATERS.
2. WHERE REQUIRED FENCE SHALL BE WOVEN WIRE, MIN. 14 GAUGE WITH A 6" MAXIMUM MESH OPENING. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI100X, 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'. FOR FILTER-CLOTH FENCE, 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 SIX INCHES AND FOLDED.
6. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
7. 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 ITEM SHALL BE PAID FOR UNDER ITEM
STANDARD SPECIFICIATION 649.51 GEOTEXTILE FOR SILT FENCE OR
SPECIAL PROVISION 900.675 (GEOTEXTILE FOR SILT FENCE, WOVEN WIRE REINFORCED)

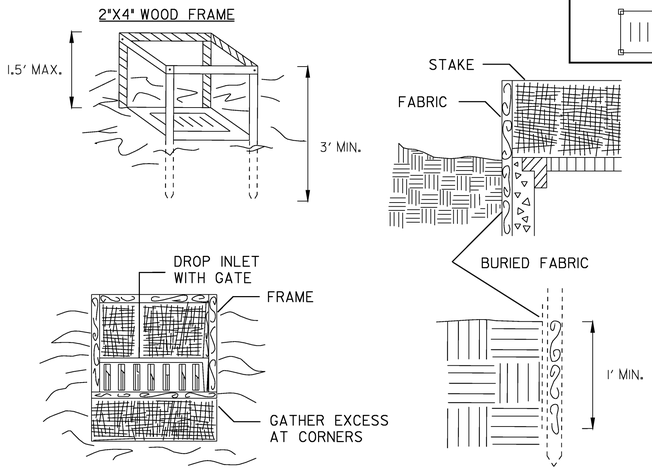
EPSC DETAILS (1)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: 78f238/str5/sf238epscdet
PROJECT LEADER: K. HIGGINS
DESIGNED BY: J. LACROIX
sf238epscdet1.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: T. FILLBACH
SHEET 50 OF 144

SYMBOL



CONSTRUCTION SPECIFICATIONS

1. FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

MAXIMUM DRAINAGE AREA 1ACRE

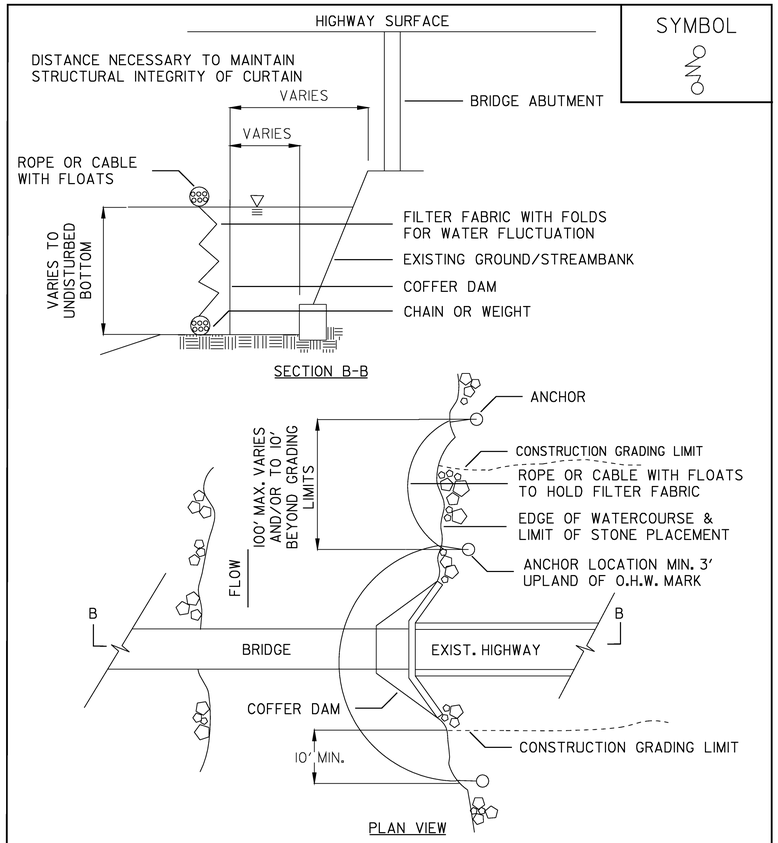
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	FILTER FABRIC DROP INLET PROTECTION

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

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.40 INLET PROTECTION DEVICE, TYPE I

REVISIONS	
MARCH 8, 2007	JMF

SYMBOL



ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT AGENCY OF TRANSPORTATION	TURBIDITY CURTAIN

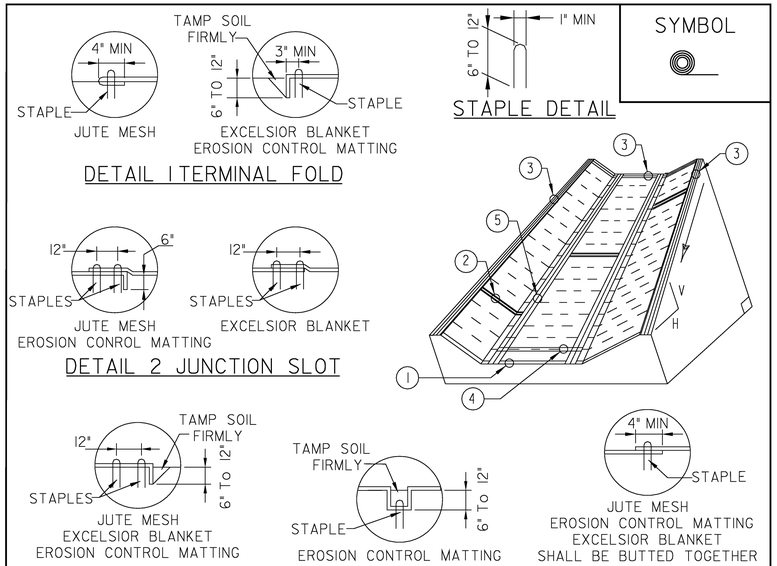
NOTES:

THIS ITEM SHALL BE PAID FOR UNDER ITEM
649.61 GEOTEXTILE FOR FILTER CURTAIN

EPSC DETAILS (2)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: 78f238/str5/sf238epscdet	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: J. LACROIX	CHECKED BY: T. FILLBACH
sf238epscdet2.i	SHEET 51 OF 144



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. EROSION MATTING, CHECK SLOTS, SHALL BE SPACED IN DITCH CHANNEL SO THAT ONE OCCURS WITHIN EACH 50' ON SLOPES OF MORE THAN 4% AND LESS THAN 6%. ON SLOPES OF 6% OR MORE, THEY SHALL BE SPACED SO THAT ONE OCCURS WITHIN EACH 25'.

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'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' 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.

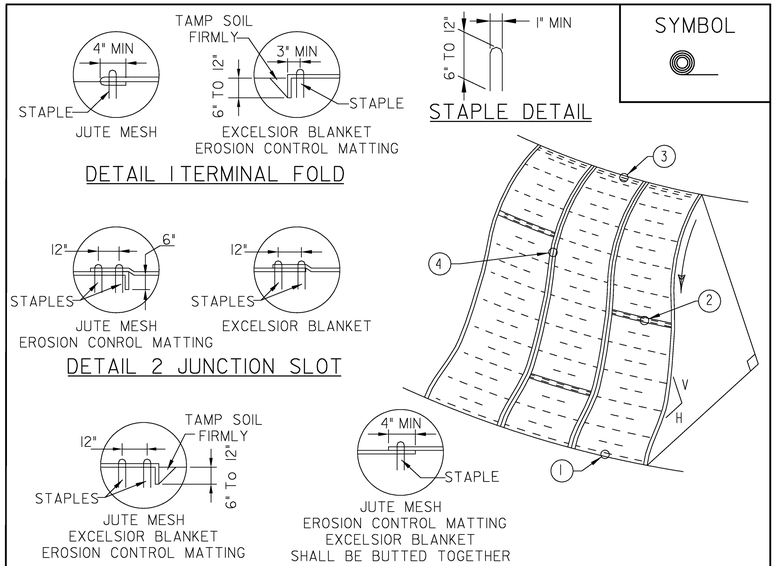
ADAPTED FROM DETAILS PROVIDED BY: ILLINOIS USDA-NRCS
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

ROLLED EROSION CONTROL PRODUCT (RECP) DITCH

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

THIS ITEM SHALL BE PAID FOR UNDER ITEM
653.20 TEMPORARY EROSION MATTING

REVISIONS	
MARCH 8, 2007	JMF
APRIL 16, 2007	WHF



SYMBOL

CONSTRUCTION SPECIFICATIONS

1. APPLY TO SLOPES GREATER THAN 3H:1V OR WHERE NECESSARY TO AID IN ESTABLISHING VEGETATION.

2. APPLY FERTILIZER, LIME AND 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'X225' ROLL OF MATERIAL AND 125 STAPLES ARE REQUIRED PER 4'X150' 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: ILLINOIS USDA-NRCS
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 ITEM SHALL BE PAID FOR UNDER ITEM
653.20 TEMPORARY EROSION MATTING

NEW	
APRIL 16, 2007	WHF
REVISIONS	

NOTES:

1. USE 2" TO 3" STONE.

2. PLACE STONE OVER GEOTEXTILE.

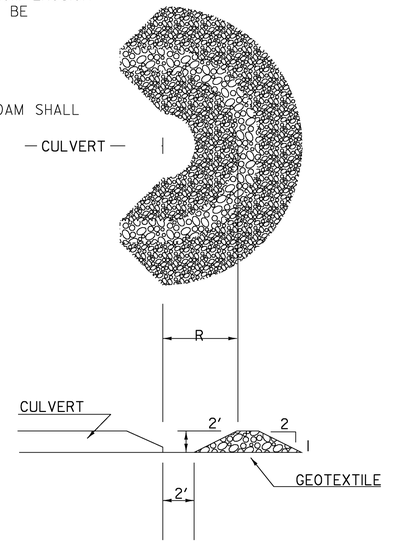
3. ONCE THE AREAS UPSTREAM FROM THE CHECK DAM ARE STABILIZED WITH VEGETATION, THE SEDIMENT TRAPPED BEHIND THE DAM SHAL BE DISPOSED OF IN AN APPROVED WASTE AREA.

4. THE CHECK DAM(S) SHALL BE FLATTENED AND GRADED IN A MANNER WHICH PROTECTS THE AREA FROM EROSION AND CHANNEL BLOCKAGE . (GEOTEXTILE MUST BE REMOVED).

5. THE GEOTEXTILE MUST BE DISPOSED OF APPROPRIATELY.

6. THE AREA CONTRIBUTING TO THE CHECK DAM SHALL NOT EXCEED 4 ACRES.

PIPE DIA.	R
18"	7'
24"	7'
30"	8'



NOT TO SCALE

SYMBOL

THIS ITEM SHALL BE PAID UNDER ITEM 653.40, INLET PROTECTION DEVICE, TYPE I.

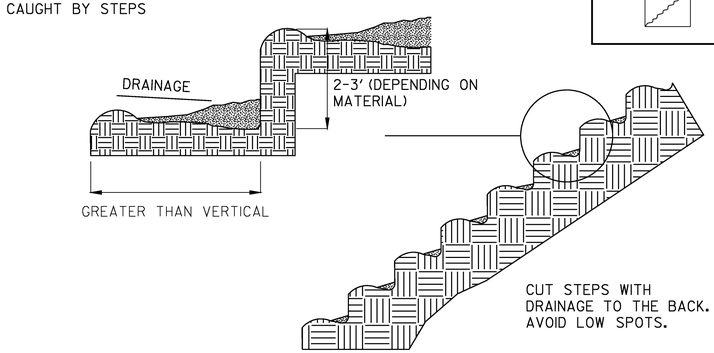
TEMPORARY INLET PROTECTION

EPSC DETAILS (3)

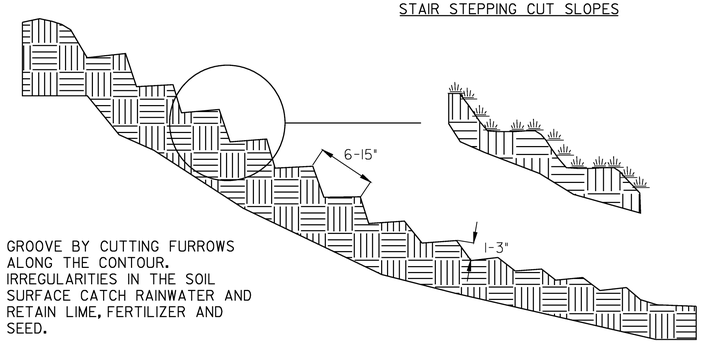
PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: 78f238/str5/sf238epscdet	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: J. LACROIX	CHECKED BY: T. FILLBACH
sf238epscdet3.i	SHEET 52 OF 144

SYMBOL



STAIR STEPPING CUT SLOPES



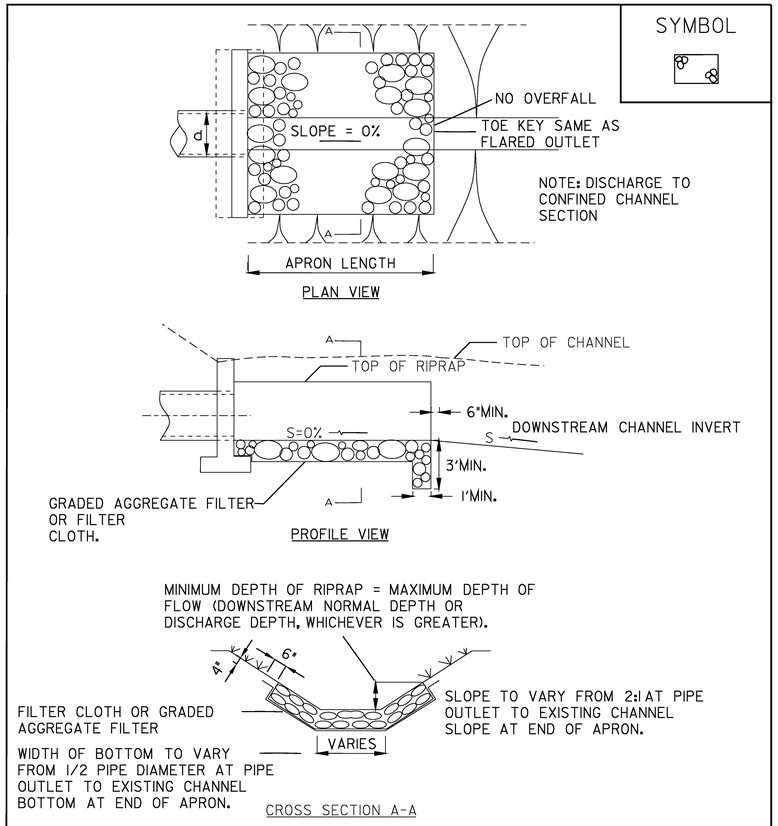
GROOVING SLOPES

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

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

THIS ITEM SHALL BE CONSIDERED INCIDENTAL TO THE EXCAVATION OR FILL ITEM WHICH REQUIRES SURFACE ROUGHENING.

SYMBOL

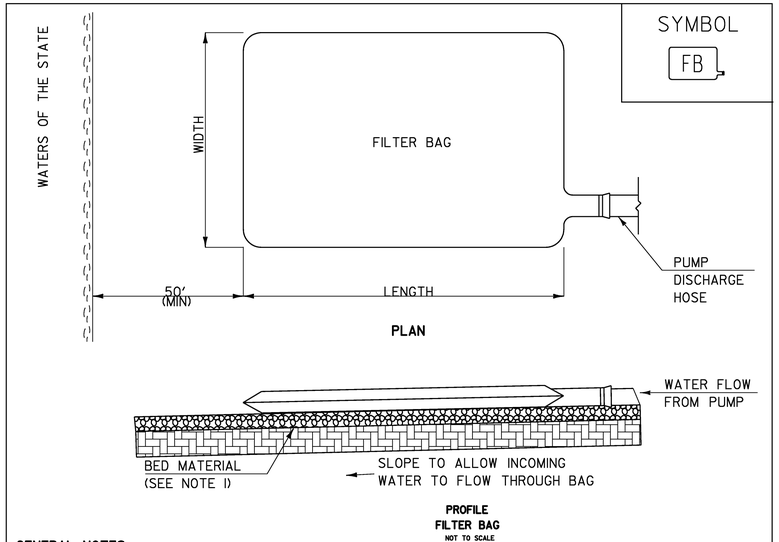


ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC ORIGINALLY DEVELOPED BY USDA-NRCS VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION	ROCK OUTLET PROTECTION

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

THIS ITEM SHALL BE PAID FOR UNDER ITEM 613.10, STONE FILL TYPE I

SYMBOL
FB



GENERAL NOTES:

FILTER BAG SHALL BE INSTALLED ON A VEGETATED SLOPE TO ALLOW INCOMING WATER TO FLOW THROUGH THE BAG. FILTER BAGS MAY ALSO BE PLACED ON COARSE AGGREGATE, STONE, OR HAYBALES TO INCREASE FILTRATION EFFICIENCY.

FILTER BAG SHALL BE LOCATED A MINIMUM OF 50 FEET FROM WATERS OF THE STATE UNLESS OTHERWISE APPROVED BY THE ENGINEER.

THE NECK OF THE FILTER BAG SHALL BE STRAPPED TIGHTLY TO THE DISCHARGE HOSE.

FILTER BAG SHALL BE INSPECTED EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A STORM EVENT GREAT ENOUGH TO CAUSE STORMWATER TO LEAVE THE CONSTRUCTION SITE.

A FILTER BAG IS FULL WHEN IT NO LONGER CAN EFFICIENTLY FILTER SEDIMENT OR ALLOW WATER TO PASS AT A REASONABLE RATE. FILTER BAG SHALL BE DISPOSED OF AS APPROVED IN THE EPSCP OR AS DIRECTED BY THE ENGINEER.

	FILTER BAG

APPLICATION NOTES:

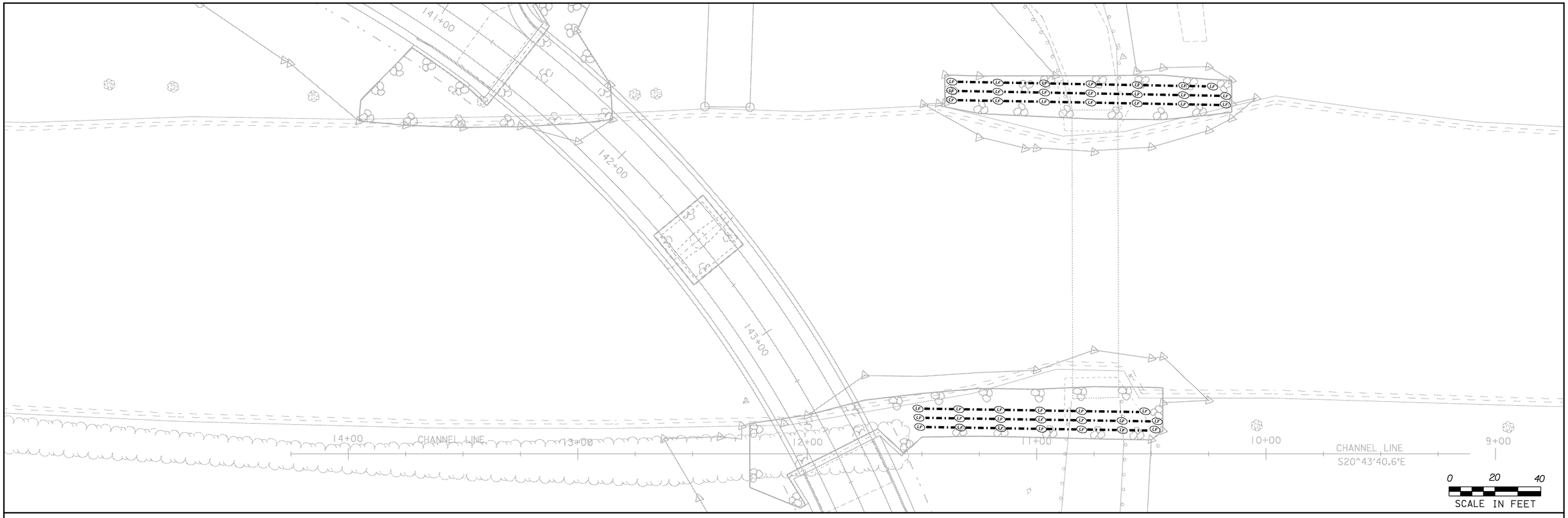
THE PRIMARY PURPOSE OF THE FILTER BAG IS TO RETAIN SILT, SAND, AND FINES DURING DEWATERING OPERATIONS WHILE ALLOWING WATER TO PASS THROUGH THE BAG.

THIS ITEM SHALL BE PAID FOR UNDER ITEM 653.45, FILTER BAG.

EPSC DETAILS (4)

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: 78f238/str5/sf238epscdet	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: J. LACROIX	CHECKED BY: T. FILLBACH
sf238epscdet4.i	SHEET 53 OF 144

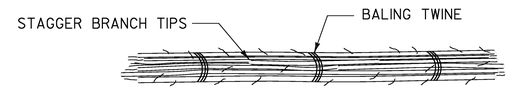


CONSTRUCTION SPECIFICATIONS

1. LIVE FASCINES SHALL BE PREPARED FROM FRESHLY CUT DORMANT PLANTS AND INSTALLED WITHIN 8 HOURS OF THE TIME THE MATERIAL IS HARVESTED, UNLESS PROPERLY STORED.
2. LIVE FASCINE SHALL CONSIST OF WILLOW CUMMINGS OR ALTERNATE SPECIES APPROVED BY THE ENGINEER AND SHALL BE OBTAINED FROM SOURCES APPROVED BY THE ENGINEER
3. LIVE FASCINES SHALL BE 4" TO 8" IN DIAMETER. LENGTHS MAY VARY TO SUIT CONDITIONS. A MINIMUM LENGTH OF 8' IS REQUIRED.
4. THE TIPS OF THE BRANCHES WITHIN THE LIVE FASCINE SHALL BE STAGGERED.
5. LIVE FASCINES SHALL BE PLACED AS INDICATED IN THE CONTRACT DOCUMENTS.
6. BEGINNING AT THE BASE OF THE SLOPE, A TRENCH SHALL BE DUG LARGE ENOUGH TO CONTAIN THE LIVE FASCINES. THE LIVE FASCINES SHALL BE PLACED IN THE TRENCH. WHERE ENDS MEET IN THE TRENCH, THE FASCINES SHALL OVERLAP BY 18".
7. WOOD POSTS SHALL BE INSTALLED FLUSH TO THE TOP OF THE FASCINE EVERY 18" ALONG THE LENGTH OF THE BUNDLES AS SHOWN ON THE CROSS SECTION. WHERE SPECIFIED LIVE STAKES MAY BE USED IN PLACE OF POSTS.
8. THE TRENCH SHALL BE BACKFILLED WITH MOIST SOIL AND HAND TAMPED. THE TOP OF THE FASCINE SHALL BE SLIGHTLY EXPOSED WHEN THE INSTALLATION IS COMPLETE AS SHOWN ON THE CROSS SECTION.
9. SEED OR OTHER EROSION CONTROL MATERIAL SHALL BE USED BETWEEN THE FASCINE ROWS, AS SPECIFIED IN THE CONTRACT DOCUMENTS.
10. LIVE FASCINE TRENCHES SHALL BE FROM 3' TO 8' APART, ACCORDING TO SLOPE AND/OR THE CONTRACT DOCUMENTS.

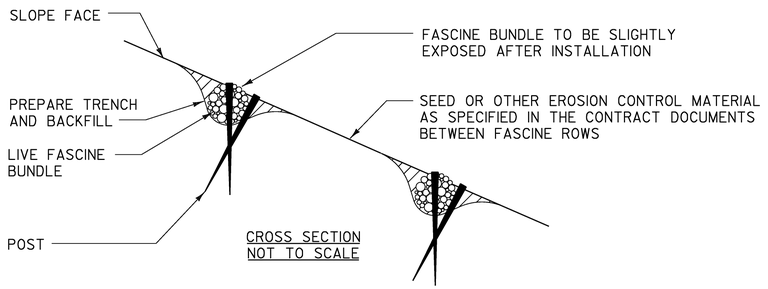
ADAPTED FROM DETAILS PROVIDED BY: NEW YORK STATE DEC
ORIGINALLY DEVELOPED BY USDA-NRCS
VERMONT DEPARTMENT OF ENVIRONMENTAL CONSERVATION

LIVE FASCINE

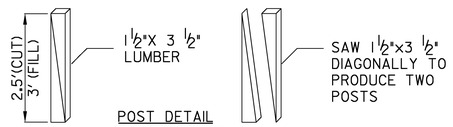


4" TO 8" DIAMETER AND MINIMUM LENGTH OF 8' REQUIRED

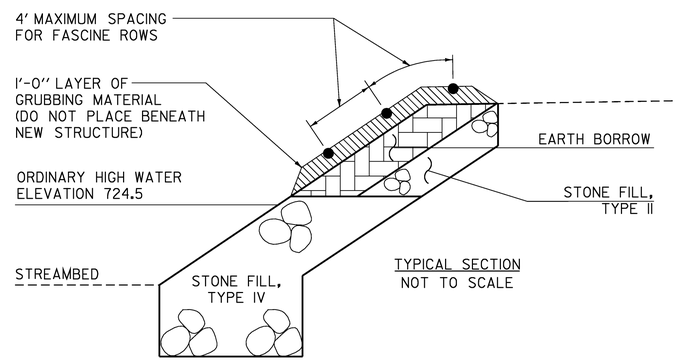
FASCINE BUNDLE DETAIL
NOT TO SCALE



CROSS SECTION
NOT TO SCALE



POST DETAIL
NOT TO SCALE



TYPICAL SECTION
NOT TO SCALE

LIVE FASCINE DETAIL SHEET

LIVE FASCINE SYMBOL (3 ROWS)

PROJECT NAME- STOCKBRIDGE
PROJECT NUMBER- BRF 013-4(21)

FILE NAME- /78f238/bioengineering.dgn
PROJECT LEADER- K. HIGGINS
DESIGNED BY- T. SUMNER
bioengineering.i

PLOT DATE- 06-FEB-2008
DRAWN BY- G. SHANGRAW
CHECKED BY- T. FILLBACH
SHEET 55 OF 144

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

COMMONLY USED SYMBOLS

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

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

DEFINITIONS (AASHTO)

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

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

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

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

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

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

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

VARVED - Alternate layers of silt and clay.

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

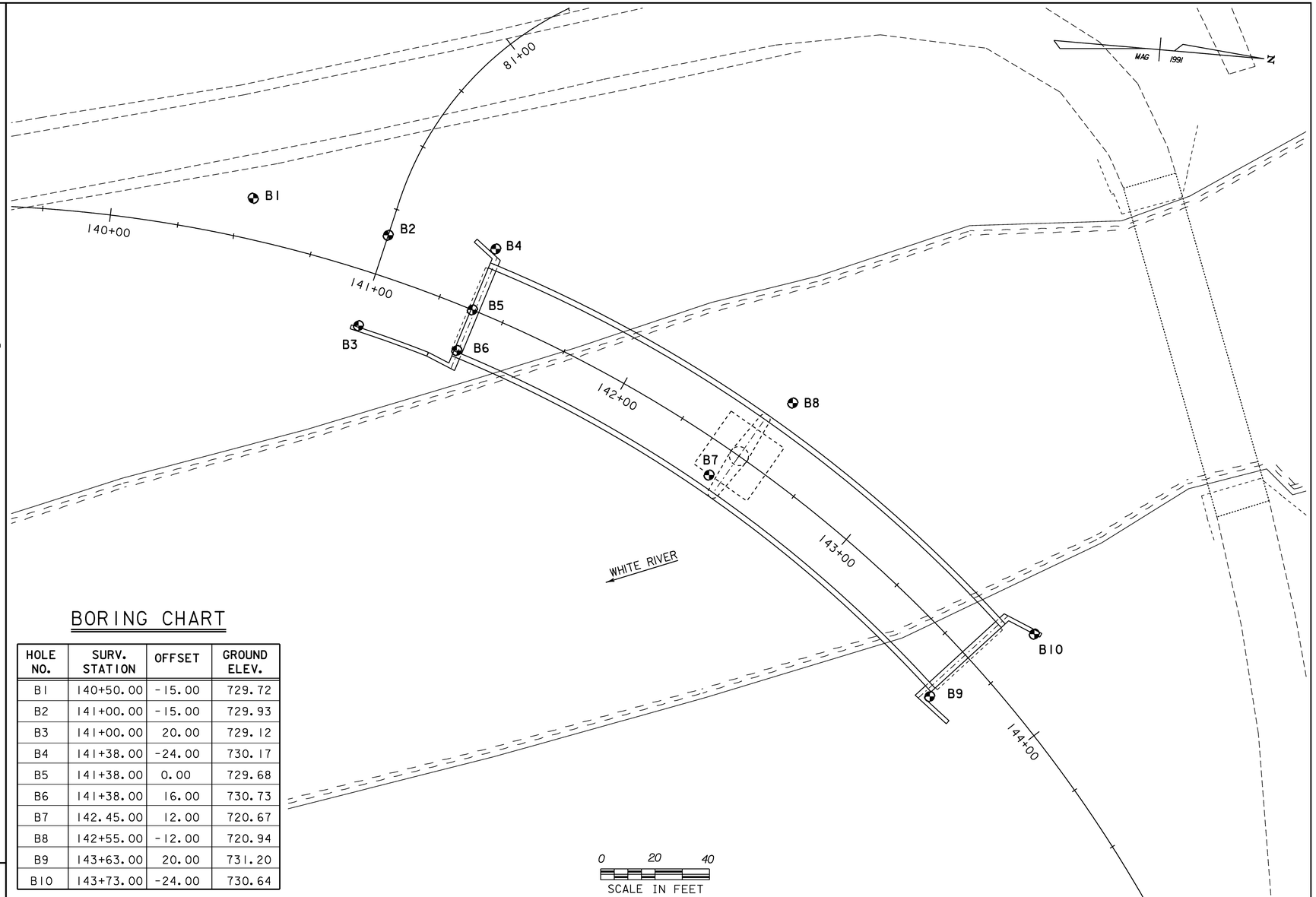
MUCK - Soft organic soil (containing > 10% organic material.

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

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

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

DIP - Inclination of bed with a horizontal plane.



BORING CHART

HOLE NO.	SURV. STATION	OFFSET	GROUND ELEV.
B1	140+50.00	-15.00	729.72
B2	141+00.00	-15.00	729.93
B3	141+00.00	20.00	729.12
B4	141+38.00	-24.00	730.17
B5	141+38.00	0.00	729.68
B6	141+38.00	16.00	730.73
B7	142.45.00	12.00	720.67
B8	142+55.00	-12.00	720.94
B9	143+63.00	20.00	731.20
B10	143+73.00	-24.00	730.64

GENERAL NOTES

1. The subsurface explorations shown herein were made between 08/03/99 and 09/03/99 by the Agency.
2. Soil and rock classifications, properties and descriptions are based on engineering interpretation from available subsurface information by the Agency and may not necessarily reflect actual variations in subsurface conditions that may be encountered between individual boring or sample locations.
3. Observed water levels and/or conditions indicated are as recorded at the time of exploration and may vary according to the prevailing rainfall, methods of exploration and other factors.
4. Engineering Judgement 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 judgement by the Contractor.
5. Pictorial structure details shown on the boring plan layout or soils profile are for illustrative purposes only and may not accurately portray final contract details.
6. Terminology used on boring logs to describe the hardness, degree of weathering, and spacing of fractures, joints and other discontinuities in the bedrock is defined in the AASHTO Manual on Subsurface Investigations, 1988.

BORING INFORMATION SHEET

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238bor.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 56 OF 144

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

HOLE NO.: BI
SHEET 1 OF 2
DATE STARTED: 8/19/99
DATE COMPLETED: 8/19/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 140+50.00
GROUND EL.: 729.72

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -15.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. YOUNG
DRILLER: R. TALLMAN
LOGGER: K. RUSSELL

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		A-1-a,SaGr,brn,Dry,rec.=0.9′	28	7.6	62.2	30.3	7.5		
10		BXDC 8.0′-11.5′,No Sample Cleaned out casing							
15		A-4,Si,gry,MTW,rec.=0.7′	10	27.5	0.4	9.5	90.1		
20		A-4,Si,gry,MTW,rec.=0.8′	13	34.1	7.7	11.9	80.4		
25		A-4,Si,gry,MTW,rec.=0.4′	15	40.7	0.4	4.8	94.8		
30		A-4,Si,gry,MTW,rec.=0.8′	8	34.8	0.3	10.8	88.9		
35		A-4,Si,gry,MTW,rec.=0.6′	8	31.1	0.8	6.9	92.3		
40		A-4,Si,gry,MTW,rec.=1.70′	5	34.3	0.2	17.1	82.7		
45		A-4,SaSi,brn,MTW,rec.=0.4′	6	26.3	0.5	31.2	68.3		

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

HOLE NO.: BI
SHEET 2 OF 2
DATE STARTED: 8/19/99
DATE COMPLETED: 8/19/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 140+50.00
GROUND EL.: 729.72

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -15.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. YOUNG
DRILLER: R. TALLMAN
LOGGER: K. RUSSELL

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-2-4,SiGrSa,brn,MTW rec.=0.3′	8	20.1	37.3	40.6	22.1		
55		A-4,SaSi,brn,MTW,rec.=0.9′	10	23.6	4.8	43.7	51.5		
60		A-1-a,Gr,brn,Dry,rec.=0.4′	R	6.8	72.7	15.9	11.4		
		Hole stopped at 60.9′							
65									
70									
75									
80									
85									
90									
95									

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

HOLE NO.: B2
SHEET 1 OF 2
DATE STARTED: 8/18/99
DATE COMPLETED: 8/18/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+00.00
GROUND EL.: 729.93

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -15.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. YOUNG
DRILLER: R. YOUNG
LOGGER: E. CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		A-2-4,SiGrSa,brn,MTW rec.=1.5′	4	34.8	28	47.4	24.6		
10		A-4,SaSi,gry,MTW,rec.=0.8′	14	24.1	9.1	27.4	63.5		
15		A-4,Si,gry,MTW,rec.=1.3′	6	29.4	3.9	4	92.1		
20		A-4,GrSi,gry,MTW,rec.=0.5′	12	28.2	26.8	3.8	69.4		
25		A-4,Si,gry,MTW,rec.=1.2′	11	37.6	0.7	10.4	88.9		
30		A-4,SaSi,brn,MTW,rec.=1.3′	18	31.1	0.8	20.7	72.4		
35		A-4,Si,brn,MTW,rec.=0.8′	24	34.9	1.2	14.7	84.1		
40		A-4,Si,brn,MTW,rec.=1.1′	12	30.4	0	17.4	82.6		
45		A-4,Si,brn-gry,MTW rec=1.4′	12	35.9	0	14.4	85.6		

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

HOLE NO.: B2
SHEET 2 OF 2
DATE STARTED: 8/18/99
DATE COMPLETED: 8/18/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+00.00
GROUND EL.: 729.93

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -15.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. YOUNG
DRILLER: R. YOUNG
LOGGER: E. CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4,Si,brn-gry,MTW rec.=1.1′	9	33.1	9.9	13.9	76.2		
55		A-4,Si,brn-gry,MTW rec.=1.8′	6	25.6	8.5	19.4	72.1		
60		A-2-4,GrSa,brn,MTW rec.=1.5′	13	21.3	26.5	53.7	19.8		
65		A-4,SaSi,brn-gry,MTW rec.=1.5′	8	23.5	17.5	29.9	52.6		
70		Visual: Broken Rock	R						
		Hole Stopped at 70.5′							
75									
80									
85									
90									
95									

BORING LOG SHEET (1)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/mf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lgl.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 57 OF 144

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

HOLE NO.: B3
SHEET 1 OF 2
DATE STARTED: 8/12/99
DATE COMPLETED: 8/17/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+00.00
GROUND EL.: 729.12

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 20.00
G.W. DEPTH:

BORING CREW
CREW CHIEF:
DRILLER:
LOGGER:

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		A-2-4,SiSa,brn,MTW rec.=2..0′	3	41.5	1.7	68.6	29.7		
10		A-2-4,SiSaGr,brn,MTW rec.=0.3′	7	21.7	40	34.5	25.5		
15		A-4,Si,gry,MTW,rec.=0.3′	15	35.1		7.9	92.1		
20		A-4,Si,gry,MTW,rec.=0.9′	7	33.7	0.3	5.1	94.6		
25		A-4,Si,gry,MTW,rec.=1.4′	6	38.4		12.7	87.3		
30		A-4,Si,gry,MTW,rec.=1.4′	9	30.4	12.6	17.9	69.5		
35		A-4,Si,gry,MTW,rec.=1.2′	6	34.8		15.6	84.4		
40		A-4,Si,gry,MTW,rec.=1.2′	5	36.4		7.9	92.1		
45		A-4,Si,gry,MTW,rec.=1.4′	6	36	2.6	13.3	84.1		

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

HOLE NO.: B3
SHEET 2 OF 2
DATE STARTED: 8/12/99
DATE COMPLETED: 8/17/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+00.00
GROUND EL.: 729.12

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 20.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. YOUNG
DRILLER: R. YOUNG
LOGGER: E. CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4,SaSi,gry-brn,MTW rec.=1.0′	17	37		30.9	69.1		
55		A-4,SaSi,gry-brn,MTW rec.=1.3′	13	33.8		45.2	54.8		
60		A-4,Si,gry,MTW,rec.=1.4′	13	38.7	9.7	7.3	83		
65		A-4,SaSi,gry-brn,MTW rec.=1.7′	5	31.1	2.4	28.2	69.4		
70		A-4,SaSi,gry-brn,MTW rec.=1.3′	9	30.3		31.9	68.1		
75		A-4,GrSiSa,gry-brn,MTW rec.=0.7′	18	21.3	25.8	38.5	35.7		
80		A-1-b,SiSaGr,brn,M rec.=.5′	36	11.1	45.2	33.6	21.2		
85		Top of Bedrock @ 85.7′							
90		RUN#1: BXDC 85.7′-90.7′ rec.=4.3′ See Geologist's Report		RUN 1	REC% 86	RQD% 50	DIP° 80		
95		RUN#2: BXDC 90.7′-95.7′ rec.=5.0′ See Geologist's Report		2	100	90	80		

Geologist's Report: Hole Stopped @ 95.7′

Run #1: Greenstone with quartz veins, Moderately hard, Unweathered, Competent.

Run #2: Same as Run #1, except zone 78′ to 79′ is soft, Competent.

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

HOLE NO.: B04
SHEET 1 OF 2
DATE STARTED: 8/5/99
DATE COMPLETED: 8/10/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+38.00
GROUND EL.: 730.17

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -24.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: MCGLYNN
LOGGER: CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

APPROX. ELEV. OF BOTTOM OF STEM ABUT. #1

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		A-2-4,SiSa,brn,MTW,rec.=1.0′	3	28.6	0.2	72.6	27.2		
10		No Sample, Boulders							
15		No Recovery.	16						
20		Visual: A-2-4,SiSaGr,brn MTW,rec.=0.02′	20						
25		Visual: A-2-4,SiGrSa,brn MTW,rec.=0.05′	23						
30		A-4,Si,brn,MTW,rec.=1.5′	12	31.2	0.9	18.3	80.8		
35		A-4,Si,brn,MTW,rec.=1.5′	10	33.5	1.8	18.9	79.3		
40		A-4,SaSi,brn,MTW,rec.=1.7′	10	31.5	0.7	21.9	77.4		
45		A-4,SaSi,brn,MTW,rec.=1.9′	13	27.4	0.5	30.9	68.6		

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

HOLE NO.: B04
SHEET 2 OF 2
DATE STARTED: 8/5/99
DATE COMPLETED: 8/10/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+38.00
GROUND EL.: 730.17

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -24.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: MCGLYNN
LOGGER: CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

APPROX. ELEV. OF BOTTOM OF PILE.

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4,Si,brn,MTW,rec.=1.4′	10	23.2	4.7	18.8	76.5		
55		A-4,GrSaSi,brn,MTW,rec.=1.0′	15	31.4	20.7	26.2	53.1		
60		A-4,SaSi,brn,MTW,rec.=1.5′	8	26.7	8.1	42.6	49.3		
65		A-4,SaSi,brn,M,rec.=1.6′	8 Poss.	18.7	7	26.1	66.9		
		Top of Bedrock @ 70.0′							
70		Run #1: BXDC 67.3′-69.0′ No Rec.		RUN 1	REC% 0	RQD% 0	DIP°		
75		RUN#2: BXDC 70.0′-71.0′ rec.=0.2′ - Seams See Geologist's Report		2	25	0	85		
80		RUN#3: BXDC 72.0′-77.0′ rec.=3.8′ See Geologist's Report		3	76	33	85		
85		RUN#4: BXDC 77.0′-82.0′ rec.=5.0′ See Geologist's Report		4	100	76	85		
90		Hole Stopped @ 82.0′							
95									

Geologist's Report:

Run #1: Possible severely weathered bedrock.

Run #2: Greenstone, Hard, Slightly weathered, Poor competency.

Run #3: Same as Run #2, But with a seam from 74.7′ to 75.4′, Poor competency.

Run #4: Same as Run #2, But contains some quartz lenses, Competent.

BORING LOG SHEET (2)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/mf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lg2.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH

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

HOLE NO.: B5
SHEET 1 OF 2
DATE STARTED: 8/3/99
DATE COMPLETED: 8/5/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+38.00
GROUND EL.: 729.68
PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 0.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. MCGLYNN
DRILLER: R. MCGLYNN
LOGGER: E. CHABOT
BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

APPROX. ELEV. OF BOTTOM OF STEM ABUT. #1

DEPTH	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5	A-1-b,SaGr,brn,M,rec.=0.5′	12	10.8	55.4	33.4	11.2		
10	A-1-b,SiSaGr,brn,M,rec.0.9′	32	14.5	51	25.3	23.7		
	A-4,Si,gry,MTW,rec.=0.3′		31.6		3	97		
15	A-4,Si,gry,MTW,rec.=0.5′	15	32.1	2.3	3.2	94.5		
20	A-4,GrSi,gry,MTW,rec.=0.9′	15	28.6	31.7	6.3	62		
25	A-4,SaSi,gry,MTW,rec.=1.5′	13	28		22.6	77.4		
30	A-4,SaSi,gry,MTW,rec.=1.2′	13	31.7	1.1	22	76.9		
35	A-4,SaSi,brn,MTW,rec.=1.8′	8	27.9	0.3	26.6	73.1		
40	A-4,SaSi,brn,MTW,rec.=1.0′	11	29.4	7.5	12.9	79.6		
45	A-4,SaSi,brn,MTW,rec.=1.9′	10	28.7	0.5	13.5	86		

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

HOLE NO.: B5
SHEET 2 OF 2
DATE STARTED: 8/3/99
DATE COMPLETED: 8/5/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+38.00
GROUND EL.: 729.68
PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 0.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. MCGLYNN
DRILLER: R. MCGLYNN
LOGGER: E. CHABOT
BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
	A-4,SaSi,brn,MTW,rec.=1.3′	25	28.3	0.9	17.8	81.3		
55	A-2-4,SiSa,brn,MTW rec.=1.7′	36	26	7.1	67	25.9		
60	A-4,Si,brn,MTW,rec.=1.5′	22	25.2	5.9	14	80.1		
65	A-2-4,GrSiSa,brn,MTW rec.=1.6′		15.8	20.2	45.8	34		
70	A-4,SaSi,brn,M,rec.=1.2′	R	21.5	2.8	47.6	49.6		
	Top of Bedrock @ 71.5′							
	RUN#1: BXDC 71.5′-76.5′ rec.=0.60′ See Geologist's Report	RUN	1	REC% 12	RQD% 0	DIP° 85		
75								
80	RUN#2: BXDC 80.4′-83.2′ rec.=2.6′ See Geologist's Report		2	92	0	85		
85	RUN#3: BXDC 83.2′-88.2′ rec.=4.7′ See Geologist's Report		3	94	70	85		
90	RUN#4: BXDC 88.2′-93.2′ rec.=5.0′ See Geologist's Report		4	100	88	85		
95	Hole Stopped @ 93.2′							

APPROX. ELEV. OF BOTTOM OF PILE.

Geologist's Report:
Run #1: Greenstone with streaks of quartz and biotite, Moderately hard, Moderately weathered, Very poor competency.
Run #2: Same as Run #1.
Run #3: Same as Run #1, but slightly weathered, Fair competency.
Run #4: Same as Run #2, Competent.

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

HOLE NO.: B6
SHEET 1 OF 2
DATE STARTED: 8/11/99
DATE COMPLETED: 8/12/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+38.00
GROUND EL.: 730.73
PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 16.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. YOUNG
DRILLER: R. YOUNG
LOGGER: E. CHABOT
BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

APPROX. ELEV. OF BOTTOM OF STEM ABUT. #1

DEPTH	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5	A-2-4,GrSa,brn,MTW,rec.=1.4′	14	24.6	37.1	43.3	19.6		
10	A-1-a,SaGr,brn,M,rec.=0.8′	19	9	60.3	29.8	9.9		
15	A-4,Si,gry,MTW,rec.=1.8′	6	30.8		3.1	96.9		
20	A-4,Si,gry,MTW,rec.=1.1′	3	31.7		1.2	98.8		
25	A-4,SaSi,gry,MTW,rec.=1.8′	3	25.8		24.9	75.1		
30	A-4,Si,gry,MTW,rec.=1.4′	9	27.7	0.3	14.1	85.6		
35	A-4,SaSi,gry,MTW,rec.=1.9′	7	28.3	1.1	27.1	71.8		
40	A-4,SaSi,gry,MTW,rec.=1.3′	13	32.8	0.6	34.4	65		
45	A-4,SaSi,gry,MTW,rec.=1.5′	8	27.8	0.3	26.1	73.6		

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

HOLE NO.: B6
SHEET 2 OF 2
DATE STARTED: 8/11/99
DATE COMPLETED: 8/12/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 141+38.00
GROUND EL.: 730.73
PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 16.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. YOUNG
DRILLER: R. YOUNG
LOGGER: E. CHABOT
BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
	A-4,SaSi,brn,MTW,rec.=1.3′	14	27.3	0.8	27.5	71.7		
55	A-2-4,SiSa,brn,MTW,rec.=1.9′	20	25.9	3.1	73.4	23.5		
60	A-4,Si,brn,MTW,rec.=1.6′	9	38.6		13.7	86.3		
65	A-4,SaSi,brn,MTW,rec.=1.4′	8	26.6	0.1	30	69.9		
70	A-4,SiGr,brn,M,rec.=0.5′	14	19.9	46	9	45		
75	A-4,GrSi,brn,MTW,rec.=1.5′	7	31	22.1	19	58.9		
80	Poss. Top of bedrock @ 81.0′							
	Run #1: BXDC 81.0′-83.0′ No Rec.							
85	Hole Stopped @ 83.0′ Broke off casing bit							

APPROX. ELEV. OF BOTTOM OF PILE.

BORING LOG SHEET (3)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/mf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lg3.i
PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 59 OF 144

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

HOLE NO.: B7
SHEET 1 OF 2
DATE STARTED: 8/24/99
DATE COMPLETED: 8/25/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 142+45.00
GROUND EL.: 720.67

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 12.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. MCGLYNN
DRILLER: R. MCGLYNN
LOGGER: E. CHABOT

BORING RIG: TRACTOR
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		A-4,Si,gry,MTW,rec.=0.2'	9	41.6		1.9	98.1		
APPROX. ELEV. OF BOTTOM OF PIER FOOTING									
10		A-4,Si,gry,MTW,rec.=1.8'	10	46.5		0.6	99.4		
15		A-4,Si,gry,MTW,rec.=1.9'	8	45.1		0.7	99.3		
20		A-4,Si,gry,MTW,rec.=1.9'	11	37.7		1	99		
25		A-4,Si,gry,MTW,rec.=1.6'	5	31	0.3	10.7	89		
30		A-4,Si,gry,MTW,rec.=1.7'	4	33.5		8.7	91.3		
35		A-4,SiSa,gry,MTW,rec.=0.8'	7	29.2	1.1	61.9	37		
40		A-2-4,SiSa,gry,MTW rec.=1.8'	15	28.2	0.7	76.3	23		
45		A-2-4,Sa,brn,MTW,rec.=1.6'	22	24.9	7.3	79.8	12.9		

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

HOLE NO.: B7
SHEET 2 OF 2
DATE STARTED: 8/24/99
DATE COMPLETED: 8/25/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 142+45.00
GROUND EL.: 720.67

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 12.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. MCGLYNN
DRILLER: R. MCGLYNN
LOGGER: E. CHABOT

BORING RIG: TRACTOR
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-2-4,SiSa,brn,MTW,rec.=1.7'	14	32.2	4.1	74.5	21.4		
55		A-3,Sa,brn,MTW,rec.=1.4'	8	21.9	0.3	89.7	10		
60		A-3,Sa,brn,MTW,rec.=1.8'	8	23.4	0.3	94.5	5.2		
65		A-3,Sa,brn,MTW,rec.=2.0'	14	25.4	0.1	93.4	6.5		
70		No Recovery	17						
75		Casing advanced to 79.5'							
		Top of bedrock @ 79.5'							
APPROX. ELEV. OF BOTTOM OF PILE. 80		RUN#1: BXDC 79.5'-84.5' rec.=3.9' See Geologist's Report	RUN 1	REC% 78	RQD% 70	Dip° 80			
85		RUN#2: BXDC 84.5'-89.5' rec.=5.0' See Geologist's Report	2	100	80	80			
90									
95									

Geologist's Report: Hole stopped @ 89.5'

Run #1: Greenstone with streaks of quartz and boitite, Hard, Unweathered, Competent.

Run #2: Greenstone with streaks of quartz and boitite, Hard, Unweathered, Competent.

BORING LOG SHEET (4)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/mf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lg4.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 60 OF 144

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

HOLE NO.: B8
SHEET 1 OF 3
DATE STARTED: 8/26/99
DATE COMPLETED: 8/30/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 142+55.00
GROUND EL.: 720.94

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -12.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. MCGLYNN
DRILLER: R. MCGLYNN
LOGGER: E. CHABOT

BORING RIG: TRACTOR
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		No recovery, stone in sampler.	20						
APPROX. ELEV. OF BOTTOM OF PIER FOOTING									
10		A-4,Si,gry,MTW,rec.=1.0'	14	36.7		0.8	99.2		
15		A-4,Si,gry,MTW,rec.=0.8'	10	34.7		1.1	98.9		
20		A-4,Si,gry,MTW,rec.=0.9'	10	33.3		2.2	97.8		
25		A-4,Si,gry,MTW,rec.=0.7'	7	35.5		10.6	89.4		
30		A-4,Si,gry,MTW,rec.=1.1'	6	30.5		16.3	83.7		
35		A-4,Si,brn,MTW,rec.=1.2'	9	30.1		67.3	32.7		
40		A-4,Si,brn,MTW,rec.=1.6'	14	28.5	2.4	57.6	40		
45		A-2-4,SiSa,brn,MTW,rec.=2.0'	46	23.2		74.7	25.3		

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

HOLE NO.: B8
SHEET 2 OF 3
DATE STARTED: 8/26/99
DATE COMPLETED: 8/30/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 142+55.00
GROUND EL.: 720.94

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -12.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. MCGLYNN
DRILLER: R. MCGLYNN
LOGGER: E. CHABOT

BORING RIG: TRACTOR
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4,SiSa,brn,MTW,rec.=1.3'	15	26.7	4.3	58.7	37		
55		A-3,Sa,brn,MTW,rec.=0.9'	25	26.2	2.6	87.7	9.7		
60		A-2-4,Sa,brn,MTW,rec.=1.0'	21	24.4	1.9	84.6	13.5		
65		No Sample, flowing sand in casing.							
70		A-3,Sa,brn,MTW,rec.=1.3'	17	25.5		93.7	6.3		
75		A-3,Sa,brn,MTW,rec.=1.8'	19	22.9		91.3	8.7		
80		A-3,Sa,brn,MTW,rec.=1.4'	R	23.8	2.4	88.8	8.8		
		Top of Bedrock @ 84.1'							
85		RUN#1: BXDC 84.1'-89.1' rec.=0.5' See Geologist's Report	RUN	REC%	RQD%	DIP°			
			1	1	0	85			
90		RUN#2: BXDC 89.1'-91.8' rec.=0.5' See Geologist's Report	2	19	0	85			
APPROX. ELEV. OF BOTTOM OF PILE.		RUN#3: BXDC 91.8'-96.8' rec.=1.6' See Geologist's Report	3	32	25	85			
95		RUN#4: BXDC 96.8'-101.8' No Recovery	4	0	0				

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

HOLE NO.: B8
SHEET 3 OF 3
DATE STARTED: 8/26/99
DATE COMPLETED: 8/30/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 142+55.00
GROUND EL.: 720.94

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -12.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: R. MCGLYNN
DRILLER: R. MCGLYNN
LOGGER: E. CHABOT

BORING RIG: TRACTOR
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
105		RUN#5: BXDC 101.8'-105.9' rec.=2.5' See Geologist's Report	RUN	REC%	RQD%	DIP°			
			5	63	40	85			
110		RUN#6: BXDC 105.8'-110.3' rec.=3.8' See Geologist's Report	6	76	72	85			
115		Hole Stopped @ 89.5'							
120		Geologist's Report:							
125		Run #1: Greenstone with streaks of quartz and biotite, Hard, Unweathered, Very poor competency.							
130		Run #2: Same as Run #1.							
135		Run #3: Green quartz-biotite schist, Hard, Unweathered, Poor competency.							
140		Run #4: No recovery							
145		Run #5: Same as Run #1, But slight weathering on joint surfaces, Poor competency.							
		Run #6: Same as Run #1, But competent.							

BORING LOG SHEET (5)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/mf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lg5.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 61 OF 144

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

HOLE NO.: B09
SHEET 1 OF 2
DATE STARTED: 9/1/99
DATE COMPLETED: 9/3/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 143+63.00
GROUND EL.: 731.20

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 20.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: MCGLYNN
LOGGER: CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		A-2-4,Sa,brn,M,rec.=1.0'	9	12.4	17.3	69.5	13.2		
APPROX. ELEV. OF BOTTOM OF STEM ABUT. #2									
10		A-1-a,SaGr,brn-gry,M, rec. =1.0'	34	9.8	55.5	34.5	10		
15		A-4,Si,gry,MTW,rec.=1.1'	13	33.1		1.6	98.4		
20		A-4,Si,gry,MTW,rec.=0.3'	19	35.6		1.7	98.3		
25		A-4,Si,gry,MTW,rec.=1.3'	15	35.7		0.7	99.3		
30		A-4,Si,gry,MTW,rec.=1.3'	15	28.5		1.3	98.7		
35		A-4,Si,gry,MTW,rec.=2.1'	17	30.2		1	99		
40		A-4,Si,gry,MTW,rec.=1.2'	18	41		1.6	98.4		
45		A-4,Si,gry,MTW,rec.=0.9'	20	38.2		1.2	98.8		

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

HOLE NO.: B09
SHEET 2 OF 2
DATE STARTED: 9/1/99
DATE COMPLETED: 9/3/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 143+63.00
GROUND EL.: 731.20

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: 20.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: MCGLYNN
LOGGER: CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4,Si,gry,MTW,rec.=0.9'	19	25.3	0.3	10.6	89.1		
55		A-4,SaSi,gry,MTW,rec.=1.1'	12	28.2	0.2	26.3	73.5		
60		A-4,Si,gry,MTW,rec.=0.8'	15	31.7		19	81		
65		A-4,SaSi,brn-gry,MTW, rec. = 0.9'	33	31.1		40.9	59.1		
70		A-4,SiSa,brn-gry,MTW, rec. = 0.8'	25	23.8	0.8	58.7	40.5		
75		No Sample-Flowing Sa							
80		A-2-4,Sa,brn-gry,MTW, rec. = 1.1'	28	26.4		84.4	15.6		
APPROX. ELEV. OF BOTTOM OF PILE.									
85		A-2-4,Sa,brn,MTW,rec.=1.3'	39	22.2	1.5	87.7	10.8		
		Top of bedrock @ 87.0'							

	RUN	REC%	RQD%	Dip°
RUN#1: BXDC 87.0'-92.0',rec.=4.9' See Geologist's Report	1	98	47	80
RUN#2: BXDC 92.0'-97.0',rec.=4.8' See Geologist's Report	2	96	90	80

Geologist's Report: Hole stopped @ 97.0'

Run #1: Green/gray quartz-sericite schist, Moderately hard, Unweathered, Poor competency.
Run #2: Same as Run #1, But competent.

BORING LOG SHEET (6)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/mf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lg6.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 62 OF 144

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

HOLE NO.: BIO
SHEET 1 OF 3
DATE STARTED: 8/27/99
DATE COMPLETED: 8/31/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 143+73.00
GROUND EL.: 730.64

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -24.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: MCGLYNN
LOGGER: CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
5		A-2-4,SiSa,brn,MTW, rec. = 0.9'	8	23.3		68	32		
10		A-1-a,SaGr,brn,M,rec.=1.0'	23	13.7	51.8	40.3	7.9		
15		A-4,Si,gry,MTW,rec.=0.5'	11	35.9	1.6	1.6	96.8		
20		A-4,Si,gry,MTW,rec.=0.9'	10	39.7		0.3	99.7		
25		A-4,Si,gry,MTW,rec.=0.5'	8	39.5		0.3	99.7		
30		A-4,Si,gry,MTW,rec.=0.7'	12	34.5		0.8	99.2		
35		A-4,Si,gry,MTW,rec.=0.6'	9	35.2		1	99		
40		A-4,Si,gry,MTW,rec.=1.0'	12	31.9		0.7	99.3		
45		A-4,Si,gry,MTW,rec.=0.9'	16	30.5	1.1	16.3	82.6		

APPROX. ELEV. OF BOTTOM OF STEM ABUT. #2

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

HOLE NO.: BIO
SHEET 2 OF 3
DATE STARTED: 8/27/99
DATE COMPLETED: 8/31/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 143+73.00
GROUND EL.: 730.64

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -24.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: MCGLYNN
LOGGER: CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
		A-4,SaSi,gry,MTW,rec.=0.9'	25	28.4		38.4	61.6		
55		A-4,SaSi,gry,MTW,rec.=0.9'	19	27.2		26.2	73.8		
60		A-2-4,SiSa,gry,MTW, rec. = 0.9'	31	25.4	0.7	70.1	29.2		
65		A-4,SaSi,brn-gry,MTW, rec. = 0.8'	23	30.5	1	34.1	65		
70		A-4,SaSi,brn-gry,MTW, rec. = 0.6'	24	29	5	24.1	70.9		
75		A-2-4,Sa,brn,MTW,rec.=0.6'	16	24.9		89.3	10.7		
80		A-2-4,Sa,brn,MTW,rec.=0.8	26	23.3	1	87.6	11.4		
85		A-2-4,GrSiSa,brn,M,rec.=0.9'	62	16.4	23.9	47	29.1		
90		No Recovery.	R	Top of bedrock @ 90.25'					
		RUN#1: BXMDC 90.25'-95.25',rec.=1.45' See Geologist's Report.	RUN 1	REC% 29	RQD% 6	Dip° 85			
95		RUN#2: BXMDC 95.25'-97.75',rec.=1.4' See Geologist's Report	2	56	0				
		RUN#3: BXMDC 97.75'-102.75',rec.=2.0' See Geologist's Report	3	40	22	85			

APPROX. ELEV. OF BOTTOM OF PILE.

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

HOLE NO.: BIO
SHEET 3 OF 3
DATE STARTED: 8/27/99
DATE COMPLETED: 8/31/99

PROJECT NAME: STOCKBRIDGE
SITE NAME: BR 130
STATION: 143+73.00
GROUND EL.: 730.64

PROJECT NUMBER: BRF 013-4(21)
SITE NO.: VT 100
OFFSET: -24.00
G.W. DEPTH:

BORING CREW
CREW CHIEF: MCGLYNN
DRILLER: MCGLYNN
LOGGER: CHABOT

BORING RIG: TRUCK
BORING TYPE: WASH BORE
SAMPLE TYPE: SPLIT BARREL

DEPTH	SYMBOL	CLASSIFICATION OF MATERIALS (Description)	BLOWS PER FOOT	M.C. %	GRAVEL %	SAND %	FINES %	LL	PI
			RUN	REC%	RQD%	Dip°			
		RUN#3: cont.	3	40	22	85			
105		RUN#4: BXMDC 102.75'-107.75',rec.=5.0' See Geologist's Report	4	100	95	85			
		Hole stopped @ 107.75'							
110									
115									
120									
125									
130									
135									
140									
145									

Geologist's Report:

Run #1: Green-gray quartz-sericite schist, Slight weathering along near vertical joint, Moderately hard, Very poor competency.

Run #2: Fractured quartz, Very hard, Unweathered, Very poor competency

Run #3: Top 0.55 feet of core is fractured quartz, Remainder of core is same as Run #1, Poor competency.

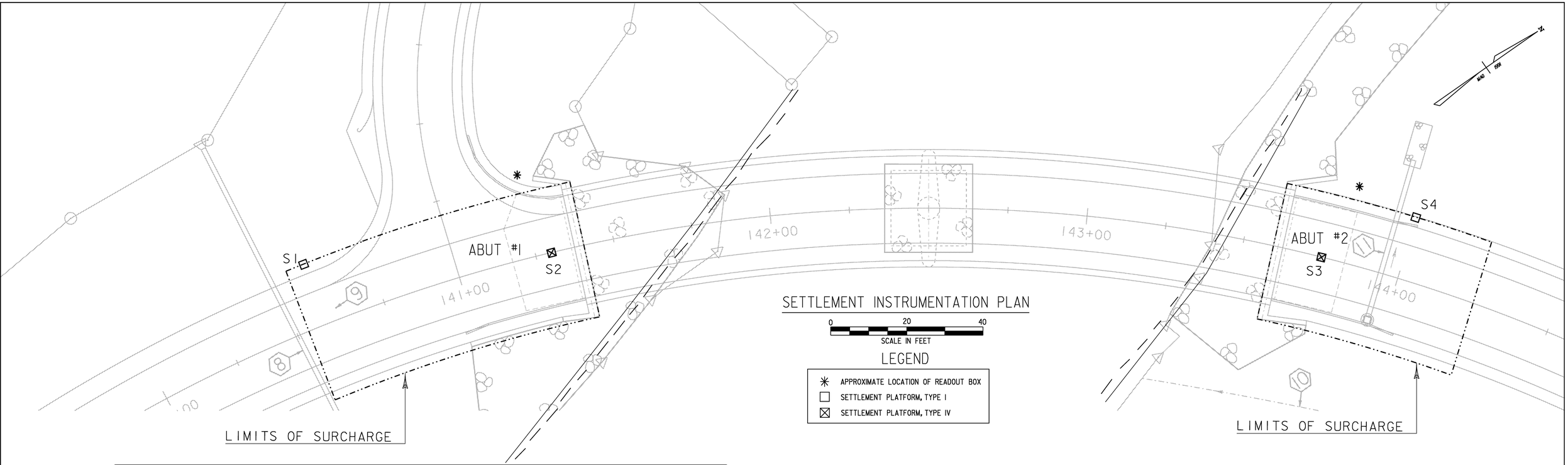
Run #4: Same as Run #1, But competent.

BORING LOG SHEET (7)

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/mf238bor.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lg7.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH
SHEET 63 OF 144



SETTLEMENT INSTRUMENTATION PLAN

0 20 40
SCALE IN FEET

LEGEND

- ✳ APPROXIMATE LOCATION OF READOUT BOX
- □ SETTLEMENT PLATFORM, TYPE I
- ⊠ SETTLEMENT PLATFORM, TYPE IV

SURCHARGE TREATMENT OF THE FOUNDATION

A. SCOPE OF THE SURCHARGE: THE SURCHARGE SHALL COVER THE ROAD SECTIONS LISTED BELOW WITH THE MINIMUM PRESSURES LISTED FOR EACH SECTION. THESE PRESSURES ARE APPROXIMATELY EQUAL TO THE PRESSURES OF THE FINISH ROADWAY EMBANKMENT PLUS TWO FEET OF EARTH ABOVE THE FINISH GRADE. FOR ABUTMENT #2, THE MINIMUM SURCHARGE PRESSURE SHALL VARY LINEARLY BETWEEN STATIONS.

ABUTMENT	FROM	PRESSURE (PSF)	TO	PRESSURE (PSF)
1	140+50	2590	141+45	2590
2	143+55	1750	144+25	1330

B. APPLICATION OF THE SURCHARGE LOAD: IF THE APPLICATION OF THE SURCHARGE LOAD IS COMBINED WITH AND A PART OF THE CONSTRUCTION OF THE PERMANENT EMBANKMENT, THE SURCHARGE FILL SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 203.11.

C. DURATION OF THE SURCHARGE: SURCHARGE LOADING AT BOTH ABUTMENTS SHALL BE MAINTAINED FOR 30 DAYS. HOWEVER, THIS SURCHARGE TIME COULD BE SHORTENED BY THE ENGINEER IF THE IN SITU GEOTECHNICAL INSTRUMENTATION INDICATES THAT EITHER THE SETTLEMENT HAS REACHED THE MAGNITUDE OUTLINED IN NOTE E BELOW OR IF THE INSTRUMENTATION READING TAKEN DOES NOT CHANGE FOR 7 CONSECUTIVE DAYS.

D. THE MONITORING INSTRUMENTATION SHALL BE PAID FOR UNDER ITEMS 900.620 SPECIAL PROVISION (SETTLEMENT PLATFORM, TYPE I) AND 900.620 SPECIAL PROVISION (SETTLEMENT PLATFORM, TYPE IV). ALL OF THE OTHER WORK REQUIRED FOR SURCHARGING THE ROADWAY, INCLUDING FURNISHING THE LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK SHALL BE PAID FOR UNDER ITEM 900.620 SPECIAL PROVISION (SURCHARGING).

E. THE MAGNITUDE OF THE SETTLEMENT: IT WAS DETERMINED THAT THE ANTICIPATED AMOUNT OF SETTLEMENT VARIES FROM 5" AT ABUTMENT 2 TO 9" AT ABUTMENT 1. IT IS EXPECTED THAT OVER 90% OF THE ANTICIPATED FOUNDATION SETTLEMENT SHOULD OCCUR DURING THE SURCHARGING PROCESS WITH THE PRESSURES LISTED ABOVE.

F. MONITORING/SETTLEMENT INSTRUMENTATION:
1. THE SETTLEMENT OF THE FOUNDATION WILL BE MONITORED DURING THE SURCHARGE TREATMENT USING TYPE I AND TYPE IV SETTLEMENT PLATFORMS INSTALLED AT THE LOCATIONS SHOWN ABOVE. BOTH TYPE I AND TYPE IV SETTLEMENT PLATFORMS SHALL MEET THE GUIDELINES SPECIFIED IN STANDARD SHEET L-1, DETAIL SHEET 69, AND SECTION 900 OF THE SPECIAL PROVISIONS.
2. FOR DETAILS OF SETTLEMENT PLATFORM, TYPE I, SEE STANDARD SHEET L-1.
3. FOR DETAILS OF SETTLEMENT PLATFORM, TYPE IV, SEE DETAIL SHEET 69.
4. THE FOLLOWING SETTLEMENT PLATFORM READINGS SHALL BE RECORDED AND PROVIDED TO THE ENGINEER: (FILL ELEVATIONS SHALL BE RECORDED WHENEVER READINGS ARE TAKEN)
   a.) INITIAL READINGS SHALL BE TAKEN AT ALL SETTLEMENT PLATFORMS BEFORE ANY SURCHARGE LOAD IS APPLIED.
   b.) IF THE SURCHARGE LOAD IS PLACED INCREMENTALLY, READINGS SHALL BE TAKEN FOR EVERY 350 PSF OF SURCHARGE PRESSURE PLACED.
   c.) UPON COMPLETION OF SURCHARGE PLACEMENT OPERATIONS, SETTLEMENT PLATFORM READINGS SHALL BE TAKEN ONCE EVERY OTHER DAY FOR THE DURATION OF THE SURCHARGE TREATMENT.

INSTRUMENTATION SCHEDULE

SETTLEMENT PLATFORM LOCATIONS

PLATFORM	LOCATION	STATION	OFFSET	TYPE
S1	VT 100	140+60	20'-LEFT	I
S2	VT 100	141+25	℄	IV
S3	VT 100	143+75	℄	IV
S4	VT 100	144+00	20'-LEFT	I

THE CONTRACTOR MAY SUBMIT FOR APPROVAL AN ALTERNATE MEANS OF SURCHARGING AND/OR MONITORING THE SETTLEMENT IN THE LOCATIONS REFERENCED ABOVE.

ANTICIPATED SETTLEMENT AT	
STA 141+25	STA 143+75
9 inches	5 inches

GEOTECHNICAL LAYOUT SHEET

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238geo.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238geo.i

PLOT DATE: 06-FEB-2008
DRAWN BY: G. SHANGRAW
CHECKED BY: T. FILLBACH

INSTRUMENT LIST (PROVIDED BY UMASS)

INSTRUMENT	LOCATION	MODEL	QUANTITY	DTL. SHEET
CABLING	ALL		5000 FT	
CASING	PILES	6400	4	67
CRACKMETER	ABUTMENT	4420	6	68
PRESSURE CELL	ABUTMENT	4810	18	67
PRESSURE CELL	WING WALL	4815	4	90
PRESSURE CELL	TEMP. CORRECTION	4810	1	68
STRAIN GAGE	GIRDERS	4050	24	68,75
STRAIN GAGE	PIER	4200	8	92
STRAIN GAGE	PILES	4000	64	67
TILTMETER	ABUTMENT	6160 MEMS	2	68
TILTMETER	PILES	6150 MEMS	20	67

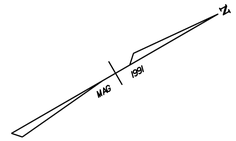
STRAIN GAGE MOUNTINGS SHALL BE PROVIDED BY UMASS

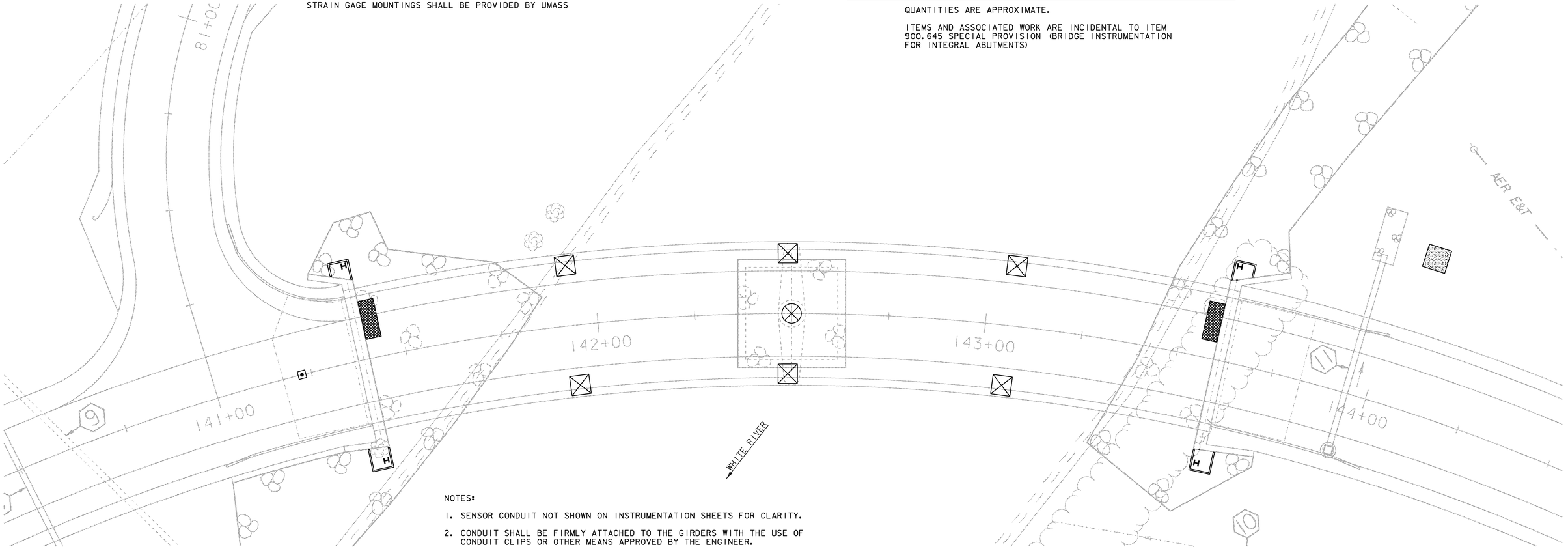
INSTRUMENTATION ITEMS (PROVIDED BY CONTRACTOR)

ITEM	DESCRIPTION	QUANTITY	UNITS
505.20	HP 14 X 117	80	LF
506.60	STRUCTURAL STEEL	1800	LB
507.15	REINFORCING STEEL	250	LB
541.25	CONCRETE, CLASS B	6	CY
541.58	MORTAR, TYPE IV	0.5	CY
604.55	CAST IRON COVER WITH FRAME	4	EACH
678.21	CONDUIT (2" PVC)	2000	LF
	ELECTRICAL BOX	3	EACH
	PRESSURE TYPE ROUND MANHOLE	4	EACH
	EPOXY, WELDS, MISC. ATTACHMENT HARDWARE		

QUANTITIES ARE APPROXIMATE.

ITEMS AND ASSOCIATED WORK ARE INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (BRIDGE INSTRUMENTATION FOR INTEGRAL ABUTMENTS)





NOTES:

1. SENSOR CONDUIT NOT SHOWN ON INSTRUMENTATION SHEETS FOR CLARITY.
2. CONDUIT SHALL BE FIRMLY ATTACHED TO THE GIRDERS WITH THE USE OF CONDUIT CLIPS OR OTHER MEANS APPROVED BY THE ENGINEER.
3. CONDUIT INSTALLATION SHALL INCLUDE ALL JOINTS AND ELBOWS REQUIRED AND ALL NON-WIRED CONDUIT SHALL BE INSTALLED WITH A PULL CORD.
4. THE INSTALLATION OF GIRDER GAGES AND ROUTING OF CABLING THROUGH CONDUIT SHALL BE PERFORMED AFTER THE GIRDER CROSS FRAMES HAVE BEEN INSTALLED AND PRIOR TO THE DECK POUR OR ABUTMENT BACKFILL.
5. CONTRACTOR SHALL PROVIDE TELEPHONE AND ELECTRIC SERVICE TO ENCLOSURE LOCATION. ENCLOSURE AND ELECTRIC SERVICE SHALL BE GROUNDED. ELECTRIC SERVICE SHALL TERMINATE IN 4 OUTLET GFI PROTECTED BOX.
6. TELEPHONE SERVICE SHALL TERMINATE IN STANDARD RECEPTACLE WITHIN THE ENCLOSURE.
7. THERE SHOULD BE NO WELDING OF GAGES, BOXES OR ATTACHMENTS TO GIRDERS IN THE FIELD. ANY WELDING THAT OCCURS ON THE PILES IN THE FIELD SHALL ADHERE TO SUBSECTION 506.10.
8. THE FINAL LOCATION OF ALL GAGES, ENCLOSURES AND CONDUIT PLACED IN THE FIELD SHALL BE APPROVED BY THE RESIDENT ENGINEER AND UMASS.
9. ELECTRICAL BOXES SHALL BE NEMA TYPE 4X WATERPROOF, LOCKING ENCLOSURES INCLUDING ALUMINUM SUBPANEL. TWO ENCLOSURES SHALL BE WALL MOUNTABLE WITH MINIMUM INTERIOR DIMENSIONS OF 60" x 36" x 13". ONE ENCLOSURE SHALL BE FLOOR MOUNTABLE WITH MINIMUM INTERIOR DIMENSIONS OF 60" x 36" x 18".

CONCRETE PAD WITH FLOOR MOUNTABLE ELECTRICAL BOX (FOR DATA COLLECTOR AND TELEPHONE)

REFERENCE PILE AND ENCLOSURE

REFERENCE PRESSURE CELL BLOCK STA. 141+22.50, 3' BELOW APPROACH SLAB

ELECTRICAL BOX ATTACHED TO ABUTMENT

STRAIN GAGES ON GIRDERS (GROUP OF 4)

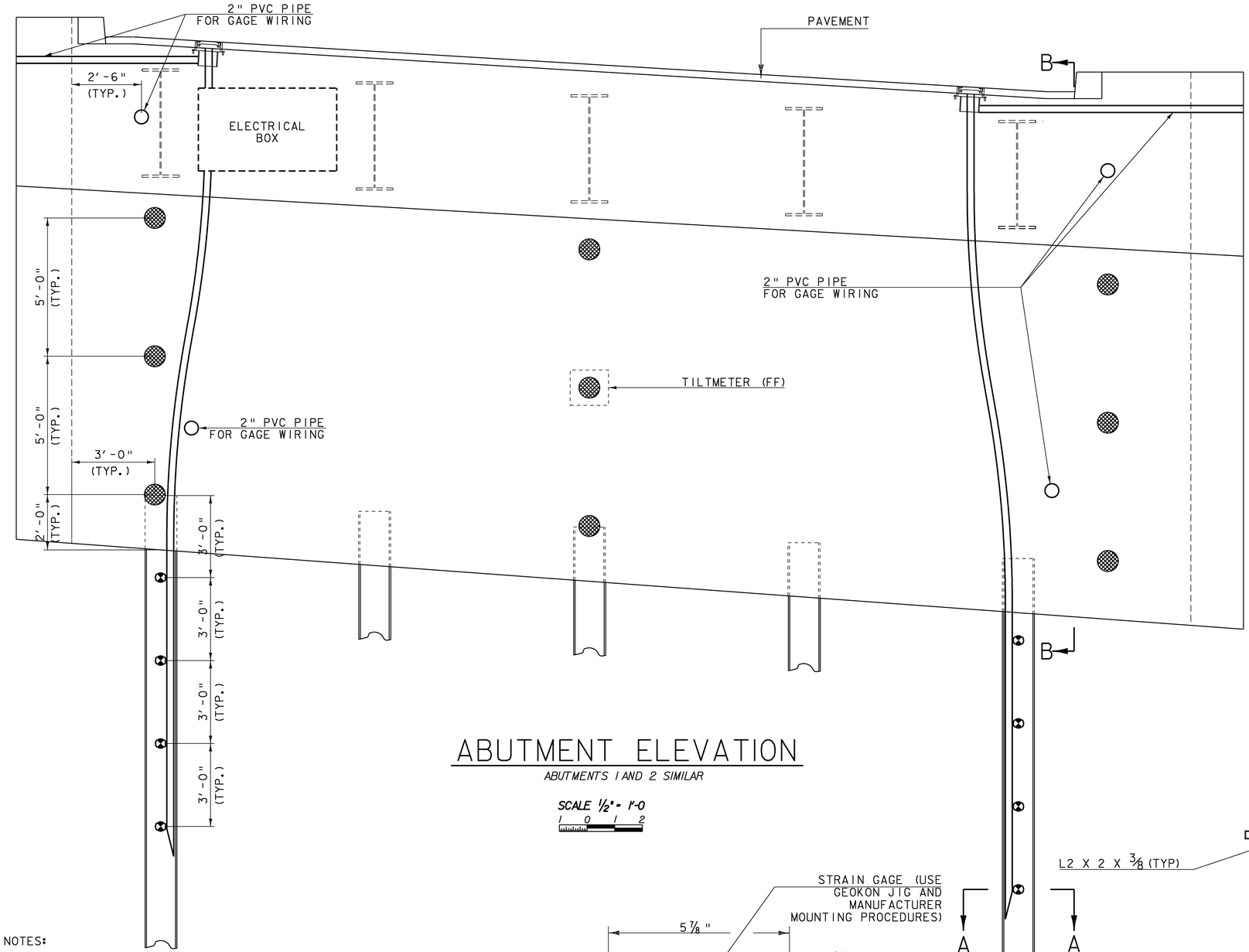
STRAIN GAGES ON PIER (TWO GROUPS OF 4)

INSTRUMENTATION LAYOUT SHEET

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238monitor
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. FILLBACH
sf238ipl.i

PLOT DATE: 06-FEB-2008
DRAWN BY: J. SALVATORI
CHECKED BY: C. ALLEN
SHEET 66 OF 144

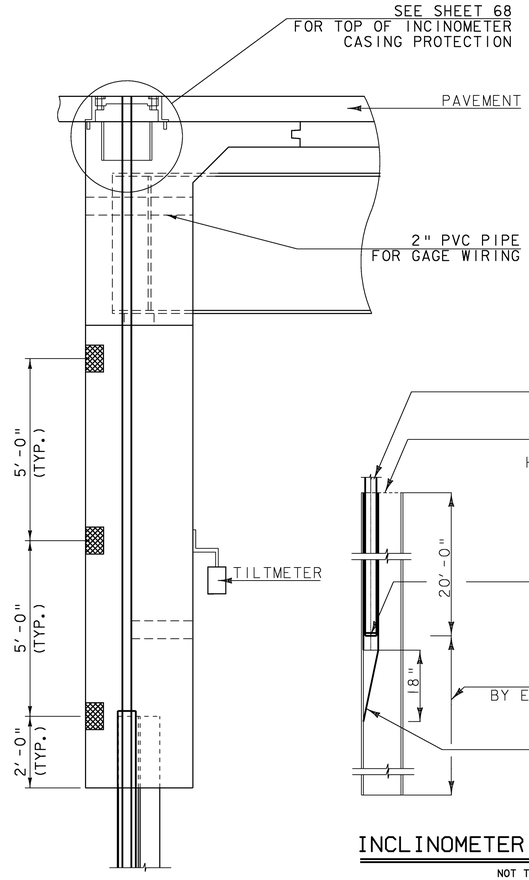


ABUTMENT ELEVATION

ABUTMENTS 1 AND 2 SIMILAR

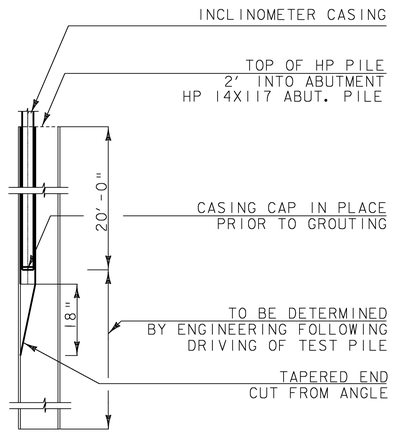
SCALE 1/2" = 1'-0

0 1 2



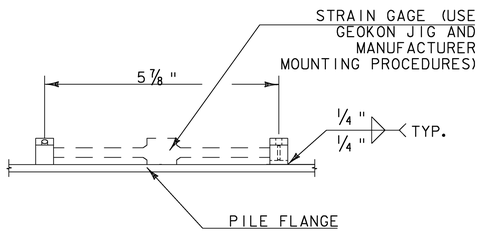
SECTION B-B

NOT TO SCALE



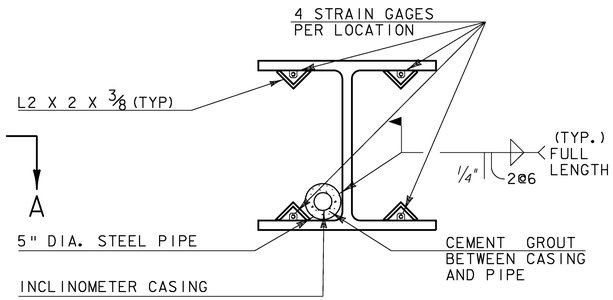
INCLINOMETER CASING ON PILE

NOT TO SCALE



STRAIN GAGE ON PILE

NOT TO SCALE



SECTION A-A

NOT TO SCALE

GAGES - PROVIDED BY UMASS

- *GEOKON 4000 STRAIN GAGES (GROUP OF 4)*
- *GEOKON 4810 EARTH PRESSURE CELL*
- *GEOKON 6400 INCLINOMETER CASING*
- *GEOKON 6160 MEMS TILTMETER*

NOTES:

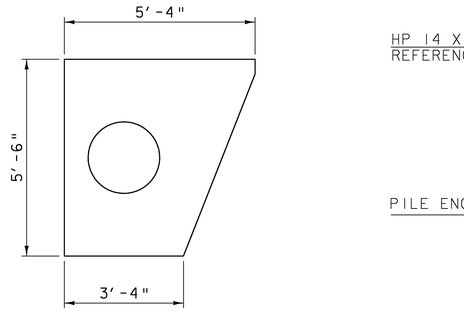
1. CONTRACTOR SHALL DRIVE NON-INSTRUMENTED (INTERIOR) PILES BEFORE DRIVING INSTRUMENTED PILES AT EACH ABUTMENT TO DETERMINE PROPER INSTRUMENT PLACEMENT.

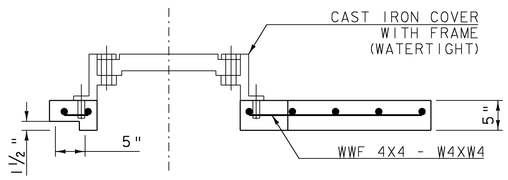
2. ALL EARTH PRESSURE CELLS SHALL BE INSTALLED ON THE BACKFILLED SIDE OF THE ABUTMENT. INSTRUMENTS SHALL BE ATTACHED TO INSIDE OF CONCRETE FORM WORK PRIOR TO ABUTMENT CONCRETE PLACEMENT. CARE SHALL BE TAKEN TO ROUTE INSTRUMENTATION WIRING THROUGH FORM WORK.

3. SEE SHEET 90 FOR LOCATION OF PRESSURE CELLS ON WINGWALLS.

ABUTMENT AND PILE INSTRUMENTATION

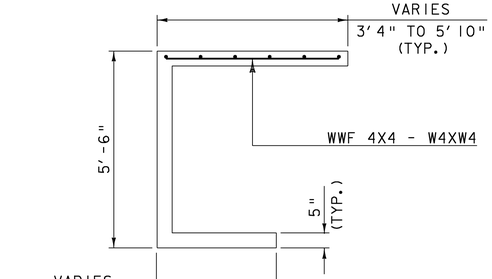
PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)
FILE NAME: /78f238/str5/sf238monitor	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: T. FILLBACH	CHECKED BY: C. ALLEN
sf238iab.i	SHEET 67 OF 144

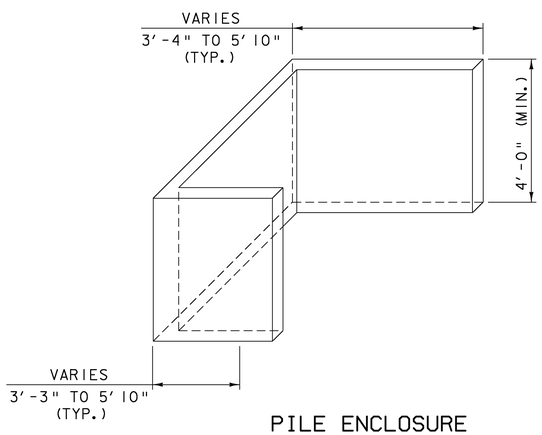




PILE ENCLOSURE LID

NOT TO SCALE

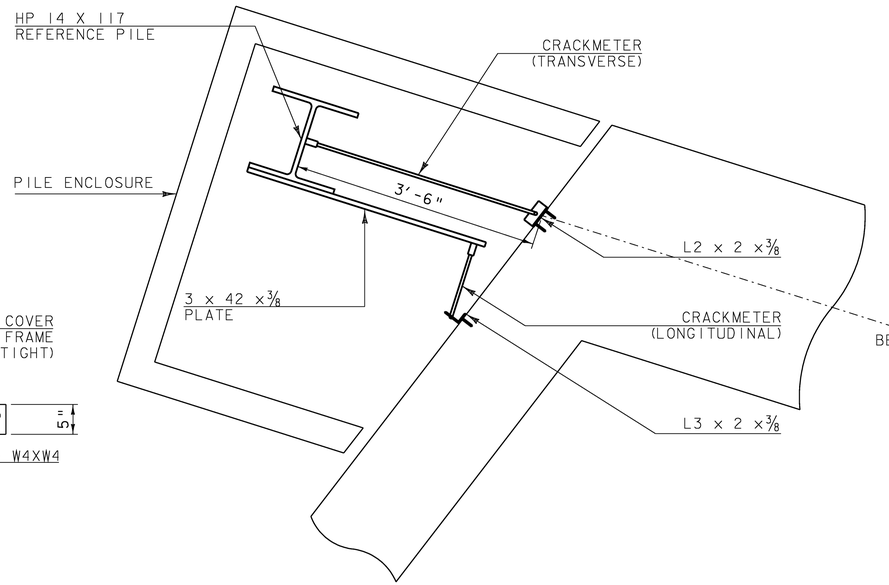




PILE ENCLOSURE

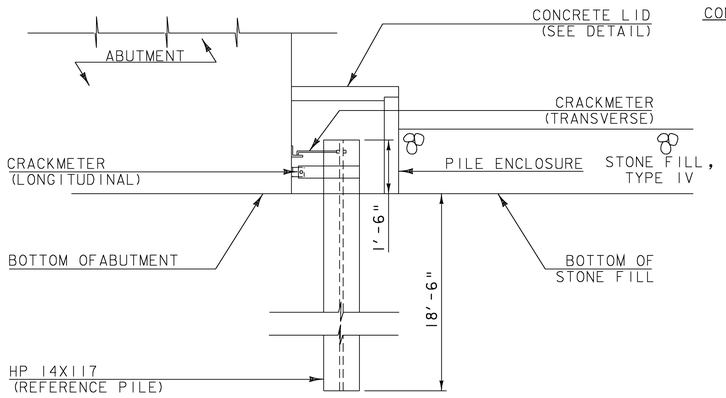
NOT TO SCALE

ALTERNATE ENCLOSURE AND LID CONFIGURATION MAY BE SUBMITTED FOR APPROVAL.



REFERENCE PILE AND GAGE LAYOUT

NOT TO SCALE

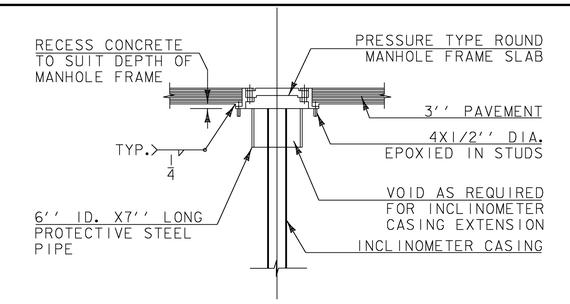


REFERENCE PILE AND GAGE ELEVATION VIEW

NOT TO SCALE

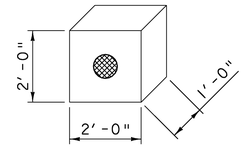
NOTES:

1. GAGES SHOWN AT DIFFERENT ELEVATIONS FOR CLARITY.
2. GAGES SHOULD BE ATTACHED BETWEEN ONE AND TWO FEET ABOVE BOTTOM OF ABUTMENT. FINAL LOCATION DETERMINED IN THE FIELD BY UMASS.
3. ONLY ONE TRANSVERSE CRACKMETER PER ABUTMENT.
4. REFERENCE PILE SIZE SUBSTITUTIONS ARE ACCEPTABLE.



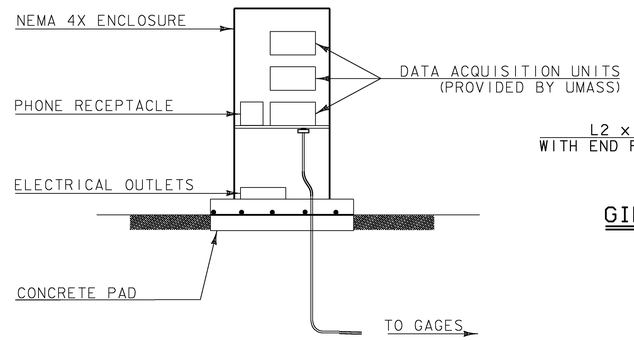
TOP OF INCLINOMETER CASING PROTECTION

NOT TO SCALE



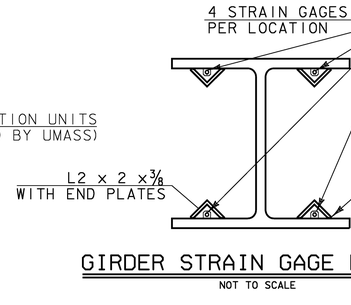
REFERENCE PRESSURE CELL BLOCK

NOT TO SCALE



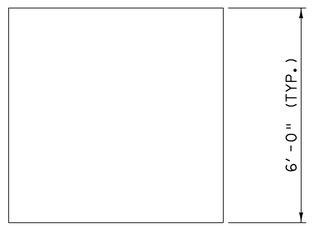
DATA ENCLOSURE SCHEMATIC

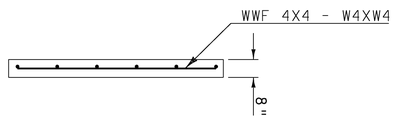
NOT TO SCALE



GIRDER STRAIN GAGE DETAIL

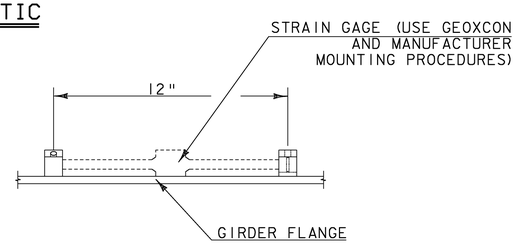
NOT TO SCALE





CONCRETE PAD

NOT TO SCALE



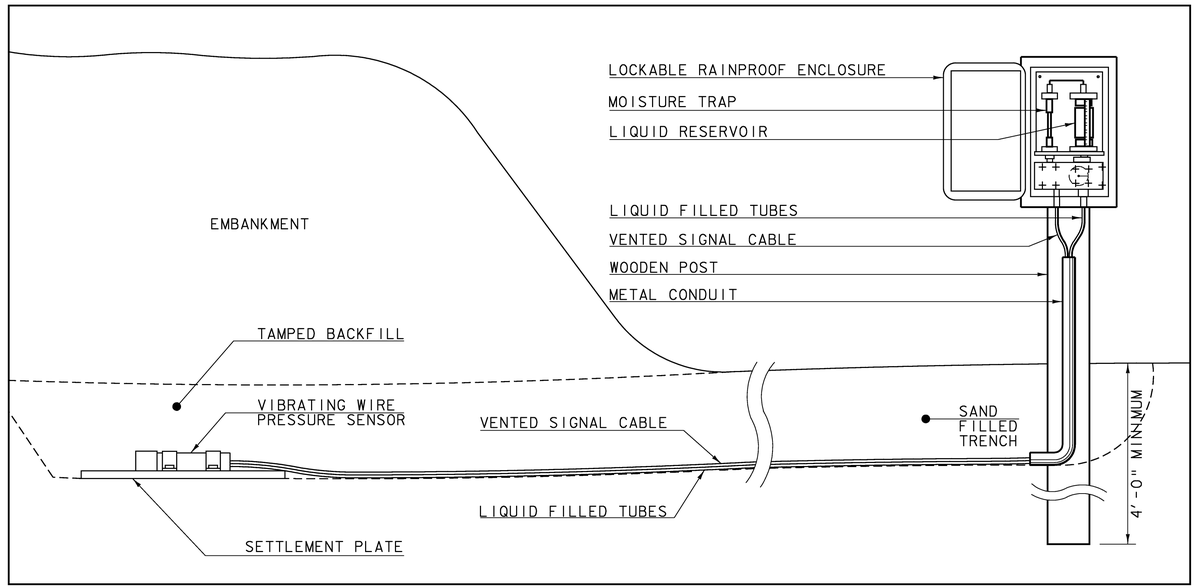
STRAIN GAGE ON GIRDER

NOT TO SCALE

MISCELLANEOUS INSTRUMENTATION DETAILS

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238monitor	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: T. FILLBACH	CHECKED BY: C. ALLEN
sf238idl.i	SHEET 68 OF 144



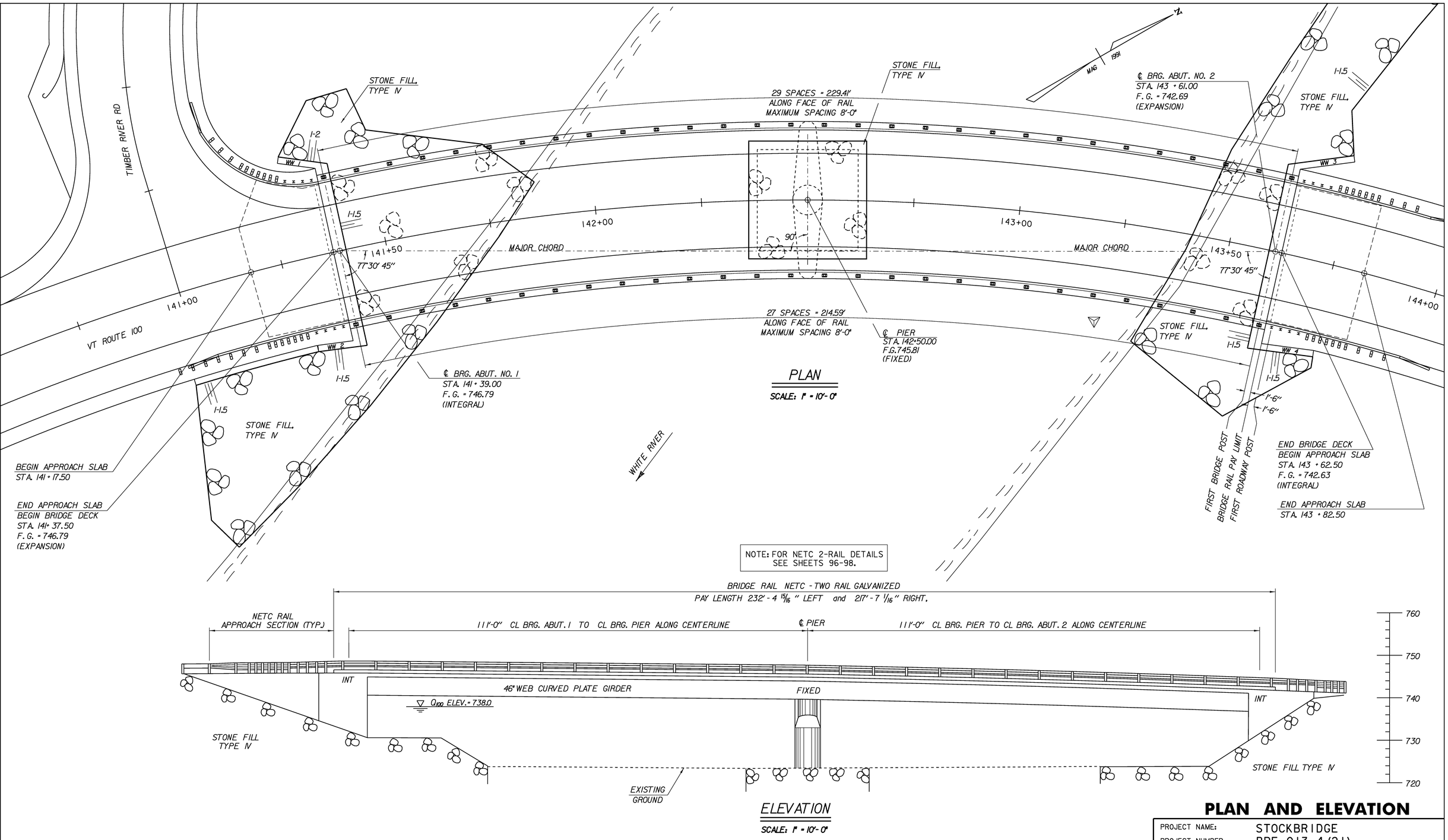
TYPICAL INSTALLATION FOR SETTLEMENT PLATFORM, TYPE IV

NOT TO SCALE

SETTLEMENT PLATFORM, TYPE IV

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238monitor	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: J. SALVATORI
DESIGNED BY: T. FILLBACH	CHECKED BY: T. FILLBACH
sf238mon4.i	SHEET 69 OF 144



PLAN

SCALE: 1" = 10'-0"

NOTE: FOR NETC 2-RAIL DETAILS SEE SHEETS 96-98.

ELEVATION

SCALE: 1" = 10'-0"

PLAN AND ELEVATION

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4 (21)

FILE NAME: /78f238/str5/sf238pe.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER	CHECKED BY: T. FILLBACH
sf238pe.i	SHEET 70 OF 144

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION, AND ITS LATEST REVISIONS.

2. THE BRIDGE GIRDERS WERE DESIGNED FOR HS 25 LIVE LOAD WITH NO ALLOWANCE FOR FUTURE PAVEMENT.

3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT UNLESS NOTED OTHERWISE.

4. ITEM 529.15 REMOVAL OF STRUCTURE IS FOR THE COMPLETE REMOVAL AND DISPOSAL OF THE EXISTING TRUSS BRIDGE, INCLUDING THE SUBSTRUCTURE DOWN TO ELEVATION 720'.

5. THE EXISTING STRUCTURAL STEEL IS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL. THE REMOVED STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE REMOVED EXISTING STRUCTURAL STEEL.

TRAFFIC MAINTENANCE DURING CONSTRUCTION

6. AS PART OF 900.645 SPECIAL PROVISION (ALL-INCLUSIVE TRAFFIC CONTROL), THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN TO THE ROADWAY, TRAFFIC, AND SAFETY ENGINEER FOR APPROVAL PER SUBSECTION 105.03. SEE SPECIAL PROVISIONS.

7. TWO-WAY TRAFFIC WILL BE MAINTAINED ON THE EXISTING STRUCTURE, ALTHOUGH DURING THE CONSTRUCTION PERIOD, THE CONTRACTOR MAY USE ONE-WAY TRAFFIC WITH FLAGGERS.

8. BLANK

9. ALL ITEMS REQUIRED TO IMPLEMENT THE CONTRACTOR'S TRAFFIC CONTROL PLAN WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 900.645 SPECIAL PROVISION (ALL-INCLUSIVE TRAFFIC CONTROL). THIS INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS:

   TEMPORARY TRAFFIC BARRIER
   UNIFORMED TRAFFIC OFFICER/FLAGGER
   TEMPORARY PAVEMENT MARKINGS
   TRAFFIC SIGNS, TYPE A
   FLANGED CHANNEL SIGN POSTS

   TEMPORARY PAVEMENT MARKINGS THAT REMAIN IN PLACE FOR FEWER THAN SEVEN CALENDAR DAYS SHALL BE TYPE II RAISED PAVEMENT MARKERS. ALL OTHER TEMPORARY PAVEMENT MARKINGS SHALL BE PAINT.

PILES

10. THE PILES SHALL BE HP 14 X 117.

11. THE ABUTMENT PILES SHALL NOT BE DRIVEN UNTIL THE ENGINEER DETERMINES THAT ALL OF THE EXPECTED SETTLEMENT HAS OCCURRED DUE TO THE SURCHARGING OPERATIONS.

12. THE PILES SHALL BE DRIVEN TO A NOMINAL RESISTANCE OF 640 KIPS BUT SHALL BE EMBEDDED IN THE GROUND A MINIMUM OF 45 FEET. TO PREVENT DAMAGE TO THE PILES, PILE SHOES SHALL BE REQUIRED AND SHALL CONFORM TO SECTION 505.

13. PILE TESTING AND SEQUENCE
    A. A MINIMUM OF ONE DYNAMIC PILE TEST SHALL BE CONDUCTED ON THE FIRST PILE DRIVEN FOR EACH SUBSTRUCTURE UNIT, FOR A TOTAL OF THREE TESTS. MORE TESTS MAY BE REQUIRED BY THE RESIDENT ENGINEER.
    B. ABUTMENT PILES SHALL BE DRIVEN STARTING AT THE CENTERLINE OF VT 100 AND WORKING OUTWARD SO THAT THE EXTERIOR PILES ARE DRIVEN LAST.

14. BLANK

15. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED AS SHOWN ON THE BORING LOGS. THE ACTUAL IN PLACE LENGTHS MAY VARY.

CONCRETE

16. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1" BY 1".

17. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

18. REINFORCING PLACEMENT TOLERANCES SHALL BE:
    SPACING ± 1"
    CLEARANCE ± ¼"

19. THE DECK, CURBS, PIER HEAD, ABUTMENTS AND WINGWALLS SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A.

20. ALL OTHER SUBSTRUCTURE CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B.

21. THE CONSTRUCTION LOADS AND DEFLECTIONS OF STEEL SUPERSTRUCTURE WERE CALCULATED ASSUMING THE POURING SEQUENCE SHOWN IN THE PLANS. ANY CHANGE IN THE POURING SEQUENCE SHOWN IN THE PLANS NEEDS TO BE APPROVED BY THE PROJECT MANAGER BEFORE THE STRUCTURAL STEEL FABRICATION DRAWINGS HAVE BEEN APPROVED.

