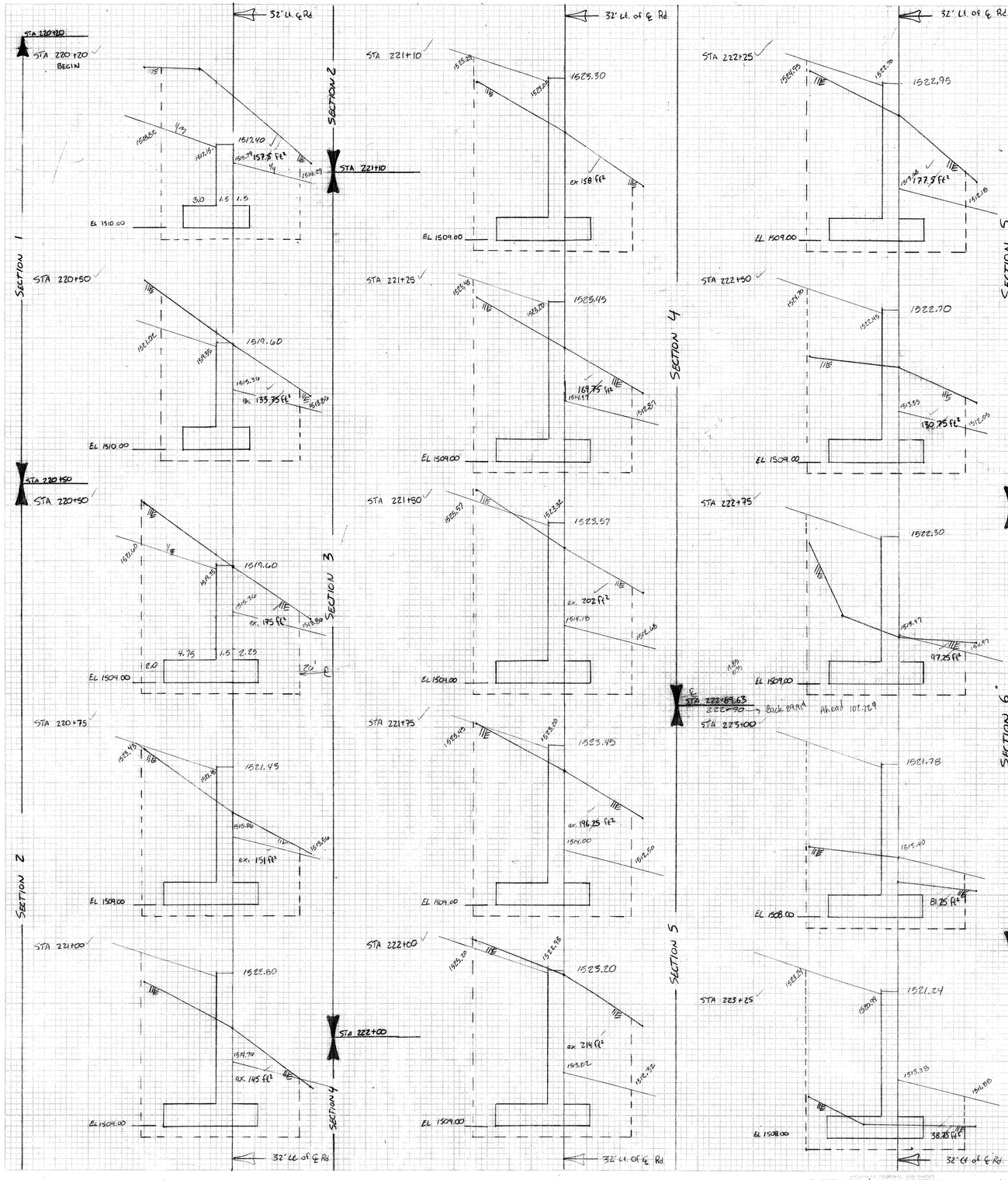
MORSE WALL EXCAVATION CROSS-SECTION
STATION 220+20 - 224+33.62
BY C TALBOT



Excavation

SECTION 1

Wall

STATION	AREA (ft²)	DIST (ft)	VOL (ft³)
220+20	157.5	30	4640.0
220+50	133.75		4368.75
		TOTAL:	4368.75 / 4640

SECTION 2

STATION	AREA (ft²)	DIST (ft)	VOL (ft³)
220+50	175	25	4075
220+75	151	25	3700
221+00	145	10	1515
221+10	158	60' TOTAL:	9290.00

SECTION 3

STATION	AREA (ft²)	DIST (ft)	VOL (ft³)
221+10	158	15	2452 / 2458.13
221+25	169.75	25	4630 / 4646.88
221+50	202	25	4975 / 4978.13
221+75	196.25	25	5125 / 5128.13
222+00	214	90' TOTAL:	17211.27 / 17190

SECTION 4

STATION	AREA (ft²)	DIST (ft)	VOL (ft³)
222+00	214	25	4989 / 4893.75
222+25	177.5	25	3898 / 3853.13
222+50	130.75	25	2807 / 2850
222+75	97.25	14.63	1385 / 1364.25
222+89.63	89.25	90' TOTAL:	12361.13 / 12959

SECTION 5

STATION	AREA (ft²)	DIST (ft)	VOL (ft³)
222+89.63	89.25	10.37	858 / 884.04
223+00	81.25	25	1900 / 1800
223+25	38.75	25	650 / 668.75
223+50	14.75	25	638 / 653.13
223+75	37.5	6	189 / 183
223+76.03	37.5	90' TOTAL:	38.63 / 3244.55 / 3811

SECTION 6

STATION	AREA (ft²)	DIST (ft)	VOL (ft³)
223+76.03	37.5	20	720
224+00	35	23.97	868.91 / 1380
224+33.60	31.75	47 35.60	1121.40
		TOTAL:	1390.31 / 2100

TOTAL

SECTION	VOL (ft³)	VOL (yd³)
1	4640	
2	9290	
3	17190	
4	12959	
5	3811	
6	2106	2106/27 = 185.7 cy 7/31/02

Item 204.30 Granular Backfill for Structures

From undercut to top of footing = 3.00'

220+18 ~ 220+50 = 32.00 LF

32.00'x12.50'x 3.00' = 1200.00 ft³
- 30.00'x6.00'x 2.00' = 360.00 ft³
840.00 / 27 = 31.11 cy

220+50 ~ 223+80 = 330.00 LF

330.00'x 14.25'x 3.00' = 14,107.50 ft³
- 330.00'x 8.50'x 2.00' = 5,610.00 ft³
8,497.50 / 27 = 314.72 cy

223+80 ~ 224+42 = 62.00 LF

62.00'x 12.50'x 3.00' = 2,325.00 ft³
- 60.00'x 6.00'x 2.00' = 720.00 ft³
1605.00 / 27 = 59.44 cy

Sta	Area	Dist	
220+18	48.16 ft²		
		32.00'	62.07 cy
BK 220+50	56.58		
AH 220+50	85.62		
		25.00'	89.16 cy
220+75	90.17		
		50.0' 25.00'	98.44 cy 186.88 cy
221+25	105.66		
		25.00'	99.07 cy
221+50	108.33		
		25.00'	98.04 cy
221+75	103.44		
		25.00'	94.50 cy
222+00	100.68		97.39 cy
		25.00'	92.05 cy
222+25	98.15		90.47 cy
		25.00'	89.74 cy
222+50	95.68		
		40.00'	137.47 cy
BK 222+90	89.91		
AH 222+90	102.72		
		35.00	189.81 cy
223+25	97.56		
		25.00'	88.62 cy
223+50	93.85		
		30.00	95.22 cy
223+80	77.55		
223+80	61.32		118.36 cy
		62.00'	
224+42	86.54		

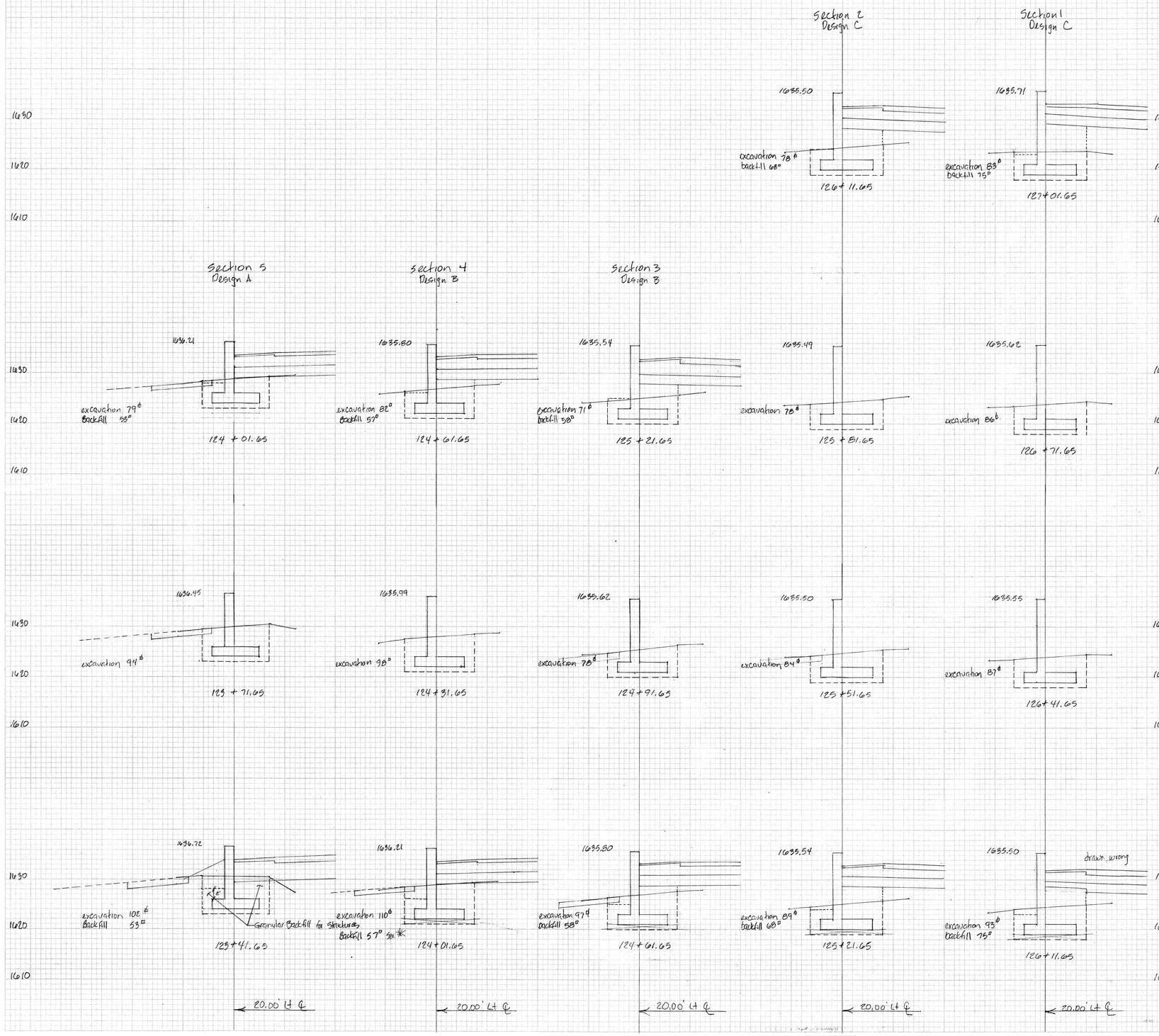
10/24/02 1364.99 cy NO / 1681.82 cy 10/24/02 CWG
10/27/03 RJ 1770.26 cy 2087.09 cy 10/27/03 RJCY

Saratoga-Wilmington
Morse Retaining Wall 1/1
Structure Excavation
Granular Backfill for Structures
Original Cross sections 6/13/02

4/50 Morse Wall

FINAL SURVEY
ORIGINAL SURVEY
NOT FIELD CHECKED
DESIGNED
PLOTTED
TEMPLATE
AREAS
MADE CHANGES AS NOTED
NO.
BY
DATE

HIGHWAY FEDERAL AID SHEET
PLATE 3 PIN CROSS SECTION-FULL LINE
REVISION 2 NOVEMBER
PRINTED IN U.S.A.



Structure Excavation

Station	Area	Dist	Volume
123+41.65	102	32	
		30	108.9
125+71.65	94		
		30	96.1
124+01.65	79		
124+01.65	110		
		30	115.6
124+31.65	98		
		30	100.0
124+61.65	82		
124+61.65	97		
		30	97.2
124+91.65	78		
		30	82.8
125+21.65	71		
125+21.65	89		
		30	96.1
125+51.65	84		
		30	90.0
125+81.65	78		
		30	86.7
126+11.65	78		
126+11.65	93		
		30	100.0
126+41.65	87		
		30	96.1
126+71.65	86		
		30	98.9
127+01.65	83	32	
+03.65			

* no 1 foot undercut

Section 4: 13.75' x 1.00' x 60'/27 = -30.6 cy
Section 3: 13.75' x 100' x 60'/27 = -30.6 cy
Section 2: 14.25' x 100' x 90'/27 = -47.5 cy
Section 1: 14.25' x 100' x 80'/27 = -47.5 cy

Granular Backfill for Structures

Station	Area	Dist	Vol
123+41.65	53		
		60	117.8 cy
124+01.65	53		
124+01.65	57		
		60	126.7 cy
124+61.65	57		
124+61.65	58		
		60	128.9 cy
125+21.65	58		
125+21.65	68	90	226.7 cy
126+11.65	68		
126+11.65	75		
		90	250.0 cy
127+01.65	75		

Catamount Wall
Stoneburg-Wilmington 1/1

DEERFIELD CHANNEL XSECT 1/1

Category 108x Deerfield Channel

Item 209.27 Unclassified Channel Excavation

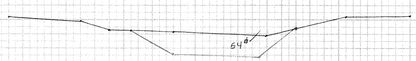
Station	Area	Distance	Volume
8+50	0.0		
		50'	42.6 cy
9+00	46		
		50'	109.3 cy
9+50	78		
		50'	150.0 cy
10+00	90		
		50'	189.8 cy
10+50	115		
		50'	156.5 cy
11+00	54		
		50'	50.0 cy
11+50	0.0		

698.2 cy 10/28/02 cwg

DC
1-18-05

1490

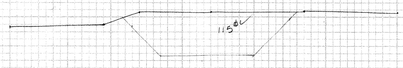
11+50 shoot for 1484.2



1490

1480

11+00 shoot for 1485.0



1490

1480

10+50 shoot for 1485.6

1490

1480

10+00 shoot for 1486.3

1490

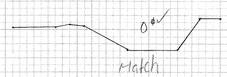
1480

9+50 Shoot for 1486.9

1490

1480

9+00 shoot for 1487.6



1490

1480

8+50 Match

New Overflow Channel

℄

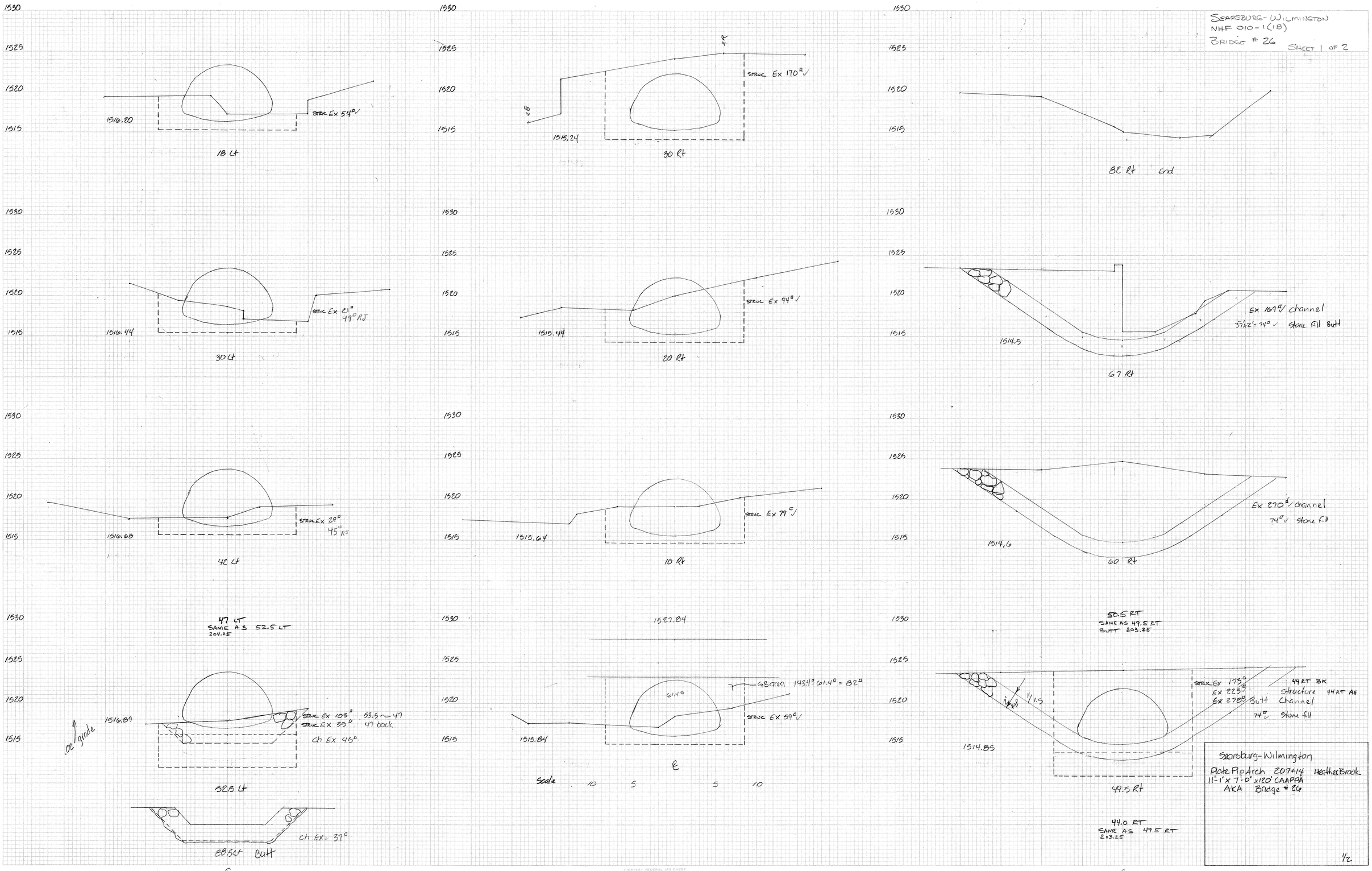
Searsburg - Wilmington

Deerfield Channel

#52 Deerfield Channel

FINAL SURVEY
ORIGINAL SURVEY
NOTE BOOK
NO.
BY
DATE
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
ADDITIONAL COPIES ONLY
PRINTED IN U.S.A.

SEARSBURG-WILMINGTON
NHF 010-1(18)
BRIDGE # 26
SHEET 1 OF 2



Searsburg-Wilmington
Plate Pip Arch 207+14 Heather Brook
11'-1" x 7'-0" x 120' CAAPPA
AKA Bridge # 26

1/2

453 PPA 207+14

FINAL SURVEY
ORIGINAL SURVEY

PLATE 3-FULL CROSS SECTION-FULL LINE

Item 204.25 Structure Excavation

STA	AREA	DIST	VOL
53.5	103		
		6.5	24.8
47	103		
47	35		
		5	5.9 7.4
42	2945'		
		12	111 20.9
30	2141'		
		12	16.7 22.7
18	54		
		18	37.7
℄	59		
		10	25.6
10	79		
		10	38.0 ~~453.6 8/14/02~~
20	94		
		10	48.9
30	170		
		14	88.9
44	179		
44	223		
		6.5	53.7 ~~102.6 8/27/03~~
50.5	223		
			362.8 10/13/03 RJ
			10/13/03 CWG

Item 649.31 GAL Under Stone Fill

CL 22'x35'x 1/9 = 85.6 SY Measured In Field 8/14/02 CWG 10/13/03 RJ

Rt 12'x18'/9 x 2 sides = 48.0 SY Measured in field 9/29/03 CWG 10/13/03 RJ

Item 651.40 Grubbing Material

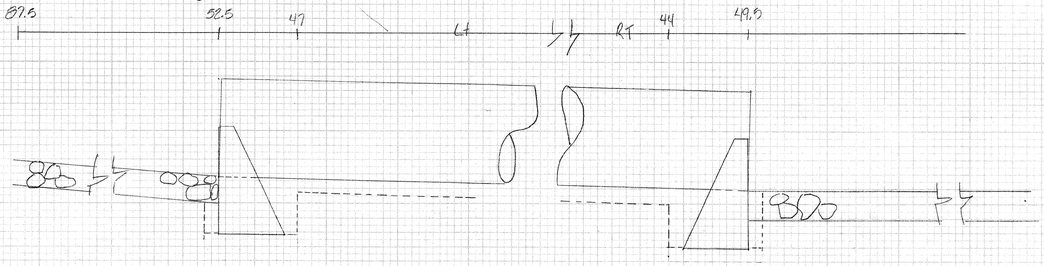
Inlet 20'x35'x1/9 = 78 SY Measured In Field 8/14/02 CWG
Outlet none military 10/13/03 RJ

Item 613.11 Stone Fill Type II

STA	AREA	DIST	VOL
88.5 Lt	37		
		36	49.3 CY 8/14/02 CWG
52.5 Lt	37		
49.5 Rt	74		
		17.5'	48.0 CY 9/29/03
67' Rt	74°		
			97.3 CY

Item 203.27 Unclassified Channel Excavation

	STA	Area	Dist	Vol
Lt	88.5	37		
			35	58.1 CY 8/14/02 CWG
Lt	53.5	45		
Rt	49.5	278		
			10.5	106.6
Rt	60.0	270		
			7.0	56.9
Rt	67.0	169		
			15.0	46.9
Rt	82.0	0		2.1 0.4 CY 9/29/03 CWG RJ 10/13/03



Item 204.30 Granular Backfill for Structures

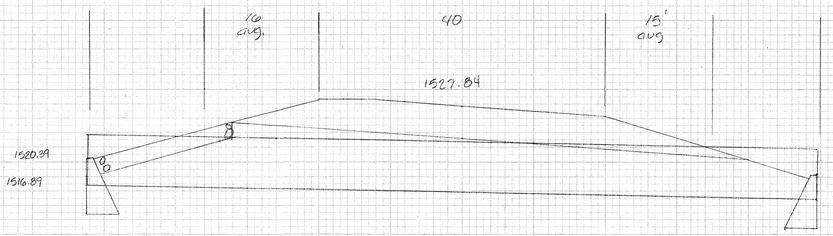
48 LF x 45 SF = 93 x 17.00' x 1.09 RD = 38.8 CY 10/13/03 CWG 10/17/03 RJ

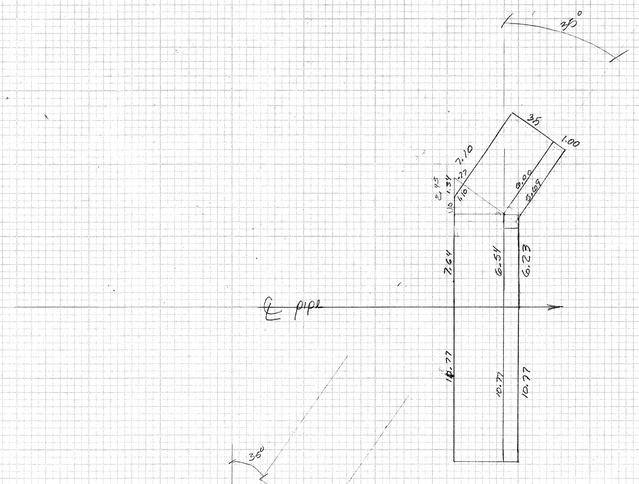
Granular Borrow

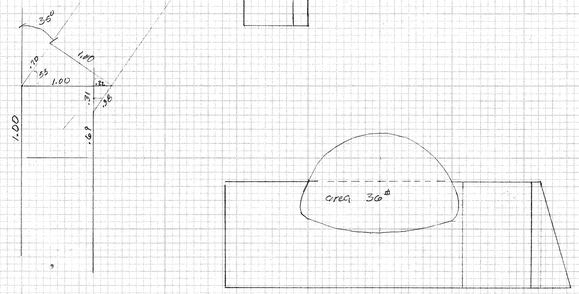
Item 203.32 16+40+15 = 71' x 82 SF = 216 CY 8/14/02 CWG 10/17/03 RJ

See ℄ X-Section

pay 179 for now
dep 37 7/29/03
216







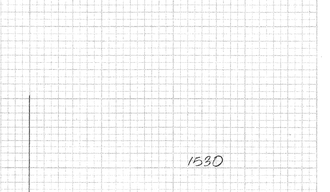
Inlet & Outlet Concrete

10.77' + (6.54+6.23)/2 + (6.00+5.69)/2 x 1' x 7.5' = 172.50 CF
10.77' + (7.64+6.54)/2 + (7.10+6.00)/2 x (0.0+3.5)/2 x 7.5' = 330.38 CF
hole 36 SF x 1.75' = - 63.00 CF
429.88 CF / 27 = 15.92 CY EACH
8/27/03 CWG 10/17/03 RJ

Sears burg - Wilmington
NHF 010-1(18)
Bridge # 26

Sheet 2 of 2

Sin 35° = 6.23/x = 2.45
Sin 35° = .77/1.34 = 1.34
Cos 35° = 3.5/3.5+x = x = .77
tan 35° = .77/y = y = 1.10
Sin 55° = 1.00/1+x = .22
Sin 35° = .22/x = 1.35
tan 55° = 1.00/y = .70
Cos 35° = y/.98 =



1515

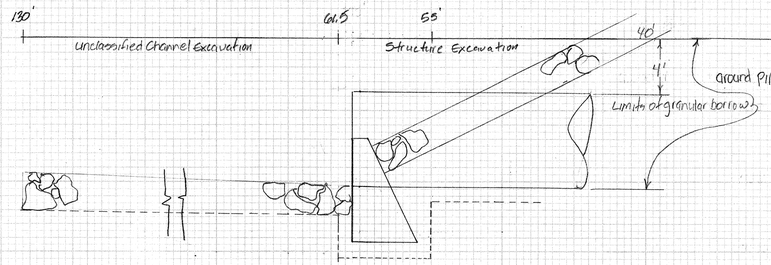
Sears burg Wilmington
BR #26
2/2

454 PPA 2007H9

ORIGINAL SURVEY
PLOTTED
NOTE BOOK
NO.
FINAL SURVEY
PLOTTED
TEMPLATE
AREAS
CHKD & REVISED
DATE
BY

Searsburg - Wilmington
NHF 010-1(18)

Bridge #27 Sheet 1 of 3



Item 613.11 Stone Fill Type II

channel - 26'x2'x69'x1/27 = 133 cy 8/20/02 cwg
ground pipe, up slope - 24'x20'x2'x1/27 = 36 cy
169 cy inlet
12-10-02 dkw

Measured in Field

outlet

upslope - 24'x2'x((30+18')/2)x1/27 = 42.7 cy
below pipe - 17'x2'x12'x1/27 = 15.1 cy
57.8 cy
12-12-02 dkw

FH. 11/14/02 12/9/02

Item 649.31 Geotextile Under Stone Fill

channel - 26'x69'x1/9 = 199 sy
ground pipe, up slope 24'x20'x1/9 = 53 sy
inlet — 252 sy
8/20/02 cwg
12-10-02 dkw

Measured in Field

outlet. in front of headwall

24'wide x 20' up mb face x 1/9 = 53 sy
back of wing
2 x 12'x12'x1/9 = 32 sy
85 sy 8/20/02 cwg
12-10-02 dkw

Item 661.40 Grubbing

channel - 26'x69'x1'x 1/27 = 51 cy 8/20/02 cwg
ground pipe up slope 24'x20'x1'x1/27 = 18 cy
69 cy inlet
12-10-02 dkw

Measured in Field

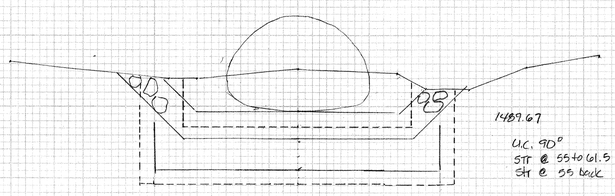
Xbone ~~4ft~~
within regulated measured pool elevation

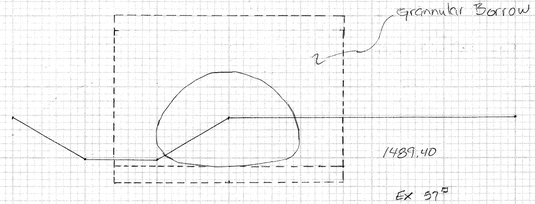
Item 204.25 Structure Excavation

STA	ARC#	DIST	VOL
61.5	166		
		6.5	40.0 cy
55	166		
		15	31.1
55	60		
		15	30.3
40	58		
		15	49.4
25	57		
		10	43.3
10	121		
		10	38.7
E	118		
		20	47.4
+10	96		
		6	10.6
+30	32		290.8
+36	63		
		14	716.2
+50	231		
		30	255.6
+80	229		
		5	33.2
+85	180		
		5	13.3
+90	14		
+90	31		
		6.5	7.5
+96.5	31		385.8

676.6 cy 10/3/02 cwg
12-10-02 dkw

See Bk 3 E pg. 92





Inlet Headwall poured 8/19/02 — Sta 55.25 15 cy
Outlet Headwall poured 10/8/02

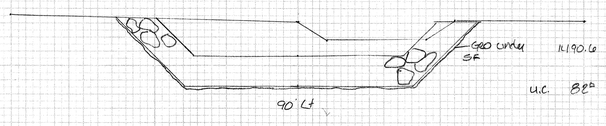
Item 203.27 Unclassified Channel Excavation

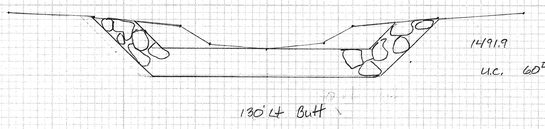
60 Lt

STA	AREA	DIST	VOL
61.5	90°	28.5'	90.8 cy
90	82°	40.0'	105.2 cy
130	60°		

196.0 cy 8/8/02 cwg
12-7-02 dkw

Work completed 8/9/02 See Book 3E pg. 80





25 Lt

40 Lt

Item 203.32 Granular Borrow

Sta	Area	Dist	Vol
58 Lt	0		
		17	36.9
41 Lt	117.2		
		41	178.0
℄	117.2		
		74	321.2
74 Rt	117.2		
		19	41.2
93 Rt	0		

377.3 cy 10/3/02 cwg
12-10-02 dkw

See Bk 3E pg. 86

Item 204.30 Granular Backfill for Structures

Sta	Area	Dist	Vol
55 Lt	159		
		91	53.6
36 Rt	159		
		14	8.7
50 Rt	117.5		
		30	35.4
80 Rt	46.8		
		5	9.0
85 Rt	50.9		
		5	9.8
90 Rt	55		

116.3 cy

Inlet headwall = 16.5 x 20' = 11.9 cy
Outlet headwall = 16.5 x 20' = 11.9 cy
end area about Creole headwall 140.3 cy
10/3/02 cwg
See Bk 3E pg. 100
12-10-02 dkw

Searsburg-Wilmington
Plate Pipe Arch 262+13 Unnamed Brook
9'-11" x 6'-8" x 150' CAAPPA
AKA Bridge # 27

1/3

4.55 PPA 262+13

ORIGINAL SURVEY — NOTE BOOK — NO. — DRAWN — PLOTTED — TRACED — CHECKED — DATE — BY
FINAL SURVEY — NOTE BOOK — NO. — DRAWN — PLOTTED — TRACED — CHECKED — DATE — BY
HIGHWAY FEDERAL AID SHEET
PLATE 2-FULL CROSS SECTION-FULL LINE
VIRGINIA DEPARTMENT
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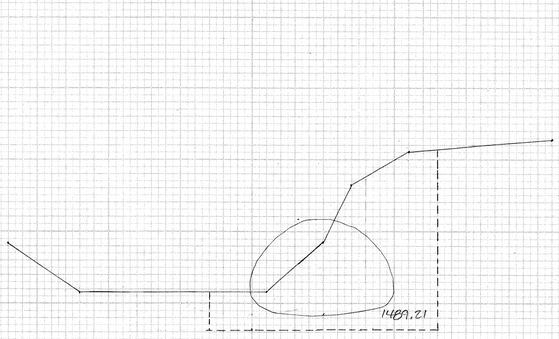
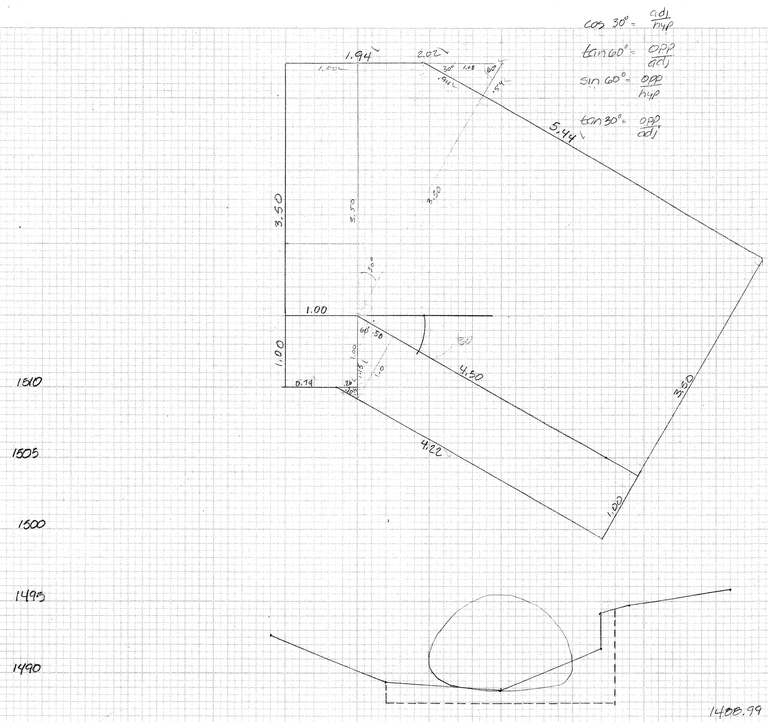
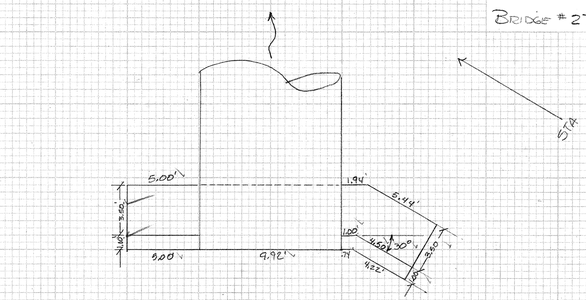
Searsburg-Wilmington
NHF 010-1(18)

Bridge #27







Inlet total headwall 147.70' + 274.00'

$\left(1.00' \times \left(5.00' + 9.92' + \left(\frac{20.15' - 7.33'}{2}\right)\right) + \left(9.92' + \left(\frac{20.15' - 7.33'}{2}\right) + \left(\frac{1.00' + 4.94'}{2}\right)\right) \times 7.33'\right) + 0.5 \times 8.50' \times \left(5.00' + 9.92' + \left(\frac{1.00' + 4.94'}{2}\right) + \left(\frac{4.50' + 5.44'}{2}\right)\right) \times 7.33' = 421.70\ ft^3$

hole created by pipe

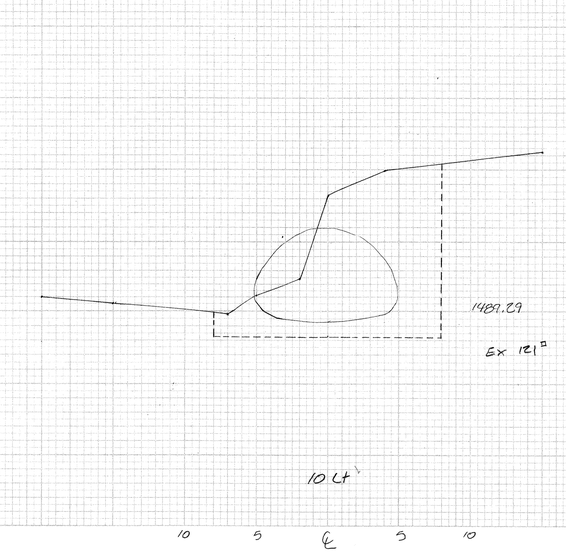
$30^\# \times 1.80' =$ 54.00 ft

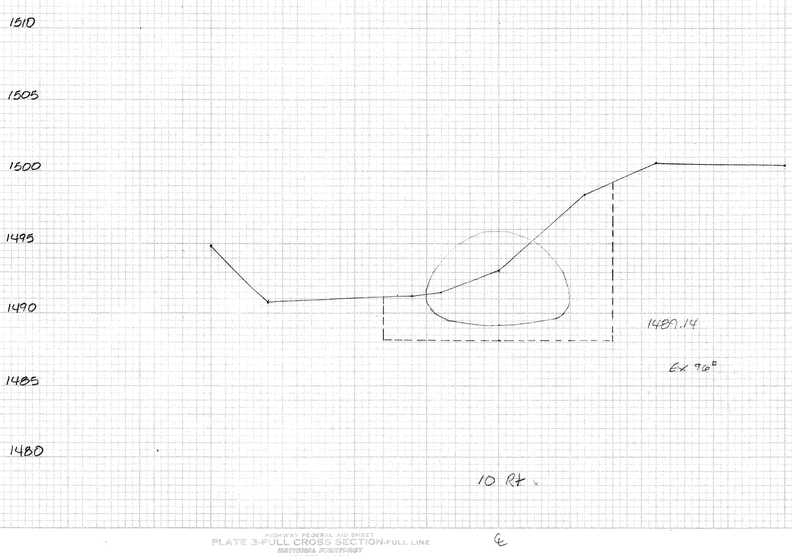
$CK\left(21.09' \times 4.50' \left(\frac{94.90°}{2}\right) + \left(\frac{20.15'}{2}\right)\right) \times 7.33' = 421.67\ ft^3$

$367.7 / 27 = 13.62$

WLY 8/14/02

See bk 3E pg104 GLG 12/9/02





Searsburg-Wilmington

Plate Pipe Arch 262+13 Unnamed Brook
9'-11"x6'-8"x156' CAAPPA
AKA Bridge #27

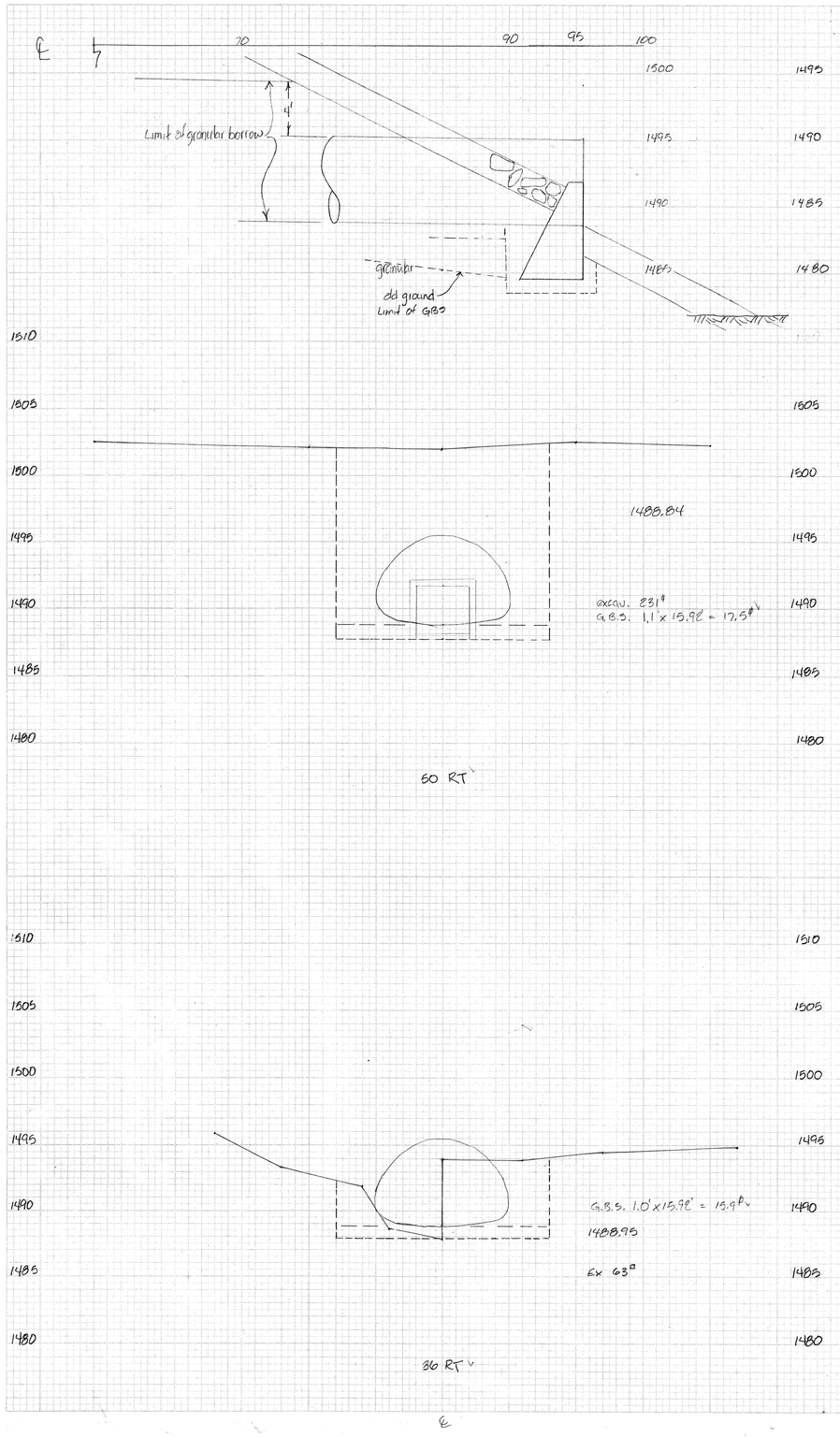
2/3

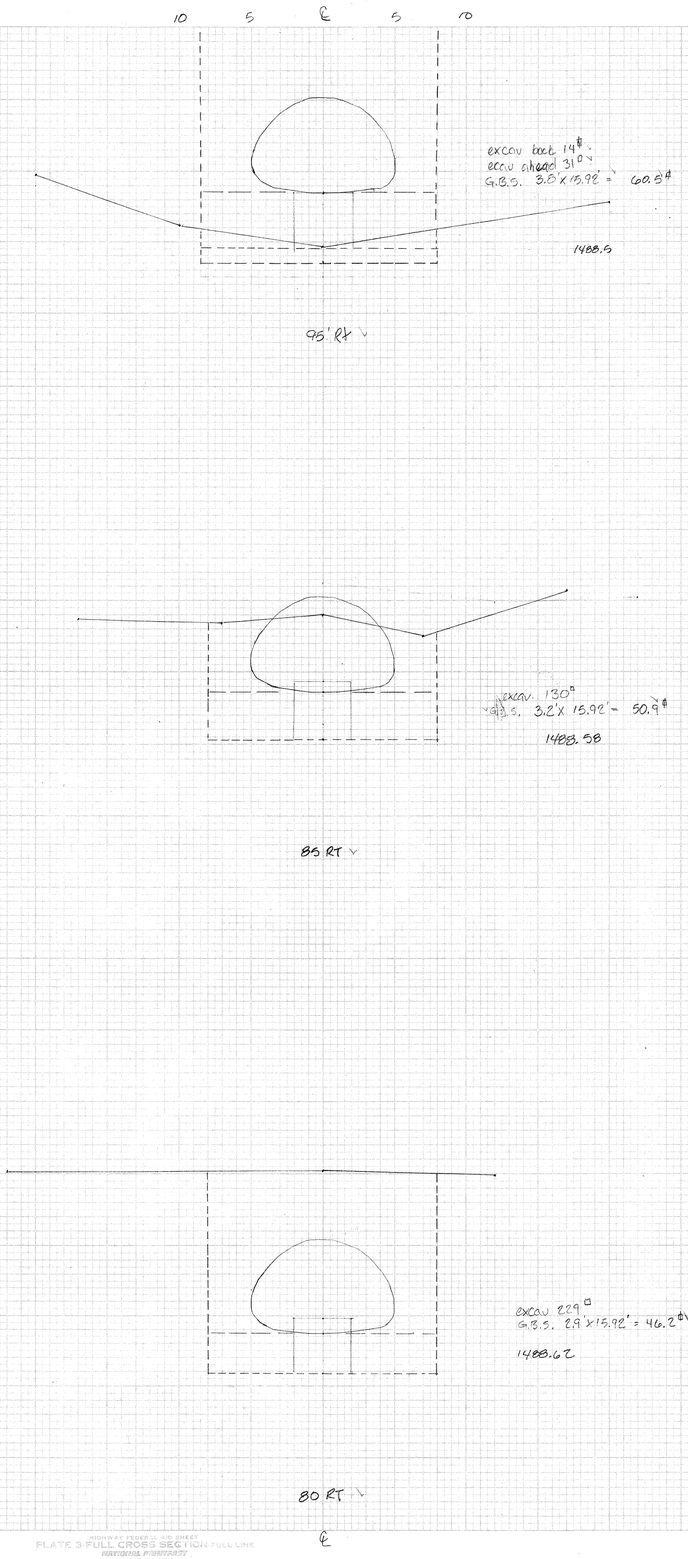
456 PPA 262+13

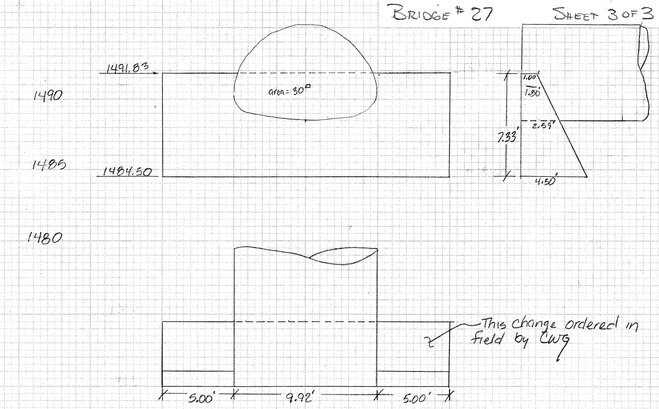
ORIGINAL SURVEY / FINAL SURVEY — BY, DATE, PLOTTED, TEMPLATE, AREAS, CHECKED, NOTE BOOK, NO.

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
MATOMA PRINTPRINT
PRINTED IN U.S.A.

SEARSBURG - WILMINGTON
NHF 010-1 (18)
BRIDGE # 27
SHEET 3 OF 3







Outlet

Item 501.25 Concrete Class B High Performance

Total headwall

$(1.00' \times 7.33' \times 19.92') + (.5 \times 3.50' \times 7.33' \times 19.92') = 401.53\ ft^3$ (146.01, 255.52)

hole created by pipe

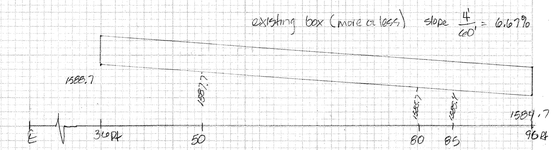
$(30^{\square} \times 1.80') =$

$\frac{54.00\ ft^3}{347.53/27} = 12.87\ cy$

10/7/02
CWG

cc $\frac{1.00 + 4.50}{2} \times 7.33 \times 19.92 = 401.54$

See bk 3E pg 104



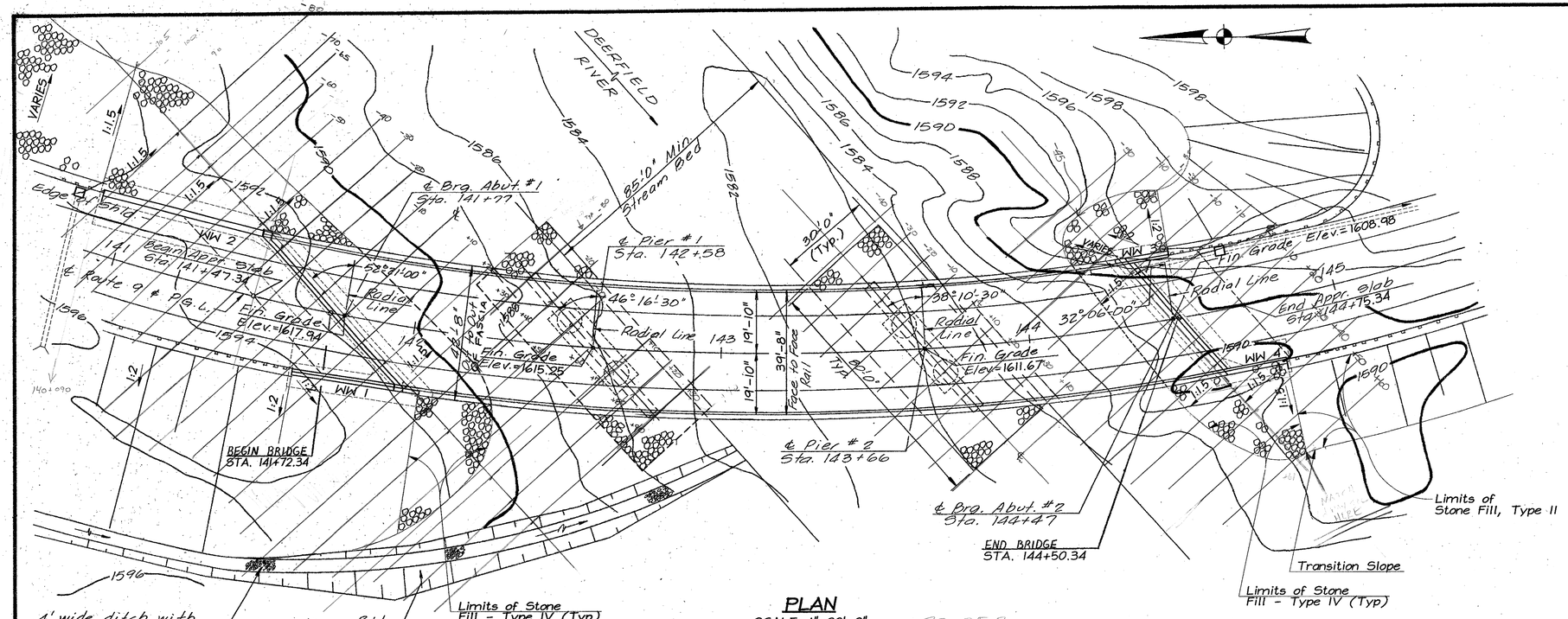
Searsburg - Wilmington
Plate Pipe Arch 262+13 Unnamed Brook
9'-11" x 6'-8" x 156' CAAPPA
AKA BR #27

3/3

457 PPA 262+13

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PRINTING
PRINTED IN U.S.A.

02/20/2002 14:23:29



PLAN
SCALE: 1"=20'-0"

BR 25 B

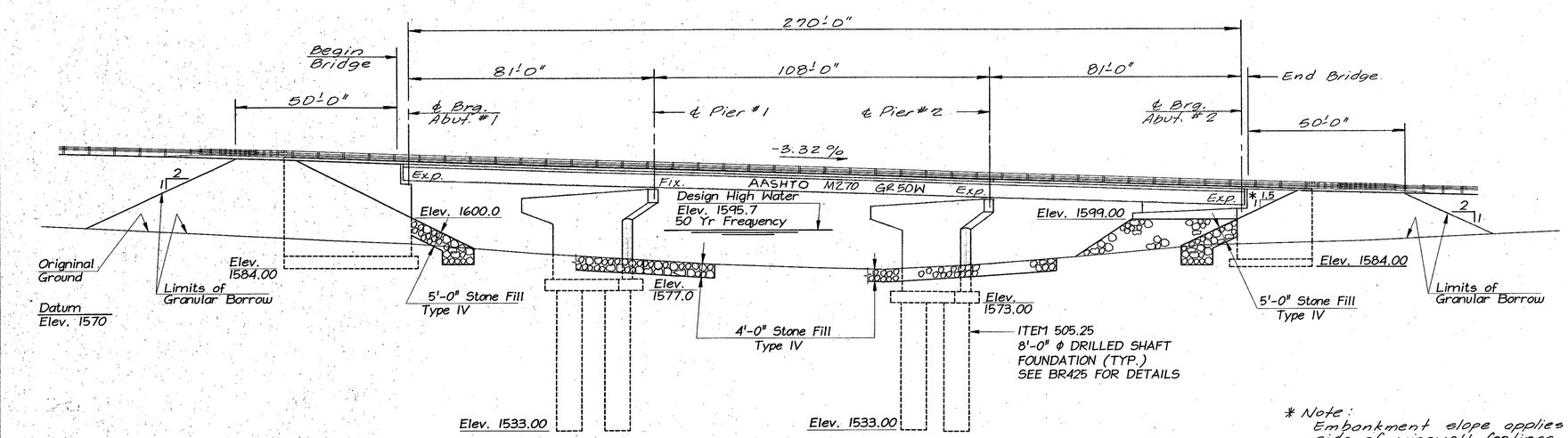
CURVE DATA

Δ = 91°-18'-18.5" Lt.	L = 1217.40'
D = 7°-30'-00"	E = 328.96'
R = 763.94'	Bank = 0.070 FT/FT.
T = 781.55'	

GENERAL NOTES:

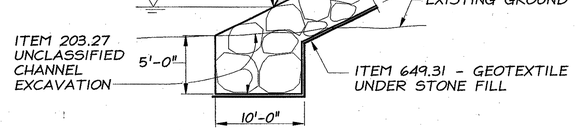
1. All surfaces of AASHTO M270, Structural Steel, shall be blast cleaned as specified under section 506.14 (a).
2. Bearing Device Assemblies, including anchor bolts, shall be paid for at the unit bid price each for Item 531.10 Bearing Device Assembly.
3. Water Repellent shall be applied to all exposed concrete surfaces in the abutments, piers and superstructure except area of deck under bituminous surface and the underside of the deck slabs between drip notches.
4. Drip notches are to be discontinued 4'-0" upgrade from from Abutment No. 2, Pier No. 1 and Pier No. 2.

SEE SHEET BR 4 FOR MORE GENERAL NOTES



ELEVATION
SCALE: 1"=20'-0"

* Note:
Embankment slope applies also of side of wingwall footings.



TYPICAL EMBANKMENT PROTECTION DETAIL
(NOT TO SCALE)

Note:
Topsoil will be stripped under Granular Borrow, Item 203.32.

Revisions: by CLOUGH HARBOUR & ASSOC. LLP	App'd. By:	Date:
⚠ REVISED WINGWALLS, ELEVATIONS, PIER FOUNDATIONS	MWO	6/01

McFARLAND - JOHNSON ENGINEERS, INC.

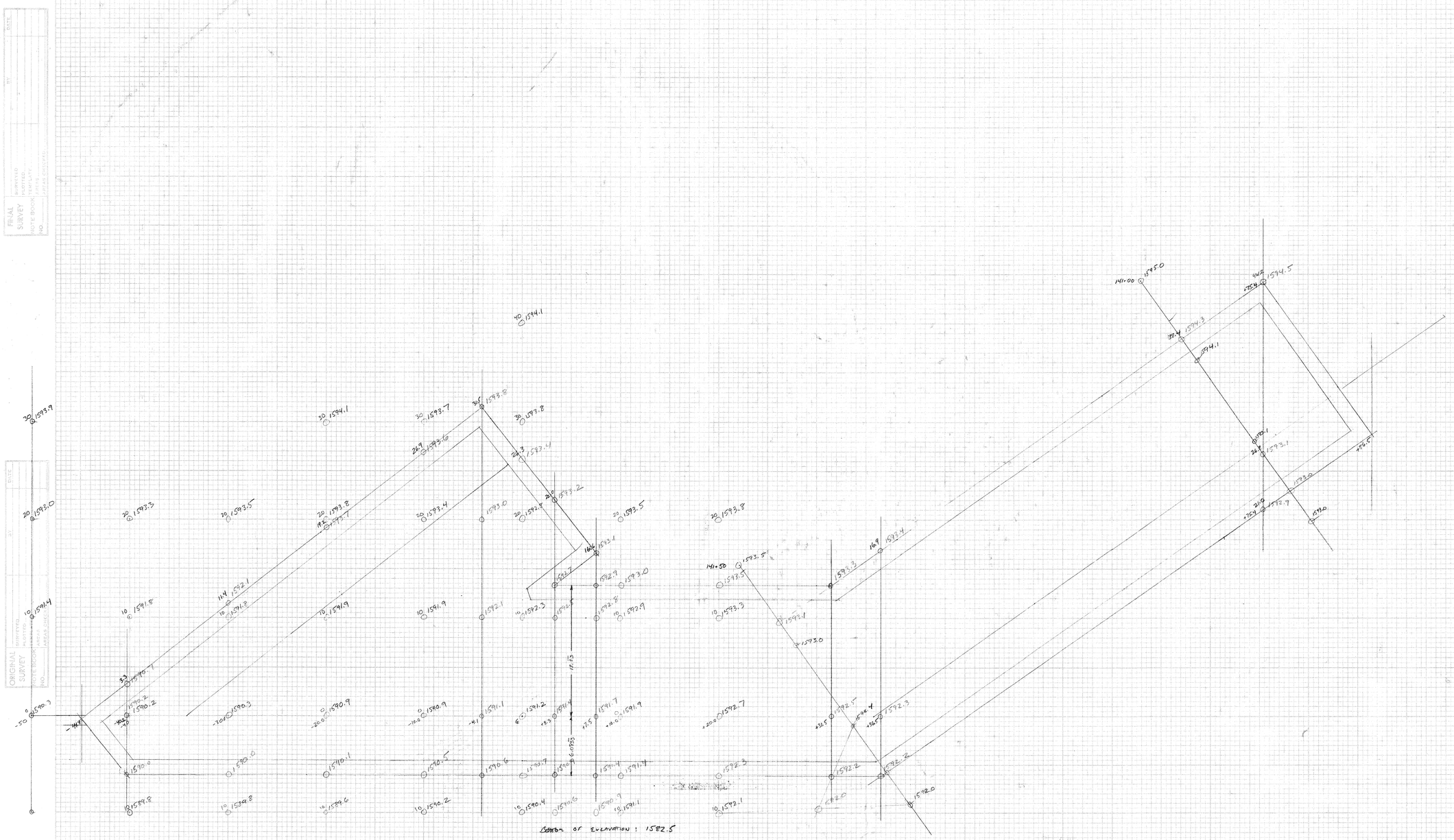
STATE OF VERMONT
AGENCY OF TRANSPORTATION

TOWN OF SEARSBURG	Bridge No. 25 B
HIGHWAY NO. VT. ROUTE 9	Log Sta. / Surv. Sta. 143+11
VT. ROUTE 9 OVER DEERFIELD RIVER	
PLAN, ELEVATION AND GENERAL NOTES	
Designed by W.T.S.	Drawn by J.J.R.
Checked by R.P.J. date 11/85	Bridge Design Supervisor W.T.S. date 9-84
PROJECT SEARSBURG-WILMINGTON	PROJECT NO. FD10-1(18)
Bridge Sheet No. BR402	Sheet ~~204~~ of 435

458 BR-25 B

M.J. Job No. 83-3302
M.J. Br. No. 2
M.J. Sht. No. 2
BRUNING 44-131-40151

SEARSBURG-WILMINGTON
NHF 010-1(18)
BRIDGE # 25 B ABUT # 1



HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FUEL LINE
NATIONAL HIGHWAY
PRINTED IN U.S.A.

459 BR-25B-ABT

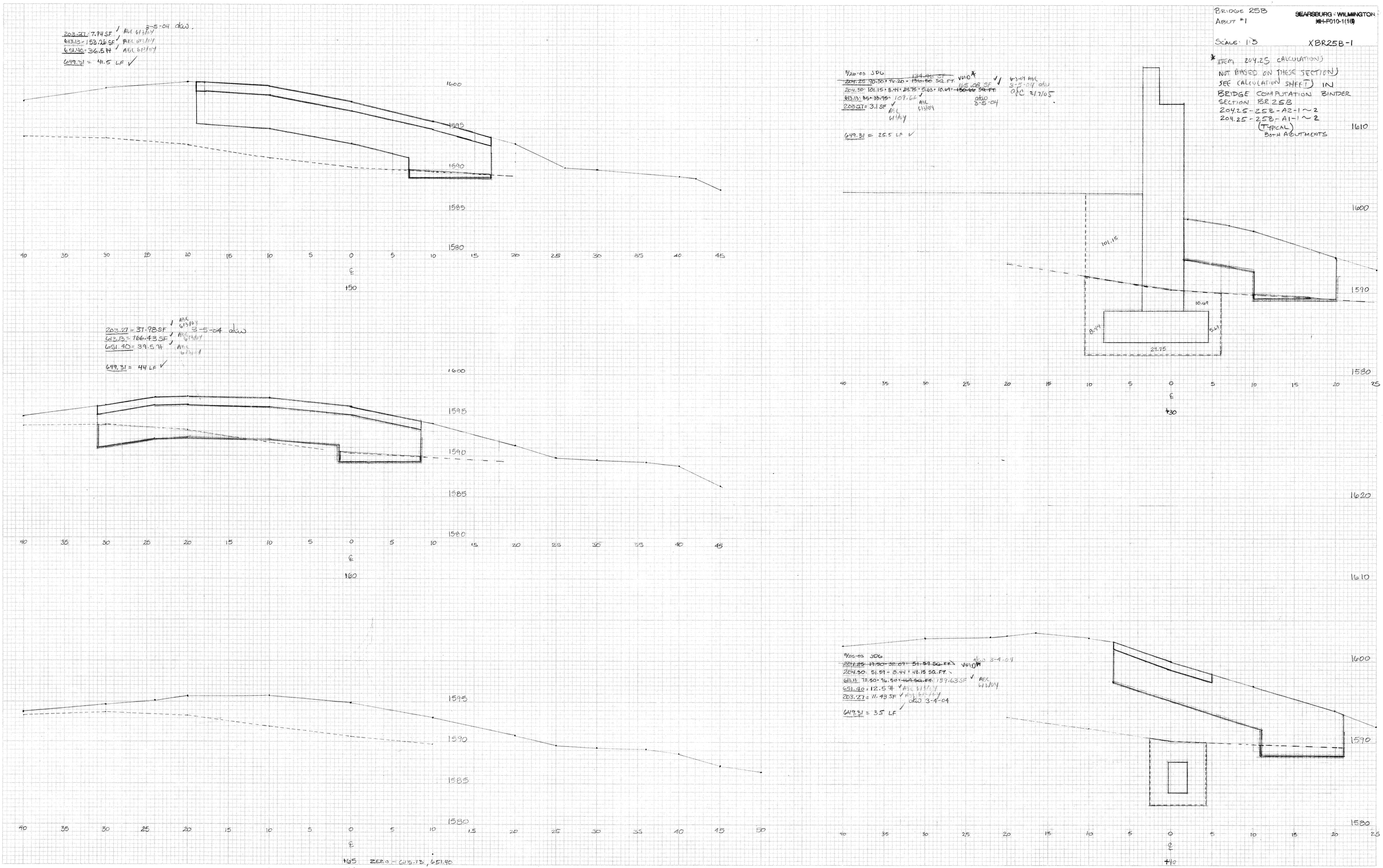
BRIDGE 25B
ABUT #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE: 1:5

XBR25B-1

* ITEM 204.25 CALCULATIONS NOT BASED ON THESE SECTIONS SEE CALCULATION SHEET 1 IN BRIDGE COMPUTATION BINDER SECTION BR25B
204.25-25B-A2-1~2
204.25-25B-A1-1~2
(TYPICAL)
BOTH ABUTMENTS



+65 ZERO - 613.13, 651.40
+66 ZERO - 203.27
ZERO - 649.31 ✓ OPC 2/1/05

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL DIMENSIONS
PRINTED IN U.S.A.

460 BR25b-AB1

BRIDGE 25B
ABUT #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5

XBR25B-2

* ITEM 204.25 CALCULATIONS NOT BASED ON THESE SECTIONS SEE CALCULATION SHEET SEE NOTE ON XBR25B-1

3-8-04 dkw

9/26-03 JDG

~~204.25: 24.75 + 101.50 + 88.50 + 19.00 + 314.25 = 548.00 SQ. FT.~~ 521.50 SF

204.80: 186.39 + 7.50 + 99.13 + 5.63 + 279.81 + 15.94 + 12.83 = 557.23 SQ. FT

613.15: 83.75 + 31.50 + ~~115.25 SQ. FT.~~ 115.25 SF

649.31 = 23 LF ✓

ABC 613/04

* This line should be correct per 204.25

TYPE IV

3-8-04 dkw

9/26-03 JDG

~~204.25: 341.13 + 99.4 + 64.50 = 505.03 SQ. FT.~~ 345.13 SF

204.30: 247 + 5.63 + 26.88 + 2.63 + 2.19 + 16.58 = ~~303.12 SQ. FT~~ 303.12 SF

613.13: 81.25 + 26.5 + ~~107.75 SQ. FT~~ 93.38 SF

649.31 = 21 LF ✓

ABC 613/04

3-8-04 dkw

9/26-03 JDG

~~204.25: 61.88 + 88.50 + 77.10 + 217.86 SQ. FT.~~ 249.46 SF

204.80: 27.94 + 172.46 + 5.63 + 36.38 + 5.63 + 11.70 = ~~259.74~~ SQ. FT

613.13: 80 + 63 = ~~143.00 SF~~ 129.22 SF

649.31 = 24 LF ✓

ABC 613/04

STONE IX

3-8-04 dkw

9/26-03 JDG

~~204.25: 51.80 + 584.42 + 50.40 = 686.62 SQ. FT.~~ 686.62 SF

204.30: 584.10 + 8.44 + 47.63 + 5.63 + 14.16 = ~~659.96 SQ. FT~~ 659.96 SF

613.18: 85 + 33.50 = ~~118.50 SQ. FT.~~ 95.33 SF

649.31 = 22 LF ✓

ABC 613/04

TYPE IX

ORIGINAL SURVEY
BY / DATE
SURVEYED
PLOTTED
NOTE BOOK / TEMPLATE
AREA
PAGE CHECKED
NO.

FINAL SURVEY
BY / DATE
SURVEYED
PLOTTED
NOTE BOOK / TEMPLATE
AREA
PAGE CHECKED
NO.

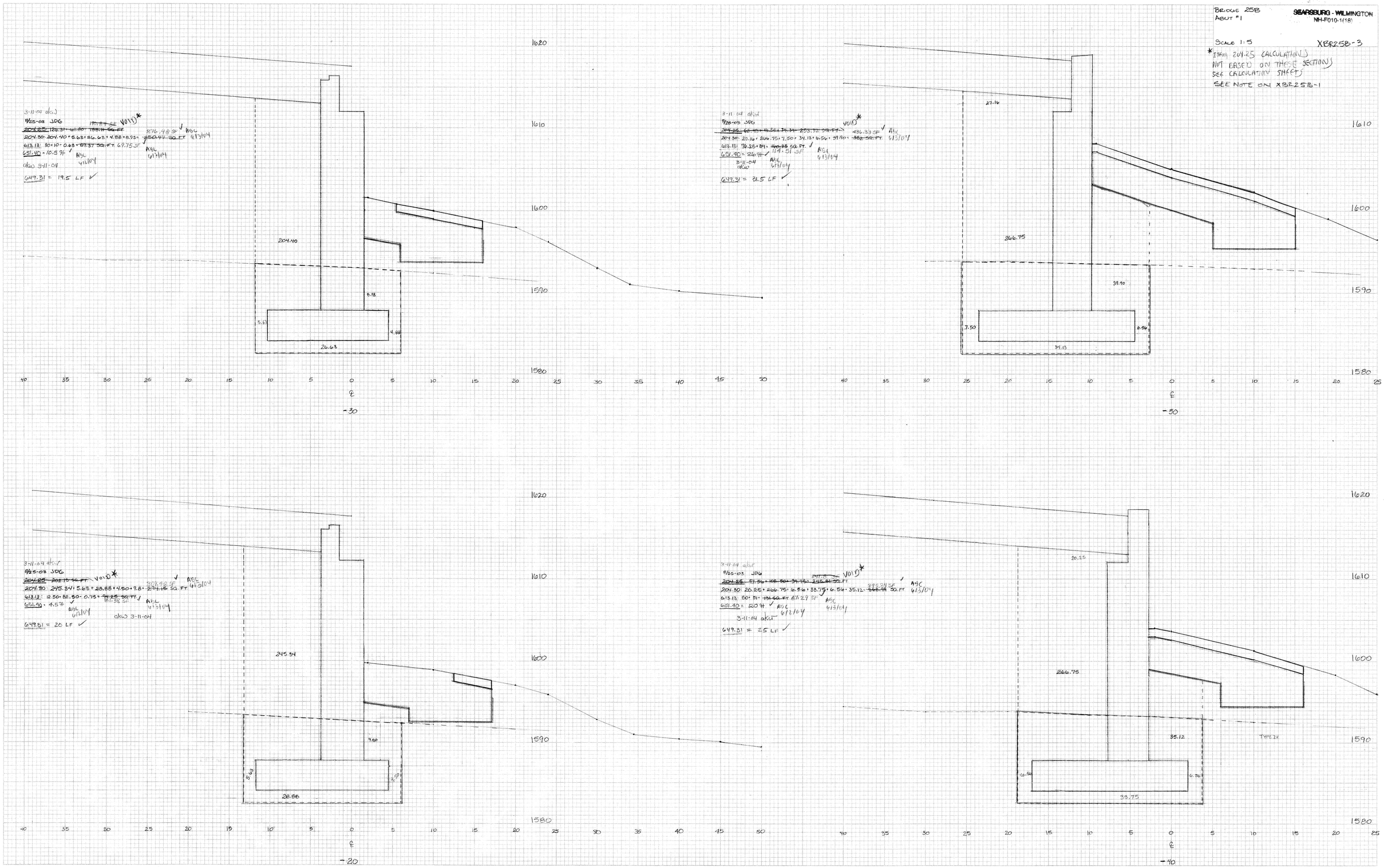
BRIDGE 25B
ABUT #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5

XBR25B-3

*ITEM 204.25 CALCULATIONS NOT BASED ON THESE SECTIONS SEE CALCULATION SHEETS
SEE NOTE ON XBR25B-1



FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PRINTING
PRINTED IN U.S.A.

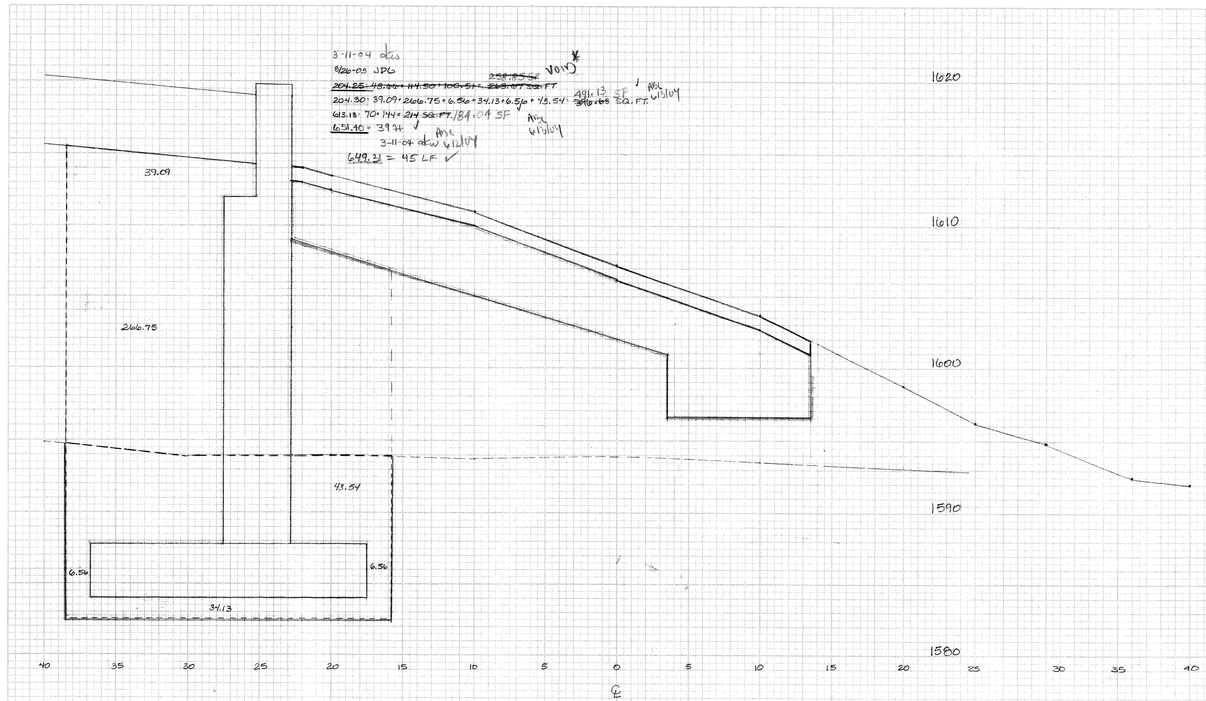
462 BR25B-AB1

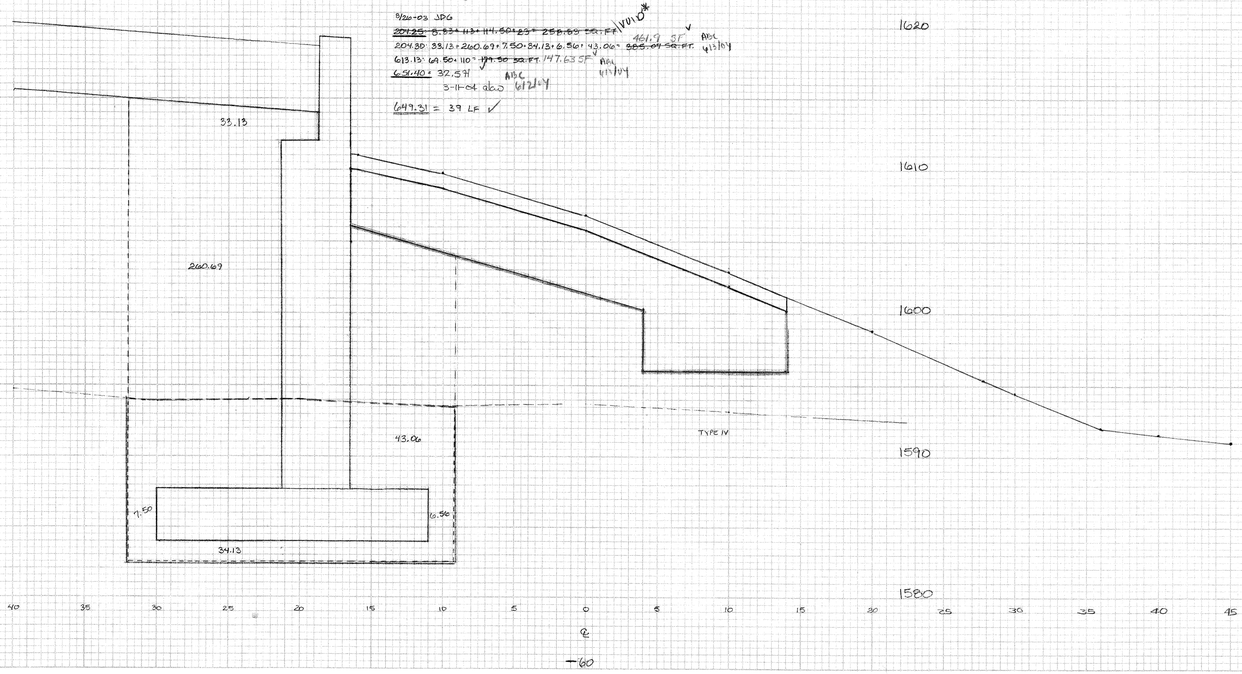
BR#25B
ABUT #1

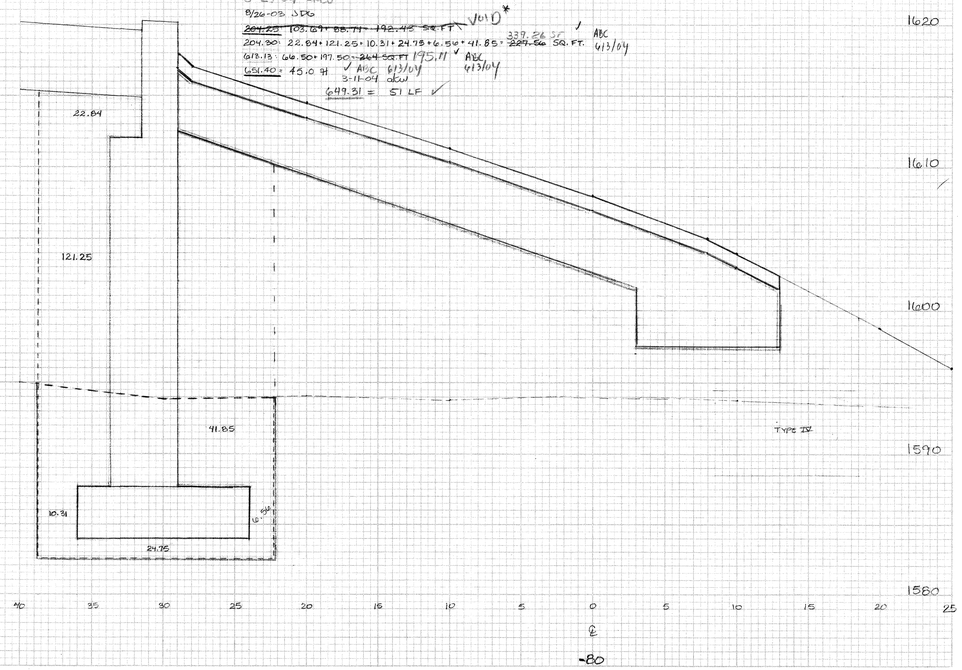
SEARSBURG - WILMINGTON
NH-F010-1(18)

Scale: 1:5

XBR25B-4







* ITEM 204.25 CALCULATIONS NOT BASED ON THESE SECTIONS
SEE CALCULATION SHEETS
SEE NOTE ON XBR25B-1

-105 ZERO 649.31 ✓

-87.5 ZERO 651.40

FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PRINTING
PRINTED IN U.S.A.

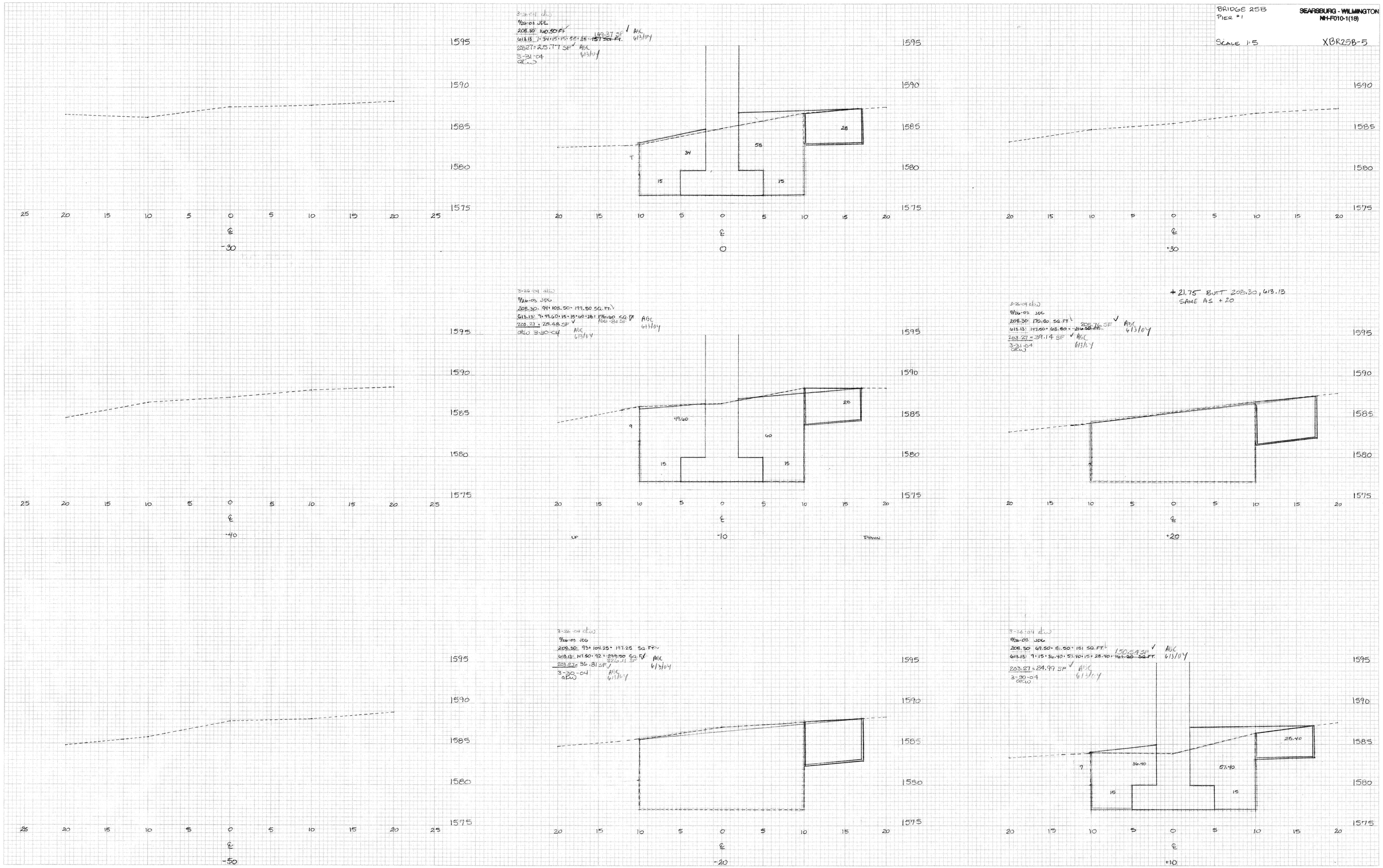
463 BR25B-AB1

BRIDGE 25B
PIER #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5

XBR25B-5



HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL
NATIONAL FIRETRAST
PRINTED IN U.S.A.

-22.75 BUTT 208.30, 613.13
SAME AS -20

464 BR25B

BRIDGE 25B
PIER #1

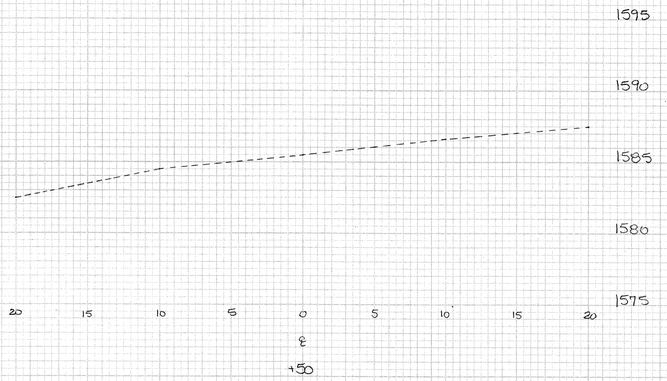
SEARSBURG - WILMINGTON
NH-F010-1(18)

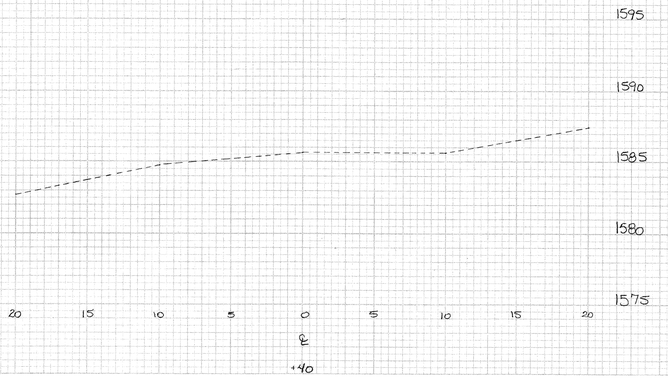
SCALE 1:5

XBR25B-G

FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TRACED
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TRACED
AREAS
AREAS CHECKED
BY
DATE





HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
AMERICAN PHOTOTYPE
PRINTED IN U.S.A.

465 BRZ5B P1

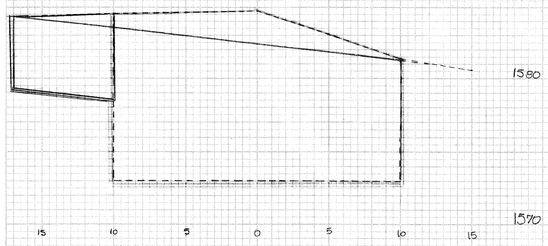
BRIDGE "25B
PIER "2

SEARSBURG - WILLMINGTON
NH-F010-1(18)

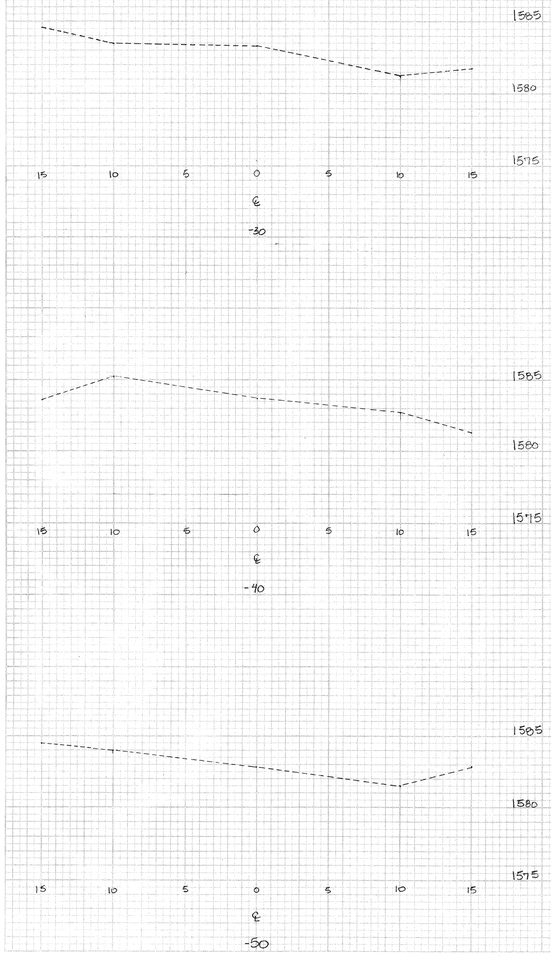
SCALE: 1:5

XBR25B-7

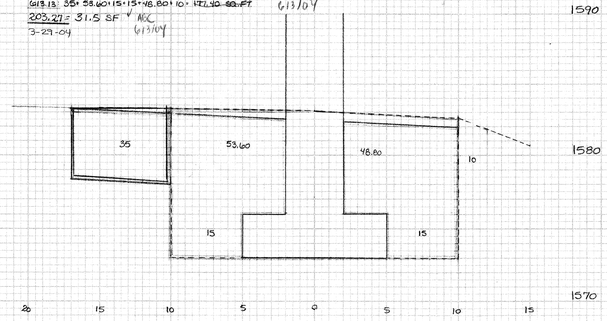
9/26-03 JDG
208.30: 116.25 + 100.75 + 217 SQ. FT. ✓
613.13: 145 + 87.50 + ~~232.50~~ SQ. FT. 823 : 20 SF ✓ ABC 6/13/04
203.27= 40.149 SF ✓ ABC 6/13/04



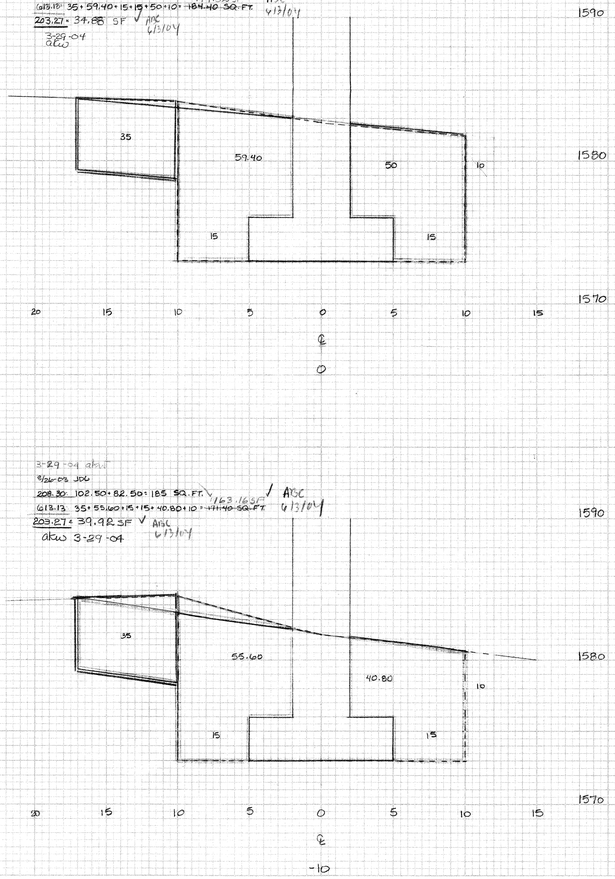
=20.5 BUTT 208.30, 613.13
SAME AS -20



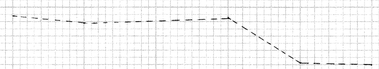
3-29-04 dkw
9/26-03 JDG
208.30: 101.75 + 98.50 = 200.25 SQ FT ✓ 164.129 SF ✓ ABC 6/13/04
613.13: 35 + 53.60 + 15 + 15 + 48.80 + 10 = ~~177.40 SQ FT~~
203.27= 31.5 SF ✓ ABC 6/13/04
3-29-04



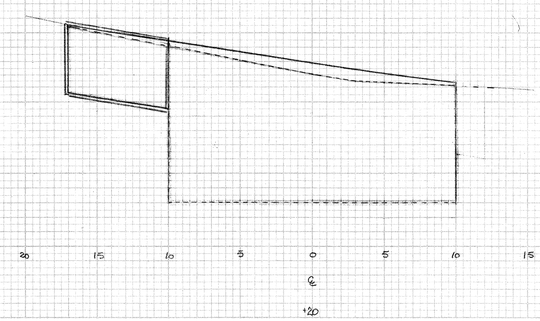
9/26-03 JDG
208.30: 104.50 + 92.50 + 197 SQ FT ✓ 174.5225 ✓ ABC 6/13/04
613.13: 35 + 59.40 + 15 + 15 + 50 + 10 = ~~184.40 SQ FT~~
203.27= 37.88 SF ✓ JDG 6/13/04
3-29-04 dkw



3-29-04 dkw
9/26-03 JDG
208.30: 102.50 + 82.50 = 185 SQ. FT. ✓ 163.1695 ✓ ABC 6/13/04
613.13: 35 + 55.60 + 15 + 15 + 40.80 + 10 = ~~171.40 SQ FT~~
203.27= 39.982 SF ✓ ABC 6/13/04
dkw 3-29-04



3-26-04 dkw
9/26-03 JDG
208.30: 101 + 26.40 + 58.10 = 185.50 SQ.FT. ✓
613.13: 147.50 + 99 = ~~246.50 SQ.FT.~~ 230.795 SF ✓ ABC 6/13/04
203.27= 32.116 SF ✓ ABC 6/13/04
3-29-04 dkw



+19.50 SAME AS +20 (208.30), 613.13

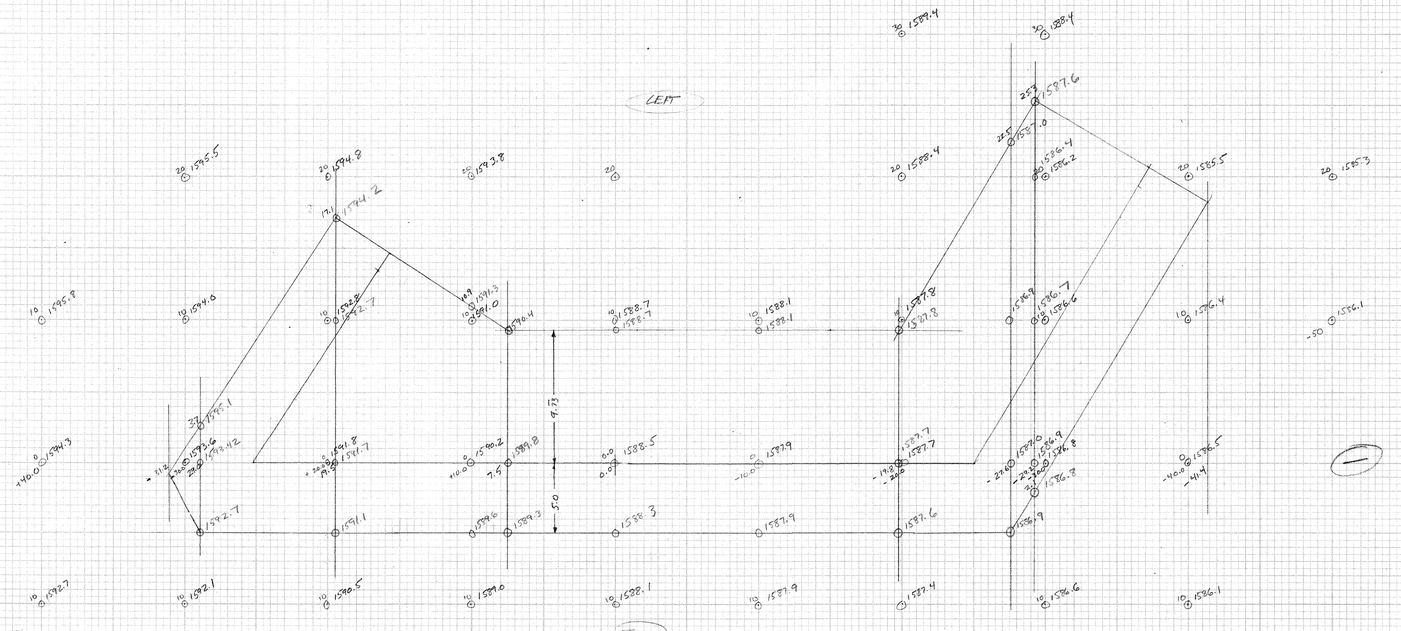
FINAL SURVEY — SURVEYED, PLOTTED, TEMPLATE, AREAS, AREAS CHECKED, NOTE BOOK, PAGE, DATE, BY

ORIGINAL SURVEY — NOTE BOOK, PAGE, DATE, BY

HIGHWAY FEDERAL AID SERIES
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PRINTOUT
PRINTED IN U.S.A.

466 AB25B P2

PLAN SKETCH BR. 25B ABUT 2.



Bottom of excavation = 1584.00 - 1.5 = 1582.5

FINAL SURVEY
ORIGINAL SURVEY
DATE
BY
SURVEYED
PLOTTED
NOTE BOOK
TEMPLATE
AREAS
NOTE SHEETS
NO.
CROSS SECTIONED

467 BR25B-AB2

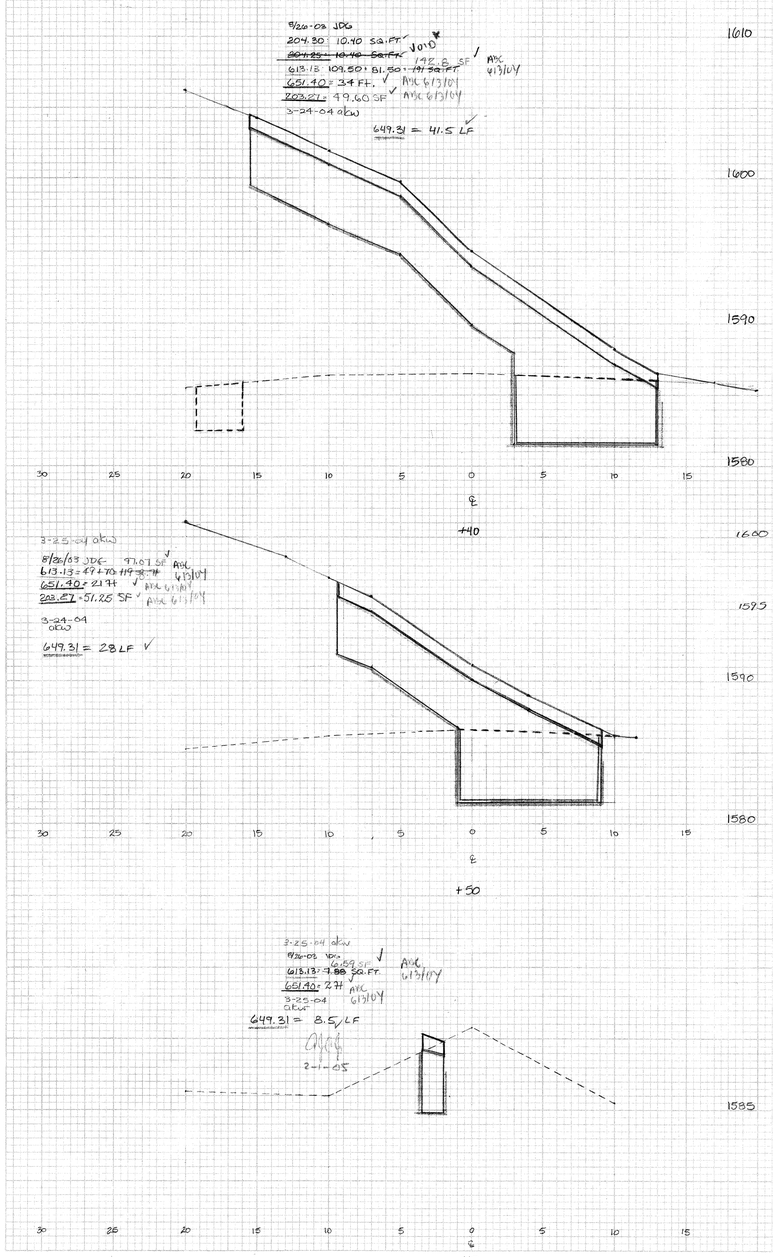
BRIDGE 25B
ABUT #2

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE: 1:5

XBR25B-8

*ITEM 204.25 CALCULATIONS
NOT BASED ON THESE SECTIONS
SEE CALCULATION SHEETS
SEE NOTE ON XBR25B-1



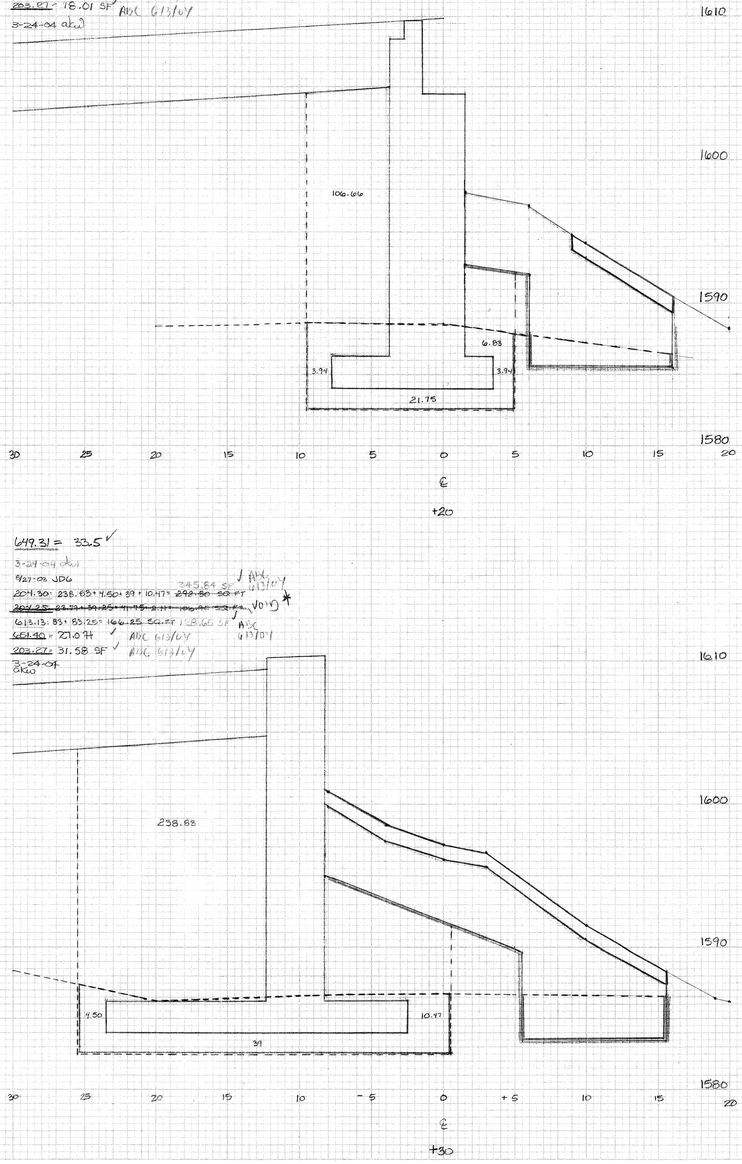
3-25-04 akw
8/26/03 JDG 97.07 SF ABC 613/04
613.13 = 49 + 70 = ~~119.38 FT~~
651.40 = 21 FT ABC 613/04
203.27 = 51.25 SF ABC 613/04
3-24-04 akw
649.31 = 28 LF

3-25-04 akw
8/26-03 JDG 6.59 SF ABC 613/04
613.13 = ~~7.88~~ SQ.FT.
651.40 = 2 FT ABC 613/04
3-25-04 akw
649.31 = 8.5 LF
2-1-05

+61 ZERO 613.13, 651.40, 649.31

649.31 = 24 LF

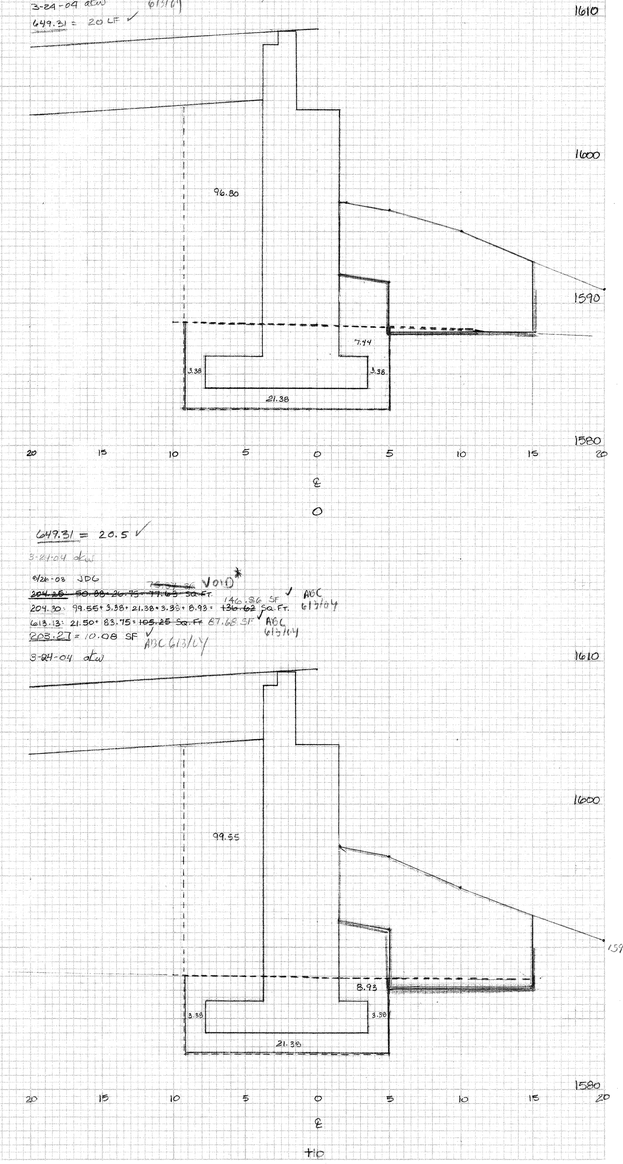
3-24-04 akw
8/26-03 JDG
204.30 = 106.66 + 3.94 + 21.75 + 3.94 + 6.83 = ~~143.12 SQ.FT.~~ 106.94 SF ABC 613/04
~~204.25 = 37.75 + 28.75 + 86.70 SQ.FT.~~ VOID*
613.13 = 27.50 + 84.50 = ~~112 SQ.FT.~~ 94.74 SF ABC 613/04
651.40 = 8.5 FT ABC 613/04
203.27 = 18.01 SF ABC 613/04
3-24-04 akw



649.31 = 33.5

3-24-04 akw
8/27-03 JDG
204.30 = 238.83 + 4.50 + 39 + 10.47 = ~~292.80 SQ.FT.~~ 345.84 SF ABC 613/04
~~204.25 = 23.79 + 39.25 + 41.75 + 2.71 = 106.90 SQ.FT.~~ VOID*
613.13 = 83 + 83.25 = ~~166.25 SQ.FT.~~ 128.65 SF ABC 613/04
651.40 = 27.0 FT ABC 613/04
203.27 = 31.58 SF ABC 613/04
3-24-04 akw

3-24-04 akw
8/26-03 JDG
~~204.25 = 52.03 + 29.60 = 81.63 SQ.FT.~~ VOID*
204.30 = 96.80 + 3.38 + 21.38 + 3.38 + 7.44 = ~~132.38 SQ.FT.~~ 143.38 SF ABC 613/04
613.13 = 21.84 = ~~105 SQ.FT.~~ 87.72 SF ABC 613/04
203.27 = 3.1 SF ABC 613/04
3-24-04 akw
649.31 = 20 LF



649.31 = 20.5

3-24-04 akw
8/26-03 JDG
~~204.25 = 50.88 + 26.95 = 77.63 SQ.FT.~~ VOID*
204.30 = 99.55 + 3.38 + 21.38 + 3.38 + 8.93 = ~~136.62 SQ.FT.~~ 146.86 SF ABC 613/04
613.13 = 21.50 + 83.75 = ~~105.25 SQ.FT.~~ 87.68 SF ABC 613/04
203.27 = 10.08 SF ABC 613/04
3-24-04 akw

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PROSTRESS
PRINTED IN U.S.A.

468 BR25B-AB2

BR25B
ABUT. #2

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5

XBR25B-9

* ITEM 204.25 CALCULATIONS NOT BASED ON THESE SECTIONS SEE CALCULATION SHEETS

SEE NOTE ON XBR25B-1

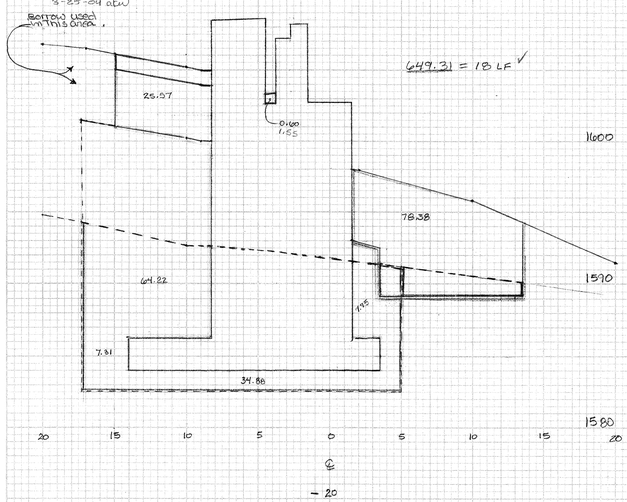
ZERO 203.27, 613.13, 651.40, 649.31 ✓

-45

3-25-04 atw
8/26-03 JDG
~~204.25: 80.11+90+45.13=223.24 Sq.Ft.~~ ✓ VOID *
204.30: 64.22+7.31+84.88+7.75+0.60= ~~144.76 Sq.Ft.~~ 188.33+1.55=189.88 SF ✓ ABC 613/04
613.13: 9+84.58= ~~93.58~~ Sq.Ft. 25.57+78.38=103.95 SF ✓ ABC 613/04
651.40=7 FT ✓ ABC 613/04
203.27=14.42 SF ✓ ABC 613/04
3-25-04 atw

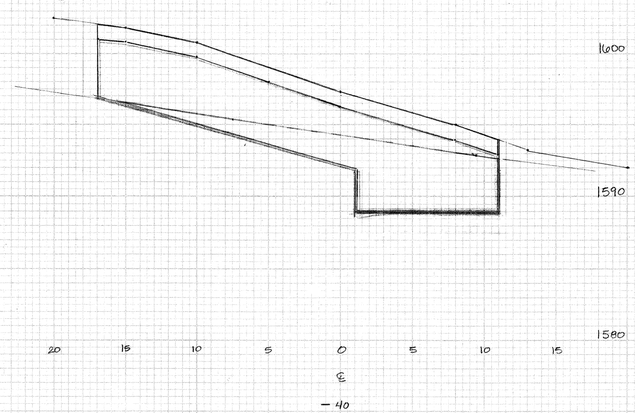
Borrow used in this area.

649.31 = 18 LF ✓



3-23-04 atw
8/26-03
613.13: 101+57.5= ~~158.80 Sq.Ft.~~ 153.11 SF
203.27=60.64 SF ✓ ABC 613/04
651.40=34 ft ✓ ABC 613/04
3-23-04 atw

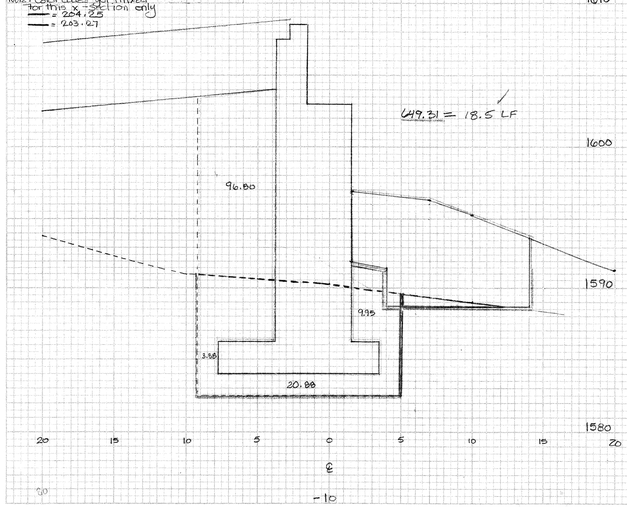
649.31 = 35 LF ✓



atw 3-25-04
atw 3-25-04
8/26-03 JDG
~~204.25: 79.69+37.13=111.82 Sq.Ft.~~ VOID *
204.30: 96.80+3.38+20.88+9.95= ~~131.01 Sq.Ft.~~ 139.11 SF ✓ ABC 613/04
613.13: 15+83= ~~98 Sq.Ft.~~ 79.97 SF ✓ ABC 613/04
203.27=4.65 SF ✓ ABC 613/04

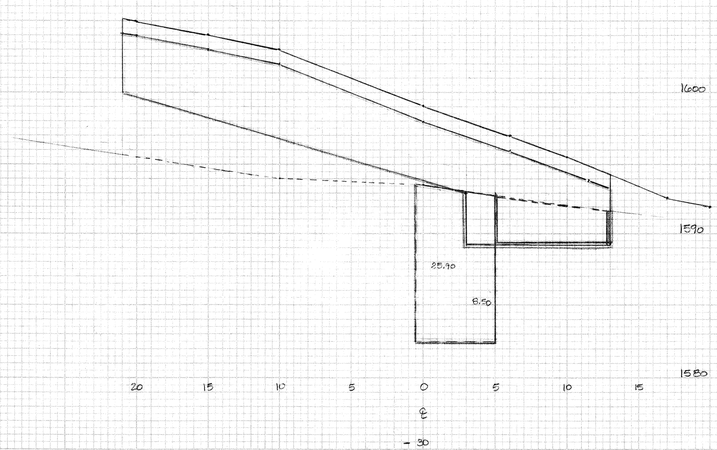
Note: color codes got mixed for this x-section only
— = 204.25
— = 203.27

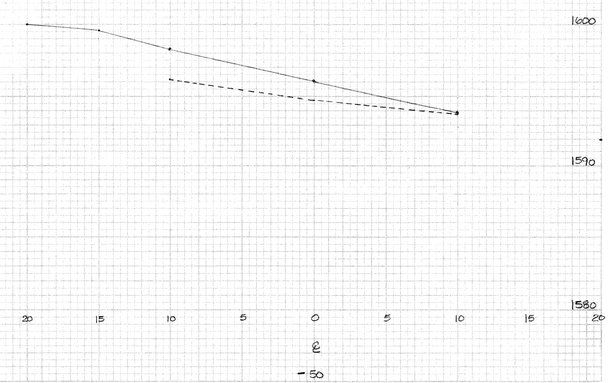
649.31 = 18.5 LF ✓



3-23-04 atw
8/26-03 JDG
~~204.25: 5.53+53.25=58.78 Sq.Ft.~~ VOID *
204.30: 25.90+8.50= ~~34.40 Sq.Ft.~~ 53.48 SF ✓ ABC 613/04
613.13: 125+64= ~~189 Sq.Ft.~~ 164.3 SF ✓ ABC 613/04
203.27=22.28 SF ✓ ABC 613/04
651.40=35.5 ft ✓ ABC 613/04
3-23-04 atw

649.31 = 42 LF ✓





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NOTE BOOK
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HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PRINTPAST
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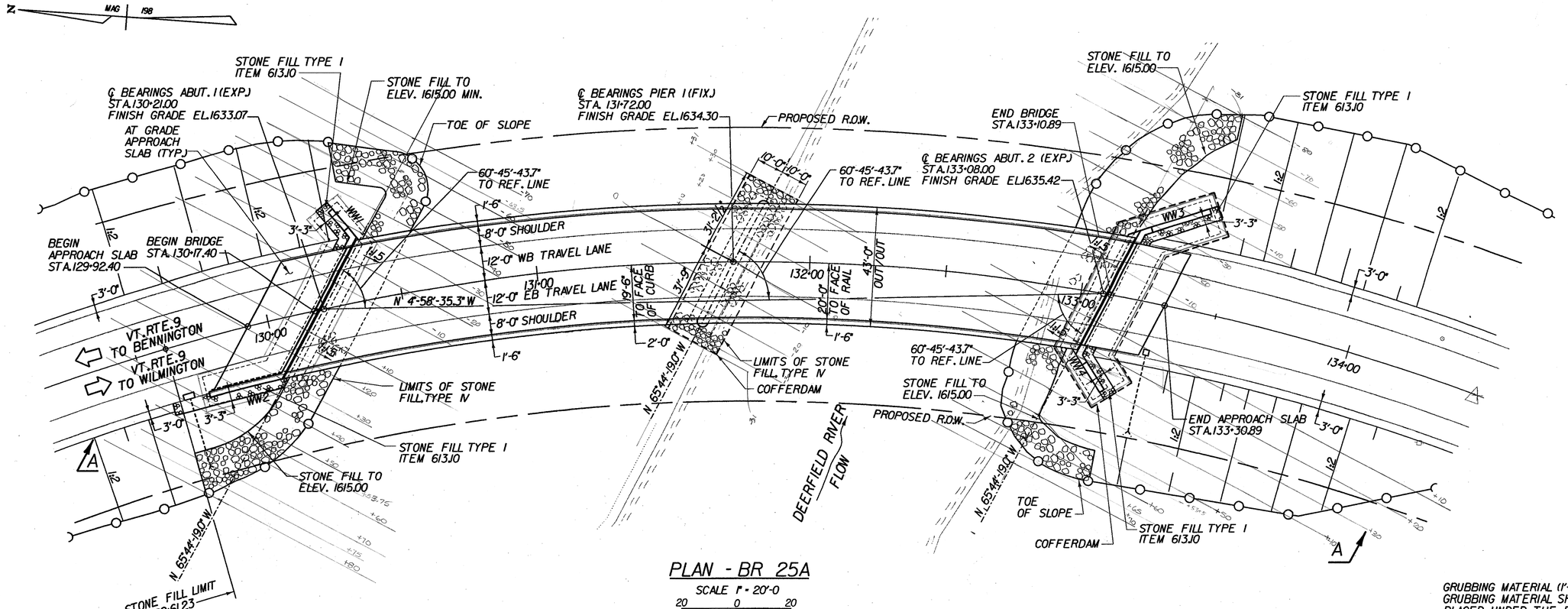
469 BR25B AB2



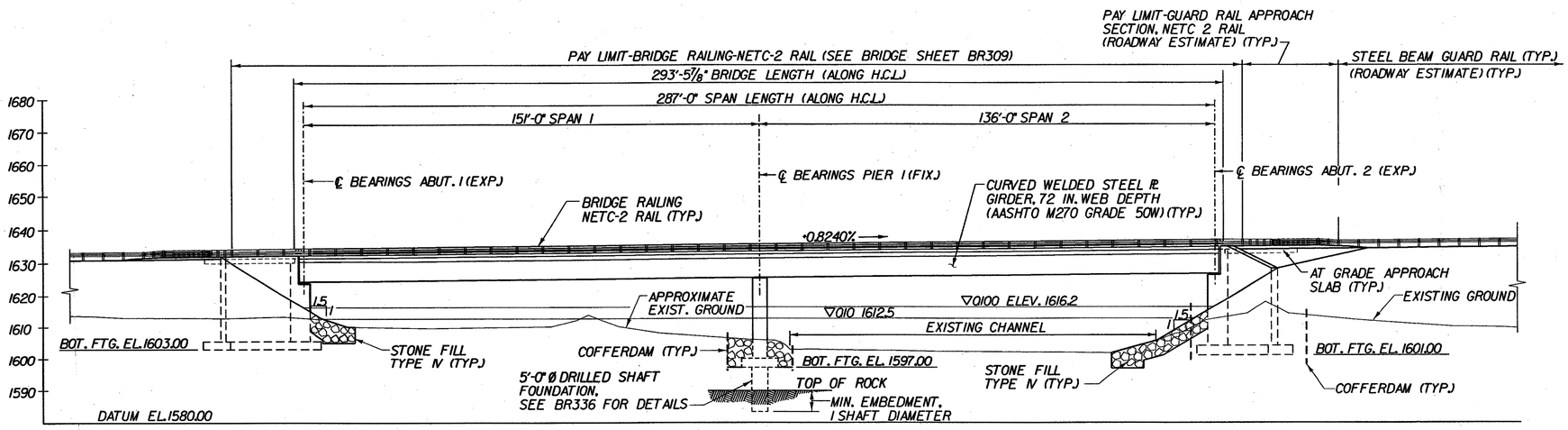
PLAN - BR 25A

SCALE 1" = 20'-0

20 0 20

CURVE DATA

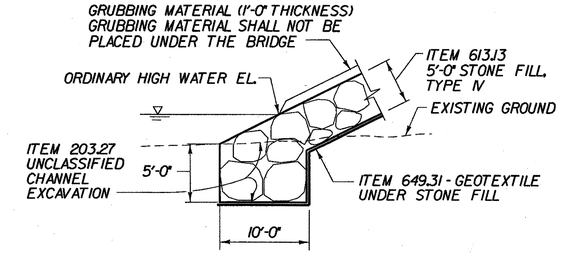
REV P.C. = STA. 127+03.30
REV P.T. = STA. 134+48.830
Δ = 55°-55'-38.86" RT
R = 763.94'
Dc = 7°-30'
L = 745.70'
T = 405.58'
E = 100.99'
BANK: 0.0800 FT/FT



ELEVATION A-A - BR 25A

SCALE 1" = 20'-0

20 0 20



TYPICAL EMBANKMENT PROTECTION DETAIL

(NOT TO SCALE)

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of SEARSBURG	Bridge No. 25A
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta.

VT. RTE. 9 OVER DEERFIELD RIVER

PLAN AND ELEVATION - BR 25A

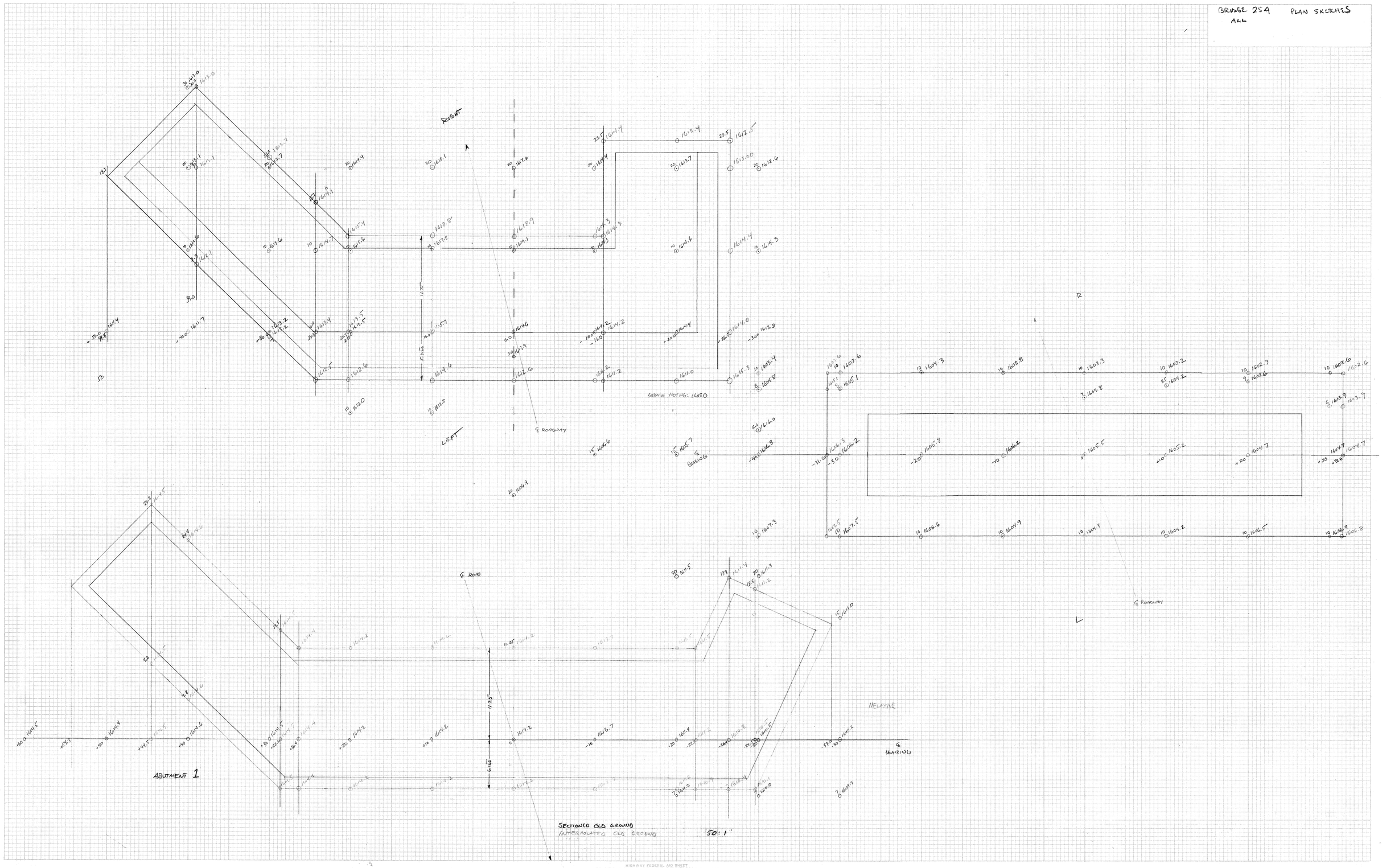
Designed By D. VIENI	Drawn by K. DETRICK / WmWEATHERBY
Checked By M. OLSTAD Date 2/2002	Bridge Design Supervisor M. OLSTAD Date 2/2002
PROJECT SEARSBURG - WILMINGTON	PROJECT NO. NHF 010-1(18)
I.G.C. Info.	
Bridge Sheet No. BR300	Sheet ~~165~~ OF 435

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
3 WINNERS CIRCLE ALBANY, NEW YORK, 12205

FILE NAME = ug\1755\MSTN\15\BRD025A\25A_PLN_ELE20.DGN
DATE/TIME = 02/20/02 12:22:25
USER =

470 BR 25A

BRIDGE 25A PLAN SKETCHES
ALL



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BY
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HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
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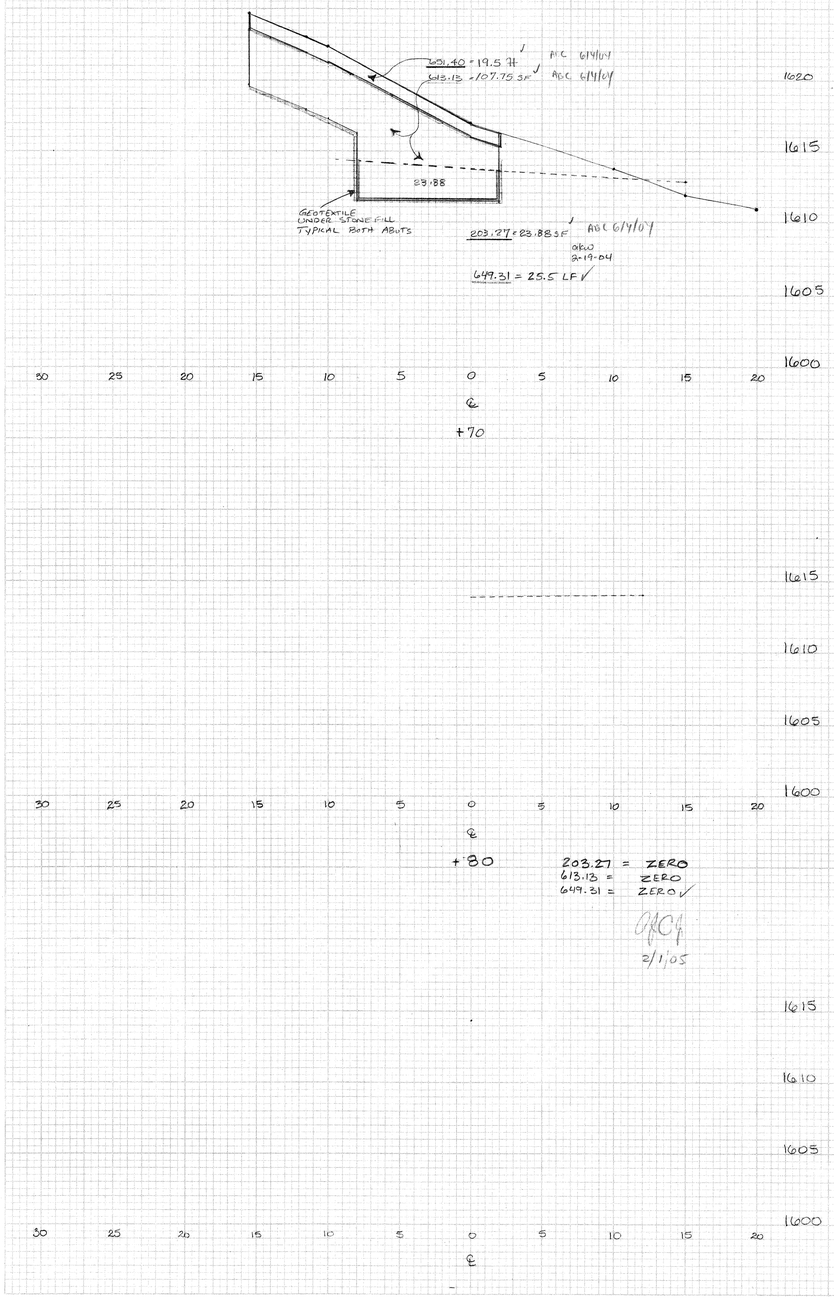
471 BR25A

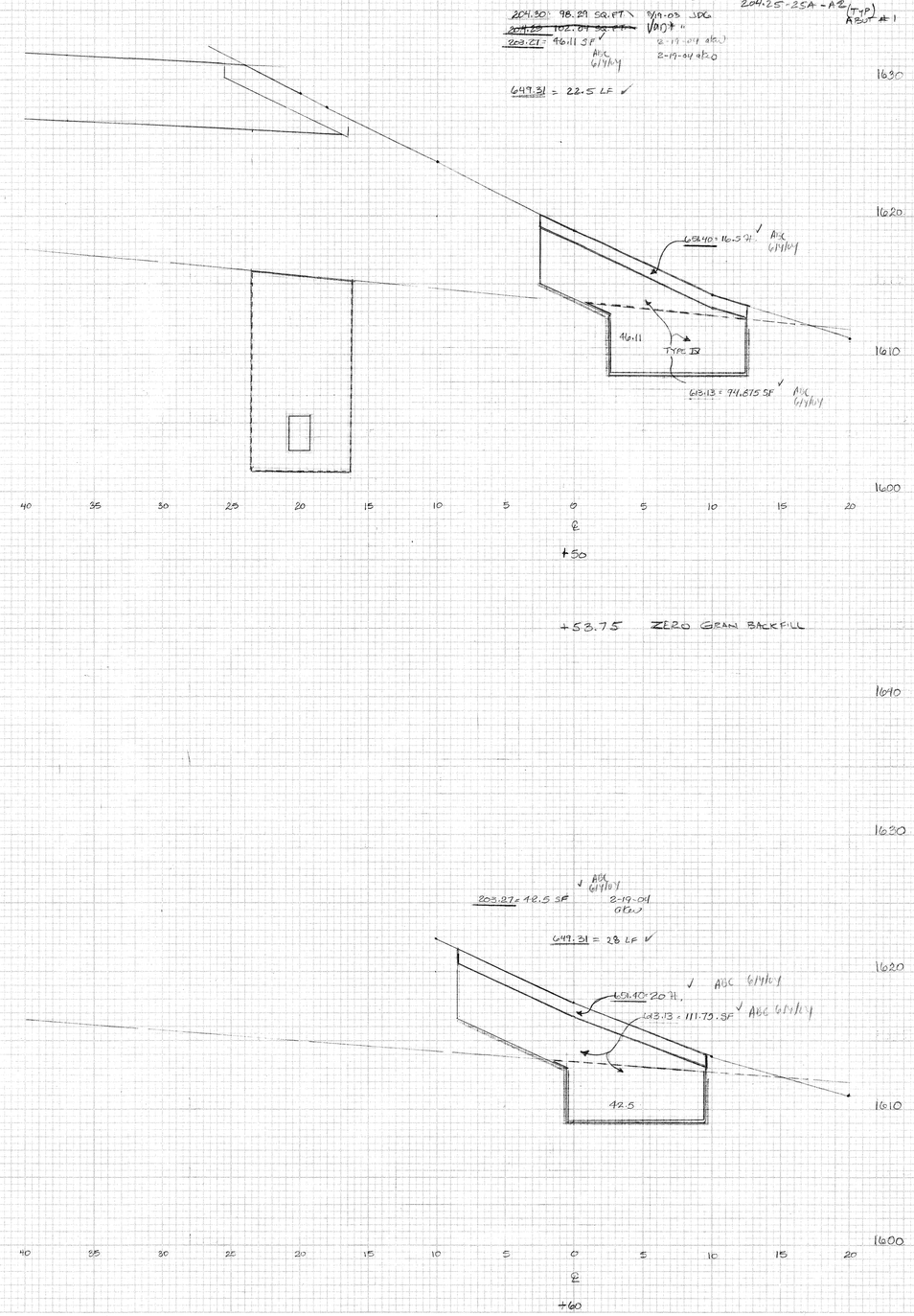
BRIDGE 25A
ABUT #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5 XBR25A-1

* ITEM 204.25 CALCULATIONS NOT BASED ON THESE SECTIONS
SEE CALCULATION SHEETS IN BRIDGE COMP. BINDER 204.25-25A-A1 & A1-2
204.25-25A-A2 (TYP) ABUT #1





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TEMPLATE
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HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PARKWAY
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472 BR25A-AB1

BR25A
ABUT #1

SEARSBURG - WILMINGTON
NH-R010-1(18)

SCALE 1:5

XBR25A-2

* ITEM 204.25 CALCULATIONS NOT BASED ON THIS SECTION)
SEE CALCULATION SHEETS
SEE NOTE ON XBR25A-1

~~204.25 259.21~~ ~~SQ.FT~~ VOID *
204.30: 253.80 + 7.50 + 33.38 + 6.88 + 9.38 + 39.88 + 350.79 SQ.FT. 343.52 SF ✓ 6:1 EW ABC 8/20-08 JDG
~~208.27~~ = 96.50 SF ✓ 2:1 EW 2:1 7-04 ABC 6-4.04

649.31 = 23 LF ✓

651.90 = 18 ft ✓
643.13 = 163.085F ✓ 2:1 8-04 alcw 6/4/04 ABC

253.80

39.88
9.38
7.50
6.88
33.38
TYPE IV
96.50

1640
1630
1620
1610
1600

40 35 30 25 20 15 10 5 0 5 10 15 20
℄

+30

~~204.25 ~~ VOID *
204.30: 252.33 + 8.13 + 33.38 + 6.88 + ~~58.54~~ 59.24 = ~~359.70~~ 386.73 SQ. FT. ABC 6/4/04 8/19-03 JDG
~~208.27~~ = 99.79 SF ✓ ABC 6/4/04 alcw 2-17-04

649.31 = 36 LF ✓ BK 2/11/05

651.90 = 30 ft ✓ ABC 6/4/04
643.13 = 156.16 SF ✓ alcw 3-11-04 ABC 6/4/04

252.33

58.24
8.13
6.88
33.38
TYPE IV
99.79

1640
1630
1620
1610
1600

40 35 30 25 20 15 10 5 0 5 10 15 20
℄

+40

+10

~~204.25 ~~ VOID *
204.30: 175.40 + 5 + 27.75 + 5 + 5 + 18.85 = ~~237~~ 234.75 SQ.FT. 8/19-03 JDG 8-19-04 alcw
~~208.27~~ = 37.97 SF ✓ ABC 6/4/04 alcw 2-17-04

649.31 = 19 LF ✓

651.40 = 5.97 ft ✓ 2-18-04 alcw
643.13 = 82.16 SF ✓ ABC 6/4/04

175.40

18.85
5
5
5
5
27.75
TYPE IV
37.97

1640
1630
1620
1610
1600

40 35 30 25 20 15 10 5 0 5 10 15 20
℄

+20

ORIGINAL SURVEY
NOTE BOOK
SURVEYED
PROJECT NO.
TEMPLATE
AREA
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DATE
NO.

FINAL SURVEY
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SURVEYED
PROJECT NO.
TEMPLATE
AREA
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HIGHWAY PEDDICAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
DIFFERENCE EXISTENCE
PRINTED IN U.S.A.

BR 25A
ABUT #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5

XBR25A-3

* ITEM 604.25 CALCULATIONS NOT BASED ON THESE SECTIONS SEE CALCULATION SHEET

SEE NOTE ON XBR25A-1

~~204.25 197.40 SQ.FT.~~ VOID *

204.30: 176.80 + 5 + 27.75 + 5 + 20.86 = ~~229.41~~ 284.91 SQ.FT.

203.27a 28.29 SF ✓

ADL 6/4/04

2-19-04 ADL

244.32 SF ✓

ADL 6/4/04

8/20-03 JDL

2-19-04 ADL

649.31 = 19 LF ✓

613.13 = 84.13 SF ✓ ADL 6/4/04

176.80

20.34

TYPE IV 28.69

5 5 27.75

1640 1630 1620 1610 1600

40 35 30 25 20 15 10 5 0 5 10 15 20

℄

~~204.25 229.78~~ VOID *

204.30 30.40 + 5.63 + 37.88 + 7.88 + 3.80 + 58.40 = ~~119.75~~ 196.08 SF ✓

203.27a 18.60 SF

8-19-04 ADL

ADL 6/4/04

ADL 6/4/04

8/20-03 JDL

649.31 = 30 LF ✓

613.13 = 125.13 SF ADL 6/4/04 ✓ ADL 6/4/04 2-19-04

36.40

58.40

18.60

TYPE IV

5.63 3.80 7.88 37.88

1640 1630 1620 1610 1600

40 35 30 25 20 15 10 5 0 5 10 15 20

℄

10

~~204.25 197.40 SQ.FT.~~ VOID *

204.30: 187.40 + 5 + 27.75 + 5 + 21.43 = 246.58 SQ.FT. ✓

203.27a 30.91 SF ✓

244.32 SF ✓

ADL 6/4/04

8/20-03 JDL

2-19-04 ADL

ADL 6/4/04

649.31 = 19.5 LF ✓

613.13 = 89.18 SF ✓ ADL 6/4/04

187.40

21.48

TYPE IV 30.41

5 5 27.75

1640 1630 1620 1610 1600

40 35 30 25 20 15 10 5 0 5 10 15 20

℄

0

~~204.25 188.20 SQ.FT.~~ VOID *

204.30: 194 + 5 + 27.75 + 5 + 19.73 = 251.48 SQ.FT. ✓ 8/20-03 JDL

203.27 = 29.50 SF ✓ ADL 6/4/04 atw 2-19-04

ADL 6/4/04 atw 2-19-04

649.31 = 19 LF ✓

613.18 = 80.6 SF ADL 6/4/04 atw 2-19-04 ✓

194.00

19.73

24.50

TYPE IV

5 5 27.75

1640 1630 1620 1610 1600

40 35 30 25 20 15 10 5 0 5 10 15 20

℄

-20

ORIGINAL SURVEY
NOTE BOOK
NO.
FINAL SURVEY
NOTE BOOK
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AREAS
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HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
REVISED 7/22/77/79
PRINTED IN U.S.A.

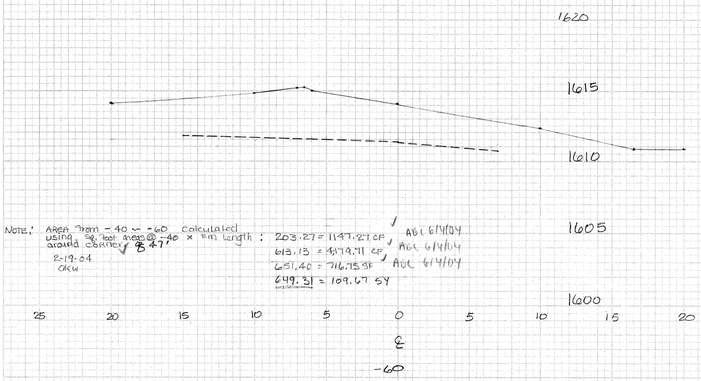
474 BR-25A-AB1

BRIDGE 25A
ABUT #1

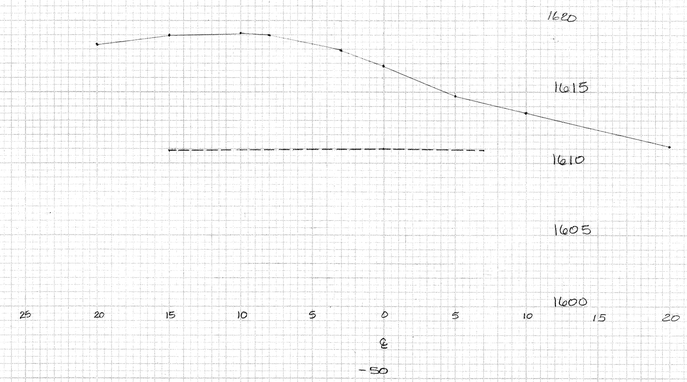
SEARSBURG - WILMINGTON
NH-F010-1(18)

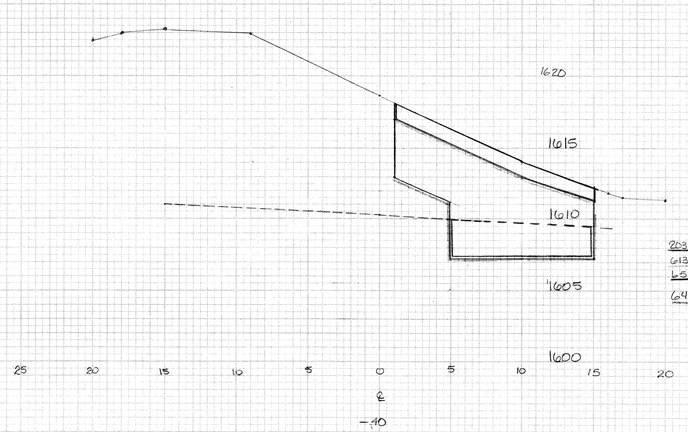
SCALE 1:5

XBR25A-4



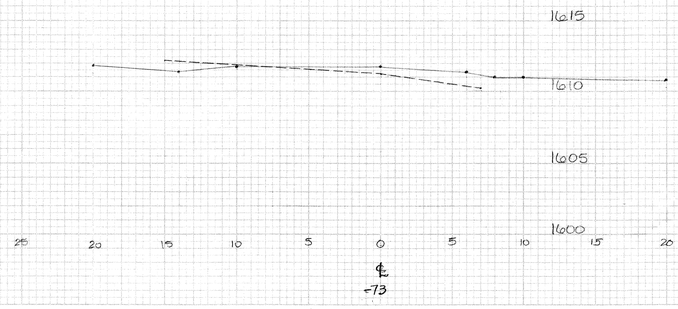
NOTE: AREA from -40 ~ -60 calculated using sq. foot meters @ -40 x ±m length : 203.27 = 1147.27 CF ✓ ABC 6/4/04
around corner ✓ 8.47'
2-19-04
OKW
613.13 = 4179.71 CF ✓ ABC 6/4/04
651.40 = 716.75 SF ✓ ABC 6/4/04
649.31 = 109.67 SY
Long Sub Meters





203.27 = 24.41 SF ✓ ABC 6/4/04
613.13 = 88.73 SF ✓ ABC 6/4/04
651.40 = 15.25 SF ✓ ABC 6/4/04
649.31 = 21 LF ✓

GJC 2/1/05



FINAL SURVEY
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NOTE BOOK NO.
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HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
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475 BR25A-AB1

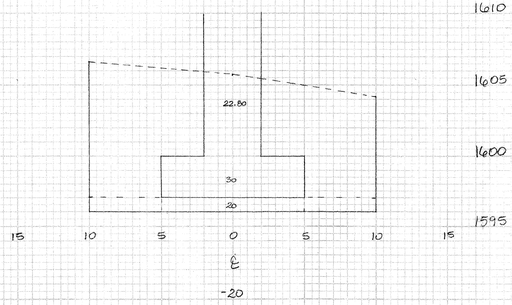
BRIDGE 25A
PIER

SEABOARD - WILMINGTON
NH-F010-1(18)

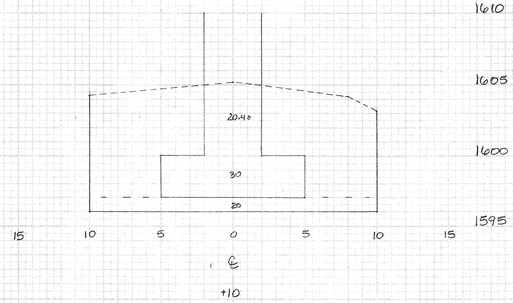
SCALE 1:5

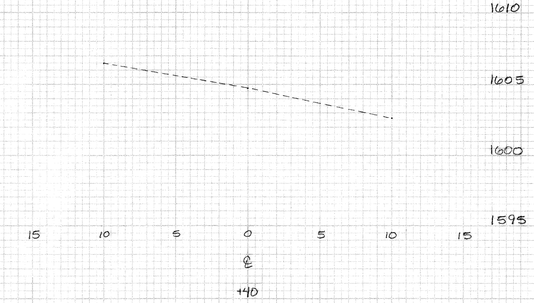
XBR25A-5

208.30 - 101.75 + 90 = 191.75 SF 8/20/03 JDB
613.13: 191.75 - (20+30+22.80) = 118.95 SQ FT 3-31-04 dbl

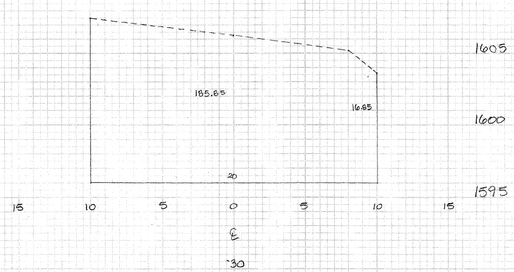


208.30 88+69.60+15.40 = 173 SQ FT 8/20-03 JDB
613.13: 173 - (20.40+30+20) = 102.60 SQ FT 3-31-04 dbl

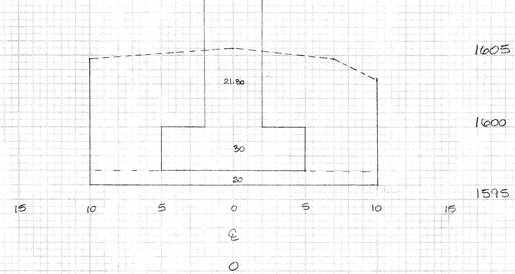




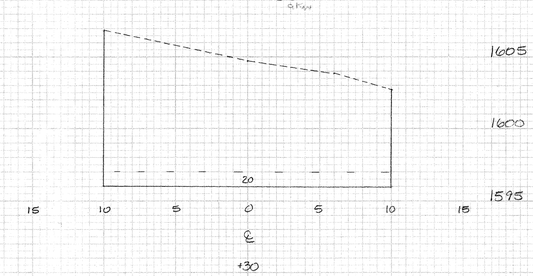
208.30 185.85 + 16.85 = 202.70 8/20-03 JDB
613.13: 202.70 - 20 = 182.70 SQ FT 3-31-04 dbl



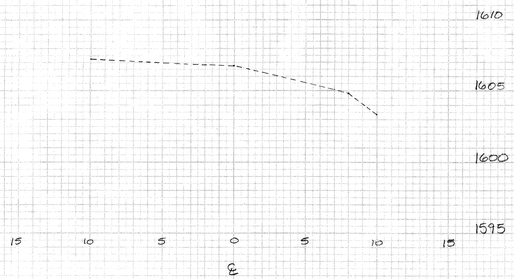
3-31-04 dbl
208.30 91.56 + 68.88 + 24 = 179.58 SQ FT 8/20-03 JDB
613.13: 179.58 - (21.80+30+20) = 107.80 SQ FT

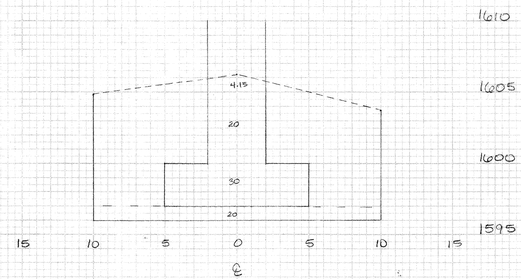


208.30 97.75 + 49.95 + 29.30 = 177.00 SQ FT 8/20-03 JDB
613.13: 177.00 - 20 = 157.00 SQ FT 3-31-04 dbl

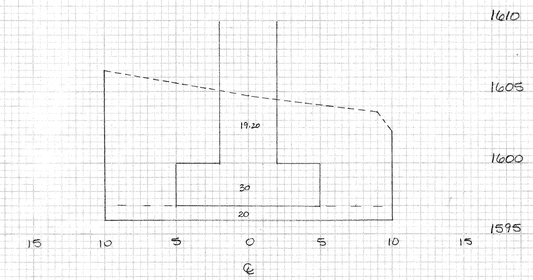


3-31-04 dbl
208.30 95 + 89.75 = 185.25 SQ FT 8/20-03 JDB
613.13: 185.25 - (20+30+20+4.15) = 111.10 SQ FT





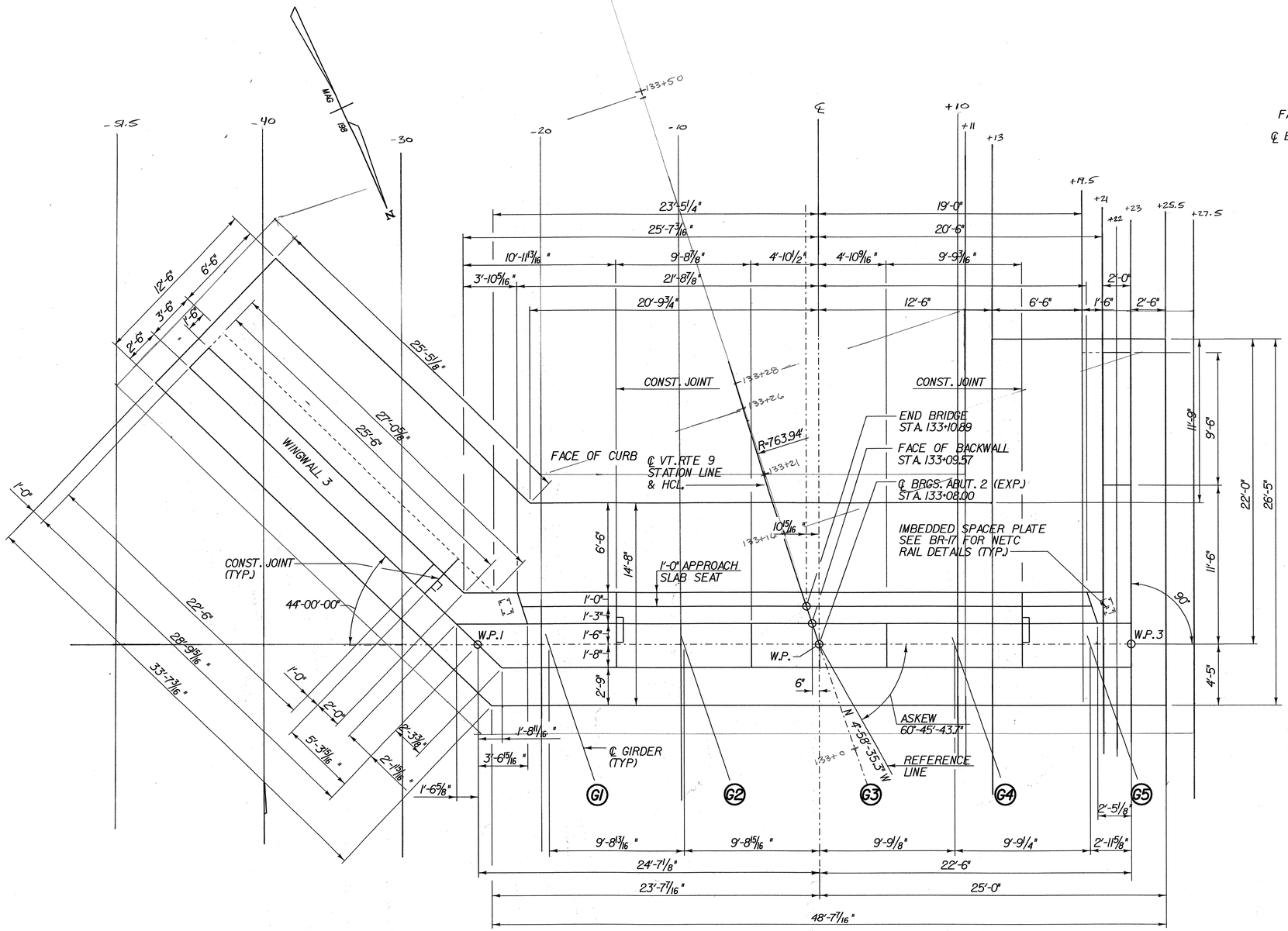
3-31-04 dbl
208.30 98.25 + 71.55 + 6.95 = 174.43 SQ FT 8/20-03 JDB
613.13: 174.43 - (20+30+19.20) = 105.23 SQ FT



ORIGINAL SURVEY
FINAL SURVEY
NOTE BOOK
NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

HIGHWAY PERSONAL AID SHEET
PLATE 5-FULL CROSS SECTION-FULL LINE
PERSONAL PROPERTY
PRINTED IN U.S.A.

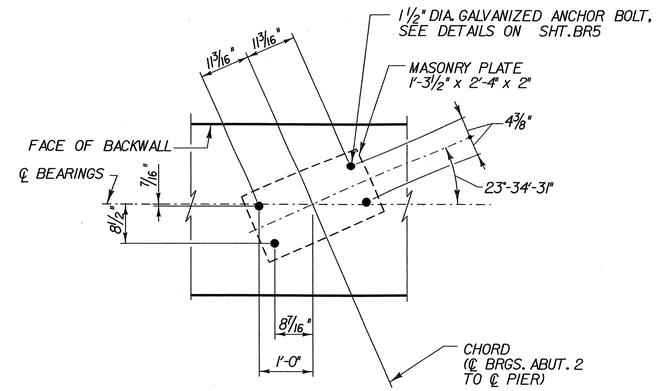
476 BR25A-P1



ABUTMENT 2 REDESIGN PLAN - BR 25A

SCALE 1/4" = 1'-0

1 0 2 4 6



PLAN-ANCHOR BOLT LAYOUT-ABUTMENT 2

SCALE 3/4" = 1'-0

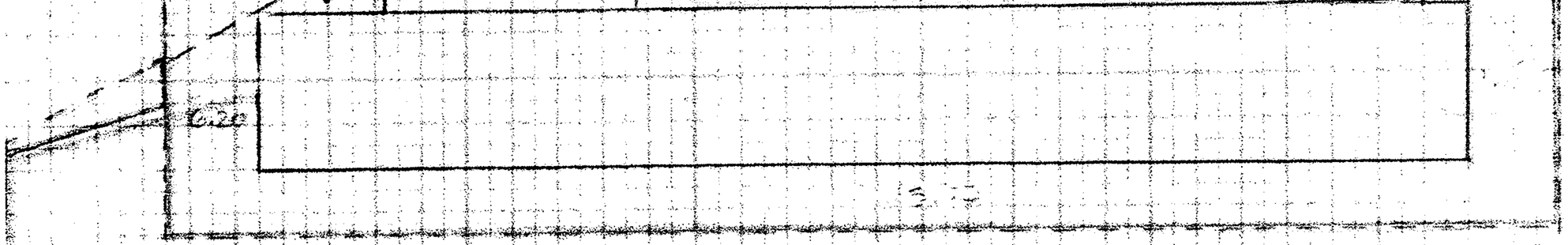
1 0 2

NOTES:

1. FOR BEARING DETAIL SEE BRIDGE DRAWING BR5 AND BR7.
2. FOR CONSTRUCTION JOINT DETAIL, SEE BRIDGE DRAWING BR15.

SHEET NAME: ABUTMENT 2 REDESIGN PLAN VIEW	
PROJECT NAME: SEARSBURG	HIGHWAY NO.: ROUTE 9
PROJECT NUMBER: NH F 010-1(18)	BRIDGE NO.: 25A
	OVER: THE DEERFIELD RIVER
FILE NAME: /str4/78d096/25 abut2.dgn	PLOT DATE: 19-FEB-2003
PROJECT MANAGER: R.WHITCOMB	DRAWN BY: J.GILMORE
DESIGNED BY: CH&A LLP	IPARM NAME: br327
BRIDGE SHEET NUMBER: BR327	SHEET ~~191~~ OF 435

477 BR 25A AB 2



204.30 = 172 ⊕ ✓ +21

204.30 = 425.75 ⊕ ✓ +19.5

204.30 = 425.75 ⊕ ✓ +13 SAME AS +19.5

5 0 5 10 15 20 25 3

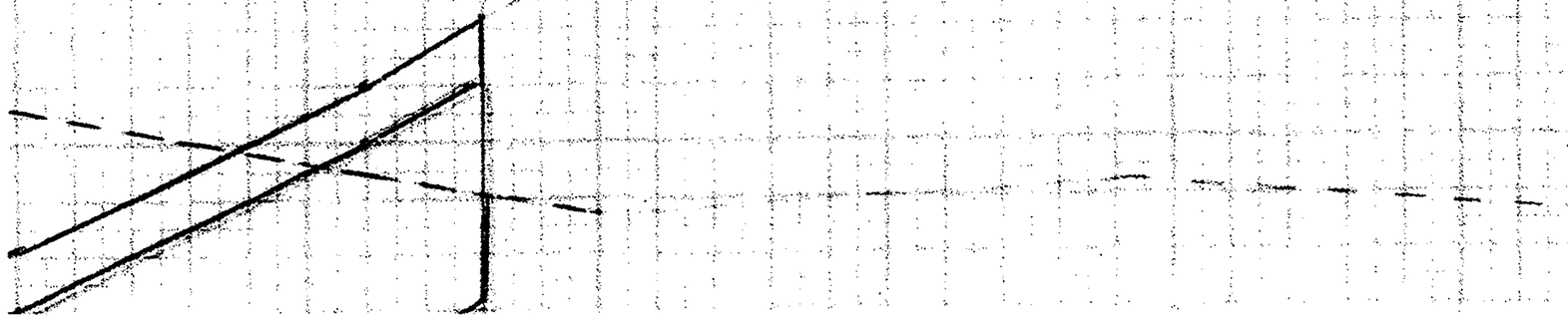
℄

2-22-05

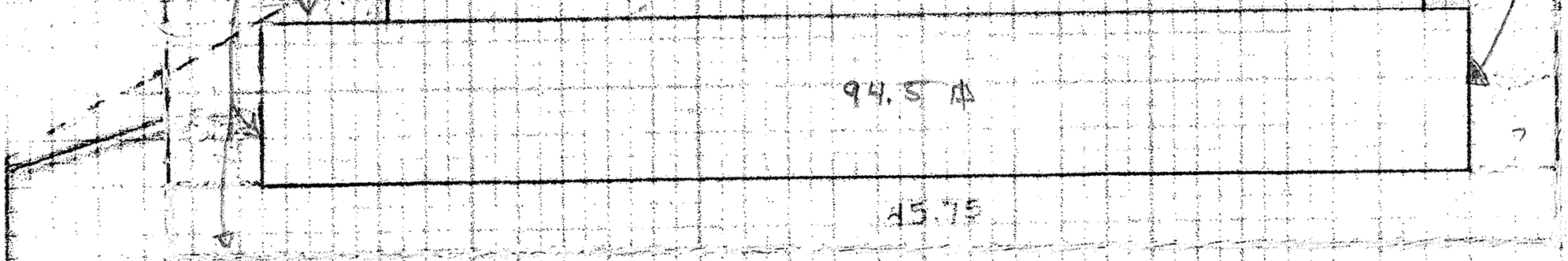
+20

+22.7 BUTT 204.25
SAME AS +20

+27.5 BUTT 204.30



478A-BR25A ABZ

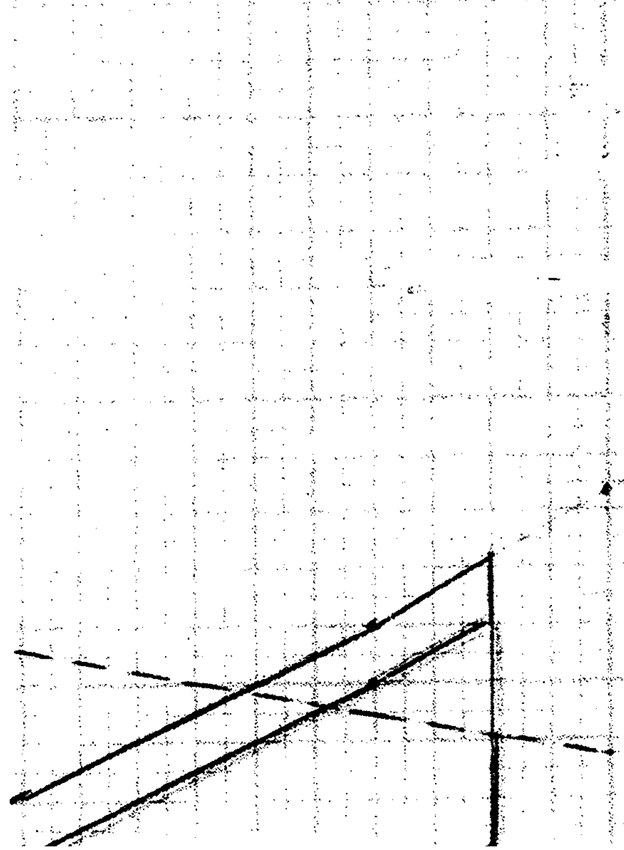


204.30 = 591.75 Δ ✓
204.30 = 591.75 Δ ✓
204.30 = 204.5 Δ ✓

+25.5
+23 SAME AS +25.5
+22

5 0 5 10 15 25

2/23/05



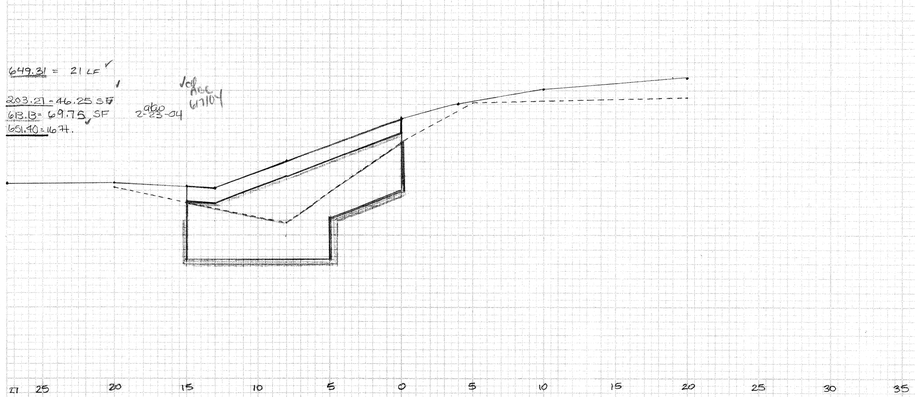
478 · BR25A ABZ

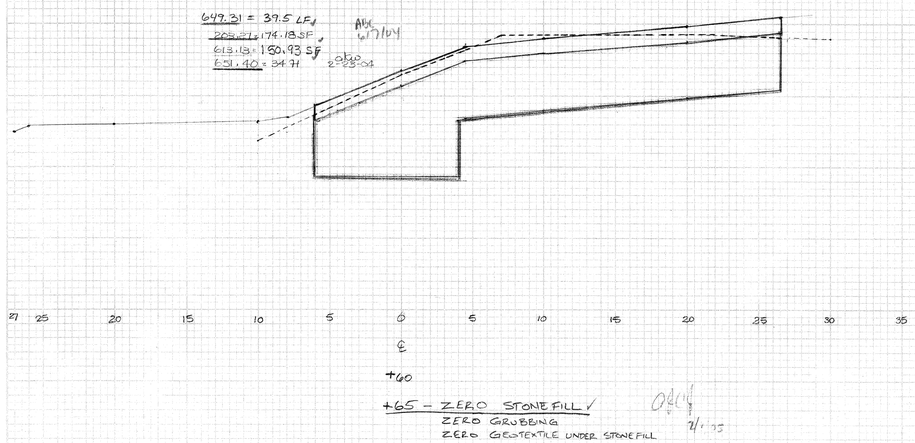
BRIDGE 25A
ABUTMENT 2

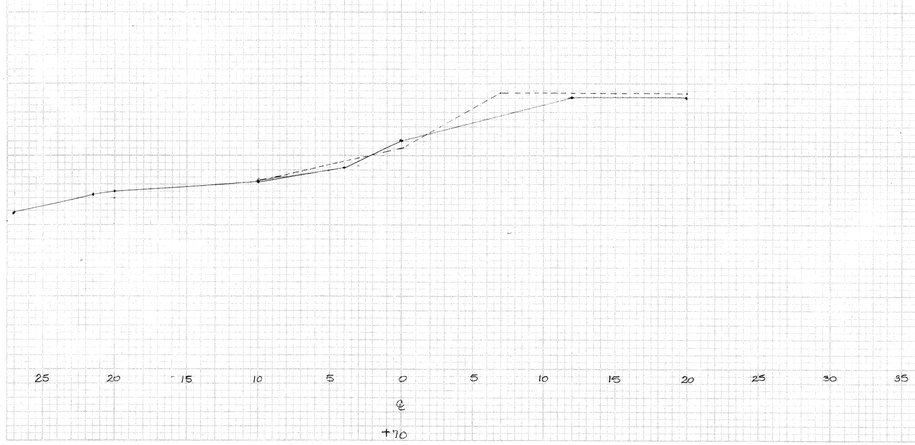
SEARSBURG - WILMINGTON
NH-F010-1(18)

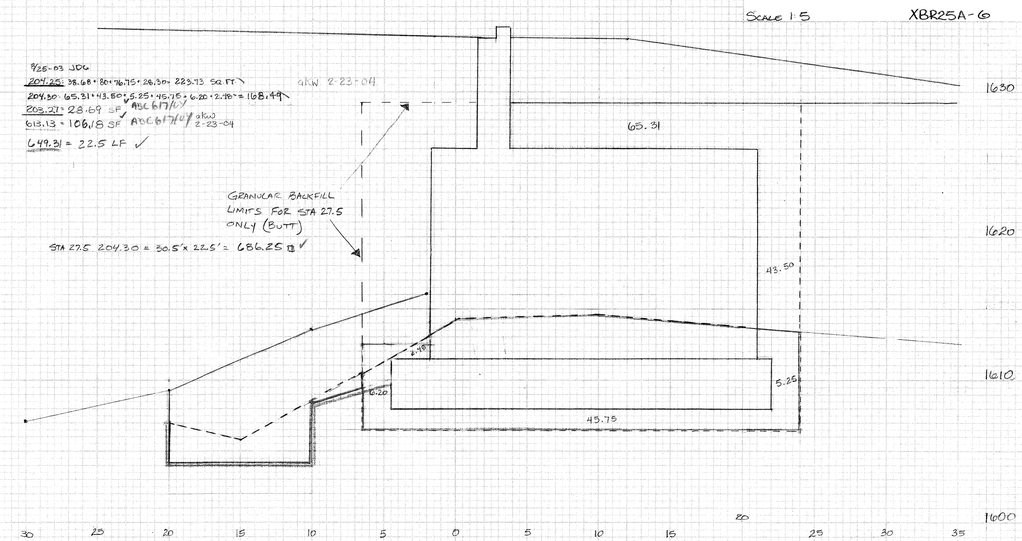
SCALE 1:5

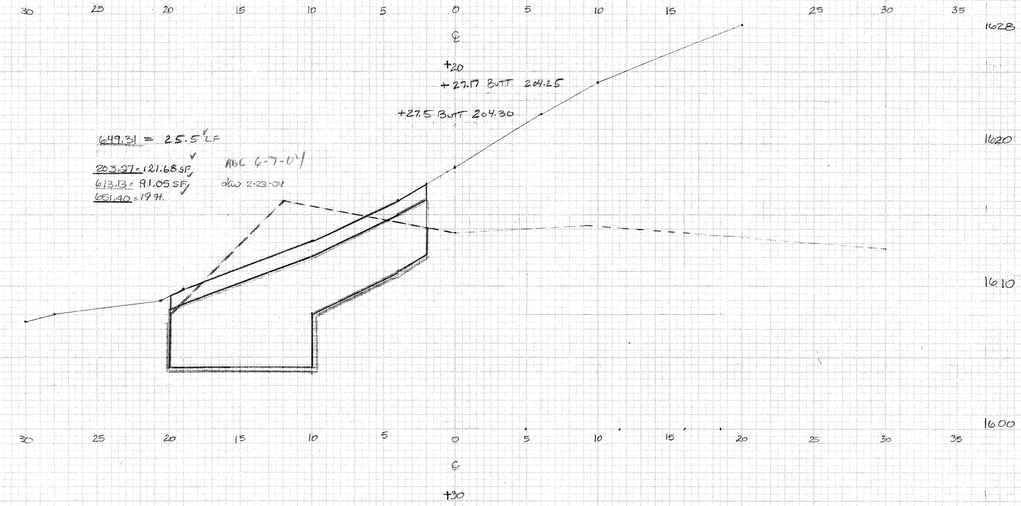
XBR25A-6

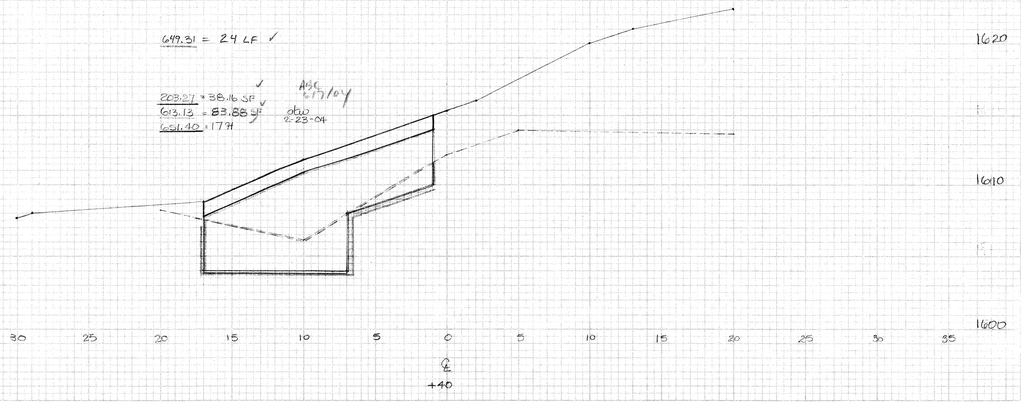












FINAL SURVEY

ORIGINAL SURVEY

HIGHWAY FEDERAL AID SHEET
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PROMPTCOST
PRINTED IN U.S.A.

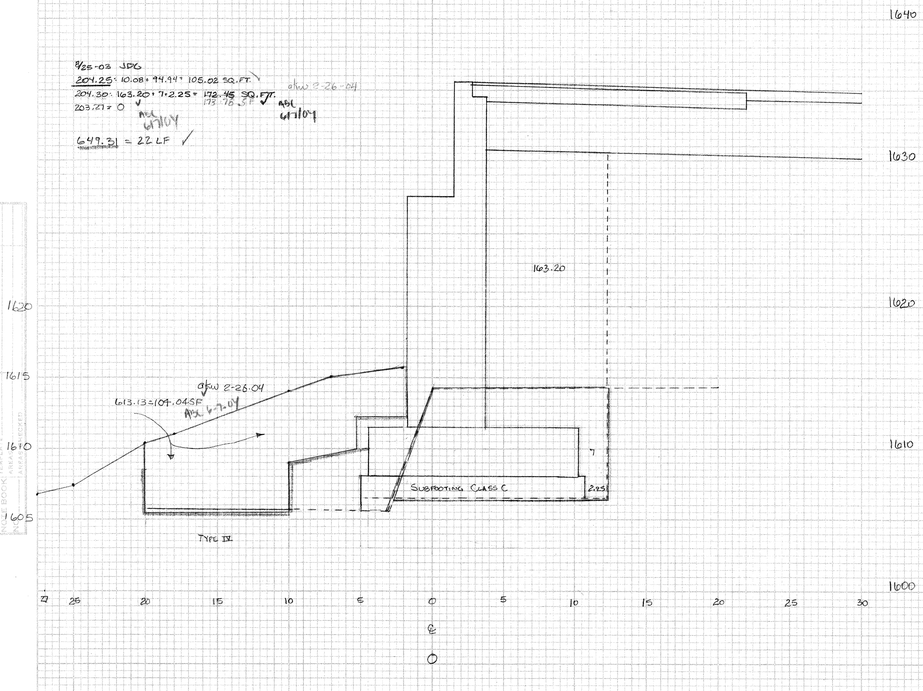
478c BR25A AB2

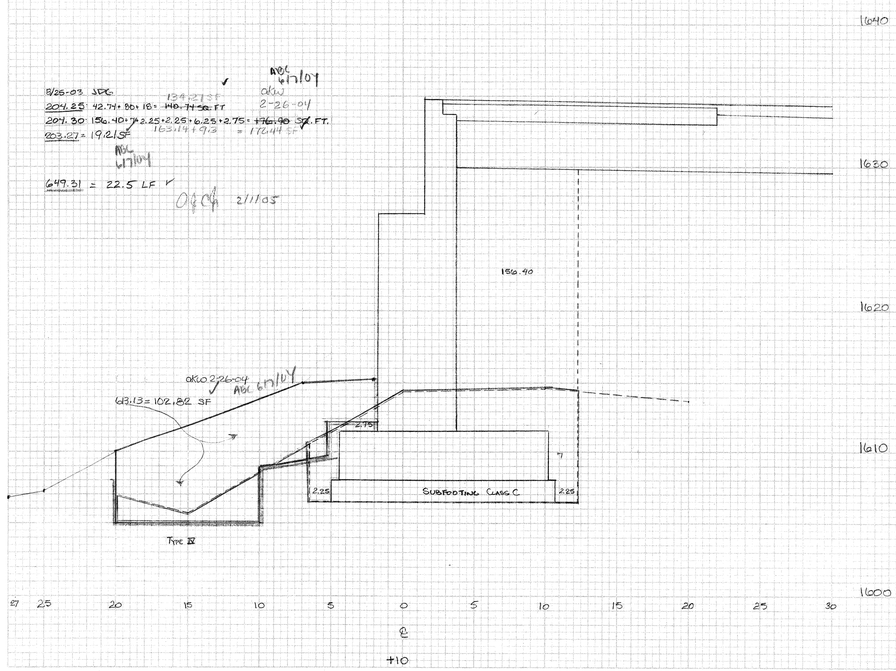
BR25A
ABUT #2

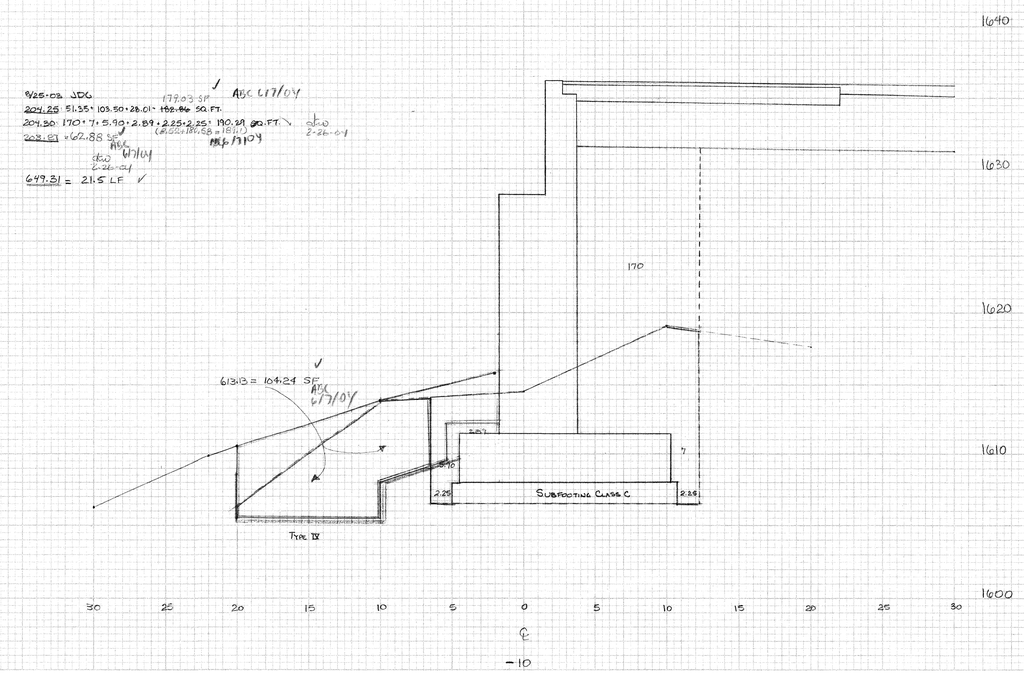
SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5

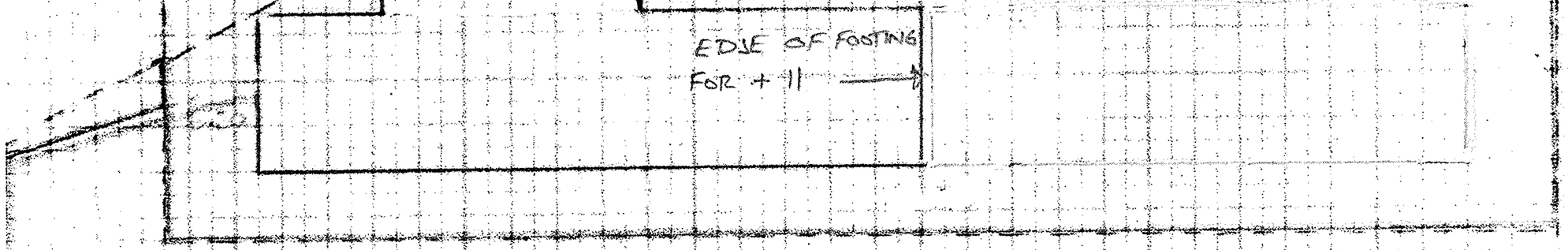
XBR25A-7



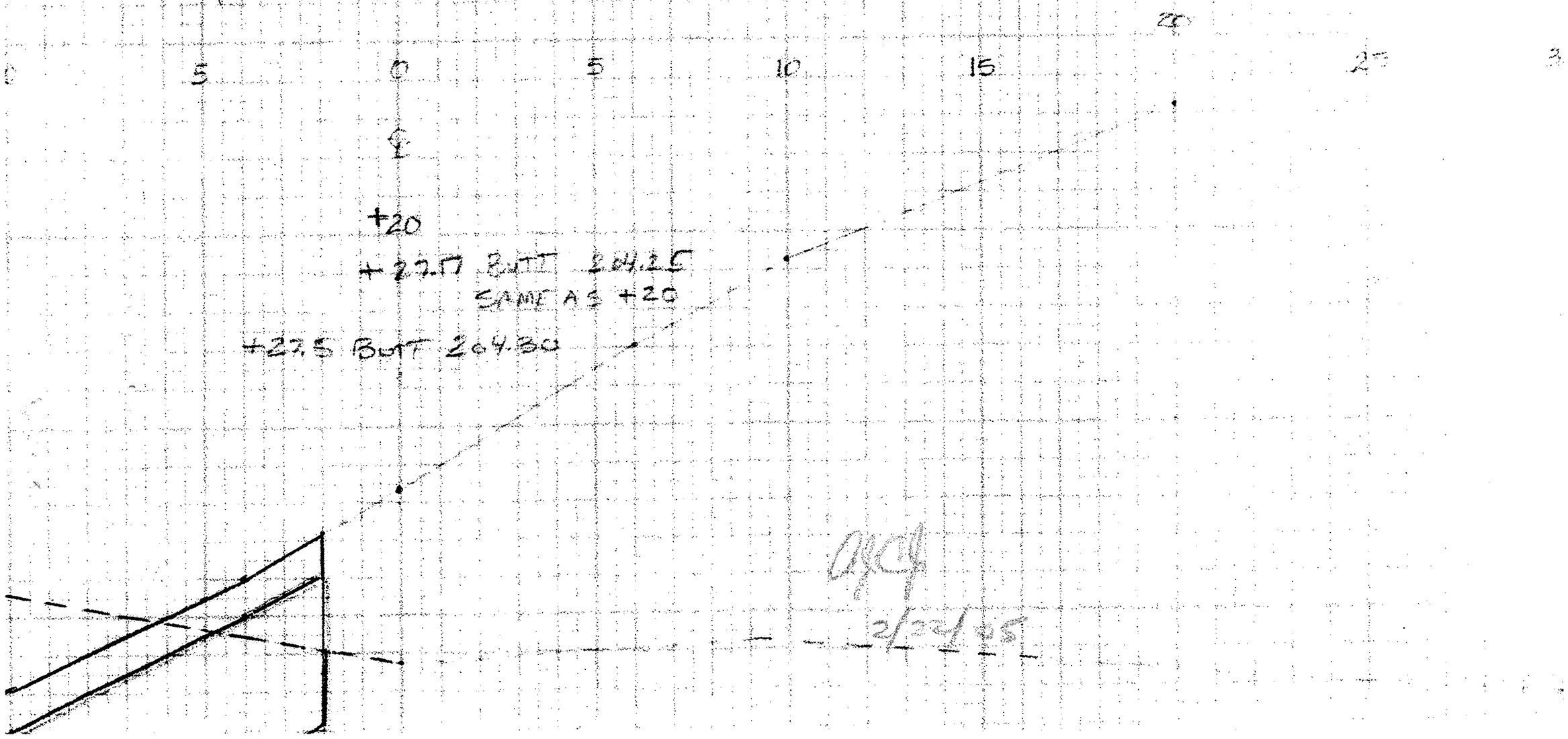




479 BR25A AB 2



204.30 = 476.5 ✓ + 11



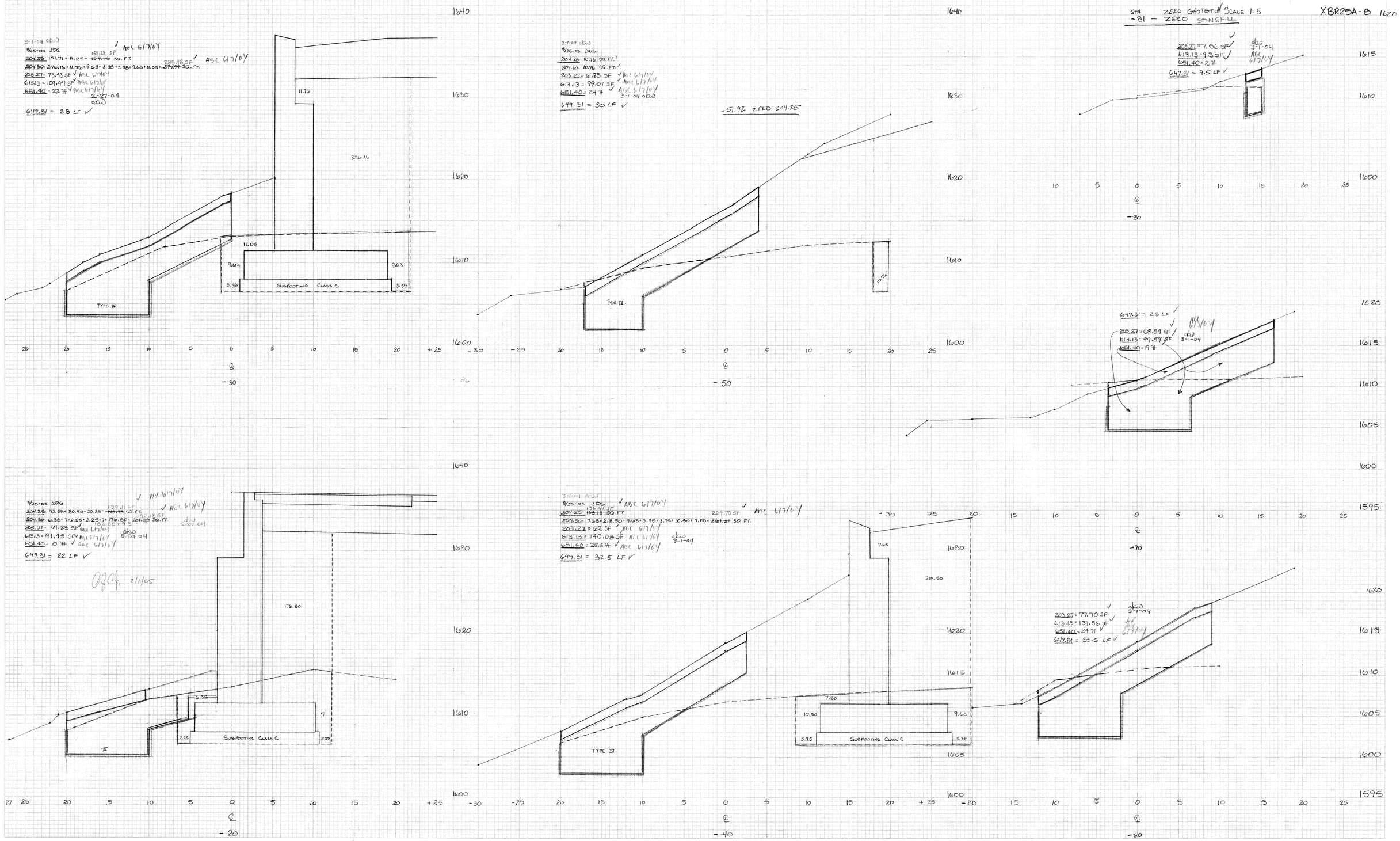
2/22/05

BRIDGE 25A
ABUT #2

SEARSBURG - WILMINGTON
NH-F010-1(18)

XBR25A-8

STA ZERO GEOTEXTILE SCALE 1:5
-81 – ZERO STONEFILL

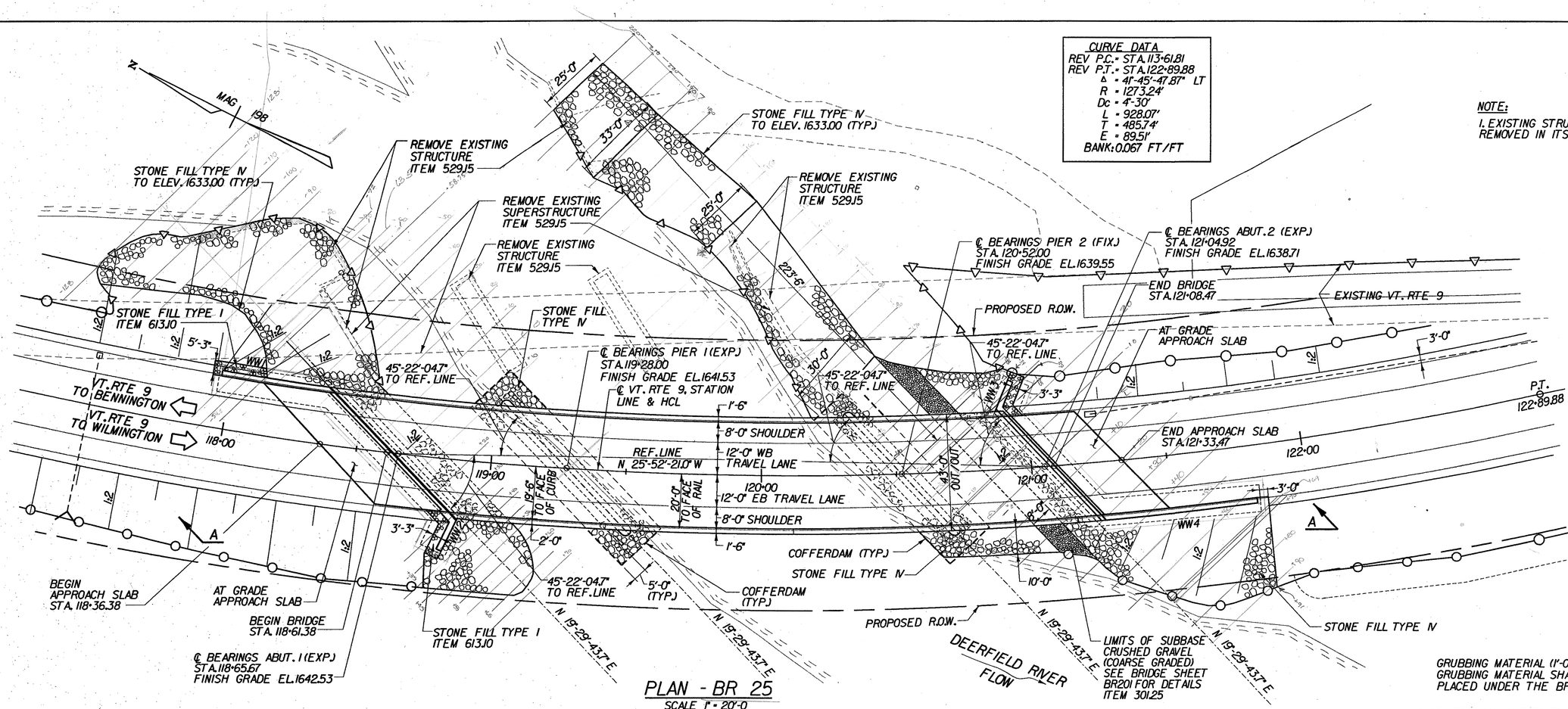


480 BR25A AB2

CURVE DATA
REV P.C. = STA. 113+61.81
REV P.T. = STA. 122+89.88
Δ = 41°-45'-47.87" LT
R = 1273.24'
Dc = 4°-30'
L = 928.07'
T = 485.74'
E = 89.51'
BANK: 0.067 FT/FT

NOTE:

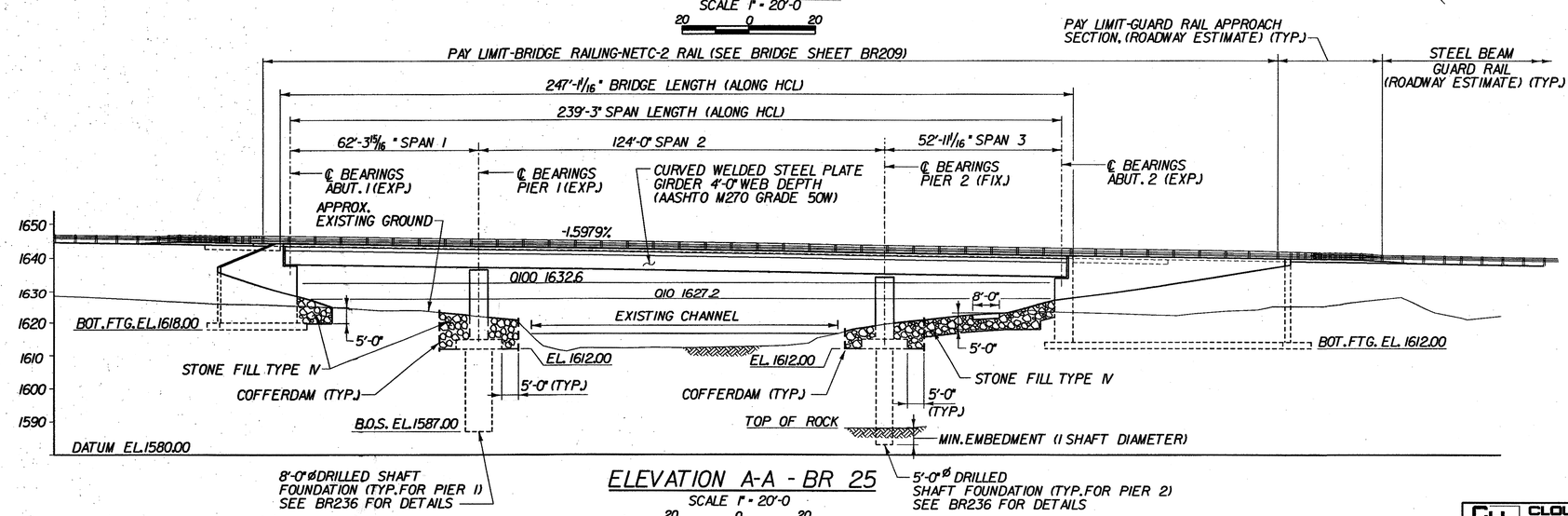
1. EXISTING STRUCTURE TO BE REMOVED IN ITS ENTIRETY.



PLAN - BR 25

SCALE 1" = 20'-0

20 0 20



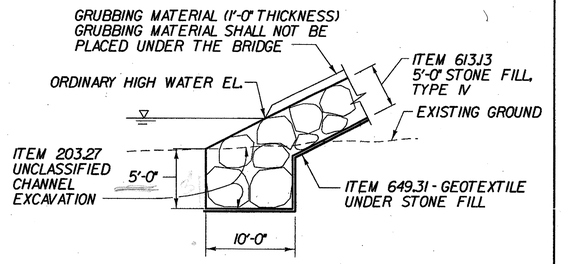
8'-0" ø DRILLED SHAFT FOUNDATION (TYP. FOR PIER 1) SEE BR236 FOR DETAILS

ELEVATION A-A - BR 25

SCALE 1" = 20'-0

20 0 20

5'-0" ø DRILLED SHAFT FOUNDATION (TYP. FOR PIER 2) SEE BR236 FOR DETAILS



TYPICAL EMBANKMENT PROTECTION DETAIL

(NOT TO SCALE)

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of	SEARSBURG	Bridge No. 25	
Highway No.	VT. RTE. 9	Log Sta.	
		Surv. Sta.	

VT. RTE. 9 OVER DEERFIELD RIVER

PLAN AND ELEVATION - BR 25

Designed By D. VIENI		Drawn by K. DETRICK	
Checked By M. OLSTAD	Date 2/2002	Bridge Design Supervisor M. OLSTAD	Date 2/2002
PROJECT SEARSBURG - WILMINGTON		PROJECT NO. NHF 010-1(18)	
L.G.C. Info.			
Bridge Sheet No. BR200		Sheet ~~125~~ OF 435	

CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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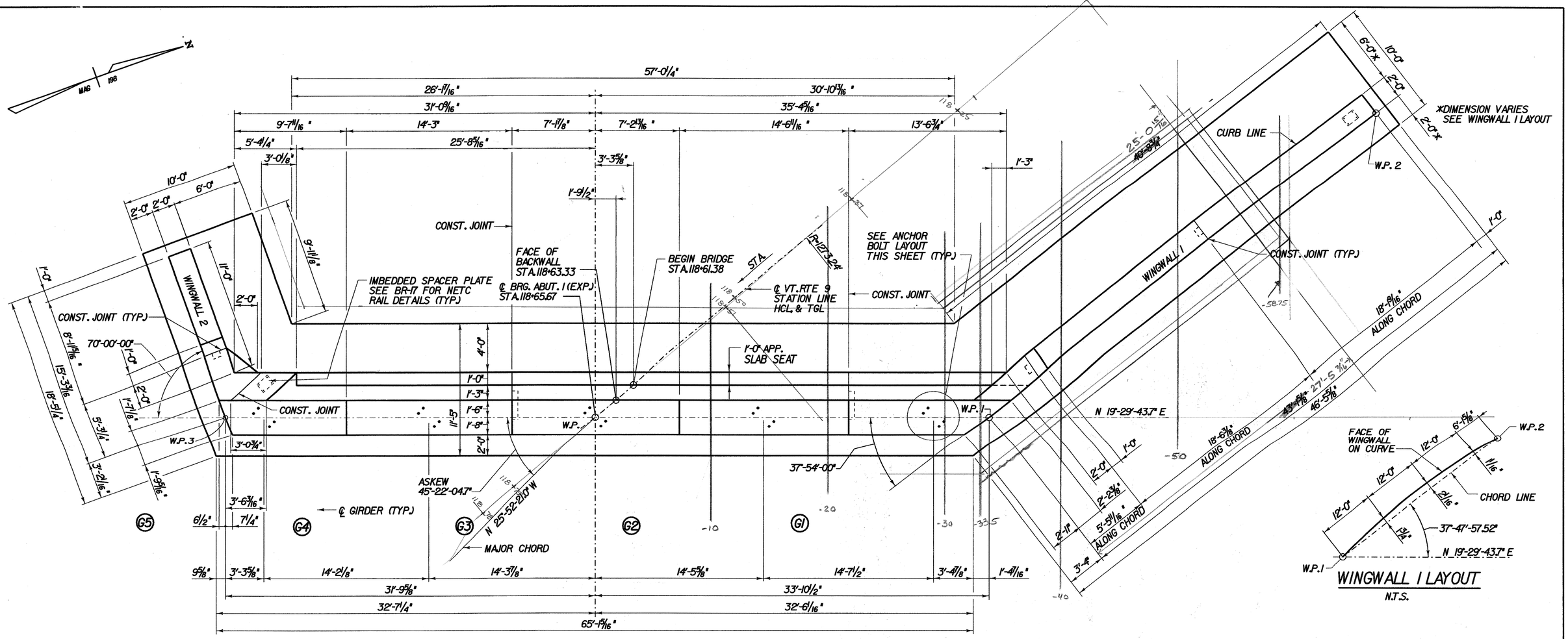
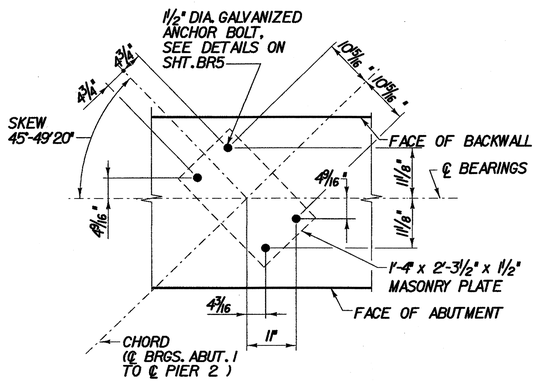
481 BR-25





NOTE:

1. FOR BEARING DETAIL SEE BRIDGE SHEET BR5 AND BR7.
2. FOR CONSTRUCTION JOINT DETAIL SEE BRIDGE SHEET BR15.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of SEARSBURG	Bridge No. 25
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta.

VT. RTE. 9 OVER DEERFIELD RIVER

ABUTMENT 1 PLAN - BR 25

Designed By D. VIENI	Drawn by K. DETRICK/Wm WEATHERBY
Checked By M. OLSTAD Date 2/2002	Bridge Design Supervisor M. OLSTAD Date 2/2002
PROJECT SEARSBURG - WILMINGTON	PROJECT NO. NHF 010-1(18)
L.G.C. Info.	
Bridge Sheet No. BR220	Sheet 146 OF 435

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
11 WINNERS CIRCLE ALBANY, NEW YORK, 12205

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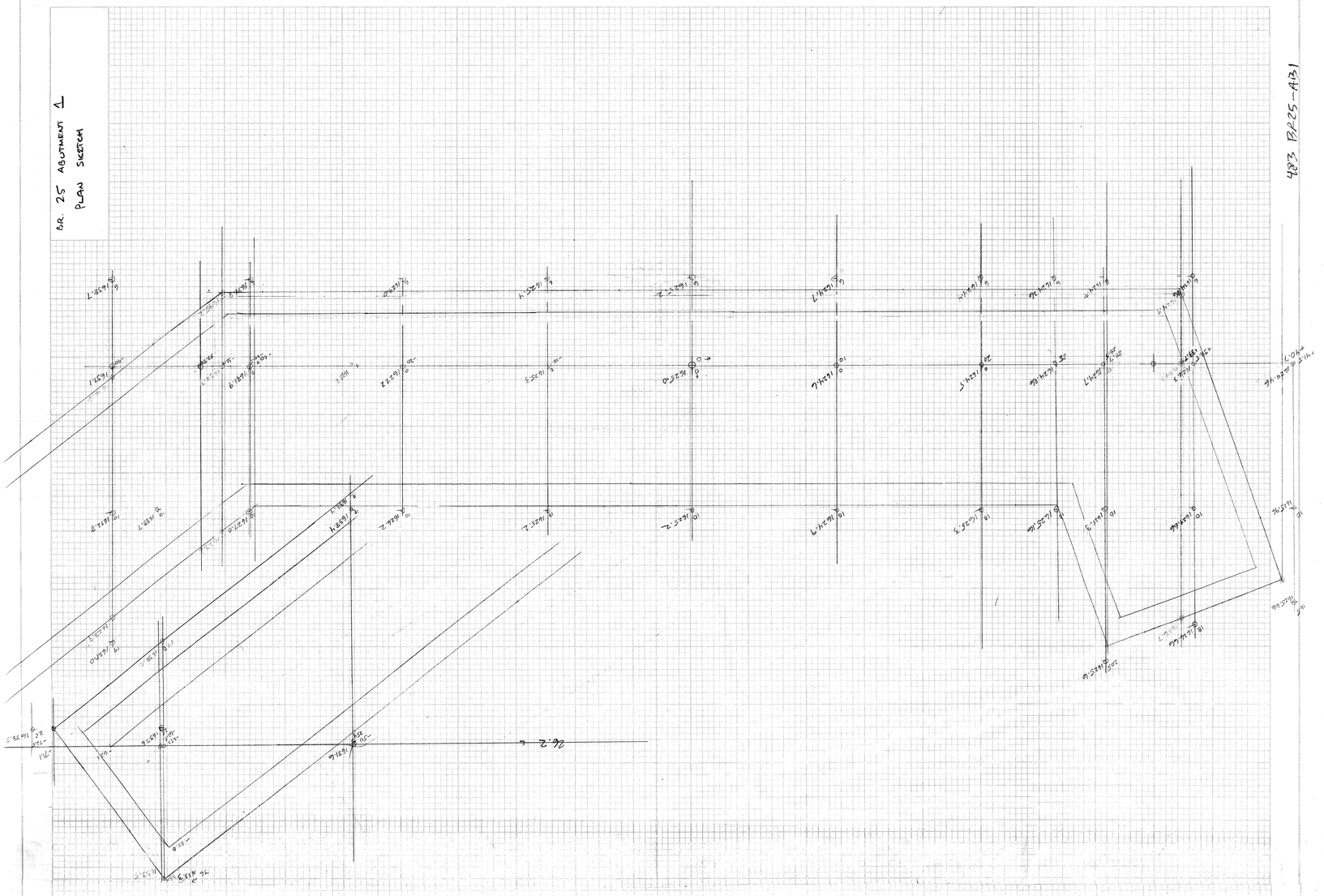
482 BR25-AB1

BR. 25 ABUTMENT 1
PLAN SKETCH



483 BR25-A131

PLATE 9-FULL CROSS SECTION-FULL LINE
UNITY FEDERAL AID PROJ.
ELECTRONIC COPY
PRINTED ON 8.5x11

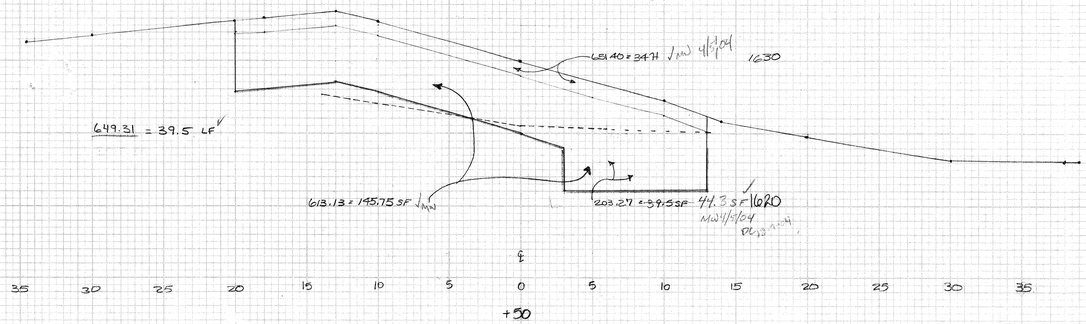
FINAL SURVEY NOTE BOOK
NO | FLOTTED | TEMPLATE | AREAS | AREAS CHECKED | BY | DATE
ORIGINAL SURVEY NOTE BOOK
NO | PLOTTED | TEMPLATE | AREAS | BY | DATE

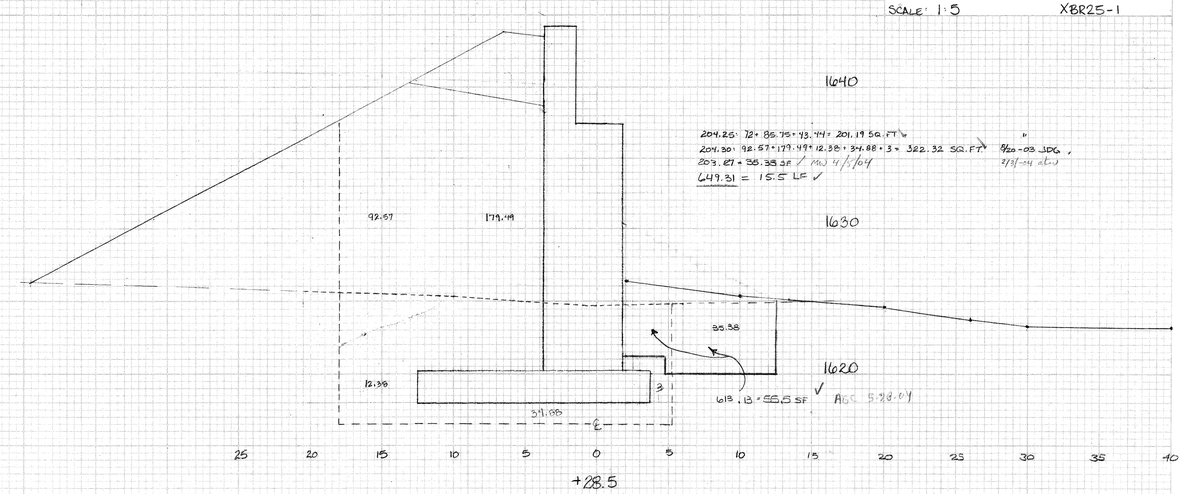
BRIDGE 25
ABUT #1

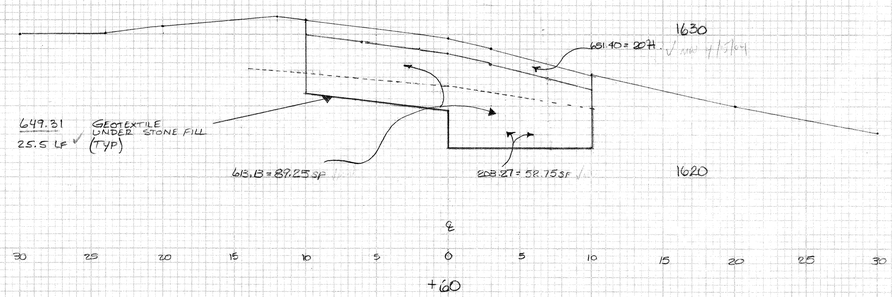
SEARSBURG - WILMINGTON
NH-F010-1(18)

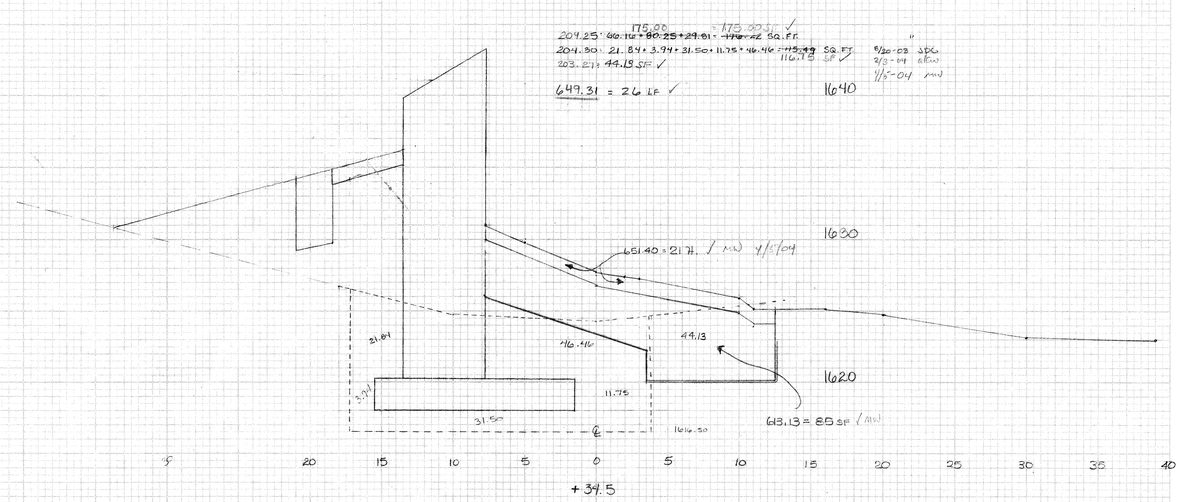
SCALE: 1:5

XBR25-1

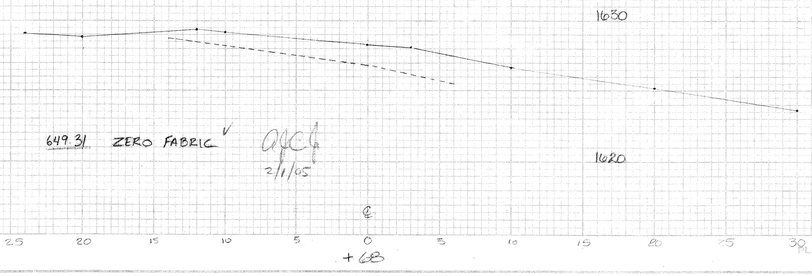


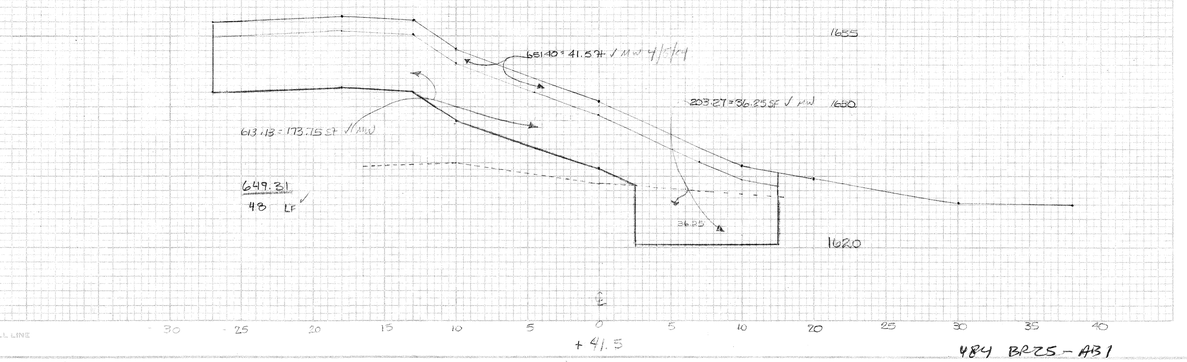






+40.7 ZERO 204.25





NOTE THAT SQ.FT QUANTITIES SHOWN IN RED PENCIL FOR ITEM 204.25 AND 204.30 WERE RE-PLANIMETERED & CARRIED FORWARD IN THE BRIDGE CALC. BOOK

AJC 5-6-04

484 BR25-AB1

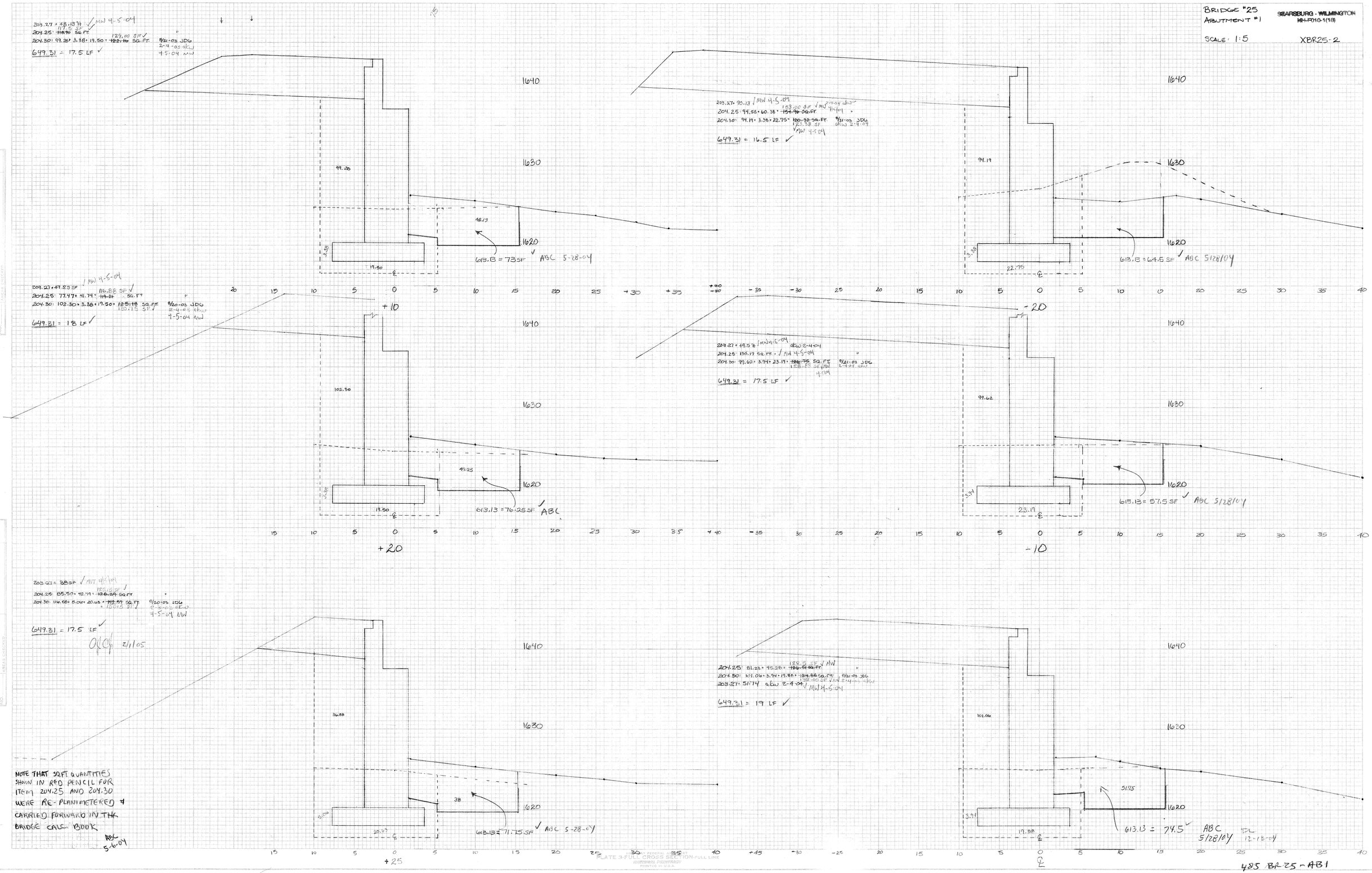
PLATE 3-FULL CROSS SECTION-FULL LINE

BRIDGE #25
ABUTMENT #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE: 1:5

XBR25-2



NOTE THAT SQ.FT. QUANTITIES SHOWN IN RED PENCIL FOR ITEM 204.25 AND 204.30 WERE RE-PLANIMETERED & CARRIED FORWARD IN THE BRIDGE CALC. BOOK

ABC 5-6-04

FINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

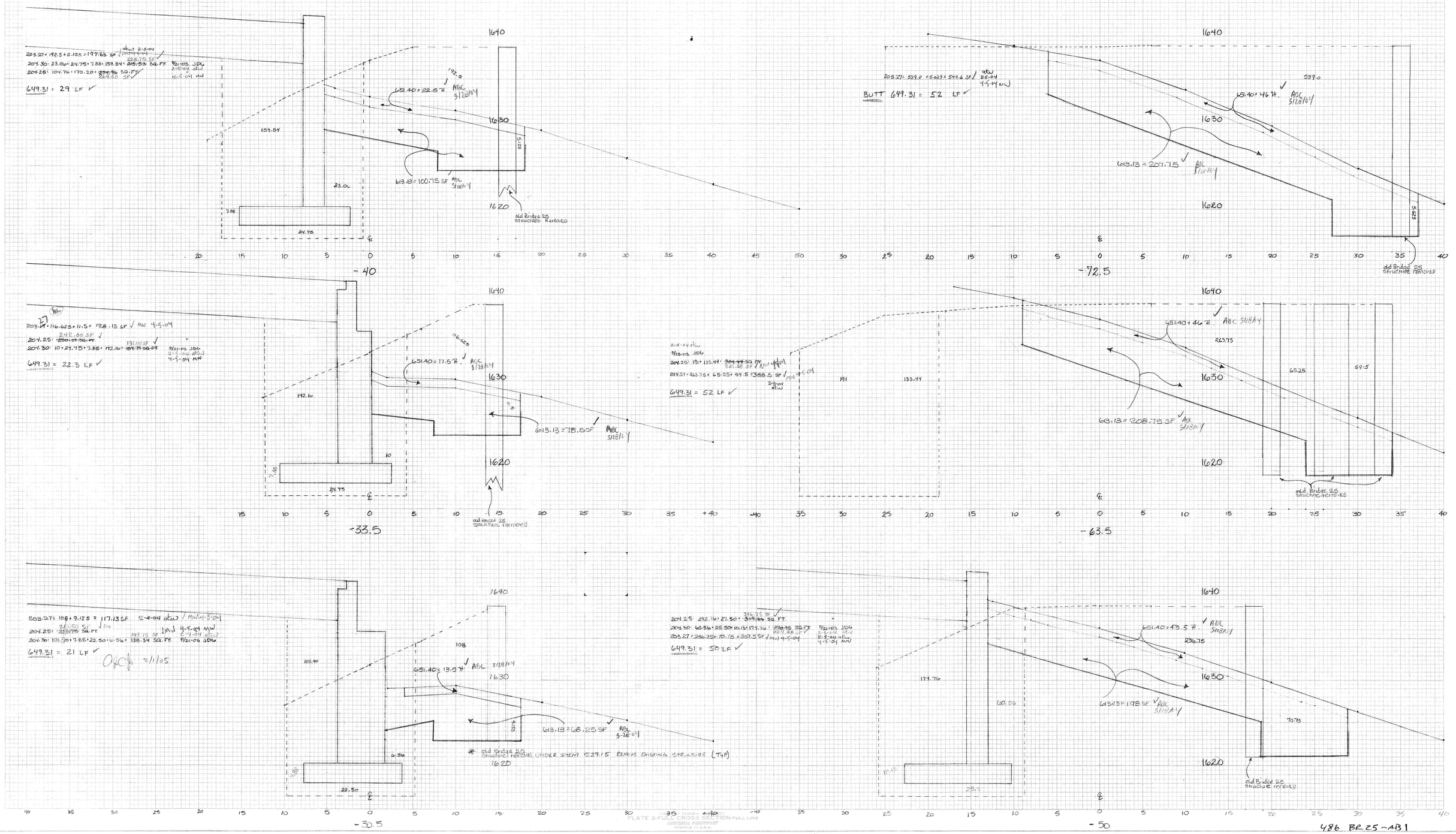
ORIGINAL SURVEY — NOTE BOOK NO. — SURVEYED — PLOTTED — TEMPLATE — AREAS — AREAS CHECKED — BY — DATE

PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PROMPTNESS
PRINTED IN U.S.A.

485 BR25-AB1

BRIDGE 25
ABUTMENT #1
SCALE: 1:5

SEARSBURG - WILMINGTON
NH-F010-1(18)
XBR25-3



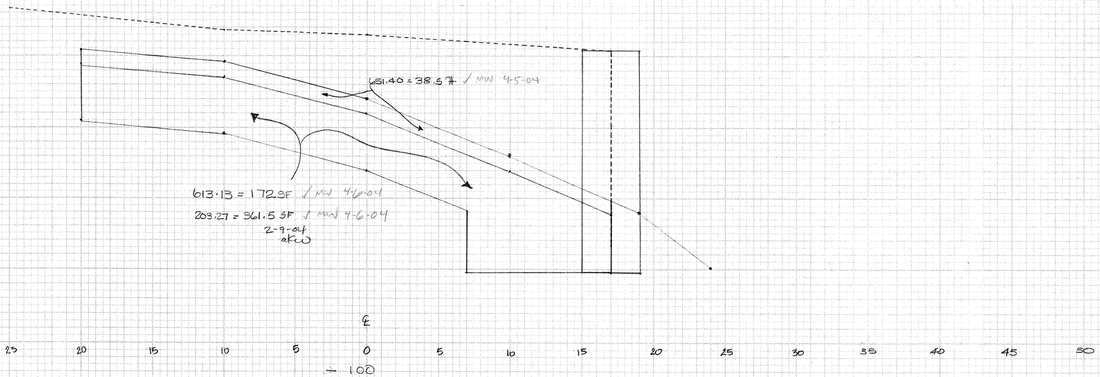
486 BR25-AB1

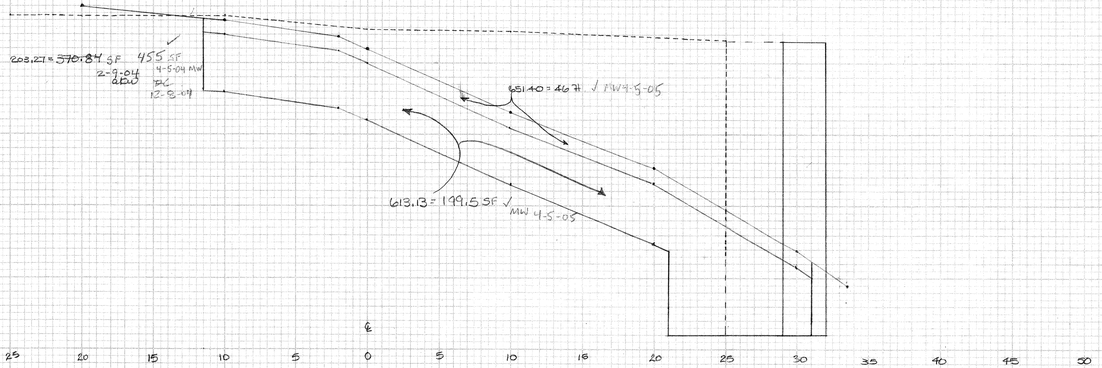
BRIDGE 25
ABUTMENT #1

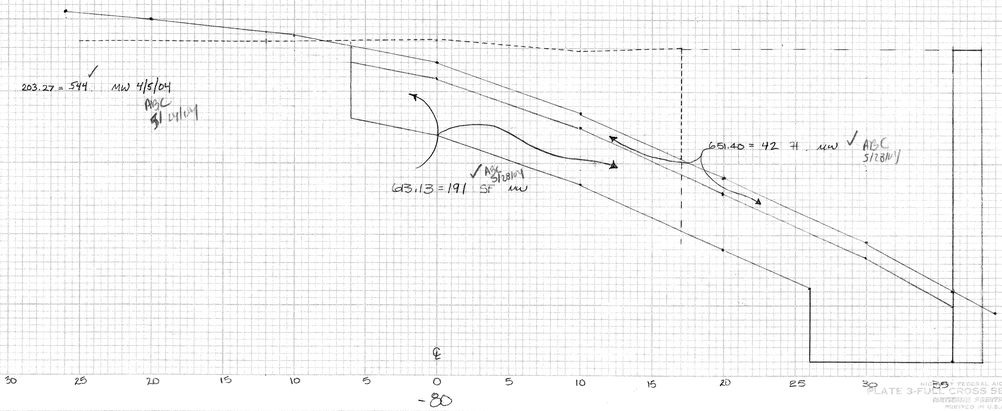
SEARSBURG - WILMINGTON
NH-F010-1(16)

SCALE: 1:5

XBR25-4







ORIGINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
PLATE
AREAS
AREAS CHECKED
DATE
BY

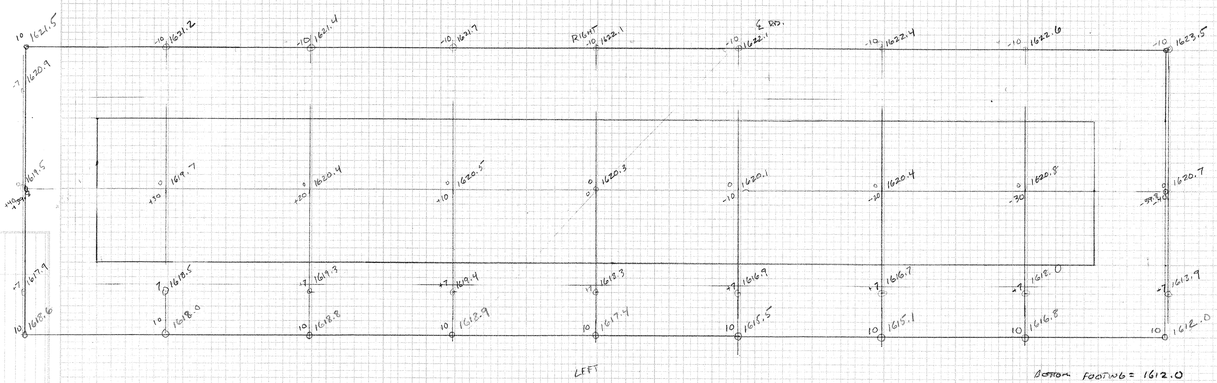
FINAL SURVEY
SURVEYED
PLOTTED
NOTE BOOK
PLATE
AREAS
AREAS CHECKED
NO.
DATE
BY

AASHTO-FEDERAL AID SERIES
PLATE 3-FULL CROSS SECTION-FULL LINE
BITUMINOUS PAVEMENT
PRINTED IN U.S.A.