22. FOR BRIDGE DECK POURS, THE MAXIMUM TIME LIMIT FOR ANY COMBINATION OF POURS DONE IN ANY ONE DAY SHALL BE EIGHT HOURS. THERE SHALL BE A MINIMUM OF 96 HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF OTHER ADJACENT POURS. ALL INDIVIDUAL DECK POURS SHALL START FROM THE LOW END OF THE BRIDGE.

23. NO CONCRETE IN THE ABUTMENTS OR WINGWALLS SHALL BE PLACED ABOVE THE BRIDGE SEAT CONSTRUCTION JOINT UNTIL THE GIRDERS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED.

24. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTHED WITH A MAGNESIUM FLOAT.

25. NO TRAFFIC SHALL BE ALLOWED ON THE NEW DECK UNTIL THE CURE PERIOD IS UP AND THE 28 DAY DESIGN STRENGTH IS ATTAINED, AS EVIDENCED BY TEST CYLINDERS CURED UNDER FIELD CONDITIONS.

26. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP BEADS.

27. CONCRETE FORMWORK AND SUPPORTS.
    A. FLEMING BRACKETS OR SIMILAR FALSE WORK SHALL BE PLACED AT A MAXIMUM SPACING OF 4'-0". THE BRACKETS SHALL BEAR NEAR THE BOTTOM FLANGE AND IN NO CASE SHALL THEY BEAR ABOVE THE BOTTOM QUARTER OF THE WEB DEPTH.
    B. PER SUBSECTION 501.09, THE CONTRACTOR SHALL SUBMIT A CONCRETE FORMWORK DESIGN FOR THE PIER.

STONE FILL

28. THE STONE FILL, TYPE IV SHALL BE PLACED IN FRONT OF THE ABUTMENTS BEFORE THE STRUCTURAL STEEL HAS BEEN SET.

29. THE STONE FILL, TYPE IV SHALL BE PLACED AROUND THE PIER BEFORE THE STRUCTURAL STEEL HAS BEEN SET.

STRUCTURAL STEEL

30. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.

31. ALL HOLES IN THE WEBS OF THE FASCIA GIRDERS THAT ARE NOT OTHERWISE FILLED, SHALL BE FILLED WITH EITHER BUTTON HEAD OR HEX HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

32. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH-STRENGTH BOLTS IN 15/16" DIAMETER HOLES, PER SECTION 506.

33. BLANK

34. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.

35. AFTER THE GIRDERS HAVE BEEN SET ON THE ANCHOR BOLTS AND BEFORE THE MORTAR PEDESTALS HAVE BEEN POURED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE GIRDERS, AS DIRECTED BY THE RESIDENT ENGINEER, TO DETERMINE IF THE ELEVATIONS AT THE END OF THE GIRDERS SHOULD BE ADJUSTED. AFTER THE MORTAR PEDESTALS HAVE BEEN POURED, MORE EXTENSIVE ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE GIRDERS FOR CALCULATING THE HAUNCH DEPTHS.

BACKFILL

36. ALL ABUTMENT GAGES SHALL BE INSTALLED AND FUNCTIONING PROPERLY BEFORE BACKFILLING OPERATIONS COMMENCE.

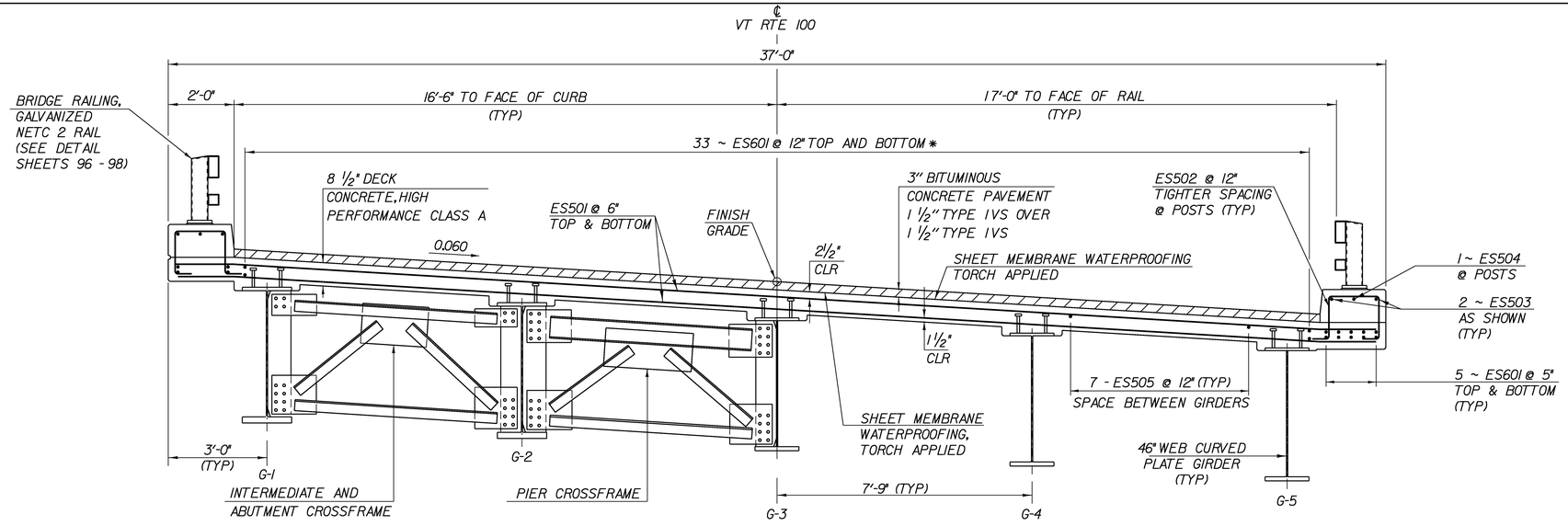
37. BACKFILLING OF THE ABUTMENTS SHALL NOT BEGIN UNTIL THE DECK HAS BEEN POURED AND CURED. IF IT IS DESIRED TO BACKFILL BEFORE THE DECK HAS BEEN CURED, THEN THE CONTRACTOR SHALL SUBMITT A PLAN FOR SUPPORTING THE ABUTMENTS TO MINIMIZE DEFLECTIONS AND ROTATIONS CAUSED BY THE BACKFILLING OPERATION. THIS PLAN SHALL BE APPROVED BY THE PROJECT MANAGER BEFORE ANY BACKFILLING OPERATIONS BEGIN. AN ACCEPTABLE METHOD OF ACHIEVING THIS WOULD BE TO MAINTAIN THE SAME HEIGHT OF FILL ON THE FRONT AND BACK FACE OF THE ABUTMENT.

38. THE ROADWAY EMBANKMENT BEHIND ABUTMENT #1 AND #2 SHALL BE SURCHARGED TO CONSOLIDATE THE SOIL IN THESE LOCATIONS. SEE SHEET 65, THE GEOTECHNICAL LAYOUT SHEET, FOR ADDITIONAL INFORMATION. THE MONITORING INSTRUMENTATION SHALL BE PAID FOR UNDER ITEMS 900.620 SPECIAL PROVISION (SETTLEMENT PLATFORM, TYPE I) AND 900.620 SPECIAL PROVISION (SETTLEMENT PLATFORM, TYPE IV). ALL OF THE OTHER WORK REQUIRED FOR SURCHARGING THE ROADWAY, INCLUDING FURNISHING THE LABOR, TOOLS, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THE WORK SHALL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (SURCHARGING).

GENERAL NOTES SHEET

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: 78f238/str5/sf238gennotes.dgn PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS DRAWN BY: R. PELLETT
DESIGNED BY: T. SUMNER CHECKED BY: T. FILLBACH
sf238gennotes.i SHEET 71 OF 144

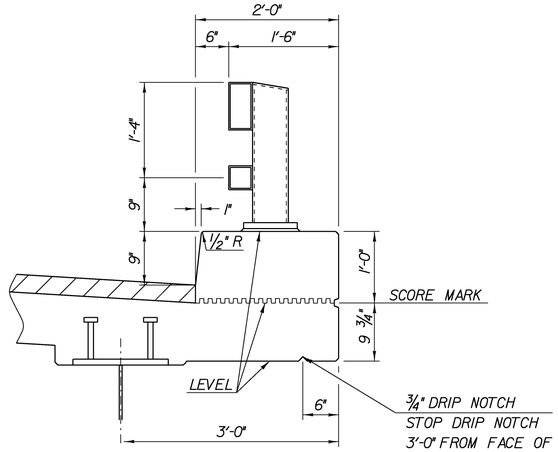


ALL HORIZONTAL DIMENSIONS ARE RADIAL

TYPICAL BRIDGE SECTION

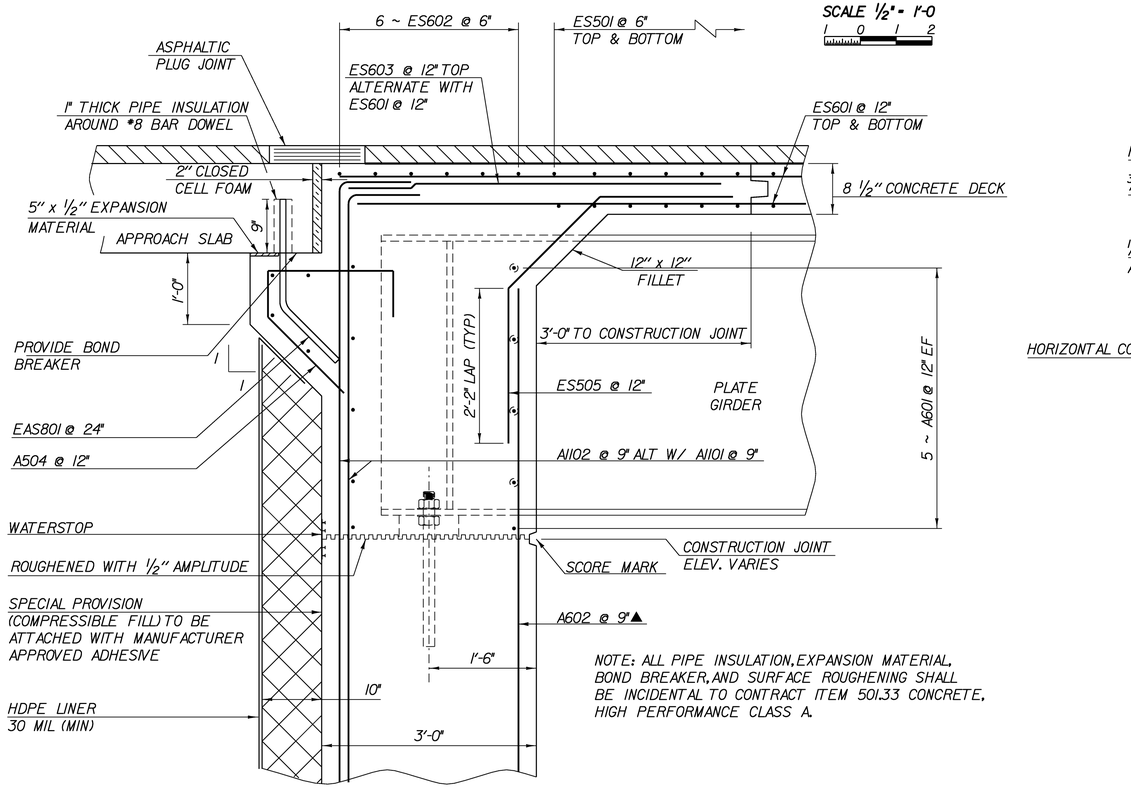
SCALE 1/2" = 1'-0

*DECREASE SPACING OF 3 SETS OF ES601 (TOP) TO 6" THROUGH NEGATIVE MOMENT REGION (SEE SHEET 74)



CURB SECTION - RIGHT FASCIA

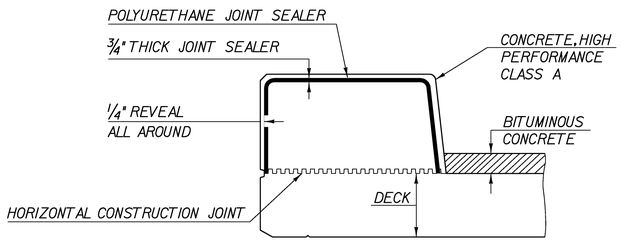
SCALE 1" = 1'-0



NOTE: ALL PIPE INSULATION, EXPANSION MATERIAL, BOND BREAKER, AND SURFACE ROUGHENING SHALL BE INCIDENTAL TO CONTRACT ITEM 501.33 CONCRETE, HIGH PERFORMANCE CLASS A.

END OF BRIDGE

SCALE 1" = 1'-0

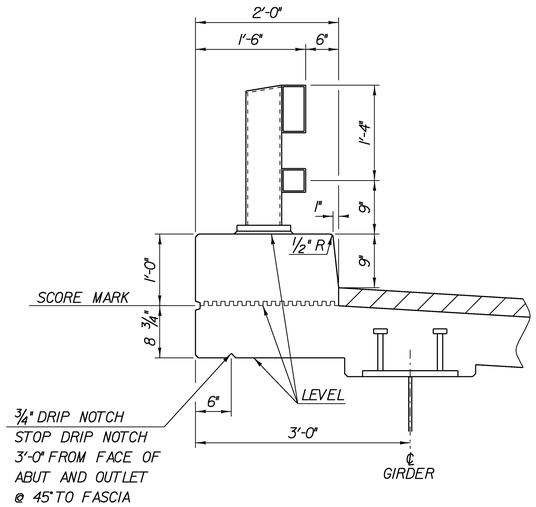


TYPICAL SECTION THROUGH CONCRETE CURB CONSTRUCTION JOINT

NTS

HORIZONTAL CONSTRUCTION JOINT

1. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE AND SHALL BE ROUGHENED TO A FULL AMPLITUDE OF 1/4".
2. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.



CURB SECTION - LEFT FASCIA

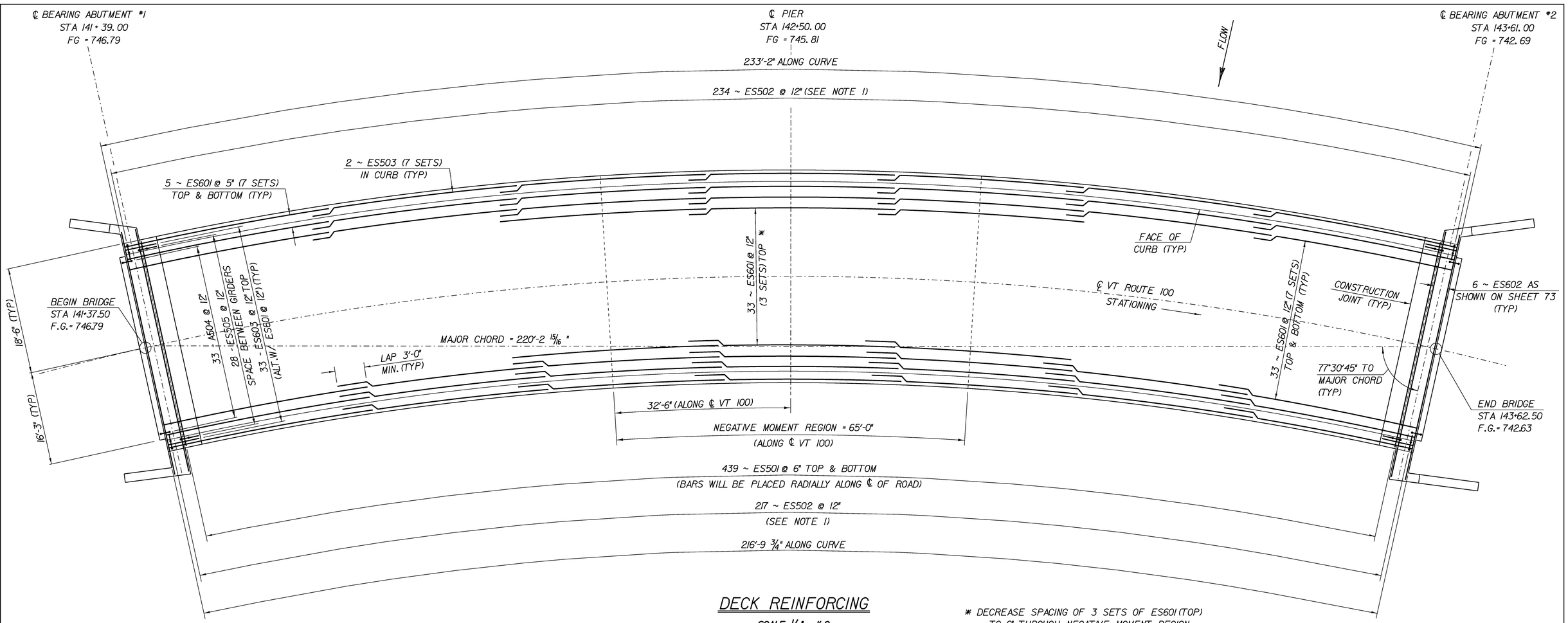
SCALE 1" = 1'-0

DECK TYPICAL & DETAILS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238dck.i

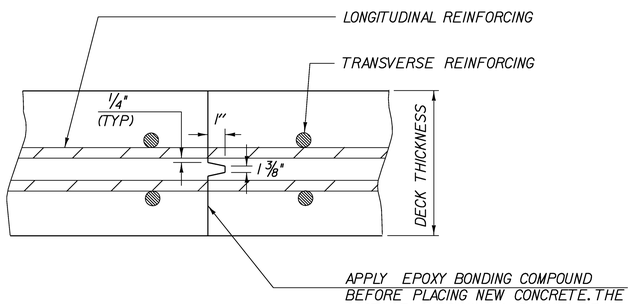
PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH



DECK REINFORCING

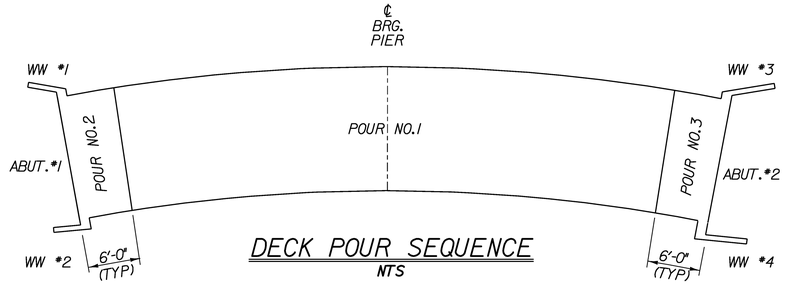
SCALE 1/8" = 1'-0
1 0 2 4 6 8

* DECREASE SPACING OF 3 SETS OF ES601 (TOP) TO 6" THROUGH NEGATIVE MOMENT REGION



TRANSVERSE BRIDGE SLAB CONSTRUCTION JOINT DETAIL

NTS



DECK POUR SEQUENCE

NTS

NOTE: IF AN ALTERNATE POUR SEQUENCE IS USED, IT MUST BE APPROVED BY THE STRUCTURES ENGINEER PRIOR TO THE APPROVAL OF THE STEEL FABRICATION DRAWINGS.

NOTES:

1. EXTRA REINFORCING AROUND RAILING POSTS. SEE SHEET 96 FOR DETAILS.
2. ES504 NOT SHOWN, SEE SHEET 96 FOR DETAILS.

NOTE:

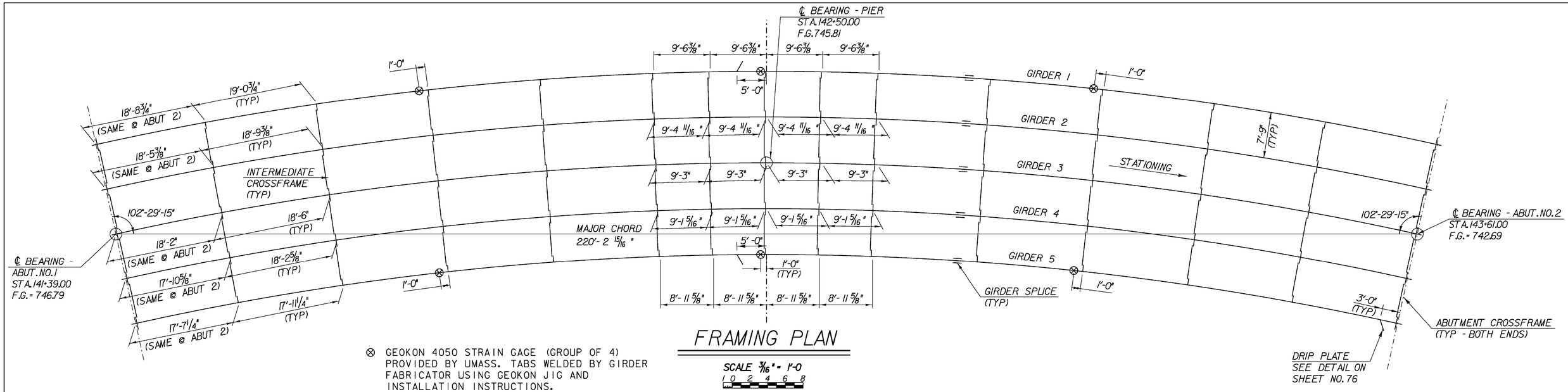
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

DECK PLAN SHEET

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238dre.1

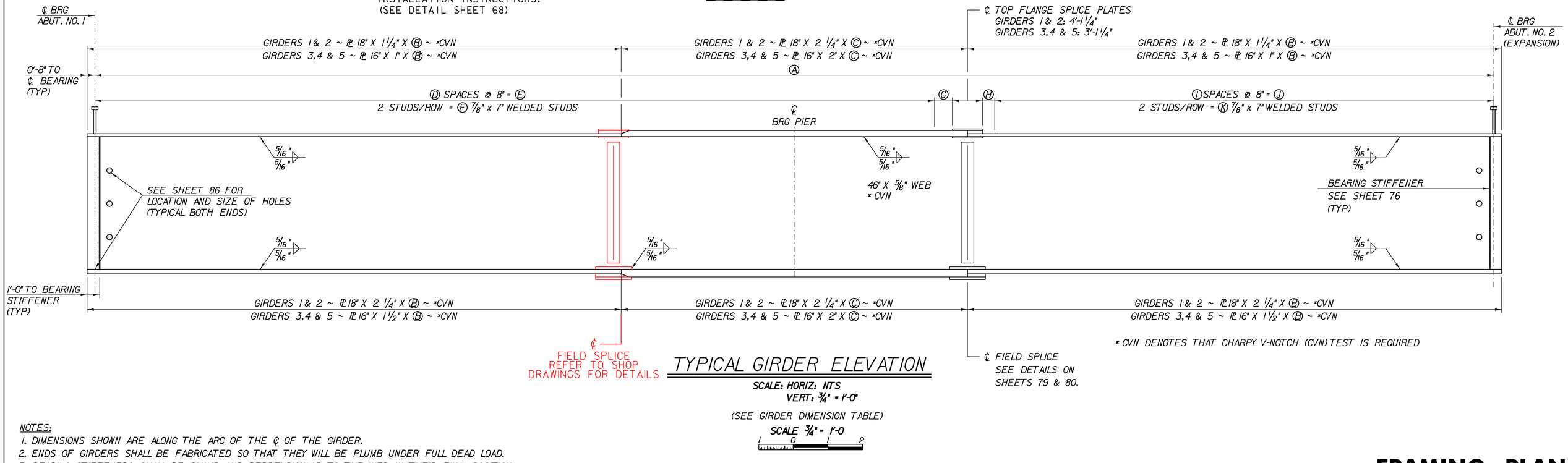
PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 74 OF 144



⊗ GEOKON 4050 STRAIN GAGE (GROUP OF 4) PROVIDED BY UMASS. TABS WELDED BY GIRDER FABRICATOR USING GEOKON JIG AND INSTALLATION INSTRUCTIONS. (SEE DETAIL SHEET 68)

FRAMING PLAN

SCALE 3/16" = 1'-0



* CVN DENOTES THAT CHARPY V-NOTCH (CVN) TEST IS REQUIRED

TYPICAL GIRDER ELEVATION

SCALE: HORIZ: NTS
VERT: 3/4" = 1'-0"

(SEE GIRDER DIMENSION TABLE)

SCALE 3/4" = 1'-0

NOTES:
1. DIMENSIONS SHOWN ARE ALONG THE ARC OF THE ℄ OF THE GIRDER.
2. ENDS OF GIRDERS SHALL BE FABRICATED SO THAT THEY WILL BE PLUMB UNDER FULL DEAD LOAD.
3. BEARING STIFFENERS SHALL BE PLUMB AND PERPENDICULAR TO THE WEB IN THEIR FINAL POSITION.
4. GEOKON 4050 TABS AND JIG WELL BE PROVIDED TO THE GIRDER FABRICATOR BY UMASS.

GIRDER DIMENSION TABLE

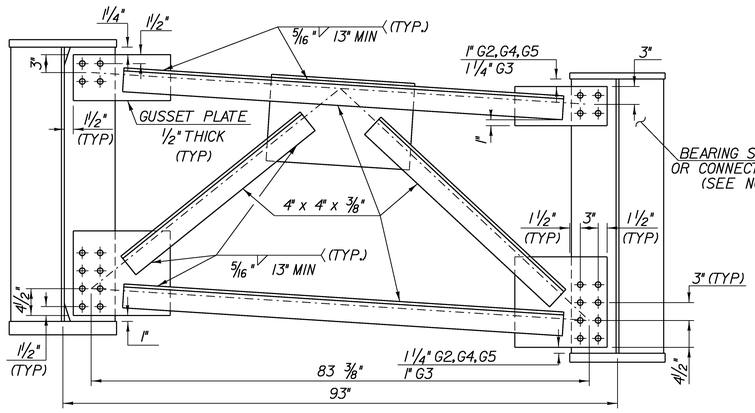
Girder	Radius	A	B	C	D	E	F	G	H	I	J	K
1	524.80	228'-9"	82'-9 3/4"	64'-5 1/2"	216	144'-0"	434	0'-6 5/8"	0'-1 1/8"	120	80'-0"	242
2	517.05	225'-4 1/2"	82'-2"	62'-4 1/2"	212	141'-4"	426	0'-5 7/8"	0'-1 3/8"	119	79'-4"	240
3	509.30	222'-0"	80'-4"	62'-8"	211	140'-8"	424	0'-1 3/8"	0'-1 3/8"	117	78'-0"	236
4	501.55	218'-7 1/2"	78'-11"	62'-1 1/2"	208	138'-8"	418	0'-1 7/8"	0'-8 3/8"	114	76'-0"	230
5	493.80	215'-3"	77'-11 1/2"	60'-8"	204	136'-0"	410	0'-4 7/8"	0'-4 7/8"	113	75'-4"	228

FRAMING PLAN & GIRDER DETAILS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

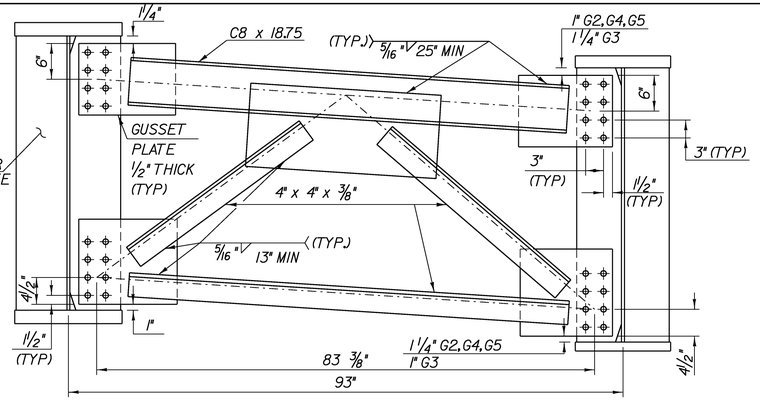
FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238gdr.i

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 75 OF 144



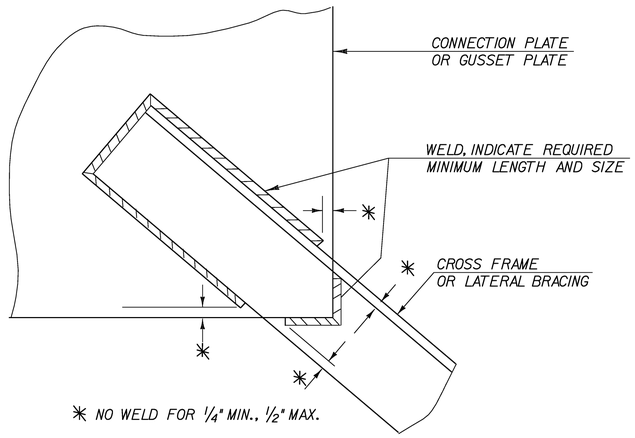
ELEVATION VIEW OF INTERMEDIATE AND ABUTMENT CROSSFRAME

SCALE 1" = 1'-0



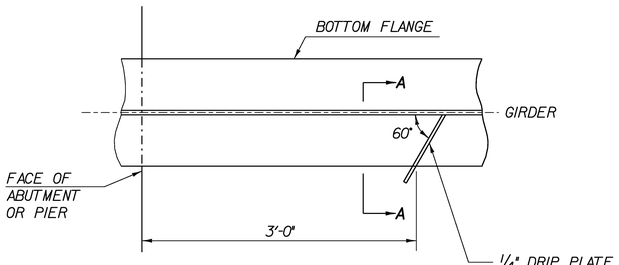
ELEVATION VIEW OF PIER CROSSFRAME

SCALE 1" = 1'-0



WELD LOCATION DETAIL AT CROSS FRAMES AND LATERAL BRACING

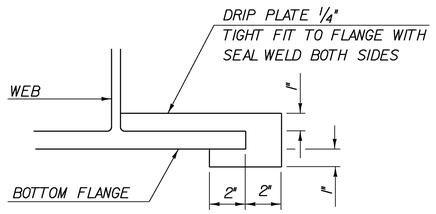
NOTE: ALL STRUCTURAL STEEL SHALL BE CHARPY V-NOTCH (CVN) TESTED. INCLUDING GUSSET PLATES, CONNECTION PLATES, BEARINGS STIFFENERS AND ANGLES



PLAN DRIP PLATE

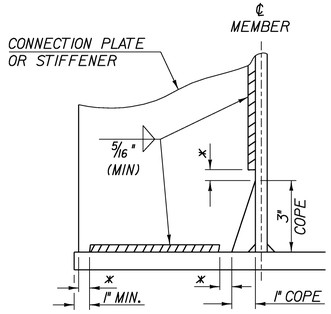
N.T.S.

NOTE: DRIP PLATES SHALL BE PLACED ON OUTSIDE EDGE OF FASCIA GIRDERS AS INDICATED ON THE PROJECT PLANS.



SECTION A - A

N.T.S.



WELD TERMINATION AND COPING DETAILS FOR STEEL MEMBERS

* NO WELD FOR ¼" MIN. ½" MAX. (EXCEPT MUST MAINTAIN 1" MINIMUM FROM EDGE OF FLANGE)

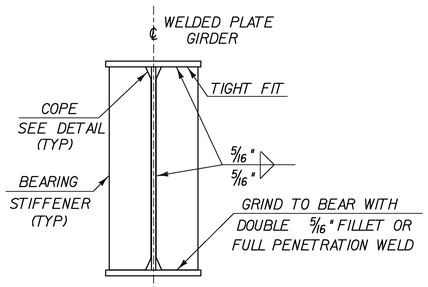
N.T.S.

NOTES:

1. MIN.7" WELD ON OUTSTANDING LEG OF ANGLE (TYP)

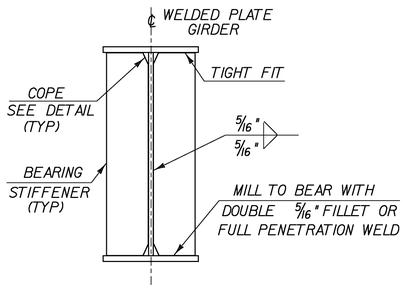
2. BEARING STIFFENER AT ABUTMENT AND PIER
   8 ½" X 7/8" @ GIRDER 1, 2
   7 ½" X ¾" @ GIRDER 3,4,5

   CONNECTION PLATES (OTHERWISE)
   8 ½" X ½" @ GIRDER 1, 2
   7 ½" X ½" @ GIRDER 3,4,5



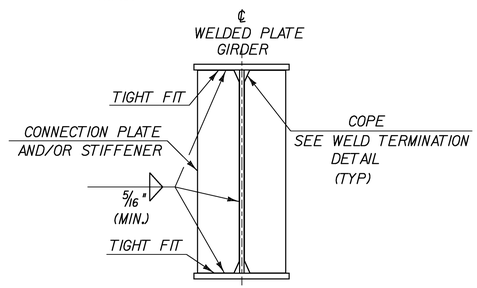
ABUTMENT BEARING STIFFENERS FOR WELDED PLATE GIRDERS

N.T.S.



PIER BEARING STIFFENERS FOR WELDED PLATE GIRDERS

N.T.S.



INTERMEDIATE CONNECTION PLATES AND/OR STIFFENERS FOR WELDED PLATE GIRDERS

N.T.S.

CROSSFRAME & BRACING DETAILS

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sup.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: R. PELLETT
DESIGNED BY: T. SUMNER	CHECKED BY: T. FILLBACH
sf238xfr.1	SHEET 76 OF 144

ASPHALTIC PLUG BRIDGE JOINT

INSTALLATION:

1. THE JOINT SHALL BE LOCATED CENTRALLY OVER THE DECK EXPANSION GAP OR FIXED JOINT MARKED OUT TO THE MANUFACTURER'S RECOMMENDED WIDTH.

2. THE JOINT SHALL BE EXCAVATED AS SHOWN ON THE PLANS BY USE OF SAWS AND PNEUMATIC HAMMER OR A HAMMER AND CHISEL.

3. THE JOINT AREA SHALL BE BLAST CLEANED OF DEBRIS AND ASPHALT. THE JOINT AREA SHALL BE THOROUGHLY DRIED USING HOT COMPRESSED AIR PRIOR TO APPLYING BINDER MATERIAL.

4. SPALLED AND DEFECTIVE CONCRETE SHALL BE REPAIRED WITH AN APPROVED MATERIAL AS AGREED UPON BY THE ENGINEER.

5. PROPERLY SIZED HEAT RESISTANT BACKER ROD SHALL BE PLACE IN THE MOVEMENT GAP ALLOWING FOR 25 MM (1 INCH) +/- OF BINDER ABOVE THE ROD.

6. THE BINDER MATERIAL SHALL BE HEATED AND PLACED AS RECOMMENDED BY THE MANUFACTURER.

7. PLACE 6 MM (1/4 INCH) THICK BY 200 MM (8 INCH) WIDE SECTIONS OF STEEL PLATE OVER THE CENTER OF THE MOVEMENT GAP. SECURE PLATES FROM MOVING BY INSERTING LOCATING PINS THROUGH THE PRESTAMPED HOLES INTO BACKER ROD AND COVER WITH HOT BINDER.

   A. THE STEEL PLATES MAY BE OMITTED WHERE THE APPROACH SLAB IS COVERED WITH A STONE BASE OR BITUMINOUS PAVEMENT AND VERTICAL MOVEMENT OF THE PLATES MIGHT OCCUR.

8. THE BINDER MATERIAL AND AGGREGATE SHALL BE HEATED AND MIXED AS RECOMMENDED BY THE MANUFACTURER.

9. THE INSTALLATION OF MATERIAL, COMPACTION, AND TOPCOATING SHALL BE AS RECOMMENDED BY THE MANUFACTURER.

10. IMMEDIATELY AFTER TOPCOATING, AN ANTI-SKID MATERIAL SHALL BE CAST OVER THE JOINT TO REDUCE THE RISK OF TRACKING.

11. JOINT SHALL BE PROTECTED FROM TRAFFIC UNTIL THE MATERIAL HAS COOLED TO 52 C +/- (125 F).

WEATHER LIMITATIONS:

BINDER MATERIAL SHALL BE APPLIED ONLY WHEN THE FOLLOWING CONDITIONS PREVAIL:

(A) THE AMBIENT AIR TEMPERATURE IS AT LEAST 10 C (50 F) AND RISING.

(B) THE ROAD SURFACE IS SUFFICIENTLY DRY.

(C) WEATHER CONDITIONS OR OTHER CONDITIONS ARE FAVORABLE AND ARE EXPECTED TO REMAIN SO FOR THE PERFORMANCE OF SATISFACTORY WORK.

HORIZONTAL CONSTRUCTION JOINT

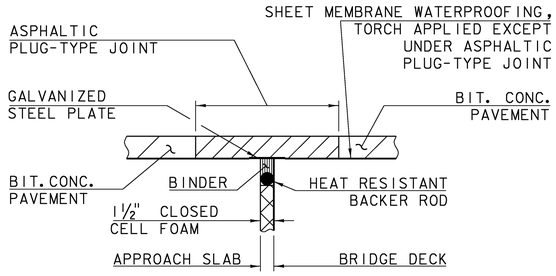
1. THE SURFACE OF THE CONCRETE CONSTRUCTION JOINTS SHALL BE CLEANED AND FREE OF LAITANCE AND SHALL BE ROUGHENED TO A FULL AMPLITUDE OF 1/4".

2. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, ALL CONSTRUCTION JOINTS SHALL BE WETTED AND STANDING WATER REMOVED.

PILE NOTES:

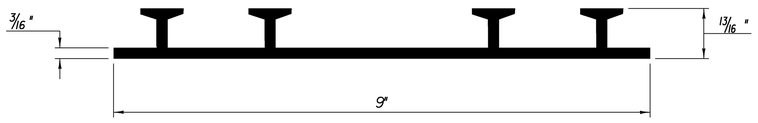
1. WELDING PROCEDURES TO BE APPROVED BY THE STRUCTURES ENGINEER PRIOR TO WELDING

2. PREFABRICATED PILE SPLICE PLATES MAY BE USED WITH THE APPROVAL OF THE RESIDENT ENGINEER



ASPHALTIC PLUG-TYPE JOINT DETAIL

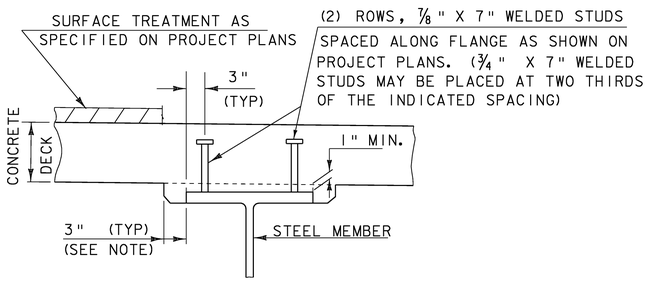
N. T. S.



P.V.C. WATERSTOP FOR CONSTRUCTION JOINTS

N.T.S.

THE COSTS FOR P.V.C. WATERSTOP SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CONTRACT ITEM 501.33 CONCRETE, HIGH PERFORMANCE CLASS A. OTHER CONFIGURATIONS MAY BE USED UPON APPROVAL OF THE STRUCTURES ENGINEER.

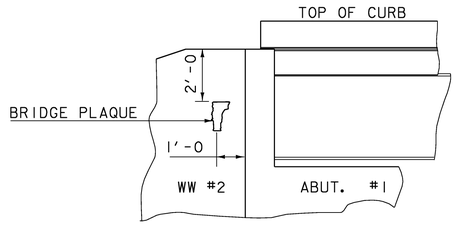


NOTE: THE 3" HORIZONTAL SECTION MAY BE ELIMINATED FOR FORMING SYSTEMS DESIGNED FOR THE CONSTRUCTION OF VERTICAL HAUNCHES. SYSTEMS SHALL BE SUBMITTED FOR APPROVAL TO THE STRUCTURES ENGINEER. ALL VOIDS SHALL BE FILLED WITH MORTAR, TYPE IV OR AN EQUIVALENT PRODUCT FROM THE APPROVED PRODUCTS LIST.

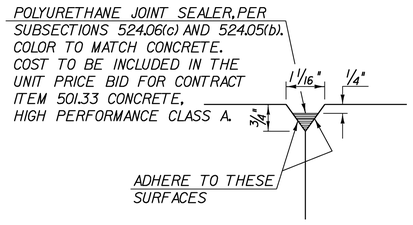
HAUNCH AND SHEAR CONNECTOR DETAILS

(NOT TO SCALE)

PLAN

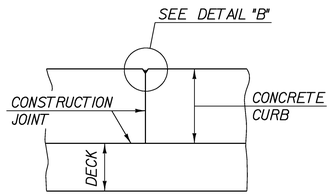


VIEW "A - A"



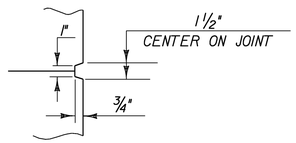
DETAIL "B"

NTS



SECTION B - B

NTS



SCORE MARK DETAIL

NTS

CURB DETAIL

A CONSTRUCTION JOINT SHALL BE PLACED IN THE CURB AT STATION 142+50 OVER THE PIER AND 10 FEET ON EITHER SIDE OF THIS STATION.

BRIDGE PLAQUE DETAIL

(NOT TO SCALE)

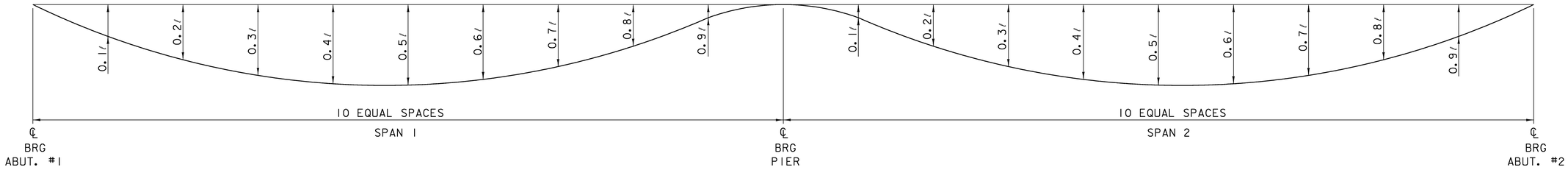
THE BRIDGE PLAQUE WILL BE SUPPLIED BY THE AGENCY OF TRANSPORTATION AND SHALL BE INSTALLED BY THE CONTRACTOR AT ABUTMENT #1 ON THE RIGHT SIDE AS SHOWN OR AS DIRECTED BY THE ENGINEER.
PAYMENT FOR BRIDGE PLAQUE INSTALLATION SHALL BE INCIDENTAL TO CONTRACT ITEM 501.33 CONCRETE, HIGH PERFORMANCE CLASS A.

MISCELLANEOUS DETAILS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

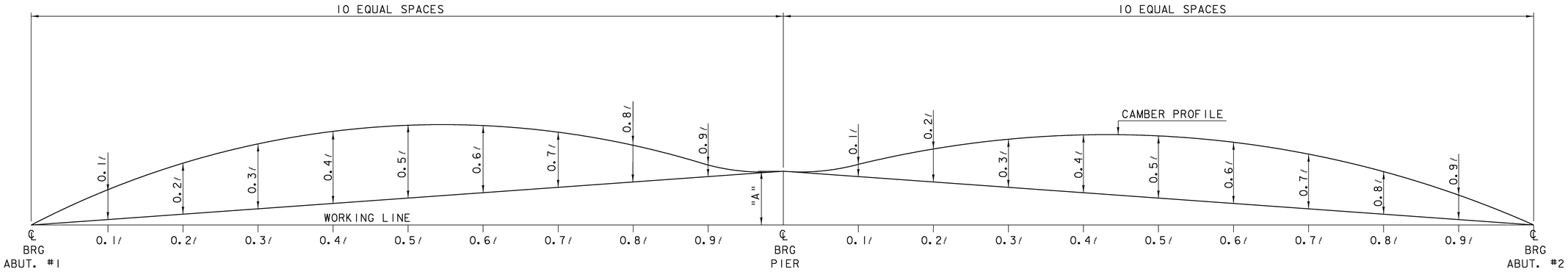
FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238msd.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 77 OF 144



DEFLECTION DIAGRAM

NTS - SEE TABLE BELOW



CAMBER DIAGRAM

NTS - SEE TABLE BELOW

Girder			SPAN 1										SPAN 2									
		0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	0.00	0.10	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00
1	Steel Deflection	0	-0 3/16	-0 3/8	-0 1/2	-0 9/16	-0 1/2	-0 7/16	-0 5/16	-0 3/16	-0 1/16	0	-0 1/16	-0 3/16	-0 5/16	-0 7/16	-0 1/2	-0 9/16	-0 1/2	-0 3/8	-0 3/16	0
	Slab & Super Deflection	0	-0 5/8	-1 1/8	-1 7/16	-1 9/16	-1 1/2	-1 1/4	-0 7/8	-0 1/2	-0 1/8	0	-0 1/8	-0 1/2	-0 7/8	-1 1/4	-1 1/2	-1 9/16	-1 7/16	-1 1/8	-0 5/8	0
	Total Deflection	0	-0 13/16	-1 1/2	-1 15/16	-2 1/8	-2	-1 11/16	-1 3/16	-0 11/16	-0 3/16	0	-0 3/16	-0 11/16	-1 3/16	-1 11/16	-2	-2 1/8	-1 15/16	-1 1/2	-0 13/16	0
	Residual Camber	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0
	Total Camber	0	2 3/16	3 7/8	5 1/16	5 3/4	5 3/4	5 5/16	4 5/16	3 1/16	1 9/16	0	1 9/16	3 1/16	4 5/16	5 5/16	5 3/4	5 3/4	5 1/16	3 7/8	2 3/16	0
	"A" Distance	10 1/4																				
2	Steel Deflection	0	-0 3/16	-0 5/16	-0 7/16	-0 7/16	-0 7/16	-0 3/8	-0 1/4	-0 1/8	-0 1/16	0	-0 1/16	-0 1/8	-0 1/4	-0 3/8	-0 7/16	-0 7/16	-0 7/16	-0 5/16	-0 3/16	0
	Slab & Super Deflection	0	-0 9/16	-1 1/16	-1 3/8	-1 1/2	-1 7/16	-1 1/4	-0 7/8	-0 1/2	-0 1/8	0	-0 1/8	-0 1/2	-0 7/8	-1 1/4	-1 7/16	-1 1/2	-1 3/8	-1 1/16	-0 9/16	0
	Total Deflection	0	-0 3/4	-1 3/8	-1 13/16	-1 15/16	-1 7/8	-1 5/8	-1 1/8	-0 5/8	-0 3/16	0	-0 3/16	-0 5/8	-1 1/8	-1 5/8	-1 7/8	-1 15/16	-1 13/16	-1 3/8	-0 3/4	0
	Residual Camber	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0
	Total Camber	0	2 1/8	3 3/4	4 15/16	5 9/16	5 5/8	5 1/4	4 1/4	3	1 9/16	0	1 9/16	3	4 1/4	5 1/4	5 5/8	5 9/16	4 15/16	3 3/4	2 1/8	0
	"A" Distance	10 1/4																				
3	Steel Deflection	0	-0 3/16	-0 5/16	-0 3/8	-0 7/16	-0 3/8	-0 5/16	-0 1/4	-0 1/8	-0 1/16	0	-0 1/16	-0 1/8	-0 1/4	-0 5/16	-0 3/8	-0 7/16	-0 3/8	-0 5/16	-0 3/16	0
	Slab & Super Deflection	0	-0 9/16	-1 1/16	-1 3/8	-1 1/2	-1 7/16	-1 3/16	-0 13/16	-0 7/16	-0 1/8	0	-0 1/8	-0 7/16	-0 13/16	-1 3/16	-1 7/16	-1 1/2	-1 3/8	-1 1/16	-0 9/16	0
	Total Deflection	0	-0 3/4	-1 3/8	-1 3/4	-1 15/16	-1 13/16	-1 1/2	-1 1/16	-0 9/16	-0 3/16	0	-0 3/16	-0 9/16	-1 1/16	-1 1/2	-1 13/16	-1 15/16	-1 3/4	-1 3/8	-0 3/4	0
	Residual Camber	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0
	Total Camber	0	2 1/8	3 3/4	4 7/8	5 9/16	5 9/16	5 1/8	4 3/16	2 15/16	1 9/16	0	1 9/16	2 15/16	4 3/16	5 1/8	5 9/16	5 9/16	4 7/8	3 3/4	2 1/8	0
	"A" Distance	10 1/4																				
4	Steel Deflection	0	-0 1/8	-0 1/4	-0 3/8	-0 3/8	-0 3/8	-0 5/16	-0 3/16	-0 1/8	-0 1/16	0	-0 1/16	-0 1/8	-0 3/16	-0 5/16	-0 3/8	-0 3/8	-0 3/8	-0 1/4	-0 1/8	0
	Slab & Super Deflection	0	-0 9/16	-1	-1 5/16	-1 7/16	-1 3/8	-1 3/16	-0 13/16	-0 7/16	-0 1/8	0	-0 1/8	-0 7/16	-0 13/16	-1 3/16	-1 3/8	-1 7/16	-1 5/16	-1	-0 9/16	0
	Total Deflection	0	-0 11/16	-1 1/4	-1 11/16	-1 13/16	-1 3/4	-1 1/2	-1	-0 9/16	-0 3/16	0	-0 3/16	-0 9/16	-1	-1 1/2	-1 3/4	-1 13/16	-1 11/16	-1 1/4	-0 11/16	0
	Residual Camber	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0
	Total Camber	0	2 1/16	3 5/8	4 13/16	5 7/16	5 1/2	5 1/8	4 1/8	2 15/16	1 9/16	0	1 9/16	2 15/16	4 1/8	5 1/8	5 1/2	5 7/16	4 13/16	3 5/8	2 1/16	0
	"A" Distance	10 1/4																				
5	Steel Deflection	0	-0 1/8	-0 1/4	-0 5/16	-0 5/16	-0 5/16	-0 1/4	-0 3/16	-0 1/8	-0 1/16	0	-0 1/16	-0 1/8	-0 3/16	-0 1/4	-0 5/16	-0 5/16	-0 5/16	-0 1/4	-0 1/8	0
	Slab & Super Deflection	0	-0 1/2	-0 15/16	-1 3/16	-1 5/16	-1 1/4	-1 1/16	-0 3/4	-0 7/16	-0 1/8	0	-0 1/8	-0 7/16	-0 3/4	-1 1/16	-1 1/4	-1 5/16	-1 3/16	-0 15/16	-0 1/2	0
	Total Deflection	0	-0 5/8	-1 3/16	-1 1/2	-1 5/8	-1 9/16	-1 5/16	-0 15/16	-0 9/16	-0 3/16	0	-0 3/16	-0 9/16	-0 15/16	-1 5/16	-1 9/16	-1 5/8	-1 1/2	-1 3/16	-0 5/8	0
	Residual Camber	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0	1 3/8	2 3/8	3 1/8	3 5/8	3 3/4	3 5/8	3 1/8	2 3/8	1 3/8	0
	Total Camber	0	2	3 9/16	4 5/8	5 1/4	5 5/16	4 15/16	4 1/16	2 15/16	1 9/16	0	1 9/16	2 15/16	4 1/16	4 15/16	5 5/16	5 1/4	4 5/8	3 9/16	2	0
	"A" Distance	10 1/4																				

NOTES:

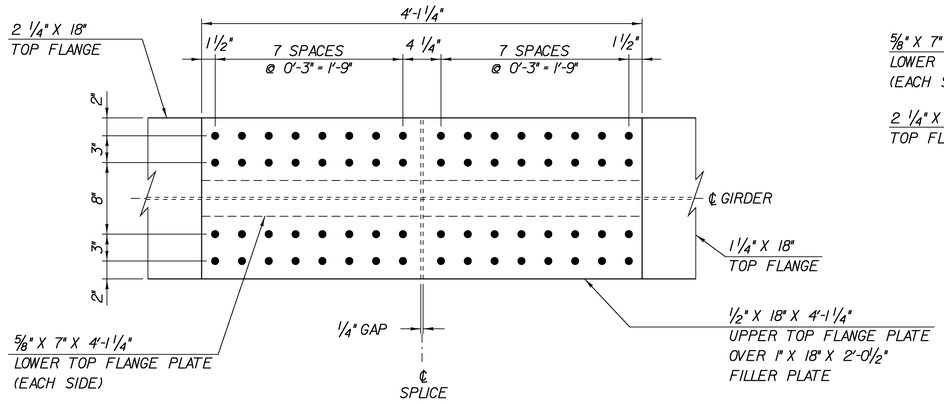
1. DIMENSIONS SHOWN ARE ALONG THE ARC OF THE ℄ OF THE GIRDER.
2. ENDS OF GIRDERS SHALL BE FABRICATED SO THAT THEY WILL BE PLUMB UNDER FULL DEAD LOAD.
3. BEARINGS STIFFENERS SHALL BE PLUMB AND PERPENDICULAR TO THE WEB IN THEIR FINAL POSITION.
4. STEEL DEFLECTION IS DUE TO GIRDERS AND CROSSFRAMES.
5. SLAB & SUPER DEFLECTION IS DUE TO DECK, CURB, RAILING AND PAVEMENT.
6. WORKING LINE IS A STRAIGHT LINE BASED ON THE ELEVATION AT THE BOTTOM OF THE WEB AT THE CENTERLINE OF BEARING AT THE ABUTMENTS.

DEAD LOAD & CAMBER DIAGRAMS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

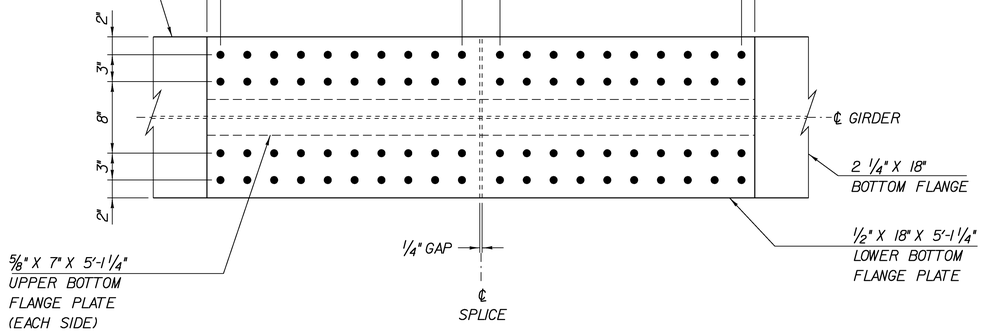
FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238dl.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH



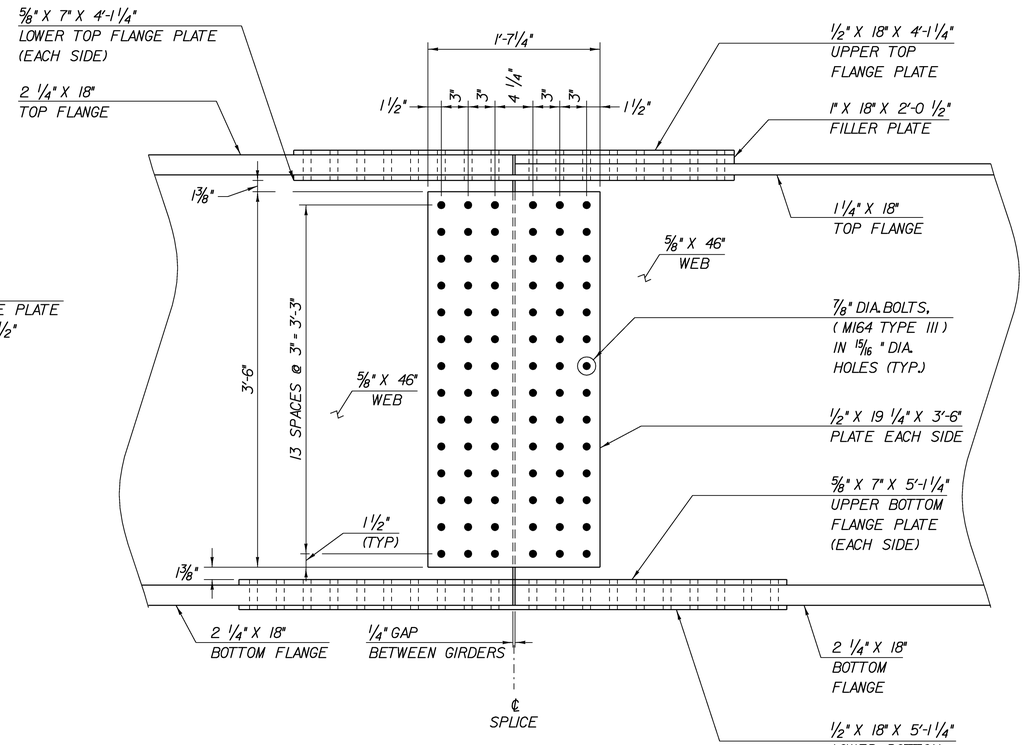
TOP FLANGE PLAN

SCALE 1 1/2" = 1'-0



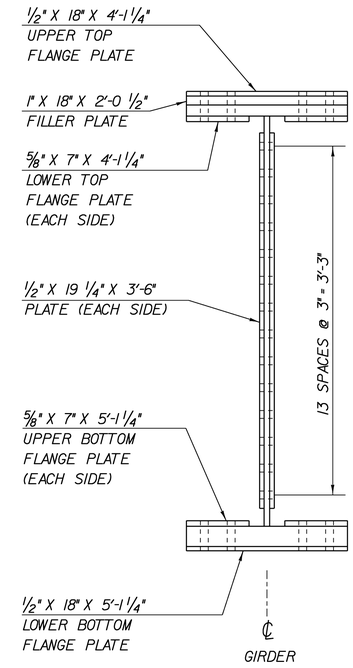
BOTTOM FLANGE PLAN

SCALE 1 1/2" = 1'-0



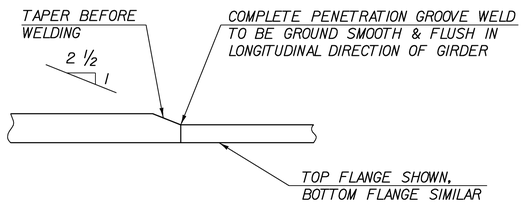
SPLICE ELEVATION

SCALE 1 1/2" = 1'-0



SPLICE SECTION

SCALE 1 1/2" = 1'-0



FLANGE THICKNESS TRANSITION DETAIL

SCALE: 3" = 1'-0"

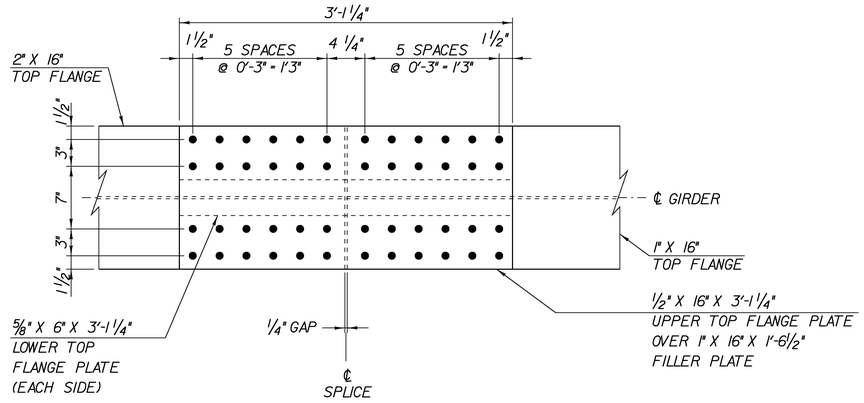
ALL SECTIONS OF THE SPLICE SHALL BE CVN (CHARPY V-NOTCH) TESTED, INCLUDING THE FILLER PLATES

SPLICE DETAIL SHEET GIRDERS #1 & #2

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

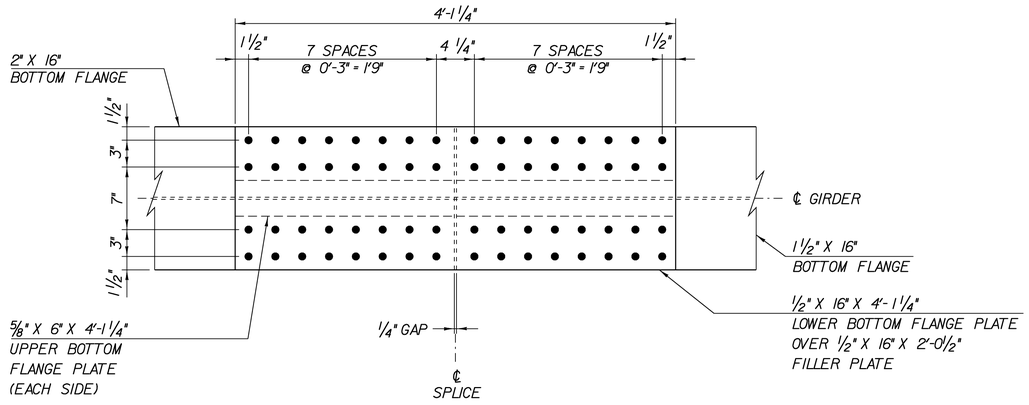
FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238sdl.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH



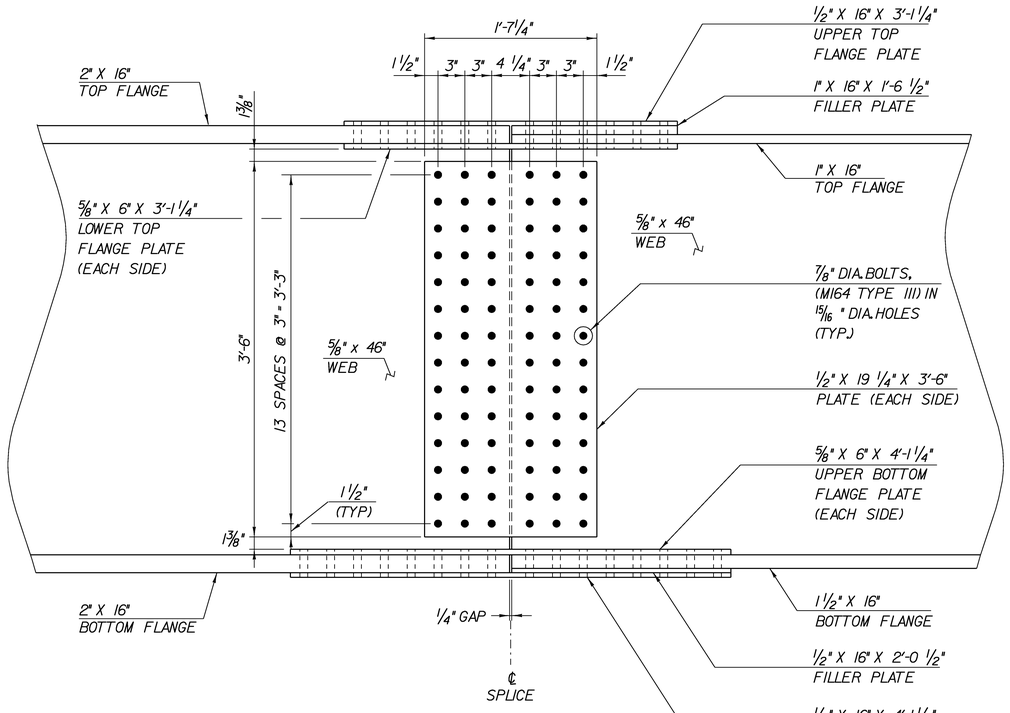
TOP FLANGE PLAN

SCALE 1 1/2" = 1'-0



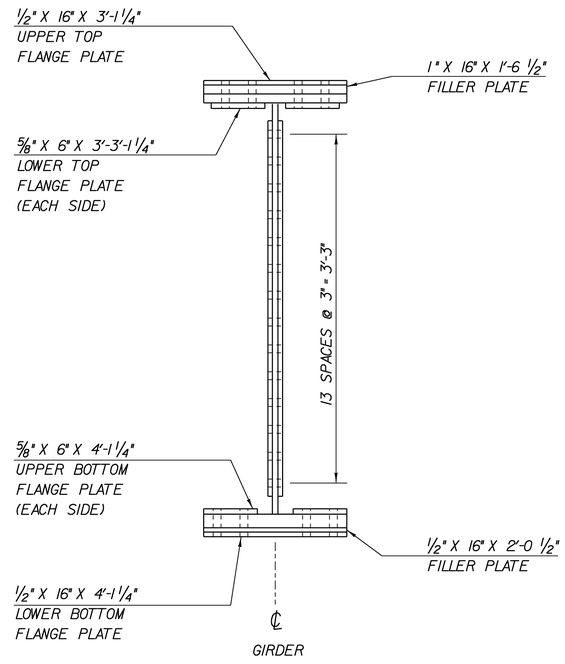
BOTTOM FLANGE PLAN

SCALE 1 1/2" = 1'-0



SPLICE ELEVATION

SCALE 1 1/2" = 1'-0



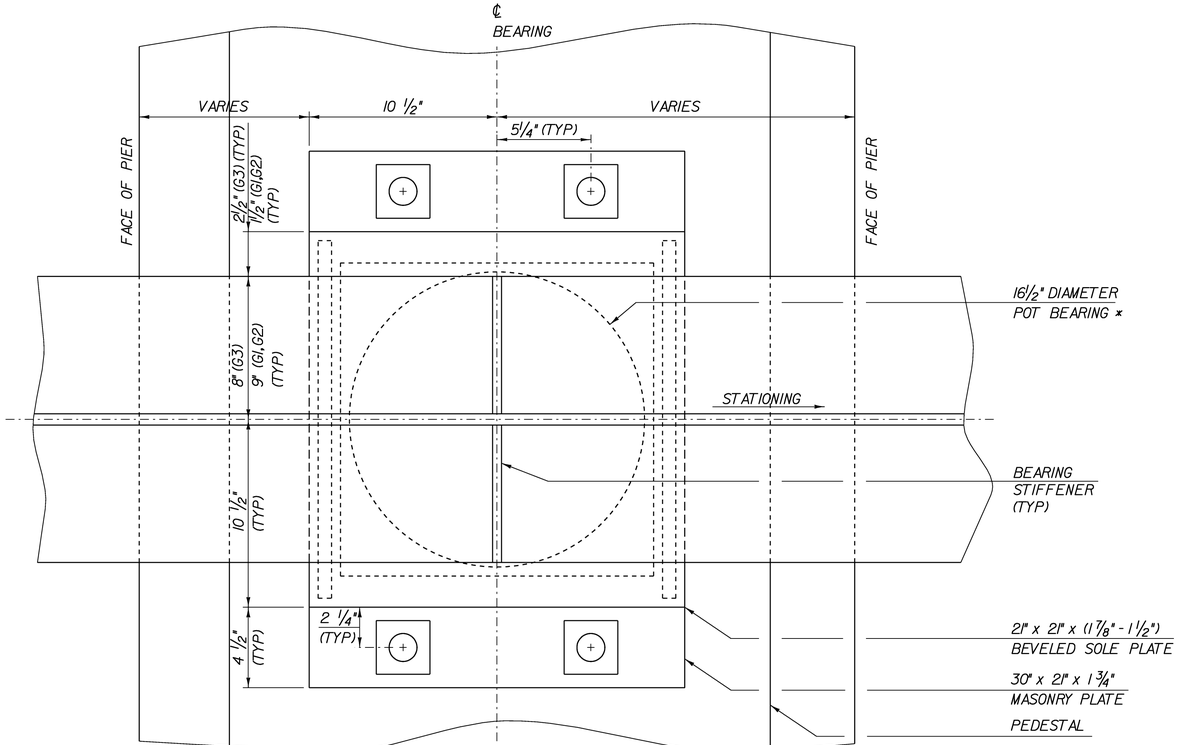
SPLICE SECTION

SCALE 1 1/2" = 1'-0

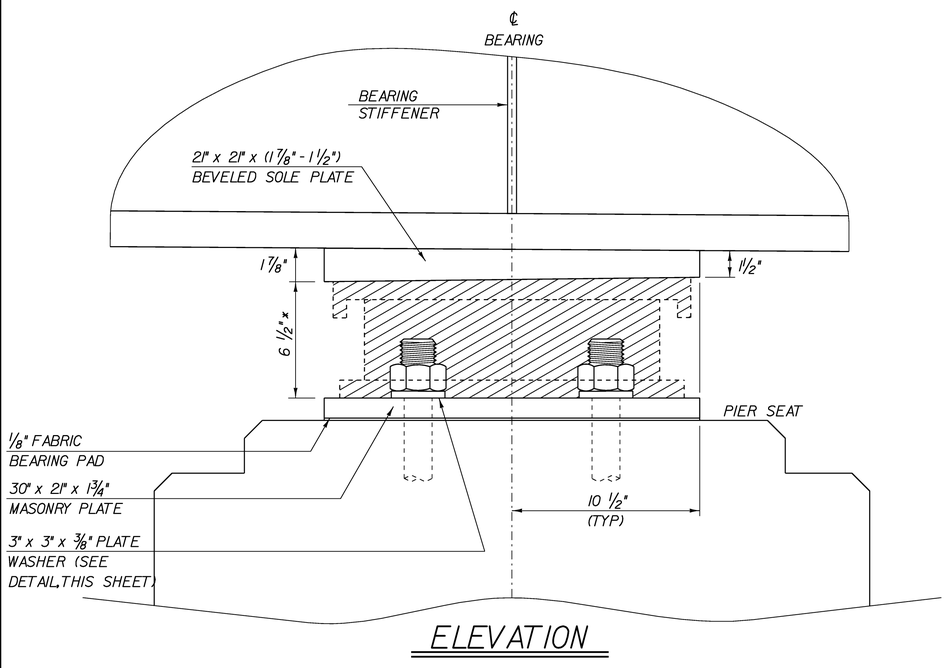
ALL SECTIONS OF THE SPLICE SHALL BE CVN (CHARPY V-NOTCH) TESTED, INCLUDING THE FILLER PLATES

SPLICE DETAIL SHEET GIRDERS #3, #4 & #5

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)
FILE NAME: /78f238/str5/sf238sup.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: R. PELLETT
DESIGNED BY: T. SUMNER	CHECKED BY: T. FILLBACH
sf238sd2.I	SHEET 80 OF 144



PLAN



ELEVATION

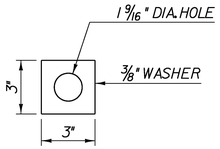
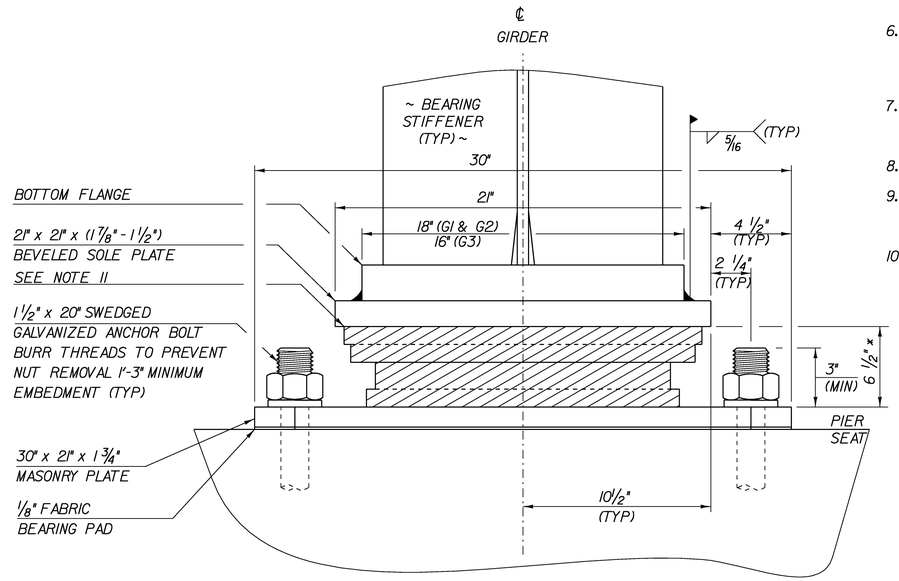
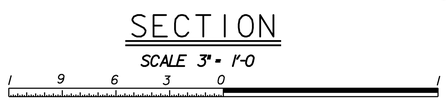


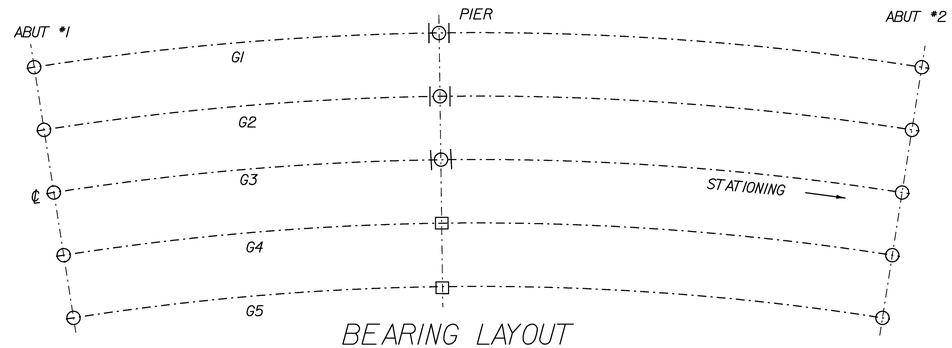
PLATE WASHER



SECTION

SCALE 3" = 1'-0





BEARING LAYOUT

LEGEND	
□	FIXED POT BEARING
⊙	GUIDED POT BEARING
○	INTEGRAL ABUTMENT BEARING

PIER BEARING NOTES

1. Pier bearings shall conform to applicable subsections of Sections 531 and 731.
2. Pier bearings shall be paid for under item 531.12 "Bearing Device Assembly, Pot".
3. The concrete surface under the bearing device shall be level.
4. Design Criteria:
   A. Base plate to concrete design pressure = 1.20 ksi maximum.
   B. Minimum allowable design rotation = 0.016 radians.
   C. Horizontal capacity shall be a minimum of 20% of the vertical load.
   D. Vertical design load per bearing (unfactored) at pier = 395 K
5. Anchor bolts shall be ASTM A-449 and have a minimum embedment of 1'-3" into the concrete and shall conform to subsection 714.08.
6. All bearing devices shall be galvanized or metallized as per subsections 531.04(b) and 506.15. Areas of galvanizing or metallizing damaged by field welding or handling shall be painted with a zinc rich paint in accordance with Section 513. The inside of the pots shall not be galvanized or metallized.
7. All anchor bolts, nuts and washers shall be galvanized. All washers shall be 3/8" plate (minimum). Payment for drilling and grouting of anchor bolts, nuts, and washers shall be included in the bid price for "Bearing Device Assembly, Pot".
8. The Contractor may submit designs for alternate bearings for approval.
9. All bearings shall be marked prior to shipping. The marks shall include the bearing location on the bridge, and a direction arrow that points up-station. All marks shall be permanent and be visible after the bearing is installed.
10. Connection between bearing and sole plate shall be designed and detailed by the bearing supplier.

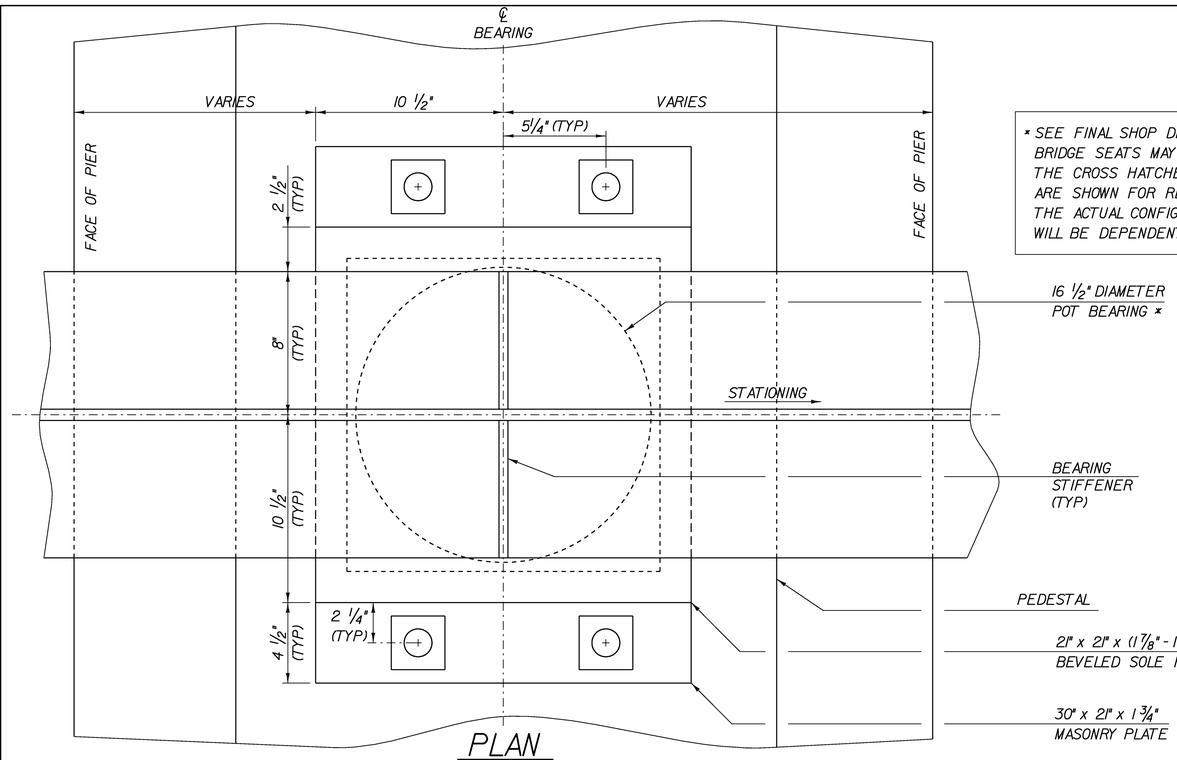
* SEE FINAL FABRICATION DRAWINGS FOR EXACT DIMENSIONS. BRIDGE SEATS MAY NEED ADJUSTMENT. THE CROSS HATCHED COMPONENTS OF THE BEARING ARE SHOWN FOR REPRESENTATIVE PURPOSES ONLY. THE ACTUAL CONFIGURATION OF THE COMPONENTS WILL BE DEPENDENT UPON THE BEARING FABRICATOR.

GUIDED POT BEARINGS AT PIER – GIRDERS 1, 2, & 3

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238brgp.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 81 OF 144



PLAN

SCALE 3" = 1'-0

* SEE FINAL SHOP DRAWINGS FOR EXACT DIMENSIONS. BRIDGE SEATS MAY NEED ADJUSTMENT. THE CROSS HATCHED COMPONENTS OF THE BEARING ARE SHOWN FOR REPRESENTATIVE PURPOSES ONLY. THE ACTUAL CONFIGURATION OF THE COMPONENTS WILL BE DEPENDENT UPON THE BEARING FABRICATOR.

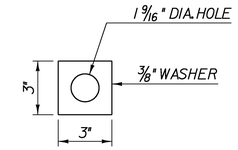
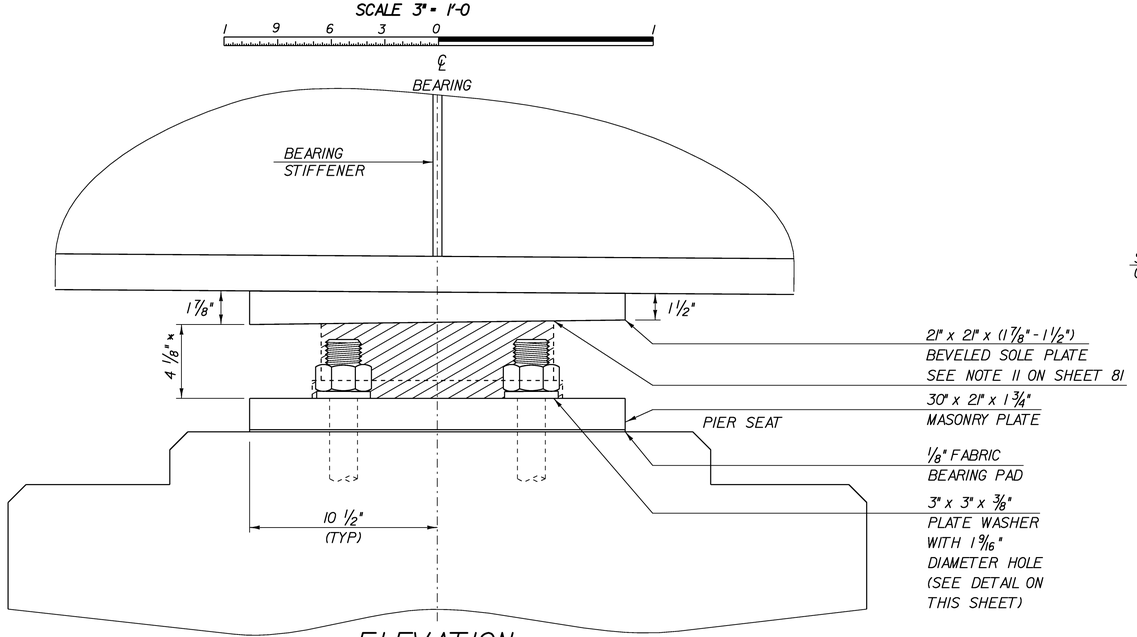
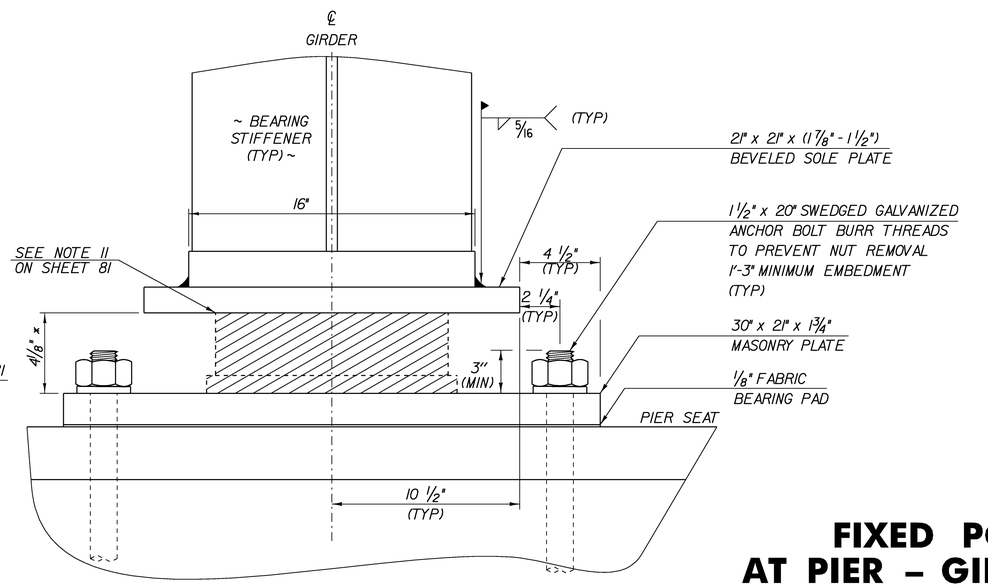


PLATE WASHER



ELEVATION

SCALE 3" = 1'-0



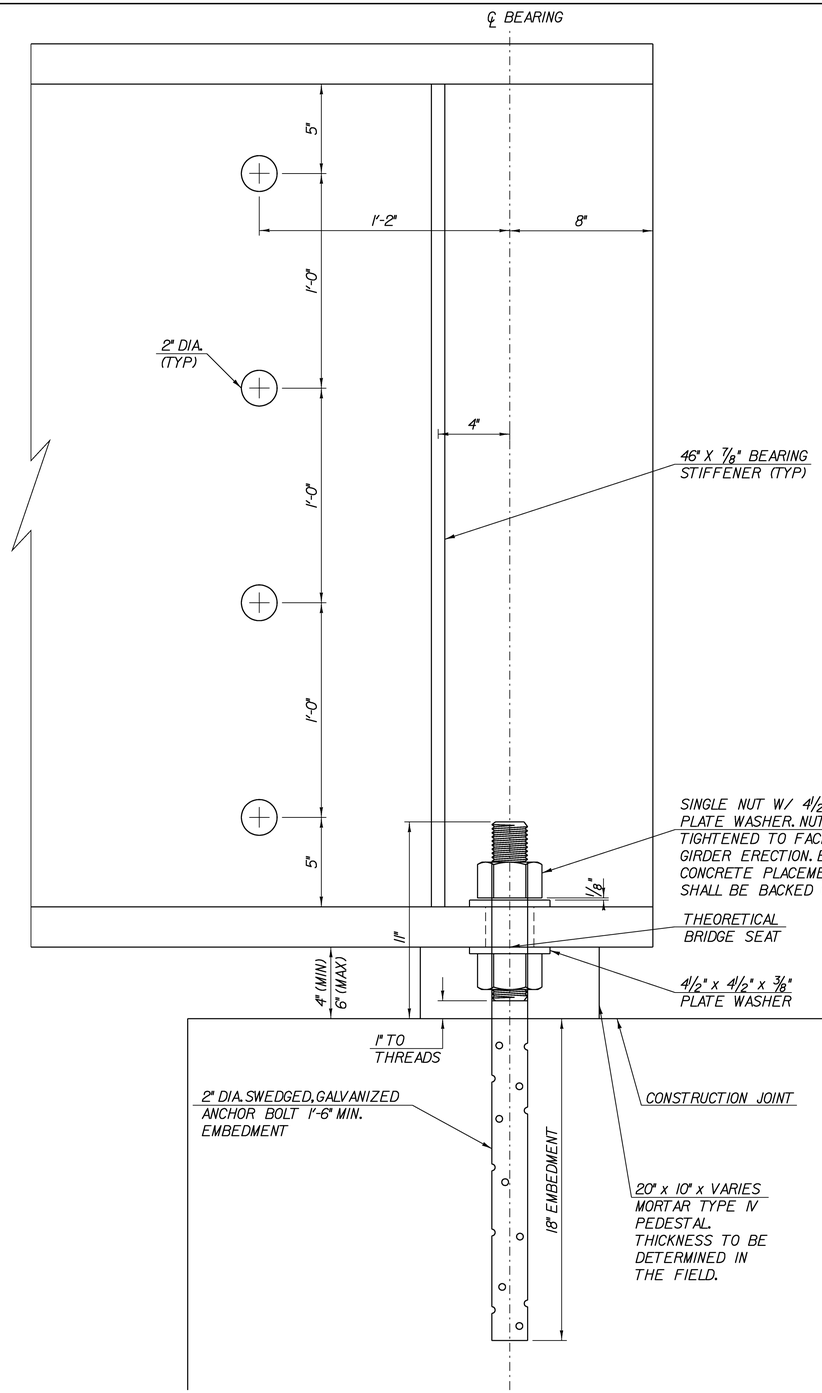
SECTION

SCALE 3" = 1'-0

FIXED POT BEARINGS AT PIER – GIRDERS 4 & 5

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sup.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: R. PELLETT
DESIGNED BY: T. SUMNER	CHECKED BY: T. FILLBACH
sf238fpb.1	SHEET 82 OF 144



INTEGRAL ABUTMENT ELEVATION

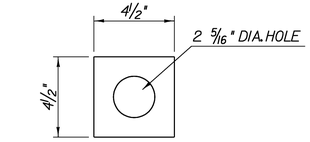


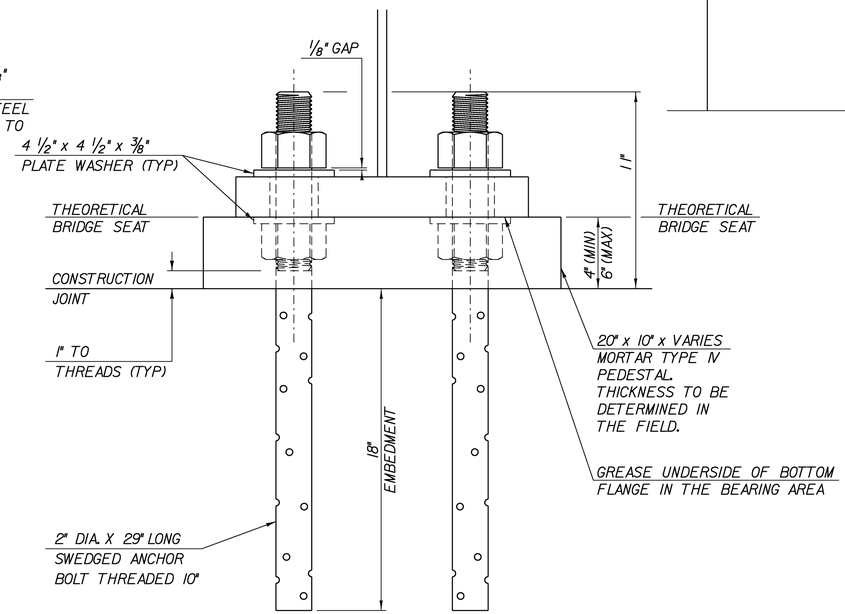
PLATE WASHER DETAIL

NOTES:

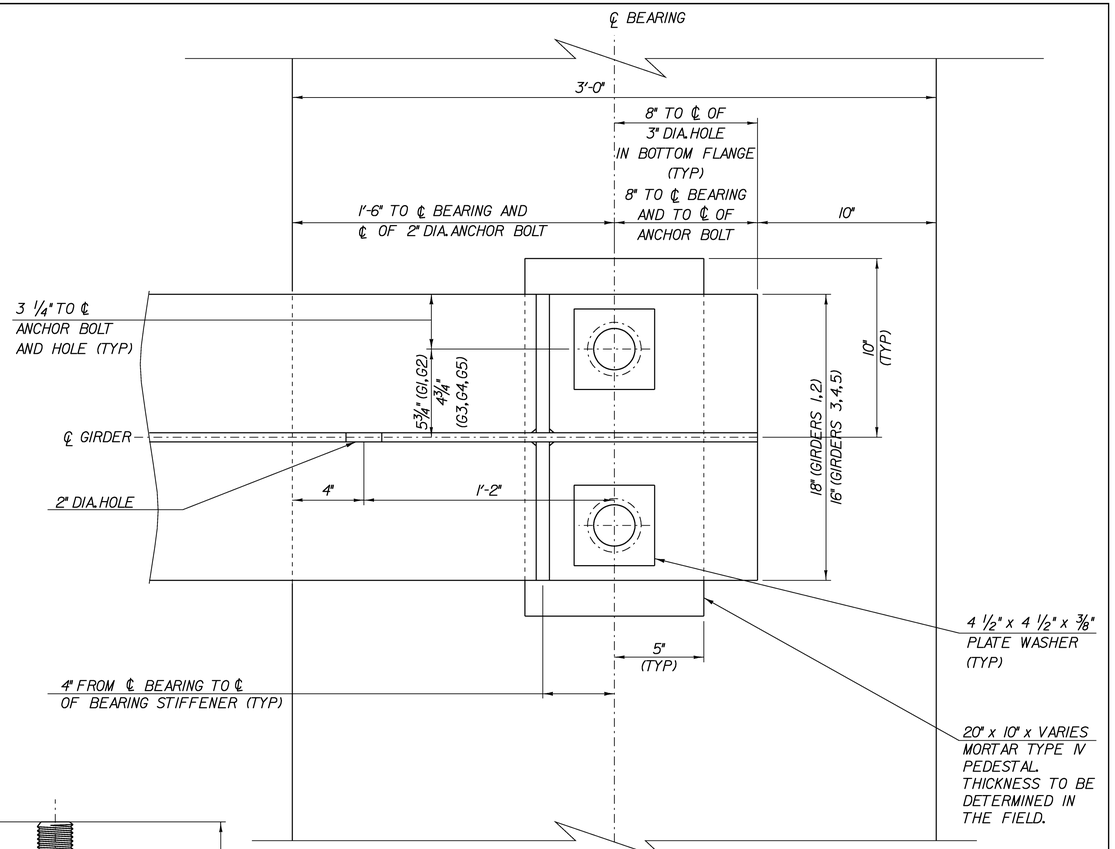
1) THE ANCHOR BOLTS, WASHERS, NUTS AND MORTAR PEDESTAL SHALL BE PAID FOR UNDER ITEM 531.14 "BEARING DEVICE ASSEMBLY, INTEGRAL ABUTMENT" AND SHALL CONFORM TO SECTIONS 531 AND 731 OF VAOT STANDARD SPECIFICATIONS.

2) THE ANCHOR BOLTS, WASHERS AND NUTS SHALL BE GALVANIZED OR METALIZED PER VAOT STANDARD SPECIFICATIONS 531.04 AND 506.15 (a) AND (b).

3) ALL STEEL IN BEARING DEVICE ASSEMBLY SHALL BE AASHTO M 270M/M 270, EXCEPT ANCHOR BOLTS, WHICH SHALL BE ASTM A449, TYPE 1 (Fy=58 ksi)



INTEGRAL ABUTMENT BEARING SECTION



INTEGRAL ABUTMENT BEARING PLAN

	ABUT #1	ABUT #2
GIRDER 1	EL 742.41	EL 738.31
GIRDER 2	EL 741.94	EL 737.84
GIRDER 3	EL 741.56	EL 737.46
GIRDER 4	EL 740.10	EL 737.00
GIRDER 5	EL 740.63	EL 736.53

THEORETICAL BRIDGE SEAT ELEVATIONS

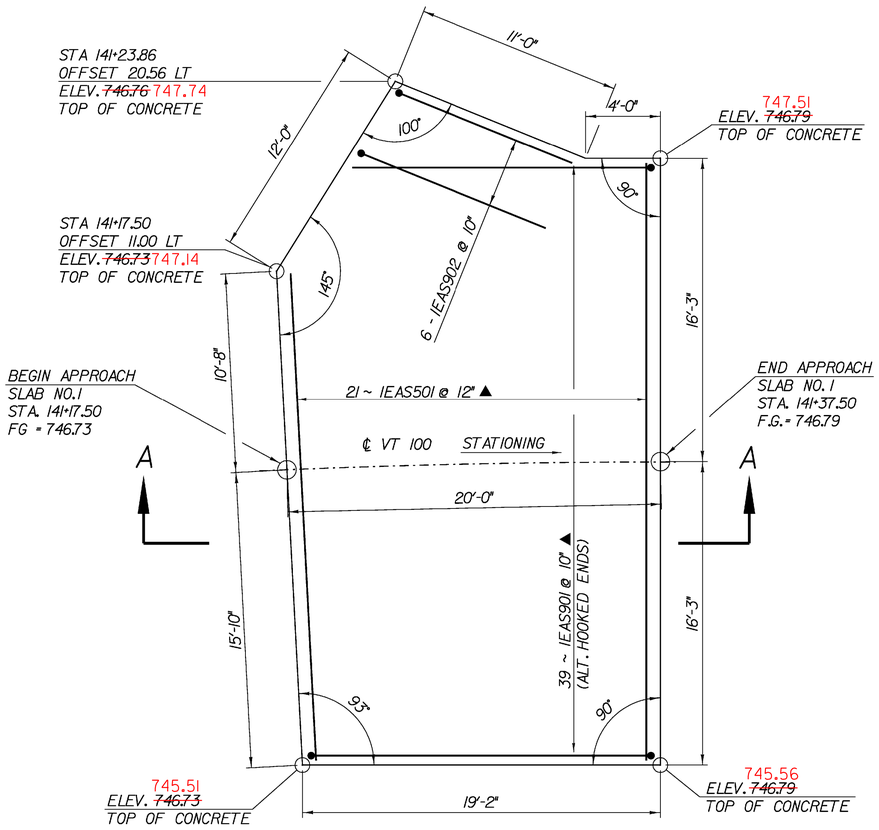
SCALE 3" = 1'-0

INTEGRAL ABUTMENT BEARING DETAILS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

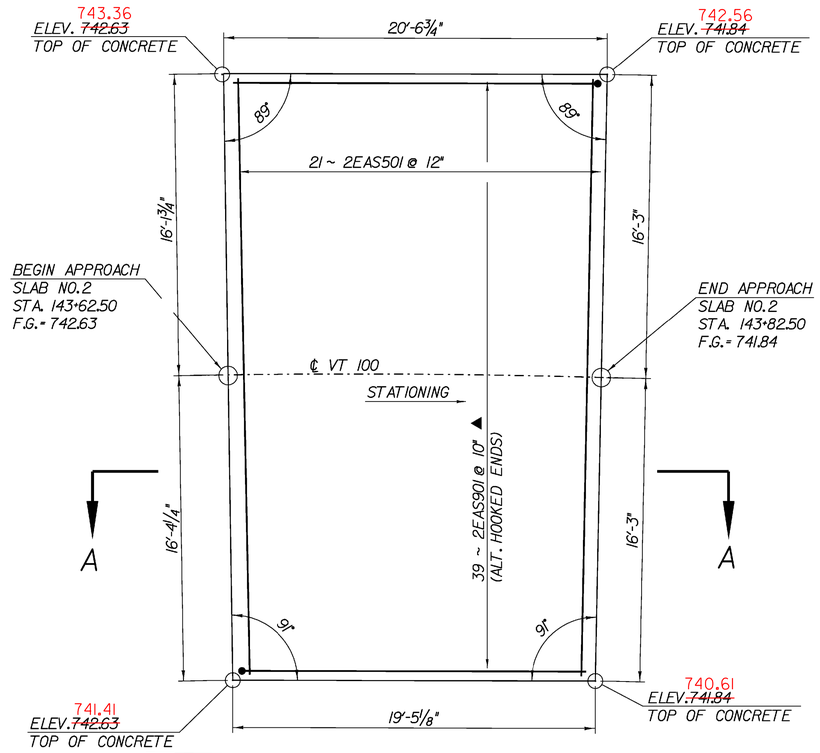
FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238lab.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 86 OF 144



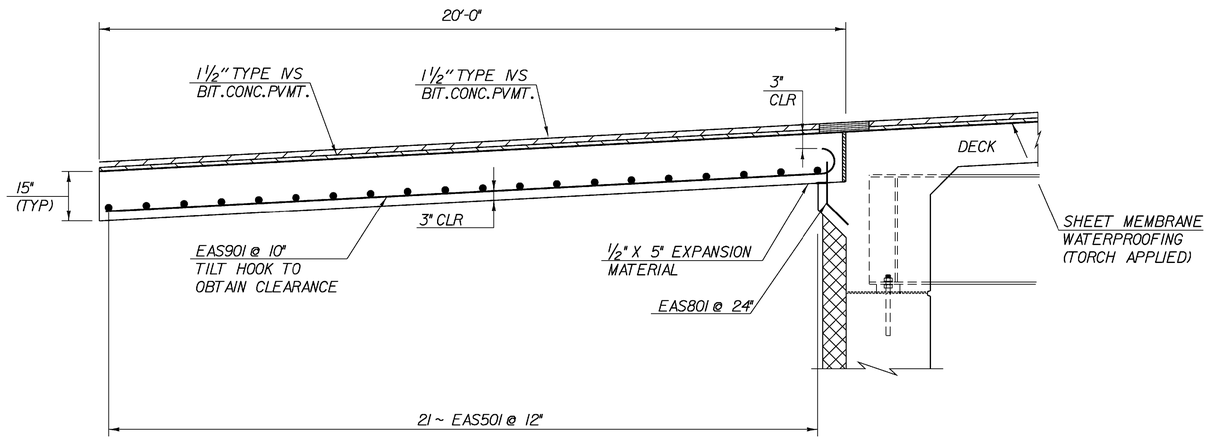
APPROACH SLAB NO. 1

SCALE 1/4" = 1'-0



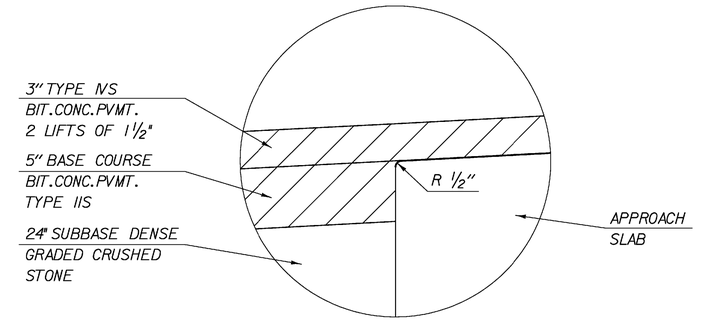
APPROACH SLAB NO. 2

SCALE 1/4" = 1'-0



SECTION A-A APPROACH SLAB ELEVATION (TYP)

SCALE 1/2" = 1'-0



APPROACH SLAB END RADIUS DETAIL

NOTE:

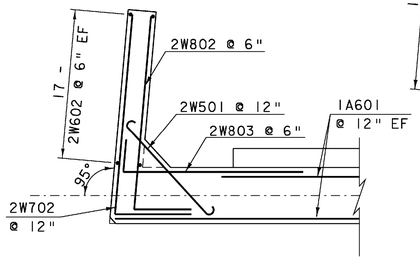
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

APPROACH SLAB DETAILS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

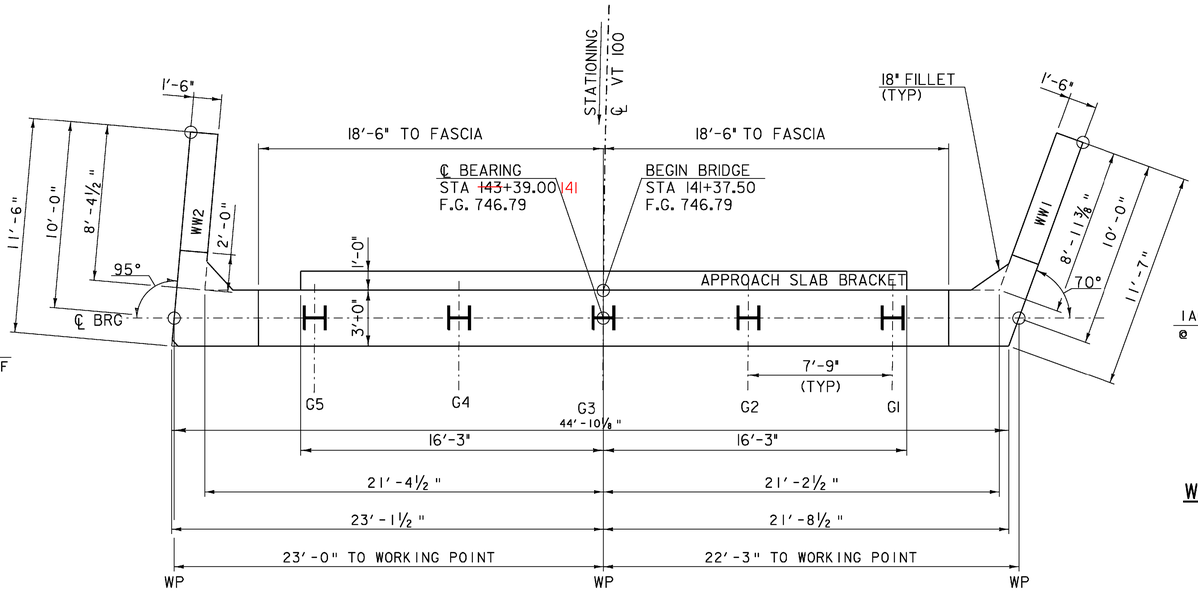
FILE NAME: /78f238/str5/sf238sup.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. SUMNER
sf238asd.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. FILLBACH
SHEET 87 OF 144

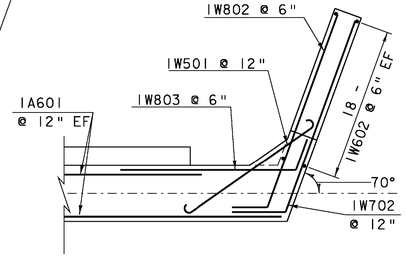


WINGWALL #2 CORNER DETAILS

BELOW BRIDGE DECK

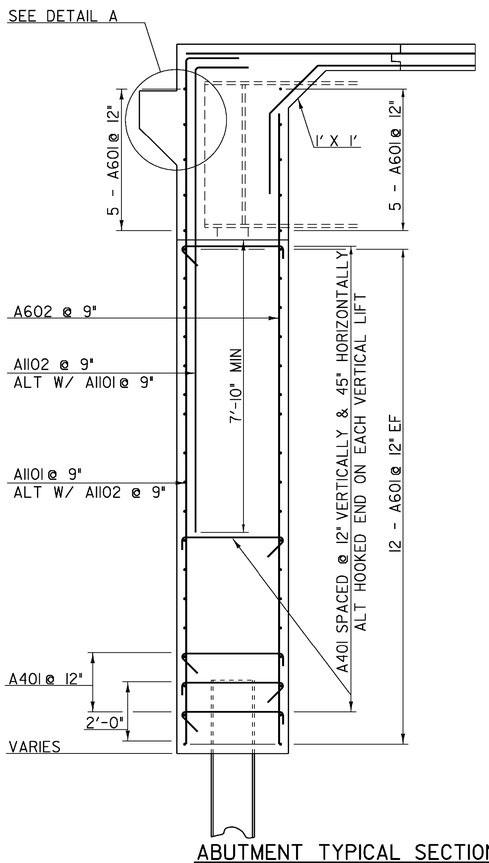


ABUTMENT #1 PLAN



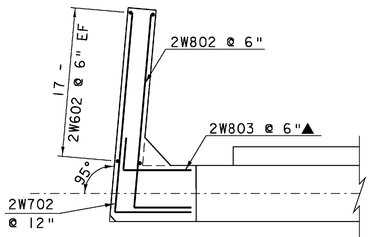
WINGWALL #1 CORNER DETAILS

BELOW BRIDGE DECK



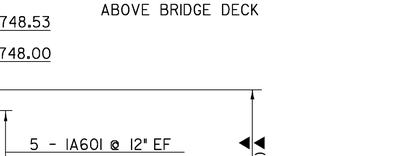
ABUTMENT TYPICAL SECTION

SCALE ½"= 1'-0



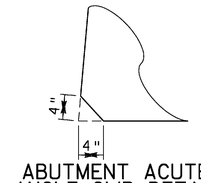
WINGWALL #2 CORNER DETAILS

ABOVE BRIDGE DECK



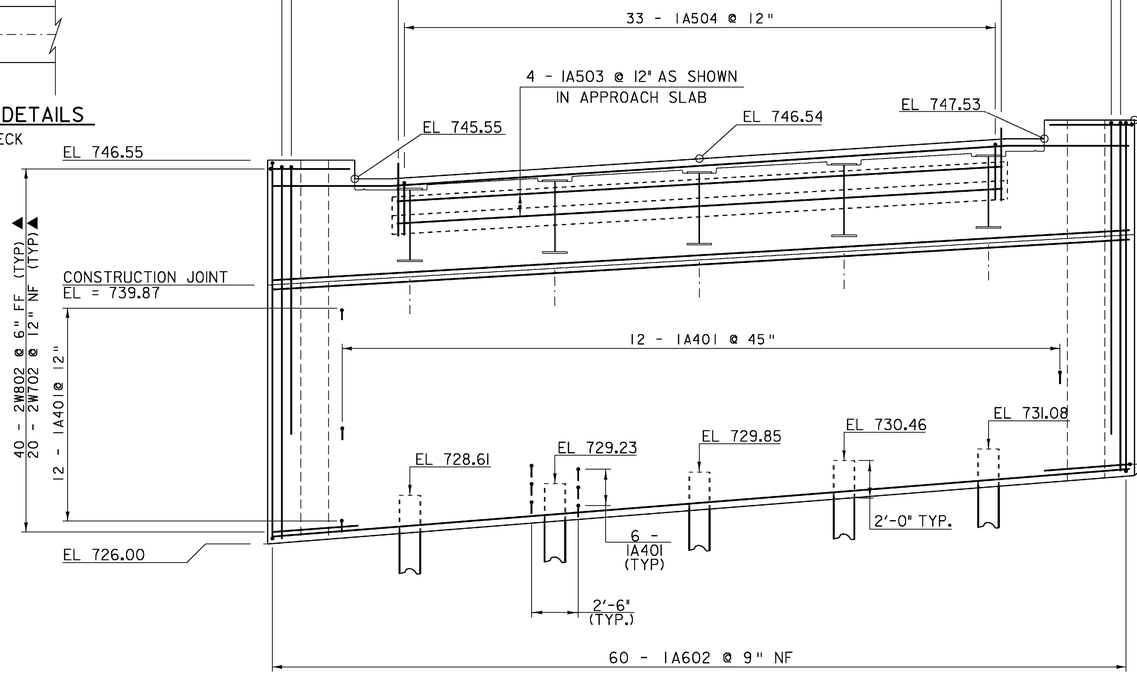
WINGWALL #1 CORNER DETAILS

ABOVE BRIDGE DECK



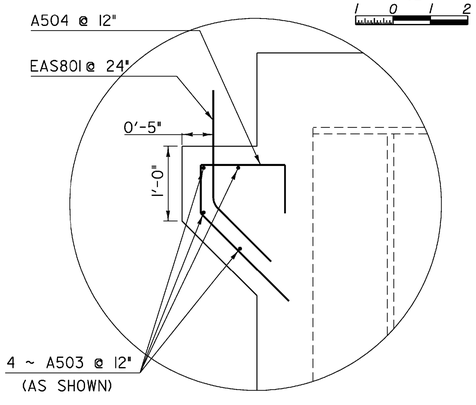
ABUTMENT ACUTE ANGLE CLIP DETAIL

N. T. S.



ABUTMENT #1 ELEVATION

FLOW



DETAIL A

SCALE 1"= 1'-0

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

HIGH PERFORMANCE CONCRETE CLASS A

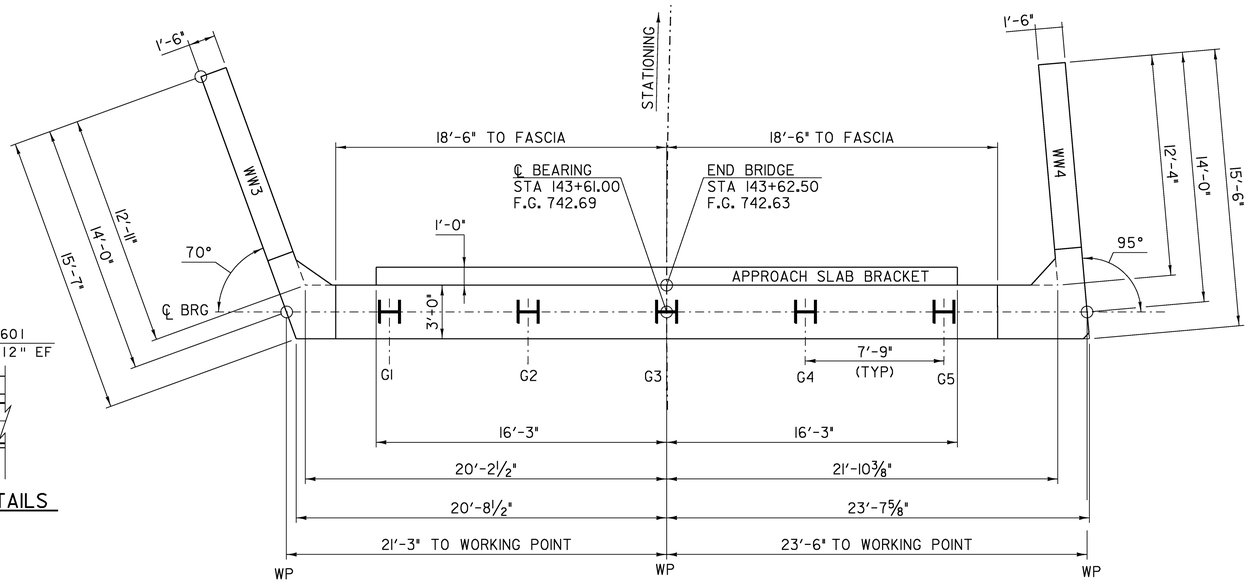
SCALE ¼"= 1'-0

ABUTMENT #1 DETAILS

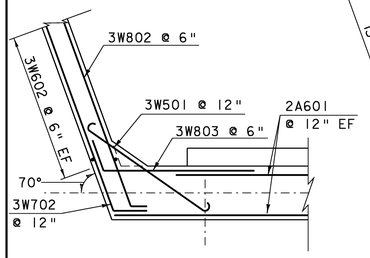
PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sub.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. FILLBACH
sf238ab1.i

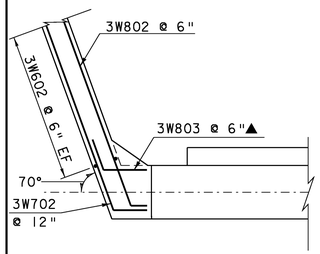
PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER
SHEET 88 OF 144



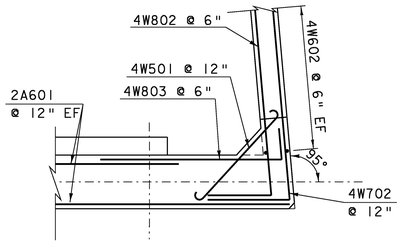
ABUTMENT #2 PLAN



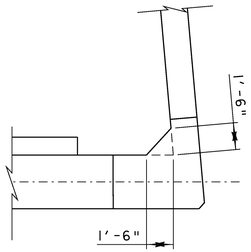
WINGWALL #3 CORNER DETAILS
BELOW BRIDGE DECK



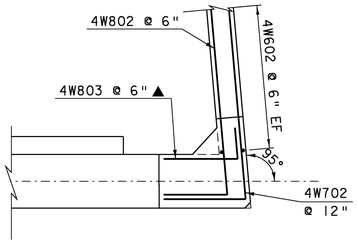
WINGWALL #3 CORNER DETAILS
ABOVE BRIDGE DECK



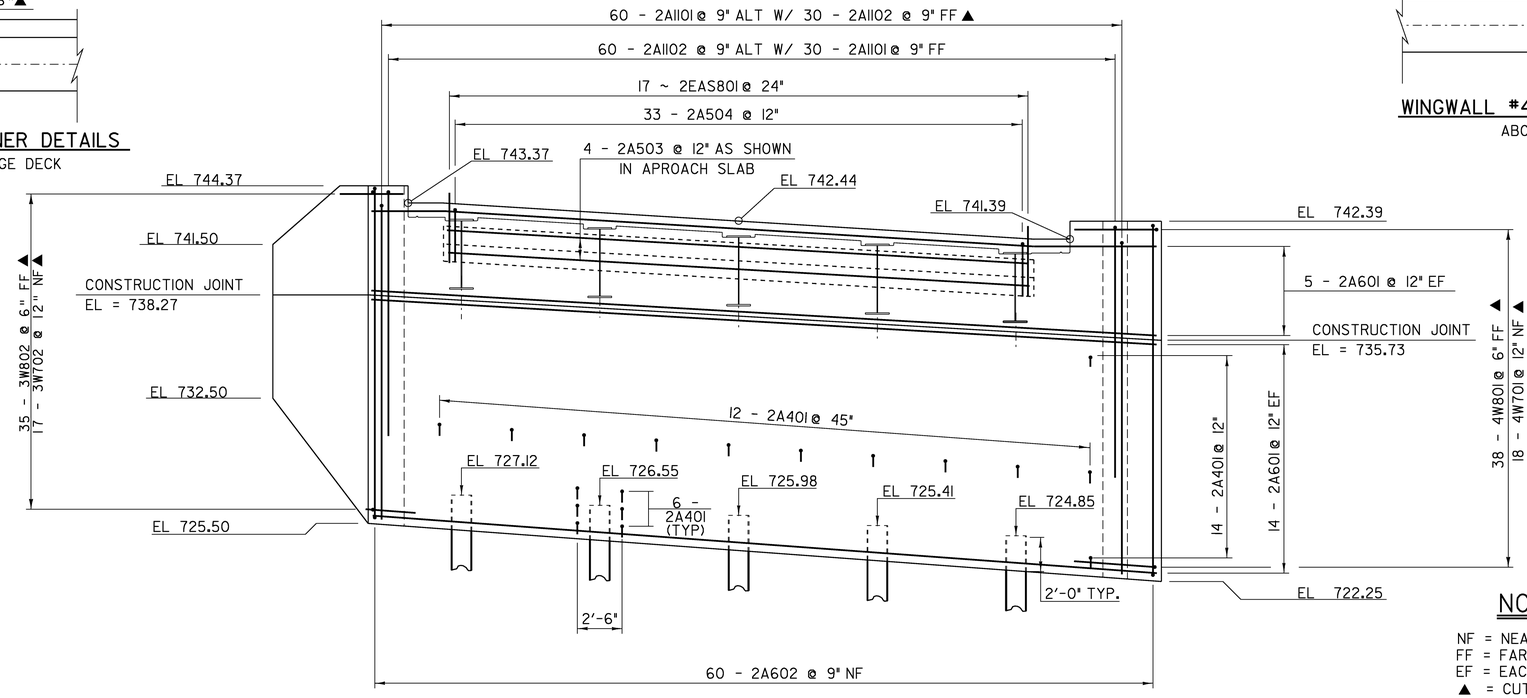
WINGWALL #4 CORNER DETAILS
BELOW BRIDGE DECK



TYPICAL FILLET DETAIL



WINGWALL #4 CORNER DETAILS
ABOVE BRIDGE DECK



ABUTMENT #2 ELEVATION

SEE SHEET 88 FOR
ABUTMENT TYPICAL

HIGH PERFORMANCE
CONCRETE CLASS A

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE
SPECIFIED ON THE PLANS.