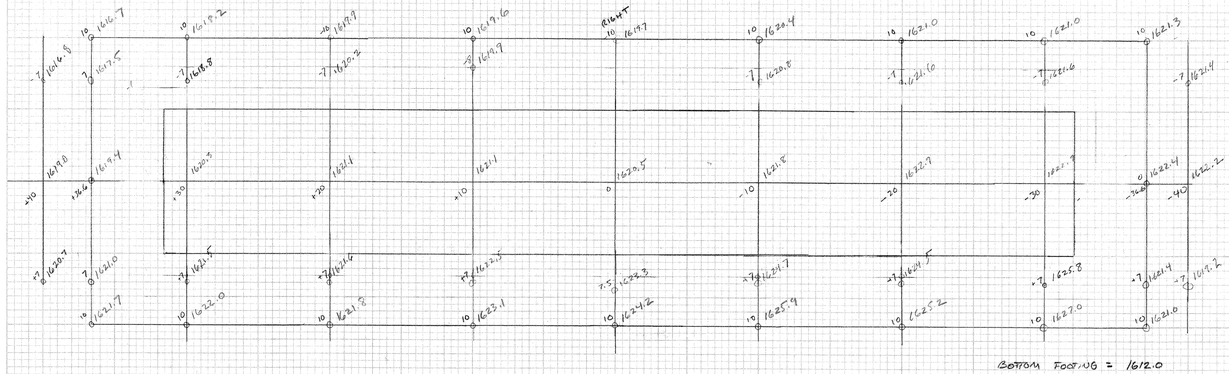
487 BR25-AB1

EXCAVATION FOR STRUCTURES BRIDGE 25

BR. 25 PIERS 1 & 2
PLAN SKETCH



PIER 1



PIER 2.

FINAL SURVEY

ORIGINAL SURVEY

PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PRINTPAST
PRINTED IN U.S.A.

488 BR25-~~AB~~ P1&2

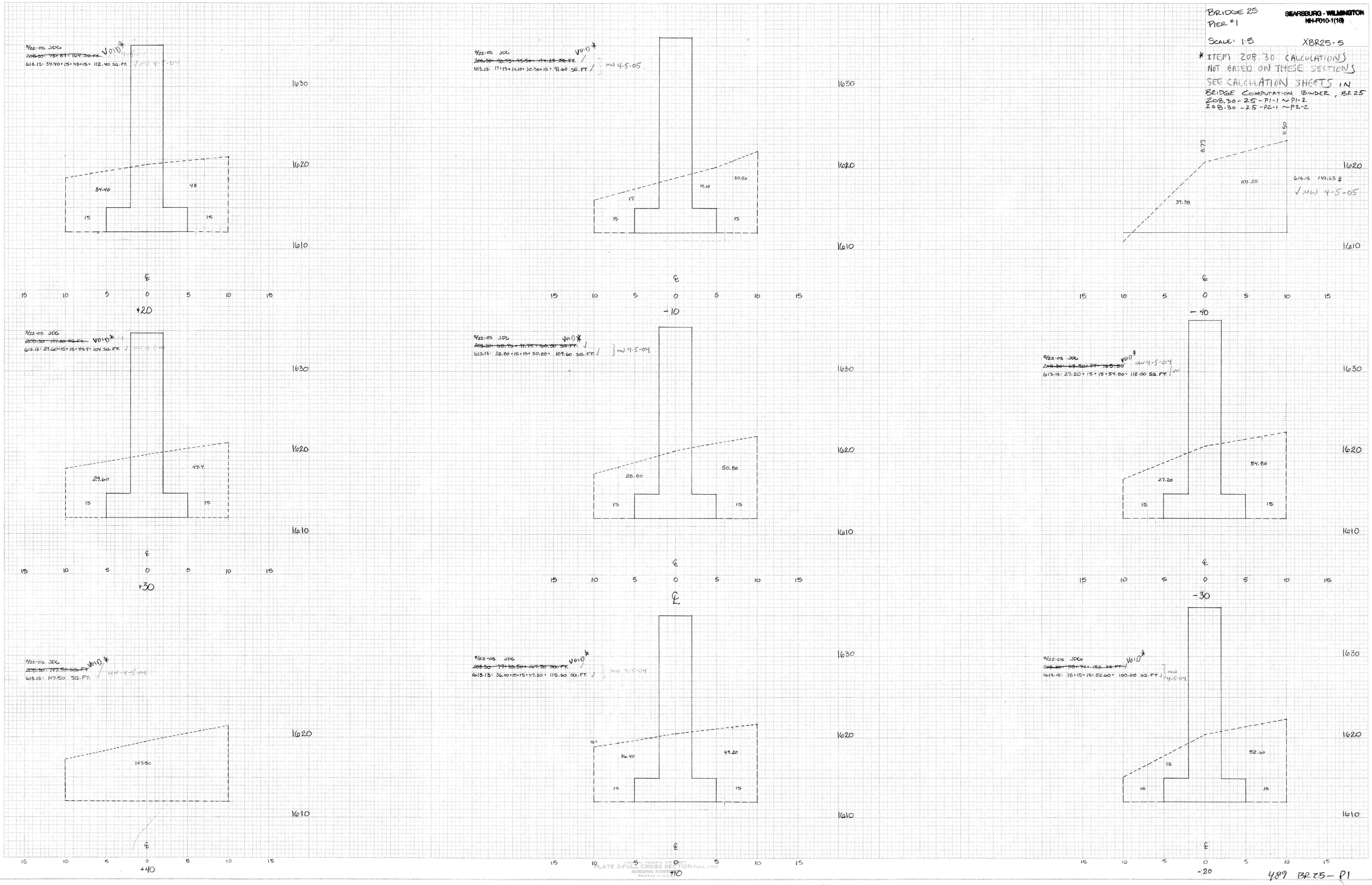
BRIDGE 25
PIER #1

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE: 1:5

XBR25-5

* ITEM 208.30 CALCULATIONS NOT BASED ON THESE SECTIONS SEE CALCULATION SHEETS IN BRIDGE COMPUTATION BINDER, BR25
208.30-25-P1-1 ~ P1-2
208.30-25-P2-1 ~ P2-2



489 BR25-P1

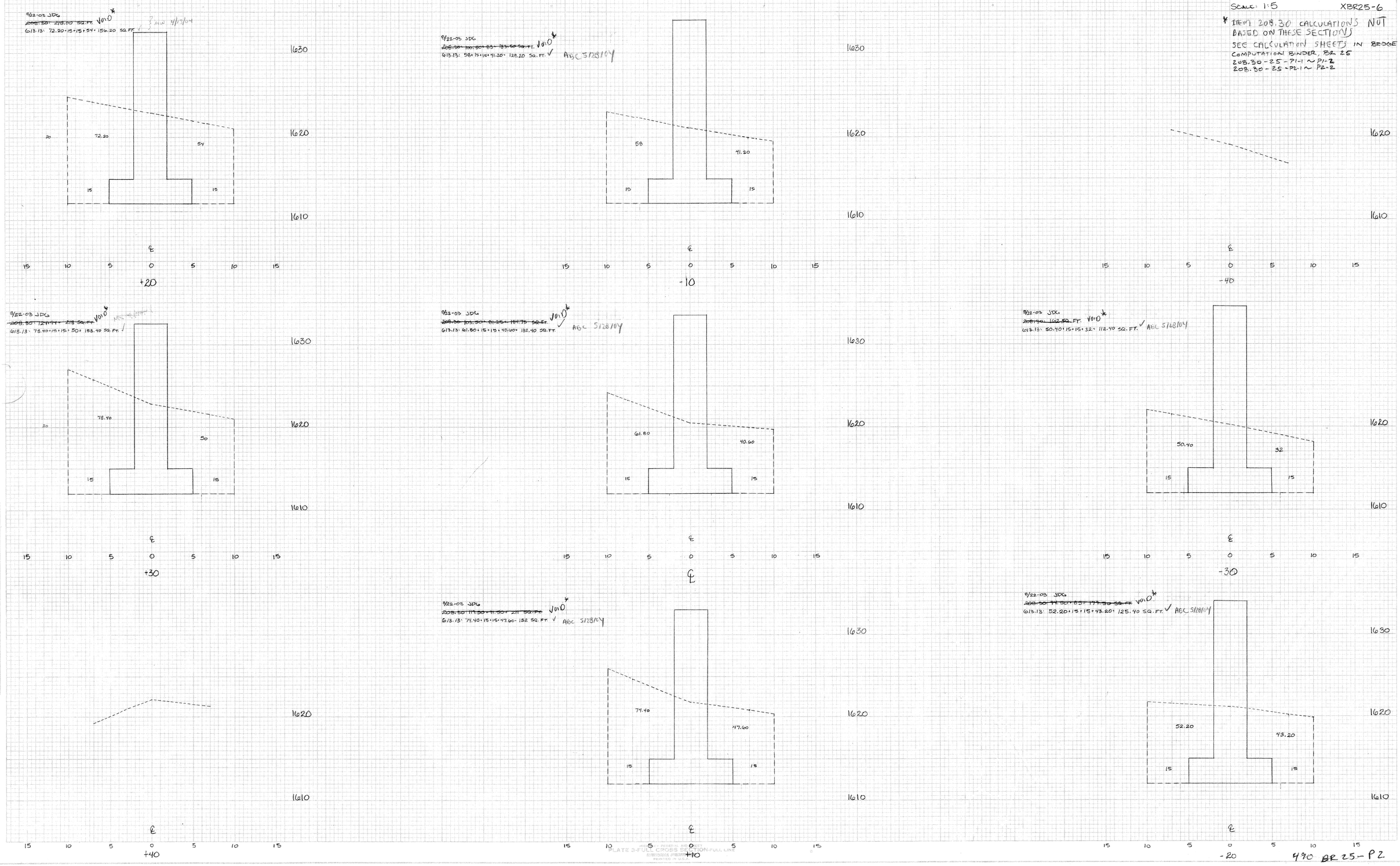
BRIDGE 25
PIER #2

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE: 1:5

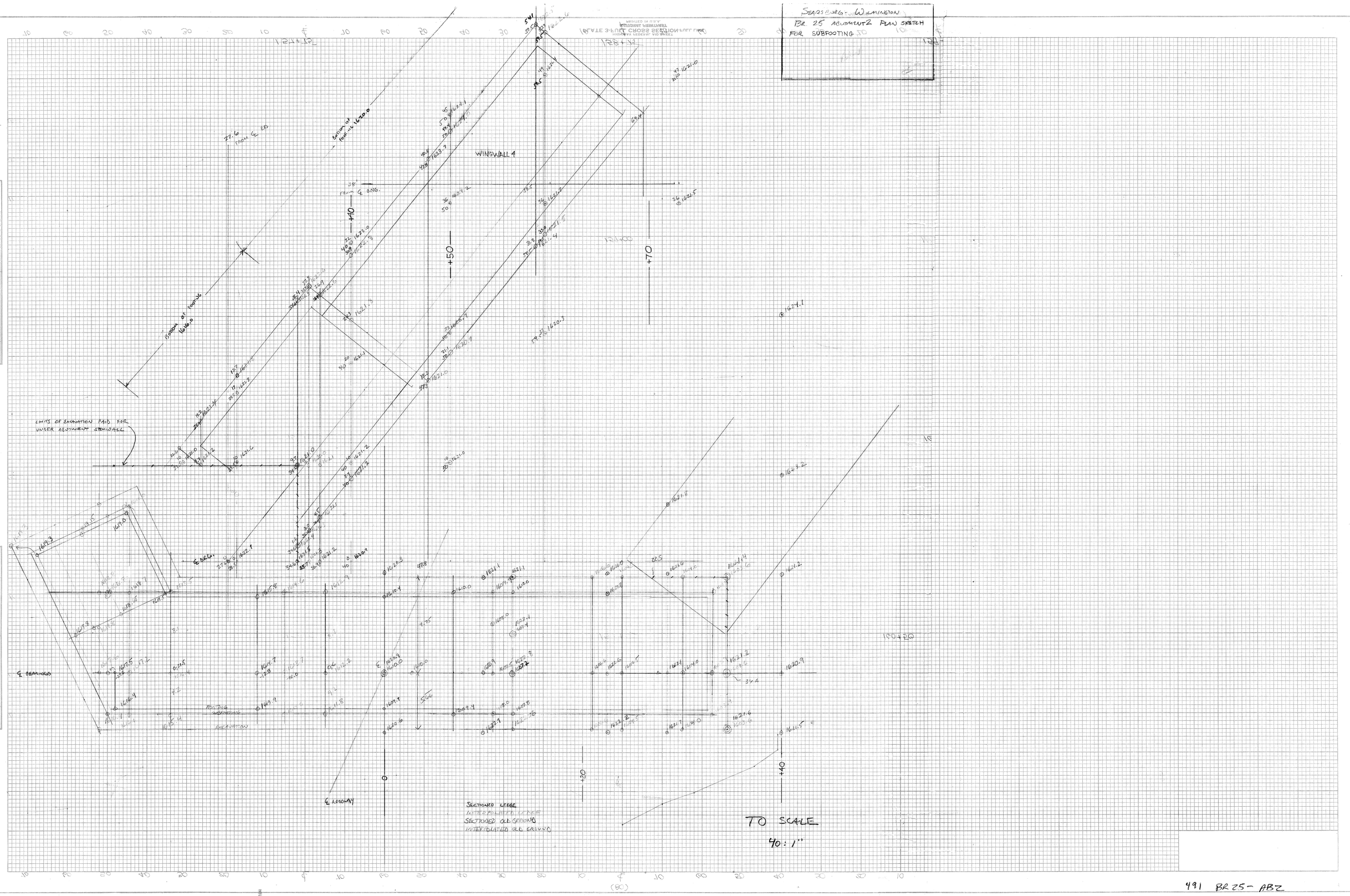
XBR25-6

* ITEM 208.30 CALCULATIONS NOT BASED ON THESE SECTIONS
SEE CALCULATION SHEETS IN BRIDGE COMPUTATION BINDER, BR 25
208.30-25-P1-1 ~ P1-2
208.30-25-P2-1 ~ P2-2



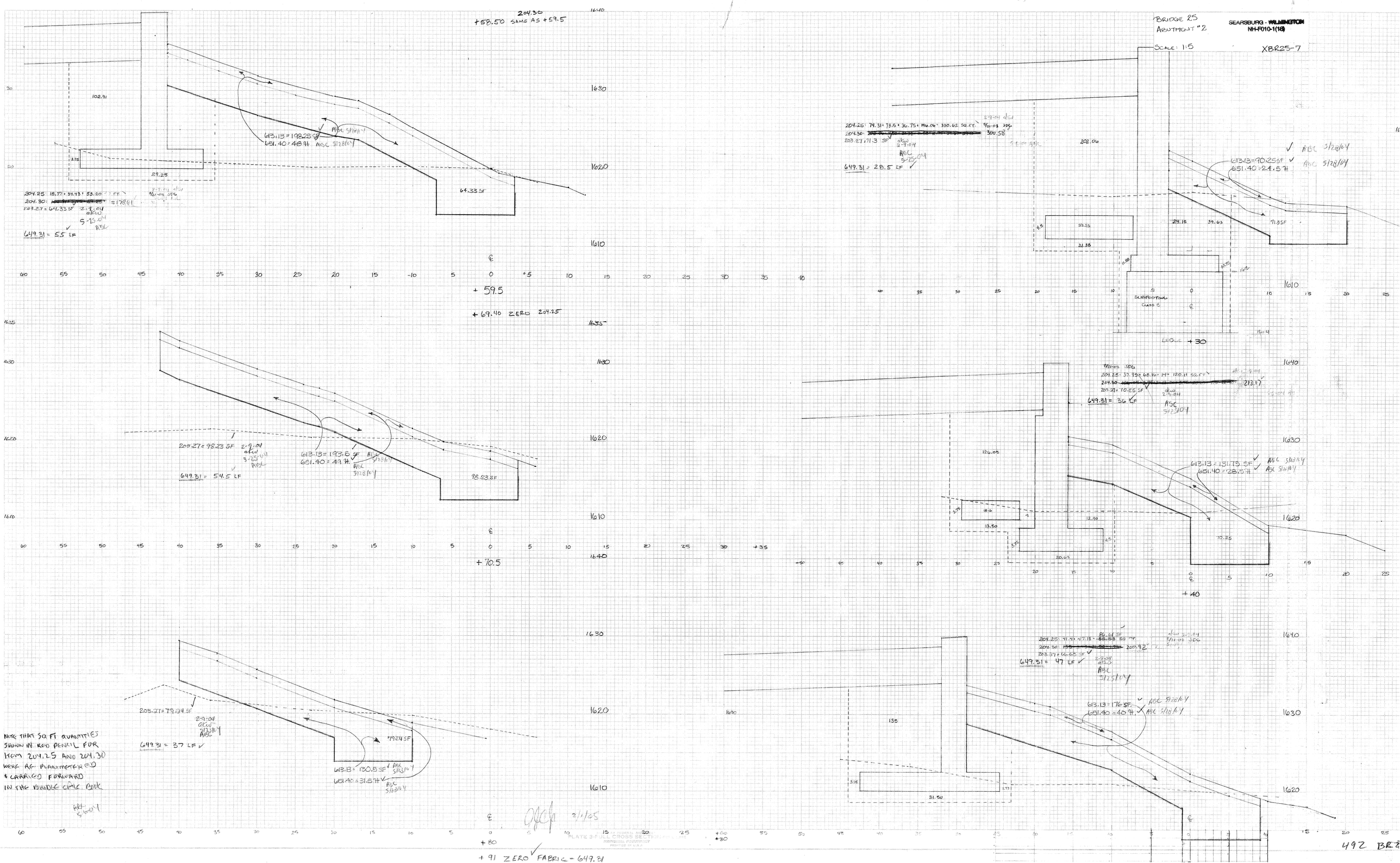
490 BR 25-P2

HIGHWAY FEDERAL AID PROJECT
PLATE 3-FULL CROSS SECTION-FULL LINE
PRINTED IN U.S.A.



SEARSBURG - WILMINGTON
BR. 25 ABUTMENT 2 PLAN SKETCH
FOR SUBFOOTING
WINGWALL 4
LIMITS OF EXCAVATION PAID FOR UNDER ABUTMENT STEMWALL
BOTTOM OF FOOTING 1620.0
BOTTOM OF FOOTING 1616.0
FROM ℄ RD.
FROM ℄ BNG.
℄ BEARINGS
℄ ROADWAY
EXCAVATION
SECTIONED LEDGE
INTERPOLATED LEDGE
SECTIONED OLD GROUND
INTERPOLATED OLD GROUND
TO SCALE
40:1"

491 BR 25 - AB2



BRIDGE 25
ABUTMENT "2
SCALE: 1:5
SEARSBURG - WILMINGTON
NH-F010-1(18)
XBR25-7
+58.50 SAME AS +59.5
204.30
+ 59.5
+ 69.40 ZERO 204.25
+ 70.5
+ 80
+ 91 ZERO FABRIC - 649.31
+ 30
+ 40
+ 35
+ 30
SUBFOOTING CLASS C
LEDGE
NOTE THAT SQ FT QUANTITIES SHOWN IN RED PENCIL FOR ITEM 204.25 AND 204.30 WERE RE-PLANIMETERED & CARRIED FORWARD IN THE BRIDGE CALC. BOOK

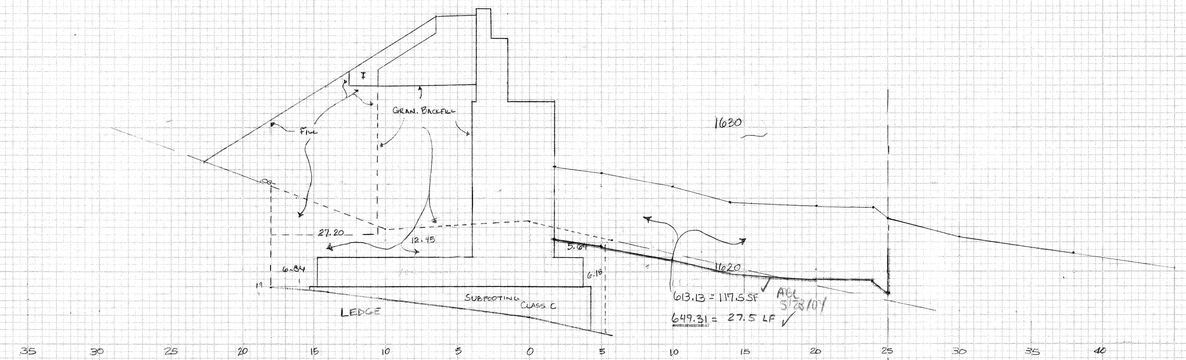
492 BR2

BRIDGE 25
ABUTMENT #2

SCALE: 1:5

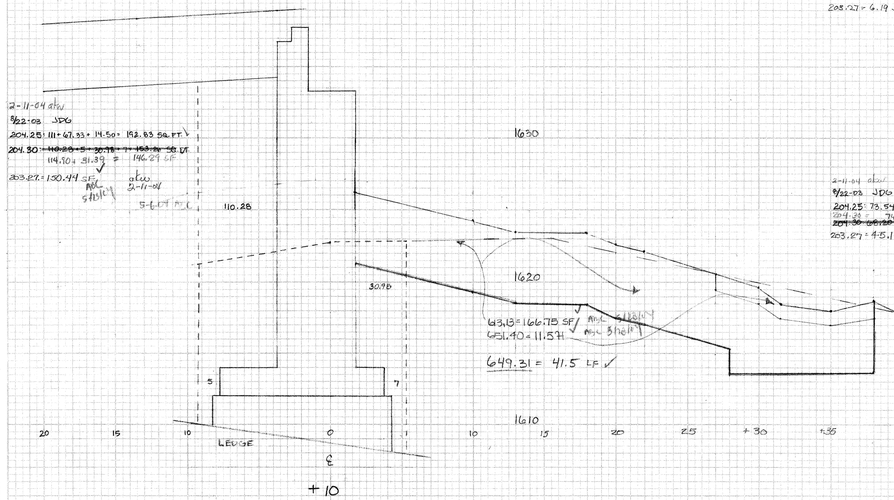
SEABROOK - WILMINGTON
NH-F010-1(18)

XBR25-8

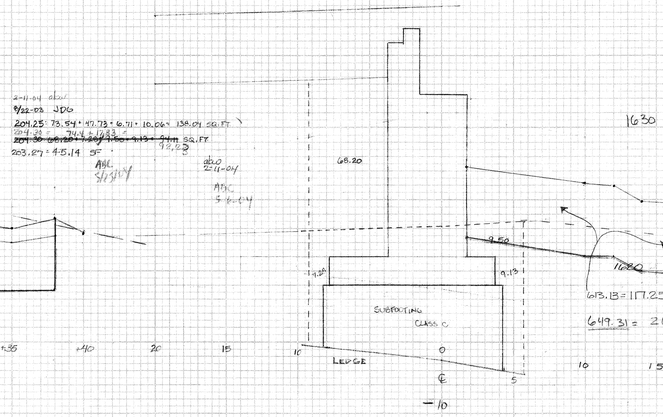


8/22-03 JDG
204.25: 43.20+41.50+20.08+0.8+17.50+14.04=137.12 SQ.FT.
~~204.30: 27.20-12.48=6.84=34.84=50.84 SQ.FT.~~
204.30 = 76.875 + 10.85 = 137.72 SF
203.27 = 6.19 SF
ABC 5/18/04
137.67 SF ✓
dcw 2-11-04
also 2.11.04
ABC 5.16.04

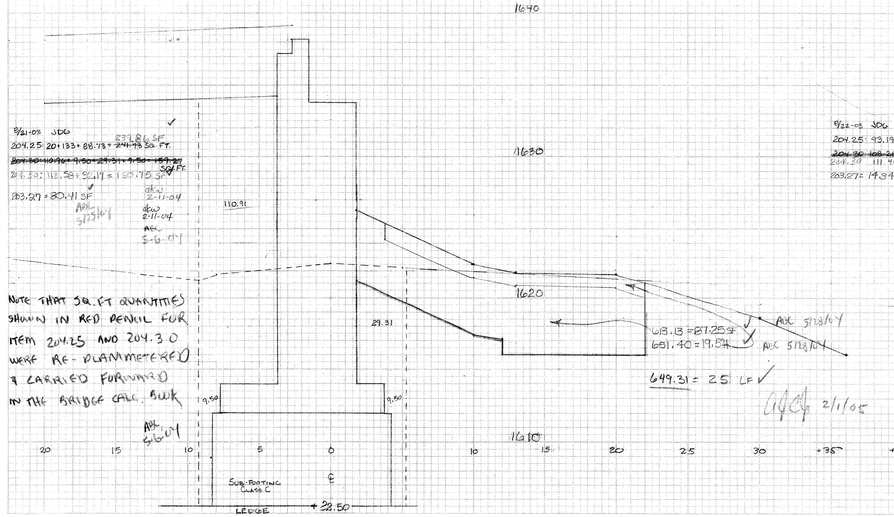
613.13 = 117.55 SF ABC 5/18/04
649.31 = 27.5 LF ✓



2-11-04 dcw
8/22-03 JDG
204.25: 111+67.33+14.50+152.83 SQ.FT.
~~204.30 = 110.28+5+30.78 = 145.78+5=150.78 SQ.FT.~~
114.30+31.39 = 145.69 SF
203.27 = 130.44 SF
ABC 5/18/04
dcw 2-11-04
5-6-04 ABC



8/22-03 JDG
204.25: 73.54+47.73+6.71+10.06=138.04 SQ.FT
~~204.30 = 74.43+23.33~~
~~204.30 = 68.20+9.50+9.19+5.31 = 92.20 SQ.FT~~
203.27 = 45.19 SF
ABC 5/18/04
dcw 2-11-04
ABC 5-6-04
92.25

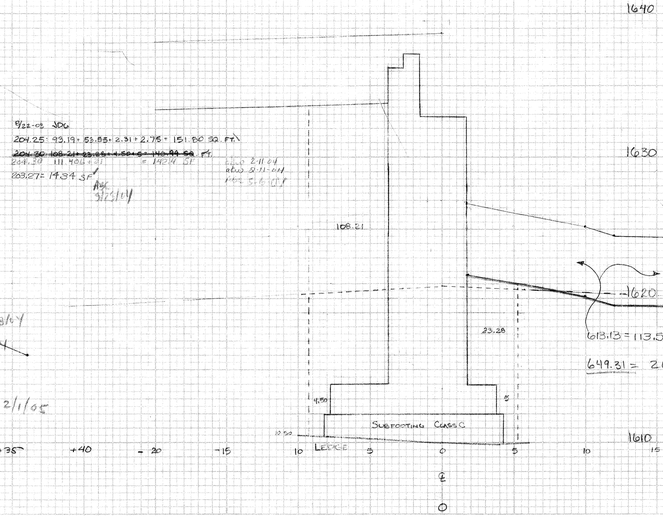


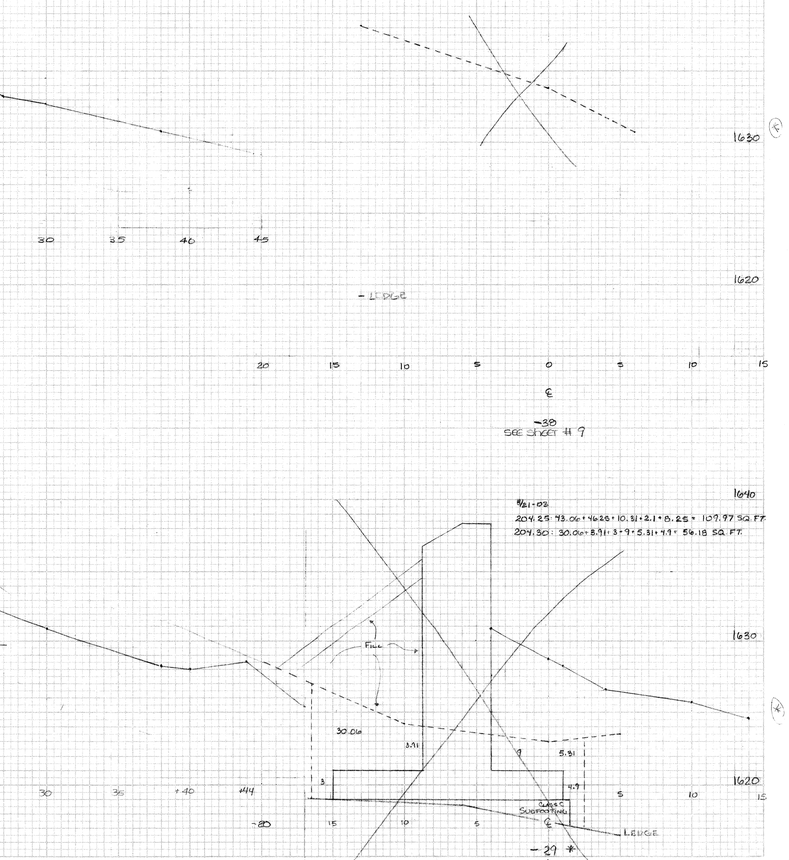
8/21-03 JDG
204.25: 20+133+88.75+24=265.75 SQ.FT.
~~204.30 = 109.61+2.00+29.31+4.50=145.42 SQ.FT.~~
244.30: 112.58+52.19 = 164.77 SQ.FT.
203.27 = 80.41 SF
dcw 2-11-04
ABC 5/18/04
dcw 2-11-04
ABC 5-6-04

NOTE THAT SQ.FT QUANTITIES SHOWN IN RED PENCIL FOR ITEM 204.25 AND 204.30 WERE RE-PLANIMETERED & CARRIED FORWARD IN THE BRIDGE CALC. BOOK

ABC 5/18/04

8/22-03 JDG
204.25: 93.19+53.85+2.31+2.75=151.80 SQ. FT.
~~204.30 = 108.21+23.23+4.50=135.94 SF~~
244.30 = 111.40 SF
203.27 = 19.34 SF
ABC 5/18/04
dcw 2-11-04
dcw 2-11-04
ABC 5.16.04





*SEE SHEET # 9 FOR DRAWING OF -29

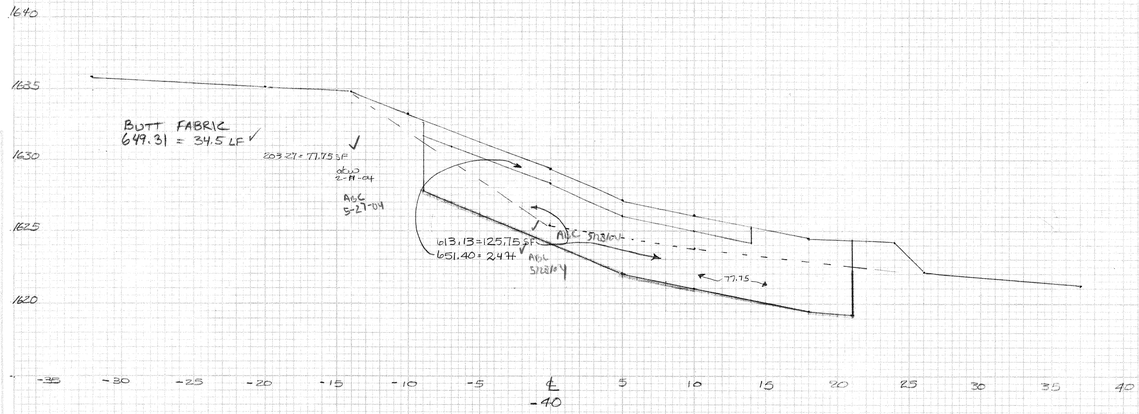
493 BR 25 - AB2

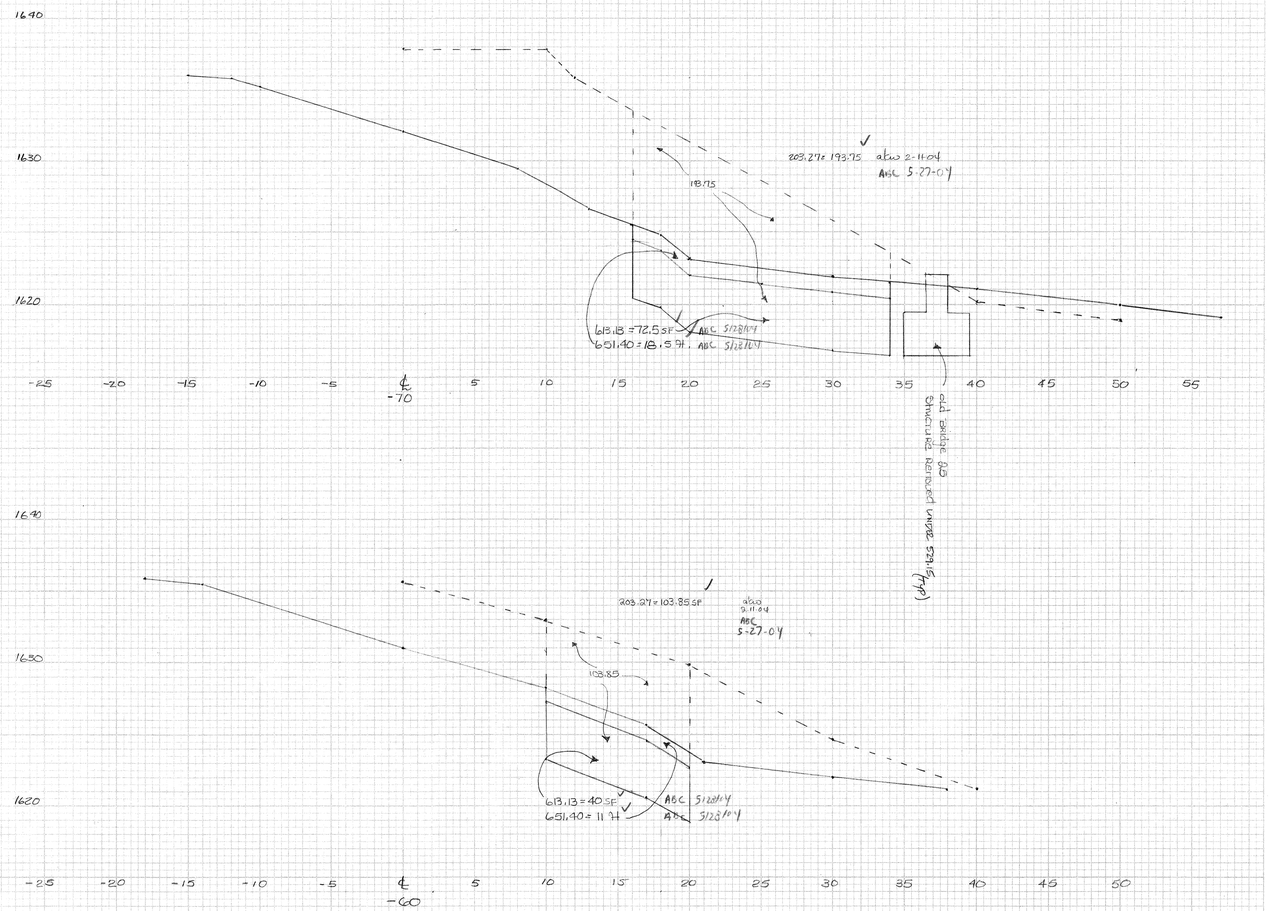
PLATE 3-FULL CROSS SECTION-FULL LINE

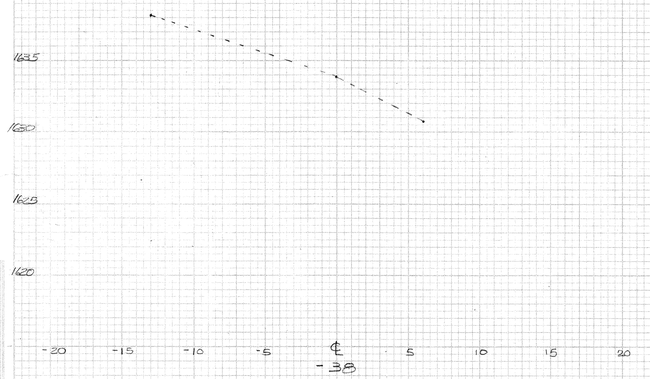
BRIDGE 25
ABUTMENT #2

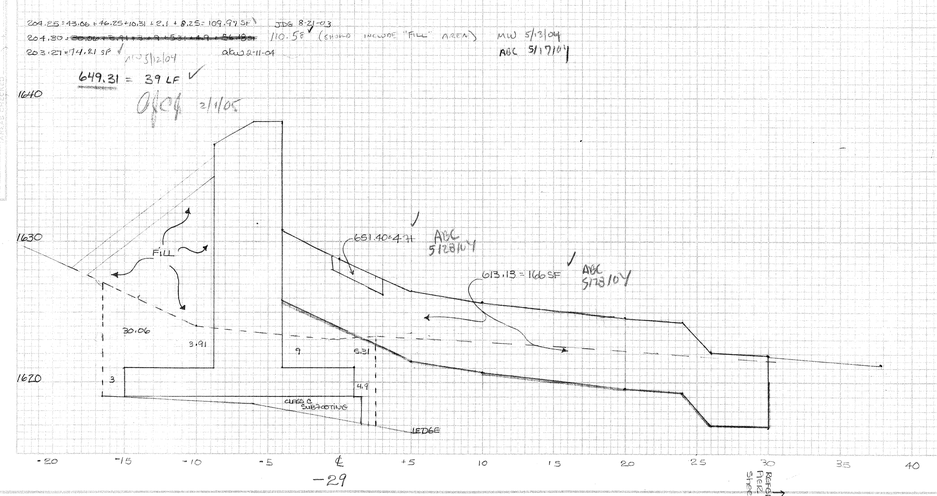
SCALE 1:5

XBR25-9









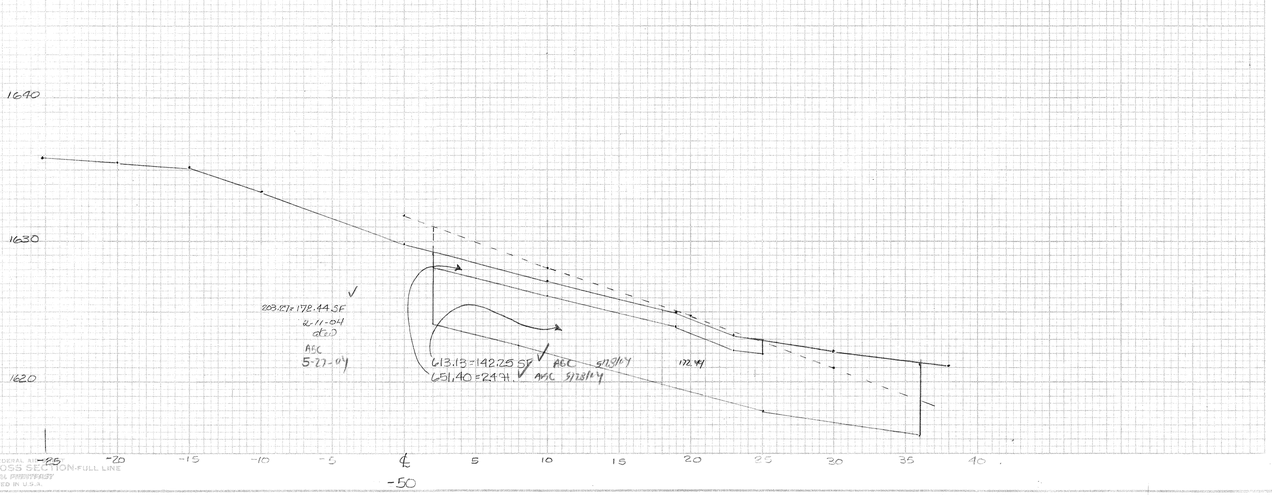


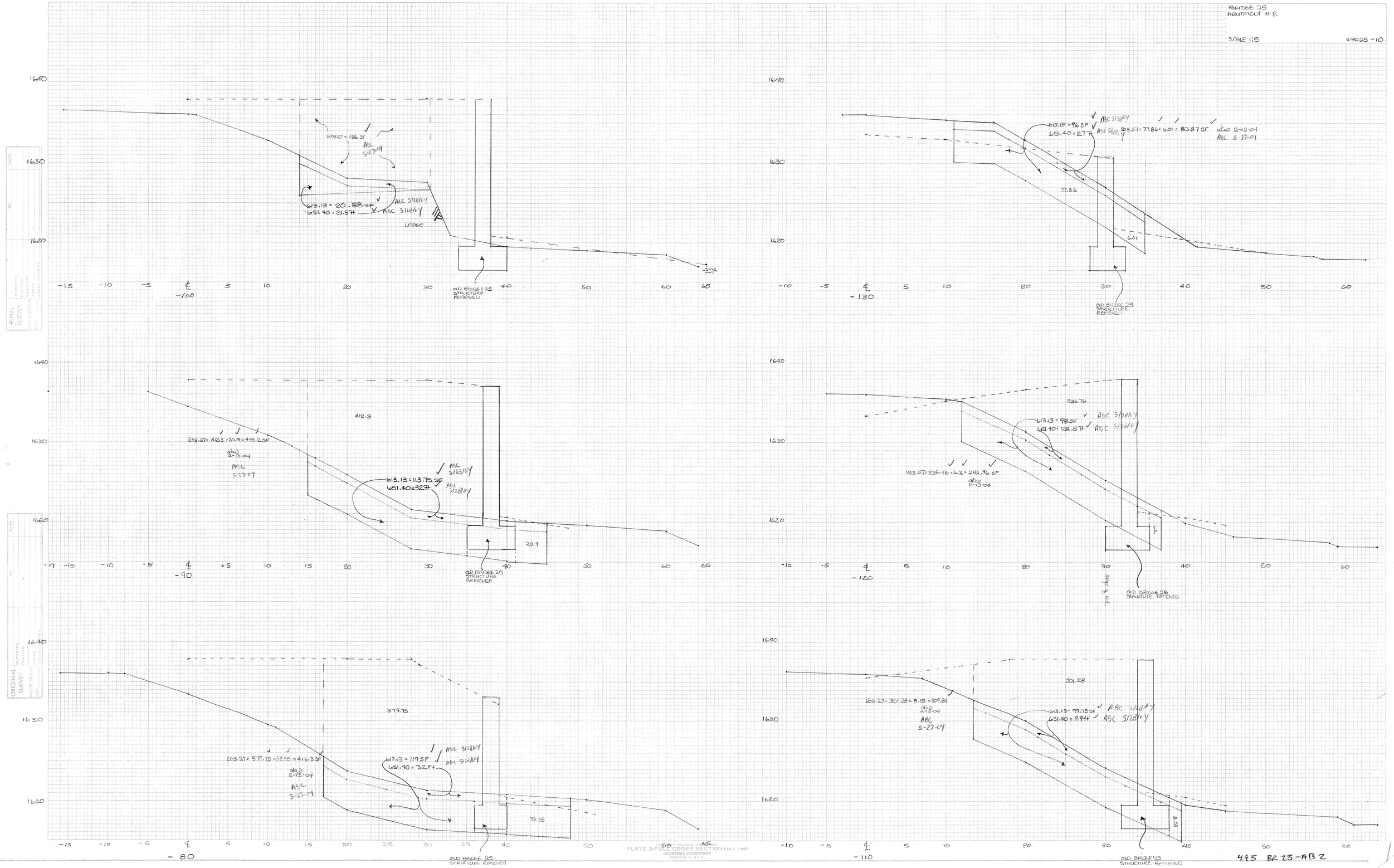
PLATE 3-FULL CROSS SECTION-FULL LINE
HIGHWAY FEDERAL AID
NATIONAL PRINTING
PRINTED IN U.S.A.

494 BR 25-AB 2

BRIDGE 25
ABUTMENT #2

SCALE 1:5

XBR25-10



FINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

ORIGINAL SURVEY
NOTE BOOK NO.
SURVEYED
PLOTTED
TEMPLATE
AREAS
AREAS CHECKED
BY
DATE

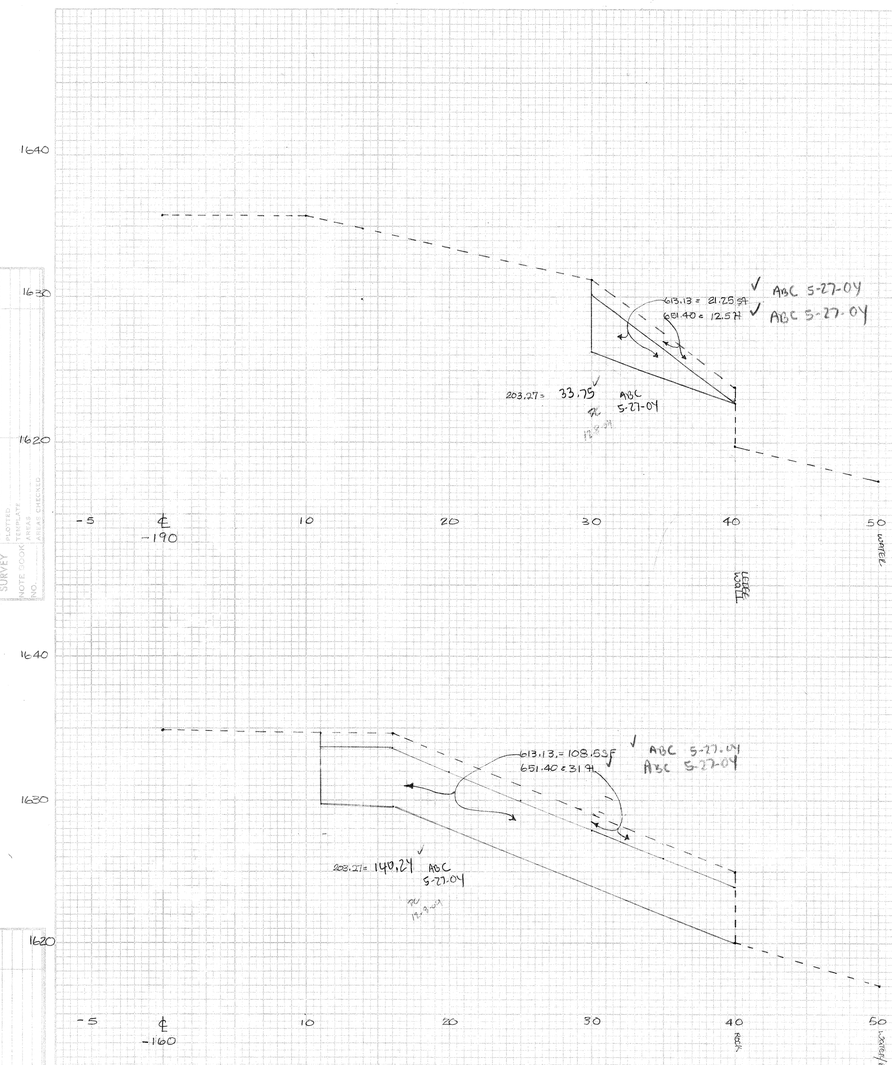
MICHIGAN FEDERAL AIRPORT
PLATE 3-FULL CROSS SECTION-FULL LINE
NATIONAL PRINTING
PRINTED IN U.S.A.

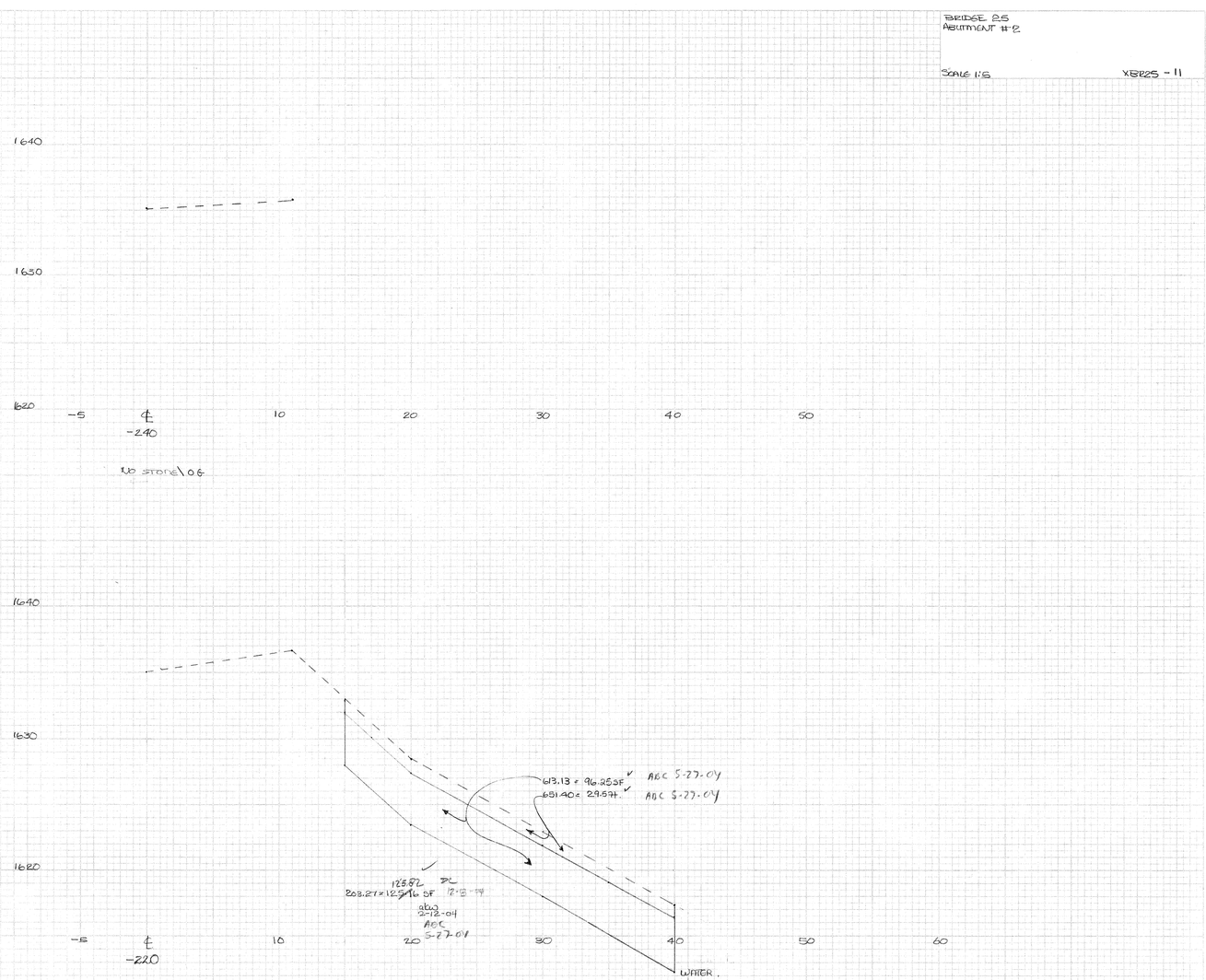
495 BR 25-AB 2

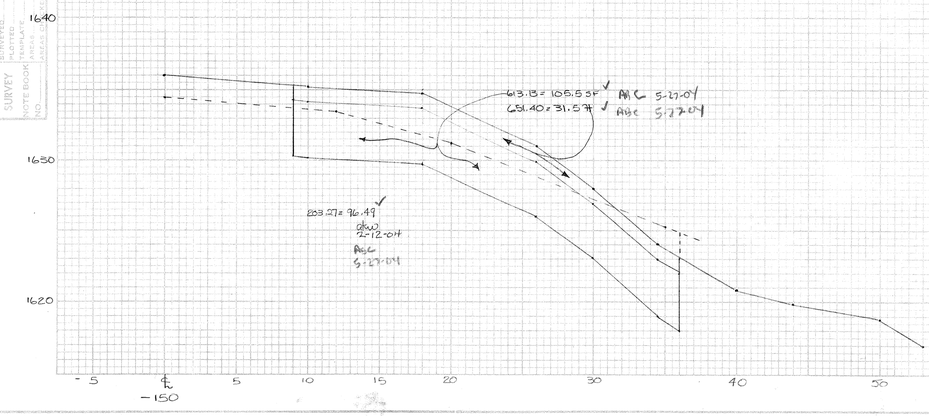
BRIDGE 25
ABUTMENT #2

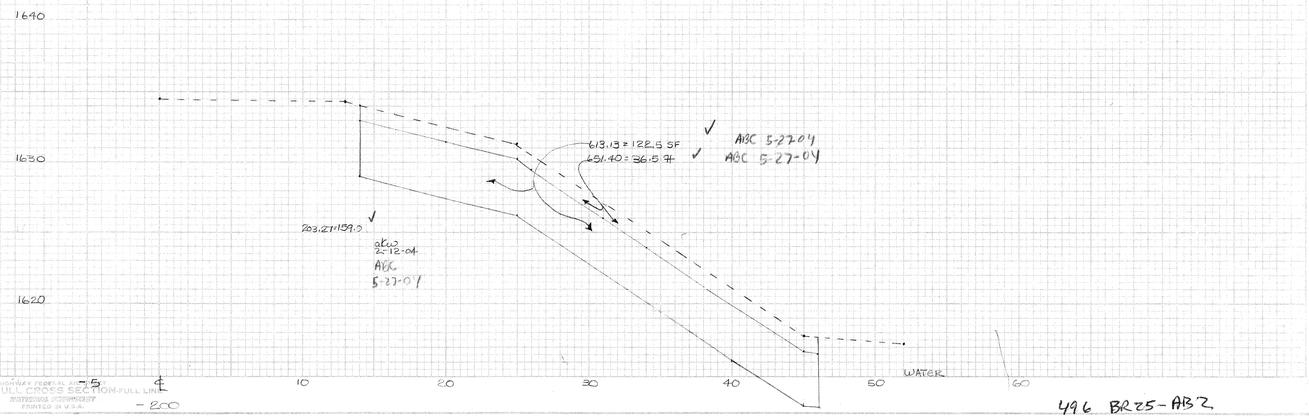
SCALE 1:5

XBR25 - 11





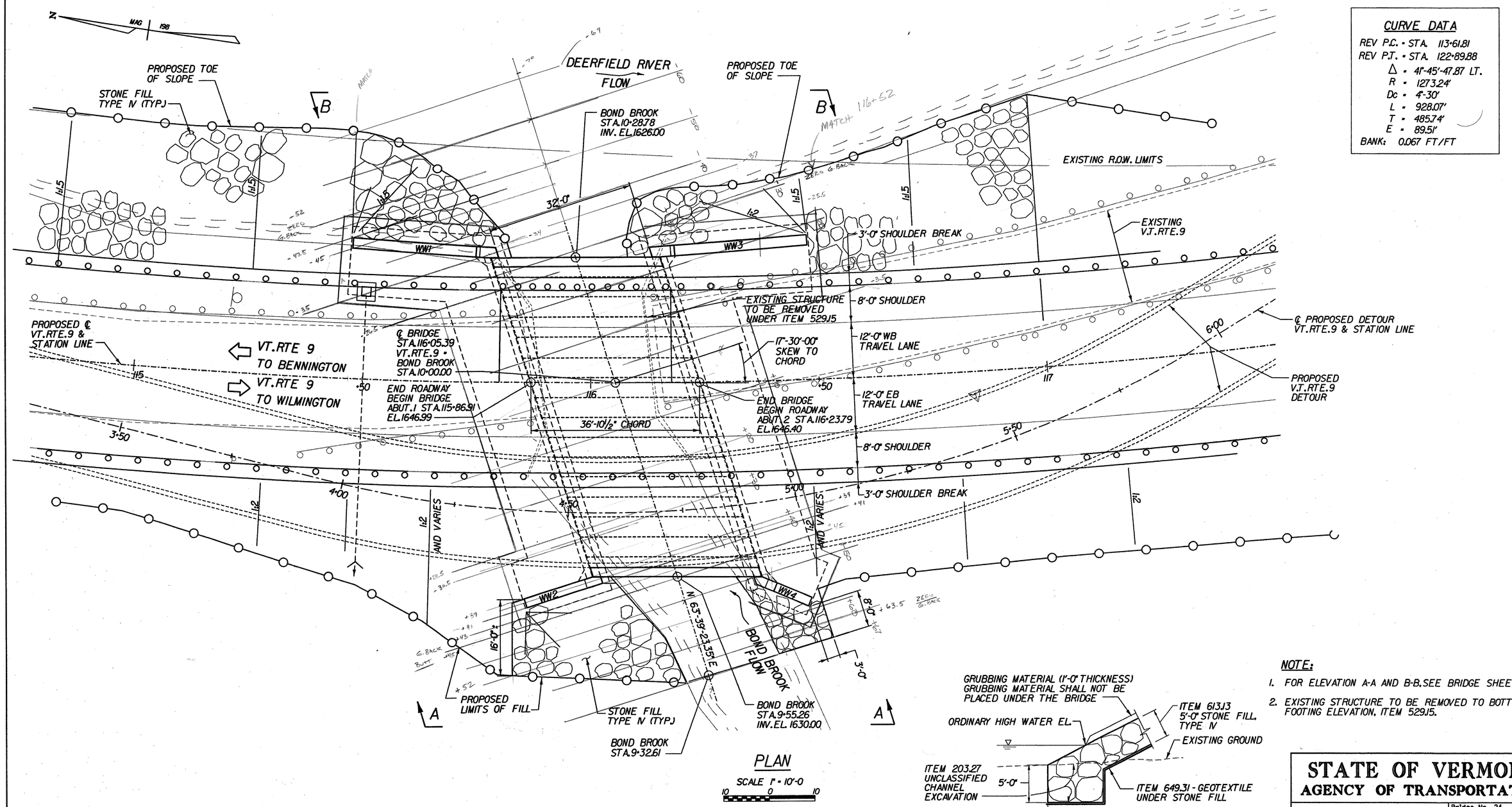




FINAL SURVEY
ORIGINAL SURVEY
DATE
BY
SURVEYED
PLOTTED
NOTE BOOK
AREAS
AREAS CHECKED
NO.

HIGHWAY FEDERAL AID PROJECT
PLATE 5-FULL CROSS SECTION-FULL LINE
NORTHERN ILLUSTRATORS
PRINTED IN U.S.A.

496 BR25-AB2



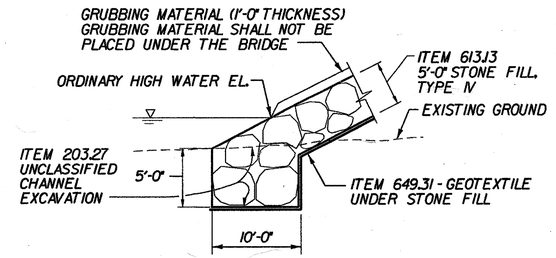
PLAN

SCALE 1" = 10'-0

10 0 10

CURVE DATA

REV P.C. = STA. 113+61.81
REV P.T. = STA. 122+89.88
Δ = 41°-45'-47.87" LT.
R = 1273.24'
Dc = 4°-30'
L = 928.07'
T = 485.74'
E = 89.51'
BANK: 0.067 FT/FT



TYPICAL EMBANKMENT PROTECTION DETAIL

(NOT TO SCALE)

NOTE:

1. FOR ELEVATION A-A AND B-B, SEE BRIDGE SHEET BR103.
2. EXISTING STRUCTURE TO BE REMOVED TO BOTTOM OF FOOTING ELEVATION, ITEM 529.15.

STATE OF VERMONT
AGENCY OF TRANSPORTATION

Town Of SEARSBURG	Bridge No. 24
Highway No. VT. RTE. 9	Log Sta.
	Surv. Sta. 116+00
VT. RTE.9 OVER BOND BROOK	
PLAN	
Designed By M. GOGUEN	Drawn by J. LAGONE
Checked By M. OLSTAD Date 12/2001	Bridge Design Supervisor M. OLSTAD Date 12/2001
PROJECT SEARSBURG - WILMINGTON	PROJECT NO. NHF 010-1(18)
I.G.C. Info.	
Bridge Sheet No. BR100	Sheet ## OF 435

CHA CLOUGH, HARBOUR & ASSOCIATES LLP
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS
8 WINNERS CIRCLE ALBANY, NEW YORK, 12205

FILE NAME =u\19755\MSTN\15\br-dg24\24_plan.plt
DATE/TIME =12/17/01
USER =2225

497 BR 24

ABUT # 1

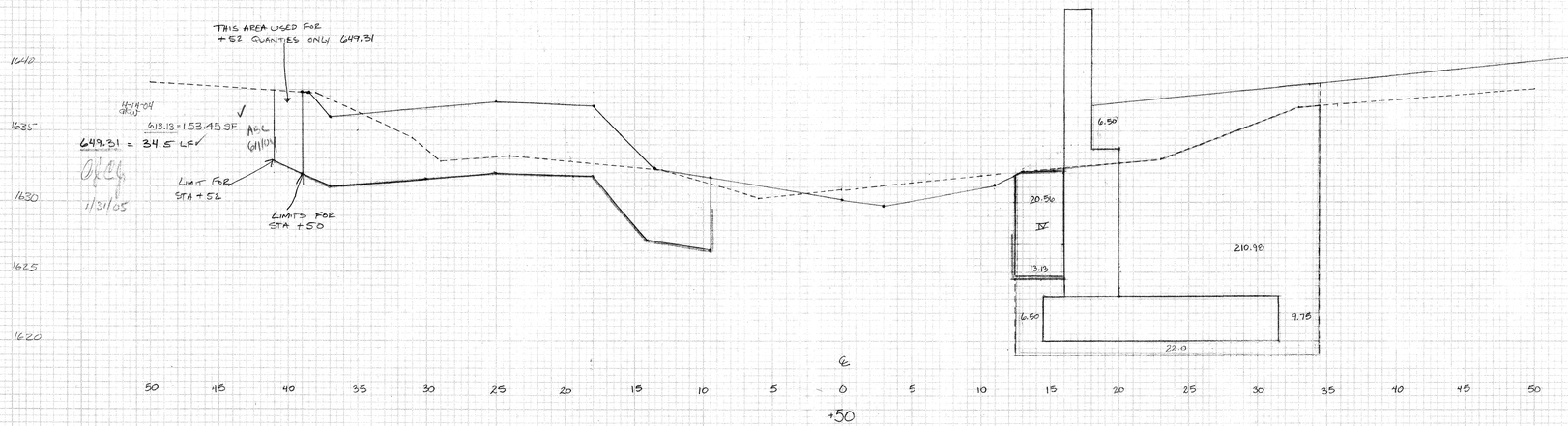
ABUT # 2

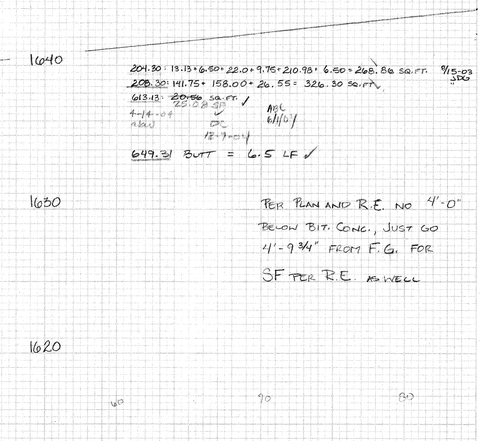
BRIDGE 24
SECTIONS

SEARSBURG - WILMINGTON
NH-F010-1(16)

SCALE: 1:5

XBR24-1





PER PLAN AND R.E. NO 4'-0" BELOW BIT. CONC., JUST GO 4'-9 3/4" FROM F.G. FOR SF PER R.E. AS WELL

316.5 LF ✓ BUTT 649.31 +52 ABUT # 1
1/31/05

ALL COFFERDAM EXCAVATION TO BE PAID AS EARTH, PER AGREEMENT WITH THE PRIME.

+67 ✓
2@8 (649.31)

+67
BUTT 649.31
SAME AS +60 = 21 LF ✓

ADC 1/31/05

PLATE 3-FULL CROSS SECTION-FULL LINE

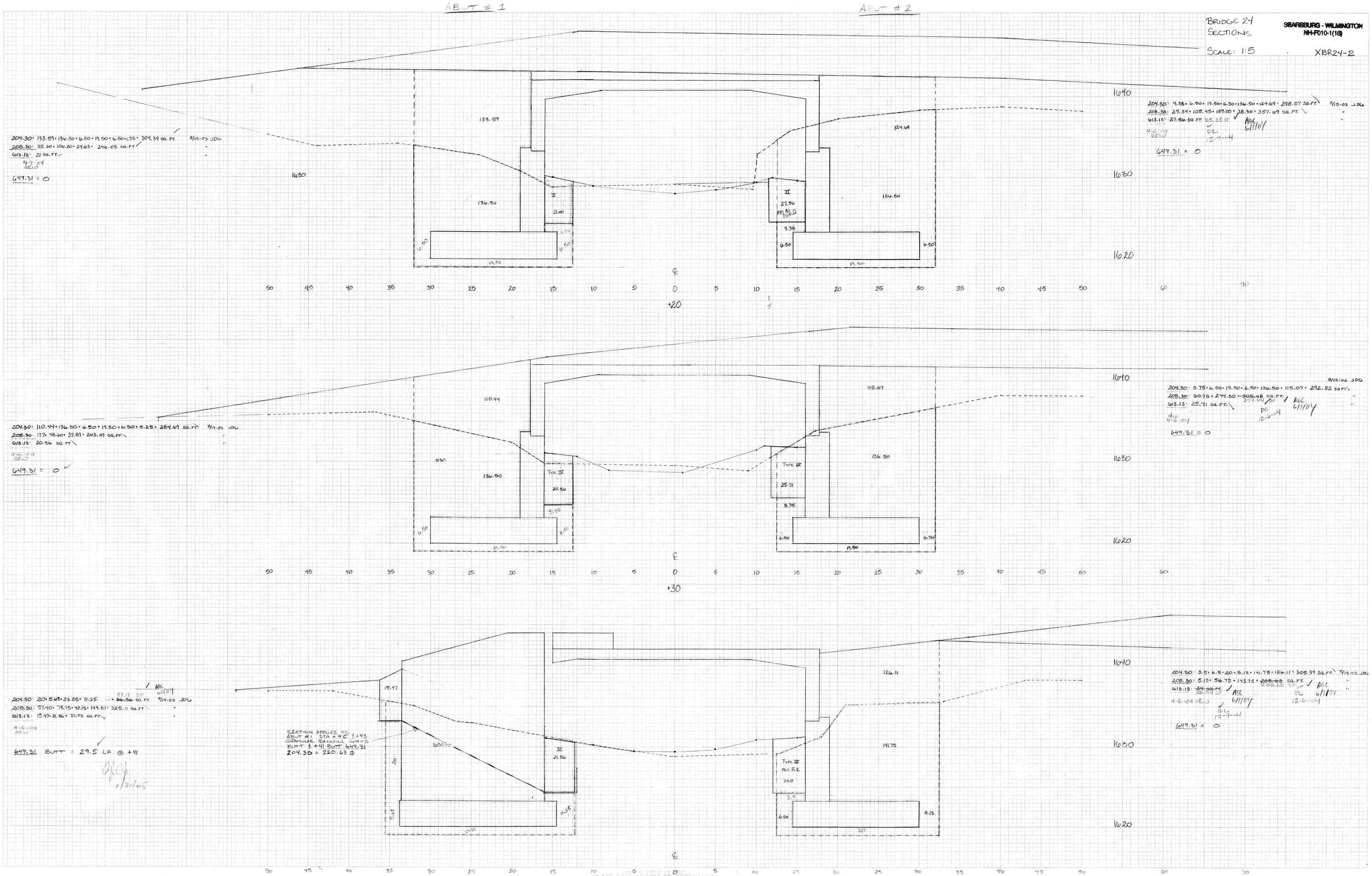
498 BR 24 ANS

BRIDGE 24
SECTIONS

SCALE: 1:5

SEARSBURG - WILMINGTON
NH-F010-1(18)

XBR24-2



204.30: 133.59 + 136.50 + 6.50 + 19.50 + 6.50 + 1.75 = 304.34 SQ. FT. 8/19-03 JDG
208.30: 115.20 + 106.20 + 24.63 = 246.03 SQ. FT.
613.13: 21 SQ. FT.
4-7-04 ARW
649.31 = 0

204.30: 4.38 + 6.50 + 19.50 + 6.50 + 136.50 + 124.69 = 298.07 SQ. FT. 8/15-03 JDG
208.30: 24.34 + 105.45 + 189.00 + 38.90 = 357.69 SQ. FT.
613.13: 27.56 SQ. FT. 25.38 SF ✓ ABC 6/11/04
4-6-04 ARW DC 12-7-04
649.31 = 0

204.30: 110.44 + 136.50 + 6.50 + 19.50 + 6.50 + 5.25 = 284.69 SQ. FT. 8/19-03 JDG
208.30: 177 + 48.60 + 37.89 = 263.49 SQ. FT.
613.13: 20.56 SQ. FT.
4-6-04 ARW
649.31 = 0

204.30: 8.75 + 6.50 + 19.50 + 6.50 + 136.50 + 115.07 = 292.82 SQ. FT. 8/15-03 JDG
208.30: 60.98 + 244.50 = ~~305.48~~ 302.44 SF SQ. FT. ✓ ABC 6/11/04
613.13: 25.71 SQ. FT. DC 12-6-04
ARW 4-6-04
649.31 = 0

204.30: 20 + 5.67 + 23.25 + 10.25 = ~~66.56~~ 59.17 SF SQ. FT. 8/19-03 JDG ✓ ABC 6/11/04
208.30: 57.40 + 75.75 + 42.15 + 149.81 = 325.11 SQ. FT.
613.13: 15.47 + 21.56 = 37.03 SQ. FT.
4-6-04 ARW
649.31 BUTT = 29.5 LF @ +41

SECTION APPLIES TO ABUT #1 STA +46 & +43 GRANULAR BACKFILL LIMITS BUTT & +41 BUTT 649.31
204.30 = 220.63 ⌀

204.30: 3.5 + 6.5 + 20 + 8.13 + 141.75 + 126.11 = 305.99 SQ. FT. 8/15-03 JDG
208.30: 5.13 + 56.75 + 143.75 = ~~205.63~~ 288.68 SQ. FT. ✓ ABC 6/11/04
613.13: ~~24 SQ. FT.~~ 26.84 SF ✓ ABC 6/11/04 DC 12-6-04
4-6-04 ARW DC 12-7-04
649.31 = 0

FOR +41 ABUT #1 USE +40 (649.31)

499 BR24 X5

BRIDGE 24
SECTIONS

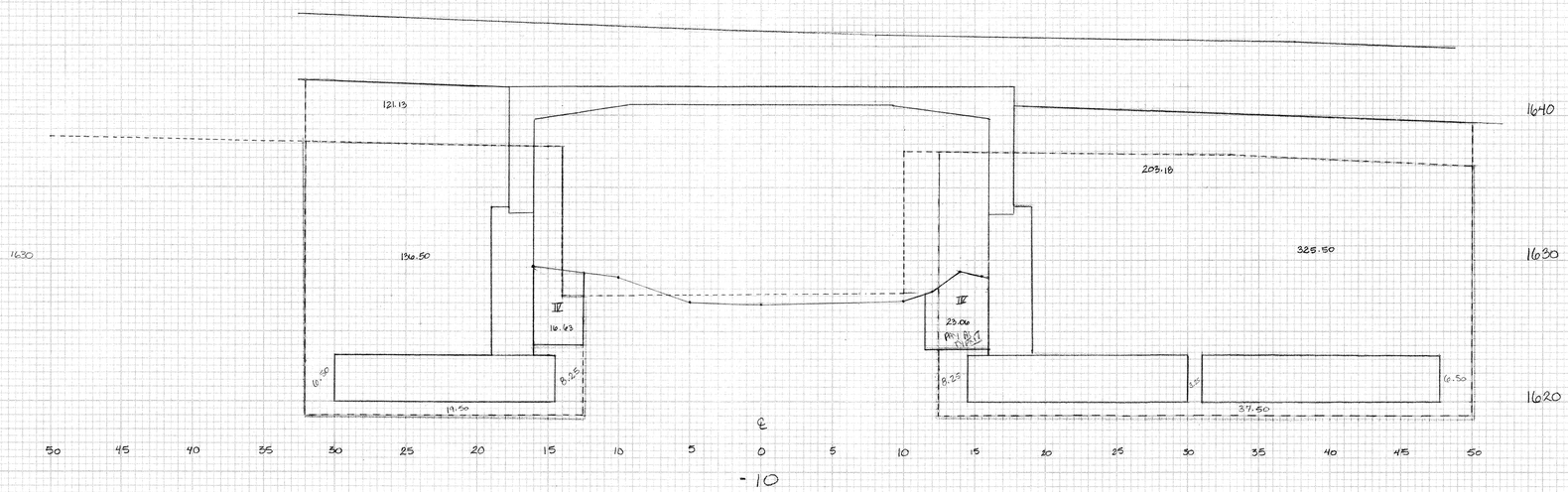
SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE 1:5

XBR24-3

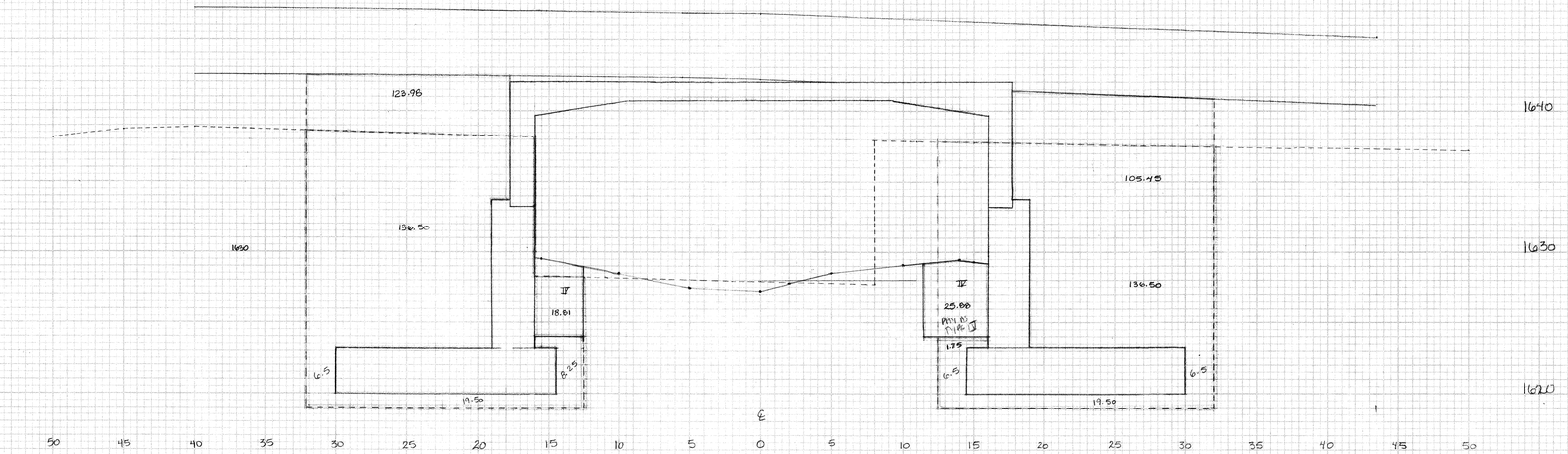
ABUT # 1 ABUT # 2

204.30: 121.13+136.50+6.50+19.50+8.25 = 291.88 SQ.FT. 8/19-03 JDG
208.30: 342+12.75 = 354.75 SQ.FT. "
613.13: 16.63 SQ.FT. "
ATW 4-9-04
649.31 = 0



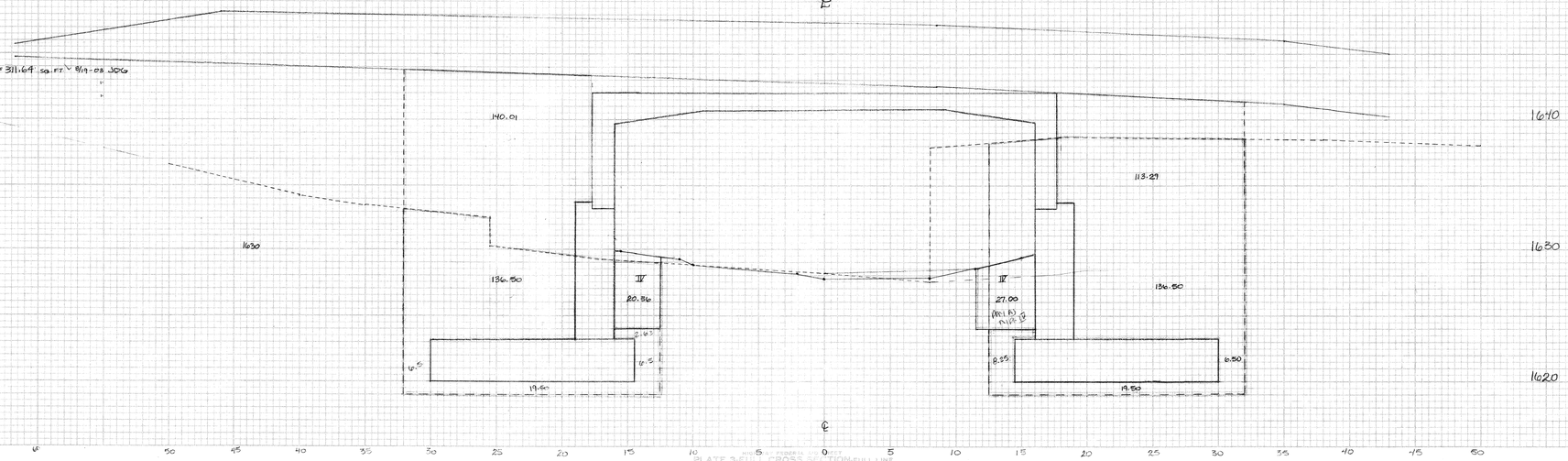
204.30: 8.25+3.25+37.50+6.50+325.50+203.18 = 584.18 SQ.FT. 8/15-03 JDG
208.30: 675.00 SQ.FT. "
613.13: ~~23.06~~ SQ.FT. "
20.15 SF
ATW 4-9-04
ABL 6/11/04
649.31 = 0

204.30: 123.98+136.50+6.50+19.50+8.25 = 294.73 SQ.FT. 8/19-03 JDG
208.30: 309.60+32.73 = 342.33 SQ.FT. "
613.13: 18.81 SQ.FT. "
4-7-04 ATW
649.31 = 0



204.30: 1.75+6.50+19.50+6.50+136.50+105.45 = 276.20 SQ.FT. 8/15-03 JDG
208.30: 364.65 SQ.FT. "
613.13: 25.88 SQ.FT. "
ATW 4-7-04
649.31 = 0

204.30: 140.01+136.50+6.50+19.50+6.50+2.63 = 311.64 SQ.FT. 8/19-03 JDG
208.30: 90.68+91.16+45.45 = 227.29 SQ.FT. "
613.13: 20.86 SQ.FT. "
4-7-04 ATW
649.31 = 0



204.30: 8.25+19.50+6.50+136.50+113.29 = 284.04 SQ.FT. 8/15-03 JDG
208.30: 106.84+273.70 = 380.54 SQ.FT. "
613.13: ~~27.00~~ SQ.FT. "
24.37 SF
4-7-04 ATW
DC 12-9-04
ABL 6/11/04
649.31 = 0

ABUT #1 ABUT #2

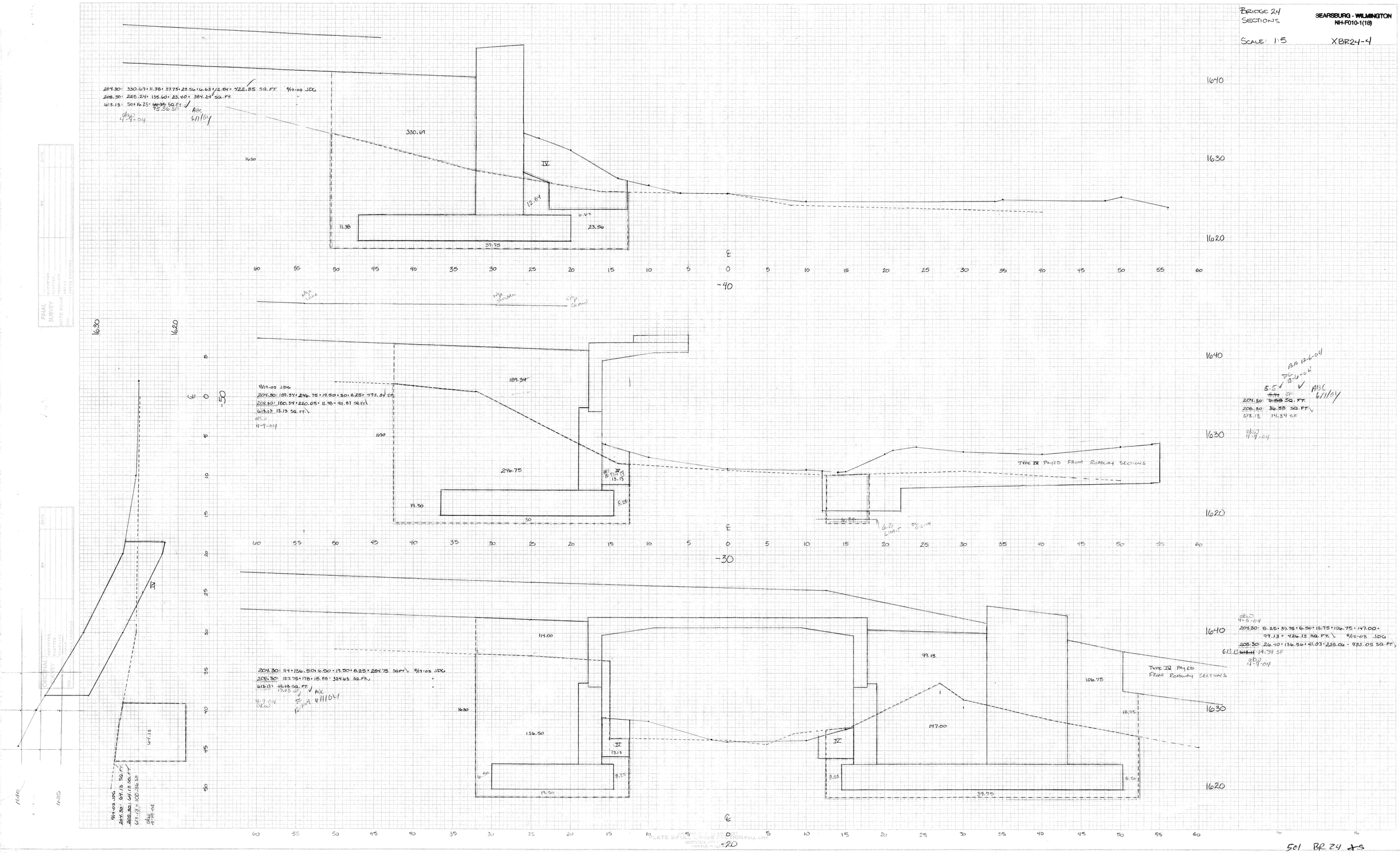
500 BR 24 AS

BRIDGE 24
SECTIONS

SEARSBURG - WILMINGTON
NH-F010-1(18)

SCALE: 1:5

XBR24-4



BB 12-6-04
DG 12-6-04
5.5 ✓ ~~6.11~~ SF ✓
ABC 6/11/04
204.30: ~~6.88~~ SQ.FT.
208.30: 36.58 SQ.FT.
613.13 14.34 SF
4-9-04

4-9-04
204.30: 8.25+39.75+6.50+18.75+106.75+147.00+99.13= 426.13 SQ.FT. 8/15-03 JDG
208.30: 26.40+136.56+41.03+228.06= 432.05 SQ.FT.
613.13 ~~613.11~~ 14.34 SF
4-9-04

204.30: 114+136.50+6.50+19.50+8.25= 284.75 SQ.FT. 8/19-03 JDG
208.30: 127.75+178+18.88= 324.63 SQ.FT.
613.13: ~~13.13~~ 17.05 SF ✓ ABC 6/11/04
4-9-04

8/19-03 JDG
204.30: 189.34+246.75+19.50+30+8.25= 493.84 SF
208.30: 180.34+220.05+11.48= 411.87 SQ.FT.
613.13 13.13 SQ.FT.
4-9-04

8/19-03 JDG
204.30: 64.13 SQ.FT.
208.30: 64.13 SQ.FT.
613.13 = 100.36 SF
4-9-04

501 BR 24 XS

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

1). ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990 WITH LATEST REVISIONS AND THE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS

1). AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996 EDITION WITH LATEST REVISIONS.

MATERIAL SPECIFICATIONS

1). UNLESS NOTED, ALL STEEL TO BE AASHTO M270 GRADE 50W (ASTM A709-50W).

2). HIGH STRENGTH BOLTS: AASHTO M164 (ASTM A325) 7/8" DIA.
TYPE 3 BOLTS SHALL BE USED FOR UNPAINTED CONNECTIONS.
TYPE 1 (GALV.) BOLTS SHALL BE USED FOR PAINTED CONNECTIONS.

3). ALL GIRDER WEB & FLANGES, CROSSFRAMES AND CONNECTION PLATES SHALL BE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS. DRAWINGS SHALL CALL OUT "H2-3" FOR EACH APPLICABLE ITEM IN THE BILLS OF MATERIAL.

FABRICATION

1). ALL HOLES SHALL BE PUNCHED OR DRILLED FULL SIZE (UN). HOLES NOTED "DA" SHALL BE DRILLED DURING ASSEMBLY WITH PARTS ASSEMBLED.

2). STUDS ARE FURNISHED AND FIELD APPLIED BY OTHERS.

WELDING

1). THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS D1.5-02 BRIDGE WELDING CODE AND IN ADDITION TO SPECIFICATIONS SHOWN ABOVE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.

2). WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGED ARC & SHIELDED METAL ARC PROCESSES. ALL WELDS ARE CONTINUOUS U.N.

3). NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.

CLEANING:

1). ALL STEEL SHALL BE BLAST CLEANED AS PER SSPC SP-10 PER SPEC. 506.14(a)
2). $\frac{1}{16}$" RADIUS ON ALL EDGES OF PAINTED SURFACES.

PAINTING

1). ALL STEEL COMPONENTS WITHIN 10'-0 OF END OF GIRDERS AS SHOWN IN SKETCH "P1" SHALL BE COATED WITH THE PROTECTIVE SYSTEM ACCORDING TO SECTION 513 OF THE SPECIFICATION. THE PAINT COLOR SHALL BE BROWN. PAINT SYSTEM MUST BE SYSTEM LISTED ON THE QUALIFIED PRODUCT LIST SECTION 513.02 BROWN COLOR CHIP #20059.

FIELD CONNECTIONS

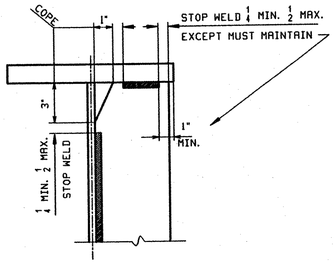
1). ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" (22mm) DIAMETER HIGH STRENGTH A-325 BOLTS, INSTALLED PER SECTION 506.19(c).

2). BOLTS SHALL HAVE HEAVY HEX NUT, HEX HEAD, & ONE FLAT WASHER EACH (WASHER TO BE PLACED UNDER TURNED ELEMENT): oversized holes shall have hardened washers under both bolt head and nut

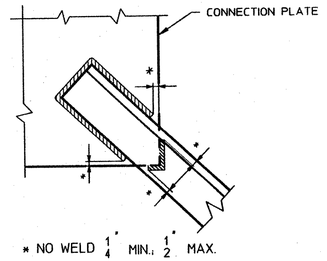
3). PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWINGS.

PAINT SYSTEM

WASSER		*(moisture cure system)*		
HIGH TECH COATINGS	P	MC-Zinc zinc rich urethane (organic)	3.0	6.0
	I	MC-Ferrox B urethane	3.0	6.0
	T	MC-Ferrox A aliphatic urethane	3.0	10.0

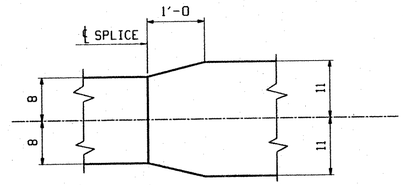


DETAIL "WSI"

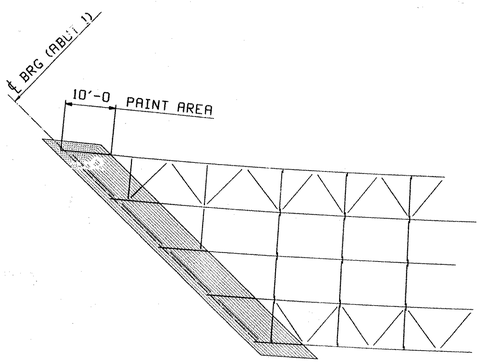


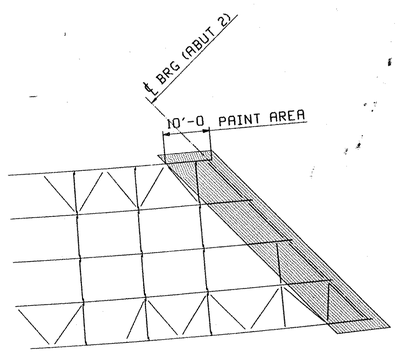
* NO WELD $\frac{1}{4}$" MIN., $\frac{1}{2}$" MAX.

TYP. WELD TERMINATION



WIDTH TRANSITION DETAIL "WT"

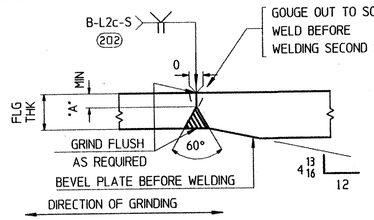




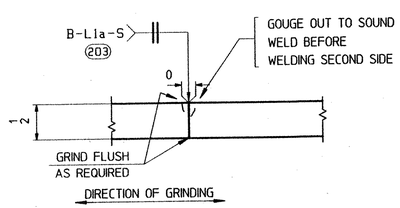
PAINT SKETCH "P1"

NOTES:
-ALL STEEL WITHIN 10'-0 OF THE END OF GIRDER SHALL BE PAINTED.
-FOR LATERAL BRACING AND INT CROSSFRAMES THAT FALL PARTIALLY IN PAINTED AREA, PAINT THE ENTIRE PIECE.

FLG THK	"A"
$\frac{7}{8}$ - 1	$\frac{1}{4}$
$1\frac{1}{4}$ - $1\frac{1}{2}$	$\frac{3}{8}$



FLANGE PLATE SPLICE DETAIL "FA"



WEB PLATE SPLICE DETAIL "WA"

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-17-02

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

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	5-22-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: | ELECTRODES: | HOLES: | SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: GENERAL NOTES
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT DOT

DRAWN BY	DATE
WL	07/15
CHKD BY	
JAK	7/17
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

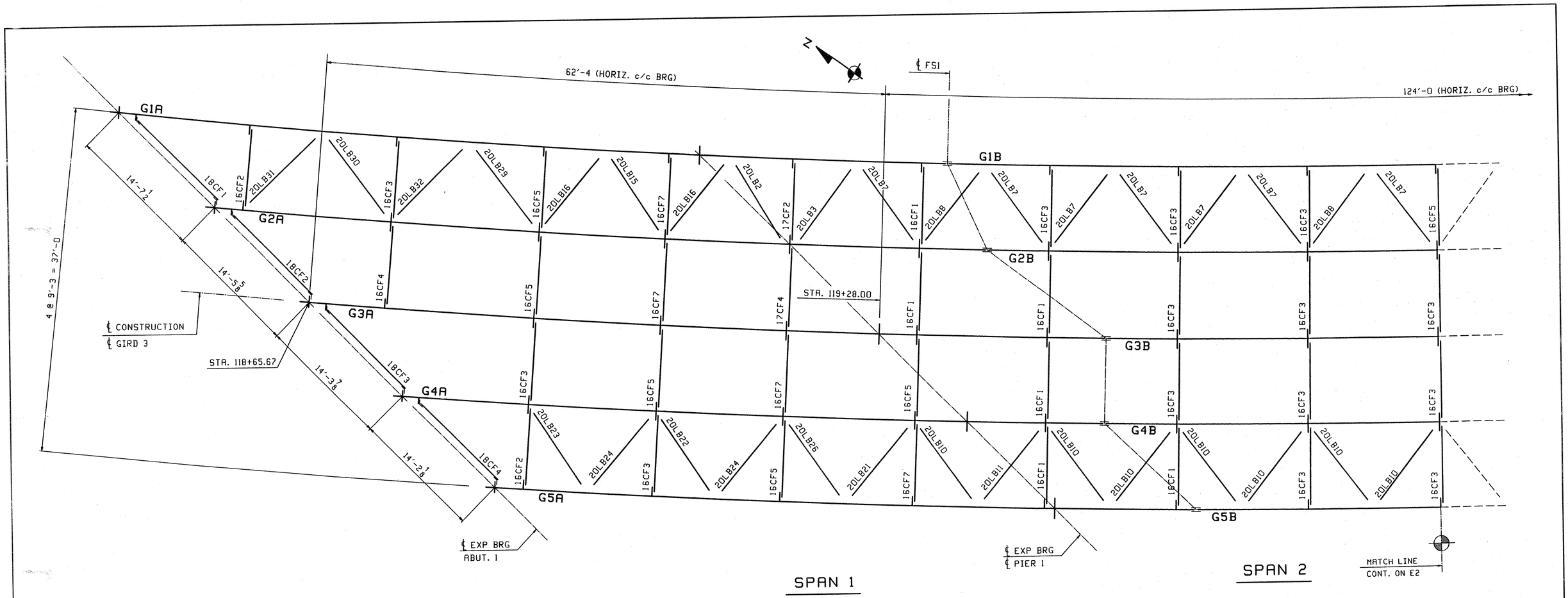
TENSOR 2241

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	GN1
	REV. △

600 BR25 SS

Sat Aug 10 10:20:01 EST 2002 /users/jak/2241/GN1 dwg



OUT FOR APPROVAL	8-23-02										
OUT FOR APPROVAL											
ISSUED TO SHOP											
FIELD & OFFICE											
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES:

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-17-02

DESCRIPTION: FRAMING PLAN SPAN 1-2

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2241

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

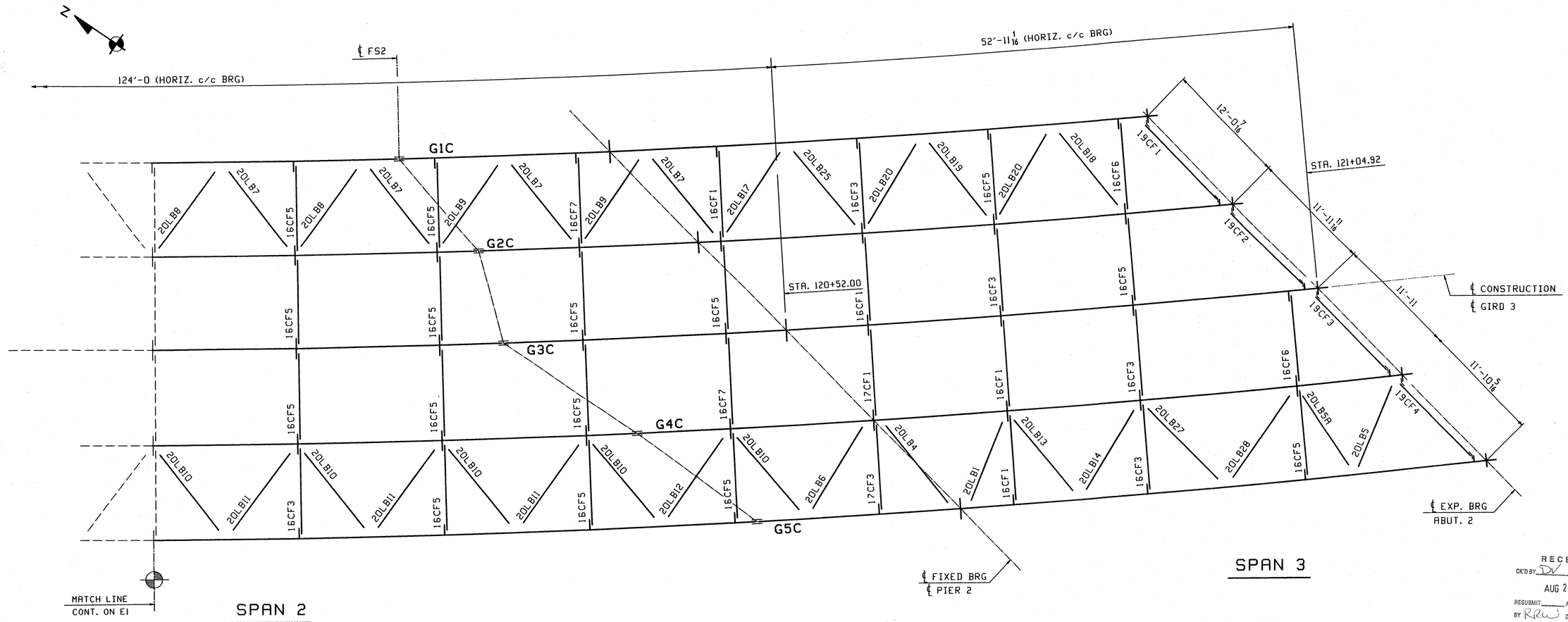
DRAWN BY	DATE
VWJ	08/09
CHKD BY	
DO	08/14
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	E1
	REV. △

WORK WITH E2 & E3.

601 BR25-E1



SPAN 2

SPAN 3

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

WORK THIS DWG WITH E1 & E3.

DESCRIPTION: FRAMING PLAN SPAN 2-3

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2241

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE		
VWJ	08/10		
CHKD BY			
DO	08/14		
APPROV BY			
SUPERVISOR	W. J. GATTI		
Q.A.			

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	E2
	REV.

602 BRS-E-2

VWJ Fri Aug 16 16:55:28 EDT 2002 /users/jobs/2241/E2.1 Rev0

FIELD BOLT LIST						A325 Type 3 BOLTS								
LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS/CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED						WASH CODE	PIECES CONNECTED AND REMARKS
1														FS1 LN 1 & 3, FS2 LN 1 & 2
2	128	7/8	3 1/4	32	4	1 15/16	1/2	7/8	9/16				1	TOP FLG SPLICE
3	448	7/8	3	112	4	1 1/2	1/2	1/2	1/2				1	WEB SPLICE
4	216	7/8	4 1/2	72	3	3 1/8	3/4	1 1/2	7/8				1	BTM FLG SPLICE U.N.
5	72	7/8	4 1/4	72	1	2 7/8	3/4	1 1/4	7/8				1	BTM FLG SPL FS1 LN 3
6														
7														FS1 LINE 2
8	32	7/8	3 1/4	32	1	1 15/16	1/2	7/8	9/16				1	TOP FLG SPLICE
9	84	7/8	3	84	1	1 1/2	1/2	1/2	1/2				1	WEB SPLICE
10	72	7/8	4 1/2	72	1	3 1/8	3/4	1 1/2	7/8				1	BTM FLG SPLICE
11														
12														FS1 LINE 4
13	32	7/8	3 3/4	32	1	2 5/16	1/2	1 1/4	9/16				1	TOP FLG SPLICE
14	140	7/8	3	140	1	1 1/2	1/2	1/2	1/2				1	WEB SPLICE
15	72	7/8	4 1/4	72	1	2 7/8	3/4	1 1/4	7/8				1	BTM FLG SPLICE
16	4	7/8	3	4	1	1 5/8	3/8	1 1/4					1	FILL @ TOP FLG
17														
18														FS1 LINE 5
19	32	7/8	3 3/4	32	1	2 5/16	1/2	1 1/4	9/16				1	TOP FLG SPLICE
20	112	7/8	3	112	1	1 1/2	1/2	1/2	1/2				1	WEB SPLICE
21	72	7/8	4 1/4	72	1	2 7/8	3/4	1 1/4	7/8				1	BTM FLG SPLICE
22	4	7/8	3	4	1	1 5/8	3/8	1 1/4					1	FILL @ TOP FLG
23														
24														FS2 LINE 3 & 4
25	64	7/8	3 1/4	32	2	1 15/16	1/2	7/8	9/16				1	TOP FLG SPLICE
26	168	7/8	3	84	2	1 1/2	1/2	1/2	1/2				1	WEB SPLICE
27	144	7/8	4 1/4	72	2	2 7/8	3/4	1 1/4	7/8				1	BTM FLG SPLICE
28														
29														FS2 LINE 5
30	32	7/8	3 1/4	32	1	1 15/16	1/2	7/8	9/16				1	TOP FLG SPLICE
31	112	7/8	3	112	1	1 1/2	1/2	1/2	1/2				1	WEB SPLICE
32	72	7/8	4 1/4	72	1	2 7/8	3/4	1 1/4	7/8				1	BTM FLG SPLICE

1: 1 Hard Flat Washer

FIELD BOLT LIST						A325 Type 3 BOLTS								
LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS/CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED						WASH CODE	PIECES CONNECTED AND REMARKS
33														CF TYPE-C2 (UNPAINTED) TYP U.N.
34	896	7/8	2 1/2	8	112	1	1/2	1/2					1	TOP GUSS TO STIFFENER
35	1120	7/8	2 1/2	10	112	1	1/2	1/2					1	BTM GUSS TO STIFFENER
36														
37														CF TYPE-C3 (UNPAINTED) 17CF1,2,3 & 4
38	32	7/8	3	8	4	1 1/2	1/2	1					1	TOP GUSS TO STIFFENER
39	32	7/8	2 1/2	8	4	1	1/2	1/2					1	TOP GUSS TO STIFFENER
40	40	7/8	3	10	4	1 1/2	1/2	1					1	BTM GUSS TO STIFFENER
41	40	7/8	2 1/2	10	4	1	1/2	1/2					1	BTM GUSS TO STIFFENER
42														
43														LATERAL BRACING (UNPAINTED)
44	366	7/8	2 1/2	6	61	7/8	1/2	3/8					2	LATERAL TO GUSSET

1: 1 Hard Flat Washer
2: 2 Hard Flat Washers

FIELD BOLT LIST						A325-1 GALV BOLTS								
LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS/CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED						WASH CODE	PIECES CONNECTED AND REMARKS
45														END CF TYPE-C1 (PAINTED)
46	96	7/8	3	12	8	1 1/2	1/2	1					2	TOP GUSS TO STIFFENER
47	96	7/8	2 1/2	12	8	1	1/2	1/2					2	TOP GUSS TO STIFFENER
48	64	7/8	3	8	8	1 1/2	1/2	1					2	BTM GUSS TO STIFFENER
49	64	7/8	2 1/2	8	8	1	1/2	1/2					2	BTM GUSS TO STIFFENER
50														
51														CF TYPE-C2 (PAINTED) 16CF2,4 & 6
52	80	7/8	2 1/2	8	10	1	1/2	1/2					1	TOP GUSS TO STIFFENER
53	100	7/8	2 1/2	10	10	1	1/2	1/2					1	BTM GUSS TO STIFFENER
54														
55														LAT BRACING (PAINTED) 20LB5,18 & 31
56	18	7/8	2 1/2	6	3	7/8	1/2	3/8					2	LATERAL TO GUSSET

1: 1 Hard Flat Washer
2: 2 Hard Flat Washers

FIELD BOLT SUMMARY			2% + 3 ADDED, MIN. 2 EXTRA			
LINE	NO. OF BOLTS	BOLT DIAM.	TYPE	BOLT LEN	ACTUAL COUNT	REMARKS
1	2506	7/8	A325 Type 3	2 1/2	2454	
2	1170	7/8		3	1144	
3	264	7/8		3 1/4	256	
4	68	7/8		3 3/4	64	
5	444	7/8		4 1/4	432	
6	297	7/8	A325 Type 3	4 1/2	288	
7						
8	5122	Hard Flat Washers		for 7/8 ϕ BOLT		
9						
10						
11	368	7/8	A325-1 GALV	2 1/2	358	
12	166	7/8	A325-1 GALV	3	160	
13						
14	879	Hard Flat Washers		for 7/8 ϕ BOLT		
15						
16						
17						

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: | ELECTRODES: | HOLES: | SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: FIELD BOLTS

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

	DRAWN BY	DATE
	VWJ	08/12
	CHKD BY	
	DO	08/16
	APPROV BY	
	SUPERVISOR	W. J. GATTI
	Q.A.	

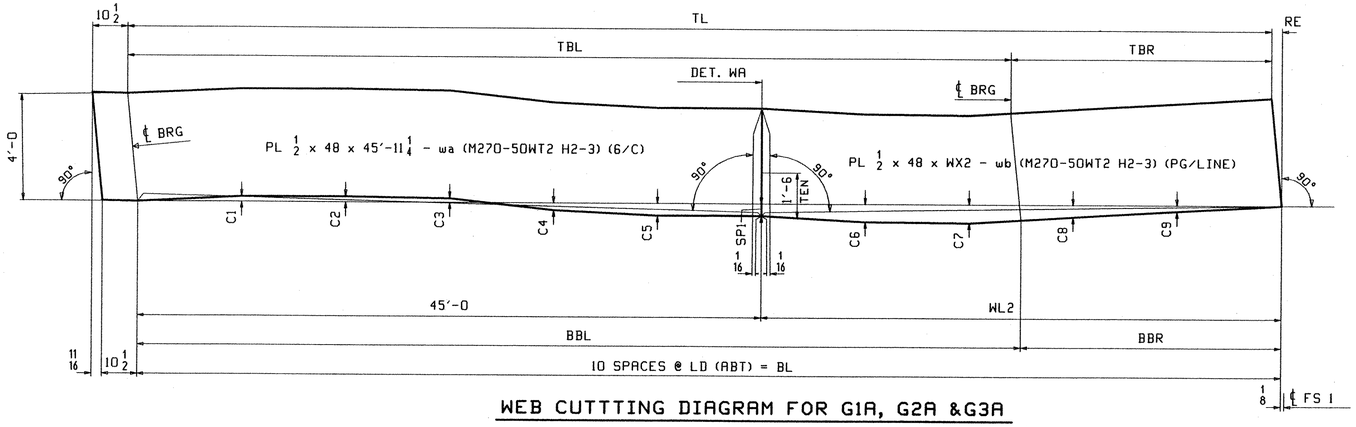
TENSOR 2241

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 165 | DRG. NO. E3 | REV. △

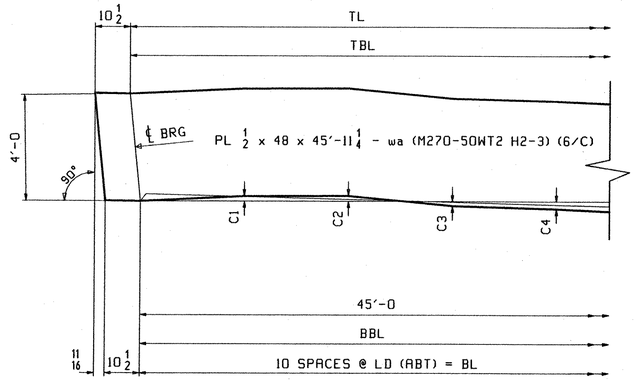
603-BR 25-E-3

VWJ Fri Aug 16 16:30:05 EDT 2002 /users/jobs/2241/E3.dwg

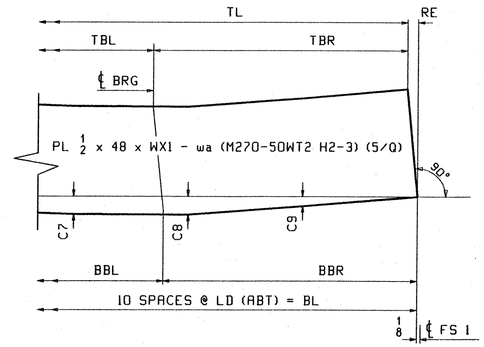


WEB CUTTTING DIAGRAM FOR G1A, G2A &G3A

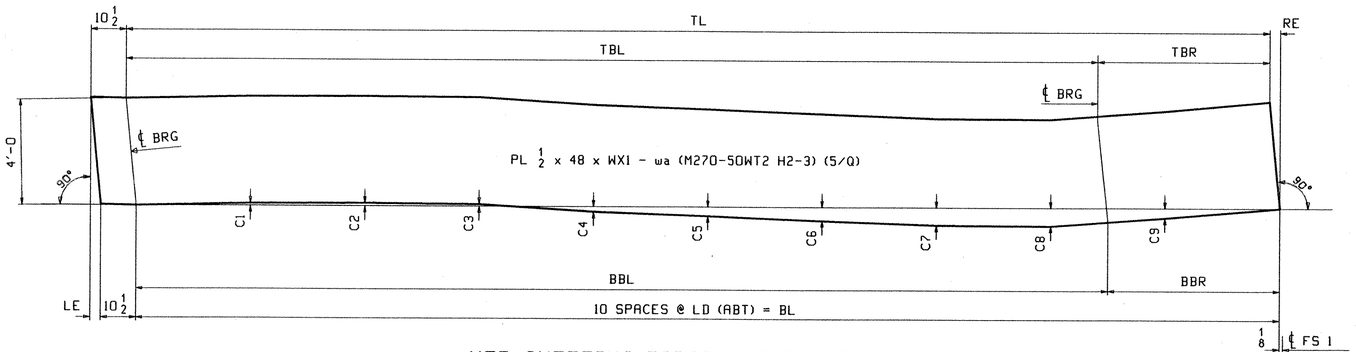
MARK	TL	BL	RE	WL2	WX2	SP1	TBL	TBR	BBL	BBR	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	PG/LINE
G1A	90'-0 3/16	89'-11 7/8	3/8	44'-11 7/8	44'-11 7/8	11/16	63'-6 3/4	26'-5 7/16	63'-6 15/16	26'-4 15/16	9'-0	3/16	3/16	1/16	1/4	11/16	1 1/4	1 3/4	1 1/8	9/16	5/ U
G2A	84'-6 5/8	84'-6 1/4	5/16	39'-6 1/4	39'-6 1/4	3/4	62'-11 3/16	21'-7 7/16	62'-11 3/8	21'-6 7/8	8'-5 3/8	1/4	1/4	3/16	1/16	9/16	1	1 9/16	1 7/16	11/16	5/ Y
G3A	87'-2 7/16	87'-2 1/16	5/16	42'-2 1/16	42'-2 1/16	15/16	62'-4	24'-10 7/16	62'-4 3/16	24'-9 7/8	8'-8 5/8	3/16	1/8	1/16	7/16	7/8	1 3/8	1 15/16	1 7/16	11/16	5/ W



WEB CUTTTING DIAGRAM FOR G3A



WEB CUTTTING DIAGRAM FOR G5A



WEB CUTTTING DIAGRAM FOR G4A & G5A

MARK	TL	BL	LE	RE	WX1	TBL	TBR	BBL	BBR	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9
G4A	76'-9 9/16	76'-9 1/4	11/16	3/8	77'-8 7/16	61'-9 1/8	15'-0 7/16	61'-9 5/16	14'-11 15/16	7'-8 1/8	3/16	1/4	3/16	0	5/16	5/8	1	1 3/8	3/4
G5A	76'-8	76'-7 13/16	5/8	7/16	77'-6 15/16	61'-2 9/16	15'-5 7/16	61'-2 13/16	15'-5	7'-8	1/8	1/8	0	1/4	1/2	7/8	1 3/16	1 1/2	3/4

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL WA SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RJW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES:
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: CAMBER DIAGRAM "A" GIRDERS
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

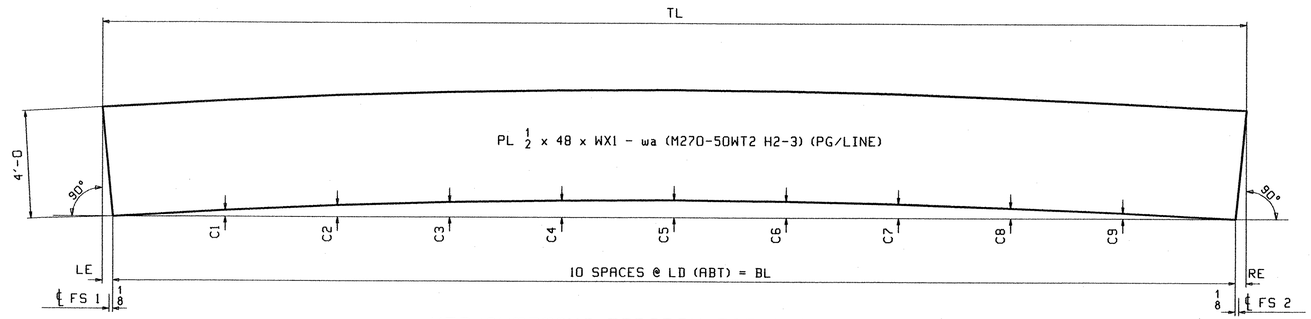
DRAWN BY	DATE
ATD	07/31
CHKD BY	
DO	08/09
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 165 | DRG. NO. C1 | REV. △

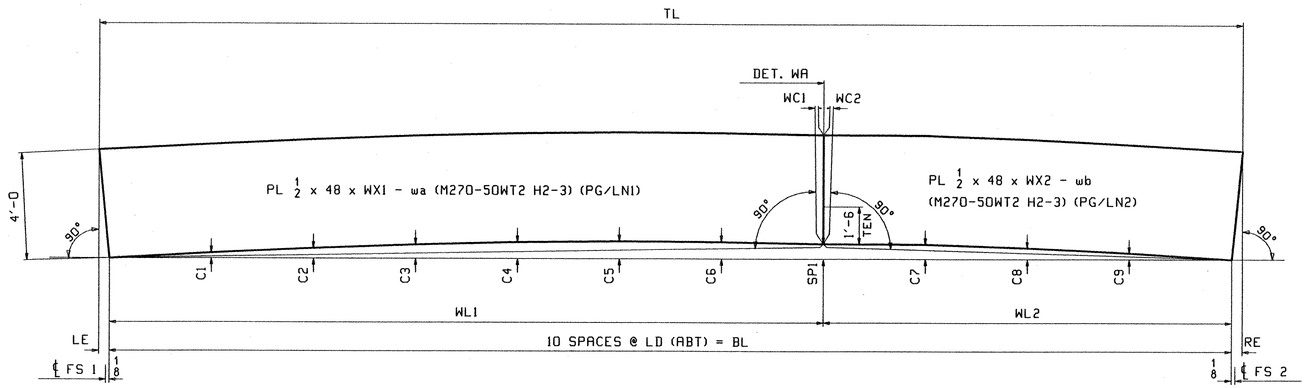
604-BR25-C1

DO Mon Aug 12 07:07:51 EDT 2002 /users/jobs/2241/c1.dwg



WEB CUTTTING DIAGRAM FOR G1B THRU G3B

MARK	TL	BL	LE	RE	WX1	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	PG/LINE
G1B	78'-6 1/4	78'-5 3/8	7/16	7/16	78'-6 1/4	7'-10 1/8	7/8	1 9/16	2 1/16	2 5/16	2 3/8	2 1/4	1 15/16	1 7/16	3/4	5/ A
G2B	81'-6 1/16	81'-5 5/16	3/8	3/8	81'-6 1/16	8'-1 3/4	3/4	1 3/8	1 7/8	2 3/16	2 5/16	2 3/16	1 7/8	1 7/16	3/4	4/ Y
G3B	71'-1 3/8	71'-0 5/8	3/8	3/8	71'-1 3/8	7'-1 1/4	5/8	1 1/8	1 1/2	1 3/4	1 13/16	1 3/4	1 1/2	1 1/8	5/8	5/ N



WEB CUTTTING DIAGRAM FOR G4B & G5B

MARK	TL	BL	LE	RE	WL1	WL2	WX1	WX2	SP1	WC1	WC2	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	PG/LN1	PG/LN2
G4B	84'-8 3/16	84'-7 3/8	3/8	7/16	56'-11 7/8	27'-7 1/2	57'-0 1/4	27'-7 15/16	2 3/16	1/8	5/16	8'-5 1/2	3/4	1 1/2	2	2 3/8	2 9/16	2 7/16	2 1/8	1 5/8	7/8	6/ A	6/ G
G5B	86'-8 7/16	86'-7 9/16	7/16	7/16	56'-11 7/8	29'-7 11/16	57'-0 5/16	29'-8 1/8	2 1/2	3/16	5/16	8'-8	15/16	1 3/4	2 3/8	2 3/4	2 7/8	2 11/16	2 5/16	1 11/16	15/16	5/ S	6/ E

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL WA SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23	OZ								
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-17-02

DESCRIPTION: CAMBER DIAGRAM "B" GIRDERS
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

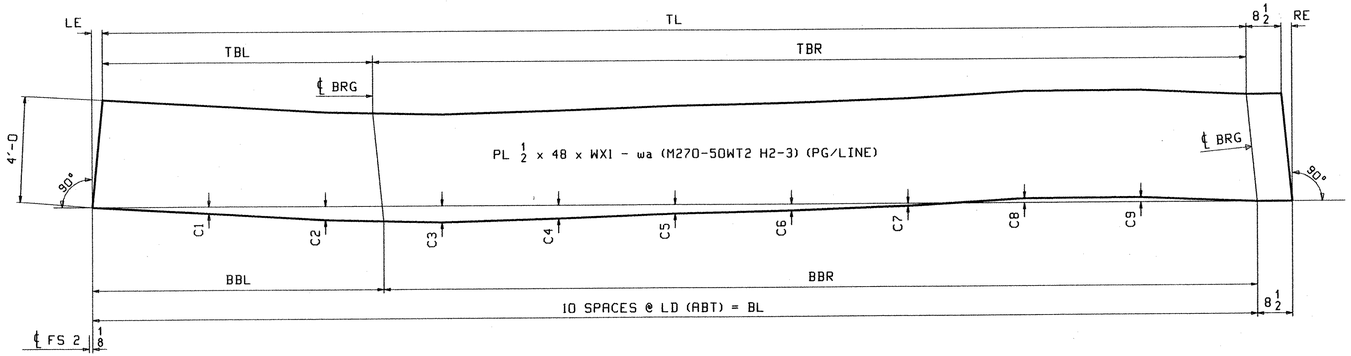
DRAWN BY	DATE
ATD	07/31
CHKD BY	
DO	08/09
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	
JOB NO.	DRG. NO.
165	C2
	REV. △

TENSOR 2241

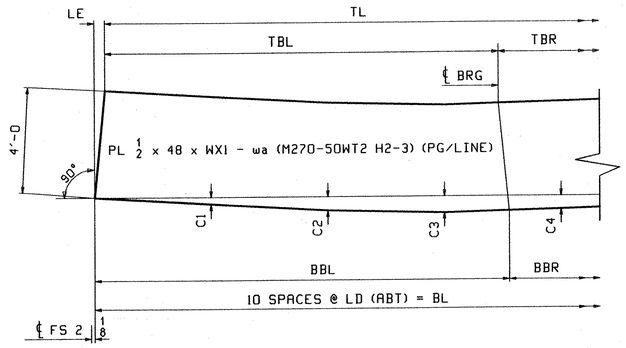
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

605-BR25-C2

DO Mon Aug 12 07:12:10 CDT 2002 /users/jobs/2241/c2.1 Rev=0



WEB CUTTTING DIAGRAM FOR G1C THRU G5C



WEB CUTTTING DIAGRAM FOR G3C & G4C

MARK	TL	BL	LE	RE	WX1	TBL	TBR	BBL	BBR	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	PG/LINE
G1C	74'-3 15/16	74'-5 3/16	5/16	15/16	75'-1 11/16	20'-10	53'-5 15/16	20'-11	53'-6 3/16	7'-5 3/8	5/8	1 5/16	1 3/4	1 1/4	7/8	7/16	3/16	0	1/16	5/ J
G2C	74'-11 7/16	75'-0 5/8	5/16	7/8	75'-9 1/8	21'-9	53'-2 7/16	21'-10	53'-2 5/8	7'-6 1/8	5/8	1 1/4	1 3/4	1 1/4	13/16	7/16	1/8	1/16	3/16	5/ G
G3C	80'-11 1/16	81'-0 1/4	1/4	15/16	81'-8 3/4	28'-0 1/16	52'-11	28'-1	52'-11 1/4	8'-1 1/4	9/16	1 3/16	1 7/8	1 13/16	1 1/8	5/8	1/4	0	1/8	5/ C
G4C	76'-0 11/16	76'-1 7/8	5/16	7/8	76'-10 3/8	23'-5	52'-7 11/16	23'-6	52'-7 7/8	7'-7 3/8	5/8	1 1/4	1 13/16	1 5/16	7/8	7/16	1/8	0	1/8	5/ E
G5C	72'-6 9/16	72'-7 3/4	3/8	13/16	73'-4 1/4	20'-2	52'-4 9/16	20'-3 1/16	52'-4 11/16	7'-3 1/8	5/8	1 5/16	1 5/8	1 1/16	11/16	5/16	1/16	1/8	3/16	5/ L

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL WA SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
OUT FOR APPROVAL		8-23	02								
OUT FOR APPROVAL											
ISSUED TO SHOP											
FIELD & OFFICE											

MATERIAL: M270-50W | ELECTRODES: | HOLES: | SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV CK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-17-02

DESCRIPTION: CAMBER DIAGRAM "C" GIRDERS

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2241

PROJ NO. PROJ. NHF 010-1(18)

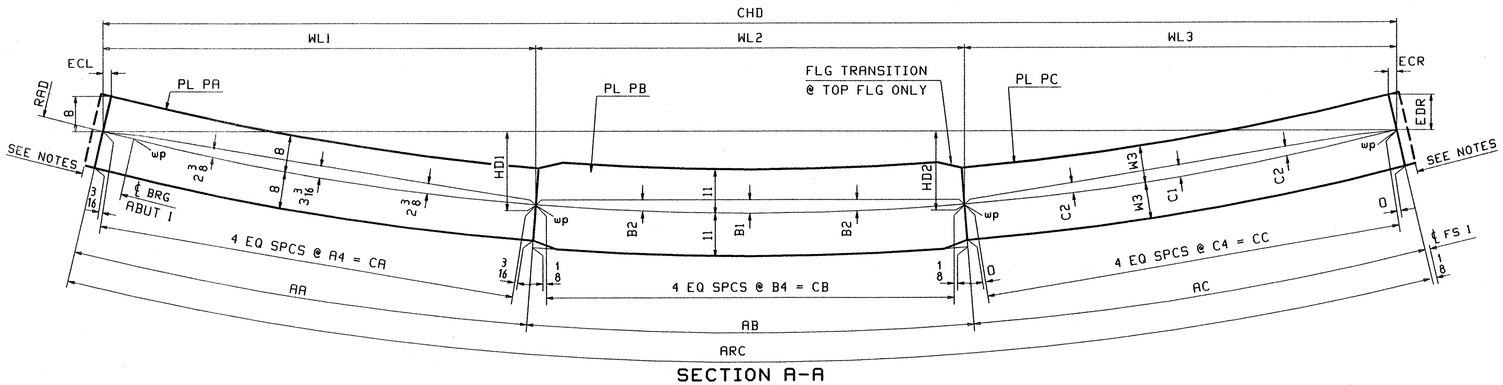
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
ATD	07/31
CHKD BY	
DO	08/09
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

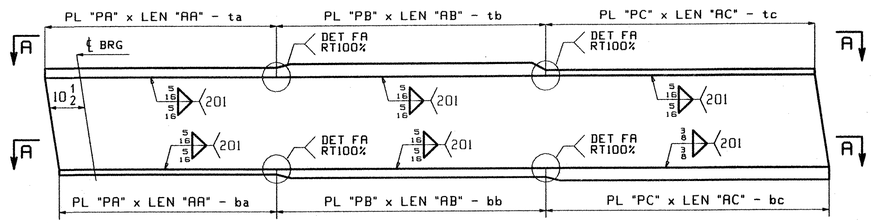
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	C3
	REV. △

606 BR25-C3

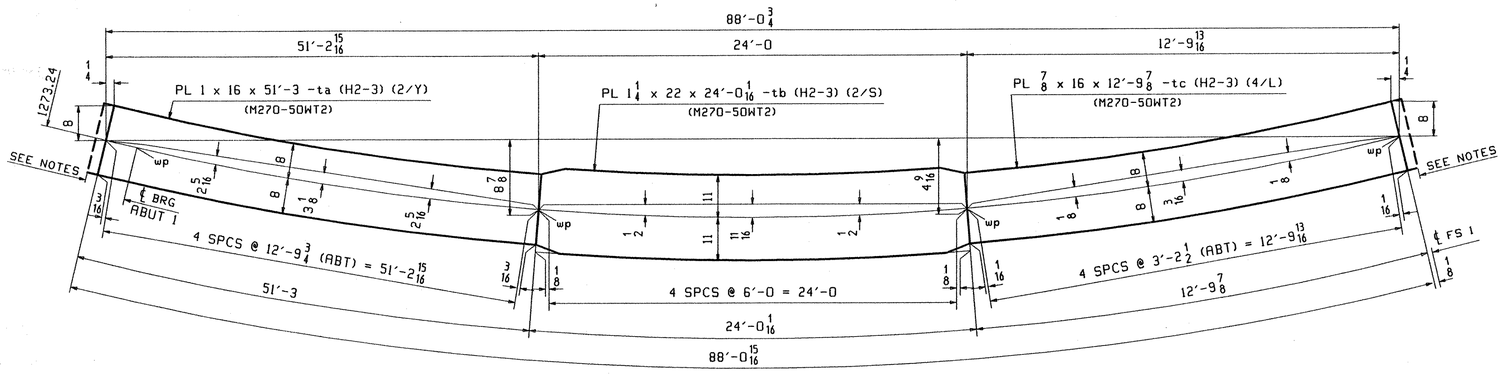


SECTION A-A

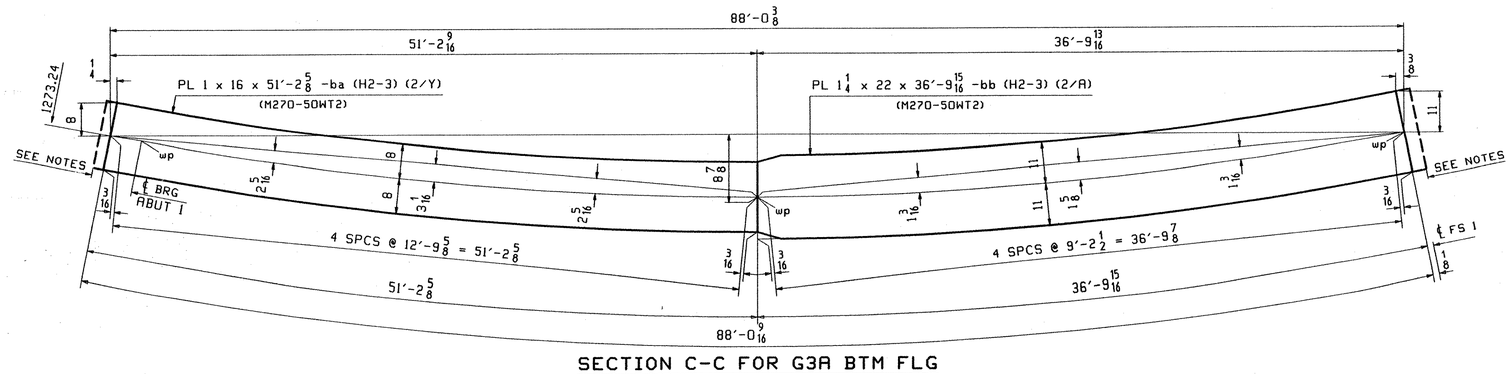


FLANGE DIAGRAM FOR G1A & G2A

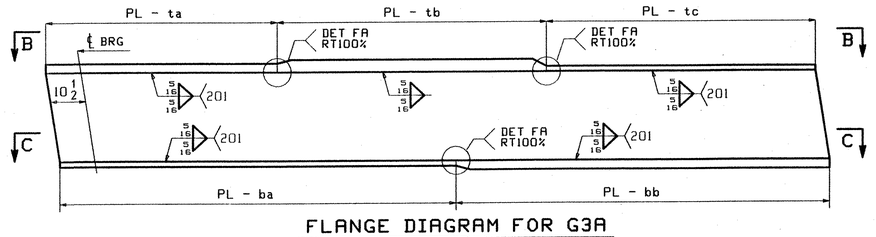
LOCATION	RAD	ARC	CHD	AA	AB	AC	A4	CA	B1	B2	B4	CB	C1	C2	C4	CC	ECL	ECR	EDR	WL1	WL2	WL3	HD1	HD2	W3	PL PA (M270-50WT2)	PL PB (M270-50WT2)	PL PC (M270-50WT2)
G1A TOP FLG	1254.74	90′-10 11/16	90′-10 7/16	51′-7 3/4	24′-10 1/16	14′-4 7/8	12′-10 15/16	51′-7 11/16	3/4	9/16	6′-2 1/2	24′-10	1/4	3/16	3′-7 1/4	14′-4 7/8	5/16	5/16	8	51′-7 5/8	24′-10	14′-4 13/16	9 11/16	5 1/4	8	PL 1 x 16 -ta (H2-3) (2/U)	PL 1 1/4 x 22 -tb (H2-3) (2/Q)	PL 7/8 x 16 -tc (H2-3) (4/J)
G1A BTM FLG	1254.74	90′-10 3/8	90′-10 1/8	51′-7 7/16	24′-10 1/16	14′-4 7/8	12′-10 7/8	51′-7 3/8	3/4	9/16	6′-2 1/2	24′-10	1/4	3/16	3′-7 1/4	14′-4 7/8	5/16	3/8	11	51′-7 5/16	24′-10	14′-4 13/16	9 11/16	5 1/4	11	PL 1 x 16 -ba (H2-3) (2/W)	PL 1 1/4 x 22 -bb (H2-3) (2/Q)	PL 1 1/2 x 22 -bc (H2-3) (1/J)
G2A TOP FLG	1263.99	85′-5 1/8	85′-4 15/16	51′-10 3/16	24′-0 1/16	9′-6 7/8	12′-11 9/16	51′-10 3/16	11/16	1/2	6′-0	24′-0	1/8	1/16	2′-4 3/4	9′-6 7/8	1/4	1/4	8	51′-10 1/8	24′-0	9′-6 13/16	8 1/4	3 7/16	8	PL 1 x 16 -ta (H2-3) (2/U)	PL 1 1/4 x 22 -tb (H2-3) (2/S)	PL 7/8 x 16 -tc (H2-3) (4/Q)
G2A BTM FLG	1263.99	85′-4 3/4	85′-4 9/16	51′-9 13/16	24′-0 1/16	9′-6 7/8	12′-11 7/16	51′-9 13/16	11/16	1/2	6′-0	24′-0	1/8	1/16	2′-4 3/4	9′-6 7/8	1/4	3/8	11	51′-9 3/4	24′-0	9′-6 13/16	8 1/4	3 7/16	11	PL 1 x 16 -ba (H2-3) (2/U)	PL 1 1/4 x 22 -bb (H2-3) (2/S)	PL 1 1/2 x 22 -bc (H2-3) (1/L)



SECTION B-B FOR G3A TOP FLG



SECTION C-C FOR G3A BTM FLG



FLANGE DIAGRAM FOR G3A

NOTES:

1. FOR GENERAL NOTES, WELD DETAIL FA & FLG WIDTH TRANSITION WT SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8/23/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10′-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: FLANGE DIAGRAM "A" GIRDERS

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
ATD	07/31
CHKD BY	
DO	08/09
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 165 | DRG. NO. F1 | REV. △

607 BR 25 F1

Mon Aug 12 07:58:43 EDT 2002 /users/jake/2241/F1.dwg
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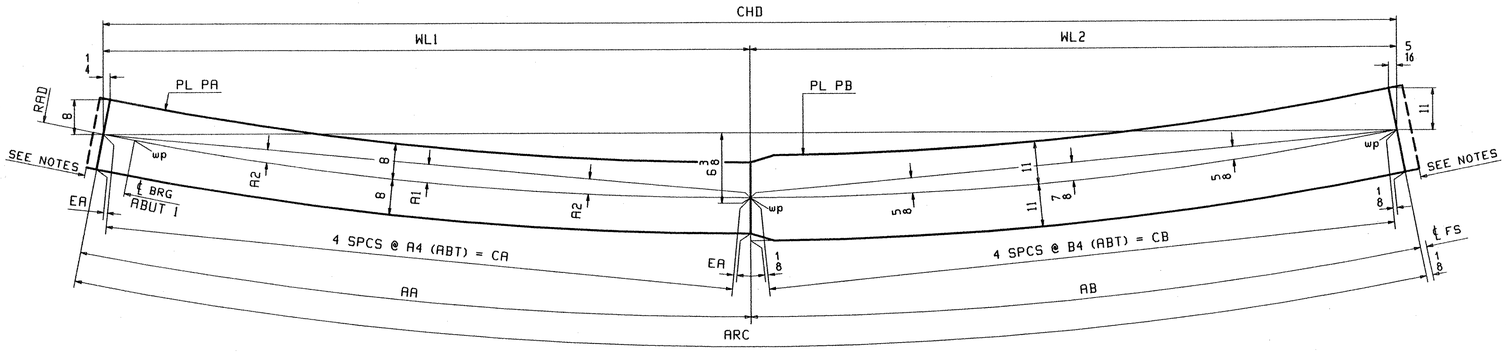
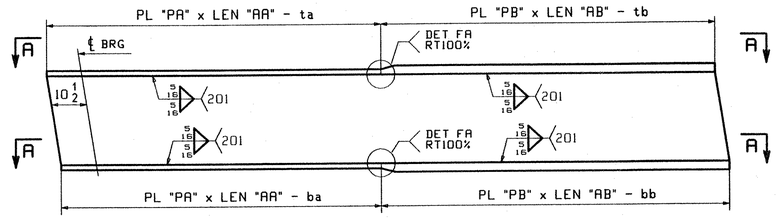


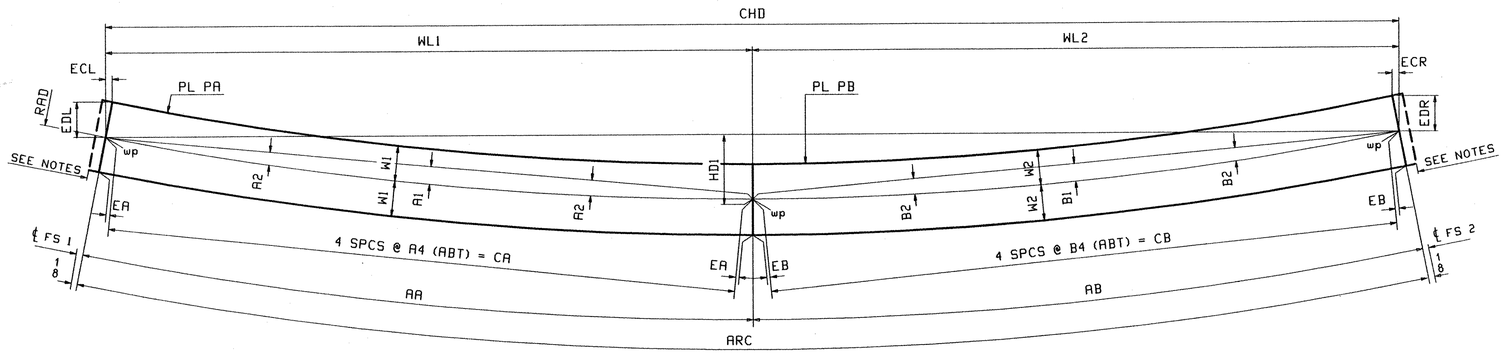
SECTION A-A



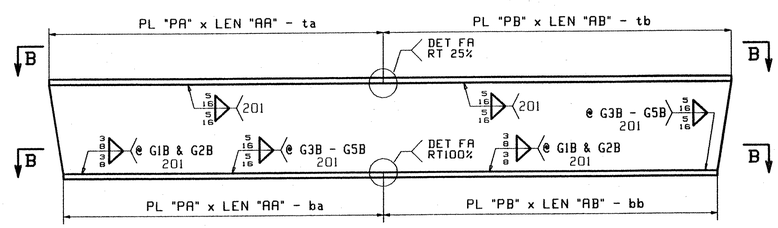
FLANGE DIAGRAM FOR G4A & G5A

LOCATION	RAD	ARC	CHD	AA	AB	EA	A1	A2	A4	CA	B4	CB	WL1	WL2	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G4A TOP FLG	1282.49	77'-8 1/16	77'-7 15/16	50'-8 1/8	26'-11 15/16	3/16	3	2 1/4	12'-8	50'-8 1/8	6'-9	26'-11 7/8	50'-8 1/16	26'-11 7/8	PL 1 x 16 -ta (H2-3) (3/A)	PL 1 1/4 x 22 -tb (H2-3) (2/L)
G4A BTM FLG	1282.49	77'-7 3/4	77'-7 5/8	50'-7 13/16	26'-11 15/16	3/16	3	2 1/4	12'-7 15/16	50'-7 13/16	6'-9	26'-11 7/8	50'-7 3/4	26'-11 7/8	PL 1 x 16 -ba (H2-3) (3/A)	PL 1 1/4 x 22 -bb (H2-3) (2/L)
G5A TOP FLG	1291.74	77'-6 1/2	77'-6 3/8	50'-1 9/16	27'-4 15/16	1/8	2 15/16	2 3/16	12'-6 3/8	50'-1 9/16	6'-10 1/4	27'-4 7/8	50'-1 1/2	27'-4 7/8	PL 1 x 16 -ta (H2-3) (3/C)	PL 1 1/4 x 22 -tb (H2-3) (2/J)
G5A BTM FLG	1291.74	77'-6 5/16	77'-6 3/16	50'-1 3/8	27'-4 15/16	1/8	2 15/16	2 3/16	12'-6 5/16	50'-1 3/8	6'-10 1/4	27'-4 7/8	50'-1 5/16	27'-4 7/8	PL 1 x 16 -ba (H2-3) (3/C)	PL 1 1/4 x 22 -bb (H2-3) (2/J)

NOTES:
1. FOR GENERAL NOTES, WELD DETAIL FA & FLG WIDTH TRANSITION WT SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F



SECTION B-B



FLANGE DIAGRAM FOR G1B THRU G5B

LOCATION	RAD	ARC	CHD	AA	AB	EA	A1	A2	A4	CA	EB	B1	B2	B4	CB	ECL	ECR	EDL	EDR	WL1	WL2	HD1	W1	W2	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G1B TOP FLG	1254.74	78'-6 1/4	78'-6 1/8	38'-7 15/16	39'-10 5/16	1/8	1 13/16	1 5/16	9'-8	38'-7 15/16	1/8	1 7/8	1 7/16	9'-11 9/16	39'-10 5/16	1/4	1/4	8	8	38'-7 7/8	39'-10 1/4	7 3/8	8	8	PL 7/8 x 16 -ta (H2-3) (4/A)	PL 7/8 x 16 -tb (H2-3) (3/W)
G1B BTM FLG	1254.74	78'-5 3/8	78'-5 1/4	38'-7 15/16	39'-9 7/16	3/16	1 13/16	1 5/16	9'-8	38'-7 15/16	3/16	1 7/8	1 7/16	9'-11 3/8	39'-9 7/16	5/16	5/16	11	11	38'-7 7/8	39'-9 3/8	7 3/8	11	11	PL 1 1/2 x 22 -ba (H2-3) (1/G)	PL 1 1/2 x 22 -bb (H2-3) (1/C)
G2B TOP FLG	1263.99	81'-6 1/16	81'-5 7/8	38'-11 15/16	42'-6 1/8	1/8	1 13/16	1 3/8	9'-9	38'-11 15/16	1/8	2 1/8	1 5/8	10'-7 1/2	42'-6 1/8	1/4	1/4	8	8	38'-11 13/16	42'-6 1/16	7 7/8	8	8	PL 7/8 x 16 -ta (H2-3) (3/Y)	PL 7/8 x 16 -tb (H2-3) (3/U)
G2B BTM FLG	1263.99	81'-5 5/16	81'-5 1/8	38'-11 15/16	42'-5 3/8	3/16	1 13/16	1 3/8	9'-9	38'-11 15/16	3/16	2 1/8	1 5/8	10'-7 5/16	42'-5 3/8	3/8	3/8	11	11	38'-11 13/16	42'-5 5/16	7 7/8	11	11	PL 1 1/2 x 22 -ba (H2-3) (1/E)	PL 1 1/2 x 22 -bb (H2-3) (1/A)
G3B TOP FLG	1273.24	71'-1 3/8	71'-1 1/4	38'-11 15/16	32'-1 7/16	1/8	1 13/16	1 5/16	9'-9	38'-11 15/16	1/8	1 3/16	15/16	8'-0 3/8	32'-1 7/16	1/4	1/4	8	8	38'-11 7/8	32'-1 3/8	5 7/8	8	8	PL 7/8 x 16 -ta (H2-3) (3/Y)	PL 7/8 x 16 -tb (H2-3) (4/E)
G3B BTM FLG	1273.24	71'-0 5/8	71'-0 1/2	38'-11 15/16	32'-0 11/16	3/16	1 13/16	1 5/16	9'-9	38'-11 15/16	1/8	1 3/16	15/16	8'-0 3/16	32'-0 11/16	5/16	5/16	11	11	38'-11 7/8	32'-0 5/8	5 7/8	11	11	PL 1 1/4 x 22 -ba (H2-3) (1/Y)	PL 1 1/4 x 22 -bb (H2-3) (2/G)
G4B TOP FLG	1282.49	84'-8 3/16	84'-8	38'-11 15/16	45'-8 1/4	1/8	1 3/4	1 5/16	9'-9	38'-11 15/16	1/8	2 7/16	1 13/16	11'-5 1/16	45'-8 1/4	1/4	1/4	8	8	38'-11 13/16	45'-8 3/16	8 5/16	8	8	PL 7/8 x 16 -ta (H2-3) (4/C)	PL 7/8 x 16 -tb (H2-3) (3/S)
G4B BTM FLG	1282.49	84'-7 3/8	84'-7 3/16	38'-11 15/16	45'-7 7/16	3/16	1 3/4	1 5/16	9'-9	38'-11 15/16	3/16	2 7/16	1 13/16	11'-4 7/8	45'-7 7/16	3/8	3/8	11	11	38'-11 13/16	45'-7 3/8	8 5/16	11	11	PL 1 1/4 x 22 -ba (H2-3) (1/Y)	PL 1 1/4 x 22 -bb (H2-3) (1/U)
G5B TOP FLG	1291.74	86'-8 7/16	86'-8 1/4	38'-11 15/16	47'-8 1/2	1/8	1 3/4	1 5/16	9'-9	38'-11 15/16	1/8	2 5/8	2	11'-11 1/8	47'-8 1/2	1/4	1/4	8	8	38'-11 13/16	47'-8 7/16	8 5/8	8	8	PL 7/8 x 16 -ta (H2-3) (4/C)	PL 7/8 x 16 -tb (H2-3) (3/Q)
G5B BTM FLG	1291.74	86'-7 9/16	86'-7 3/8	38'-11 15/16	47'-7 5/8	3/16	1 3/4	1 5/16	9'-9	38'-11 15/16	3/16	2 5/8	2	11'-10 7/8	47'-7 5/8	3/8	3/8	11	11	38'-11 13/16	47'-7 9/16	8 5/8	11	11	PL 1 1/4 x 22 -ba (H2-3) (1/Y)	PL 1 1/4 x 22 -bb (H2-3) (1/S)

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RKW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-23-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES:
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: FLANGE DIAGRAM "A" & "B" GIRDERS
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
TENSOR 2241
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

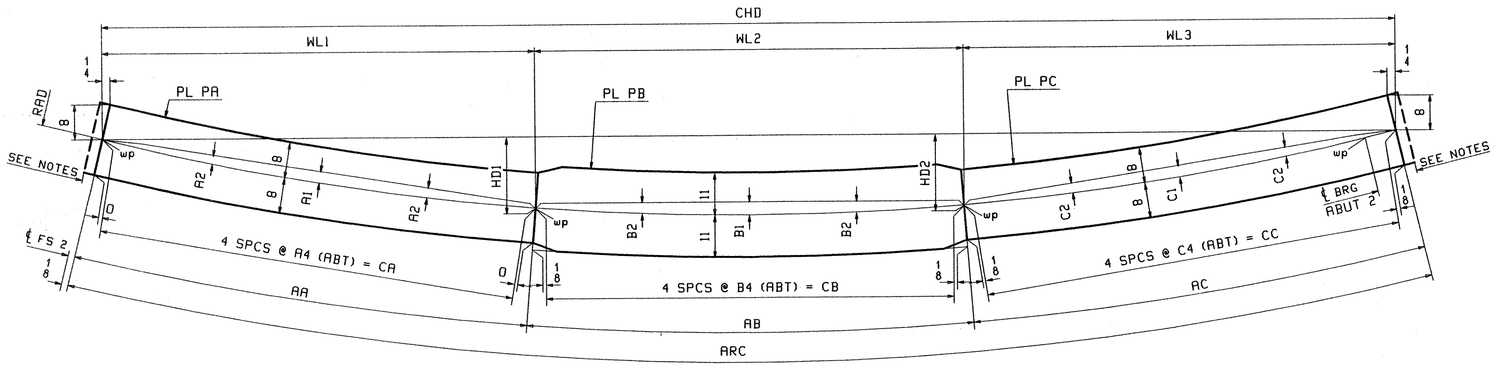
DRAWN BY	DATE
ATD	07/31
CHKD BY	
DO	08/09
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	F2
	REV. △

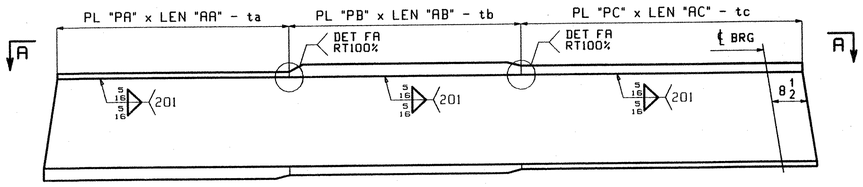
608 BR 25-F2

DO Mon Aug 12 07:37:46 EDT 2002 /users/jobs/221/f2 | Rev0



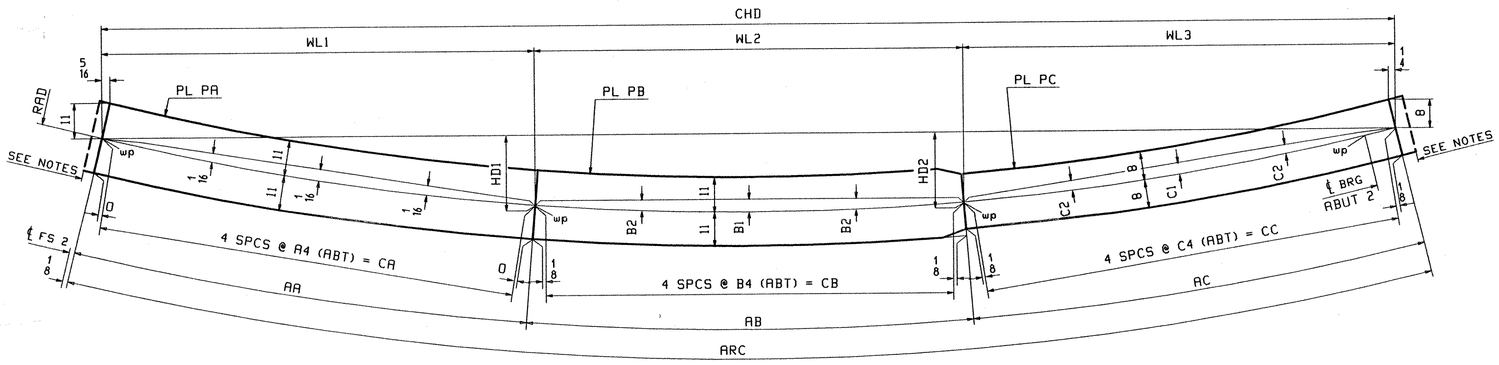
SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	AC	A1	A2	A4	CA	B1	B2	B4	CB	C1	C2	C4	CC	WL1	WL2	WL3	HD1	HD2	PL PA (M270-50WT2)	PL PB (M270-50WT2)	PL PC (M270-50WT2)
G1C TOP FLG	1254.74	75′-0 7/16	75′-0 5/16	7′-10 7/8	25′-0 1/16	42′-1 1/2	1/16	1/16	1′-11 3/4	7′-10 7/8	3/4	9/16	6′-3	25′-0 1/16	2 1/8	1 9/16	10′-6 3/8	42′-1 1/2	7′-10 7/8	25′-0	42′-1 7/16	2 9/16	6 5/8	PL 7/8 x 16 -ta (H2-3) (4/U)	PL 1 1/4 x 22 -tb (H2-3) (2/Q)	PL 1 x 16 -tc (H2-3) (3/E)
G2C TOP FLG	1263.99	75′-7 15/16	75′-7 13/16	7′-3 7/8	26′-6 1/16	41′-10	1/16	1/16	1′-10	7′-3 7/8	13/16	5/8	6′-7 1/2	26′-6 1/16	2 1/16	1 9/16	10′-5 1/2	41′-10	7′-3 7/8	26′-6	41′-9 15/16	2 3/8	6 11/16	PL 7/8 x 16 -ta (H2-3) (4/W)	PL 1 1/4 x 22 -tb (H2-3) (2/N)	PL 1 x 16 -tc (H2-3) (3/G)
G3C TOP FLG	1273.24	81′-7 9/16	81′-7 3/8	16′-0 7/8	24′-0 1/16	41′-6 5/8	5/16	1/4	4′-0 1/4	16′-0 7/8	11/16	1/2	6′-0	24′-0 1/16	2 1/16	1 1/2	10′-4 5/8	41′-6 9/16	16′-0 7/8	24′-0	41′-6 1/2	4 15/16	7 13/16	PL 7/8 x 16 -ta (H2-3) (4/G)	PL 1 1/4 x 22 -tb (H2-3) (2/S)	PL 1 x 16 -tc (H2-3) (3/J)
G4C TOP FLG	1282.49	76′-9 3/16	76′-9 1/16	11′-5 7/8	24′-0 1/16	41′-3 1/4	1/8	1/8	2′-10 1/2	11′-5 7/8	11/16	1/2	6′-0	24′-0 1/16	2	1 1/2	10′-3 13/16	41′-3 1/4	11′-5 7/8	24′-0	41′-3 3/16	3 1/2	6 7/8	PL 7/8 x 16 -ta (H2-3) (4/N)	PL 1 1/4 x 22 -tb (H2-3) (2/S)	PL 1 x 16 -tc (H2-3) (3/L)
G5C TOP FLG	1291.74	73′-3 1/16	73′-2 15/16	8′-2 7/8	26′-6 1/16	38′-6 1/8	1/16	1/16	2′-0 3/4	8′-2 7/8	13/16	5/8	6′-7 1/2	26′-6 1/16	1 3/4	1 5/16	9′-7 1/2	38′-6 1/8	8′-2 7/8	26′-6	38′-6 1/16	2 1/2	6 3/16	PL 7/8 x 16 -ta (H2-3) (4/S)	PL 1 1/4 x 22 -tb (H2-3) (2/N)	PL 1 x 16 -tc (H2-3) (3/N)



FLANGE DIAGRAM FOR G1C THRU G5C

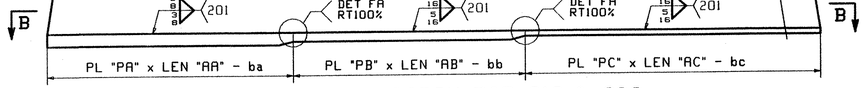
(TOP FLG ONLY)



SECTION B-B

LOCATION	RAD	ARC	CHD	AA	AB	AC	A4	CA	B1	B2	B4	CB	C1	C2	C4	CC	WL1	WL2	WL3	HD1	HD2
G1C BTM FLG	1254.74	75′-11 11/16	75′-11 9/16	7′-10 7/8	25′-0 1/16	42′-2 3/4	1′-11 3/4	7′-10 7/8	3/4	9/16	6′-3	25′-0 1/16	2 1/8	1 5/8	10′-6 11/16	42′-2 3/4	7′-10 7/8	25′-0	42′-2 11/16	2 9/16	6 5/8
G2C BTM FLG	1263.99	75′-9 1/8	75′-9	7′-3 7/8	26′-6 1/16	41′-11 3/16	1′-10	7′-3 7/8	13/16	5/8	6′-7 1/2	26′-6 1/16	2 1/16	1 9/16	10′-5 13/16	41′-11 3/16	7′-3 7/8	26′-6	41′-11 1/8	2 3/8	6 3/4

LOCATION	PL PA (M270-50WT2)	PL PB (M270-50WT2)	PL PC (M270-50WT2)
G1C BTM FLG	PL 1 1/2 x 22 -ba (H2-3) (1/N)	PL 1 1/4 x 22 -bb (H2-3) (2/Q)	PL 1 x 16 -bc (H2-3) (3/E)
G2C BTM FLG	PL 1 1/2 x 22 -ba (H2-3) (1/Q)	PL 1 1/4 x 22 -bb (H2-3) (2/N)	PL 1 x 16 -bc (H2-3) (3/G)



FLANGE DIAGRAM FOR G1C & G2C

(BTM FLG ONLY)

NOTES:

1. FOR GENERAL NOTES, WELD DETAIL FA & FLG WIDTH TRANSITION WT SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15ft-lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-26-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10′-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: FLANGE DIAGRAM "C" GIRDERS

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2241

PROJ NO. PROJ. NHF 010-1(18)

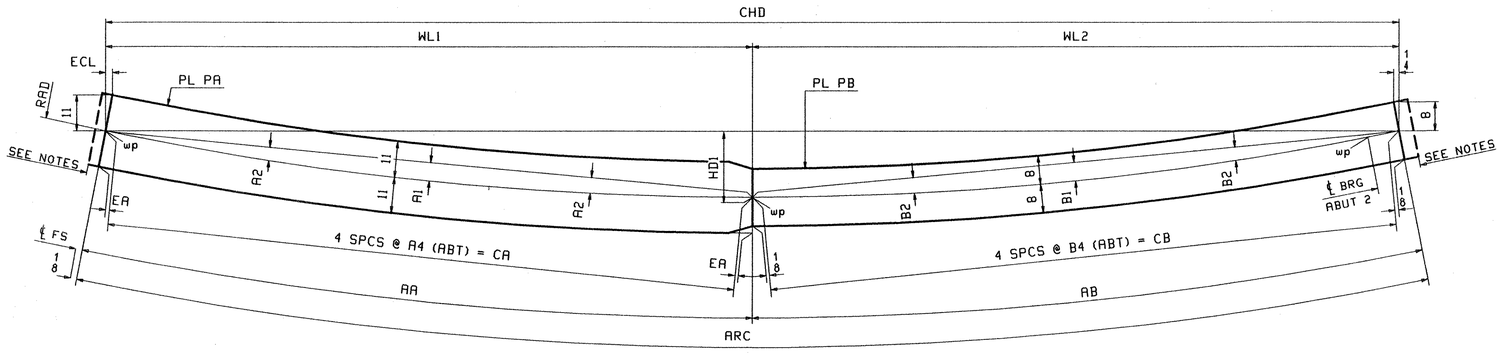
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

DRAWN BY	DATE
ATD	07/31
CHKD BY	
DO	08/09
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	
JOB NO.	DRG. NO.
165	F 3
REV.	△

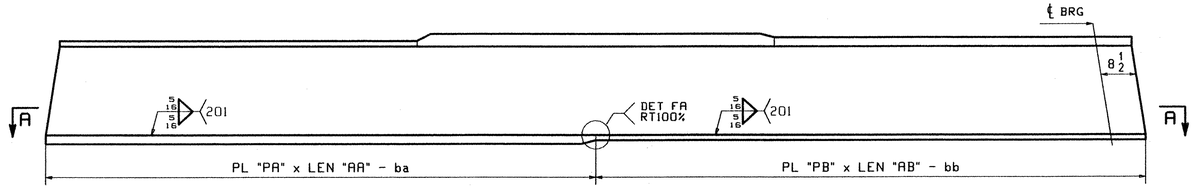
609 BR75-F3

BD Mon Aug 12 07:38:05 EDT 2002 /users/jobs/2241/f3 - Rev0



SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	EA	A1	A2	A4	CA	B1	B2	B4	CB	ECL	WL1	WL2	HD1	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G3C BTM FLG	1273.24	81'-8 3/4	81'-8 9/16	40'-0 15/16	41'-7 13/16	3/16	1 7/8	1 7/16	10'-0 1/4	40'-0 15/16	2 1/16	1 9/16	10'-4 15/16	41'-7 3/4	3/8	40'-0 7/8	41'-7 11/16	7 7/8	PL 1 1/4 x 22 -ba (H2-3) (1/W)	PL 1 x 16 -bb (H2-3) (3/J)
G4C BTM FLG	1282.49	76'-10 3/8	76'-10 1/4	35'-2 15/16	41'-7 7/16	1/8	1 7/16	1 1/16	8'-9 3/4	35'-2 15/16	2	1 1/2	10'-4 7/8	41'-7 7/16	5/16	35'-2 7/8	41'-7 3/8	6 7/8	PL 1 1/4 x 22 -ba (H2-3) (2/C)	PL 1 x 16 -bb (H2-3) (3/J)
G5C BTM FLG	1291.74	73'-4 1/4	73'-4 1/8	34'-8 15/16	38'-7 5/16	1/8	1 3/8	1 1/16	8'-8 1/4	34'-8 15/16	1 3/4	1 5/16	9'-7 13/16	38'-7 5/16	5/16	34'-8 7/8	38'-7 1/4	6 1/4	PL 1 1/4 x 22 -ba (H2-3) (2/E)	PL 1 x 16 -bb (H2-3) (3/N)



FLANGE DIAGRAM FOR G3C THRU G5C

(BTM FLG ONLY)

NOTES:

1. FOR GENERAL NOTES, WELD DETAIL FA & FLG WIDTH TRANSITION WT SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

RECEIVED
CK'D BY DV OK'D BY
AUG 2 6 2002
RESUBMIT APPROVED
BY RKW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	5-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

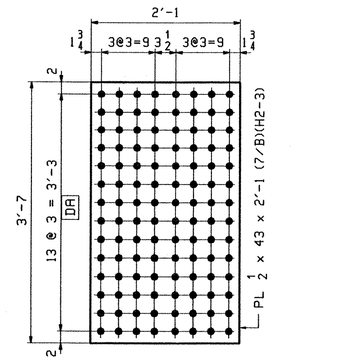
DESCRIPTION: FLANGE DIAGRAM "C" GIRDERS		DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER		ATD	08/07
BRIDGE NO. 25		CHKD BY	
SEARSBURG, VERMONT		DO	08/09
TENSOR 2241 CONTRACTOR: J.A. McDONALD		APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)		Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION			

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	F 4
	REV. △

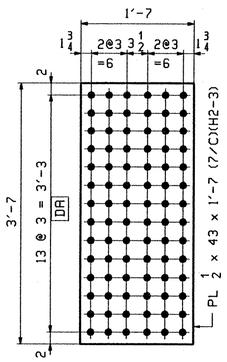
610 BR25-F4

Mon Aug 12 07:38:10 EDT 2002 /users/jobs/2241/f4.s Rev0



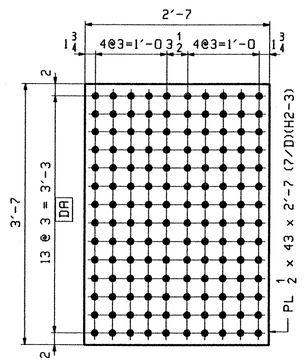
D.O.R.

12 ~ x1a



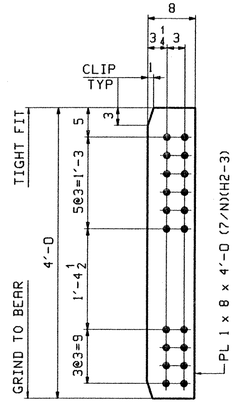
D.O.R.

6 ~ x1g



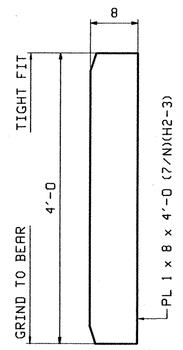
D.O.R.

2 ~ x1h



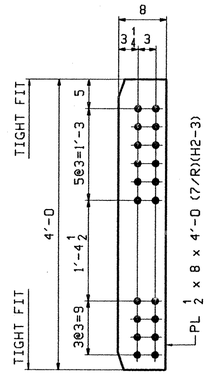
8 ~ x1m

ABUT 1 & 2



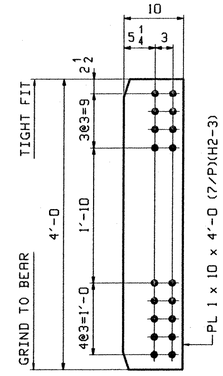
12 ~ x1n

ABUT 1 & 2



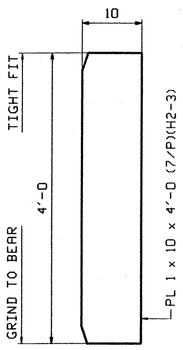
8 ~ x1p

NEAR ABUT 1 & 2



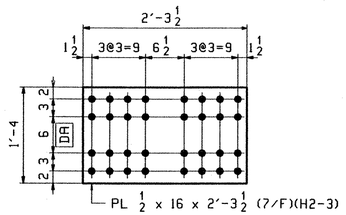
4 ~ x1s

PIER 1 & 2



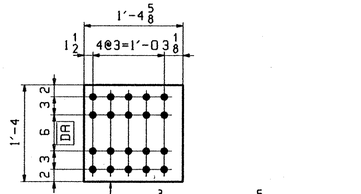
16 ~ x1t

PIER 1 & 2

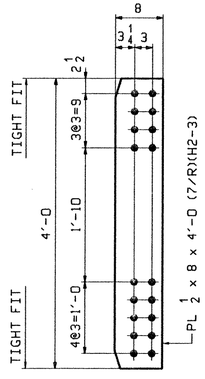


D.O.R.

10 ~ x1b



2 ~ x1k



126 ~ x1v

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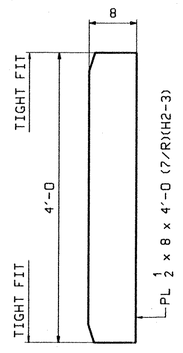
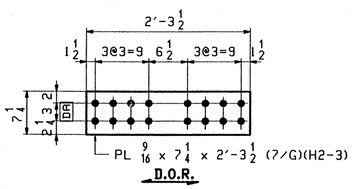


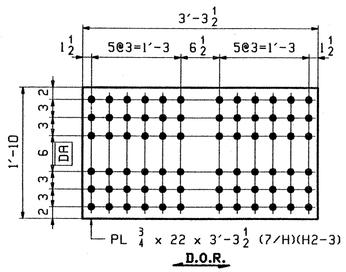
8 ~ x1w

INT



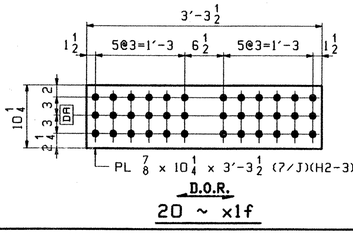
D.O.R.

20 ~ x1c



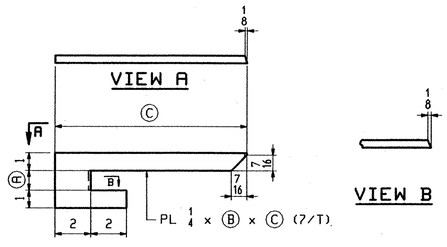
D.O.R.

10 ~ x1d



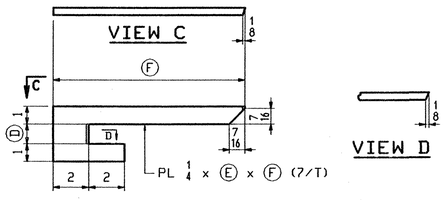
D.O.R.

20 ~ x1f



DRIP PL

MARK	REQ'D	A	B	C
x1aa	2	1 1/4	3 1/4	1'-2 7/16
x1ab	2	1 1/2	3 1/2	1'-2 7/16
x1ac	1	1	3	11



DRIP PL

MARK	REQ'D	D	E	F
x1ad	4	1 1/4	3 1/4	1'-2 7/16
x1af	1	1	3	11

NOTES:

FOR GENERAL NOTES SEE GNI

H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TESTING.

D.O.R. DENOTES DIRECTION OF MILL ROLLING

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RKW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GNI)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

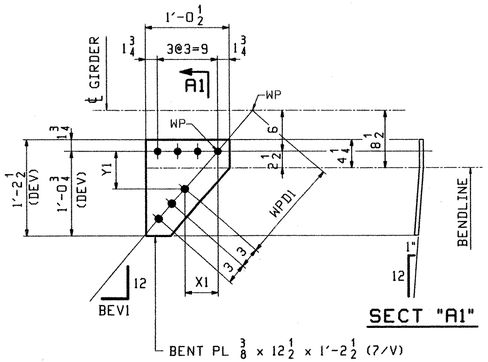
DESCRIPTION:	GIRDER STANDARDS	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/07
	BRIDGE NO. 25	CHKD BY	
TENSOR 2241	SEARSBURG, VERMONT	DO	08/10
	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	X1
	REV. △

611 BR25-X1

ATD Tue Aug 20 10:09:26 EDT 2002 /users/_jobs/2241/x1.dwg

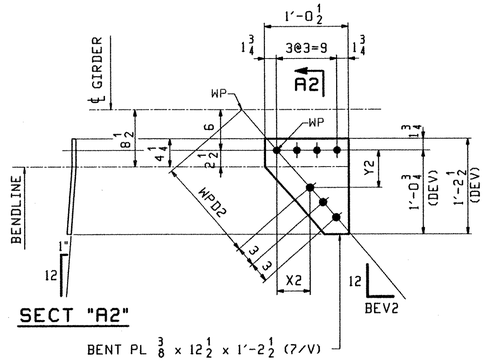


SECT "A1"

BENT PL $\frac{3}{8}$ x 12 $\frac{1}{2}$ x 1'-2 $\frac{1}{2}$ (7/V)

16" BTM FLANGE

MARK	REQ'D	BEV1	WPD1	Y1	X1
x2a	1	$5\frac{15}{16}$	1'-1	$5\frac{5}{8}$	$2\frac{13}{16}$
x2b	2	$6\frac{3}{8}$	1'-1	$5\frac{1}{2}$	$2\frac{15}{16}$
x2c	2	$8\frac{3}{8}$	1'-2 1/2	$5\frac{7}{8}$	$4\frac{1}{8}$
x2d	2	$8\frac{1}{2}$	1'-2 1/2	$5\frac{13}{16}$	$4\frac{1}{8}$
x2g	1	$8\frac{11}{16}$	1'-2 1/2	$5\frac{3}{4}$	$4\frac{3}{16}$
x2h	1	$8\frac{3}{4}$	1'-2 1/2	$5\frac{11}{16}$	$4\frac{3}{16}$
x2k	2	9	1'-2 1/2	$5\frac{5}{8}$	$4\frac{3}{16}$
x2m	1	$9\frac{1}{16}$	1'-2 1/2	$5\frac{9}{16}$	$4\frac{3}{16}$
x2n	2	$9\frac{1}{8}$	1'-2 1/2	$5\frac{9}{16}$	$4\frac{3}{16}$
x2s	1	$9\frac{3}{16}$	1'-2 1/2	$5\frac{1}{2}$	$4\frac{1}{4}$
x2t	1	$9\frac{1}{4}$	1'-2 1/2	$5\frac{1}{2}$	$4\frac{1}{4}$
x2v	1	$10\frac{1}{16}$	1'-3 1/2	$5\frac{7}{8}$	$4\frac{15}{16}$
x2w	1	$10\frac{3}{16}$	1'-3 1/2	$5\frac{13}{16}$	$4\frac{15}{16}$
x2y	2	$10\frac{3}{8}$	1'-3 1/2	$5\frac{3}{4}$	$4\frac{15}{16}$
x2aa	2	$10\frac{1}{2}$	1'-3 1/2	$5\frac{11}{16}$	$4\frac{15}{16}$

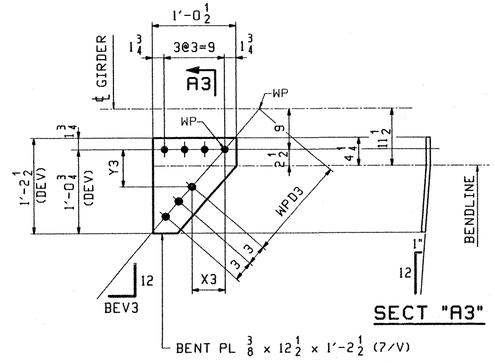


SECT "A2"

BENT PL $\frac{3}{8}$ x 12 $\frac{1}{2}$ x 1'-2 $\frac{1}{2}$ (7/V)

16" BTM FLANGE

MARK	REQ'D	BEV2	WPD2	Y2	X2
x2ab	1	$6\frac{3}{8}$	1'-1	$5\frac{1}{2}$	$2\frac{15}{16}$
x2ac	1	$6\frac{7}{16}$	1'-1	$5\frac{7}{16}$	$2\frac{15}{16}$
x2ad	2	$8\frac{3}{8}$	1'-2 1/2	$5\frac{7}{8}$	$4\frac{1}{8}$
x2af	2	$8\frac{7}{16}$	1'-2 1/2	$5\frac{7}{8}$	$4\frac{1}{8}$
x2ag	1	$8\frac{5}{8}$	1'-2 1/2	$5\frac{3}{4}$	$4\frac{1}{8}$
x2ah	2	$8\frac{13}{16}$	1'-2 1/2	$5\frac{11}{16}$	$4\frac{3}{16}$
x2ak	2	9	1'-2 1/2	$5\frac{5}{8}$	$4\frac{3}{16}$
x2am	1	$9\frac{1}{16}$	1'-2 1/2	$5\frac{9}{16}$	$4\frac{3}{16}$
x2an	2	$9\frac{1}{8}$	1'-2 1/2	$5\frac{9}{16}$	$4\frac{3}{16}$
x2as	1	$9\frac{1}{4}$	1'-2 1/2	$5\frac{1}{2}$	$4\frac{1}{4}$
x2at	1	$9\frac{5}{16}$	1'-3 1/2	$6\frac{1}{4}$	$4\frac{7}{8}$
x2av	1	$10\frac{1}{16}$	1'-3 1/2	$5\frac{7}{8}$	$4\frac{15}{16}$
x2aw	1	$10\frac{3}{16}$	1'-3 1/2	$5\frac{13}{16}$	$4\frac{15}{16}$
x2ay	2	$10\frac{3}{8}$	1'-3 1/2	$5\frac{3}{4}$	$4\frac{15}{16}$
x2da	2	$10\frac{1}{2}$	1'-3 1/2	$5\frac{11}{16}$	$4\frac{15}{16}$

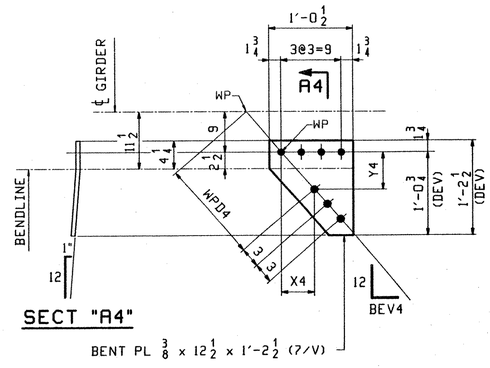


SECT "A3"

BENT PL $\frac{3}{8}$ x 12 $\frac{1}{2}$ x 1'-2 $\frac{1}{2}$ (7/V)

22" BTM FLANGE

MARK	REQ'D	BEV3	WPD3	Y3	X3
x2ba	1	$7\frac{15}{16}$	1'-6	6	4
x2bb	1	$8\frac{1}{2}$	1'-6	$5\frac{11}{16}$	4
x2bc	1	$8\frac{9}{16}$	1'-7	$6\frac{7}{16}$	$4\frac{5}{8}$
x2bd	1	$8\frac{5}{8}$	1'-7	$6\frac{7}{16}$	$4\frac{5}{8}$
x2bf	2	$8\frac{15}{16}$	1'-7	$6\frac{1}{4}$	$4\frac{5}{8}$
x2bg	7	9	1'-7	$6\frac{3}{16}$	$4\frac{5}{8}$
x2bh	2	$9\frac{1}{16}$	1'-7	$6\frac{3}{16}$	$4\frac{5}{8}$
x2bk	1	$9\frac{1}{8}$	1'-7	$6\frac{1}{8}$	$4\frac{11}{16}$
x2bm	9	$9\frac{3}{16}$	1'-7	$6\frac{1}{16}$	$4\frac{11}{16}$
x2bn	7	$9\frac{1}{4}$	1'-7	$6\frac{1}{16}$	$4\frac{11}{16}$
x2bs	9	$9\frac{3}{8}$	1'-7	6	$4\frac{11}{16}$
x2bt	1	$8\frac{5}{16}$	1'-6	$5\frac{13}{16}$	4



SECT "A4"

BENT PL $\frac{3}{8}$ x 12 $\frac{1}{2}$ x 1'-2 $\frac{1}{2}$ (7/V)

22" BTM FLANGE

MARK	REQ'D	BEV4	WPD4	Y4	X4
x2ca	1	$5\frac{7}{8}$	1'-4 1/2	$5\frac{13}{16}$	$2\frac{7}{8}$
x2cb	1	8	1'-6	6	4
x2cc	1	$8\frac{3}{16}$	1'-6	$5\frac{7}{8}$	4
x2cd	1	$8\frac{7}{16}$	1'-6	$5\frac{3}{4}$	4
x2cf	1	$8\frac{9}{16}$	1'-7	$6\frac{7}{16}$	$4\frac{5}{8}$
x2cg	1	$8\frac{3}{4}$	1'-7	$6\frac{3}{8}$	$4\frac{5}{8}$
x2ch	1	$8\frac{7}{8}$	1'-7	$6\frac{1}{4}$	$4\frac{5}{8}$
x2ck	9	$9\frac{1}{16}$	1'-7	$6\frac{3}{16}$	$4\frac{5}{8}$
x2cm	9	$9\frac{1}{8}$	1'-7	$6\frac{1}{8}$	$4\frac{11}{16}$
x2cn	8	$9\frac{1}{4}$	1'-7	$6\frac{1}{16}$	$4\frac{11}{16}$
x2cs	9	$9\frac{5}{16}$	1'-7	6	$4\frac{11}{16}$

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		$\frac{15}{16}$"ø (UN)	

RECEIVED
CK'D BY DK OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER STANDARDS	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/08
BRIDGE NO. 25	CHKD BY	
SEARSBURG, VERMONT	DO	08/10
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

TENSOR 2241

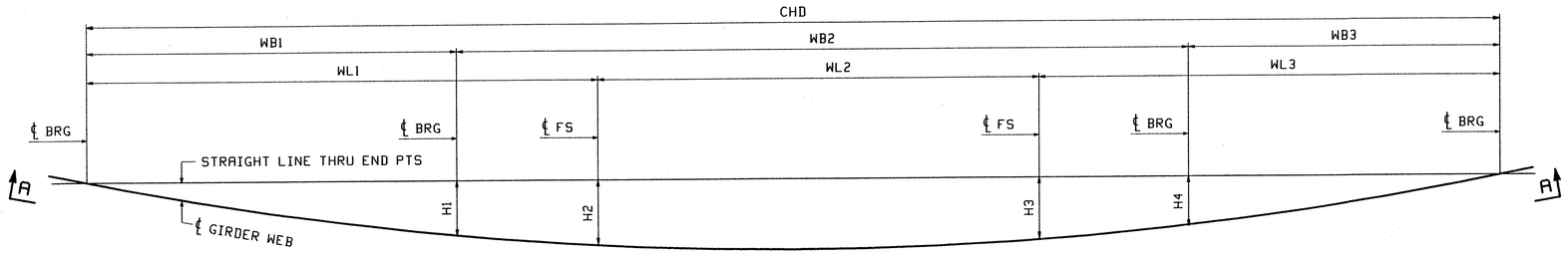
CASCO BAY STEEL STRUCTURES, INC.

75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

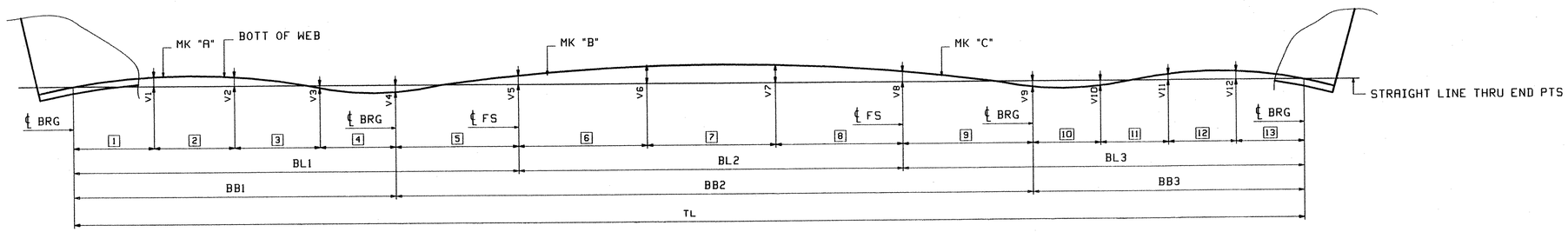
JOB NO.	DRG. NO.
165	X2
	REV. △

612 BR25-X2

ATD Tue Aug 20 10:41:25 EDT 2002 /users/jane/2241/X2.dgn



PLAN VIEW GIRDER @ BOTT OF WEB



VIEW A-A

LINE	BL1	BL2	BL3	1	2	3	4	5	6	7	8	9	10	11	12	13	BB1	BB2	BB3	TL	"A"	"B"	"C"
1	90'-0	78'-5 5/8	74'-5 5/16	14'-3 5/8	16'-1 1/8	16'-1 1/16	17'-1 1/8	26'-5 1/16	25'-9 7/8	28'-0 3/8	24'-7 3/8	20'-11 1/8	10'-6 9/16	14'-0 1/4	12'-11 5/8	15'-11 3/4	63'-6 15/16	125'-9 13/16	53'-6 3/16	242'-10 15/16	G1A	G1B	G1C
2	84'-6 3/8	81'-5 9/16	75'-0 3/4	19'-2 15/16	16'-2 7/16	13'-9 1/16	13'-8 15/16	21'-7	20'-9 3/8	28'-2 13/16	32'-5 3/8	21'-10 1/8	16'-3 15/16	13'-0 13/16	13'-0 11/16	10'-9 3/16	62'-11 3/8	124'-10 11/16	53'-2 5/8	241'-0 11/16	G2A	G2B	G2C
3	87'-2 3/16	71'-0 7/8	81'-0 3/8	8'-2 9/16	16'-3 7/8	13'-10 1/4	23'-11 7/16	24'-10 1/16	21'-11 7/16	28'-5 5/16	20'-8 1/8	28'-1 1/8	8'-1 11/16	13'-2	13'-1 13/16	18'-5 3/4	62'-4 3/16	124'-0	52'-11 1/4	239'-3 7/16	G3A	G3B	G3C
4	76'-9 3/8	84'-7 5/8	76'-2	13'-8 7/8	13'-11 7/16	13'-11 1/4	20'-1 3/4	15'-0 1/16	22'-2 1/8	28'-7 13/16	33'-9 11/16	23'-6 1/8	13'-3 1/16	13'-3	15'-7	10'-6 13/16	61'-9 5/16	123'-1 13/16	52'-7 7/8	237'-7	G4A	G4B	G4C
5	76'-7 15/16	86'-7 13/16	72'-7 7/8	17'-1 5/16	14'-0 7/16	14'-5 1/4	15'-7 7/8	15'-5 1/16	26'-7 15/16	28'-10 1/4	31'-1 5/8	20'-3 3/16	5'-3 1/16	13'-4 1/8	15'-8 3/8	18'-1 1/8	61'-2 7/8	122'-4 1/16	52'-4 11/16	235'-11 5/8	G5A	G5B	G5C

LINE	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	WL1	WL2	WL3	H1	H2	H3	H4	WB1	WB2	WB3	CHD
1	7/16	7/16	1/16	3/4	1 7/16	3 9/16	3 7/16	1 7/16	3/4	3/8	1/8	5/16	89'-9 3/4	78'-5 1/2	74'-3 3/16	4'-6 7/16	5'-5 3/4	4'-11 7/8	4'-0 7/16	63'-4 7/8	125'-9 1/4	53'-4 5/16	242'-6 7/16
2	1/2	3/8	3/16	3/4	1 5/16	3	3 9/16	1 7/16	3/4	1/16	5/16	3/8	84'-4 1/4	81'-5 3/8	74'-10 11/16	4'-5 1/8	5'-2 3/4	4'-11 1/16	3'-11 3/8	62'-9 3/8	124'-10 1/8	53'-0 13/16	240'-8 5/16
3	3/8	7/16	* 1/8	3/4	1 11/16	3 5/16	3 3/8	2	3/4	5/16	3/16	7/16	87'-0 1/8	71'-0 3/4	80'-10 5/16	4'-3 15/16	5'-2 7/16	5'-0 3/8	3'-10 7/16	62'-2 1/4	123'-11 7/16	52'-9 1/2	238'-11 3/16
4	3/8	3/8	1/16	3/4	13/16	2 13/16	3 11/16	1 9/16	3/4	1/8	5/16	3/8	76'-7 7/16	84'-7 7/16	76'-0 1/8	4'-2 3/4	4'-9 11/16	4'-9 7/16	3'-9 1/2	61'-7 1/2	123'-1 1/4	52'-6 1/4	237'-3
5	1/4	1/8	5/16	3/4	15/16	3 7/16	3 3/4	1 5/16	3/4	1/2	1/16	3/8	76'-6	86'-7 5/8	72'-6	4'-1 5/8	4'-8 11/16	4'-7 1/16	3'-8 5/8	61'-1 1/8	122'-3 3/8	52'-3 1/8	235'-7 5/8

* THIS DIMENSION IS ABOVE WL.

NOTES
FOR GENERAL NOTES SEE DWG GN1
ALL DIMENSIONS GIVEN AT BOTT OF WEB (UN)

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-23-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV CK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

DESCRIPTION: GENERAL NOTES
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
VWJ	08/21
CHKD BY	
DO	08/21
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

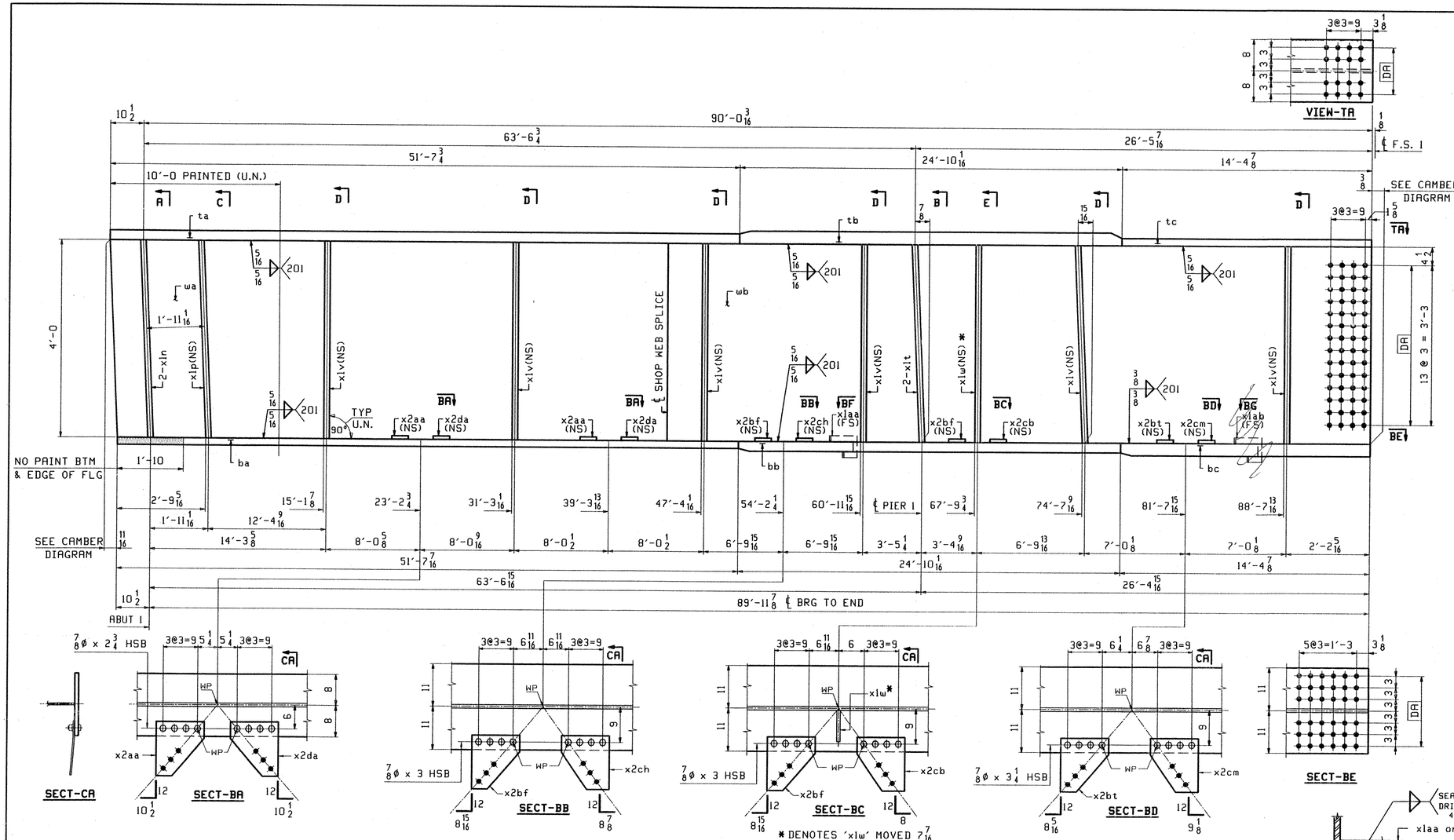
TENSOR 2241

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

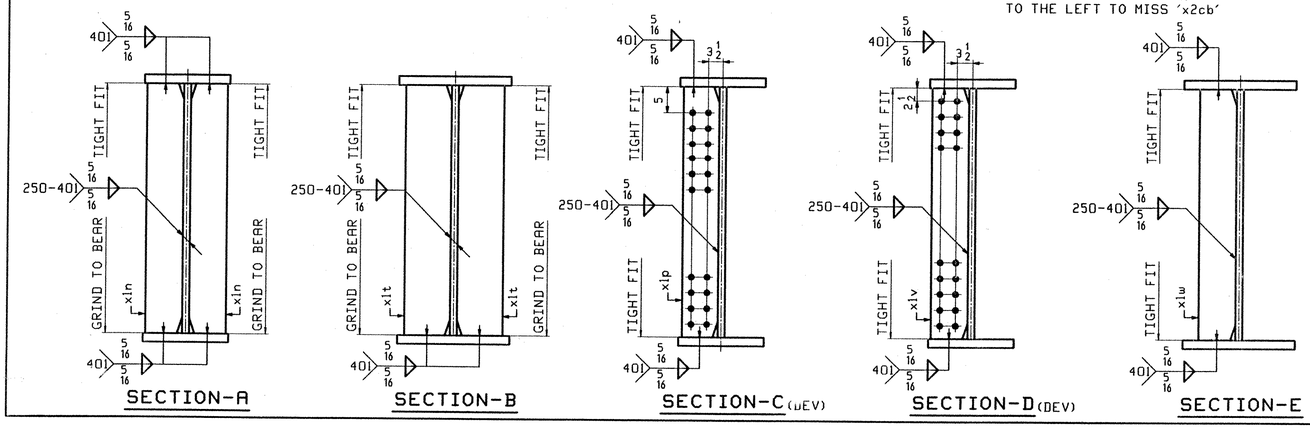
JOB NO.	DRG. NO.
165	SA1
	REV. △

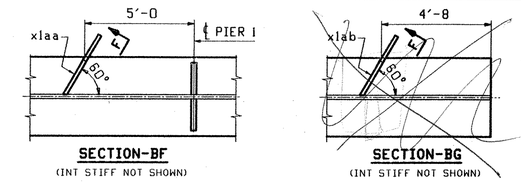
613 BR25 - SA1

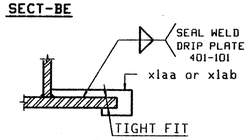
DO Wed Aug 21 17:11:03 EDT 2002 /users/jobs/2241/SA1 - Rev0



* DENOTES 'x1w' MOVED 7 7/16 TO THE LEFT TO MISS 'x2cb'



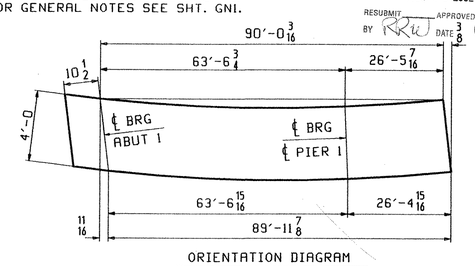




ONE - GIRDER - G1A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.

RECEIVED
CK'D BY DV CK'D BY
AUG 26 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-17-02



ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIA	1		GIRDER				21247	
6	C		1	wa	PL ½x48 1/4	45	11 1/4	(M270-50WT2) (H2-3)		
5	U		1	wb	PL ½x49 1/8	44	11 1/8	(M270-50WT2) (H2-3)		
2	U		1	ta	PL 1x16	51	7 3/4	(M270-50WT2) (H2-3)		
2	Q		1	tb	PL 1 1/4x22	24	10 1/16	(M270-50WT2) (H2-3)		
4	J		1	tc	PL ½x16	14	4 7/8	(M270-50WT2) (H2-3)		
2	W		1	ba	PL 1x16	51	7 7/16	(M270-50WT2) (H2-3)		
2	Q		1	bb	PL 1 1/4x22	24	10 1/16	(M270-50WT2) (H2-3)		
1	J		1	bc	PL 1 1/2x22	14	4 7/8	(M270-50WT2) (H2-3)		
7	N		2	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	R		6	x1v	PL ½x8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1w	PL ½x8	4	0	(M270-50WT2) (H2-3)		
7	V		2	x2aa	PL ⅜x12 1/2	1	2 1/2	BENT		
7	V		2	x2da	PL ⅜x12 1/2	1	2 1/2	BENT		
7	V		2	x2bf	PL ⅜x12 1/2	1	2 1/2	BENT		
7	V		1	x2ch	PL ⅜x12 1/2	1	2 1/2	BENT		
7	V		1	x2cb	PL ⅜x12 1/2	1	2 1/2	BENT		
7	V		1	x2bt	PL ⅜x12 1/2	1	2 1/2	BENT		
7	V		1	x2cm	PL ⅜x12 1/2	1	2 1/2	BENT		
7	R		1	x1p	PL ½x8	4	0	(M270-50WT2) (H2-3)		
7	T		1	x1aa	PL ¼x3 1/4	1	2 7/16			
~~7~~	~~T~~		~~1~~	~~x1ab~~	~~PL ¼x3 1/2~~	~~1~~	~~2 7/16~~			
9	M		16		7/8 ø HSB	0	2 3/4	(A325-3)		
9	N		16		7/8 ø HSB	0	3	(A325-3)		
9	P		8		7/8 ø HSB	0	3 1/4	(A325-3)		
9	R		40		7/8 ø HSW			(F436M)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-23-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16 ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

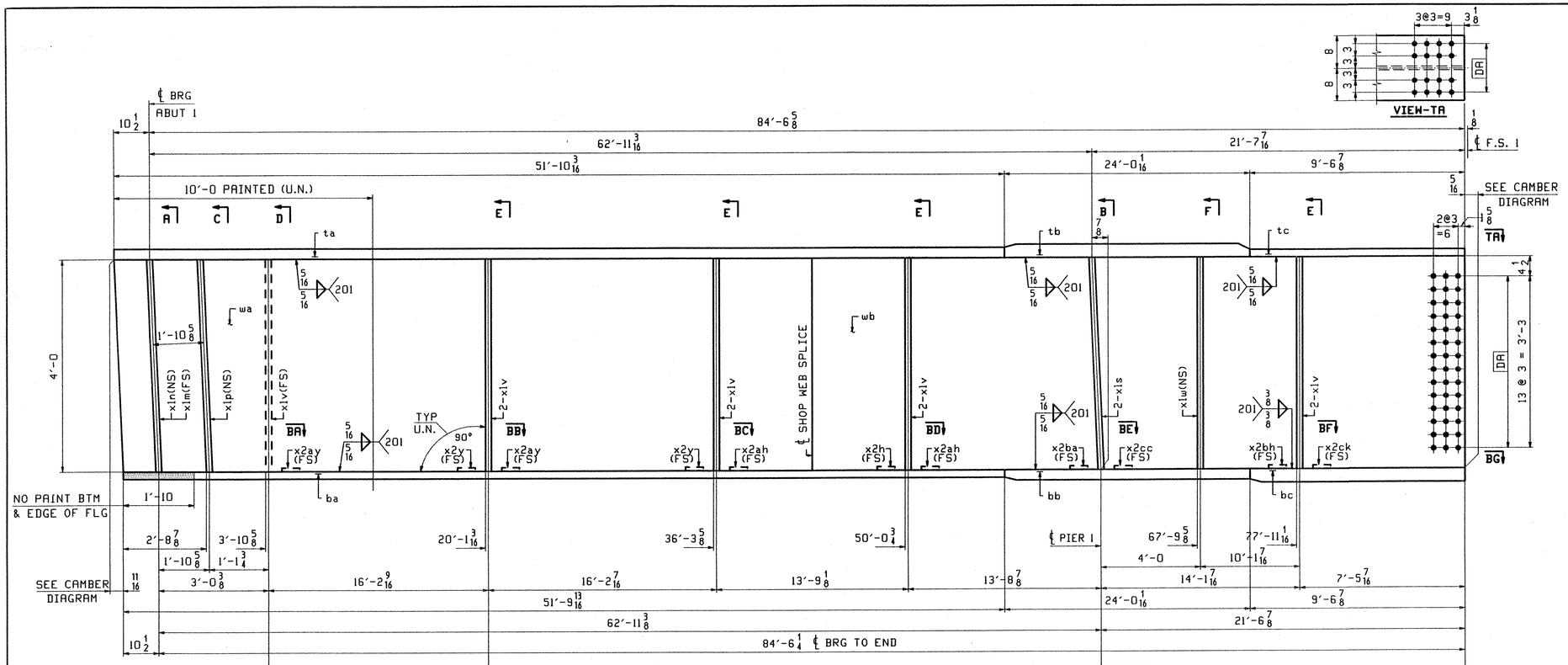
DESCRIPTION: GIRDER - G1A	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/12
BRIDGE NO. 25	CHKD BY	
SEARSBURG, VERMONT	DO	08/15
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

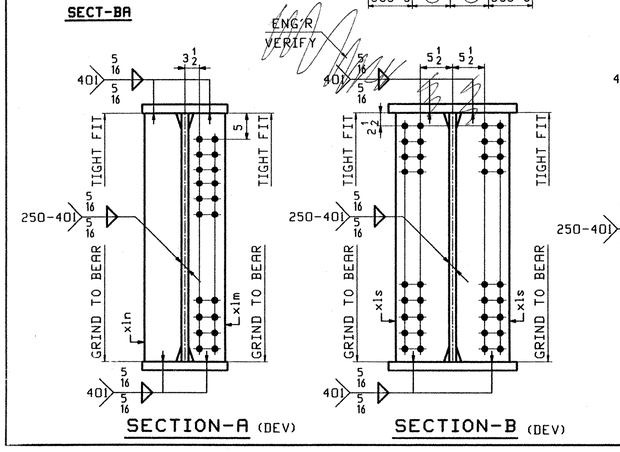
JOB NO.	DRG. NO.
165	1
	REV. △

614 BR 25-551

DO Tue Aug 20 18:10:13 EDT 2002 /users/jobs/224/c1 Rev:0

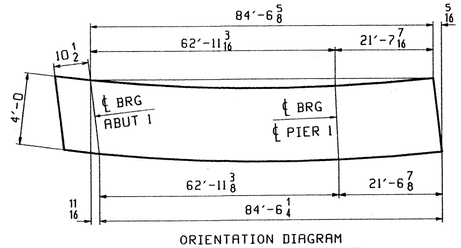


SECT	WD	A	B	C	BEVL	BEVR	1	2	D
BB	8	6	5 3/16	5 3/16	10 3/8	10 3/8	x2y	x2ay	7/8 Ø x 2 3/4
BC	8	6	5 3/16	4 7/16	10 3/8	8 13/16	x2y	x2ah	7/8 Ø x 2 3/4
BD	8	6	4 3/8	4 7/16	8 3/4	8 13/16	x2h	x2ah	7/8 Ø x 2 3/4
BF	11	9	6 13/16	6 13/16	9 1/16	9 1/16	x2bh	x2ck	7/8 Ø x 3 1/4



ONE - GIRDER - G2A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	BILL OF MATERIAL MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G2A	1		GIRDER				20051	
6	C		1	wa	PL 1/2x48 1/8	45	11 1/4	(M270-50WT2) (H2-3)		
5	Y		1	wb	PL 1/2x49 1/8	39	6 1/4	(M270-50WT2) (H2-3)		
2	U		1	ta	PL 1x16	51	10 3/16	(M270-50WT2) (H2-3)		
2	S		1	tb	PL 1 1/4x22	24	0 1/16	(M270-50WT2) (H2-3)		
4	Q		1	tc	PL 7/8x16	9	6 7/8	(M270-50WT2) (H2-3)		
2	U		1	ba	PL 1x16	51	9 13/16	(M270-50WT2) (H2-3)		
2	S		1	bb	PL 1 1/4x22	24	0 1/16	(M270-50WT2) (H2-3)		
1	L		1	bc	PL 1 1/2x22	9	6 7/8	(M270-50WT2) (H2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	R		9	x1v	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1s	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	V		2	x2ay	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		2	x2y	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		2	x2ah	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2h	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2ba	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2cc	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2bh	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2ck	PL 3/8x12 1/2	1	2 1/2	BENT		
7	R		1	x1p	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1w	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
9	C		4		7/8 Ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 Ø HSW			(F436) GALV		
9	M		24		7/8 Ø HSB	0	2 3/4	(A325-3)		
9	N		8		7/8 Ø HSB	0	3	(A325-3)		
9	P		8		7/8 Ø HSB	0	3 1/4	(A325-3)		
9	R		40		7/8 Ø HSW			(F436W)		

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"Ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G2A
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
ATD	08/14
CHKD BY	
DO	08/16
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

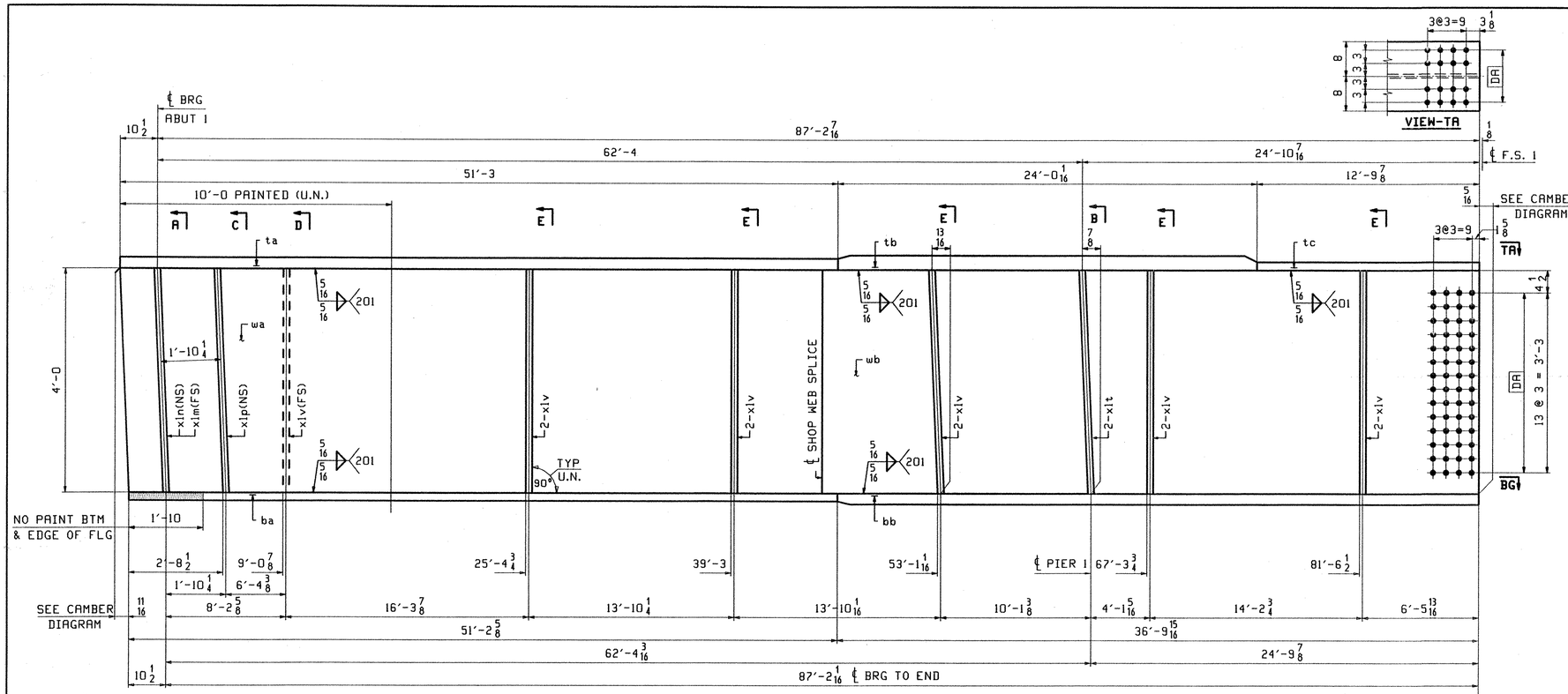
TENSOR 2241

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 165 | DRG. NO. 2 | REV. △

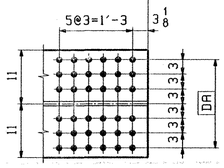
615 BR 25-552

Tue Aug 20 10:10:53 EDT 2002 /users/pw/2241/c1.dwg

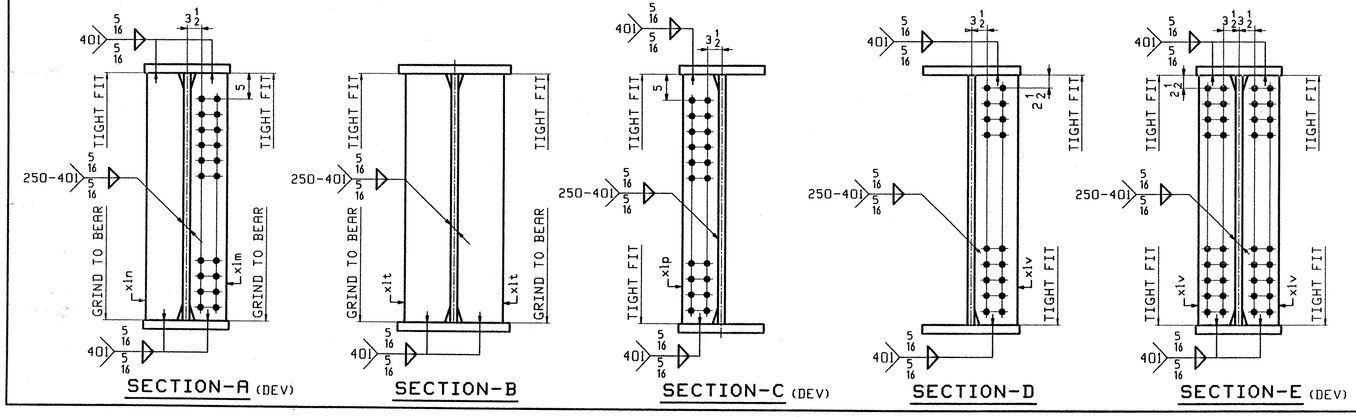


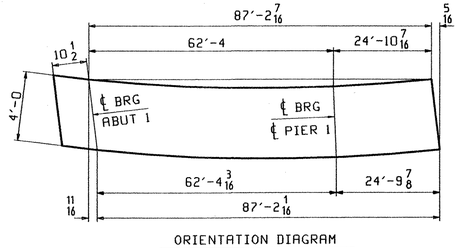
ONE - GIRDER - G3A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.



SECT-BG





ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G3A	1		GIRDER				20331	
6	C		1	wa	PL 1/2x48 3/8	45	11 1/4	(M270-50WT2) (N2-3)		
5	W		1	wb	PL 1/2x49 5/8	42	2 1/16	(M270-50WT2) (N2-3)		
2	Y		1	ta	PL 1x16	51	3	(M270-50WT2) (N2-3)		
2	S		1	tb	PL 1 1/4x22	24	0 1/16	(M270-50WT2) (N2-3)		
4	L		1	tc	PL 7/8x16	12	9 7/8	(M270-50WT2) (N2-3)		
2	Y		1	ba	PL 1x16	51	2 5/8	(M270-50WT2) (N2-3)		
2	A		1	bb	PL 1 1/4x22	36	9 15/16	(M270-50WT2) (N2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (N2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (N2-3)		
7	R		11	x1v	PL 1/2x8	4	0	(M270-50WT2) (N2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (N2-3)		
7	R		1	x1p	PL 1/2x8	4	0	(M270-50WT2) (N2-3)		

BILL OF MATERIAL

JOB NO.

DRAWING NO. 3 REV.

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RKW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8/23/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

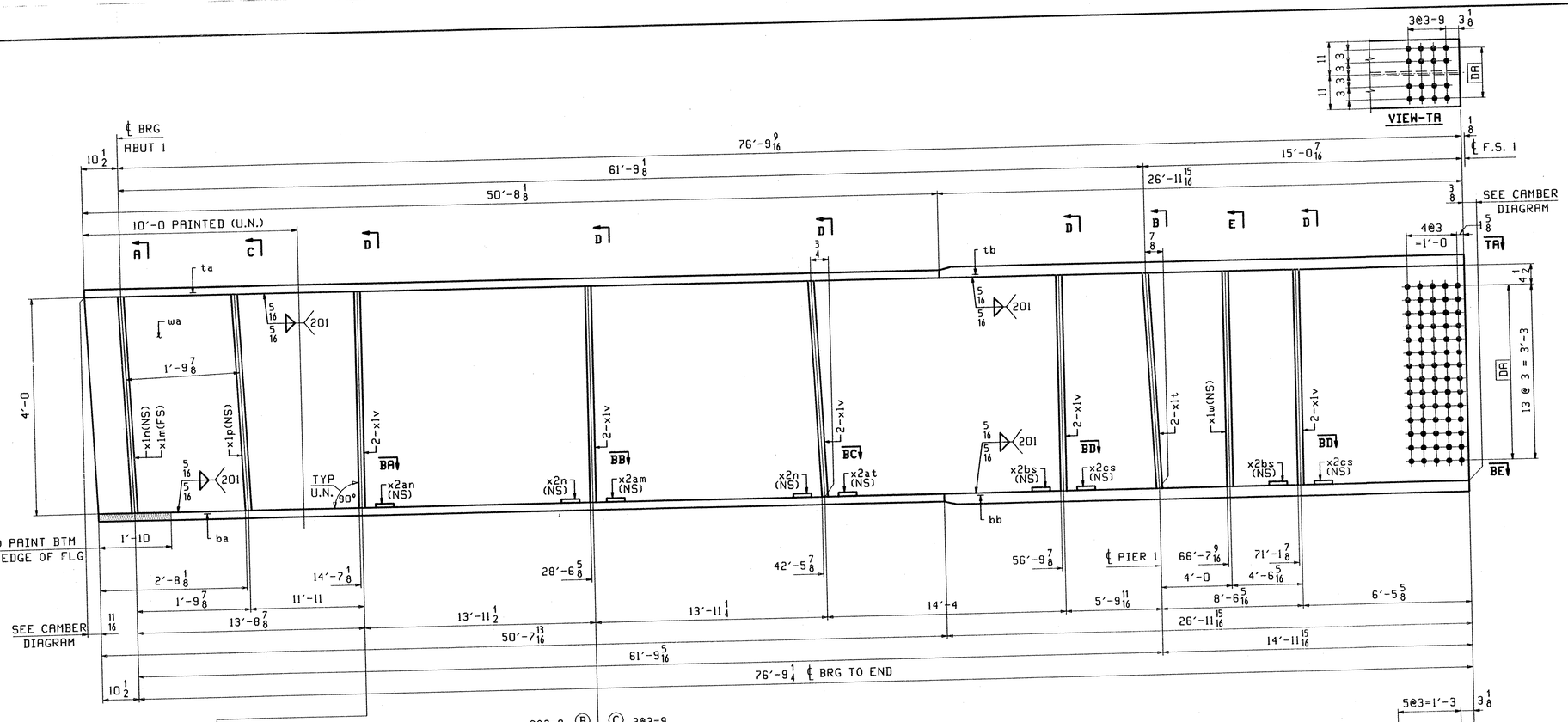
DESCRIPTION:	GIRDER - G3A	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/15
	BRIDGE NO. 25	CHKD BY	
	SEARSBURG, VERMONT	DO	08/16
TENSOR 241	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

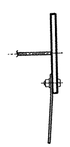
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

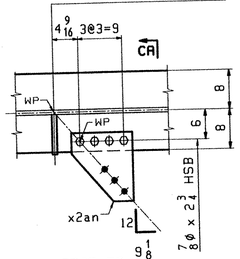
JOB NO. 165 DRG. NO. 3 REV. △

615 BRZ5-553

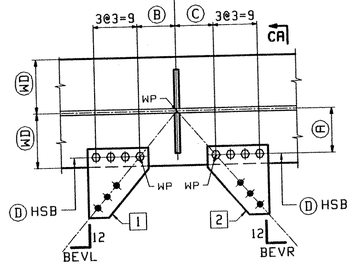
RTD Tue Aug 20 14:45:26 EST 2002 /users/jobs/2241/3/ R4=0



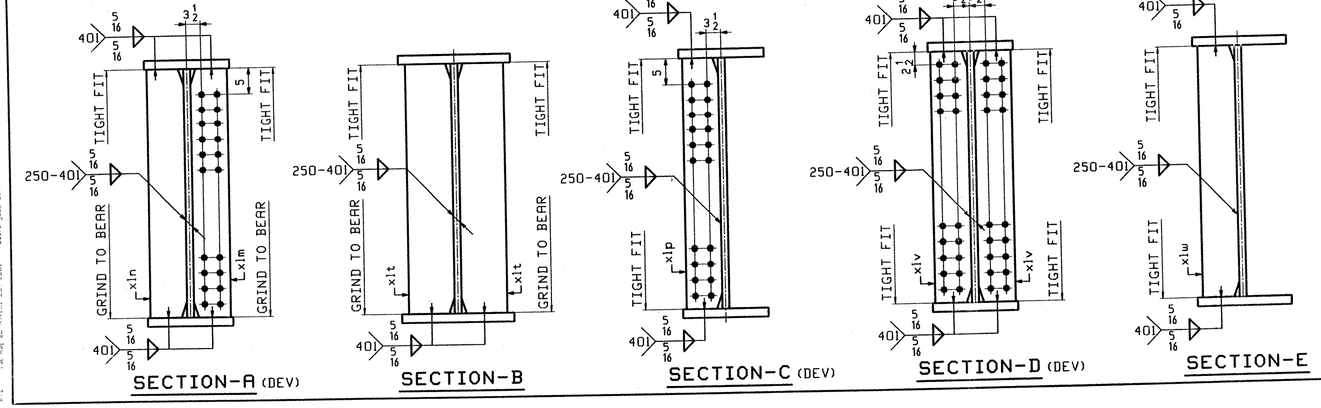




SECT-BA

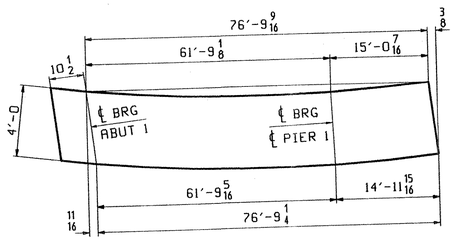


SECT	WD	A	B	C	BEVL	BEVR	1	2	D
BB	8	6	4 9/16	4 1/2	9 1/8	9 1/16	x2n	x2am	7/8Ø x 2 3/4
BC	8	6	4 9/16	4 11/16	9 1/8	9 5/16	x2n	x2at	7/8Ø x 2 3/4
BD	11	9	7 1/16	7	9 3/8	9 5/16	x2bs	x2cs	7/8Ø x 3



ONE - GIRDER - G4A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4A	1		GIRDER				18461	
5	Q		1	wa	PL 1/2x49 5/8	77	8 7/16	(M270-50WT2) (H2-3)		
3	A		1	ta	PL 1x16	50	8 1/8	(M270-50WT2) (H2-3)		
2	L		1	tb	PL 1 1/4x22	26	11 15/16	(M270-50WT2) (H2-3)		
3	A		1	ba	PL 1x16	50	7 13/16	(M270-50WT2) (H2-3)		
2	L		1	bb	PL 1 1/4x22	26	11 15/16	(M270-50WT2) (H2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	R		10	x1v	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	V		1	x2an	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		2	x2n	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2am	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2at	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		2	x2bs	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		2	x2cs	PL 3/8x12 1/2	1	2 1/2	BENT		
7	R		1	x1p	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1w	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
9	M		20		7/8 Ø HSB	0	2 3/4	(A325-3)		
9	N		16		7/8 Ø HSB	0	3	(A325-3)		
9	R		36		7/8 Ø HSW			(F436W)		

BILL OF MATERIAL

JOB NO. | DRAWING NO. 4 | REV.

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP
	OUT FOR APPROVAL	8-23-02			
	OUT FOR APPROVAL				
	ISSUED TO SHOP				
	FIELD & OFFICE				

Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"Ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10′-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

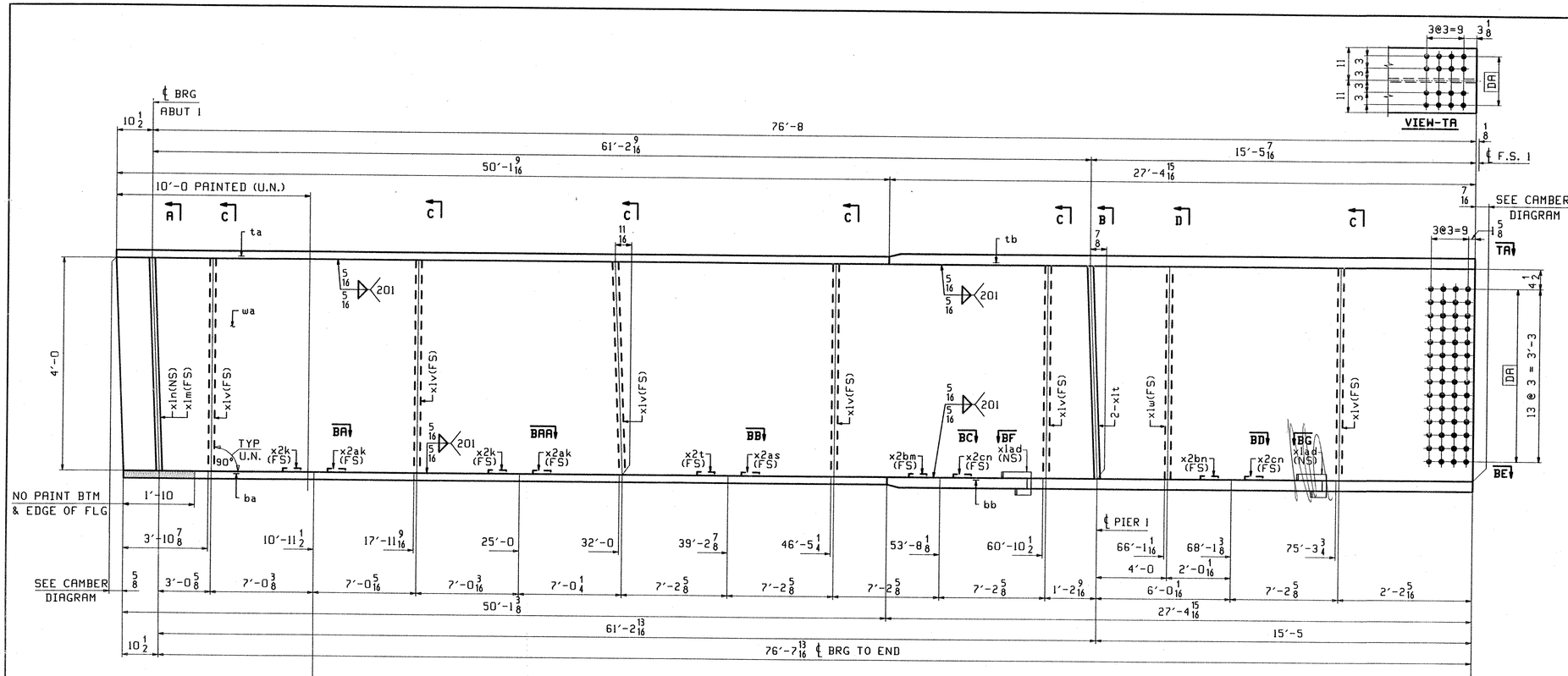
DESCRIPTION: GIRDER - G4A
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

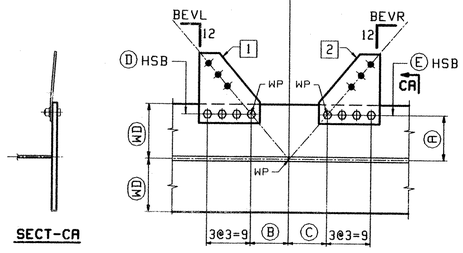
DRAWN BY	DATE
ATD	08/16
CHKD BY	
DO	08/19
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 165 | DRG. NO. 4 | REV. △

617-BR25-SS4

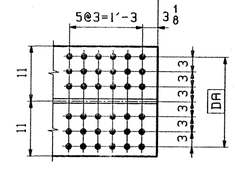


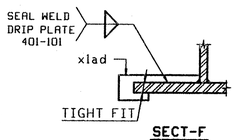


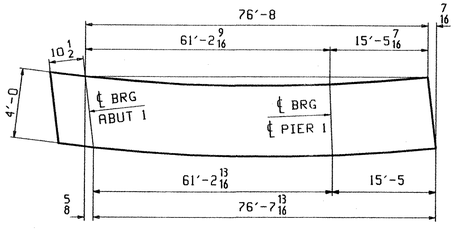
SECT	WD	A	B	C	BEVL	BEVR	1	2	D	E
BA	8	6	4 1/2	4 1/2	9	9	x2k	x2ak	7/8Ø x 2 3/4 (GALV)	7/8Ø x 2 3/4
BAA	8	6	4 1/2	4 1/2	9	9	x2k	x2ak	7/8Ø x 2 3/4	7/8Ø x 2 3/4
BB	8	6	4 5/8	4 5/8	9 1/4	9 1/4	x2t	x2as	7/8Ø x 2 3/4	7/8Ø x 2 3/4
BC	11	9	6 7/8	6 15/16	9 3/16	9 1/4	x2bm	x2cn	7/8Ø x 3	7/8Ø x 3
BD	11	9	6 15/16	6 15/16	9 1/4	9 1/4	x2bn	x2cn	7/8Ø x 3	7/8Ø x 3

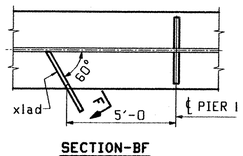
ONE - GIRDER - G5A (DEV)

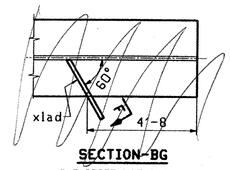
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.