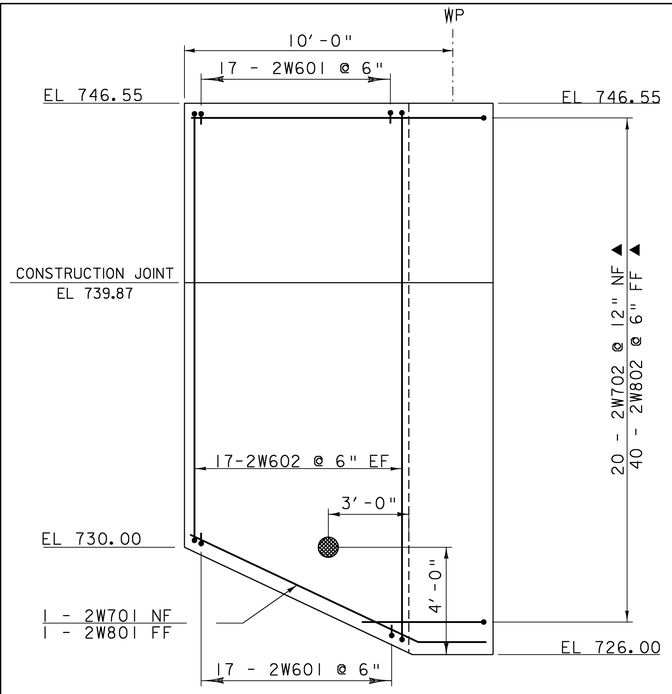
SCALE 1/4" = 1'-0
1 0 2 4 6

ABUTMENT #2 DETAILS

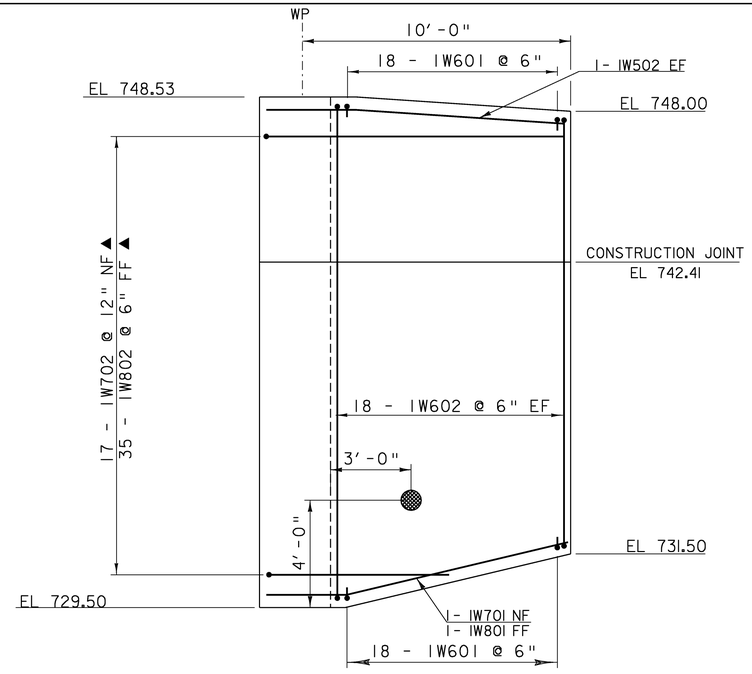
PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sub.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. FILLBACH
sf238db2.1

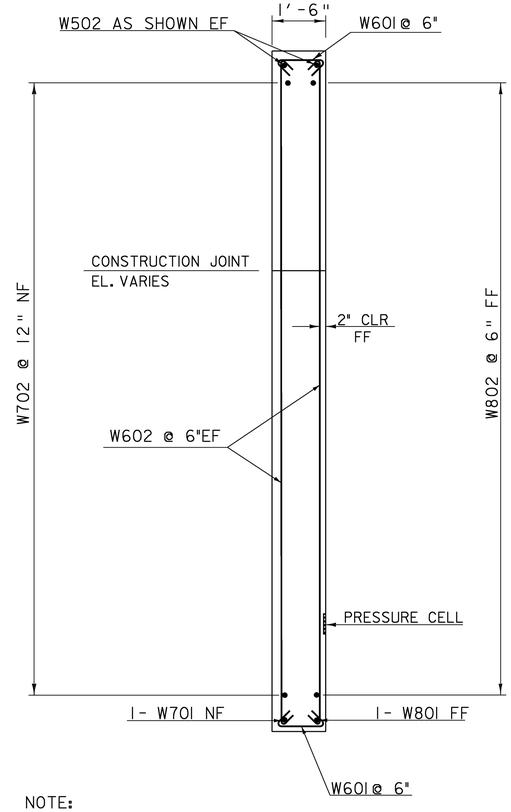
PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER
SHEET 89 OF 144



WW #2 ELEVATION



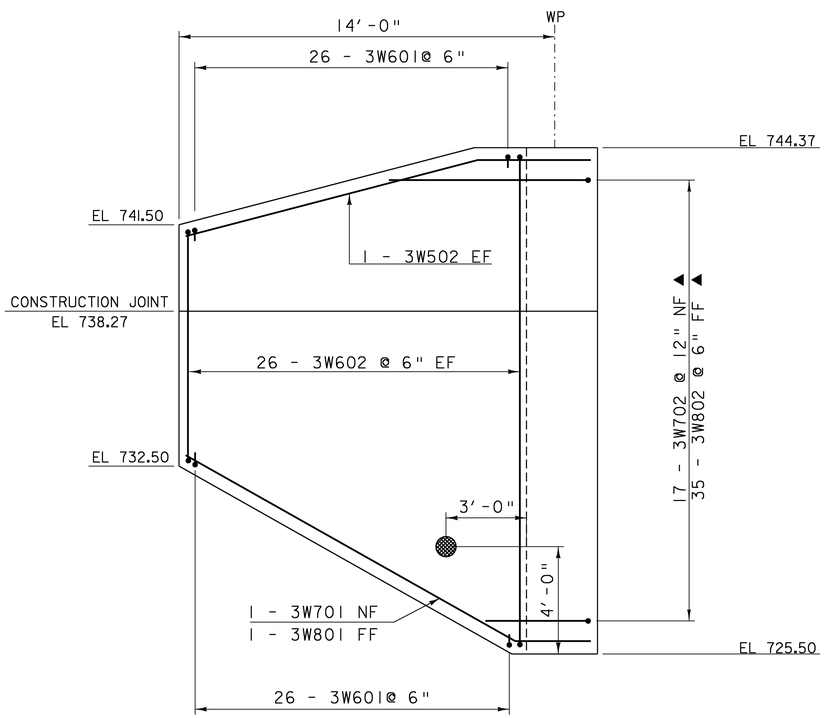
WW # 1 ELEVATION



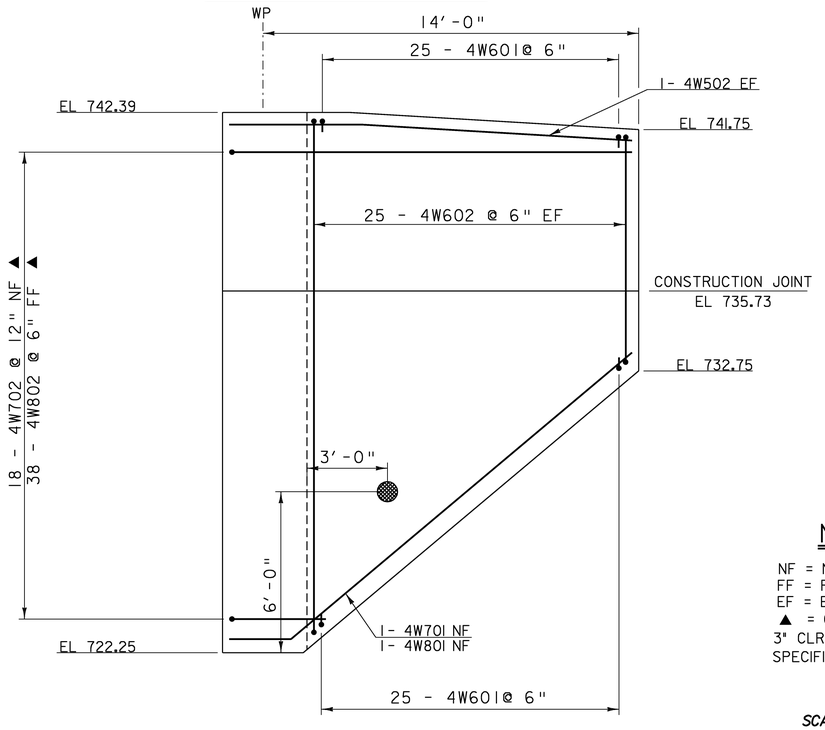
NOTE:
ALL VERTICAL BARS MUST HOOK TO A HORIZONTAL BAR

WINGWALL TYPICAL SECTION

SCALE ½"= 1'-0
1 0 1 2



WW #3 ELEVATION



WW #4 ELEVATION

GEOKON 4815 EARTH PRESSURE CELL - PROVIDED BY UMASS
ATTACH PRESSURE CELL TO FORMWORK ON BACKFILLED FACE OF WALL. CABLING SHALL EITHER BE ROUTED OUTSIDE OF FORMWORK OR PLACED IN A BOX OUT PRIOR TO CONCRETE PLACEMENT.

HIGH PERFORMANCE
CONCRETE CLASS A

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
3" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

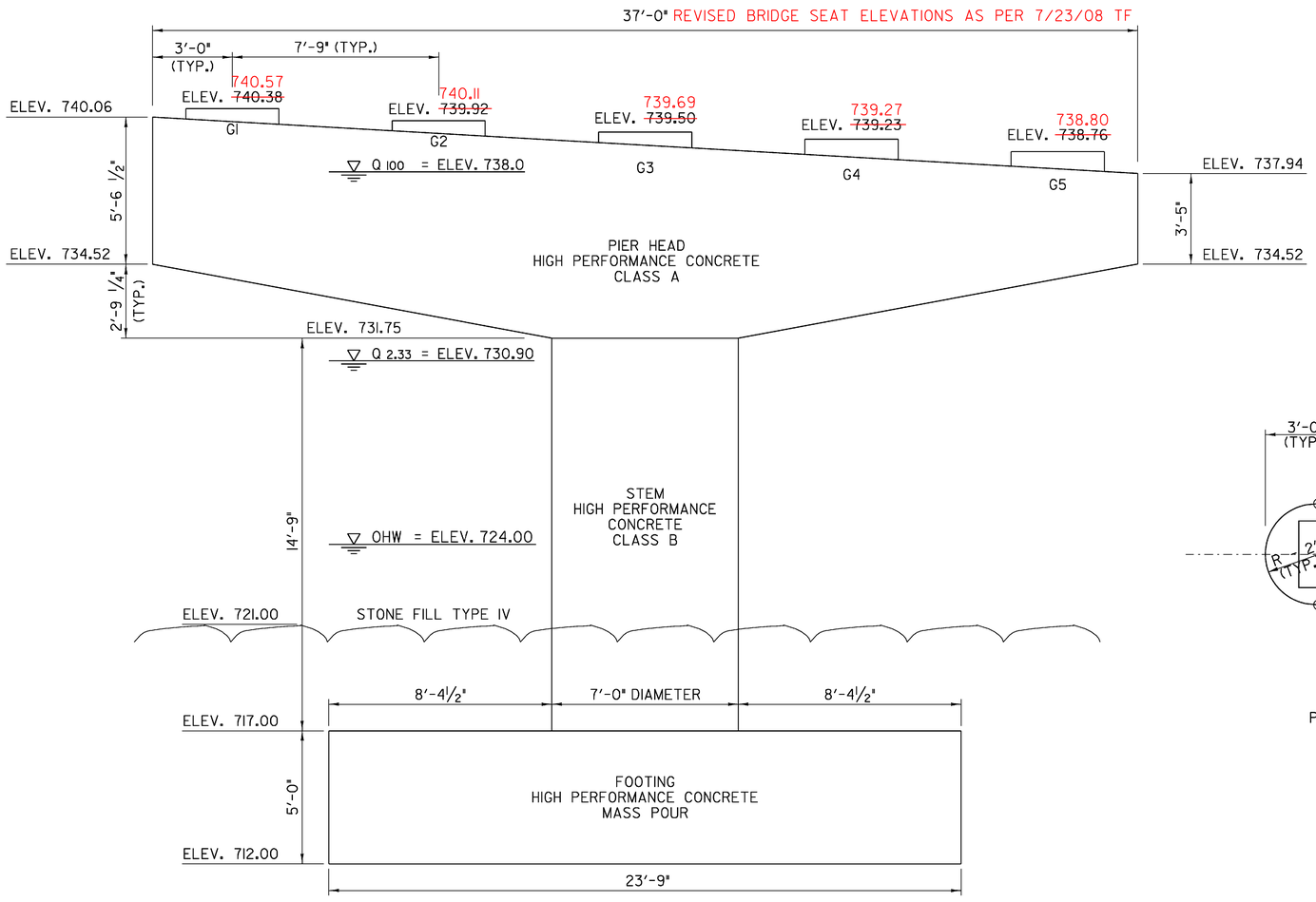
SCALE ⅜"= 1'-0
1 0 1 2 3 4

WINGWALL DETAILS

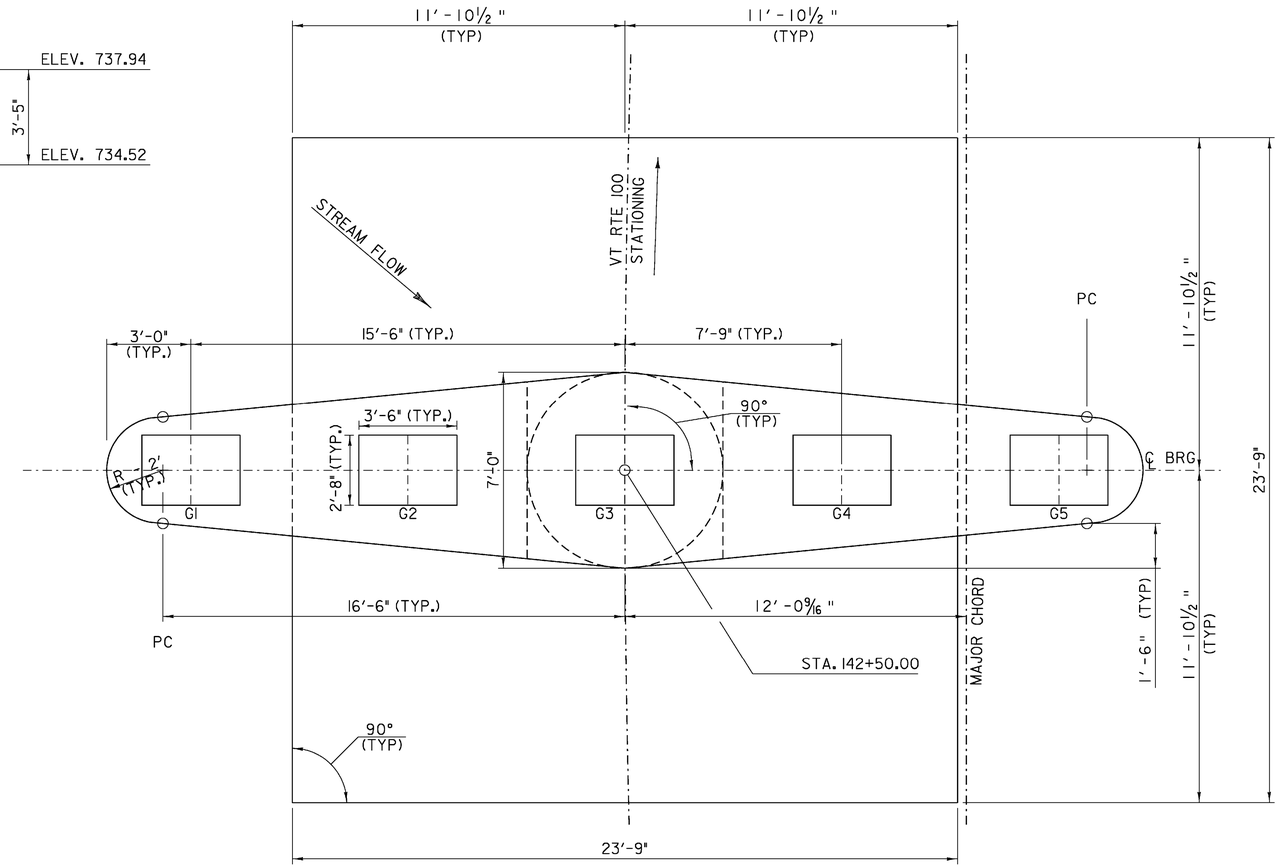
PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sub.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. FILLBACH
sf238ww.1

PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER
SHEET 90 OF 144



PIER ELEVATION



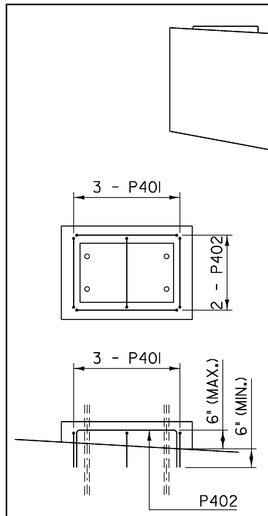
PIER PLAN

PIER DIMENSION PLAN

PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4(21)

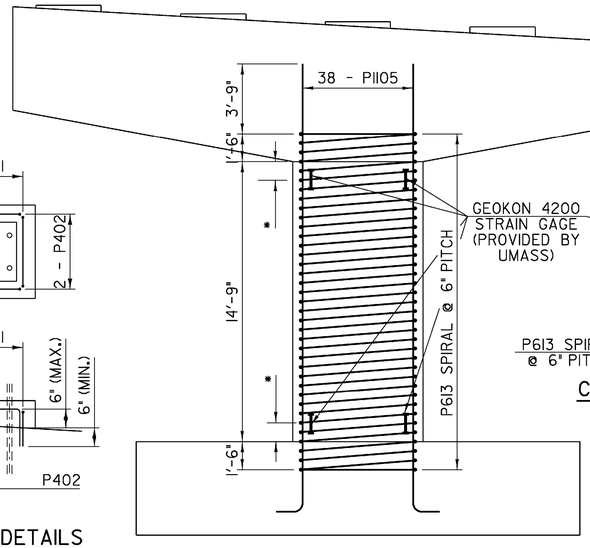
FILE NAME: /78f238/str5/sf238sub.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: R. PELLETT
DESIGNED BY: T. FILLBACH	CHECKED BY: J. LACROIX
sf238ppe.1	SHEET 91 OF 144

SCALE 3/8"= 1'-0
1 0 1 2 3 4



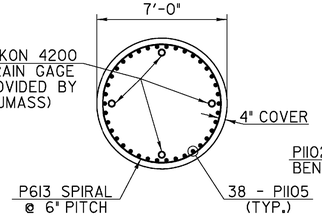
PEDESTAL DETAILS

SCALE ½"= 1'-0



PIER ELEVATION

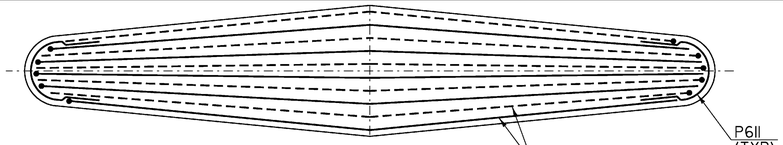
SCALE ¼"= 1'-0



COLUMN SECTION

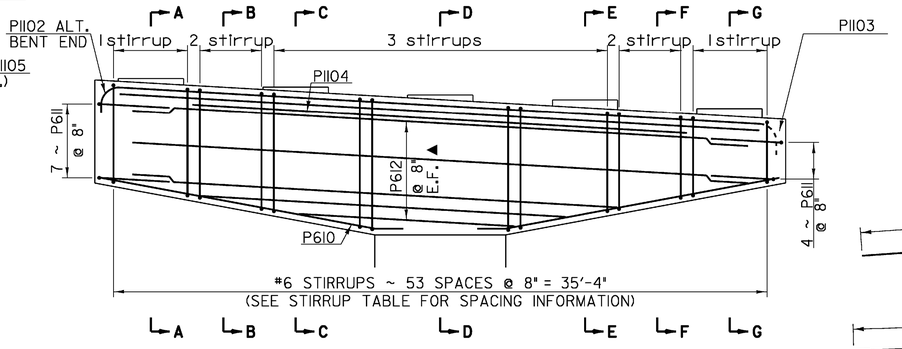
SCALE ¼"= 1'-0

* LOCATION DETERMINED IN THE FIELD



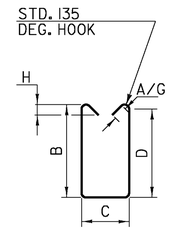
PIER HEAD PLAN

SCALE ¼"= 1'-0

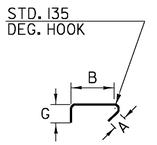


PIER HEAD ELEVATION

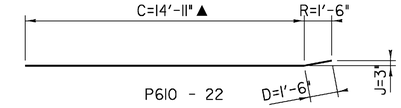
SCALE ¼"= 1'-0



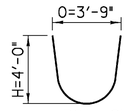
P603A - P609A - S3



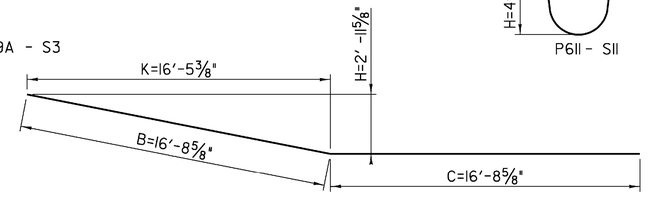
P603B - P609B - T9



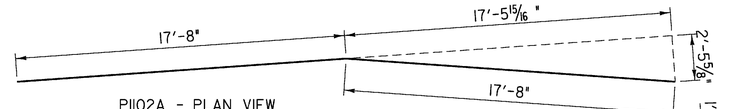
P610 - 22



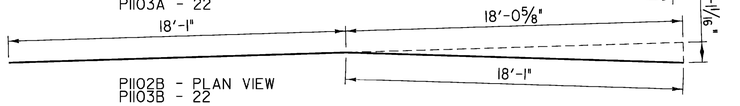
P611 - S11



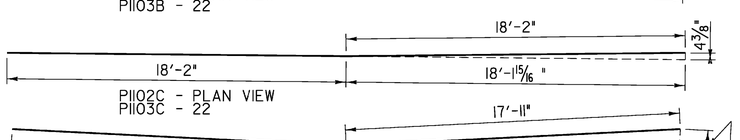
P612 - 22 ▲



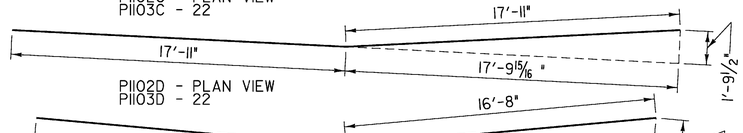
P1102A - PLAN VIEW
P1103A - 22



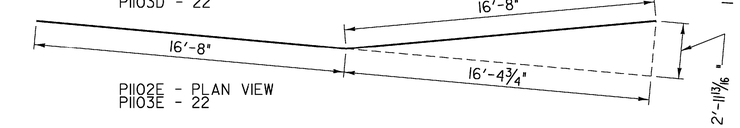
P1102B - PLAN VIEW
P1103B - 22



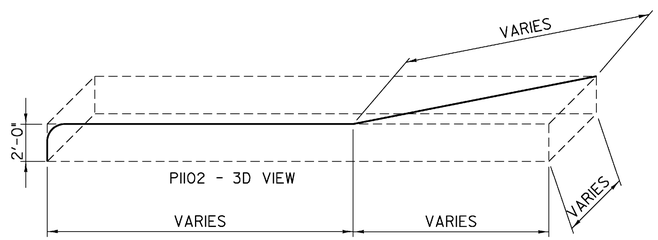
P1102C - PLAN VIEW
P1103C - 22



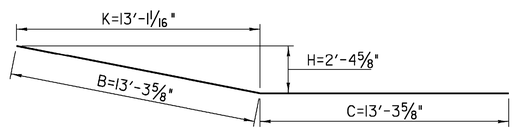
P1102D - PLAN VIEW
P1103D - 22



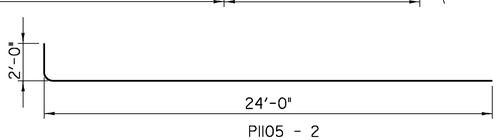
P1102E - PLAN VIEW
P1103E - 22



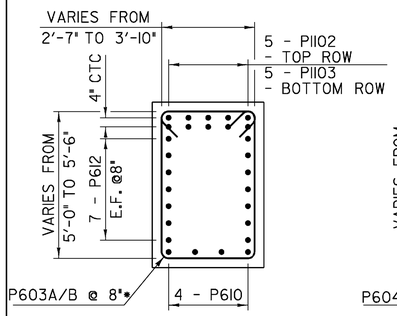
P1102 - 3D VIEW



P1104 - 22

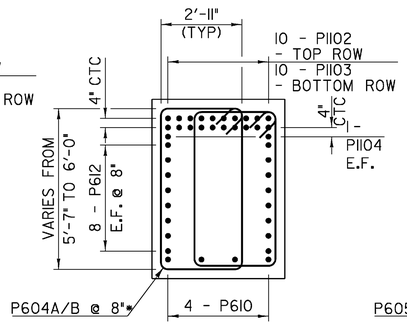


P1105 - 2

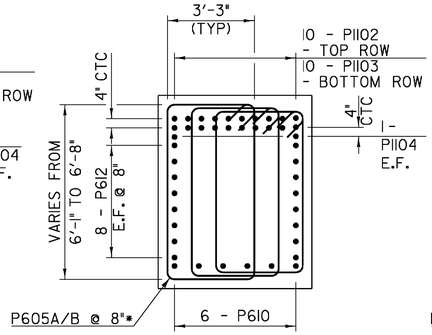


SECTION A-A

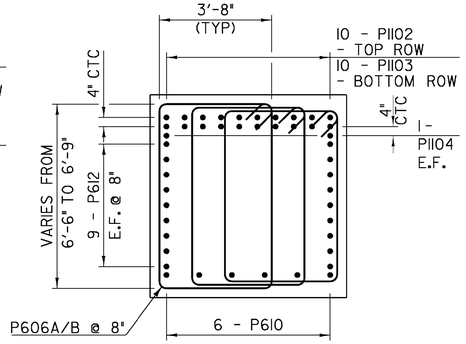
P611 OMITTED FOR CLARITY



SECTION B-B

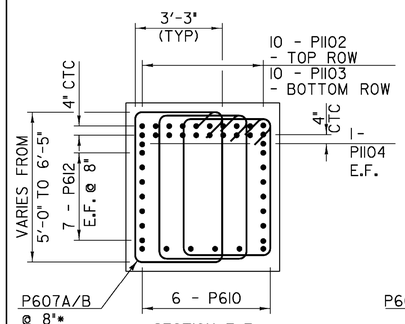


SECTION C-C

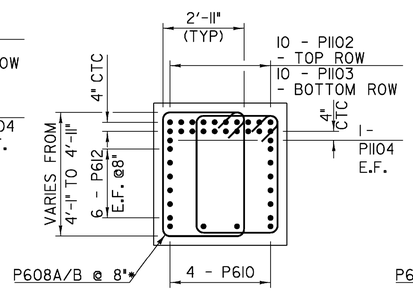


SECTION D-D

* ALTERNATE HOOKED ENDS OF BARS 603B-609B

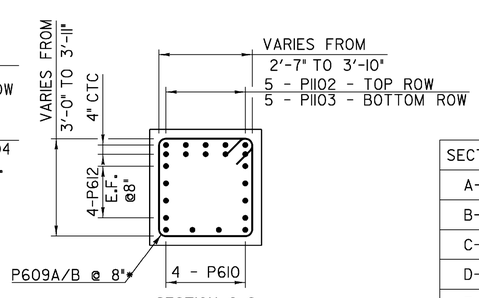


SECTION E-E



SECTION F-F

SCALE ⅜"= 1'-0



SECTION G-G

P611 OMITTED FOR CLARITY

STIRRUP TABLE

SECTION	# STIRRUPS	SPACING	BAR #
A-A	1 STIRRUP	6 SPACES @ 8" = 4'-0"	P603 STIRRUP
B-B	2 STIRRUPS	5 SPACES @ 8" = 3'-4"	P604 STIRRUP
C-C	3 STIRRUPS	8 SPACES @ 8" = 5'-4"	P605 STIRRUP
D-D	3 STIRRUPS	9 SPACES @ 8" = 6'-0"	P606 STIRRUP
E-E	3 STIRRUPS	8 SPACES @ 8" = 5'-4"	P607 STIRRUP
F-F	2 STIRRUPS	5 SPACES @ 8" = 3'-4"	P608 STIRRUP
G-G	1 STIRRUP	6 SPACES @ 8" = 4'-0"	P609 STIRRUP

ALL STIRRUPS ROTATED 180 IN SECTION VIEW TO ALLOW ANCHOR BOLT INSTALLATION AS PER TF ON 9/18/08.

NOTE:

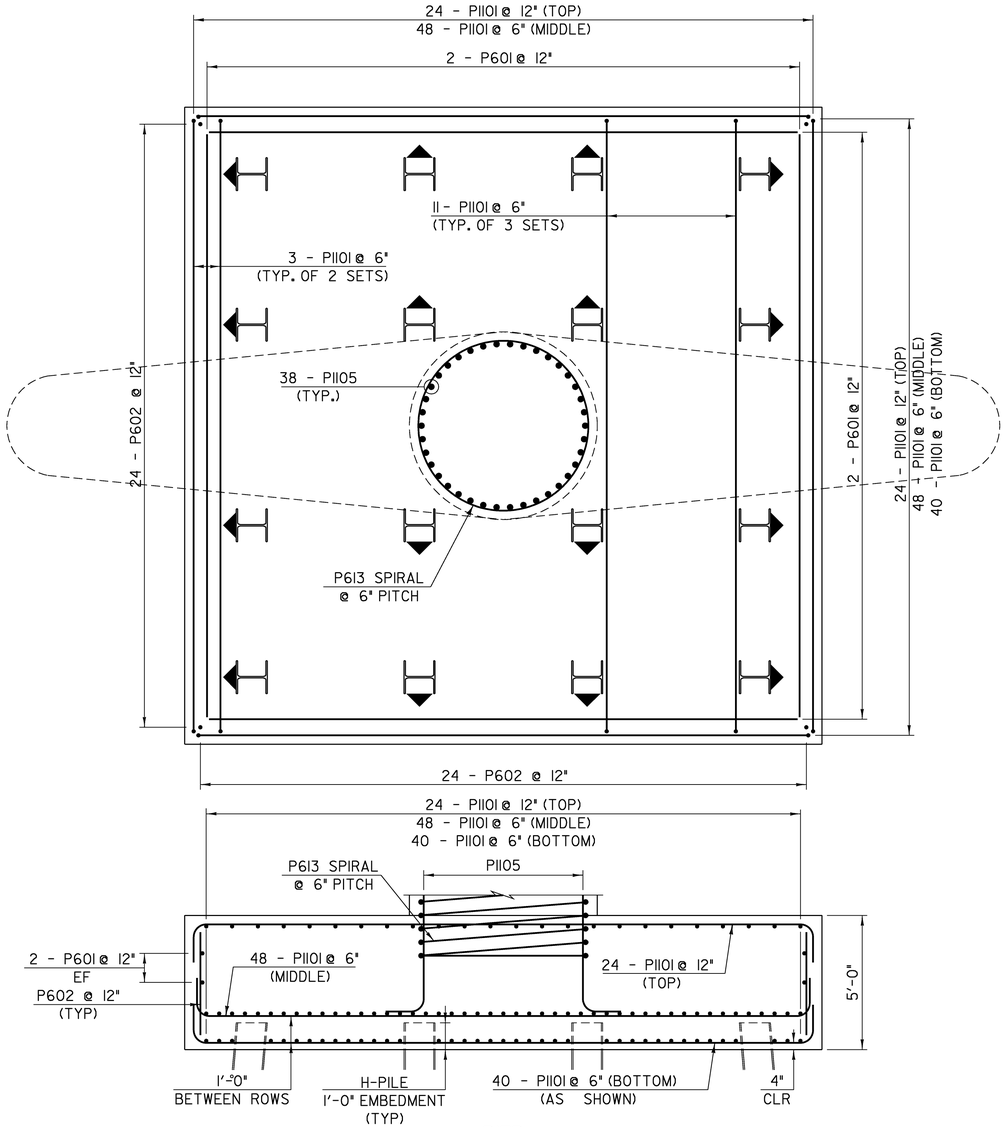
NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
CTC = CENTER TO CENTER
▲ = CUT TO FIT IN FIELD
4" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PIER REINFORCING

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

FILE NAME: /78f238/str5/sf238sub.dgn
PROJECT LEADER: K. HIGGINS
DESIGNED BY: T. FILLBACH
sf238pre.i

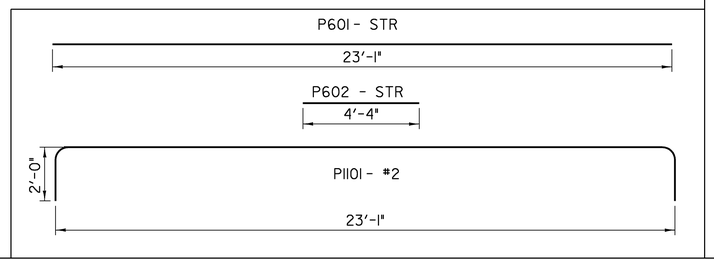
PLOT DATE: 06-FEB-2008
DRAWN BY: R. PELLETT
CHECKED BY: T. SUMNER
SHEET 92 OF 144

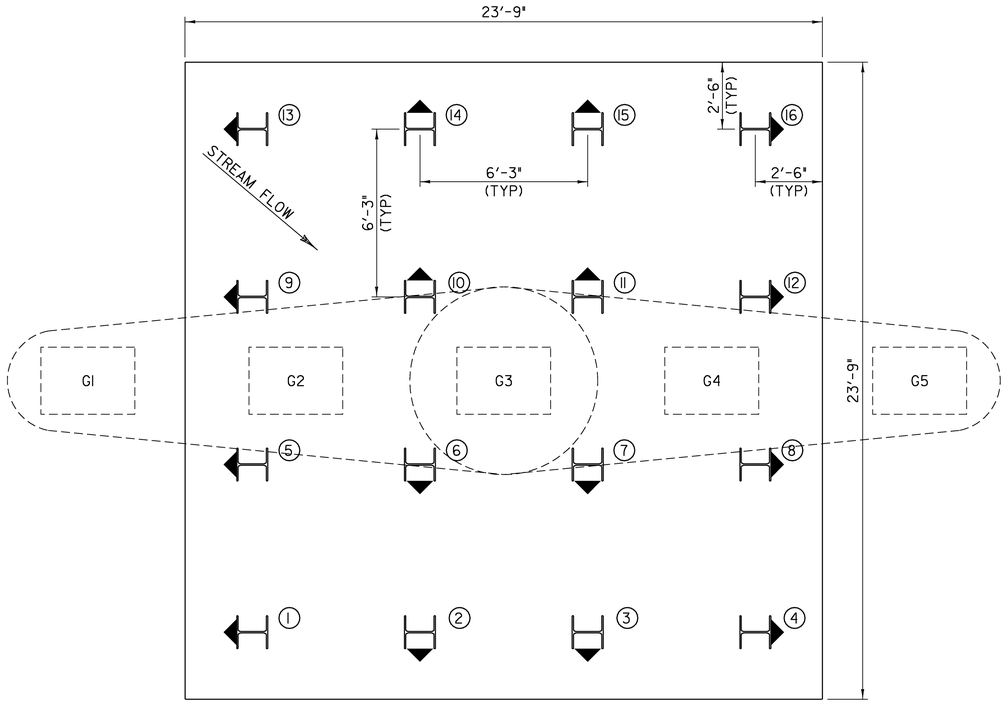


PIER
REINFORCING STEEL

NOTE:

NF = NEAR FACE
FF = FAR FACE
EF = EACH FACE
▲ = CUT TO FIT IN FIELD
4" CLR. UNLESS OTHERWISE SPECIFIED ON THE PLANS.

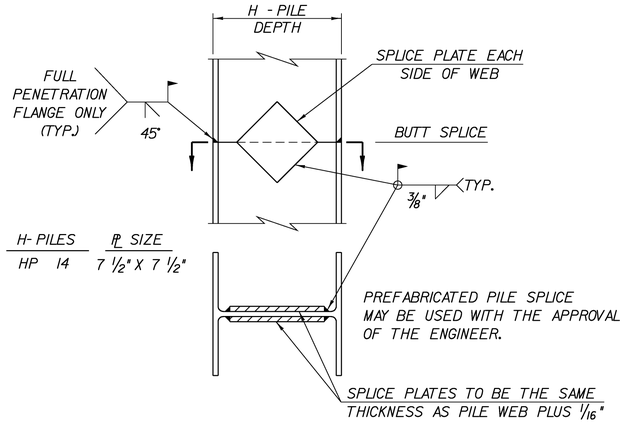




PIER
H- PILE LAYOUT

PILE NOTES:

1. H - *INDICATES LOCATION OF A VERTICAL H-PILE*
2. H→ - *INDICATES LOCATION OF A BATTERED H-PILE BATTER= 1" PER FOOT*

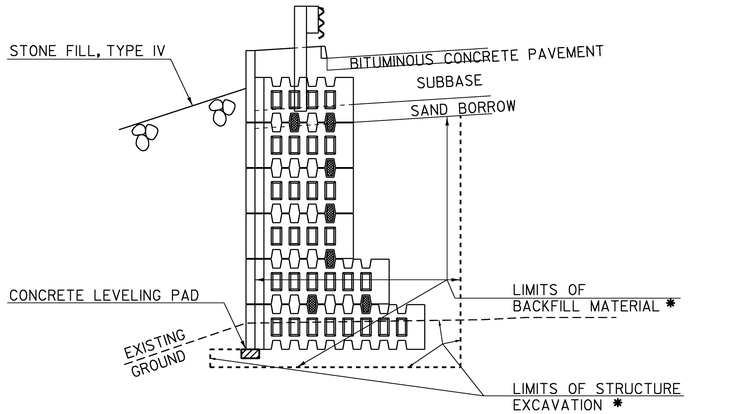


DETAIL OF PILE SPLICE
NTS

PIER FOOTING REINFORCING & PILE LAYOUT

SCALE 3/8" = 1'-0
1 0 1 2 3 4

PROJECT NAME: STOCKBRIDGE	
PROJECT NUMBER: BRF 013-4(21)	
FILE NAME: /78f238/str5/sf238sub.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: R. PELLETT
DESIGNED BY: T. FILLBACH	CHECKED BY: J. LACROIX
sf238ppl.i	SHEET 93 OF 144



* LIMITS AS DEEMED NECESSARY BY DESIGN

CONCRETE RETAINING WALL TYPICAL SECTION

SCALE 1" = 1'-0

1 9 6 3 0 1 2

RETAINING WALL NOTES

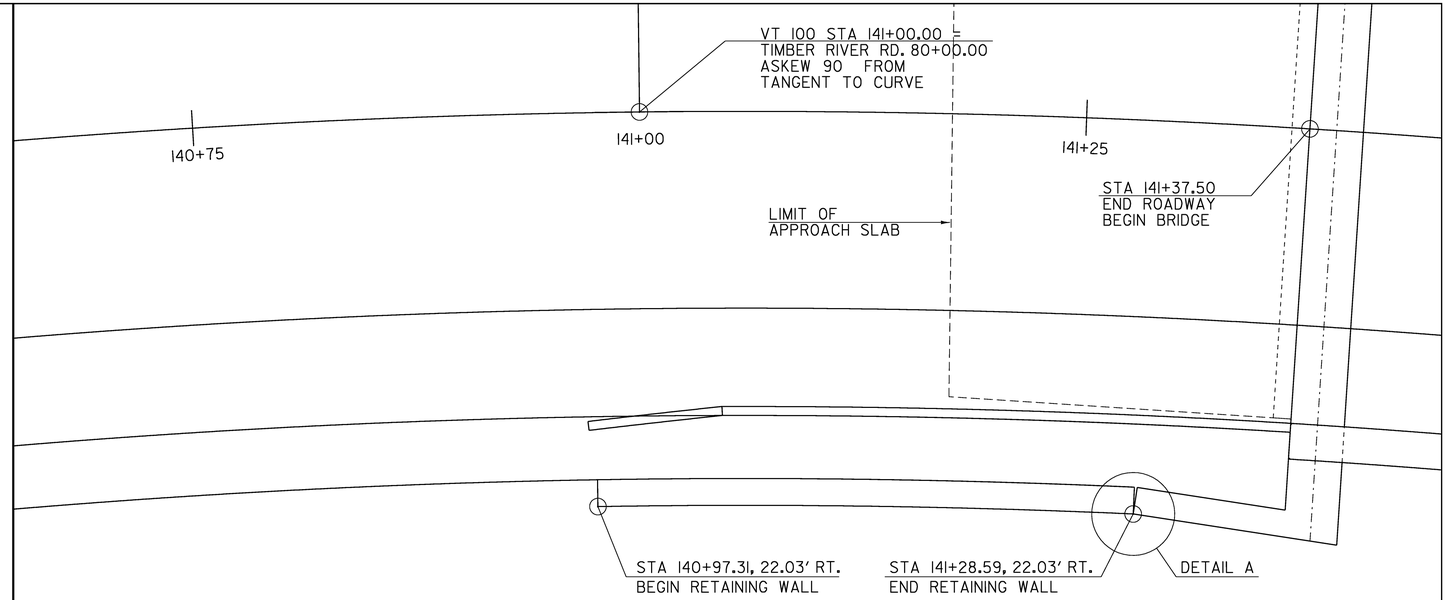
ITEM 900.670 SPECIAL PROVISION (CONCRETE RETAINING WALL) SHALL CONSIST OF THE DESIGN, CONSTRUCTION, AND ALL MATERIALS INCLUDING BUT NOT LIMITED TO CONCRETE, REINFORCING STEEL, BACKFILL MATERIAL, GEOTEXTILE FABRIC, EXPANSION MATERIAL, AND ANY DRAINAGE MATERIAL REQUIRED FOR THE RETAINING WALL AT THE LOCATION SHOWN ON THIS SHEET.

THE DETAILS SHOWN ARE CONCEPTUAL IN NATURE AND ARE INTENDED TO PROVIDE OVERALL INFORMATION SUCH AS BEGINNING AND END OF WALL AND APPROXIMATE TOP AND BOTTOM PROFILE OF THE WALL.

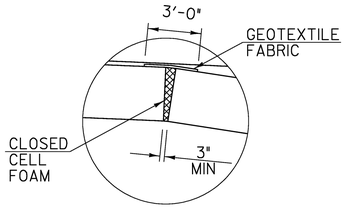
THE DESIGN SHALL BE IN ACCORDANCE WITH THE APPROPRIATE SECTIONS OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.

FOR DESIGN PURPOSES THE UNIT WEIGHT OF MATERIAL 704.08 GRANULAR BACKFILL FOR STRUCTURES SHALL BE 140 POUNDS/CUBIC FOOT WITH AN INTERNAL FRICTION ANGLE OF 34 DEGREES. SOME INFORMATION IS AVAILABLE PERTAINING TO THE EXISTING SOIL PROPERTIES IN THE BORING LOGS.

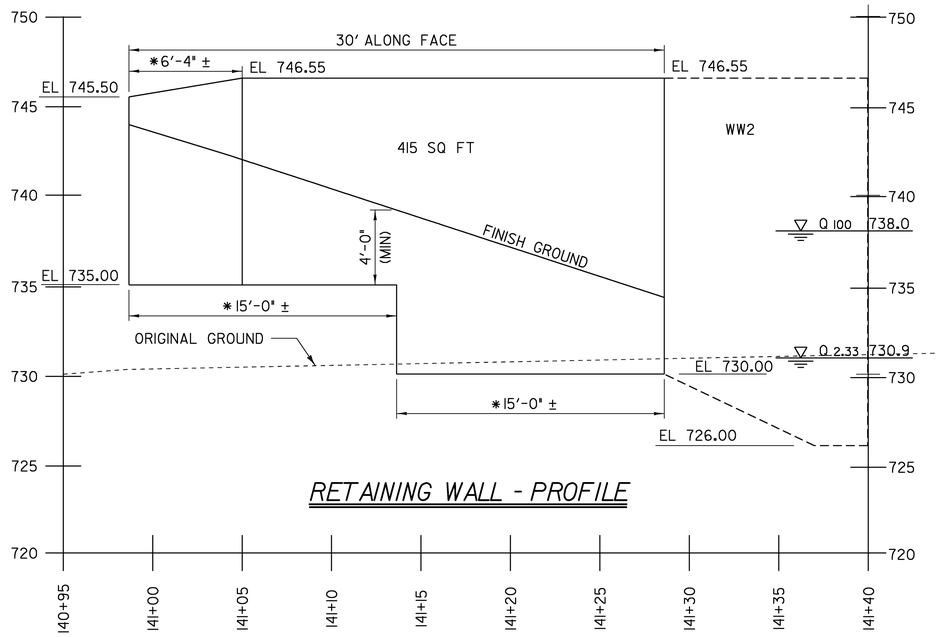
LIVE LOAD SURCHARGE SHALL BE CONSIDERED.



RETAINING WALL - PLAN VIEW



DETAIL A



RETAINING WALL - PROFILE

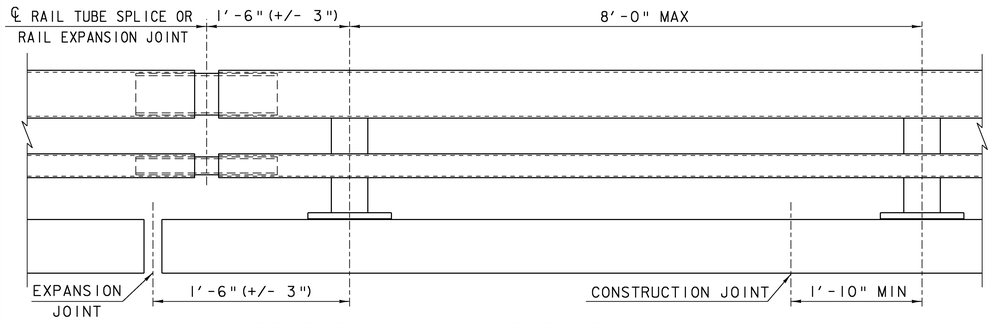
* BASED ON WALL TYPE DIMENSIONS MAY VARY

SCALE 1/2" = 1'-0

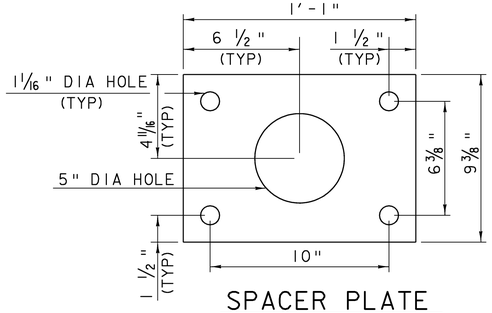
1 0 1 2

RETAINING WALL DETAILS

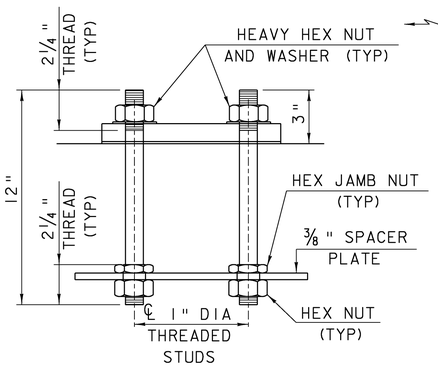
PROJECT NAME:	STOCKBRIDGE
PROJECT NUMBER:	BRF 013-4 (21)
FILE NAME: retainingwallpe.dgn	PLOT DATE: 06-FEB-2008
PROJECT LEADER: K. HIGGINS	DRAWN BY: G. SHANGRAW
DESIGNED BY: T. SUMNER	CHECKED BY: T. FILLBACH
sf238retwall.i	SHEET 95 OF 144



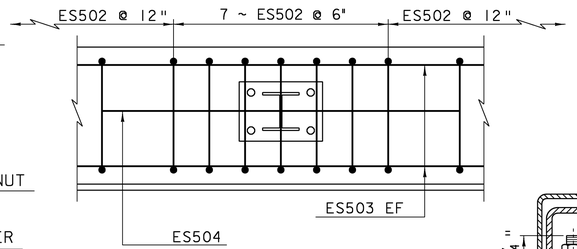
BRIDGE RAILING ELEVATION



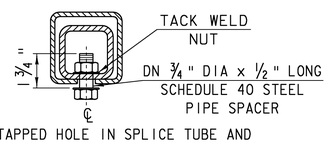
SPACER PLATE

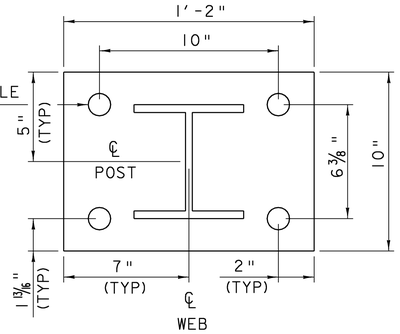


RAIL POST ANCHORAGE

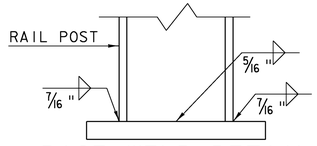


CURB REINFORCING PLAN





POST AND BASE PLATE

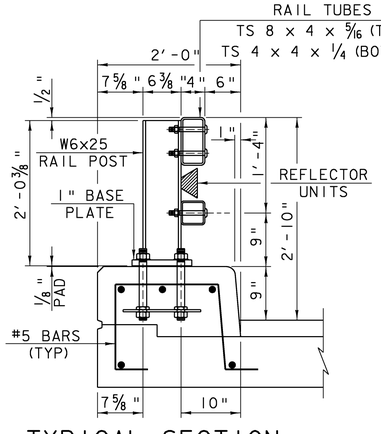


BASE WELD DETAIL

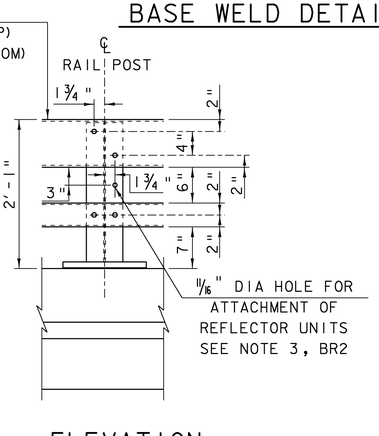
5/8" DIA TAPPED HOLE IN SPLICE TUBE AND 1 1/8" x 'C' SLOT IN RAIL TUBE FOR 5/8" DIA BOLT AND PLAIN HARDENED WASHER

EXPANSION JOINT SECTION

FOR DETAILS NOT SHOWN, SEE "RAIL TUBE SPLICE SECTION."



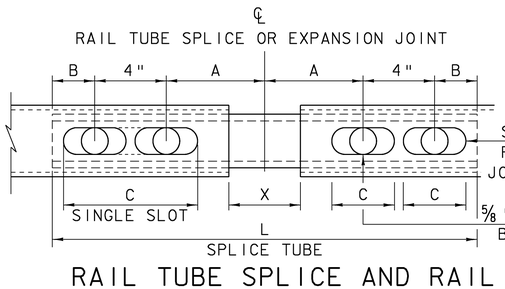
TYPICAL SECTION



ELEVATION

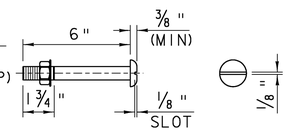
SPLICE TABLE					
T	A	B	C	L	X
N/A	4"	2"	--	20"	3/4"
EXPANSION JOINT TABLE					
<4"	4"	2"	2½"	20"	2½"

T = TOTAL MOVEMENT BETWEEN BRIDGE EXPANSION JOINTS. SEE NOTE 6.
* = SINGLE SLOT



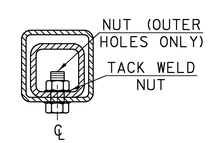
RAIL TUBE SPLICE AND RAIL EXPANSION JOINT DETAIL

(BOTTOM VIEW)

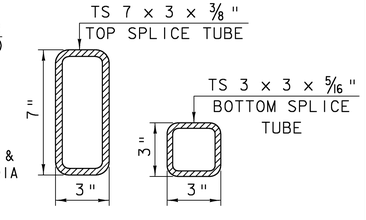


3/4" DIA M164 (TYPE 1) ROUND HEAD BOLT

(WITH WASHER AND PREVAILING TORQUE TYPE LOCK NUT)
(SEE NOTE #9)
ONLY FULL DIAMETER BODY BOLTS WILL BE ALLOWED.



5/8" DIA TAPPED HOLE IN SPLICE TUBE & 3/4" DIA HOLE IN RAIL TUBE FOR 5/8" DIA BOLT & PLAIN HARDENED WASHER



RAIL TUBE SPLICE SECTION

NOTES

1. ALL WORK AND MATERIALS SHALL CONFORM TO THE PROVISIONS OF SECTION 525, "RAILINGS OF THE STANDARD SPECIFICATION FOR CONSTRUCTION."
2. NOT USED.
3. ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A 1/16" RADIUS AND BE FREE OF BURRS.
4. RAIL POSTS SHALL BE SET NORMAL TO GRADE.
5. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO (2) RAIL POSTS AND PREFERABLY TO AT LEAST FOUR (4) POSTS.
6. RAIL TUBE EXPANSION JOINTS SHALL BE PROVIDED IN ANY RAIL BAY SPANNING A SUPERSTRUCTURE EXPANSION JOINT. EXPANSION JOINT WIDTH SHALL BE "X" AT 45°F AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPERATURES.
7. ALL PARTS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111, EXCEPT THAT HARDWARE SHALL MEET THE REQUIREMENTS OF AASHTO M232.
8. RAIL POSTS ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ONE-EIGHTH TURN.
9. RAIL TUBES SHALL BE ATTACHED USING 3/4" FULL DIAMETER BODY AASHTO M164 (TYPE 1) ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE. HOLES IN POSTS SHALL BE 1/16" LARGER THAN THE BOLT SIZE.
10. HOLES IN RAILS FOR RAIL TUBE ATTACHMENT MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO ERECTION.
11. IF THERE IS A CONFLICT BETWEEN THESE STANDARD DETAILS AND THE DESIGN, THE REQUIREMENTS OF THE DESIGN DRAWINGS SHALL BE FOLLOWED.
12. ANY BENDING OF RAIL SHALL BE BY SHOP PROCEDURE ONLY.
13. THE FABRICATOR SHALL SUBMIT SHOP DRAWINGS INCLUDING WELDING PROCEDURES TO THE STRUCTURES SECTION FOR APPROVAL IN ACCORDANCE WITH THE PROVISION OF 506.04, SHOP DRAWINGS. ALL WELDING SHALL CONFORM WITH SECTION 506.10.
14. RAIL POSTS AND BASE PLATES SHALL BE TESTED FOR IMPACT PROPERTIES IN ACCORDANCE WITH ASTM A-370 CHARPY IMPACT TESTING USING TYPE A SPECIMEN.

MATERIALS

RAIL TUBES.....ASTM A500, GRADE B OR ASTM A501
RAIL POSTS AND BASE PLATES.....ASTM A709A709M, GRADE 50
ALL OTHER SHAPES AND PLATES.....ASTM A709/A709M, GRADE 36
ANCHOR STUDS.....ASTM A449
ALL OTHER BOLTS (UNLESS NOTED).....AASHTO M164, TYPE 1

NUTS FOR AASHTO M164 (ASTM A325) BOLTS AND FOR ANCHOR STUDS SHALL COMPLY WITH AASHTO M291 (ASTM A563).

WASHERS SHALL COMPLY WITH AASHTO M293 (ASTM F436) SPECIFICATIONS.

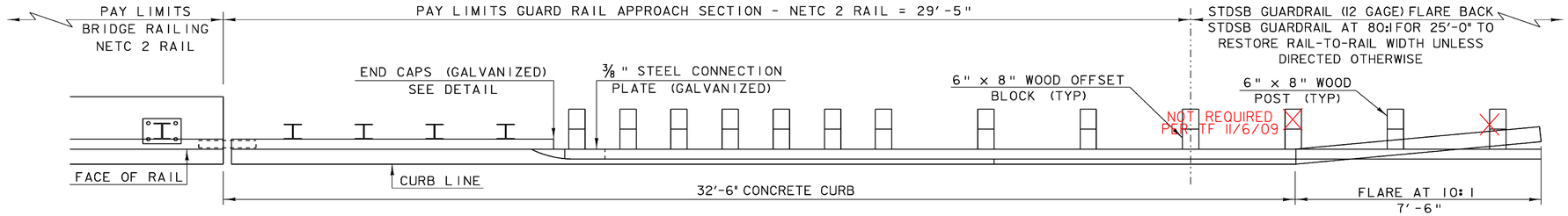
1/8" PAD SHALL COMPLY WITH STANDARD SPECIFICATION SUBSECTION 731.01 OR 731.02.

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

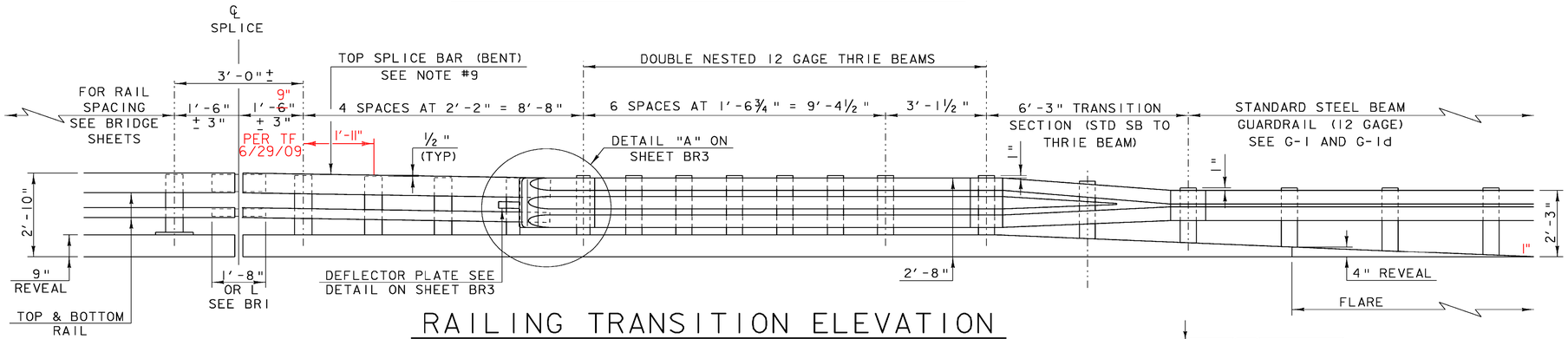
BRIDGE RAILING - NETC 2 RAIL

VERMONT AGENCY OF TRANSPORTATION

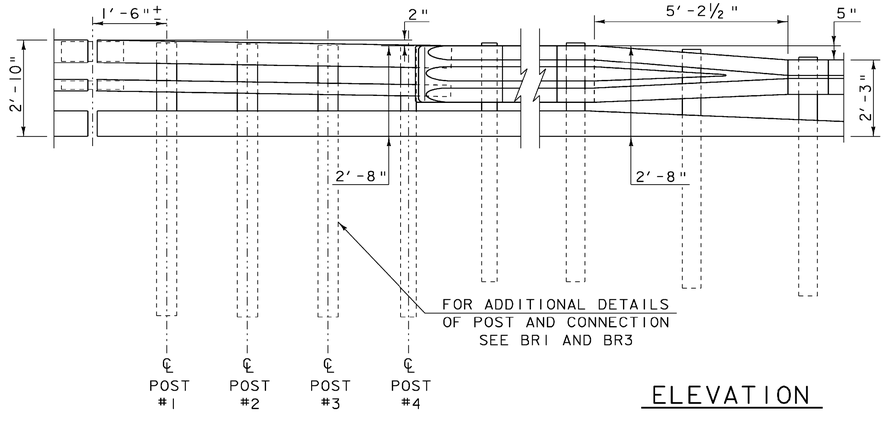
DETAIL BR1



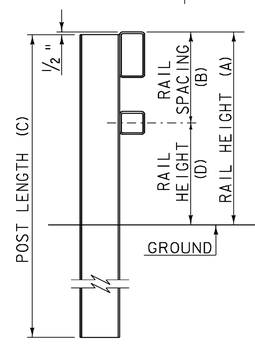
RAILING TRANSITION PLAN



RAILING TRANSITION ELEVATION



ELEVATION

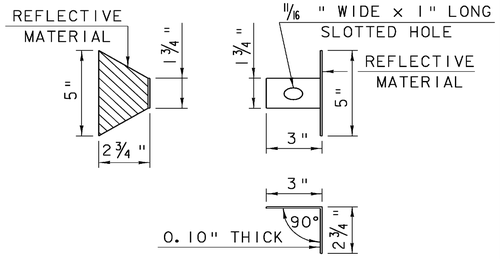


TYPICAL SECTION

POST NUMBER	RAIL HEIGHT (A)	RAIL SPACING (B)	POST LENGTH (C)	RAIL HEIGHT (D)
1	2'-9 ½"	1'-3¾"	8'-0"	1'-5¾"
2	2'-9"	1'-3 ½"	8'-0"	1'-5 ½"
3	2'-8 ½"	1'-3 3/16"	8'-0"	1'-5 5/16"
4	2'-8"	1'-2⅞"	8'-0"	1'-5 ⅛"

NOTES

1. REFER TO SHEET BR1 FOR ADDITIONAL DETAILS, NOTES AND MATERIAL SPECIFICATIONS.
2. PAYMENT FOR GUARD RAIL APPROACH SECTION - NETC 2 RAIL SHALL INCLUDE THE TERMINAL CONNECTOR, THE CONNECTION PLATE, THE DEFLECTOR PLATE, RAIL, POSTS, BLOCKS AND ATTACHMENT HARDWARE.
3. THE REFLECTORIZED ALUMINUM DELINEATION IS TO BE ERECTED EVERY 30' (OR CLOSEST POST) WITH A 5/8" DIAMETER BOLT. DELINEATORS SHALL MEET SPECIFICATION REQUIREMENTS FOR ASTM B209 ALLOY 5052-H32.
4. REFLECTIVE MATERIAL SHALL MEET REQUIREMENTS OF SUBSECTION 750.08 AND SHALL BE OF ENCAPSULATED LENS SILVER OR AMBER. AMBER IS TO BE INSTALLED ON THE DRIVER'S LEFT AND SILVER ON THEIR RIGHT.
5. ON BRIDGES WITH A SIDEWALK, DELINEATORS ARE NOT TO BE INSTALLED ON THE SIDEWALK SIDE OF THE BRIDGE (I.E. DELINEATORS INSTALLED ONLY ON THE CURB SIDE AND ON THE APPROACH ON THE CURB SIDE). PAYMENT SHALL BE SUBSIDIARY TO ALL OTHER ITEMS.
6. ALL APPROACH RAIL SPLICES SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW.
7. ALL BRIDGE APPROACH RAIL MATERIALS, DIMENSION SIZES AND NOTES SHALL BE THE SAME AS THOSE OF THE BRIDGE RAIL, UNLESS OTHERWISE NOTED.
8. APPROACH RAIL BOLTS SHALL BE ASTM A307 GRADE A AND NUTS SHALL BE AASHTO M291 (ASTM A563 GRADE A OR BETTER (GALVANIZED). WASHERS SHALL BE ASTM F844.
9. WELD TOP SPLICE BAR TO FIT BEND. USE COMPLETE PENETRATION WELD (B-U2).
10. THE CONCRETE CURB WILL BE PAID FOR AS ITEM 616.28, "CAST-IN-PLACE CONCRETE CURB, TYPE B."



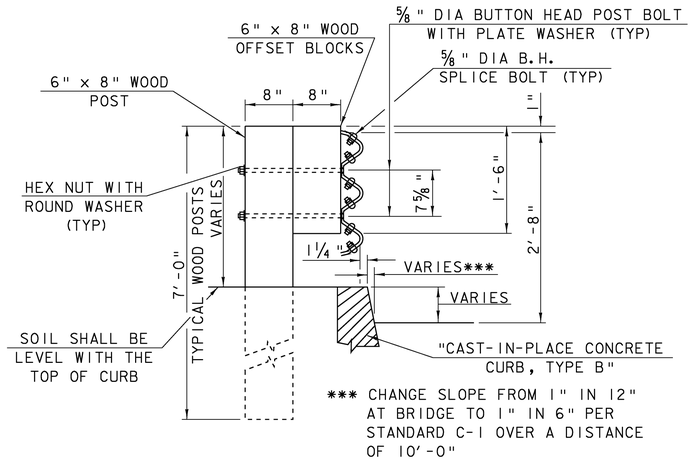
DELINEATION DEVICE DETAILS

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

BRIDGE RAILING - NETC 2 RAIL - THRIE BEAM APPROACH RAIL

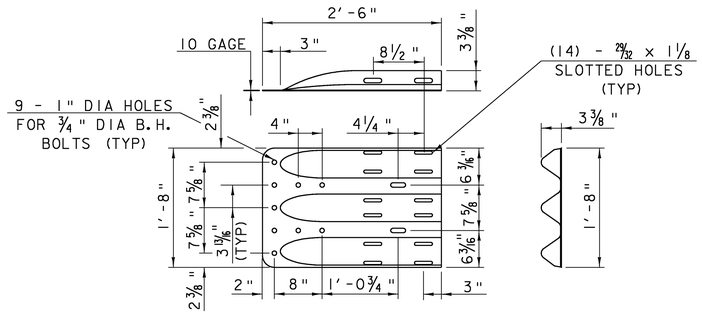
VERMONT AGENCY OF TRANSPORTATION

DETAIL BR2

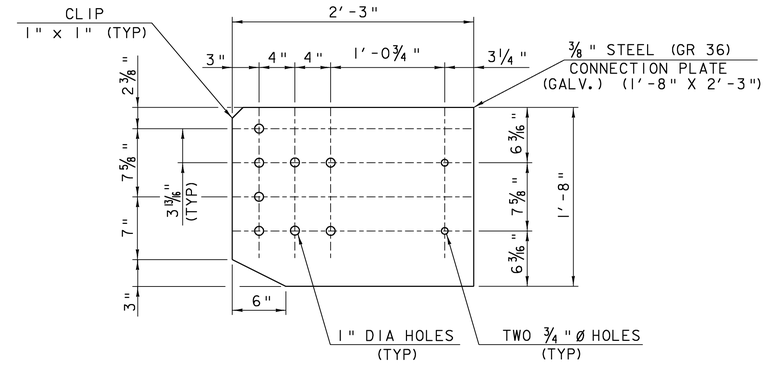


*** CHANGE SLOPE FROM 1" IN 12" AT BRIDGE TO 1" IN 6" PER STANDARD C-1 OVER A DISTANCE OF 10'-0"

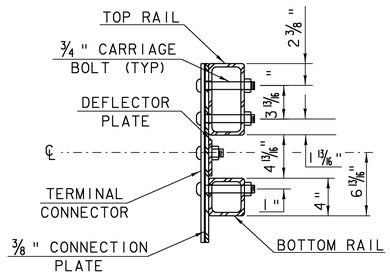
WOOD POST-RAIL ASSEMBLY



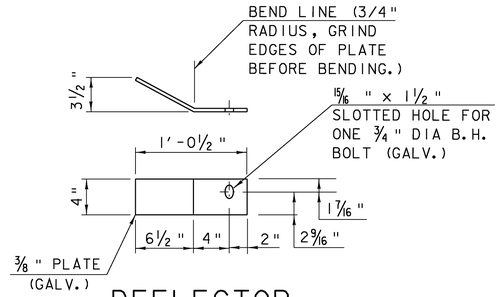
THRIE-BEAM TERMINAL CONNECTOR (HM-TF-13/RE-67)



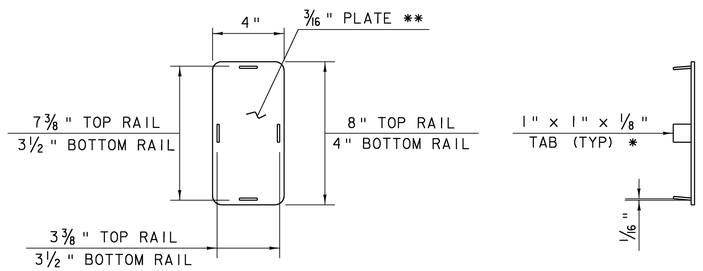
CONNECTION PLATE



SECTION C-C (CONNECTION PLATE)

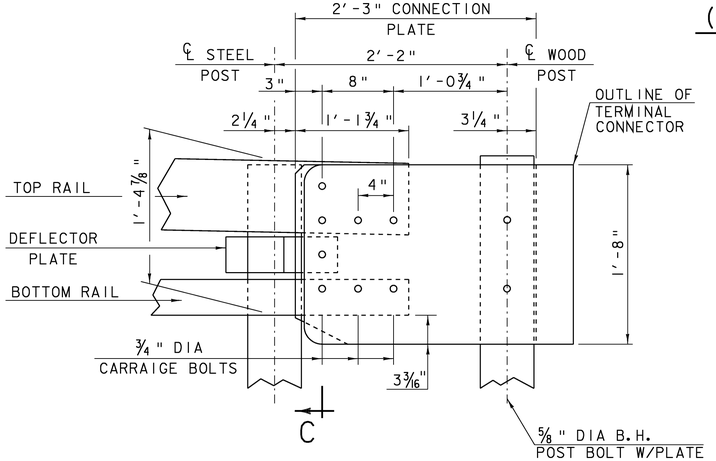


DEFLECTOR PLATE DETAIL

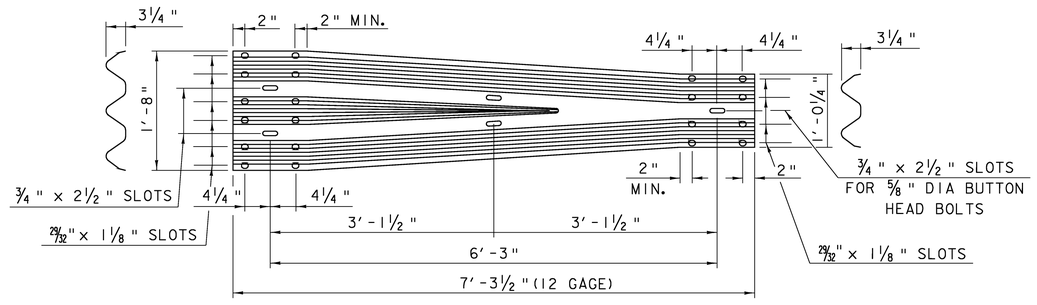


* WELD TABS TO END CAP PLATE IN TAPERED POSITION SO CAP CAN BE JAMMED INTO END OF RAIL TUBE.
** ROUND CORNERS 1/2 " RADIUS (TYP)

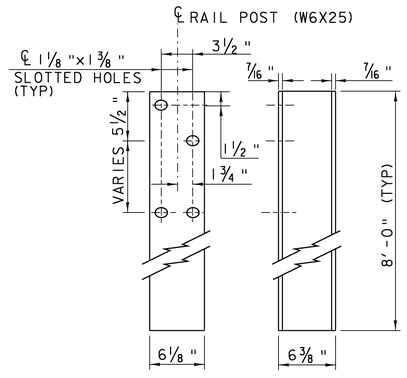
END CAP DETAIL



DETAIL A



THRIE-BEAM TO STD SB TRANSITION SECTION (HM-TF-13/RE-69)



RAIL POST

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

BRIDGE RAILING - NETC 2 RAIL - THRIE BEAM APPROACH RAIL

VERMONT AGENCY OF TRANSPORTATION

DETAIL BR3

STATE OF VERMONT
AGENCY OF TRANSPORTATION

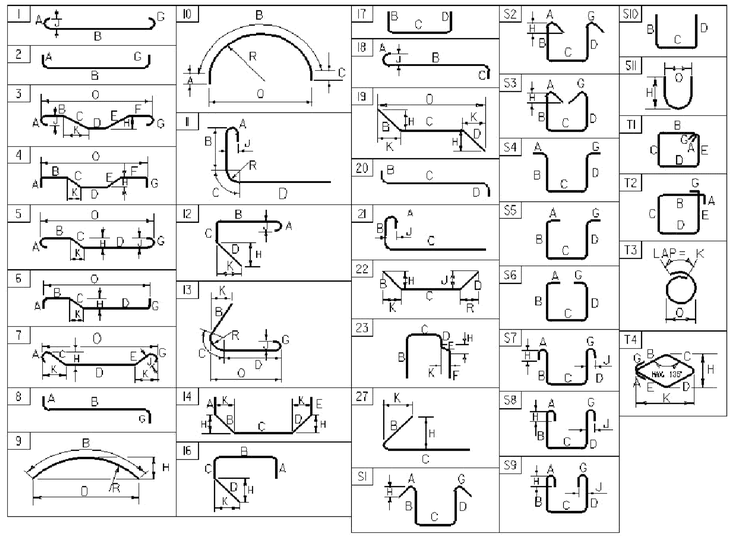
REINFORCING STEEL SCHEDULE

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	DECK																
	878	5	36'- 6"	ES501	STR	36'- 6"											
	28	5	35'- 10"	ES503	STR	35'- 10"											
△	60	5	5'- 0"	ES504	STR	5'- 0"											
	701	6	35'- 10"	ES601	STR	35'- 10"											
▲	12	6	44'- 4"	ES602	STR	44'- 4"											
△	68	6	5'- 6"	ES603	STR	5'- 6"											
	625	5	5'- 5"	ES502	S5	0'- 10"	1'- 0"	1'- 6"	1'- 3"			0'- 10"					
	56	5	6'- 0"	ES505	22		2'- 2"	1'- 8"	2'- 2"								
	APPROACH SLABS																
	21	5	32'- 0"	1EAS501	STR	32'- 0"											
	17	8	3'- 0"	1EAS801	22		1'- 6"	1'- 6"									
△ ▲	41	9	21'- 4"	1EAS901	18	1'- 3"	20'- 1"	---						1'- 2"			
	6	9	16'- 7"	1EAS902	18	1'- 3"	15'- 4"	---						1'- 2"			
	21	5	32'- 0"	2EAS501	STR	32'- 0"											
	17	8	3'- 0"	2EAS801	22		1'- 6"	1'- 6"									
▲	39	9	21'- 4"	2EAS901	18	1'- 3"	20'- 1"	---						1'- 2"			
	ABUTMENT #1																
	4	5	32'- 0"	1A503	STR	32'- 0"											
	34	6	44'- 4"	1A601	STR	44'- 4"											
▲	60	6	17'- 6"	1A602	STR	17'- 6"											
	174	4	3'- 4"	1A401	S3	0'- 5"	---	2'- 6"	---			0'- 5"	0'- 3"				
	33	5	4'- 7"	1A504	16	0'- 8"	1'- 9"	0'- 8"	1'- 6"				1'- 0"		1'- 0"		
△ ▲	62	11	22'- 0"	1A1101	8	2'- 0"	20'- 0"					---					
▲	60	11	16'- 6"	1A1102	8	2'- 0"	14'- 6"					---					
	WINGWALL #1																
	17	5	9'- 11"	1W501	1	0'- 7"	8'- 9"					0'- 7"		0'- 5"			
	2	5	11'- 1"	1W502	22		---	3'- 4"	7'- 9"				0'- 6"		7'- 9"		---
	36	6	2'- 4"	1W601	S3	0'- 8"	---	1'- 0"	---			0'- 8"	0'- 5"				
△	38	6	19'- 0"	1W602	S3	0'- 8"	---	17'- 4"	1'- 0"			---	0'- 5"	C varies from 16'-1" to 18'-6"			
	1	7	11'- 4"	1W701	22		---	8'- 5"	2'- 11"			---	0'- 8"	---	2'- 10"		
▲	17	7	11'- 10"	1W702	22		---	11'- 1"	0'- 9"				0'- 5"		0'- 5"		
	1	8	11'- 4"	1W801	22		---	8'- 5"	2'- 11"			---	0'- 8"	---	2'- 10"		
▲	35	8	11'- 11"	1W802	22		---	11'- 1"	0'- 10"				0'- 6"		0'- 6"		
▲	35	8	11'- 5"	1W803	22		---	9'- 8"	1'- 9"			---	1'- 8"	---	0'- 7"		
	WINGWALL #2																
	19	5	8'- 2"	2W501	1	0'- 7"	7'- 0"					0'- 7"		0'- 5"			
	34	6	2'- 4"	2W601	S3	0'- 8"	---	1'- 0"	---			0'- 8"	0'- 5"				
	34	6	19'- 8"	2W602	S3	0'- 8"	---	18'- 0"	1'- 0"			---	0'- 5"	C varies from 16'-2" to 19'-10"			
	1	7	11'- 11"	2W701	22		---	9'- 2"	2'- 9"			---	1'- 2"	---	2'- 5"		
▲	20	7	11'- 9"	2W702	22		---	11'- 0"	0'- 9"				0'- 5"	---	0'- 5"	---	
	1	8	11'- 11"	2W801	22		---	9'- 2"	2'- 9"				1'- 2"	---	2'- 5"		
▲	40	8	11'- 10"	2W802	22		---	11'- 0"	0'- 10"				0'- 5"	---	0'- 5"	---	
	40	8	11'- 8"	2W803	27		1'- 9"	9'- 11"					1'- 9"		0'- 2"		

ITEM	EACH	SIZE	LENGTH	MARK	TYPE	A	B	C	D	E	F	G	H	J	K	R	O
	ABUTMENT #2																
	4	5	32'- 0"	2A503	STR	32'- 0"											
	38	6	44'- 0"	2A601	STR	44'- 0"											
▲	60	6	17'- 6"	2A602	STR	17'- 6"											
	198	4	3'- 4"	2A401	S3	0'- 5"	---	2'- 6"	---			0'- 5"	0'- 3"				
	33	5	4'- 7"	2A504	16	0'- 8"	1'- 9"	0'- 8"	1'- 6"				1'- 0"		1'- 0"		
	60	11	21'- 7"	2A1101	8	2'- 0"	19'- 7"					---					
△	62	11	15'- 4"	2A1102	8	2'- 0"	13'- 4"					---					
	WINGWALL #3																
	17	5	9'- 11"	3W501	1	0'- 7"	8'- 9"					0'- 7"		0'- 5"			
	2	5	15'- 6"	3W502	22		---	4'- 4"	11'- 2"				2'- 10"		10'- 9"		---
	52	6	2'- 4"	3W601	S3	0'- 8"	---	1'- 0"	---			0'- 8"	0'- 5"				
	52	6	15'- 2"	3W602	S3	0'- 8"	---	13'- 6"	1'- 0"			---	0'- 5"	C varies from 8'-8" to 18'-4"			
	1	7	16'- 11"	3W701	22		---	14'- 0"	2'- 11"				---	1'- 5"	---	2'- 6"	
▲	17	7	15'- 10"	3W702	22		---	15'- 1"	0'- 9"				0'- 5"		0'- 5"		
	1	8	4'- 11"	3W801	22		---	2'- 0"	2'- 11"				---	1'- 5"	---	2'- 6"	
△ ▲	37	8	15'- 11"	3W802	22		---	15'- 1"	0'- 10"				0'- 5"	---	0'- 5"	---	
▲	35	8	10'- 5"	3W803	22		1'- 9"	8'- 8"	---				1'- 8"	---	0'- 8"	---	
	WINGWALL #4																
	18	5	8'- 2"	4W501	1	0'- 7"	7'- 0"					0'- 7"		0'- 5"			
	2	5	15'- 0"	4W502	22		---	4'- 5"	10'- 7"				0'- 8"		10'- 7"		---
	50	6	2'- 4"	4W601	S3	0'- 8"	---	1'- 0"	---			0'- 8"	0'- 5"				
	50	6	15'- 8"	4W602	S3	0'- 8"	---	14'- 0"	1'- 0"			---	0'- 5"	C varies from 8'-8" to 19'-3"			
	1	7	18'- 9"	4W701	22		---	16'- 1"	2'- 8"				---	1'- 9"	---	2'- 1"	
▲	18	7	16'- 3"	4W702	22		---	15'- 6"	0'- 9"				0'- 5"	---	0'- 5"	---	
	1	8	18'- 9"	4W801	22		---	16'- 1"	2'- 8"				---	1'- 9"	---	2'- 1"	
▲	38	8	16'- 4"	4W802	22		---	15'- 6"	0'- 10"				0'- 5"	---	0'- 5"	---	
▲	38	8	12'- 2"	4W803	27		1'- 9"	10'- 5"					1'- 9"		0'- 2"		
	PIER																
	8	6	23'- 1"	P601	STR	23'- 1"											
	96	6	4'- 4"	P602	STR	4'- 4"											
	15	4	4'- 0"	P401	2	1'- 0"	2'- 0"					1'- 0"					
	10	4	4'- 10"	P402	2	1'- 0"	2'- 10"					1'- 0"					
	7	6	15'- 1"	P603A	S3	0'- 8"	5'- 3"	3'- 3"	5'- 3"			0'- 8"	0'- 5"	B & D vary from 5'-0" to 5'-6" C varies from 2'-7" to 3'-10"			
	7	6	4'- 11"	P603B	S3	0'- 8"	---	3'- 3"	1'- 0"			---	0'- 5"	C varies from 2'-7" to 3'-10"			
	12	6	15'- 11"	P604A	S3	0'- 8"	5'- 10"	2'- 11"	5'- 10"			0'- 8"	0'- 5"	B & D vary from 5'-7" to 6'-0"			
	12	6	4'- 7"	P604B	S3	0'- 8"	---	2'- 11"	1'- 0"			---	0'- 5"				
	27	6	17'- 5"	P605A	S3	0'- 8"	6'- 5"	3'- 3"	6'- 5"			0'- 8"	0'- 5"	B & D vary from 6'-1" to 6'-8"			
	27	6	4'- 11"	P605B	S3	0'- 8"	---	3'- 3"	1'- 0"			---	0'- 5"				
△	32	6	18'- 4"	P606A	S3	0'- 8"	6'- 8"	3'- 8"	6'- 8"			0'- 8"	0'- 5"	B & D vary from 6'-6" to 6'-9"			
	30	6	5'- 4"	P606B	S3	0'- 8"	---	3'- 8"	1'- 0"			---	0'- 5"				
	27	6	16'- 1"	P607A	S3	0'- 8"	5'- 9"	3'- 3"	5'- 9"			0'- 8"	0'- 5"	B & D vary from 5'-0" to 6'-5"			
	27	6	4'- 11"	P607B	S3	0'- 8"	---	3'- 3"	1'- 0"			---	0'- 5"				
	12	6	13'- 3"	P608A	S3	0'- 8"	4'- 6"	2'- 11"	4'- 6"			0'- 8"	0'- 5"	B & D vary from 4'-1" to 4'-11"			
	12	6	4'- 7"	P608B	S3	0'- 8"	---	2'- 11"	1'- 0"			---	0'- 5"				
	7	6	11'- 7"	P609A	S3	0'- 8"	3'- 6"	3'- 3"	3'- 6"			0'- 8"	0'- 5"	B & D vary from 3'-0" to 3'-11" C varies from 2'-7" to 3'-10"			
	7	6	4'- 11"	P609B	S3	0'- 8"	---	3'- 3"	1'- 0"			---	0'- 5"	C varies from 2'-7" to 3'-10"			
▲	12	6	16'- 5"	P610	22		---	14'- 11"	1'- 6"				---	0'- 3"	---	1'- 6"	
	11	6	9'- 8"	P611	S11								4'- 0"				3'- 9"
▲	18	6	33'- 6"	P612	22		16'- 9"	16'- 9"	---				2'- 11"	---	16'- 5"	---	
	1	6	1075'- 3"	P613	T3												6'- 2"
	224	11	27'- 1"	P1101	2	2'- 0"	23'- 1"					2'- 0"					
	2	11	37'- 4"	P1102A	6*	2'- 0"	17'- 8"	17'- 8"	---			---	2'- 6"		17'- 6"		35'- 2"
	2	11	38'- 2"	P1102B	6*	2'- 0"	18'- 1"	18'- 1"					1'- 1"		18'- 1"		36'- 2"
	2	11	38'- 4"	P1102C	6*	2'- 0"	18'- 2"	18'- 2"					0'- 4"		18'- 2"		36'- 4"
	2	11	37'- 10"	P1102D	6*	2'- 0"	17'- 11"	17'- 11"					1'- 10"		17'- 10"		35'- 9"
	2	11	35'- 4"	P1102E	6*	2'- 0"	16'- 8"	16'- 8"					3'- 0"		16'- 5"		33'- 1"
	2	11	35'- 4"	P1103A	22		17'- 8"	17'- 8"	---				2'- 6"		17'- 6"		
	2	11	36'- 2"	P1103B	22		18'- 1"	18'- 1"	---				1'- 1"		18'- 1"		
	2	11	36'- 4"	P1103C	22		18'- 2"	18'- 2"	---				0'- 4"		18'- 2"		
	2	11	35'- 10"	P1103D	22		17'- 11"	17'- 11"	---				1'- 10"		17'- 10"		
	2	11	33'- 4"	P1103E	22		16'- 8"	16'- 8"	---				3'- 0"		16'- 5"		
	2	11	26'- 8"	P1104	22		13'- 4"	13'- 4"	---				2'- 5"		13'- 1"		
△	40	11	25'- 9"	P1105	2	2'- 0"	23'- 9"										

~ NOTES ~

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



ASTM STANDARD REINFORCING BARS

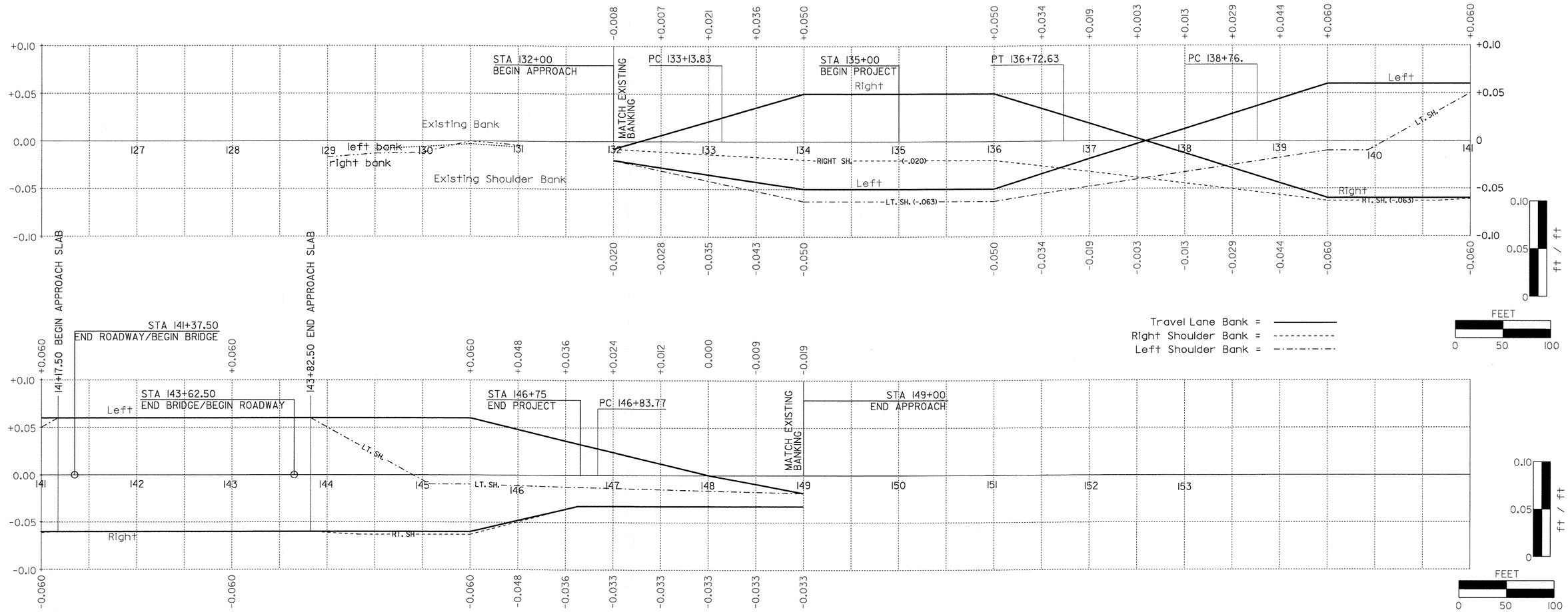
BAR SIZE DESIGNATION	WEIGHT POUNDS PER FOOT	NOMINAL DIMENSIONS ROUND SECTION DIAMETER INCHES	AREA INCHES ^{2}	PERIMETER INCHES
#3	0.376	0.375	0.11	1.178
#4	0.668	0.500	0.20	1.571
#5	1.043	0.625	0.31	1.963
#6	1.502	0.750	0.44	2.356
#7	2.044	0.875	0.60	2.749
#8	2.670	1.000	0.79	3.142
#9	3.400	1.128	1.00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

PROJECT NAME: STOCKBRIDGE
PROJECT NUMBER: BRF 013-4(21)

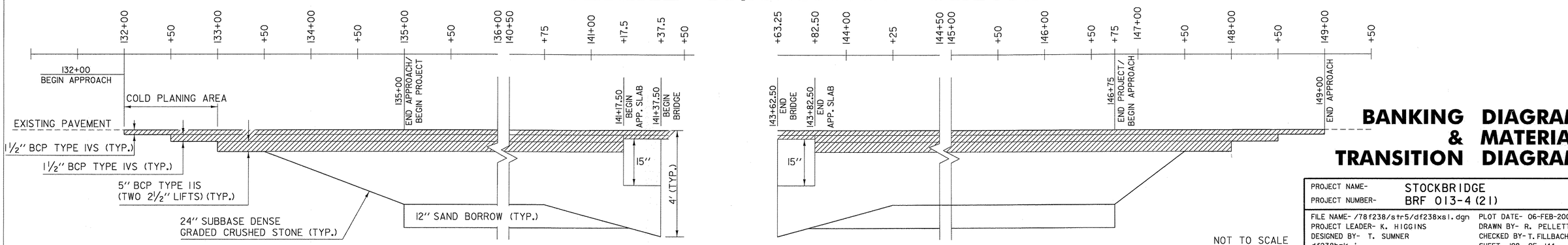
FILE NAME: sf238rein
PROJECT MANAGER: K. HIGGINS
DESIGNED BY: T. FILLBACH
REINFORCING STEEL SCHEDULE SHEET #1

PLOT DATE: 1/28/2008
DRAWN BY: R. PELLETT
CHECKED BY: J. LACROIX
SHEET 99 OF 144

BANKING DIAGRAM

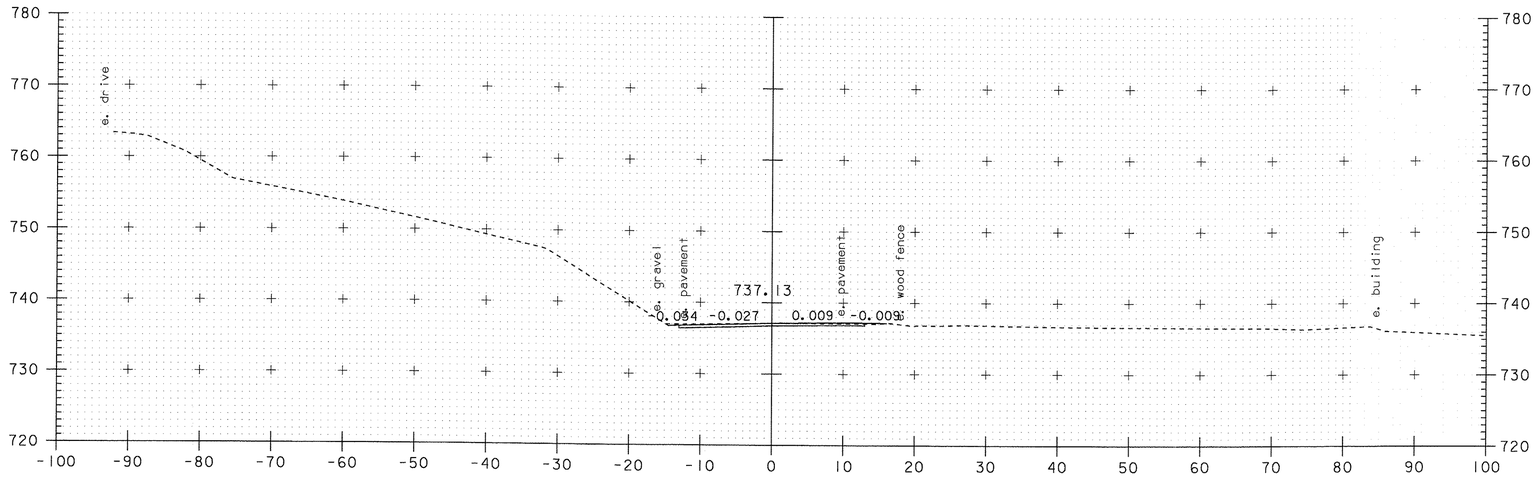


MATERIAL TRANSITION DIAGRAM



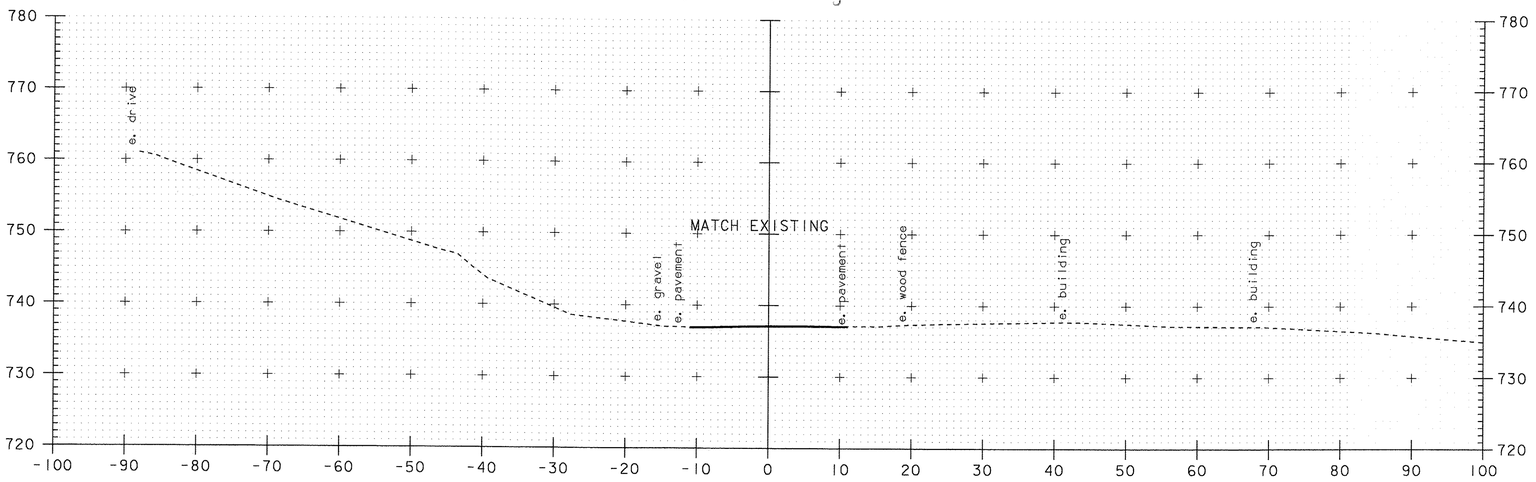
BANKING DIAGRAM & MATERIAL TRANSITION DIAGRAM

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df238xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- R. PELLETT
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238bnk.i	SHEET 108 OF 144



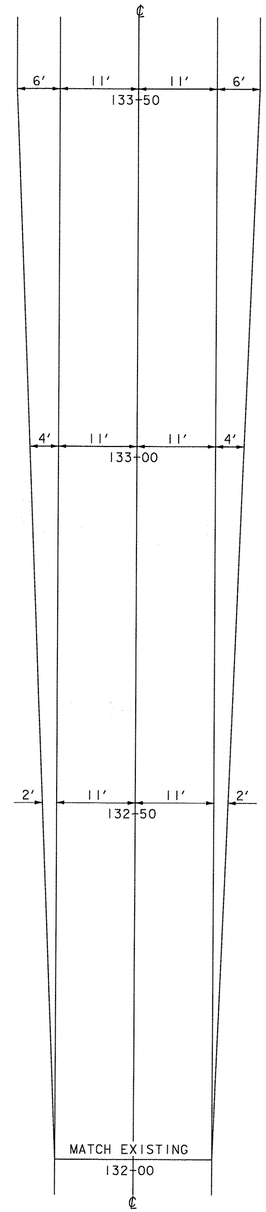
132+50

132+00 begin cold planing



132+00
BEGIN APPROACH

SCALE 1" = 10'-0
10 0 10

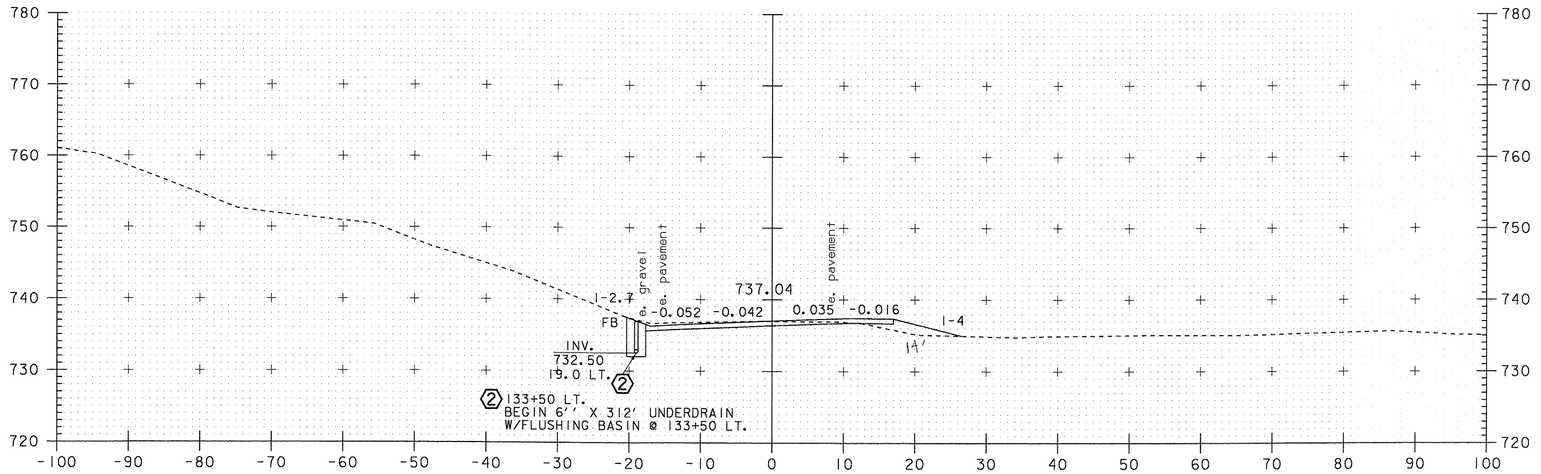


WIDTH TRANSITION

MAINLINE CROSS SECTIONS STA. 132+00 – STA. 132+50

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x01.i	SHEET 109 OF 144

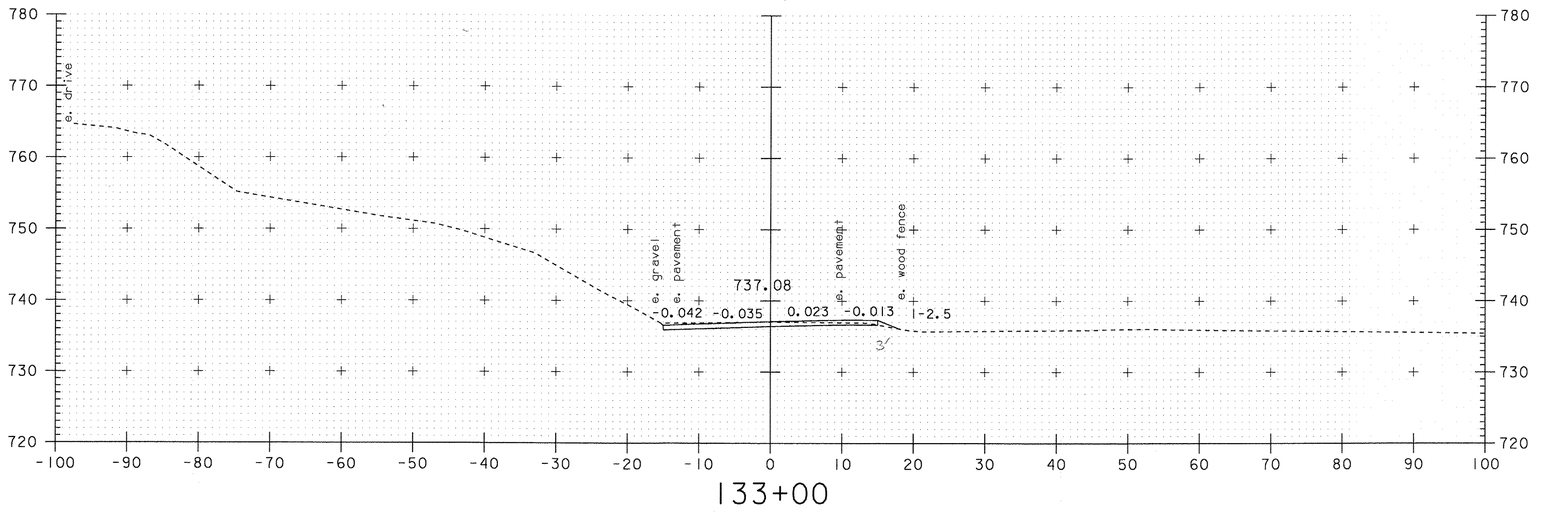
Begin DGCS Taper



133+50

EB = 11.04 ft²
CE = 19.95ft²

End cold planing



133+00

EB = 0.84 ft²
Common Ex = 19.95ft²

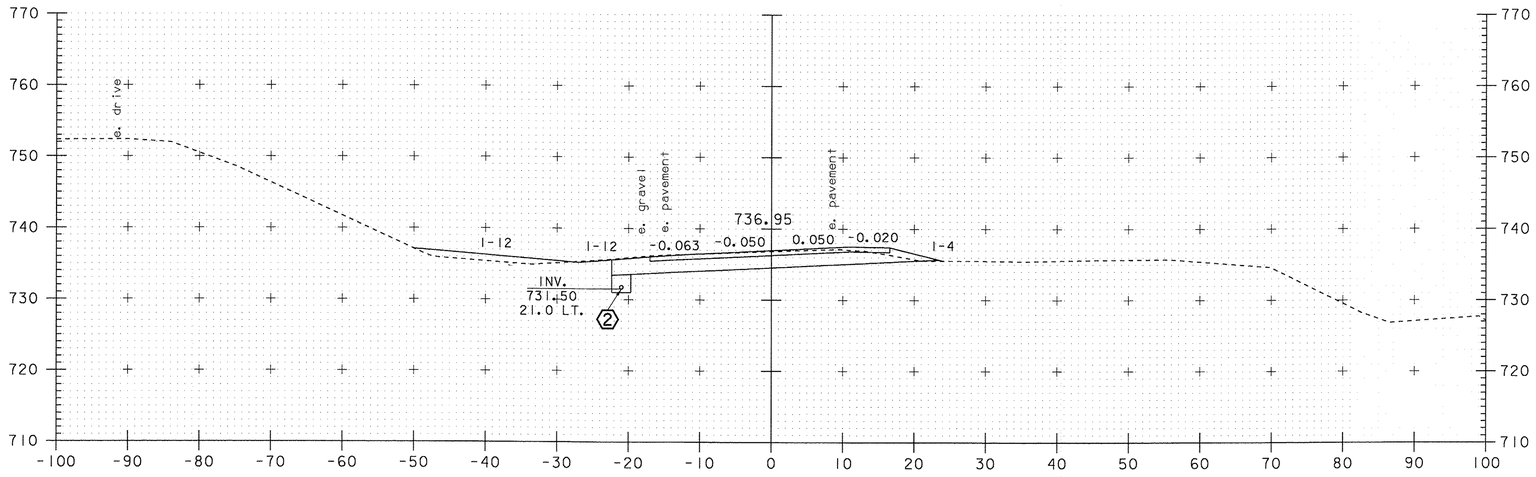
NRC 12/16/09
DGB 1/19/11

SCALE 1" = 10'-0
10 0 10

MAINLINE CROSS SECTIONS STA. 133+00 – STA. 133+50

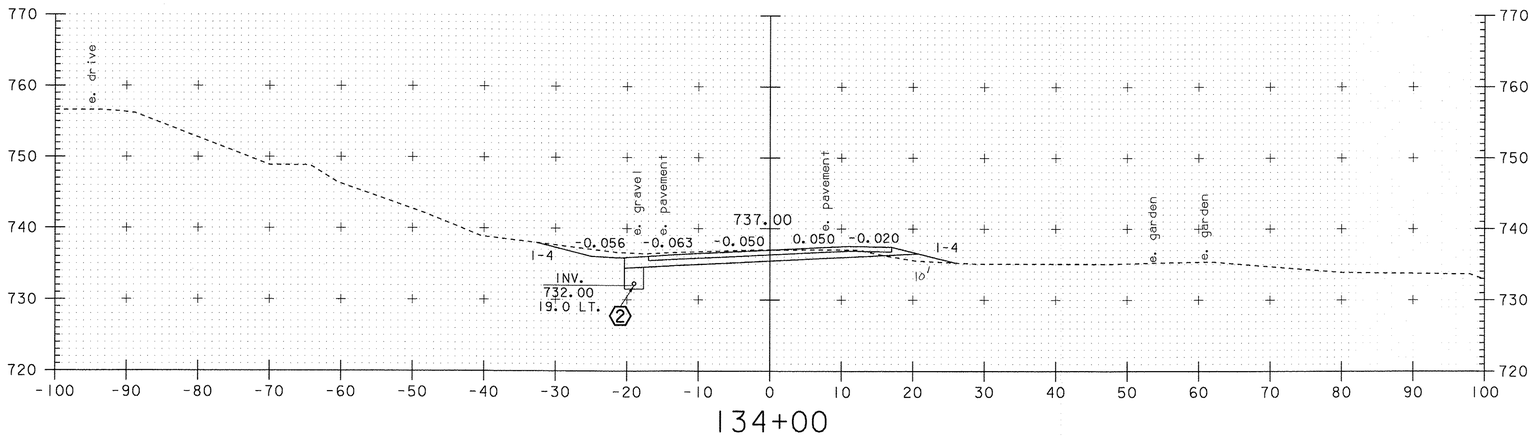
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)

FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x02.i	SHEET 110 OF 144



134+50

Common ex 58.38 ft²
EB 0.286 ft² + 15.67 ft² = 16.0 ft²
DGCS 76.71 ft²
Underdrain 6.61 ft².