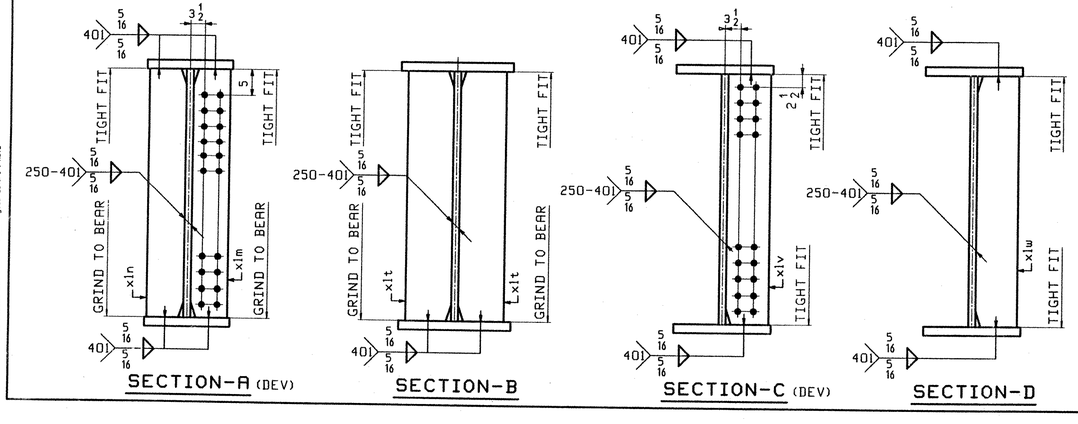












ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5A	1		GIRDER				18224	
5	Q		1	wa	PL 1/2x49 5/8	77	6 15/16	(M270-50WT2) (H2-3)		
3	C		1	ta	PL 1x16	50	1 9/16	(M270-50WT2) (H2-3)		
2	J		1	tb	PL 1 1/4x22	27	4 15/16	(M270-50WT2) (H2-3)		
3	C		1	ba	PL 1x16	50	1 3/8	(M270-50WT2) (H2-3)		
2	J		1	bb	PL 1 1/4x22	27	4 15/16	(M270-50WT2) (H2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	R		6	x1v	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	V		2	x2k	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		2	x2ak	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2t	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2as	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2bm	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		2	x2cn	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2bn	PL 3/8x12 1/2	1	2 1/2	BENT		
7	R		1	x1w	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	T		2	x1ad	PL 1/4x3 1/4	1	2 7/16			
9	C		4		7/8 Ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 Ø HSW			(F436) GALV		
9	M		20		7/8 Ø HSB	0	2 3/4	(A325-3)		
9	N		16		7/8 Ø HSB	0	3	(A325-3)		
9	R		36		7/8 Ø HSW			(F436W)		

BILL OF MATERIAL

JOB NO. | DRAWING NO. 5 | REV.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-17-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"Ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

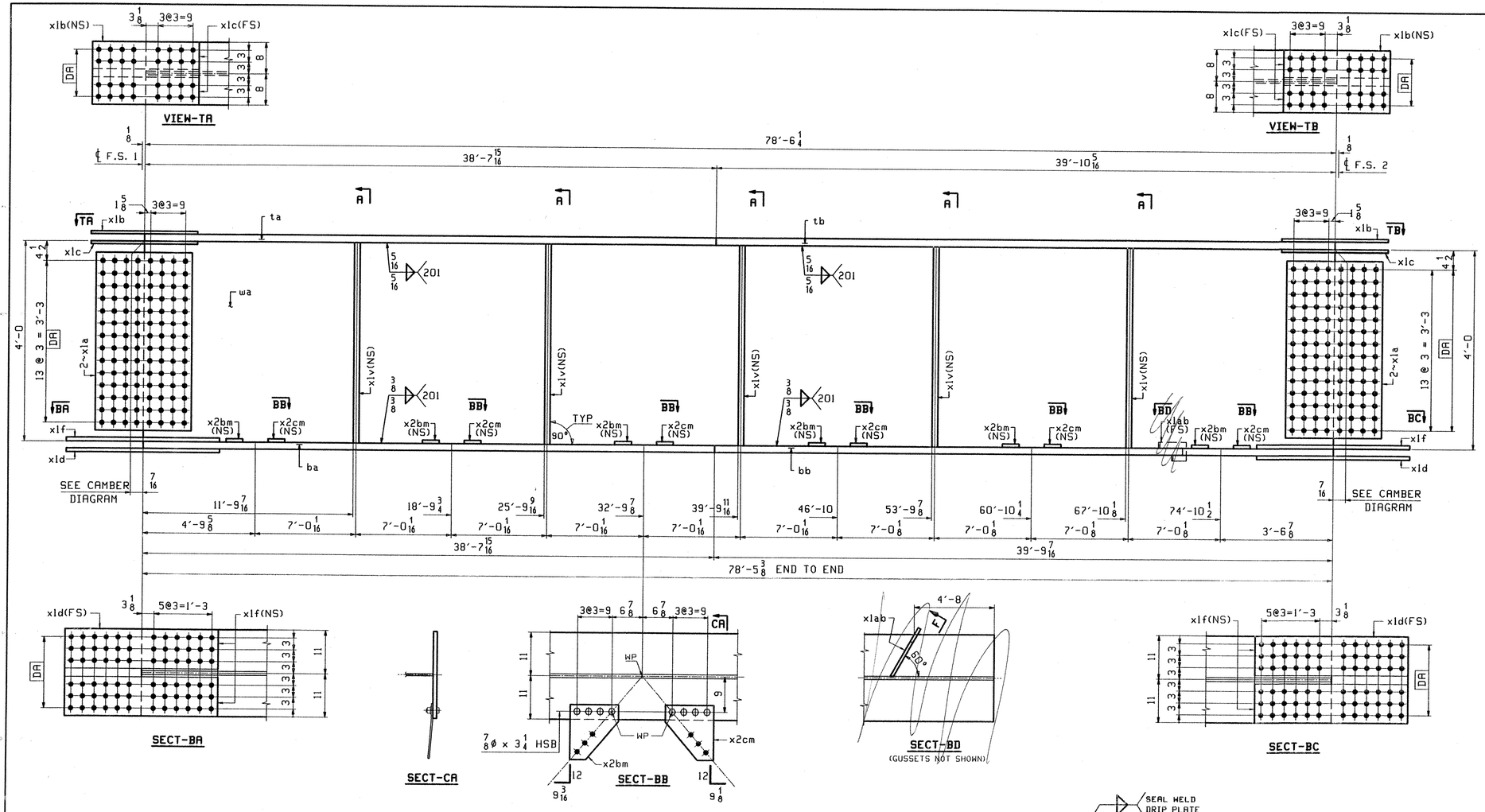
DESCRIPTION:	GIRDER - G5A	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/18
	BRIDGE NO. 25	CHKD BY	
	SEARSBURG, VERMONT	DO	08/19
TENSOR 2241	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

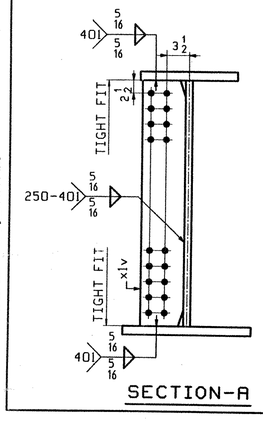
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 165 | DRG. NO. 5 | REV. △

6/8-BR 25-555

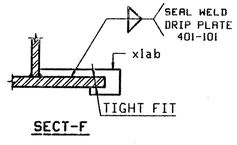
ATD Tue Aug 20 14:28:13 EDT 2002 /users/jobs/2241/s1 : Rev0

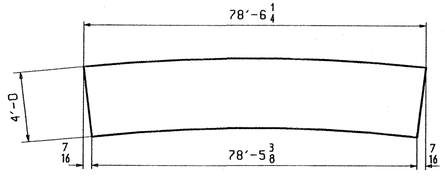




ONE - GIRDER - G1B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.





ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									6	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIB	1		GIRDER				21439	
5	A		1	wa	PL 1/2x50 3/8	78	6 1/4	(M270-50WT2) (H2-3)		
4	A		1	ta	PL 7/8x16	38	7 15/16	(M270-50WT2) (H2-3)		
3	H		1	tb	PL 7/8x16	39	10 5/16	(M270-50WT2) (H2-3)		
1	G		1	ba	PL 1 1/2x22	38	7 15/16	(M270-50WT2) (H2-3)		
1	C		1	bb	PL 1 1/2x22	39	9 7/16	(M270-50WT2) (H2-3)		
7	B		4	xla	PL 1/2x43	2	1	(M270-50WT2) (H2-3)		
7	F		2	xlb	PL 1/2x16	2	3 1/2	(M270-50WT2) (H2-3)		
7	G		4	xlc	PL 9/16x7 1/4	2	3 1/2	(M270-50WT2) (H2-3)		
7	H		2	xld	PL 3/4x22	3	3 1/2	(M270-50WT2) (H2-3)		
7	J		4	xlf	PL 7/8x10 1/4	3	3 1/2	(M270-50WT2) (H2-3)		
7	R		5	xlv	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	V		6	x2bm	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		6	x2cm	PL 3/8x12 1/2	1	2 1/2	BENT		
7	X		1	xlab	PL 1/4x3 1/4	1	2 7/16			
9	P		48		7/8 ø HSB	0	3 1/4	(A325-3)		
9	R		48		7/8 ø HSW			(F436H)		

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8.23.02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G1B	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/14
BRIDGE NO. 25	CHKD BY	
SEARSBURG, VERMONT	DO	08/15
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

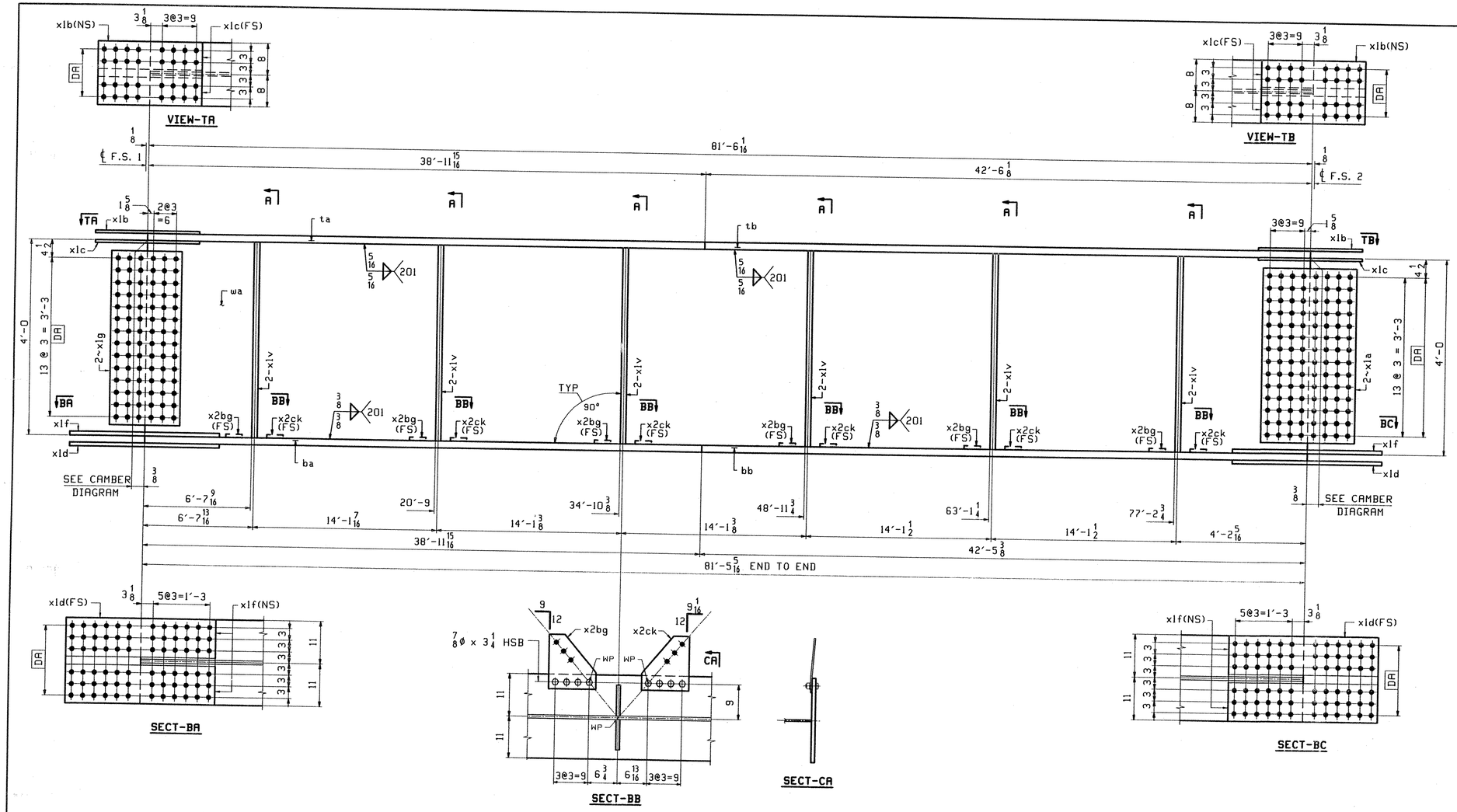
TENSOR 2241

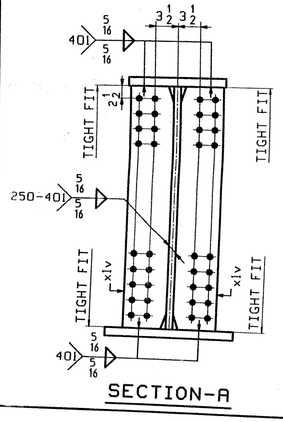
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	6
	REV. △

619-BR25-SS4

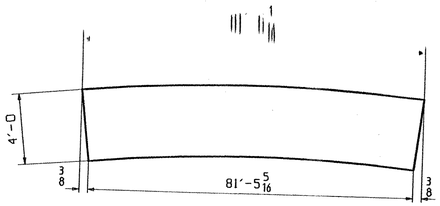
RTD Tue Aug 20 11:24:52 EDT 2002 /users/jobs/2241/6 : Rev0





ONE - GIRDER - G2B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.		REV.
									7		
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		G2B	1		GIRDER				22469		
4	Y		1	wa	PL 1/2x50 5/16	81	6 1/16	(M270-50WT2) (H2-3)			
3	Y		1	ta	PL 7/8x16	38	11 15/16	(M270-50WT2) (H2-3)			
3	U		1	tb	PL 7/8x16	42	6 1/8	(M270-50WT2) (H2-3)			
1	E		1	ba	PL 1 1/2x22	38	11 15/16	(M270-50WT2) (H2-3)			
1	A		1	bb	PL 1 1/2x22	42	5 3/8	(M270-50WT2) (H2-3)			
7	C		2	xlg	PL 1/2x43	1	7	(M270-50WT2) (H2-3)			
7	F		2	xlb	PL 1/2x16	2	3 1/2	(M270-50WT2) (H2-3)			
7	G		4	xlc	PL 9/16x7 1/4	2	3 1/2	(M270-50WT2) (H2-3)			
7	H		2	xld	PL 3/4x22	3	3 1/2	(M270-50WT2) (H2-3)			
7	J		4	xlf	PL 7/8x10 1/4	3	3 1/2	(M270-50WT2) (H2-3)			
7	B		2	xla	PL 1/2x43	2	1	(M270-50WT2) (H2-3)			
7	R		12	xlv	PL 1/2x8	4	0	(M270-50WT2) (H2-3)			
7	V		6	x2bg	PL 3/8x12 1/2	1	2 1/2	BENT			
7	V		6	x2ck	PL 3/8x12 1/2	1	2 1/2	BENT			
9	P		48		7/8 ø HSB	0	3 1/4	(A325-3)			
9	R		48		7/8 ø HSW			(F436W)			

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RLW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-23-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10′-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)

THIS AREA LEFT UNPAINTED.

DESCRIPTION: GIRDER - G2B
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

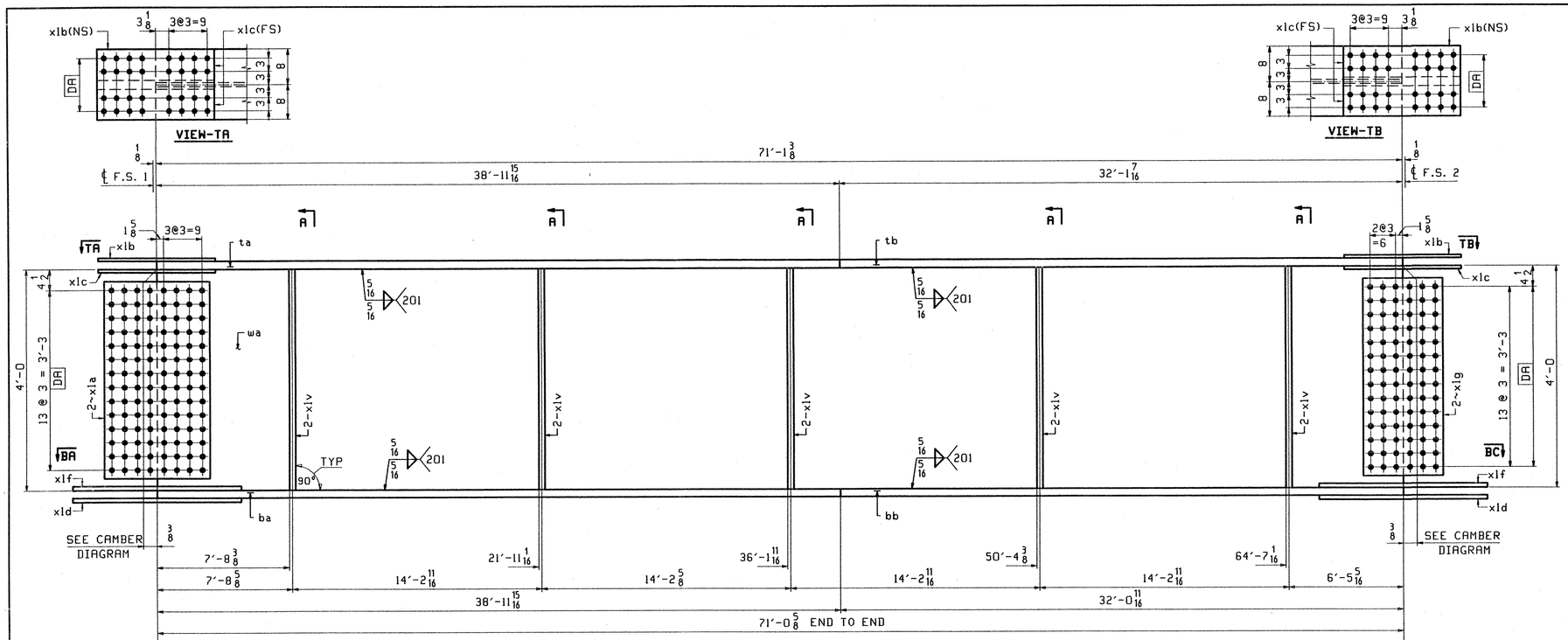
DRAWN BY	DATE
ATD	08/15
CHKD BY	
DO	08/16
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

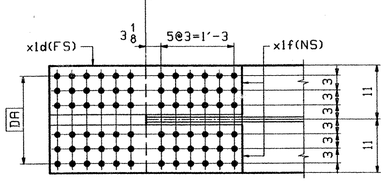
TENSOR 2241

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

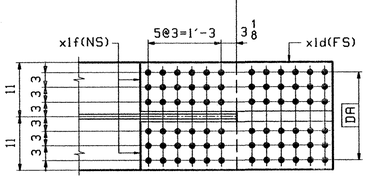
JOB NO.	DRG. NO.
165	7
	REV. △

ATD Tue Aug 20 11:40:27 EDT 2002 /users/jobs/2241/7.dwg





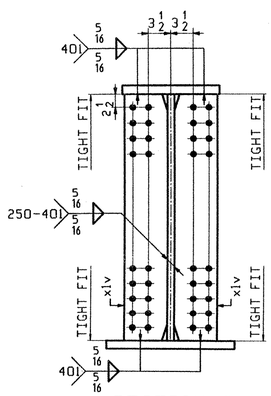
SECT-BA



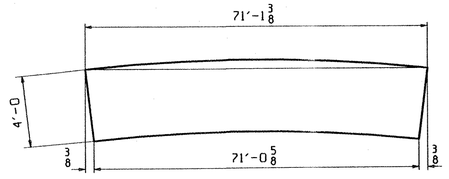
SECT-BC

ONE - GIRDER - G3B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



SECTION-A



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									8	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G3B	1		GIRDER				18168	
5	N		1	wa	PL 1/2x49 13/16	71	1 3/8	(M270-50WT2) (H2-3)		
3	Y		1	ta	PL 7/8x16	38	11 15/16	(M270-50WT2) (H2-3)		
4	E		1	tb	PL 7/8x16	32	1 7/16	(M270-50WT2) (H2-3)		
1	Y		1	ba	PL 1 1/4x22	38	11 15/16	(M270-50WT2) (H2-3)		
2	G		1	bb	PL 1 1/4x22	32	0 11/16	(M270-50WT2) (H2-3)		
7	B		2	xla	PL 1/2x43	2	1	(M270-50WT2) (H2-3)		
7	F		2	xlb	PL 1/2x16	2	3 1/2	(M270-50WT2) (H2-3)		
7	G		4	xlc	PL 9/16x7 1/4	2	3 1/2	(M270-50WT2) (H2-3)		
7	H		2	xld	PL 3/4x22	3	3 1/2	(M270-50WT2) (H2-3)		
7	J		4	xlf	PL 7/8x10 1/4	3	3 1/2	(M270-50WT2) (H2-3)		
7	C		2	xlg	PL 1/2x43	1	7	(M270-50WT2) (H2-3)		
7	R		10	xlv	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RKW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-23-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"Ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

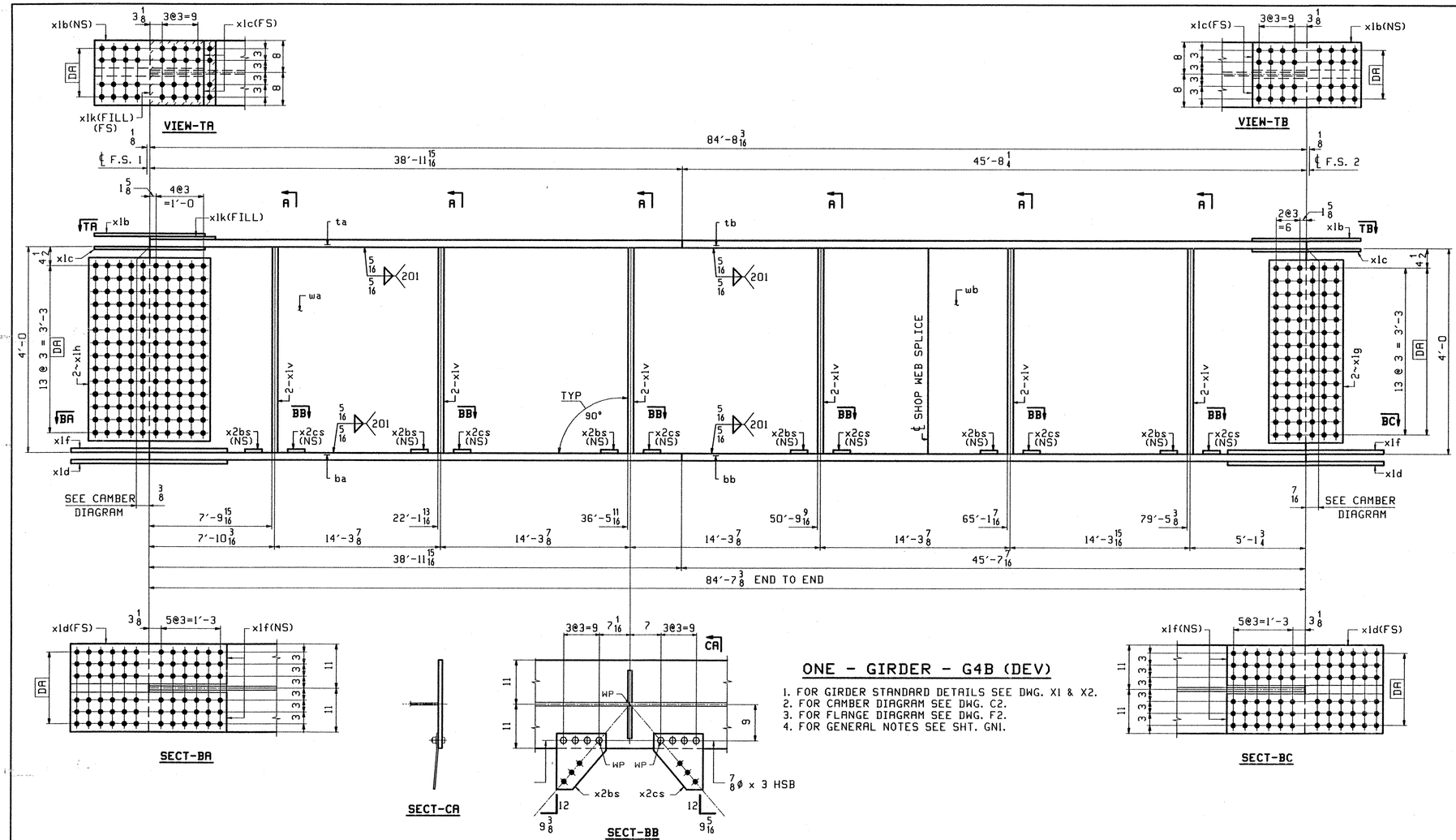
DESCRIPTION:	GIRDER - G3B	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/15
	BRIDGE NO. 25	CHKD BY	
	SEARSBURG, VERMONT	DO	08/19
TENSOR 2241	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	8
	REV. △

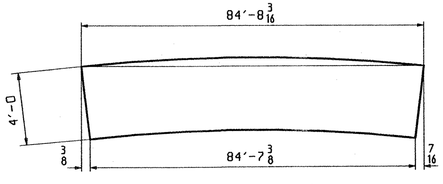
621-B225-SS8

DD Tue Aug 20 08:05:58 EDT 2002 /users/jake/2241/8.1.RevD



ONE - GIRDER - G4B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4B	1		GIRDER				21542	
6	A		1	wa	PL 1/2x49	57	0 1/4	(M270-50WT2) (H2-3)		
6	G		1	wb	PL 1/2x48 1/4	27	7 15/16	(M270-50WT2) (H2-3)		
4	C		1	ta	PL 7/8x16	38	11 15/16	(M270-50WT2) (H2-3)		
3	S		1	tb	PL 3/8x16	45	8 1/4	(M270-50WT2) (H2-3)		
1	Y		1	ba	PL 1 1/4x22	38	11 15/16	(M270-50WT2) (H2-3)		
1	U		1	bb	PL 1 1/4x22	45	7 7/16	(M270-50WT2) (H2-3)		
7	D		2	x1h	PL 1/2x43	2	7	(M270-50WT2) (H2-3)		
7	F		2	x1b	PL 1/2x16	2	3 1/2	(M270-50WT2) (H2-3)		
7	G		4	x1c	PL 9/16x7 1/4	2	3 1/2	(M270-50WT2) (H2-3)		
7	K		1	x1k	PL 3/8x16	1	4 5/8	FILL		
7	H		2	x1d	PL 3/4x22	3	3 1/2	(M270-50WT2) (H2-3)		
7	J		4	x1f	PL 3/8x10 1/4	3	3 1/2	(M270-50WT2) (H2-3)		
7	C		2	x1g	PL 1/2x43	1	7	(M270-50WT2) (H2-3)		
7	R		12	x1v	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	V		6	x2bs	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		6	x2cs	PL 3/8x12 1/2	1	2 1/2	BENT		
9	N		48		7/8 ø HSB	0	3	(A325-3)		
9	R		48		7/8 ø HSW			(F436H)		

BILL OF MATERIAL

JOB NO.

DRAWING NO. 9

REV.

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

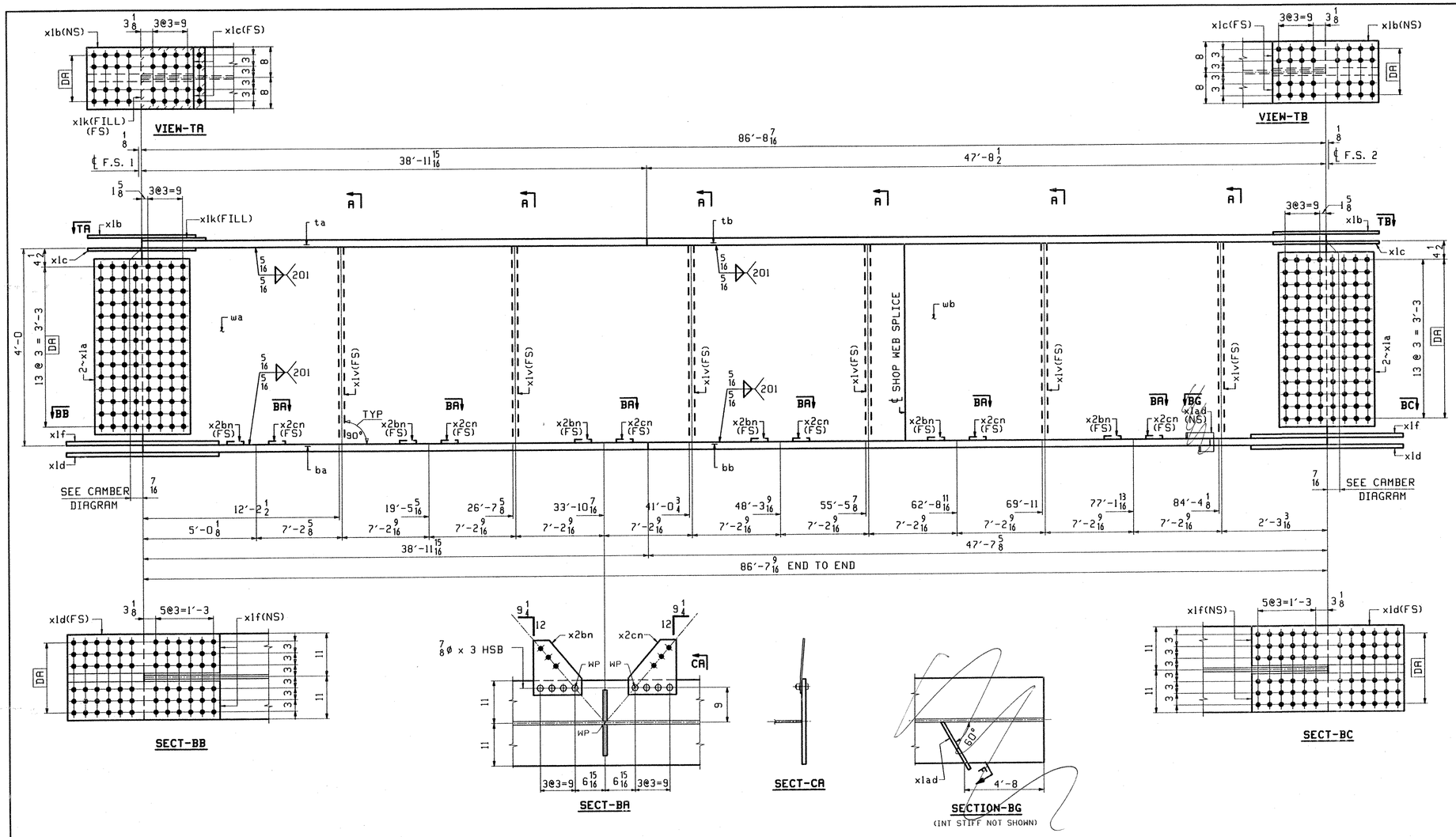
DESCRIPTION:	GIRDER - G4B	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/16
	BRIDGE NO. 25	CHKD BY	
	SEARSBURG, VERMONT	DO	08/19
TENSOR 2241	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

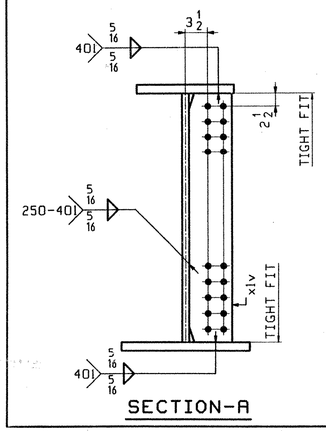
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

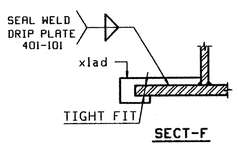
JOB NO. 165 | DRG. NO. 9 | REV. △

672-BR 25-459

ATD Tue Aug 20 11:53:10 EDT 2002 /users/jobs/2241/9 : Rev0

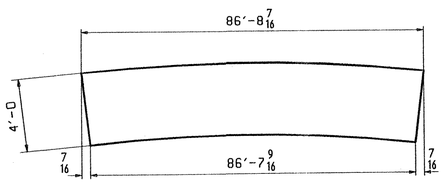






ONE - GIRDER - G5B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

BILL OF MATERIAL

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5B	1		GIRDER				21693	
5	S		1	wa	PL 1/2 x 49 1/4	57	0 5/16	(M270-50WT2) (H2-3)		
6	E		1	wb	PL 1/2 x 48 1/4	29	8 5/8	(M270-50WT2) (H2-3)		
4	C		1	ta	PL 5/8 x 16	38	11 15/16	(M270-50WT2) (H2-3)		
3	Q		1	tb	PL 7/8 x 16	47	8 1/2	(M270-50WT2) (H2-3)		
1	Y		1	ba	PL 1 1/4 x 22	38	11 15/16	(M270-50WT2) (H2-3)		
1	S		1	bb	PL 1 1/4 x 22	47	7 5/8	(M270-50WT2) (H2-3)		
7	B		4	x1a	PL 1/2 x 43	2	1	(M270-50WT2) (H2-3)		
7	F		2	x1b	PL 1/2 x 16	2	3 1/2	(M270-50WT2) (H2-3)		
7	G		4	x1c	PL 9/16 x 7 1/4	2	3 1/2	(M270-50WT2) (H2-3)		
7	K		1	x1k	PL 3/8 x 16	1	4 5/8	FILL		
7	H		2	x1d	PL 1/2 x 22	3	3 1/2	(M270-50WT2) (H2-3)		
7	J		4	x1f	PL 7/8 x 10 1/4	3	3 1/2	(M270-50WT2) (H2-3)		
7	R		6	x1v	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
7	V		6	x2bn	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		6	x2cn	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	L		1	xtad	PL 1/4 x 9 1/4	1	2 7/16			
9	N		48		7/8 ø HSB	0	3	(A325-3)		
9	R		48		7/8 ø HSW			(F436M)		

RECEIVED
OK'D BY RV OK'D BY
AUG 26 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-23-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16 ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G5B
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

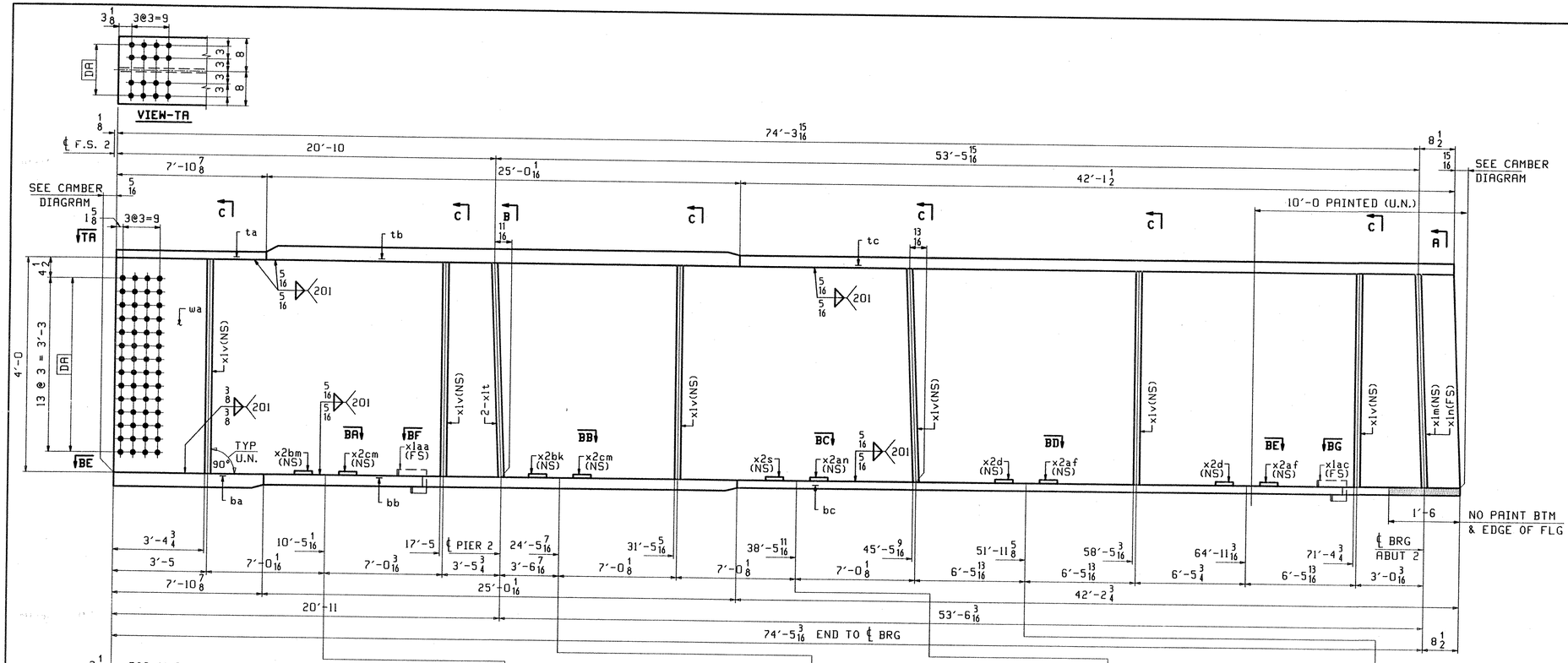
	DRAWN BY	DATE
	ATD	08/18
	CHKD BY	
	DO	08/19
	APPROV BY	
	SUPERVISOR	W. J. GATTI
	Q.A.	

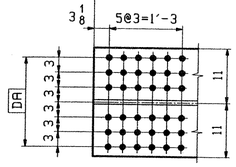
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

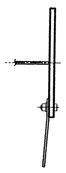
JOB NO. 165 DRG. NO. 10 REV. △

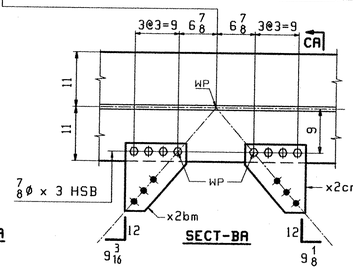
623 BR-25-1510

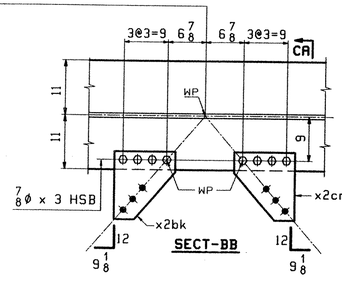
Tue Aug 20 10:00:44 EDT 2002 /users/jobs/2241/10.dwg

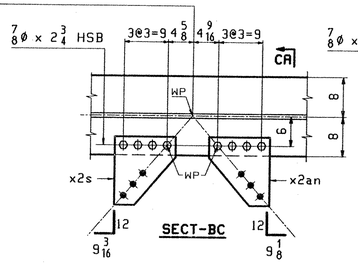


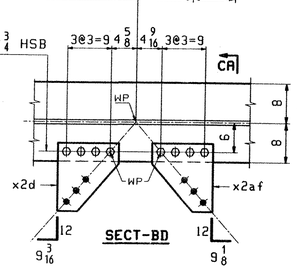


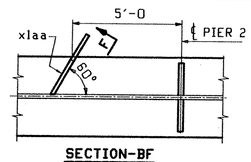


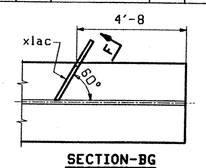


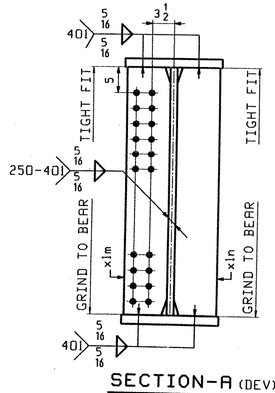


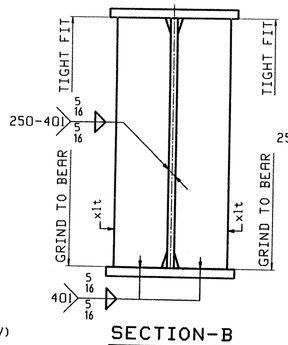


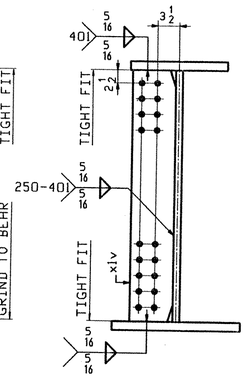


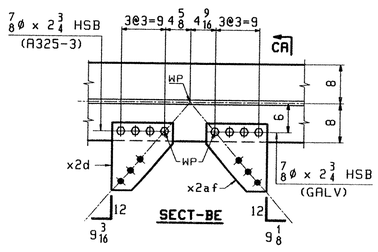


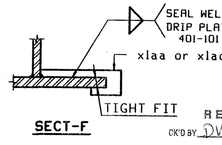


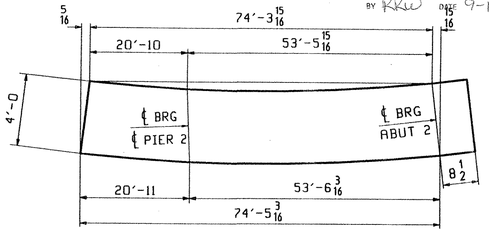












ONE - GIRDER - G1C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.

BILL OF MATERIAL

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIC	1		GIRDER				17936	
5	J		1	wa	PL 1/2 x 49 13/16	75	1 11/16	(M270-50WT2) (H2-3)		
4	U		1	ta	PL 7/8 x 16	7	10 7/8	(M270-50WT2) (H2-3)		
2	Q		1	tb	PL 1 1/4 x 22	25	0 1/16	(M270-50WT2) (H2-3)		
3	E		1	tc	PL 1x16	42	1 1/2	(M270-50WT2) (H2-3)		
1	N		1	ba	PL 1 1/2 x 22	7	10 7/8	(M270-50WT2) (H2-3)		
2	Q		1	bb	PL 1 1/4 x 22	25	0 1/16	(M270-50WT2) (H2-3)		
3	E		1	bc	PL 1x16	42	2 3/4	(M270-50WT2) (H2-3)		
7	R		6	x1v	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	V		1	x2bm	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		2	x2cm	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2bk	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2s	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2an	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		2	x2d	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		2	x2af	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	T		1	x1aa	PL 1/4 x 3 1/4	1	2 7/16			
7	T		1	x1ac	PL 1/4 x 3	0	11			
9	M		20		7/8 ø HSB	0	2 3/4	(A325-3)		
9	N		16		7/8 ø HSB	0	3	(A325-3)		
9	R		36		7/8 ø HSW			(F436M)		
9	C		4		7/8 ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 ø HSW			(F436) GALV		

JOB NO. | DRAWING NO. 11 | REV.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-23-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
AUG 26 2002
RESUBMIT BY RKW
APPROVED 9-17-02

DESCRIPTION: GIRDER - G1C
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

	DRAWN BY	DATE
	ATD	08/14
	CHKD BY	
	DO	08/15
	APPROV BY	
	SUPERVISOR	W. J. GATTI
	Q.A.	

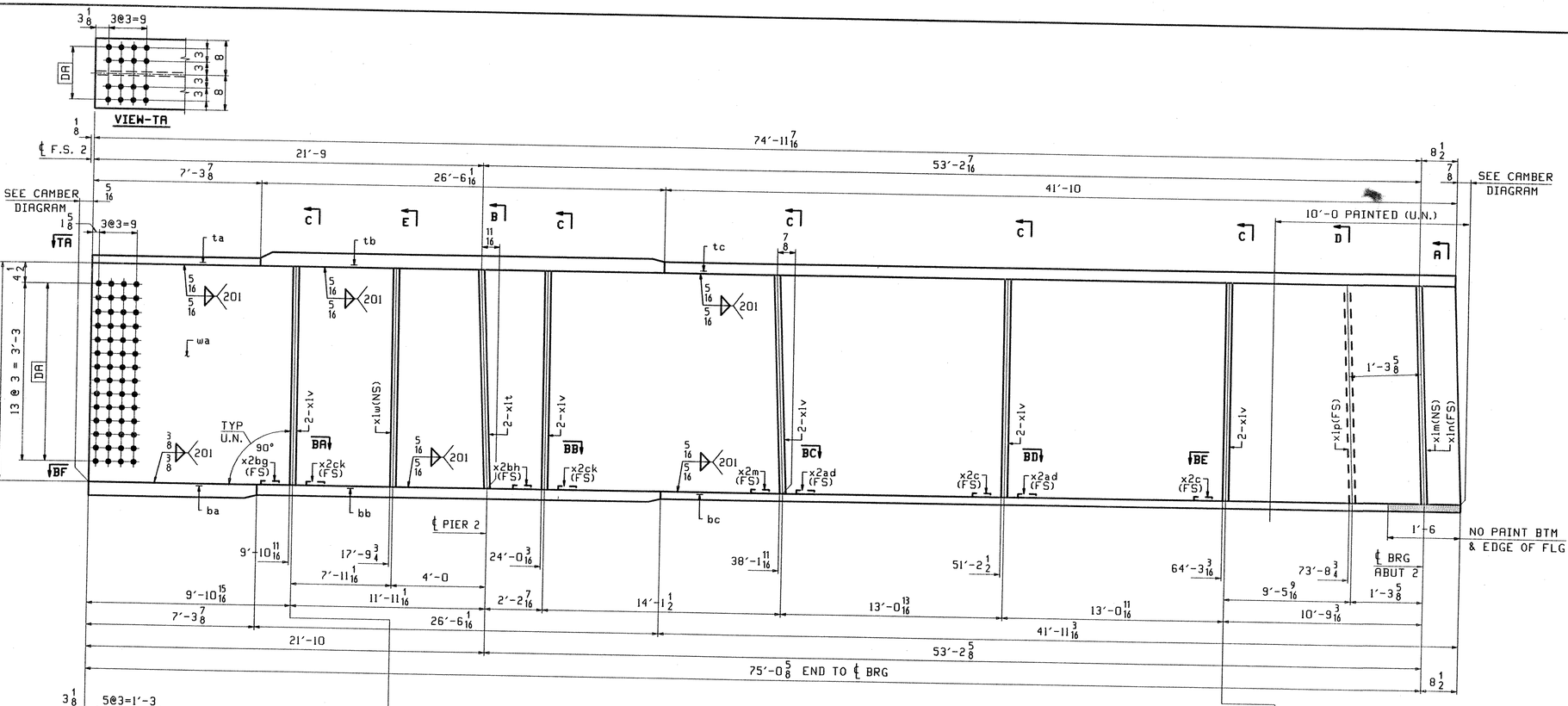
TENSOR 224

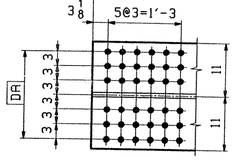
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

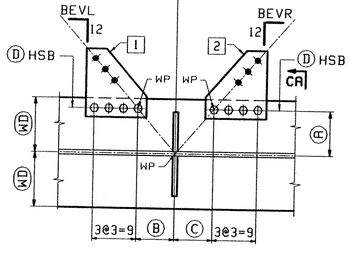
JOB NO. 165 | DRG. NO. 11 | REV. △

624 BR25-SS11

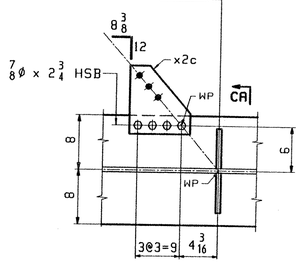
RTD Tue Aug 20 14:38:56 EDT 2002 /users/jobs/224/11/ Rev0

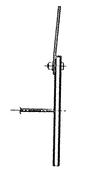


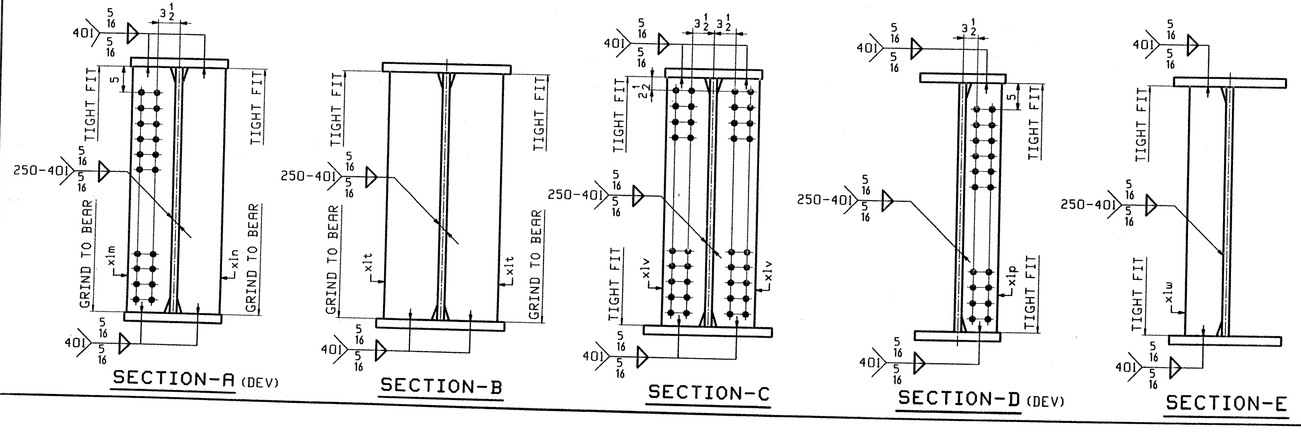




SECT	WD	A	B	C	BEVL	BEVR	1	2	D
BA	11	9	6 3/4	6 13/16	9	9 1/16	x2bg	x2ck	7/8 Ø x 3
BB	11	9	6 13/16	6 13/16	9 1/16	9 1/16	x2bh	x2ck	7/8 Ø x 3
BC	8	6	4 1/2	4 3/16	9 1/16	8 3/8	x2m	x2ad	7/8 Ø x 2 3/4
BD	8	6	4 3/16	4 3/16	8 3/8	8 3/8	x2c	x2ad	7/8 Ø x 2 3/4

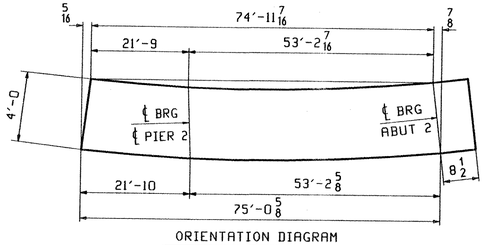






ONE - GIRDER - G2C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

BILL OF MATERIAL

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G2C	1		GIRDER				18452	
5	G		1	wa	PL 1/2 x 49 7/8	75	9 1/8	(M270-50WT2) (H2-3)		
4	W		1	ta	PL 3/8 x 16	7	3 7/8	(M270-50WT2) (H2-3)		
2	N		1	tb	PL 1 1/4 x 22	26	6 1/16	(M270-50WT2) (H2-3)		
3	G		1	tc	PL 1x16	41	10	(M270-50WT2) (H2-3)		
1	Q		1	ba	PL 1 1/2 x 22	7	3 7/8	(M270-50WT2) (H2-3)		
2	N		1	bb	PL 1 1/4 x 22	26	6 1/16	(M270-50WT2) (H2-3)		
3	G		1	bc	PL 1x16	41	11 3/16	(M270-50WT2) (H2-3)		
7	R		10	x1v	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	V		1	x2bg	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		2	x2ck	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2bh	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2m	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		2	x2ad	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		2	x2c	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	R		1	x1w	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1p	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
9	M		20		7/8 Ø HSB	0	2 3/4	(A325-3)		
9	N		16		7/8 Ø HSB	0	3	(A325-3)		
9	R		36		7/8 Ø HSW			(F436H)		

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16" Ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G2C
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

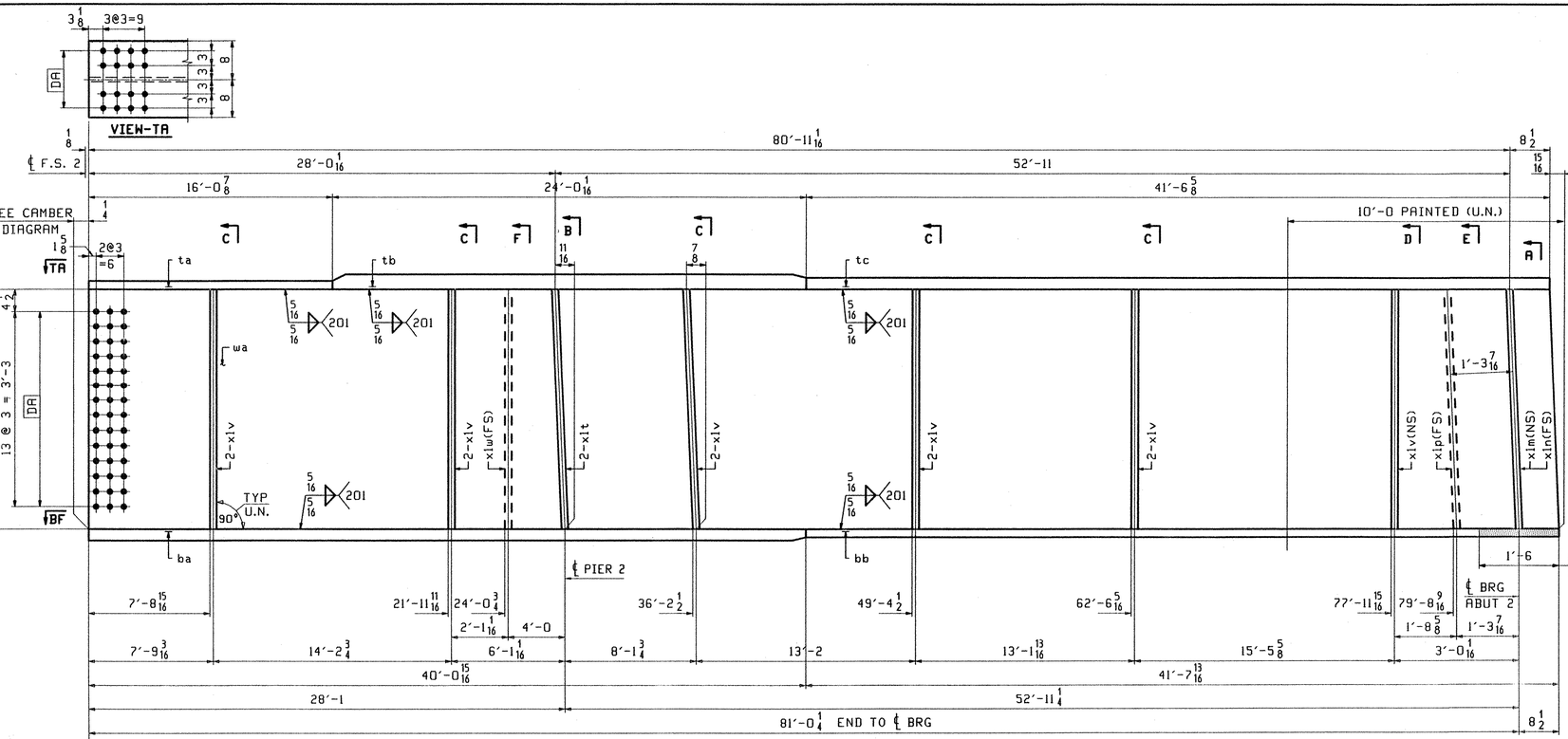
	DRAWN BY	DATE
	ATD	08/15
	CHKD BY	
	DO	08/16
	APPROV BY	
	SUPERVISOR	W. J. GATTI
	Q.A.	

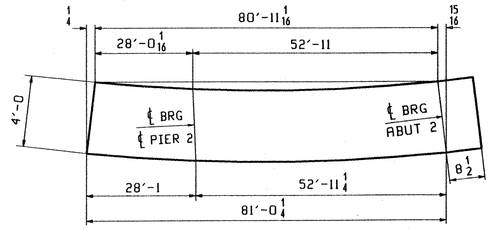
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	12
	REV. △

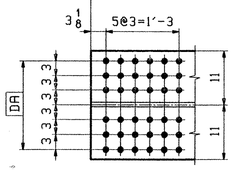
625-BR25-SS12

ATD Tue Aug 20 17:04:21 EDT 2002 /users/jobs/2241/d2 : RevD



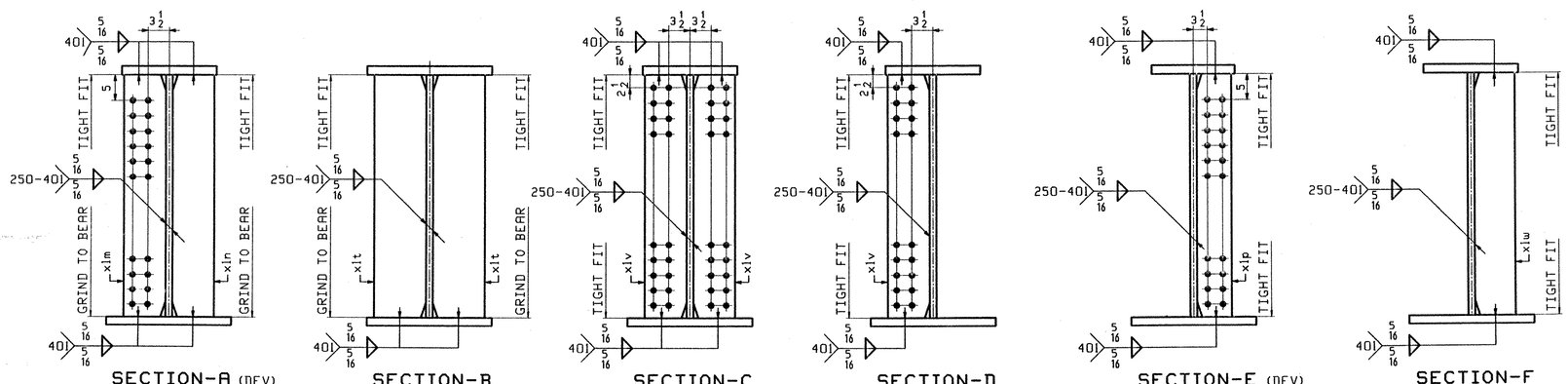


ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3



ONE - GIRDER - G3C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3 & F4.
4. FOR GENERAL NOTES SEE SHT. GN1.



BILL OF MATERIAL

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G3C	1		GIRDER				19443	
5	C		1	wa	PL 1/2x50	81	8 3/4	(M270-50WT2) (H2-3)		
4	G		1	ta	PL 7/8x16	16	0 7/8	(M270-50WT2) (H2-3)		
2	S		1	tb	PL 1 1/4x22	24	0 1/16	(M270-50WT2) (H2-3)		
3	J		1	tc	PL 1x16	41	6 5/8	(M270-50WT2) (H2-3)		
1	W		1	ba	PL 1 1/4x22	40	0 15/16	(M270-50WT2) (H2-3)		
3	J		1	bb	PL 1x16	41	7 13/16	(M270-50WT2) (H2-3)		
7	R		11	x1v	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1w	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1p	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		

JOB NO.

DRAWING NO. 13

REV

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8/23/02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

RECEIVED
CK'D BY DK OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RRW DATE 9-17-02

MATERIAL: M270-50W

ELECTRODES:

HOLES: 15/16"ø (UN)

SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G3C

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

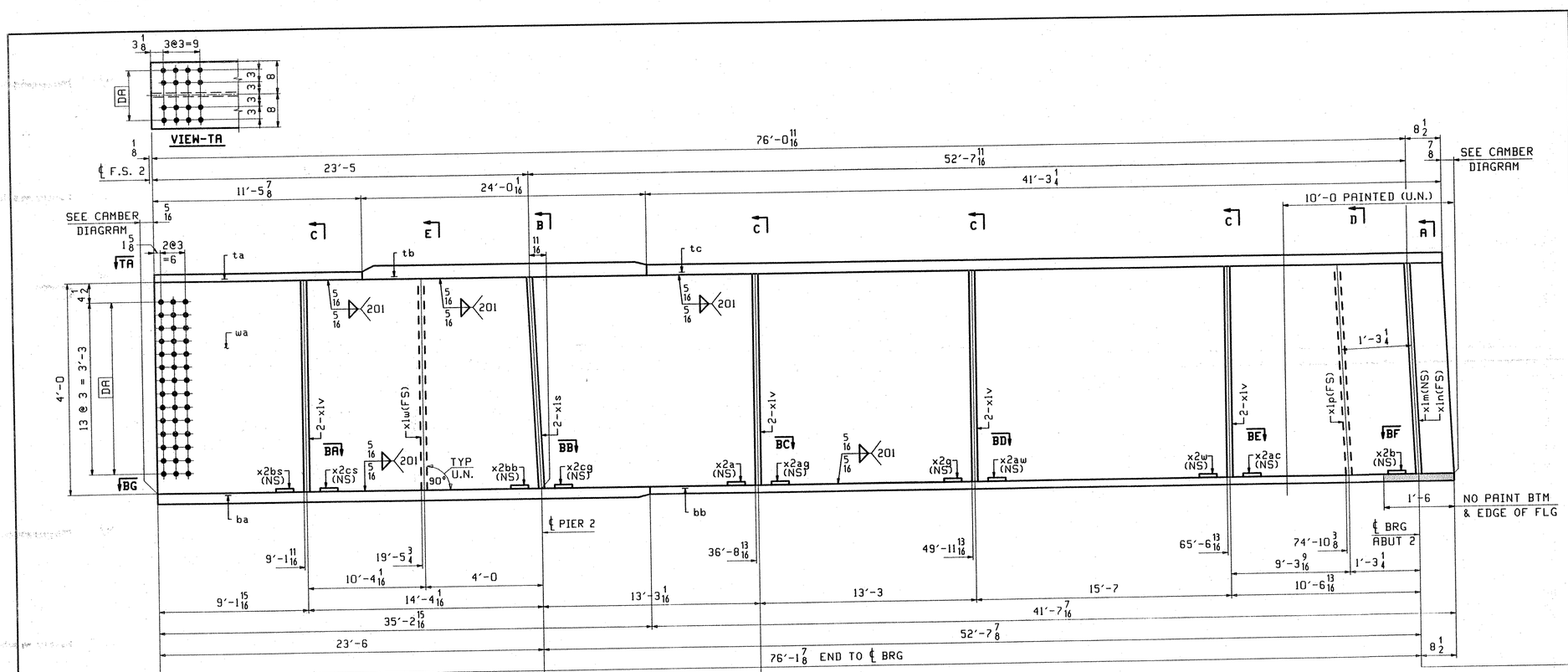
DRAWN BY	DATE
ATD	08/16
CHKD BY	
DO	08/19
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

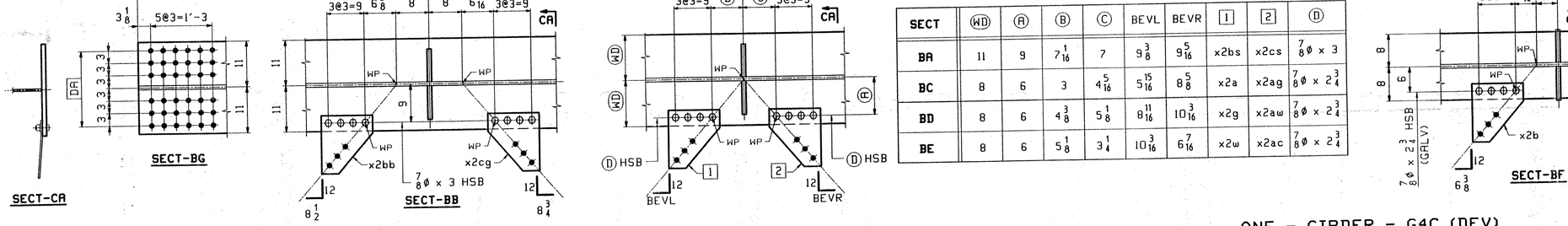
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 165 DRG. NO. 13 REV. △

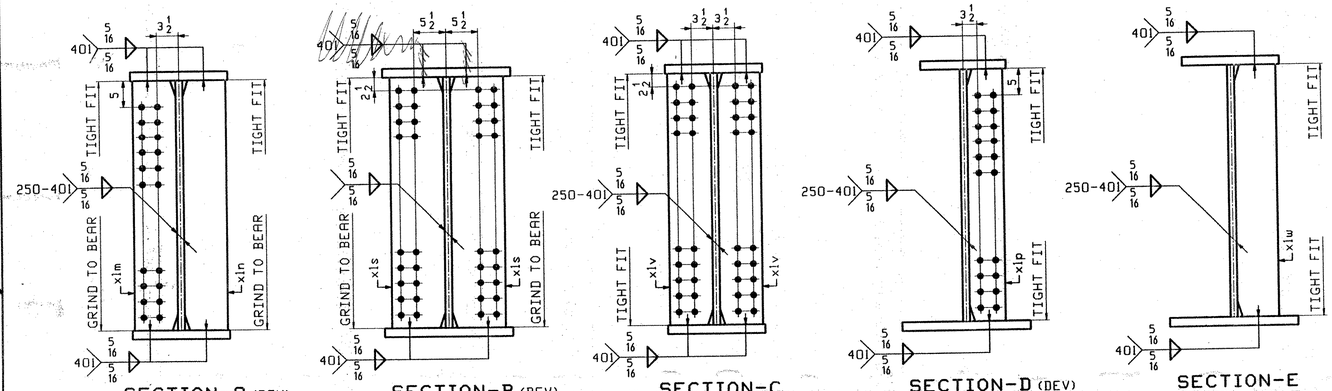
626-BR 25-5313

Tue Aug 20 17:58:24 EDT 2002 /users/jaw/2241/13.1 Rev0



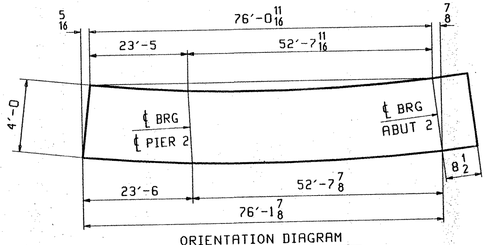


SECT	WD	A	B	C	BEVL	BEVR	1	2	D
BA	11	9	7 1/16	7	9 3/8	9 5/16	x2bs	x2cs	7/8Ø x 3
BC	8	6	3	4 5/16	5 15/16	8 5/8	x2a	x2ag	7/8Ø x 2 3/4
BD	8	6	4 3/8	5 1/8	8 11/16	10 3/16	x2g	x2aw	7/8Ø x 2 3/4
BE	8	6	5 1/8	3 1/4	10 3/16	6 7/16	x2w	x2ac	7/8Ø x 2 3/4



ONE - GIRDER - G4C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3 & F4.
4. FOR GENERAL NOTES SEE SHT. GN1.



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4C	1		GIRDER				18399	
5	E		1	wa	PL 1/2x49 15/16	76	10 3/8	(M270-50WT2) (H2-3)		
4	N		1	ta	PL 7/8x16	11	5 7/8	(M270-50WT2) (H2-3)		
2	S		1	tb	PL 1 1/4x22	24	0 1/16	(M270-50WT2) (H2-3)		
3	L		1	tc	PL 1x16	41	3 1/4	(M270-50WT2) (H2-3)		
2	C		1	ba	PL 1 1/4x22	35	2 15/16	(M270-50WT2) (H2-3)		
3	J		1	bb	PL 1x16	41	7 1/16	(M270-50WT2) (H2-3)		
7	R		8	x1v	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1s	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1m	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	N		1	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	V		1	x2bs	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2cs	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2bb	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2cg	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2a	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2ag	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2g	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2aw	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2w	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2ac	PL 3/8x12 1/2	1	2 1/2	BENT		
7	V		1	x2b	PL 3/8x12 1/2	1	2 1/2	BENT		
7	R		1	x1w	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1p	PL 1/2x8	4	0	(M270-50WT2) (H2-3)		
9	C		4		7/8 Ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 Ø HSW			(F436) GALV		
9	M		24		7/8 Ø HSB	0	2 3/4	(A325-3)		
9	N		16		7/8 Ø HSB	0	3	(A325-3)		
9	R		40		7/8 Ø HSW			(F436H)		

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"Ø (UN)
SHOP BOLTS: AS NOTED

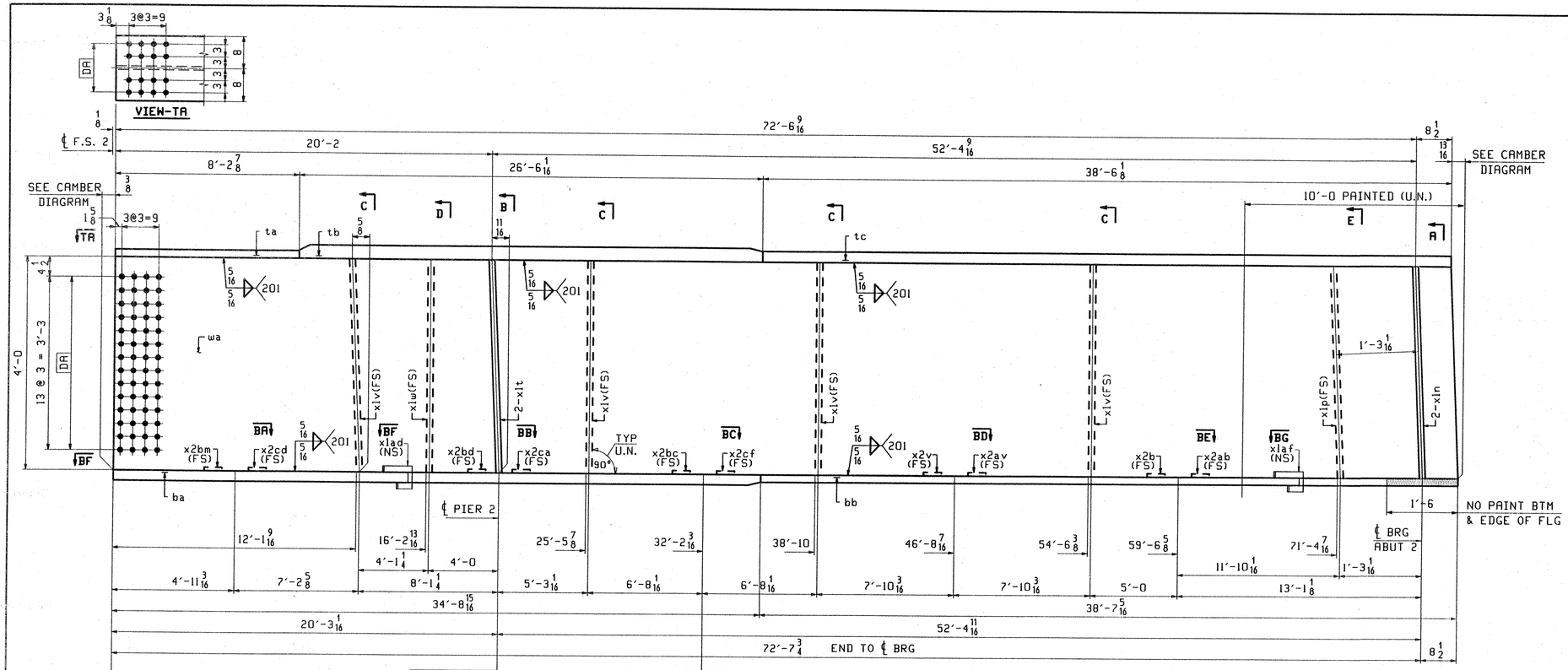
SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

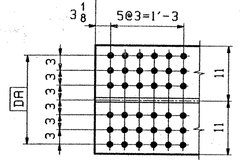
DESCRIPTION:	GIRDER - G4C	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/18
	BRIDGE NO. 25	CHKD BY	
	SEARSBURG, VERMONT	DO	08/20
TENSOR 2241	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

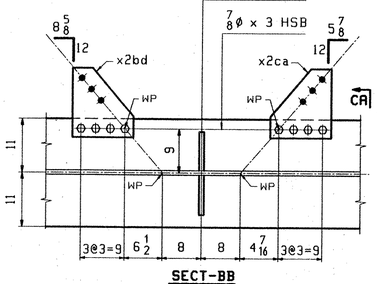
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

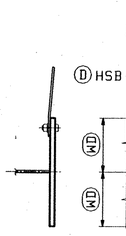
JOB NO. 165 | DRG. NO. 14 | REV. △

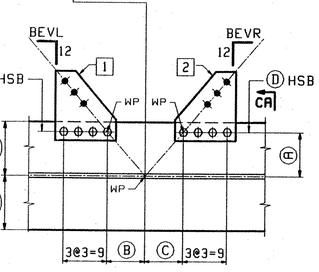
627-BR 25-5514



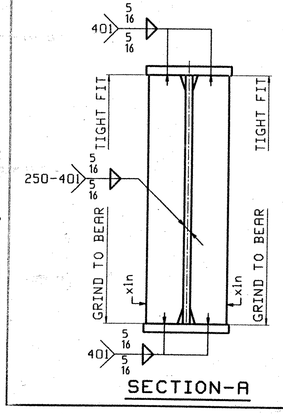


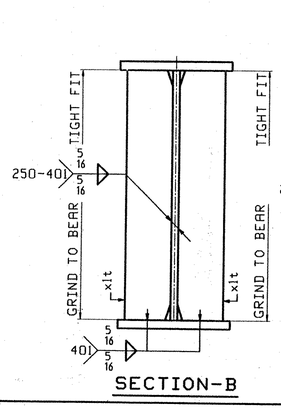


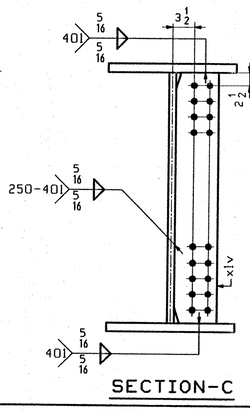


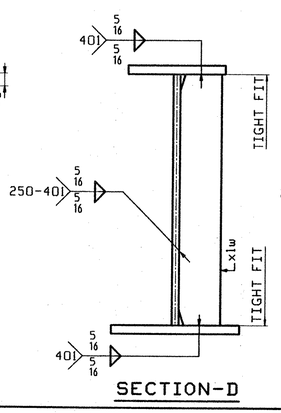


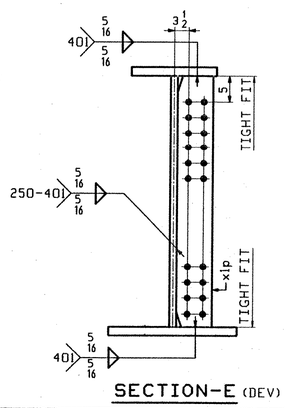
SECT	(WD)	(A)	(B)	(C)	BEVL	BEVR	1	2	(D)
BA	11	9	6 7/8	6 5/16	9 3/16	8 7/16	x2bm	x2cd	7/8ø x 3
BC	11	9	6 7/16	6 7/16	8 9/16	8 9/16	x2bc	x2cf	7/8ø x 3
BD	8	6	5 1/16	5 1/16	10 1/16	10 1/16	x2v	x2av	7/8ø x 2 3/4
BE	8	6	3 3/16	3 3/16	6 3/8	6 3/8	x2b	x2ab	7/8ø x 2 3/4





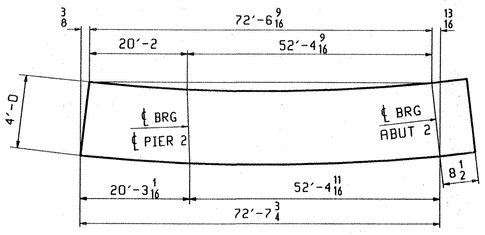






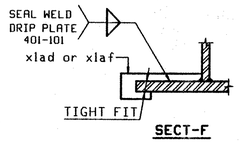
ONE - GIRDER - G5C (DEV)

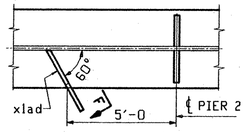
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3 & F4.
4. FOR GENERAL NOTES SEE SHT. GN1.

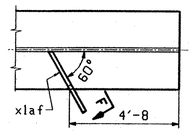


ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

RECEIVED
CK'D BY DV OK'D BY
AUG 2 6 2002
RESUBMIT APPROVED
BY RJW DATE 9-17-02







ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5C	1		GIRDER				17571	
5	L		1	wa	PL 1/2 x 49 13/16	73	4 1/4	(M270-50WT2) (H2-3)		
4	S		1	ta	PL 7/8 x 16	8	2 7/8	(M270-50WT2) (H2-3)		
2	N		1	tb	PL 1 1/4 x 22	26	6 1/16	(M270-50WT2) (H2-3)		
3	N		1	tc	PL 1x16	38	6 7/8	(M270-50WT2) (H2-3)		
2	E		1	ba	PL 1 1/4 x 22	34	8 15/16	(M270-50WT2) (H2-3)		
3	N		1	bb	PL 1x16	38	7 5/16	(M270-50WT2) (H2-3)		
7	R		4	x1v	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
7	P		2	x1t	PL 1x10	4	0	(M270-50WT2) (H2-3)		
7	N		2	x1n	PL 1x8	4	0	(M270-50WT2) (H2-3)		
7	V		1	x2bm	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2cd	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2bd	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2ca	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2bc	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2cf	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2v	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2av	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2b	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	V		1	x2ab	PL 3/8 x 12 1/2	1	2 1/2	BENT		
7	R		1	x1w	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
7	R		1	x1p	PL 1/2 x 8	4	0	(M270-50WT2) (H2-3)		
7	T		1	x1ad	PL 1/4 x 3 1/4	1	2 7/16			
7	T		1	x1af	PL 1/4 x 3	0	11			
9	M		16		7/8 ø HSB	0	2 3/4	(A325-3)		
9	N		24		7/8 ø HSB	0	3	(A325-3)		
9	R		40		7/8 ø HSW			(F436W)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	8-22-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

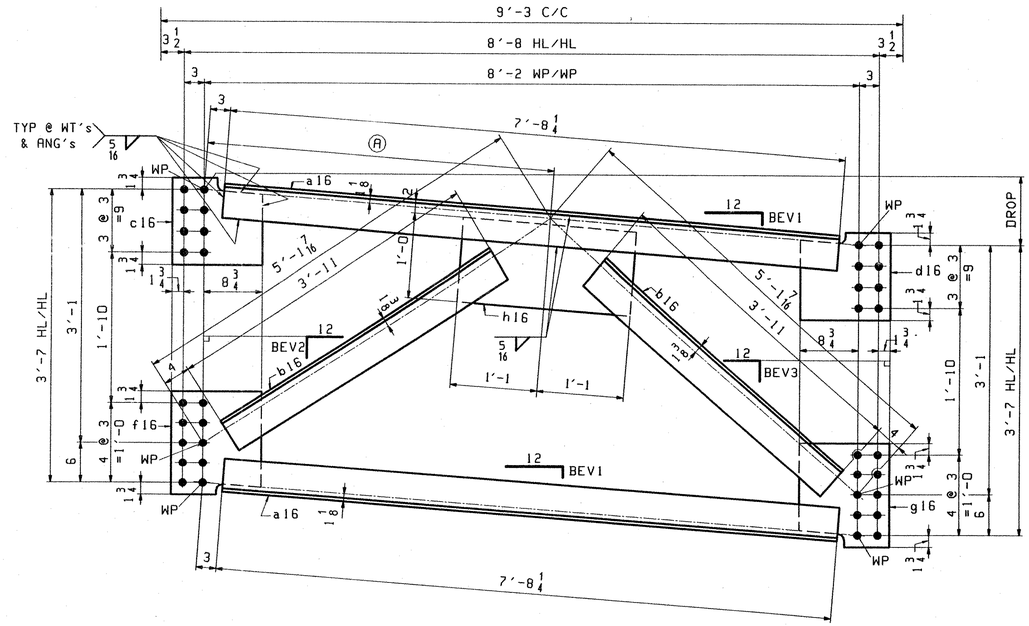
DESCRIPTION:	GIRDER - G5C	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/18
	BRIDGE NO. 25	CHKD BY	
	SEARSBURG, VERMONT	DO	08/20
TENSOR 2241	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	15
	REV. △

628-BR-25-4315

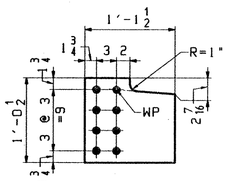
RTD Tue Aug 20 17:33:20 EDT 2002 /users/jobs/2241/15/ Rev0

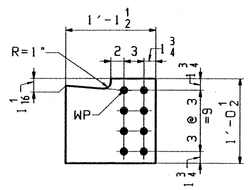


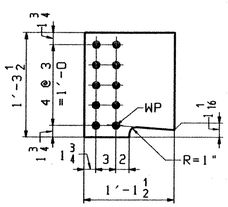
INTERMEDIATE CROSSFRAME TYPE C2

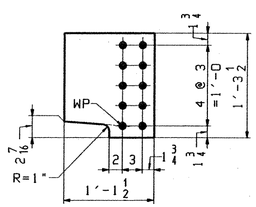
LOOKING BACK-STATION

MARK	REQ'D	DROP	Ⓐ	BEV1	BEV2	BEV3	PAINT
16CF1	10	7	4'-3 3/4	7/8	7 3/4	10 7/16	NO
16CF2	2	7	4'-3 3/4	7/8	7 3/4	10 7/16	YES
16CF3	19	7 5/16	4'-3 7/8	7/8	7 11/16	10 1/2	NO
16CF4	1	7 5/16	4'-3 7/8	7/8	7 11/16	10 1/2	YES
16CF5	21	7 5/8	4'-4	15/16	7 5/8	10 9/16	NO
16CF6	2	7 5/8	4'-4	15/16	7 5/8	10 9/16	YES
16CF7	6	7 15/16	4'-4 1/8	1	7 9/16	10 5/8	NO









FOR GENERAL NOTES SEE GN1.

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	BILL OF MATERIAL MATERIAL	LENGTH FT	LENGTH INCHES	JOB NO. REMARKS	DRAWING NO. 16 WT	REV. PROCUREMENT NOTES
		16CF5	21		CROSSFRAME				578	
8	N		42	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		42	b16	L 5x5x1/2	3	11	(M270-50WT2) (H2-3)		
8	R		21	c16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	R		21	d16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		21	f16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		21	g16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	Q		21	h16	PL 1/2x12	2	2	(M270-50WT2) (H2-3)		
		16CF6	2		CROSSFRAME				578	
8	N		4	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		4	b16	L 5x5x1/2	3	11	(M270-50WT2) (H2-3)		
8	R		2	c16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	R		2	d16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		2	f16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		2	g16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	Q		2	h16	PL 1/2x12	2	2	(M270-50WT2) (H2-3)		
		16CF7	6		CROSSFRAME				578	
8	N		12	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		12	b16	L 5x5x1/2	3	11	(M270-50WT2) (H2-3)		
8	R		6	c16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	R		6	d16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		6	f16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		6	g16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	Q		6	h16	PL 1/2x12	2	2	(M270-50WT2) (H2-3)		

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	BILL OF MATERIAL MATERIAL	LENGTH FT	LENGTH INCHES	JOB NO. REMARKS	DRAWING NO. 16 WT	REV. PROCUREMENT NOTES
		16CF1	10		CROSSFRAME				578	
8	N		20	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		20	b16	L 5x5x1/2	3	11	(M270-50WT2) (H2-3)		
8	R		10	c16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	R		10	d16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		10	f16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		10	g16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	Q		10	h16	PL 1/2x12	2	2	(M270-50WT2) (H2-3)		
		16CF2	2		CROSSFRAME				578	
8	N		4	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		4	b16	L 5x5x1/2	3	11	(M270-50WT2) (H2-3)		
8	R		2	c16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	R		2	d16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		2	f16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		2	g16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	Q		2	h16	PL 1/2x12	2	2	(M270-50WT2) (H2-3)		
		16CF3	19		CROSSFRAME				578	
8	N		38	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		38	b16	L 5x5x1/2	3	11	(M270-50WT2) (H2-3)		
8	R		19	c16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	R		19	d16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		19	f16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		19	g16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	Q		19	h16	PL 1/2x12	2	2	(M270-50WT2) (H2-3)		
		16CF4	1		CROSSFRAME				578	
8	N		2	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		2	b16	L 5x5x1/2	3	11	(M270-50WT2) (H2-3)		
8	R		1	c16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	R		1	d16	PL 1/2x12 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		1	f16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	S		1	g16	PL 1/2x15 1/2	1	1 1/2	(M270-50WT2) (H2-3)		
8	Q		1	h16	PL 1/2x12	2	2	(M270-50WT2) (H2-3)		

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RWJ DATE 9-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"Ø (UN)	7/8"Ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: CROSSFRAMES	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	VWJ	08/06
BRIDGE NO. 25	CHKD BY	
SEARSBURG, VERMONT	DO	08/12
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

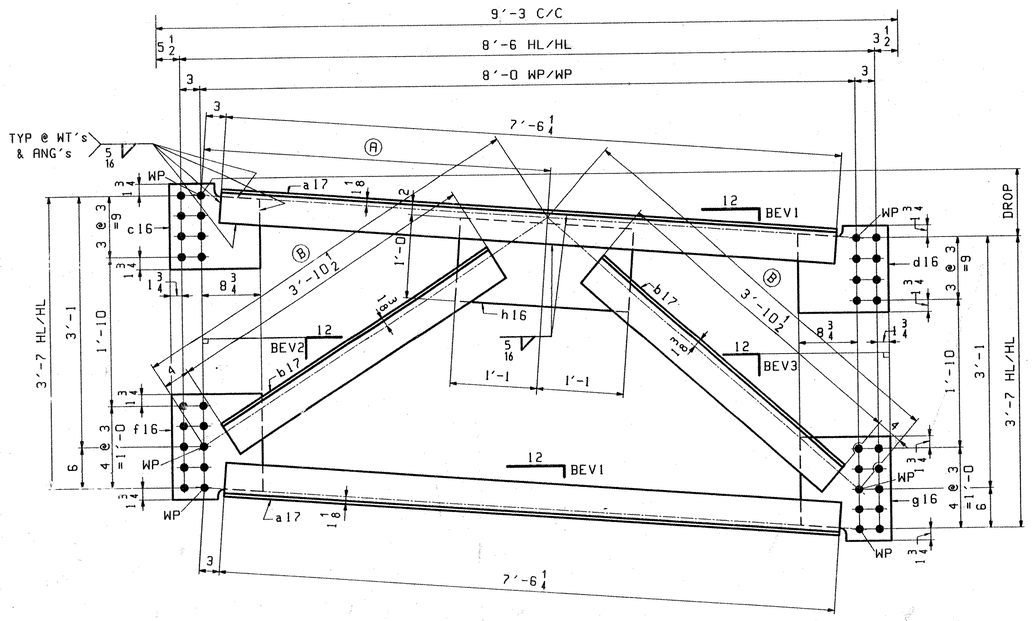
TENSOR 2241

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	16
	REV. △

624-BR-25-SS16

VWJ Wed Aug 14 14:09:31 EDT 2002 /users/jobs/22x11/dt.dwg



INTERMEDIATE CROSSFRAME TYPE C3

LOOKING BACK-STATION

MARK	REQ'D	DROP	Ⓐ	Ⓑ	BEV1	BEV2	BEV3	PAINT
17CF1	1	$6\frac{13}{16}$	4'-2 3/4	5'-0 5/8	7/8	$7\frac{15}{16}$	$10\frac{5}{8}$	NO
17CF2	1	7	4'-2 13/16	5'-0 5/8	7/8	$7\frac{7}{8}$	$10\frac{11}{16}$	NO
17CF3	1	$7\frac{13}{16}$	4'-3 3/16	5'-0 11/16	1	$7\frac{3}{4}$	$10\frac{13}{16}$	NO
17CF4	1	$8\frac{1}{8}$	4'-3 1/4	5'-0 11/16	1	$7\frac{11}{16}$	$10\frac{7}{8}$	NO

FOR GENERAL NOTES SEE GN1.

BILL OF MATERIAL

JOB NO. | DRAWING NO. 17 | REV.

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		17CF1	1		CROSSFRAME				570	
8	N		2	a17	WT 5x19.5	7	$6\frac{1}{4}$	(M270-50WT2) (M2-3)		
8	P		2	b17	L 5x5x 1/2	3	$10\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	c16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	d16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	f16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	g16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	Q		1	h16	PL 1/2x12	2	2	(M270-50WT2) (M2-3)		
		17CF2	1		CROSSFRAME				570	
8	N		2	a17	WT 5x19.5	7	$6\frac{1}{4}$	(M270-50WT2) (M2-3)		
8	P		2	b17	L 5x5x 1/2	3	$10\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	c16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	d16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	f16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	g16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	Q		1	h16	PL 1/2x12	2	2	(M270-50WT2) (M2-3)		
		17CF3	1		CROSSFRAME				570	
8	N		2	a17	WT 5x19.5	7	$6\frac{1}{4}$	(M270-50WT2) (M2-3)		
8	P		2	b17	L 5x5x 1/2	3	$10\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	c16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	d16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	f16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	g16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	Q		1	h16	PL 1/2x12	2	2	(M270-50WT2) (M2-3)		
		17CF4	1		CROSSFRAME				570	
8	N		2	a17	WT 5x19.5	7	$6\frac{1}{4}$	(M270-50WT2) (M2-3)		
8	P		2	b17	L 5x5x 1/2	3	$10\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	c16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	R		1	d16	PL 1/2x12 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	f16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	S		1	g16	PL 1/2x15 1/2	1	$1\frac{1}{2}$	(M270-50WT2) (M2-3)		
8	Q		1	h16	PL 1/2x12	2	2	(M270-50WT2) (M2-3)		

RECEIVED
OK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT ____ APPROVED ✓
BY RRW DATE 8-17-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	8-23-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: $\frac{15}{16}$"ø (UN)
SHOP BOLTS: $\frac{7}{8}$"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

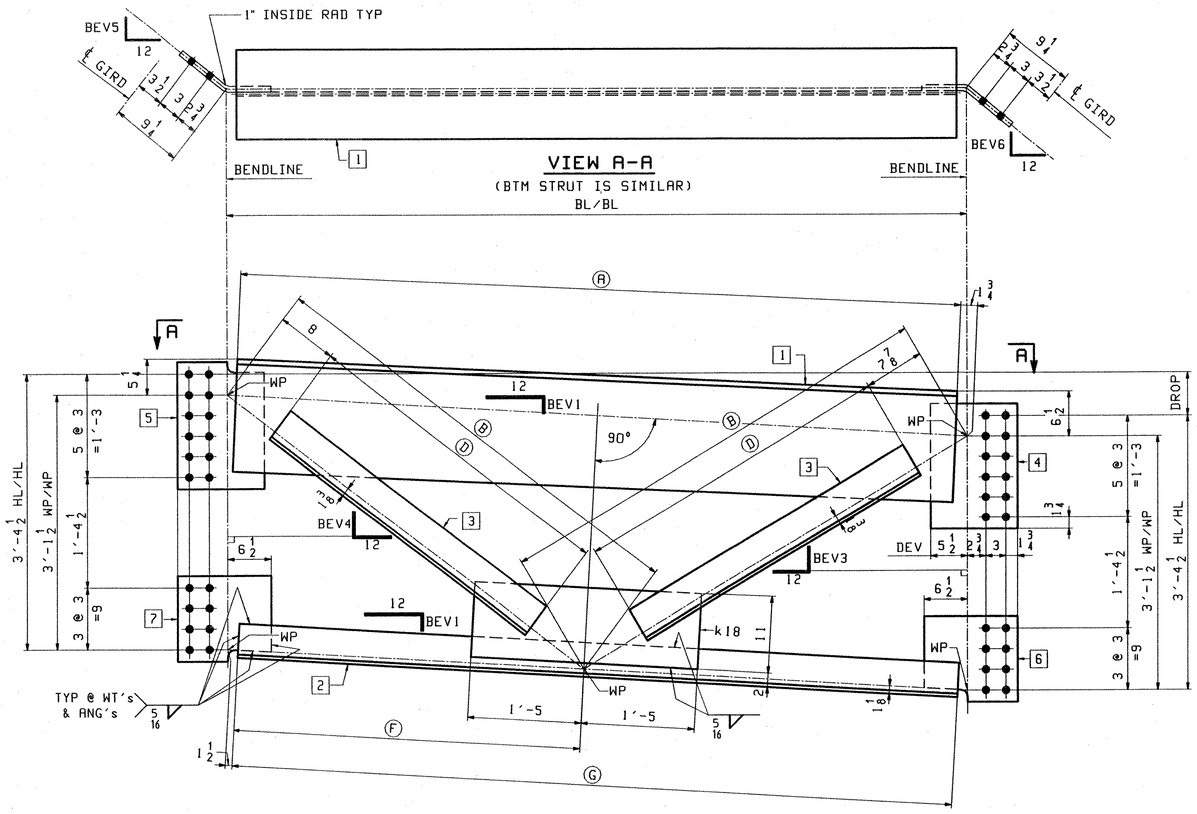
DESCRIPTION: CROSSFRAMES
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
TENSOR 2241
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

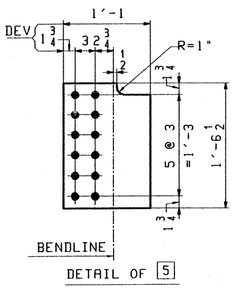
	DRAWN BY	DATE
	VHJ	08/06
	CHKD BY	
	DO	08/12
	APPROV BY	
	SUPERVISOR	W. J. GHITI
	Q.A.	

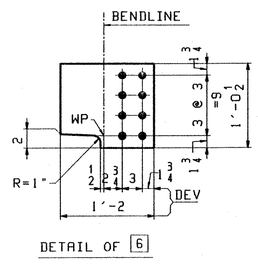
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

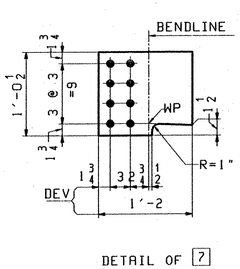
JOB NO. 165 | DRG. NO. 17 | REV. △

630-BR25-5517









ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	DRAWING NO. 18 WT	DRAWING NO. 18 PROCUREMENT NOTES	REV.
		18CF3	1		CROSSFRAME				1248		
8	B		1	aa18	WT 16.5x59	11	7 3/4	(M270-50WT2) (H2-3)			
8	D		1	ab18	WT 5x19.5	11	8 1/4	(M270-50WT2) (H2-3)			
8	G		2	ac18	L 5x5x1/2	5	0 1/4	(M270-50WT2) (H2-3)			
8	J		1	ad18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	J		1	af18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	K		1	ag18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	K		1	ah18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)			
		18CF4	1		CROSSFRAME				1237		
8	B		1	am18	WT 16.5x59	11	6 1/4	(M270-50WT2) (H2-3)			
8	D		1	an18	WT 5x19.5	11	6 3/4	(M270-50WT2) (H2-3)			
8	G		2	ap18	L 5x5x1/2	4	11 3/4	(M270-50WT2) (H2-3)			
8	J		1	as18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	J		1	at18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	K		1	av18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	K		1	aw18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)			

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	DRAWING NO. 18 WT	DRAWING NO. 18 PROCUREMENT NOTES	REV.
		18CF1	1		CROSSFRAME				1271		
8	B		1	a18	WT 16.5x59	11	10 3/4	(M270-50WT2) (H2-3)			
8	D		1	b18	WT 5x19.5	11	11 1/4	(M270-50WT2) (H2-3)			
8	G		2	c18	L 5x5x1/2	5	1 1/2	(M270-50WT2) (H2-3)			
8	J		1	d18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	J		1	f18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	K		1	g18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	K		1	h18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)			
		18CF2	1		CROSSFRAME				1259		
8	B		1	m18	WT 16.5x59	11	9	(M270-50WT2) (H2-3)			
8	D		1	n18	WT 5x19.5	11	9 3/4	(M270-50WT2) (H2-3)			
8	G		2	p18	L 5x5x1/2	5	1	(M270-50WT2) (H2-3)			
8	J		1	s18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	J		1	t18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT			
8	K		1	v18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	K		1	w18	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT			
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)			

ABUTMENT CROSSFRAME TYPE C1

(ALL PAINTED)

MARK	REQ'd	DROP	BL/BL	A	B	D	F	G	BEV1	BEV3	BEV4	BEV5	BEV6	1	2	3	4	5	6	7
18CF1	1	5 9/16	12'-2 1/8	11'-10 3/4	6'-10 1/8	5'-1 1/2	5'-11 11/16	11'-11 1/4	7/16	5 9/16	6 3/4	9 7/8	9 11/16	a18	b18	c18	d18	f18	g18	h18
18CF2	1	5 9/16	12'-0 9/16	11'-9	6'-9 7/16	5'-1	5'-10 7/8	11'-9 3/4	7/16	5 5/8	6 13/16	10 1/16	9 7/8	m18	n18	p18	s18	t18	v18	w18
18CF3	1	5 5/8	11'-11 1/16	11'-7 3/4	6'-8 13/16	5'-0 1/4	5'-10 1/8	11'-8 1/4	1/2	5 11/16	6 7/8	10 1/4	10 1/16	aa18	ab18	ac18	ad18	af18	ag18	ah18
18CF4	1	5 5/8	11'-9 11/16	11'-6 1/4	6'-8 3/16	4'-11 3/4	5'-9 3/8	11'-6 3/4	1/2	5 3/4	6 15/16	10 7/16	10 1/4	am18	an18	ap18	as18	at18	av18	aw18

FOR GENERAL NOTES SEE GN1.

OUT FOR APPROVAL	8-29-02									
OUT FOR APPROVAL										
ISSUED TO SHOP										
FIELD & OFFICE										
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 1 1/16"Ø (OVS)

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: ABUTMENT CROSSFRAMES

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2241

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
VWJ	08/06
CHKD BY	
DO	08/14
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

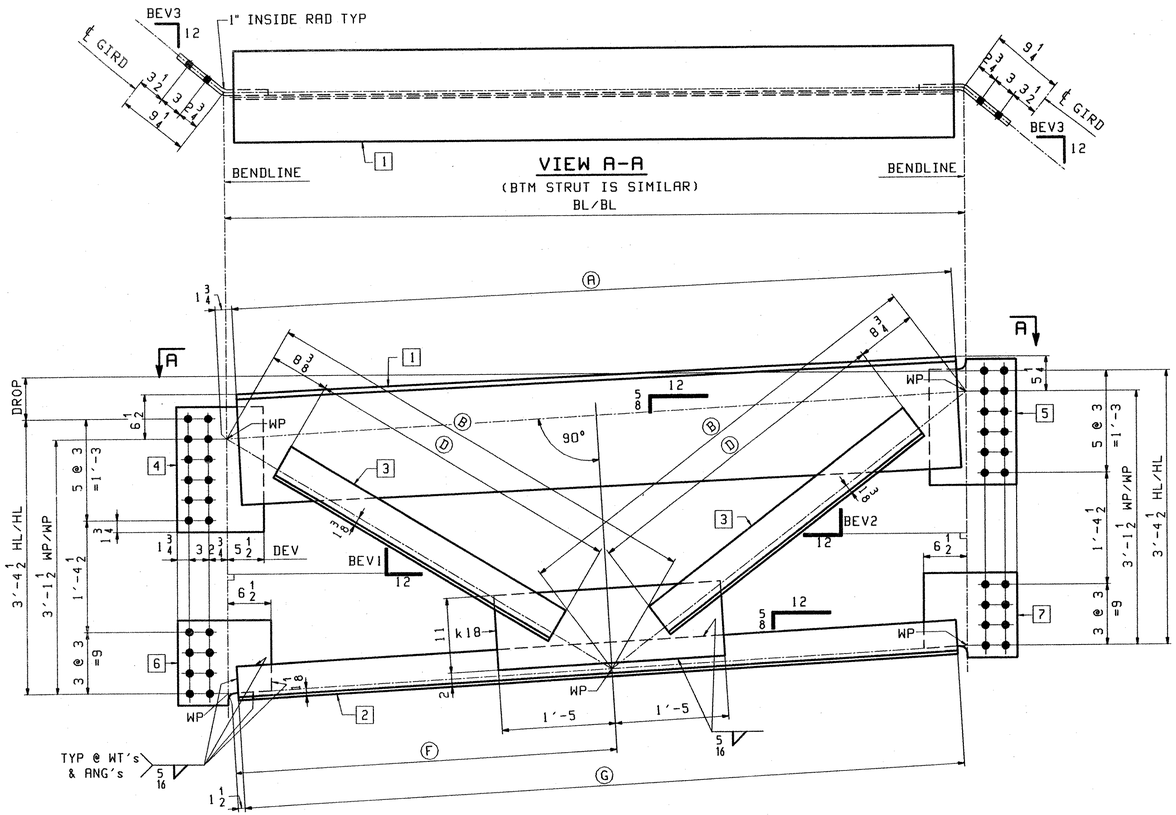
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	18
	REV. △

RECEIVED
CK'D BY DV CK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RLW DATE 9-17-02

631-BR25-5518

VWJ Fri Aug 16 16:55:57 EDT 2002 /users/jobs/2241/18 - Rev0



ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		19CF3	1		CROSSFRAME				1067	
8	C		1	aa19	WT 16.5x59	9	7 3/4	(M270-50WT2) (H2-3)		
8	E		1	ab19	WT 5x19.5	9	8 1/4	(M270-50WT2) (H2-3)		
8	F		2	ac19	L 5x5x1/2	4	3 1/4	(M270-50WT2) (H2-3)		
8	J		1	ad19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	af19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	ag19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	K		1	ah19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)		
		19CF4	1		CROSSFRAME				1062	
8	C		1	am19	WT 16.5x59	9	7 1/4	(M270-50WT2) (H2-3)		
8	E		1	an19	WT 5x19.5	9	7 3/4	(M270-50WT2) (H2-3)		
8	F		2	ap19	L 5x5x1/2	4	2 3/4	(M270-50WT2) (H2-3)		
8	J		1	as19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	at19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	av19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	K		1	aw19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)		

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		19CF1	1		CROSSFRAME				1076	
8	C		1	a19	WT 16.5x59	9	9	(M270-50WT2) (H2-3)		
8	E		1	b19	WT 5x19.5	9	9 1/2	(M270-50WT2) (H2-3)		
8	F		2	c19	L 5x5x1/2	4	3 1/2	(M270-50WT2) (H2-3)		
8	J		1	d19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	f19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	g19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	K		1	h19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)		
		19CF2	1		CROSSFRAME				1074	
8	C		1	m19	WT 16.5x59	9	8 1/2	(M270-50WT2) (H2-3)		
8	E		1	n19	WT 5x19.5	9	9	(M270-50WT2) (H2-3)		
8	F		2	p19	L 5x5x1/2	4	4	(M270-50WT2) (H2-3)		
8	J		1	s19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	t19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	v19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	K		1	w19	PL 1/2x12 1/2	1	2	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x11	2	10	(M270-50WT2) (H2-3)		

ABUTMENT CROSSFRAME TYPE C1

(ALL PAINTED)

MARK	REQ'd	DROP	BL/BL	A	B	D	F	G	BEV1	BEV2	BEV3	1	2	3	4	5	6	7
19CF1	1	6 3/16	10'-0 7/16	9'-9	5'-11	4'-3 1/2	5'-2 1/4	9'-9 1/2	6 5/8	8 3/8	10	a19	b19	c19	d19	f19	g19	h19
19CF2	1	6 1/4	9'-11 13/16	9'-8 1/2	5'-10 11/16	4'-4	5'-1 15/16	9'-9	6 5/8	8 3/8	9 7/8	m19	n19	p19	s19	t19	v19	w19
19CF3	1	6 1/4	9'-11 1/4	9'-7 3/4	5'-10 7/16	4'-3 1/4	5'-1 11/16	9'-8 1/4	6 11/16	8 7/16	9 3/4	aa19	ab19	ac19	ad19	af19	ag19	ah19
19CF4	1	6 5/16	9'-10 11/16	9'-7 1/4	5'-10 1/4	4'-2 3/4	5'-1 7/16	9'-7 3/4	6 11/16	8 1/2	9 5/8	am19	an19	ap19	as19	at19	av19	aw19

FOR GENERAL NOTES SEE GN1.

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED
BY RCW DATE 9-17-02

OUT FOR APPROVAL	8-23-02									
OUT FOR APPROVAL										
ISSUED TO SHOP										
FIELD & OFFICE										
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 1 1/16"ø (OVS)

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: ABUTMENT CROSSFRAMES

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2241

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

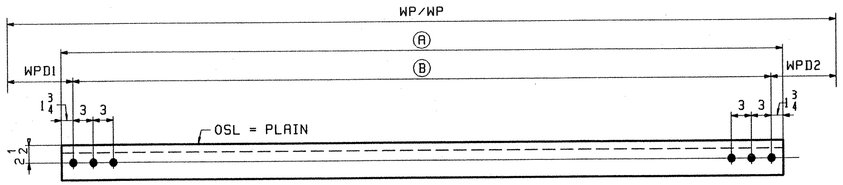
DRAWN BY	DATE
VHJ	08/09
CHKD BY	
DO	08/14
APPROV BY	
SUPERVISOR	W. J. GAITI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
165	19
	REV. △

632-BR25-SS19

VHJ Wed Aug 14 15:20:33 CDT 2002 /users/proj/2241/19 : Rev-0



LATERAL BRACING

MARK	REQ'D	Ⓐ	Ⓑ	PAINT	WP/WP	WPD1	WPD2
20LB1	1	8'-2 1/8	7'-10 5/8	NO	10'-4 1/8	1'-4 1/2	1'-1
20LB2	1	8'-5 1/8	8'-1 5/8	NO	11'-1 5/8	1'-6	1'-6
20LB3	1	8'-6 1/2	8'-3	NO	11'-3	1'-6	1'-6
20LB4	1	8'-6 7/8	8'-3 3/8	NO	11'-5 3/8	1'-7	1'-7
20LB5	1	8'-7 3/4	8'-4 1/4	YES	10'-6 1/4	1'-1	1'-1
20LB5A	1	8'-7 3/4	8'-4 1/4	NO	10'-6 1/4	1'-1	1'-1
20LB6	1	8'-7 3/4	8'-4 1/4	NO	11'-4 1/4	1'-6	1'-6
20LB7	11	8'-9 1/8	8'-5 5/8	NO	11'-7 5/8	1'-7	1'-7
20LB8	4	8'-9 1/4	8'-5 3/4	NO	11'-7 3/4	1'-7	1'-7
20LB9	2	8'-9 3/8	8'-5 7/8	NO	11'-7 7/8	1'-7	1'-7
20LB10	12	8'-10 1/4	8'-6 3/4	NO	11'-8 3/4	1'-7	1'-7
20LB11	4	8'-10 3/8	8'-6 7/8	NO	11'-8 7/8	1'-7	1'-7
20LB12	1	8'-10 1/2	8'-7	NO	11'-9	1'-7	1'-7
20LB13	1	8'-10 7/8	8'-7 3/8	NO	11'-4 7/8	1'-2 1/2	1'-7
20LB14	1	8'-11	8'-7 1/2	NO	11'-5	1'-7	1'-2 1/2
20LB15	1	9'-0 1/4	8'-8 3/4	NO	11'-6 1/4	1'-7	1'-2 1/2
20LB16	2	9'-0 1/2	8'-9	NO	11'-6 1/2	1'-2 1/2	1'-7
20LB17	1	9'-1 3/4	8'-10 1/4	NO	11'-7 3/4	1'-7	1'-2 1/2
20LB18	1	9'-2 3/8	8'-10 7/8	YES	11'-3 7/8	1'-2 1/2	1'-2 1/2
20LB19	1	9'-2 3/8	8'-10 7/8	NO	11'-3 7/8	1'-2 1/2	1'-2 1/2
20LB20	2	9'-2 1/2	8'-11	NO	11'-4	1'-2 1/2	1'-2 1/2
20LB21	1	9'-3	8'-11 1/2	NO	11'-9	1'-2 1/2	1'-7
20LB22	1	9'-5 3/4	9'-2 1/4	NO	11'-7 1/4	1'-2 1/2	1'-2 1/2
20LB23	1	9'-5 7/8	9'-2 3/8	NO	11'-7 3/8	1'-2 1/2	1'-2 1/2
20LB24	2	9'-6	9'-2 1/2	NO	11'-7 1/2	1'-2 1/2	1'-2 1/2
20LB25	1	9'-6 1/8	9'-2 5/8	NO	11'-7 5/8	1'-2 1/2	1'-2 1/2
20LB26	1	9'-7 1/4	9'-3 3/4	NO	11'-8 3/4	1'-2 1/2	1'-2 1/2
20LB27	1	9'-10	9'-6 1/2	NO	12'-1 1/2	1'-3 1/2	1'-3 1/2
20LB28	1	9'-10 1/8	9'-6 5/8	NO	12'-1 5/8	1'-3 1/2	1'-3 1/2
20LB29	1	9'-11 7/8	9'-8 3/8	NO	12'-3 3/8	1'-3 1/2	1'-3 1/2
20LB30	1	10'-0	9'-8 1/2	NO	12'-3 1/2	1'-3 1/2	1'-3 1/2
20LB31	1	10'-0 1/8	9'-8 5/8	YES	12'-3 5/8	1'-3 1/2	1'-3 1/2
20LB32	1	10'-0 1/8	9'-8 5/8	NO	12'-3 5/8	1'-3 1/2	1'-3 1/2

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		20LB12	1		LAT BRACE				143	
7	Z		1		L 5x5x1/2	8	10 1/2			
		20LB13	1		LAT BRACE				144	
7	Y		1		L 5x5x1/2	8	10 7/8			
		20LB14	1		LAT BRACE				144	
7	Y		1		L 5x5x1/2	8	11			
		20LB15	1		LAT BRACE				146	
7	Y		1		L 5x5x1/2	9	0 1/4			
		20LB16	2		LAT BRACE				146	
7	Y		2		L 5x5x1/2	9	0 1/2			
		20LB17	1		LAT BRACE				148	
7	Y		1		L 5x5x1/2	9	1 3/4			
		20LB18	1		LAT BRACE				149	
7	Y		1		L 5x5x1/2	9	2 3/8	PAINTED		
		20LB19	1		LAT BRACE				149	
7	X		1		L 5x5x1/2	9	2 3/8			
		20LB20	2		LAT BRACE				149	
7	X		2		L 5x5x1/2	9	2 1/2			
		20LB21	1		LAT BRACE				150	
7	X		1		L 5x5x1/2	9	3			
		20LB22	1		LAT BRACE				153	
7	X		1		L 5x5x1/2	9	5 1/4			
		20LB23	1		LAT BRACE				153	
7	X		1		L 5x5x1/2	9	5 7/8			
		20LB24	2		LAT BRACE				154	
7	X		2		L 5x5x1/2	9	6			
		20LB25	1		LAT BRACE				154	
7	X		1		L 5x5x1/2	9	6 1/8			
		20LB26	1		LAT BRACE				155	
7	X		1		L 5x5x1/2	9	7 1/4			
		20LB27	1		LAT BRACE				159	
7	X		1		L 5x5x1/2	9	10			
		20LB28	1		LAT BRACE				159	
7	X		1		L 5x5x1/2	9	10 1/8			
		20LB29	1		LAT BRACE				161	
7	X		1		L 5x5x1/2	9	11 7/8			
		20LB30	1		LAT BRACE				162	
7	X		1		L 5x5x1/2	10	0			
		20LB31	1		LAT BRACE				162	
7	X		1		L 5x5x1/2	10	0 1/8	PAINTED		
		20LB32	1		LAT BRACE				162	
7	X		1		L 5x5x1/2	10	0 1/8			

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		20LB1	1		LAT BRACE				132	
7	Z		1		L 5x5x1/2	8	2 1/8			
		20LB2	1		LAT BRACE				136	
7	Z		1		L 5x5x1/2	8	5 1/8			
		20LB3	1		LAT BRACE				138	
7	Z		1		L 5x5x1/2	8	6 1/2			
		20LB4	1		LAT BRACE				139	
7	Z		1		L 5x5x1/2	8	6 7/8			
		20LB5	1		LAT BRACE				140	
7	Z		1		L 5x5x1/2	8	7 3/4	PAINTED		
		20LB5A	1		LAT BRACE				140	
7	Z		1		L 5x5x1/2	8	7 3/4			
		20LB6	1		LAT BRACE				140	
7	Z		1		L 5x5x1/2	8	7 3/4			
		20LB7	11		LAT BRACE				142	
7	Z		11		L 5x5x1/2	8	9 1/8			
		20LB8	4		LAT BRACE				142	
7	Z		4		L 5x5x1/2	8	9 1/4			
		20LB9	2		LAT BRACE				142	
7	Z		2		L 5x5x1/2	8	9 3/8			
		20LB10	12		LAT BRACE				143	
7	Z		12		L 5x5x1/2	8	10 1/4			
		20LB11	4		LAT BRACE				143	
7	Z		4		L 5x5x1/2	8	10 3/8			

RECEIVED
CK'D BY DV OK'D BY
AUG 26 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-17-02

FOR GENERAL NOTES SEE GN1.

OUT FOR APPROVAL	8-23-02									
OUT FOR APPROVAL										
ISSUED TO SHOP										
FIELD & OFFICE										

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 1 1/16"ø (OVS)
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: LATERAL BRACING
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

TENSOR 2241

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

	DRAWN BY	DATE
	VWJ	08/10
	CHKD BY	
	DO	08/14
	APPROV BY	
	SUPERVISOR	W. J. GATTI
	Q.A.	
JOB NO.	165	
DRG. NO.	20	
REV.	△	

633-BR25-5520

VWJ Fri Aug 16 15:49:25 EDT 2002 /users/jobs/2241/20 - Rev0

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

1). ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990 WITH LATEST REVISIONS AND THE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS

1). AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996 EDITION WITH LATEST REVISIONS.

MATERIAL SPECIFICATIONS

1). UNLESS NOTED, ALL STEEL TO BE AASHTO M270 GRADE 50W (ASTM A709-50W).

2). HIGH STRENGTH BOLTS: AASHTO M164 (ASTM A325) 7/8" DIA.
TYPE 3 BOLTS SHALL BE USED FOR UNPAINTED CONNECTIONS.
TYPE 1 (GALV.) BOLTS SHALL BE USED FOR PAINTED CONNECTIONS.

3). ALL GIRDER WEB & FLANGES, CROSSFRAMES AND CONNECTION PLATES SHALL BE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS. DRAWINGS SHALL CALL OUT "H2-3" FOR EACH APPLICABLE ITEM IN THE BILLS OF MATERIAL.

FABRICATION

1). ALL HOLES SHALL BE PUNCHED OR DRILLED FULL SIZE (UN). HOLES NOTED "DA" SHALL BE DRILLED DURING ASSEMBLY WITH PARTS ASSEMBLED.

2). STUDS ARE FURNISHED AND FIELD APPLIED BY OTHERS.

WELDING

1). THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS D1.5-02 BRIDGE WELDING CODE AND IN ADDITION TO SPECIFICATIONS SHOWN ABOVE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.

2). WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGED ARC & SHIELDED METAL ARC PROCESSES. ALL WELDS ARE CONTINUOUS U.N.

3). NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE REFERENCED SPECIFICATION.

CLEANING:

1). ALL STEEL SHALL BE BLAST CLEANED AS PER SSPC SP-10 PER SPEC. 506.14(a)
2). 1/16" RADIUS ON ALL EDGES OF PAINTED SURFACES.

PAINTING

1). ALL STEEL COMPONENTS WITHIN 10'-0 OF END OF GIRDERS AS SHOWN IN SKETCH "P1" SHALL BE COATED WITH THE PROTECTIVE SYSTEM ACCORDING TO SECTION 513 OF THE SPECIFICATION. THE PAINT COLOR SHALL BE BROWN. PAINT SYSTEM MUST BE SYSTEM LISTED ON THE QUALIFIED PRODUCT LIST SECTION 513.02 BROWN COLOR CHIP #20059.

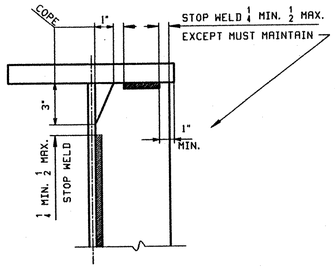
FIELD CONNECTIONS

1). ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH A-325 BOLTS, INSTALLED PER SECTION 506.19(c).

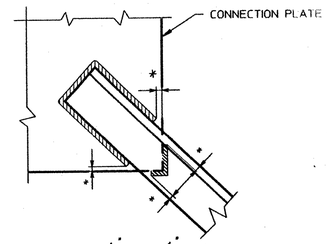
2). BOLTS SHALL HAVE HEAVY HEX NUT, HEX HEAD, & ONE FLAT WASHER EACH (WASHER TO BE PLACED UNDER TURNED ELEMENT). where oversized holes are used washers shall be placed according to Sect. 506.19(c)

3). PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWINGS.

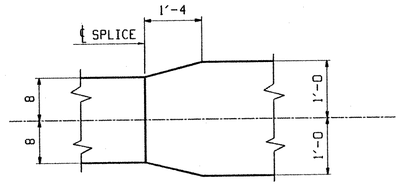
PAINT SYSTEM



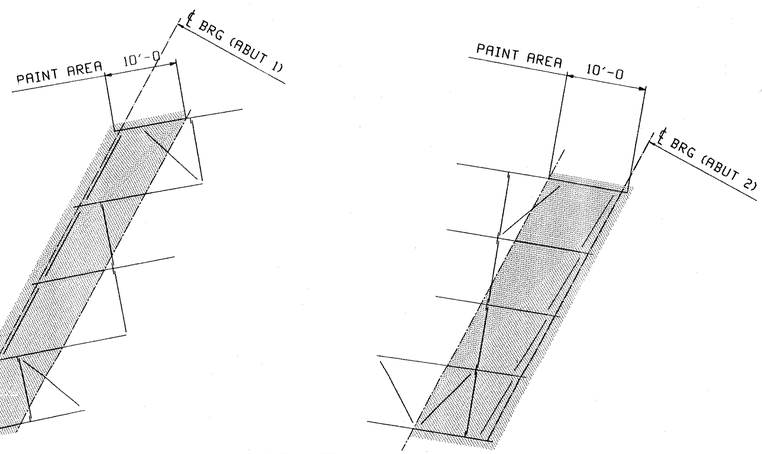
DETAIL "WSI"



TYP. WELD TERMINATION



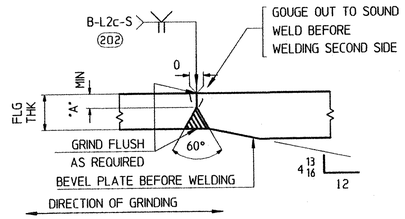
WIDTH TRANSITION DETAIL "WT"



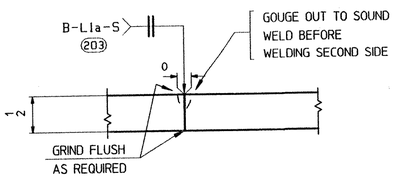
PAINT SKETCH "P1"

NOTES:
-ALL STEEL WITHIN 10'-0 OF THE END OF GIRDER SHALL BE PAINTED.
-FOR LATERAL BRACING AND INT CROSSFRAMES THAT FALL PARTIALLY IN PAINTED AREA, PAINT THE ENTIRE PIECE.

FLG THK	"A"
1"	1/4
1 1/4 - 1 1/2	3/8



FLANGE PLATE SPLICE DETAIL "FA"



WEB PLATE SPLICE DETAIL "WA"

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

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/9/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: | ELECTRODES: | HOLES: | SHOP BOLTS:

SURFACE PREP. & PAINT:

RECEIVED
SEP 09 2002
CK'D BY DV OK'D BY
RESUBMIT APPROVED As Noted
BY RRW DATE 9-27-02

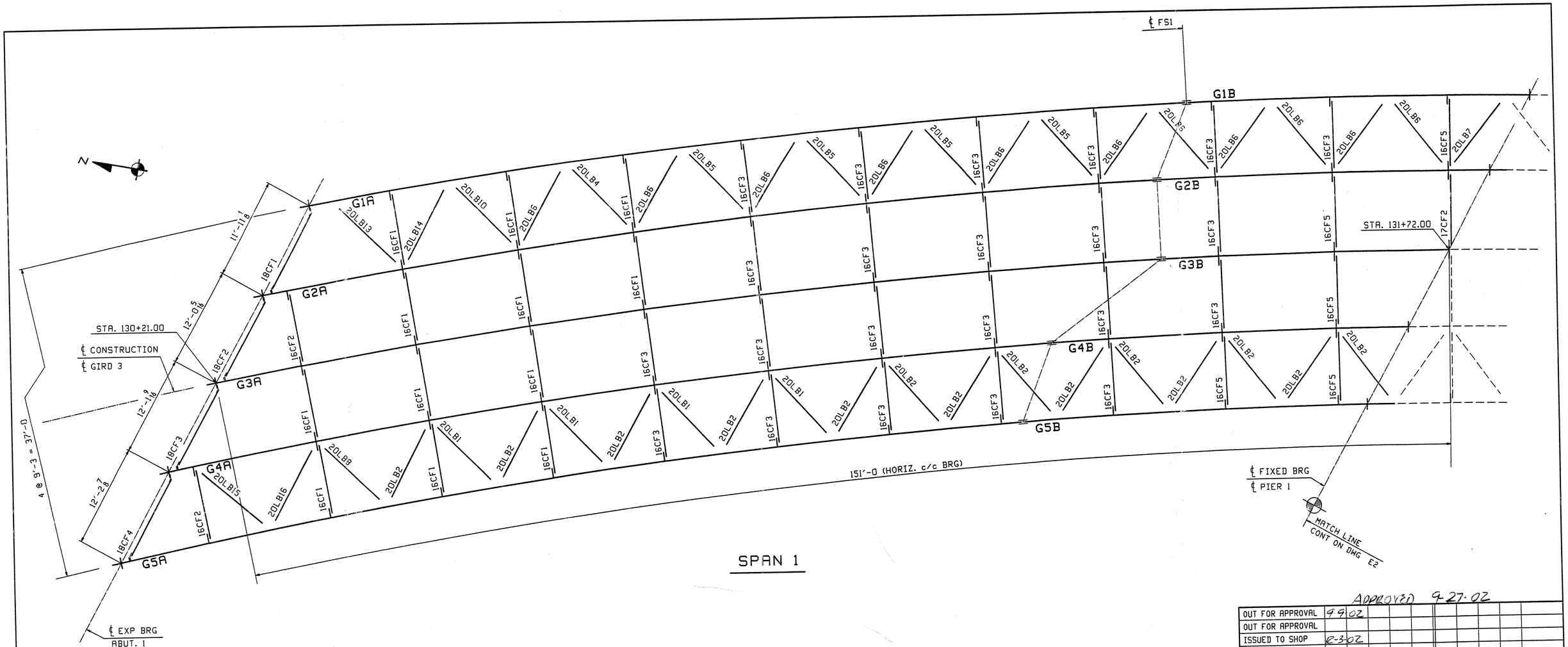
DESCRIPTION:	GENERAL NOTES	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	WL	07/17
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	08/05
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
PROJ NO.	PROJ. NHF 010-1(18)	SUPERVISOR	W. J. GAIL
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION	Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	GN1
	REV. 1

634 BR25A-GN1

\\server\jobs\2242\DWG Rev:0
Thu, 12 Sep 02 10:07 2002



SPAN 1

ADDROVED 9-27-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-9-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP	12-3-02				
	FIELD & OFFICE					
1	CORRECTED ALL LAT MARKS	02/28/03	VWJ	DO		

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY _____ OK'D BY _____
MAR 06 2003
RESUBMIT _____ APPROVED ✓
BY RPW DATE 3-6-03

WORK WITH E2 & E3.

DESCRIPTION: FRAMING PLAN

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2242

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

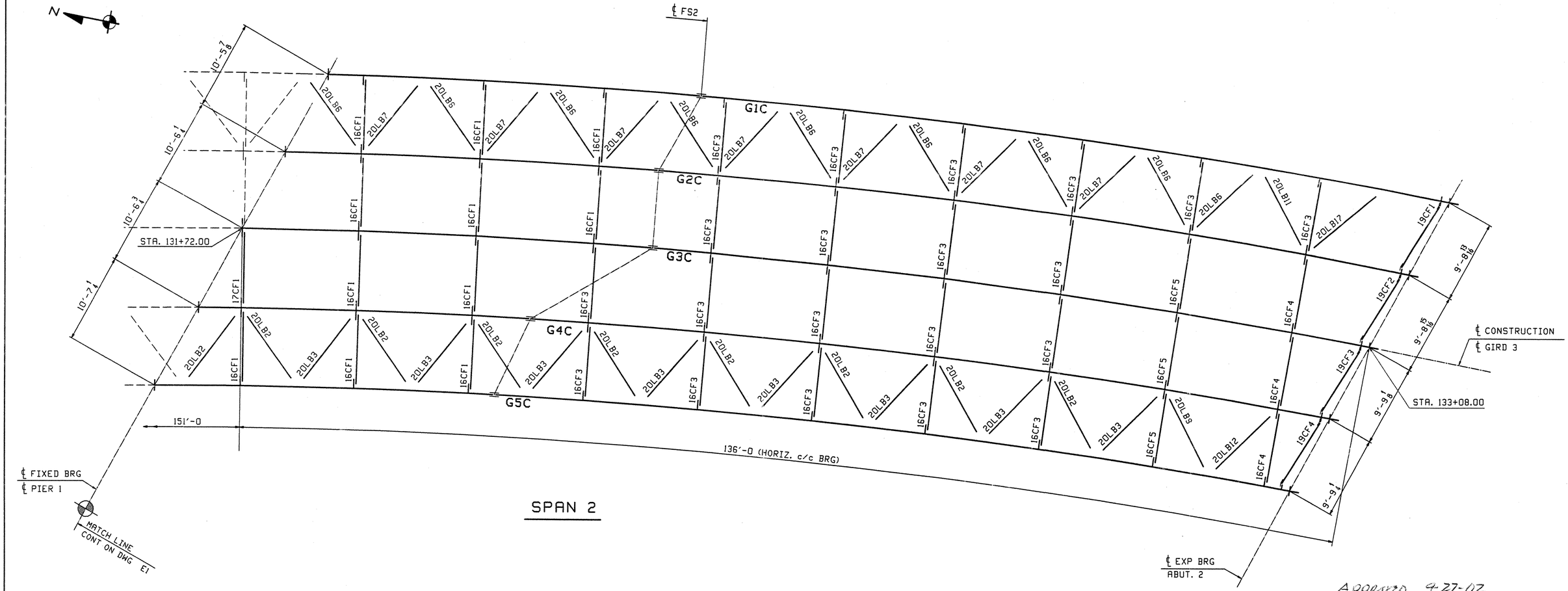
DRAWN BY	DATE
VWJ	08/14
CHKD BY	
DO	08/29
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	E1
	REV. 1

635-BR25A-E1

DO Fri Feb 28 16:08:34 EST 2003 /users/jobs/2242/E1.dwg



SPAN 2

ADDENDUM 9-27-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	7-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP	12-3-02									
	FIELD & OFFICE										
1	CORRECTED ALL LAT MARKS	02/28/03	VWJ	DO							

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
MAR 0 6 2003
CK'D BY _____ OK'D BY _____
RESUBMIT _____ APPROVED ✓
BY RRW DATE 3-6-03

WORK WITH E1 & E3.

DESCRIPTION: FRAMING PLAN	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	VWJ	08/14
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/29
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

TENSOR 2242

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	E2
	REV. 1

636-BR25A E2

DO Fri Feb 28 16:16:45 EST 2003 /users/jobs/2242/E2.dwg

FIELD BOLT LIST							A325 Type 3 BOLTS								
LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS /CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED							WASH CODE	PIECES CONNECTED AND REMARKS
1															FIELD SPLICE 1
2	160	7/8	3 1/2	32	5	2 1/16	1/2	1	9/16					1	TOP FLG SPLICE
3	660	7/8	3	132	5	1 1/2	1/2	1/2	1/2					1	WEB SPLICE
4	240	7/8	3 3/4	60	4	2 1/4	5/8	1	5/8					1	BTM FLG SPLICE U.N.
5	72	7/8	4 1/2	72	1	3	3/4	1 1/2	3/4					1	BTM FLG SPL LN 1
6															
7															FIELD SPLICE 2
8	160	7/8	3 1/2	32	5	2 1/16	1/2	1	9/16					1	TOP FLG SPLICE
9	660	7/8	3	132	5	1 1/2	1/2	1/2	1/2					1	WEB SPLICE
10	300	7/8	4	60	5	2 1/2	5/8	1 1/4	5/8					1	BTM FLG SPLICE

1: 1 Hard Flat Washer

FIELD BOLT LIST							A325 Type 3 BOLTS								
LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS /CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED							WASH CODE	PIECES CONNECTED AND REMARKS
11															CF TYPE-C2 (UNPAINTED)
12	1168	7/8	2 1/2	8	146	1	1/2	1/2						1	TOP GUSS TO STIFFENER
13	1460	7/8	2 1/2	10	146	1	1/2	1/2						1	BTM GUSS TO STIFFENER
14															
15															CF TYPE-C3 (UNPAINTED) 17CF1 & 2
16	16	7/8	3 1/4	8	2	1 3/4	1/2	1 1/4						1	TOP GUSS TO STIFFENER
17	16	7/8	2 1/2	8	2	1	1/2	1/2						1	TOP GUSS TO STIFFENER
18	20	7/8	3 1/4	10	2	1 3/4	1/2	1 1/4						1	BTM GUSS TO STIFFENER
19	20	7/8	2 1/2	10	2	1	1/2	1/2						1	BTM GUSS TO STIFFENER
20															
21															LATERAL BRACING (UNPAINTED)
22	444	7/8	2 1/2	6	74	7/8	1/2	3/8						2	LATERAL TO GUSSET

1: 1 Hard Flat Washer
2: 2 Hard Flat Washers

FIELD BOLT LIST							A325-I GALV BOLTS								
LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS /CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED							WASH CODE	PIECES CONNECTED AND REMARKS
23															END CF @ ABUT1 (PAINTED)
24	48	7/8	3	12	4	1 1/2	1/2	1						2	TOP GUSS TO STIFFENER
25	48	7/8	2 1/2	12	4	1	1/2	1/2						2	TOP GUSS TO STIFFENER
26	40	7/8	3	10	4	1 1/2	1/2	1						2	BTM GUSS TO STIFFENER
27	40	7/8	2 1/2	10	4	1	1/2	1/2						2	BTM GUSS TO STIFFENER
28															
29															END CF @ ABUT2 (PAINTED)
30	96	7/8	2 1/2	12	8	1	1/2	1/2						2	TOP GUSS TO STIFFENER
31	80	7/8	2 1/2	10	8	1	1/2	1/2						2	BTM GUSS TO STIFFENER
32															
33															CF TYPE-C2 (PAINTED) 16CF2 & 4
34	80	7/8	2 1/2	8	10	1	1/2	1/2						1	TOP GUSS TO STIFFENER
35	100	7/8	2 1/2	10	10	1	1/2	1/2						1	BTM GUSS TO STIFFENER
36															
37															LAT BRACING (PAINTED) 20LB12, 13, 15 & 17
38	24	7/8	2 1/2	6	4	7/8	1/2	3/8						2	LATERAL TO GUSSET

1: 1 Hard Flat Washer
2: 2 Hard Flat Washers

FIELD BOLT SUMMARY			2% + 3 ADDED, MIN. 2 EXTRA		
LINE	NO. OF BOLTS	BOLT DIAM.	TYPE	BOLT LEN	ACTUAL COUNT	REMARKS
1	3173	7/8	A325 Type 3	2 1/2	3108	
2	1349	7/8	"	3	1320	
3	41	7/8	"	3 1/4	36	
4	329	7/8	"	3 1/2	320	
5	248	7/8	"	3 3/4	240	
6	309	7/8	"	4	300	
7	76	7/8	A325 Type 3	4 1/2	72	
8						
9	5978	Hard Flat Washers for 7/8 ϕ BOLT				
10						
11						
12	480	7/8	A325-I GALV	2 1/2	468	
13	93	7/8	A325-I GALV	3	88	
14						
15	963	Hard Flat Washers for 7/8 ϕ BOLT				
16						
17						
18						

WORK WITH E1 & E2.

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9902				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

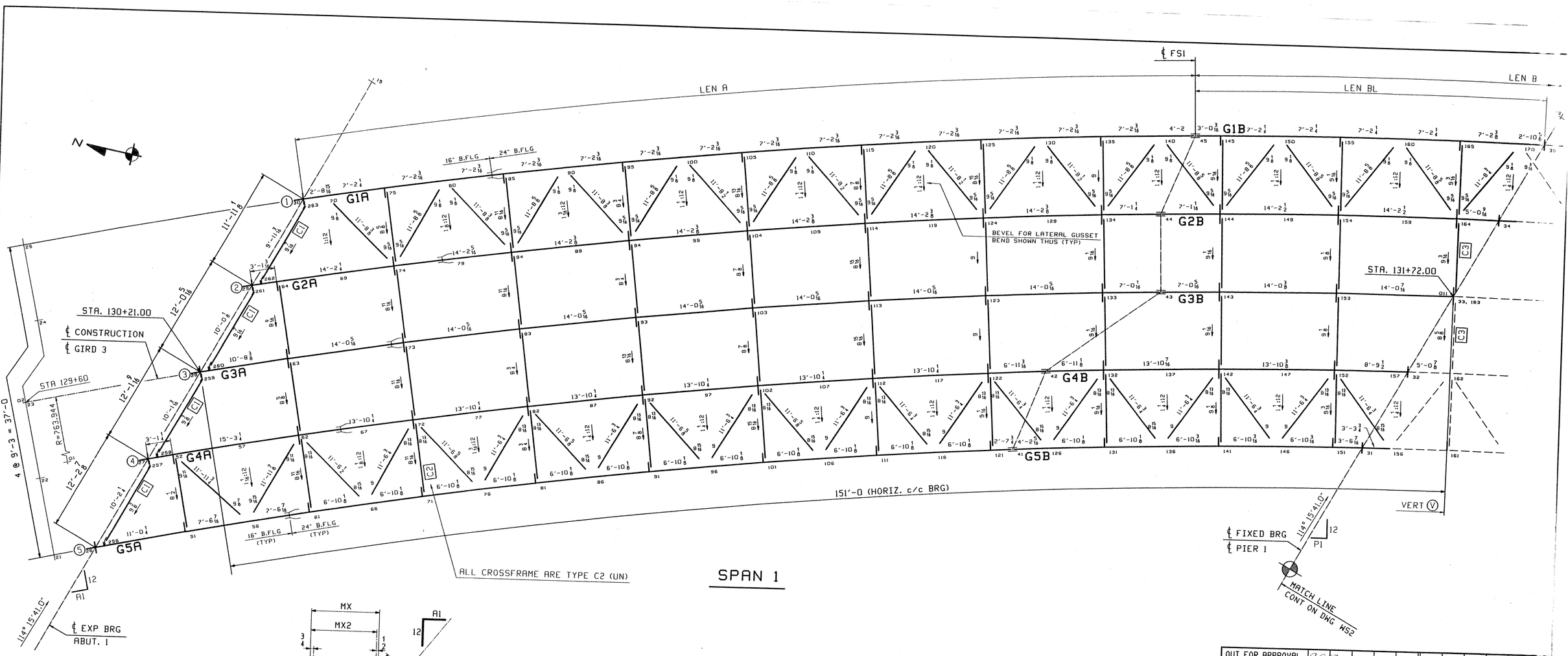
DESCRIPTION: FIELD BOLTS	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	VWJ	08/17
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/29
CONTRACTOR: J.A. McDONALD	APPROV BY	
TENSOR 2242	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

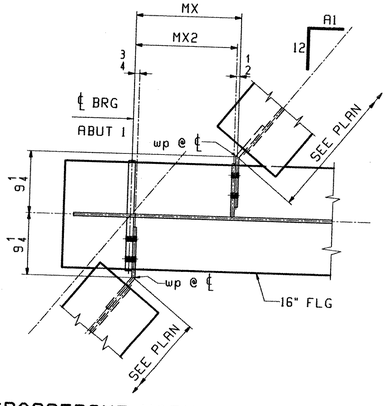
JOB NO.	DRG. NO.
166	E3
	REV. 1

637-BR25A-E3

Wed Jan 3 11:51:38 CST 2003 /user/jobs/2242/E3.dgn



SPAN 1



CROSSFRAME WORKPOINTS @ ABUT 1

Line	MX	MX2
2	1'- 2 11/16	1'- 2 3/16
3	1'-3	1'-2 1/2
4	1'-3 5/16	1'-2 13/16
5	1'-3 11/16	1'-3 3/16

CALCULATION PLAN FOR BRIDGE 25A

Line	DEVELOPED LENGTHS ALONG BTM OF WEB			GIRDER SLOPE		PLAN BEVELS	
	LEN A	LEN BL	LEN B	ABUT 1	Pier 1	A1	P1
1	107'-5 5/8	41'-10 3/16	86'-6 1/4	.0125	.0068	9 11/16	6 3/8
2	109'-6 7/8	40'-6 5/8	85'-3 1/2	.0126	.0092	9 7/8	6 7/16
3	115'-10 5/8	35'-1 1/8	84'-3 9/16	.0127	.0079	10 1/16	6 9/16
4	108'-5 3/16	43'-5 7/16	83'-2 13/16	.0117	.0062	10 5/16	6 11/16
5	110'-10 3/8	41'-11 9/16	82'-7 1/2	.0116	.0081	10 1/2	6 3/4

RECEIVED
OK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

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

NOTES
1. LONGITUDINAL DIMENSIONS ARE SLOPING ALONG BOTT OF WEB. WITH CORRECTIONS MADE FOR GRADE & CAMBER (UN).
2. TRANSVERSE DIMENSIONS ARE IN A HORIZ. PLANE (UN).
3. ARROW POINTS TOWARDS LOW END OF MEMBER.
4. ENDS OF GIRDERS AND BRG. STIFF'S ARE VERTICAL AFTER DL ROTATION.
5. DIAPH STIFF & FIELD SPLICES ARE NORMAL TO GRADE UNLESS NOTED (V)
6. BOTT PT NUMBERS =TOP PT NUMBERS + 300.
7. FOR LAYOUTS SEE DWG TD1 & TD2.
8. COMBINE CROSSFRAMES FOR DIFF IN DROPS OF +/- 1/8.
9. CROSSFRAMES DROPS ARE CALCULATED IN THEIR FINAL POSITION.
10. LATERAL BRACE LENGTHS ARE SLOPONG CHORD WP/WP.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	7/8"ø A325-3

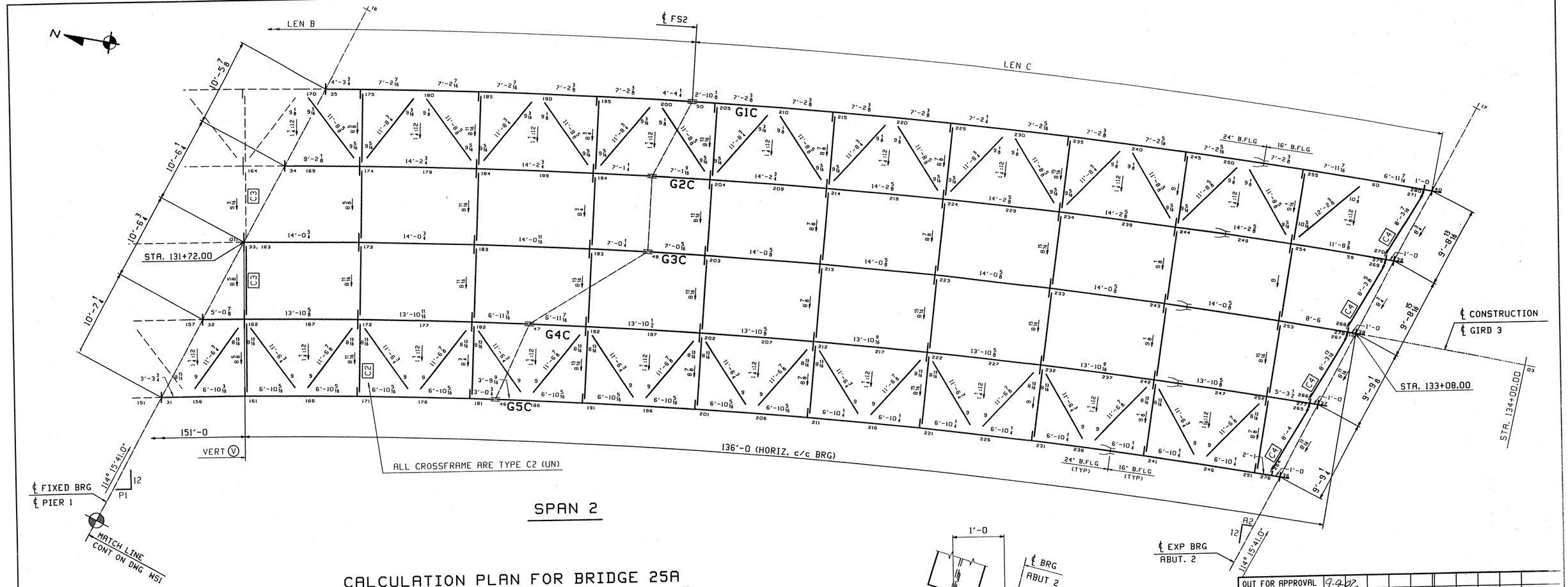
SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION:	CALCULATION PLAN	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	WL	07/16
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	JAK	07/17
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION	6-33-BR25A-WS1	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	WS1
	REV.

Thu Jul 25 11:21:05 EDT 2002 c:\casco\jobs\2242\WS1.dgn 8x10



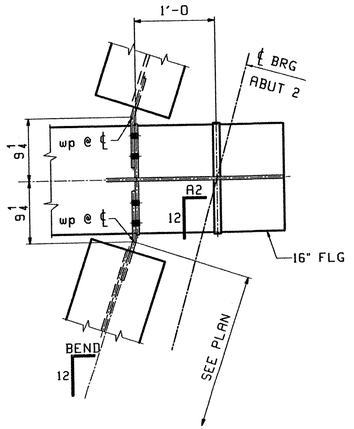
SPAN 2

CALCULATION PLAN FOR BRIDGE 25A

Line	DEV LEN. ALONG BTM OF WEB		GIRDER SLOPE		PLAN BEVELS	
	LEN B	LEN C	Pier 1	ABUT 2	P1	A2
1	86'-6 1/4	90'-8 7/16	.0068	.0114	6 3/8	3 7/8
2	85'-3 1/2	90'-11 3/16	.0092	.0115	6 7/16	3 15/16
3	84'-3 9/16	86'-9 7/16	.0079	.0115	6 9/16	4
4	83'-2 13/16	96'-6 7/16	.0062	.0116	6 11/16	4 1/16
5	82'-7 1/2	96'-0 1/8	.0081	.0117	6 3/4	4 1/8

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

NOTES
1. LONGITUDINAL DIMENSIONS ARE SLOPING ALONG BOTT OF WEB. WITH CORRECTIONS MADE FOR GRADE & CAMBER (UN).
2. TRANSVERSE DIMENSIONS ARE IN A HORIZ. PLANE (UN).
3. ARROW POINTS TOWARDS LOW END OF MEMBER.
4. ENDS OF GIRDERS AND BRG. STIFF'S ARE VERTICAL AFTER DL ROTATION.
5. DIAPH STIFF & FIELD SPLICES ARE NORMAL TO GRADE UNLESS NOTED Ⓥ
6. BOTT PT NUMBERS =TOP PT NUMBERS + 300.
7. FOR LAYOUTS SEE DWG TD1 & TD2.
8. COMBINE CROSSFRAMES FOR DIFF IN DROPS OF +/- 1/8.
9. CROSSFRAMES DROPS ARE CALCULATED IN THEIR FINAL POSITION.
10. LATERAL BRACE LENGTHS ARE SLOPONG CHORD WP/WP.



CROSSFRAME WORKPOINTS @ ABUT 2

Line	BEND
1	$4\frac{11}{16}$
2	$4\frac{3}{4}$
3	$4\frac{13}{16}$
4	$4\frac{7}{8}$
5	$4\frac{15}{16}$

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

OUT FOR APPROVAL	9-9-02										
OUT FOR APPROVAL											
ISSUED TO SHOP											
FIELD & OFFICE											
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: $\frac{15}{16}$"ø (UN)
SHOP BOLTS: $\frac{7}{8}$"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

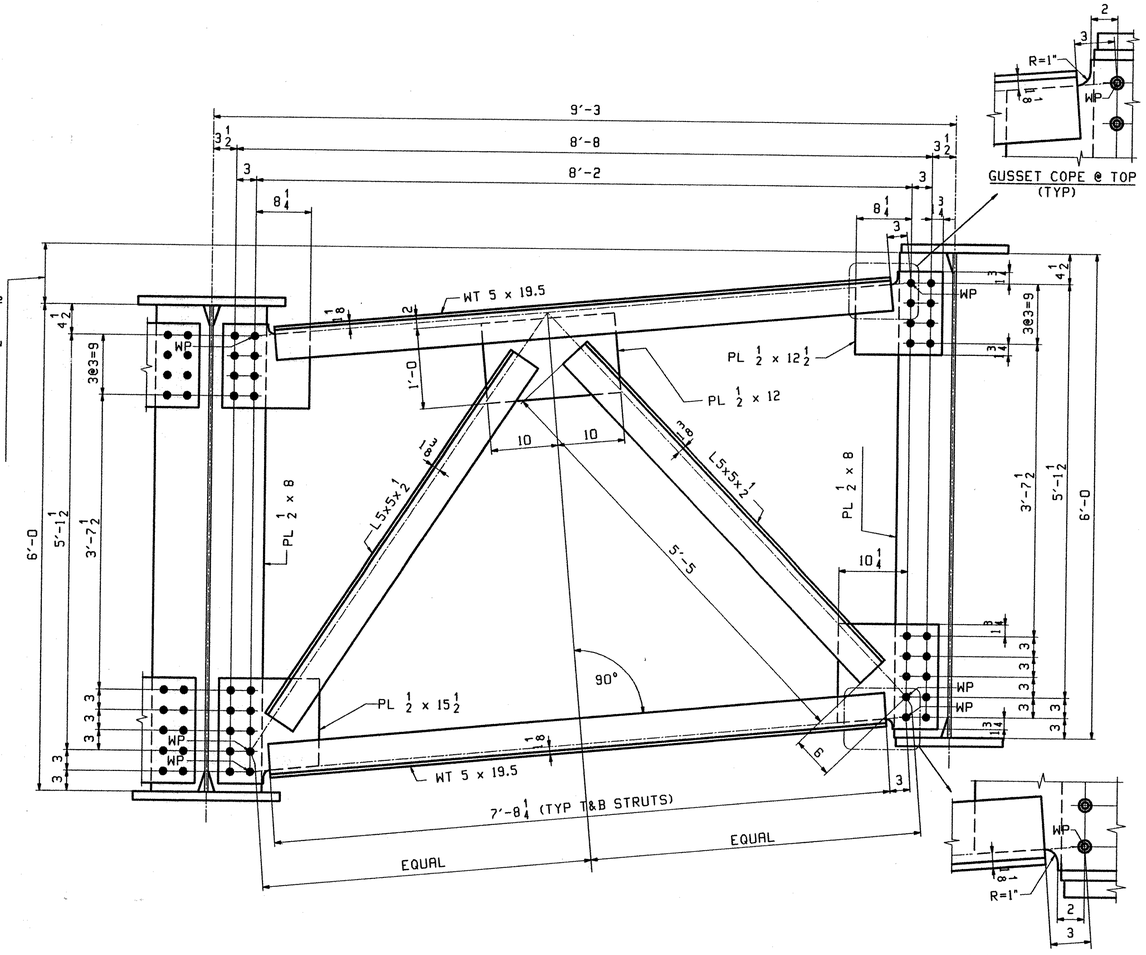
DESCRIPTION: CALCULATION PLAN
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
TENSOR 2242
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
WL	07/16
CHKD BY	
JAK	07/17
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	
639-	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	WS2
	REV. △

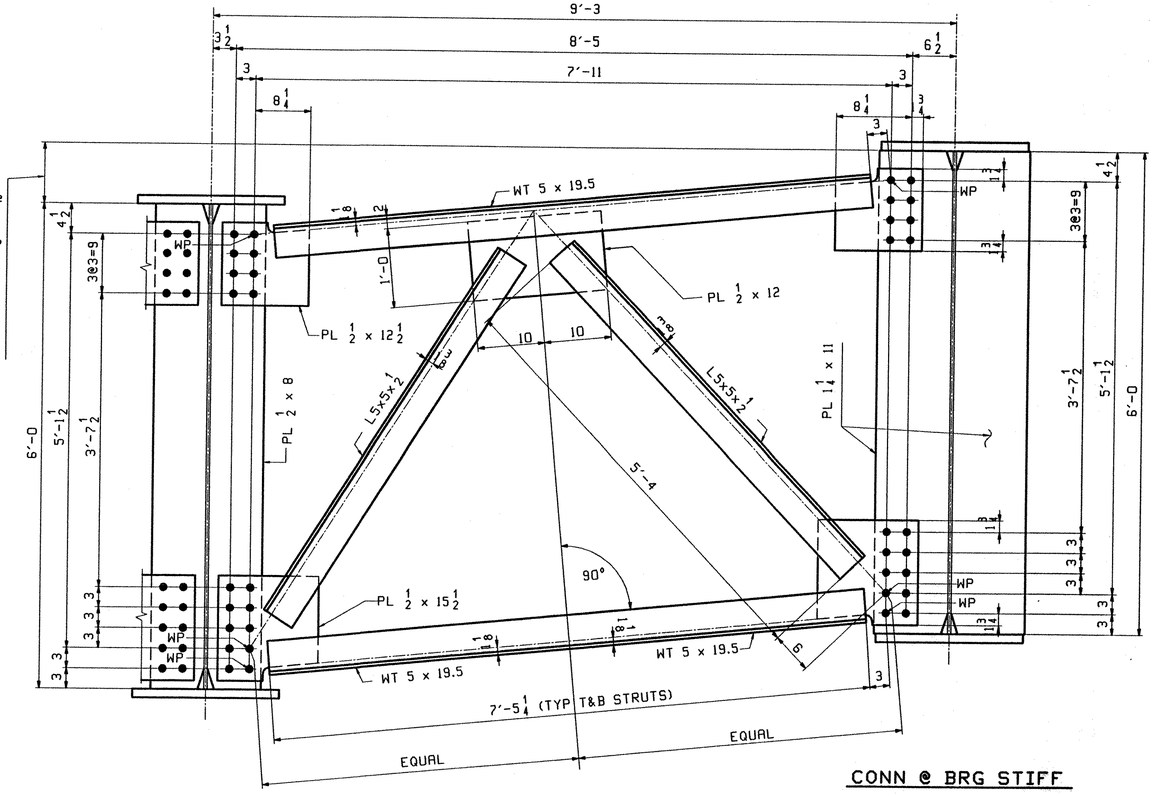
639-BR25A-WS2



TYP. INTERMEDIATE CROSSFRAME "C2"

LOOKING BACK-STATION

NOTE: C2 CROSSFRAMES WITHIN 10'-0 OF ABUTMENTS SHALL BE PAINTED AS PER NOTES ON GN1.



CONN @ INT STIFF

CONN @ BRG STIFF

INTERMEDIATE CROSSFRAME @ BRG STIFF "C3"

LOOKING BACK-STATION

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

NOTES:
1. ALL CROSSFRAME AND CONNECTION PLATES SHALL BE CVN.
2. EDGE DISTANCES SHALL BE 1 3/4 (UN).
3. SEE DESIGN SHEETS BR314 & BR316 FOR WELDING & OTHER INFORMATION NOT SHOWN.
4. BOLTS IN PAINTED AREAS SHALL BE A325-1 GALVANIZED. ALL OTHERS SHALL BE A325-3.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"Ø (UN)	SEE NOTE 4

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: INTERMEDIATE CROSSFRAME LAYOUTS

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

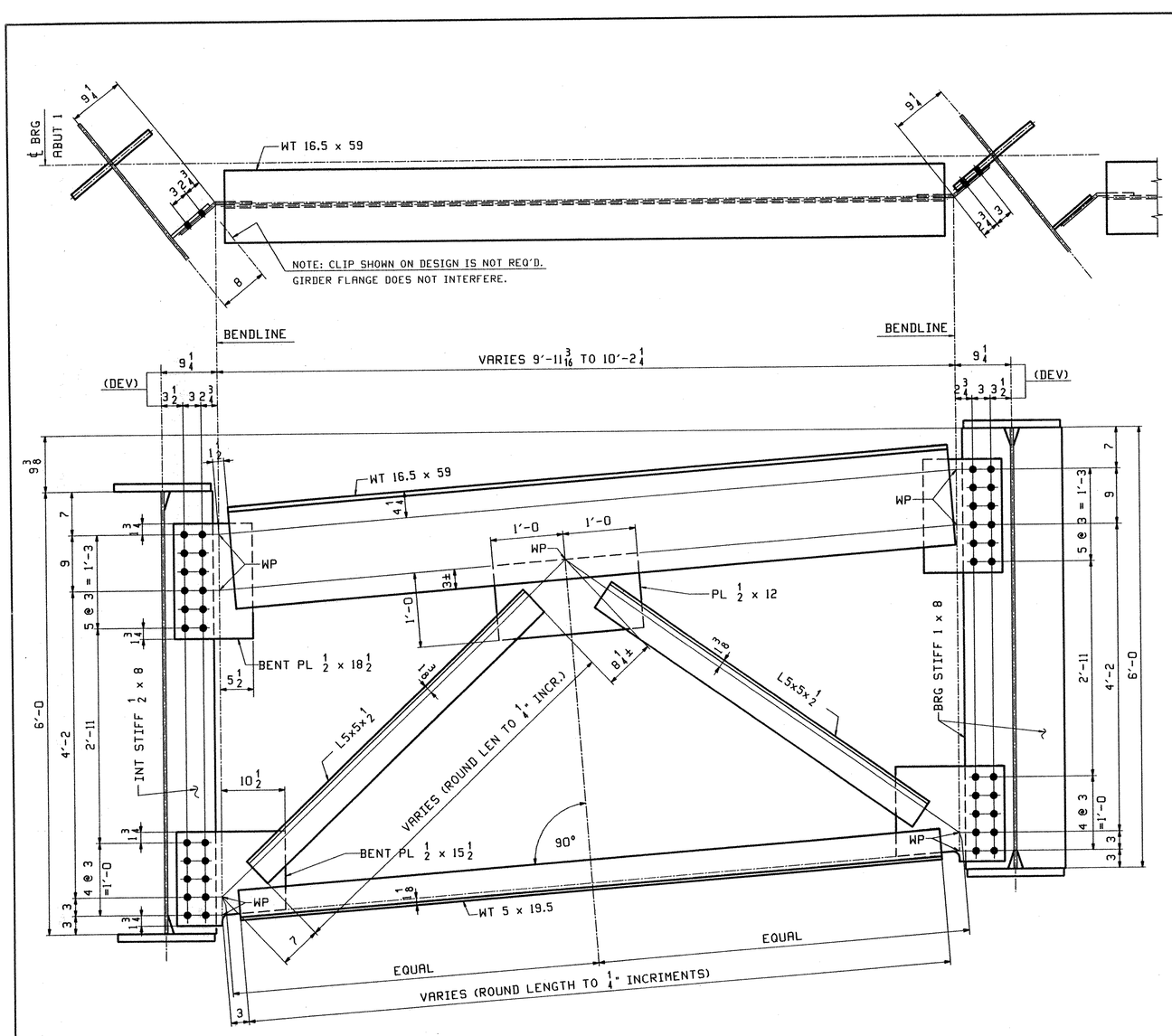
	DRAWN BY	DATE
	WL	07/16
	CHKD BY	
	DO	08/03
	APPROV BY	
	SUPERVISOR	W. J. GATTI
	Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	TD1
	REV. △

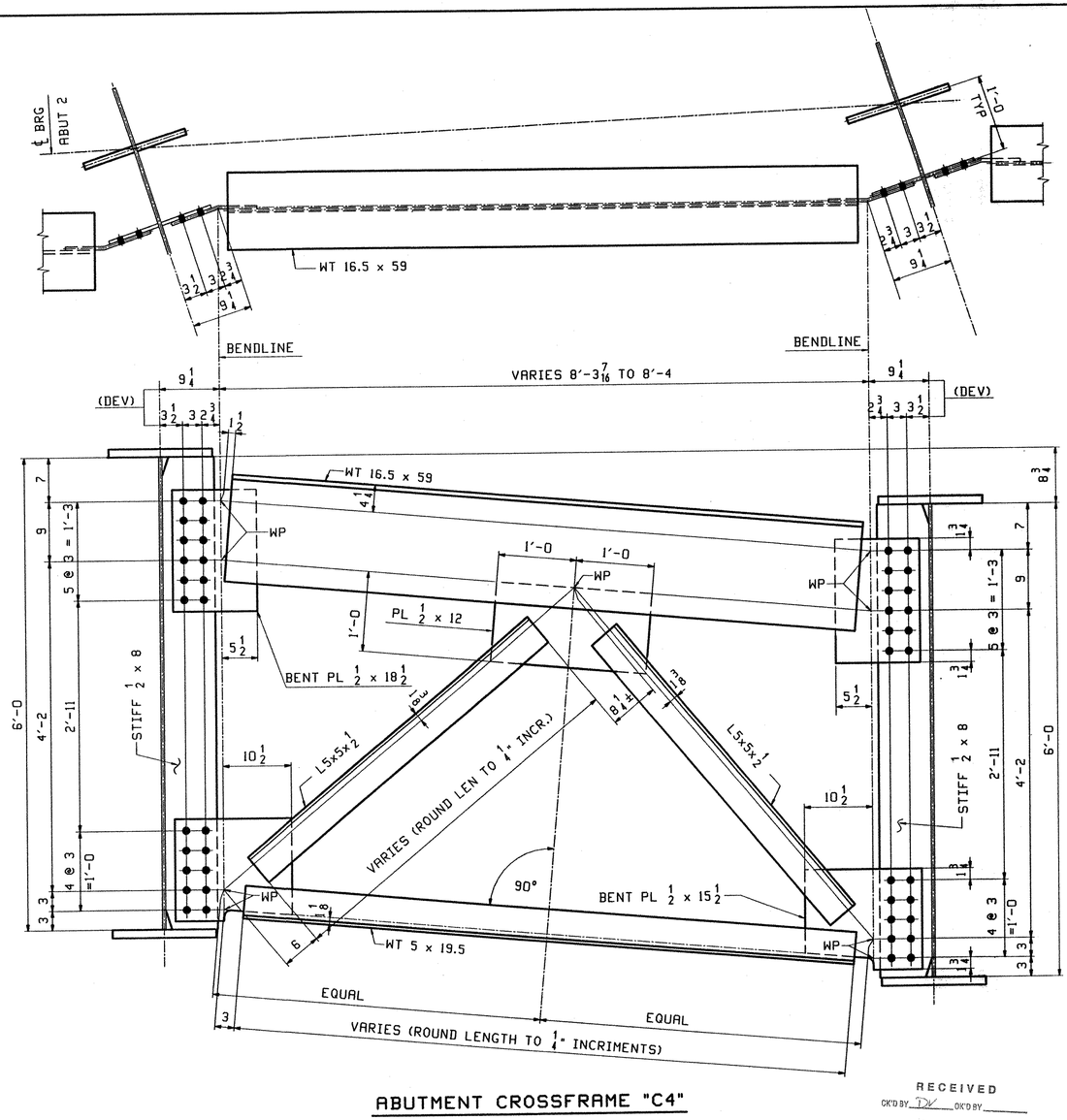
640-BR25A-TD1

DO Tue Aug 6 13:22:28 EDT 2002 /users/jake/2242/TD1.DWG



ABUTMENT CROSSFRAME "C1"

ABUTMENT 1 LOOKING BACK STATION



ABUTMENT CROSSFRAME "C4"

ABUTMENT 2 LOOKING AHEAD STATION

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

NOTE: END CROSSFRAMES SHALL BE PAINTED AS PER NOTES ON GN1

NOTES:

1. ALL CROSSFRAME AND CONNECTION PLATES SHALL BE CVN.
2. EDGE DISTANCES SHALL BE $1\frac{3}{4}$ (UN).
3. SEE DESIGN SHEETS BR314 & BR316 FOR WELDING & OTHER INFORMATION NOT SHOWN.
4. HOLES SHALL BE $1\frac{1}{16}\phi$ (OVS) IN GUSSET PL & $\frac{15}{16}\phi$ IN STIFFENER FOR $\frac{7}{8}\phi$ HS BOLTS (A325-1 GALV.) EACH W/ 2 WASHERS.

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

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		AS NOTED	AS NOTED

SURFACE PREP. & PAINT: AS NOTED

OUT FOR APPROVAL	9-9-02										
OUT FOR APPROVAL											
ISSUED TO SHOP											
FIELD & OFFICE											
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

DESCRIPTION: END CROSSFRAME LAYOUTS

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2242

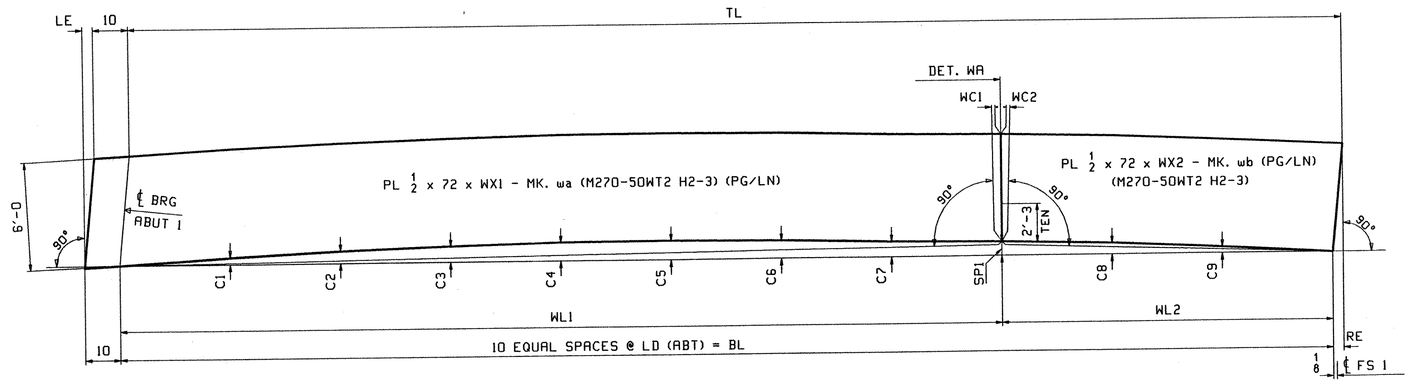
PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

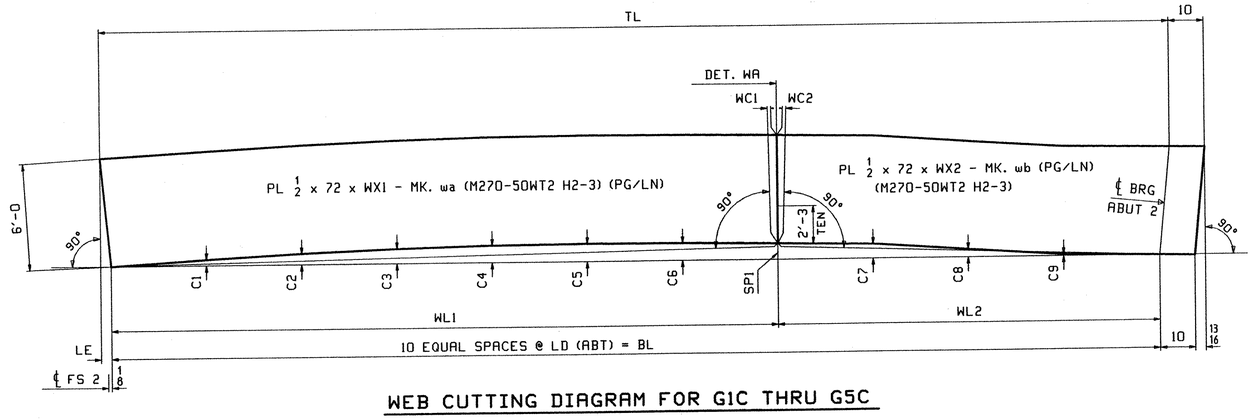
DRAWN BY	DATE
WL	07/17
CHKD BY	
DO	08/03
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	
JOB NO.	DRG. NO.
166	TD2
	REV. △

641-BR25A-TD2



WEB CUTTING DIAGRAM FOR G1A THRU G5A

MARK	TL	BL	LE	RE	WL1	WL2	WX1	WX2	SP1	WC1	WC2	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	WEB MK. wa PG/LINE	WEB MK. wb PG/LINE
G1A	107'-6 1/8	107'-5 1/2	1/8	3/4	79'-0	28'-5 1/2	79'-10 3/16	28'-6 1/4	2 13/16	3/16	9/16	10'-9	1 5/16	2 5/16	3 1/16	3 5/8	3 3/4	3 9/16	3 1/16	2 5/16	1 1/4	5/ A	6/ G
G2A	109'-7 5/16	109'-6 3/4	3/16	3/4	79'-0	30'-6 3/4	79'-10 1/4	30'-7 1/2	2 7/8	1/4	9/16	10'-11 1/2	1 1/4	2 1/4	3	3 1/2	3 11/16	3 9/16	3 1/16	2 1/4	1 1/4	5/ A	6/ C
G3A	115'-11	115'-10 1/2	3/16	11/16	78'-6	37'-4 1/2	79'-4 1/4	37'-5 3/16	3 5/16	1/4	9/16	11'-7	1 5/16	2 7/16	3 1/4	3 3/4	3 15/16	3 3/4	3 3/16	2 3/8	1 1/4	5/ J	5/ U
G4A	108'-5 1/2	108'-5 1/16	1/4	11/16	78'-6	29'-11 1/16	79'-4 3/16	29'-11 3/4	2 11/16	3/16	9/16	10'-10 1/8	1 1/16	2	2 3/4	3 1/4	3 7/16	3 5/16	2 7/8	2 1/8	1 3/16	5/ J	6/ E
G5A	110'-10 3/4	110'-10 1/4	3/16	11/16	78'-6	32'-4 1/4	79'-4 1/4	32'-4 15/16	2 7/8	1/4	9/16	11'-1	1 1/8	2 1/16	2 13/16	3 3/8	3 9/16	3 7/16	2 15/16	2 3/16	1 3/16	5/ J	6/ A



WEB CUTTING DIAGRAM FOR G1C THRU G5C

MARK	TL	BL	LE	WL1	WL2	WX1	WX2	SP1	WC1	WC2	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	WEB MK. wa PG/LINE	WEB MK. wb PG/LINE
G1C	90'-9 5/8	90'-8 5/16	1/2	57'-11 7/8	32'-8 7/16	58'-0 3/8	33'-7 1/4	2 1/16	3/16	3/8	9'-0 7/8	3/4	1 3/8	1 7/8	2 1/8	2 1/4	2 3/16	1 13/16	1	3/16	5/ N	5/ W
G2C	91'-0 3/8	90'-11 1/16	1/2	58'-11 7/8	31'-11 3/16	59'-0 3/8	32'-10	2	3/16	3/8	9'-1 1/8	11/16	1 5/16	1 13/16	2 1/16	2 3/16	2 1/8	1 13/16	1	1/4	5/ L	5/ Y
G3C	86'-10 5/8	86'-9 5/16	1/2	58'-11 7/8	27'-9 7/16	59'-0 3/8	28'-8 1/4	1 9/16	3/16	5/16	8'-8 1/8	5/8	1 3/16	1 9/16	1 7/8	1 15/16	1 7/8	1 1/2	3/4	1/8	5/ L	6/ G
G4C	96'-7 5/8	96'-6 5/16	1/2	58'-11 7/8	37'-6 7/16	59'-0 3/8	38'-5 1/4	2 1/8	3/16	5/16	9'-7 7/8	3/4	1 5/16	1 13/16	2 1/8	2 1/4	2 3/16	1 7/8	1 1/16	3/16	5/ Q	6/ L
G5C	96'-1 1/4	96'-0	7/16	55'-11 7/8	40'-0 1/8	56'-0 5/16	40'-10 15/16	2 1/8	1/4	5/16	9'-7 1/4	11/16	1 1/4	1 11/16	2	2 3/16	2 1/8	1 13/16	1	1/4	5/ S	6/ J

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SEP 09 2002
RESUBMIT APPROVED
BY RKW DATE 9-27-02

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL WA SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	7/8"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

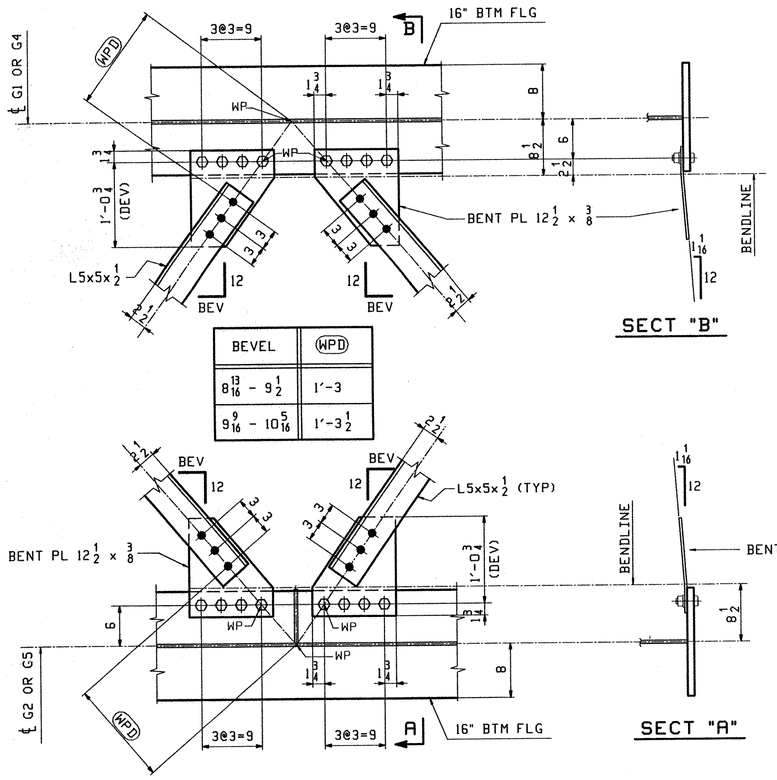
DESCRIPTION:	CAMBER DIAGRAM	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	AB	07/23
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	07/31
	CONTRACTOR: J.A. McDONALD	APPROV BY	
TENSOR 2242		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	C1
	REV.

642-BR25A-C1

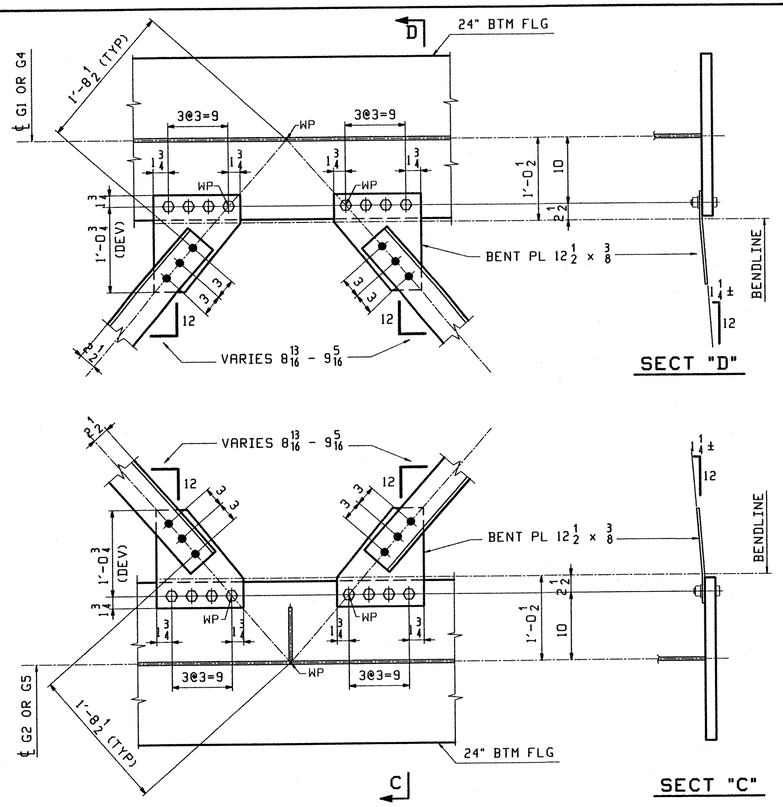
Thu Aug 1 11:50:55 EDT 2002 /users/pbw/2242/C1.dwg



BEVEL	(WPD)
$8\frac{13}{16}$ - $9\frac{1}{2}$	1'-3
$9\frac{9}{16}$ - $10\frac{5}{16}$	1'-3½

LATERAL BRACING LAYOUTS @ 16" BTM FLANGE

(PANEL G1-G2 SHOWN)
(PANEL G4-G5 SIMILAR)



LATERAL BRACING LAYOUTS @ 24" BTM FLANGE

(PANEL G1-G2 SHOWN)
(PANEL G4-G5 SIMILAR)

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

NOTES:
1. EDGE DISTANCES SHALL BE $1\frac{3}{4}$ (UN).
2. SEE DESIGN SHEET BR317 INFORMATION NOT SHOWN.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9902									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		$\frac{15}{16}$"ø (UN)	$\frac{7}{8}$"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

DESCRIPTION: LATERAL BRACING LAYOUTS	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	WL	07/17
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/03
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

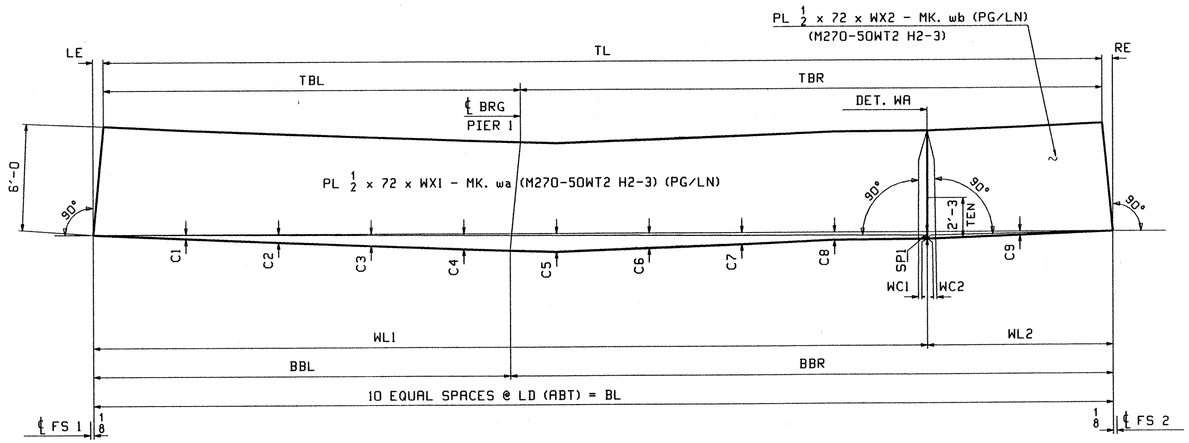
TENSOR 2242

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	TD3
	REV. △

642-BR25A-TD3

Plotted by: Hug @ 12:26:56 EST 2002 /users/jobs/2242/TD3 Rev0



WEB CUTTING DIAGRAM FOR G1B THRU G5B

MARK	TL	BL	LE	RE	WL1	WL2	WX1	WX2	SP1	WC1	WC2	TBL	TBR	BBL	BBR	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	WEB MK. wa PG/LINE	WEB MK. wb PG/LINE
G1B	86'-5 1/16	86'-6	1/2	7/16	70'-11 7/8	15'-6 1/8	70'-11 7/8	15'-6 3/16	1 1/4	1/8	1/2	41'-10 3/16	44'-6 7/8	41'-10 1/16	44'-7 15/16	8'-7 3/4	3/4	1 7/16	2 1/16	2 11/16	3 3/16	2 5/8	2 1/16	1 3/8	11/16	4/ Y	6/ S
G2B	85'-2 3/8	85'-3 1/4	1/2	3/8	66'-11 7/8	18'-3 3/8	66'-11 7/8	18'-3 7/16	1 7/16	1/8	7/16	40'-6 5/8	44'-7 3/4	40'-6 1/2	44'-8 3/4	8'-6 3/8	3/4	1 7/16	2 1/16	2 11/16	3	2 1/2	1 15/16	1 5/16	5/8	5/ G	6/ N
G3B	84'-2 7/16	84'-3 5/16	9/16	5/16	66'-11 7/8	17'-3 7/16	66'-11 7/8	17'-3 1/2	1 1/16	1/8	3/8	35'-1 1/8	49'-1 5/16	35'-1	49'-2 5/16	8'-5 1/8	3/4	1 1/2	2 1/4	2 15/16	2 3/4	2 1/8	1 5/8	1 1/16	1/2	4/ W	6/ Q
G4B	83'-1 5/8	83'-2 9/16	7/16	1/2	69'-11 7/8	13'-2 11/16	69'-11 7/8	13'-2 11/16	1 1/16	1/8	1/2	43'-5 7/16	39'-8 3/16	43'-5 5/16	39'-9 1/4	8'-3 7/8	5/8	1 3/16	1 3/4	2 5/16	2 7/8	2 9/16	2	1 3/8	11/16	5/ C	6/ U
G5B	82'-6 3/8	82'-7 1/4	7/16	7/16	69'-11 7/8	12'-7 3/8	69'-11 7/8	12'-7 3/8	15/16	1/16	7/16	41'-11 5/8	40'-6 3/4	41'-11 7/16	40'-7 13/16	8'-3 1/8	5/8	1 3/16	1 13/16	2 5/16	2 7/8	2 7/16	1 7/8	1 1/4	5/8	5/ C	6/ W

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL WA SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/9/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W	ELECTRODES:	HOLES: 15/16"ø (UN)
SHOP BOLTS: 7/8"ø A325-3		

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: CAMBER DIAGRAM	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	AB	07/23
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	07/31
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

TENSOR 2242

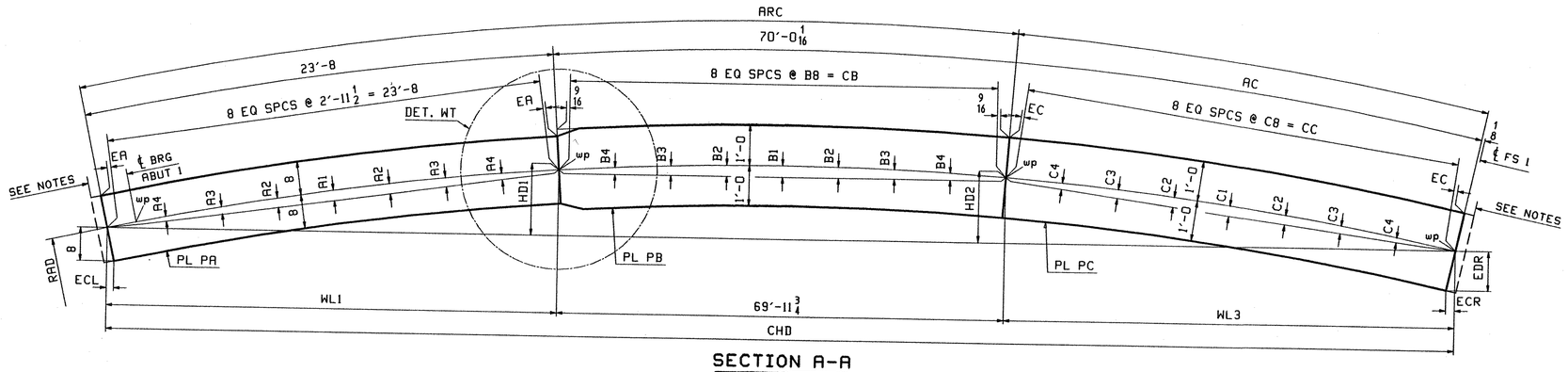
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	C2
	REV. △

RECEIVED
CK'D BY DV CK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

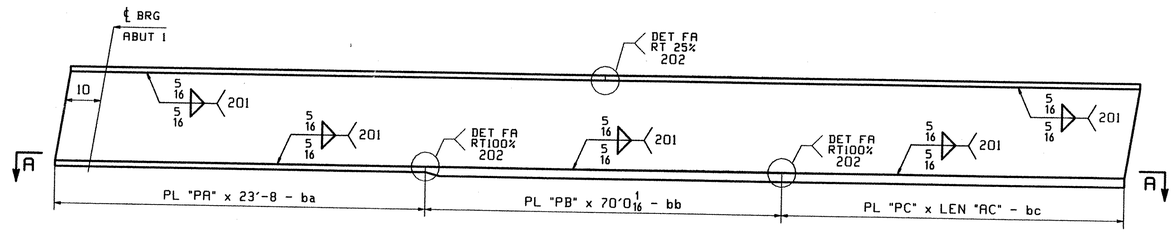
643-BR254-C2

Thu Aug 1 15:34:37 EDT 2002 /users/jms/2242/C2_1.dgn

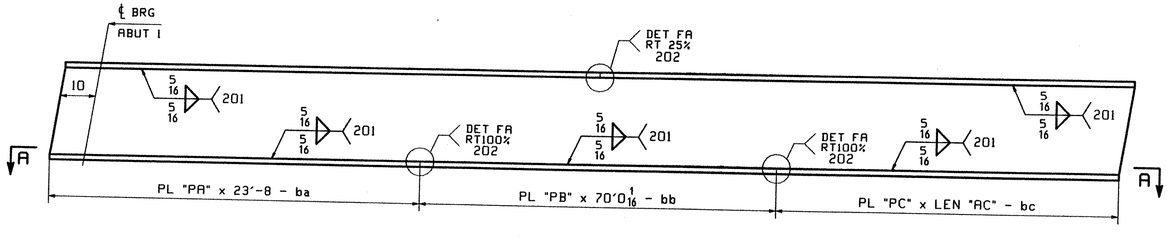


SECTION A-A

LOCATION	RAD	ARC	CHD	AC	EA	A1	A2	A3	A4	B1	B2	B3	B4	B8	CB	EC	C1	C2	C3	C4	C8	CC	ECL	ECR	EDR	WL1	WL3	HD1	HD2	PL PA (M270-50WT2)	PL PB (M270-50WT2)	PL PC (M270-50WT2)
G1A BTM FLG	782.44	108'-3 1/2	108'-2 7/16	14'-7 7/16	1/8	1 1/16	1	13/16	1/2	9 3/8	8 13/16	7 1/16	4 1/8	8'-9	69'-11 3/4	1/8	7/16	3/8	5/16	3/16	1'-9 15/16	14'-7 7/16	9/16	13/16	1'-0	23'-7 9/16	14'-7 1/8	1'-3 3/8	10 1/2	PL 1 x 16 -ba (H2-3) (4/C)	PL 1 1/2 x 24 -bb (H2-3) (1/C)	PL 1 1/2 x 24 -bc (H2-3) (1/G)
G2A BTM FLG	773.19	110'-4 3/4	110'-3 5/8	16'-8 11/16	1/8	1 1/16	1	13/16	1/2	9 1/2	8 15/16	7 1/8	4 3/16	8'-9	69'-11 3/4	1/8	9/16	1/2	7/16	1/4	2'-1 1/16	16'-8 11/16	9/16	7/8	1'-0	23'-7 9/16	16'-8 5/16	1'-3 15/16	1'-0 1/8	PL 1 x 16 -ba (H2-3) (4/C)	PL 1 x 24 -bb (H2-3) (2/C)	PL 1 x 24 -bc (H2-3) (2/N)
G3A BTM FLG	763.94	116'-8 1/2	116'-7 1/8	23'-0 7/16	1/8	1 1/8	1	13/16	1/2	9 5/8	9	7 3/16	4 3/16	8'-8 15/16	69'-11 3/4	3/16	1 1/16	1	13/16	7/16	2'-10 9/16	23'-0 7/16	5/8	15/16	11 15/16	23'-7 7/16	22'-11 15/16	1'-5 5/16	1'-4 15/16	PL 1 x 16 -ba (H2-3) (4/C)	PL 1 x 24 -bb (H2-3) (2/C)	PL 1 x 24 -bc (H2-3) (2/E)
G4A BTM FLG	754.69	109'-3 1/16	109'-1 15/16	15'-7	1/8	1 1/8	1 1/16	13/16	1/2	9 3/4	9 1/8	7 5/16	4 1/4	8'-8 15/16	69'-11 3/4	1/8	1/2	7/16	3/8	3/16	1'-11 3/8	15'-7	9/16	7/8	11 15/16	23'-7 9/16	15'-6 5/8	1'-4 1/16	11 5/8	PL 1 x 16 -ba (H2-3) (4/C)	PL 1 x 24 -bb (H2-3) (2/C)	PL 1 x 24 -bc (H2-3) (2/S)
G5A BTM FLG	745.44	111'-8 1/4	111'-7	18'-0 3/16	1/8	1 1/8	1 1/16	7/8	1/2	9 7/8	9 1/4	7 3/8	4 5/16	8'-8 15/16	69'-11 3/4	1/8	5/8	5/8	1/2	5/16	2'-3	18'-0 3/16	5/8	7/8	11 15/16	23'-7 1/2	17'-11 3/4	1'-4 3/4	1'-1 9/16	PL 1 x 16 -ba (H2-3) (4/C)	PL 1 x 24 -bb (H2-3) (2/C)	PL 1 x 24 -bc (H2-3) (2/J)



FLANGE DIAGRAM FOR G1A



FLANGE DIAGRAM FOR G2A, G3A, G4A & G5A

NOTES:

1. FOR GENERAL NOTES, WELD DETAIL FA AND WIDTH TRANSITION DETAIL WT SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-9-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 15/16"ø (UN)

SHOP BOLTS: 7/8"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

DESCRIPTION: FLANGE DIAGRAM

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2242

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
AB	07/23
CHKD BY	
DO	07/31
APPROV BY	
SUPERVISOR	N. J. GAIII
Q.A.	
645-BA25A-F2	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	F2
	REV. △

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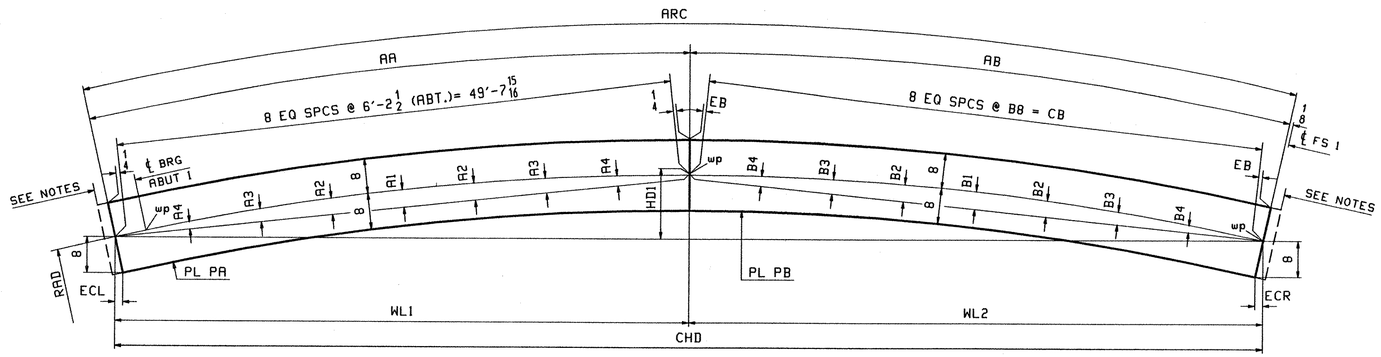
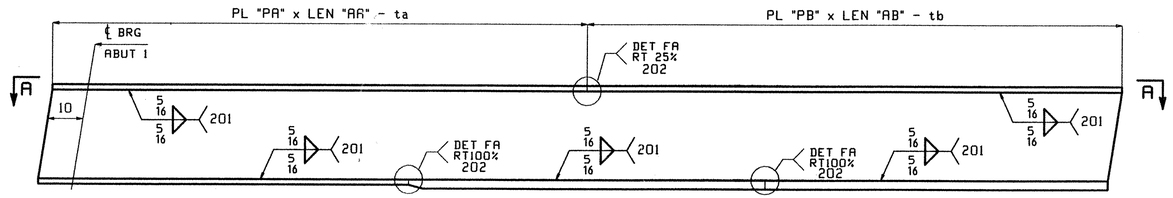
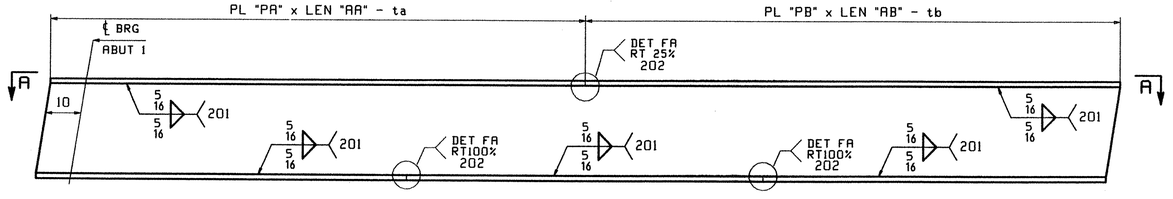


SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	A1	A2	A3	A4	EB	B1	B2	B3	B4	B8	CB	ECL	ECR	WL1	WL2	HD1	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G1A TOP FLG	782.44	108'-4 1/8	108'-3 1/16	49'-8 1/16	58'-8 1/16	4 3/4	4 7/16	3 9/16	2 1/16	5/16	6 5/8	6 3/16	4 15/16	2 7/8	7'-4	58'-7 15/16	9/16	9/16	49'-7 1/2	58'-7 9/16	1'-10 5/16	PL 1 x 16 -ta (H2-3) (3/N)	PL 1 x 16 -tb (H2-3) (3/G)
G2A TOP FLG	773.19	110'-5 5/16	110'-4 3/16	49'-8	60'-9 5/16	4 13/16	4 1/2	3 9/16	2 1/16	5/16	7 3/16	6 11/16	5 3/8	3 1/8	7'-7 1/8	60'-9 1/16	9/16	9/16	49'-7 1/2	60'-8 11/16	1'-11 7/16	PL 1 x 16 -ta (H2-3) (3/N)	PL 1 x 16 -tb (H2-3) (3/C)
G3A TOP FLG	763.94	116'-9	116'-7 5/8	49'-8	67'-1	4 13/16	4 9/16	3 5/8	2 1/8	3/8	8 13/16	8 5/16	6 5/8	3 7/8	8'-4 9/16	67'-0 11/16	5/8	5/8	49'-7 5/16	67'-0 5/16	2'-2 1/8	PL 1 x 16 -ta (H2-3) (3/N)	PL 1 x 16 -tb (H2-3) (2/G)
G4A TOP FLG	754.69	109'-3 1/2	109'-2 3/8	49'-8 1/16	59'-7 7/16	4 7/8	4 5/8	3 11/16	2 1/8	5/16	7 1/16	6 5/8	5 5/16	3 1/16	7'-5 7/16	59'-7 5/16	9/16	9/16	49'-7 1/2	59'-6 7/8	1'-11 1/2	PL 1 x 16 -ta (H2-3) (3/N)	PL 1 x 16 -tb (H2-3) (3/E)
G5A TOP FLG	745.44	111'-8 3/4	111'-7 1/2	49'-8 1/16	62'-0 11/16	4 15/16	4 5/8	3 3/4	2 3/16	5/16	7 3/4	7 1/4	5 13/16	3 3/8	7'-9 1/16	62'-0 1/2	5/8	5/8	49'-7 7/16	62'-0 1/16	2'-0 13/16	PL 1 x 16 -ta (H2-3) (3/N)	PL 1 x 16 -tb (H2-3) (2/Y)



FLANGE DIAGRAM FOR G1A



FLANGE DIAGRAM FOR G2A, G3A, G4A & G5A

NOTES:

1. FOR GENERAL NOTES AND WELD DETAILS FA SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15ft-lbs @ 40 °F

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-9-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS: 7/8"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: FLANGE DIAGRAM
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
AB	07/23
CHKD BY	
DO	07/30
APPROV BY	
SUPERVISOR	W. J. GAITI
Q.A.	

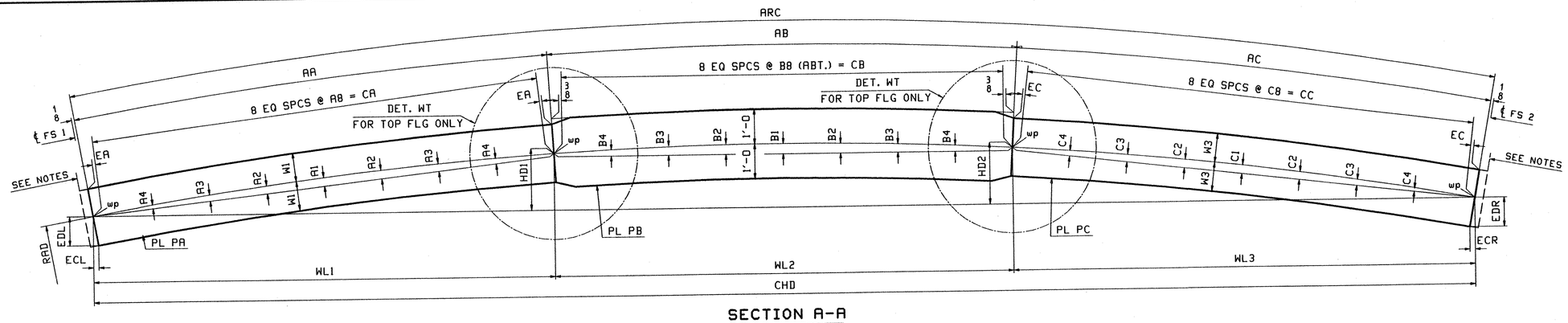
TENSOR 2242

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	F1
	REV. △

644-BR25A-F1

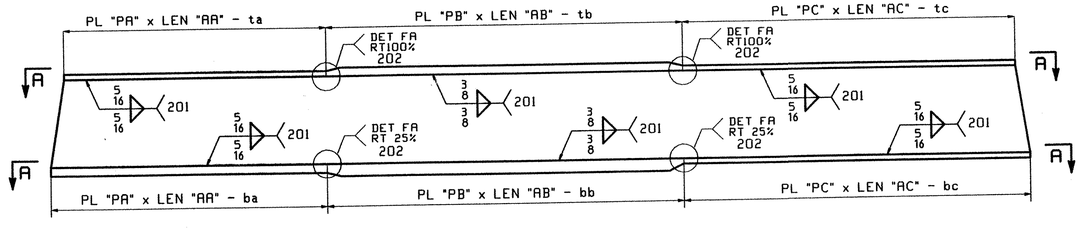
Thu Aug 1 15:52:41 CDT 2002 /users/pbs/2242/f1.dwg



SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	AC	EA	A1	A2	A3	A4	A8	CA	B1	B2	B3	B4	B8	CB	EC	C1	C2	C3	C4	C8	CC	ECL	ECR	EDL	EDR	WL1	WL2	WL3	HD1	HD2	W1	W3
G1B TOP FLG	782.44	86'-5 1/16	86'-4 9/16	15'-10 3/16	46'-0	24'-6 7/8	1/16	1/2	7/16	3/8	3/16	1'-11 3/4	15'-10 3/16	4 1/16	3 13/16	3 1/16	1 3/4	5'-9	45'-11 15/16	1/8	1 3/16	1 1/16	7/8	1/2	3'-0 7/8	24'-6 13/16	7/16	7/16	8	8	15'-10	45'-11 15/16	24'-6 5/8	8 9/16	11 5/8	8	8
G1B BTM FLG	782.44	86'-6	86'-5 1/2	15'-10 1/16	46'-0	24'-7 15/16	1/8	1/2	7/16	3/8	3/16	1'-11 3/4	15'-10 1/16	4 1/16	3 13/16	3 1/16	1 3/4	5'-9	45'-11 15/16	3/16	1 3/16	1 1/16	7/8	1/2	3'-1	24'-7 7/8	11/16	11/16	1'-0	1'-0	15'-9 7/8	45'-11 15/16	24'-7 11/16	8 9/16	11 11/16	1'-0	1'-0
G2B TOP FLG	773.19	85'-2 3/8	85'-1 7/8	14'-6 5/8	46'-0	24'-7 3/4	1/16	7/16	3/8	5/16	3/16	1'-9 13/16	14'-6 5/8	4 1/8	3 7/8	3 1/16	1 13/16	5'-9	45'-11 15/16	1/8	1 3/16	1 1/8	7/8	1/2	3'-0 15/16	24'-7 3/4	7/16	7/16	8	8	14'-6 7/16	45'-11 15/16	24'-7 1/2	8	11 9/16	8	8
G2B BTM FLG	773.19	85'-3 1/4	85'-2 3/4	14'-6 1/2	46'-0	24'-8 3/4	1/8	7/16	3/8	5/16	3/16	1'-9 13/16	14'-6 1/2	4 1/8	3 7/8	3 1/16	1 13/16	5'-9	45'-11 15/16	3/16	1 3/16	1 1/8	7/8	1/2	3'-1 1/16	24'-8 11/16	11/16	11/16	1'-0	1'-0	14'-6 5/16	45'-11 15/16	24'-8 1/2	8	11 5/8	1'-0	1'-0
G3B TOP FLG	763.94	84'-2 7/16	84'-1 15/16	9'-1 1/8	46'-0	29'-1 5/16	1/16	3/16	1/8	1/8	1/16	1'-1 5/8	9'-1 1/8	4 1/8	3 7/8	3 1/8	1 13/16	5'-9	45'-11 15/16	1/8	1 11/16	1 9/16	1 1/4	3/4	3'-7 11/16	29'-1 1/4	7/16	7/16	8	8	9'-1	45'-11 7/8	29'-1 1/16	5 3/8	1'-0 9/16	8	8
G3B BTM FLG	763.94	84'-3 5/16	84'-2 13/16	9'-1	46'-0	29'-2 5/16	1/16	3/16	1/8	1/8	1/16	1'-1 5/8	9'-1	4 1/8	3 7/8	3 1/8	1 13/16	5'-9	45'-11 15/16	1/4	1 11/16	1 9/16	1 1/4	3/4	3'-7 13/16	29'-2 1/4	11/16	11/16	1'-0	1'-0	9'-0 7/8	45'-11 7/8	29'-2 1/16	5 3/8	1'-0 5/8	1'-0	1'-0
G4B TOP FLG	754.69	83'-1 5/8	83'-1 1/8	17'-5 7/16	47'-0	18'-8 3/16	1/16	5/8	9/16	7/16	1/4	2'-2 3/16	17'-5 7/16	4 3/8	4 1/8	3 5/16	1 15/16	5'-10 1/2	46'-11 15/16	1/8	11/16	5/8	1/2	5/16	2'-4	18'-8 3/16	7/16	7/16	8	8	17'-5 1/4	46'-11 15/16	18'-7 15/16	9 1/8	9 9/16	8	8
G4B BTM FLG	754.69	83'-2 9/16	83'-2 1/16	17'-5 5/16	47'-0	18'-9 1/4	1/8	5/8	9/16	7/16	1/4	2'-2 3/16	17'-5 5/16	4 3/8	4 1/8	3 5/16	1 15/16	5'-10 1/2	46'-11 15/16	1/8	11/16	11/16	1/2	5/16	2'-4 1/8	18'-9 1/4	11/16	11/16	1'-0	1'-0	17'-5 1/8	46'-11 15/16	18'-9	9 1/8	9 5/8	1'-0	1'-0
G5B TOP FLG	745.44	82'-6 3/8	82'-5 7/8	15'-11 5/8	46'-0	20'-6 3/4	1/16	1/2	1/2	3/8	1/4	1'-11 15/16	15'-11 5/8	4 1/4	4	3 3/16	1 7/8	5'-9	45'-11 15/16	3/16	7/8	13/16	5/8	3/8	2'-6 13/16	20'-6 3/4	7/16	7/16	8	8	15'-11 7/16	45'-11 15/16	20'-6 1/2	8 9/16	10 1/4	8	8
G5B BTM FLG	745.44	82'-7 1/4	82'-6 3/4	15'-11 7/16	46'-0	20'-7 13/16	1/8	1/2	1/2	3/8	1/4	1'-11 15/16	15'-11 7/16	4 1/4	4	3 3/16	1 7/8	5'-9	45'-11 15/16	3/16	7/8	13/16	5/8	3/8	2'-7	20'-7 13/16	11/16	11/16	1'-0	1'-0	15'-11 1/4	45'-11 15/16	20'-7 9/16	8 9/16	10 5/16	1'-0	1'-0

LOCATION	PL PA (M270-50WT2)	PL PB (M270-50WT2)	PL PC (M270-50WT2)
G1B TOP FLG	PL 1 x 16 -ta (H2-3) (4/Q)	PL 2 x 24 -tb (H2-3) (1/A)	PL 1 x 16 -tc (H2-3) (4/A)
G1B BTM FLG	PL 1 1/2 x 24 -ba (H2-3) (1/E)	PL 2 x 24 -bb (H2-3) (1/A)	PL 1 1/4 x 24 -bc (H2-3) (1/W)
G2B TOP FLG	PL 1 x 16 -ta (H2-3) (4/S)	PL 2 x 24 -tb (H2-3) (1/A)	PL 1 x 16 -tc (H2-3) (4/A)
G2B BTM FLG	PL 1 x 24 -ba (H2-3) (2/U)	PL 2 x 24 -bb (H2-3) (1/A)	PL 1 1/4 x 24 -bc (H2-3) (1/W)
G3B TOP FLG	PL 1 x 16 -ta (H2-3) (4/U)	PL 2 x 24 -tb (H2-3) (1/A)	PL 1 x 16 -tc (H2-3) (3/Y)
G3B BTM FLG	PL 1 x 24 -ba (H2-3) (2/W)	PL 2 x 24 -bb (H2-3) (1/A)	PL 1 1/4 x 24 -bc (H2-3) (1/U)
G4B TOP FLG	PL 1 x 16 -ta (H2-3) (4/N)	PL 2 x 24 -tb (H2-3) (1/B)	PL 1 x 16 -tc (H2-3) (4/J)
G4B BTM FLG	PL 1 x 24 -ba (H2-3) (2/L)	PL 2 x 24 -bb (H2-3) (1/B)	PL 1 1/4 x 24 -bc (H2-3) (2/A)
G5B TOP FLG	PL 1 x 16 -ta (H2-3) (4/Q)	PL 2 x 24 -tb (H2-3) (1/A)	PL 1 x 16 -tc (H2-3) (4/G)
G5B BTM FLG	PL 1 x 24 -ba (H2-3) (2/Q)	PL 2 x 24 -bb (H2-3) (1/A)	PL 1 1/4 x 24 -bc (H2-3) (1/Y)



FLANGE DIAGRAM FOR G1B, G2B, G3B, G4B & G5B

NOTES:

1. FOR GENERAL NOTES, WELD DETAIL FA AND WIDTH TRANSITION DETAIL WT SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

RECEIVED
CK'D BY DV CK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	7/8"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

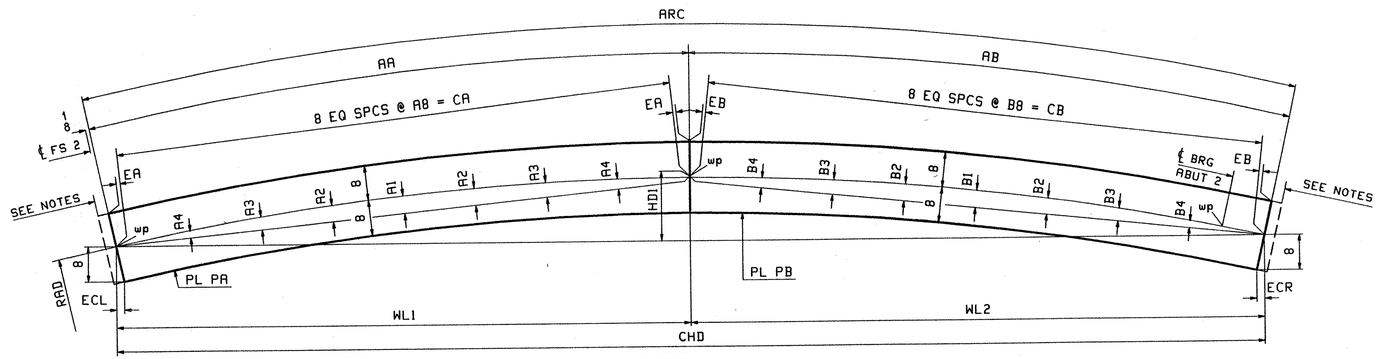
DESCRIPTION:	FLANGE DIAGRAM	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	AB	07/23
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	07/31
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	M. J. GRIFFIN
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	F3
	REV. △

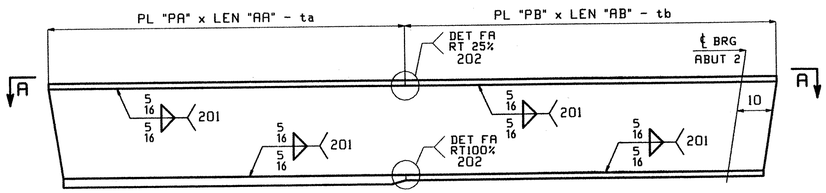
646-BR25A-F3

Tue Sep 3 11:53:56 EDT 2002 /users/jobs/2242/f3.dgn



SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	EA	A1	A2	A3	A4	A8	CA	EB	B1	B2	B3	B4	B8	CB	ECL	ECR	WL1	WL2	HD1	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G1C TOP FLG	782.44	91'-7 5/8	91'-7	51'-11 5/8	39'-8	1/4	5 3/16	4 7/8	3 7/8	2 1/4	6'-5 15/16	51'-11 1/2	3/16	3	2 13/16	2 1/4	1 5/16	4'-11 1/2	39'-7 15/16	7/16	7/16	51'-11 5/16	39'-7 11/16	1'-3 13/16	PL 1 x 16 -ta (H2-3) (3/L)	PL 1 x 16 -tb (H2-3) (3/U)
G2C TOP FLG	773.19	91'-10 3/8	91'-9 3/4	52'-2 3/8	39'-8	1/4	5 5/16	4 15/16	3 15/16	2 5/16	6'-6 1/4	52'-2 1/4	3/16	3 1/16	2 7/8	2 5/16	1 5/16	4'-11 1/2	39'-7 15/16	1/2	1/2	52'-2 1/16	39'-7 11/16	1'-4 1/16	PL 1 x 16 -ta (H2-3) (3/L)	PL 1 x 16 -tb (H2-3) (3/U)
G3C TOP FLG	763.94	87'-8 5/8	87'-8 1/16	48'-0 5/8	39'-8	1/4	4 9/16	4 1/4	3 3/8	2	6'-0 1/16	48'-0 1/2	3/16	3 1/16	2 7/8	2 5/16	1 3/8	4'-11 1/2	39'-7 15/16	7/16	7/16	48'-0 5/16	39'-7 3/4	1'-2 15/16	PL 1 x 16 -ta (H2-3) (3/Q)	PL 1 x 16 -tb (H2-3) (3/U)
G4C TOP FLG	754.69	97'-5 5/8	97'-4 13/16	53'-9 5/8	43'-8	5/16	5 3/4	5 3/8	4 5/16	2 1/2	6'-8 11/16	53'-9 1/2	1/4	3 13/16	3 9/16	2 13/16	1 11/16	5'-5 1/2	43'-7 15/16	1/2	1/2	53'-9 3/16	43'-7 5/8	1'-6 11/16	PL 1 x 16 -ta (H2-3) (3/J)	PL 1 x 16 -tb (H2-3) (3/S)
G5C TOP FLG	745.44	96'-11 1/4	96'-10 7/16	61'-3 1/4	35'-8	5/16	7 9/16	7 1/16	5 11/16	3 5/16	7'-7 7/8	61'-3 1/16	3/16	2 9/16	2 3/8	1 15/16	1 1/8	4'-5 1/2	35'-8	1/2	1/2	61'-2 13/16	35'-7 5/8	1'-5 9/16	PL 1 x 16 -ta (H2-3) (3/R)	PL 1 x 16 -tb (H2-3) (3/W)



FLANGE DIAGRAM FOR G1C, G2C, G3C, G4C & G5C

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL FA SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9.9.02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W

ELECTRODES:

HOLES: 15/16"ø (UN)

SHOP BOLTS: 7/8"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DK CK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

DESCRIPTION: FLANGE DIAGRAM

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

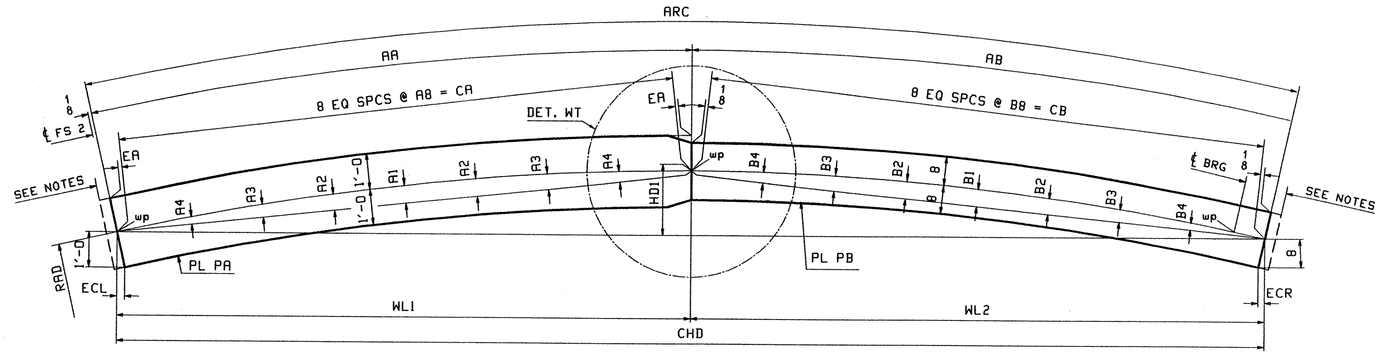
DRAWN BY	DATE
AB	07/23
CHKD BY	
DO	07/31
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 166 | DRG. NO. F4 | REV. △

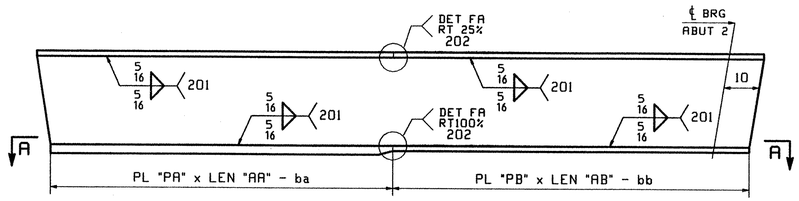
647-B225A F4

Thu Aug 1 21:17:04 EDT 2002 /users/jobs/2242/f4.dgn



SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	EA	A1	A2	A3	A4	A8	CA	B1	B2	B3	B4	B8	CB	ECL	ECR	WL1	WL2	HD1	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G1C BTM FLG	782.44	91'-6 5/16	91'-5 11/16	69'-10 5/16	21'-8	9/16	9 3/8	8 3/4	7	4 1/16	8'-8 3/4	69'-10	7/8	13/16	11/16	3/8	2'-8 1/2	21'-8	11/16	7/16	69'-9 15/16	21'-7 3/4	11 5/8	PL 1 1/4 x 24 -ba (H2-3) (1/Q)	PL 1 x 16 -bb (H2-3) (4/E)
G2C BTM FLG	773.19	91'-9 1/16	91'-8 7/16	70'-1 1/16	21'-8	9/16	9 1/2	8 15/16	7 1/8	4 3/16	8'-9 1/8	70'-0 3/4	15/16	7/8	11/16	3/8	2'-8 1/2	21'-8	11/16	1/2	70'-0 11/16	21'-7 3/4	11 3/4	PL 1 1/4 x 24 -ba (H2-3) (1/N)	PL 1 x 16 -bb (H2-3) (4/E)
G3C BTM FLG	763.94	87'-7 5/16	87'-6 3/4	65'-11 5/16	21'-8	1/2	8 9/16	8	6 3/8	3 3/4	8'-2 7/8	65'-11 1/16	15/16	7/8	11/16	3/8	2'-8 1/2	21'-8	11/16	7/16	65'-11	21'-7 3/4	11 3/16	PL 1 1/4 x 24 -ba (H2-3) (1/S)	PL 1 x 16 -bb (H2-3) (4/E)
G4C BTM FLG	754.69	97'-4 5/16	97'-3 1/2	78'-8 5/16	18'-8	5/8	1'-0 5/16	11 9/16	9 1/4	5 3/8	9'-10	78'-7 7/8	11/16	5/8	1/2	5/16	2'-4	18'-8	3/4	1/2	78'-7 13/16	18'-7 11/16	11 11/16	PL 1 1/4 x 24 -ba (H2-3) (1/J)	PL 1 x 16 -bb (H2-3) (4/L)
G5C BTM FLG	745.44	96'-10	96'-9 3/16	75'-2	21'-8	5/8	11 3/8	10 11/16	8 1/2	5	9'-4 11/16	75'-1 5/8	15/16	7/8	11/16	7/16	2'-8 1/2	21'-8	3/4	1/2	75'-1 1/2	21'-7 11/16	1'-1 1/8	PL 1 1/4 x 24 -ba (H2-3) (1/L)	PL 1 x 16 -bb (H2-3) (4/E)



FLANGE DIAGRAM FOR G1C, G2C, G3C, G4C & G5C

NOTES:

1. FOR GENERAL NOTES, WELD DETAIL FA AND WIDTH TRANSITION DETAIL WT SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15ft-lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9902									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	7/8"ø A325-3

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION:	FLANGE DIAGRAM	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	AB	07/23
	BRIDGE NO. 25A	CHKD BY	
TENSOR 2242	SEARSBURG, VERMONT	DO	07/31
	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

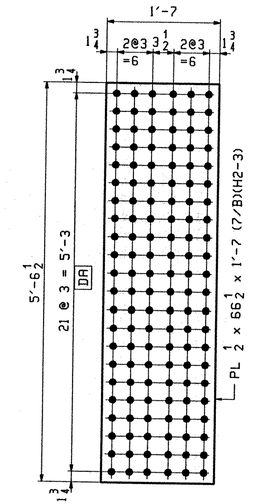
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	F5
	REV. △

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY DATE 9-27-02

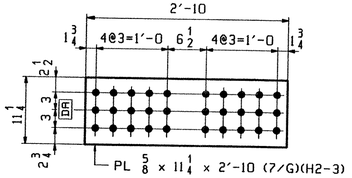
647-BR-25A-F5

Thu Aug 1 13:30:57 EDT 2002 /users/jobs/2242/f5.dgn



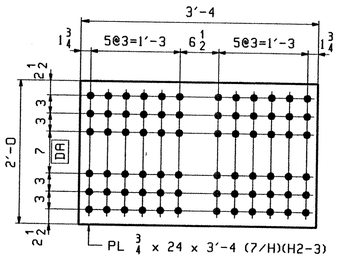
D.O.R.

20 ~ x1a



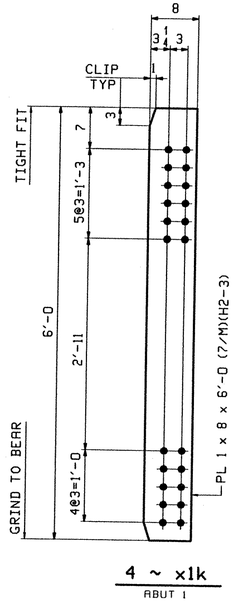
D.O.R.

18 ~ x1f



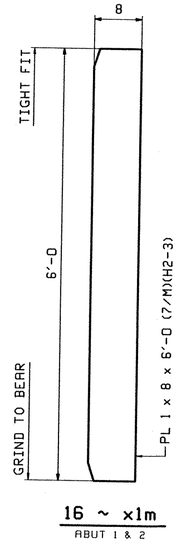
D.O.R.

1 ~ x1g



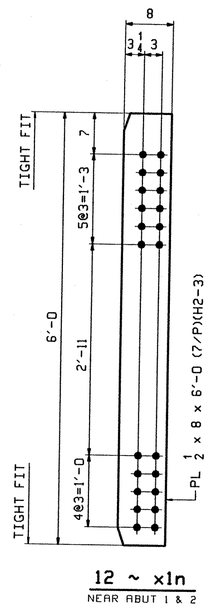
4 ~ x1k

ABUT 1



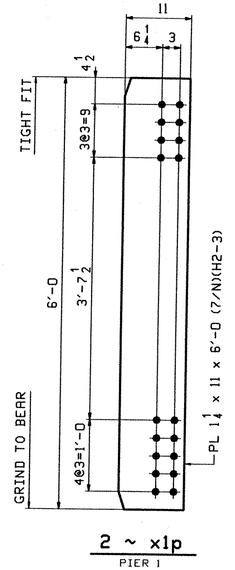
16 ~ x1m

ABUT 1 & 2



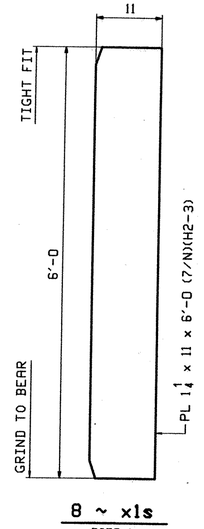
12 ~ x1n

NEAR ABUT 1 & 2



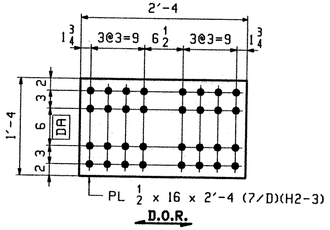
2 ~ x1p

PIER 1



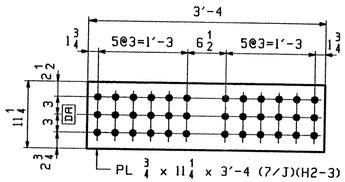
8 ~ x1s

PIER 1



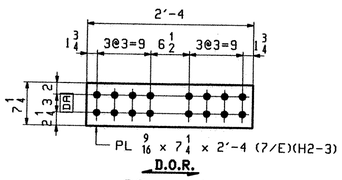
D.O.R.

10 ~ x1b



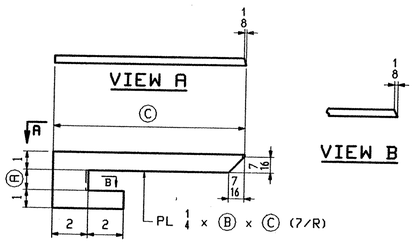
D.O.R.

2 ~ x1h

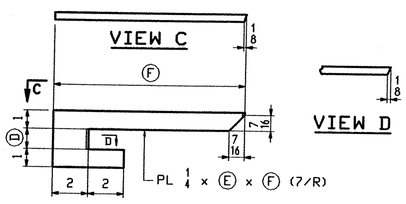


D.O.R.

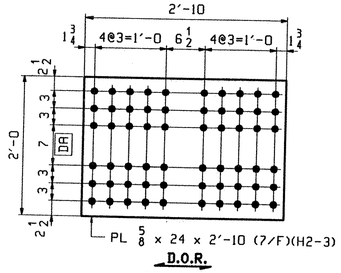
20 ~ x1c



VIEW B



VIEW D



D.O.R.