134+00

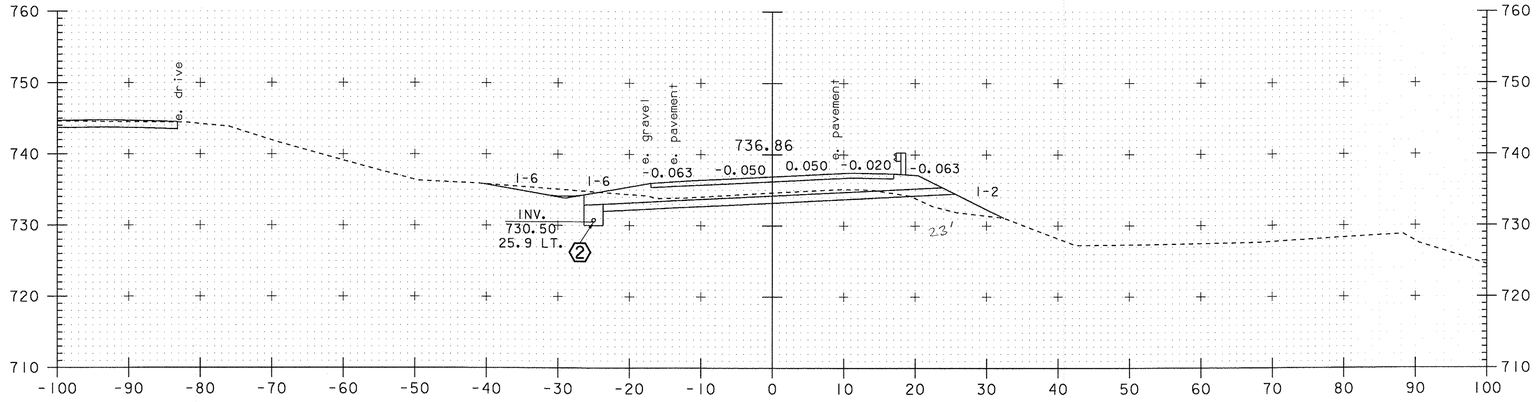
Common ex 62.03 ft²
EB 5.28 ft²
DGCS 35.55 ft²
Underdrain 7.99 ft²

NRC 12/16/09
DEB 1/19/11

MAINLINE CROSS SECTIONS STA. 134+00 – STA. 134+50

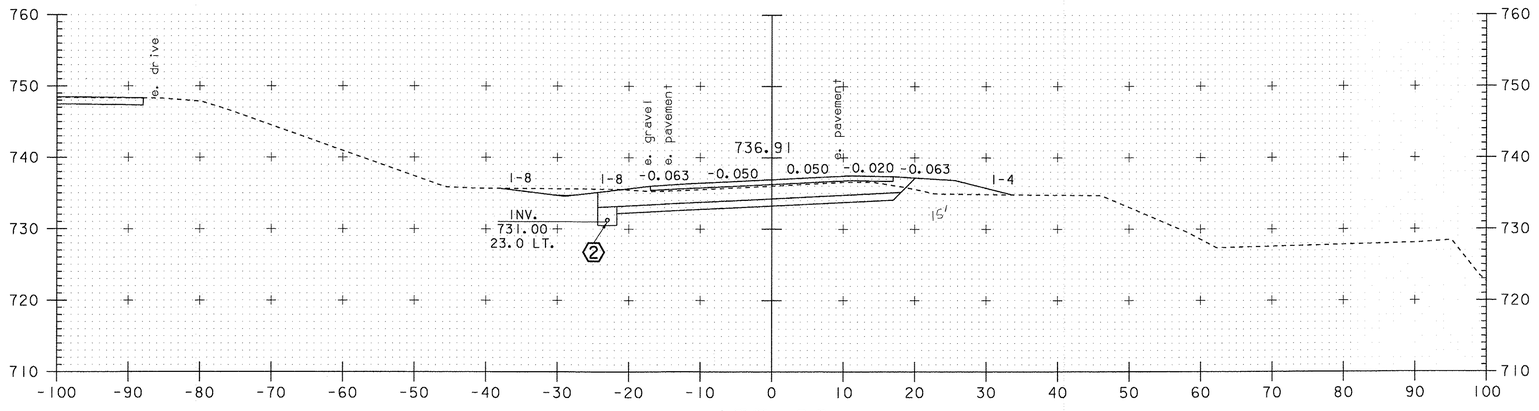
SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x03.i	SHEET 111 OF 144



135+50

End DGCS Taper
Begin Sand box cut



135+00

END APPROACH
BEGIN PROJECT

Common ex 9.72 + 65.72 = 75.44 ft²
EB 17.81 ft²
DGCS 95.82 ft²
underdrain 7.84 ft²
Sand 48.46 ft²

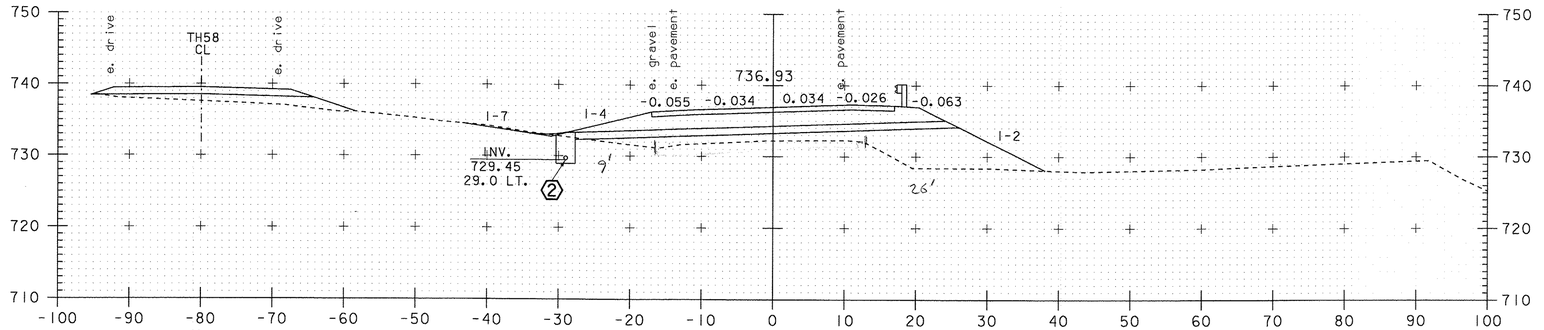
Common ex 8.52 + 112.96 = 121.48 ft²
EB 19.14 ft²
DGCS 82.67 ft²
underdrain 6.89 ft²
Sand 39.24 ft²

NRC 12/16/09
DAB 1/19/11

MAINLINE CROSS SECTIONS
STA. 135+00 – STA. 135+50

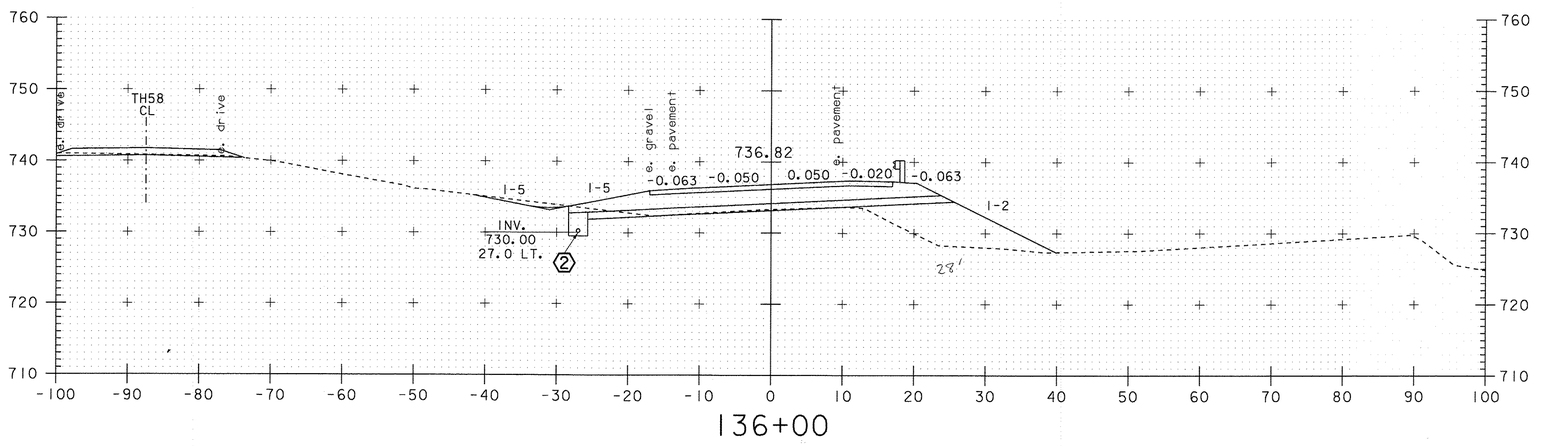
SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x04.i	SHEET 112 OF 144



136+50

Common ex 2.32 ft²
EB 143.62 ft²
DGCS 91.35 ft²
underdrain 11.24 ft²
Sand 52.76 ft²



136+00

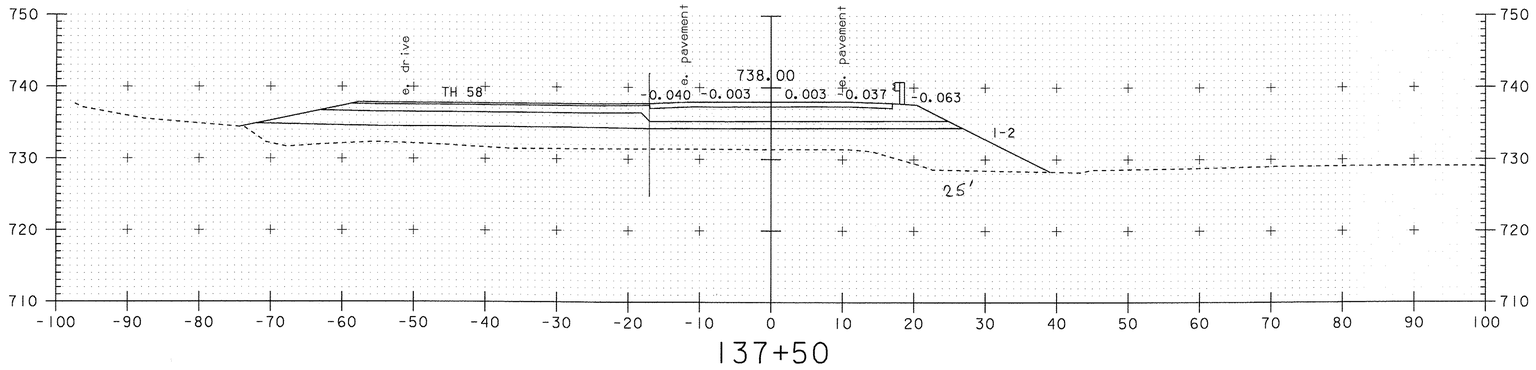
Common ex 5.74 + 9.17 = 14.91 ft²
EB 91.13 ft²
DGCS 97.28 ft²
underdrain 8.79 ft²
Sand 50.50 ft²

NRC 12/16/09
DGB 1/13/11

SCALE 1" = 10'-0
10 0 10

MAINLINE CROSS SECTIONS STA. 136+00 – STA. 136+50

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x05. i	SHEET 113 OF 144

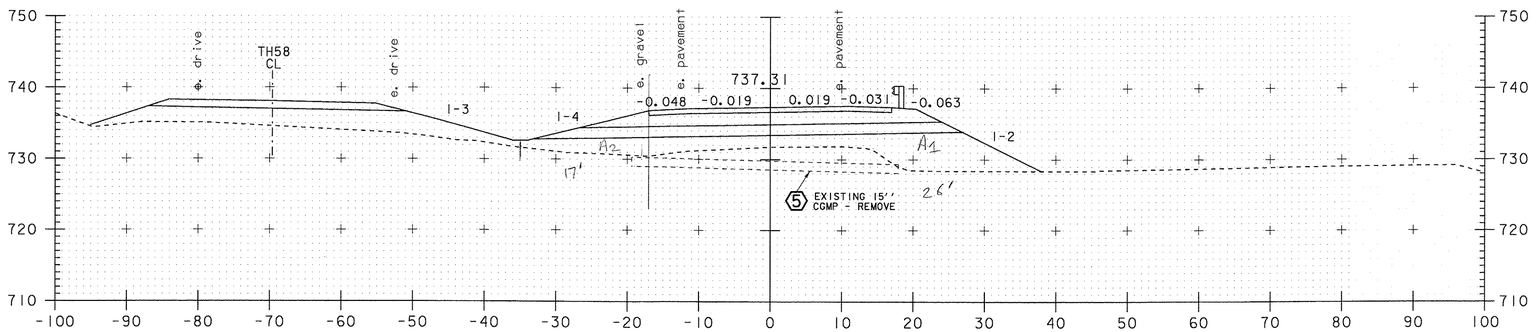


137+50

EB 190.52 ft²
DGCS 79.37 ft²
Sand 42.78 ft²

Begin 17' offset

Note: Sand 1.5' thick scaled, should be 1.0'. used 66%

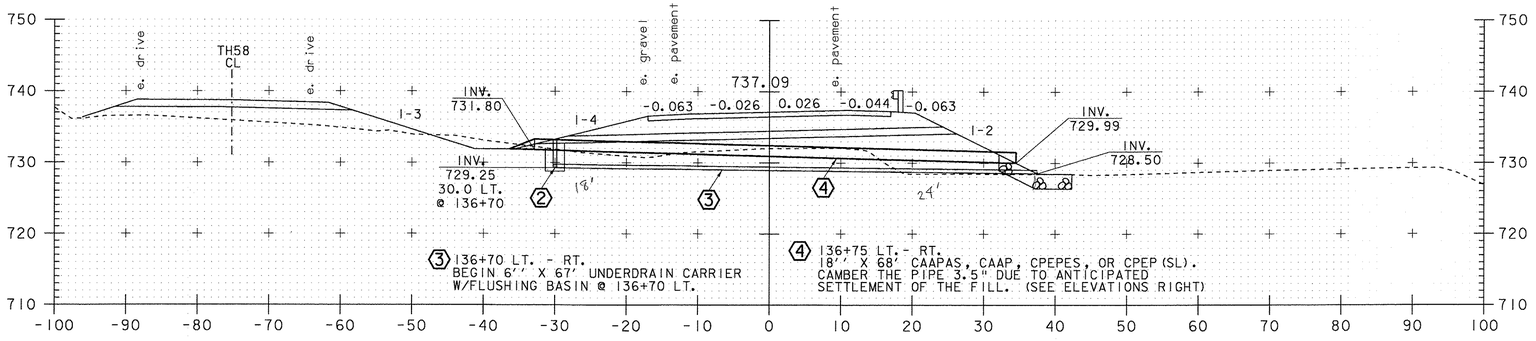


137+00

Common Ex 0 ft²
EB A_1=150.62 ft² A_1+A_2=186.73ft²
DGCS 68.14 ft²
Sand 63.61 ft² x0.66 = 41.98ft²
Trench Ex 101.45 ft²

CAMBER CHART FOR
136+70 LT
6" UNDERDRAIN CARRIER

OFFSET	ELEVATION
-30	729.25
-20	729.29
-10	729.27
0	729.21
10	729.09
20	728.91
30	728.69
37	728.50



136+75

Trench Earth 18" = 28.61 ft²
Trench Earth 6" = 115.58 ft²

CAMBER CHART FOR
136+75 CL
NEW 18"OPTION PIPE

OFFSET	ELEVATION
-33	731.80
-23	731.68
-13	731.50
-03	731.29
7	731.01
17	730.68
27	730.30
34	729.99

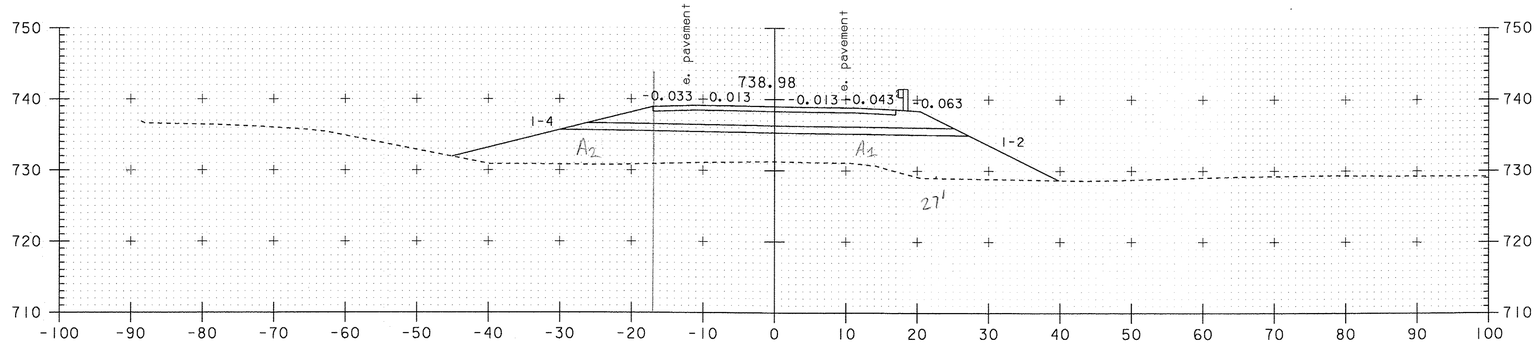
NRC 12/16/09
DLB 11/9/11

SCALE 1" = 10'-0
10 0 10

MAINLINE CROSS SECTIONS
STA. 136+75 – STA. 137+50

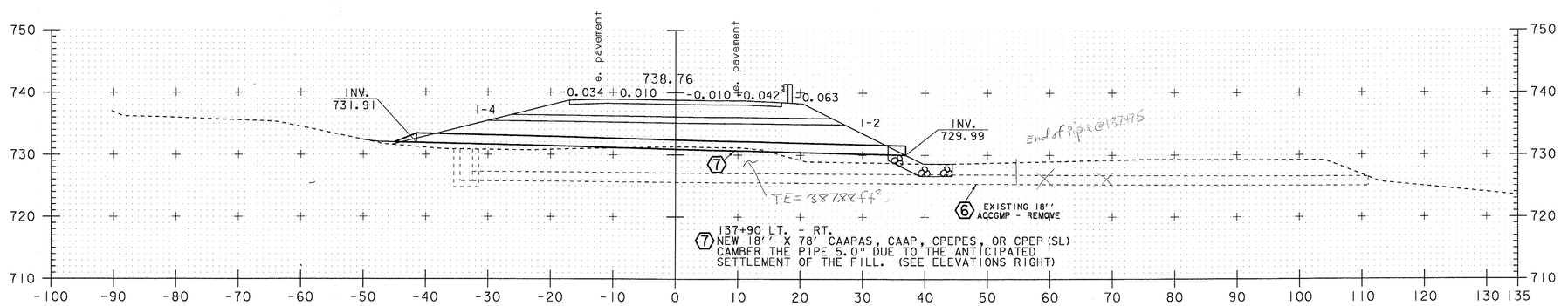
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x06.i	SHEET 114 OF 144

End 17' offset



138+00

Common ex 0 ft²
EB A1 = 244.69 ft²
DGCS 80.38 ft²
Sand 43.19 ft²
A1+A2 = 348.91 ft²



137+90

CAMBER CHART FOR
137+90 CL
NEW 18"OPTION PIPE

OFFSET	ELEVATION
-42	731.91
-32	731.86
-22	731.74
-12	731.57
-02	731.35
08	731.07
18	730.74
28	730.35
36	723.99

NRC 12/16/09
DGB 11/9/11

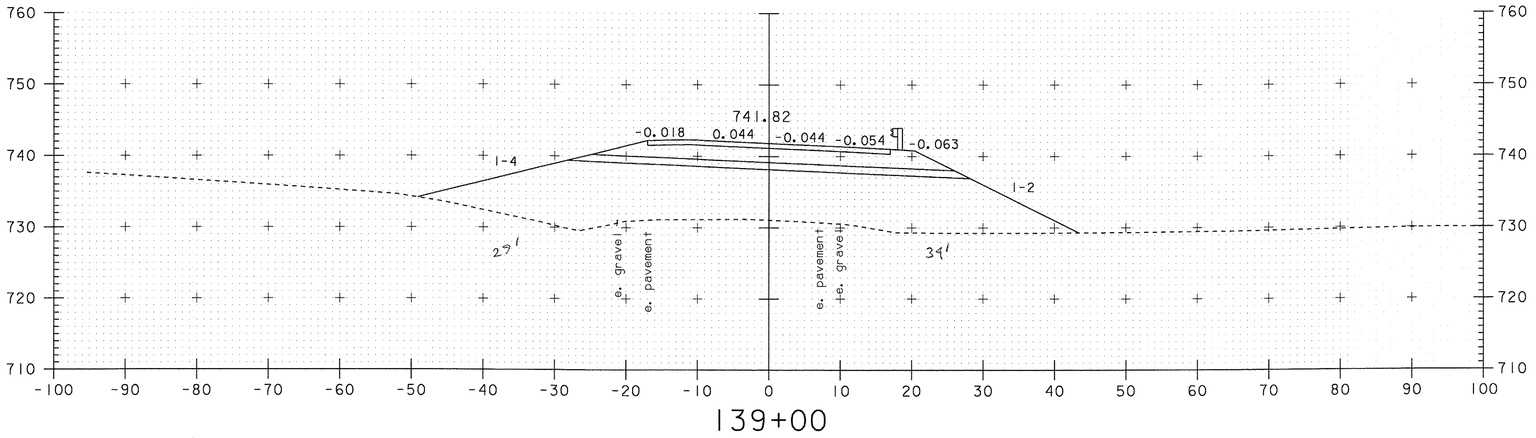
SCALE 1" = 10'-0
10 0 10

MAINLINE CROSS SECTIONS STA. 137+90 – STA. 138+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)

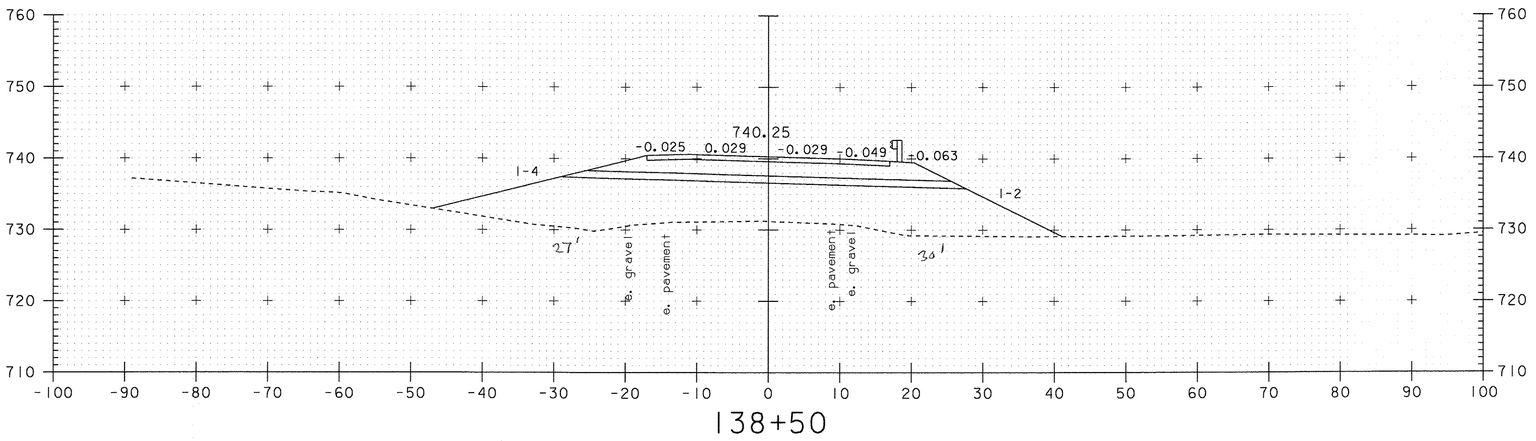
FILE NAME- /78f238/str5/df268xs1.dgn
PROJECT LEADER- K. HIGGINS
DESIGNED BY- T. SUMNER
df238x07.i

PLOT DATE- 06-FEB-2008
DRAWN BY- G. SHANGRAW
CHECKED BY- T. FILLBACH
SHEET 115 OF 144



139+00

Common ex 0 ft²
EB 594.02 ft²
DGCS 91.81 ft²
Sand 53.70 ft²



138+50

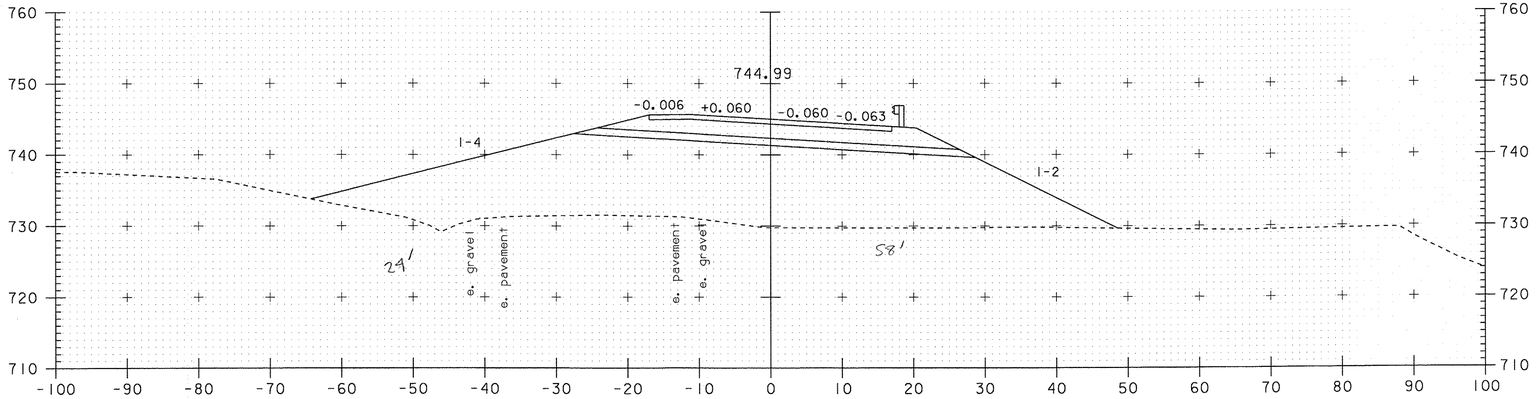
Common ex 0 ft²
EB 459.18 ft²
DGCS 91.47 ft²
Sand 53.91 ft²

NRC 12/15/09
DGB 1/13/11

MAINLINE CROSS SECTIONS STA. 138+50 – STA. 139+00

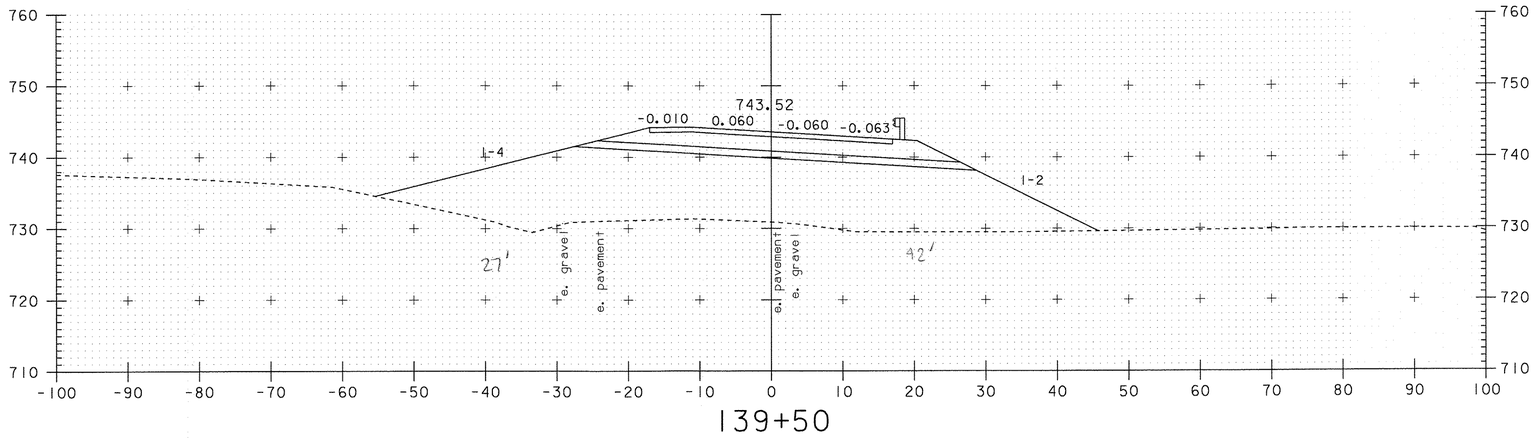
SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x08.i	SHEET 116 OF 144



140+00

Common Ex 0 ft²
EB 965.29 ft² -
DGCS 92.12 ft² -
Sand 53.57 ft² -



139+50

Common Ex 0 ft²
EB 775.37 ft² -
DGCS 92.12 -
Sand 53.57 ft² -

NRC 12/16/09
DGD 1/13/11

SCALE 1" = 10'-0
10 0 10

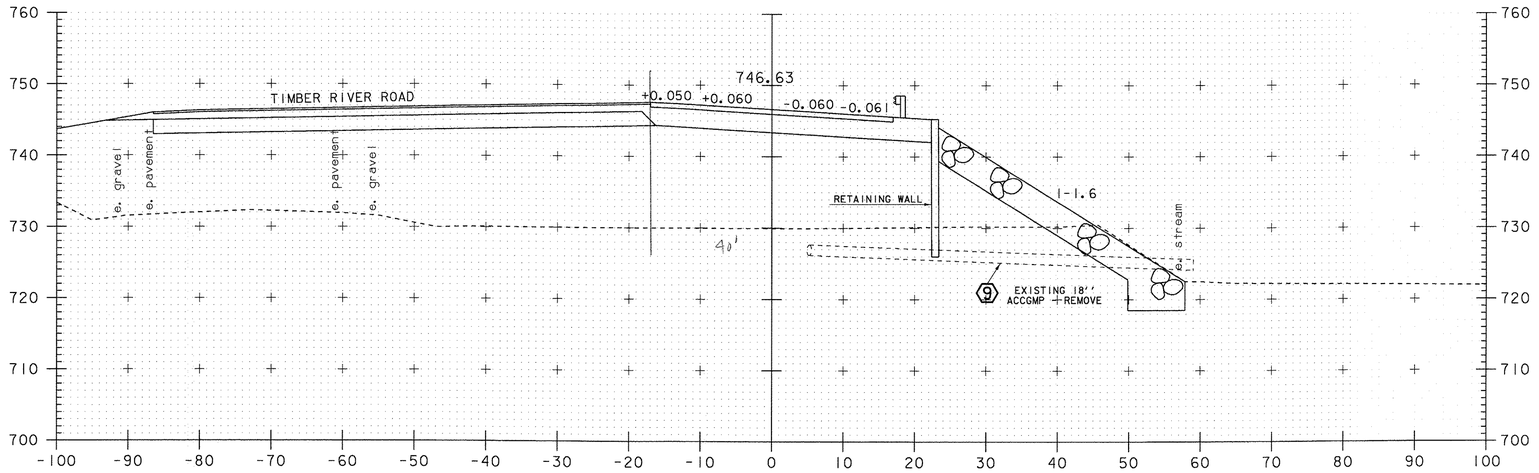
MAINLINE CROSS SECTIONS STA. 139+50 – STA. 140+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)

FILE NAME- /78f238/str5/df268xsl.dgn
PROJECT LEADER- K. HIGGINS
DESIGNED BY- T. SUMNER
df238x09. i

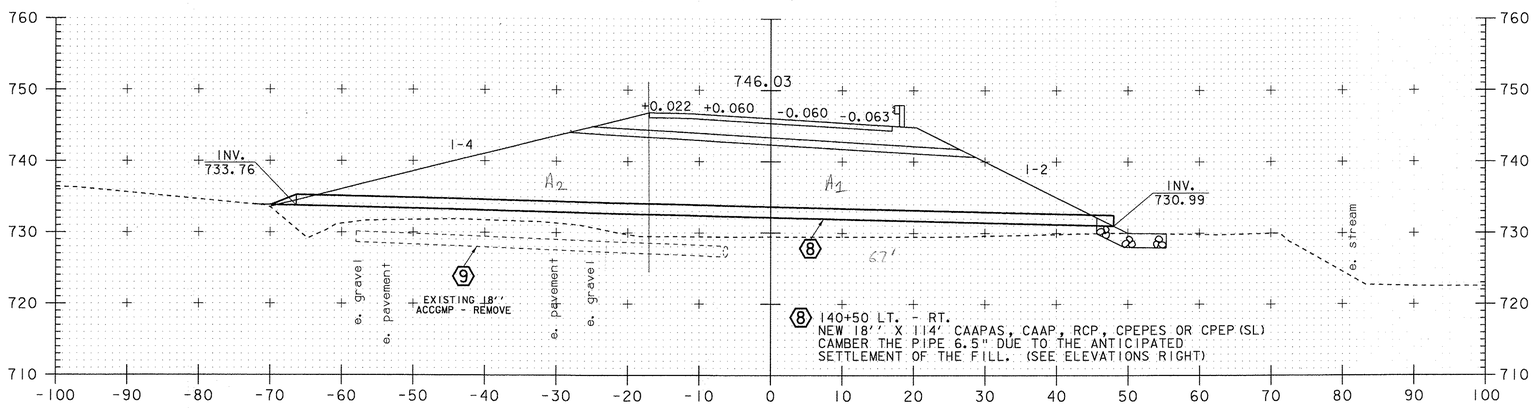
PLOT DATE- 06-FEB-2008
DRAWN BY- G. SHANGRAW
CHECKED BY- T. FILLBACH
SHEET 117 OF 144

141+17.50 Begin App Slab



141+00

140+87.5 begin DGCS Taper to 4' @ Abutment



140+50

SCALE 1" = 10'-0

STA 141+36.7 D Ave. Width
DGCS = 118.18ft² = 3.33', 35.54'

STA. 141+00
EB = 588.0ft² (for average use only)
DGCS = 99.09 ft²
DGCS = 83.02 ft² upstation of Retaining wall.

STA. 140+87.5
EB = 0 ft²
SAND = 44.65ft²

STA. 140+68.2
EB = 640.06ft² = (692.12ft² + 588.0ft²)/2

EB A1+A2 = 1148.65ft²
EB @ 17' = 692.12 ft²
DGCS 84.44 ft²
Sand 44.65 ft²

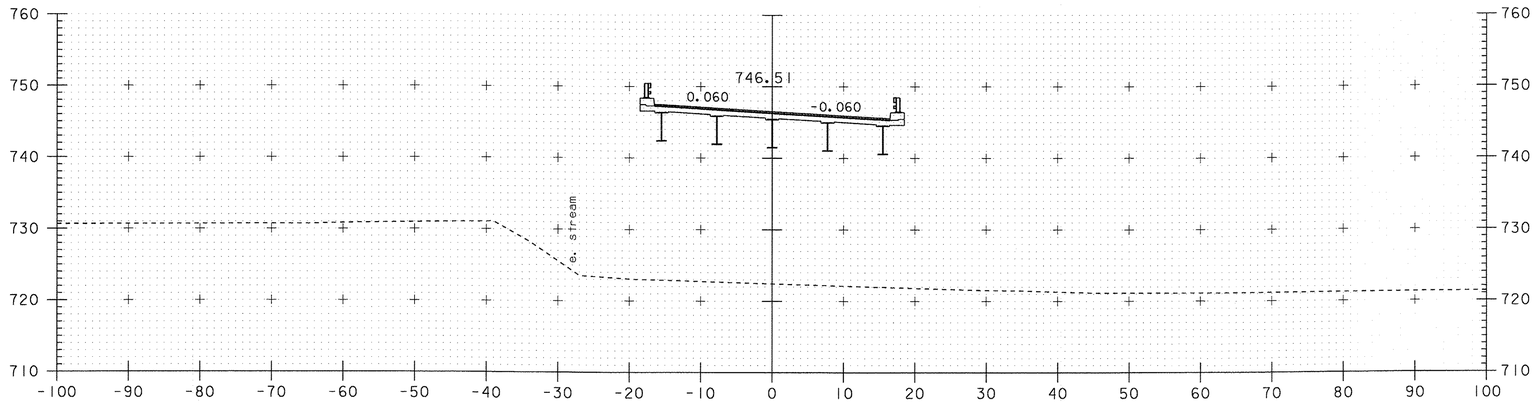
CAMBER CHART FOR
140+50 CL
NEW 18"OPTION PIPE

OFFSET	ELEVATION
-66	733.76
-56	733.70
-46	733.58
-36	733.45
-26	733.28
-16	733.08
-06	732.85
04	732.57
14	732.57
24	731.94
34	731.57
44	731.17
48	730.99

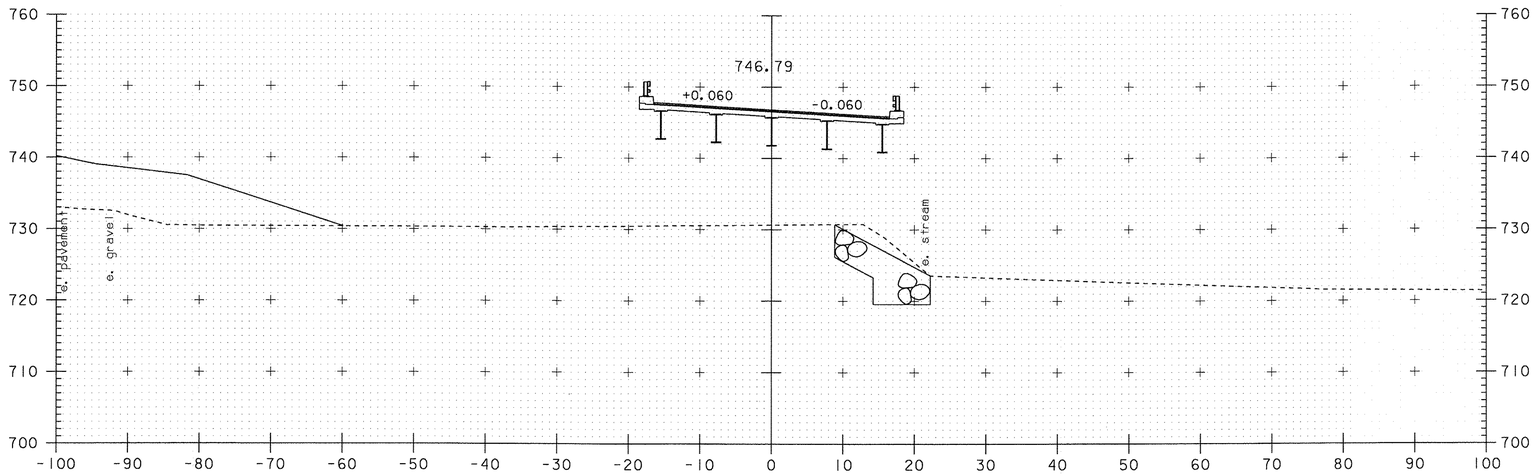
NRC 12/16/09
DGB 1/19/11

MAINLINE CROSS SECTIONS STA. 140+50 – STA. 141+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x10.i	SHEET 118 OF 144



142+00



141+50

141+37.50 BEGIN BRIDGE

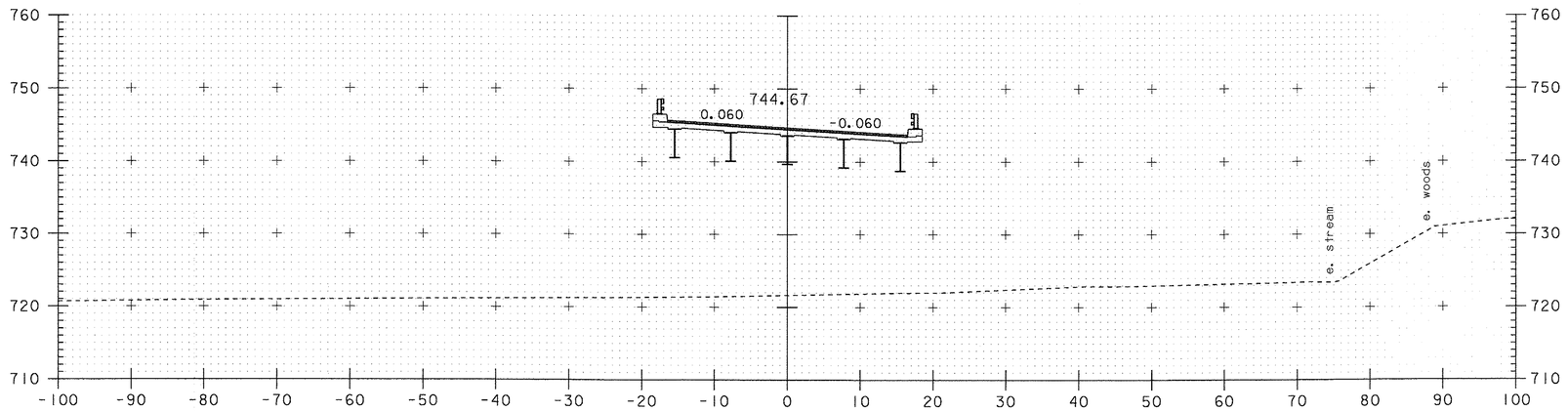
SCALE 1" = 10'-0

10 0 10

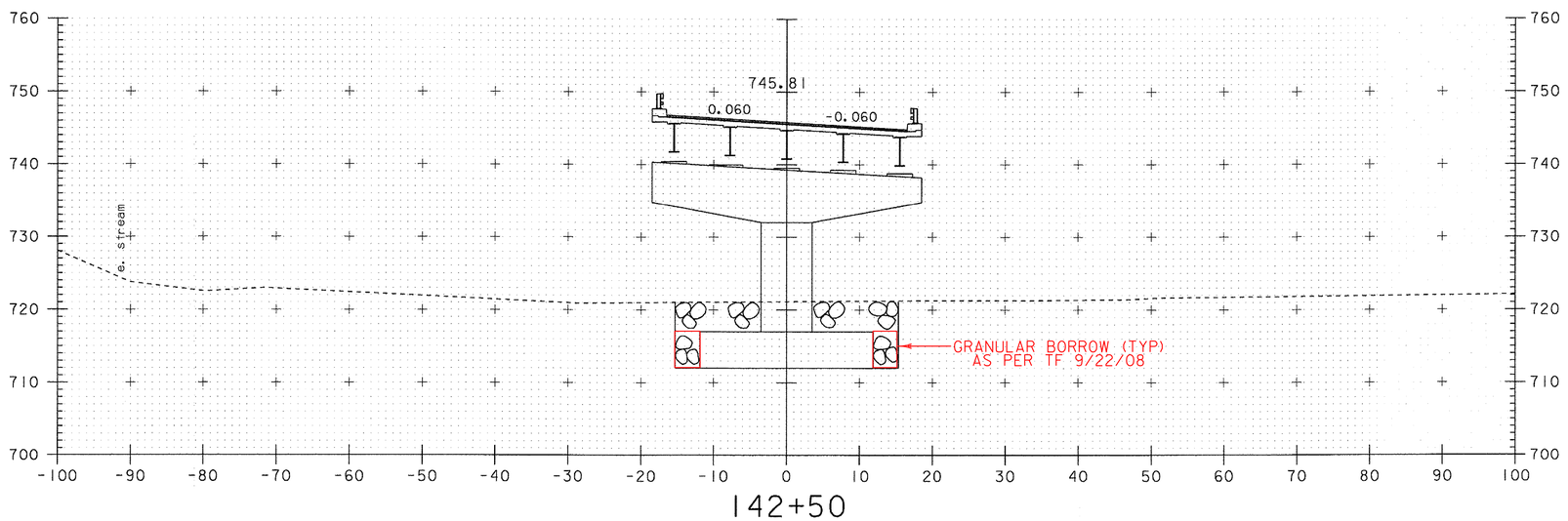
MAINLINE CROSS SECTIONS STA. 141+50 – STA. 142+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x11.i	SHEET 119 OF 144



143+00



142+50

Stonefill 23.75'x23.75'x4' − (π3.5²x4') + (8'x4'x31.75')2 + (8'x4'x23.75')2
2256.25ft³ − 153.94ft³ + 2032.0ft³ + 1520.0ft³

$\frac{5654.31\,ft^3}{27\,ft^3/cy} = 209.42\,cy$ to add to channel total

NRC 12/18/09
DGB 1/13/11

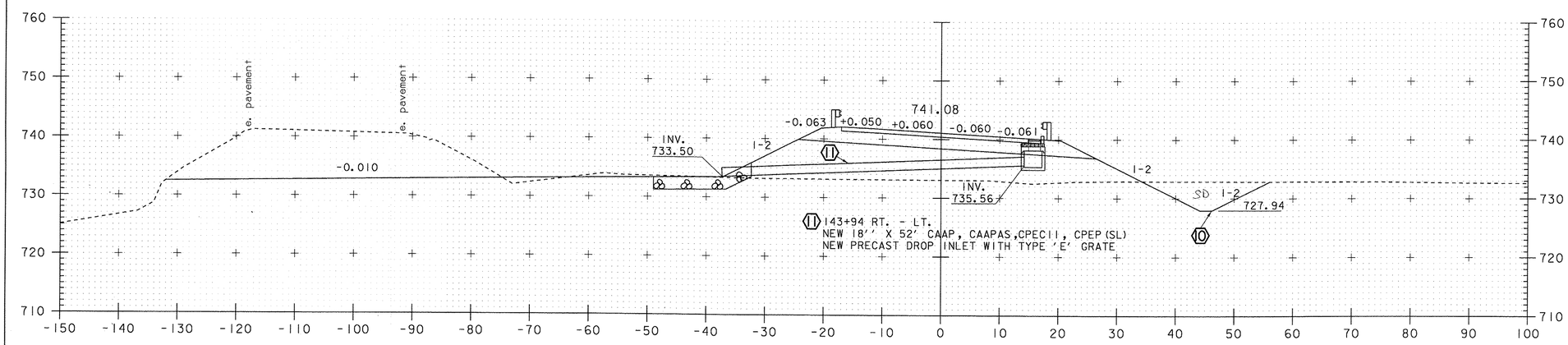
SCALE 1" = 10'-0
10 0 10

MAINLINE CROSS SECTIONS
STA. 142+50 – STA. 143+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)

FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x12.i	SHEET 120 OF 144

STA 144+18.29
EB = 262.61ft² = (338.38ft² + 186.83ft²)/2

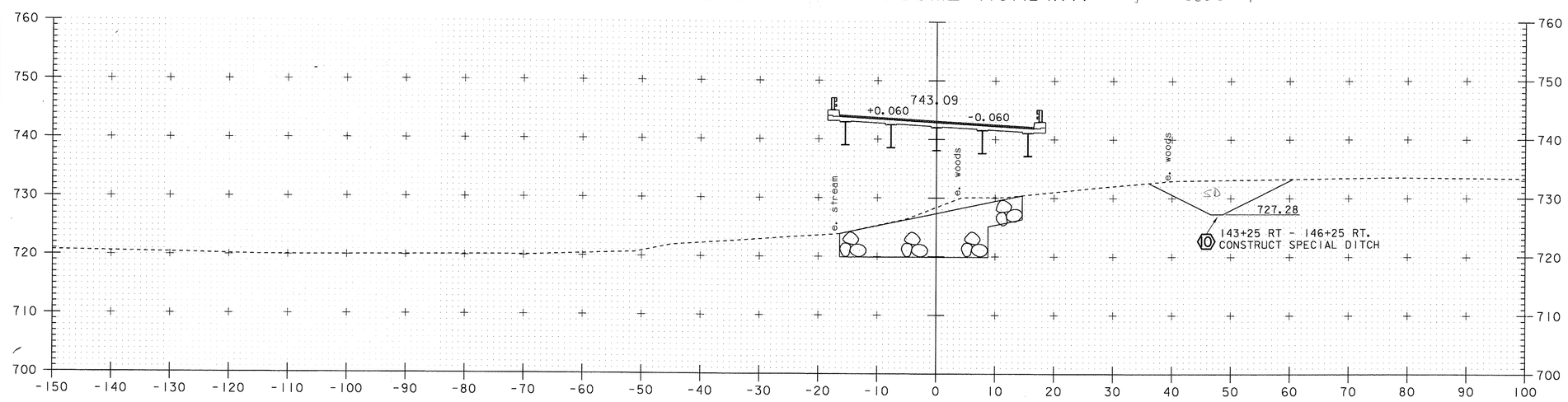


144+00

143+82.5 End App. Slab

143+62.50 END BRIDGE/ RESUME ROADWAY

Begin 4' DGCS Taper



143+50

SCALE 1" = 10'-0
10 0 10

Common Ex 351.07 + 6.61 = 357.68ft²
EB 5.82ft² + 332.56ft² = 338.38ft²
GB Tobe Subtracted
DGCS 97.13ft² @ STA 144+12.5
SAND 52.46ft² @ STA 144+12.5

STA 143+63.3 D Ave. width
DGCS = 143.19ft² = 3.33' . 42.96'
SD = 58.34ft²

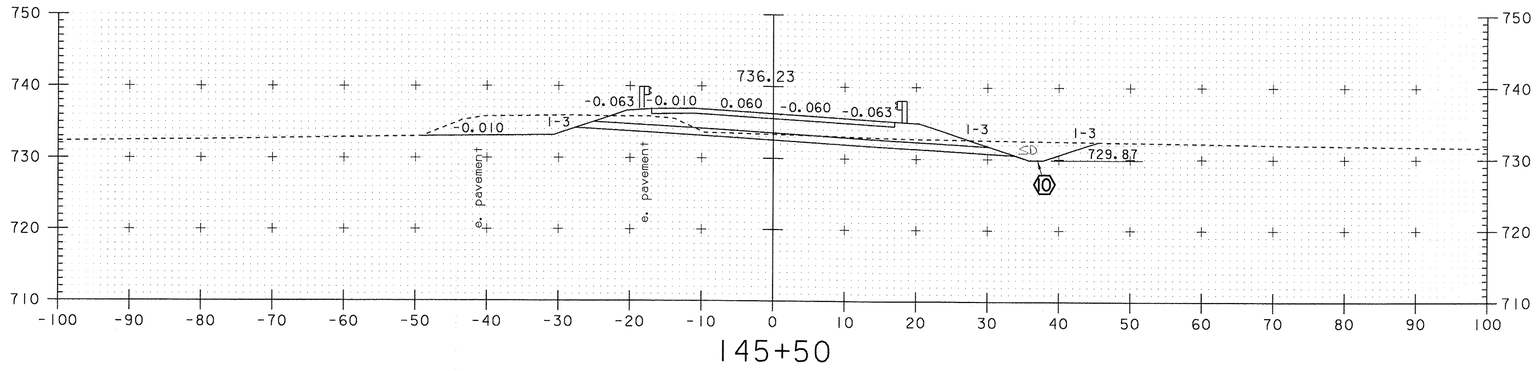
SD 77.57ft²

used Channel for Stonefill

NRC 12/16/09
DGB 1/19/11

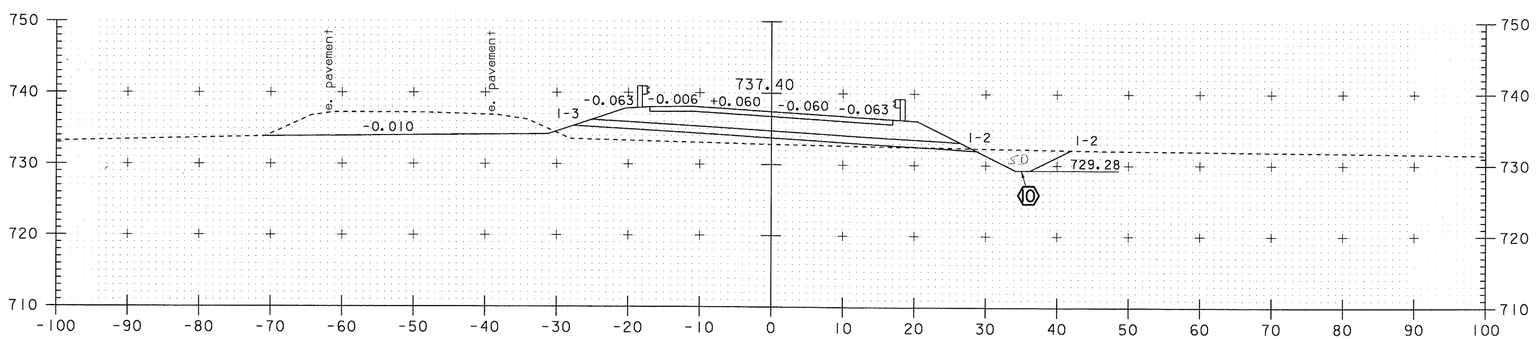
MAINLINE CROSS SECTIONS STA. 143+50 – STA. 144+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x13.i	SHEET 121 OF 144



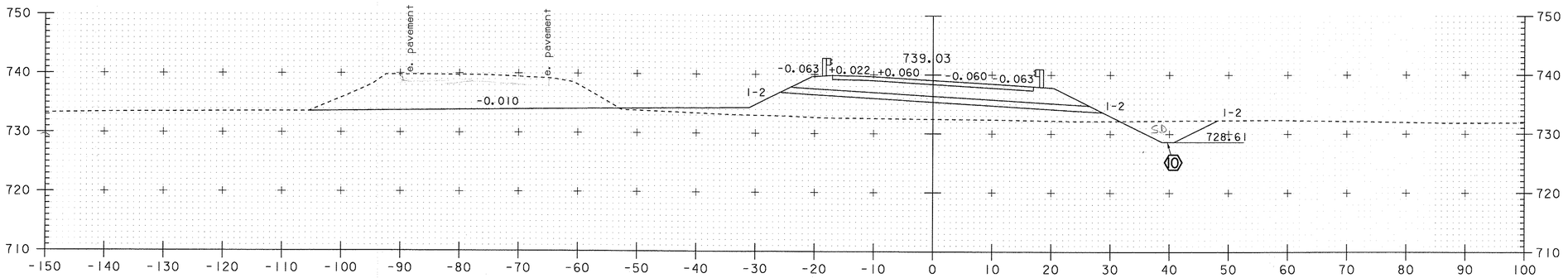
145+50

Common Ex 125.77 ft² w/o Ditch
EB 0 ft²
DGCS 79.19 ft²
Sand 58.48 ft²
SD 26.75 ft²



145+00

Common Ex 104.78 + 1.25 ft²
EB 50.94 ft²
DGCS 95.19 ft²
Sand 54.04 ft²
SD 23.58 ft²



144+50

Common Ex 232.05 ft²
EB 186.83 ft²
DGCS 95.64 ft²
Sand 52.46 ft²
SD 33.49 ft²

NRC 12/16/09
DGB 1/19/11

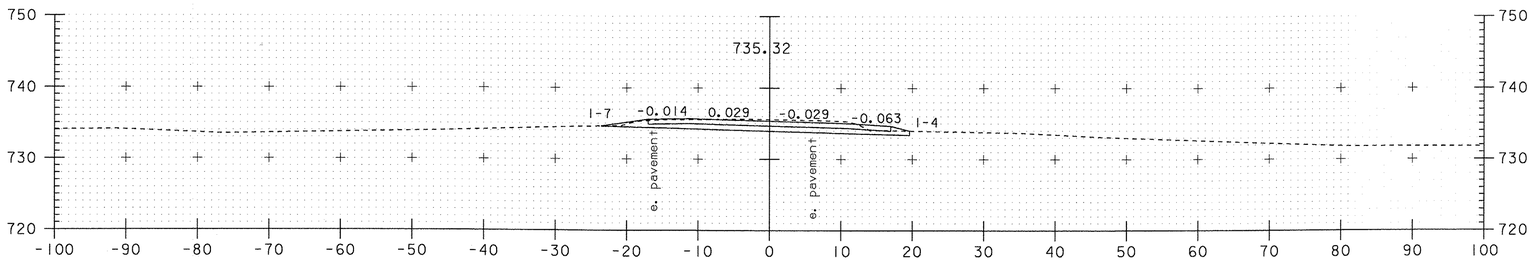
SCALE 1" = 10'-0
10 0 10

MAINLINE CROSS SECTIONS STA. 144+50 – STA. 145+50

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)

FILE NAME- /78f238/str5/df268xs1.dgn
PROJECT LEADER- K. HIGGINS
DESIGNED BY- T. SUMNER
df238x14.i

PLOT DATE- 06-FEB-2008
DRAWN BY- G. SHANGRAW
CHECKED BY- T. FILLBACH
SHEET 122 OF 144

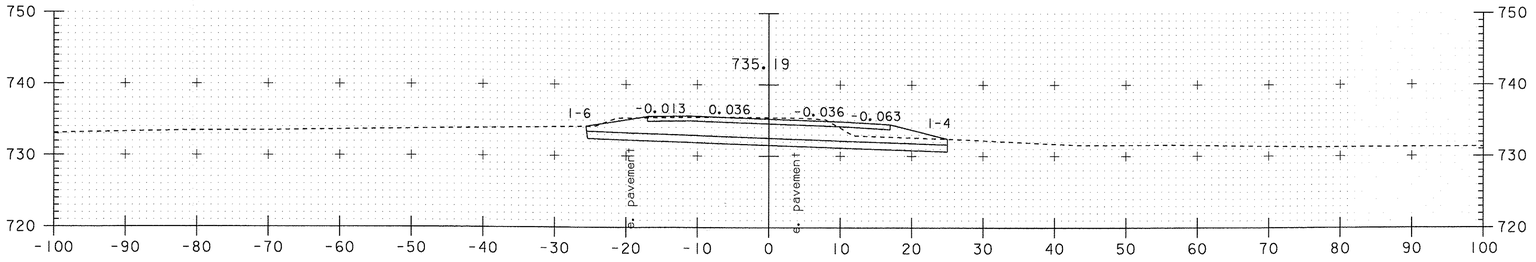


Common Ex 50.27 ft²
EB 0 ft²
DGCS 29.38 ft²

147+00

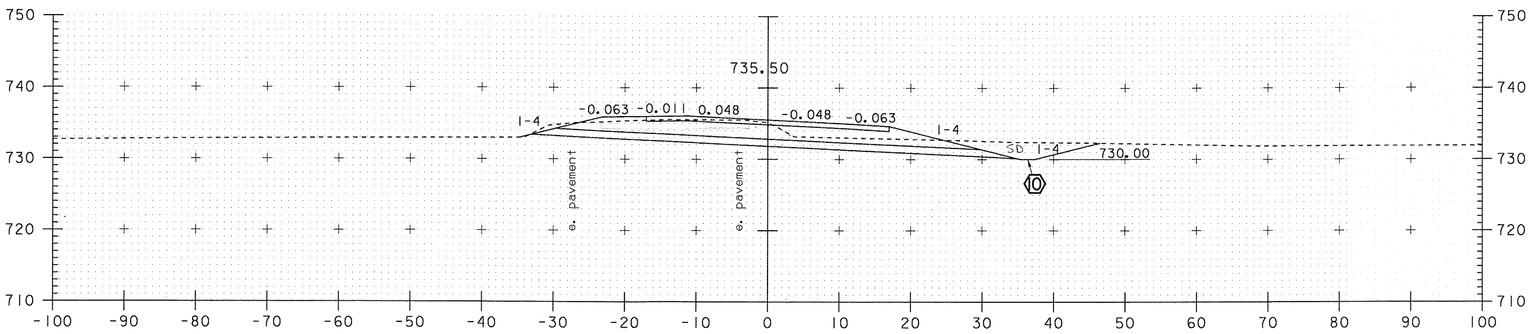
146+75 END PROJECT
BEGIN APPROACH

End sand box cut at 146+75
Begin DGCS Taper at 146+75



Common Ex 149.29 ft²
EB 0 ft²
DGCS 93.19 ft²
Sand 50.50 ft²

146+50



Common Ex 143.49 ft²
EB 0.10 ft²
DGCS 102.98 ft²
Sand 63.78 ft²
SD 28.62 ft²

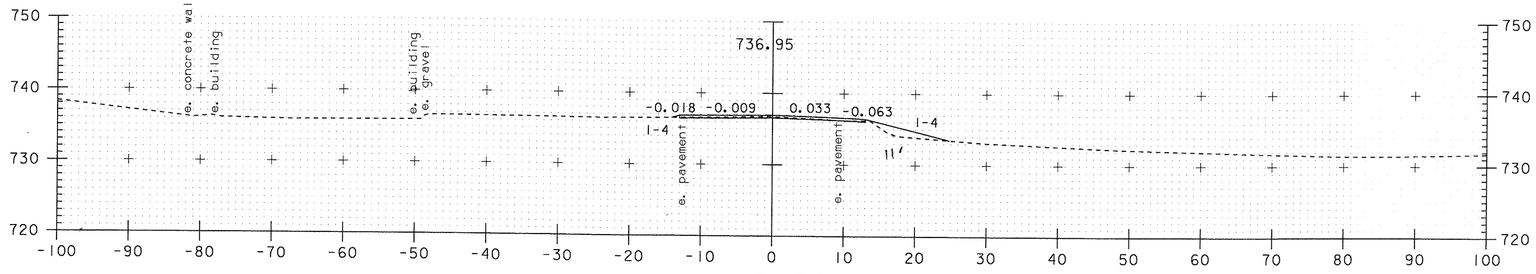
146+00

SCALE 1" = 10'-0
10 0 10

NRC 12/16/09
DGB 11/9/11

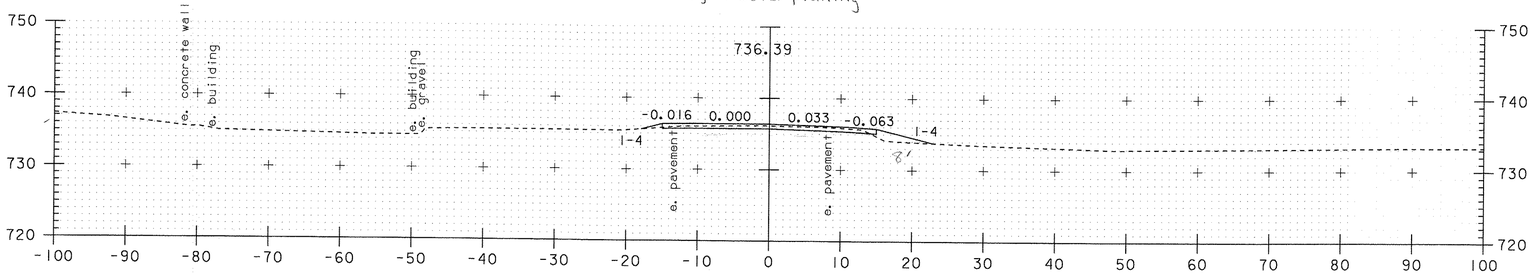
MAINLINE CROSS SECTIONS STA. 146+00 – STA. 147+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238x15.i	SHEET 123 OF 144



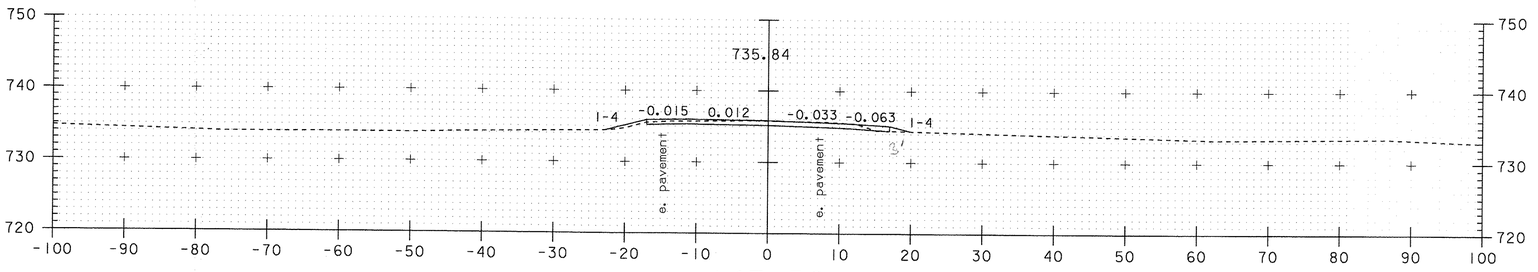
148+50

148+00 Begin Cold planing

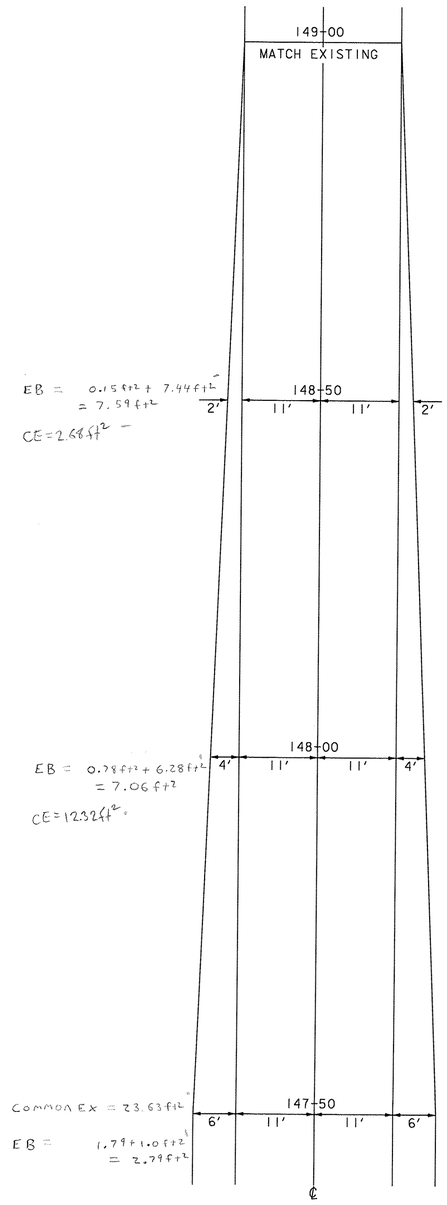


148+00

147+50 End DGCS Taper



147+50



EB = 0.15ft² + 7.44ft² = 7.59ft²

CE=2.68ft²

EB = 0.78ft² + 6.28ft² = 7.06ft²

CE=12.32ft²

Common Ex = 23.63ft²

EB = 1.79ft + 1.0ft² = 2.79ft²

NRC 12/16/09
DGB 11/19/11

WIDTH TRANSITION

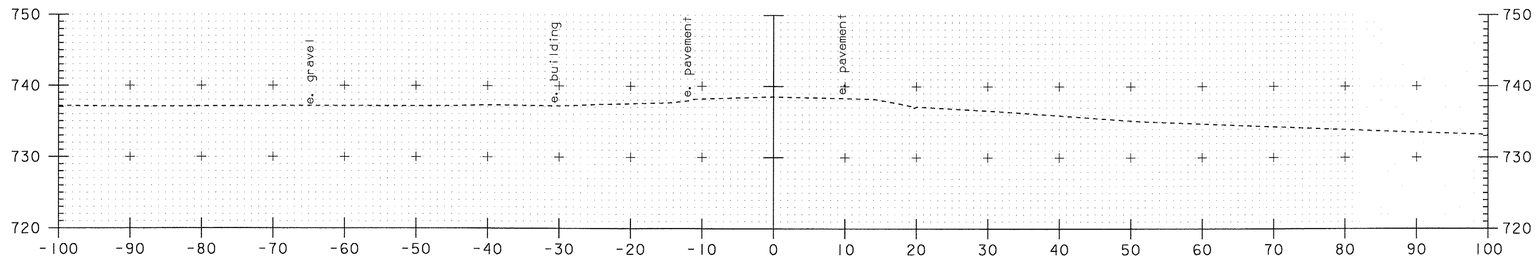
SCALE 1"-10'-0
10 0 10

MAINLINE CROSS SECTIONS STA. 147+50 – STA. 148+50

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)

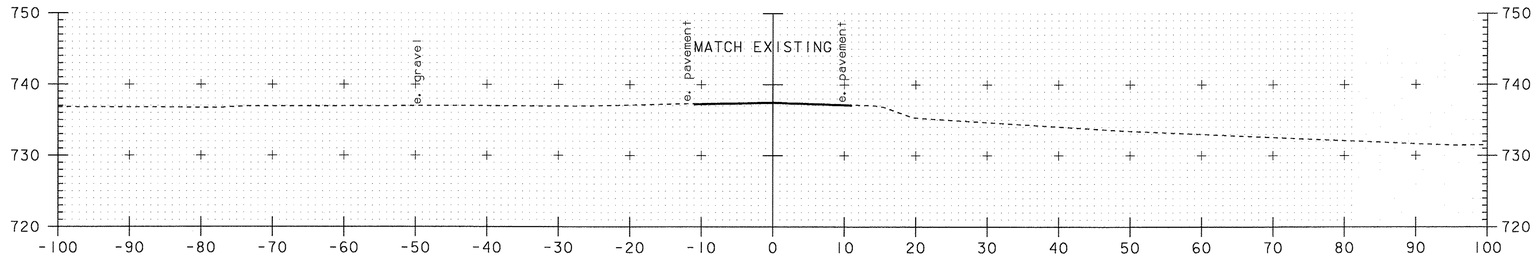
FILE NAME- /78f238/str5/df268xs1.dgn
PROJECT LEADER- K. HIGGINS
DESIGNED BY- T. SUMNER
df238x16.i

PLOT DATE- 06-FEB-2008
DRAWN BY- G. SHANGRAW
CHECKED BY- T. FILLBACH
SHEET 124 OF 144



149+50

149+00 End cold planing



149+00

END APPROACH

SCALE 1"=10'-0

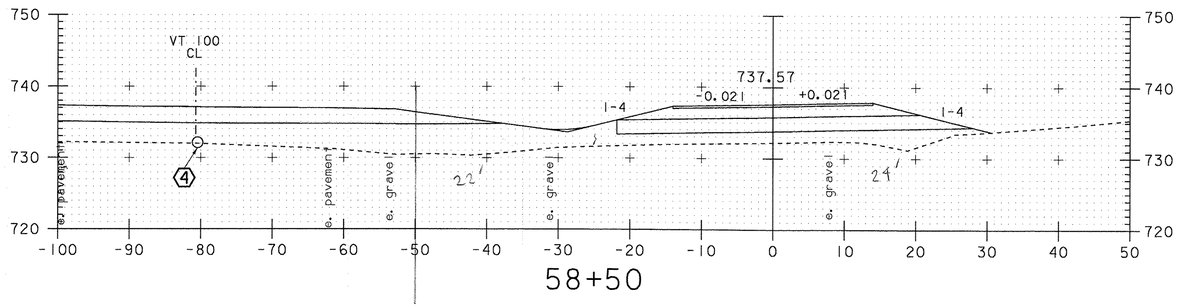
10 0 10

MAINLINE CROSS SECTIONS STA. 149+00 – STA. 149+50

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

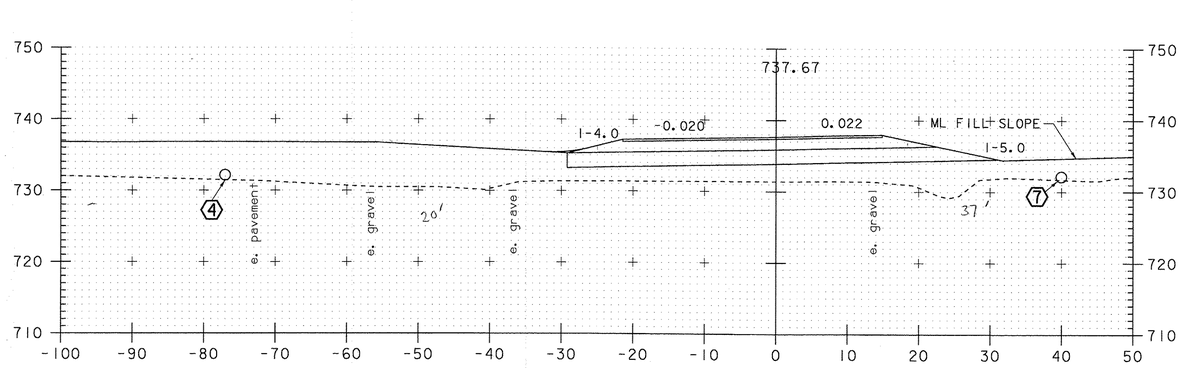
FILE NAME- /78f238/str5/df268xs1.dgn
PROJECT LEADER- K. HIGGINS
DESIGNED BY- T. SUMNER
df238x17.i

PLOT DATE- 06-FEB-2008
DRAWN BY- G. SHANGRAW
CHECKED BY- T. FILLBACH
SHEET 125 OF 144



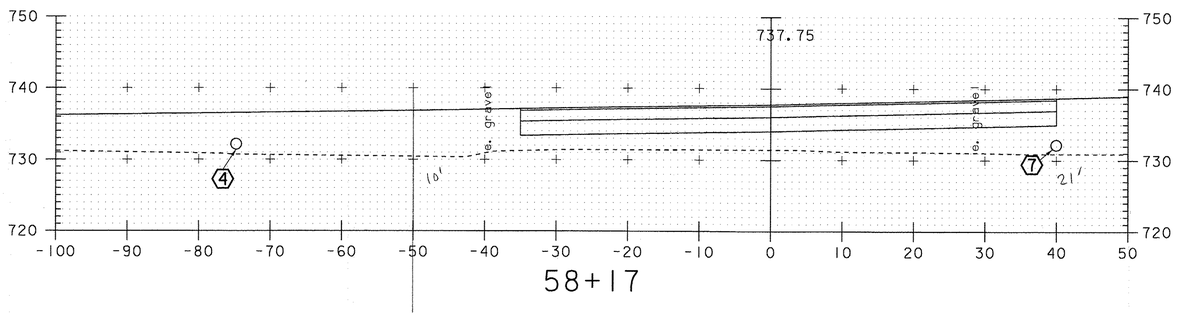
58+50

EB = 185.08 ft²
DGCS = 54.95 ft²
Sand = 92.28 ft²
Agg Surface = 8.17 ft²



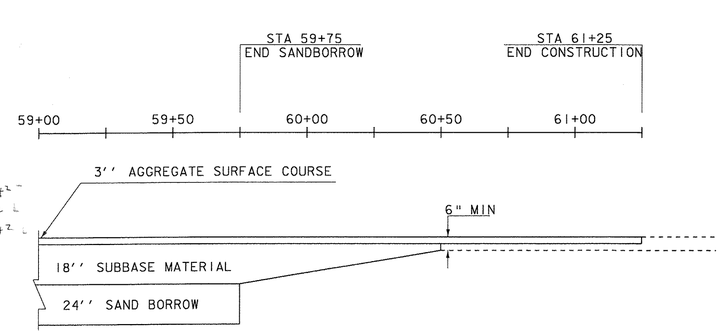
58+25

EB = 213.36 ft²
DGCS = 67.83 ft²
Sand = 113.90 ft²



58+17

BEGIN CONSTRUCTION



TIMBER HAWK ROAD
SUBBASE TRANSITION

NTS

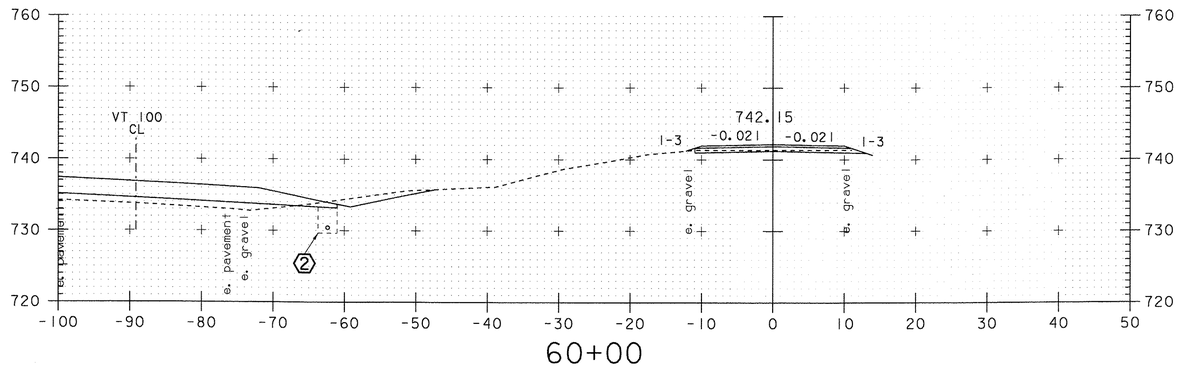
EB = 380.22 ft²
DGCS = 112.51 ft²
Sand = 150.01 ft²

NRC 12/16/09
DCB 1/19/11

TIMBER HAWK ROAD
CROSS SECTIONS
STA. 58+17 – STA. 58+50

SCALE 1"=10'-0
10 0 10

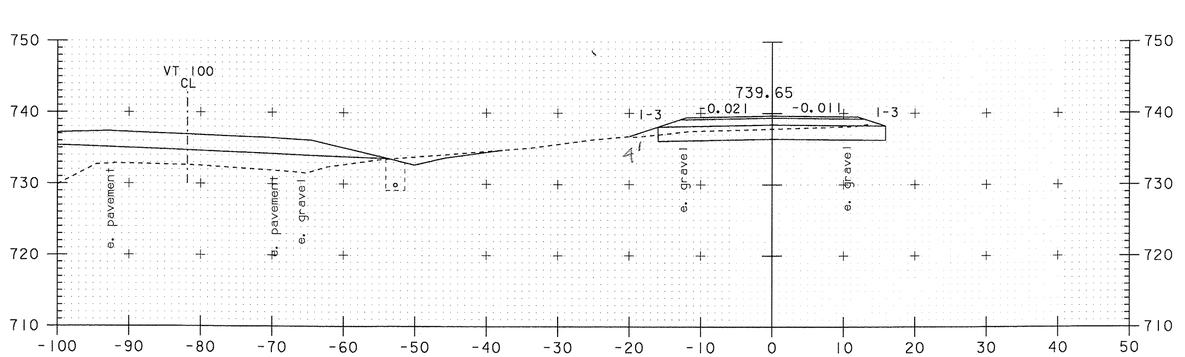
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238txl.i	SHEET 126 OF 144



60+00

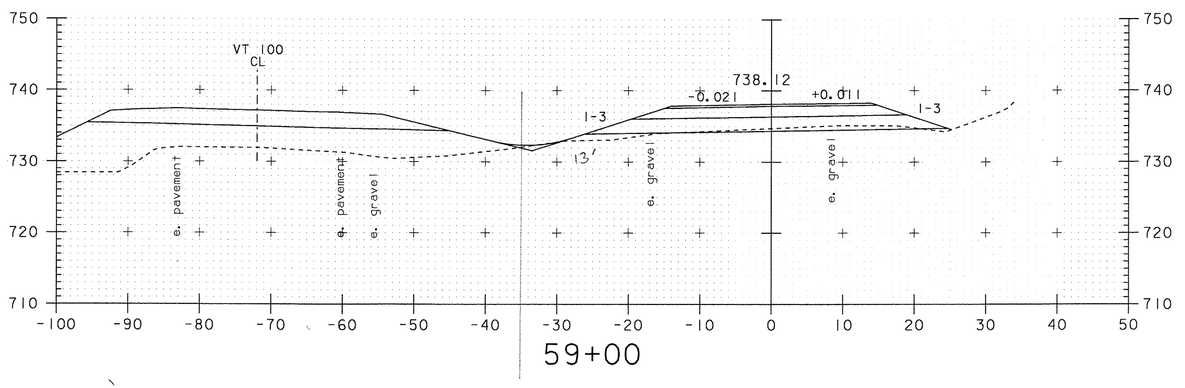
Common Ex = 6.42 ft2
EB = 0.19 ft2
DGCS = 15.29 ft2
Sand = 0 ft2
Agg Surface = 6.11 ft2

59+75 end sand



59+50

Common Ex = 48.52 ft2
EB = 2.52 ft2
DGCS = 27.66 ft2 23.66ft2@59+75 adjusted
Sand = 63.70 ft2 - 58.39ft2 @59+75 adjusted
Agg Surface = 7.27 ft2
2' width loss from 59+50 to 59+75



59+00

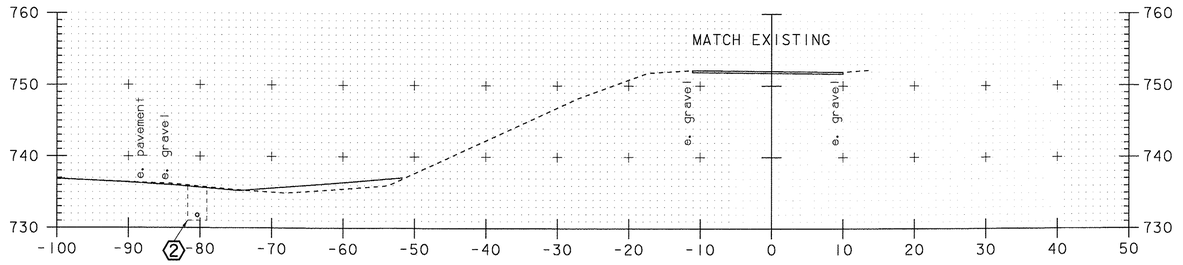
Common Ex = 12.64 ft2
EB = 8.13+ 1.02 ft2 =
DGCS = 49.88 ft2
Sand = 89.41 ft2
AGG Surface = 8.56 ft2

NRC 12/16/09
DGB 1/13/11

TIMBER HAWK ROAD
CROSS SECTIONS
STA. 59+00 – STA. 60+00

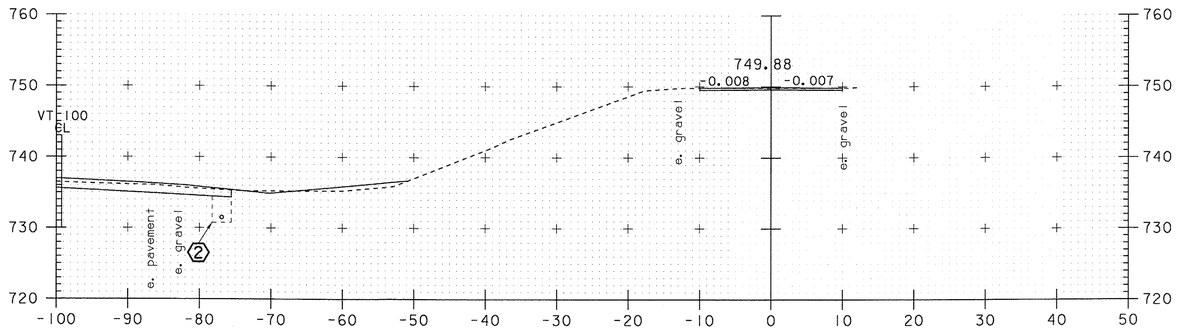
SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238tx2.i	SHEET 127 OF 144

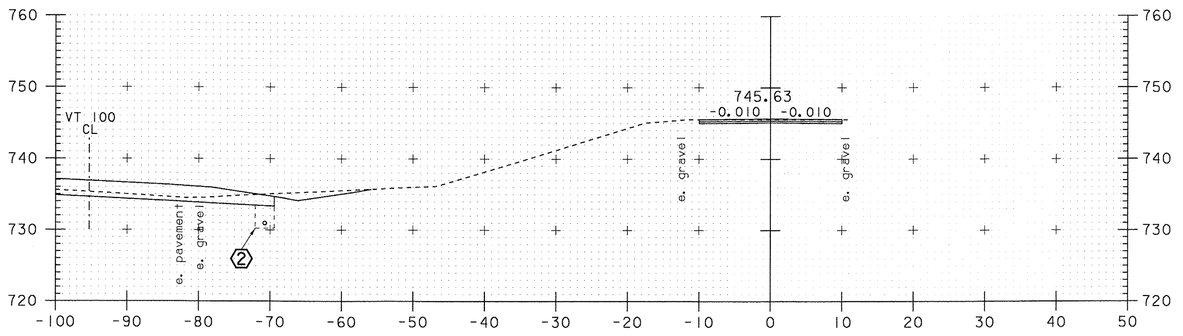


61+25

END CONSTRUCTION



61+00

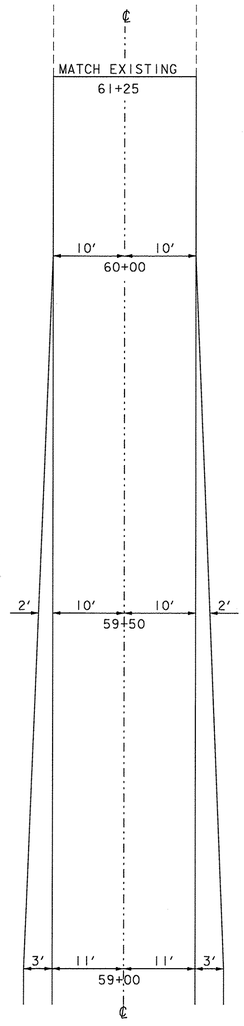


60+50

Common Ex = 5.29 ft²
Agg Surface = 5.29 ft²

Common Ex = 5.04 ft²
Agg Surface = 5.83 ft²

Common Ex = 9.81 ft²
DGCS = 5.0 ft²
Agg Surface = 5.83 ft²



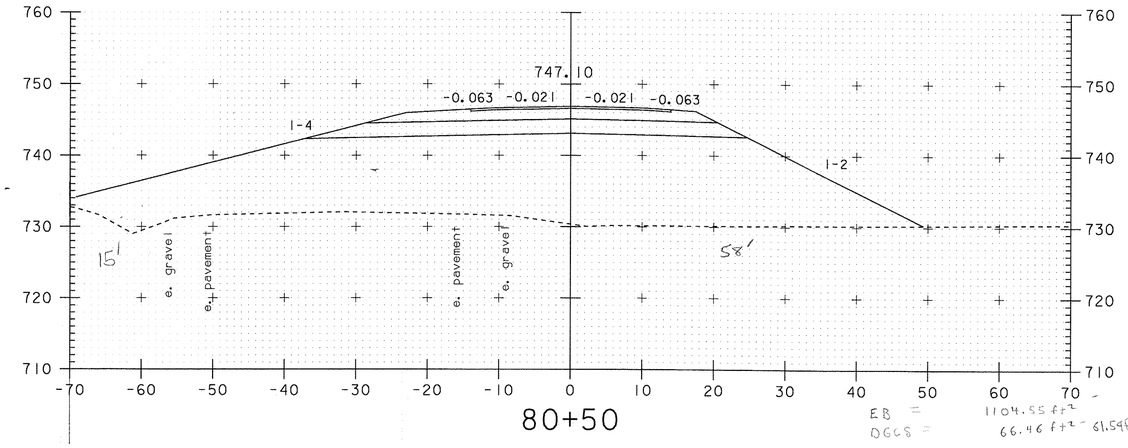
WIDTH TRANSITION

NBC 12/16/09
DGB 1/19/11

TIMBER HAWK ROAD
CROSS SECTIONS
STA. 60+50 – STA. 61+25

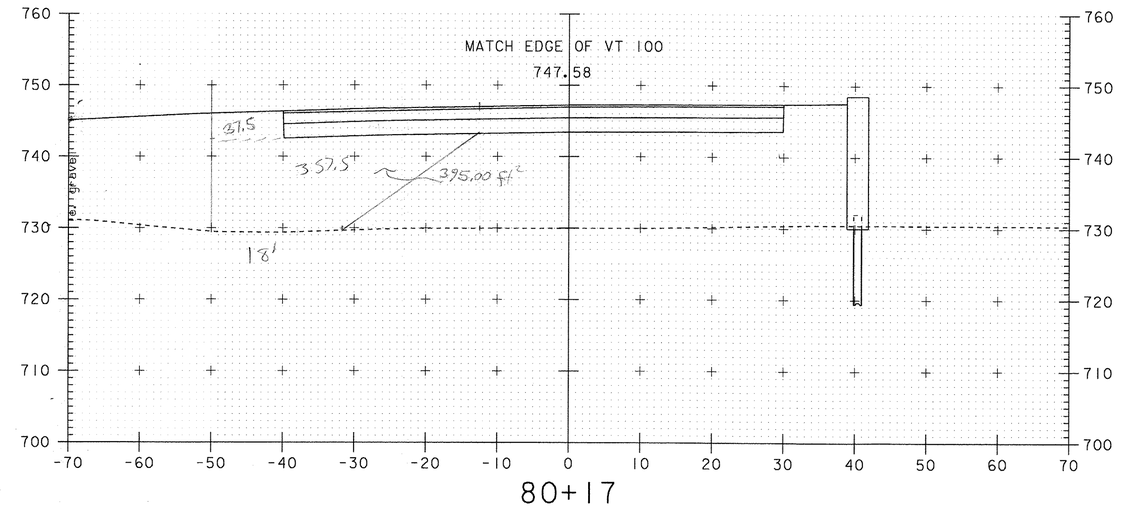
SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238fx3.i	SHEET 128 OF 144



80+50

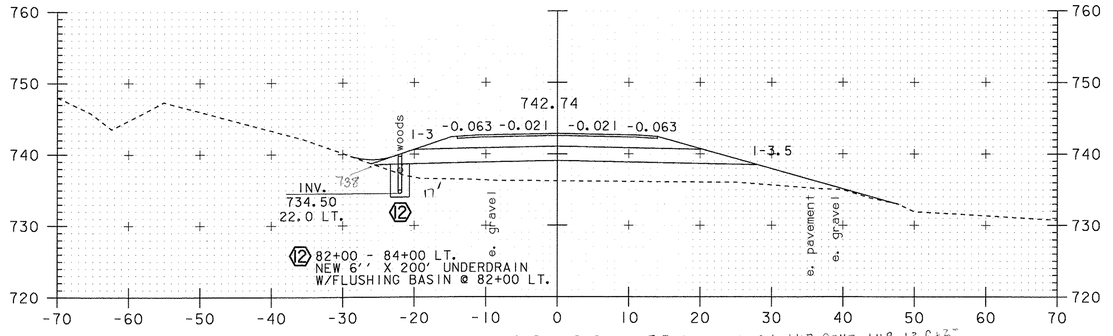
EB = 1104.55 ft²
DGCS = 66.46 ft² - 61.59 ft² @ 80+25
Sand = 111.13 ft² -
Agg Surface = 8.19 ft² -



80+17

BEGIN CONSTRUCTION

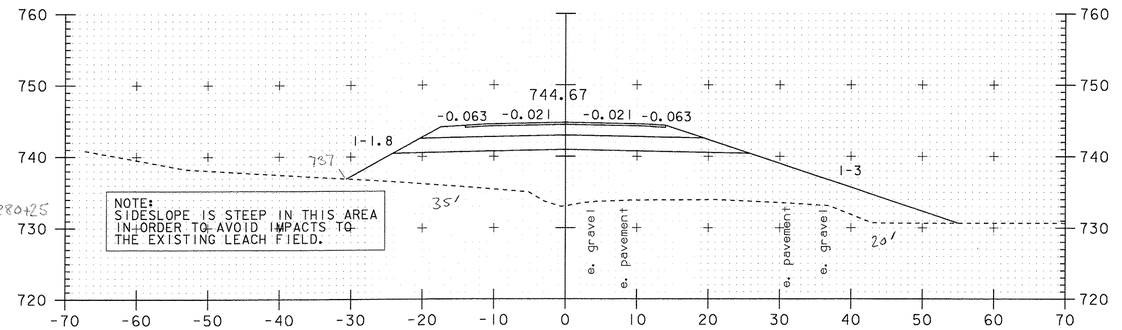
EB = 1249.79 ft² -
DGCS = 102.81 ft² -
Sand = 137.59 ft² -