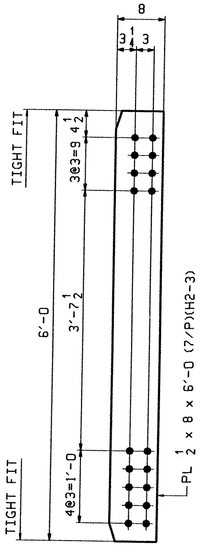
9 ~ x1d

DRIP PL @ LINE 5

MARK	REQ'D	Ⓐ	Ⓑ	Ⓒ
x1aa	1	1	3	11
x1ab	1	1	3	1'-3 9/16
x1ac	1	1 1/4	3 1/4	1'-3 9/16
x1ad	1	2	4	1'-3 9/16

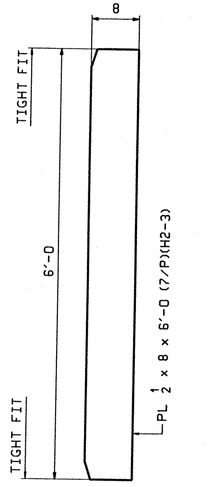
DRIP PL @ LINE 1

MARK	REQ'D	Ⓓ	Ⓔ	Ⓕ
x1af	1	1	3	11
x1ag	1	1 1/4	3 1/4	1'-3 9/16
x1ah	1	1 1/2	3 1/2	1'-3 9/16
x1ak	1	2	4	1'-3 9/16



158 ~ x1t

INT



76 ~ x1v

ABUT 1, 2 & PR 1

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY DATE 9-27-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	

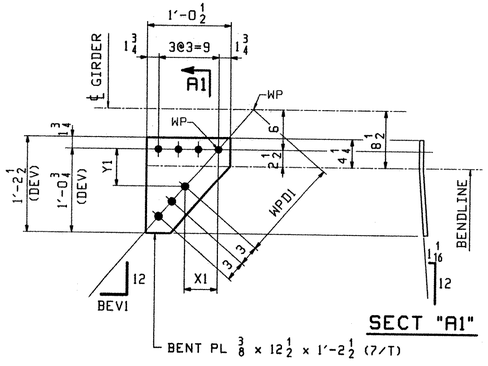
SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION:	GIRDER STANDARDS	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/19
	BRIDGE NO. 25A	CHK'D BY	
	SEARSBURG, VERMONT	DO	08/26
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION	648-BR25a-x1	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

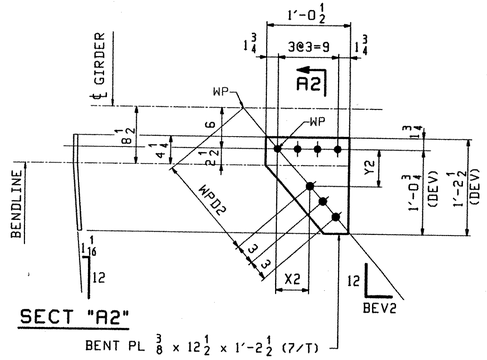
JOB NO.	DRG. NO.
166	X1
	REV. △

ATD Wed Aug 28 13:45:57 CDT 2002 /users/jobs/2242/X1.dwg



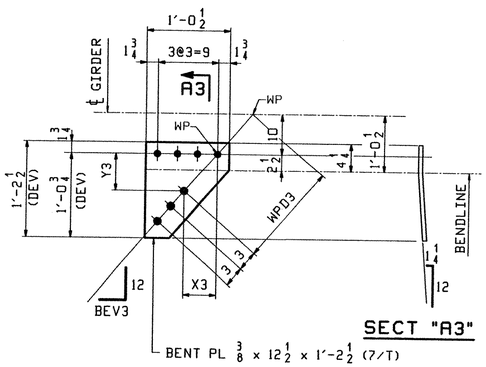
16" BTM FLANGE

MARK	REQ'D	BEV1	WPD1	Y1	X1
x2a	1	$8\frac{13}{16}$	1'-3	$6\frac{1}{16}$	$4\frac{1}{2}$
x2b	1	9	1'-3	6	$4\frac{1}{2}$
x2c	1	$9\frac{1}{8}$	1'-3	$5\frac{15}{16}$	$4\frac{1}{2}$
x2d	2	$9\frac{5}{16}$	1'-3	$5\frac{7}{8}$	$4\frac{9}{16}$
x2g	1	$9\frac{11}{16}$	1'-3 1/2	$6\frac{1}{16}$	$4\frac{7}{8}$
x2h	1	$9\frac{7}{8}$	1'-3 1/2	$5\frac{15}{16}$	$4\frac{15}{16}$
x2k	1	$10\frac{1}{8}$	1'-3 1/2	$5\frac{7}{8}$	$4\frac{15}{16}$



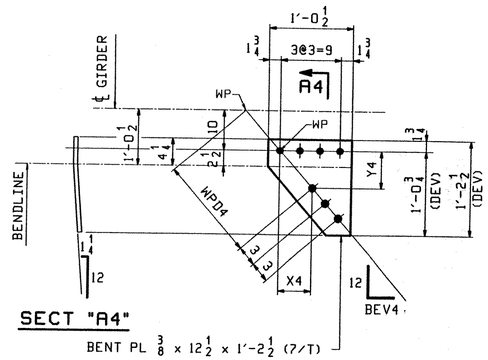
16" BTM FLANGE

MARK	REQ'D	BEV2	WPD2	Y2	X2
x2m	1	$8\frac{13}{16}$	1'-3	$6\frac{1}{16}$	$4\frac{1}{2}$
x2n	1	9	1'-3	6	$4\frac{1}{2}$
x2s	2	$9\frac{1}{8}$	1'-3	$5\frac{15}{16}$	$4\frac{1}{2}$
x2t	1	$9\frac{5}{16}$	1'-3	$5\frac{7}{8}$	$4\frac{9}{16}$
x2v	1	$9\frac{11}{16}$	1'-3 1/2	$6\frac{1}{16}$	$4\frac{7}{8}$
x2w	1	$9\frac{15}{16}$	1'-3 1/2	$5\frac{15}{16}$	$4\frac{15}{16}$
x2y	1	$10\frac{5}{16}$	1'-3 1/2	$5\frac{3}{4}$	$4\frac{15}{16}$



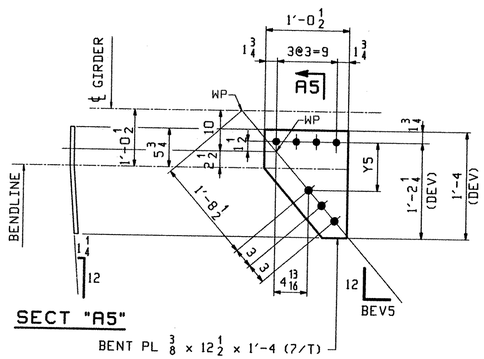
24" BTM FLANGE

MARK	REQ'D	BEV3	WPD3	Y3	X3
x2ab	18	$8\frac{13}{16}$	1'-8 1/2	$6\frac{1}{2}$	$4\frac{13}{16}$
x2ac	9	$8\frac{15}{16}$	1'-8 1/2	$6\frac{7}{16}$	$4\frac{13}{16}$
x2ad	9	9	1'-8 1/2	$6\frac{3}{8}$	$4\frac{13}{16}$
x2af	13	$9\frac{1}{8}$	1'-8 1/2	$6\frac{5}{16}$	$4\frac{13}{16}$
x2ag	4	$9\frac{3}{16}$	1'-8 1/2	$6\frac{1}{4}$	$4\frac{13}{16}$
x2ah	17	$9\frac{5}{16}$	1'-8 1/2	$6\frac{3}{16}$	$4\frac{13}{16}$



24" BTM FLANGE

MARK	REQ'D	BEV4	WPD4	Y4	X4
x2ak	17	$8\frac{13}{16}$	1'-8 1/2	$6\frac{1}{2}$	$4\frac{13}{16}$
x2am	18	9	1'-8 1/2	$6\frac{3}{8}$	$4\frac{13}{16}$
x2an	15	$9\frac{1}{8}$	1'-8 1/2	$6\frac{5}{16}$	$4\frac{13}{16}$
x2as	1	$9\frac{3}{16}$	1'-8 1/2	$6\frac{1}{4}$	$4\frac{13}{16}$
x2at	17	$9\frac{5}{16}$	1'-8 1/2	$6\frac{3}{16}$	$4\frac{13}{16}$



24" BTM FLANGE

MARK	REQ'D	BEV5	Y5
x2bk	1	$8\frac{13}{16}$	8
x2bn	1	$9\frac{1}{8}$	$7\frac{13}{16}$

RECEIVED
CK'D BY DV CK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		$\frac{15}{16}$"ø (UN)	

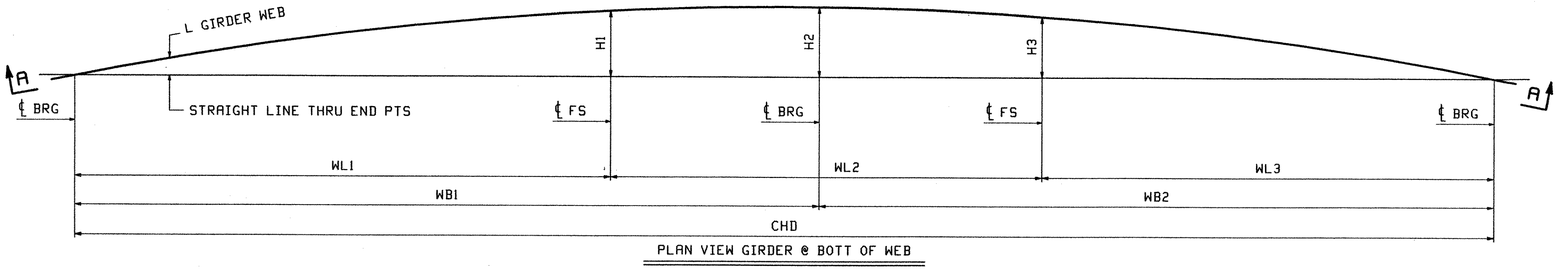
SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER STANDARDS	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/19
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/26
CONTRACTOR: J.A. McDONALD	APPROV BY	
TENSOR 2242	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION	649-BR25A-X2	

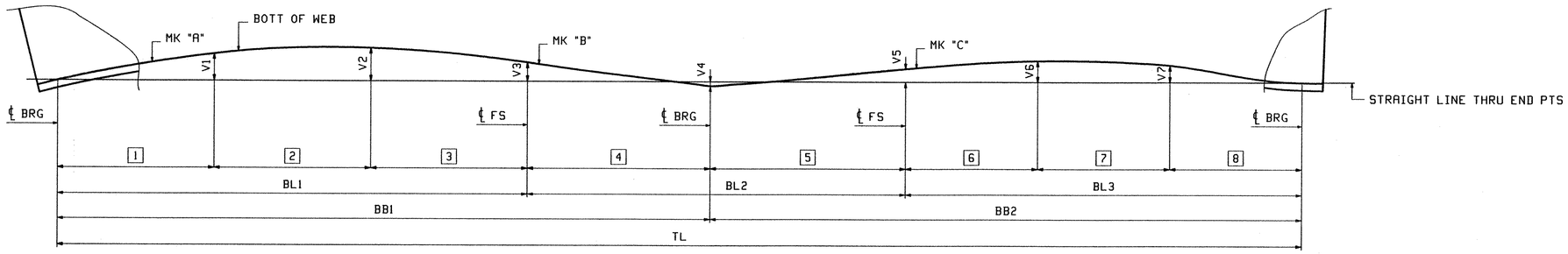
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 166 | DRG. NO. X2 | REV. △

RTS Tue Sep 3 14:00:35 EDT 2002 /users/jobs/2242/x2.1 Rev0



PLAN VIEW GIRDER @ BOTT OF WEB



DEVELOPED SECTION A-A

DIMENSIONS GIVEN ALONG ℄ WEB

LINE	BL1	BL2	BL3	BB1	BB2	1	2	3	4	5	6	7	8	TL	"A"	"B"	"C"
1	107'-5 5/8	86'-6 1/4	90'-8 7/16	149'-3 13/16	135'-4 1/2	38'-7 15/16	28'-8 3/4	40'-0 15/16	41'-10 3/16	44'-8 1/16	31'-7 9/16	28'-9 3/8	30'-3 1/2	284'-8 5/16	G1A	G1B	G1C
2	109'-6 7/8	85'-3 1/2	90'-11 3/16	150'-1 7/16	135'-8 1/8	45'-8 1/4	28'-4 5/8	35'-5 15/16	40'-6 5/8	44'-8 15/16	35'-6 13/16	28'-5 5/16	26'-11 1/16	285'-9 9/16	G2A	G2B	G2C
3	115'-10 5/8	84'-3 9/16	86'-9 7/16	150'-11 3/4	135'-11 7/8	38'-9 1/16	42'-0 7/8	35'-0 11/16	35'-1 1/8	49'-2 7/16	35'-1 5/8	28'-1 3/16	23'-6 5/8	286'-11 5/8	G3A	G3B	G3C
4	108'-5 3/16	83'-2 13/16	96'-6 7/16	151'-10 9/16	136'-3 7/8	46'-0 15/16	27'-8 1/2	34'-7 3/4	43'-5 3/8	39'-9 7/16	34'-8 5/8	27'-9 1/8	34'-0 11/16	288'-2 7/16	G4A	G4B	G4C
5	110'-10 3/8	82'-7 1/2	96'-0 1/8	152'-9 15/16	136'-8 1/16	39'-9 7/16	41'-0 5/8	30'-0 5/16	41'-11 9/16	40'-7 15/16	38'-1	27'-5 1/16	30'-6 1/16	289'-6	G5A	G5B	G5C

LINE	V1	V2	V3	V4	V5	V6	V7	WL1	WL2	WL3	H1	H2	H3	WB1	WB2	CHD
1	4 1/2	5 3/8	3	11/16	2 1/8	3 3/8	2 11/16	106'-8 3/8	86'-5 11/16	89'-11 7/16	12'-1 5/8	12'-10 9/16	11'-2 1/2	148'-6 3/8	134'-7 7/8	283'-1 1/2
2	4 3/4	5 1/8	2 7/8	11/16	2	3 5/16	2 7/16	108'-9 1/4	85'-3	90'-1 7/8	12'-5 3/8	13'-1 5/8	11'-5 1/16	149'-3 3/4	134'-10 3/8	284'-2 1/8
3	4 1/4	4 7/8	2 3/8	11/16	2 3/16	3 3/16	1 15/16	115'-0 9/16	84'-2 7/8	86'-0	12'-11 1/4	13'-4 3/4	11'-4	150'-1 5/8	135'-1 13/16	285'-3 7/16
4	4 5/8	5	3	3/4	1 9/16	3	2 5/8	107'-6 13/16	83'-2 5/16	95'-8 5/16	12'-10 7/16	13'-8 1/8	12'-2 5/8	151'-0 1/16	135'-5 3/8	286'-5 7/16
5	4 3/16	4 13/16	2 13/16	3/4	1 1/2	2 15/16	2 3/8	109'-11 5/8	82'-6 15/16	95'-1 5/8	13'-2 7/8	13'-11 9/16	12'-5	151'-11	135'-9 1/8	287'-8 3/16

NOTES
FOR GENERAL NOTES SEE DWG GN1
ALL DIMENSIONS GIVEN AT BOTT OF WEB (UN)

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9.9.02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

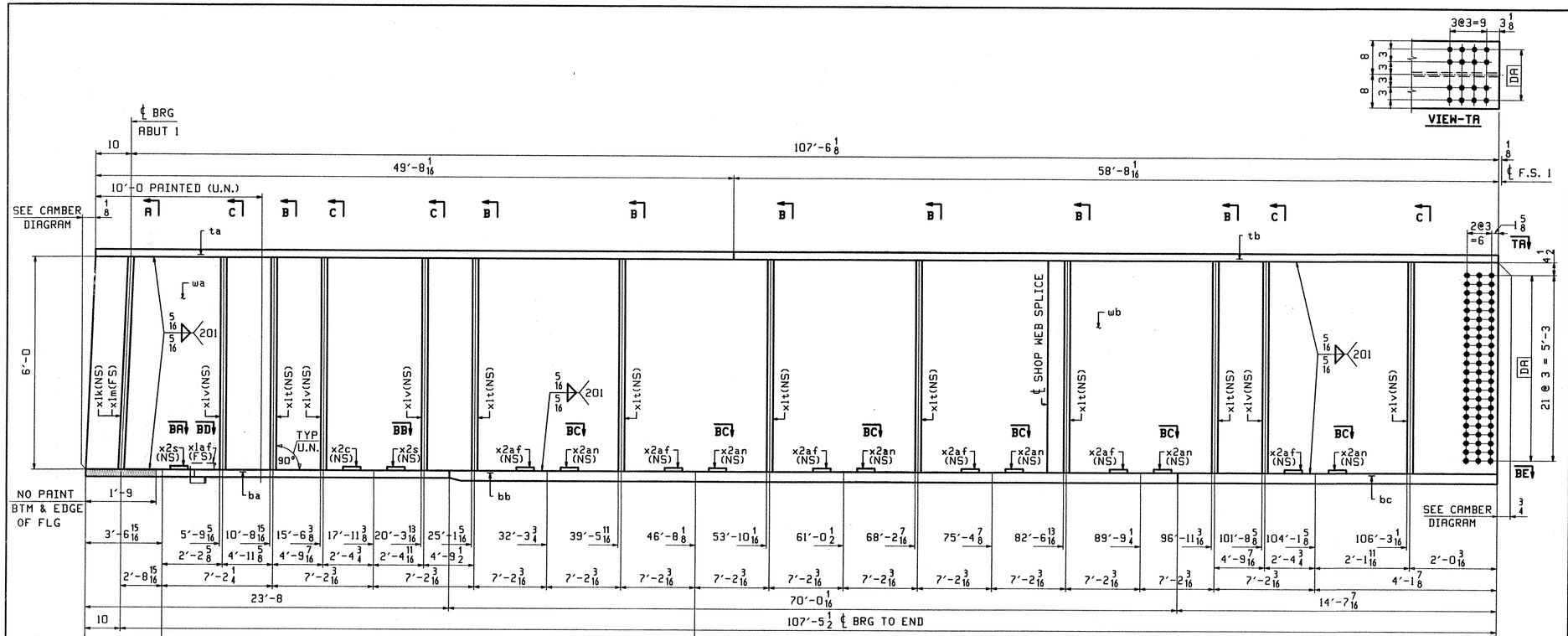
RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

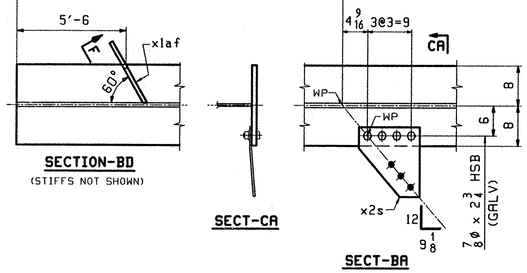
DESCRIPTION:	SHOP ASSEMBLY	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	VWJ	08/24
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	08/29
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GAITI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION	650-BR25A-03	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

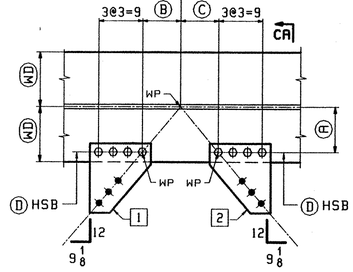
JOB NO.	DRG. NO.
166	SA1
	REV. △

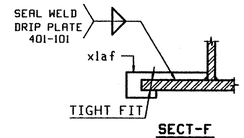
VWJ Thu Aug 29 14:43:23 CDT 2002 /users/jobs/2242/SA1.dwg





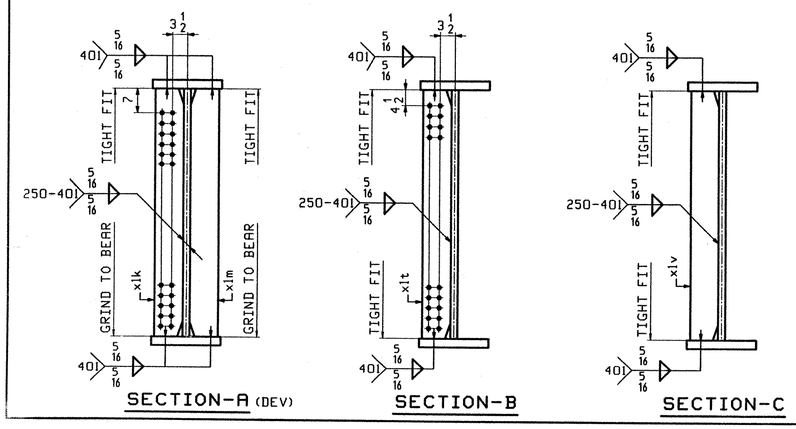
SECT	WD	A	B	C	1	2	D
BB	8	6	4 9/16	4 9/16	x2c	x2s	7/8ø x 2 3/4
BC	1′-0	10	7 5/8	7 5/8	x2af	x2an	7/8ø x 3 1/4

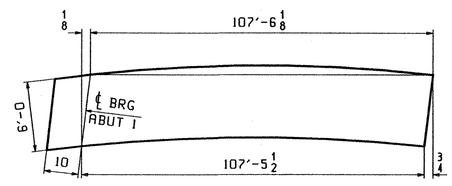




ONE - GIRDER - G1A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1 & F2.
4. FOR GENERAL NOTES SEE SHT. GN1.





ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIA	1		GIRDER				32735	
5	A		1	wa	PL 1/2x74	79	10 3/16	(M270-50WT2) (H2-3)		
6	G		1	wb	PL 1/2x72 1/4	28	6 1/4	(M270-50WT2) (H2-3)		
3	N		1	ta	PL 1x16	49	8 1/16	(M270-50WT2) (H2-3)		
3	G		1	tb	PL 1x16	58	8 1/16	(M270-50WT2) (H2-3)		
4	C		1	ba	PL 1x16	23	8	(M270-50WT2) (H2-3)		
1	C		1	bb	PL 1 1/2x24	70	0 1/16	(M270-50WT2) (H2-3)		
1	G		1	bc	PL 1 1/2x24	14	7 7/16	(M270-50WT2) (H2-3)		
7	M		1	x1k	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	M		1	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	P		7	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	T		2	x2s	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2c	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2af	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2an	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		5	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	R		1	x1af	PL 1/4x3	0	11			
9	C		4		7/8 ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 ø HSW			(F436) GALV		
9	M		8		7/8 ø HSB	0	2 3/4	(A325-3)		
9	P		48		7/8 ø HSB	0	3 1/4	(A325-3)		
9	T		56		7/8 ø HSW			(F436H)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9902									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10′-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

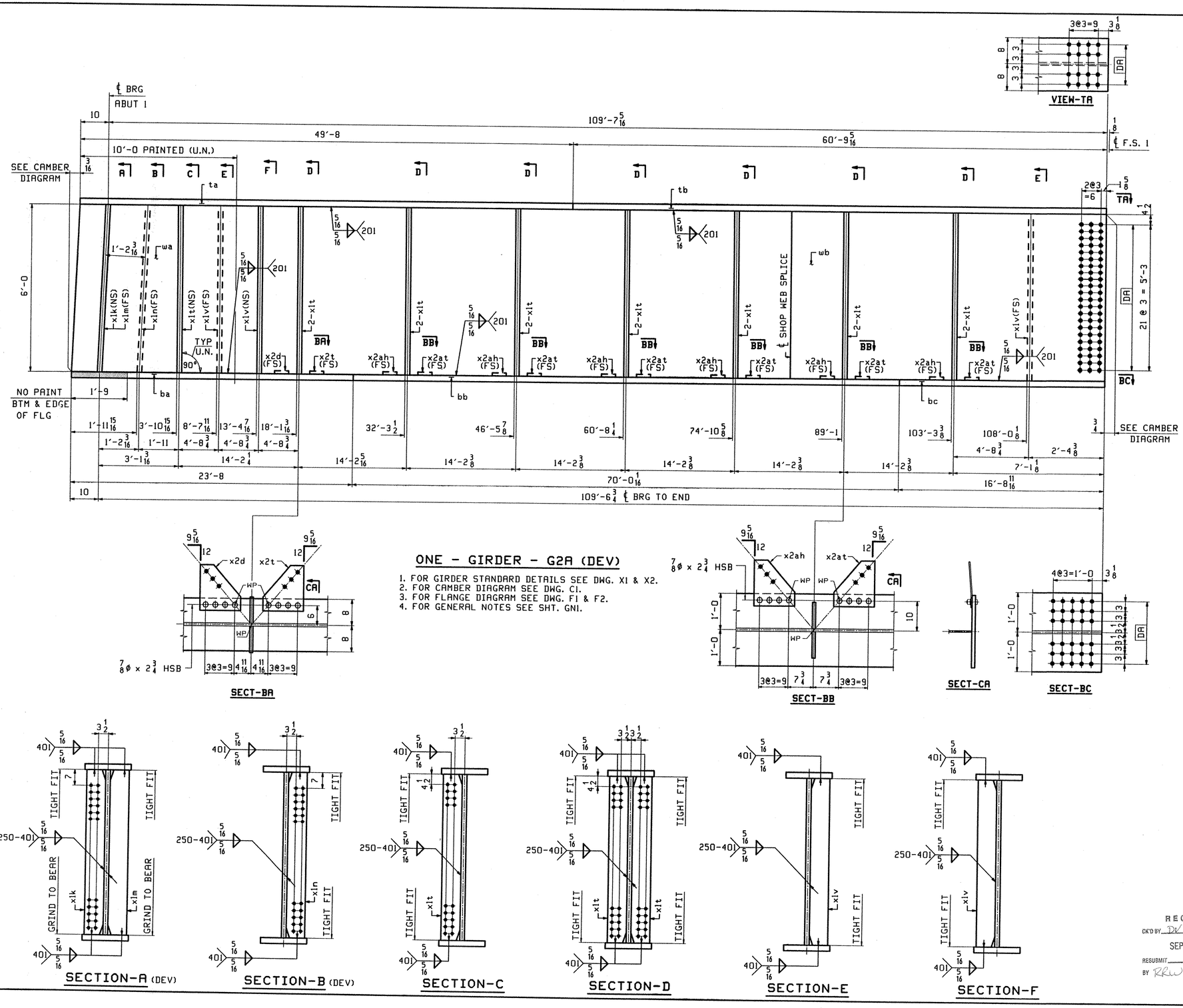
DESCRIPTION: GIRDER - G1A	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/21
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/26
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		651-BR25A-3S1

TENSOR 2242

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 166 | DRG. NO. 1 | REV. △

Wed Aug 28 13:51:50 EDT 2002 /users/jobs/2242/1 Rev0



SECT-BA

SECT-BB

SECT-CA

SECT-BC

ONE - GIRDER - G2A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1 & F2.
4. FOR GENERAL NOTES SEE SHT. GN1.

SECTION-A (DEV)

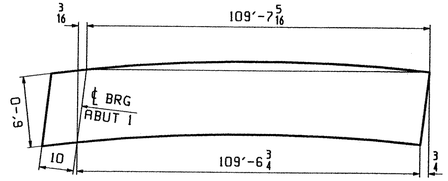
SECTION-B (DEV)

SECTION-C

SECTION-D

SECTION-E

SECTION-F



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G2A	1		GIRDER				30356	
5	A		1	wa	PL 1/2x73 7/8	79	10 1/4	(M270-50WT2) (H2-3)		
6	C		1	wb	PL 1/2x72 1/4	30	7 1/2	(M270-50WT2) (H2-3)		
3	N		1	ta	PL 1x16	49	8	(M270-50WT2) (H2-3)		
3	C		1	tb	PL 1x16	60	9 5/16	(M270-50WT2) (H2-3)		
4	C		1	ba	PL 1x16	23	8	(M270-50WT2) (H2-3)		
2	C		1	bb	PL 1x24	70	0 1/16	(M270-50WT2) (H2-3)		
2	N		1	bc	PL 1x24	16	8 11/16	(M270-50WT2) (H2-3)		
7	M		1	x1k	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	M		1	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	P		15	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	T		1	x2d	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2t	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2ah	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2at	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		1	x1n	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	P		3	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
9	M		56		7/8 ø HSB	0	2 3/4	(A325-3)		
9	T		56		7/8 ø HSW			(F436W)		

JOB NO.	DRAWING NO.	REV.
	2	

OUT FOR APPROVAL	9-9-02						
OUT FOR APPROVAL							
ISSUED TO SHOP							
FIELD & OFFICE							

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DK CK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

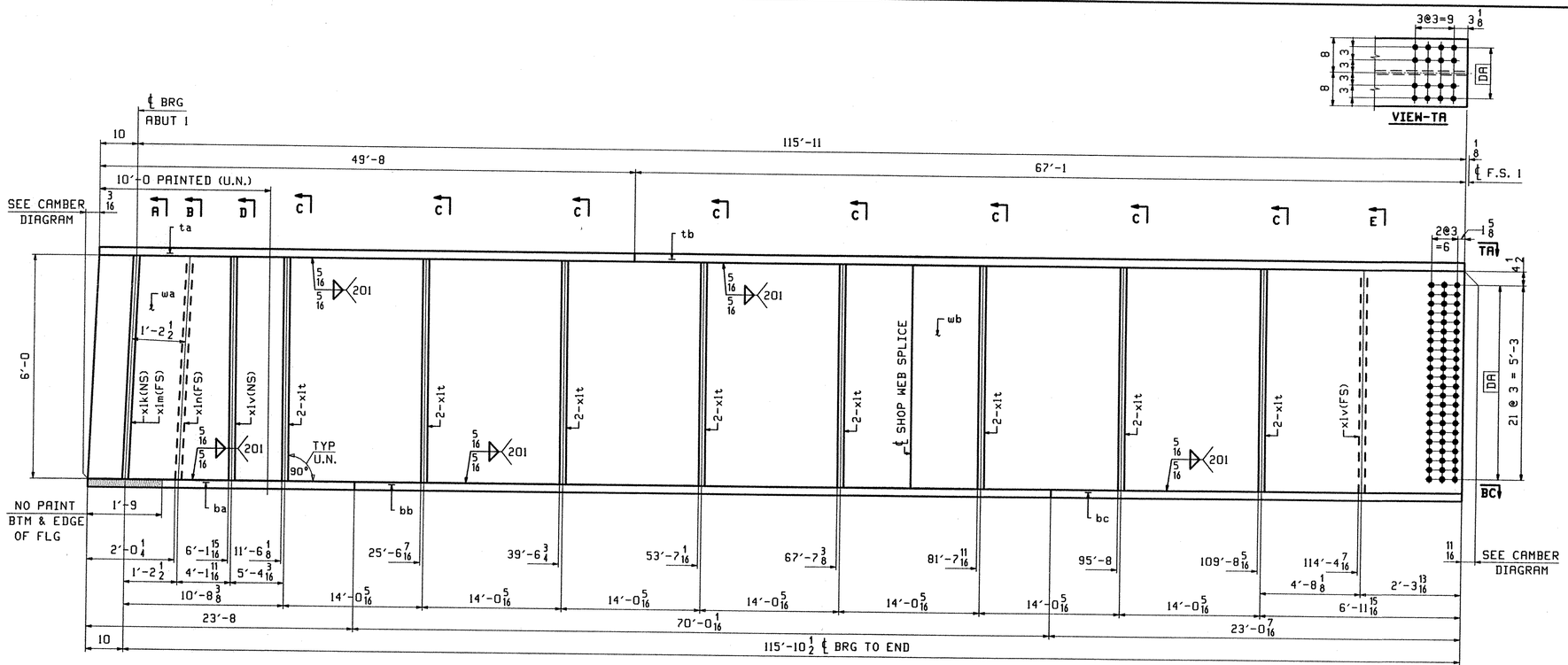
DESCRIPTION: GIRDER - G2A	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/22
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/26
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION	652.RR254-552	

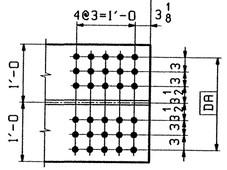
TENSOR 242

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	2
	REV. △

RTD Wed Aug 28 14:04:17 EDT 2002 /users/jobs/2242/2 : Rev0

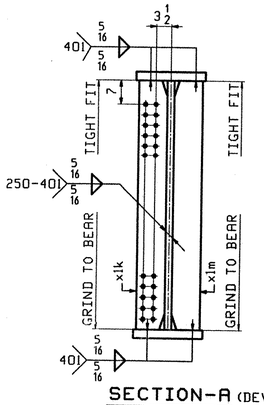




SECT-BC

ONE - GIRDER - G3A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1 & F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



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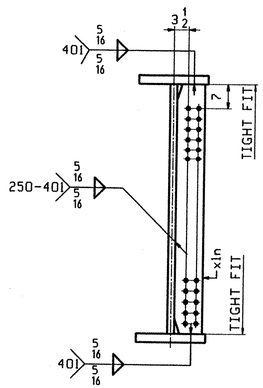

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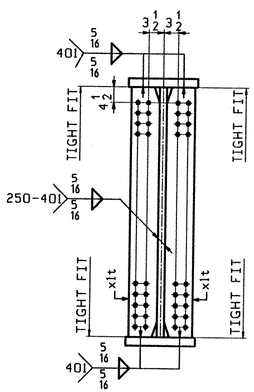
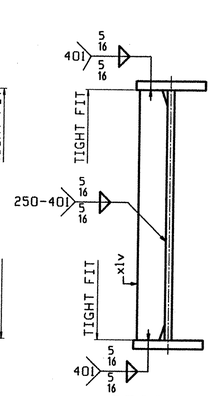
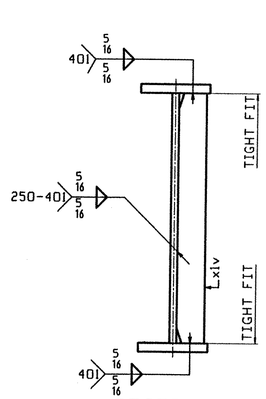


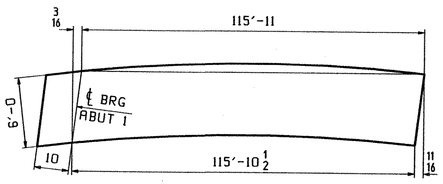
SECTION-C



SECTION-D



SECTION-E



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

RECEIVED
SEP 0 9 2002

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.		REV.
									3		
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		G3A	1		GIRDER				31680		
5	J		1	wa	PL 1/2x73 3/4	79	4 1/4	(M270-50WT2) (H2-3)			
5	U		1	wb	PL 1/2x72 1/4	37	5 3/16	(M270-50WT2) (H2-3)			
3	N		1	ta	PL 1x16	49	8	(M270-50WT2) (H2-3)			
2	G		1	tb	PL 1x16	67	1	(M270-50WT2) (H2-3)			
4	C		1	ba	PL 1x16	23	8	(M270-50WT2) (H2-3)			
2	C		1	bb	PL 1x24	70	0 1/16	(M270-50WT2) (H2-3)			
2	E		1	bc	PL 1x24	23	0 7/16	(M270-50WT2) (H2-3)			
7	M		1	x1k	PL 1x8	6	0	(M270-50WT2) (H2-3)			
7	M		1	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)			
7	P		16	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)			
7	P		1	x1n	PL 1/2x8	6	0	(M270-50WT2) (H2-3)			
7	P		2	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)			

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

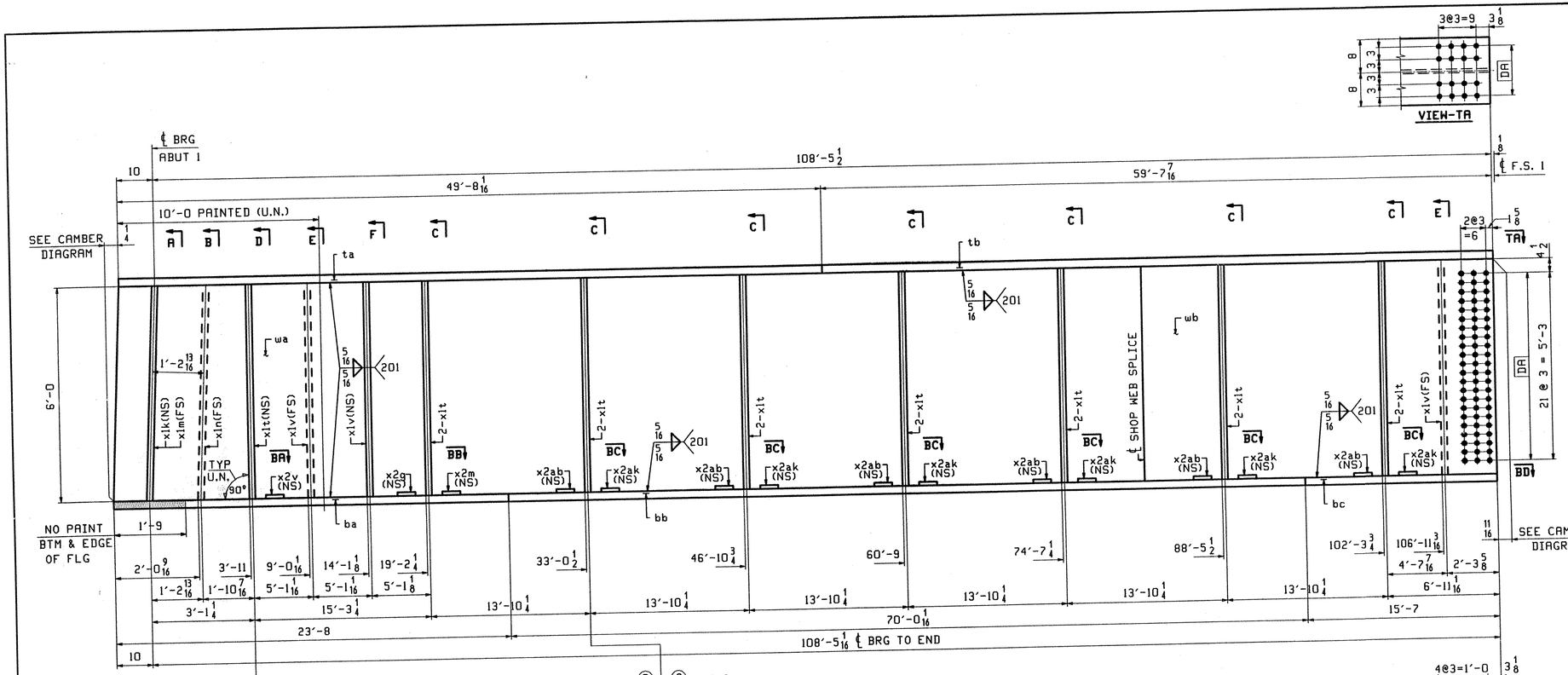
DESCRIPTION:	GIRDER - G3A	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/22
	BRIDGE NO. 25A	CHK'D BY	
	SEARSBURG, VERMONT	DO	08/26
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GAITI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION	653-B225A-553	

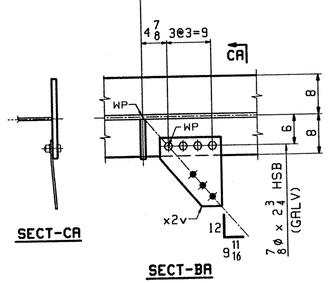
OK'D BY DV OK'D BY
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	3
	REV. △

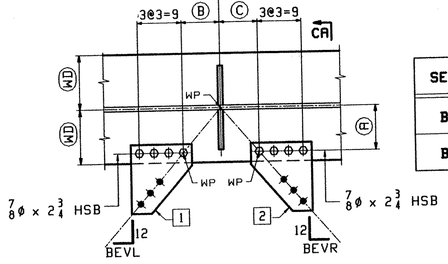
FTS Wed Aug 28 14:04:55 EDT 2002 /users/jobs/2242/3.1 Rev0





SECT-CA

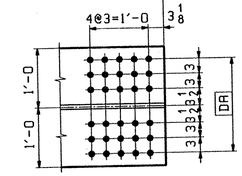
SECT-BA



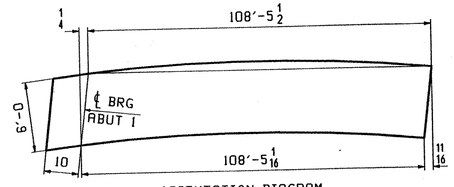
SECT	WD	Ⓐ	Ⓑ	Ⓒ	BEVL	BEVR	1	2
BB	8	6	4 7/8	4 7/16	9 11/16	8 13/16	x2g	x2m
BC	1′-0	10	7 3/8	7 3/8	8 13/16	8 13/16	x2ab	x2ak

ONE - GIRDER - G4A (DEV)

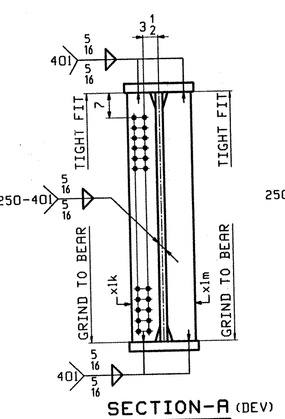
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1 & F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



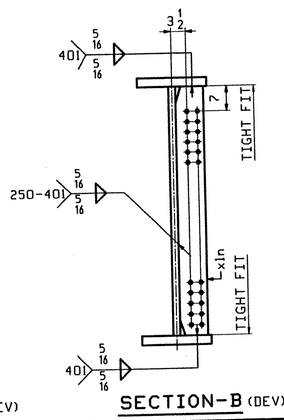
SECT-BD



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1



SECTION-A (DEV)



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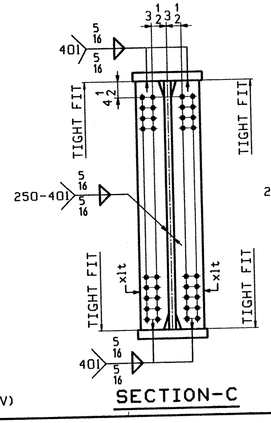
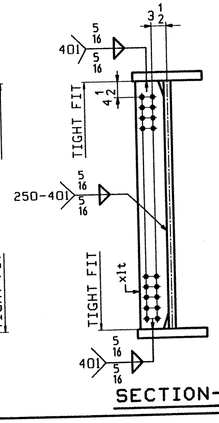
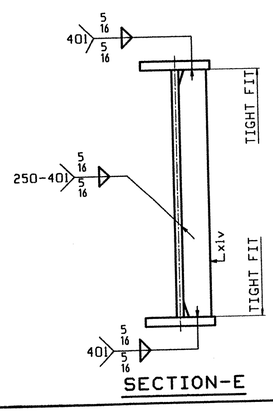


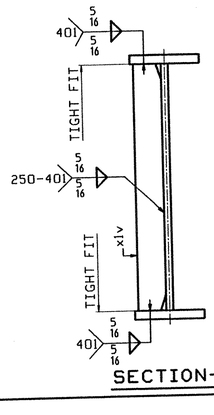
SECTION-C



SECTION-D



SECTION-E



SECTION-F

RECEIVED
OK'D BY DV OK'D BY
SEP 0 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4A	1		GIRDER				30062	
5	J		1	wa	PL 1/2x73 3/4	79	4 3/16	(M270-50WT2) (H2-3)		
6	E		1	wb	PL 1/2x72 1/4	29	11 3/4	(M270-50WT2) (H2-3)		
3	N		1	ta	PL 1x16	49	8 1/16	(M270-50WT2) (H2-3)		
3	E		1	tb	PL 1x16	59	7 7/16	(M270-50WT2) (H2-3)		
4	C		1	ba	PL 1x16	23	8	(M270-50WT2) (H2-3)		
2	C		1	bb	PL 1x24	70	0 1/16	(M270-50WT2) (H2-3)		
2	S		1	bc	PL 1x24	15	7	(M270-50WT2) (H2-3)		
7	M		1	x1k	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	M		1	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	P		15	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	T		1	x2v	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2g	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2m	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2ab	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2ak	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		1	x1n	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	P		3	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
9	C		4		7/8 ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 ø HSW			(F436) GALV		
9	M		56		7/8 ø HSB	0	2 3/4	(A325-3)		
9	T		56		7/8 ø HSW			(F436H)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10′-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G4A	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/22
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/27
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

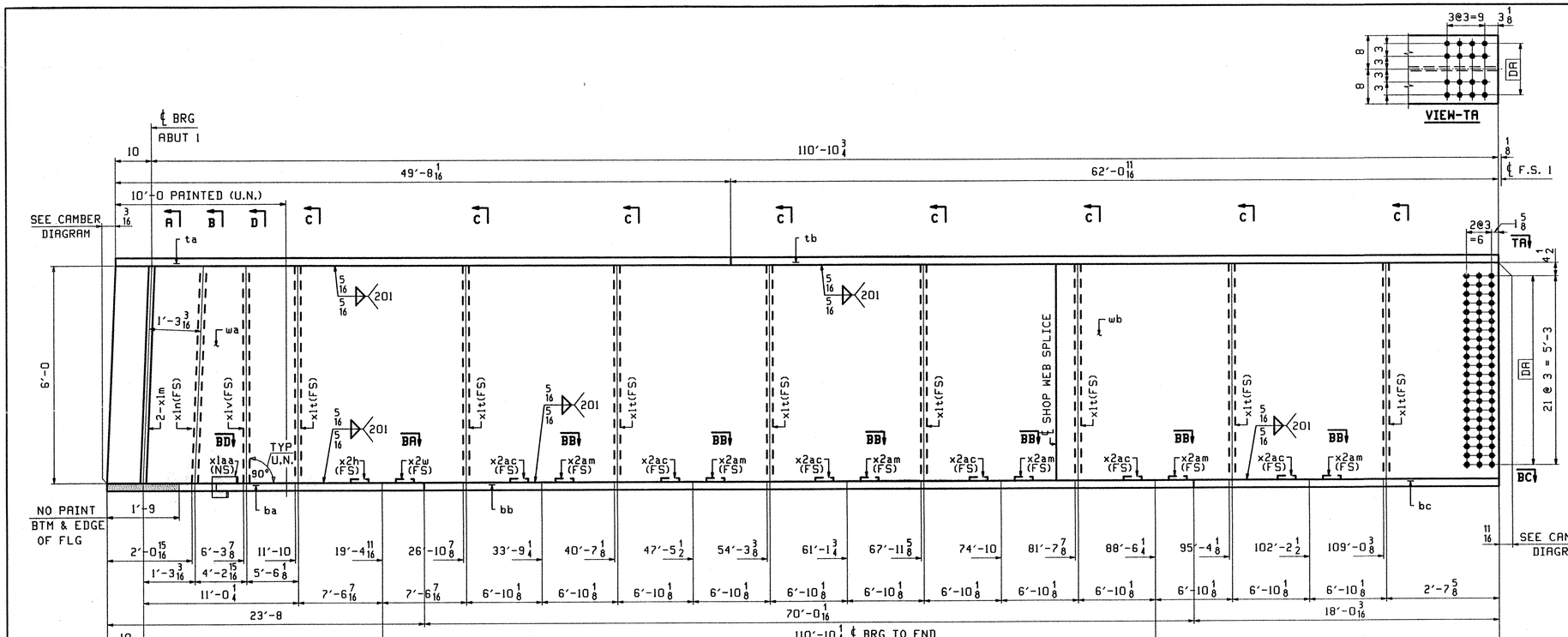
TENSOR 2242

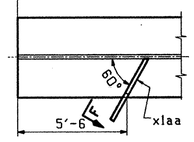
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	4
	REV. △

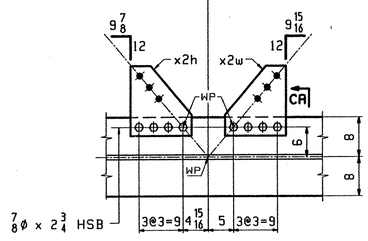
654- BR25A-SS4

Wed Aug 28 14:19:07 EDT 2002 /users/jobs/2242/4 : Rev0





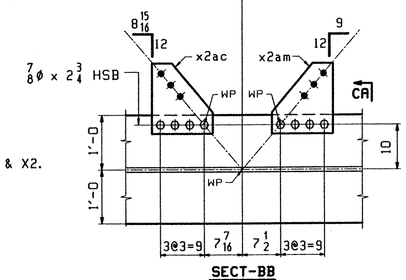
SECTION-BD
(STIFFS NOT SHOWN)



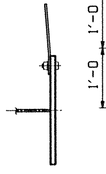
SECT-BA

ONE - GIRDER - G5A (DEV)

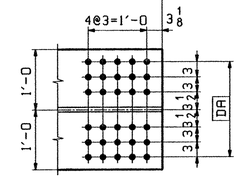
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1 & F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



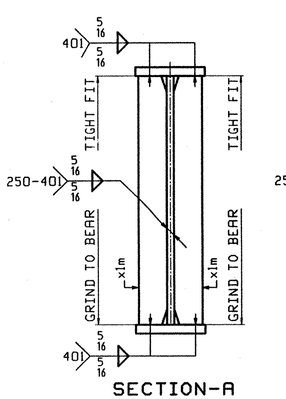
SECT-BB



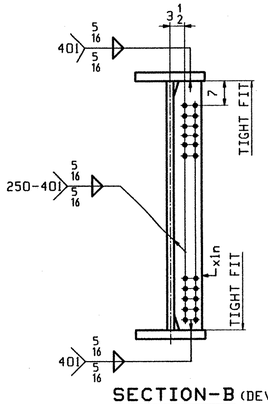
SECT-CA



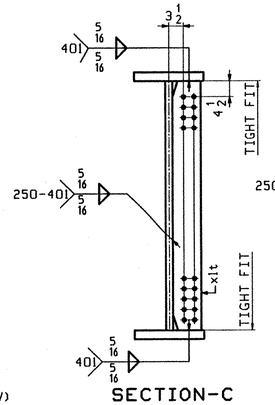
SECT-BC



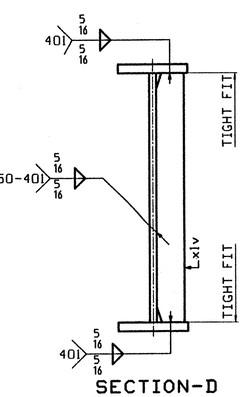
SECTION-A



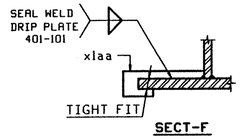
SECTION-B (DEV)



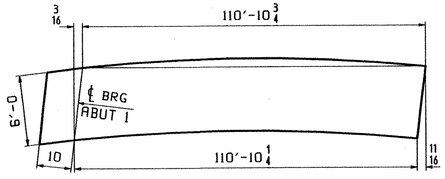
SECTION-C



SECTION-D



SECT-F



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

RECEIVED
OK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RW DATE 9-27-02

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5A	1		GIRDER				29922	
5	J		1	wa	PL 1/2x73 5/8	79	4 1/16	(M270-50WT2) (H2-3)		
6	A		1	wb	PL 1/2x72 1/4	32	4 15/16	(M270-50WT2) (H2-3)		
3	N		1	ta	PL 1x16	49	8 1/16	(M270-50WT2) (H2-3)		
2	Y		1	tb	PL 1x16	62	0 11/16	(M270-50WT2) (H2-3)		
4	C		1	ba	PL 1x16	23	8	(M270-50WT2) (H2-3)		
2	C		1	bb	PL 1x24	70	0 1/16	(M270-50WT2) (H2-3)		
2	J		1	bc	PL 1x24	18	0 3/16	(M270-50WT2) (H2-3)		
7	M		2	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	P		8	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	T		1	x2h	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2w	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2ac	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2am	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		1	x1n	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	P		1	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	R		1	x1aa	PL 1/4x3	0	11			
9	M		56		7/8 ø HSB	0	2 3/4	(A325-3)		
9	T		56		7/8 ø HSW			(F436M)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-9-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

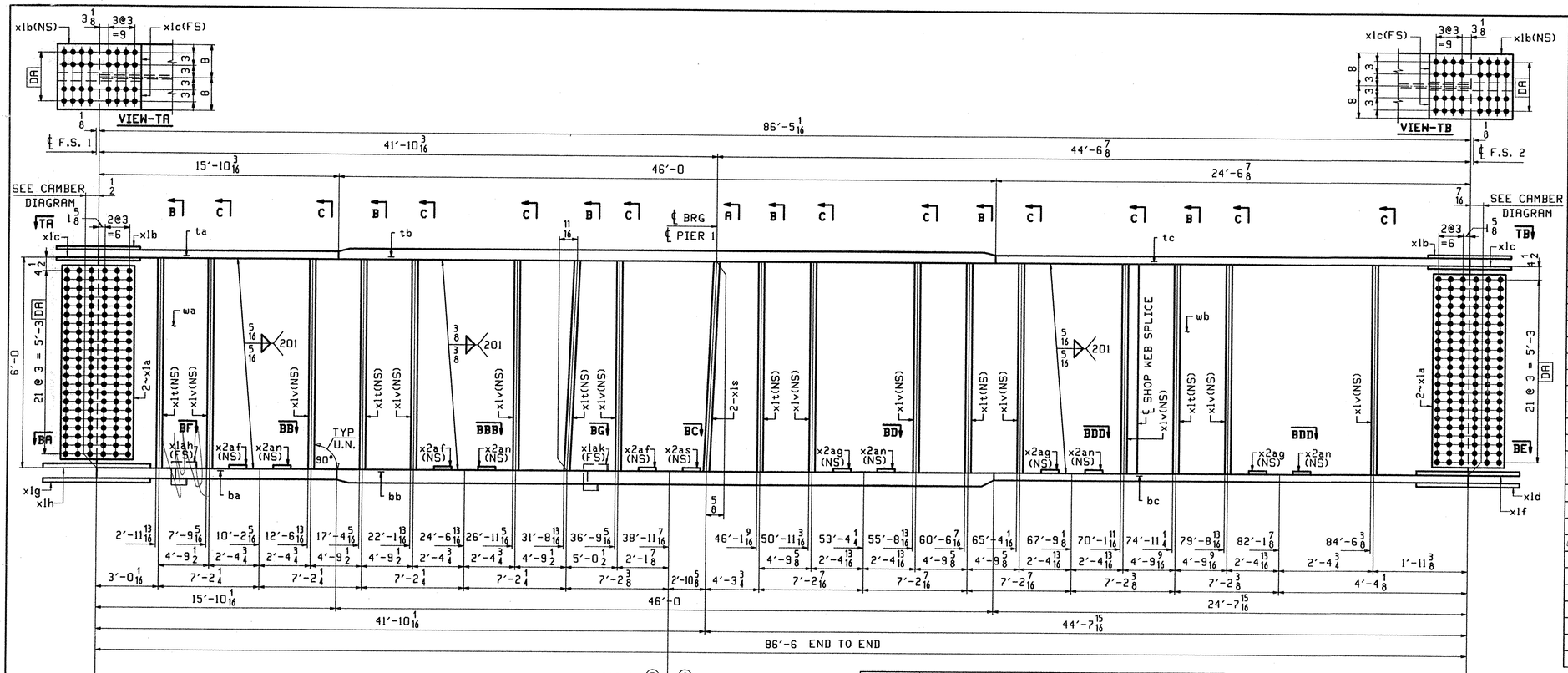
DESCRIPTION:	GIRDER - G5A	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/23
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	08/28
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GALLI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

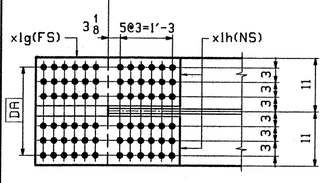
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

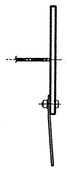
JOB NO.	DRG. NO.
166	5
	REV. △

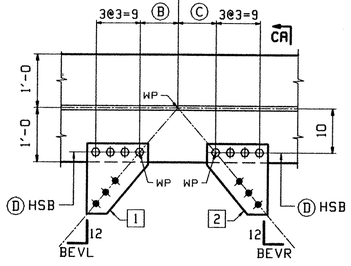
655-BR-25A-99-5

RTD mod Aug 28 14:21:25 EDT 2002 /users/jake/2242r5 : Rev0





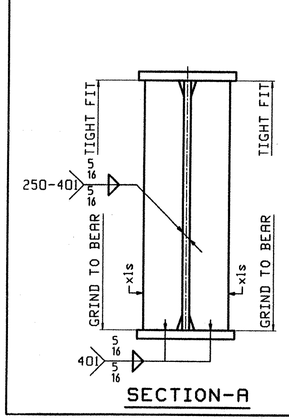


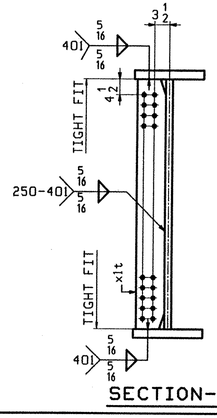


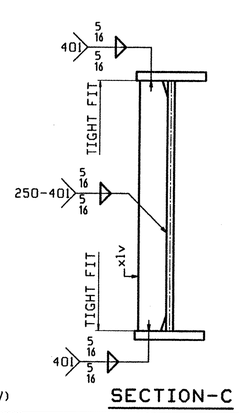
SECT	Ⓑ	Ⓒ	BEVL	BEVR	1	2	Ⓓ
BB	7 5/8	7 5/8	9 1/8	9 1/8	x2af	x2an	7/8Ø x 3 1/4
BBB	7 5/8	7 5/8	9 1/8	9 1/8	x2af	x2an	7/8Ø x 3 3/4
BC	7 5/8	7 11/16	9 1/8	9 3/16	x2af	x2as	7/8Ø x 3 3/4
BD	7 11/16	7 5/8	9 3/16	9 1/8	x2ag	x2an	7/8Ø x 3 3/4
BDD	7 11/16	7 5/8	9 3/16	9 1/8	x2ag	x2an	7/8Ø x 3

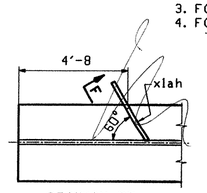
ONE - GIRDER - G1B (DEV)

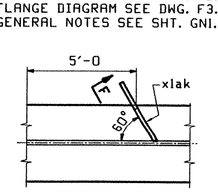
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.

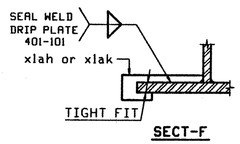


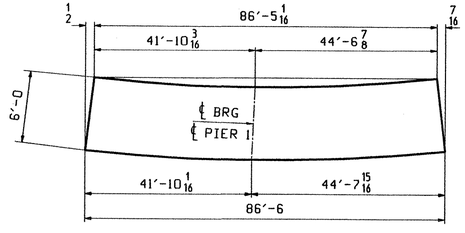


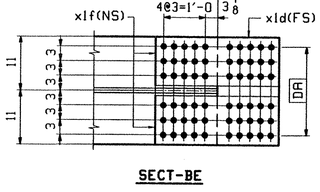












ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIB	1		GIRDER				36396	
4	Y		1	wa	PL 1/2x74 1/8	70	11 7/8	(M270-50WT2) (H2-3)		
6	S		1	wb	PL 1/2x72	15	6 3/16	(M270-50WT2) (H2-3)		
4	Q		1	ta	PL 1x16	15	10 3/16	(M270-50WT2) (H2-3)		
1	A		1	tb	PL 2x24	46	0	(M270-50WT2) (H2-3)		
4	A		1	tc	PL 1x16	24	6 7/8	(M270-50WT2) (H2-3)		
1	E		1	ba	PL 1 1/2x24	15	10 1/16	(M270-50WT2) (H2-3)		
1	A		1	bb	PL 2x24	46	0	(M270-50WT2) (H2-3)		
1	W		1	bc	PL 1 1/4x24	24	7 15/16	(M270-50WT2) (H2-3)		
7	B		4	x1a	PL 1/2x66 1/2	1	7	(M270-50WT2) (H2-3)		
7	D		2	x1b	PL 1/2x16	2	4	(M270-50WT2) (H2-3)		
7	E		4	x1c	PL 9/16x7 1/4	2	4	(M270-50WT2) (H2-3)		
7	H		1	x1g	PL 3/4x24	3	4	(M270-50WT2) (H2-3)		
7	J		2	x1h	PL 3/4x11 1/2	3	4	(M270-50WT2) (H2-3)		
7	F		1	x1d	PL 5/8x24	2	10	(M270-50WT2) (H2-3)		
7	G		2	x1f	PL 5/8x11 1/2	2	10	(M270-50WT2) (H2-3)		
7	P		6	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	N		2	x1s	PL 1 1/4x11	6	0	(M270-50WT2) (H2-3)		
7	T		3	x2af	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		5	x2an	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2as	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		3	x2ag	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		11	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	R		1	x1ah	PL 1/4x3 1/2	1	3 9/16			
7	R		1	x1ak	PL 1/4x4	1	3 9/16			
9	N		16		7/8 Ø HSB	0	3	(A325-3)		
9	P		8		7/8 Ø HSB	0	3 1/4	(A325-3)		
9	R		24		7/8 Ø HSB	0	3 3/4	(A325-3)		
9	T		48		7/8 Ø HSW			(F436W)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-27-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"Ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

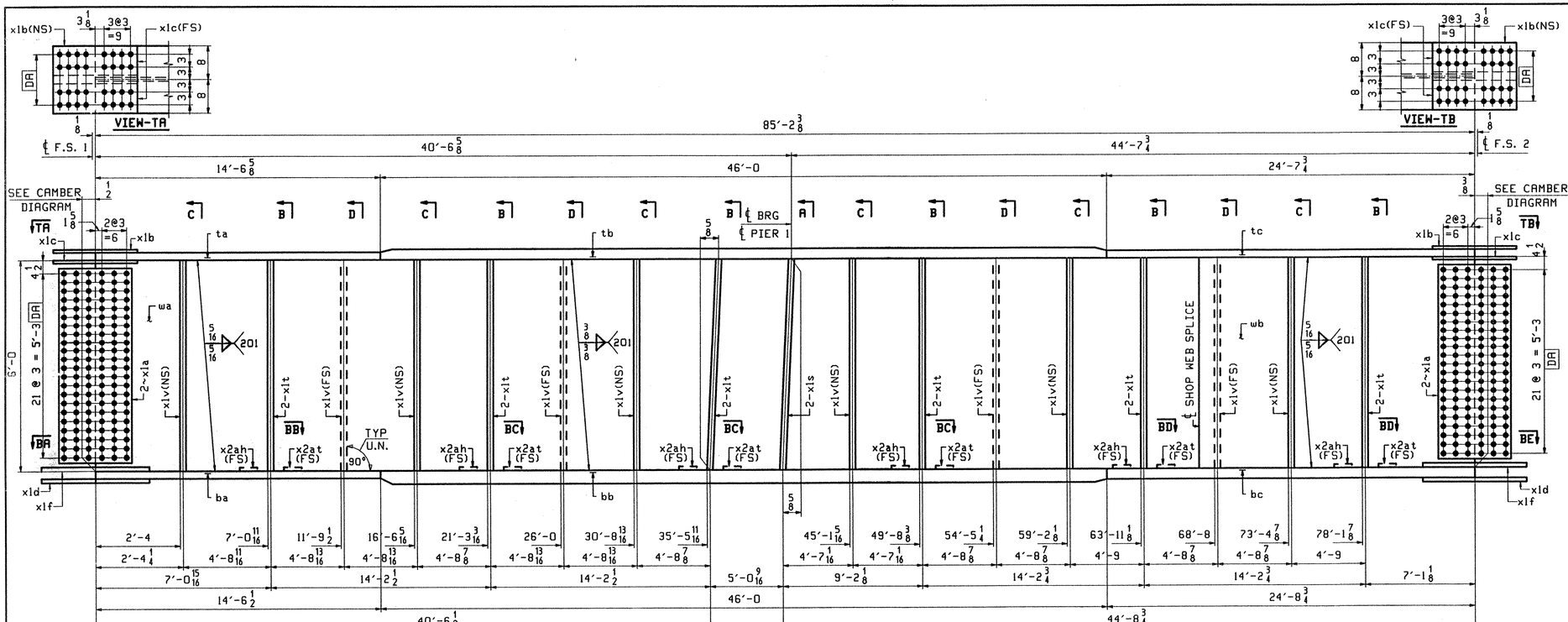
DESCRIPTION: GIRDER - G1B	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/23
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/27
TENSOR 2242 CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

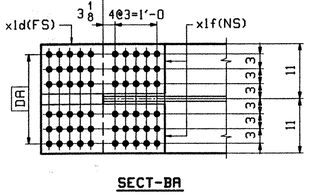
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

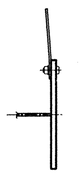
JOB NO.	DRG. NO.
166	6
	REV. △

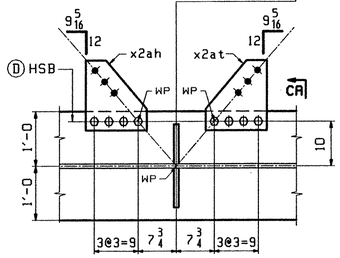
656r BR25A-556

RTD Wed Aug 28 14:32:26 EDT 2002 /users/jobs/2242/6.1 RevC





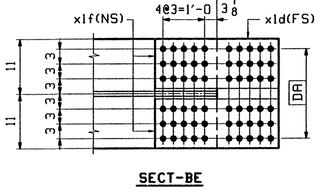


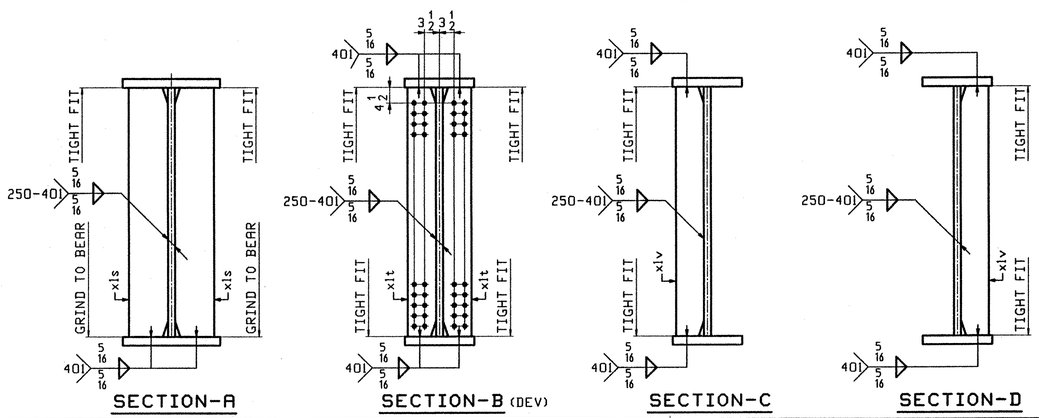


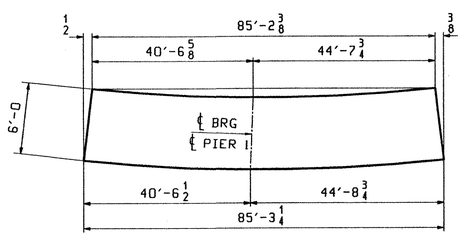
SECT	Ⓓ
BB	7/8ø x 2 3/4
BC	7/8ø x 3 3/4
BD	7/8ø x 3

ONE - GIRDER - G2B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.







ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT BY APPROVED
DATE 9-27-02

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G2B	1		GIRDER				35675	
5	G		1	wa	PL 1/2x73 7/8	66	11 7/8	(M270-50WT2) (N2-3)		
6	N		1	wb	PL 1/2x72	18	3 7/16	(M270-50WT2) (N2-3)		
4	S		1	ta	PL 1x16	14	6 5/8	(M270-50WT2) (N2-3)		
1	A		1	tb	PL 2x24	46	0	(M270-50WT2) (N2-3)		
4	A		1	tc	PL 1x16	24	7 3/4	(M270-50WT2) (N2-3)		
2	U		1	ba	PL 1x24	14	6 1/2	(M270-50WT2) (N2-3)		
1	A		1	bb	PL 2x24	46	0	(M270-50WT2) (N2-3)		
1	W		1	bc	PL 1 1/4x24	24	8 3/4	(M270-50WT2) (N2-3)		
7	B		4	xla	PL 1/2x66 1/2	1	7	(M270-50WT2) (N2-3)		
7	D		2	xlb	PL 1/2x16	2	4	(M270-50WT2) (N2-3)		
7	E		4	xlc	PL 1/2x7 1/4	2	4	(M270-50WT2) (N2-3)		
7	F		2	xld	PL 3/8x24	2	10	(M270-50WT2) (N2-3)		
7	G		4	xlf	PL 5/8x11 1/4	2	10	(M270-50WT2) (N2-3)		
7	P		12	xlt	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
7	N		2	xls	PL 1 1/4x11	6	0	(M270-50WT2) (N2-3)		
7	T		6	x2ah	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2at	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		10	xlv	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
9	M		8		7/8 ø HSB	0	2 3/4	(A325-3)		
9	N		16		7/8 ø HSB	0	3	(A325-3)		
9	R		24		7/8 ø HSB	0	3 3/4	(A325-3)		
9	T		48		7/8 ø HSW			(F436M)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G2B	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/26
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	08/27
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GAITI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

TENSOR 2242

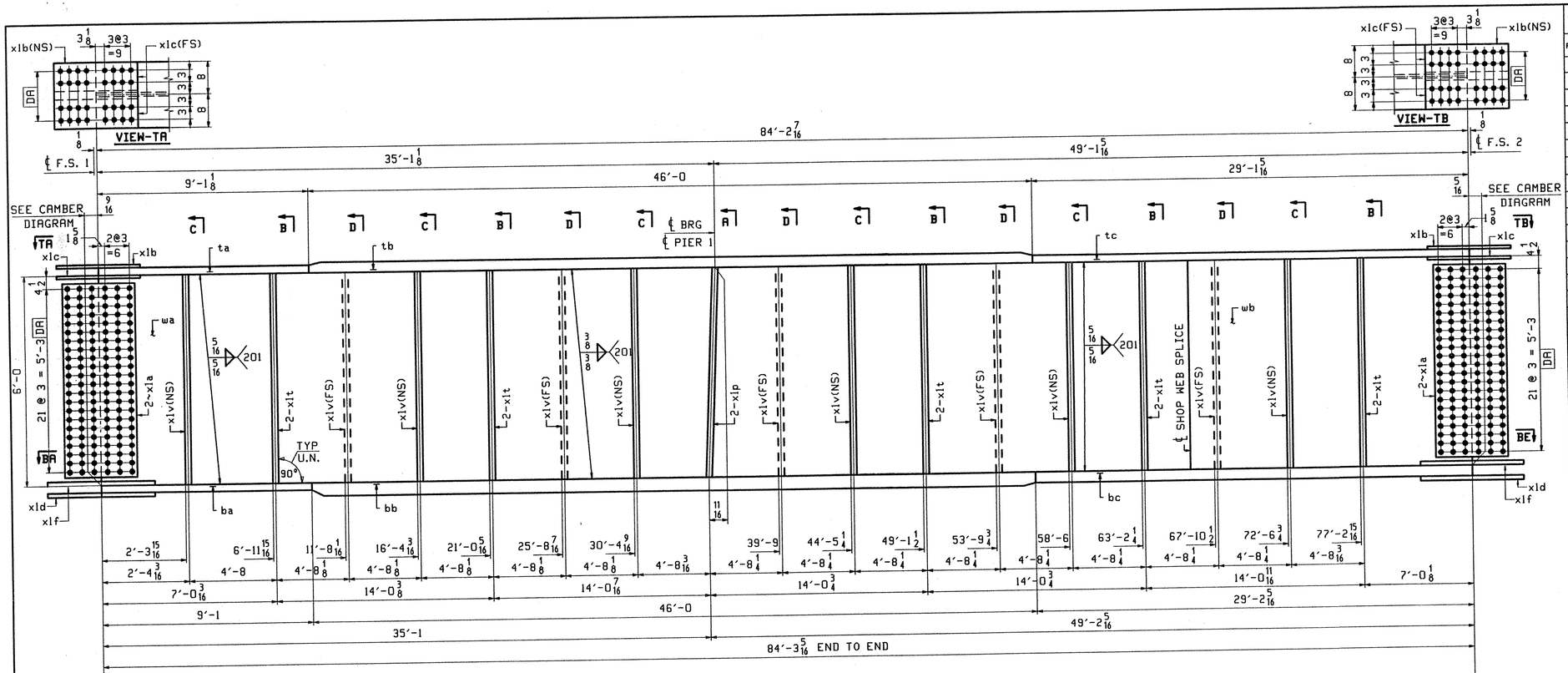
CASCO BAY STEEL STRUCTURES, INC.

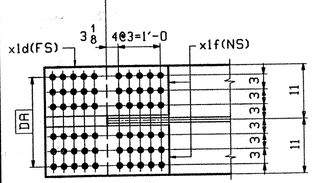
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

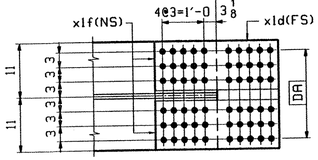
JOB NO.	DRG. NO.
166	7
	REV. △

ATD Wed Aug 28 14:37:03 EDT 2002 /users/jobs/22427/ RevD

657-BR-25A-357

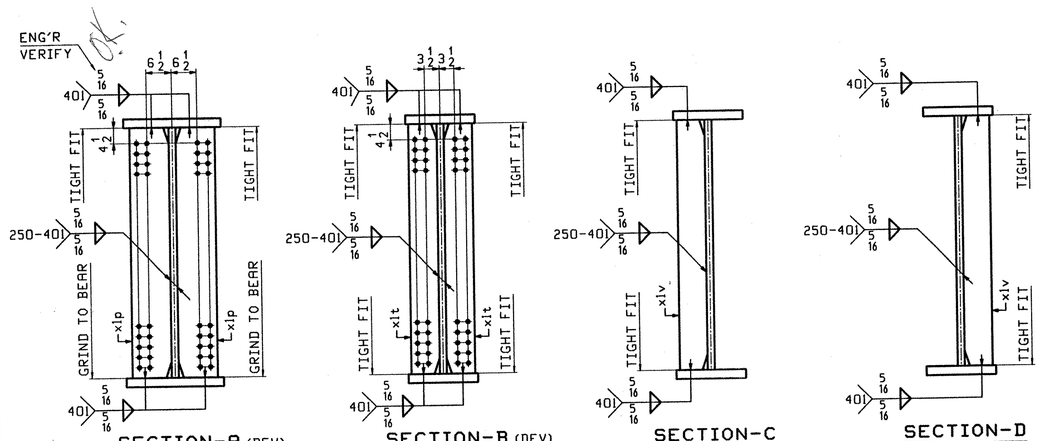


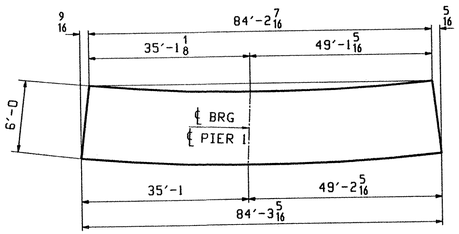




ONE - GIRDER - G3B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.





ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
									8	
		G3B	1		GIRDER				35234	
4	W		1	wa	PL 1/2x74 3/8	66	11 7/8	(M270-50WT2) (H2-3)		
6	Q		1	wb	PL 1/2x72	17	3 1/2	(M270-50WT2) (H2-3)		
4	U		1	ta	PL 1x16	9	1 1/8	(M270-50WT2) (H2-3)		
1	A		1	tb	PL 2x24	46	0	(M270-50WT2) (H2-3)		
3	Y		1	tc	PL 1x16	29	5/16	(M270-50WT2) (H2-3)		
2	W		1	ba	PL 1x24	9	1	(M270-50WT2) (H2-3)		
1	A		1	bb	PL 2x24	46	0	(M270-50WT2) (H2-3)		
1	U		1	bc	PL 1 1/4x24	29	2 5/16	(M270-50WT2) (H2-3)		
7	B		4	x1a	PL 1/2x66 1/2	1	7	(M270-50WT2) (H2-3)		
7	D		2	x1b	PL 1/2x16	2	4	(M270-50WT2) (H2-3)		
7	E		4	x1c	PL 9/16x7 1/4	2	4	(M270-50WT2) (H2-3)		
7	F		2	x1d	PL 5/8x24	2	10	(M270-50WT2) (H2-3)		
7	G		4	x1f	PL 5/8x11 1/4	2	10	(M270-50WT2) (H2-3)		
7	P		10	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	N		2	x1p	PL 1 1/4x11	6	0	(M270-50WT2) (H2-3)		
7	P		11	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RKW DATE 9-27-02

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G3B
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

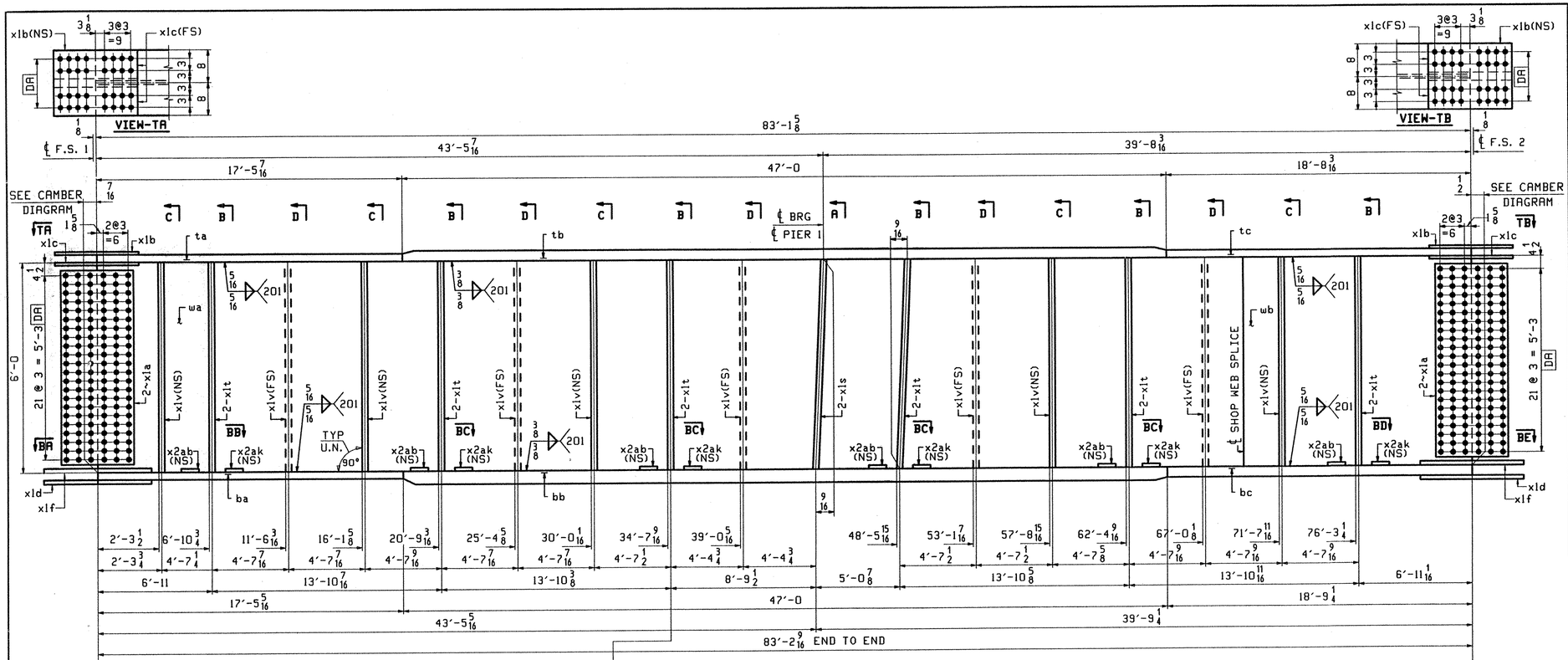
	DRAWN BY	DATE
	RTD	08/26
	CHKD BY	
	DO	08/27
	APPROV BY	
TENSOR 2242	SUPERVISOR	H. J. GHITI
	Q.A.	

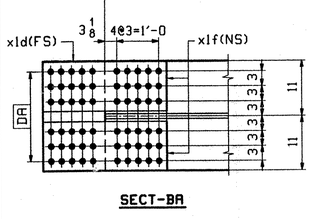
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

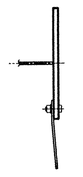
JOB NO. 166 | DRG. NO. 8 | REV. △

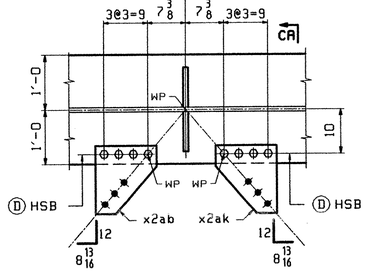
653-BR25A-SS8

RTS Wed Aug 28 14:40:43 CDT 2002 /users/jobs/2242/8.1 Rev=0





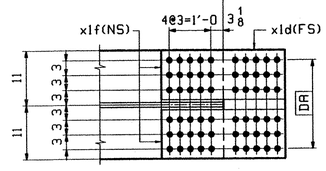


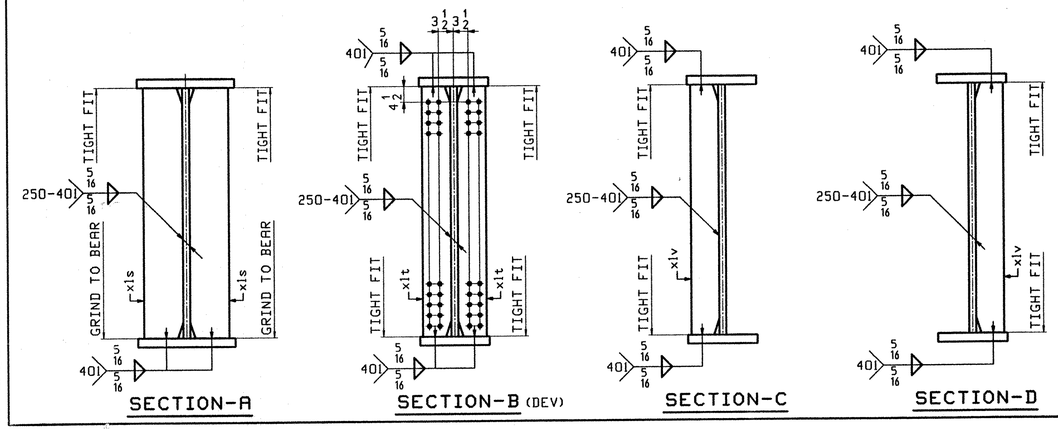


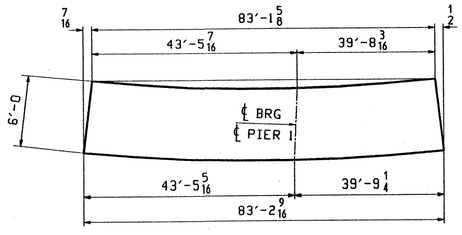
SECT	Ⓓ
BB	7/8ø x 2 3/4
BC	7/8ø x 3 3/4
BD	7/8ø x 3

ONE - GIRDER - G4B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.







ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4B	1		GIRDER				35220	
5	C		1	wa	PL 1/2x73 7/8	69	11 7/8	(M270-50WT2) (H2-3)		
6	U		1	wb	PL 1/2x72	13	2 11/16	(M270-50WT2) (H2-3)		
4	N		1	ta	PL 1x16	17	5 7/16	(M270-50WT2) (H2-3)		
1	B		1	tb	PL 2x24	47	0	(M270-50WT2) (H2-3)		
4	J		1	tc	PL 1x16	18	8 3/16	(M270-50WT2) (H2-3)		
2	L		1	ba	PL 1x24	17	5 5/16	(M270-50WT2) (H2-3)		
1	B		1	bb	PL 2x24	47	0	(M270-50WT2) (H2-3)		
2	A		1	bc	PL 1 1/4x24	18	9 1/4	(M270-50WT2) (H2-3)		
7	B		4	xla	PL 1/2x66 1/2	1	7	(M270-50WT2) (H2-3)		
7	D		2	xlb	PL 1/2x16	2	4	(M270-50WT2) (H2-3)		
7	E		4	xlc	PL 9/16x7 1/4	2	4	(M270-50WT2) (H2-3)		
7	F		2	xld	PL 5/8x24	2	10	(M270-50WT2) (H2-3)		
7	G		4	xlf	PL 5/8x11 1/4	2	10	(M270-50WT2) (H2-3)		
7	P		12	xlt	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	N		2	xls	PL 1 1/4x11	6	0	(M270-50WT2) (H2-3)		
7	T		6	x2ab	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2ak	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		10	xlv	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
9	M		8		7/8 ø HSB	0	2 3/4	(A325-3)		
9	N		8		7/8 ø HSB	0	3	(A325-3)		
9	R		32		7/8 ø HSB	0	3 3/4	(A325-3)		
9	T		48		7/8 ø HSW			(F436M)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9.9.02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DV CK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RLW DATE 9-27-02

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G4B
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
TENSOR 2242
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

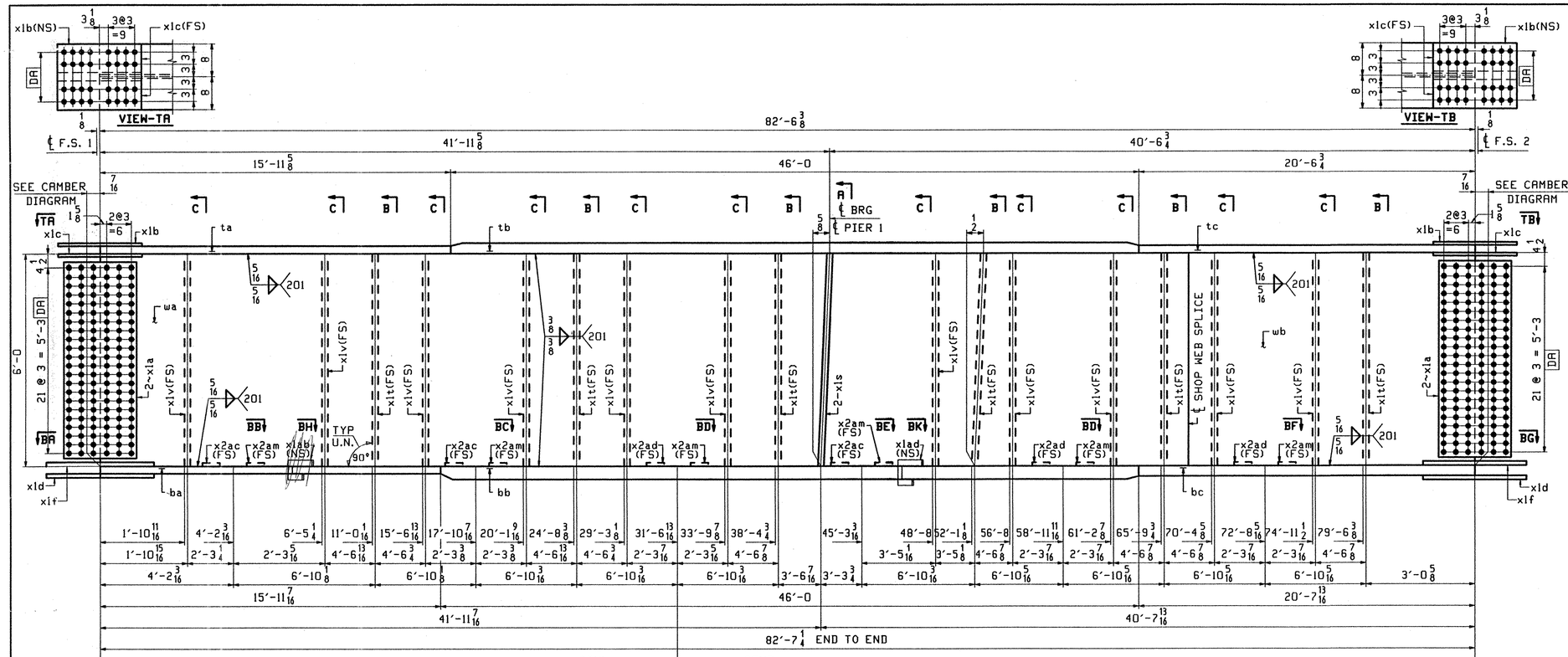
DRAWN BY	DATE
ATD	08/26
CHKD BY	
DO	08/27
APPROV BY	
SUPERVISOR	M. J. GATTI
Q.A.	

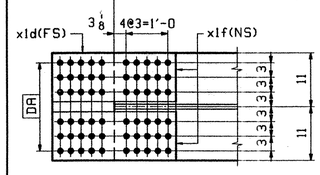
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

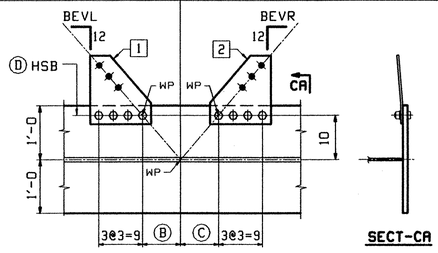
JOB NO. 166 | DRG. NO. 9 | REV. △

659-BR25A-259

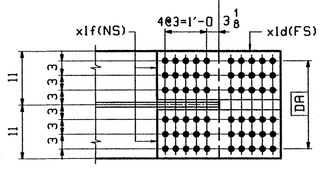
RTB Wed Aug 28 14:53:02 EDT 2002 /users/jobs/2242/9/9.dwg





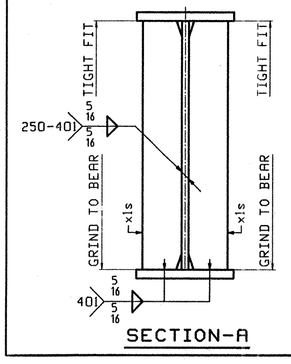


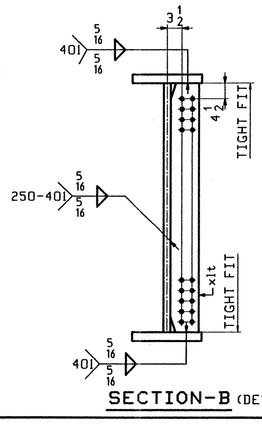
SECT	Ⓑ	Ⓒ	BEVL	BEVR	1	2	Ⓓ
BB	7 7/16	7 1/2	8 15/16	9	x2ac	x2am	7/8Ø x 2 3/4
BC	7 7/16	7 1/2	8 15/16	9	x2ac	x2am	7/8Ø x 3 3/4
BD	7 1/2	7 1/2	9	9	x2ad	x2am	7/8Ø x 3 3/4
BE	7 7/16	7 1/2	8 15/16	9	x2ac	x2am	7/8Ø x 3 3/4
BF	7 1/2	7 1/2	9	9	x2ad	x2am	7/8Ø x 3

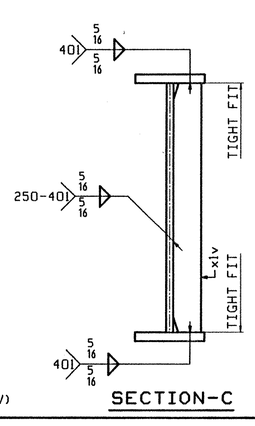


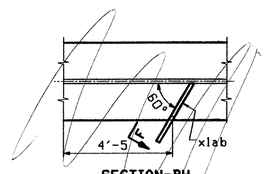
ONE - GIRDER - G5B (DEV)

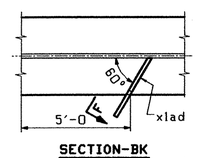
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.

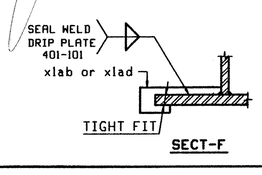


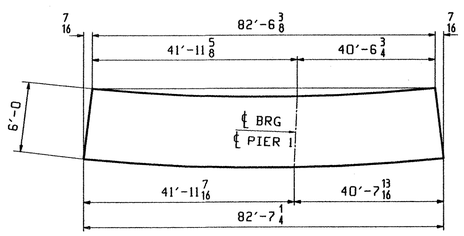












RECEIVED
OK'D BY DW OK'D BY
SEP 09 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-27-02

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5B	1		GIRDER				34525	
5	C		1	wa	PL 1/2x74	69	11 7/8	(M270-50WT2) (H2-3)		
6	W		1	wb	PL 1/2x72	12	7 3/8	(M270-50WT2) (H2-3)		
4	Q		1	ta	PL 1x16	15	11 5/8	(M270-50WT2) (H2-3)		
1	A		1	tb	PL 2x24	46	0	(M270-50WT2) (H2-3)		
4	G		1	tc	PL 1x16	20	6 3/4	(M270-50WT2) (H2-3)		
2	Q		1	ba	PL 1x24	15	11 7/16	(M270-50WT2) (H2-3)		
1	A		1	bb	PL 2x24	46	0	(M270-50WT2) (H2-3)		
1	Y		1	bc	PL 1 1/4x24	20	7 13/16	(M270-50WT2) (H2-3)		
7	B		4	x1a	PL 1/2x66 1/2	1	7	(M270-50WT2) (H2-3)		
7	D		2	x1b	PL 1/2x16	2	4	(M270-50WT2) (H2-3)		
7	E		4	x1c	PL 9/16x7 1/4	2	4	(M270-50WT2) (H2-3)		
7	F		2	x1d	PL 5/8x24	2	10	(M270-50WT2) (H2-3)		
7	G		4	x1f	PL 5/8x11 1/4	2	10	(M270-50WT2) (H2-3)		
7	P		6	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	N		2	x1s	PL 1 1/4x11	6	0	(M270-50WT2) (H2-3)		
7	T		3	x2ac	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		6	x2am	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		3	x2ad	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		11	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	R		1	x1ab	PL 1/4x3	1	3 9/16			
7	R		1	x1ad	PL 1/4x4	1	3 9/16			
9	M		8		7/8 Ø HSB	0	2 3/4	(A325-3)		
9	N		8		7/8 Ø HSB	0	3	(A325-3)		
9	R		32		7/8 Ø HSB	0	3 3/4	(A325-3)		
9	T		48		7/8 Ø HSW			(F436W)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-9-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"Ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

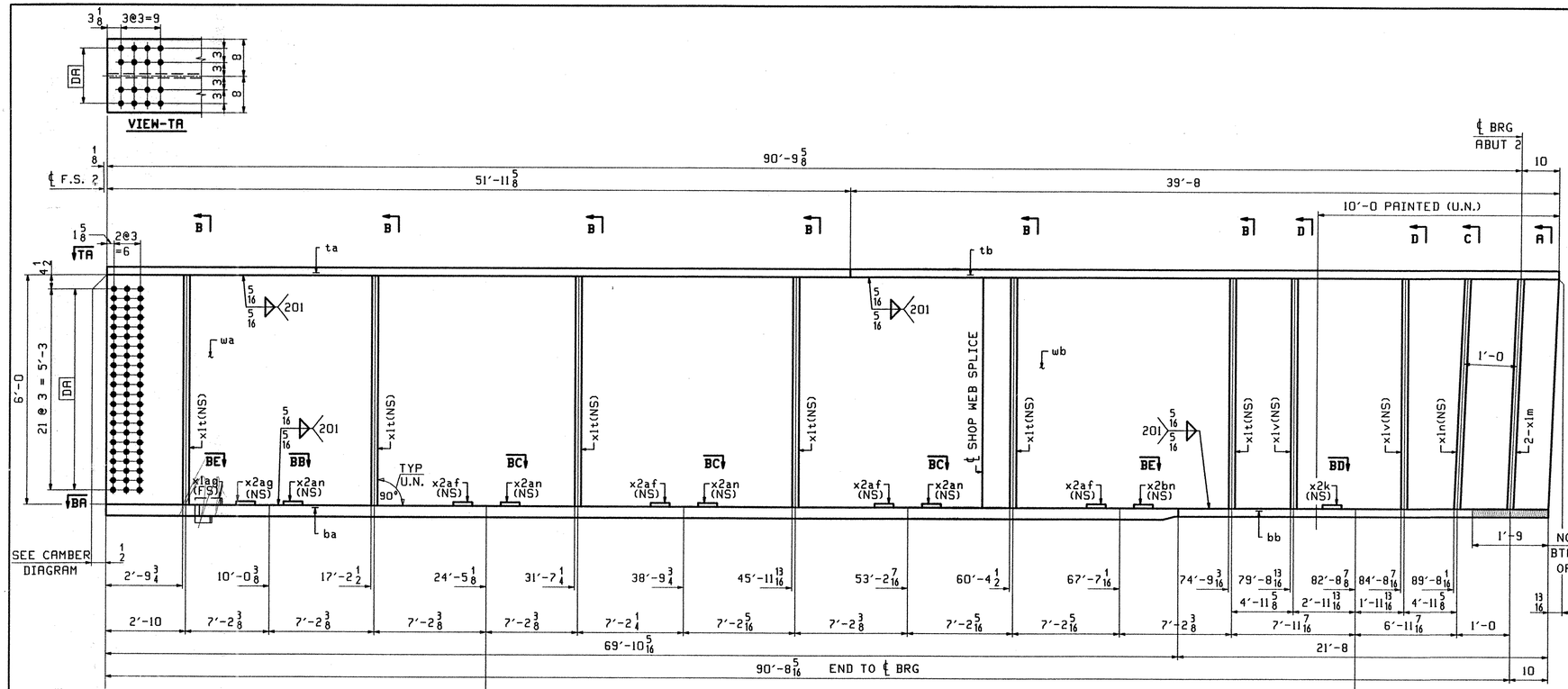
DESCRIPTION: GIRDER - G5B
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
TENSOR 2242
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

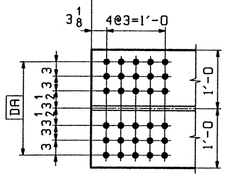
DRAWN BY	DATE
ATD	08/26
CHKD BY	
DO	08/28
APPROV BY	
SUPERVISOR	W. J. GHITI
Q.A.	

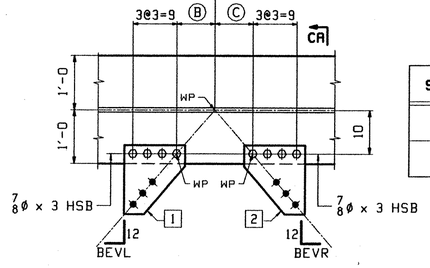
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 166 DRG. NO. 10 REV.

660 BRESA-3510



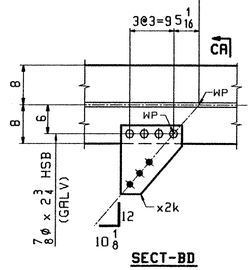


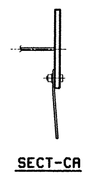


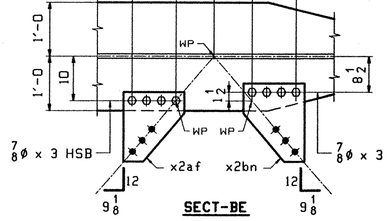
SECT	BEVL	BEVR	Ⓑ	Ⓒ	1	2
BB	9 3/16	9 1/8	7 11/16	7 5/8	x2ag	x2an
BC	9 1/8	9 1/8	7 5/8	7 5/8	x2af	x2an

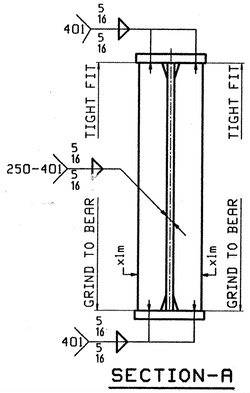
ONE - GIRDER - G1C (DEV)

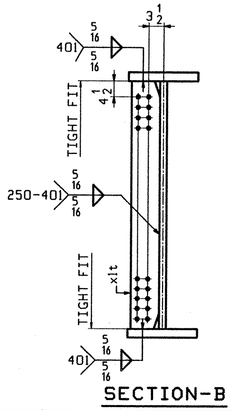
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F4 & F5.
4. FOR GENERAL NOTES SEE SHT. GN1.

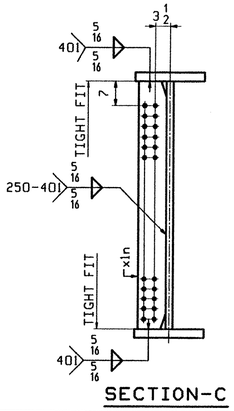


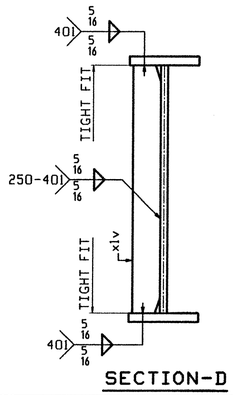


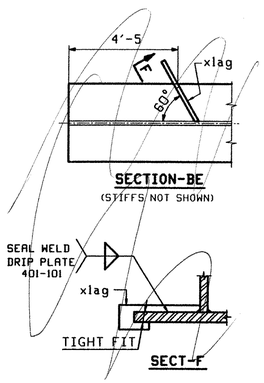


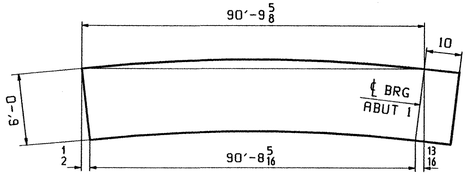












ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

RECEIVED
CK'D BY DV OK'D BY
SEP 05 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 9-27-02

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIC	1		GIRDER				25916	
5	N		1	wa	PL 1/2x72 7/8	58	0 3/8	(M270-50WT2) (N2-3)		
5	W		1	wb	PL 1/2x72 1/8	33	7 1/4	(M270-50WT2) (N2-3)		
3	L		1	ta	PL 1x16	51	11 5/8	(M270-50WT2) (N2-3)		
3	U		1	tb	PL 1x16	39	8	(M270-50WT2) (N2-3)		
1	Q		1	ba	PL 1 1/4x24	69	10 5/16	(M270-50WT2) (N2-3)		
4	E		1	bb	PL 1x16	21	8	(M270-50WT2) (N2-3)		
7	P		6	xlt	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
7	P		1	xln	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
7	M		2	xlm	PL 1x8	6	0	(M270-50WT2) (N2-3)		
7	T		1	x2ag	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		4	x2an	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2bn	PL 3/8x12 1/2	1	4	BENT		
7	T		4	x2af	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2k	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		2	xlv	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
7	R		1	xlag	PL 1/4x3 1/2	1	9 9/16			
9	C		4		7/8 ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 ø HSW			(F436) GALV		
9	N		40		7/8 ø HSB	0	3	(A325-3)		
9	T		40		7/8 ø HSW			(F436H)		

REV.	REMARKS	DATE	DWN	CHK	APP
	OUT FOR APPROVAL	9-9-02			
	OUT FOR APPROVAL				
	ISSUED TO SHOP				
	FIELD & OFFICE				

Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø (UN)
SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

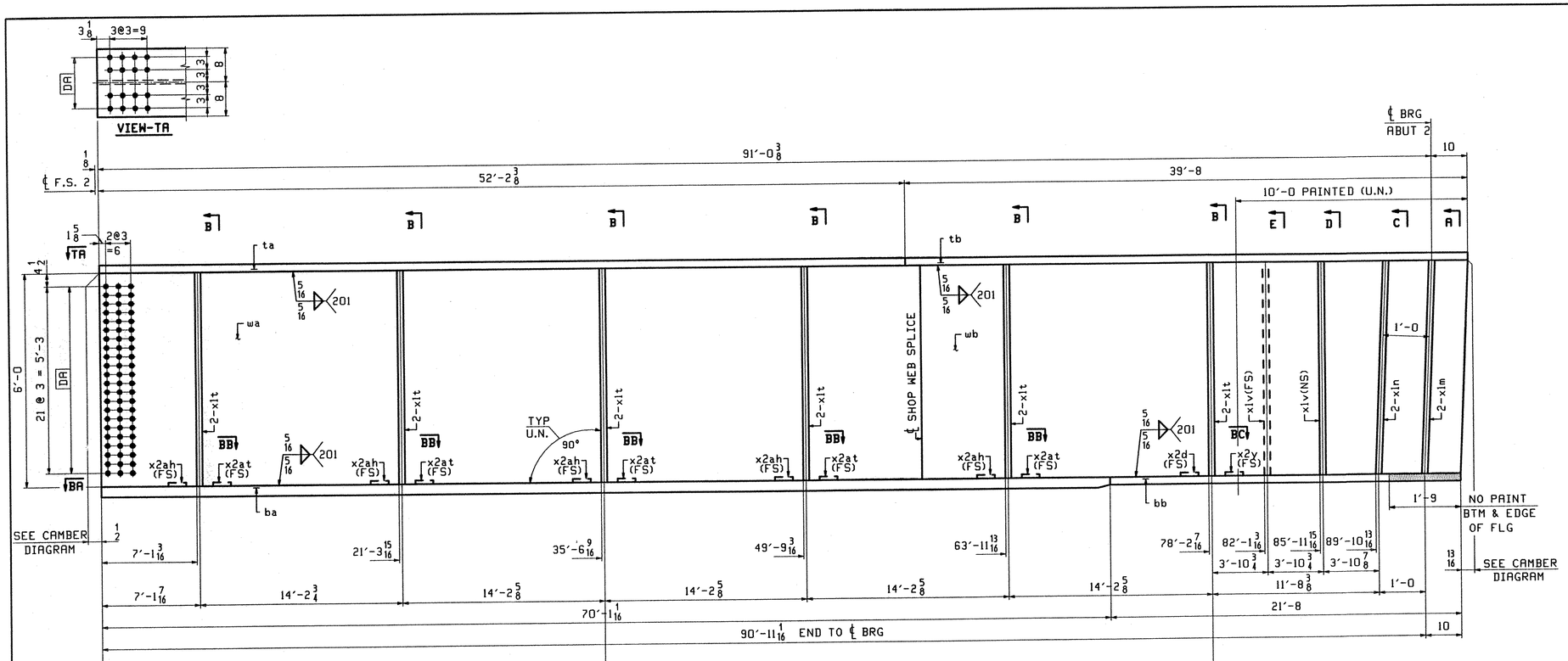
DESCRIPTION:	GIRDER - G1C	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/27
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	09/03
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
PROJ NO.	PROJ. NHF 010-1(18)	SUPERVISOR	W. J. GAIII
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION	Q.A.	

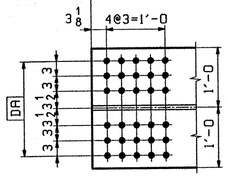
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

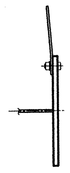
JOB NO.	DRG. NO.
166	11
	REV. △

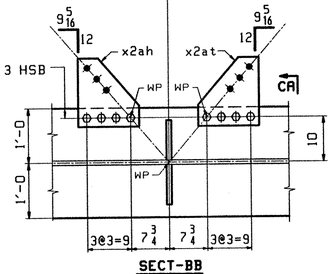
RT3 Tue Sep 3 15:06:03 EDT 2002 /users/pbw/2242/11/ Rev0

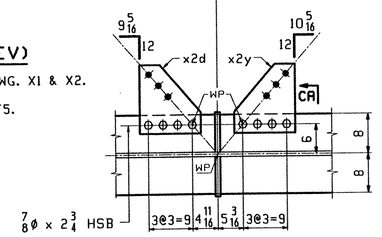
661-BR25A-SS11





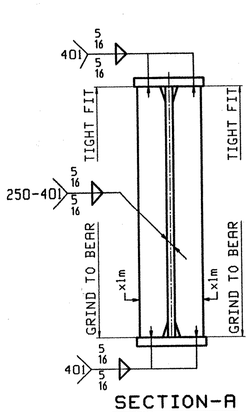


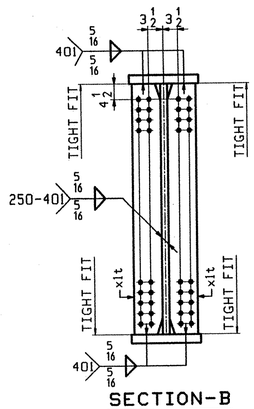


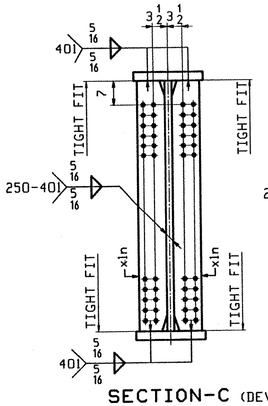


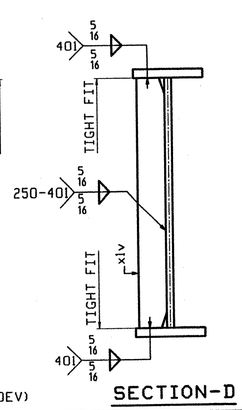
ONE - GIRDER - G2C (DEV)

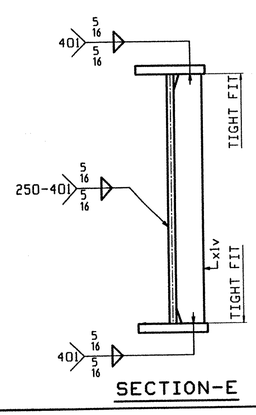
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F4 & F5.
4. FOR GENERAL NOTES SEE SHT. GN1.



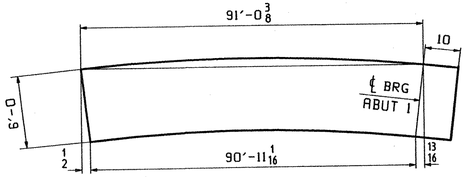








RECEIVED
CK'D BY DV OK'D BY
SEP 05 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
									12	
		G2C	1		GIRDER				26566	
5	L		1	wa	PL 1/2x72 7/8	59	0 3/8	(M270-50WT2) (H2-3)		
5	Y		1	wb	PL 1/2x72 1/8	32	10	(M270-50WT2) (H2-3)		
3	L		1	ta	PL 1x16	52	2 3/8	(M270-50WT2) (H2-3)		
3	U		1	tb	PL 1x16	39	8	(M270-50WT2) (H2-3)		
1	N		1	ba	PL 1 1/4x24	70	1 1/16	(M270-50WT2) (H2-3)		
4	E		1	bb	PL 1x16	21	8	(M270-50WT2) (H2-3)		
7	P		12	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	P		2	x1n	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	M		2	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	T		5	x2ah	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		5	x2at	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2d	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2y	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		2	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
9	M		4		7/8 ø HSB	0	2 3/4	(A325-3)		
9	N		40		7/8 ø HSB	0	3	(A325-3)		
9	T		44		7/8 ø HSW			(F436M)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

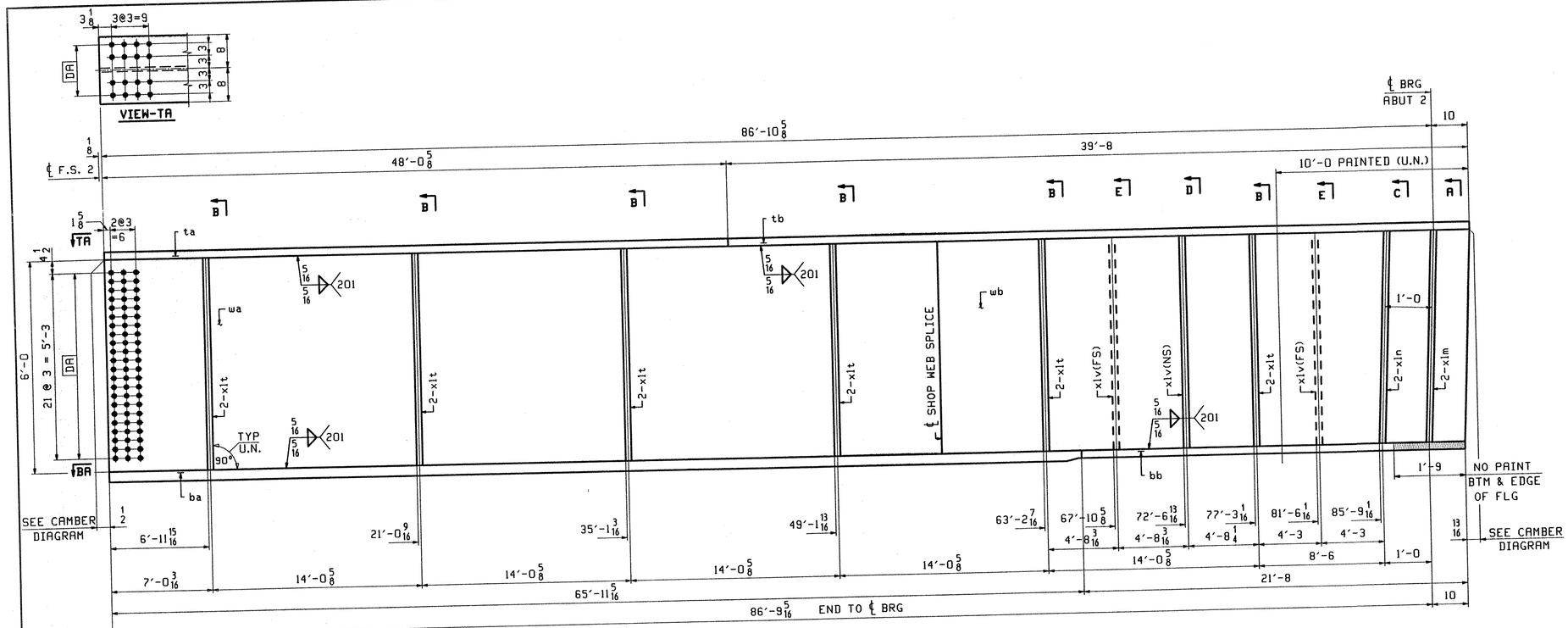
DESCRIPTION: GIRDER - G2C	DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/27
BRIDGE NO. 25A	CHKD BY	
SEARSBURG, VERMONT	DO	09/03
CONTRACTOR: J.A. McDONALD	APPROV BY	
TENSOR 2242	SUPERVISOR	W. J. GATTI
PROJ NO. PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

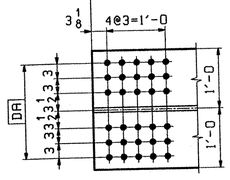
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	12
	REV. △

662-BR25A-SS12

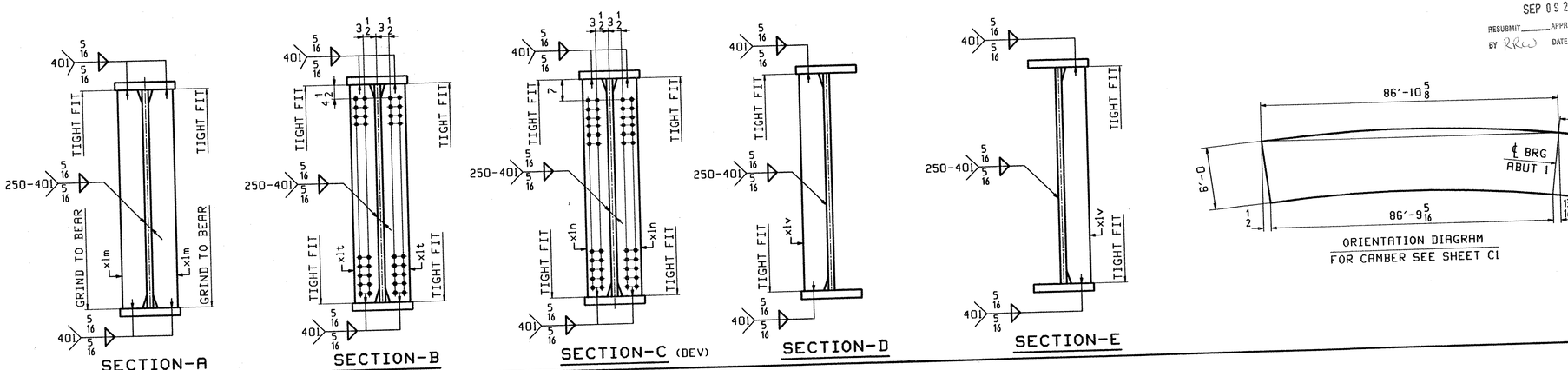
Tue Sep 3 10:35:45 EDT 2002 /www/jobs/2242/12 Rev0





ONE - GIRDER - G3C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F4 & F5.
4. FOR GENERAL NOTES SEE SHT. GN1.



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G3C	1		GIRDER				25248	
5	L		1	wa	PL 1/2x72 7/8	59	0 3/8	(M270-50WT2) (H2-3)		
6	G		1	wb	PL 1/2x72 1/4	28	8 1/4	(M270-50WT2) (H2-3)		
3	Q		1	ta	PL 1x16	48	0 5/8	(M270-50WT2) (H2-3)		
3	U		1	tb	PL 1x16	39	8	(M270-50WT2) (H2-3)		
1	S		1	ba	PL 1 1/4x24	65	11 5/16	(M270-50WT2) (H2-3)		
4	E		1	bb	PL 1x16	21	8	(M270-50WT2) (H2-3)		
7	P		12	x1t	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	P		2	x1n	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		
7	M		2	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	P		3	x1v	PL 1/2x8	6	0	(M270-50WT2) (H2-3)		

BILL OF MATERIAL

JOB NO.

DRAWING NO. 13

REV.