82+00

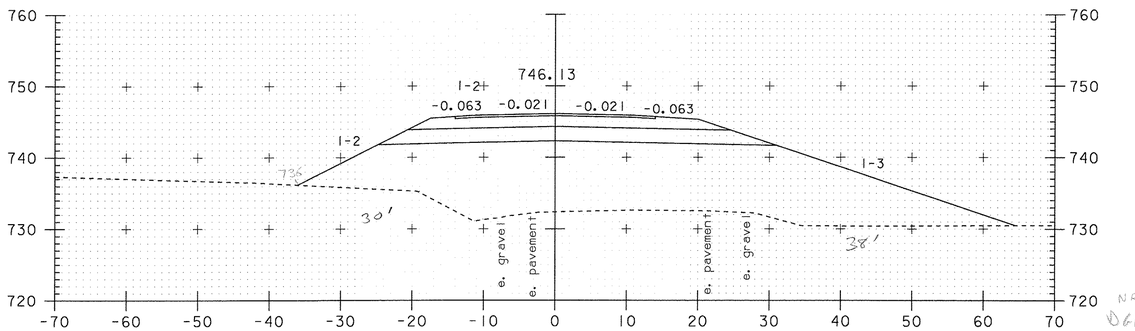
EB = 1.306 + 147.824 = 149.13 ft² -
DGCS = 51.26 ft² -
Sand = 95.0 ft² -
Agg Surface = 8.17 ft² -

877.6465



81+50

EB = 425.60 ft² -
DGCS = 53.75 ft² -
Sand = 89.54 ft² -
Agg Surface = 8.17 ft² -



81+00

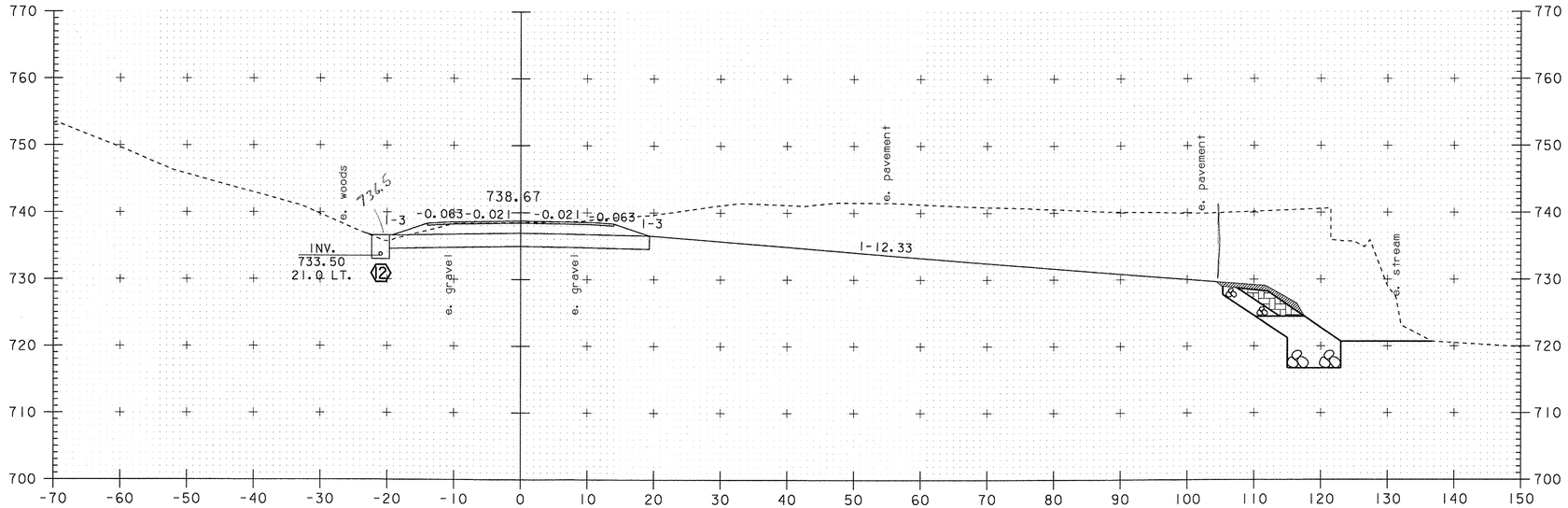
EB = 741.44 ft² -
DGCS = 62.03 ft² -
Sand = 100.94 ft² -
Agg Surface = 8.17 ft² -

NRC 12/16/08
DGD 1/13/11

TIMBER RIVER ROAD CROSS SECTIONS STA. 80+17 – STA. 82+00

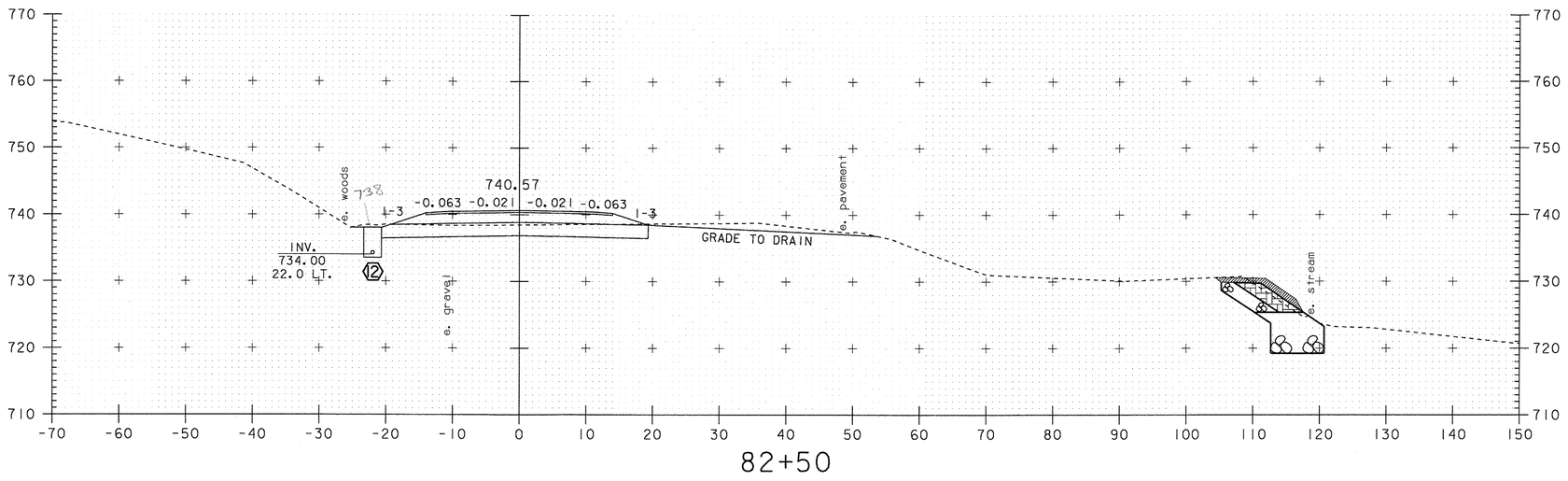
SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df23rx1.i	SHEET 129 OF 144



83+00

Common Ex = 664.49 + 126.15 = 791.29 ft²
EB = 0 ft² -
DGCS = 50.53 ft² -
Sand = 78.42 ft² -
Agg Surface = 8.17 ft² -



82+50

Common Ex = 1.68 + 21.48 + 72.65 = 95.81 ft²
EB = 0 ft² -
DGCS = 50.53 ft² -
Sand = 79.72 ft² -
Agg Surface = 8.17 ft² -

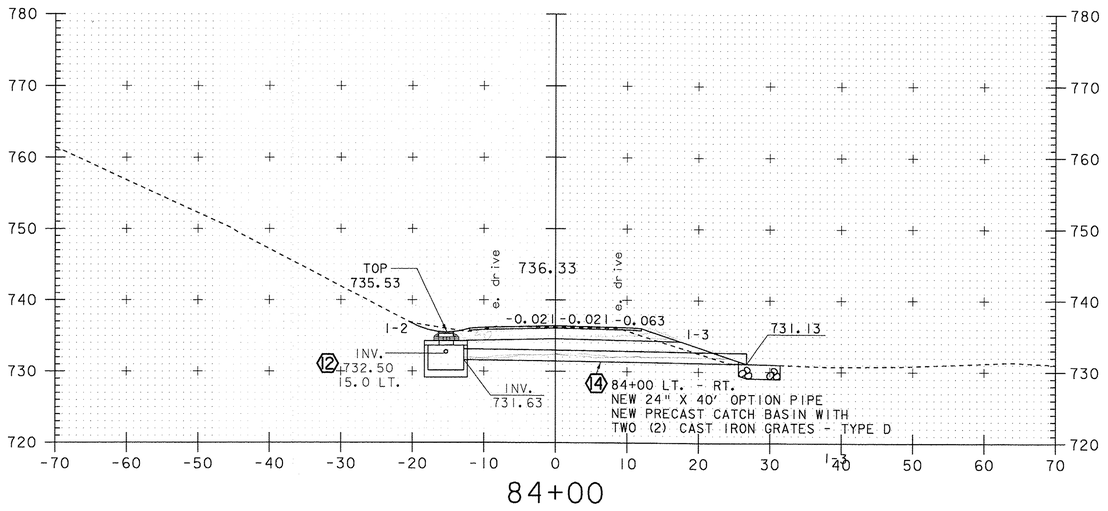
NRC 12/16/09
DGB 11/19/11

TIMBER RIVER ROAD
CROSS SECTIONS
STA. 82+50 – STA. 83+00

SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df23rx2.i	SHEET 130 OF 144

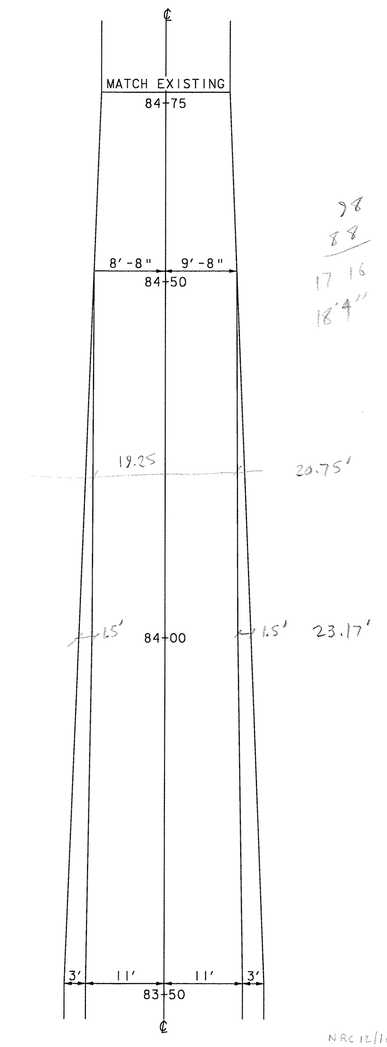
Sand to 84+25



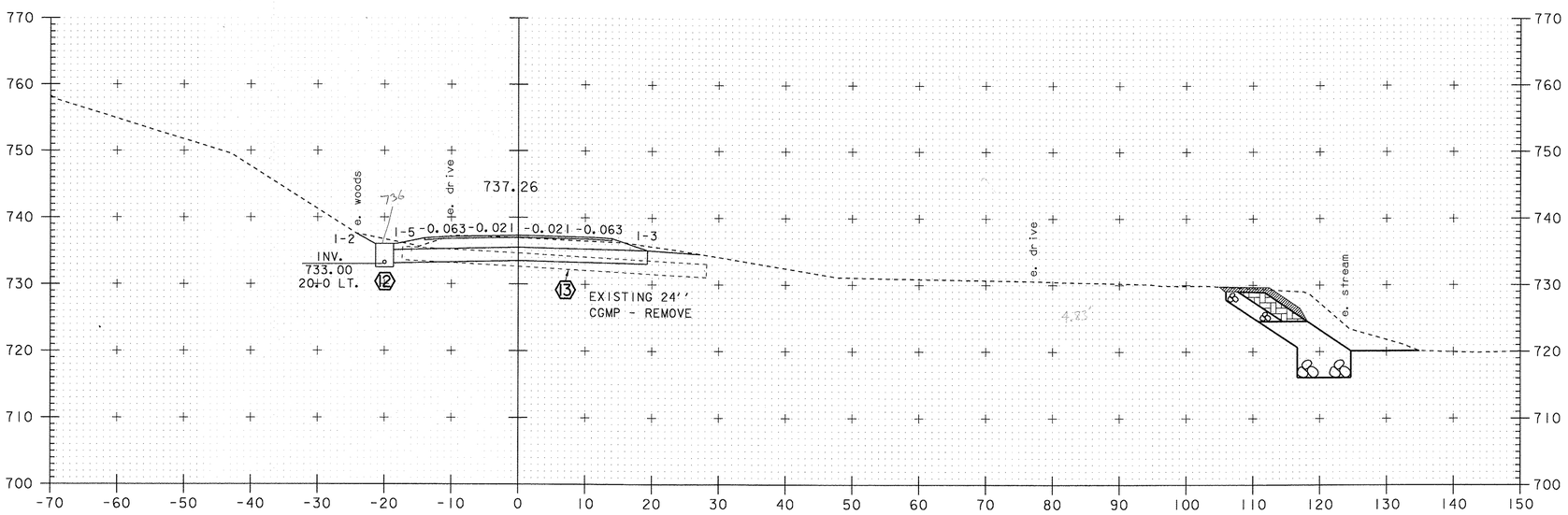
84+00

Common Ex = 2.66 + 136.18 ft² = 138.84 ft²
EB = 0.40 + 7.85 ft² = 8.25 ft²
DGCS = 43.34 ft² 38.81@84+25
Sand = 58.70 ft²
Agg Surface = 7.0 ft²

Trench Earth = 33.25 ft² for 24" ϕ Pipe



98
88
17 16
18'4"



83+50

Common Ex = 3.64 + 3.79 ft² + 123.64 = 131.07 ft²
EB = 3.12 ft²
DGCS = 51.93 ft²
Sand = 75.98 ft²
Agg Surface = 8.17 ft²

SCALE 1" = 10'-0
10 0 10

WIDTH TRANSITION

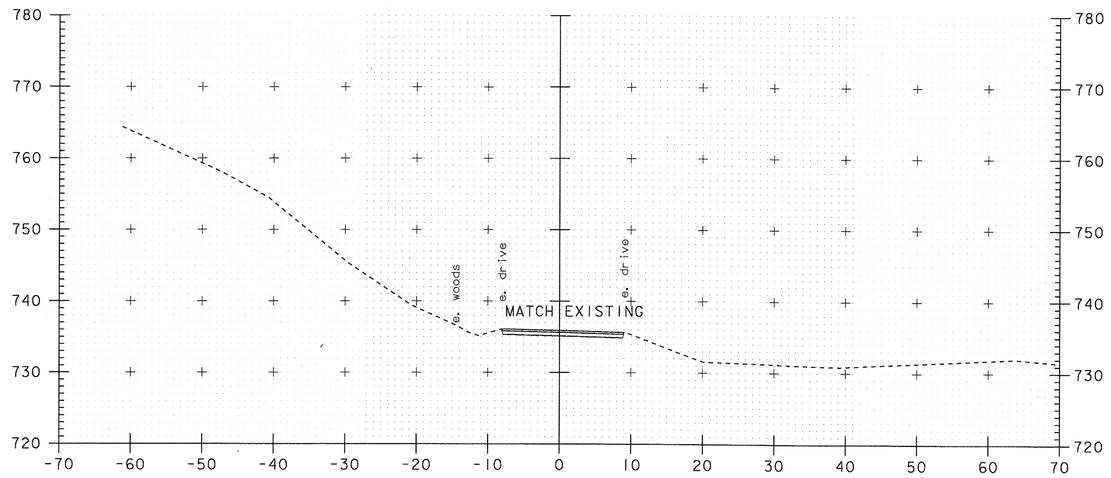
NRC 12/16/09
DGB 1/13/11

TIMBER RIVER ROAD
CROSS SECTIONS
STA. 83+50 – STA. 84+00

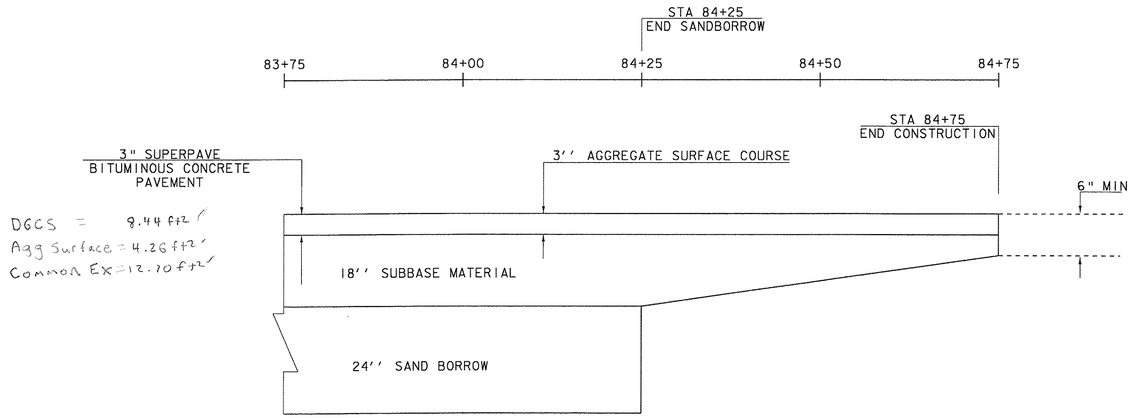
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

FILE NAME- /78f238/str5/df268xs1.dgn
PROJECT LEADER- K. HIGGINS
DESIGNED BY- T. SUMNER
df23rx3.i

PLOT DATE- 06-FEB-2008
DRAWN BY- G. SHANGRAW
CHECKED BY- T. FILLBACH
SHEET 131 OF 144

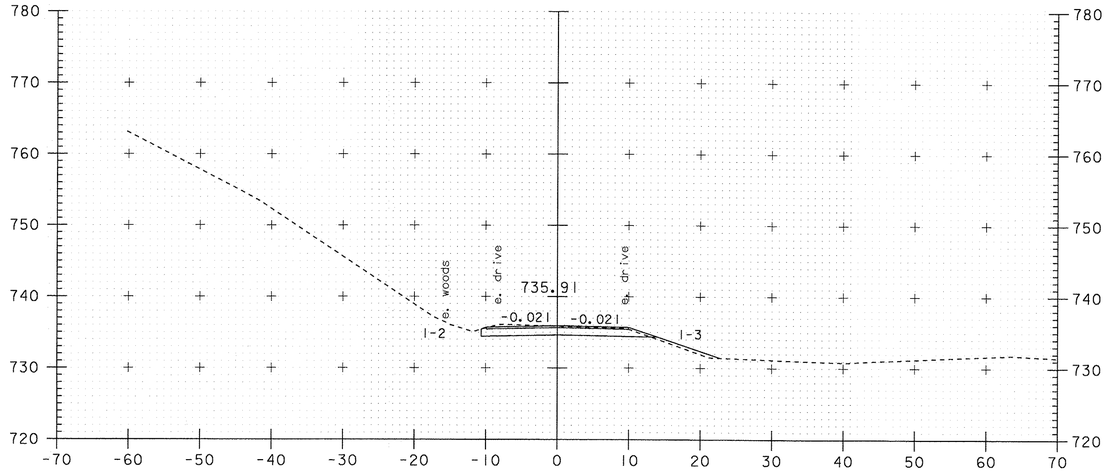


84+75
END CONSTRUCTION



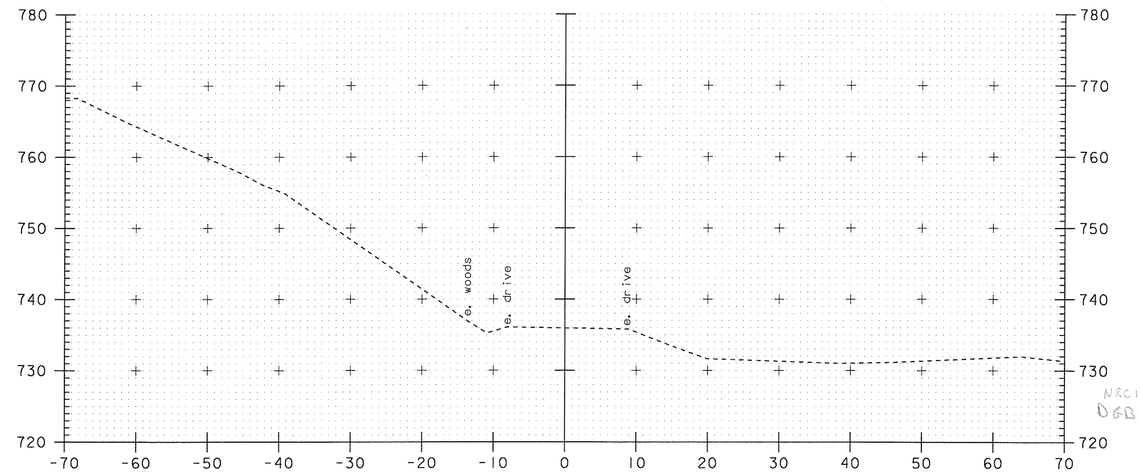
TIMBER RIVER ROAD
SUBBASE TRANSITION

NTS



84+50

Common Ex = 28.31 ft2
EB = 3.33 ft2
DGCS = 23.74 ft2
Sand = 0 ft2
Agg Surface = 4.76 ft2



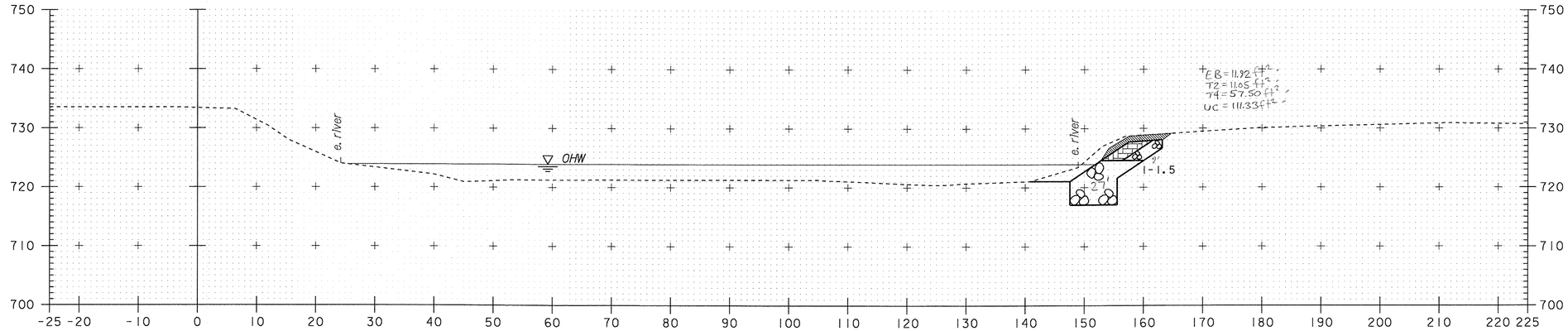
85+00

NRC 12/16/09
DGB 1/13/11

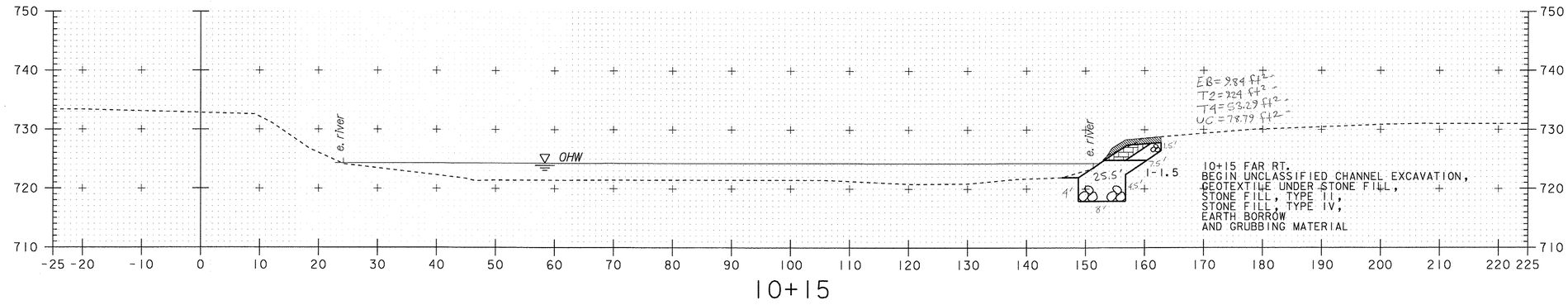
TIMBER RIVER ROAD
CROSS SECTIONS
STA. 84+50 – STA. 85+00

SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df23rx4.i	SHEET 132 OF 144



10+25



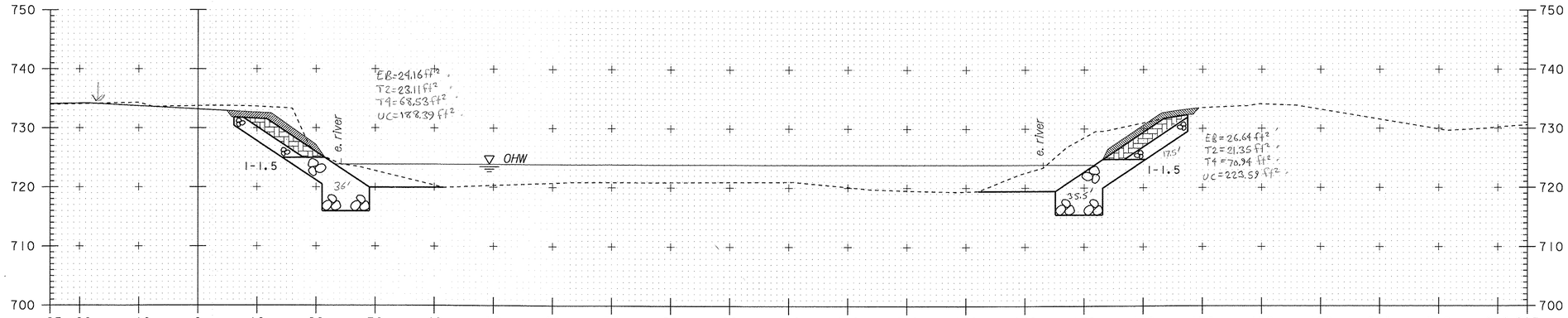
10+15

NRC 12/16/09
DGB 1/13/10

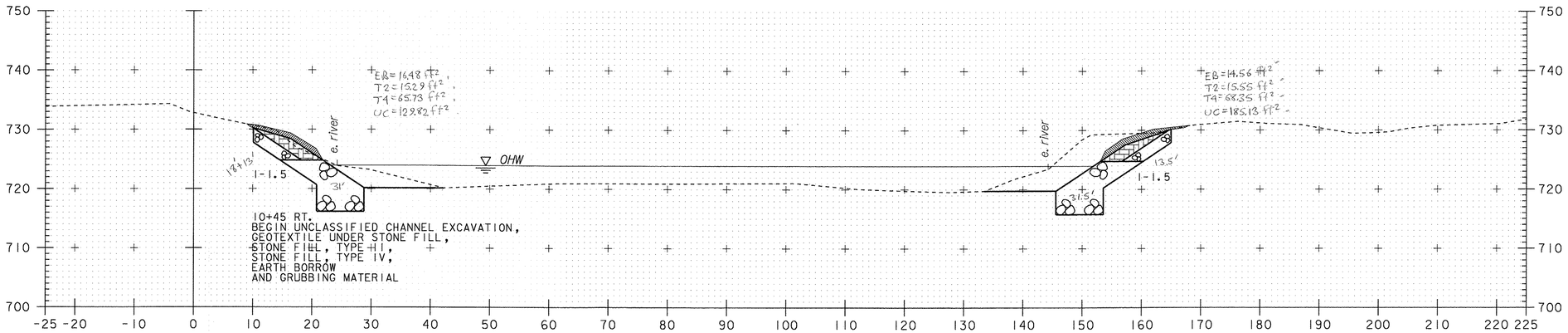
CHANNEL CROSS SECTIONS STA. 10+15 – STA. 10+25

SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c01.i	SHEET 133 OF 144



10+50



10+45

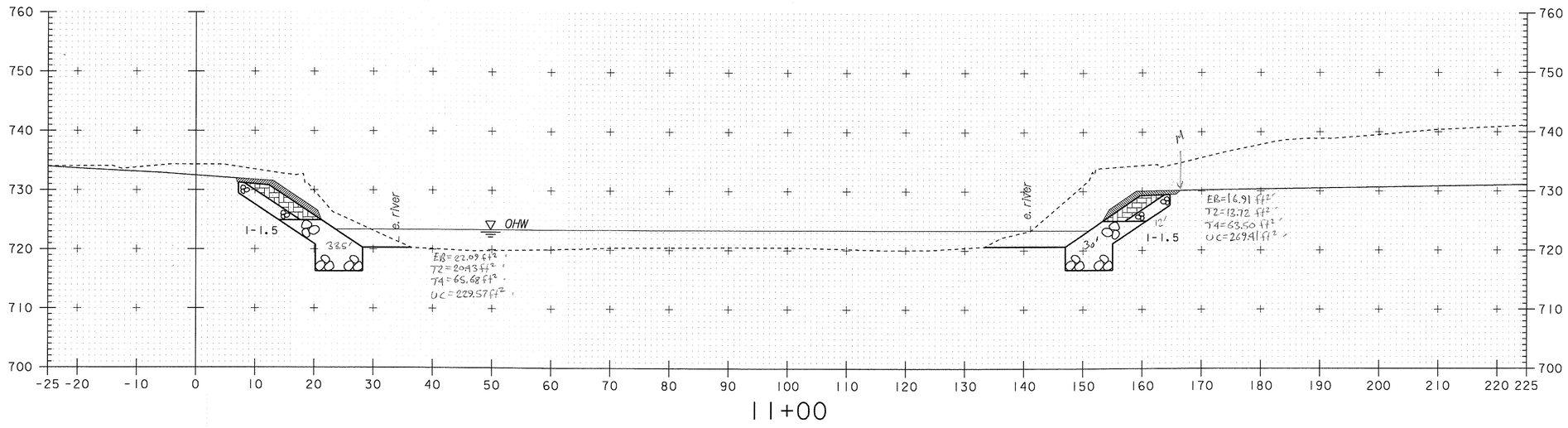
NRC 12/16/09
DEB 1/19/11

CHANNEL CROSS SECTIONS STA. 10+45 – STA. 10+50

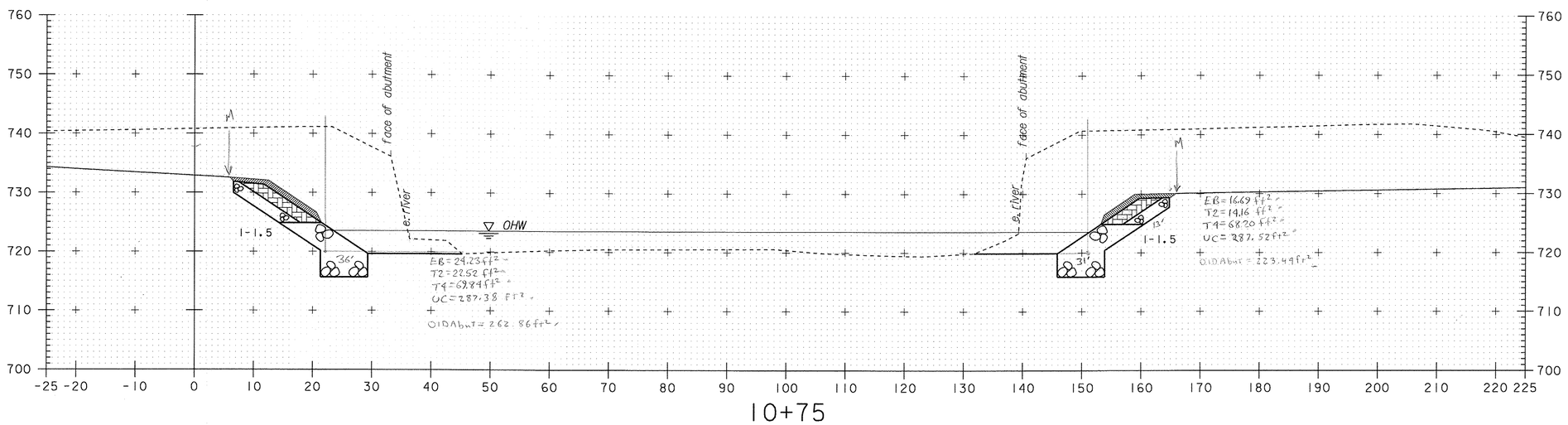
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

SCALE 1" = 10'-0
10 0 10

FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c02.i	SHEET 134 OF 144



11+00



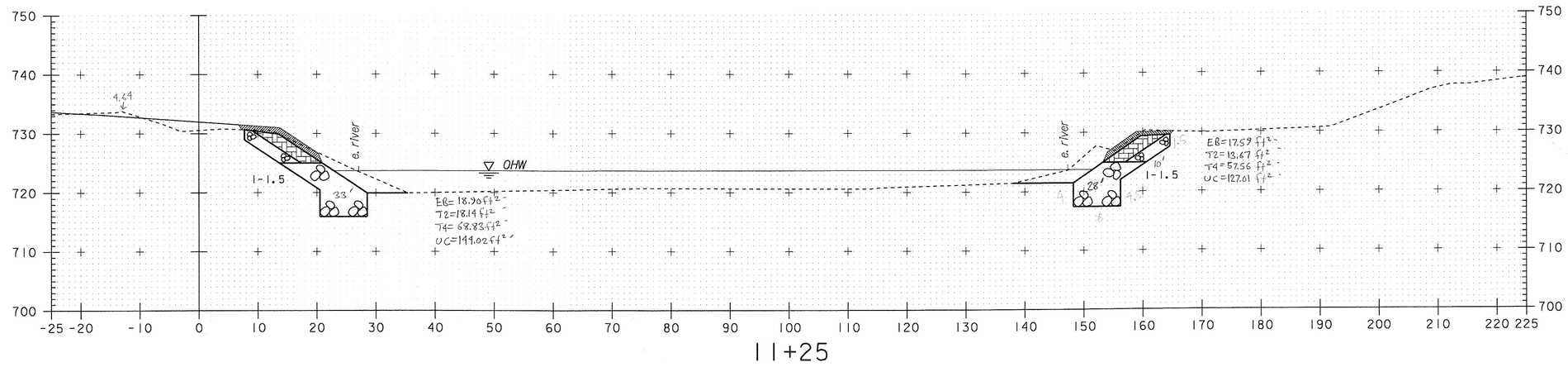
10+75

NRC 12/16/09
DGB 1/13/11

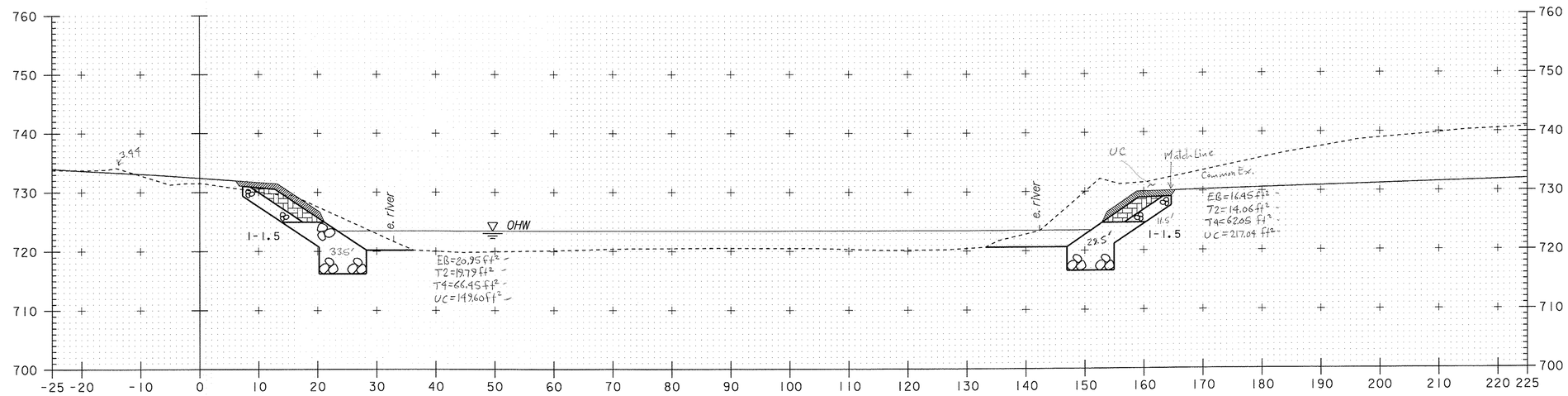
CHANNEL CROSS SECTIONS STA. 10+75 – STA. 11+00

SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c03.i	SHEET 135 OF 144



11+25



11+05

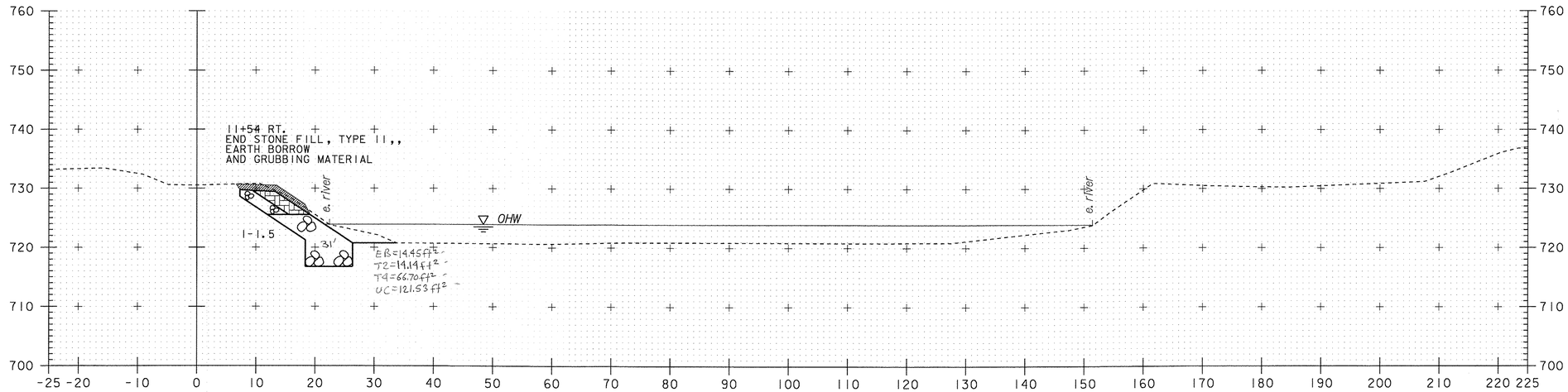
NRC 12/16/09
DCB 1/13/11

CHANNEL CROSS SECTIONS
STA. 11+05 – STA. 11+25

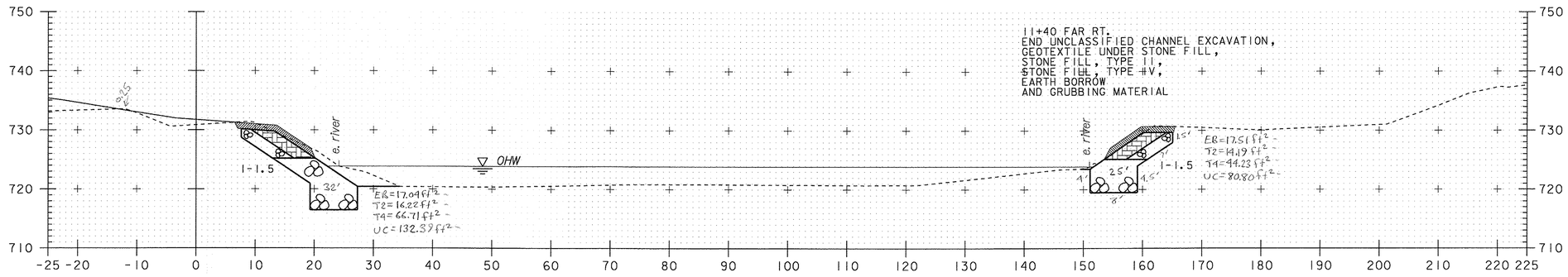
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)

FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c04.i	SHEET 136 OF 144

SCALE 1"-10'-0
10 0 10



11+50



11+40

NRC 12/16/09

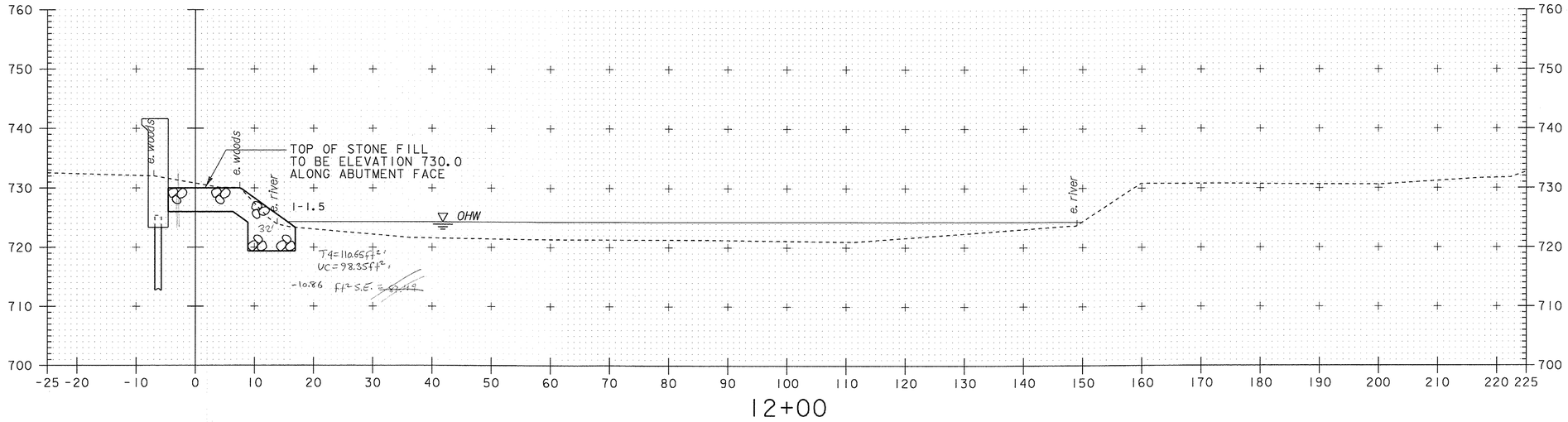
CHANNEL CROSS SECTIONS STA. 11+40 – STA. 11+50

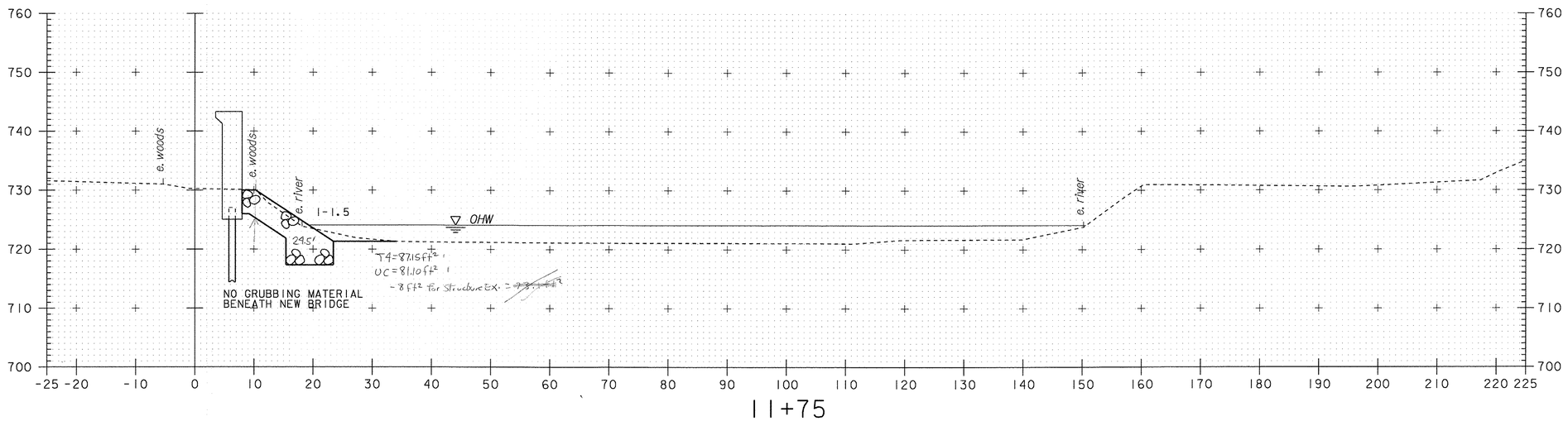
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c05.i	SHEET 137 OF 144

SCALE 1" = 10'-0

10 0 10





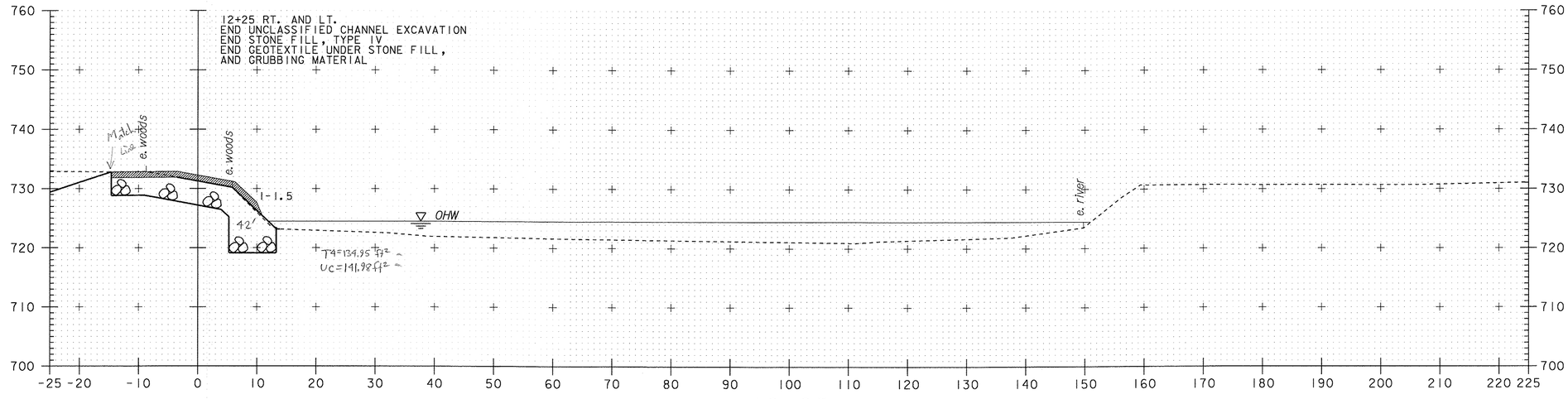
NAC 12/16/09
DGB 1/19/11

CHANNEL CROSS SECTIONS
STA. 11+75 – STA. 12+00

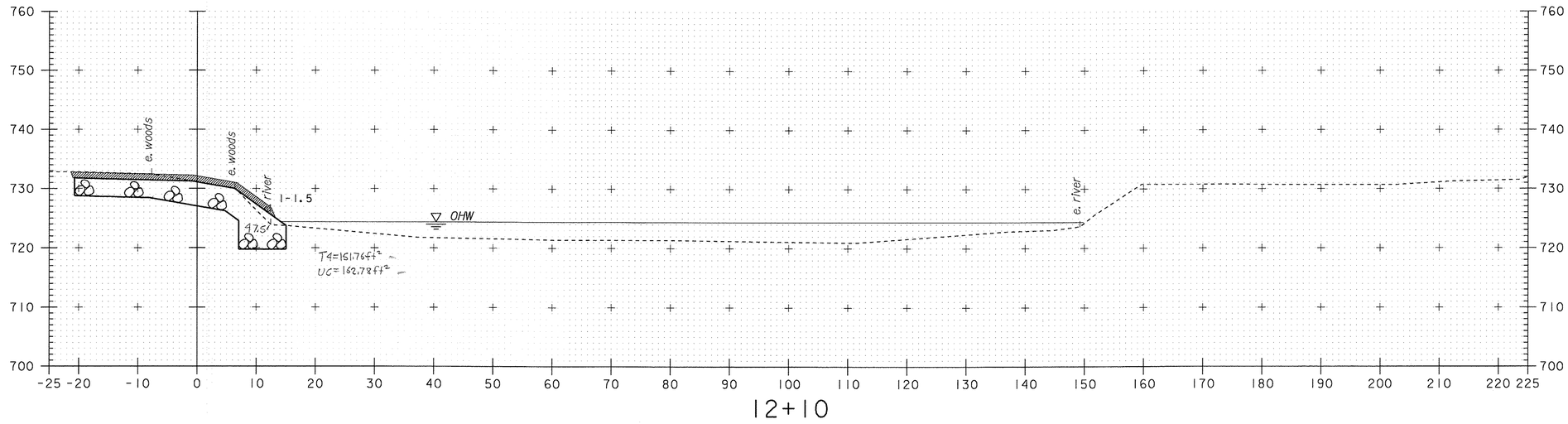
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c06.i	SHEET 138 OF 144

SCALE 1"-10'-0
10 0 10



12+25



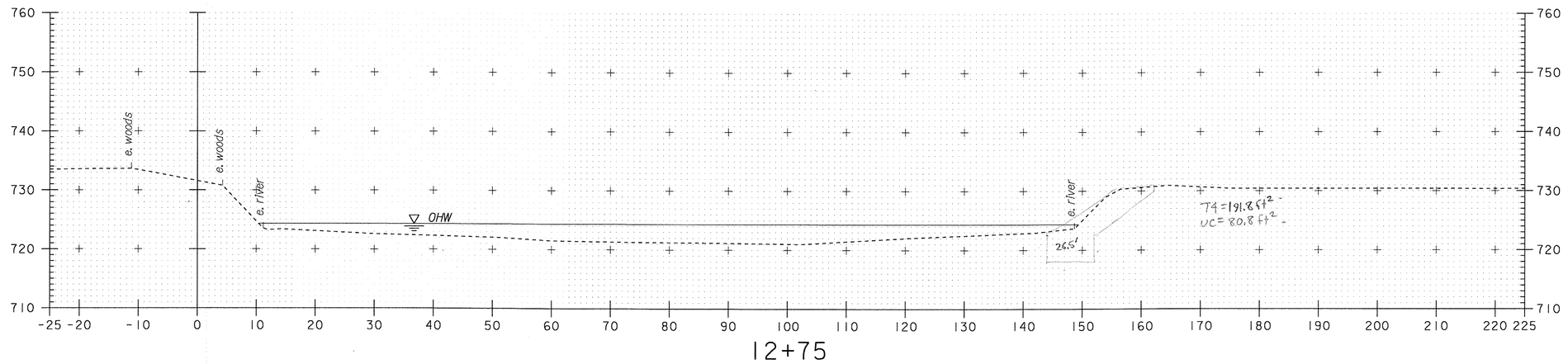
12+10

NRC 12/16/09
DGB 1/15/11

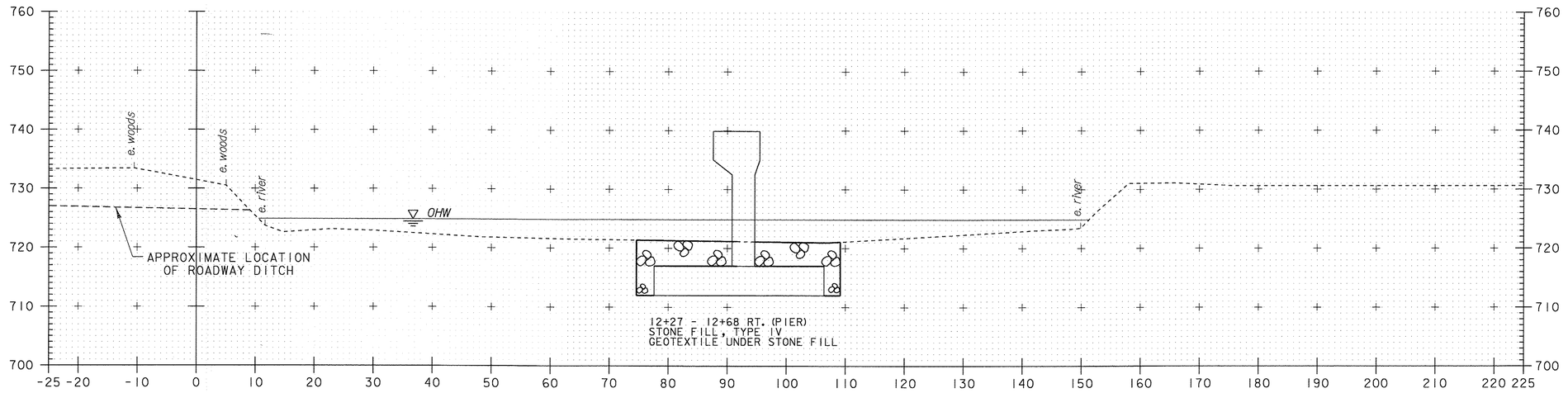
CHANNEL CROSS SECTIONS STA. 12+10 – STA. 12+25

SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c07.i	SHEET 139 OF 144



12+75



12+50

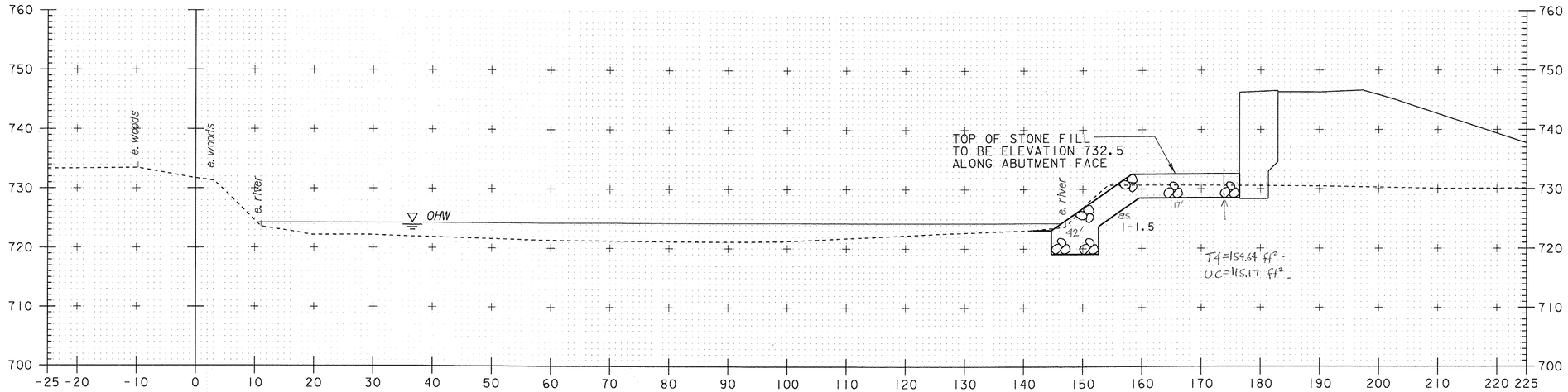
NRC 12/16/09
DCB 1/19/11

CHANNEL CROSS SECTIONS
STA. 12+50 – STA. 12+75

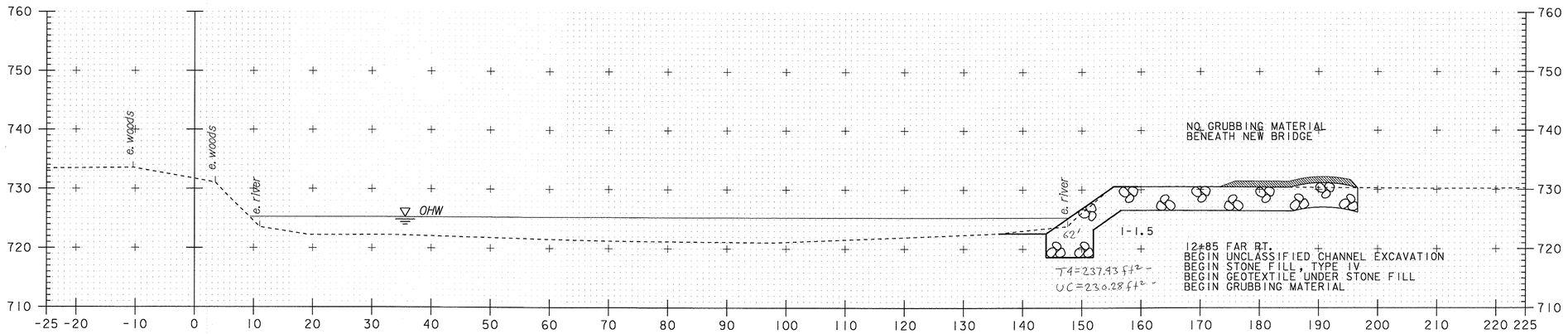
PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c08.i	SHEET 140 OF 144

SCALE 1" = 10'-0
10 0 10



13+20



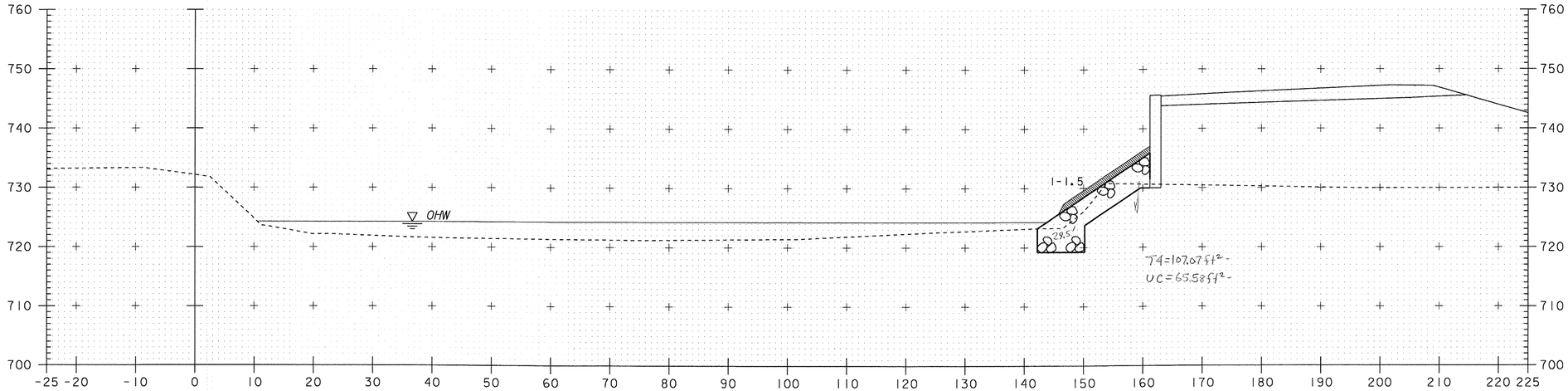
13+00

NRC 12/16/09
DGB 11/19/11

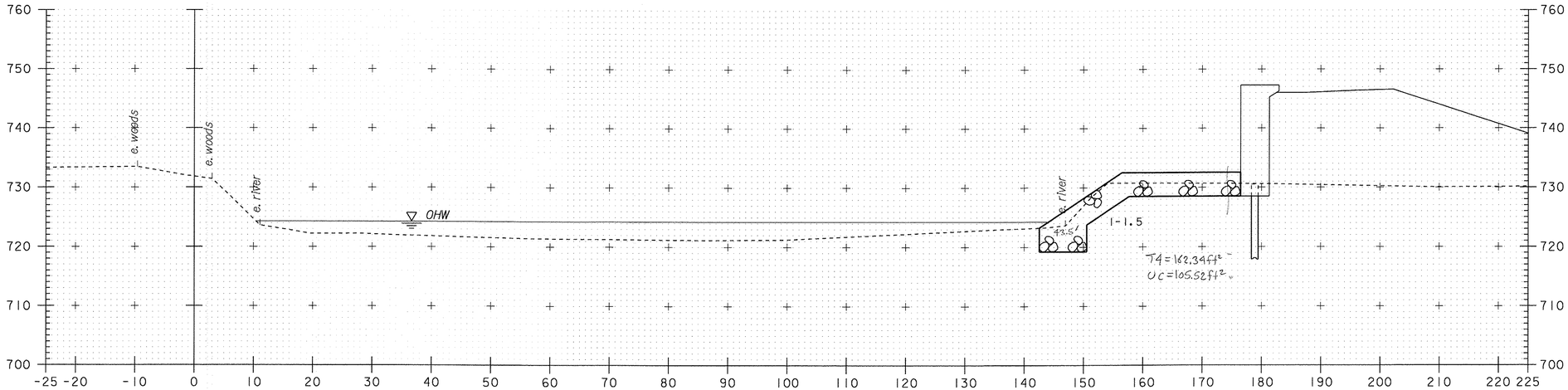
CHANNEL CROSS SECTIONS STA. 13+00 – STA. 13+20

SCALE 1" = 10'-0
10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c09.i	SHEET 141 OF 144



13+50



13+25

NRC 12/16/09
DGB 1/19/11

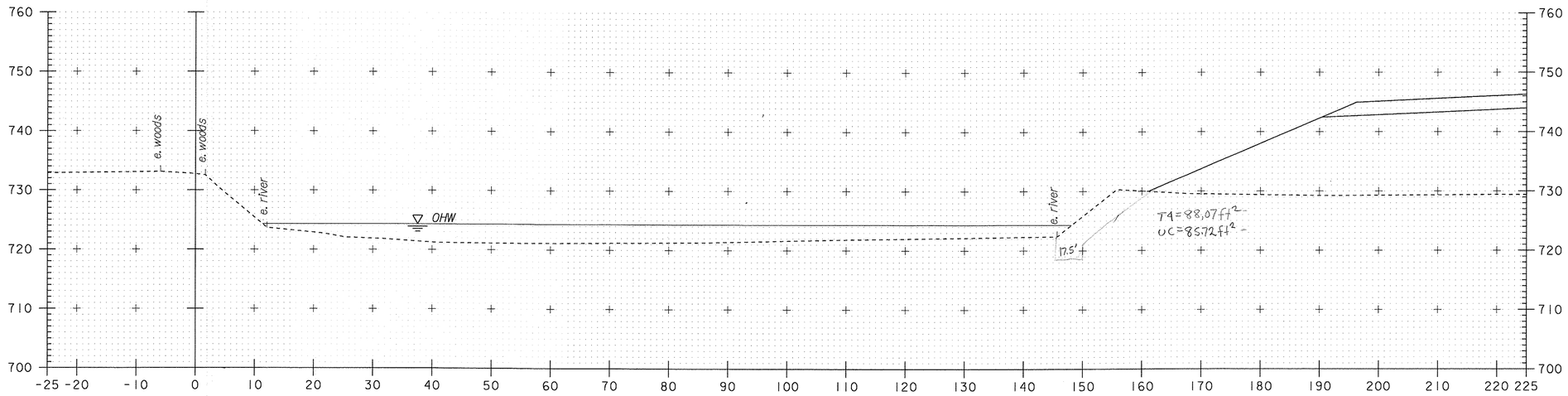
CHANNEL CROSS SECTIONS STA. 13+25 – STA. 13+50

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)

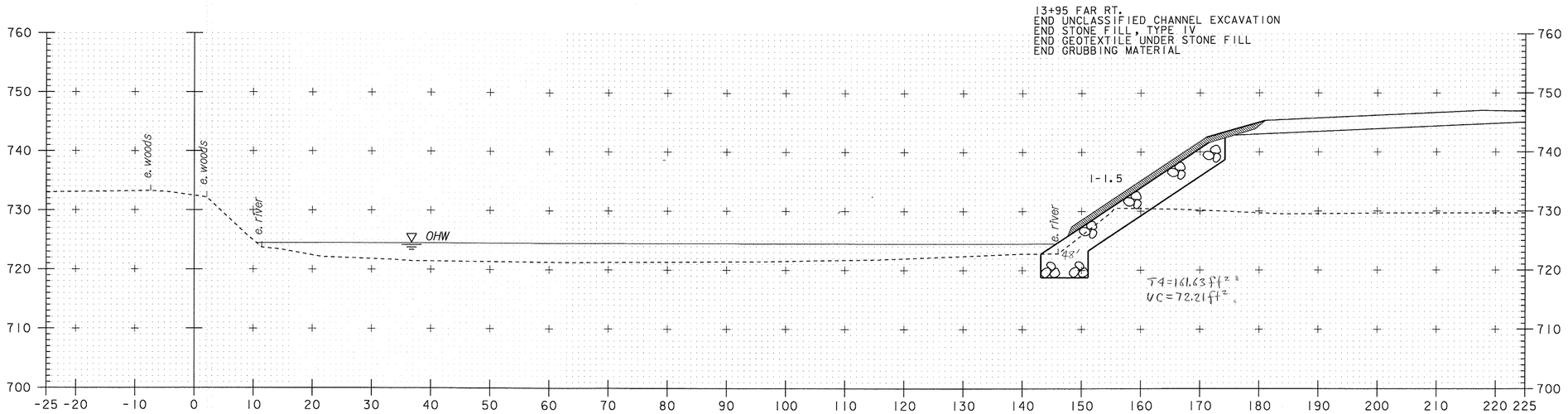
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c10.i	SHEET 142 OF 144

SCALE 1" = 10'-0

10 0 10



14+00



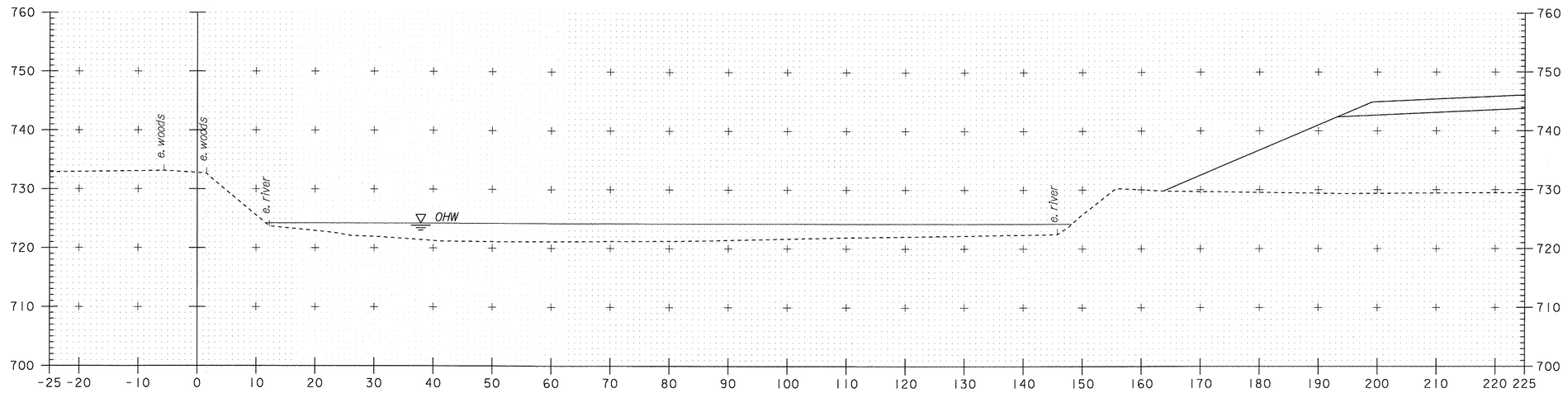
13+75

NAC 12/16/09
DCB 1/13/11

CHANNEL CROSS SECTIONS STA. 13+75 – STA. 14+00

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4 (21)
FILE NAME- /78f238/str5/df268xsl.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238cll.i	SHEET 143 OF 144

SCALE 1" = 10'-0
10 0 10



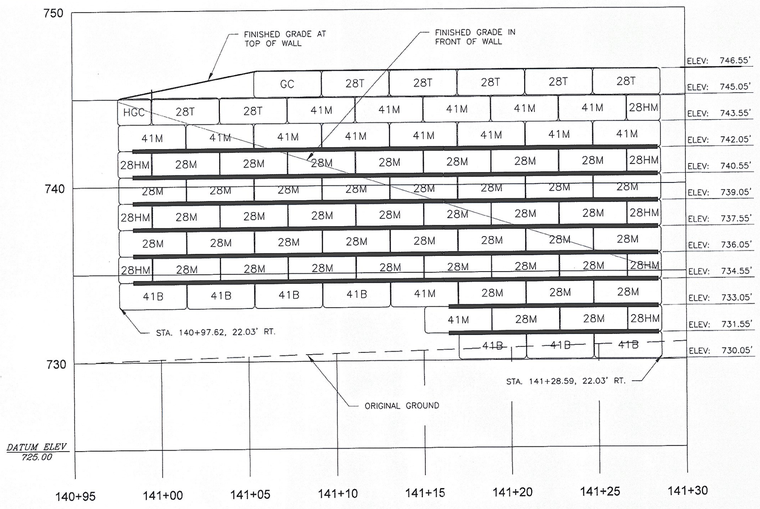
14+05

CHANNEL CROSS SECTIONS STA. 14+05

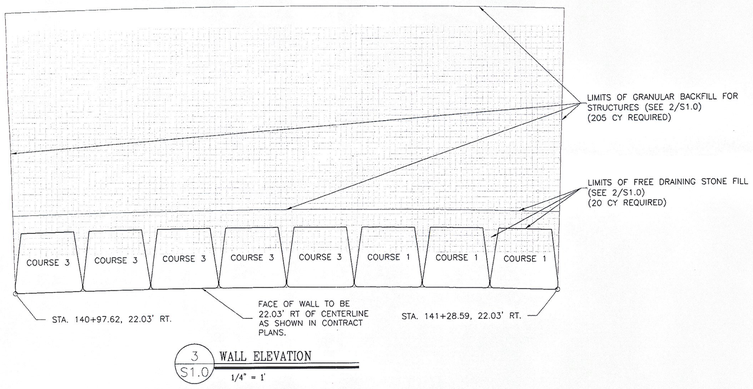
SCALE 1" = 10'-0

10 0 10

PROJECT NAME-	STOCKBRIDGE
PROJECT NUMBER-	BRF 013-4(21)
FILE NAME- /78f238/str5/df268xs1.dgn	PLOT DATE- 06-FEB-2008
PROJECT LEADER- K. HIGGINS	DRAWN BY- G. SHANGRAW
DESIGNED BY- T. SUMNER	CHECKED BY- T. FILLBACH
df238c12.i	SHEET 144 OF 144



1 / S1.0 WALL ELEVATION
1/4" = 1'



3 / S1.0 WALL ELEVATION
1/4" = 1'

REDI-ROCK RETAINING WALL NOTES:

1. PRECAST CONCRETE, INCLUDING THE MIX DESIGN AND FABRICATION, SHALL COMPLY WITH VAOT STANDARD SPECIFICATIONS SECTION 540.

2. WALL CONSTRUCTION SHALL FULLY COMPLY WITH REDI-ROCK INTERNATIONALS STANDARD SPECIFICATIONS AND CONTRACT PLANS & SPECIFICATIONS. THE MORE STRINGENT SHALL APPLY.

3. RETAINED SOIL SHALL BE DETERMINED TO MEET OR EXCEED THE REQUIREMENTS BELOW IN THE ABSENCE OF A GEOTECHNICAL ENGINEERING STUDY. SOILS NOT MEETING THESE REQUIREMENTS SHALL BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOILS. IF WEAK SOILS ARE FOUND TO BE PRESENT BELOW THE WALL, THEY SHALL BE EXCAVATED AND REPLACED WITH ACCEPTABLE SOILS.

LEVELING PAD SHALL BE COMPRISED OF A MINIMUM 1'-0" THICK LAYER OF 3/4" CRUSHED STONE CONSTRUCTED ON UNDISTURBED EXISTING MATERIAL. THE CRUSHED STONE SHALL COMPLY WITH VAOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ITEM 301.26 SUBASE OF CRUSHED GRAVEL, FINE GRADED. THE EXISTING FOUNDATION MATERIAL SHALL HAVE A MINIMUM ALLOWABLE BEARING CAPACITY OF 4,000 P.S.F.

FREE DRAINING STONE BACKFILL SHALL BE #89 CRUSHED STONE. PLACED DIRECTLY BEHIND WALL FOR THE DEPTHS SPECIFIED ON PLANS (1'-0" MIN) AND SHALL EXTEND VERTICALLY FROM LEVELING PAD TO THE TOP OF THE 28" TOP BLOCK. EXPOSED DRAINAGE STONE SHALL BE PROTECTED FROM FINE SOIL MIGRATION THROUGHOUT CONSTRUCTION.

BACKFILL SOIL BEYOND DRAINAGE ZONE SHALL COMPLY WITH CONTRACT MATERIALS SPECIFICATIONS 704.08, GRANULAR BACKFILL FOR STRUCTURES OR AN APPROVED EQUAL. IT SHALL BE INSTALLED PER CONTRACT PLANS AND SPECIFICATIONS. THIS MATERIAL SHALL MEET OR EXCEED THE SOIL PROPERTIES LISTED BELOW. ORGANIC AND FROST SUSCEPTIBLE SOILS ARE NOT PERMITTED WITHIN A 1 TO 1 INFLUENCE AREA.

4. ALL DRAINAGE AND FOUNDATION SOIL SHALL BE COMPACTED TO 95% OF ASTM D1557 USING HAND-OPERATED PLATE COMPACTION EQUIPMENT. BACK FILL SOIL BEYOND CONSOLIDATION ZONE SHALL BE COMPACTED TO 95% OF ASTM D1557. CONTRACTOR SHALL ENSURE THAT FOUNDATION SOIL IS CAPABLE OF SUPPORTING 4,000 P.S.F.

5. THE FOLLOWING MINIMUM SOIL PROPERTIES WERE USED IN THE DESIGN:

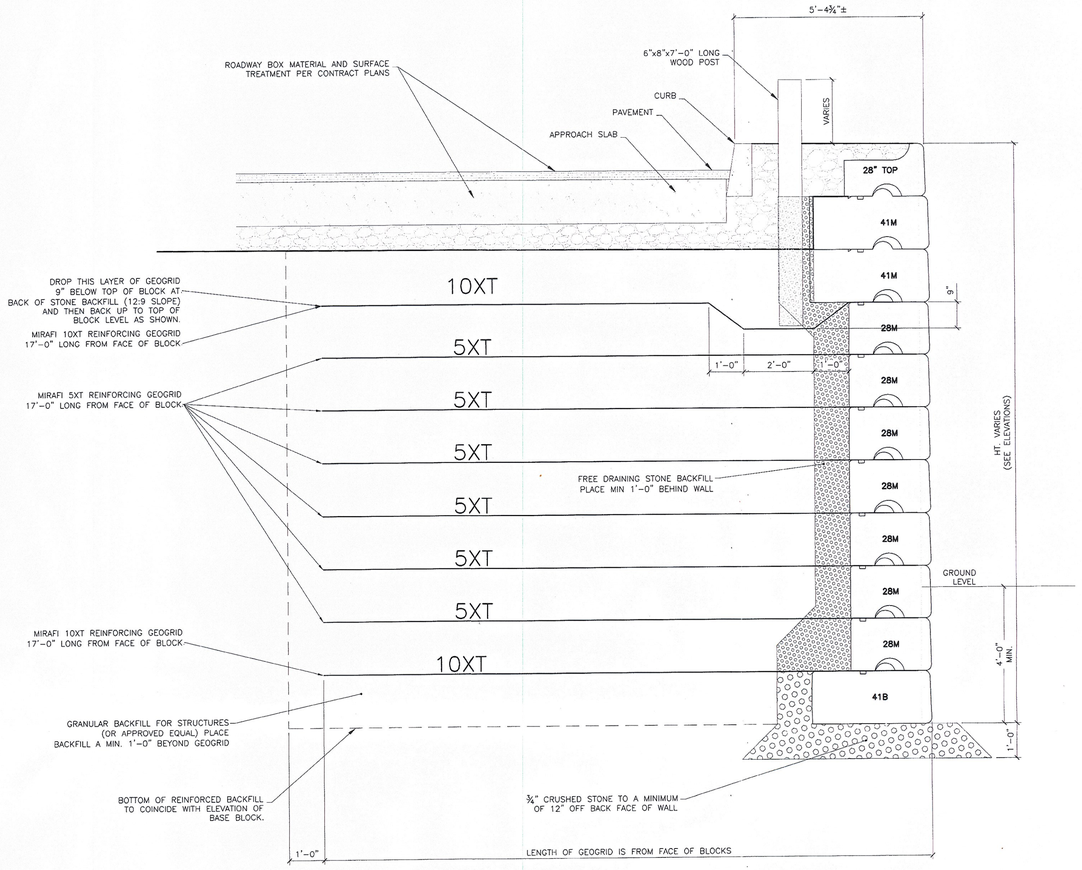
	SOIL WEIGHT [PCF]	FRICTION ANGLE [DEG]
BACKFILL SOIL	140	34
RETAINED SOIL	140	30
FOUNDATION SOIL	140	30
LEVELING PAD	140	34
FREE DRAINING BACKFILL	140	34

6. ENSURE THAT THE FIRST COURSE OF WALL UNITS IS IN FULL CONTACT WITH FOUNDATION. INSTALL NEXT COURSE OF UNITS SUCH THAT THE VERTICAL GAPS ARE STAGGERED BETWEEN ADJACENT COURSES. GAPS SHALL BE FILLED WITH #89 CRUSHED STONE PRIOR TO STARTING THE NEXT COURSE.

7. CONTRACTOR SHALL APPROVE/PROVIDE ALL ELEVATIONS AND INVERTS IN THESE PLANS PRIOR TO ORDERING MATERIAL.

8. THIS WALL IS DESIGNED FOR LIVE LOAD SURCHARGE OF 240 PSF AND FOR SEISMIC ACCELERATION COEFFICIENT A=0.10.

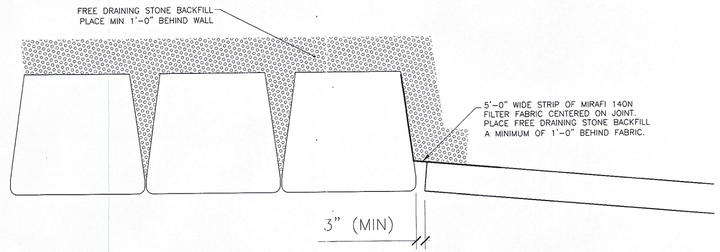
9. REDI-ROCK WALL IS DESIGNED IN ACCORDANCE WITH "AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS", 4TH EDITION, 2007 WITH LATEST INTERIMS.



2 / S1.0 TYPICAL SECTION
1/2" = 1'

ASTM C33 #89 STONE GRADATION

SIEVE	%PASSING
½"	100
⅜"	90-100
NO. 4	20-55
NO. 8	5-30
NO. 16	0-5
NO. 50	0-5



5 / S1.0 REDI-ROCK / CIP CONCRETE JOINT
1/2" = 1'

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CK'D BY ___ OK'D BY KMH
MAY 2 8 2009
RESUBMIT ___ APPROVED ✓
BY KMH DATE 5/29/09

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No.	Date	Revision	By
1	5/21/09	Revised per Vtrans comments	TAF
2	5/19/09	Revised per Vtrans comments	TAF
3	3/03/09	Revised per Vtrans comments	TAF
4	12/4/08	Revised per Vtrans comments	CFP

STATE OF VERMONT
THOMAS A. FREMAN
NO. 8871
Structural
LICENSED
PROFESSIONAL ENGINEER
10/20/08

MICHIE CORPORATION, INC.
173 BUXTON INDUSTRIAL DRIVE-PO BOX 870
HENNIKER, NH 03242
PHONE 603-428-3228
FAX 603-428-7426

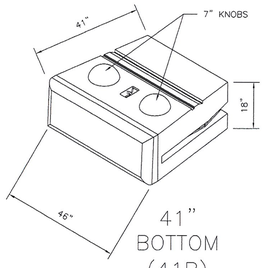
STOCKBRIDGE, VT
BRF 013-4(21)
REDI-ROCK WALLS

Project No. 5002 | Designed By: JMB | Drawn By: TAF/CFP | Checked By: TAF/JMB | Scale: As Shown
Date: 10/20/08

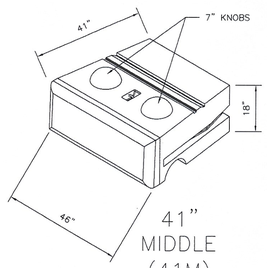
Prepared for:
Winterset Construction
PO Box 968
Lyndonville, VT 05851

DWG NO.
S1.0

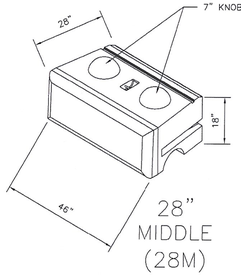
S:\PROJECTS\Winterset Const\STOCKBRIDGE\Dwg\BRF0321 RR winterset walls.dwg 5/1/2009 9:54:41 PM



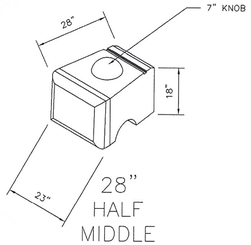
41"
BOTTOM
(41B)



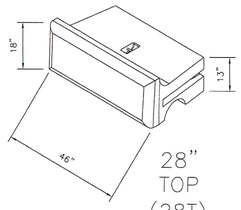
41"
MIDDLE
(41M)



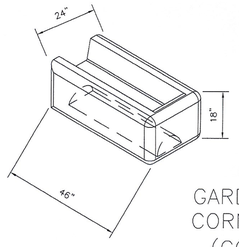
28"
MIDDLE
(28M)



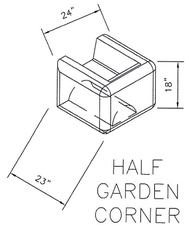
28"
HALF
MIDDLE
(28HM)



28"
TOP
(28T)



GARDEN
CORNER
(GC)



HALF
GARDEN
CORNER

WINTERSET CONSTRUCTION – STOCKBRIDG, VT SPLIT LIMESTONE REDI-ROCK BLOCK COUNT			
BLOCK TYPE			TOTAL UNITS
41B – 41" BOTTOM (7" KNOB)			7
41M – 41" MIDDLE (7" KNOB)			15
28M – 28" MIDDLE (7" KNOB)			42
28HM – 28" HALF MIDDLE (7" KNOB)			8
28T – 28" TOP			7
GC – GARDEN CORNER			1
HGC – HALF GARDEN CORNER			1
ACCESSORIES			
7/16" ø x 40" LONG FIBERGLASS CONNECTION RODS			59
15'–0" WIDE ROLLS OF MIRAFI 140N FILTER FABRIC			35 LF
6'–0" WIDE ROLLS OF MIRAFI 5XT GEOGRID			3.5 ROLLS
12'–0" WIDE ROLLS OF MIRAFI 8XT GEOGRID			N/A
12'–0" WIDE ROLLS OF MIRAFI 10XT GEOGRID			68 LF

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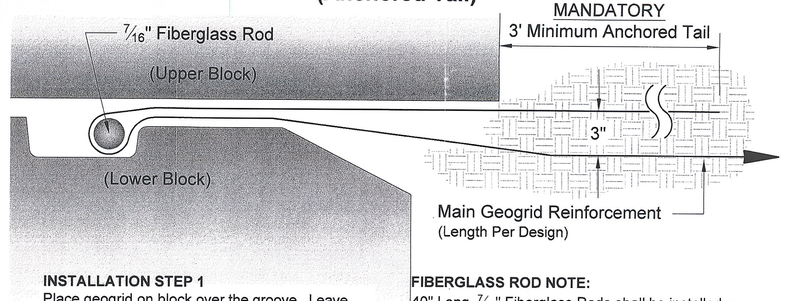
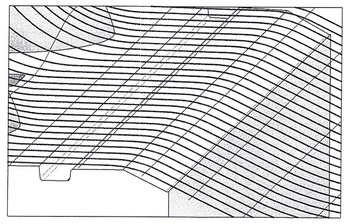
MAY 28 2009
RELEASED APPROVED
BY DATE

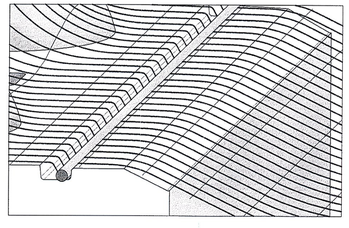
Type 1AT Connection
(Anchored Tail)



INSTALLATION STEP 1
Place geogrid on block over the groove. Leave about 3'-6" extending over the block past the groove to provide for the tail.



INSTALLATION STEP 2
Place the fiberglass rod on top of geogrid.

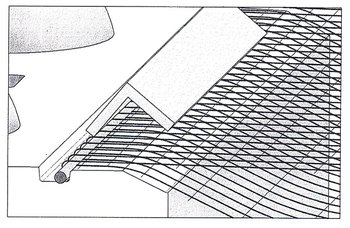


FIBERGLASS ROD NOTE:
40" Long, 7/16" Fiberglass Rods shall be installed on full size blocks only. Have blocks shall not receive rods.

GEOGRID NOTE:
Miragrid XT geogrids by Mirafi are uniaxial. The strong axis shall be placed perpendicular to the blocks.

TIP FOR STEP 3
A steel angle can be used to hold the geogrid and rod in position.

INSTALLATION STEP 3
Fold the geogrid over the fiberglass rod. Pull to tighten rod snug with the back of the groove. Extend the geogrid tail behind the block to provide a minimum of 3'-0" embedment behind the back of the block.



No.	Date	Revision	By
4	5/21/09	Revised per Vtrans comments	TAF
3	5/19/09	Revised per Vtrans comments	TAF
2	3/03/09	Revised per Vtrans comments	TAF
1	12/4/08	Revised per Vtrans comments	CFP

STATE OF VERMONT
THOMAS A. PRECHT
NO. 8871
Structural
PROFESSIONAL ENGINEER
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MICHIE CORPORATION, INC.
173 BUXTON INDUSTRIAL DRIVE-PO BOX 870
HENNIKER, NH 03242
PHONE: 603-428-7218
FAX: 603-428-7425

STOCKBRIDGE, VT
BRF 013-4(21)
REDI-ROCK WALLS

Project No. 5002 | Date: 10/20/08 | Designed By: TAF | Drawn By: TAF | Checked By: SG | Scale: As Shown

Prepared for:
Winterset Construction
PO Box 968
Lyndonville, VT 05851

DWG NO.
BLOCKS

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09 0521 RR WINTERSET WORKING

S:\PROJECTS\Winterset Const\STOCKBRIDGE\Dwgs\09 0521 RR winterset working.dwg, BLOCKS, 10/20/2008 3:48:48 PM

Fax: 419.257.2200
e-mail: dsb@dsbrown.com
www.dsbrown.com

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Recessed Sheet PTFE to Steel Bonding Procedure

The bonding process for laminating PTFE to steel is as follows:

The steel surface to be bonded is prepared for lamination by blasting and degreasing. A two-part structural epoxy is then applied per the manufacturer's instructions. The PTFE used must be etched on one side. The PTFE is cut slightly undersized to fit within the steel recess. The PTFE is then applied to the prepared steel recess, with the etched face of the PTFE facing the steel, and mild pressure is applied to the PTFE for the necessary time period.

Once the epoxy has cured, pressure is removed and any excess epoxy is removed from around the steel recess. Quality control will review the bond to ensure that it is satisfactory.

VTRANS
RECEIVED
CK'D BY _____ OK'D BY JWC
JUN 09 2008
RESUBMIT _____ APPROVED √
BY DATE 6/12/08

3. Material specification(s) ASTM A709 Gr. 36, 50, 50W, 304SS, 316SS
4. Material Thickness (es) Unlimited
5. Welding process GTAW
6. Manual [X], machine [ ], or semiautomatic [ ]
7. Position(s) of welding 1F, 2F
8. Filler metal specification AWS A5.9
9. Filler metal class and brand name ER309L (Murrex)
10. Flux class & brand N/A, Type N/A
11. Shielding gas 100% Argon Flow rate 20 CFH
12. Single pass [X] Or multiple pass [ ]
13. Single arc [X] Or multiple arc [ ]
14. Welding Current DCEN
15. Polarity Straight
16. Welding progression stringers
17. Root treatment Clean to bright sound metal or per AWS D1.5 (3.2.1 & 3.11)
18. Postheat treatment N/A
19. Calculated Heat Input (KJ/In) Min 10.9 KJ Max 20.4 KJ
20. Electrode extension (electrical stickout) N/A

For DOT Approval

VTRANS
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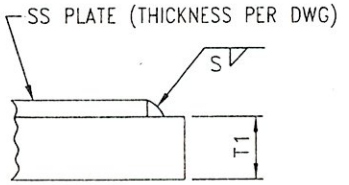
CK'D BY _____ OK'D BY JWC
JUN 05 2008
RESUBMIT _____ APPROVED ✓
BY _____ DATE 6/12/08

Weld size (In)	Pass No(s).	Electrode Size (In)	Welding Process Variables		Travel Speed (IPM)
			AMPS/WFS*	VOLTS	
20 ga.	1	1/8"	170-200	15-17	10-14
16 ga.	1	1/8"	170-200	15-17	10-14
14 ga.	1	1/8"	170-200	15-17	10-14
12 ga.	1	1/8"	170-200	15-17	10-14
11 ga.	1	1/8"	170-200	15-17	10-14
10 ga.	1	1/8"	170-200	15-17	10-14
8 ga.	1	1/8"	170-200	15-17	10-14
3/16"	1	1/8"	170-200	15-17	10-14

Joint Detail (Flare Bevel)
Show all dimensions, weld sizes, passes, and AWS symbols



T_1 = Varies
S = Fillet Weld Size (Fillet weld must not exceed thickness of stainless steel)

* Wire feed speed may be used along with amperage (include chart)

Prepared By: James R. Connor DSB QA Manager

Project: _____

DSB Job: 23160-1112

Preheat and Interpass Temperature Chart

Base Metal Thickness range	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
≤3/4"	50°F	450°F
>3/4" to ≤1.5"	70°F	450°F
>1.5" to ≤2.5"	150°F	450°F
>2.5"	225°F	450°F

Note: When this procedure is used for A709Gr50W materials, it shall be limited to 5/16" single pass or material be coated.

For DOT Approval

3. Material specification(s) ASTM A709 Gr. 36, 50, 50W
4. Material Thickness (es) Unlimited
5. Welding process GMAW
6. Manual [ ], machine [X], or semiautomatic [X]
7. Position(s) of welding 1F, 2F
8. Filler metal specification AWS A5.18
9. Filler metal class and brand name E70C-6M Corex Metal-Core Maxim
10. Flux class & brand N/A, Type N/A
11. Shielding gas 75% Ar / 25% CO2 Flow rate 45 CFH
12. Single pass [X] Or multiple pass [X]
13. Single arc [X] Or multiple arc [ ]
14. Welding Current DCEP
15. Polarity Reverse
16. Welding progression stringers
17. Root treatment Clean to bright sound metal or per AWS D1.5 (3.2.1 & 3.11)
18. Postheat treatment N/A
19. Calculated Heat Input (KJ/In) Min 30.6 Kj/in Max 51.1 Kj/in
20. Electrode extension (electrical stickout) 3/4"

VTRANS RECEIVED
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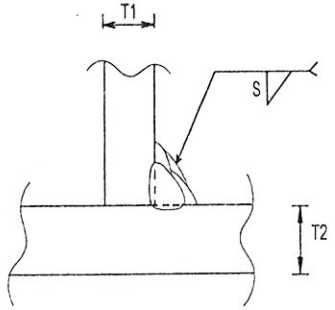
JUN 0 5 2008
RESUBMIT _____ APPROVED ✓
BY _____ DATE 6/12/08

Weld size (In)	Pass No(s).	Electrode Size (In)	Welding Process Variables		Travel Speed (IPM)
			AMPS/WFS*	VOLTS	
**1/4"	1	.052"	265-320	31-34.5	13-16
5/16"	1	.052"	265-320	31-34.5	13-16
3/8"	1-3	.052"	265-320	31-34.5	13-16
7/16"	2-4	.052"	265-320	31-34.5	13-16
1/2"	4-6	.052"	265-320	31-34.5	13-16
5/8"	5-7	.052"	265-320	31-34.5	13-16
3/4"	6-8	.052"	265-320	31-34.5	13-16

Joint Detail (Fillet)
Show all dimensions, weld sizes, passes, and AWS symbols



T1 = Varies
T2 = Varies
S = Weld Size

**** T1 & T2 equal to or less than 3/4" for 1/4" welds.**

* Wire feed speed may be used along with amperage (include chart)

Prepared By: James R. Connor DSB QA Manager

Project: _____

DSB Job:

Preheat and Interpass Temperature Chart

Base Metal Thickness range	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
≤3/4"	50°F	450°F
>3/4" to ≤1.5"	70°F	450°F
>1.5" to ≤2.5"	150°F	450°F
>2.5"	225°F	450°F

Note: When this procedure is used for A709Gr50W materials, it shall be limited to 5/16" single pass or material be coated.

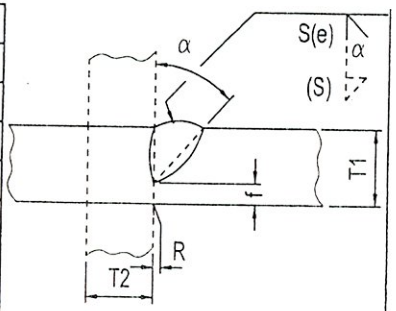
For DOT Approval

4. Material Thickness (es) Unlimited
5. Welding process GMAW
6. Manual [ ], machine [ ], or semiautomatic [X]
7. Position(s) of welding 1G, 2G, 1F, 2F
8. Filler metal specification AWS A5.18
9. Filler metal class and brand name E70C-6M Corex Metal-Core Maxim
10. Flux class & brand N/A, Type N/A
11. Shielding gas 75% Ar / 25% CO2 Flow rate 45 CFH
12. Single pass [X] Or multiple pass [X]
13. Single arc [X] Or multiple arc [ ]
14. Welding Current DCEP
15. Polarity Reverse
16. Welding progression stringers
17. Root treatment Clean to bright sound metal or per AWS D1.5 (3.2.1 & 3.11)
18. Postheat treatment N/A
19. Calculated Heat Input (KJ/In) Min 30.6 Kj/in Max 51.1 Kj/in
20. Electrode extension (electrical stickout) 3/4"

VTRANS
RECEIVED
CK'D BY _____ OK'D BY JWC
JUN 0 5 2008
RESUBMIT _____ APPROVED ✓
BY _____ DATE 6/12/08

Weld size (E)&(S) (In)	Pass No(s).	Electrode Size (In)	Welding Process Variables		Travel Speed (IPM)
			AMPS/WFS*	VOLTS	
1/4"	1	.052"	265-320	31-34.5	13-16
5/16"	1	.052"	265-320	31-34.5	13-16
3/8"	1-2	.052"	265-320	31-34.5	13-16
1/2"	3-4	.052"	265-320	31-34.5	13-16
5/8"	4-6	.052"	265-320	31-34.5	13-16
3/4"	5-7	.052"	265-320	31-34.5	13-16
7/8"	6-9	.052"	265-320	31-34.5	13-16
1"	7-10	.052"	265-320	31-34.5	13-16

Joint Detail (TC-P4-GF)
Show all dimensions, weld sizes, passes, and AWS symbols



For Butt Joints see AWS 2.14

T1 = ¼" min.
T2 = Varies
(E) = S-1/8"
f = 1/8" min.
R = 0
α = 45°
S = size groove
(S) = size of reinforcing fillet(if required) not to exceed ¼" in corner & T jts.

* Wire feed speed may be used along with amperage (include chart)

Prepared By: James R. Connor DSB QA Manager

Project: _____

DSB Job:

Preheat and Interpass Temperature Chart

Base Metal Thickness range	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
≤3/4"	50°F	450°F
>3/4" to ≤1.5"	70°F	450°F
>1.5" to ≤2.5"	150°F	450°F
>2.5"	225°F	450°F

Note: When this procedure is used for A709Gr50W materials, it shall be limited to 5/16" single pass or material be coated.

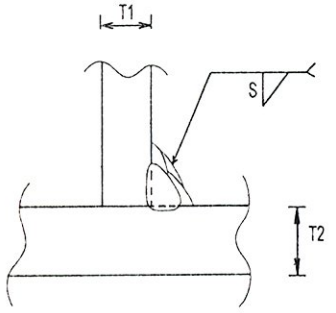
For DOT Approval

3. Material specification(s) ASTM A709 Gr. 36, 50, 50W
4. Material Thickness (es) Unlimited
5. Welding process FCAW
6. Manual [ ], machine [ ], or semiautomatic [X]
7. Position(s) of welding 1F, 2F
8. Filler metal specification AWS A5.20
9. Filler metal class and brand name E71T-1CH8 (UltraCore71C)
10. Flux class & brand N/A, Type N/A
11. Shielding gas 100% CO2 Flow rate 45 CFH
12. Single pass [X] Or multiple pass [X]
13. Single arc [X] Or multiple arc [ ]
14. Welding Current DCEP
15. Polarity Reverse
16. Welding progression stringers
17. Root treatment Clean to bright sound metal or per AWS D1.5 (3.2.1 & 3.11)
18. Postheat treatment N/A
19. Calculated Heat Input (KJ/In) Min 31.20 Kj/in Max 50.72 Kj/in
20. Electrode extension (electrical stickout) 3/4"

VTRANS
RECEIVED
CK'D BY _____ OK'D BY JWC
JUN 0 5 2008
RESUBMIT _____ APPROVED ✓
BY [redacted] DATE 6/12/08

Weld size (In)	Pass No(s).	Electrode Size (In)	Welding Process Variables		Travel Speed (IPM)
			AMPS/WFS*	VOLTS	
**1/4"	1	1/16"	260-310	26-30	11-13
5/16"	1	1/16"	260-310	26-30	11-13
3/8"	2-3	1/16"	260-310	26-30	11-13
7/16"	3-5	1/16"	260-310	26-30	11-13
1/2"	4-6	1/16"	260-310	26-30	11-13
5/8"	5-7	1/16"	260-310	26-30	11-13
3/4"	6-8	1/16"	260-310	26-30	11-13

Joint Detail (Fillet)
Show all dimensions, weld sizes, passes, and AWS symbols



T1 = Varies
T2 = Varies
S = Weld Size

**** T1 & T2 equal to or less than 3/4" for 1/4" welds.**

* Wire feed speed may be used along with amperage (include chart)

Prepared By: _____ DSB QA Manager

Project: _____

DSB Job:

Preheat and Interpass Temperature Chart

Base Metal Thickness range	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
≤3/4"	50°F	450°F
>3/4" to ≤1.5"	70°F	450°F
>1.5" to ≤2.5"	150°F	450°F
>2.5"	225°F	450°F

Note: When this procedure is used for A709Gr50W materials, it shall be limited to 5/16" single pass or material be coated.

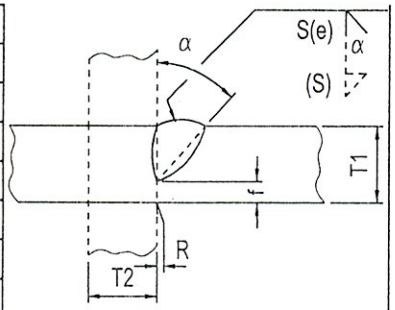
3. Material specification(s) ASTM A709 Gr. 36, 50, 50W
4. Material Thickness (es) Unlimited
5. Welding process FCAW
6. Manual [ ] , machine [ ] , or semiautomatic [X]
7. Position(s) of welding 1G, 2G,(1F,2F)
8. Filler metal specification AWS A5.20
9. Filler metal class and brand name E71T-1CH8 (UltraCore71C)
10. Flux class & brand N/A , Type N/A
11. Shielding gas 100% CO2 Flow rate 45 CFH
12. Single pass [X] Or multiple pass [X]
13. Single arc [X] Or multiple arc [ ]
14. Welding Current DCEP
15. Polarity Reverse
16. Welding progression Stringers
17. Root treatment Clean to bright sound metal or per AWS D1.5 (3.2.1 & 3.11)
18. Postheat treatment N/A
19. Calculated Heat Input (KJ/In) Min 31.20 Kj/in Max 50.72 Kj/in
20. Electrode extension (electrical stickout) 3/4"

For DOT Approval

VTRANS
RECEIVED
CK'D BY _____ OK'D BY JWC
JUN 0 5 2008
RESUBMIT _____ APPROVED ✓
BY _____ DATE 6/12/08

Weld size (In) (E)&(S)	Pass No(s).	Electrode Size (In)	Welding Process Variables AMPS/WFS*	VOLTS	Travel Speed (IPM)
1/4"	1	1/16"	260-310	26-30	11-13
5/16"	1	1/16"	260-310	26-30	11-13
3/8"	2-3	1/16"	260-310	26-30	11-13
1/2"	3-4	1/16"	260-310	26-30	11-13
5/8"	4-6	1/16"	260-310	26-30	11-13
3/4"	5-7	1/16"	260-310	26-30	11-13
7/8"	6-8	1/16"	260-310	26-30	11-13
1"	7-9	1/16"	260-310	26-30	11-13

Joint Detail (TC-P4-GF)
Show all dimensions, weld sizes, passes, and AWS symbols



For Butt Joints see AWS 2.14

T1 = ¼" min.
T2 = Varies
(E) = S-1/8"
f = 1/8" min.
R = 0
α = 45°
S = size groove
(S) = size of reinforcing fillet(if required) not to exceed ¼" in corner & T jts.

* Wire feed speed may be used along with amperage (include chart)

Prepared By: _____ DSB QA Manager

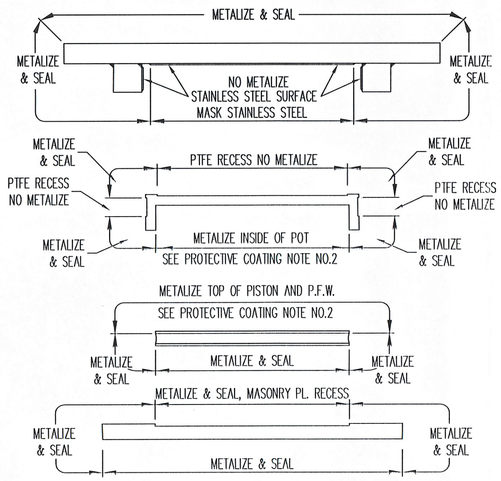
Project: _____

DSB Job:

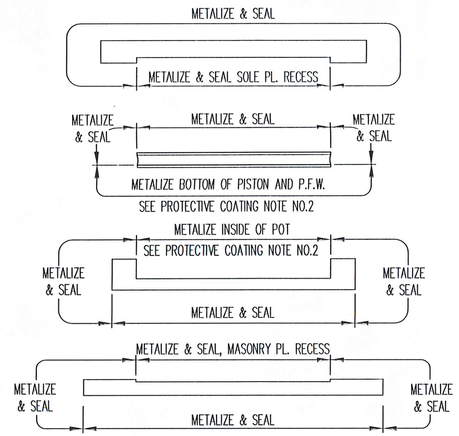
Preheat and Interpass Temperature Chart

Base Metal Thickness range	Minimum Preheat (°F)	Max Preheat & Interpass (°F)
≤3/4"	50°F	450°F
>3/4" to ≤1.5"	70°F	450°F
>1.5" to ≤2.5"	150°F	450°F
>2.5"	225°F	450°F

Note: When this procedure is used for A709Gr50W materials, it shall be limited to 5/16" single pass or material be coated.



UNI-DIRECTIONAL VERSIFLEX HLMR COATING LIMITS



FIXED BEARING COATING LIMITS

PROTECTIVE COATING NOTES:

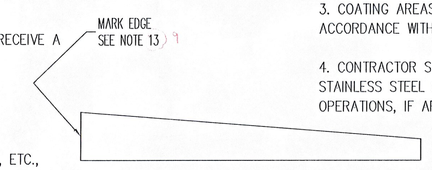
1. ALL MILL SCALE SHALL BE REMOVED FROM BEARINGS BY BLASTING (SSPC-SP10) PRIOR TO APPLYING PROTECTIVE COATING.

2. METALIZATION SHALL BE IN ACCORDANCE WITH ANSI/AWS C2.18-93 & SECTION 506.15b OF THE VT STANDARD SPECIFICATIONS. EXTERNAL STEEL SURFACES SHALL BE METALIZED TO A MINIMUM THICKNESS OF 6 MILS. THE INSIDE OF THE POT, PORTION OF PISTON IN CONTACT WITH ELASTOMER, AND THE P.F.W. SHALL BE METALIZED TO A MINIMUM COATING THICKNESS OF 2 MILS AND BE POLISHED TO 125 MICROINCHES AFTER METALIZING. PROVIDE WIRE MATERIAL FOR THE METALIZED PRIMER CONSISTING OF PURE ZINC (99.9% PURITY).

3. WITHIN 8 HOURS AFTER METALIZATION, THE EXTERNAL STEEL SURFACES SHALL RECEIVE A SEAL COAT IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
   SEAL COAT = CARBOLINE RUSTBOND, D.F.T. = 2 MILS MIN.

4. SEE COATING LIMIT DETAILS FOR COATING LOCATIONS.

5. PRIOR TO METALIZING ALL CORNERS AND EDGES OF THE STEEL PLATES, SHAPES, ETC., SHALL BE GROUND TO 1/16" RADIUS.



SOLE PLATE EDGE DETAIL

GENERAL NOTES:

1. MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES [SECTION 14 (DIVISION I) AND SECTION 18 (DIVISION II)]; ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE AND THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006.

2. PTFE SHALL BE VIRGIN, UNFILLED POLYTETRAFLUOROETHYLENE. GUIDE BAR PTFE SHALL BE PIGMENTED. THE PTFE RESIN SHALL CONFORM TO THE REQUIREMENTS OF ASTM D4894.

3. PTFE IS TO BE PURCHASED ETCHED ON ONE SIDE FOR BONDING INTO MACHINED RECESS. STEEL MATING SURFACES OF PTFE AND STEEL SHALL BE GRIT BLASTED AND DEGREASED PRIOR TO APPLICATION OF ADHESIVE. ADHESIVE SHALL BE APPLIED USING DIRECTIONS SUPPLIED BY THE ADHESIVE MANUFACTURER.

4. STAINLESS STEEL SHALL CONFORM TO ASTM A240 – TYPE 304 AND SHALL BE 11 GA. (0.120"). STAINLESS STEEL SLIDING SURFACES IN CONTACT WITH PTFE SHALL HAVE A NO. 8 MIRROR FINISH AND ALL OTHERS SHALL HAVE A 2B FINISH.

5. WELDING SHALL CONFORM TO AWS-D1.5 BRIDGE WELDING CODE, AS WELL AS ANY STATE STANDARD OR PROJECT SPECIAL PROVISION.

6. THE TOP AND BOTTOM OF THE NEOPRENE DISC SHALL BE LUBRICATED WITH DOW CORNING #4 SILICONE COMPOUND.

7. ALL SHARP CORNERS OF STEEL MATERIALS SHALL BE REMOVED BY GRINDING OR SANDING.

8. THE BRASS SEALING RING ENDS SHALL BE CUT AT AN ANGLE OF 45° WITH A MAXIMUM GAP OF 0.050". THE RINGS SHALL BE STAGGERED 120° APART USING A QUANTITY OF THREE (3) RINGS.

9. EACH BEARING SHALL BE MARKED WITH THE MANUFACTURER'S NAME, THE BEARING TYPE OR MODEL NUMBER, THE BEARING NUMBER AND LOT NUMBER, UPSTATION MARK, AND THE INSTALLED LOCATION. THE MARKING SHALL BE PERMANENT AND IN A LOCATION THAT WILL BE VISIBLE AFTER ERECTION OF STRUCTURE.

10. EACH NON-FIXED BEARING SHALL HAVE MARKS PLACED ON THE TOP OF THE MASONRY PLATE AND SIDE OF THE SOLE PLATES/GUIDE BARS TO INDICATE THE LOCATION OF THE CENTERLINE. THIS MARK CAN BE USED IN THE FIELD TO DETERMINE THE INITIAL OFFSET LOCATION OF THE SLIDE PLATE, IF APPLICABLE. THE MARKS SHALL BE MADE IN INDELIBLE INK AND SHALL BE VISIBLE AFTER BEARING INSTALLATION.

11. BEARINGS ARE TO BE SHIPPED AS COMPLETE UNITS, STEEL BANDED, AND SHALL BE WRAPPED TO PROTECT FROM MOISTURE AND DIRT DURING TRANSIT AND STORAGE. BEARINGS SHALL BE STORED IN A CLEAN, DRY, LEVEL UPRIGHT POSITION WHILE AT JOBSITE. BEARINGS SHALL BE LIFTED FROM THEIR UNDERSIDES ONLY.

12. AT NO TIME MAY THE BEARINGS BE DISASSEMBLED WITHOUT AUTHORIZATION FROM D.S. BROWN OR WITHOUT THE PRESENCE OF A D.S. BROWN REPRESENTATIVE.

13. POT/PISTON INTERFACE SHALL BE CAULKED WITH SIKAFLEX 1A, OR APPROVED EQUAL PRIOR TO SHIPMENT.

14. VERSIFLEX HLMR "POT" STYLE BEARING MANUFACTURING FACILITY AND REPRESENTATIVE FOR COORDINATING PRODUCTION:
    THE D.S. BROWN COMPANY
    300 EAST CHERRY STREET
    NORTH BALTIMORE, OHIO 45872
    CSR – JAMIE SCHROEDER (419) 257-3561

CONTRACTOR NOTES:

1. THE EXPANSION BEARINGS WILL BE SHIPPED CENTERED, AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO OFFSET THE SLIDE PLATES IN THE FIELD DURING INSTALLATION. IF REQUIRE, THE OFFSET WOULD BE PROVIDED TO THE CONTRACTOR BY THE BRIDGE DESIGNER.

2. WELDING PROCEDURES SHALL BE ESTABLISHED BY THE CONTRACTOR TO RESTRICT THE TEMPERATURE TO A MAXIMUM OF 200°F (93°C) FOR SURFACES IN CONTACT WITH THE ELASTOMER AND 300° (149°C) FOR SURFACES IN CONTACT WITH PTFE. TEMPERATURES SHALL BE DETERMINED BY TEMPERATURE INDICATING WAX PENCILS OR OTHER SUITABLE MEANS. DURING FIELD WELDING, NO WELDING CURRENT SHALL BE PERMITTED TO PASS BETWEEN POT AND PISTON COMPONENTS.

3. COATING AREAS DAMAGED DURING INSTALLATION OR FIELD WELDING SHALL BE REPAIRED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

4. CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTION TO PROTECT THE PTFE & STAINLESS STEEL SLIDING SURFACES FROM SPLATTER DURING WELDING, GROUTING, OR PAINTING OPERATIONS, IF APPLICABLE.

SAMPLING AND TESTING NOTES:

ELASTOMERIC DISCS SHALL BE SUBJECTED TO RANDOM IN-HOUSE TESTING OF THE APPLICABLE PHYSICAL PROPERTIES PER AASHTO DIVISION 2, SECTION 18.

BEARINGS SHALL BE SUBJECTED TO THE TESTS DESCRIBED BELOW AND IN ACCORDANCE WITH THE APPLICABLE AASHTO SPECIFICATIONS.

1. SAMPLE TEST – ONE (1) BEARING PER "LOT" SHALL BE TESTED AND SHALL BE CHOSEN AT RANDOM. A "LOT" SHALL CONSIST OF ONE OF THE FOLLOWING:
   (1) NO MORE THAN 10 FIXED BEARINGS OF ONE "LOAD CATEGORY"
   (2) NO MORE THAN 10 EXPANSION BEARINGS OF ONE "LOAD CATEGORY"
   ONE LOAD CATEGORY MAY CONSIST OF BEARINGS OF A DIFFERING VERTICAL LOAD CAPACITY BUT THE BEARINGS MAY NOT EXCEED A RANGE OF CAPACITY DIFFERING BY MORE THAN 300 KIPS.

2. PROCEDURE FOR TESTING EXPANSION BEARINGS–
   a.) LOAD THE BEARING WITH ITS DESIGN LOADING FOR AT LEAST 12 HOURS. MEASURE THE FORCE REQUIRED FOR THE FIRST MOVEMENT AND CALCULATE THE COEFFICIENT OF FRICTION. MEASURE THE FORCE REQUIRED FOR MOVEMENT UNDER DYNAMIC LOADING AND CALCULATE THE COEFFICIENT OF FRICTION.
   b.) LOAD THE BEARING AT 70% OF THE DESIGN LOAD BUT NOT LESS THAN 2000 PSI. MEASURE THE STATIC AND DYNAMIC COEFFICIENTS OF FRICTION [70% OF DESIGN LOAD = 276.5 KIPS = 2.39 KSI].
   c.) LOAD THE BEARING AT 150% OF THE DESIGN LOAD FOR 30 MINUTES, AT A 2% ROTATION, AND SUBJECT THE BEARING TO 100 CYCLES OF MOVEMENT, MEASURE THE STATIC AND DYNAMIC COEFFICIENTS OF FRICTION.
   d.) COEFFICIENTS OF FRICTION SHALL BE LESS THAN 4%.

3. PROCEDURE FOR TESTING FIXED BEARINGS–
   a.) LOAD BEARING AT 150% OF ITS DESIGN LOAD FOR 30 MINUTES, AT A 2% ROTATION.

4. AFTER PERFORMING EACH TEST DESCRIBED IN (2) & (3) ABOVE, DISASSEMBLE THE BEARING AND INSPECT FOR:
   a.) ANY SIGN OF SEALING FAILURE.
   b.) ANY SIGN OF MATERIAL FAILURE.
   c.) ANY OTHER DEFECTS.

TOLERANCES:

THE DIMENSIONAL TOLERANCES AND SURFACE FINISHES OF THE BEARING SHALL SATISFY THE REQUIREMENTS OF AASHTO, DIVISION II, SECTION 18, TABLE 18.5.1.5-1.

RECEIVED
CK'D BY JEL OK'D BY JEL
JUN 05 2008
RESUBMIT APPROVED JEL
BY DATE 6/24/08

REV.	DESCRIPTION	DATE	DET.	CK'D.

D.S. BROWN
THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM

LOCATION — VT RTE. 100 (MINOR ARTERIAL) OVER WHITE RIVER
—
PROJECT — (STP) BRF 013-4(21)
—
P.O. NO. — C2120
DESIGNER — VT DOT
CUSTOMER — WINTERSET, INC.

ITEM	QUANTITY
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–

DESCRIPTION:
GENERAL NOTES & COATING LIMITS
WINDSOR CO., VT

SCALE:	DRAWN BY:	CHECKED BY:	DATE:	
N.T.S.	DA	RSS	5/29/08	–
PROJECT NUMBER		PRODUCT CODE	RELEASE	SHEET
23160		1112	1	GN1

MK	QTY	DESCRIPTION
1A	2	PF–395
1sp1	2	SOLE PLATE
1ps1	2	PISTON
1pt1	2	POT PLATE
1ed1	2	ELASTOMERIC DISC
1br1	6	BRASS RING
1mp1	2	MASONRY PLATE
1FA	2	UNDERLAYMENT (*SL)
1B	8	ANCHOR ROD (*SL)
1C	8	HEAVY HEX NUT (*SL)
1D	8	PLATE WASHER (*SL)

HLMR BEARING ASSEMBLY LOCATION & DESIGN INFORMATION (PF)

MK	QTY	STRUCTURE	BEARING TYPE	LOCATION	VERT. CAP	HORIZ. CAP	LONG MVMNT	TRANS MVMNT	ROTATION (RAD)	HEIGHT DESIGNED	HEIGHT IN PLANS	DIFFERENCE IN PLANS	UNDERLAYMENT IN HEIGHT (Y/N)
1A	2	Bridge	PF–395	PIER: 4 & 5	395.0 kips	79.0 kips	0	0	0.03	7.170	7.688	–0.518	YES

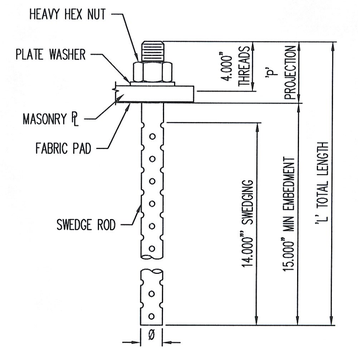
ELASTOMERIC DISC SCHEDULE (PF)

ASSEM MK	PIECE MK	QTY	ELASTOMERIC DISC DIMENSIONS	ELASTOMER MATERIAL
1A	1ed1	2	1.250 X 12.125ø	Neoprene, 50+/–5 Duro Gr.3

VIRGIN NATURAL (RUBBER)
AASHTO M251, SHORE HARDNESS
GRADE 4 ORS

BRASS RING SCHEDULE (PF)

ASSEM MK	PIECE MK	QTY	BRASS RING DIMENSIONS	BRASS MATERIAL
1A	1br1	6	0.094 X 0.375 X 12.125ø	B36 Half–Hard



ANCHOR ROD DETAIL

'SR' ø CHART

ASSEM. MK	PIECE MK	TOTAL QTY	SR ROD ø	'P' PROJ	'L' LENGTH
1B	1sr1	8	1.500	5.000	20.000

MAT'L: ASTM A449
COATING: ASTM A153

HEAVY HEX NUT

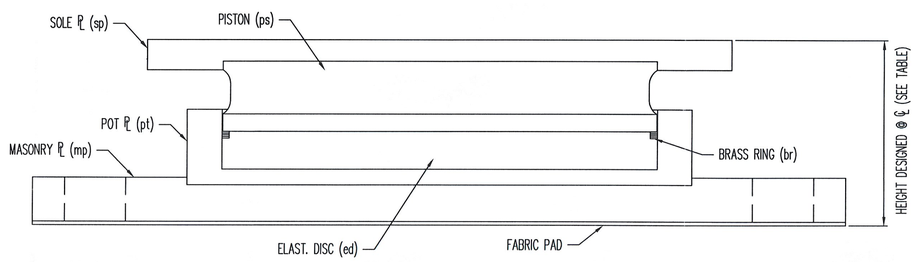
ASSEM. MK	PIECE MK	TOTAL QTY	NUT ø
1C	1hn1	8	1.500

MAT'L: ASTM A563–DH
OR A194–2H
COATING: ASTM A153

PLATE WASHER

ASSEM. MK	PIECE MK	TOTAL QTY	PLATE WASHER
1D	1fw1	8	0.375 X 3.000 X 3.000 W/1.563ø HOLE @ CTR

MAT'L: ASTM A36 COATING: ASTM A123



FIXED BEARING ASSEMBLY

RECEIVED
CK'D BY JK OK'D BY JEL
JUN 05 2008
RESUBMIT APPROVED JEL (As Noted)
BY DATE 6/24/08

* SL = SHIPPED LOOSE
SEE SHT. 03 FOR SUB–ASSEMBLY DETAILS.
SEE SHT. GN1 FOR GENERAL NOTES & COATING LIMITS.
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

REV.	DESCRIPTION	DATE	DET.	CKD.

D.S. BROWN
THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM

ITEM	QUANTITY
LOCATION — VT RTE. 100 (MINOR ARTERIAL) OVER WHITE RIVER	23160–1112–2	2 OF 2
—	–	–
PROJECT — (STP) BRF 013–4(21)	–	–
—	–	–
P.O. NO. — C2120	–	–
DESIGNER — VT DOT	–	–
CUSTOMER — WINTERSET, INC.	–	–
	–	–

DESCRIPTION: FIXED HLMR ASSEMBLY & DESIGN DETAILS
WINDSOR CO., VT

SCALE:	DRAWN BY:	CHECKED BY:	DATE:	
N.T.S.	DA	RSS	5/29/08	–
PROJECT NUMBER:	PRODUCT CODE:	RELEASE:	SHEET:	
23160	1112	1	01	

MK	QTY	DESCRIPTION
2A	3	PMGT–395
2sp1	3	SOLE PLATE
2sf1	3	STAINLESS STEEL
2pf1	3	PTFE DISC
2ps1	3	PISTON
2pt1	3	POT PLATE
2ed1	3	ELASTOMERIC DISC
2br1	9	BRASS RING
2gb1	6	GUIDE BAR
2sg1	6	G.B. STAINLESS STEEL
2pg1	6	G.B. PTFE
2mp1	3	MASONRY PLATE
2FA	3	UNDERLAYMENT (*SL)
2B	12	ANCHOR ROD (*SL)
2C	12	HEAVY HEX NUT (*SL)
2D	12	PLATE WASHER (*SL)

HLMR BEARING ASSEMBLY LOCATION & DESIGN INFORMATION (PMGT)

MK	QTY	STRUCTURE	BEARING TYPE	LOCATION	VERT. CAP	HORIZ. CAP	LONG MVMNT	TRANS MVMNT	ROTATION (RAD)	HEIGHT DESIGNED	HEIGHT IN PLANS	DIFFERENCE IN PLANS	UNDERLAYMENT IN HEIGHT (Y/N)
2A	3	Bridge	PMGT–395	PIER: 1–3	395.0 kips	79.0 kips	0	0.500	0.03	7.794	10.063	–2.269	YES

ELASTOMERIC DISC SCHEDULE (PMGT)

ASSEM MK	PIECE MK	QTY	ELASTOMERIC DISC DIMENSIONS	ELASTOMER MATERIAL
2A	2ed1	3	1.250 X 12.125ø	Neoprene, 50+/–5 Duro Gr.3

VIRGIN MATERIAL POLYISOPRENE (RUBBER) BASED MIXED WITH NO FILLERS OR EXTENDERS SHALL BE USED

BRASS RING SCHEDULE (PMGT)

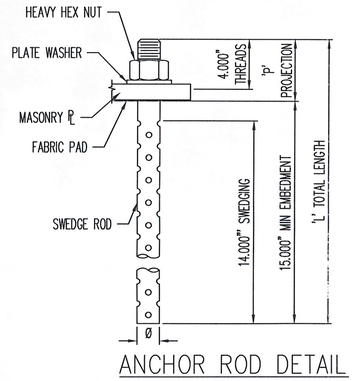
ASSEM MK	PIECE MK	QTY	BRASS RING DIMENSIONS	BRASS MATERIAL
2A	2br1	9	0.094 X 0.375 X 12.125ø	B36 Half–Hard

PTFE DISC SCHEDULE (PMGT)

ASSEM MK	PIECE MK	QTY	PTFE DIMENSIONS	PTFE DISC MATERIAL
2A	2pf1	3	0.188 X 12.000ø	Pure Virgin Unfilled

GUIDE BAR PTFE SCHEDULE (PMGT)

ASSEM MK	PIECE MK	QTY	GB PTFE DIMENSIONS	GB PTFE MATERIAL
2A	2pg1	6	0.188 X 1.375 X 13.375	Pigmented



ANCHOR ROD DETAIL

'SR' ø CHART

ASSEM. MK	PIECE MK	TOTAL QTY	SR ROD ø	'P' PROJ	'L' LENGTH
2B	2sr1	12	1.500	5.000	20.000

MAT'L: ASTM A449
COATING: ASTM A153

HEAVY HEX NUT

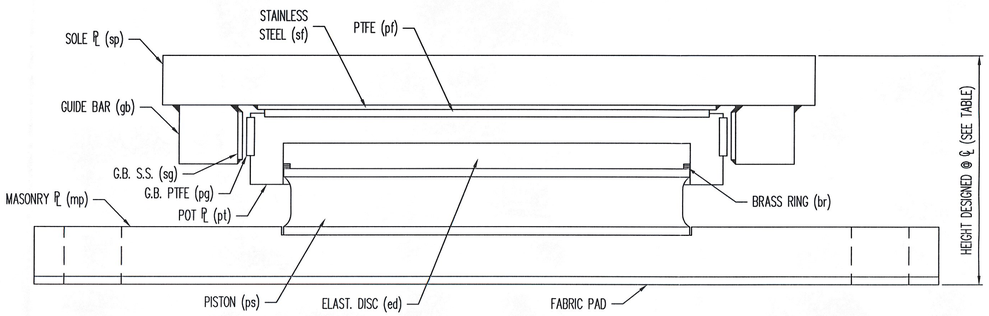
ASSEM. MK	PIECE MK	TOTAL QTY	NUT ø
2C	2hn1	12	1.500

MAT'L: ASTM A563–DH
OR A194–2H
COATING: ASTM A153

PLATE WASHER

ASSEM. MK	PIECE MK	TOTAL QTY	PLATE WASHER
2D	2fw1	12	0.375 X 3.000 X 3.000 W/1.563ø HOLE @ CTR

MAT'L: ASTM A36 COATING: ASTM A123



UNI–DIRECTIONAL BEARING ASSEMBLY

RECEIVED
CKD BY ___ OK'D BY JEL
JUN 0 5 2003
RESUBMIT ___ APPROVED JEL (AS NOTED)
BY ___ DATE 6/24/08

* SL = SHIPPED LOOSE
SEE SHT. 04 & 05 FOR SUB–ASSEMBLY DETAILS.
SEE SHT. GN1 FOR GENERAL NOTES & COATING LIMITS.
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE NOTED

REV.	DESCRIPTION	DATE	DET.	CKD.

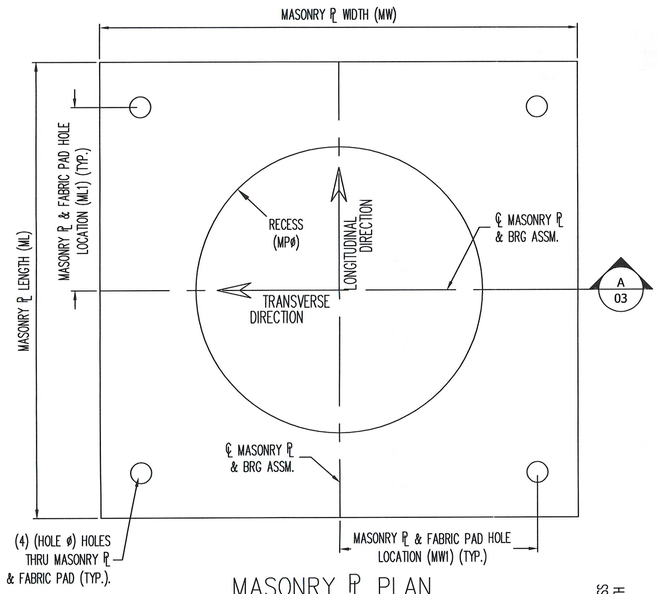
D.S. BROWN
THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM

ITEM	QUANTITY
LOCATION — VT RTE. 100 (MINOR ARTERIAL) OVER WHITE RIVER	23160–1112–1	3 OF 3
—	–	–
PROJECT — (STP) BRF 013–4(21)	–	–
—	–	–
P.O. NO. — C2120	–	–
DESIGNER — VT DOT	–	–
CUSTOMER — WINTERSET, INC.	–	–
	–	–

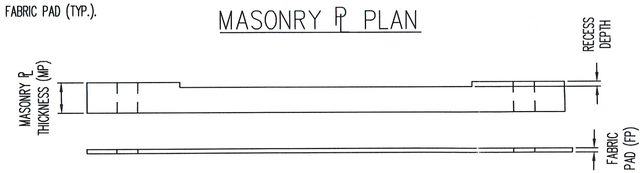
DESCRIPTION: UNI–DIRECTIONAL HLMR ASSEMBLY & DESIGN DETAILS
WINDSOR CO., VT

SCALE:	DRAWN BY:	CHECKED BY:	DATE:	
N.T.S.	DA	RSS	5/29/08	–
PROJECT NUMBER	PRODUCT CODE	RELEASE	SHEET	
23160	1112	1	02	

ASSEMBLY 01

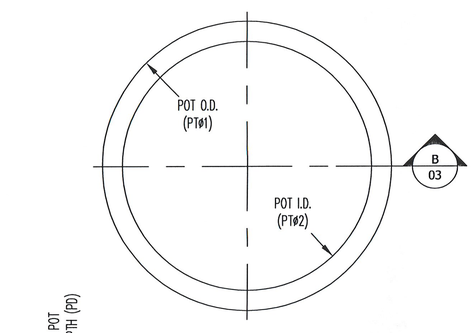


MASONRY ℄ PLAN

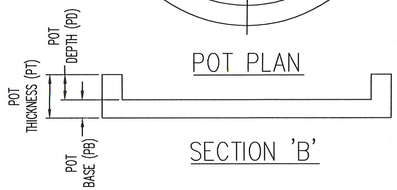


SECTION 'A'

MASONRY PLATE & UNDERLAYMENT (UL) SCHEDULE (PF)														
ASSEM MK	PIECE MK	QTY	MP	MW	ML	MW1	ML1	RECESS MPø	RECESS DEPTH	HOLE ø	UL MK	UL FP	UL MATERIAL	MASONRY PL MATERIAL
1A	1mp1	2	1.750	30.000	21.000	12.750	5.250	15.063	0.250	1.875	1fp1	0.125	VT 731.01	A709 GR 50W

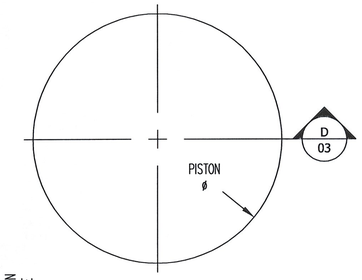


POT PLAN

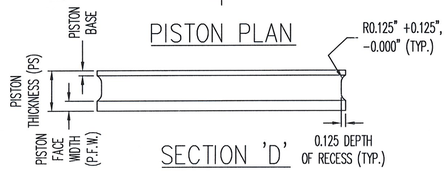


SECTION 'B'

POT PLATE SCHEDULE (PF)								
ASSEM MK	PIECE MK	QTY	PT	PT ø1	PT ø2	PB	PD	POT PL MATERIAL
1A	1pt1	2	3.350	15.000	12.125	1.467	1.883	A709 GR 50W

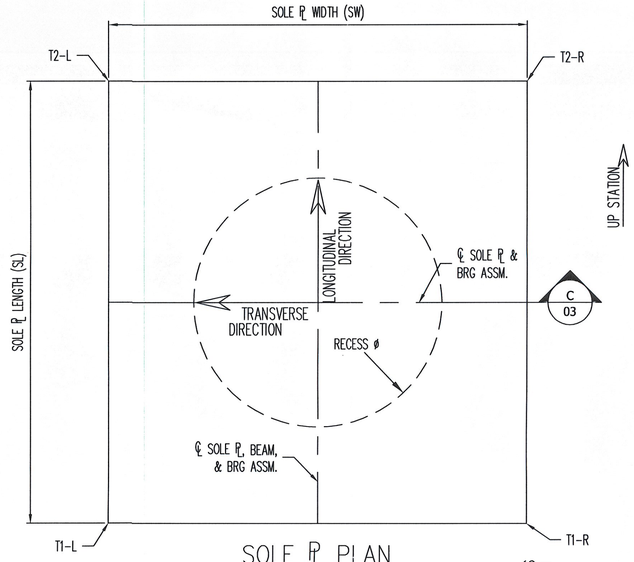


PISTON PLAN

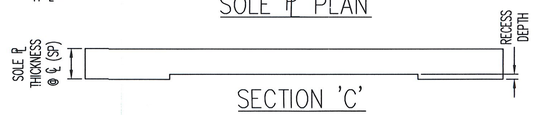


SECTION 'D'

PISTON SCHEDULE (PF)							
ASSEM MK	PIECE MK	QTY	PS	PISTON ø	PFW	PISTON BASE	PISTON MATERIAL
1A	1ps1	2	1.390	12.085	0.326	0.250	A709 GR 50W



SOLE ℄ PLAN



SECTION 'C'

SOLE PLATE SCHEDULE (PF)												
ASSEM MK	PIECE MK	QTY	BEVEL T1-L	BEVEL T1-R	BEVEL T2-L	BEVEL T2-R	SP	SW	SL	RECESS SPø	SP RECESS DEPTH	SOLE PLATE MATERIAL
1A	1sp1	2	1.875	1.875	1.500	1.500	1.688	21.000	21.000	12.148	0.250	A709 GR 50W

SEE SHT. 01 FOR ASSEMBLY DETAILS & LOCATIONS.
SEE SHT. GN1 FOR GENERAL NOTES & COATING LIMITS.
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

RECEIVED
CKD BY JEL
JUN 05 2008
RESUBMIT APPROVED JEL (DS NOTED)
BY DATE 6/24/08

REV.	DESCRIPTION	DATE	DET.	CKD.

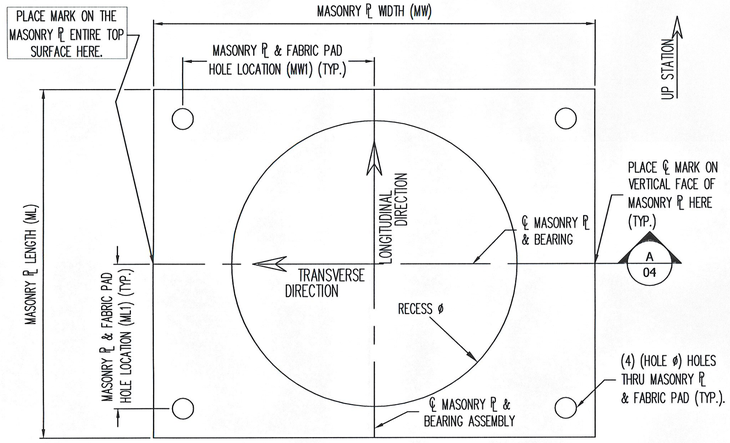
D.S. BROWN
THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM

	ITEM	QUANTITY
LOCATION — VT RTE. 100 (MINOR ARTERIAL) OVER WHITE RIVER	–	–
—	–	–
PROJECT — (STP) BRF 013-4(21)	–	–
—	–	–
P.O. NO. — C2120	–	–
DESIGNER — VT DOT	–	–
CUSTOMER — WINTERSET, INC.	–	–
	–	–

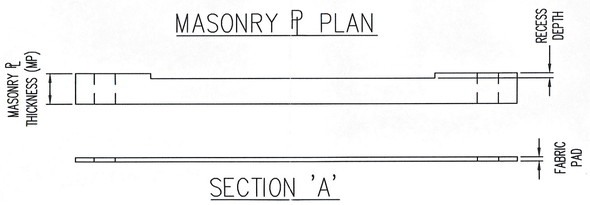
DESCRIPTION: FIXED BEARING SUB-ASSEMBLY DETAILS
WINDSOR CO., VT

SCALE:	DRAWN BY:	CHECKED BY:	DATE:	
N.T.S.	DA	RSS	5/29/08	–
PROJECT NUMBER	PROJECT CODE	RELEASE	SHEET	
23160	1112	1	03	

ASSEMBLY 02

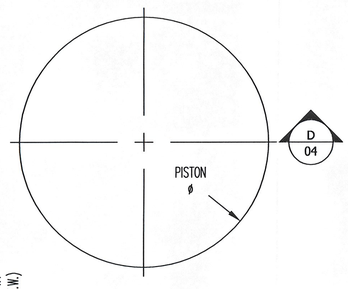


MASONRY ℄ PLAN

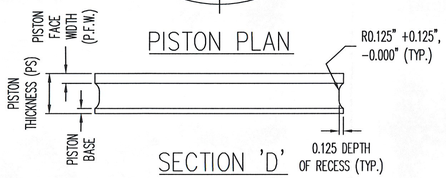


SECTION 'A'

MASONRY PLATE & UNDERLAYMENT (UL) SCHEDULE (PMGT)														
ASSEM MK	PIECE MK	QTY	MP	MW	ML	MW1	ML1	RECESS ø	RECESS DEPTH	HOLE ø	UL MK	UL FP	UL MATERIAL	MASONRY PL MATERIAL
2A	2mp1	3	1.750	30.000	21.000	12.750	5.250	12.148	0.250	1.875	2fp1	0.125	VT 731.01	A709 GR 50W

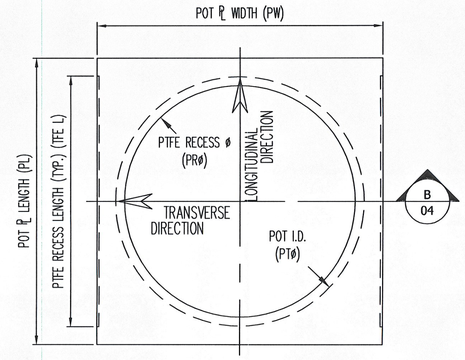


PISTON PLAN

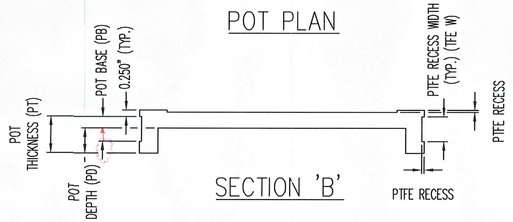


SECTION 'D'

PISTON SCHEDULE (PMGT)							
ASSEM MK	PIECE MK	QTY	PS	PISTON ø	PFW	PISTON BASE	PISTON MATERIAL
2A	2ps1	3	1.500	12.085	0.326	0.250	A709 GR 50W



POT PLAN



SECTION 'B'

POT PLATE SCHEDULE (PMGT)												
ASSEM MK	PIECE MK	QTY	PT	PW	PL	PB	PD	PT ø	PR ø	TFE L	TFE W	POT PL MATERIAL
2A	2pt1	3	3.400	13.625	13.625	1.517	1.883	12.125	12.000	13.375	1.375	A709 GR 50W

PTFE RECESS 0.094

SEE SHT. 02 FOR ASSEMBLY DETAILS & LOCATIONS.
SEE SHT. 05 FOR ADDITIONAL SUB-ASSEMBLY DETAILS.
SEE SHT. GN1 FOR GENERAL NOTES & COATING LIMITS.
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

RECEIVED
BRIDGE 11 CKD BY JEL
JUN 05 '08
RESUBMIT APPROVED JEL (AS NOTED)
BY DATE 6/24/08

REV.	DESCRIPTION	DATE	DET.	CKD.

D.S. BROWN
THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM

LOCATION — VT RTE. 100 (MINOR ARTERIAL) OVER WHITE RIVER
PROJECT — (STP) BRF 013-4(21)
P.O. NO. — C2120
DESIGNER — VT DOT
CUSTOMER — WINTERSET, INC.

ITEM	QUANTITY
–	–
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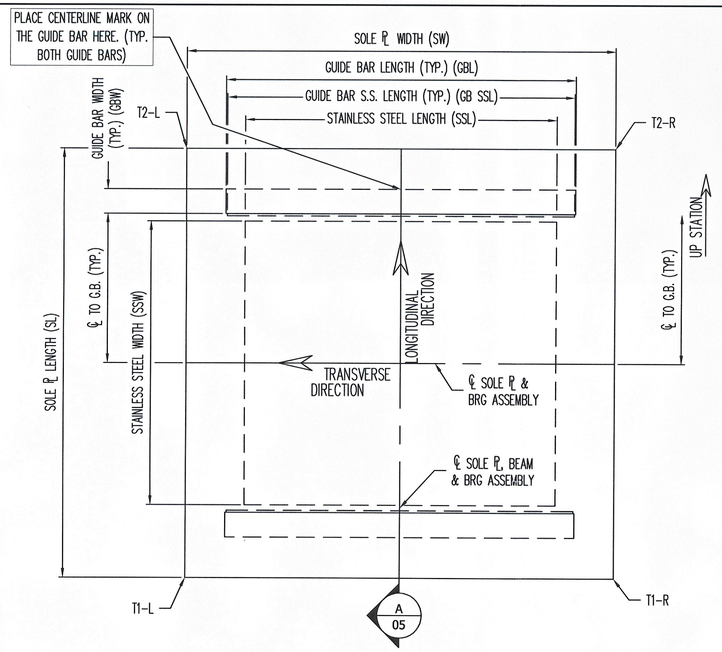
–	–
–	–

DESCRIPTION: UNI-DIRECTIONAL BEARING SUB-ASSEMBLY DETAILS
WINDSOR CO., VT

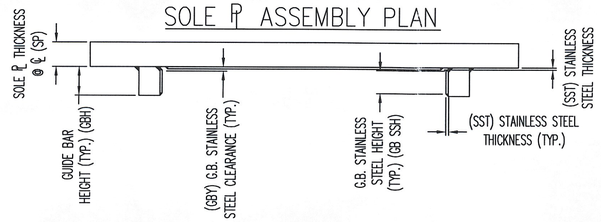
SCALE:	DRAWN BY:	CHECKED BY:	DATE:	
N.T.S.	DA	RSS	5/29/08	–

PROJECT NUMBER	PRODUCT CODE	RELEASE	SHEET
23160	1112	1	04

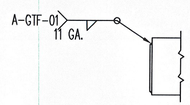
ASSEMBLY 02



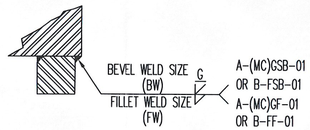
SOLE ℄ ASSEMBLY PLAN



SECTION 'A'



STAINLESS STEEL WELD DETAIL



GUIDE BAR WELD DETAIL

SOLE PLATE, STAINLESS STEEL, & GUIDE BAR SCHEDULE (PMGT)																											
ASSEM MK	PIECE MK	QTY	BEVEL T1-L	BEVEL T1-R	BEVEL T2-L	BEVEL T2-R	SP	SW	SL	SOLE PLATE MATERIAL	SP SS MK	SST	SSW	SSL	SP SS MATERIAL	GB SS MK	GB SSH	GB SSL	GB SS MATERIAL	GB MK	GBW	GBH	GBL	CL to GB	GBY	FW	BW	GB MATERIAL
2A	2sp1	3	1.875	1.875	1.500	1.500	1.688	21.000	21.000	A709 GR 50W	2sf1	0.120	13.125	14.500	A240 T304, #8 & 2B	2sg1	1.625	15.875	A240 T304, #8 & 2B	2gb1	2.125	2.125	16.125	7.089	0.375	0.313	0.438 (0.313)	A709 GR 50W

SEE SHT. 02 FOR ASSEMBLY DETAILS & LOCATIONS.
SEE SHT. 04 FOR ADDITIONAL SUB-ASSEMBLY DETAILS.
SEE SHT. GN1 FOR GENERAL NOTES & COATING LIMITS.
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

RECEIVED
CK'D BY JEL OK'D BY JEL
JUN 05 2008
RESUBMIT APPROVED JEL (AS NOTED)
BY . DATE 6/24/08

REV.	DESCRIPTION	DATE	DET.	CKD.

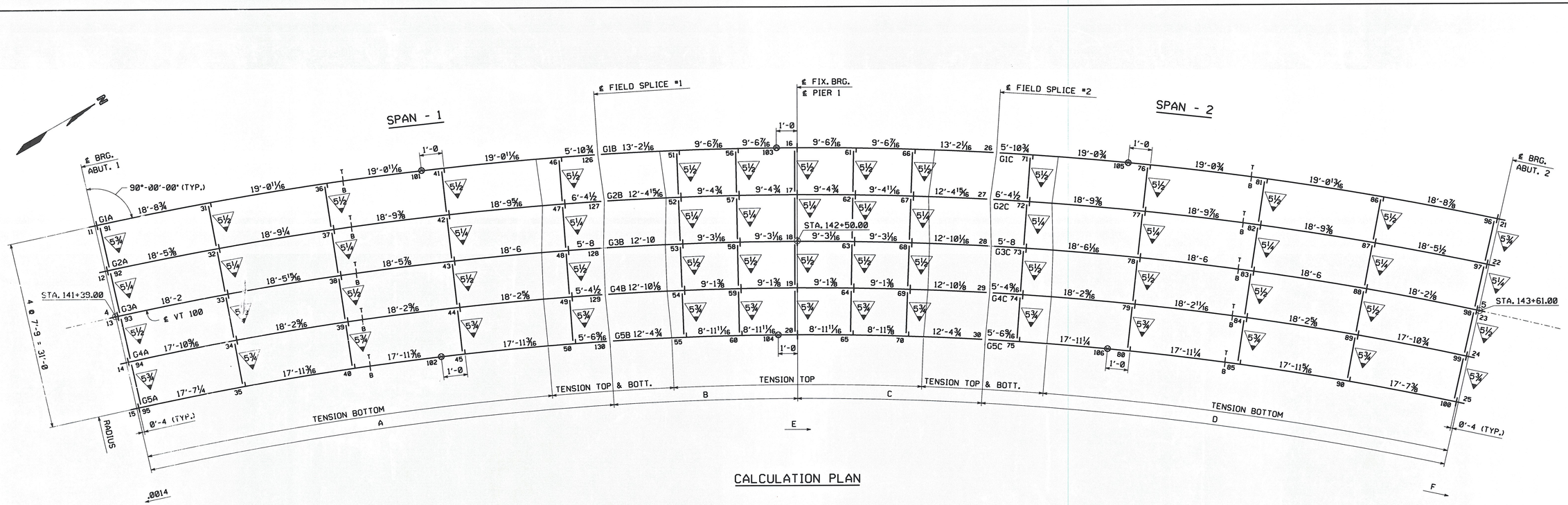
D.S. BROWN
THE D.S. BROWN COMPANY
300 E. CHERRY STREET
NORTH BALTIMORE, OHIO 45872
419.257.3561
FAX: 419.257.0332
WWW.DSBROWN.COM

LOCATION — VT RTE. 100 (MINOR ARTERIAL) OVER WHITE RIVER
—
PROJECT — (STP) BRF 013-4(21)
—
P.O. NO. — C2120
DESIGNER — VT DOT
CUSTOMER — WINTERSET, INC.

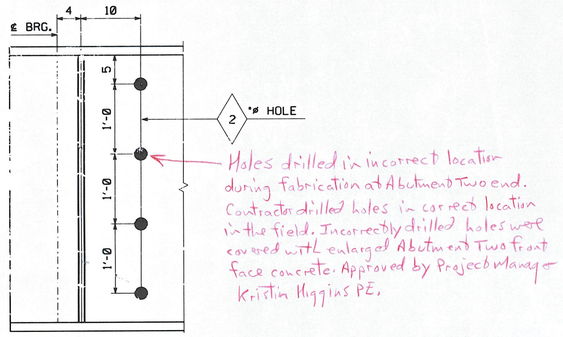
ITEM	QUANTITY
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–
–	–

DESCRIPTION: UNI-DIRECTIONAL BEARING SUB-ASSEMBLY DETAILS
WINDSOR CO., VT

SCALE:	DRAWN BY:	CHECKED BY:	DATE:	
N.T.S.	DA	RSS	5/29/08	–
PROJECT NUMBER	PRODUCT CODE	RELEASE	SHEET	
23160	1112	1	05	



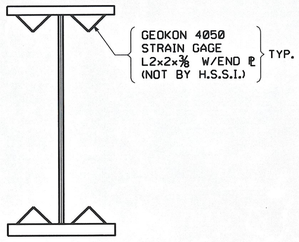
CALCULATION PLAN



Holes drilled in incorrect location during fabrication at Abutment Two end. Contractor drilled holes in correct location in the field. Incorrectly drilled holes were covered with L enlargal Abutment Two front face concrete. Approved by Project Manager Kristin Higgins PE.

WEB LAYOUT

(ABUT. 1 SHOWN, ABUT. 2 SIMILAR)



STRAIN GAGE DETAIL

⊗ INDICATES LOCATION OF STRAIN GAGE (GROUP OF 4)
(WELDED BY HSSI USING GEOKON JIG & INSTALLATION INSTRUCTIONS)

LINE	RADIUS	A	B	C	D	E	F
G1	[illegible]-9⅝	82'-1 15/16	32'-2 15/16	32'-2 15/16	82'-1 15/16	.0179	.0371
G2	[illegible]-0⅝	81'-5 13/16	31'-2 7/16	31'-2⅜	81'-6 3/16	.0182	.0377
G3	[illegible]-3⅝	79'-7 13/16	31'-4⅛	31'-4 3/16	79'-8 3/16	.0185	.0383
G4	[illegible]-6½	78'-2 13/16	31'-0⅞	31'-0⅞	78'-3 3/16	.0187	.0389
G5	[illegible]-9⅝	77'-3⅛	30'-4⅛	30'-4 1/16	77'-[illegible]	.0190	.0395

RECEIVED
OK'D BY JH OK'D BY JFR
AUG 18 2008
RESUBMIT APPROVED
BY KMH DATE 8/19/08

NOTES:

DIMENSIONS ON PLAN ALONG GIRDERS ARE GIVEN TO THE CHORD AT THE BOTTOM OF WEB IN FULLY CAMBERED POSITION. ALL OTHER DIMENSIONS ARE GIVEN HORIZONTALLY.
DIMENSIONS PLACED ON THE GIRDER LINES REPRESENT CROSSFRAME SPACING.
FIGURES GIVEN THUS: .0014 ARE THE GRADES OF THE GIRDERS AT THE BEARINGS IN FINAL POSITION; ARROW POINTS DOWNGRADE.
ALL STIFFENER AND CONNECTION PLATE SPACINGS ARE GIVEN TO ℄ PLATE.
ENDS OF GIRDERS AND ALL BEARING STIFFENERS TO BE VERTICAL IN FINAL POSITION.
ALL STEEL TO BE ASTM A709 GRADE 50W (U.N.).
ALL FIELD CONNECTIONS TO BE MADE WITH ⅞"ø H.S. (AASHTO M164 TYPE 3) BOLTS IN 15/16"ø HOLES. (U.N.).
FIGURES GIVEN THUS: .03 ARE THE DIFFERENCES IN ELEVATIONS OF GIRDERS (IN THE PLANE OF THE CROSSFRAME IN FINAL POSITION) AT CROSSFRAMES; ARROW POINTS TOWARD LOW GIRDER.
FOR TYPICAL DETAIL LAYOUTS, SEE DRAWINGS PREFIXED 'TD'.

••NOTE••
THE PURPOSE OF THIS DRAWING IS TO COORDINATE GEOMETRIC CONTROL INFORMATION. THIS DRAWING IS SUBMITTED FOR INFORMATION ONLY AND IS NOT INTENDED FOR SHOP FABRICATION. THIS DRAWING IS FOR REFERENCE ONLY, APPROVAL IS NOT REQUIRED.

NO.	REVISION	BY	CHK'D	DATE

HIGH STEEL STRUCTURES, INC.
Lancaster Facility: 195 Old Philadelphia Pike, Lancaster, PA 17605-0008, Phone (717) 299-5211
Williamsport Facility: 3501 W. 4th Street, Williamsport, PA 17701, Phone (570) 326-9051
An ISO 9001:2000 Certified Company — An Affiliate of High Industries Inc. — www.highsteel.com

HOLES | BOLTS | COATING | CODE(S) | SCALE N.T.S.

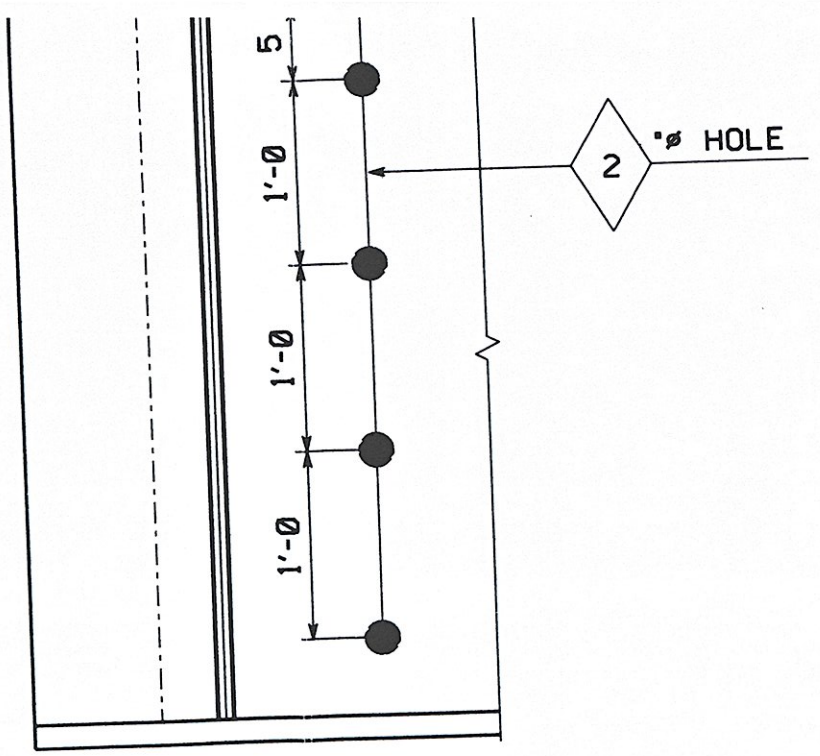
WORKSHEET ~ CALCULATION PLAN
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1 — DRAWING MANAGER	KREIDER (IH)	MADE BY SSL	CHK'D. BY CS — DATE 6-17-08
STATE VT — HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID A	DRAWING NUMBER WS1 OF WS1

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH
Scale = .0104166667 Feet/Foot
SHAPENT 2: SHAPENT: S0024327 PRO: S0023228 SHPRESPECT: S0024329
BY: MKreidel
PLOTTED: 6/25/2008 3:40:10 PM

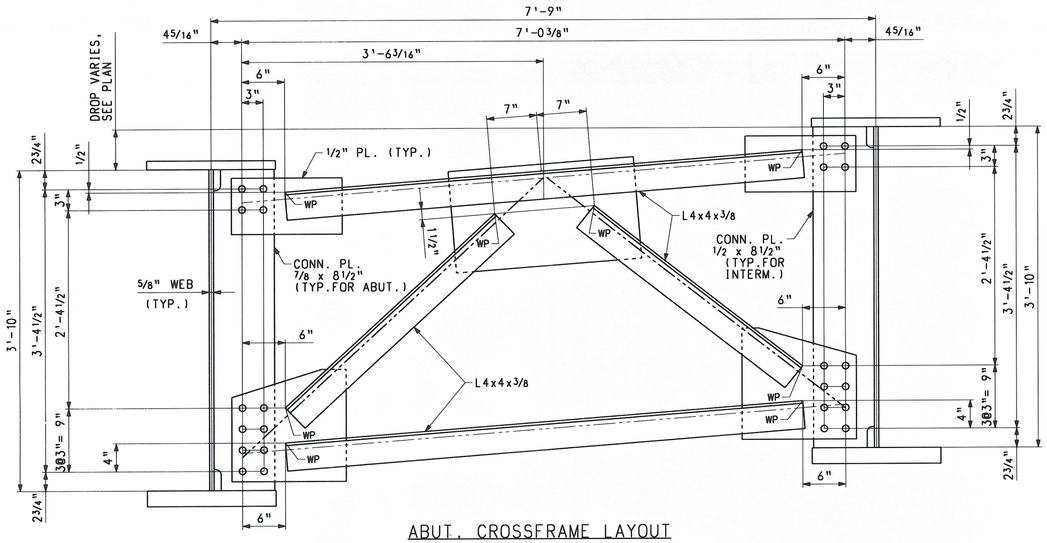
PLOTTED: 6/25/2008
3:40:18 PM
BY: MKreidel
SHIPMENT 01
PM&ENG: 5004327 PRE



WEB LAYOUT

(ABUT. 1 SHOWN. ABUT. 2 SIMILAR)

LINE	RADIUS	A	B	C	D	E	F
G1	524'-9 5/8	82'-1 9/16	32'-2 15/16	32'-2 15/16	82'-1 15/16	.0179	.0371
G2	517'-0 5/8	81'-5 13/16	31'-2 7/16	31'-2 3/8	81'-6 3/16	.0182	.0377
G3	509'-3 5/8	79'-7 13/16	31'-4 1/8	31'-4 3/16	79'-8 3/16	.0185	.0383
G4	501'-6 5/8	78'-2 13/16	31'-0 7/8	31'-0 7/8	78'-3 3/16	.0187	.0389
G5	493'-9 5/8	77'-3 3/8	30'-4 1/8	30'-4 1/16	77'-3 3/4	.0190	.0395

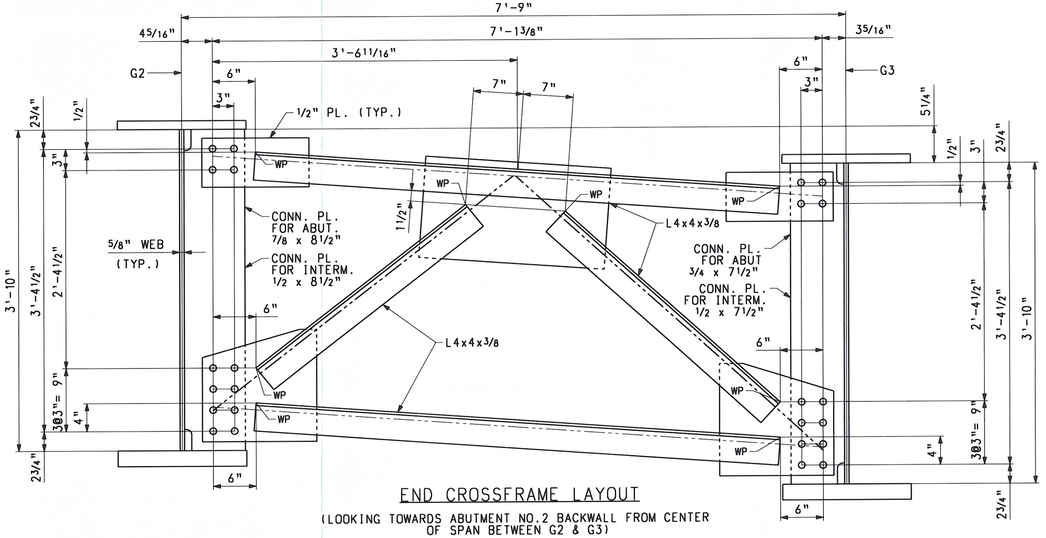


ABUT. CROSSFRAME LAYOUT

(LOOKING TOWARDS BACKWALL BETWEEN G1 & G2)

INTERM. CROSSFRAME LAYOUT

(LOOKING STATIONS AHEAD BETWEEN G1 & G2)

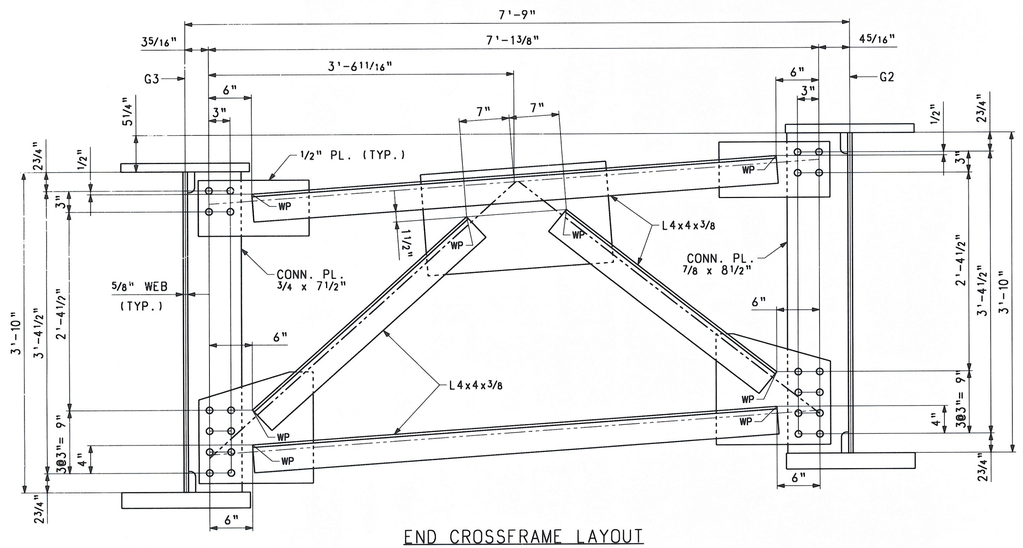


END CROSSFRAME LAYOUT

(LOOKING TOWARDS ABUTMENT NO.2 BACKWALL FROM CENTER OF SPAN BETWEEN G2 & G3)

INTERM. CROSSFRAME LAYOUT

(LOOKING STATIONS AHEAD BETWEEN G2 & G3)



END CROSSFRAME LAYOUT

(LOOKING TOWARDS ABUTMENT NO.1 BACKWALL FROM CENTER OF SPAN BETWEEN G3 & G2)

RECEIVED
CK'D BY JFL OK'D BY
AUG 18 2008
RESUBMIT APPROVED
BY KMH DATE 8/19/08

NOTES:

FOR NOTES, SEE DRAWING WS1.
WORK THIS DRAWING WITH WS1.

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

NO.	REVISION	BY	CHK'D	DATE

HOLES 15/16" Ø
BOLTS NONE
COATING NONE
CODE(S)
SCALE N.T.S.

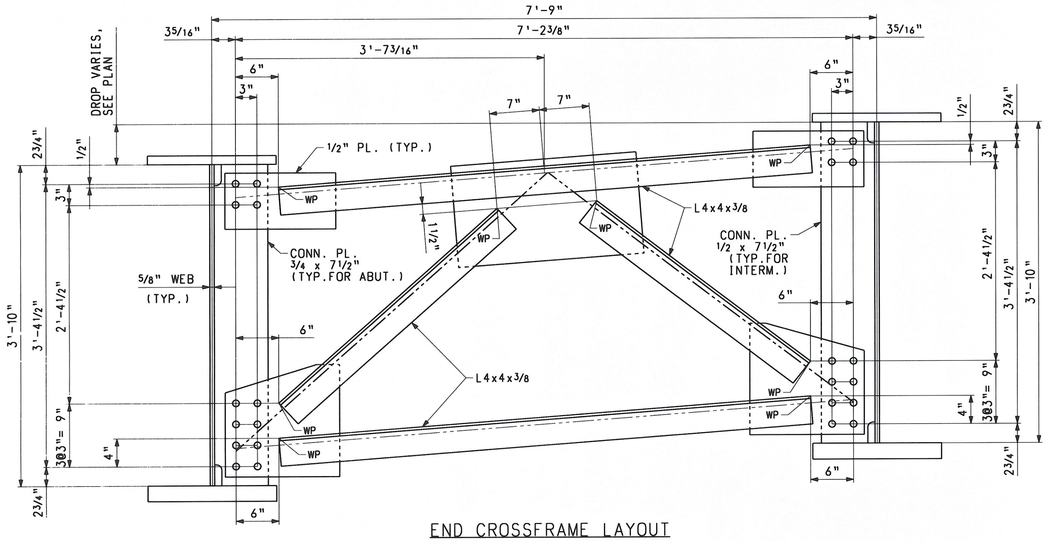
HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com

TYPICAL DETAILS - CROSSFRAME LAYOUTS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER KREIDER (IH)	MADE BY KLW	CHK'D. BY CS DATE 6/17/08
STATE VT	HSSI PROJECT NUMBER S-1080077	HSSI STRUCT. ID A	DRAWING NUMBER TD1 OF TD3

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PMEFNG: XXXXXXX PRD: XXXXXXX SHIP&ERECT: XXXXXXX
PLOTTED: 06/25/08 15:45:01 By: MKreidel

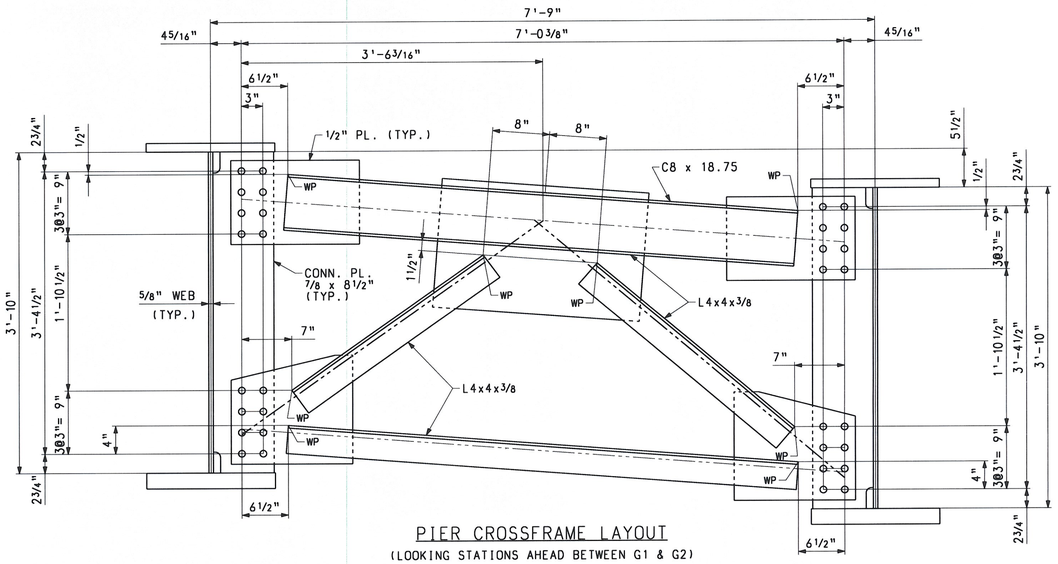


END CROSSFRAME LAYOUT

(LOOKING TOWARDS BACKWALL FROM CENTER OF SPAN BETWEEN G3 THRU G5)

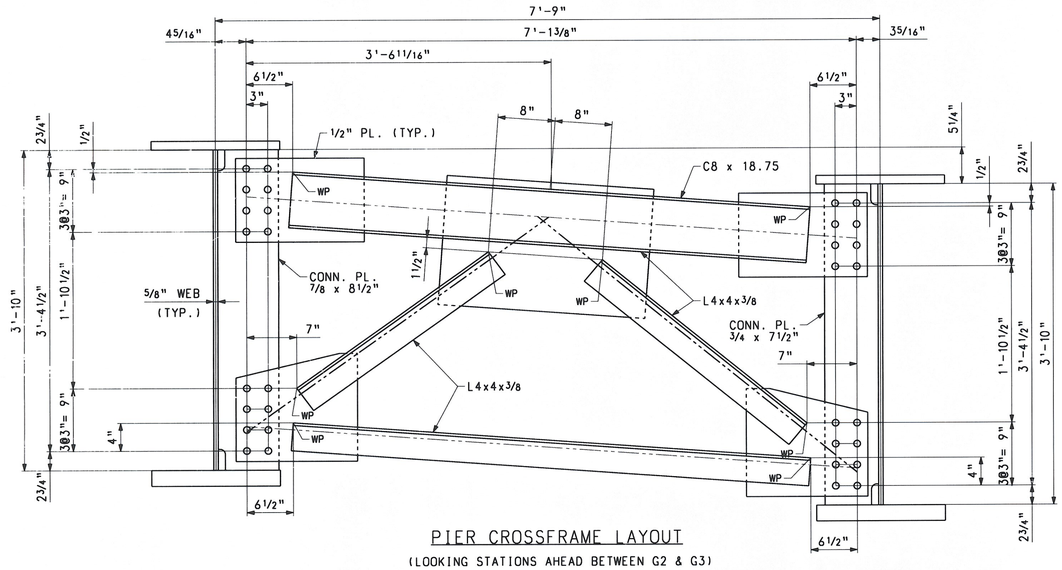
INTERM. CROSSFRAME LAYOUT

(LOOKING STATIONS AHEAD BETWEEN G3 & G5)



PIER CROSSFRAME LAYOUT

(LOOKING STATIONS AHEAD BETWEEN G1 & G2)



PIER CROSSFRAME LAYOUT

(LOOKING STATIONS AHEAD BETWEEN G2 & G3)

NOTES:

FOR NOTES, SEE DRAWING WS1.
WORK THIS DRAWING WITH WS1.

NOTE
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RECEIVED
CK'D BY JEL OK'D BY JEL
AUG 18 2008
RESUBMIT APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HIGH STEEL STRUCTURES INC.
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Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com

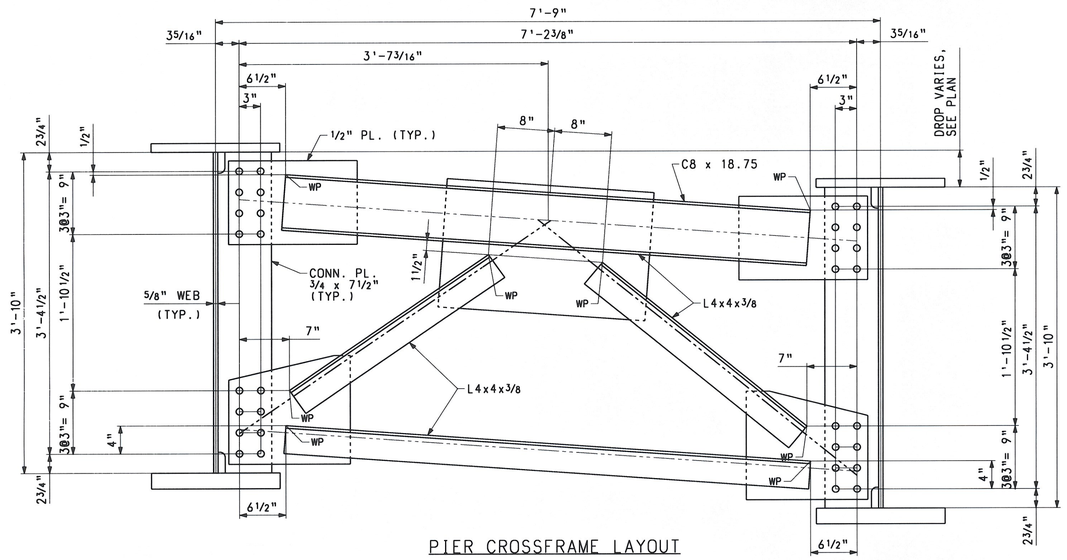
HOLES: 15/16" Ø
BOLTS: NONE
COATING: NONE
CODE(S):
SCALE: N.T.S.

TYPICAL DETAILS - CROSSFRAME LAYOUTS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)		FED. AID PROJ. NO.				
GENERAL CONTRACTOR	WINTERSET, INC.		HSSI PROJ. MGR	DEB KUPRES			
SHPMT 1	DRAWING MANAGER	KREIDER (IH)	MADE BY	KLW	CHK'D. BY	CS	DATE 6/17/08
STATE VT	HSSI PROJECT NUMBER	S-10800 77	HSSI STRUCT. ID	A	DRAWING NUMBER	TD2 OF TD3	

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT : PM&ENG: XXXXXXX PRD: XXXXXXX SHIP&RECT: XXXXXXX
PLOTTED: 06/25/08 15:45:16 BY: MKreidel



PIER CROSSFRAME LAYOUT

(LOOKING STATIONS AHEAD BETWEEN G3 & G5)

NOTES:

FOR NOTES, SEE DRAWING WS1.
WORK THIS DRAWING WITH WS1.

NOTE
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RECEIVED
CK'D BY ____ OK'D BY JEL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HOLES: 15/16" Ø
BOLTS: NONE
COATING: NONE
CODE(S):
SCALE: N.T.S.

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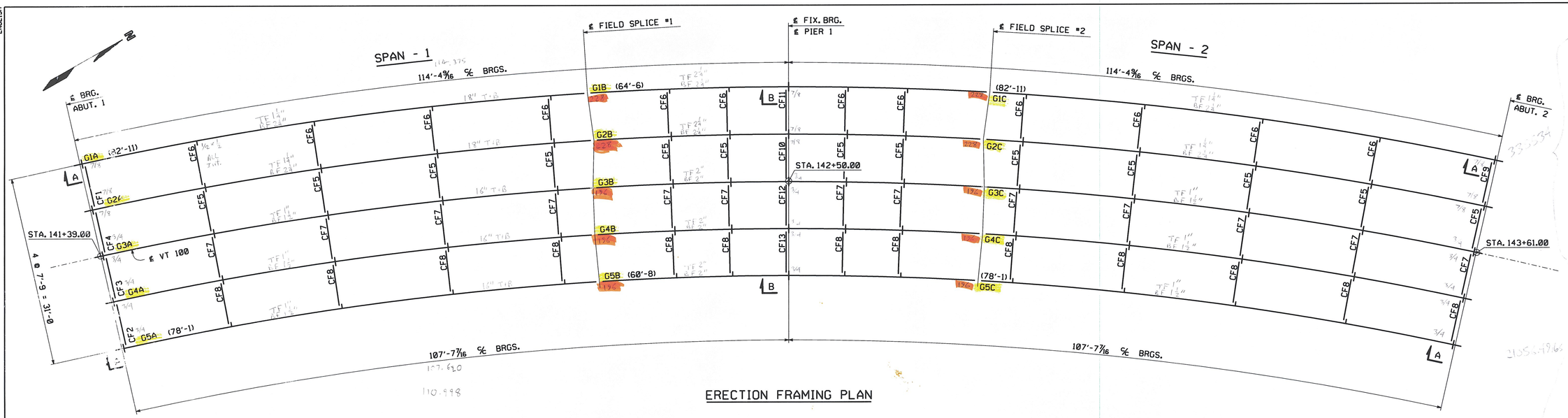
TYPICAL DETAILS - CROSSFRAME LAYOUTS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: KLW	CHK'D. BY: CS DATE: 6/17/08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: TD3 OF TD3

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PM&ENG: XXXXXXX PRD: XXXXXXX SHIP&ERECT: XXXXXXX
PLOTTED: 06/25/08 15:45:30 BY: MKreidel



ERECTION FRAMING PLAN

SHIPPING PIECES		
SHIPPING PIECE MARK	WEIGHT EA. (LBS)	DWG NO.
G1A	26,405	1
G2A	26,426	2
G3A	19,480	3
G4A	19,148	4
G5A	18,728	5
G1B	26,066	6
G2B	25,503	7
G3B	21,536	8
G4B	21,363	9
G5B	20,710	10
G1C	26,404	11
G2C	26,420	12
G3C	19,475	13
G4C	19,144	14
G5C	18,726	15
CF1	342	16
CF2	346	16
CF3	346	17
CF4	344	17
CF5	344	18
CF6	342	18
CF7	346	19
CF8	346	19
CF9	342	20
CF10	441	20
CF11	438	21
CF12	444	21
CF13	444	22

LIST OF FIELD CONNECTIONS

ONE WASHER PER BOLT UNLESS NOTED OTHERWISE

LINE	ACTUAL NUMBER REQ'D	BOLT DIAM	BOLT LENGTH	BOLTS PER CONN.	NO. OF CONN	GRIP	THICKNESS OF PIECES JOINED					PIECES CONNECTED AND REMARKS
✓ 1	840	7/8	3	84	10	1 5/8	1/2	5/8	1/2			WEB SPL @ FS1 G1-G5; FS2 G1-G5
✓ 2	288	7/8	4 1/2	48	6	3 1/8	1/2	2	5/8			TOP FLG SPL @ FS1 G3-G5; FS2 G3-G5
✓ 3	256	7/8	4 3/4	64	4	3 3/8	1/2	2 1/4	5/8			TOP FLG SPL @ FS1 G1-G2; FS2 G1-G2
✓ 4	384	**7/8**	4 1/2	64	6	3 1/8	1/2	2	5/8			BOT FLG SPL @ FS1 G3-G5; FS2 G3-G5
✓ 5	320	7/8	4 3/4	80	4	3 3/8	1/2	2 1/4	5/8			BOT FLG SPL @ FS1 G1-G2; FS2 G1-G2
6												
✓ 7	72	7/8	2 3/4	12	6	1 3/8	1/2	7/8				ABUT. CF TO BRG. STIFF. (G1 & G2)
✓ 8	120	**7/8**	2 1/2	12	10	1 1/4	1/2	3/4				ABUT. CF TO BRG. STIFF. (G3 - G5)
✓ 9	**48**	**7/8**	2 3/4	16	3	1 3/8	1/2	7/8				PIER CF TO BRG STIFF. (G1 & G2)
✓ 10	**80**	**7/8**	2 1/2	16	5	1 1/4	1/2	3/4				PIER CF TO BRG STIFF. (G3 - G5)
✓ 11	**1152**	**7/8**	2 1/4	12	96	1	1/2	1/2				INTERM. CF TO CONN. PL.

FIELD BOLT SUMMARY - SHIP. #1

(2% ADDITIONAL BOLTS ADDED + 3 EA. FOR TESTING)

AASHTO M164 TYPE 3 (RCT); W/HVY HEX HD

✓	591	7/8"ø HIGH STRENGTH BOLTS x 0'-4 3/4
✓	688	7/8"ø HIGH STRENGTH BOLTS x 0'-4 1/2
✓	860	7/8"ø HIGH STRENGTH BOLTS x 0'-3
✓	125	7/8"ø HIGH STRENGTH BOLTS x 0'-2 3/4
✓	207	7/8"ø HIGH STRENGTH BOLTS x 0'-2 1/2
✓	1,178	7/8"ø HIGH STRENGTH BOLTS x 0'-2 1/4

3,649 nuts

AASHTO M291 GRADE DH3 (RCT); HVY HEX

✓	3,649	NUTS FOR 7/8"ø BOLT

AASHTO M293 WEATHERING (RCT); ROUND & FLAT

✓	3,649	STD WASHERS FOR 7/8"ø BOLT

NOTES:

NO CREDIT WILL BE ALLOWED FOR WORK PERFORMED BY OTHERS IN REPLACING OR CORRECTING MATERIALS OR WORKMANSHIP COVERED BY THIS DRAWING UNLESS EXPRESSLY AUTHORIZED BY HIGH STEEL STRUCTURES, INC.

HIGH STEEL STRUCTURES, INC. DOES NOT SUPPLY SHEAR STUDS, EXPANSION DAM MATERIAL, BEARINGS, BEARING PADS, ANCHOR BOLTS, FIELD APPLIED GREASE COATING, OR HOLES FOR FLEMMING BRACKETS

ERECTOR NOTE: ELEVATIONS, CAMBER CHECKS AND HORIZONTAL ALIGNMENT OF FIELD SPLICES MUST BE COMPLETED PRIOR TO FINAL BOLTING. HIGH STEEL STRUCTURES IS TO BE NOTIFIED AND CONSULTED, PRIOR TO FINAL BOLTING, IF SPLICE LOCATIONS ARE NOT WITHIN ACCEPTABLE TOLERANCE. BOTH VERTICAL & HORIZONTAL CORRECTION OF ANY UNACCEPTABLE SPLICES AFTER FINAL BOLTING WILL BE AT NO COST TO HIGH STEEL STRUCTURES.

NOTICE: WEIGHTS OF MEMBERS LISTED ON THESE DRAWINGS ARE ESTIMATED WEIGHTS AND ACTUAL WEIGHTS WILL VARY. HIGH STEEL STRUCTURES, INC. WILL NOT BE RESPONSIBLE FOR ANY ERECTION PROCEDURES, SHIPPING PROCEDURES, ETC. DEVELOPED USING ESTIMATED WEIGHTS AS SHOWN.

ALL DIMENSIONS ARE GIVEN HORIZONTALLY (U.N.).

DIMENSIONS GIVEN THUS: (82'-11) ARE THE SHIPPING LENGTHS OUT TO OUT OF FASCIA GIRDERS.

ERECTOR NOTE: ALL BOLTS MUST BE LOCATED IN ACCORDANCE WITH THE LIST OF FIELD CONNECTIONS. HIGH STEEL STRUCTURES WILL NOT BE RESPONSIBLE FOR FURNISHING ADDITIONAL BOLTS OR FOR ANY OTHER RELATED COSTS OR DAMAGES RESULTING FROM IMPROPER LOCATION OF BOLTS.

ALL FIELD BOLTS THRU BOTTOM FLANGE ARE TO HAVE HEADS UP.

(RCT) INDICATES ROTATIONAL CAPACITY TESTED BOLTS. DO NOT MIX NUTS, BOLTS AND WASHERS FROM DIFFERENT CONTAINERS UNLESS ALL NUTS, BOLTS AND WASHERS HAVE THE SAME LOT NUMBER.

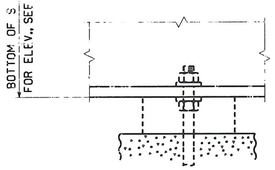
ALL FIELD BOLTS THRU WEB OF FASCIA GIRDERS TO HAVE HEADS ON OUTSIDE OF WEB.

SEE DRAWING SA1 & SA2 FOR MATCH MARKING SYSTEM.

WORK THIS DRAWING WITH DRAWING E2.

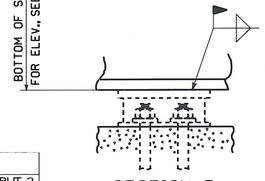
CONTRACTOR PLEASE NOTE — ANCHOR BOLTS AT ABUTMENTS MUST BE SET IN PLACE BEFORE GIRDERS ARE ERECTED. NUT MAY BE TIGHTENED TO FACILITATE STEEL GIRDER ERECTION.

CONTRACTOR NOTE:
ELEVATIONS ARE GIVEN TO BOTTOM OF STEEL - DO NOT POUR TO FINAL ELEVATIONS WITHOUT VERIFICATION OF BEARING HEIGHTS AND BRIDGE SEATS.



SECTION A

CONTRACTOR NOTE:
ELEVATIONS ARE GIVEN TO BOTTOM OF STEEL - DO NOT POUR TO FINAL ELEVATIONS WITHOUT VERIFICATION OF BEARING HEIGHTS AND BRIDGE SEATS.



SECTION B

ELEVATIONS			
LINE	ABUT. 1	PIER	ABUT. 2
G1	742.410	741.219	738.310
G2	741.940	740.759	737.840
G3	741.560	740.339	737.460
G4	741.100	739.871	737.000
G5	740.630	739.401	736.530

SHIPPING GROUP A1	
SHIPPING PIECE MARK	QUANTITY
G1A	1
G2A	1
G3A	1
G4A	1
G5A	1
CF1	1
CF2	1
CF3	1
CF4	1
CF5	4
CF6	4
CF7	4
CF8	4

SHIPPING GROUP B1	
SHIPPING PIECE MARK	QUANTITY
G1B	1
G2B	1
G3B	1
G4B	1
G5B	1
CF5	4
CF6	4
CF7	4
CF8	4
CF10	1
CF11	1
CF12	1
CF13	1

SHIPPING GROUP C1	
SHIPPING PIECE MARK	QUANTITY
G1C	1
G2C	1
G3C	1
G4C	1
G5C	1
CF5	5
CF6	4
CF7	5
CF8	5
CF9	1

RECEIVED
CK'D BY ____ OK'D BY JFL
AUG 1 8 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HIGH STEEL STRUCTURES, INC.
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Lancaster Facility: 1915 Old Philadelphia Pike, Lancaster, PA 17605-0008, Phone (717) 299-5211
Williamsport Facility: 3501W. 4th Street, Williamsport, PA 17701, Phone (570) 326-9051
www.Highsteel.com

ERECTION FRAMING PLAN
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

HOLES | BOLTS | COATING | CODE(S) | SCALE N.T.S.

STATE CONT. OR REF. NO.: PROJECT NO. (STP) BRF 013-4(21) | FED. AID PROJ. NO.:
GENERAL CONTRACTOR: WINTERSET, INC. | HSSI PROJ. MGR: DEB KUPRES

SHPMT 1 | DRAWING MANAGER: KREIDER (IH) | MADE BY: MAF | CHK'D. BY: CS | DATE: 6-24-08

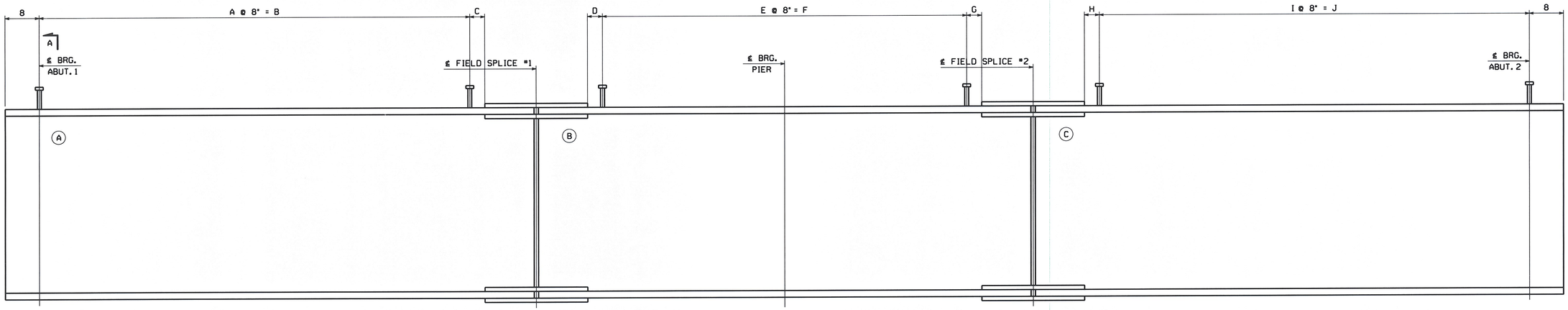
STATE VT | HSSI PROJECT NUMBER: S-1080077 | HSSI STRUCT. ID: A | DRAWING NUMBER: E1 OF E2

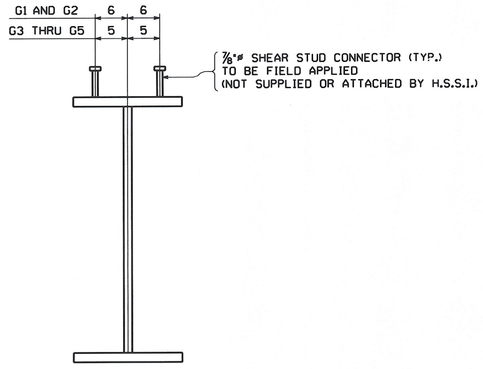
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH
Scale = .0104166667 Feet/Foot
MKeLNG: 5084327 PRO: 5084329 SHIP&REC'd: 5084329
SHIPMENT 01
DIR: MKreidel
PLOTTED: 6/25/2003 3:39:54 PM

ENGLISH

Scale = .0104166667 Feet/Foot





SECTION A

SHEAR STUD CONNECTOR LOCATION LAYOUT

DIMENSIONS GIVEN ALONG TOP OF GIRDER

MARK	A	B	C	D	E	F	G	H	I	J
G1	120	80'-0	2 1/16	2 5/16	90	60'-0	2 1/4	8 3/8	119	79'-4
G2	119	79'-4	2 3/8	1 3/4	87	58'-0	1 1 1/16	1 1/16	119	79'-4
G3	117	78'-0	2 3/8	1 1/2	89	59'-4	1 7/16	1 1/16	117	78'-0
G4	115	76'-8	1 3/8	2 3/16	88	58'-8	2 1/8	8 1/16	114	76'-0
G5	113	75'-4	5 13/16	1 1/2	86	57'-4	1 7/16	4 7/16	113	75'-4

584 ✓ 446 ✓ 582 ✓

T = 1606 X 2 = 3212
Summary = 3288
Lost = 76
Due to extra splice

NOTES:
FOR NOTES, SEE DRAWING E1.
WORK THIS DRAWING WITH DRAWING E1.
(A) INDICATES SUFFIX MARK OF SHIPPING PIECE.

RECEIVED
CK'D BY JJ OK'D BY JEL
AUG 18 2008
RESUBMIT APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE

HOLES
BOLTS
COATING
CODE(S)
SCALE N.T.S.

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ERECTION PLAN ~ STUD LAYOUTS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D. BY	CS	DATE	6-24-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	E2 OF E2		

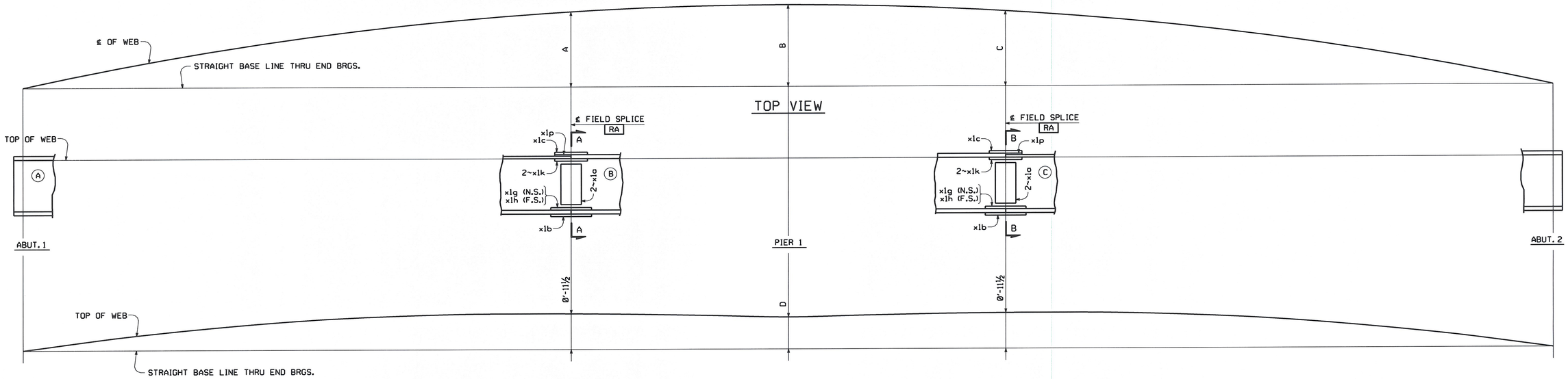
SHIPMENT 01 PM&ENG: 5004327 PROD 5004328 SHIP&ERECT.: 5004329

BY: MKreidel

PLOTTED: 6/25/2008 3:40:03 PM

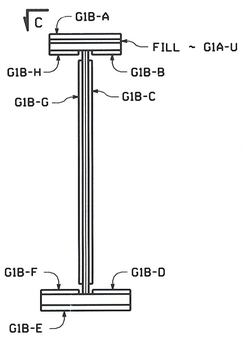
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH

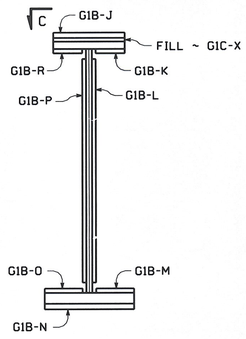


LINE ASSEMBLY DIAGRAM

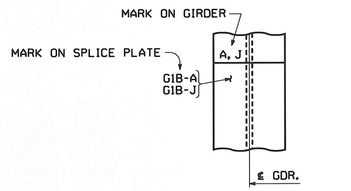
GDR. LINE	A	B	C	D
G1	11'-5 3/16	12'-5	11'-5 1/16	Ø'-10 5/16
G2	11'-3 3/16	12'-2 13/16	11'-3 1/2	Ø'-10 7/16



SECTION A-A FOR G1B
(G2B SIMILAR)



SECTION B-B FOR G1B
(G2B SIMILAR)



VIEW C
(ROTATE 180° WHERE REQUIRED)
(HOLES NOT SHOWN FOR CLARITY)

NOTES:

ALL SPLICE PLATES ARE MATCH MARKED AFTER REAMING AS SHOWN IN SECTION A-A & SECTION B-B.
THE MATCH MARKS ON THE SPLICE MATERIAL CONSIST OF THE MARK OF THE GIRDER THEY ARE SHIPPED WITH AND A SUFFIX. THE MARKINGS ARE LOCATED ON THE STEEL AT THE END OF THE SPLICE MATERIAL WHICH IS ON THE GIRDER IT IS SHIPPED WITH. MATCH MARKING MARKS WILL APPEAR ON EDGES OF PLATES. THE CORRESPONDING SUFFIX (A, B, C, ETC.) IS MARKED NEAR THE SPLICE PLATE ON THE GIRDER (SEE VIEW C).
FOR GIRDER MARKS, SEE THE ERECTION FRAMING PLAN DRAWINGS.
HOLES MARKED [RA] ARE TO BE SUB-PUNCHED/SUB-DRILLED ¼"ø UNDER SIZE AND REAMED TO FULL SIZE OR DRILLED FROM SOLID WITH CONNECTING PARTS ASSEMBLED AND MATCH MARKED. HOLES TO BE 15/16"ø.
(A) INDICATES SUFFIX MARK OF SHIPPING PIECE.
FIELD SPLICE PLATES TO BE SHIPPED WITH THE (B) GIRDERS.

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CK'D BY 1 OK'D BY JFL
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RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE

HOLES
BOLTS
COATING
CODE(S)
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
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Lancaster, PA 17605-0008
Phone (717) 299-5211
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3501 W. 4th Street
Williamsport, PA 17701
Phone (570) 326-9051
www.highsteel.com

SHOP ASSEMBLY DIAGRAM
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: SSL	CHK'D BY: CS
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: SA1 OF SA2

DATE: 6-18-08

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

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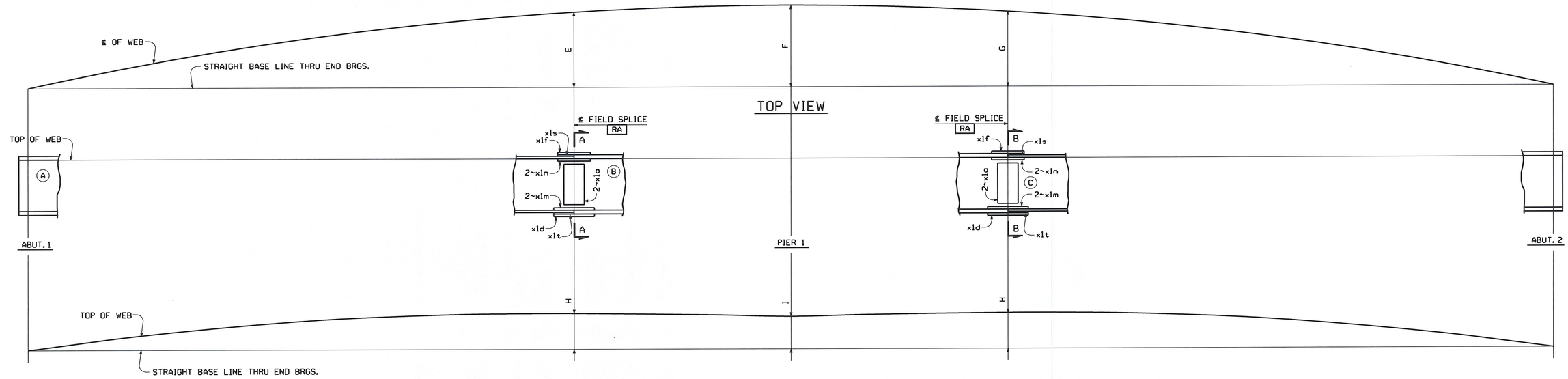
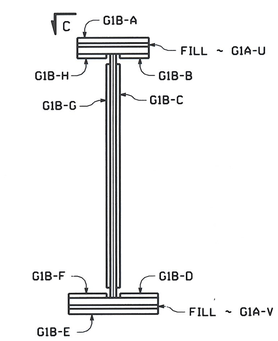
ENGLISH

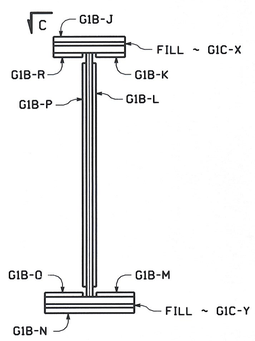


LINE ASSEMBLY DIAGRAM

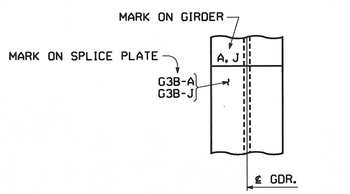
GDR. LINE	E	F	G	H	I
G3	11'-1⅛	12'-0⅝	11'-1	0'-11½	0'-10⅞
G4	10'-10¹⁵⁄₁₆	11'-10⅞	10'-10¹³⁄₁₆	0'-11⅜	0'-10⁵⁄₁₆
G5	10'-9¹⁄₁₆	11'-8³⁄₁₆	10'-9	0'-11⁵⁄₁₆	0'-10⁵⁄₁₆



SECTION A-A FOR G3B
(G4B & G5B SIMILAR)



SECTION B-B FOR G3B
(G4B & G5B SIMILAR)



VIEW C
(ROTATE 180° WHERE REQUIRED)
(HOLES NOT SHOWN FOR CLARITY)

NOTES:

ALL SPLICE PLATES ARE MATCH MARKED AFTER REAMING AS SHOWN IN SECTION A-A & SECTION B-B.
THE MATCH MARKS ON THE SPLICE MATERIAL CONSIST OF THE MARK OF THE GIRDER THEY ARE SHIPPED WITH AND A SUFFIX. THE MARKINGS ARE LOCATED ON THE STEEL AT THE END OF THE SPLICE MATERIAL WHICH IS ON THE GIRDER IT IS SHIPPED WITH. MATCH MARKING MARKS WILL APPEAR ON EDGES OF PLATES. THE CORRESPONDING SUFFIX (A, B, C, ETC.) IS MARKED NEAR THE SPLICE PLATE ON THE GIRDER (SEE VIEW C).
FOR GIRDER MARKS, SEE THE ERECTION FRAMING PLAN DRAWINGS.
HOLES MARKED RA ARE TO BE SUB-PUNCHED/SUB-DRILLED ¼"ø UNDER SIZE AND REAMED TO FULL SIZE OR DRILLED FROM SOLID WITH CONNECTING PARTS ASSEMBLED AND MATCH MARKED. HOLES TO BE ¹⁵⁄₁₆"ø.
(A) INDICATES SUFFIX MARK OF SHIPPING PIECE.
FIELD SPLICE PLATES TO BE SHIPPED WITH THE (B) GIRDERS.

RECEIVED
CK'D BY ___ OK'D BY JFL
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

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HOLES
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COATING
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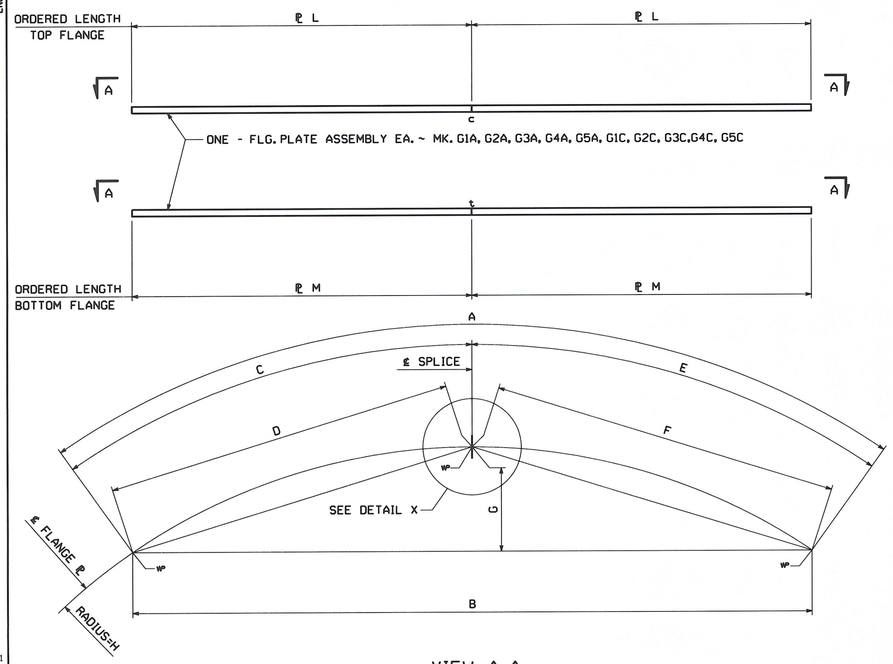
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	SSL	CHK'D. BY	CS	DATE	6-18-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	SA2 OF SA2		

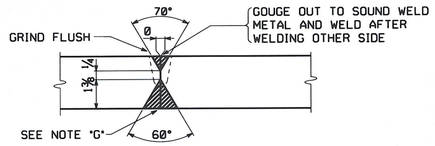
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 6/25/2008 3:48:13 PM
BY: MKreidel
SHIPMENT 01
PM&ENG: 50041327 PROJ: 50041328 SHIP&ERECT.: 50041329

ENGLISH

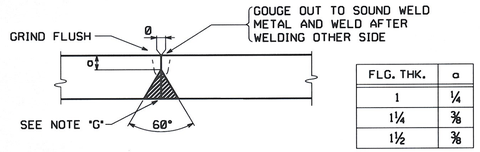


VIEW A-A



TYPICAL FLANGE PLATE SPLICE

FOR FLANGE PLATES THICKER THAN 2" (B-U3c-S)



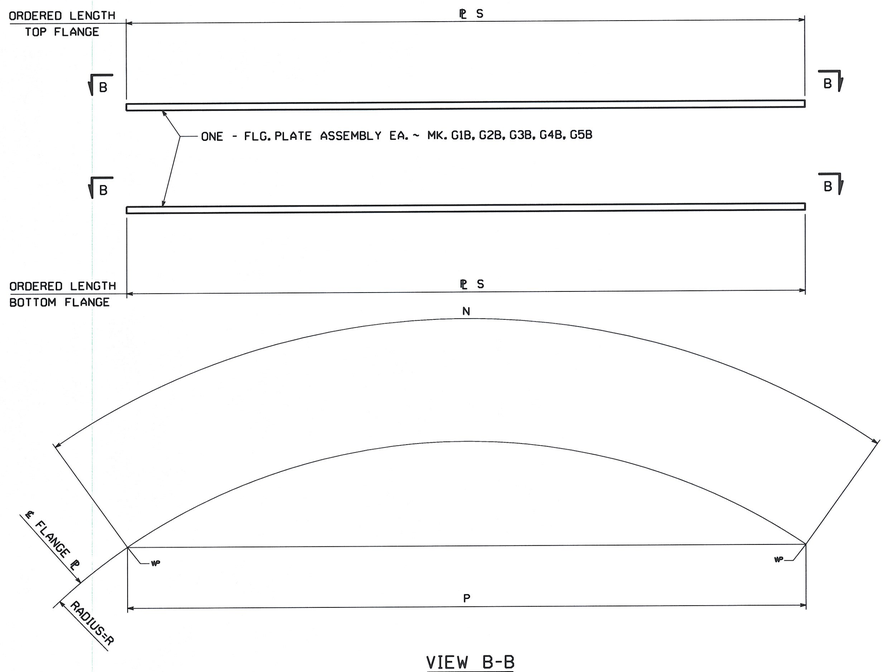
FLG. THK.	α
1	¼
1¼	⅜
1½	⅜

TYPICAL FLANGE PLATE SPLICE

FOR FLANGE PLATES 2" THICK AND UNDER (B-L2c-S)

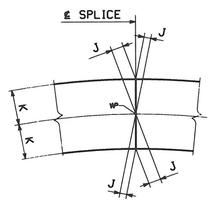
NOTE "G"

ALL SPLICES MAY HAVE A MAXIMUM REINFORCEMENT OF ⅛". GRIND SMOOTH AT SPLICES THAT ARE TO BE TESTED AND ALL BOTTOM FLANGE SPLICES.



VIEW B-B

MARK	FLANGE	A	B	C	D	E	F	G	H	J	K	L	M
G1A	TOP	82'-10⅝	82'-9⅞	41'-5¹³⁄₁₆	41'-5¹¹⁄₁₆	41'-4¹³⁄₁₆	41'-4⅝	1'-7⅝	524'-9⅝	1¹⁄₃₂	9	1¼ x 18 x 41'-8 M270 GR. 50W (04007)	--
G2A	TOP	82'-2¹⁵⁄₁₆	82'-1⅞	41'-2	41'-1⅞	41'-0¹⁵⁄₁₆	41'-0¾	1'-7⅝	517'-0⅝	1¹⁄₃₂	9	1¼ x 18 x 41'-4 M270 GR. 50W (04007)	--
G3A	TOP	80'-4⅞	80'-3⅞	40'-3	40'-2⅞	40'-1⅞	40'-1¹³⁄₁₆	1'-7¹⁄₁₆	509'-3⅝	5⁄16	8	1 x 16 x 40'-5 M270 GR. 50W (04008)	--
G4A	TOP	78'-11⅞	78'-10¹⁵⁄₁₆	39'-6½	39'-6⅜	39'-5⅜	39'-5⁵⁄₁₆	1'-6⅝	501'-6⅝	5⁄16	8	1 x 16 x 39'-9 M270 GR. 50W (04009)	--
G5A	TOP	78'-0⅝	77'-11⅜	39'-0¹¹⁄₁₆	39'-0⅝	38'-11⅝	38'-11³⁄₁₆	1'-6½	493'-9⅝	5⁄16	8	1 x 16 x 39'-3 M270 GR. 50W (04010)	--
G1C	TOP	82'-9⅞	82'-8⅜	41'-4¾	41'-4⅝	41'-4¹¹⁄₁₆	41'-4½	1'-7⅞	524'-9⅝	1¹⁄₃₂	9	1¼ x 18 x 41'-8 M270 GR. 50W (04007)	--
G2C	TOP	82'-1⅝	82'-0⅛	41'-0⅞	41'-0¾	41'-0¾	41'-0⅛	1'-7⅛	517'-0⅝	1¹⁄₃₂	9	1¼ x 18 x 41'-4 M270 GR. 50W (04007)	--
G3C	TOP	80'-3⅜	80'-2⅝	40'-1⅞	40'-1¾	40'-1¹¹⁄₁₆	40'-1⅝	1'-7	509'-3⅝	5⁄16	8	1 x 16 x 40'-5 M270 GR. 50W (04008)	--
G4C	TOP	78'-10⅛	78'-9⅝	39'-5⅜	39'-5¼	39'-5⁷⁄₁₆	39'-5⅛	1'-6⅞	501'-6⅝	5⁄16	8	1 x 16 x 39'-9 M270 GR. 50W (04009)	--
G5C	TOP	77'-10¹⁵⁄₁₆	77'-10	38'-11⅝	38'-11½	38'-11⁵⁄₁₆	38'-11¼	1'-6⅞	493'-9⅝	5⁄16	8	1 x 16 x 39'-3 M270 GR. 50W (04010)	--
G1A	BOTTOM	82'-9½	82'-8⅞	41'-4¹¹⁄₁₆	41'-4⅝	41'-4¹³⁄₁₆	41'-4⅝	1'-7⅜	524'-9⅝	1¹⁄₃₂	9	--	2¼ x 18 x 41'-7 M270 GR. 50W (04002)
G2A	BOTTOM	82'-1¾	82'-0¹¹⁄₁₆	41'-0¹³⁄₁₆	41'-0¹¹⁄₁₆	41'-0¹⁵⁄₁₆	41'-0¾	1'-7⅜	517'-0⅝	1¹⁄₃₂	9	--	2¼ x 18 x 41'-3 M270 GR. 50W (04002)
G3A	BOTTOM	80'-3¹¹⁄₁₆	80'-2¾	40'-1¹³⁄₁₆	40'-1¹¹⁄₁₆	40'-1⅞	40'-1¾	1'-7	509'-3⅝	5⁄16	8	--	1½ x 16 x 40'-4 M270 GR. 50W (04004)
G4A	BOTTOM	78'-10¹¹⁄₁₆	78'-9¾	39'-5⅝	39'-5³⁄₁₆	39'-5⅜	39'-5⁵⁄₁₆	1'-6⅝	501'-6⅝	5⁄16	8	--	1½ x 16 x 39'-8 M270 GR. 50W (04005)
G5A	BOTTOM	77'-11¼	77'-10⅝	38'-11⅝	38'-11½	38'-11⅜	38'-11³⁄₁₆	1'-6⅞	493'-9⅝	5⁄16	8	--	1½ x 16 x 39'-2 M270 GR. 50W (04006)
G1C	BOTTOM	82'-9⅞	82'-8¹³⁄₁₆	41'-4¾	41'-4⅝	41'-5⅛	41'-4¹⁵⁄₁₆	1'-7⅝	524'-9⅝	1¹⁄₃₂	9	--	2¼ x 18 x 41'-7 M270 GR. 50W (04002)
G2C	BOTTOM	82'-2⅛	82'-1¹⁄₁₆	41'-0⅞	41'-0¾	41'-1¼	41'-1¹⁄₁₆	1'-7⅜	517'-0⅝	1¹⁄₃₂	9	--	2¼ x 18 x 41'-3 M270 GR. 50W (04002)
G3C	BOTTOM	80'-4⅛	80'-3⅛	40'-1⅞	40'-1¾	40'-2⅜	40'-2¹⁄₁₆	1'-7	509'-3⅝	5⁄16	8	--	1½ x 16 x 40'-4 M270 GR. 50W (04004)
G4C	BOTTOM	78'-11¹⁄₁₆	78'-10⅛	39'-5⅜	39'-5¼	39'-5¹¹⁄₁₆	39'-5⅝	1'-6⅝	501'-6⅝	5⁄16	8	--	1½ x 16 x 39'-8 M270 GR. 50W (04005)
G5C	BOTTOM	77'-11⅝	77'-10¹¹⁄₁₆	38'-11⅝	38'-11½	39'-0	38'-11¹⁵⁄₁₆	1'-6⅞	493'-9⅝	5⁄16	8	--	1½ x 16 x 39'-2 M270 GR. 50W (04006)



DETAIL X

MARK	FLANGE	N	P	R	S
G1B	TOP	64'-5⁹⁄₁₆	64'-5¹⁄₁₆	524'-9⅝	2¼ x 18 x 64'-8 M270 GR. 50W (04001)
G2B	TOP	62'-4⅞	62'-4	517'-0⅝	2¼ x 18 x 62'-7 M270 GR. 50W (04001)
G3B	TOP	62'-7¹⁵⁄₁₆	62'-7¹¹⁄₁₆	509'-3⅝	2 x 16 x 62'-10 M270 GR. 50W (04003)
G4B	TOP	62'-1⅜	62'-0⅞	501'-6⅝	2 x 16 x 62'-4 M270 GR. 50W (04003)
G5B	TOP	60'-7¹⁵⁄₁₆	62'-7½	493'-9⅝	2 x 16 x 60'-10 M270 GR. 50W (04003)
G1B	BOTTOM	64'-5⅝	64'-5⅛	524'-9⅝	2¼ x 18 x 64'-8 M270 GR. 50W (04001)
G2B	BOTTOM	62'-4⅜	62'-4⅛	517'-0⅝	2¼ x 18 x 62'-7 M270 GR. 50W (04001)
G3B	BOTTOM	62'-8¹⁄₁₆	62'-7¹¹⁄₁₆	509'-3⅝	2 x 16 x 62'-10 M270 GR. 50W (04003)
G4B	BOTTOM	62'-1½	62'-1	501'-6⅝	2 x 16 x 62'-4 M270 GR. 50W (04003)
G5B	BOTTOM	60'-7¹⁵⁄₁₆	60'-7½	493'-9⅝	2 x 16 x 60'-10 M270 GR. 50W (04003)

NOTES:

FOR GENERAL SHOP NOTES, SEE DRAWING GN1.
ALL FLANGE PLATES REQUIRE CHARPY V-NOTCH TEST.
THE LETTERS "t" & "c" AT FLANGE SPLICES INDICATE TENSION AND COMPRESSION SPLICES RESPECTIVELY.
ALL SPLICES MARKED "t" TO BE RADIOGRAPHICALLY TESTED 100%.
ALL SPLICES MARKED "c" TO BE RADIOGRAPHICALLY TESTED 25%.

RECEIVED
CK'D BY ___ OK'D BY JEL
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
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HOLES
BOLTS
COATING
CODE(S) 30
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FLANGE SPLICE DETAILS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D. BY	CS	DATE	6-18-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	FS1 OF FS1		

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

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BY: MKreidel
SHIPMENT 01
PM&ENG: 50024327 PROJ: 50024329 SHIP&ERECT.: 50024329

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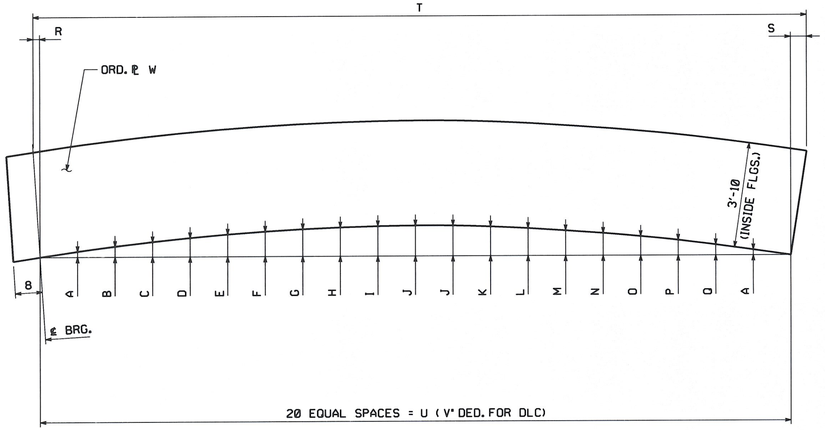
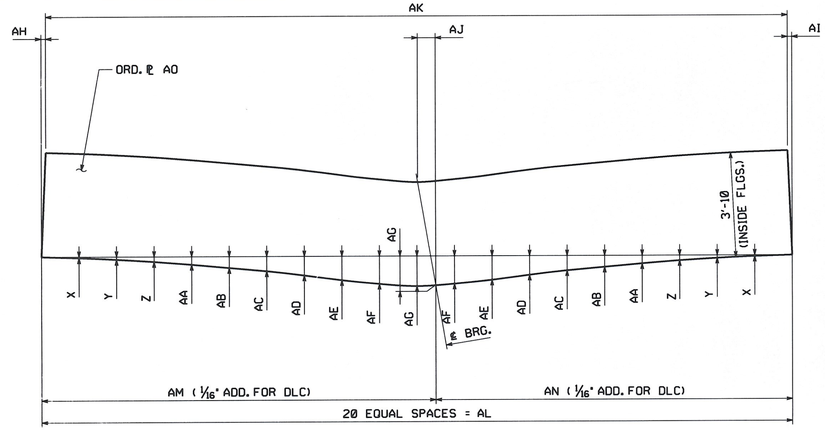
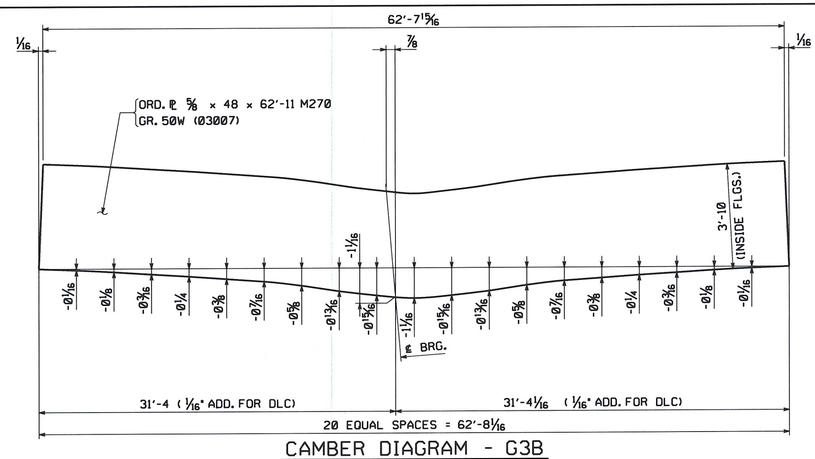


MARK	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
G1A	5/8	1 3/16	1 3/4	2 3/16	2 5/16	2 7/8	3 1/8	3 5/16	3 7/16	3 1/2	3 3/8	3 1/8	2 7/8	2 5/16	2 3/16	1 3/4	1 3/16	9/16	9/16	82'-2 3/16	82'-1 7/16	1/4	5/8 x 50 1/2 x 83'-1 M270 GR. 50W (03001)
G2A	5/8	1 3/16	1 11/16	2 1/16	2 1/2	2 13/16	3 1/16	3 1/4	3 3/8	3 3/8	3 1/4	3 1/16	2 13/16	2 5/16	2 3/16	1 3/4	1 1/4	9/16	5/8	81'-6 7/8	81'-5 11/16	1/4	5/8 x 50 1/2 x 82'-5 M270 GR. 50W (03002)
G3A	5/8	1 3/16	1 11/16	2 1/16	2 7/16	2 3/4	3	3 3/16	3 5/16	3 3/16	3 3/16	3 1/16	2 3/4	2 7/16	2 1/16	1 11/16	1 3/16	9/16	5/8	79'-8 7/8	79'-7 11/16	1/4	5/8 x 50 1/2 x 80'-7 M270 GR. 50W (03003)
G4A	5/8	1 1/16	1 5/16	2	2 5/16	2 5/8	2 7/8	3 1/16	3 1/4	3 1/4	3 1/16	3	2 3/4	2 7/16	2 1/16	1 11/16	1 3/16	9/16	5/8	78'-3 7/8	78'-2 11/16	3/16	5/8 x 50 1/2 x 79'-2 M270 GR. 50W (03004)
G5A	9/16	1 1/16	1 9/16	1 15/16	2 5/16	2 5/8	2 13/16	2 15/16	3 1/16	3 1/16	3	2 13/16	2 5/8	2 5/16	2	1 9/16	1 1/16	1/2	9/16	77'-4 5/16	77'-3 1/4	3/16	5/8 x 50 x 78'-3 M270 GR. 50W (03005)



MARK	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO
G1B	-0 1/16	-0 1/8	-0 3/16	-0 5/16	-0 7/16	-0 9/16	-0 3/4	-0 15/16	-1 1/8	-1 3/16	0	1/16	1 3/16	64'-5 5/16	64'-5 5/8	32'-2 13/16	32'-2 13/16	5/8 x 48 1/2 x 64'-8 M270 GR. 50W (03006)
G2B	-0 1/16	-0 1/8	-0 3/16	-0 5/16	-0 3/8	-0 1/2	-0 11/16	-0 7/8	-1	-1 1/16	1/16	1/16	1 3/16	62'-4 7/16	62'-4 9/16	31'-2 5/16	31'-2 1/4	5/8 x 48 x 62'-11 M270 GR. 50W (03006)
G4B	0	-0 1/16	-0 1/8	-0 3/16	-0 5/16	-0 3/8	-0 5/16	-0 3/4	-0 15/16	-1	1/16	1/16	7/8	62'-1 7/8	62'-1 1/2	31'-0 3/4	31'-0 3/4	5/8 x 48 x 62'-11 M270 GR. 50W (03007)
G5B	0	-0 1/16	-0 1/8	-0 3/16	-0 1/4	-0 3/8	-0 1/2	-0 11/16	-0 7/8	-0 15/16	0	0	7/8	60'-7 15/16	60'-7 15/16	30'-4	30'-3 15/16	5/8 x 48 x 60'-10 M270 GR. 50W (03008)



CAMBER DIAGRAM - G3B

NOTES:

FOR GENERAL SHOP NOTES, SEE DRAWING GN1.
ALL WEB PLATES REQUIRE CHARPY V-NOTCH TEST.
NEGATIVE CAMBER ORDINATES INDICATE CURVE IS BELOW BASELINE.

RECEIVED
CK'D BY JJ OK'D BY JEL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HOLES
BOLTS
COATING
CODE(S) 30
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.

Lancaster Facility
195 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211

Williamsport Facility
3501 W. 4th Street
Williamsport, PA 17701
Phone (570) 326-9051
www.highsteel.com

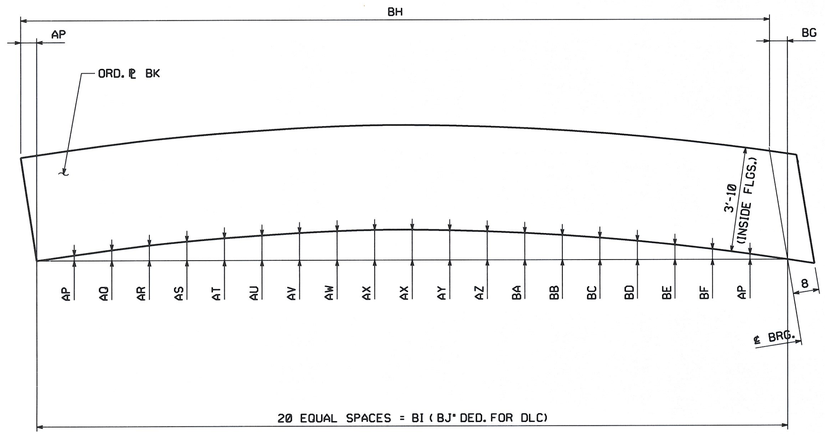
WEB CAMBER DIAGRAMS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER KREIDER (IH)	MADE BY KMA	CHK'D. BY SJA	DATE 5/22/08
STATE VT	HSSI PROJECT NUMBER S-1080077	HSSI STRUCT. ID A	DRAWING NUMBER WC1 OF WC2	

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 6/25/2008 3:48:14 PM
BY: MKreidel
SHIPMENT 01
PM&ENG: 5B0A327 PRO: 5B0A328 SHIP&ERECT.: 5B0A329

ENGLISH



MARK	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK
G1C	5/8	1 3/16	1 3/4	2 3/16	2 5/16	2 7/8	3 1/8	3 3/8	3 1/2	3 7/16	3 5/16	3 1/8	2 7/8	2 9/16	2 3/16	1 3/4	1 3/16	1 1/16	82'-1 3/8	82'-1 13/16	1/4	5/8 x 50 1/2 x 83'-1 M270 GR. 50W (03001)
G2C	5/8	1 1/4	1 3/4	2 3/16	2 5/16	2 13/16	3 1/16	3 1/4	3 3/8	3 3/8	3 1/4	3 1/16	2 13/16	2 1/2	2 1/8	1 11/16	1 3/16	1 1/8	81'-5 9/16	81'-6 1/16	1/4	5/8 x 50 1/2 x 82'-5 M270 GR. 50W (03002)
G3C	5/8	1 3/16	1 11/16	2 1/8	2 7/16	2 3/4	3 1/16	3 1/4	3 3/8	3 5/16	3 3/16	3	2 3/4	2 7/16	2 1/8	1 11/16	1 3/16	1 1/8	79'-7 9/16	79'-8 1/16	1/4	5/8 x 50 1/2 x 80'-7 M270 GR. 50W (03003)
G4C	5/8	1 3/16	1 11/16	2 1/8	2 7/16	2 3/4	3	3 1/8	3 1/4	3 1/4	3 1/8	2 7/8	2 5/8	2 5/16	2	1 5/8	1 1/8	1 1/8	78'-2 9/16	78'-3 1/16	3/16	5/8 x 50 1/2 x 79'-2 M270 GR. 50W (03004)
G5C	3/16	1 1/16	1 9/16	2	2 5/16	2 5/8	2 13/16	3	3 1/8	3 1/16	2 15/16	2 13/16	2 5/8	2 5/16	1 15/16	1 9/16	1 1/16	1 1/4	77'-2 15/16	77'-3 5/8	3/16	5/8 x 50 x 78'-3 M270 GR. 50W (03005)

NOTES:

FOR NOTES, SEE DWG. WC1.

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BY KmH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
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HOLES

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Lancaster, PA 17605-0008
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3501 W. 4th Street
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WEB CAMBER DIAGRAMS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

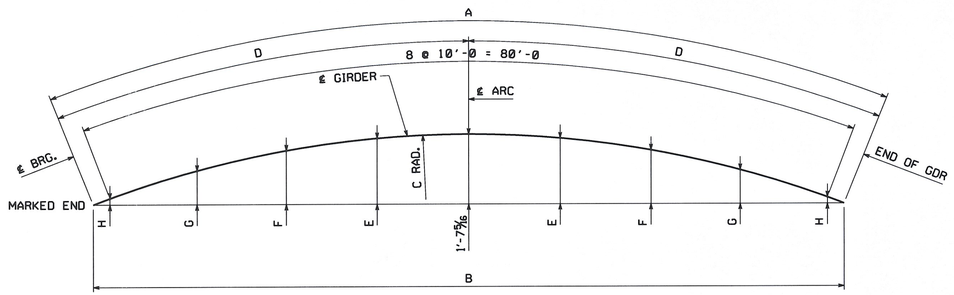
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	KMA	CHK'D. BY	SJA	DATE	5/22/08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	WC2 OF WC2		

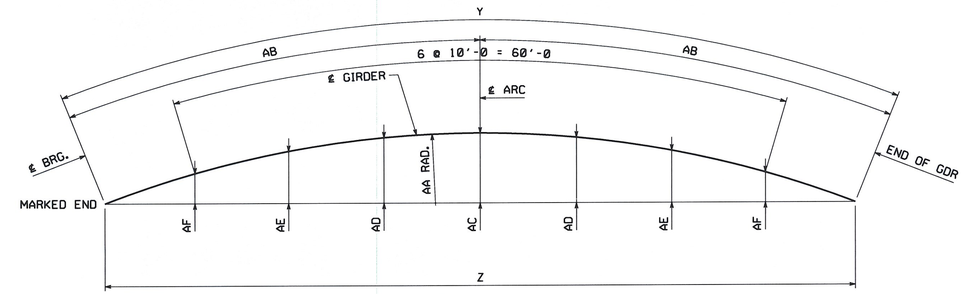
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 6/25/2008 3:48:16 PM
BY: MKreidel
SHIPMENT 01
PM&ENG: 50084327 PRO: 50084329 SHIP&ERECT.: 50084329

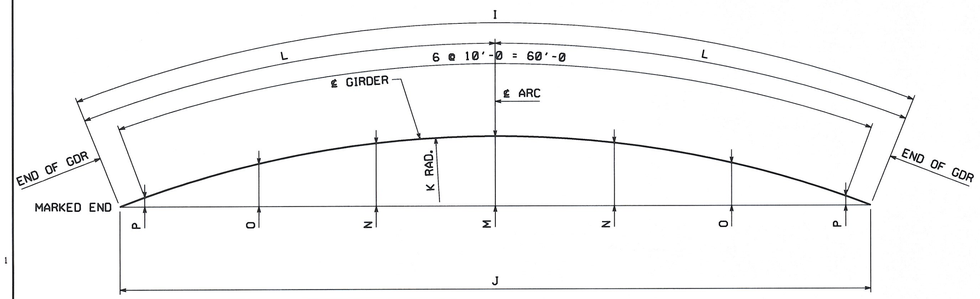
ENGLISH



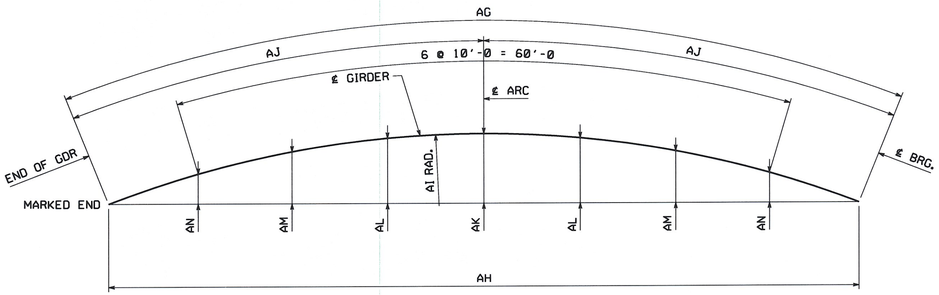
MARK	A	B	C	D	E	F	G	H
G1A	82'-2⅜	82'-1⅜	524'-9⅝	41'-1³⁄₃₂	1'-6⅜	1'-2¾	9	1
G2A	81'-6⅞	81'-5⅞	517'-0⅝	40'-9⅞	1'-6⅛	1'-2⅝	8⅞	¾



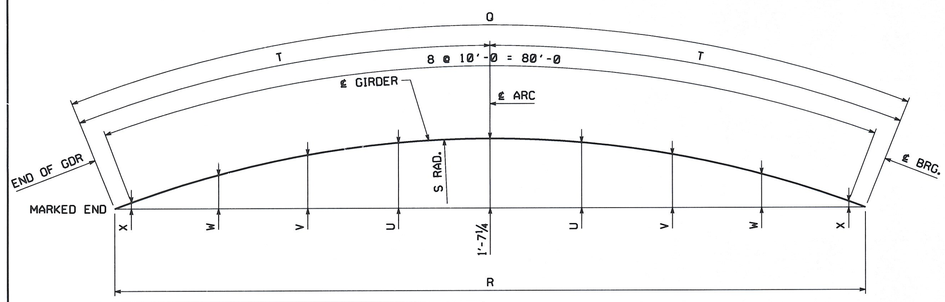
MARK	Y	Z	AA	AB	AC	AD	AE	AF
G3A	79'-8⅞	79'-7⅞	509'-3⅝	39'-10⅞	1'-6¹⁄₁₆	1'-5⅝	1'-2	8⅛
G4A	78'-3⅞	78'-2¹⁵⁄₁₆	501'-6⅝	39'-1¹⁵⁄₁₆	1'-6⅝	1'-5⅛	1'-1⅝	7⅝
G5A	77'-4⅝	77'-3⅜	493'-9⅝	38'-8⁵⁄₃₂	1'-6⅜	1'-4¹⁵⁄₁₆	1'-1⅝	7¼



MARK	I	J	K	L	M	N	O	P
G1B	64'-5⅝	64'-5¹⁄₁₆	524'-9⅝	32'-2²⁵⁄₃₂	11⅞	10¾	7⅝	1⅜
G2B	62'-4⅞	62'-4	517'-0⅝	31'-2⁷⁄₃₂	11⅝	10⅛	6⅝	1⅜
G3B	62'-7¹⁵⁄₁₆	62'-7⅞	509'-3⅝	31'-3³¹⁄₃₂	11⅜	10⅜	6⅞	1⅝
G4B	62'-1⅜	62'-0⅞	501'-6⅝	31'-0¹¹⁄₁₆	11⅜	10⅝	6¾	¾
G5B	60'-7¹⁵⁄₁₆	60'-7½	493'-9⅝	30'-3³¹⁄₃₂	11⅜	9¹⁵⁄₁₆	6⅝	¼



MARK	AG	AH	AI	AJ	AK	AL	AM	AN
G3C	79'-7⅝	79'-6⅝	509'-3⅝	39'-9²⁵⁄₃₂	1'-6¹¹⁄₁₆	1'-5½	1'-1⁵⁄₁₆	8¹⁄₁₆
G4C	78'-2⅜	78'-1⅝	501'-6⅝	39'-1³⁄₃₂	1'-6⅝	1'-5⅛	1'-1½	7½
G5C	77'-2¹⁵⁄₁₆	77'-2	493'-9⅝	38'-7¹⁵⁄₃₂	1'-6⅛	1'-4⅞	1'-1¼	7⅜



MARK	O	R	S	T	U	V	W	X
G1C	82'-1⅜	82'-0⅜	524'-9⅝	41'-0¹⁄₁₆	1'-6⅛	1'-2¹⁄₁₆	9	1
G2C	81'-5⅝	81'-4⅜	517'-0⅝	40'-8²⁵⁄₃₂	1'-6¹⁄₁₆	1'-2⅝	8¹³⁄₁₆	1¹⁄₁₆

NOTES:

ALL DIMENSIONS APPLY AT THE TOP OF WEB PLATE OF THE GIRDERS.

RECEIVED
OK'D BY RJS OK'D BY JCL
AUG 18 2008
RESUBMIT APPROVED
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
Lancaster Facility
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
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3501 W. 4th Street
Williamsport, PA 17701
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www.Highsteel.com

HOLES
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HORIZONTAL CURVE DIAGRAMS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	KMA	CHK'D. BY	SJA	DATE	5/22/08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	HC1 OF HC1		

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

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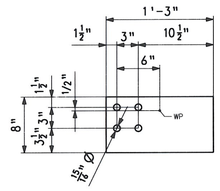
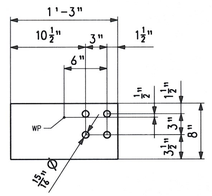
BY: MKreidel
PLOTTED: 6/25/2008 3:40:09 PM
60



GUSSET PL. - MK. m1a



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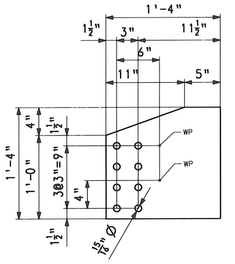

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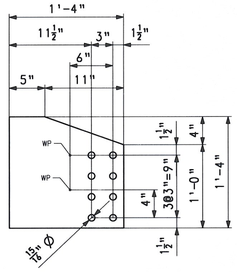

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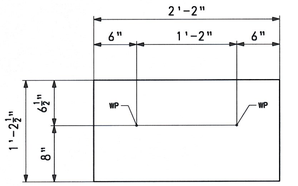

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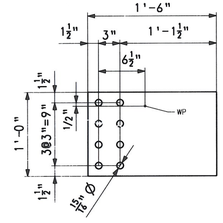

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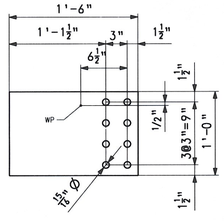

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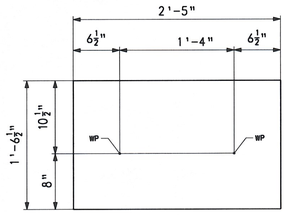

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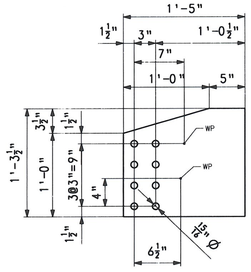

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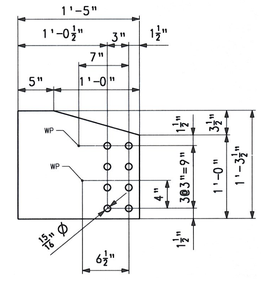

GUSSET PL. - MK. m1m

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
56	m1a	PL	1/2 x 8	1 3 1/2	M270	50W	T			17.58	0.00	17.58
56	m1b	PL	1/2 x 8	1 3 1/2	M270	50W	T			17.58	0.00	17.58
56	m1c	PL	1/2 x 16	1 4	M270	50W	T			36.30	0.00	36.30
56	m1d	PL	1/2 x 16	1 4	M270	50W	T			36.30	0.00	36.30
56	m1f	PL	1/2 x 14 1/2	2 2	M270	50W	T			53.45	0.00	53.45
4	m1g	PL	1/2 x 12	1 6	M270	50W	T			30.62	0.00	30.62
4	m1h	PL	1/2 x 12	1 6	M270	50W	T			30.62	0.00	30.62
4	m1k	PL	1/2 x 15 1/2	1 5	M270	50W	T			37.36	0.00	37.36
4	m1m	PL	1/2 x 15 1/2	1 5	M270	50W	T			37.36	0.00	37.36
4	m1n	PL	1/2 x 18 1/2	2 5	M270	50W	T			76.07	0.00	76.07

RECEIVED
CK'D BY TT OK'D BY JEL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

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1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com

HOLES: 15/16" Ø
BOLTS: NONE
COATING: NONE
CODE(S): 63
SCALE: N.T.S.

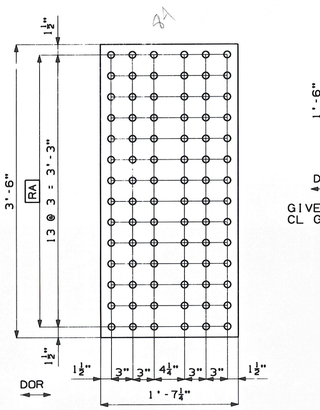
MISCELLANEOUS JOB STANDARDS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.: PROJ. NO.(STP)BRF 013-4(21) | FED. AID PROJ. NO.:
GENERAL CONTRACTOR: WINTERSET, INC. | HSSI PROJ. MGR: DEB KUPRES
SHPMT: 1 | DRAWING MANAGER: KREIDER (IH) | MADE BY: SSL | CHK'D. BY: CS | DATE: 6-19-08
STATE: VT | HSSI PROJECT NUMBER: S-1080077 | HSSI STRUCT. ID: A | DRAWING NUMBER: M1 OF M1

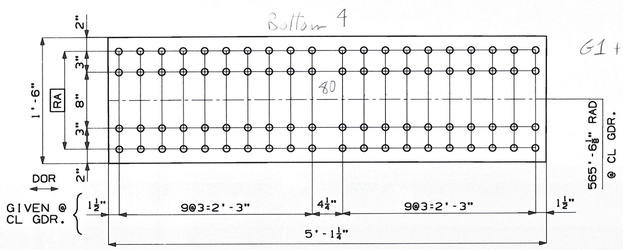
FOR SHOP NOTES, SEE DEG. GN1.

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PMENG: 5004327 PRD: 5004328 SHIPAERECT: 5004329
PLOTTED: 06/25/08 16:13:27 BY: SLaudeng

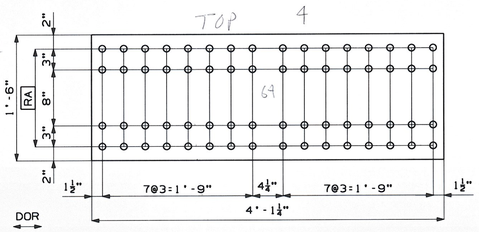


WEB SPLICE PLATE - MK. x1a

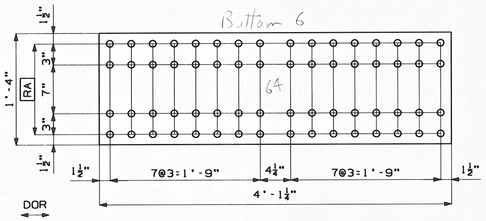


FLANGE SPLICE PLATE - MK. x1b

G1+G2



FLANGE SPLICE PLATE - MK. x1c



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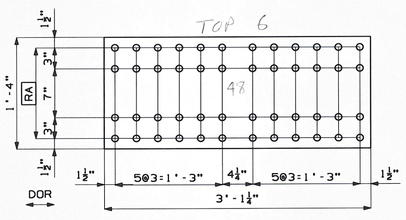
G3, G4, G5



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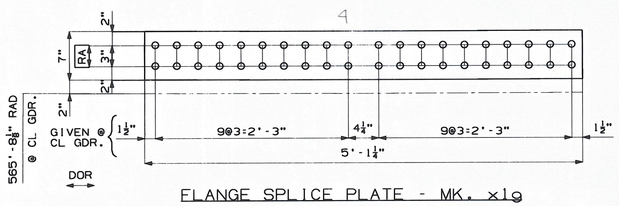

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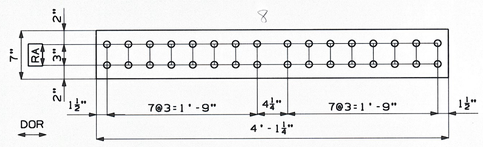

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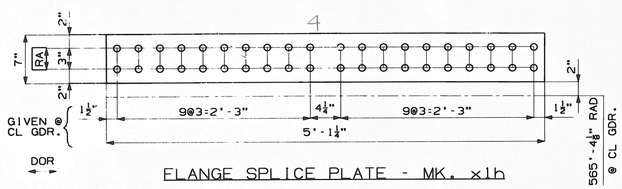

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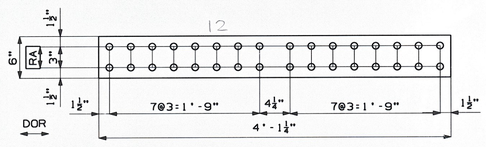

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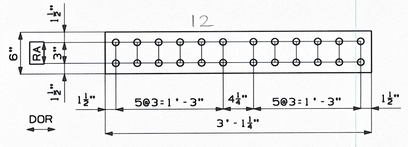

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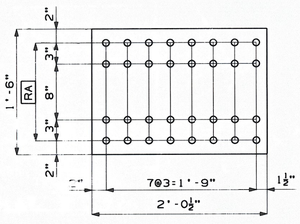

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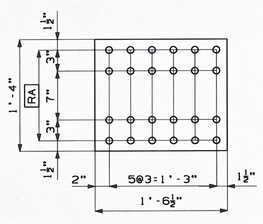

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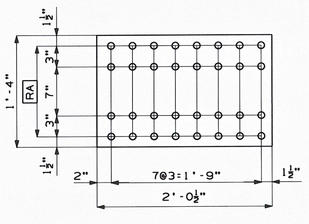


FLANGE FILL PLATE - MK. x1t

FOR SHOP NOTES, SEE DWG. GN1.

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.	
20	x1a	PL	1/2 42	1 7 1/4	M270	50W	T		06001	114.63	0.00	114.63	2292.6
4	x1b	PL	1/2 18	5 1 1/4	M270	50W	T	WIDTH & LENGTH AROUND CURVE	06002	156.32	0.00	156.32	625.28
4	x1c	PL	1/2 18	4 1 1/4	M270	50W	T		06003	125.69	0.00	125.69	502.76
6	x1d	PL	1/2 16	4 1 1/4	M270	50W	T		06004	111.72	0.00	111.72	670.32
6	x1f	PL	1/2 16	3 1 1/4	M270	50W	T		06004	84.50	0.00	84.50	507.00
4	x1g	PL	5/8 7	5 1 1/4	M270	50W	T	WIDTH & LENGTH AROUND CURVE	06005	75.99	0.00	75.99	303.96
4	x1h	PL	5/8 7	5 1 1/4	M270	50W	T	WIDTH & LENGTH AROUND CURVE	06005	75.99	0.00	75.99	303.96
8	x1k	PL	5/8 7	4 1 1/4	M270	50W	T		06006	61.10	0.00	61.10	488.80
12	x1m	PL	5/8 6	4 1 1/4	M270	50W	T		06007	52.37	0.00	52.37	628.44
12	x1n	PL	5/8 6	3 1 1/4	M270	50W	T		06007	39.61	0.00	39.61	475.32
4	x1p	PL	1 18	2 0 1/2	M270	50W	T	FILL PL	06008	125.05	0.00	125.05	500.20
6	x1s	PL	1 16	1 6 1/2	M270	50W	T	FILL PL	06009	83.94	0.00	83.94	503.64
6	x1t	PL	1/2 16	2 0 1/2	M270	50W	T	FILL PL	06010	55.58	0.00	55.58	333.48
													8135.76

RECEIVED
OK'D BY JH OK'D BY JEL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KmH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HIGH STEEL STRUCTURES INC.
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.

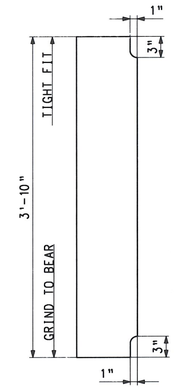
HOLES: 15/16" Ø (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

GIRDER JOB STANDARDS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

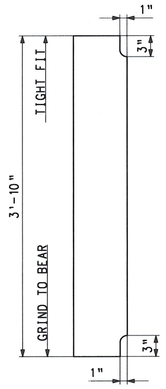
STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR.	DEB KUPRES
DRAWING MANAGER	KREIDER (IH)	MADE BY	SSL
CHK'D BY	CS	DATE	6-18-08
SHPMT	1	STATE	VT
HSSI PROJECT NUMBER	S-108007 7	HSSI STRUCT. ID	A
DRAWING NUMBER	X1 OF X2		

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT | PWENG: XXXXXXX PRO: XXXXXXX SHIP&PRECT: XXXXXXX
PLOTTED: 06/25/08 15:45:38 BY: MKreidel



BRG. STIFF. MK. x2a



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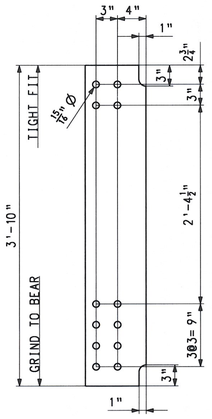

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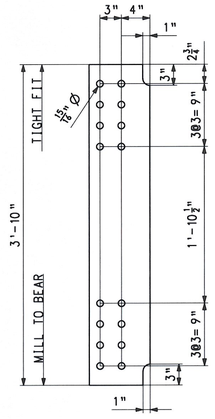

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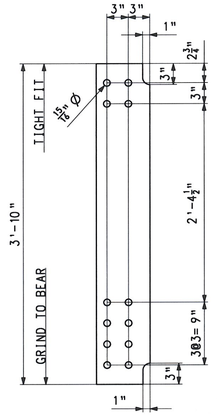
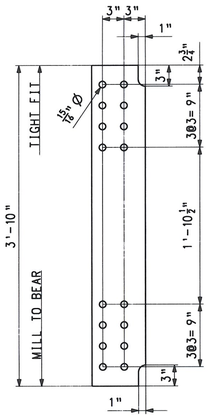


BRG. STIFF. MK. x2f



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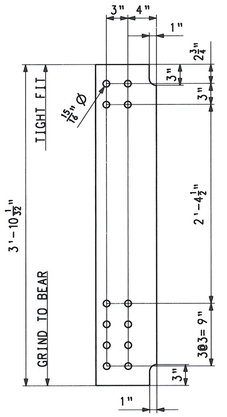
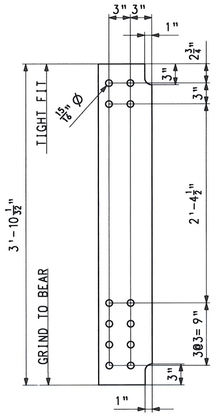
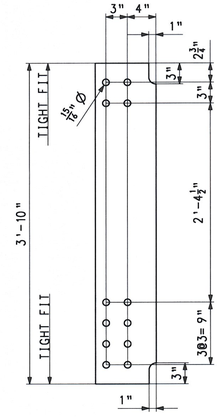


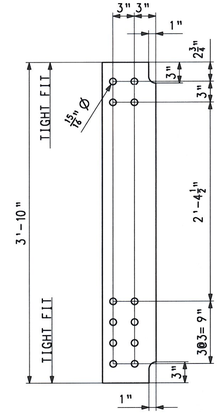
BRG. STIFF. MK. x2h



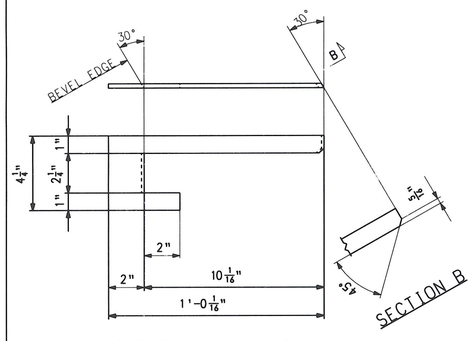
BRG. STIFF. MK. x2k



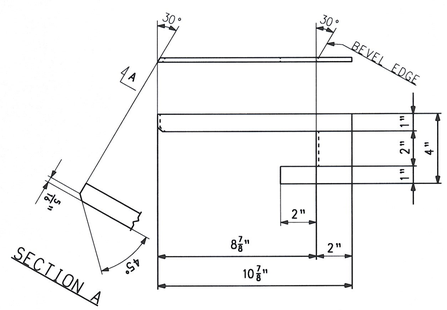
CONN. PL. MK. x2m



CONN. PL. MK. x2n



DRIP PLATE MK. x2p



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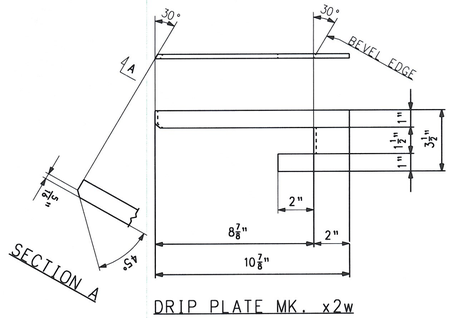


DRIP PLATE MK. x2w

FOR GENERAL SHOP NOTES, SEE DWG. GN1

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION			LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
3	x2a	PL	7/8		8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
3	x2b	PL	3/4		7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
3	x2c	PL	7/8		8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
3	x2d	PL	7/8		8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
5	x2f	PL	3/4	x	7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
5	x2g	PL	3/4	x	7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
3	x2h	PL	7/8	x	8 1/2	3 10 1/32	M270	50W	T		07001	97.08	0.00	97.08
5	x2k	PL	3/4	x	7 1/2	3 10 1/32	M270	50W	T		07002	73.42	0.00	73.42
36	x2m	PL	1/2	x	8 1/2	3 10	M270	50W	T		07003	55.44	0.00	55.44
60	x2n	PL	1/2	x	7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
2	x2p	PL	1/4	x	4 1/4	1 0 1/16	M270	50W			07007	3.63	0.00	3.63
1	x2t	PL	1/4	x	4	10 7/8	M270	50W			07005	3.08	0.00	3.08
1	x2w	PL	1/4	x	3 1/2	10 7/8	M270	50W			07006	2.70	0.00	2.70

RECEIVED
CK'D BY AJS OK'D BY JGL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HOLES 15/16" Ø
BOLTS NONE
COATING NONE
CODE ISI 30
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.

GIRDER JOB STANDARDS
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.			
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES		
SHPMT 1	DRAWING MANAGER KREIDER (IH)	MADE BY MAF	CHK'D. BY CS	DATE 6-23-08	
STATE VT	HSSI PROJECT NUMBER S-1080077	HSSI STRUCT. ID A	DRAWING NUMBER X2 OF X2		

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PMSENG: 50043327 PRD: 50043328 SHIP&ERECT: 50043329
PLOTED: 08/25/08 16:31:29 BY: MKreidel

ENGLISH

GENERAL SHOP NOTES

SPECIFICATIONS:
- DESIGN SPECIFICATIONS: THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 4TH EDITION, AND ITS LATEST REVISIONS.
- ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT, AGENCY OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, WITH CURRENT MODIFICATIONS AND ADDITIONS.

MATERIAL:
- UNLESS NOTED OTHERWISE, ALL STEEL TO BE AASHTO M270 GRADE 50W
- (T) INDICATES ZONE 2 CHARPY V-NOTCH TESTING REQUIRED.

SHOP PROCEDURE:
- ALL FLANGE AND WEB PLATE SPLICES TO BE MADE BEFORE FINAL FITTING AND WELDING INTO GIRDER.
- CAMBER TOLERANCE: -0" TO +¾"
- ALL RE-ENTRANT CUTS TO HAVE 1" MIN. RADIUS.
- BEARING AREA, AS NOTED ON GIRDER DETAILS, INDICATES AREA THAT MUST BE FLAT AND TRUE TO RECEIVE SOLE PLATE.

DOR INDICATES DIRECTION OF ROLLING.
(CG) INDICATES CORNER GRINDING.
CORNER GRINDING IS REQUIRED FOR ALL MAIN MEMBER FLANGE PLATES, FIELD SPLICE PLATES AND CROSSFRAMES.

INSPECTION:
- SHOP INSPECTION BY TO BE DETERMINED

WELDING:
- ALL WELDING IS TO CONFORM TO AWS D1.5-02.
- WELDING METHODS, PROCEDURES, AND MATERIALS SHALL COMPLY WITH THE SPECIFIC PROCEDURE DESIGNATED IN THE WELD SYMBOL TAIL.
- FOR WELDING STIFFENERS AND CONNECTION PLATES TO GIRDERS, SEE TYPICAL WELDING DETAIL.
- FOR WELDING CROSSFRAMES, SEE SECONDARY MEMBER WELDING DETAIL.

IDENTIFICATION OF HOLE PLACEMENT:
- ALL HOLES IN ALL MEMBERS SHALL BE DRILLED.

NON-DESTRUCTIVE TESTING:
- FLANGE AND WEB PLATE SPLICES TO BE RADIOGRAPHICALLY TESTED, AS CALLED FOR ON DRAWINGS PREFIXED "FS" AND "WC", BY H.S.S.I.

MAGNETIC PARTICLE INSPECTION IS REQUIRED ON AT LEAST 1'-0 OF EVERY 10'-0 LENGTH OF FILLET WELDS AND 1'-0 OF SUCH WELDS LESS THAN 10'-0 IN LENGTH ON GIRDER WEB TO FLANGE, CONNECTION PLATES TO WEB AND FLANGE AND CROSSFRAME WELDS. TESTING PER THE YOKE METHOD, USING DC.

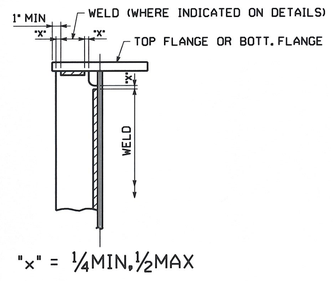
[RA] NOTE:
- HOLES MARKED [RA] ON DETAIL DRAWINGS TO BE SUB-PUNCHED/SUB-DRILLED ¼"ø UNDER SIZE AND REAMED TO FULL SIZE OR DRILLED FROM SOLID WITH CONNECTING PARTS ASSEMBLED AND MATCH MARKED.

CLEANING:
- SSPC-SP10

PAINTING:
- NO PAINT

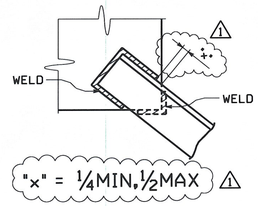
DRAWING REFERENCE:

FLANGE SPLICES	-PREFIXED "FS"
WEB CAMBERS	-PREFIXED "WC"
GIRDER JOB STANDARDS	-PREFIXED "X"
CROSSFRAME JOB STDS.	-PREFIXED "M"
SHOP ASSEMBLY	-PREFIXED "SA"
HORIZONTAL CURVE	-PREFIXED "HC"
WELDING PROCEDURE	-PREFIXED "WP"



STIFFENER WELDING DETAIL
WELDS MUST STOP 1" MIN. FROM THE EDGE OF FLANGE.

ALL CROSSFRAME WELDS ARE TO BE TERMINATED FROM EDGE OF GUSSET PLATES, FILL PLATES OR ANGLES AS INDICATED



SECONDARY MEMBER WELDING DETAIL

RECEIVED
CK'D BY ___ OK'D BY JSL
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
1	REVISED SECONDARY MEMBER WELDING DETAIL	MGK	WW	8/2/08

HOLES
BOLTS
COATING
CODE(S)
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
Lancaster Facility
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
Williamsport Facility
3501 W. 4th Street
Williamsport, PA 17701
Phone (570) 326-9051
www.highsteel.com

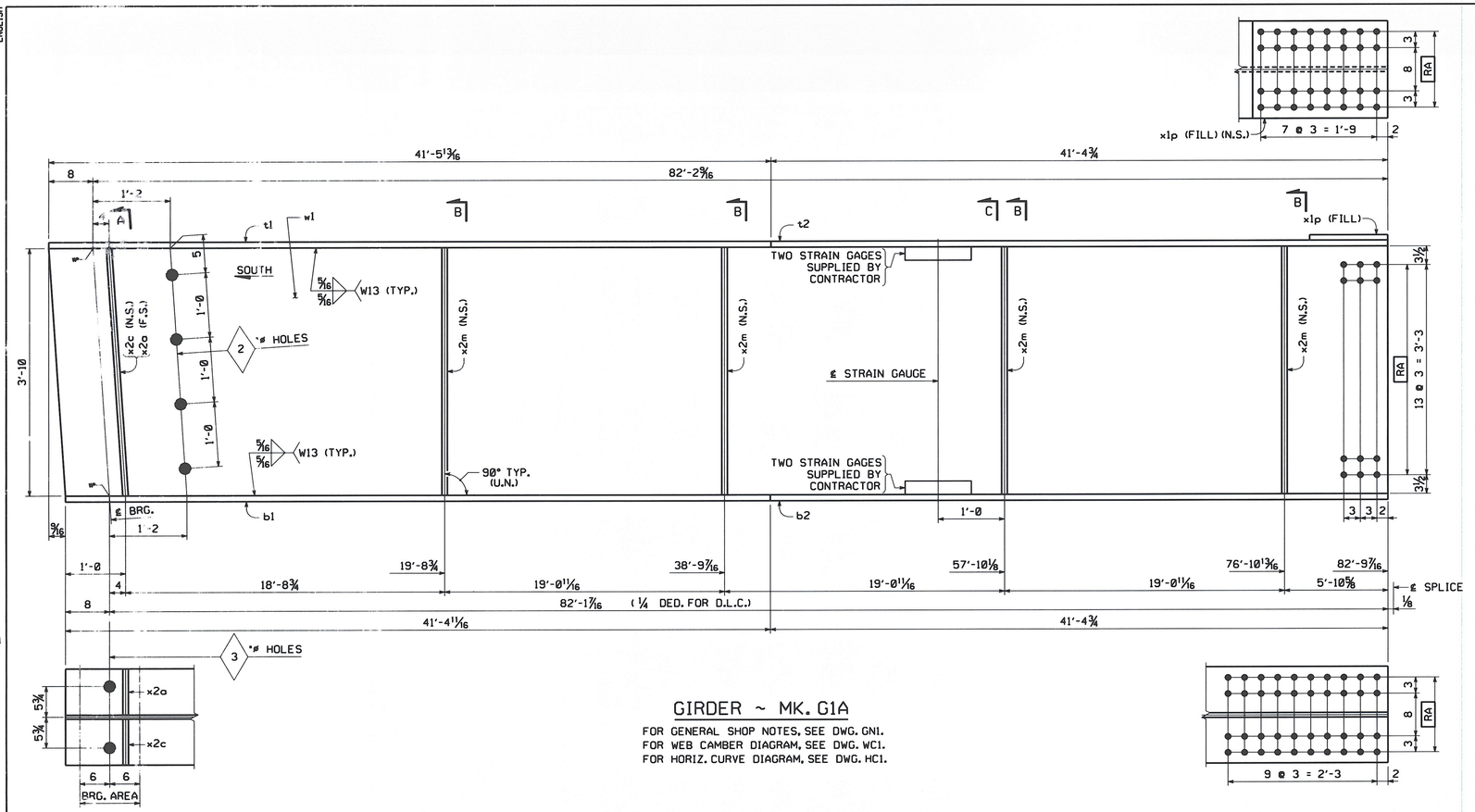
GENERAL SHOP NOTES
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: Kma	CHK'D. BY: SJA	DATE: 5/22/08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: GN1 OF GN1	

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

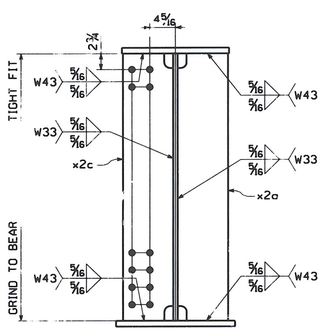
SHIPMENT 01 PM&ENG: 58041327 PRO: 58041328 SHIP&ERECT.: 58041329
BY: bweaver
PLOTTED: 8/4/2008 8:24:48 AM

ENGLISH

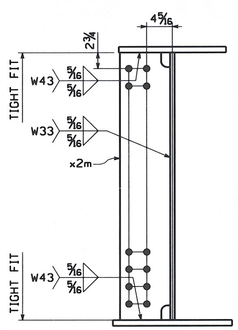


GIRDER ~ MK. G1A

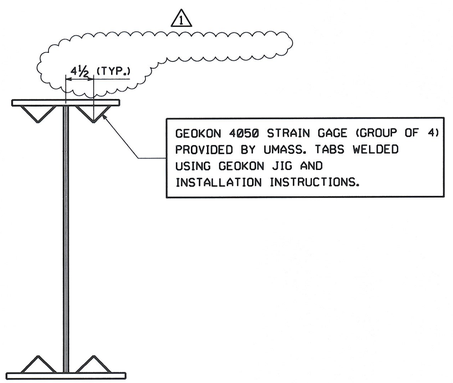
FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A



SECTION B

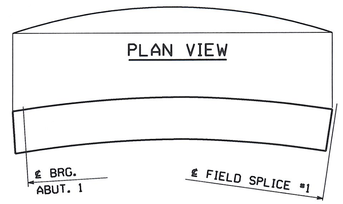


SECTION C

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G1A		GIRDER							26,404.63	5.03	26,399.60
1	w1	PL	5/8 x 46	82 10 9/16	M270	50W	T		03001	8,108.16	5.03	8,103.13
1	t1	PL	1 1/4 x 18	41 5 13/16	M270	50W	T		04007	3,176.15	0.00	3,176.15
1	t2	PL	1 1/4 x 18	41 4 13/16	M270	50W	T		04007	3,169.77	0.00	3,169.77
1	b1	PL	2 1/4 x 18	41 4 11/16	M270	50W	T		04002	5,704.15	0.00	5,704.15
1	b2	PL	2 1/4 x 18	41 4 13/16	M270	50W	T		04002	5,705.58	0.00	5,705.58
1	x1p	PL	1 x 18	2 0 1/2	M270	50W	T	FILL PL	06008	125.05	0.00	125.05
1	x2a	PL	7/8 x 8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
1	x2c	PL	7/8 x 8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
4	x2m	PL	1/2 x 8 1/2	3 10	M270	50W	T		07003	55.44	0.00	55.44
4			STRAIN GAGE					SUPPLIED BY CONTRACTOR				

TOTAL WEIGHT THIS SHEET: 26,399.60 lbs.



ORIENTATION DIAGRAM

NO.	REVISION	BY	CHK'D	DATE
1	ADDED DIMENSION TO LOCATE STRAIN GAGE & REMOVED CONTRACTOR PLEASE SUPPLY	MGK	WW	8/2/08

HOLES: 15/16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
Lancaster Facility: 1915 Old Philadelphia Pike, Lancaster, PA 17605-0008, Phone (717) 299-5211
Williamsport Facility: 3501 N. 4th Street, Williamsport, PA 17701, Phone (570) 326-9051
www.Highsteel.com

GIRDER G1A
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

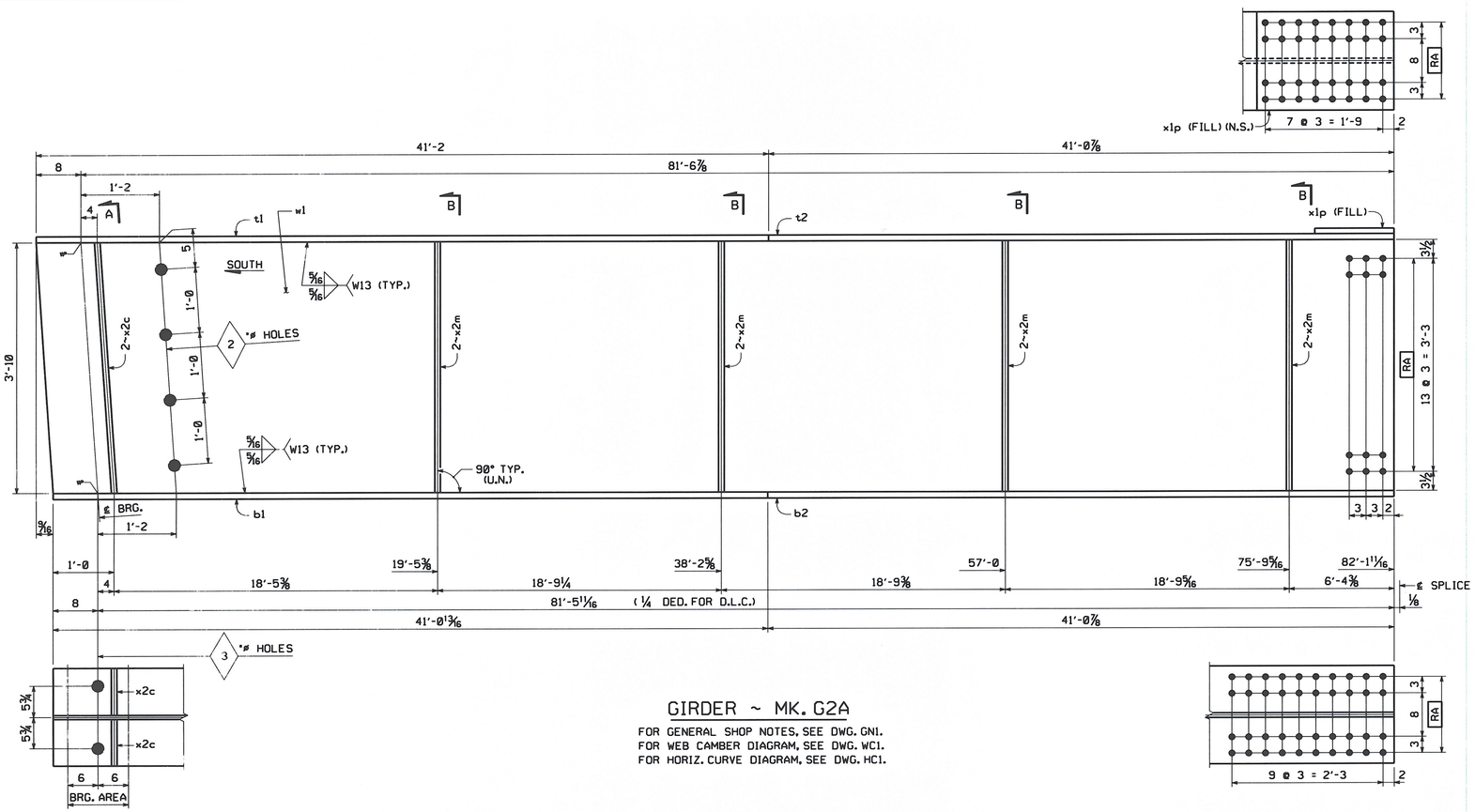
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: MAF	CHK'D. BY: CS	DATE: 6-23-08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: 1 OF 22

RECEIVED
CK'D BY ___ CK'D BY JEL
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

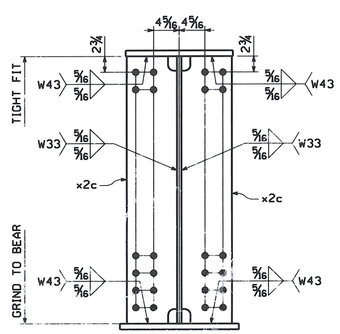
PLOTTED: 8/4/2008 9:23:25 AM
BY: bweaver
SHIPMENT 01
PM&ENG: 5804327 PRD: 5804328 SHIP&ERECT.: 5804329

ENGLISH

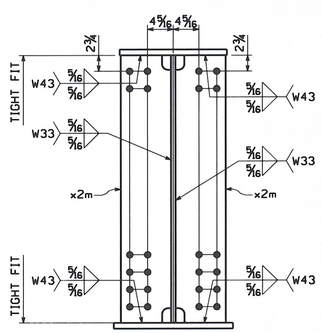


GIRDER ~ MK. G2A

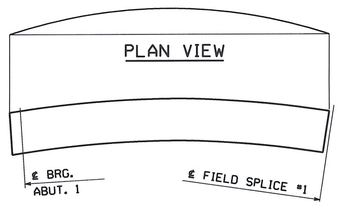
FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A



SECTION B



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA	DEDUCTED WEIGHT EA	SHIP WT. EA (LBS)
1	G2A		GIRDER							26,425.65	5.03	26,425.65
1	w1	PL	5/8 x 46	82 2 7/8	M270	50W	T		03002	8,045.49	5.03	8,040.46
1	t1	PL	1 1/4 x 18	41 2	M270	50W	T		04007	3,151.82	0.00	3,151.82
1	t2	PL	1 1/4 x 18	41 0 15/16	M270	50W	T		04007	3,145.04	0.00	3,145.04
1	b1	PL	2 1/4 x 18	41 0 13/16	M270	50W	T		04002	5,659.64	0.00	5,659.64
1	b2	PL	2 1/4 x 18	41 0 15/16	M270	50W	T		04002	5,661.08	0.00	5,661.08
1	x1p	PL	1 x 18	2 0 1/2	M270	50W	T	FILL PL	06008	125.05	0.00	125.05
2	x2c	PL	7/8 x 8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
8	x2m	PL	1/2 x 8 1/2	3 10	M270	50W	T		07003	55.44	0.00	55.44
										TOTAL WEIGHT THIS SHEET:		26425.65 lbs.

NO.	REVISION	BY	CHK'D	DATE

HOLES 15/16" (U.N.)
BOLTS NONE
COATING NONE
CODE(S) 30
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
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Lancaster Facility
1915 Old Philadelphia Pike
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Williamsport Facility
3501 W. 4th Street
Williamsport, PA 17701
Phone (570) 326-9051
www.highsteel.com

GIRDER G2A
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

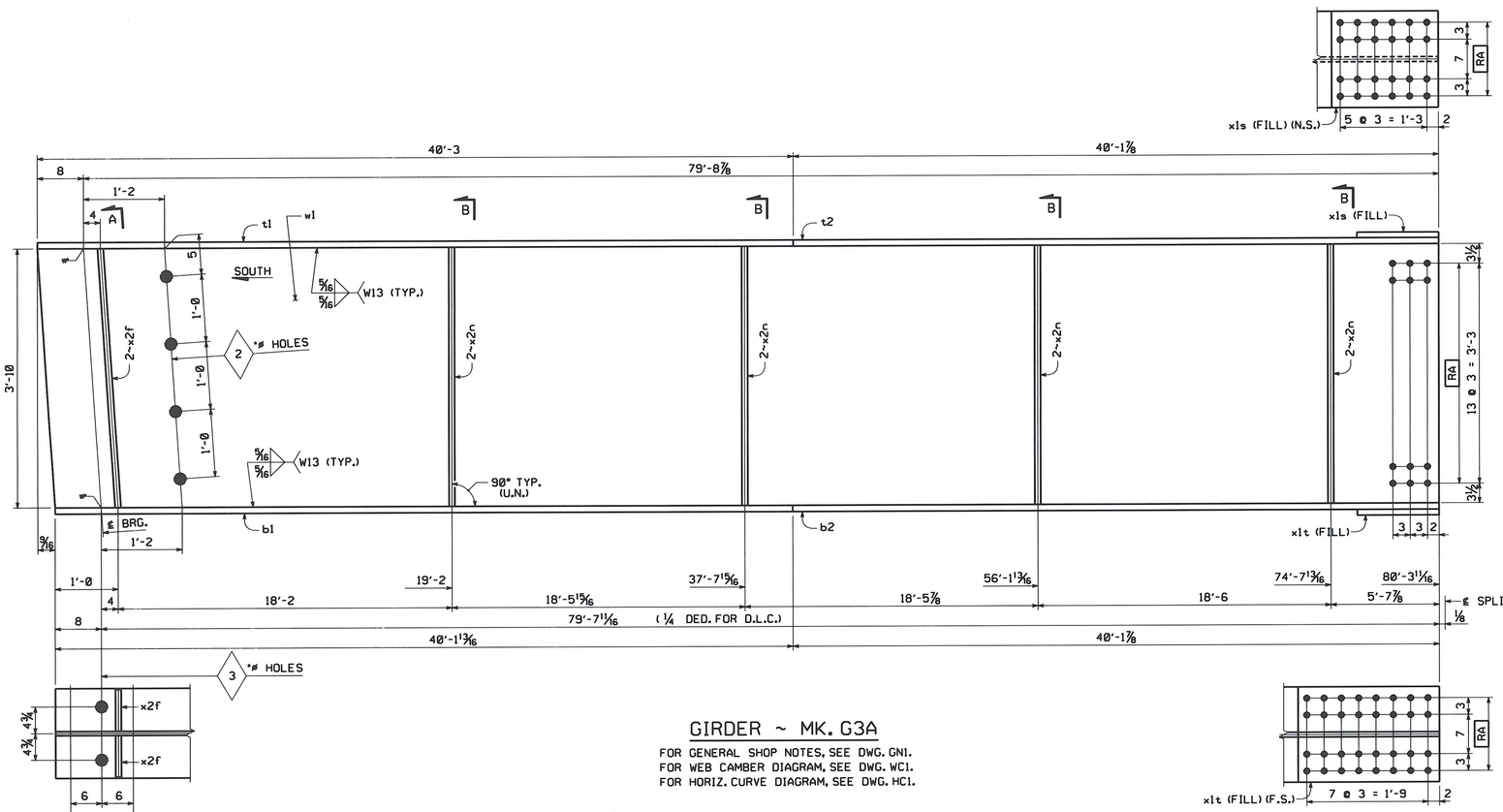
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF Ø13-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D. BY	CS	DATE	6-23-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	2 OF 22		

RECEIVED
CK'D BY ____ OK'D BY JSC
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

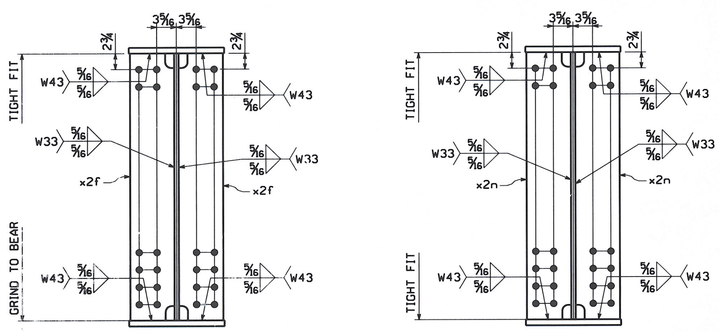
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 6/25/2008 3:38:31 PM BY: MKreidel SHIPMENT 01 PHASING: 5024327 PRJ: 5024328 SHIP&ERECT: 5024329



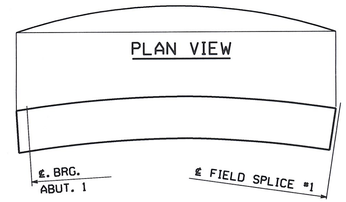
GIRDER ~ MK. G3A

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A

SECTION B



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA	DEDUCTED WEIGHT EA	SHIP WT. EA (LBS)
1	G3A		GIRDER							19,479.81	5.03	19,479.81
1	w1	PL	5/8 x 46	80 4 7/8	M270	50W	T		03003	7,866.13	5.03	7,861.10
1	t1	PL	1 x 16	40 3	M270	50W	T		04008	2,191.39	0.00	2,191.39
1	t2	PL	1 x 16	40 1 7/8	M270	50W	T		04008	2,186.28	0.00	2,186.28
1	b1	PL	1 1/2 x 16	40 1 13/16	M270	50W	T		04004	3,279.00	0.00	3,279.00
1	b2	PL	1 1/2 x 16	40 1 7/8	M270	50W	T		04004	3,279.43	0.00	3,279.43
1	x1s	PL	1 x 16	1 6 1/2	M270	50W	T	FILL PL	06009	83.94	0.00	83.94
1	x1t	PL	1/2 x 16	2 0 1/2	M270	50W	T	FILL PL	06010	55.58	0.00	55.58
2	x2f	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
8	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
										TOTAL WEIGHT THIS SHEET:		19479.81 lbs.

NO.	REVISION	BY	CHK'D	DATE

HOLES: 15/16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
Lancaster Facility, 1915 Old Philadelphia Pike, Lancaster, PA 17605-6008, Phone (717) 299-5211
Williamsport Facility, 3501 W. 4th Street, Williamsport, PA 17701, Phone (570) 326-9051
www.Highsteel.com

GIRDER G3A
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

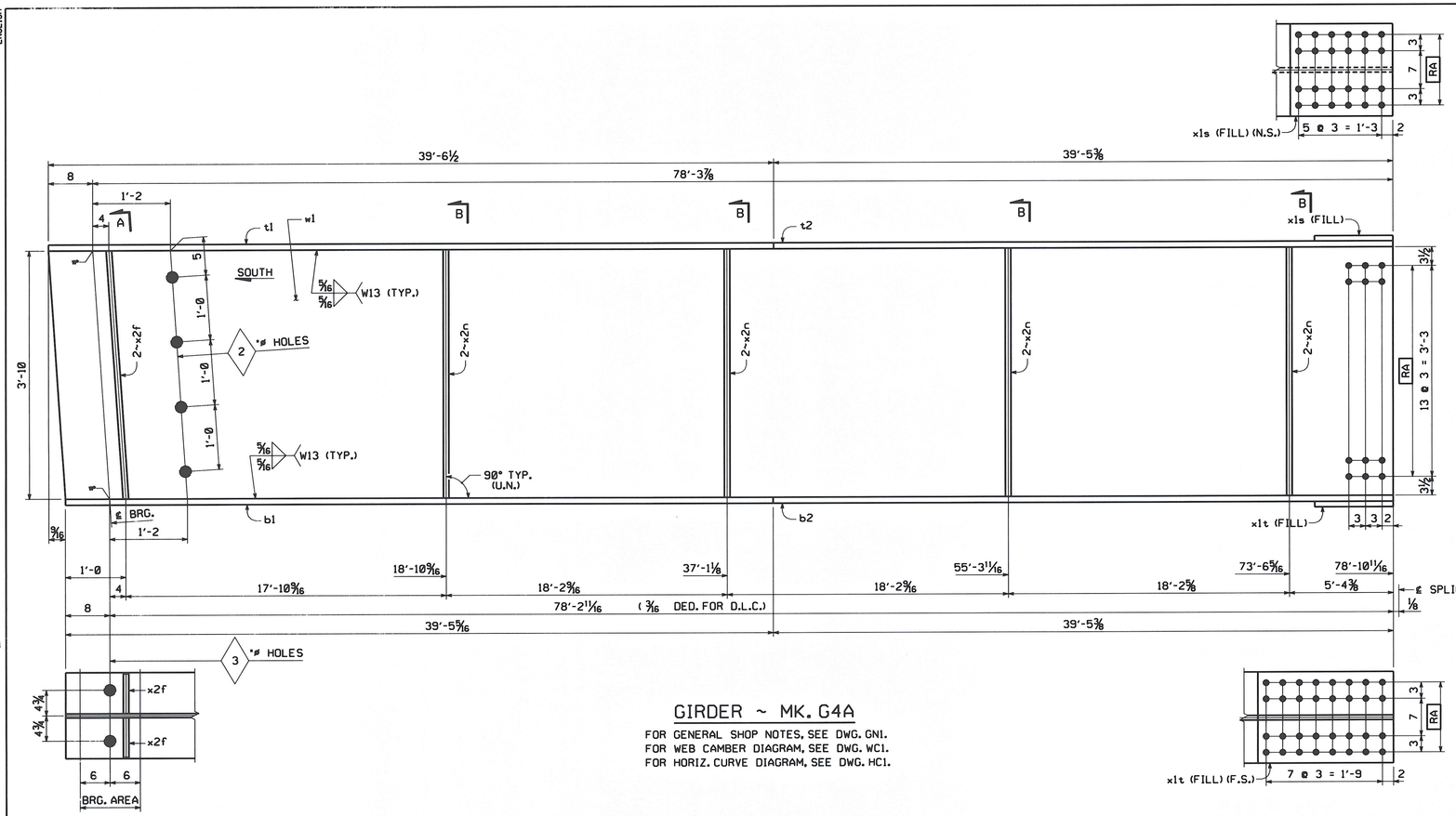
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: MAF	CHK'D. BY: CS	DATE: 6-23-08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: 3 OF 22

RECEIVED
CK'D BY ____ OK'D BY JFL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KmH DATE 9/18/08

ENGLISH
PLOTTED: 6/25/2008 3:38:40 PM
BY: MKreidel
SHIPMENT 01
PM&ENG: 52004327 PROJ: 52004328 SHIP&ERECT: 52004329

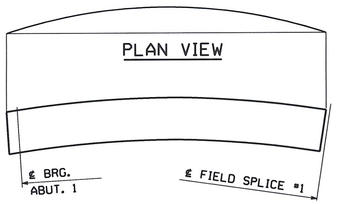
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH

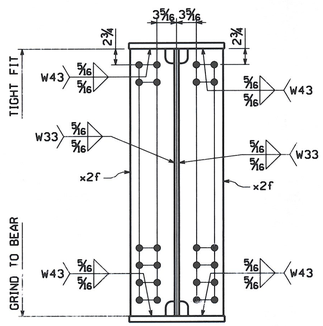


GIRDER ~ MK. G4A

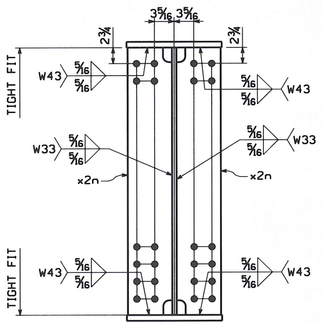
FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



ORIENTATION DIAGRAM



SECTION A



SECTION B

BILL OF MATERIAL

QTY EA	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA	DEDUCTED WEIGHT EA	SHIP WT. EA (LBS)
1	G4A		GIRDER							19,148.40	5.03	19,148.40
1	w1	PL	5/8 x 46	78 11 7/8	M270	50W	T		03004	7,727.54	5.03	7,722.51
1	t1	PL	1 x 16	39 6 1/2	M270	50W	T		04009	2,152.82	0.00	2,152.82
1	t2	PL	1 x 16	39 5 3/8	M270	50W	T		04009	2,147.72	0.00	2,147.72
1	b1	PL	1 1/2 x 16	39 5 5/16	M270	50W	T		04005	3,221.15	0.00	3,221.15
1	b2	PL	1 1/2 x 16	39 5 3/8	M270	50W	T		04005	3,221.58	0.00	3,221.58
1	x1s	PL	1 x 16	1 6 1/2	M270	50W	T	FILL PL	06009	83.94	0.00	83.94
1	x1t	PL	1/2 x 16	2 0 1/2	M270	50W	T	FILL PL	06010	55.58	0.00	55.58
2	x2f	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
8	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
										TOTAL WEIGHT THIS SHEET:		19148.40 lbs.

NO.	REVISION	BY	CHK'D	DATE

HOLES: 15/16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
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GIRDER G4A
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

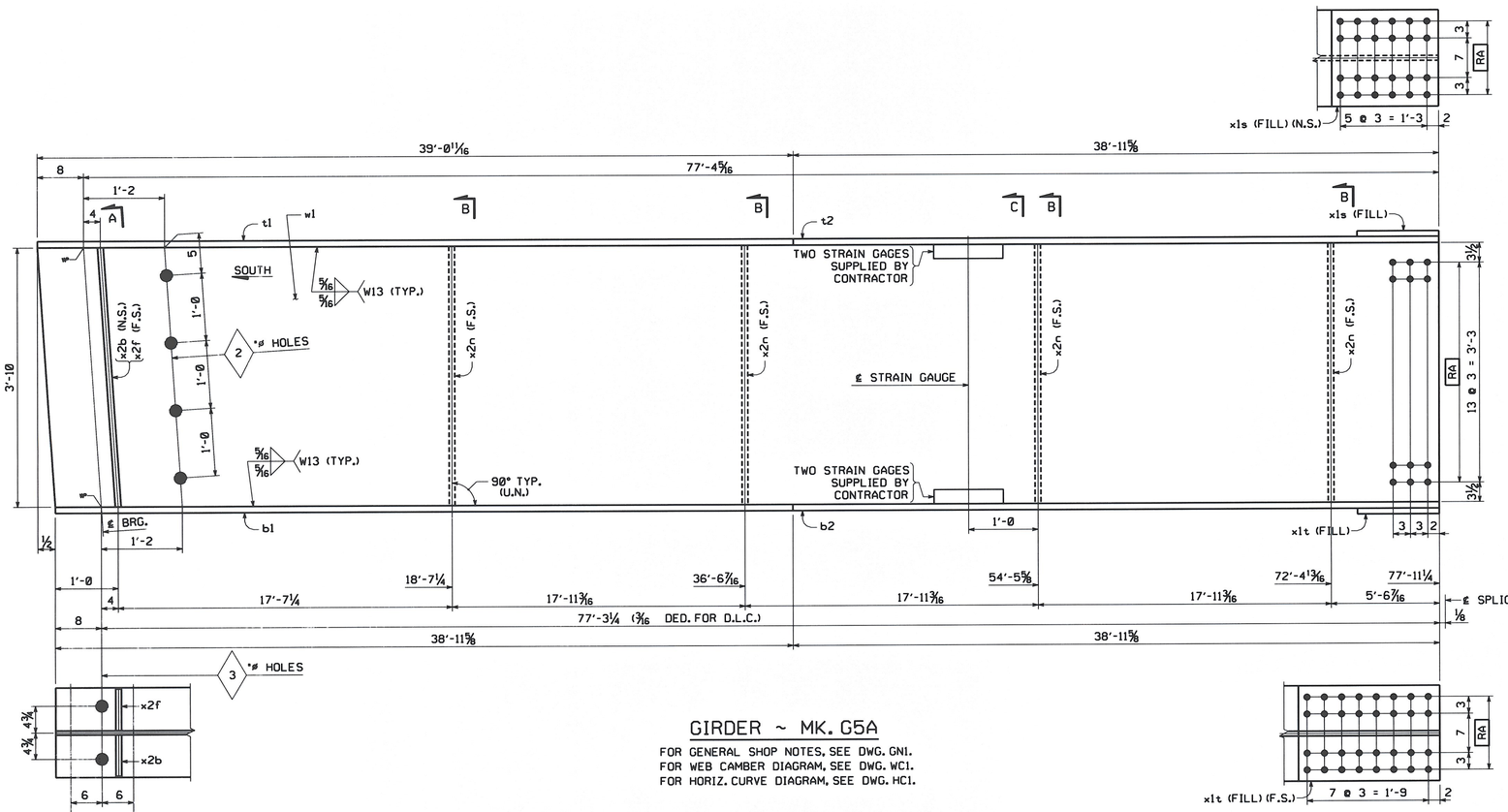
SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D BY	CS	DATE	6-23-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	4 OF 22		

RECEIVED
CK'D BY ____ OK'D BY JFL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

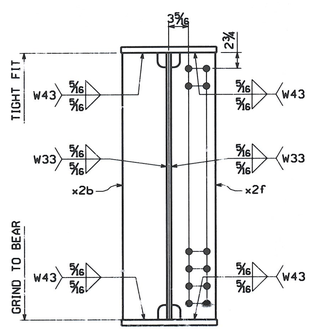
PLOTTED: 6/25/2008 3:38:49 PM BY: MKreidel
SHIPMENT 01 PM&ENG: 5004327 PROJ: 5004328 SHIP&ERECT.: 5004329

ENGLISH

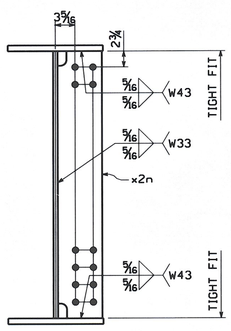


GIRDER ~ MK. G5A

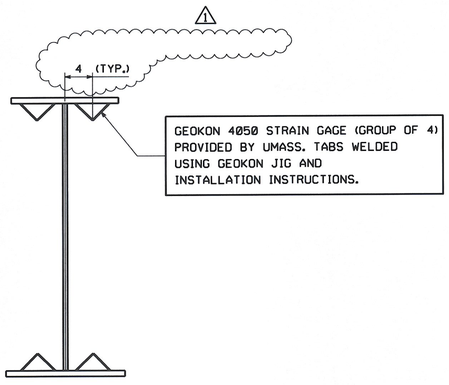
FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



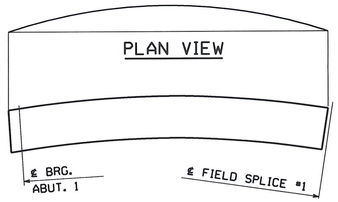
SECTION A



SECTION B



SECTION C



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G5A		GIRDER							18,728.18	4.75	18,728.18
1	w1	PL	5/8 x 46	78 0 5/16	M270	50W	T		03005	7,633.28	4.75	7,628.53
1	t1	PL	1 x 16	39 0 11/16	M270	50W	T		04010	2,126.45	0.00	2,126.45
1	t2	PL	1 x 16	38 11 5/8	M270	50W	T		04010	2,121.63	0.00	2,121.63
1	b1	PL	1 1/2 x 16	38 11 5/8	M270	50W	T		04006	3,182.45	0.00	3,182.45
1	b2	PL	1 1/2 x 16	38 11 5/8	M270	50W	T		04006	3,182.45	0.00	3,182.45
1	x1s	PL	1 x 16	1 6 1/2	M270	50W	T	FILL PL	06009	83.94	0.00	83.94
1	x1t	PL	1/2 x 16	2 0 1/2	M270	50W	T	FILL PL	06010	55.58	0.00	55.58
1	x2b	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
1	x2f	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
4	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
4			STRAIN GAGE					SUPPLIED BY CONTRACTO				
										TOTAL WEIGHT THIS SHEET:		18728.18 lbs.

NO.	REVISION	BY	CHK'D	DATE
1	ADDED DIMENSION TO LOCATE STRAIN GAGE & REMOVED CONTRACTOR PLEASE SUPPLY	MGK	WW	8/2/08

HOLES: 15/16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
Lancaster Facility
1915 Old Philadelphia Pike
Lancaster, PA 17602-0008
Phone (717) 299-5211
Williamsport Facility
3501 W. 4th Street
Williamsport, PA 17701
Phone (570) 326-9051
www.highsteel.com

GIRDER G5A
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

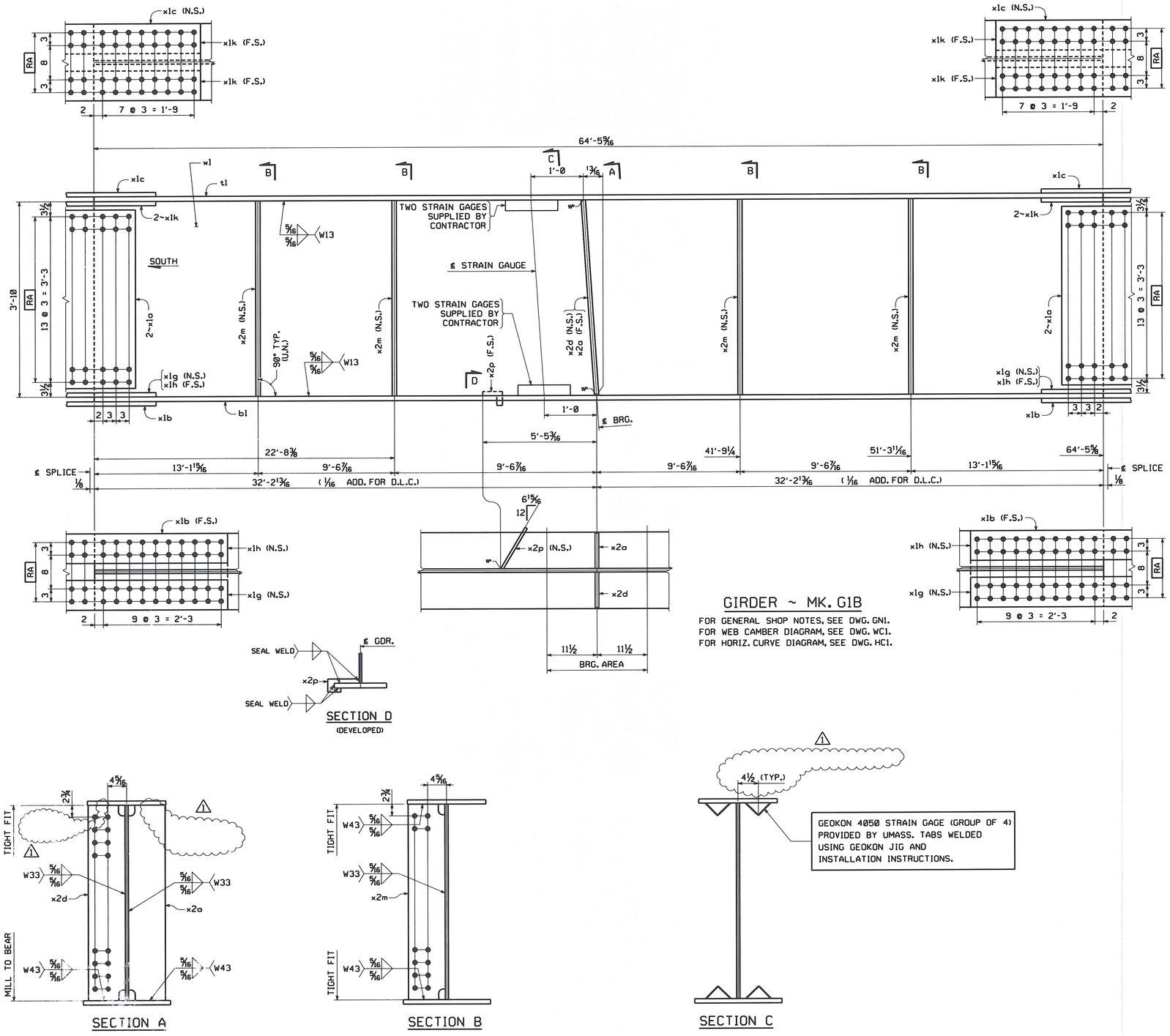
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: MAF	CHK'D. BY: CS	DATE: 6-23-08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: 5 OF 22	

RECEIVED
CK'D BY ____ OK'D BY JFL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 8/4/2008 8:23:59 AM BY: bweaver SHIPMENT 01 PM&ENG: 5804327 PROJ: 5804328 SHIP&ERECT: 5804329

ENGLISH



GIRDER ~ MK. G1B

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.

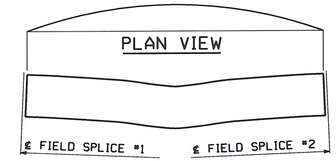
SECTION D
(DEVELOPED)

SECTION A

SECTION B

GEOKON 4050 STRAIN GAGE (GROUP OF 4) PROVIDED BY UMASS. TABS WELDED USING GEOKON JIG AND INSTALLATION INSTRUCTIONS.

SECTION C



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G1B		GIRDER							26,065.74	0.28	26,065.74
1	w1	PL	5/8 x 46	64 5 5/8	M270	50W	T		03006	6,306.97	0.28	6,306.69
1	t1	PL	2 1/4 x 18	64 5 9/16	M270	50W	T		04001	8,883.88	0.00	8,883.88
1	b1	PL	2 1/4 x 18	64 5 5/8	M270	50W	T		04001	8,884.60	0.00	8,884.60
4	x1a	PL	1/2 x 42	1 7 1/4	M270	50W	T		06001	458.52	0.00	458.52
2	x1b	PL	1/2 x 18	5 1 1/4	M270	50W	T	WIDTH & LENGTH	06002	312.63	0.00	312.63
2	x1c	PL	1/2 x 18	4 1 1/4	M270	50W	T		06003	125.69	0.00	125.69
2	x1g	PL	5/8 x 7	5 1 1/4	M270	50W	T	WIDTH & LENGTH	06005	75.99	0.00	75.99
2	x1h	PL	5/8 x 7	5 1 1/4	M270	50W	T	WIDTH & LENGTH	06005	75.99	0.00	75.99
4	x1k	PL	5/8 x 7	4 1 1/4	M270	50W	T		06006	61.10	0.00	61.10
1	x2a	PL	7/8 x 8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
1	x2d	PL	7/8 x 8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
4	x2m	PL	1/2 x 8 1/2	3 10	M270	50W	T		07003	55.44	0.00	55.44
1	x2p	PL	1/4 x 4 1/4	1 0 1/16	M270	50W			07007	3.63	0.00	3.63
4			STRAIN GAGE					SUPPLIED BY CONTRACTO				
								TOTAL WEIGHT THIS SHEET:		26065.74 lbs.		

NO.	REVISION	BY	CHK'D	DATE
1	ADDED DIMENSION TO LOCATE STRAIN GAGE, REMOVED WELDS & CONTRACTOR PLEASE SUPPLY	MGK	WW	8/2/08

HOLES: 15⁄16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES, Inc. — An ISO 9001:2000 Certified Company — An Affiliate of High Industries Inc.
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www.highsteel.com

GIRDER G1B

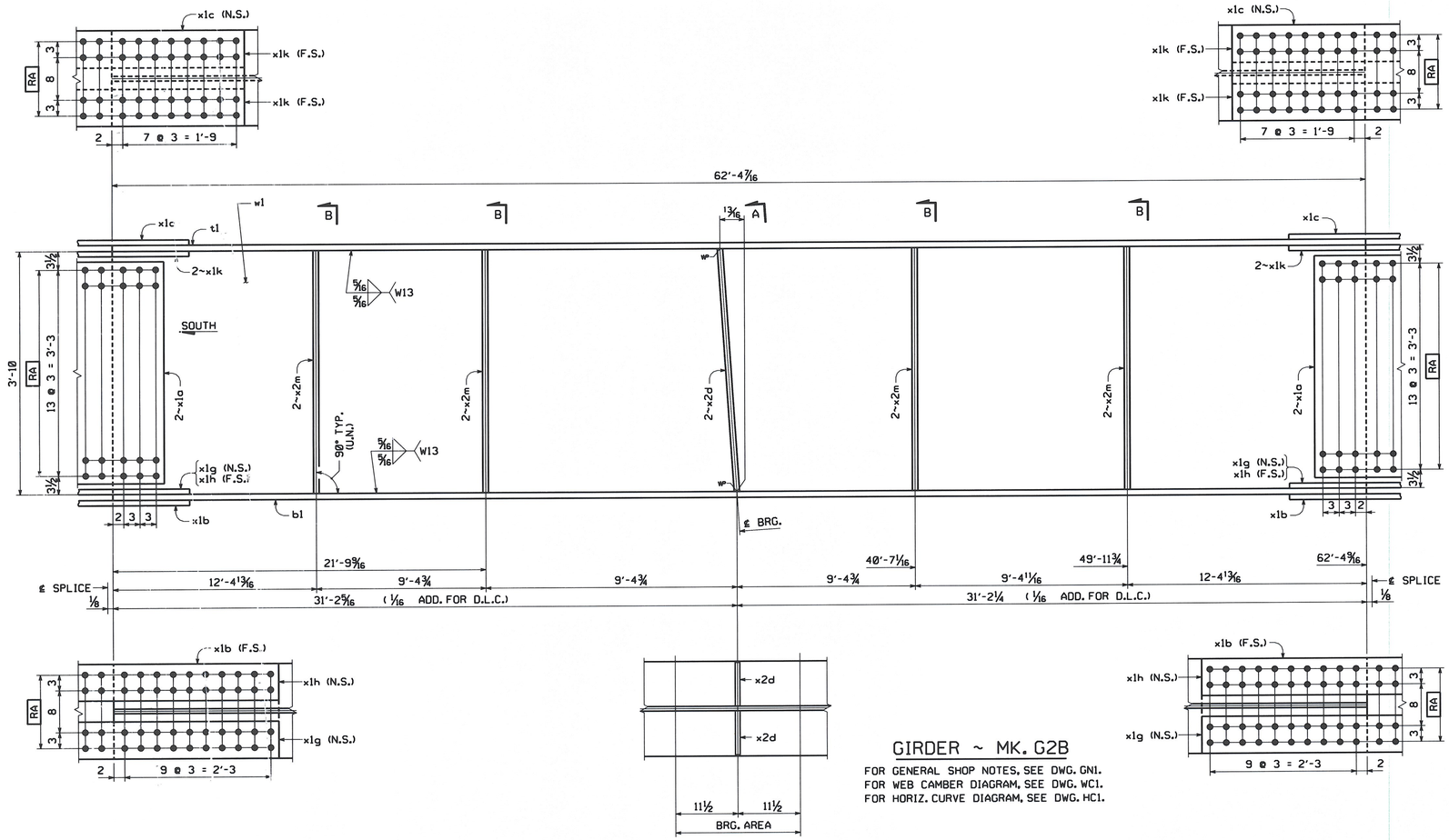
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF
CHK'D. BY	CS	DATE	6-24-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077
HSSI STRUCT. ID	A	DRAWING NUMBER	6 OF 22
SHPMT	1		

RECEIVED
CK'D BY TJ OK'D BY JFL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

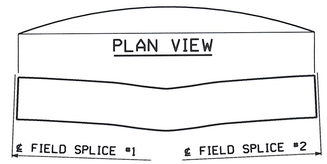
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 8/4/2008 8:24:08 AM BY: bweaver SHIPMENT 01 PM&ENG: 50084327 PRO: 50084329 SHIP&RECT.: 50084329

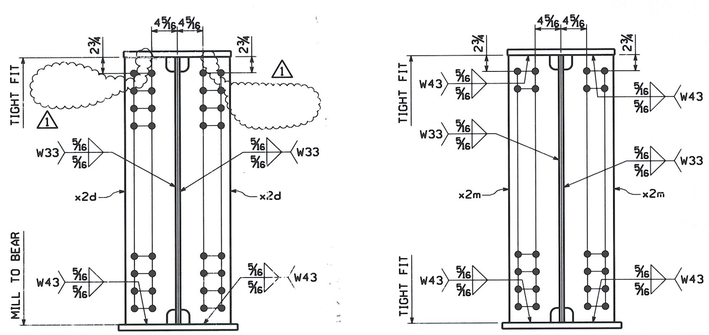


GIRDER ~ MK. G2B

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



ORIENTATION DIAGRAM



SECTION A

SECTION B

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G2B		GIRDER							25,503.16	0.56	25,503.16
1	w1	PL	5/8 x 46	62 4 9/16	M270	50W	T		03006	6,102.65	0.56	6,102.09
1	t1	PL	2 1/4 x 18	62 4 7/16	M270	50W	T		04001	8,595.34	0.00	8,595.34
1	b1	PL	2 1/4 x 18	62 4 9/16	M270	50W	T		04001	8,596.77	0.00	8,596.77
4	x1a	PL	1/2 x 42	1 7 1/4	M270	50W	T		06001	458.52	0.00	458.52
2	x1b	PL	1/2 x 18	5 1 1/4	M270	50W	T	WIDTH & LENGTH	06002	312.63	0.00	312.63
2	x1c	PL	1/2 x 18	4 1 1/4	M270	50W	T		06003	125.69	0.00	125.69
2	x1g	PL	5/8 x 7	5 1 1/4	M270	50W	T	WIDTH & LENGTH	06005	75.99	0.00	75.99
2	x1h	PL	5/8 x 7	5 1 1/4	M270	50W	T	WIDTH & LENGTH	06005	75.99	0.00	75.99
4	x1k	PL	5/8 x 7	4 1 1/4	M270	50W	T		06006	61.10	0.00	61.10
2	x2d	PL	7/8 x 8 1/2	3 10	M270	50W	T		07001	97.01		97.01
8	x2m	PL	1/2 x 8 1/2	3 10	M270	50W	T		07003	55.44		55.44
			TOTAL WEIGHT THIS SHEET:									25503.16 lbs.

RECEIVED
CK'D BY JFL OK'D BY JFL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
1	REMOVED WELDS	MGK	WW	8/2/08

HOLES: 13/16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES INC. — An Affiliate of High Industries Inc.
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GIRDER G2B
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.						
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES					
SHPMT 1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D BY	CS	DATE	6-24-08
STATE VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	7 OF 22		

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH
PLOTTED: 8/4/2008 8:24:17 AM BY: bweaver SHIPMENT 01 PM&ENG: 50243327 PROD: 50243328 SHIP&ERECT: 50243329

ENGLISH
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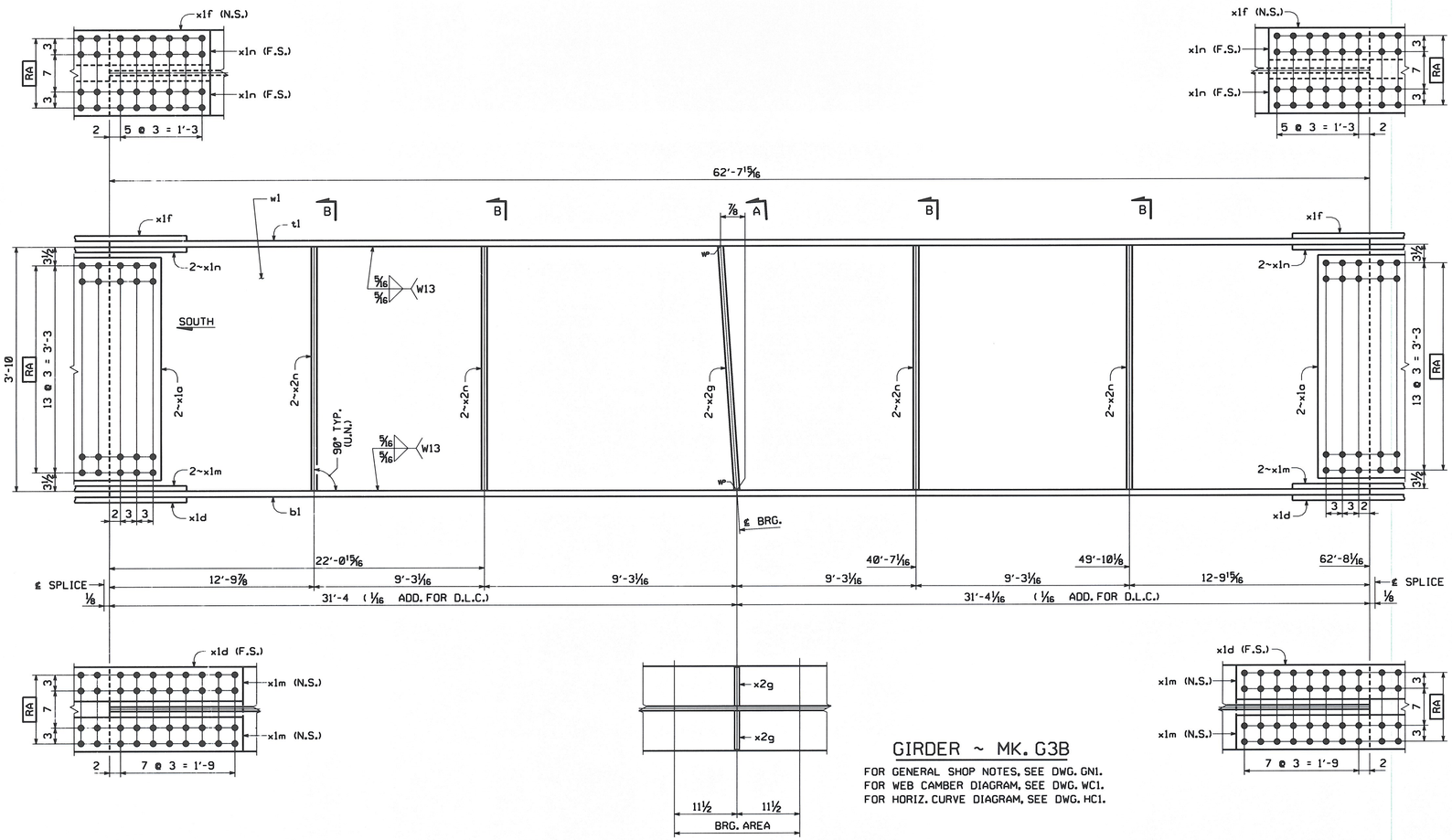
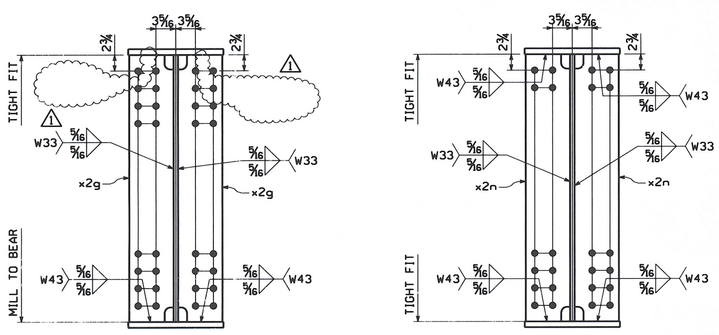


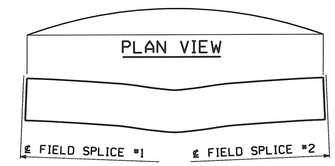
GIRDER ~ MK. G3B

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A

SECTION B



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHP WT. EA. (LBS)
1	G3B		GIRDER							21,535.56	0.56	21,535.56
			0.55208 62.25' 62.671875'									
1	w1	PL	5/8 x 46	62 8 1/16	M270	50W	T		03007	6,131.18	0.56	6,130.62
1	t1	PL	2 x 16	62 7 15/16	M270	50W	T		04003	6,823.14	0.00	6,823.14
1	b1	PL	2 x 16	62 8 1/16	M270	50W	T		04003	6,824.27	0.00	6,824.27
4	x1a	PL	1/2 x 42	1 7 1/4	M270	50W	T		06001	458.52	0.00	458.52
2	x1d	PL	1/2 x 16	4 1 1/4	M270	50W	T		06004	223.45	0.00	223.45
2	x1f	PL	1/2 x 16	3 1 1/4	M270	50W	T		06004	84.50	0.00	84.50
4	x1m	PL	5/8 x 6	4 1 1/4	M270	50W	T		06007	52.37	0.00	52.37
4	x1n	PL	5/8 x 6	3 1 1/4	M270	50W	T		06007	39.61	0.00	39.61
2	x2g	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
8	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
								TOTAL WEIGHT THIS SHEET:		21535.56 lbs.		

RECEIVED
CK'D BY ✓ OK'D BY JC
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
1	REMOVED WELDS	MGK	WW	8/2/08

HOLES 15/16" (U.N.)
BOLTS NONE
COATING NONE
CODE(S) 30
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
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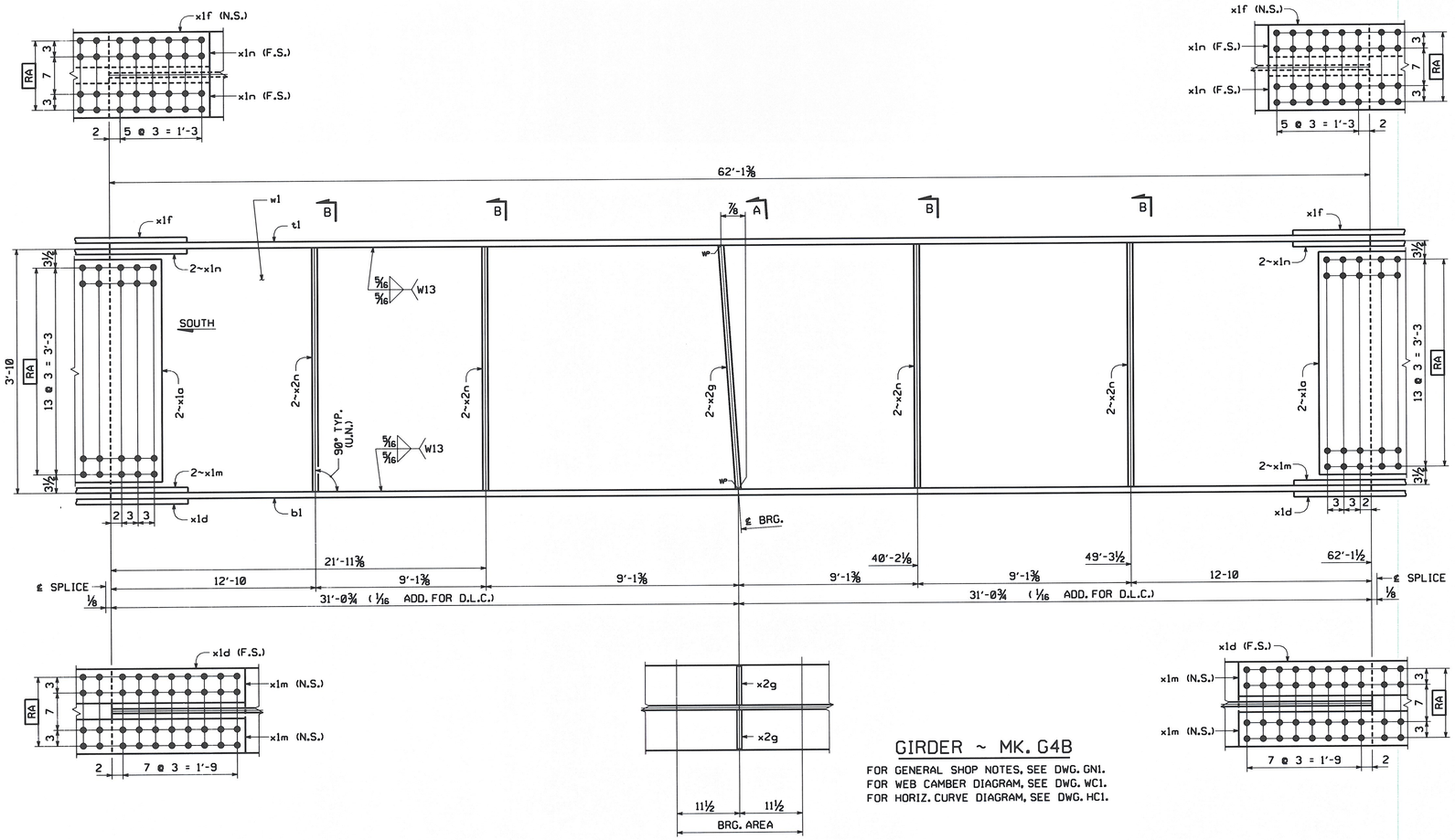
GIRDER G3B
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF Ø13-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D. BY	CS	DATE	6-24-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	8 OF 22		

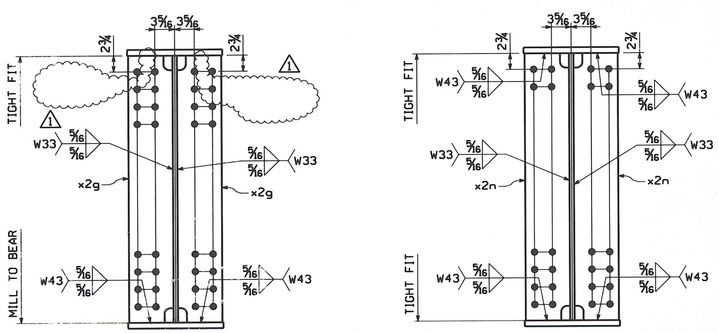
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH



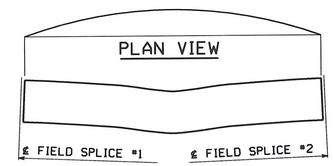
GIRDER ~ MK. G4B

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A

SECTION B



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G4B		GIRDER							21,362.96	0.56	21,362.96
1	w1	PL	5/8 x 46	62 1 1/2	M270	50W	T		03007	6,077.68	0.56	6,077.12
1	t1	PL	2 x 16	62 1 3/8	M270	50W	T		04003	6,763.59	0.00	6,763.59
1	b1	PL	2 x 16	62 1 1/2	M270	50W	T		04003	6,764.72	0.00	6,764.72
4	x1a	PL	1/2 x 42	1 7 1/4	M270	50W	T		06001	458.52	0.00	458.52
2	x1d	PL	1/2 x 16	4 1 1/4	M270	50W	T		06004	223.45	0.00	223.45
2	x1f	PL	1/2 x 16	3 1 1/4	M270	50W	T		06004	84.50	0.00	84.50
4	x1m	PL	5/8 x 6	4 1 1/4	M270	50W	T		06007	52.37	0.00	52.37
4	x1n	PL	5/8 x 6	3 1 1/4	M270	50W	T		06007	39.61	0.00	39.61
2	x2g	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
8	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91

TOTAL WEIGHT THIS SHEET: 21362.96 lbs.

RECEIVED
CK'D BY ___ OK'D BY JCL
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
1	REMOVED WELDS	MGK	WW	8/2/08

HOLES: 15/16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

Lancaster Facility
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GIRDER G4B

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VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
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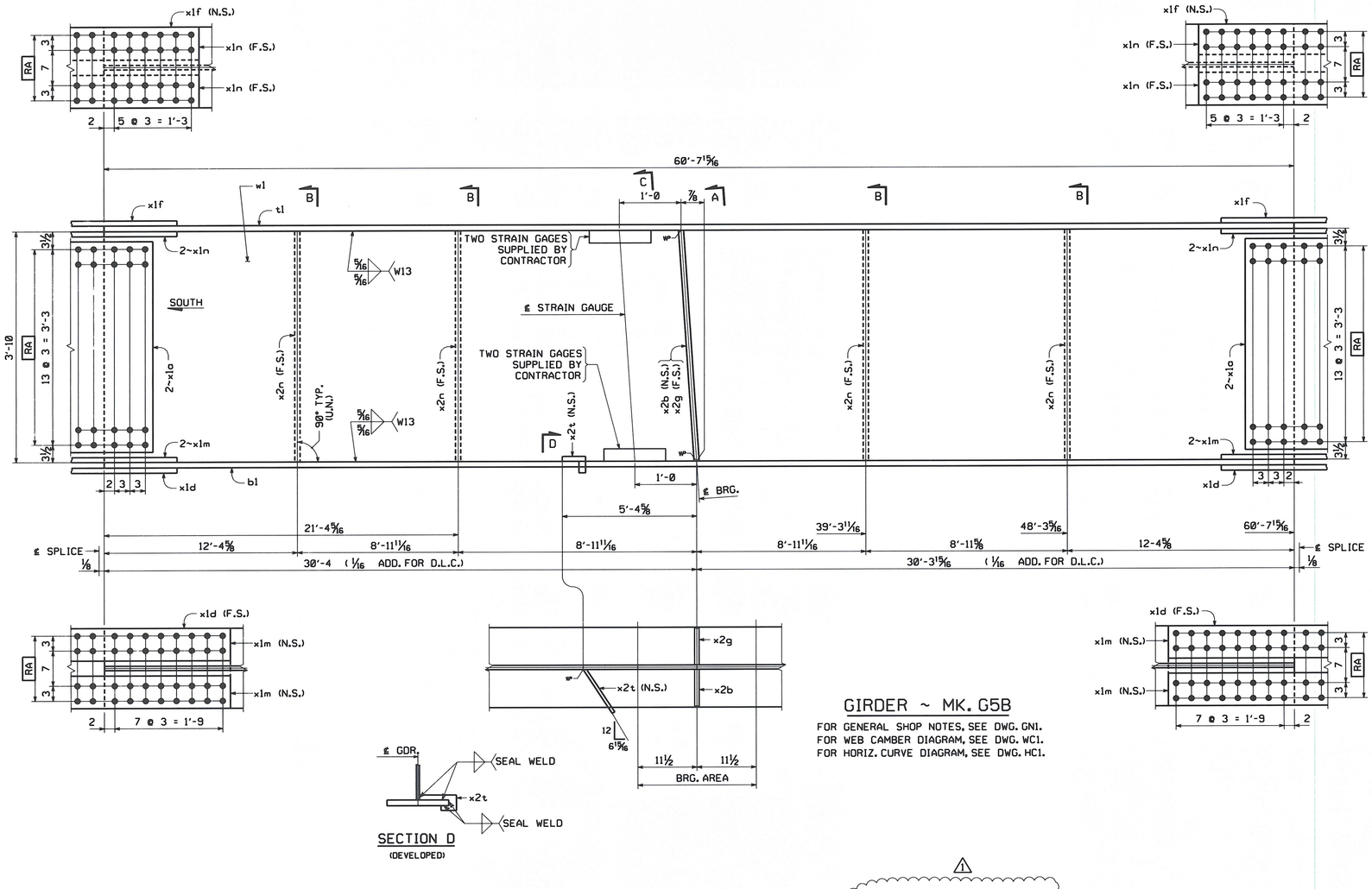
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: MAF	CHK'D. BY: CS	DATE: 6-24-08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: 9 OF 22

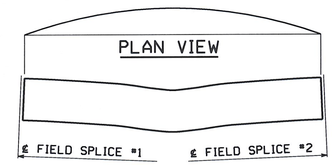
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 8/4/2008 8:24:35 AM
BY: bweaver
SHIPMENT 01 PM&ENG: 5004327 PRD: 5004328 SHIP&ERECT.: 5004329



GIRDER ~ MK. G5B

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC1.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G5B		GIRDER							20,709.61	0.00	20,709.61
1	w1	PL	5/8 x 46	60 7 15/16	M270	50W	T		03008	5,934.50	0.00	5,934.50
1	t1	PL	2 x 16	60 7 15/16	M270	50W	T		04003	6,605.36	0.00	6,605.36
1	b1	PL	2 x 16	60 7 15/16	M270	50W	T		04003	6,605.36	0.00	6,605.36
4	x1a	PL	1/2 x 42	1 7 1/4	M270	50W	T		06001	458.52	0.00	458.52
2	x1d	PL	1/2 x 16	4 1 1/4	M270	50W	T		06004	223.45	0.00	223.45
2	x1f	PL	1/2 x 16	3 1 1/4	M270	50W	T		06004	84.50	0.00	84.50
4	x1m	PL	5/8 x 6	4 1 1/4	M270	50W	T		06007	52.37	0.00	52.37
4	x1n	PL	5/8 x 6	3 1 1/4	M270	50W	T		06007	39.61	0.00	39.61
1	x2b	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
1	x2g	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
4	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
1	x2t	PL	1/4 x 4	0 10 7/8	M270	50W			07005	3.08	0.00	3.08
4			STRAIN GAGE					SUPPLIED BY CONTRACTO				
										TOTAL WEIGHT THIS SHEET:		20709.61 lbs.

NO.	REVISION	BY	CHK'D	DATE
1	ADDED DIMENSION TO LOCATE STRAIN GAGE, REMOVED WELDS & CONTRACTOR PLEASE SUPPLY	MGK	WW	8/2/08

HOLES: 15/16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
Lancaster Facility: 195 Old Philadelphia Pike, Lancaster, PA 17605-0008, Phone (717) 299-5211
Williamsport Facility: 3501 W. 4th Street, Williamsport, PA 17701, Phone (570) 326-9051
www.highsteel.com

GIRDER G5B
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

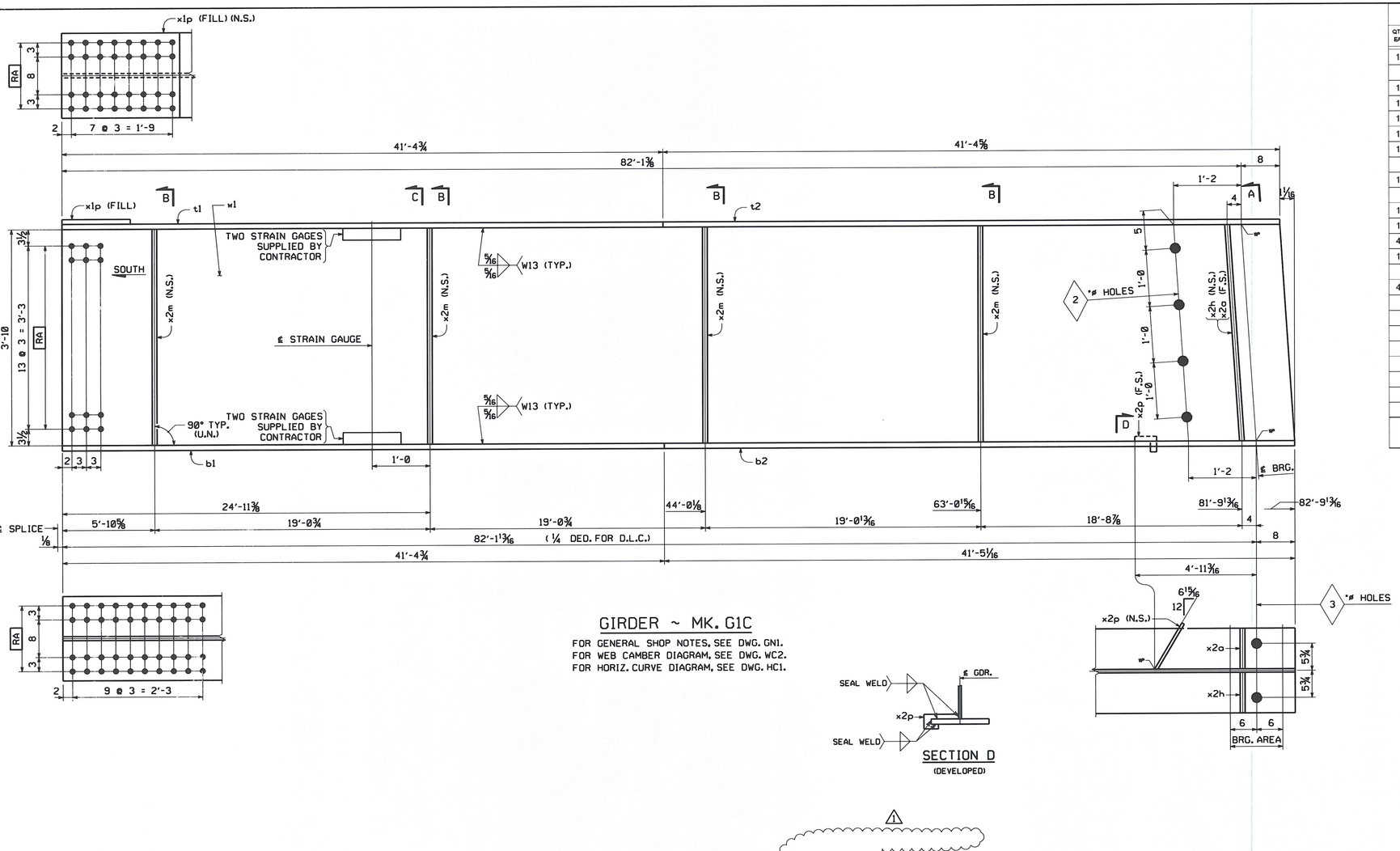
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: MAF	CHK'D. BY: CS	DATE: 6-24-08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: 10 OF 22

RECEIVED
CK'D BY TJ OK'D BY JEL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KmH DATE 9/18/08

ENGLISH
PM&ENG: 5004327 PRD: 5004328 SHIP&ERECT.: 5004329
SHIPMENT 01
BY: bweaver
PLOTTED: 8/4/2008 8:23:33 AM

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

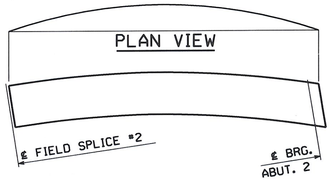
ENGLISH



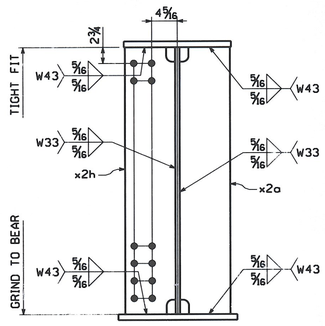
GIRDER ~ MK. G1C

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC2.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.

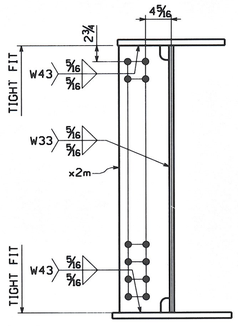
SECTION D
(DEVELOPED)



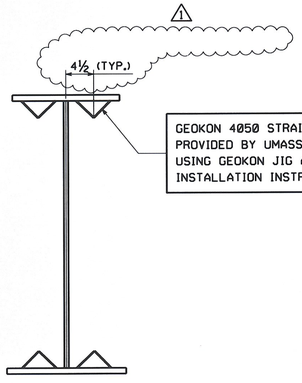
ORIENTATION DIAGRAM



SECTION A



SECTION B



GEOKON 4050 STRAIN GAGE (GROUP OF 4) PROVIDED BY UMASS. TABS WELDED USING GEOKON JIG AND INSTALLATION INSTRUCTIONS.

SECTION C

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G1C		GIRDER							26,404.04	7.55	26,404.04
1	w1	PL	5/8 x 46	82 10 7/16	M270	50W	T		03001	8,107.14	7.55	8,099.59
1	t1	PL	1 1/4 x 18	41 4 3/4	M270	50W	T		04007	3,169.37	0.00	3,169.37
1	t2	PL	1 1/4 x 18	41 4 11/16	M270	50W	T		04007	3,168.97	0.00	3,168.97
1	b1	PL	2 1/4 x 18	41 4 3/4	M270	50W	T		04002	5,704.86	0.00	5,704.86
1	b2	PL	2 1/4 x 18	41 5 1/8	M270	50W	T		04002	5,709.17	0.00	5,709.17
1	x1p	PL	1 x 18	2 0 1/2	M270	50W	T	FILL PL	06008	125.05	0.00	125.05
1	x2a	PL	7/8 x 8 1/2	3 10	M270	50W	T		07001	97.01	0.00	97.01
1	x2h	PL	7/8 x 8 1/2	3 10 1/32	M270	50W	T		07001	97.08	0.00	97.08
4	x2m	PL	1/2 x 8 1/2	3 10	M270	50W	T		07003	55.44	0.00	55.44
1	x2p	PL	1/4 x 4 1/4	1 0 1/16	M270	50W			07007	3.63	0.00	3.63
4			STRAIN GAUGE					SUPPLIED BY CONTRACTO				

TOTAL WEIGHT THIS SHEET: 26404.04 lbs.

RECEIVED
CK'D BY ___ OK'D BY JFL
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE
1	ADDED DIMENSION TO LOCATE STRAIN GAGE & REMOVED CONTRACTOR PLEASE SUPPLY	MGK	WW	8/2/08

HOLES 15/16" (U.N.)
BOLTS NONE
COATING NONE
CODE(S) 30
SCALE N.T.S.

HIGH STEEL STRUCTURES, INC.
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www.Hshsteel.com

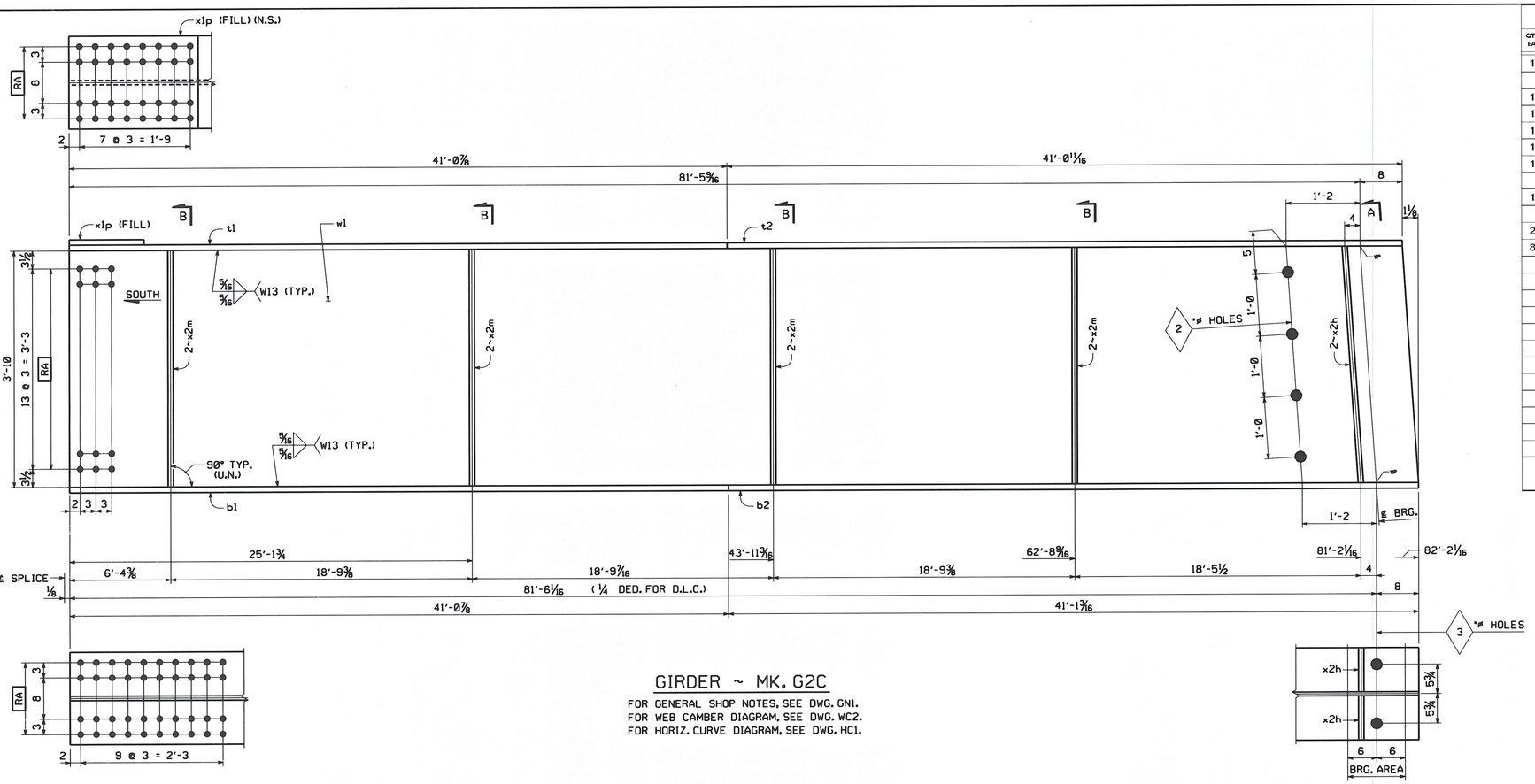
GIRDER GIC
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)			FED. AID PROJ. NO.					
GENERAL CONTRACTOR	WINTERSET, INC.			HSSI PROJ. MGR	DEB KUPRES				
SHPMT 1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D. BY	CS	DATE	6-23-08	
STATE VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	11 OF 22			

PLOTTED: 8/4/2008 8:23:42 AM BY: bwoover SHIPMENT 01 PM&ENG: 52804327 PROJ: 52804328 SHIP&ERECT.: 52804329

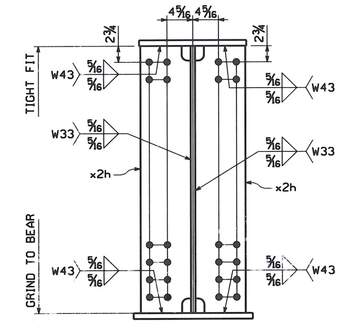
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH

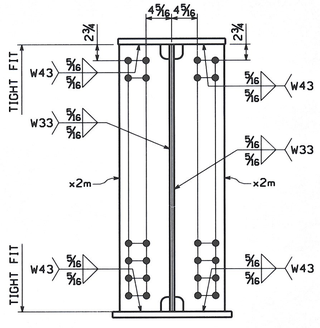


GIRDER ~ MK. G2C

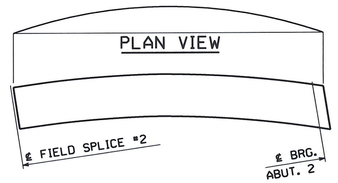
FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC2.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A



SECTION B



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA (LBS)
1	G2C		GIRDER							26,420.19	7.83	26,420.19
1	w1	PL	5/8 x 46	82 2 11/16	M270	50W	T		03002	8,043.96	7.83	8,036.13
1	t1	PL	1 1/4 x 18	41 0 7/8	M270	50W	T		04007	3,144.65	0.00	3,144.65
1	t2	PL	1 1/4 x 18	41 0 3/4	M270	50W	T		04007	3,143.85	0.00	3,143.85
1	b1	PL	2 1/4 x 18	41 0 7/8	M270	50W	T		04002	5,660.36	0.00	5,660.36
1	b2	PL	2 1/4 x 18	41 1 1/4	M270	50W	T		04002	5,664.67	0.00	5,664.67
1	x1p	PL	1 x 18	2 0 1/2	M270	50W	T	FILL PL	06008	125.05	0.00	125.05
2	x2h	PL	7/8 x 8 1/2	3 10 1/32	M270	50W	T		07001	97.08	0.00	97.08
8	x2m	PL	1/2 x 8 1/2	3 10	M270	50W	T		07003	55.44	0.00	55.44
										TOTAL WEIGHT THIS SHEET:		26420.19 lbs.

NO.	REVISION	BY	CHK'D	DATE

HOLES: 15⁄16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES INC. — An Affiliate of High Industries Inc. — An ISO 9001:2000 Certified Company
Lancaster Facility: 1915 Old Philadelphia Pike, Lancaster, PA 17605-0008, Phone (717) 299-5211
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GIRDER G2C
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

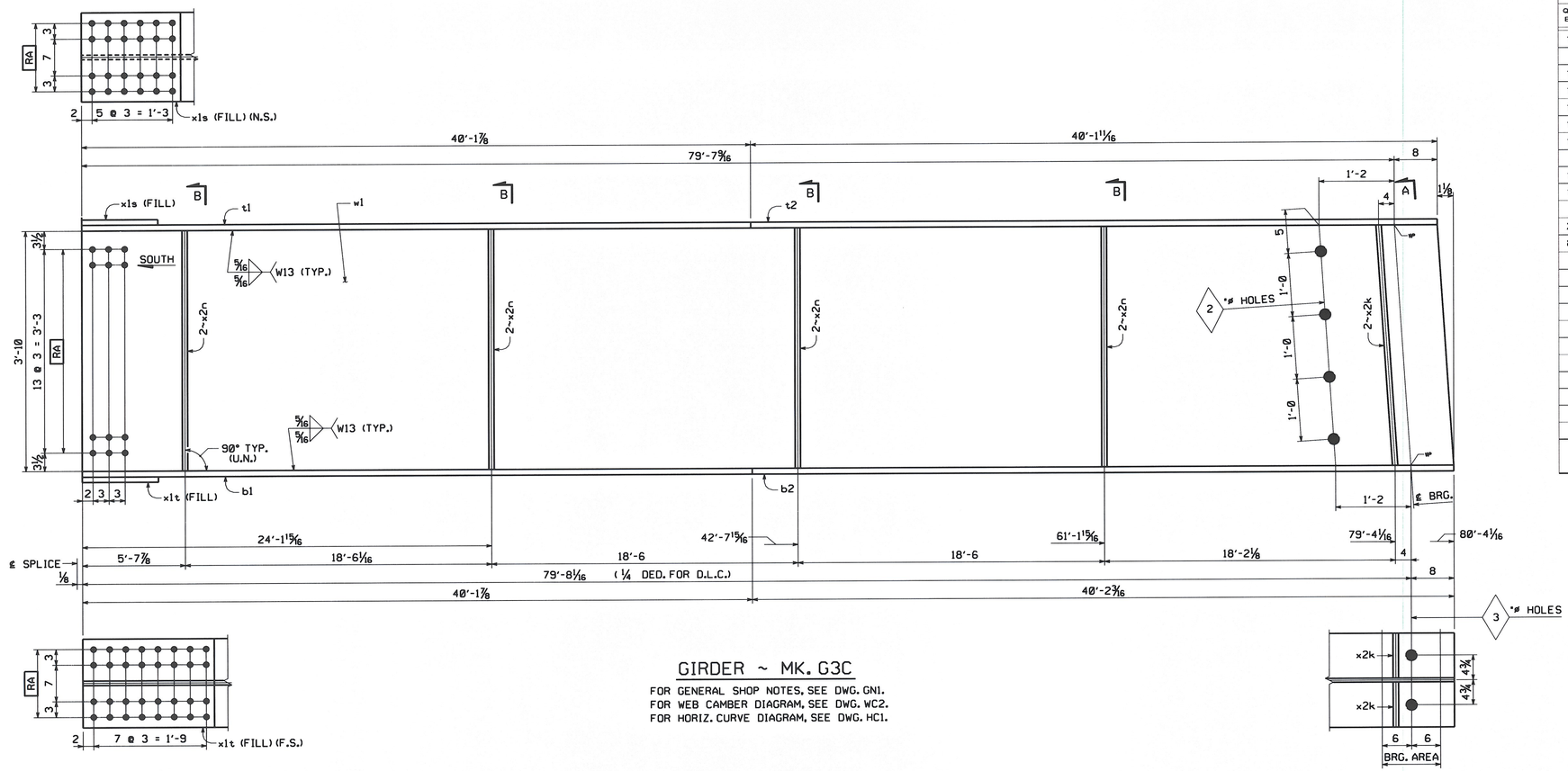
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: MAF	CHK'D. BY: CS	DATE: 6-23-08
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: 12 OF 22

RECEIVED
CK'D BY JJ OK'D BY JEL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

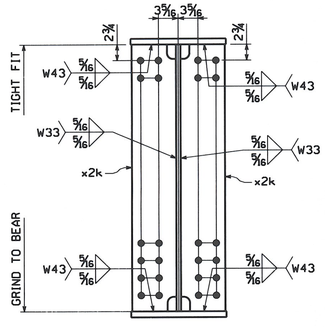
PLOTTED: 8/1/2008 1:46:39 PM
BY: MKreidel
SHIPMENT 01
PM&ENG: 50043327 PRD: 50043328 SHIP&ERECT: 50043329

ENGLISH

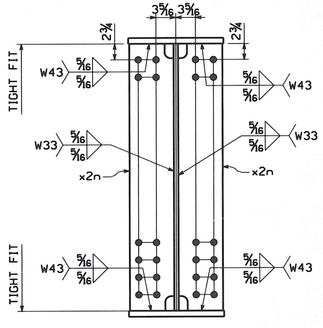


GIRDER ~ MK. G3C

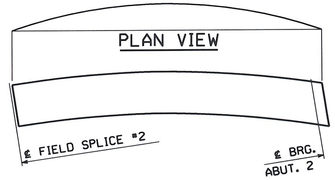
FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC2.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A



SECTION B



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA (LBS)
1	G3C		GIRDER							19,474.98	7.83	19,474.98
1	w1	PL	5/8 x 46	80 4 11/16	M270	50W	T		03003	7,864.60	7.83	7,856.77
1	t1	PL	1 x 16	40 1 7/8	M270	50W	T		04008	2,186.28	0.00	2,186.28
1	t2	PL	1 x 16	40 1 11/16	M270	50W	T		04008	2,185.43	0.00	2,185.43
1	b1	PL	1 1/2 x 16	40 1 7/8	M270	50W	T		04004	3,279.43	0.00	3,279.43
1	b2	PL	1 1/2 x 16	40 2 3/16	M270	50W	T		04004	3,281.55	0.00	3,281.55
1	x1s	PL	1 x 16	1 6 1/2	M270	50W	T	FILL PL	06009	83.94	0.00	83.94
1	x1t	PL	1/2 x 16	2 0 1/2	M270	50W	T	FILL PL	06010	55.58	0.00	55.58
2	x2k	PL	3/4 x 7 1/2	3 10 1/32	M270	50W	T		07002	73.42	0.00	73.42
8	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
										TOTAL WEIGHT THIS SHEET:		19474.98 lbs.

RECEIVED
CK'D BY JJL OK'D BY JJL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE

HOLES 15⁄16" (U.N.)
BOLTS NONE
COATING NONE
CODE(S) 30
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
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www.highsteel.com

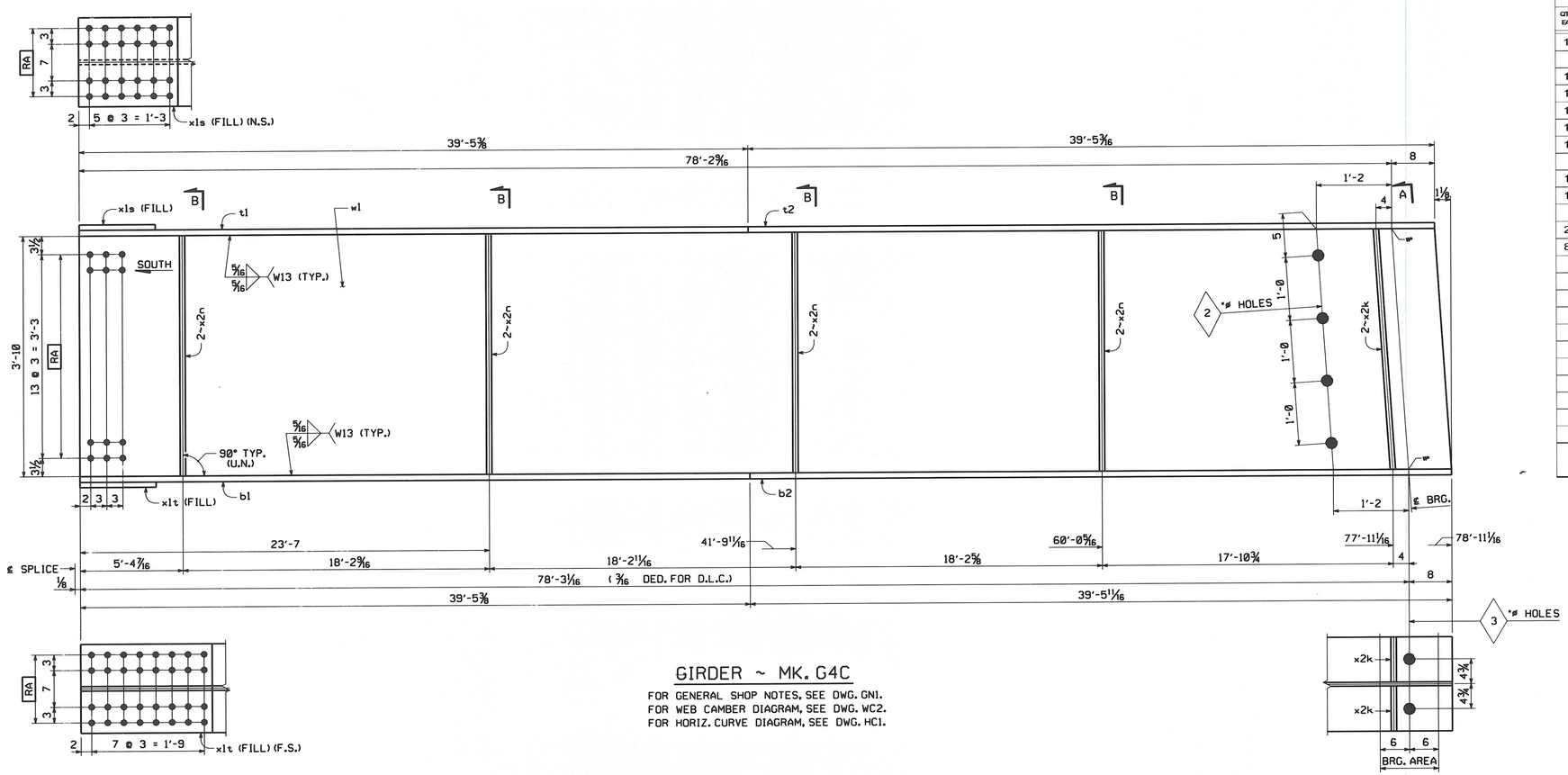
GIRDER G3C
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER KREIDER (IH)	MADE BY MAF	CHK'D. BY CS	DATE 6-23-08
STATE VT	HSSI PROJECT NUMBER S-1080077	HSSI STRUCT. ID A	DRAWING NUMBER 13 OF 22

PLOTTED: 8/1/2008 1:46:47 PM
BY: MKreudel
SHIPMENT 01
PM&ENG: 5024327 PRD: 5024328 SHIP&ERECT.: 5024329
60

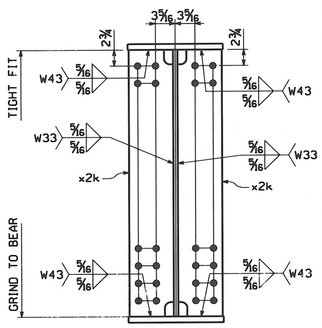
1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

ENGLISH

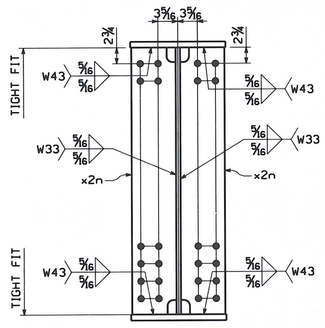


GIRDER ~ MK. G4C

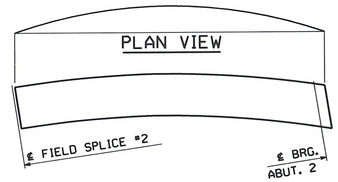
FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC2.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.



SECTION A



SECTION B



ORIENTATION DIAGRAM

BILL OF MATERIAL

QTY EA	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA	DEDUCTED WEIGHT EA	SHIP WT. EA (LBS)
1	G4C		GIRDER							19,143.56	7.83	19,143.56
1	w1	PL	5/8 x 46	78 11 11/16	M270	50W	T		03004	7,726.01	7.83	7,718.18
1	t1	PL	1 x 16	39 5 3/8	M270	50W	T		04009	2,147.72	0.00	2,147.72
1	t2	PL	1 x 16	39 5 3/16	M270	50W	T		04009	2,146.87	0.00	2,146.87
1	b1	PL	1 1/2 x 16	39 5 3/8	M270	50W	T		04005	3,221.58	0.00	3,221.58
1	b2	PL	1 1/2 x 16	39 5 11/16	M270	50W	T		04005	3,223.71	0.00	3,223.71
1	x1s	PL	1 x 16	1 6 1/2	M270	50W	T	FILL PL	06009	83.94	0.00	83.94
1	x1t	PL	1/2 x 16	2 0 1/2	M270	50W	T	FILL PL	06010	55.58	0.00	55.58
2	x2k	PL	3/4 x 7 1/2	3 10 1/32	M270	50W	T		07002	73.42	0.00	73.42
8	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
										TOTAL WEIGHT THIS SHEET:		19143.56 lbs.

RECEIVED
CK'D BY TF OK'D BY JFL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

NO.	REVISION	BY	CHK'D	DATE

HOLES 15/16" (U.N.)
BOLTS NONE
COATING NONE
CODE(S) 30
SCALE N.T.S.

HIGH STEEL STRUCTURES INC. — An Affiliate of High Industries Inc. — An ISO 9001:2000 Certified Company

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GIRDER G4C
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VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

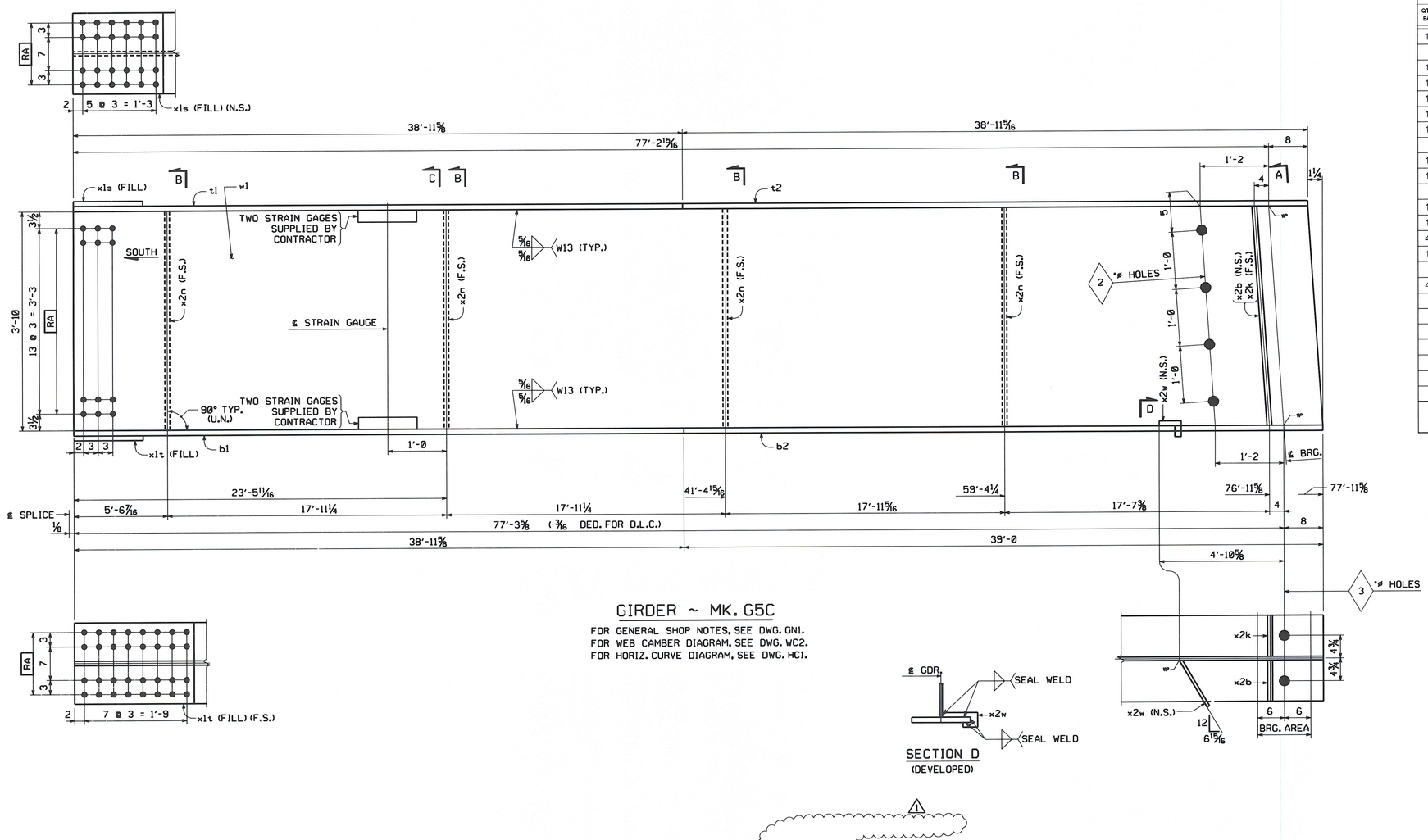
STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES

SHPMT	1	DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF	CHK'D. BY	CS	DATE	6-23-08
STATE	VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	14 OF 22		

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 8/1/2008 1:46:56 PM BY: MKreidel SHIPMENT 01 PM&ENG: 5000432? PROD: 5000432B SHIP&ERECT: 5000432B

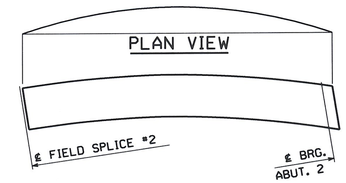
ENGLISH



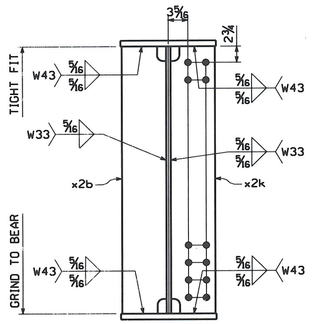
GIRDER ~ MK. G5C

FOR GENERAL SHOP NOTES, SEE DWG. GN1.
FOR WEB CAMBER DIAGRAM, SEE DWG. WC2.
FOR HORIZ. CURVE DIAGRAM, SEE DWG. HC1.

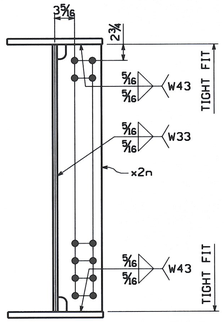
SECTION D
(DEVELOPED)



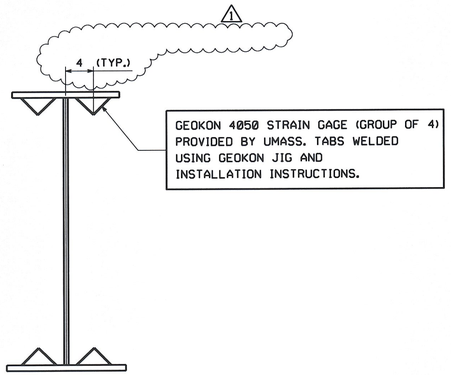
ORIENTATION DIAGRAM



SECTION A



SECTION B



SECTION C

BILL OF MATERIAL

QTY EA.	MARK	COMM	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	SHIP WT. EA. (LBS)
1	G5C		GIRDER							18,726.22	8.11	18,726.22
1	w1	PL	5/8 x 46	78 0 3/16	M270	50W	T		03005	7,632.26	8.11	7,624.15
1	t1	PL	1 x 16	38 11 5/8	M270	50W	T		04010	2,121.63	0.00	2,121.63
1	t2	PL	1 x 16	38 11 5/16	M270	50W	T		04010	2,120.21	0.00	2,120.21
1	b1	PL	1 1/2 x 16	38 11 5/8	M270	50W	T		04006	3,182.45	0.00	3,182.45
1	b2	PL	1 1/2 x 16	39 0	M270	50W	T		04006	3,185.00	0.00	3,185.00
1	x1s	PL	1 x 16	1 6 1/2	M270	50W	T	FILL PL	06009	83.94	0.00	83.94
1	x1t	PL	1/2 x 16	2 0 1/2	M270	50W	T	FILL PL	06010	55.58	0.00	55.58
1	x2b	PL	3/4 x 7 1/2	3 10	M270	50W	T		07002	73.37	0.00	73.37
1	x2k	PL	3/4 x 7 1/2	3 10 1/32	M270	50W	T		07002	73.42	0.00	73.42
4	x2n	PL	1/2 x 7 1/2	3 10	M270	50W	T		07004	48.91	0.00	48.91
1	x2w	PL	1/4 x 3 1/2	0 10 7/8	M270	50W			07006	2.70	0.00	2.70
4			STRAIN GAGE					SUPPLIED BY CONTRACTO				

TOTAL WEIGHT THIS SHEET: 18726.22 lbs.

NO.	REVISION	BY	CHK'D	DATE
1	ADDED DIMENSION TO LOCATE STRAIN GAGE & REMOVED CONTRACTOR PLEASE SUPPLY	MGK	WW	8/2/08

HOLES: 15⁄16" (U.N.)
BOLTS: NONE
COATING: NONE
CODE(S): 30
SCALE: N.T.S.

HIGH STEEL STRUCTURES, INC. — An ISO 9001:2000 Certified Company — An Affiliate of High Industries Inc.
Lancaster Facility: 1915 Old Philadelphia Pike, Lancaster, PA 17605-0008, Phone (717) 299-5211
Williamsport Facility: 3501 W. 4th Street, Williamsport, PA 17701, Phone (570) 326-9051
www.highsteel.com

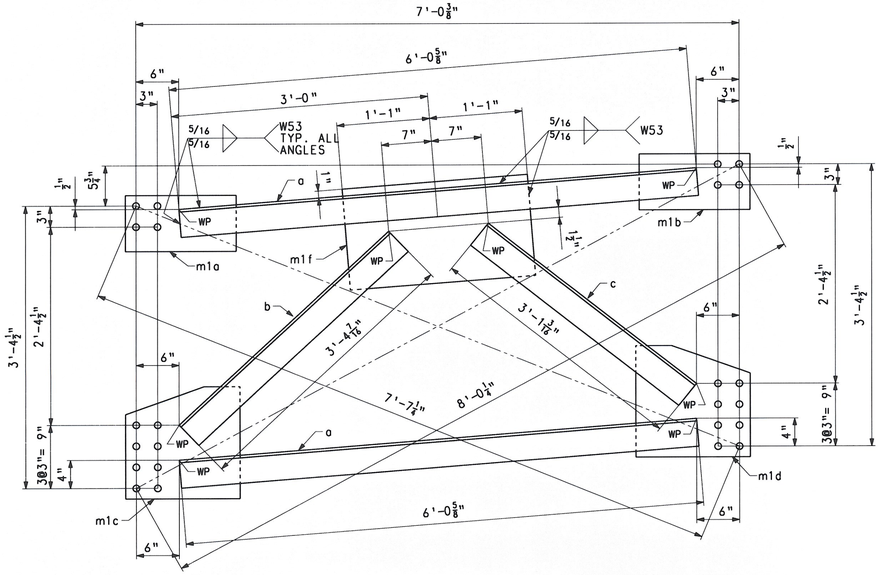
GIRDER G5C
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJECT NO. (STP) BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1 — DRAWING MANAGER	KREIDER (IH)	MADE BY	MAF
CHK'D. BY	CS	DATE	6-23-08
STATE VT — HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A
DRAWING NUMBER	15 OF 22		

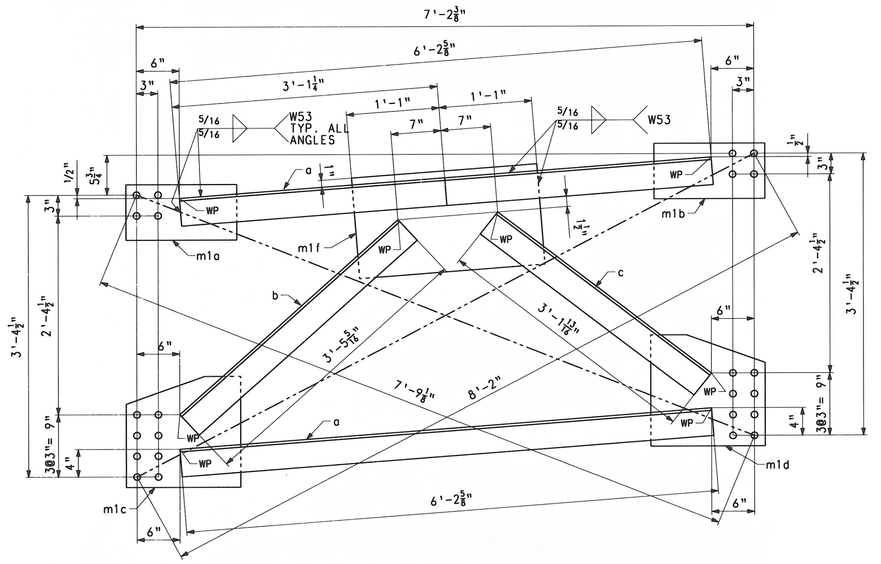
RECEIVED
CK'D BY 1.2 OK'D BY 3.0
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 8/4/2008 8:23:51 AM
BY: bweaver
SHIPMENT 01
PM&ENG: 20043427 PRD: 20043228 SHIP&ERECT.: 20043429



CROSSFRAME - MK. CF1



CROSSFRAME - MK. CF2

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION						LENGTH		SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
1	CF1		CROSSFRAME													341.74	0.00	341.74
2	a	L	4	x	4	x	3/8		6	0 5/8	M270	50W	T		11002	58.83	0.00	58.83
1	b	L	4	x	4	x	3/8		3	4 7/16	M270	50W	T		11002	32.75	0.00	32.75
1	c	L	4	x	4	x	3/8		3	1 3/16	M270	50W	T		11002	30.12	0.00	30.12
1	m1a	PL	1/2	x	8				1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2	x	8				1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2	x	16				1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2	x	16				1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2	x	14 1/2				2	2	M270	50W	T		11003	53.45	0.00	53.45
1	CF2		CROSSFRAME													346.19	0.00	346.19
2	a	L	4	x	4	x	3/8		6	2 5/8	M270	50W	T		11002	60.45	0.00	60.45
1	b	L	4	x	4	x	3/8		3	5 5/16	M270	50W	T		11002	33.46	0.00	33.46
1	c	L	4	x	4	x	3/8		3	1 13/16	M270	50W	T		11002	30.63	0.00	30.63
1	m1a	PL	1/2	x	8				1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2	x	8				1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2	x	16				1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2	x	16				1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2	x	14 1/2				2	2	M270	50W	T		11003	53.45	0.00	53.45
			TOTAL WEIGHT THIS SHEET:													687.93		LBS.

RECEIVED
CK'D BY _____ OK'D BY _____
AUG 18 2008
RESUBMIT _____ APPROVED ✓
BY KMH DATE 8/19/08

FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	CHK'D	DATE

HOLES 15/16" Ø
BOLTS NONE
COATING NONE
CODE(S) 63
SCALE N.T.S.

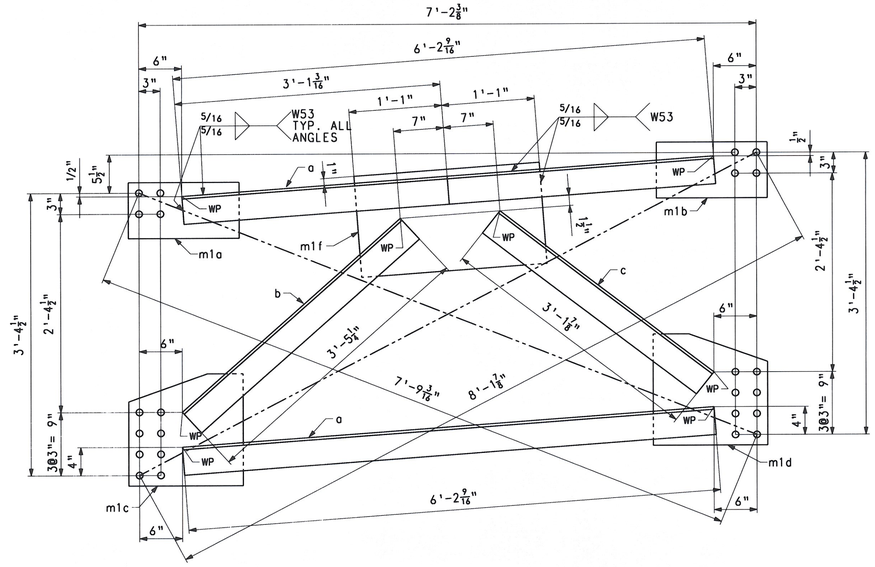
HIGH STEEL STRUCTURES INC.
An Affiliate of High Industries Inc.
An ISO 9001:2000 Certified Company
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com

CROSSFRAMES CF1 & CF2
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

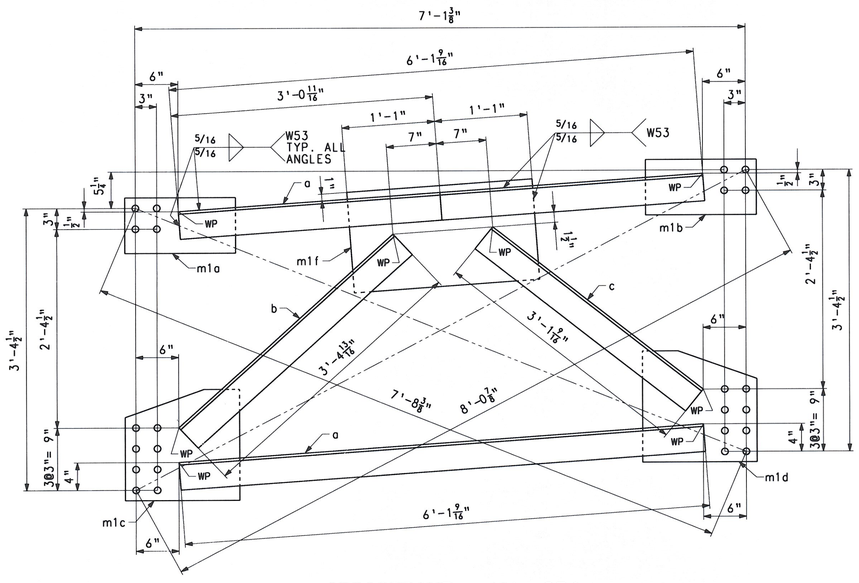
STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER KREIDER (IH)	MADE BY SSL	CHK'D. BY CS DATE 6-19-08
STATE VT	HSSI PROJECT NUMBER S-1080077	HSSI STRUCT. ID A	DRAWING NUMBER 16 OF 22

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PMKENG: 5004327 PRO: 5004328 SHIPAERECT: 5004329
PLOTTED: 06/25/08 16:12:29 BY: SLaudeng
04329



CROSSFRAME - MK. CF3



CROSSFRAME - MK. CF4

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION						LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
1	CF3		CROSSFRAME												346.09	0.00	346.09
2	a	L	4	×	4	×	3/8	6	2 9/16	M270	50W	T		11002	60.40	0.00	60.40
1	b	L	4	×	4	×	3/8	3	5 1/4	M270	50W	T		11002	33.41	0.00	33.41
1	c	L	4	×	4	×	3/8	3	1 7/8	M270	50W	T		11002	30.68	0.00	30.68
1	m1a	PL	1/2	×	8			1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2	×	8			1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2	×	16			1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2	×	16			1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2	×	14 1/2			2	2	M270	50W	T		11003	53.45	0.00	53.45
1	CF4		CROSSFRAME												343.86	0.00	343.86
2	a	L	4	×	4	×	3/8	6	1 9/16	M270	50W	T		11002	59.59	0.00	59.59
1	b	L	4	×	4	×	3/8	3	4 13/16	M270	50W	T		11002	33.06	0.00	33.06
1	c	L	4	×	4	×	3/8	3	1 9/16	M270	50W	T		11002	30.43	0.00	30.43
1	m1a	PL	1/2	×	8			1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2	×	8			1	3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2	×	16			1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2	×	16			1	4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2	×	14 1/2			2	2	M270	50W	T		11003	53.45	0.00	53.45
			TOTAL WEIGHT THIS SHEET:												689.95		LBS.

RECEIVED
CK'D BY 7.1 OK'D BY JFL
AUG 13 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HOLES 15/16" Ø
BOLTS NONE
COATING NONE
CODE(S) 63
SCALE N.T.S.

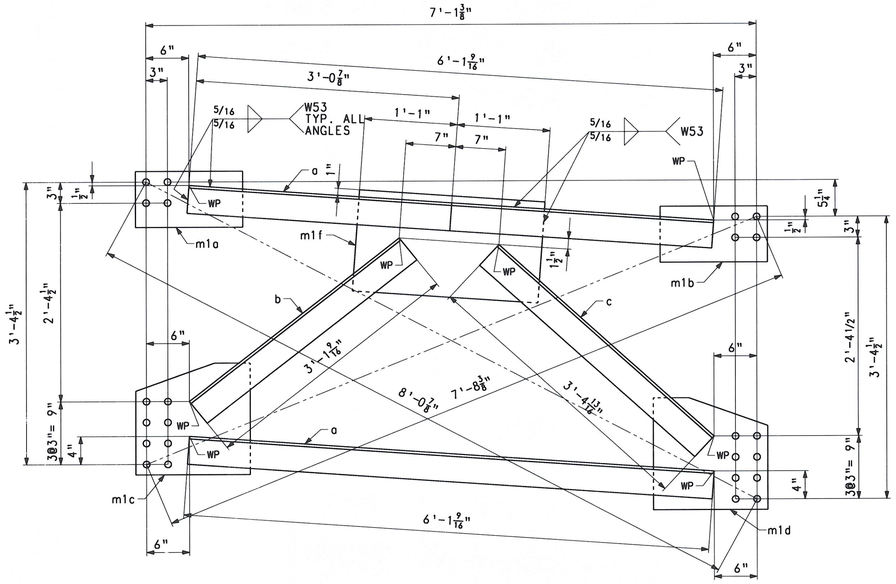
HIGH STEEL STRUCTURES INC.
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.
1815 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com

CROSSFRAMES CF3 & CF4
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

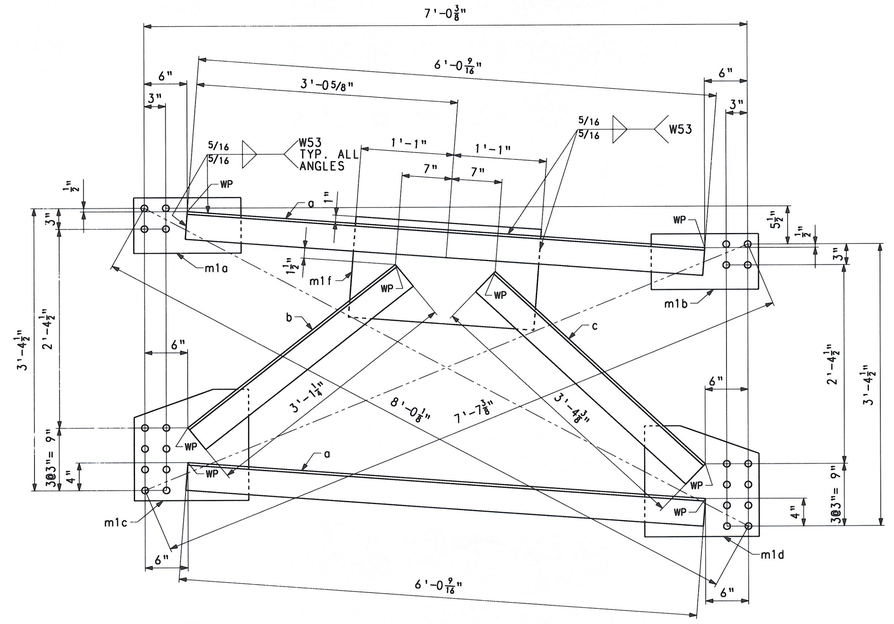
STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)	FED. AID PROJ. NO.					
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES				
SHPMT 1	DRAWING MANAGER	KREIDER (IH)	MADE BY	SSL	CHK'D. BY	CS	DATE 6-19-08
STATE VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	17 OF 22	

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PM&ENG: 50044327 PRJ: 50044328 SHIP&ERECT: 50044329
PLOTTED: 06/25/08 16:17:03 BY: SLaudeng



CROSSFRAME - MK. CF5



CROSSFRAME - MK. CF6

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
13	CF5		CROSSFRAMES							343.86	0.00	343.86
2	a	L	4 x 4 x 3/8	6 1 9/16	M270	50W	T		11002	59.59	0.00	59.59
1	b	L	4 x 4 x 3/8	3 1 9/16	M270	50W	T		11002	30.43	0.00	30.43
1	c	L	4 x 4 x 3/8	3 4 13/16	M270	50W	T		11002	33.06	0.00	33.06
1	m1a	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2 x 14 1/2	2 2	M270	50W	T		11003	53.45	0.00	53.45
12	CF6		CROSSFRAMES							341.63	0.00	341.63
2	a	L	4 x 4 x 3/8	6 0 9/16	M270	50W	T		11002	58.78	0.00	58.78
1	b	L	4 x 4 x 3/8	3 1 1/4	M270	50W	T		11002	30.17	0.00	30.17
1	c	L	4 x 4 x 3/8	3 4 3/8	M270	50W	T		11002	32.70	0.00	32.70
1	m1a	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2 x 14 1/2	2 2	M270	50W	T		11003	53.45	0.00	53.45
			TOTAL WEIGHT THIS SHEET:							8569.8		LBS.

RECEIVED
CK'D BY ___ OK'D BY JFL
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HIGH STEEL STRUCTURES INC.
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.

HOLES	15/16" Ø
BOLTS	NONE
COATING	NONE
CODE(S)	63
SCALE	N.T.S.

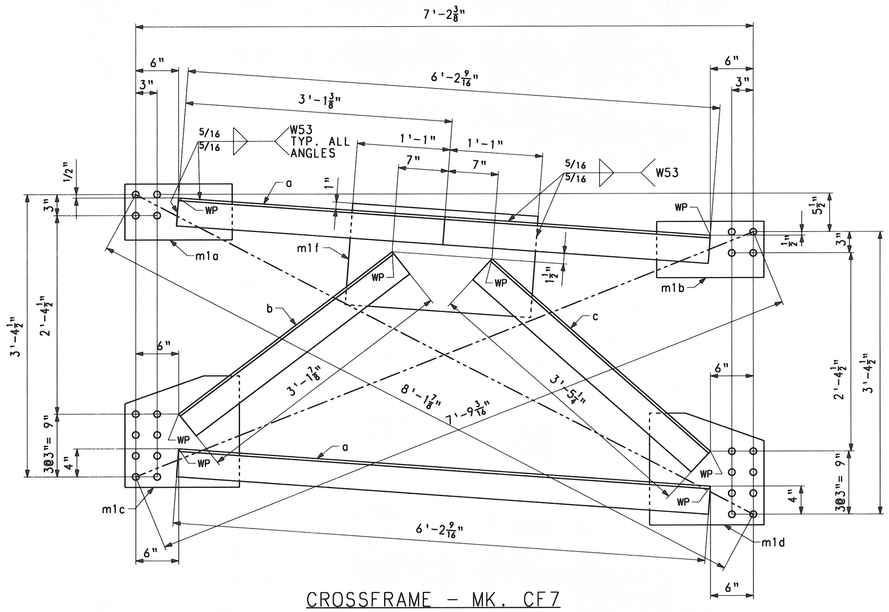
CROSSFRAMES CF5 & CF6
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER: KREIDER (IH)	MADE BY: SSL	CHK'D. BY: CS
STATE VT	HSSI PROJECT NUMBER: S-1080077	HSSI STRUCT. ID: A	DRAWING NUMBER: 18 OF 22

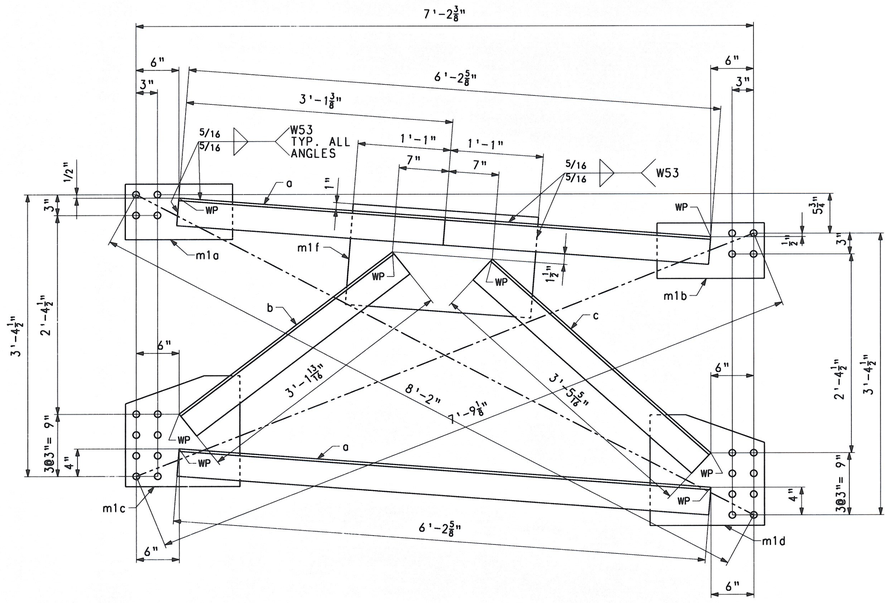
DATE: 6-19-08

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT : PMKENG: 5004322 VAR.: 3x0C126 SHIPRECT: 5004322
PLOTTED: 06/25/08 16:17:15 BY: SLaudeng



CROSSFRAME - MK. CF7



CROSSFRAME - MK. CF8

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
13	CF7		CROSSFRAMES							346.09	0.00	346.09
2	a	L	4 x 4 x 3/8	6 2 9/16	M270	50W	T		11002	60.40	0.00	60.40
1	b	L	4 x 4 x 3/8	3 1 7/8	M270	50W	T		11002	30.68	0.00	30.68
1	c	L	4 x 4 x 3/8	3 5 1/4	M270	50W	T		11002	33.41	0.00	33.41
1	m1a	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2 x 14 1/2	2 2	M270	50W	T		11003	53.45	0.00	53.45
13	CF8		CROSSFRAMES							346.19	0.00	346.19
2	a	L	4 x 4 x 3/8	6 2 5/8	M270	50W	T		11002	60.45	0.00	60.45
1	b	L	4 x 4 x 3/8	3 1 13/16	M270	50W	T		11002	30.63	0.00	30.63
1	c	L	4 x 4 x 3/8	3 5 5/16	M270	50W	T		11002	33.46	0.00	33.46
1	m1a	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2 x 8	1 3 1/2	M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2 x 16	1 4	M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2 x 14 1/2	2 2	M270	50W	T		11003	53.45	0.00	53.45
			TOTAL WEIGHT THIS SHEET:							8999.63		LBS.

RECEIVED
CK'D BY ___ OK'D BY ___
AUG 1 8 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HOLES 15/16" Ø
BOLTS NONE
COATING NONE
CODE(S) 63
SCALE N.T.S.

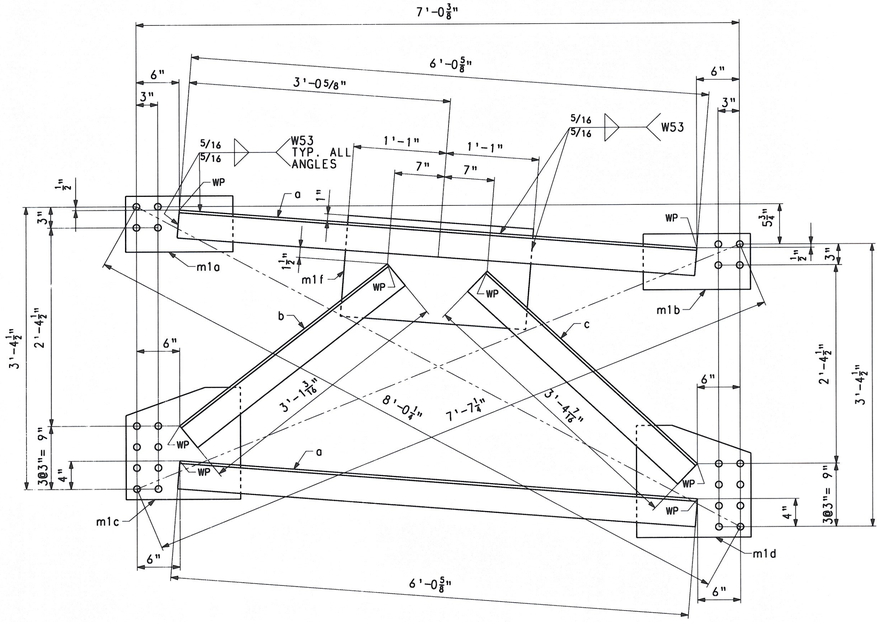
HIGH STEEL STRUCTURES INC.
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com
An ISO 9001:2000 Certified Company
An Affiliate of High Industries Inc.

CROSSFRAMES CF7 & CF8
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

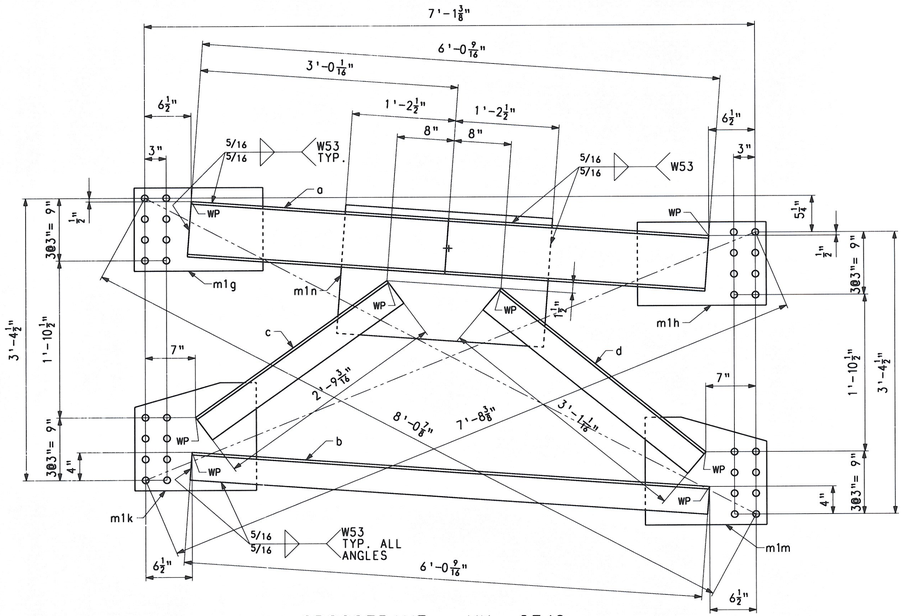
	STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)		FED. AID PROJ. NO.			
	GENERAL CONTRACTOR	WINTERSET, INC.		HSSI PROJ. MGR	DEB KUPRES		
SHPMT 1	DRAWING MANAGER	KREIDER (IH)	MADE BY	SSL	CHK'D. BY	CS	DATE 6-19-08
STATE VT	HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	19 OF 22	

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PWAENG: 5004322 PRG: 5004328 SHIPAREHECT: 5004329
PLOTTED: 06/25/08 16:17:27 JY: SLaudeng



CROSSFRAME - MK. CF9



CROSSFRAME - MK. CF10

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION						LENGTH		SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
1	CF9		CROSSFRAME													341.74	0.00	341.74
2	a	L	4	×	4	×	3/8	6	0 5/8		M270	50W	T		11002	58.83	0.00	58.83
1	b	L	4	×	4	×	3/8	3	1 3/16		M270	50W	T		11002	30.12	0.00	30.12
1	c	L	4	×	4	×	3/8	3	4 7/16		M270	50W	T		11002	32.75	0.00	32.75
1	m1a	PL	1/2	×	8			1	3 1/2		M270	50W	T		11003	17.58	0.00	17.58
1	m1b	PL	1/2	×	8			1	3 1/2		M270	50W	T		11003	17.58	0.00	17.58
1	m1c	PL	1/2	×	16			1	4		M270	50W	T		11003	36.30	0.00	36.30
1	m1d	PL	1/2	×	16			1	4		M270	50W	T		11003	36.30	0.00	36.30
1	m1f	PL	1/2	×	14 1/2			2	2		M270	50W	T		11003	53.45	0.00	53.45
1	CF10		CROSSFRAME													441.09	0.00	441.09
1	a	C	8	×	18.75			6	0 9/16		M270	50W	T		11001	113.38	0.00	113.38
1	b	L	4	×	4	×	3/8	6	0 9/16		M270	50W	T		11002	58.78	0.00	58.78
1	c	L	4	×	4	×	3/8	2	9 3/16		M270	50W	T		11002	26.88	0.00	26.88
1	d	L	4	×	4	×	3/8	3	1 1/16		M270	50W	T		11002	30.02	0.00	30.02
1	m1g	PL	1/2	×	12			1	6		M270	50W	T		11003	30.62	0.00	30.62
1	m1h	PL	1/2	×	12			1	6		M270	50W	T		11003	30.62	0.00	30.62
1	m1k	PL	1/2	×	15 1/2			1	5		M270	50W	T		11003	37.36	0.00	37.36
1	m1m	PL	1/2	×	15 1/2			1	5		M270	50W	T		11003	37.36	0.00	37.36
1	m1n	PL	1/2	×	18 1/2			2	5		M270	50W	T		11003	76.07	0.00	76.07
			TOTAL WEIGHT THIS SHEET:													782.83		LBS.

RECEIVED
CK'D BY TL OK'D BY JC
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KmH DATE 8/19/08

FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	CHK'D	DATE

HIGH STEEL STRUCTURES INC.
An Affiliate of High Industries Inc.
An ISO 9001:2000 Certified Company
1915 Old Philadelphia Pike
Lancaster, PA 17605-0008
Phone (717) 299-5211
www.highsteel.com

HOLES	15/16" Ø
BOLTS	NONE
COATING	NONE
CODE (S)	63
SCALE	N.T.S.

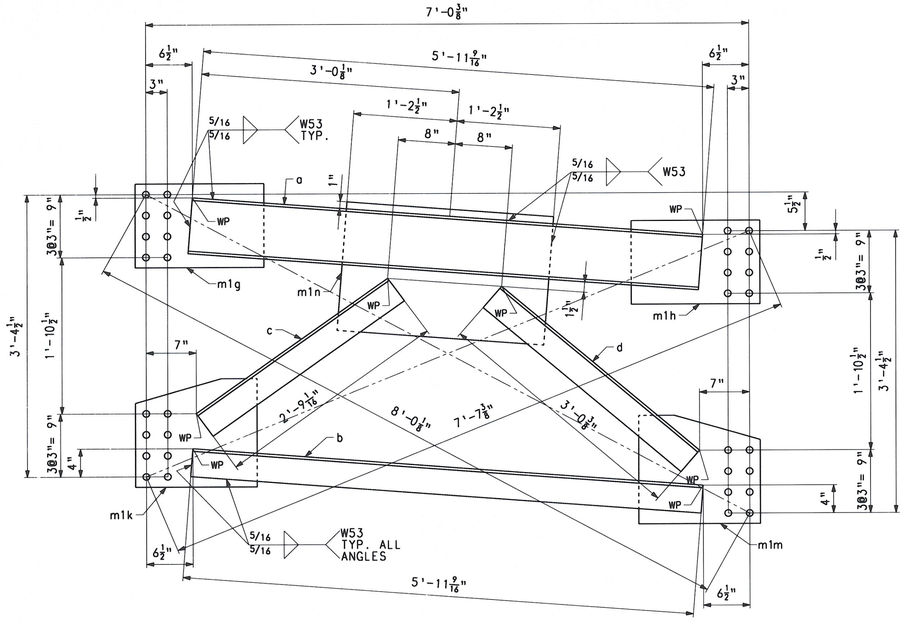
CROSSFRAMES CF9 & CF10
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
DRAWING MANAGER	KREIDER (IH)	MADE BY	SSL
		CHK'D. BY	CS
		DATE	6-19-08
HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A
		DRAWING NUMBER	20 OF 22

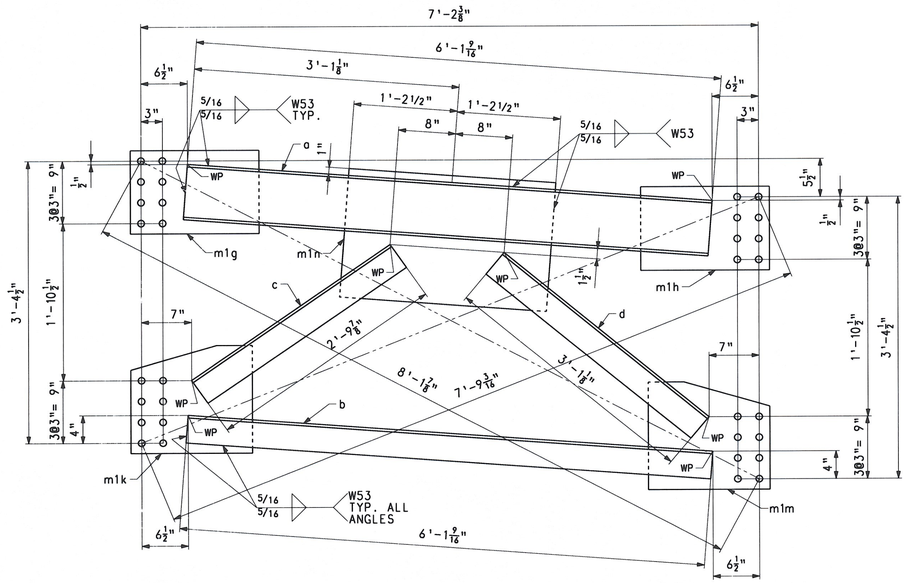
SHPMT 1
STATE VT

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

PLOTTED: 06/25/08 16:12:54 BY: SLaudeng
SHIPMENT 1 PWAENG: 5004327 PRO: 5004328 SHIPAREC1: 5004329



CROSSFRAME - MK. CF11



CROSSFRAME - MK. CF12

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
1	CF11		CROSSFRAME							438.06	0.00	438.06
1	a	C	8 x 18.75	5 11 9/16	M270	50W	T		11001	111.82	0.00	111.82
1	b	L	4 x 4 x 3/8	5 11 9/16	M270	50W	T		11002	57.97	0.00	57.97
1	c	L	4 x 4 x 3/8	2 9 1/16	M270	50W	T		11002	26.78	0.00	26.78
1	d	L	4 x 4 x 3/8	3 0 3/8	M270	50W	T		11002	29.46	0.00	29.46
1	m1g	PL	1/2 x 12	1 6	M270	50W	T		11003	30.62	0.00	30.62
1	m1h	PL	1/2 x 12	1 6	M270	50W	T		11003	30.62	0.00	30.62
1	m1k	PL	1/2 x 15 1/2	1 5	M270	50W	T		11003	37.36	0.00	37.36
1	m1m	PL	1/2 x 15 1/2	1 5	M270	50W	T		11003	37.36	0.00	37.36
1	m1n	PL	1/2 x 18 1/2	2 5	M270	50W	T		11003	76.07	0.00	76.07
1	CF12		CROSSFRAME							444.07	0.00	444.07
1	a	C	8 x 18.75	6 1 9/16	M270	50W	T		11001	114.94	0.00	114.94
1	b	L	4 x 4 x 3/8	6 1 9/16	M270	50W	T		11002	59.59	0.00	59.59
1	c	L	4 x 4 x 3/8	2 9 7/8	M270	50W	T		11002	27.44	0.00	27.44
1	d	L	4 x 4 x 3/8	3 1 1/8	M270	50W	T		11002	30.07	0.00	30.07
1	m1g	PL	1/2 x 12	1 6	M270	50W	T		11003	30.62	0.00	30.62
1	m1h	PL	1/2 x 12	1 6	M270	50W	T		11003	30.62	0.00	30.62
1	m1k	PL	1/2 x 15 1/2	1 5	M270	50W	T		11003	37.36	0.00	37.36
1	m1m	PL	1/2 x 15 1/2	1 5	M270	50W	T		11003	37.36	0.00	37.36
1	m1n	PL	1/2 x 18 1/2	2 5	M270	50W	T		11003	76.07	0.00	76.07
TOTAL WEIGHT THIS SHEET:										882.13		LBS.

RECEIVED
CK'D BY ___ OK'D BY ___
AUG 18 2008
RESUBMIT ___ APPROVED ✓
BY KMH DATE 8/19/08

FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HOLES 15/16" Ø
BOLTS NONE
COATING NONE
CODE(S) 63
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
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An Affiliate of High Industries Inc.
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Lancaster, PA 17605-0008
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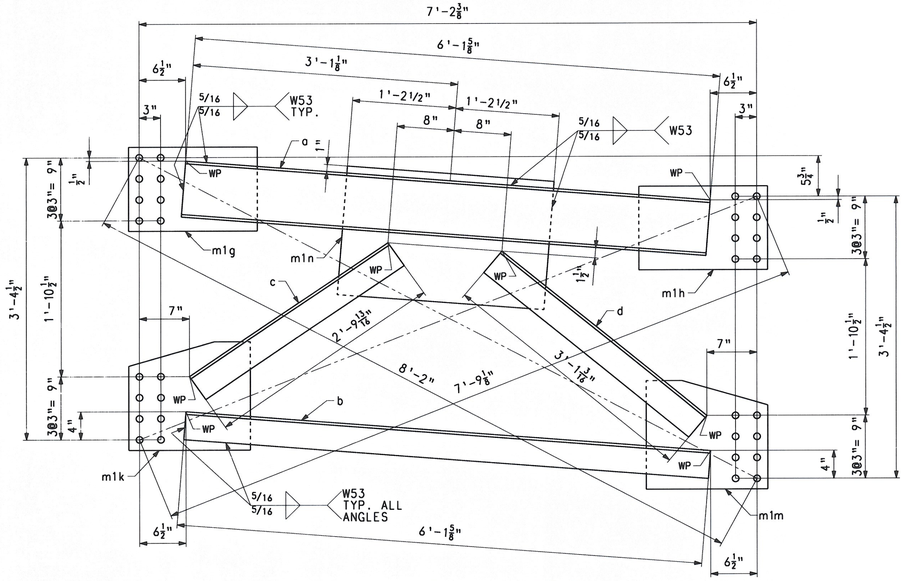
CROSSFRAMES CF11 & CF12
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

SHPMT	1	STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)	FED. AID PROJ. NO.			
STATE	VT	GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES		
		DRAWING MANAGER	KREIDER (IH)	MADE BY	SSL	CHK'D. BY	CS	DATE	6-19-08
		HSSI PROJECT NUMBER	S-1080077	HSSI STRUCT. ID	A	DRAWING NUMBER	21 OF 22		

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 PMKENG: 5004327 PRD: 5004328 SHIP&ERECT: 5004329
PLOTTED: 06/25/08 16:13:06 BY: SLoudeng



CROSSFRAME - MK. CF13

BILL OF MATERIAL

QTY	MARK	COMMODITY	DESCRIPTION	LENGTH	SPEC	GRADE	TEST	REMARKS	ITEM	GROSS WEIGHT EA.	DEDUCTED WEIGHT EA.	NET WEIGHT EA.
1	CF13		CROSSFRAME							444.22	0.00	444.22
1	a	C	8 x 18.75	6 1 5/8	M270	50W	T		11001	115.04	0.00	115.04
1	b	L	4 x 4 x 3/8	6 1 5/8	M270	50W	T		11002	59.64	0.00	59.64
1	c	L	4 x 4 x 3/8	2 9 13/16	M270	50W	T		11002	27.39	0.00	27.39
1	d	L	4 x 4 x 3/8	3 1 3/16	M270	50W	T		11002	30.12	0.00	30.12
1	m1g	PL	1/2 x 12	1 6	M270	50W	T		11003	30.62	0.00	30.62
1	m1h	PL	1/2 x 12	1 6	M270	50W	T		11003	30.62	0.00	30.62
1	m1k	PL	1/2 x 15 1/2	1 5	M270	50W	T		11003	37.36	0.00	37.36
1	m1m	PL	1/2 x 15 1/2	1 5	M270	50W	T		11003	37.36	0.00	37.36
1	m1n	PL	1/2 x 18 1/2	2 5	M270	50W	T		11003	76.07		76.07
			TOTAL WEIGHT THIS SHEET:							444.22		LBS.

RECEIVED
CK'D BY TJ OK'D BY JFL
AUG 18 2008
RESUBMIT ____ APPROVED ✓
BY KMH DATE 8/19/08

FOR GENERAL SHOP NOTES, SEE DWG. GN1.

NO.	REVISION	BY	CHK'D	DATE
△				
△				
△				

HOLES 15/16" Ø
BOLTS NONE
COATING NONE
CODE(S) 63
SCALE N.T.S.

HIGH STEEL STRUCTURES INC.
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CROSSFRAME CF13
VT ROUTE 100 (MINOR ARTERIAL) OVER WHITE RIVER
VT ROUTE 100 STA. 141+39.00 TO STA. 143+61.00
TOWN OF STOCKBRIDGE, COUNTY OF WINDSOR, VERMONT
STATE OF VERMONT
AGENCY OF TRANSPORTATION

STATE CONT. OR REF. NO.	PROJ. NO.(STP)BRF 013-4(21)	FED. AID PROJ. NO.	
GENERAL CONTRACTOR	WINTERSET, INC.	HSSI PROJ. MGR	DEB KUPRES
SHPMT 1	DRAWING MANAGER KREIDER (IH)	MADE BY SSL	CHK'D. BY CS DATE 6-19-08
STATE VT	HSSI PROJECT NUMBER S-1080077	HSSI STRUCT. ID A	DRAWING NUMBER 22 OF 22

1080077A X2 8/7/08 8/Resubmit For Approval TO:Winterset, Inc.

SHIPMENT 1 DRAWING NO: 5004329 PROJECT: 5004329
PLOTTED: 06/25/08 18:13:17 BY: SLaverty

Filler metal classification **ER70S-3** BY: DCB

Electrode and manufacturer **Lincoln Electric Lincoln Weld L-50**

Flux and manufacturer **N/A**

Shielding gas **85% Argon / 15% CO2** Flow rate **19-27 L / min**

Single or multiple pass **Single or Multiple**

Single or multiple arc **Single**

Welding current **DCEP**

Polarity **Reverse - electrode positive**

Welding progression **Stringers**

Root treatment **clean base metal**

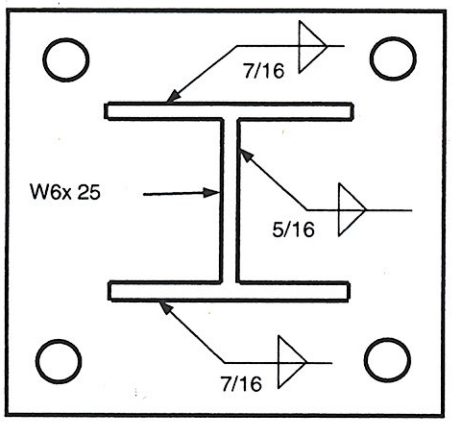
Preheat and interpass temperature **base metal up to 3/4" (50ºF) ; over 3/4 thru 1-1/2" (150ºF) : over 1-1/2" thru 2-1/2" (225ºF)**

Postheat treatment **None**

Electrode extension **3/4" ± 1/4"**

WELDING PROCEDURE

Weld size	Pass no.	Electrode size	Welding parameters		Travel speed	Joint detail
			Amperes	Volts		
5/16"	**1**	**0.062"**	**275 A ± 25**	**25 V ± 2**	**8-10 ipm**	
7/16"	**1 & 2**	**0.062"**	↓	↓	**8-10 ipm**	



VTRANS
RECEIVED
CK'D BY _____ OK'D BY Jec
AUG 29 2008
RESUBMIT _____ APPROVED ✓
BY _____ DATE 9/8/08

This procedure may vary due to fabrication sequence, fit-up, pass size, etc. within the limitation of variables given in section 5 of latest edition AWS D1.5

WPS no. **W-1665-A**

Revision no. **0**

Supporting PQR no. **Pre-Qualified**

Project Name **Stockbridge, VT**

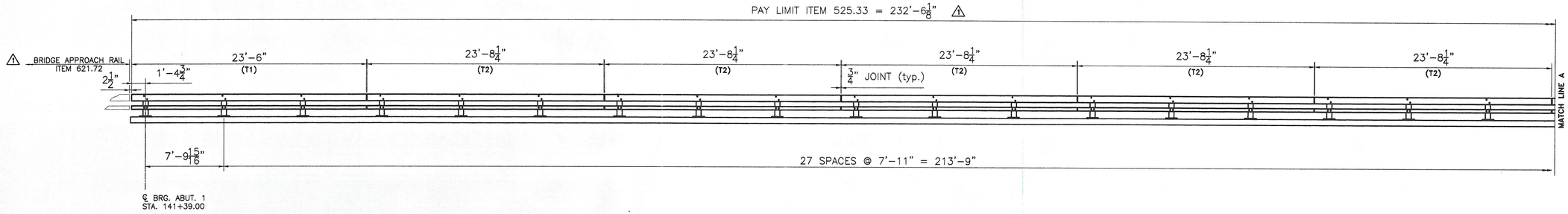
Fabricator **Highway Safety Corporation**

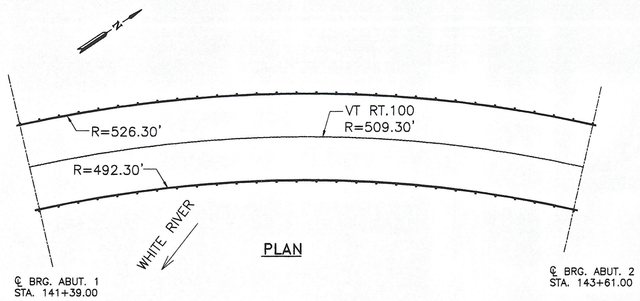
Authorized by **Paul Radice**

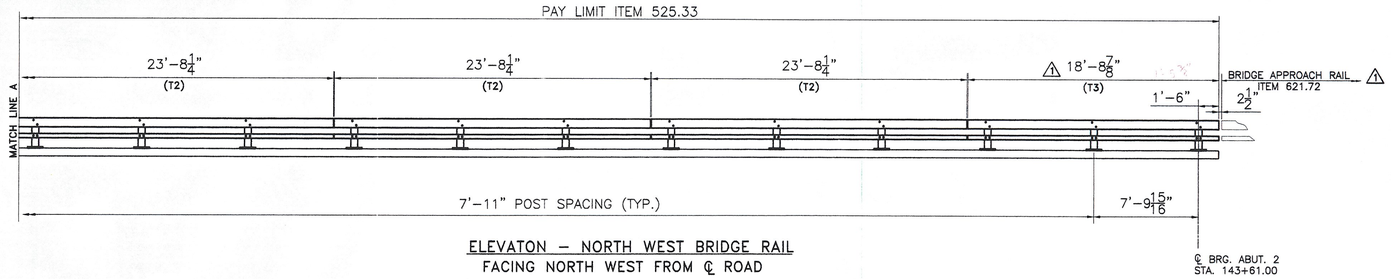
Date **8/21/08**

Project Number **(STP) BRF 013-4(21)**

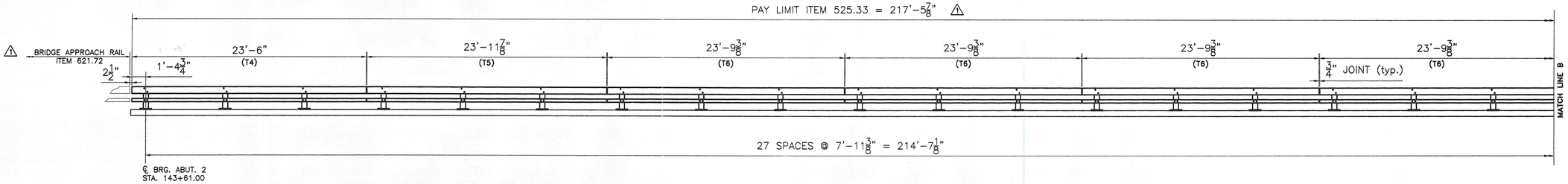
PAUL RADICE
CWI 98070221
QC1 EXP. 7/01/10

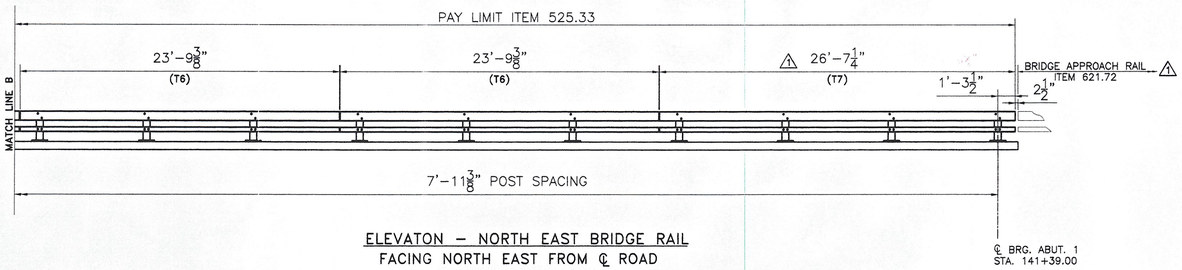






ELEVATON – NORTH WEST BRIDGE RAIL
FACING NORTH WEST FROM ℄ ROAD





ELEVATON – NORTH EAST BRIDGE RAIL
FACING NORTH EAST FROM ℄ ROAD

BILL OF MATERIAL (BOTH SIDES OF BRIDGE)					
Mk.	Qty.	Description	Size/Shape	length/qty. per unit	Material
	58	BRIDGE RAIL PED POST 2'-0 3/8" OAH W/ BASE PLATE			
	58	*POST UPRIGHT*	*W6 x 25*	*1'-11 3/8"*	*A572 Gr. 50*
	58	*POST BASE PLATE*	*1" x 10"*	*1'-2"*	*A572 Gr. 50*
	17	UPPER SPLICE TUBE FOR 8 x 4 RAIL			
	17	*TUBE*	*TS 7x3x3/8*	*1'-8"*	*A500 Gr. B*
	34	*WELDED LOCK NUT (OUTER HOLES ONLY)*	*5/8"*	*---*	*A563*
	17	LOWER SPLICE TUBE FOR 4 x4 RAIL			
	17	*TUBE*	*TS 3x3x5/16*	*1'-8"*	*A500 Gr. B*
	34	*WELDED LOCK NUT (OUTER HOLES ONLY)*	*5/8"*	*---*	*A563*
T1	1	SHOP CURVED UPPER RAIL	TS 8x4x5/16	23'-6"	A500 Gr. B
	1	SHOP CURVED LOWER RAIL	TS 4x4x1/4	23'-6"	A500 Gr. B
T2	8	SHOP CURVED UPPER RAIL	TS 8x4x5/16	23'-8 1/4"	A500 Gr. B
	8	SHOP CURVED LOWER RAIL	TS 4x4x1/4	23'-8 1/4"	A500 Gr. B
⚠1 T3	1	SHOP CURVED UPPER RAIL	TS 8x4x5/16	18'-8 7/8"	A500 Gr. B
	1	SHOP CURVED LOWER RAIL	TS 4x4x1/4	18'-8 7/8"	A500 Gr. B
T4	1	SHOP CURVED UPPER RAIL	TS 8x4x5/16	23'-6"	A500 Gr. B
	1	SHOP CURVED LOWER RAIL	TS 4x4x1/4	23'-6"	A500 Gr. B
T5	1	SHOP CURVED UPPER RAIL	TS 8x4x5/16	23'-11 7/8"	A500 Gr. B
	1	SHOP CURVED LOWER RAIL	TS 4x4x1/4	23'-11 7/8"	A500 Gr. B
T6	6	SHOP CURVED UPPER RAIL	TS 8x4x5/16	23'-9 3/8"	A500 Gr. B
	6	SHOP CURVED LOWER RAIL	TS 4x4x1/4	23'-9 3/8"	A500 Gr. B
⚠1 T7	1	SHOP CURVED UPPER RAIL	TS 8x4x5/16	26'-7 1/4"	A500 Gr. B
	1	SHOP CURVED LOWER RAIL	TS 4x4x1/4	26'-7 1/4"	A500 Gr. B
	58	ANCHOR PLATE	3/8 x 9 3/8	1'-1"	A36
	232	ANCHOR BOLTS	1" DIA.	12"	A449
	232	HEX NUT	1" DIA.	- - -	A563
	232	HEAVY HEX NUT	1" DIA.	- - -	A563DH
	232	HEX JAM NUT	1" DIA.	- - -	A563
	232	WASHER	1" DIA.	- - -	F436
⚠1	232	ROUND HEAD BOLT	3/4" DIA.	6"	A325 type 1
	232	LOCK NUT	3/4" DIA.	- - -	A563DH
	232	WASHER	3/4" DIA.	- - -	F436
⚠1	136	CAP SCREW	5/8" DIA.	1.75"	A325 type 1
⚠1	136	WASHER	5/8" DIA.	- - -	F436
	58	BEARING PAD	1/8"x10"	1'-2"	M251

NOTE:
1. FRONT FACE OF TUBES T1, T2 & T3 TO BE SET ON 526.30' CONCAVE RADIUS.
2. FRONT FACE OF TUBES T4, T5, T6 & T7 TO BE SET ON 492.30' CONVEX RADIUS.

TOTAL PAY LIMIT ITEM 525.33 = 450'

REVISIONS		
No.	Remarks	Date
0	Initial submittal	8/22/08
⚠1	Per VT DOT Comments	9/16/08

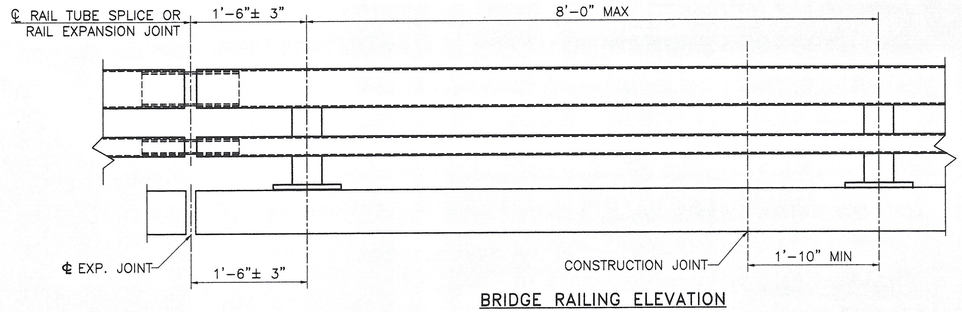
RECEIVED
CK'D BY ____ OK'D BY JF
SEP 2 3 2008
RESUBMIT ____ APPROVED As Noted
BY KMH DATE 9/24/08

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

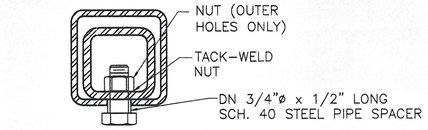
ITEM 525.33 – BRIDGE RAILING–NETC 2 RAIL
PROJECT No. (STP)BRF 013-4(21)
VT. ROUTE 100 (MINOR ARTERIAL)
TOWN OF STOCKBRIDGE, VERMONT

GENERAL CONTRACTOR
SUB CONTRACTOR A.D. ROSSI

DRAWN	MHM
CHECKED	P Radice
DATE	8/8/08
SCALE	NONE
HSC REFERENCE NO.	1665
SIZE	D
REVISION	⚠1
SHEET NO.	1 of 2



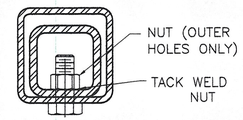
BRIDGE RAILING ELEVATION



5/8"ø TAPPED HOLE IN SPLICE TUBE AND 1 1/8" x 'C' SLOT IN RAIL TUBE FOR BOLT AND PLAIN HARDENED WASHER

EXPANSION JOINT SECTION

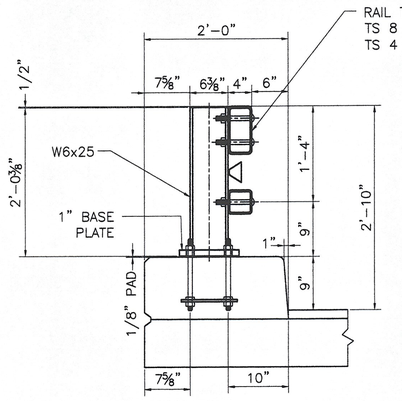
FOR DETAILS NOT SHOWN, SEE "RAIL TUBE SPLICE SECTION."



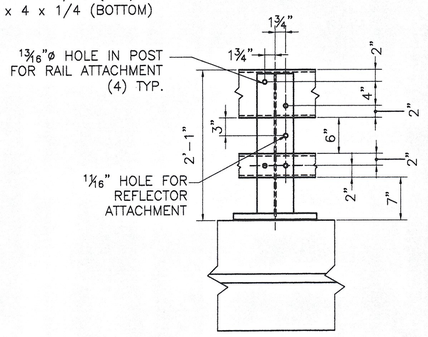
5/8"ø TAPPED HOLE IN SPLICE TUBE & 3/4"ø HOLE IN RAIL TUBE FOR BOLT & PLAIN HARDENED WASHER

NOTES:

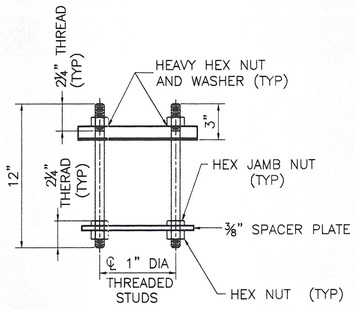
1. ALL RAILINGS AND MATERIALS SHALL CONFORM TO THE PROVISION OF SECTION 525, "RAILINGS OF THE STANDARD SPECIFICATION FOR CONSTRUCTION".
2. PRIOR TO GALVANIZING, ALL EXPOSED CUT OR SHEARED EDGES SHALL BE ROUNDED TO A 1/16" RADIUS AND BE FREE OF BURRS.
3. RAIL POSTS SHALL BE SET NORMAL TO GRADE.
4. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO (2) RAIL POSTS AND PREFERABLY TO AT LEAST FOUR (4) POSTS.
5. RAIL TUBE EXPANSION JOINT SHALL BE PROVIDED IN ANY RAIL BAY SPANNING A SUPERSTRUCTURE EXPANSION JOINT. EXPANSION JOINT WIDTH SHALL BE "X" AT 45°F AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPERATURES.
6. ALL PARTS SHALL BE GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH AASHTO M111, EXCEPT HARDWARE, WHICH SHALL MEET THE REQUIREMENTS OF AASHTO M232.
7. RAIL POST ANCHORING NUTS SHALL BE TIGHTENED TO A SNUG FIT AND GIVEN AN ADDITIONAL ONE-EIGHTH TURN.
8. RAIL TUBES SHALL BE ATTACHED USING 3/4" FULL DIAMETER BODY AASHTO M164 (TYPE 1) ROUND HEAD BOLT INSERTED THROUGH THE FACE OF TIE TUBE. HOLES IN POSTS SHALL BE 1/16" LARGER THAN THE BOLT SIZE.
9. HOLES IN RAILS FOR RAIL TUBE ATTACHMENT MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO ERECTION.
10. IF THERE IS A CONFLICT BETWEEN THE DETAILS SHOWN ON THIS SHEET AND THE DESIGN, THE REQUIREMENTS OF THE DESIGN DRAWINGS SHALL BE FOLLOWED.
11. ANY BENDING OF RAIL SHALL BE BY SHOP PROCEDURE ONLY.
12. THE FABICATOR SHALL SUBMIT SHOP DRAWINGS, INCLUDING WELDING PROCEDURES TO THE STRUCTURES SECTION FOR APPROVAL IN ACCORDANCE WITH SUBSECTION 506.04 OF THE STANDARD SPECIFICATIONS. ALL WELDING SHALL CONFORM WITH SUBSECTION 506.10.
13. RAIL POSTS AND BASE PLATES SHALL BE TESTED FOR IMPACT PROPERTIES IN ACCORDANCE WITH ASTM A-370 CHARPY IMPACT TESTING USING TYPE A SPECIMEN
⚠ 14. EXPANSION JOINT HARDWARE, REFLECTORS AND REFLECTOR HARDWARE PROVIDED BY OTHERS.



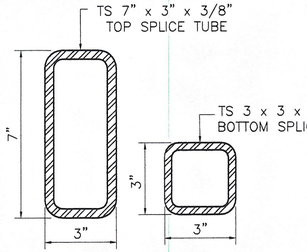
TYPICAL SECTION



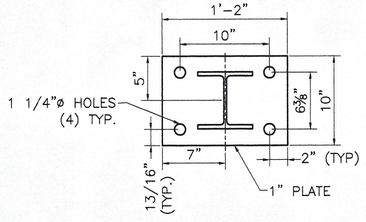
ELEVATION



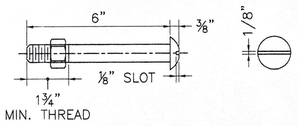
RAIL POST ANCHORAGE



RAIL TUBE SPLICE SECTION



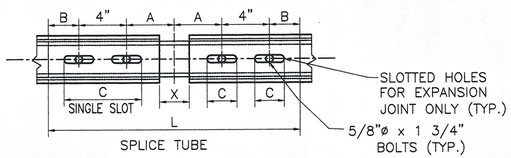
POST AND BASE PLATE



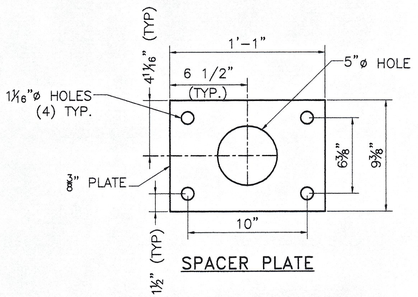
3/4" DIA. M164 (TYPE 1) ROUND HEAD BOLT

(WITH WASHER AND PREVAILING TORQUE TYPE LOCK NUT) (SEE NOTE #8) ⚠

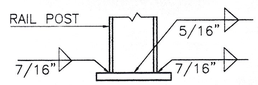
ONLY FULL DIAMETER BODY BOLTS WILL BE ALLOWED.



RAIL TUBE SPLICE AND RAIL EXPANSION JOINT DETAIL



SPACER PLATE



BASE WELD DETAIL

SPLICE TABLE					
T	A	B	C	L	X
N/A	4"	2"	--	20"	3/4"
EXPANSION JOINT TABLE					
<4"	4"	2"	2 1/2"	20"	2 1/2"

T = TOTAL MOVEMENT BETWEEN BRIDGE EXPANSION JOINTS. SEE NOTE 6 5

* = SINGLE SLOT

REVISIONS		
No.	Remarks	Date
0	Initial submittal	8/22/08
⚠	Per VT DOT Comments	9/16/08

MATERIALS

⚠ RAIL TUBES.....ASTM A500, GRADE B OR ASTM A501
RAIL POSTS AND BASE PLATES.....ASTM A709/A709M, GRADE 50
AALL OTHER SHAPRE AND PLATES.....ASTM A709/A709M, GARDE 36
ANCHOR STUDS.....ASTM A449
ALL OTHER BOLTS (UNLESS NOTED).....AASHTO M164, TYPE1

NUTS FOR AASHTO M164 BOLTS AND FOR ANCHOR STUDS SHALL COMPLY WITH AASTHO M291 (ASTM A563).

WASHERS SHALL COMPLY WITH AASHTO M293 (ASTM F436) SPECIFCATIONS.

1/8" PAD SHALL COMPLY WITH STANDARD SPECIFICATION SUBSECTION 731.01 OR 731.02.

RECEIVED
CK'D BY ____ CK'D BY ____
SEP 2 3 2008
RESUBMIT ____ APPROVED As Noted
BY KMH DATE 9/22/08

HIGHWAY SAFETY CORP.
GLASTONBURY, CT

ITEM 525.33 - BRIDGE RAILING-NETC 2 RAIL
PROJECT No. (STP)BRF 013-4(21)
VT. ROUTE 100 (MINOR ARTERIAL)
TOWN OF STOCKBRIDGE, VERMONT

GENERAL CONTRACTOR
SUB CONTRACTOR A.D. ROSSI

DRAWN MHM
CHECKED P Radice
DATE 8/8/08
SCALE NONE
NSC REFERENCE NO. 1665
SIZE D REVISION ⚠
SHEET NO. 2 of 2