REV.	REMARKS	DATE	DWN	CHK	APP
	OUT FOR APPROVAL	9-02			
	OUT FOR APPROVAL				
	ISSUED TO SHOP				
	FIELD & OFFICE				

Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 15/16"ø (UN)

SHOP BOLTS: AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
OK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

DESCRIPTION: GIRDER - G3C

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

PROJ NO. PROJ. NHF 010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

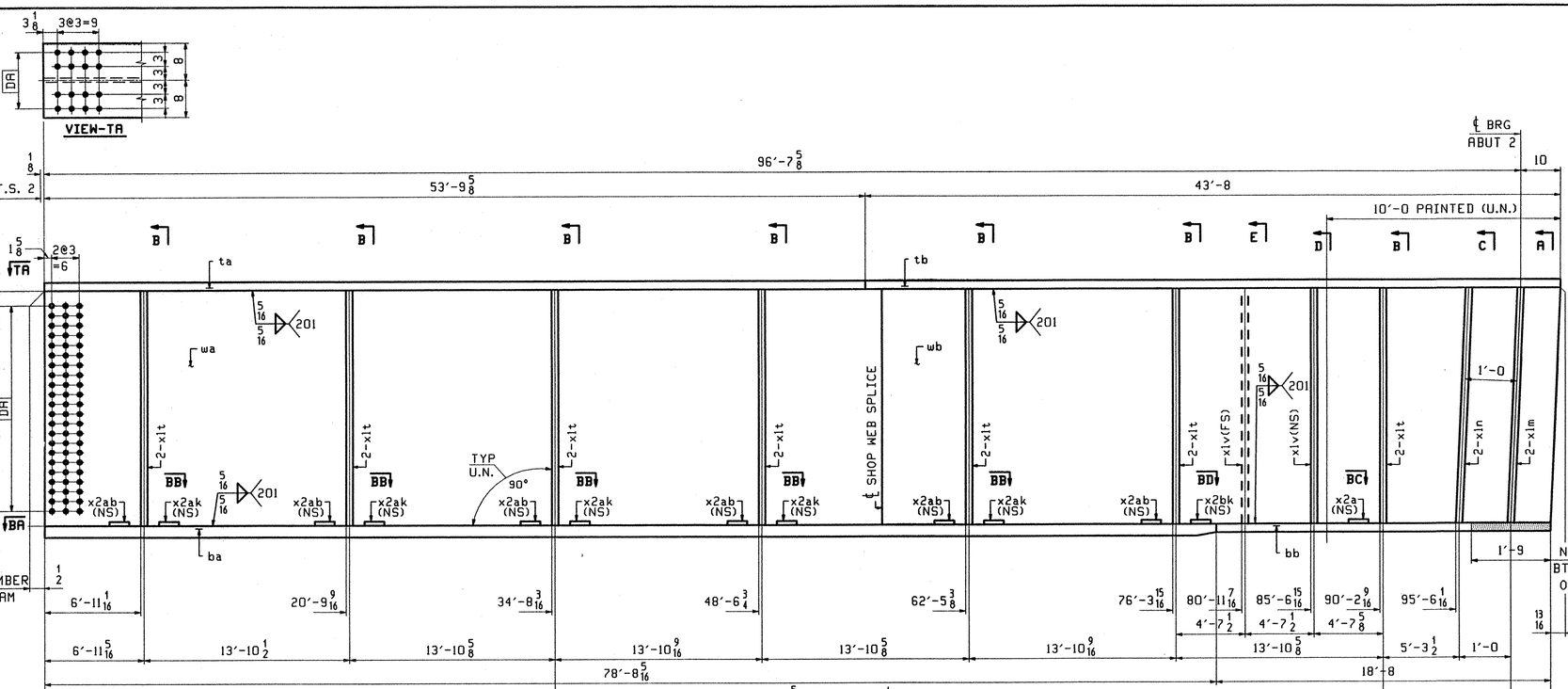
DRAWN BY	DATE
ATD	08/27
CHKD BY	
DO	09/03
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

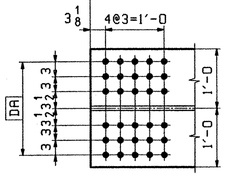
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

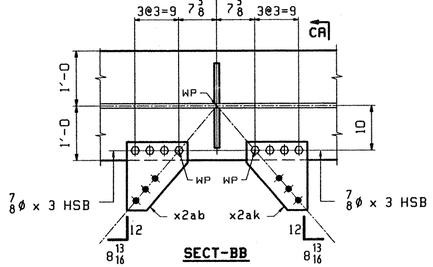
JOB NO. 166 | DRG. NO. 13 | REV. 1

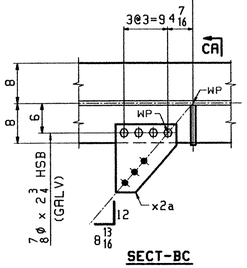
663-BR.25A-SS13

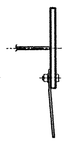
Tue Sep 3 11:04:15 EDT 2002 /users/jobs/2242/13.dgn

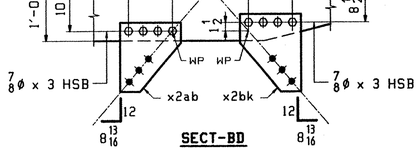






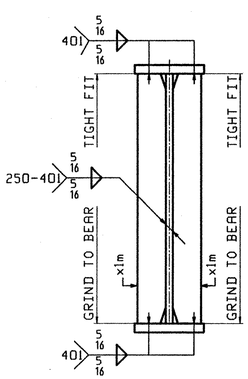


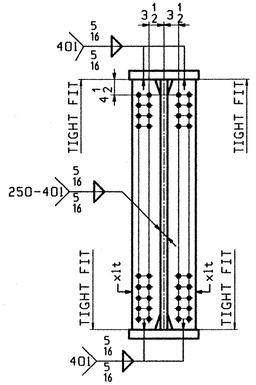


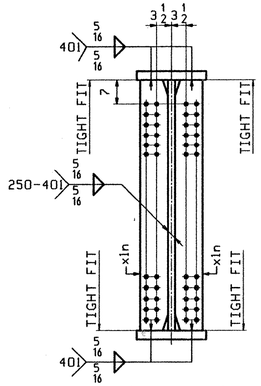


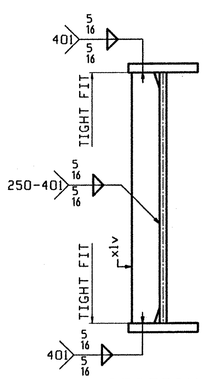
ONE - GIRDER - G4C (DEV)

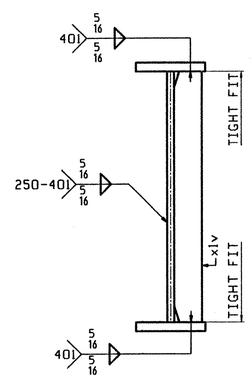
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F4 & F5.
4. FOR GENERAL NOTES SEE SHT. GN1.

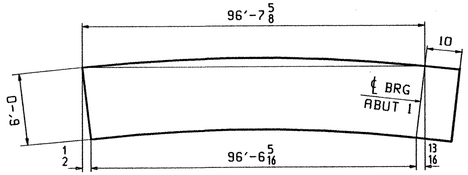












ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4C	1		GIRDER				28441	
5	Q		1	wa	PL 1/2x72 3/4	59	0 3/8	(M270-50WT2) (N2-3)		
6	L		1	wb	PL 1/2x72	38	5 1/4	(M270-50WT2) (N2-3)		
3	J		1	ta	PL 1x16	53	9 5/8	(M270-50WT2) (N2-3)		
3	S		1	tb	PL 1x16	43	8	(M270-50WT2) (N2-3)		
1	J		1	ba	PL 1 1/4x24	78	8 5/16	(M270-50WT2) (N2-3)		
4	L		1	bb	PL 1x16	18	8	(M270-50WT2) (N2-3)		
7	P		14	x1t	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
7	P		2	x1n	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
7	M		2	x1m	PL 1x8	6	0	(M270-50WT2) (N2-3)		
7	T		6	x2ab	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		5	x2ak	PL 3/8x12 1/2	1	2 1/2	BENT		
7	T		1	x2bk	PL 3/8x12 1/2	1	4	BENT		
7	T		1	x2a	PL 3/8x12 1/2	1	2 1/2	BENT		
7	P		2	x1v	PL 1/2x8	6	0	(M270-50WT2) (N2-3)		
9	C		4		7/8 ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 ø HSW			(F436) GALV		
9	N		48		7/8 ø HSB	0	3	(A325-3)		
9	T		48		7/8 ø HSW			(F436H)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9.9.02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DV CK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

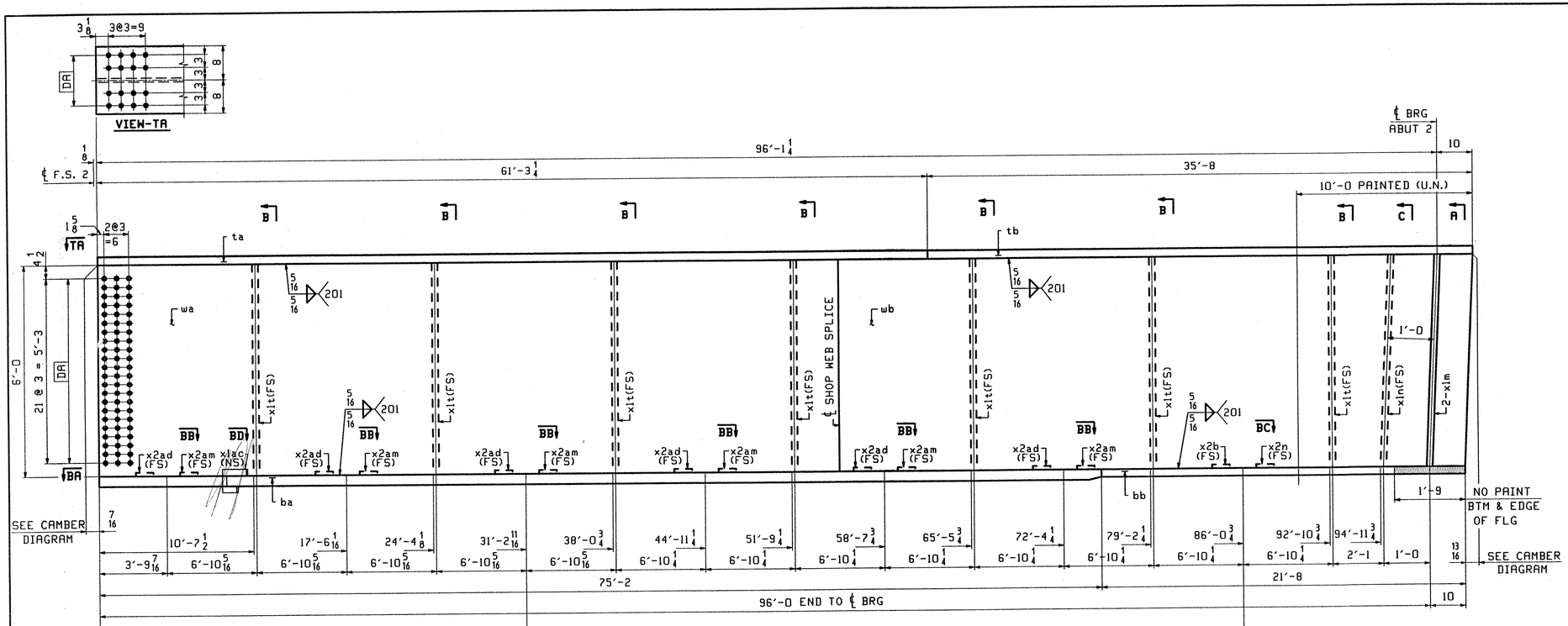
DESCRIPTION:	GIRDER - G4C	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/27
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	09/04
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

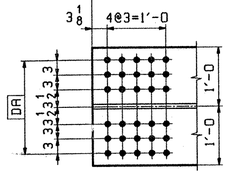
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

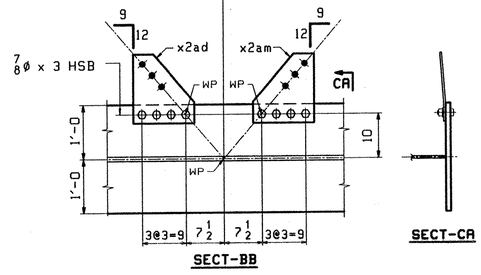
JOB NO.	DRG. NO.
166	14
	REV. △

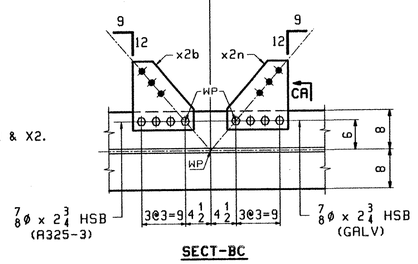
664-BR25A-3514

RTD Tue Sep 3 15:11:58 EDT 2002 /users/pbw/2242-14 : Rev0



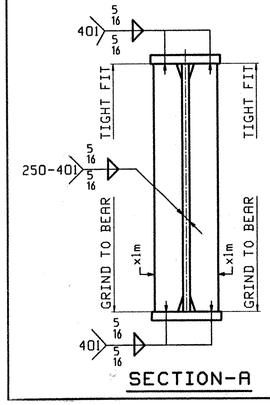


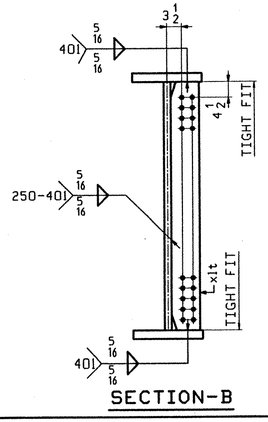


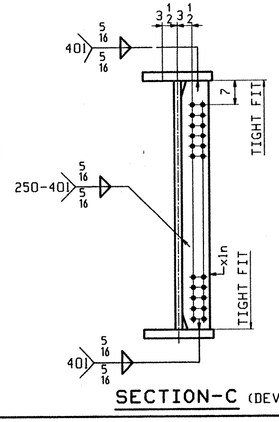


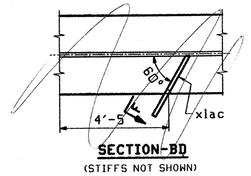
ONE - GIRDER - G5C (DEV)

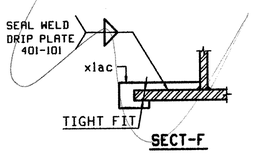
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1 & X2.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F4 & F5.
4. FOR GENERAL NOTES SEE SHT. GN1.

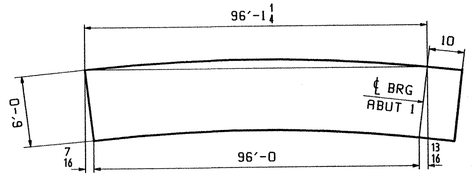












RECEIVED
CK'D BY RV OK'D BY
SEP 09 2002
RESUBMIT APPROVED As Noted
BY RRC DATE 9-27-02

ABM INFO PAGE	LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5C	1		GIRDER				27341	
5	S		1	wa	PL 1/2 x72 5/8	56	0 5/16	(M270-50WT2) (H2-3)		
6	J		1	wb	PL 1/2 x72	40	10 15/16	(M270-50WT2) (H2-3)		
3	A		1	ta	PL 1x16	61	3 1/4	(M270-50WT2) (H2-3)		
3	W		1	tb	PL 1x16	35	8	(M270-50WT2) (H2-3)		
1	L		1	ba	PL 1 1/4 x24	75	2	(M270-50WT2) (H2-3)		
4	E		1	bb	PL 1x16	21	8	(M270-50WT2) (H2-3)		
7	P		7	x1t	PL 1/2 x8	6	0	(M270-50WT2) (H2-3)		
7	P		1	x1n	PL 1/2 x8	6	0	(M270-50WT2) (H2-3)		
7	M		2	x1m	PL 1x8	6	0	(M270-50WT2) (H2-3)		
7	T		6	x2ad	PL 3/8 x12 1/2	1	2 1/2	BENT		
7	T		6	x2am	PL 3/8 x12 1/2	1	2 1/2	BENT		
7	T		1	x2b	PL 3/8 x12 1/2	1	2 1/2	BENT		
7	T		1	x2n	PL 3/8 x12 1/2	1	2 1/2	BENT		
7	R		1	x1ac	PL 1/4 x3 1/4	1	3 9/16			
9	C		4		7/8 ø HSB	0	2 3/4	(A325-1) GALV		
9	G		4		7/8 ø HSW			(F436) GALV		
9	M		4		7/8 ø HSB	0	2 3/4	(A325-3)		
9	N		48		7/8 ø HSB	0	3	(A325-3)		
9	T		52		7/8 ø HSW			(F436W)		

OUT FOR APPROVAL	9.9.02
OUT FOR APPROVAL	
ISSUED TO SHOP	
FIELD & OFFICE	

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16 ø (UN)	AS NOTED

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION:	GIRDER - G5C	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	ATD	08/28
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	09/03
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GALLI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

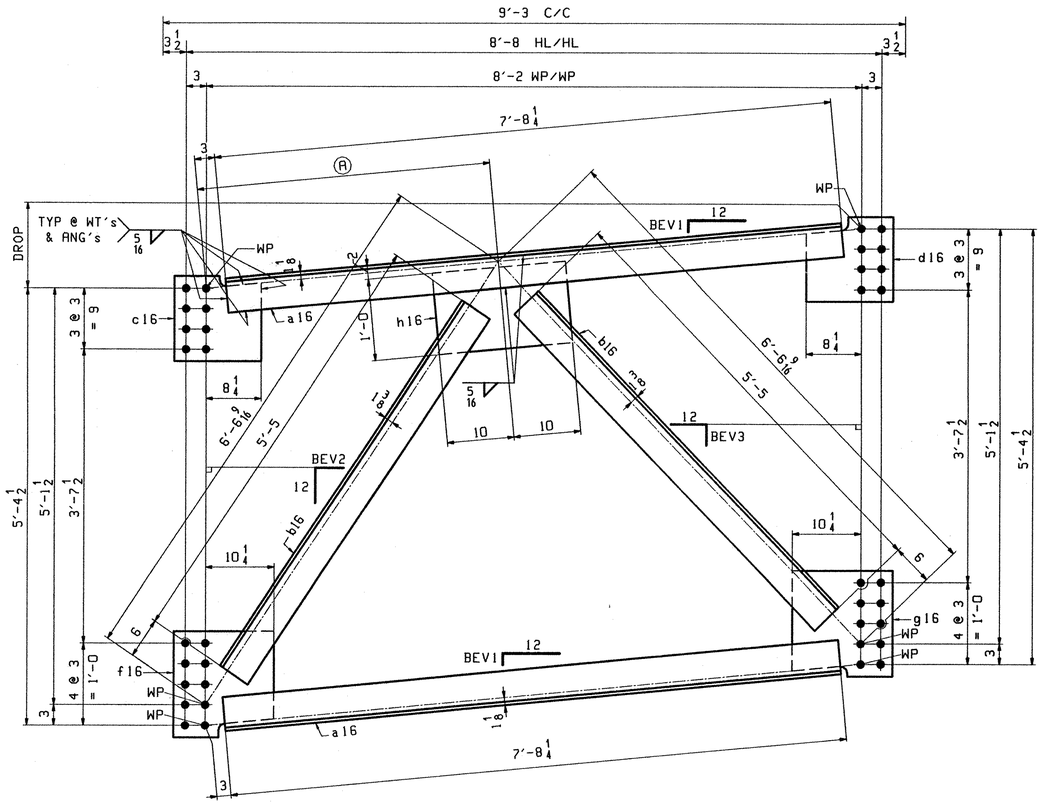
CASCO BAY STEEL STRUCTURES, INC.

75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	15
	REV. △

665-BR25A-9/15

RTD Tue Sep 3 ISSUED EDT 2002 /users/jobs/2242/15 | Rev0



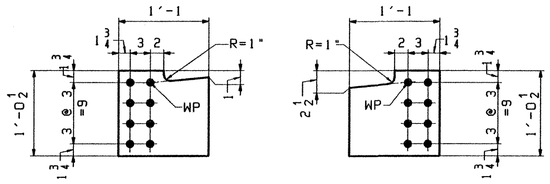
INTERMEDIATE CROSSFRAME TYPE C2

LOOKING BACK-STATION

MARK	REQ'D	DROP	Ⓐ	BEV1	BEV2	BEV3	PAINT
16CF1	23	8 5/8	3'-7 13/16	1 1/16	8	11 1/2	NO
16CF2	2	8 5/8	3'-7 13/16	1 1/16	8	11 1/2	YES
16CF3	42	8 15/16	3'-7 5/8	1 1/8	7 15/16	11 9/16	NO
16CF4	3	8 15/16	3'-7 5/8	1 1/8	7 15/16	11 9/16	YES
16CF5	8	9 1/8	3'-7 1/2	1 1/8	7 15/16	11 5/8	NO

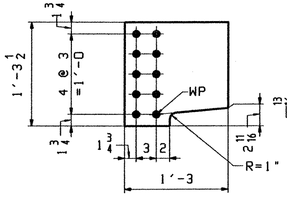
ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		16CF4	3		CROSSFRAME				621	
8	N		6	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		6	b16	L 5x5x 1/2	5	5	(M270-50WT2) (H2-3)		
8	R		3	c16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	R		3	d16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	S		3	f16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	S		3	g16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	Q		3	h16	PL 1/2x12	1	8	(M270-50WT2) (H2-3)		
		16CF5	8		CROSSFRAME				621	
8	N		16	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		16	b16	L 5x5x 1/2	5	5	(M270-50WT2) (H2-3)		
8	R		8	c16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	R		8	d16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	S		8	f16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	S		8	g16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	Q		8	h16	PL 1/2x12	1	8	(M270-50WT2) (H2-3)		

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		16CF1	23		CROSSFRAME				621	
8	N		46	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		46	b16	L 5x5x 1/2	5	5	(M270-50WT2) (H2-3)		
8	R		23	c16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	R		23	d16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	S		23	f16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	S		23	g16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	Q		23	h16	PL 1/2x12	1	8	(M270-50WT2) (H2-3)		
		16CF2	2		CROSSFRAME				621	
8	N		4	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		4	b16	L 5x5x 1/2	5	5	(M270-50WT2) (H2-3)		
8	R		2	c16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	R		2	d16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	S		2	f16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	S		2	g16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	Q		2	h16	PL 1/2x12	1	8	(M270-50WT2) (H2-3)		
		16CF3	42		CROSSFRAME				621	
8	N		84	a16	WT 5x19.5	7	8 1/4	(M270-50WT2) (H2-3)		
8	P		84	b16	L 5x5x 1/2	5	5	(M270-50WT2) (H2-3)		
8	R		42	c16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	R		42	d16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	S		42	f16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	S		42	g16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	Q		42	h16	PL 1/2x12	1	8	(M270-50WT2) (H2-3)		

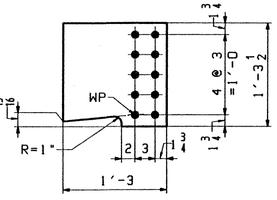


DETAIL OF c16

DETAIL OF d16



DETAIL OF f16



DETAIL OF g16

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9.9.02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W

ELECTRODES:

HOLES: 15/16"ø (UN)

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
OK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

FOR GENERAL NOTES SEE GN1.

DESCRIPTION: CROSSFRAMES
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

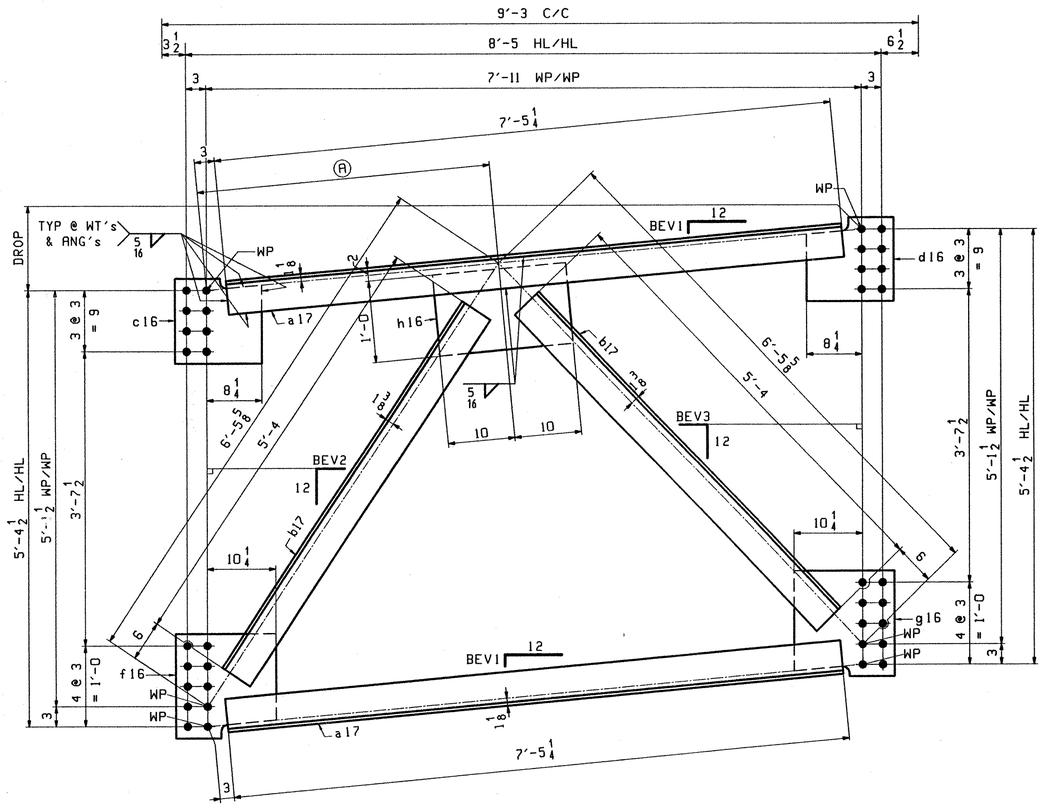
DRAWN BY	DATE
VWJ	08/15
CHKD BY	
DO	08/28
APPROV BY	
SUPERVISOR	W. J. GHITI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	16
	REV.

666-BR25A-SS16

VWJ Thu Aug 29 14:08:30 CDT 2002 /users/jobs/2242/16 Rev0



INTERMEDIATE CROSSFRAME TYPE C3

LOOKING BACK-STATION

MARK	REQ'D	DROP	Ⓐ	BEV1	BEV2	BEV3	PAINT
17CF1	1	8 5/8	3'-6 1/8	1 1/16	7 11/16	11 1/4	NO
17CF2	1	9 3/16	3'-5 13/16	1 3/16	7 5/8	11 3/8	NO

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									17	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		17CF1	1		CROSSFRAME				609	
8	N		2	a17	WT 5x19.5	7	5 1/4	(M270-50WT2) (H2-3)		
8	P		2	b17	L 5x5x 1/2	5	4	(M270-50WT2) (H2-3)		
8	R		1	c16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	R		1	d16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	S		1	f16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	S		1	g16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	Q		1	h16	PL 1/2x12	1	8	(M270-50WT2) (H2-3)		
		17CF2	1		CROSSFRAME				609	
8	N		2	a17	WT 5x19.5	7	5 1/4	(M270-50WT2) (H2-3)		
8	P		2	b17	L 5x5x 1/2	5	4	(M270-50WT2) (H2-3)		
8	R		1	c16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	R		1	d16	PL 1/2x12 1/2	1	1	(M270-50WT2) (H2-3)		
8	S		1	f16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	S		1	g16	PL 1/2x15 1/2	1	3	(M270-50WT2) (H2-3)		
8	Q		1	h16	PL 1/2x12	1	8	(M270-50WT2) (H2-3)		

OUT FOR APPROVAL	9.9.02									
OUT FOR APPROVAL										
ISSUED TO SHOP										
FIELD & OFFICE										
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 15/16"ø (UN)

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

FOR GENERAL NOTES SEE GN1.

DESCRIPTION: CROSSFRAMES

JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2242

PROJ NO. PROJ. NHF 010-1(18)

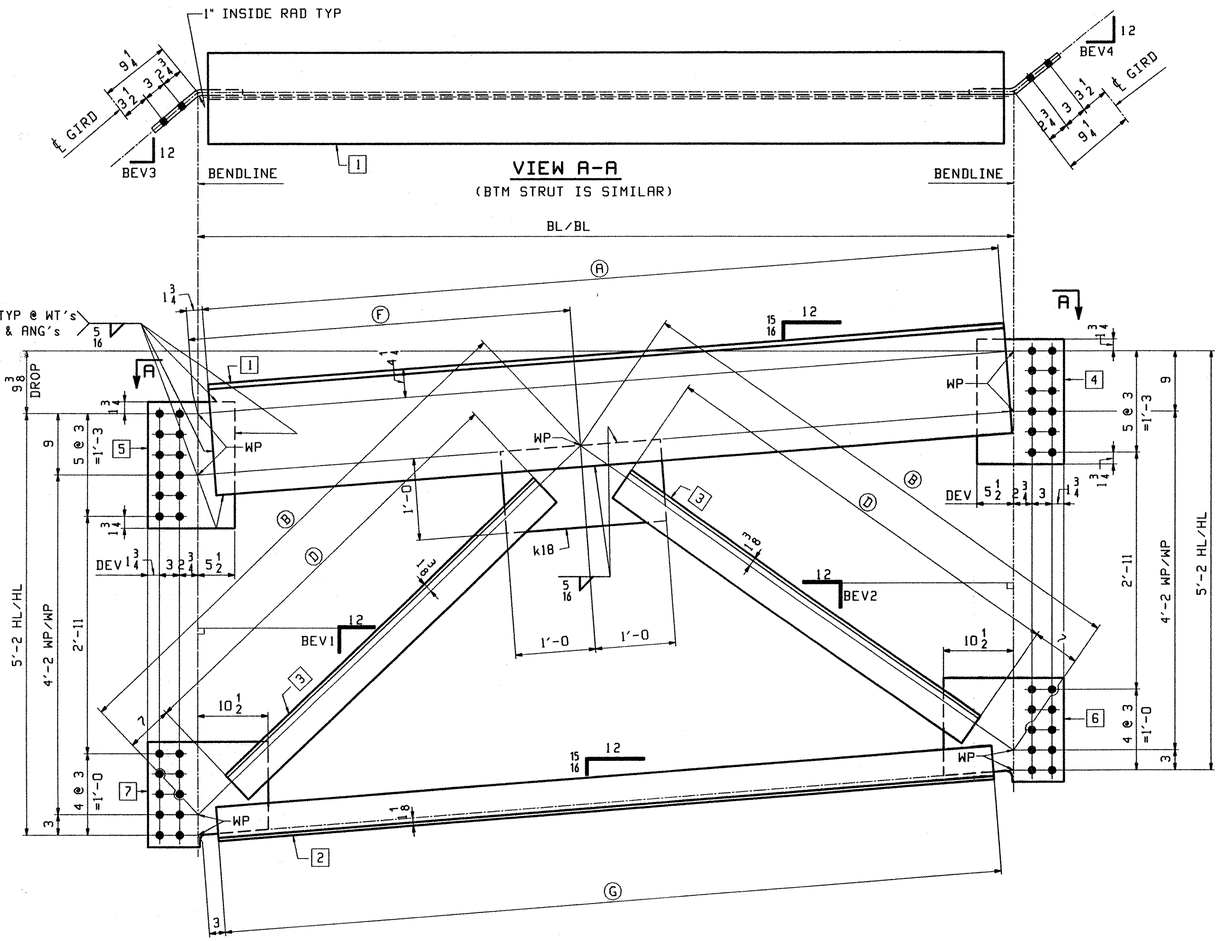
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

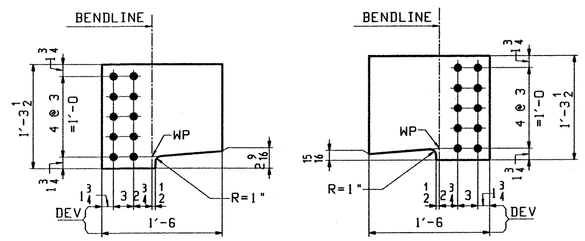
DRAWN BY	DATE
VWJ	08/15
CHKD BY	
DO	08/28
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	17
	REV. △

667-BR25A-SS17





DETAIL OF 7

DETAIL OF 6

ABUTMENT CROSSFRAMES TYPE C1

(ALL PAINTED)

MARK	REQ'd	BL/BL	Ⓐ	Ⓑ	Ⓓ	Ⓕ	Ⓖ	BEV1	BEV2	BEV3	BEV4	1	2	3	4	5	6	7
18CF1	1	9'-11 3/16	9'-8	6'-5 13/16	5'-2 1/2	4'-7 1/8	9'-5 1/2	1 1/4	8 1/2	9 7/8	9 11/16	a18	b18	c18	d18	f18	g18	h18
18CF2	1	10'-0 1/8	9'-9	6'-6 3/16	5'-3	4'-7 5/8	9'-6 1/2	1 5/8	8 7/16	10 1/16	9 7/8	m18	n18	p18	s18	t18	v18	w18
18CF3	1	10'-1 3/16	9'-10	6'-6 9/16	5'-3 1/4	4'-8 3/16	9'-7 1/2	1 1/2	8 3/8	10 5/16	10 1/16	aa18	ab18	ac18	ad18	af18	ag18	ah18
18CF4	1	10'-2 1/4	9'-11	6'-7	5'-3 3/4	4'-8 13/16	9'-8 1/2	1 3/8	8 5/16	10 1/2	10 5/16	am18	an18	ap18	as18	at18	av18	aw18

RECEIVED
OK'D BY DV OK'D BY
SEP 0 9 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

FOR GENERAL NOTES SEE GN1.

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		18CF3	1		CROSSFRAME				1126	
8	B		1	aa18	WT 16.5x59	9	10	(M270-50WT2) (H2-3)		
8	D		1	ab18	WT 5x19.5	9	7 1/2	(M270-50WT2) (H2-3)		
8	E		2	ac18	L 5x5x1/2	5	3 1/4	(M270-50WT2) (H2-3)		
8	J		1	ad18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	af18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	ag18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	ah18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		
		18CF4	1		CROSSFRAME				1134	
8	B		1	am18	WT 16.5x59	9	11	(M270-50WT2) (H2-3)		
8	D		1	an18	WT 5x19.5	9	8 1/2	(M270-50WT2) (H2-3)		
8	E		2	ap18	L 5x5x1/2	5	3 1/4	(M270-50WT2) (H2-3)		
8	J		1	as18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	at18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	av18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	aw18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		18CF1	1		CROSSFRAME				1111	
8	B		1	a18	WT 16.5x59	9	8	(M270-50WT2) (H2-3)		
8	D		1	b18	WT 5x19.5	9	5 1/2	(M270-50WT2) (H2-3)		
8	E		2	c18	L 5x5x1/2	5	2 1/2	(M270-50WT2) (H2-3)		
8	J		1	d18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	f18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	g18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	h18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		
		18CF2	1		CROSSFRAME				1119	
8	B		1	m18	WT 16.5x59	9	9	(M270-50WT2) (H2-3)		
8	D		1	n18	WT 5x19.5	9	6 1/2	(M270-50WT2) (H2-3)		
8	E		2	p18	L 5x5x1/2	5	3	(M270-50WT2) (H2-3)		
8	J		1	s18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	t18	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	v18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	w18	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-9-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

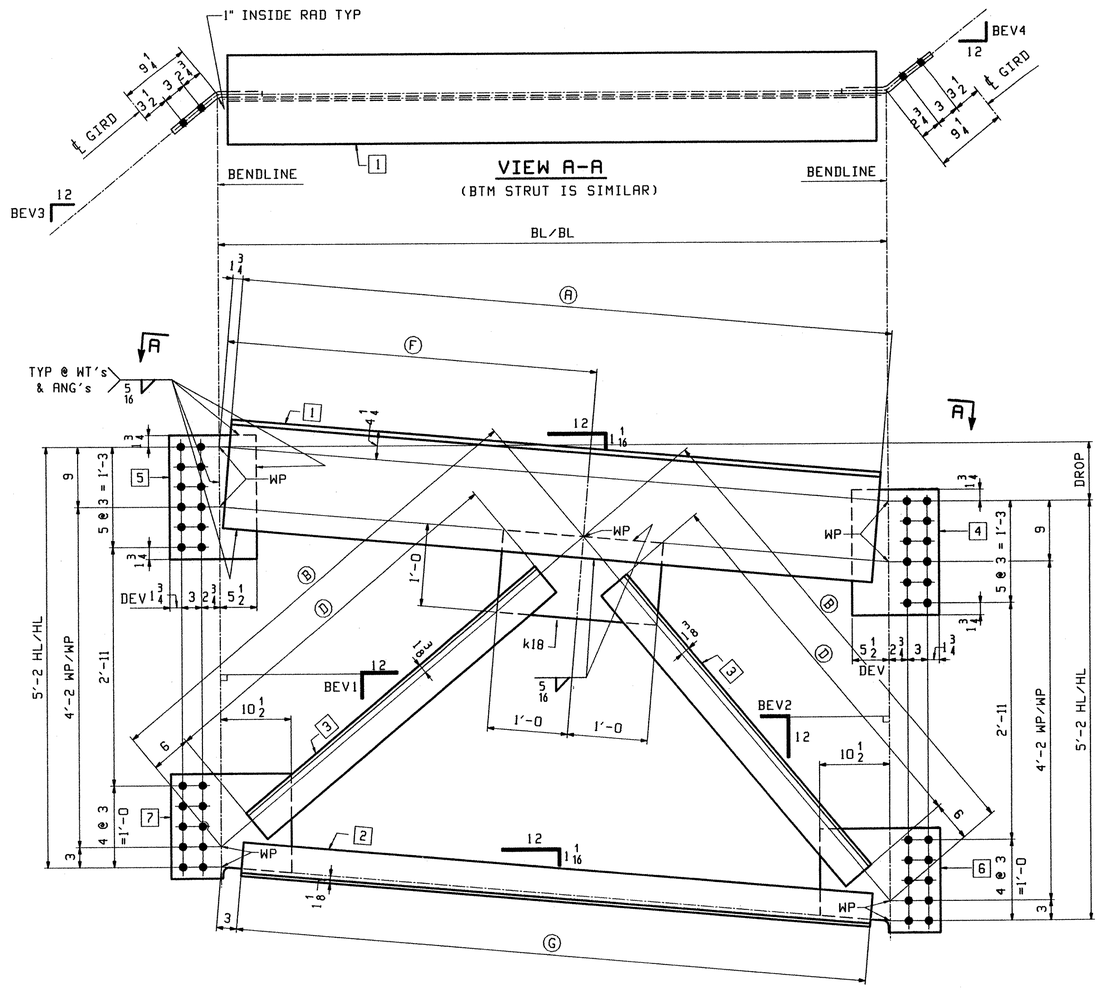
MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		1 1/16"ø (OVS)	

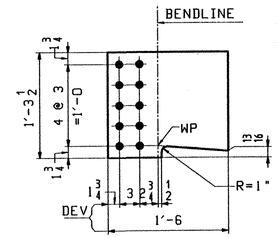
SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: ABUTMENT CROSSFRAMES		DRAWN BY	DATE
JOB: VT RTE 9 OVER THE DEERFIELD RIVER		VWJ	08/15
BRIDGE NO. 25A		CHKD BY	
SEARSBURG, VERMONT		DO	08/28
TENSOR 2242 CONTRACTOR: J.A. McDONALD		APPROV BY	
		SUPERVISOR	W. J. GRITT
PROJ NO. PROJ. NHF 010-1(18)		Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION			
CASCO BAY STEEL STRUCTURES, INC.		JOB NO.	DRG. NO.
75 SPRING HILL ROAD SACO, MAINE 04072		166	18
PHONE (207) 282-7360 FAX. (207) 282-1179			REV. △

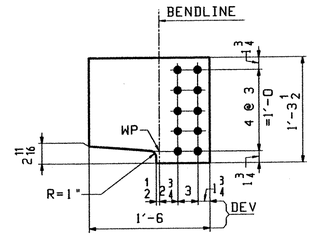
668-BR25A-5518

VWJ Thu Aug 29 14:17:56 EDT 2002 /users/jobs/2242/18 : 8x10





DETAIL OF 7



DETAIL OF 6

ABUTMENT CROSSFRAMES TYPE C4

(ALL PAINTED)

MARK	REQ'd	DROP	BL/BL	Ⓐ	Ⓑ	Ⓓ	Ⓕ	Ⓖ	BEV1	BEV2	BEV3	BEV4	1	2	3	4	5	6	7
19CF1	1	8 3/4	8'-3 7/16	8'-0 3/4	5'-10 1/2	4'-8 1/4	4'-7 1/16	7'-9 3/4	10	10 1/16	4 11/16	4 3/4	a19	b19	c19	d19	f19	g19	h19
19CF2	1	8 3/4	8'-3 5/8	8'-1	5'-10 9/16	4'-8 1/4	4'-7 3/16	7'-10	10	10 1/8	4 3/4	4 13/16	m19	n19	c19	s19	t19	v19	w19
19CF3	1	8 11/16	8'-3 13/16	8'-1 1/4	5'-10 5/8	4'-8 1/2	4'-7 3/16	7'-10 1/4	10	10 1/8	4 13/16	4 7/8	aa19	ab19	ac19	ad19	af19	ag19	ah19
19CF4	1	8 11/16	8'-4	8'-1 1/2	5'-10 11/16	4'-8 1/2	4'-7 5/16	7'-10 1/2	10	10 3/16	4 7/8	4 15/16	am19	an19	ac19	as19	at19	av19	aw19

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		19CF3	1		CROSSFRAME				972	
8	C		1	aa19	WT 16.5x59	8	1 1/4	(M270-50WT2) (H2-3)		
8	F		1	ab19	WT 5x19.5	7	10 1/4	(M270-50WT2) (H2-3)		
8	G		2	ac19	L 5x5x1/2	4	8 1/2	(M270-50WT2) (H2-3)		
8	J		1	ad19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	af19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	ag19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	ah19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		
		19CF4	1		CROSSFRAME				973	
8	C		1	am19	WT 16.5x59	8	1 1/2	(M270-50WT2) (H2-3)		
8	F		1	an19	WT 5x19.5	7	10 1/2	(M270-50WT2) (H2-3)		
8	G		2	ac19	L 5x5x1/2	4	8 1/2	(M270-50WT2) (H2-3)		
8	J		1	as19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	at19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	av19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	aw19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		19CF1	1		CROSSFRAME				968	
8	C		1	a19	WT 16.5x59	8	0 3/4	(M270-50WT2) (H2-3)		
8	F		1	b19	WT 5x19.5	7	9 3/4	(M270-50WT2) (H2-3)		
8	G		2	c19	L 5x5x1/2	4	8 1/4	(M270-50WT2) (H2-3)		
8	J		1	d19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	f19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	g19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	h19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		
		19CF2	1		CROSSFRAME				969	
8	C		1	m19	WT 16.5x59	8	1	(M270-50WT2) (H2-3)		
8	F		1	n19	WT 5x19.5	7	10	(M270-50WT2) (H2-3)		
8	G		2	c19	L 5x5x1/2	4	8 1/4	(M270-50WT2) (H2-3)		
8	J		1	s19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	J		1	t19	PL 1/2x18 1/2	1	1	(M270-50WT2) (H2-3)BENT		
8	K		1	v19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	K		1	w19	PL 1/2x15 1/2	1	6	(M270-50WT2) (H2-3)BENT		
8	H		1	k18	PL 1/2x12	2	0	(M270-50WT2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/9/02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 1 1/16"ø (OVS)

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED ✓
BY RRW DATE 9-27-02

FOR GENERAL NOTES SEE GN1.

DESCRIPTION: ABUTMENT CROSSFRAMES
JOB: VT RTE 9 OVER THE DEERFIELD RIVER
BRIDGE NO. 25A
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. PROJ. NHF 010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

TENSOR 2242

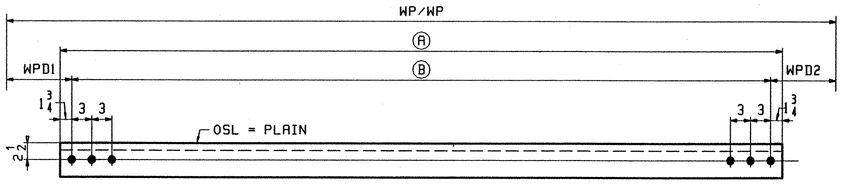
	DRAWN BY	DATE
	VWJ	08/16
CHKD BY		
DO		08/28
APPROV BY		
SUPERVISOR	W. J. GATTI	
Q.A.		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
166	19
	REV. △

669-BR25A-3519

VWJ Thu Aug 29 14:36:35 EDT 2002 /users/jobs/2242/19.1 RevD



LATERAL BRACING

MARK	QTY	Ⓐ	Ⓑ	PAINT	WP/WP	WPD1	WPD2
20LB1	4	8'-5 1/8	8'-1 5/8	NO	11'-6 5/8	1'-8 1/2	1'-8 1/2
20LB2	23	8'-5 1/4	8'-1 3/4	NO	11'-6 3/4	1'-8 1/2	1'-8 1/2
20LB3	8	8'-5 3/8	8'-1 7/8	NO	11'-6 7/8	1'-8 1/2	1'-8 1/2
20LB4	1	8'-6 7/8	8'-3 3/8	NO	11'-8 3/8	1'-8 1/2	1'-8 1/2
20LB5	4	8'-7	8'-3 1/2	NO	11'-8 1/2	1'-8 1/2	1'-8 1/2
20LB6	20	8'-7 1/8	8'-3 5/8	NO	11'-8 5/8	1'-8 1/2	1'-8 1/2
20LB7	8	8'-7 1/4	8'-3 3/4	NO	11'-8 3/4	1'-8 1/2	1'-8 1/2
20LB8	1	8'-10 1/2	8'-7	NO	11'-6 1/2	1'-3	1'-8 1/2
20LB9	1	8'-10 3/4	8'-7 1/4	NO	11'-6 3/4	1'-8 1/2	1'-3
20LB10	1	9'-0 3/8	8'-8 7/8	NO	11'-8 3/8	1'-3	1'-8 1/2
20LB11	1	9'-0 5/8	8'-9 1/8	NO	11'-8 5/8	1'-8 1/2	1'-3
20LB12	1	9'-4 3/8	9'-0 7/8	YES	11'-6 7/8	1'-3	1'-3
20LB13	1	9'-5 7/8	9'-2 3/8	YES	11'-8 3/8	1'-3	1'-3
20LB14	1	9'-6 1/8	9'-2 5/8	NO	11'-8 5/8	1'-3	1'-3
20LB15	1	9'-8 1/4	9'-4 3/4	YES	11'-11 3/4	1'-3 1/2	1'-3 1/2
20LB16	1	9'-8 3/8	9'-4 7/8	NO	11'-11 7/8	1'-3 1/2	1'-3 1/2
20LB17	1	9'-10 7/8	9'-7 3/8	YES	12'-2 3/8	1'-3 1/2	1'-3 1/2

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		20LB13	1		LAT BRACE				153	
7	X		1		L 5x5x1/2	9	5 7/8	PAINTED		
		20LB14	1		LAT BRACE				154	
7	W		1		L 5x5x1/2	9	6 1/8			
		20LB15	1		LAT BRACE				157	
7	W		1		L 5x5x1/2	9	8 1/4	PAINTED		
		20LB16	1		LAT BRACE				157	
7	W		1		L 5x5x1/2	9	8 3/8			
		20LB17	1		LAT BRACE				160	
7	W		1		L 5x5x1/2	9	10 7/8	PAINTED		

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		20LB1	4		LAT BRACE				136	
7	Z		4		L 5x5x1/2	8	5 1/8			
		20LB2	23		LAT BRACE				136	
7	Z		23		L 5x5x1/2	8	5 1/4			
		20LB3	8		LAT BRACE				137	
7	Z		8		L 5x5x1/2	8	5 3/8			
		20LB4	1		LAT BRACE				139	
7	Y		1		L 5x5x1/2	8	6 7/8			
		20LB5	4		LAT BRACE				139	
7	Y		4		L 5x5x1/2	8	7			
		20LB6	20		LAT BRACE				139	
7	Y		20		L 5x5x1/2	8	7 1/8			
		20LB7	8		LAT BRACE				139	
7	Y		8		L 5x5x1/2	8	7 1/4			
		20LB8	1		LAT BRACE				143	
7	Y		1		L 5x5x1/2	8	10 1/2			
		20LB9	1		LAT BRACE				144	
7	Y		1		L 5x5x1/2	8	10 3/4			
		20LB10	1		LAT BRACE				146	
7	X		1		L 5x5x1/2	9	0 3/8			
		20LB11	1		LAT BRACE				146	
7	X		1		L 5x5x1/2	9	0 5/8			
		20LB12	1		LAT BRACE				151	
7	X		1		L 5x5x1/2	9	4 3/8	PAINTED		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-9-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 1 1/16"Ø (UN)

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DV OK'D BY
SEP 09 2002
RESUBMIT APPROVED
BY RRW DATE 9-27-02

FOR GENERAL NOTES SEE GN1.

DESCRIPTION:	LATERAL BRACING	DRAWN BY	DATE
JOB:	VT RTE 9 OVER THE DEERFIELD RIVER	VWJ	08/14
	BRIDGE NO. 25A	CHKD BY	
	SEARSBURG, VERMONT	DO	08/28
TENSOR 2242	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	PROJ. NHF 010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 166 | DRG. NO. 20 | REV. △

670-BR25A-SS2D

DO Thu Aug 29 17:23:26 EDT 2002 /users/jobs-2242/25-1.dwg

GENERAL NOTES

CONSTRUCTION SPECIFICATIONS

1). ALL MATERIAL AND WORKMANSHIP TO BE IN ACCORDANCE WITH THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1990 WITH LATEST REVISIONS AND THE SPECIAL PROVISIONS.

DESIGN SPECIFICATIONS

1). AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (A.A.S.H.T.O) STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, 1996 EDITION WITH LATEST REVISIONS.

MATERIAL SPECIFICATIONS

1). UNLESS NOTED, ALL STEEL TO BE AASHTO M270 GRADE 50W (ASTM A709-50W).

2). HIGH STRENGTH BOLTS: AASHTO M164 (ASTM A325) 7/8" DIA.
TYPE 3 BOLTS SHALL BE USED FOR UNPAINTED CONNECTIONS.
TYPE 1 (GALV.) BOLTS SHALL BE USED FOR PAINTED CONNECTIONS.

3). ALL GIRDER WEB & FLANGES, CROSSFRAMES AND CONNECTION PLATES SHALL BE CHARPY V NOTCH TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF VERMONT STANDARD SPECIFICATIONS. DRAWINGS SHALL CALL OUT "H2-3" FOR EACH APPLICABLE ITEM IN THE BILLS OF MATERIAL.

FABRICATION

1). ALL HOLES SHALL BE PUNCHED OR DRILLED FULL SIZE (UN). HOLES NOTED "DA" SHALL BE DRILLED DURING ASSEMBLY WITH PARTS ASSEMBLED.

2). STUDS ARE FURNISHED AND FIELD APPLIED BY OTHERS.

WELDING

1). THE CONFIGURATION OF THE WELD JOINTS AND ALL WELDING PROCEDURES SHALL BE IN ACCORDANCE WITH AASHTO/AWS D1.5-02 BRIDGE WELDING CODE AND IN ADDITION TO SPECIFICATIONS SHOWN ABOVE. ALL WELDING WILL BE DETAILED TO PRE-QUALIFIED JOINTS, UNLESS PROHIBITED BY THE DESIGNER.

2). WELDING OF MAIN LOAD CARRYING MEMBERS AND ATTACHMENTS SHALL BE PERFORMED USING THE AUTOMATIC SUBMERGED ARC & SHIELDED METAL ARC PROCESSES. ALL WELDS ARE CONTINUOUS U.N.

3). NON DESTRUCTIVE TESTING OF WELDS SHALL BE IN ACCORDANCE WITH THE ABOVE REFERENCED SPECIFICATION.

CLEANING:

1). ALL STEEL SHALL BE BLAST CLEANED AS PER SSPC SP-10 PER SPEC. 506.14(a)
2). $\frac{1}{16}$" RADIUS ON ALL EDGES OF PAINTED SURFACES.

PAINTING

1). ALL STEEL COMPONENTS WITHIN 10'-0 OF END OF GIRDERS AS SHOWN IN SKETCH "P1" SHALL BE COATED WITH THE PROTECTIVE SYSTEM ACCORDING TO SECTION 513 OF THE SPECIFICATION. THE PAINT COLOR SHALL BE BROWN. PAINT SYSTEM MUST BE SYSTEM LISTED ON THE QUALIFIED PRODUCT LIST SECTION 513.02 BROWN COLOR CHIP #20059.

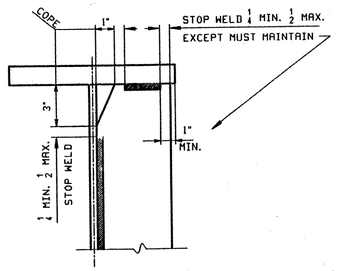
FIELD CONNECTIONS

1). ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH A-325 BOLTS, INSTALLED PER SECTION 506.19(c).

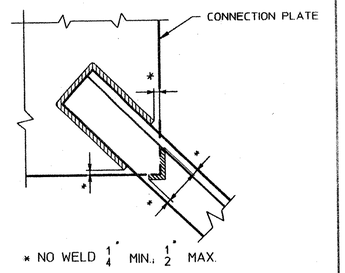
2). BOLTS SHALL HAVE HEAVY HEX NUT, HEX HEAD, & ONE FLAT WASHER EACH (WASHER TO BE PLACED UNDER TURNED ELEMENT). If oversized holes are used washers shall be installed according to Sect 506.19(c)

3). PIECE MARKS WILL BE LOCATED AS SHOWN ON ERECTION DRAWINGS.

PAINT SYSTEM

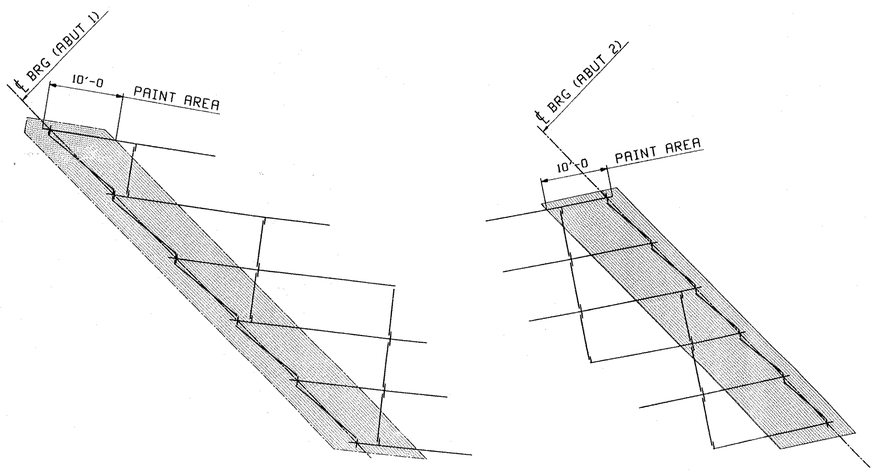


DETAIL "WS1"



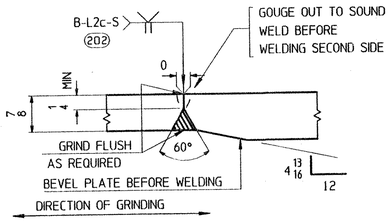
* NO WELD $\frac{1}{4}$" MIN., $\frac{1}{2}$" MAX.

TYP. WELD TERMINATION

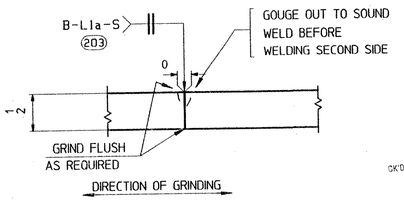


PAINT SKETCH "P1"

NOTES:
-ALL STEEL WITHIN 10'-0 OF THE END OF GIRDER SHALL BE PAINTED.
-FOR INT CROSSFRAMES THAT FALL PARTIALLY IN PAINTED AREA, PAINT THE ENTIRE PIECE.



FLANGE PLATE SPLICE DETAIL "FA"



WEB PLATE SPLICE DETAIL "WA"

RECEIVED
SEP 16 2002
VTrans - PDD
Structures Design Section

CK'D BY DTK CK'D BY
RESUBMIT APPROVED As Noted
BY RRW DATE 10-3-02

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

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/13/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

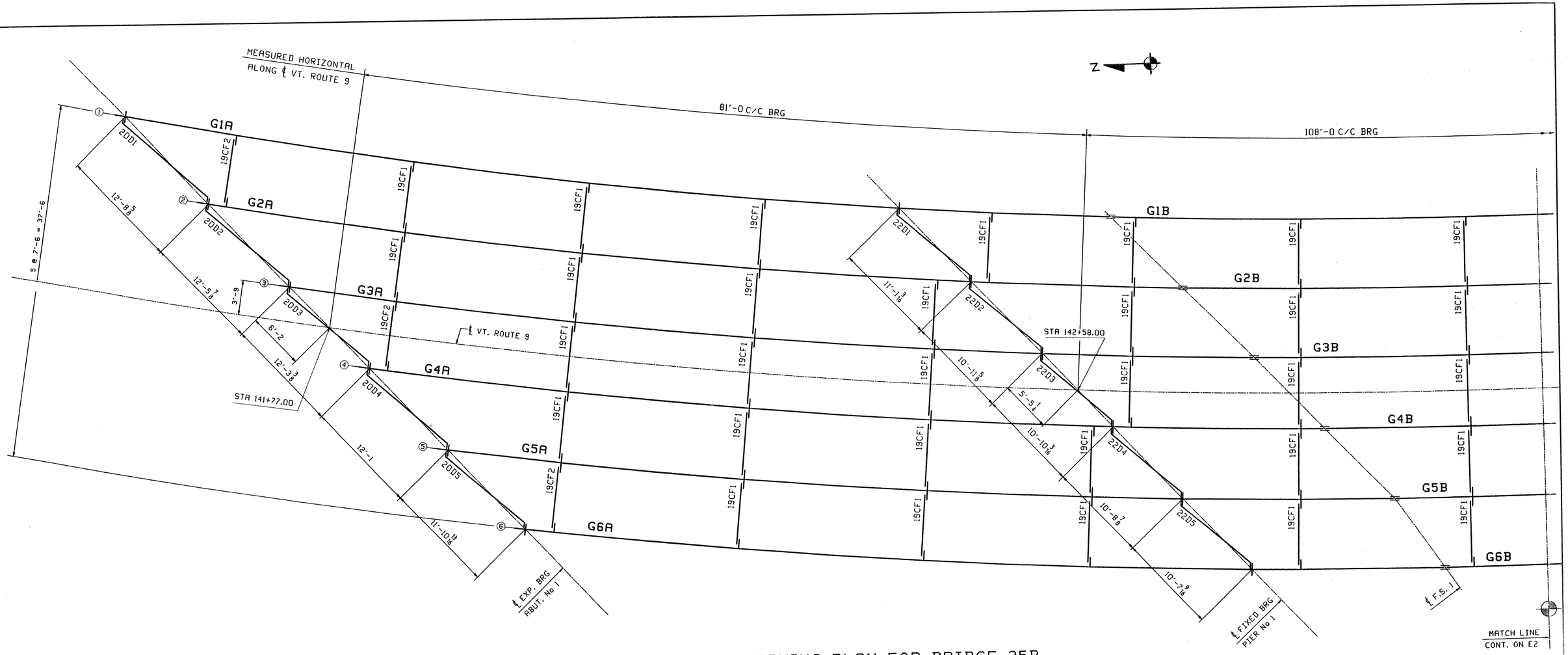
DESCRIPTION: GENERAL NOTES		DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER		WL	08/06
BRIDGE 25B		CHKD BY	
SEARSBURG, VERMONT		JAK	8/12
CONTRACTOR: J.A. McDONALD		APPROV BY	
TENSOR 2243		SUPERVISOR	W. J. GRITI
PROJ NO. NHF-010-1(18)		Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION			

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	GN1
	REV. 1

671-BR25B-GN1

Plot By: Stefan Ost 2003 J:\casco\jobs\2343\GN1.dgn



FRAMING PLAN FOR BRIDGE 25B

RECEIVED
CK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RRW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

WORK WITH E2 & E3.

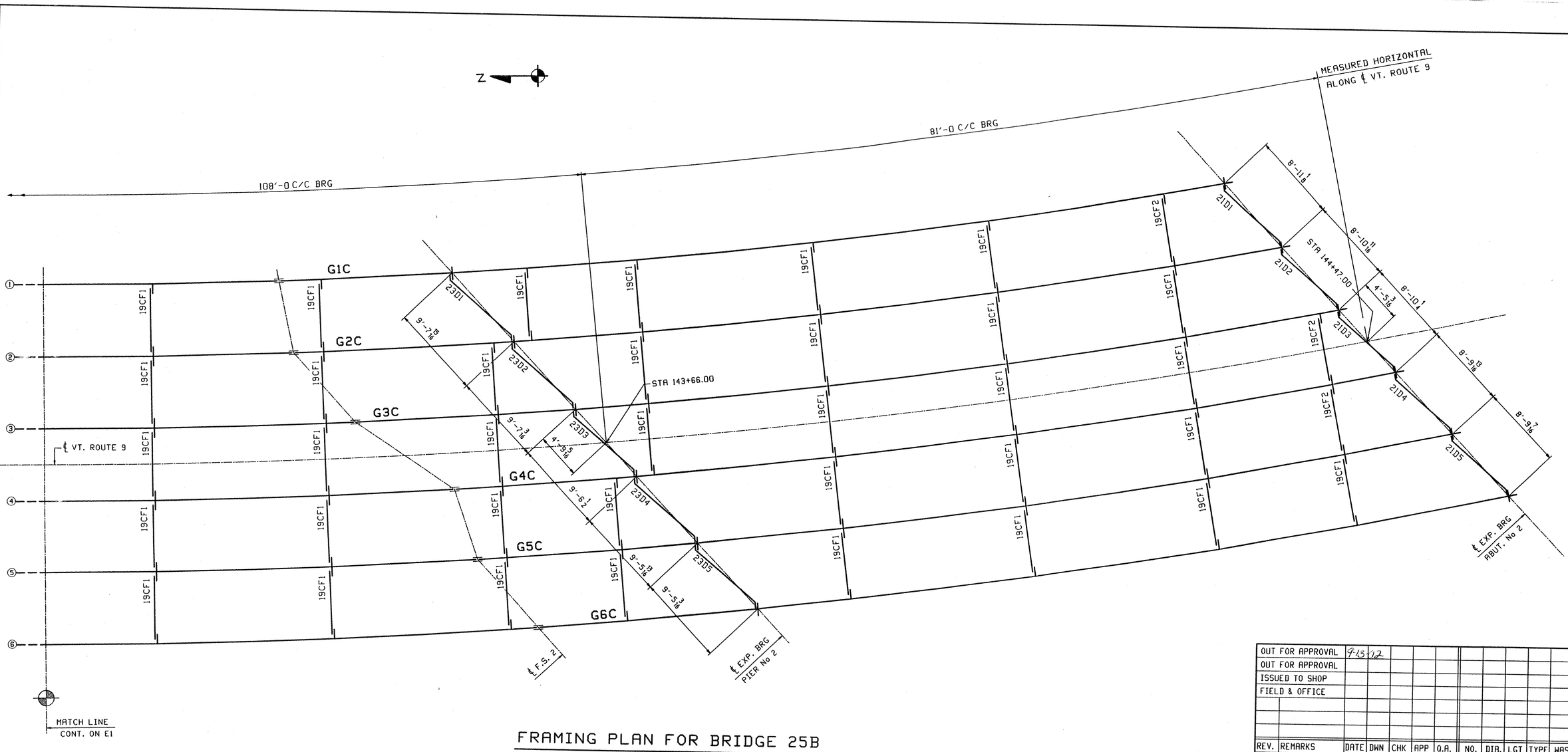
MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: FRAMING PLAN		DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER		VWJ	08/23
		CHKD BY	
		DO	09/04
		APPROV BY	
TENSOR 2243 CONTRACTOR: J.A. McDONALD		SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)		Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION			
CASCO BAY STEEL STRUCTURES, INC.		JOB NO.	DRG. NO.
75 SPRING HILL ROAD	SACO, MAINE 04072	167	E1
PHONE (207) 282-7360	FAX. (207) 282-1179		REV. △

672-BR25B-E1

VWJ Fri Sep 6 10:21:39 EDT 2002 /users/jobs/2243/E1.dgn



FRAMING PLAN FOR BRIDGE 25B

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

RECEIVED
CK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED ✓
BY RKW DATE 10-3-02

WORK WITH E1 & E3.

DESCRIPTION: FRAMING PLAN	DRAWN BY: VWJ — DATE: 08/23
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER BRIDGE 25B SEARSBURG, VERMONT CONTRACTOR: J.A. McDONALD	CHKD BY: — DO: 09/04
TENSOR 2243	APPROV BY: — SUPERVISOR: W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.:
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	E2
	REV. △

673-B25B-E2

VWJ Fri Sep 6 10:20:05 EDT 2002 /users/jobs/2243/E2.dwg

FIELD BOLT LIST — A325 Type 3 BOLTS

LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS /CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED	WASH CODE	PIECES CONNECTED AND REMARKS
1									FIELD SPLICES
2	288	7/8	4	24	12	2 1/2	1/2 1 1/2 1/2	1	TOP FLG SPLICE
3	720	7/8	2 3/4	60	12	1 1/4	3/8 1/2 3/8	1	WEB SPLICE
4	288	7/8	4	24	12	2 1/2	1/2 1 1/2 1/2	1	BTM FLG SPLICE
5									
6									INT CF (UNPAINTED)
7	1056	7/8	2 1/2	8	132	1	1/2 1/2	1	TOP GUSS TO STIFFENER
8	792	7/8	2 1/2	6	132	1	1/2 1/2	1	BTM GUSS TO STIFFENER
9									
10									PIER DIAPHRAGMS
11	320	7/8	2 3/4	16	20	1 1/4	1/2 3/4	1	GUSS TO STIFFENER
12									

1: 1 Hard Flat Washer

FIELD BOLT LIST — A325-1 GALV BOLTS

LINE	NO REQ'D.	BOLT DIAM.	BOLT LEN.	BOLTS /CONN.	# OF CONN.	GRIP	THICKNESS OF PCS. CONNECTED	WASH CODE	PIECES CONNECTED AND REMARKS
13									INT CF (PAINTED)
14	48	7/8	2 1/2	8	6	1	1/2 1/2	1	TOP GUSS TO STIFFENER
15	36	7/8	2 1/2	6	6	1	1/2 1/2	1	BTM GUSS TO STIFFENER
16									
17									ABUT DIAPHS (PAINTED)
18	320	7/8	2 3/4	16	20	1 1/4	1/2 3/4	1	GUSS TO STIFFENER
19									

1: 1 Hard Flat Washer

FIELD BOLT SUMMARY — 2% + 3 ADDED, MIN. 2 EXTRA

LINE	NO. OF BOLTS	BOLT DIAM.	TYPE	BOLT LEN	ACTUAL COUNT	REMARKS
1	1888	7/8	A325 Type 3	2 1/2	1848	
2	1064	7/8	"	2 3/4	1040	
3	591	7/8	A325 Type 3	4	576	
4						
5	3543	Hard Flat Washers for 7/8 ϕ BOLT				
6						
7						
8	89	7/8	A325-1 GALV	2 1/2	84	
9	329	7/8	A325-1 GALV	2 3/4	320	
10						
11	418	Hard Flat Washers for 7/8 ϕ BOLT				GALV
12						
13						
14						

RECEIVED
CK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RLW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/30/2				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:

ELECTRODES:

HOLES:

SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: FIELD BOLTS

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

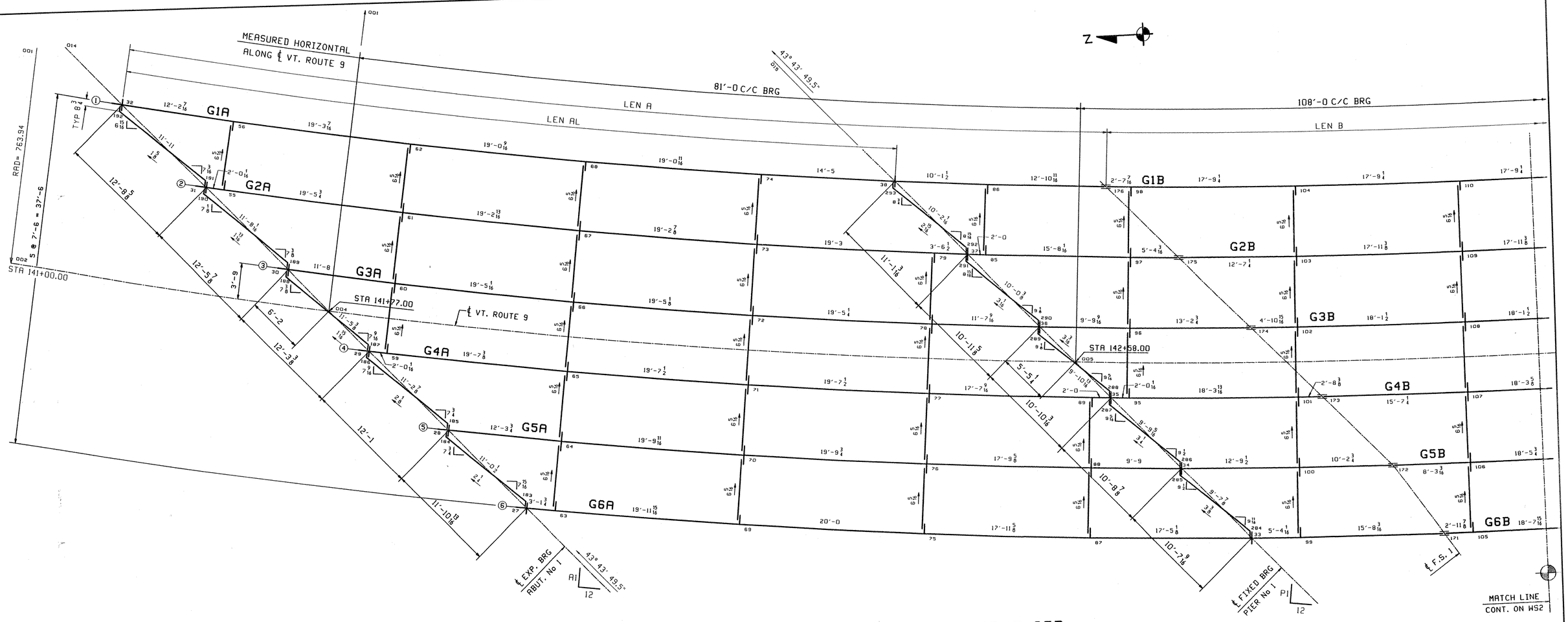
DRAWN BY	DATE
VWJ	08/23
CHKD BY	
DO	09/04
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	E3
	REV. △

674-BR25B-E-3

DO Fri Sep 6 11:56:15 EDT 2002 /users/jobs/2243/E3.dwg



CALCULATION PLAN FOR BRIDGE 25B

Line	DEVELOPED LENGTHS ALONG BTM OF WEB			GIRDER SLOPE		PLAN BEVELS	
	LEN AL	LEN A	LEN B	ABUT 1	PIER 1	A1	P1
1	84'-0 1/8	107'-0 5/16	69'-4 3/4	-.0340	-.0340	8 5/8	10 7/8
2	82'-9	105'-9 1/4	63'-4 13/16	-.0337	-.0337	8 7/8	11 1/8
3	81'-7	104'-7 5/16	62'-5 9/16	-.0334	-.0334	9 1/8	11 3/8
4	80'-6	103'-6 1/4	65'-6 15/16	-.0330	-.0330	9 3/8	11 5/8
5	79'-5 13/16	102'-6 1/16	60'-8 7/8	-.0327	-.0327	9 5/8	11 13/16
6	78'-6 7/16	99'-6 11/16	61'-11 1/4	-.0324	-.0324	9 7/8	11 15/16

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

NOTES
1. LONGITUDINAL DIMENSIONS ARE SLOPING ALONG BOTT OF WEB WITH CORRECTIONS MADE FOR VERTICAL CURVE, GRADE & DL CAMBER (UN).
2. TRANSVERSE DIMENSIONS ARE IN A HORIZ. PLANE (UN).
3. ARROW POINTS TOWARDS LOW END OF MEMBER.
4. ENDS OF GIRDERS AND BRG. STIFF'S ARE VERTICAL AFTER DL ROTATION.
5. CF STIFF, INT STIFF & FIELD SPLICES ARE NORMAL TO GRADE.
6. BOTT PT NUMBERS = TOP PT NUMBERS + 300
7. FOR LAYOUTS SEE DWG TDI.
8. COMBINE CROSSFRAMES FOR DIFF IN DROPS OF +/- 3/16
9. CROSSFRAMES DROPS ARE CALCULATED IN THEIR FINAL POSITION.

RECEIVED
OK'D BY DJK OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/6	VK			
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION:	CALC PLAN	DRAWN BY	DATE
JOB:	VT. ROUTE 9 OVER DEERFIELD RIVER	WJG	06/21
	BRIDGE 25B	CHKD BY	
	SEARSBURG, VERMONT	JAK	7/24
TENSOR 2243	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GAITI
PROJ NO.	NHF-010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	WS1
	REV. 1

675-BR25B-WS1

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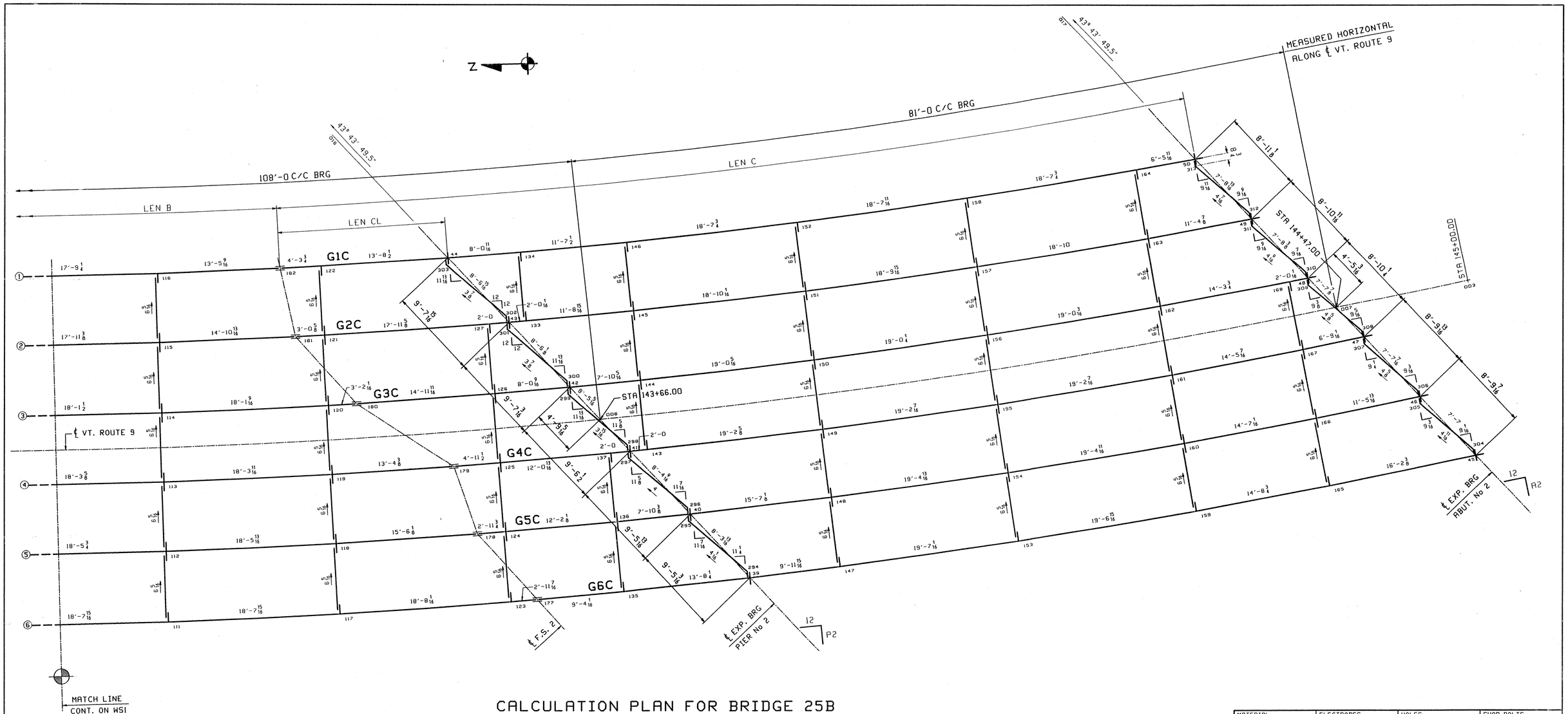


CALCULATION PLAN FOR BRIDGE 25B

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

	DEVELOPED LENGTHS ALONG BTM OF WEB			GIRDER SLOPE		PLAN BEVELS	
Line	LEN B	LEN CL	LEN C	PIER 2	ABUT 2	P2	A2
1	69'-4 3/4	18'-0 1/4	100'-1 5/16	-.0340	-.0340	9 13/16	7 13/16
2	63'-4 13/16	23'-0 1/4	104'-8 1/8	-.0337	-.0337	9 11/16	7 11/16
3	62'-5 9/16	23'-0 1/4	104'-3 1/8	-.0334	-.0334	9 1/2	7 9/16
4	65'-6 15/16	19'-0 5/16	99'-10 5/16	-.0330	-.0330	9 3/8	7 1/2
5	60'-8 7/8	23'-0 1/4	103'-5 3/4	-.0327	-.0327	9 3/16	7 3/8
6	61'-11 1/4	23'-0 5/16	103'-1 3/8	-.0324	-.0324	9 1/16	7 1/4

NOTES
1. LONGITUDINAL DIMENSIONS ARE SLOPING ALONG BOTT OF WEB WITH CORRECTIONS MADE FOR VERTICAL CURVE, GRADE & DL CAMBER (UN).
2. TRANSVERSE DIMENSIONS ARE IN A HORIZ. PLANE (UN).
3. ARROW POINTS TOWARDS LOW END OF MEMBER.
4. ENDS OF GIRDERS AND BRG. STIFF'S ARE VERTICAL AFTER DL ROTATION.
5. CF STIFF, INT STIFF & FIELD SPLICES ARE NORMAL TO GRADE.
6. BOTT PT NUMBERS = TOP PT NUMBERS + 300
7. FOR LAYOUTS SEE DWG TDI.
8. COMBINE CROSSFRAMES FOR DIFF IN DROPS OF +/- 3/16
9. CROSSFRAMES DROPS ARE CALCULATED IN THEIR FINAL POSITION.

RECEIVED
OK'D BY DIV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RRW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-13	JK			
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: CALC PLAN

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

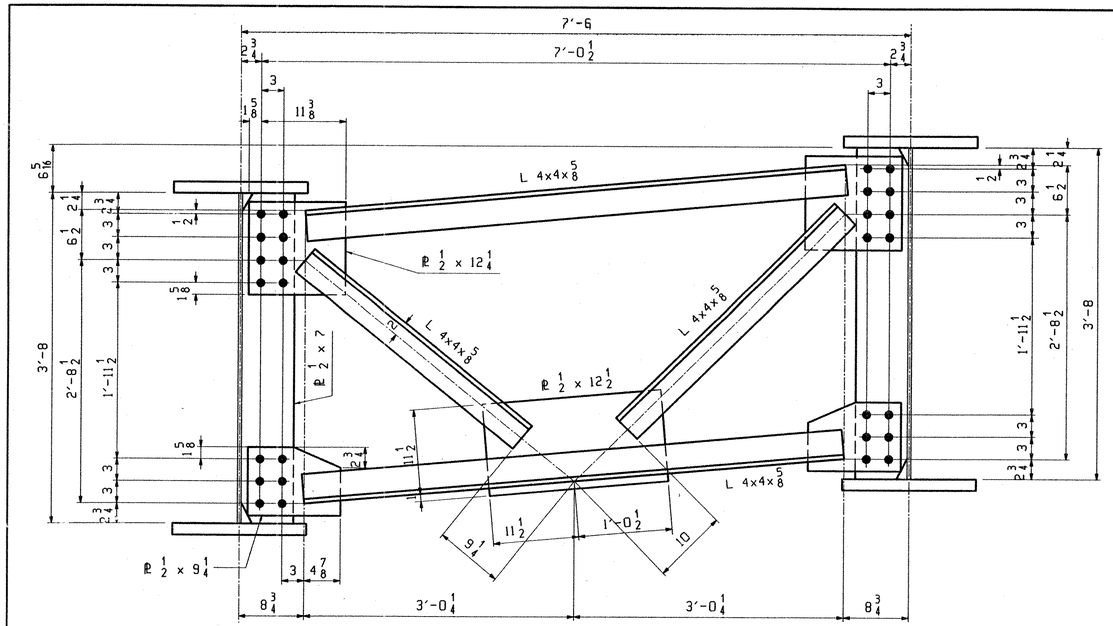
DRAWN BY	DATE
WJG	06/21
CHKD BY	
JAK	7/24
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	WS2
	REV. △

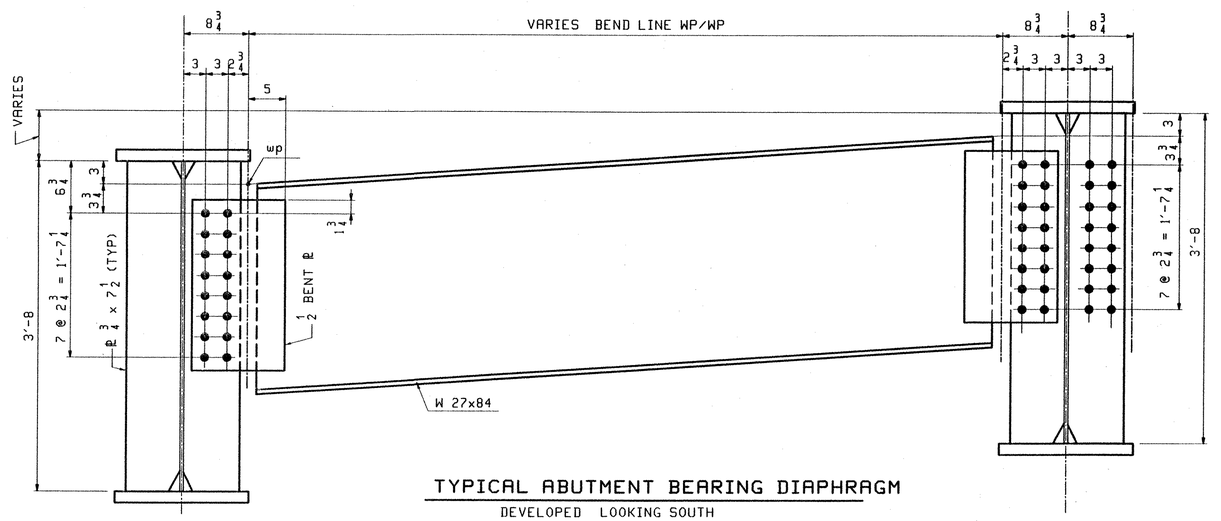
676-BF25B-WS2

JAK Thu Jul 25 14:03:07 EDT 2002 /users/jak/2243/ws2 : Rev0



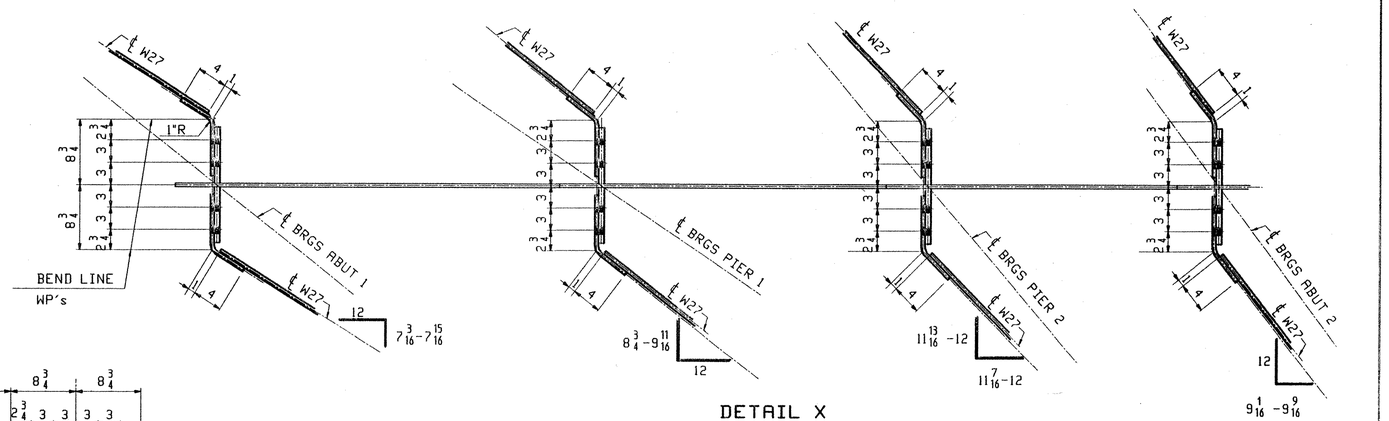
TYPICAL INTERMEDIATE CROSSFRAME

LOOKING SOUTH

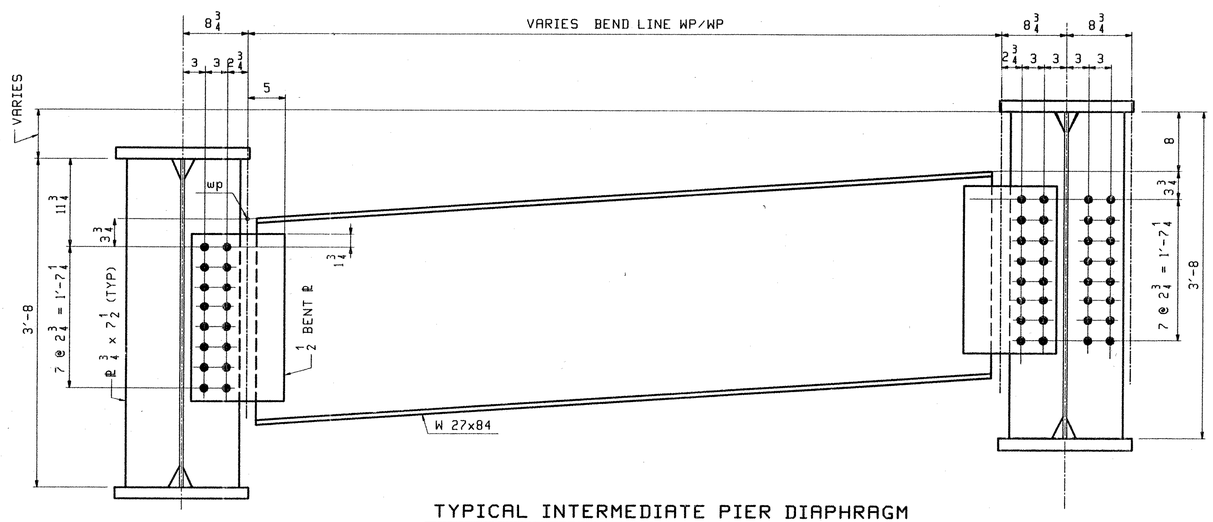


TYPICAL ABUTMENT BEARING DIAPHRAGM

DEVELOPED LOOKING SOUTH



DETAIL X



TYPICAL INTERMEDIATE PIER DIAPHRAGM

DEVELOPED LOOKING SOUTH

RECEIVED
OK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RRW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	7-15-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W	ELECTRODES:	HOLES: 15/16 Ø	BOLTS: 7/8 Ø A325-3
SURFACE PREP. & PAINT:			

DESCRIPTION: TYPICAL LAYOUTS	DRAWN BY	DATE
JOB: VT. ROUTE OVER DEERFIELD RIVER BRIDGE 25B SEARSBURG-WILMINGTON SEARSBURG BENINGTON	WJG	06/22
	CHKD BY	
	JAK	7/24
	APPROV BY	
TENSOR 2243	SUPERVISOR:	W. J. GATTI
PROJ NO. F-010-1(18)	Q.A.	
CUSTOMER: VERMONT D.O.T.		

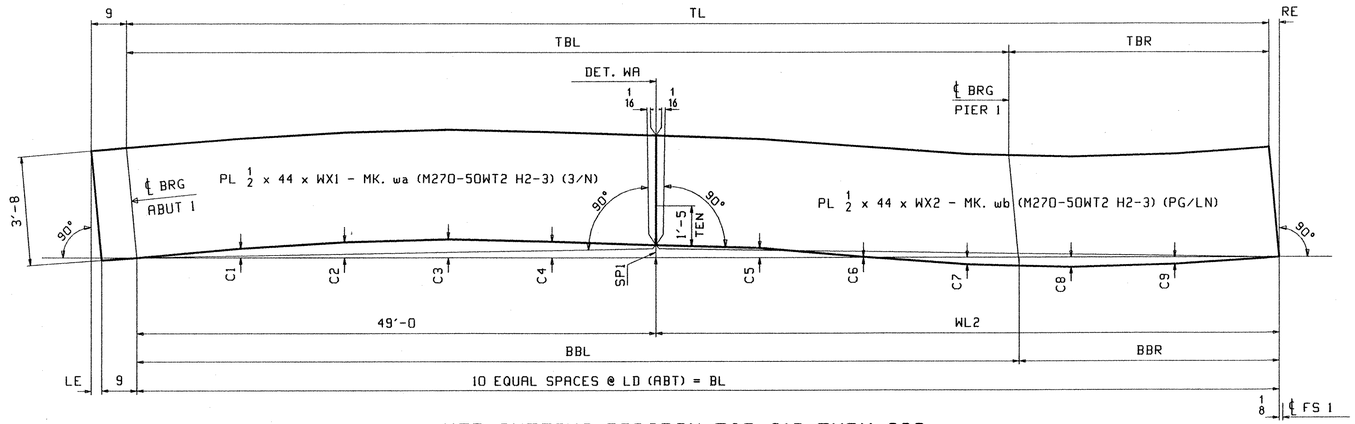
CASCO BAY STEEL STRUCTURES, INC.

75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	TD1
	REV. △

677 BR25B-TD1

JAK Thu Jul 25 10:00:04 EDT 2002 /users/jaks/2243-TD1.Rev0



WEB CUTTING DIAGRAM FOR G1A THRU G6A

MARK	TL	BL	LE	RE	WL2	WX1	WX2	SP1	TBL	TBR	BBL	BBR	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	WEB MK. wb PG/LINE
G1A	107'-1 13/16	107'-0 3/16	1 13/16	3/16	58'-0 3/16	49'-10 13/16	58'-0 1/4	1 1/16	84'-0 7/16	23'-1 3/8	84'-0 1/8	23'-0 1/16	10'-8 3/8	13/16	1 3/8	1 9/16	1 3/8	7/8	0	9/16	13/16	9/16	4/ C
G2A	105'-10 11/16	105'-9 1/8	1 13/16	1/4	56'-9 1/8	49'-10 13/16	56'-9 3/16	15/16	82'-9 3/8	23'-1 5/16	82'-9	23'-0 1/8	10'-6 7/8	13/16	1 5/16	1 7/16	1 1/4	3/4	0	9/16	13/16	9/16	4/ E
G3A	104'-8 11/16	104'-7 3/16	1 3/4	1/4	55'-7 3/16	49'-10 3/4	55'-7 1/4	1	81'-7 5/16	23'-1 3/8	81'-7	23'-0 3/16	10'-5 1/2	13/16	1 3/8	1 9/16	1 3/8	13/16	0	5/8	7/8	9/16	4/ G
G4A	103'-7 5/8	103'-6 1/8	1 3/4	1/4	54'-6 1/8	49'-10 3/4	54'-6 3/16	13/16	80'-6 5/16	23'-1 5/16	80'-6	23'-0 1/8	10'-4 1/4	13/16	1 5/16	1 7/16	1 1/4	11/16	0	5/8	7/8	9/16	4/ J
G5A	102'-7 7/16	102'-5 15/16	1 3/4	1/4	53'-5 15/16	49'-10 3/4	53'-6	15/16	79'-6 1/8	23'-1 5/16	79'-5 13/16	23'-0 1/8	10'-3	13/16	1 3/8	1 9/16	1 3/8	13/16	0	11/16	7/8	9/16	4/ L
G6A	99'-8 1/16	99'-6 9/16	1 3/4	1/4	50'-6 9/16	49'-10 3/4	50'-6 5/8	7/8	78'-6 3/4	21'-1 5/16	78'-6 7/16	21'-0 1/8	9'-11 1/2	13/16	1 5/16	1 1/2	1 5/16	13/16	0	1/2	3/4	9/16	4/ Q

RECEIVED
OK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL WA SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15ft lbs @ 40° F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/13/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: | ELECTRODES: | HOLES: | SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: CAMBER DIAGRAMS

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

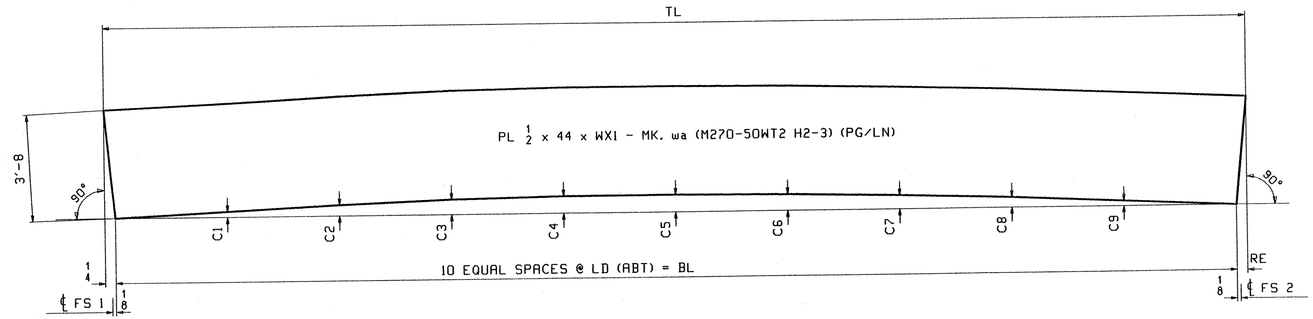
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	AB	DATE	07/22
CHKD BY	JAK		07/24
APPROV BY	SUPERVISOR	W. J. GATTI	
	Q.A.		
JOB NO.	167	DRG. NO.	C1
		REV.	△

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

678 BF25B-C1

JAK Thu Jul 25 09:24:58 EDT 2002 c:\wrk\jak\2243\C1.t Rev0



WEB CUTTING DIAGRAM FOR G1B THRU G6B

MARK	TL	BL	RE	WX1	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	WEB MK	PG/LINE
G1B	69'-5	69'-4 1/2	1/4	69'-5	6'-11 1/4	1/2	15/16	1 5/16	1 1/2	1 9/16	1 7/16	1 1/4	15/16	1/2	wa	3/ A
G2B	63'-5 1/16	63'-4 9/16	1/4	63'-5 1/16	6'-4	7/16	13/16	1 1/8	1 5/16	1 3/8	1 1/4	1 1/16	13/16	7/16	wa	3/ E
G3B	62'-5 13/16	62'-5 5/16	1/4	62'-5 13/16	6'-2 7/8	7/16	13/16	1 1/8	1 5/16	1 5/16	1 1/4	1 1/16	13/16	7/16	wa	3/ G
G4B	65'-7 3/16	65'-6 11/16	1/4	65'-7 3/16	6'-6 5/8	1/2	15/16	1 1/4	1 7/16	1 7/16	1 3/8	1 3/16	7/8	7/16	wa	3/ C
G5B	60'-9 1/8	60'-8 5/8	1/4	60'-9 1/8	6'-0 7/8	3/8	3/4	1 1/16	1 1/4	1 5/16	1 1/4	1 1/16	3/4	7/16	wa	3/ L
G6B	61'-11 9/16	61'-11	5/16	61'-11 9/16	6'-2 1/4	3/8	13/16	1 1/8	1 5/16	1 3/8	1 1/4	1 1/16	13/16	7/16	wa	3/ J

NOTES:

1. FOR GENERAL NOTES SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40° F

RECEIVED
OK'D BY TJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RRW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/13/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: CAMBER DIAGRAMS

JOB: VT. ROUTE OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG-WILMINGTON
SEARSBURG BENINGTON

PROJ NO. F-010-1(18)

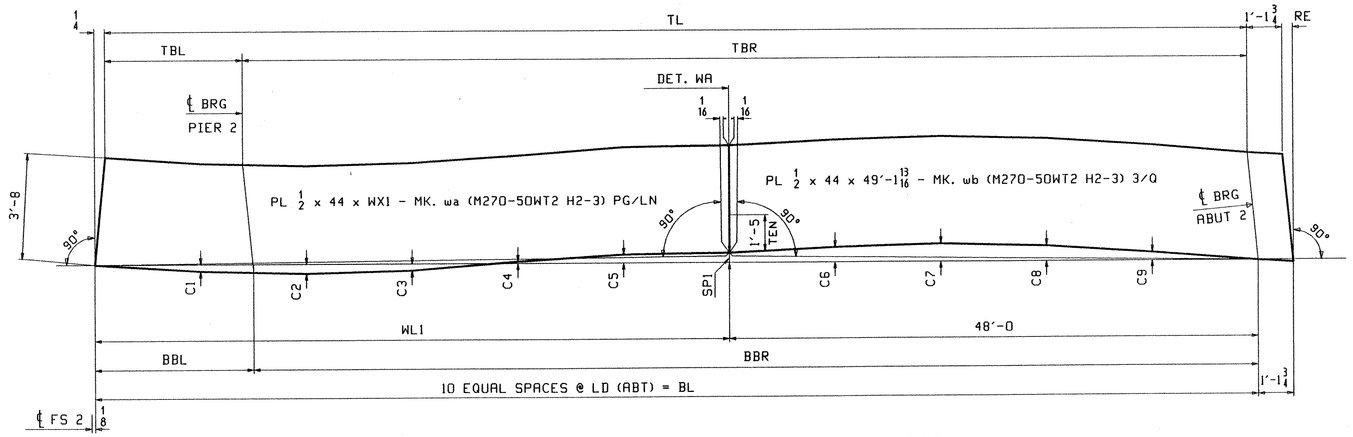
CUSTOMER: VERMONT D.O.T.

DRAWN BY	DATE
AB	07/22
CHKD BY	
JAK	07/24
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	
JOB NO.	DRG. NO.
167	C2
	REV. △

TENSOR 2243
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

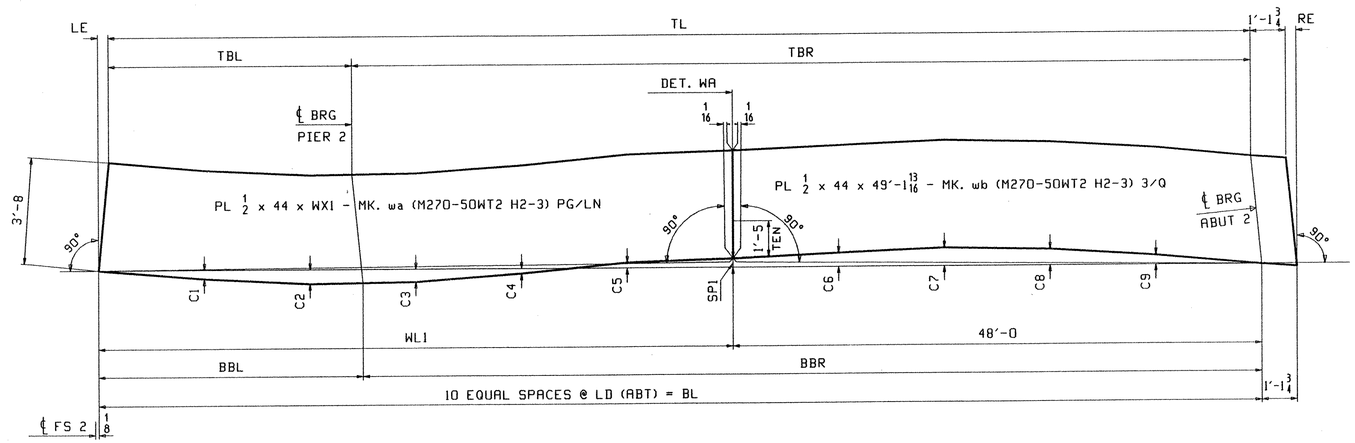
609-BR25B-C2

JAK Thu Jul 25 09:25:25 EDT 2002 /users/jak/2243/C2 Rev=0



WEB CUTTING DIAGRAM FOR G1C & G4C

MARK	TL	BL	RE	WL1	WX1	SP1	TBL	TBR	BBL	BBR	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	WEB MK. wa PG/LINE
G1C	99'-11 11/16	100'-1 3/16	1 1/4	52'-1 3/16	52'-1 1/4	13/16	17'-10 7/16	82'-1 1/4	18'-0 1/8	82'-1 1/16	10'-0 1/8	9/16	3/4	9/16	0	11/16	1 1/4	1 1/2	1 1/4	11/16	4/ N
G4C	99'-8 3/4	99'-10 3/16	1 3/16	51'-10 3/16	51'-10 1/4	11/16	18'-10 1/2	80'-10 1/4	19'-0 3/16	80'-10	9'-11 7/8	5/8	7/8	5/8	1/16	9/16	1 1/8	1 7/16	1 5/16	11/16	4/ A



WEB CUTTING DIAGRAM FOR G2C, G3C, G5C & G6C

MARK	TL	BL	LE	RE	WL1	WX1	SP1	TBL	TBR	BBL	BBR	LD	C1	C2	C3	C4	C5	C6	C7	C8	C9	WEB MK. wa PG/LINE
G2C	104'-6 9/16	104'-8	3/16	1 1/4	56'-8	56'-8 1/16	5/8	22'-10 1/2	81'-8 1/16	23'-0 1/8	81'-7 7/8	10'-5 5/8	5/8	1	7/8	3/8	3/8	1	1 5/16	1 3/16	11/16	3/ S
G3C	104'-1 9/16	104'-3	3/16	1 1/4	56'-3	56'-3 1/16	5/8	22'-10 1/2	81'-3 1/16	23'-0 1/8	81'-2 7/8	10'-5 1/8	5/8	1	15/16	3/8	3/8	15/16	1 1/4	1 3/16	11/16	3/ U
G5C	103'-4 1/4	103'-5 5/8	3/16	1 3/16	55'-5 5/8	55'-5 11/16	9/16	22'-10 1/2	80'-5 3/4	23'-0 1/8	80'-5 1/2	10'-4 1/8	5/8	1 1/16	15/16	3/8	5/16	1	1 5/16	1 1/4	11/16	3/ W
G6C	102'-11 15/16	103'-1 1/4	3/16	1 1/8	55'-1 1/4	55'-1 5/16	9/16	22'-10 9/16	80'-1 3/8	23'-0 3/16	80'-1 1/16	10'-3 3/4	5/8	1 1/16	15/16	7/16	3/8	15/16	1 5/16	1 3/16	3/4	3/ Y

RECEIVED
OK'D BY DIV OK'D BY
SEP 16 2002
RESUBMIT APPROVED ✓
BY RJW DATE 10-3-02

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL WA SEE SHT. GN1.
2. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/13/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

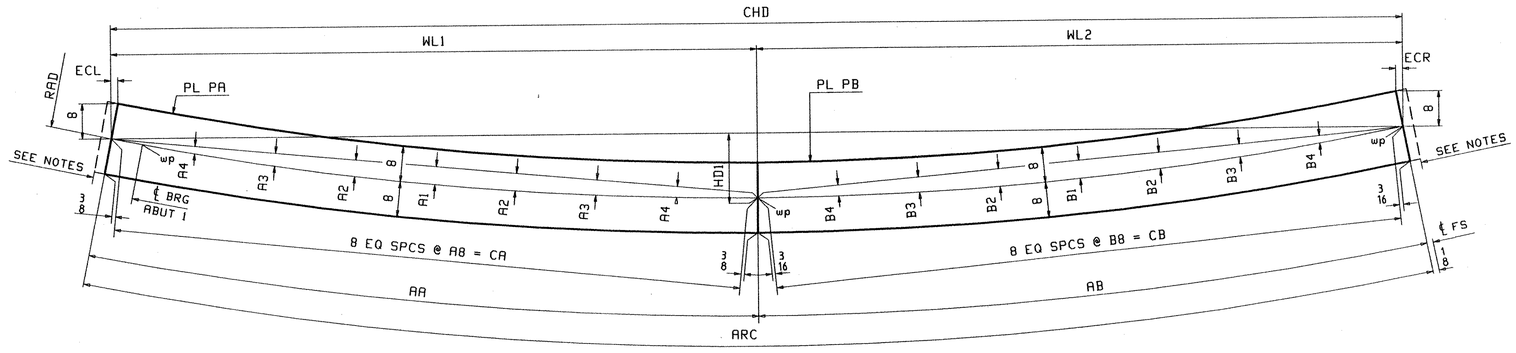
DESCRIPTION: CAMBER DIAGRAMS	DRAWN BY	DATE
JOB: VT. ROUTE OVER DEERFIELD RIVER	AB	07/22
BRIDGE 258	CHKD BY	
SEARSBURG-WILMINGTON	JAK	07/24
SEARSBURG BENINGTON	APPROV BY	
TENSOR 2243	SUPERVISOR	W. J. GATTI
PROJ NO. F-010-1(18)	Q.A.	
CUSTOMER: VERMONT D.O.T.		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	C3
	REV. △

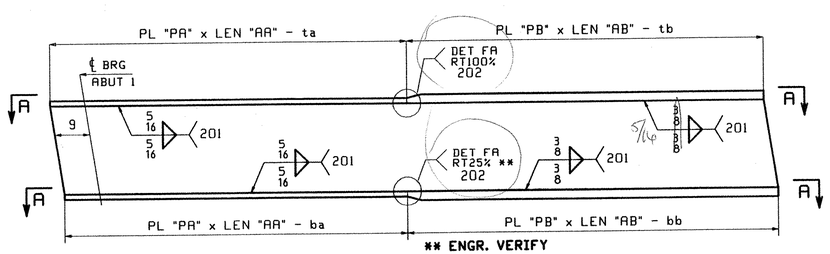
680- BR25B-C3

Thu Sep 5 18:01:26 EDT 2002 /users/jake/2243/C3 - 6x4.D



SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	A1	A2	A3	A4	A8	CA	B1	B2	B3	B4	B8	CB	ECL	ECR	WL1	WL2	HD1	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G1A TOP FLG	745.19	107′-10 13/16	107′-9 11/16	74′-10 3/4	33′-0 1/16	11 5/16	10 9/16	8 7/16	4 15/16	9′-4 5/16	74′-10 5/16	2 3/16	2 1/16	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	74′-10 1/8	32′-11 9/16	1′-7 7/8	PL 7/8 x 16 -ta (H2-3) (1/L)	PL 1 1/2 x 16 -tb (H2-3) (1/C)
G1A BTM FLG	745.19	107′-9 3/16	107′-8 1/16	74′-9 1/8	33′-0 1/16	11 1/4	10 9/16	8 7/16	4 15/16	9′-4 1/16	74′-8 11/16	2 3/16	2 1/16	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	74′-8 1/2	32′-11 9/16	1′-7 13/16	PL 7/8 x 16 -ba (H2-3) (1/L)	PL 1 1/2 x 16 -bb (H2-3) (1/C)
G2A TOP FLG	752.69	106′-7 11/16	106′-6 5/8	73′-7 5/8	33′-0 1/16	10 13/16	10 1/8	8 1/8	4 3/4	9′-2 3/8	73′-7 1/4	2 3/16	2 1/16	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	73′-7 1/16	32′-11 9/16	1′-7 3/8	PL 7/8 x 16 -ta (H2-3) (1/N)	PL 1 1/2 x 16 -tb (H2-3) (1/C)
G2A BTM FLG	752.69	106′-6 1/8	106′-5 1/16	73′-6 1/16	33′-0 1/16	10 3/4	10 1/16	8 1/16	4 11/16	9′-2 3/16	73′-5 11/16	2 3/16	2 1/16	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	73′-5 1/2	32′-11 9/16	1′-7 5/16	PL 7/8 x 16 -ba (H2-3) (1/S)	PL 1 1/2 x 16 -bb (H2-3) (1/C)
G3A TOP FLG	760.19	105′-5 11/16	105′-4 11/16	72′-5 5/8	33′-0 1/16	10 3/8	9 11/16	7 3/4	4 9/16	9′-0 11/16	72′-5 1/4	2 1/8	2	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	72′-5 1/16	32′-11 5/8	1′-6 7/8	PL 7/8 x 16 -ta (H2-3) (1/Y)	PL 1 1/2 x 16 -tb (H2-3) (1/C)
G3A BTM FLG	760.19	105′-4 3/16	105′-3 3/16	72′-4 1/8	33′-0 1/16	10 5/16	9 11/16	7 3/4	4 1/2	9′-0 1/2	72′-3 3/4	2 1/8	2	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	72′-3 9/16	32′-11 5/8	1′-6 13/16	PL 7/8 x 16 -ba (H2-3) (1/Y)	PL 1 1/2 x 16 -bb (H2-3) (1/C)
G4A TOP FLG	767.69	104′-4 5/8	104′-3 11/16	71′-4 9/16	33′-0 1/16	9 15/16	9 5/16	7 7/16	4 3/8	8′-11	71′-4 1/4	2 1/8	2	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	71′-4 1/16	32′-11 5/8	1′-6 3/8	PL 7/8 x 16 -ta (H2-3) (2/E)	PL 1 1/2 x 16 -tb (H2-3) (1/C)
G4A BTM FLG	767.69	104′-3 1/8	104′-2 3/16	71′-3 1/16	33′-0 1/16	9 15/16	9 5/16	7 7/16	4 5/16	8′-10 13/16	71′-2 3/4	2 1/8	2	1 5/8	15/16	4′-1 1/2	33′-0 1/16	9/16	9/16	71′-2 9/16	32′-11 5/8	1′-6 3/8	PL 7/8 x 16 -ba (H2-3) (2/G)	PL 1 1/2 x 16 -bb (H2-3) (1/C)
G5A TOP FLG	775.19	103′-4 7/16	103′-3 1/2	69′-4 3/8	34′-0 1/16	9 5/16	8 3/4	7	4 1/16	8′-8	69′-4 1/16	2 1/4	2 1/8	1 11/16	1	4′-3	34′-0 1/16	9/16	9/16	69′-3 7/8	33′-11 5/8	1′-6 1/4	PL 7/8 x 16 -ta (H2-3) (2/N)	PL 1 1/2 x 16 -tb (H2-3) (1/A)
G5A BTM FLG	775.19	103′-2 15/16	103′-2	69′-2 7/8	34′-0 1/16	9 1/4	8 11/16	6 15/16	4 1/16	8′-7 13/16	69′-2 9/16	2 1/4	2 1/8	1 11/16	1	4′-3	34′-0 1/16	9/16	9/16	69′-2 3/8	33′-11 5/8	1′-6 3/16	PL 7/8 x 16 -ba (H2-3) (2/N)	PL 1 1/2 x 16 -bb (H2-3) (1/A)
G6A TOP FLG	782.69	100′-5 1/16	100′-4 1/4	69′-5	31′-0 1/16	9 1/4	8 11/16	6 15/16	4 1/16	8′-8 1/16	69′-4 3/4	1 13/16	1 3/4	1 3/8	13/16	3′-10 1/2	31′-0 1/16	1/2	1/2	69′-4 9/16	30′-11 11/16	1′-4 1/2	PL 7/8 x 16 -ta (H2-3) (2/N)	PL 1 1/2 x 16 -tb (H2-3) (1/E)
G6A BTM FLG	782.69	100′-3 9/16	100′-2 3/4	69′-3 1/2	31′-0 1/16	9 3/16	8 5/8	6 7/8	4	8′-7 7/8	69′-3 1/4	1 13/16	1 3/4	1 3/8	13/16	3′-10 1/2	31′-0 1/16	1/2	1/2	69′-3 1/16	30′-11 11/16	1′-4 7/16	PL 7/8 x 16 -ba (H2-3) (2/N)	PL 1 1/2 x 16 -bb (H2-3) (1/E)



FLANGE DIAGRAM FOR G1A THRU G6A

RECEIVED
OK'D BY DJK OK'D BY
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RKW DATE 10-3-02

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL FA SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/13/02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: | ELECTRODES: | HOLES: | SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: FLG CUTTING DIAGRAMS

JOB: VT. ROUTE OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG-WILMINGTON
SEARSBURG BENINGTON

TENSOR 2243

PROJ NO. F-010-1(18)

CUSTOMER: VERMONT D.O.T.

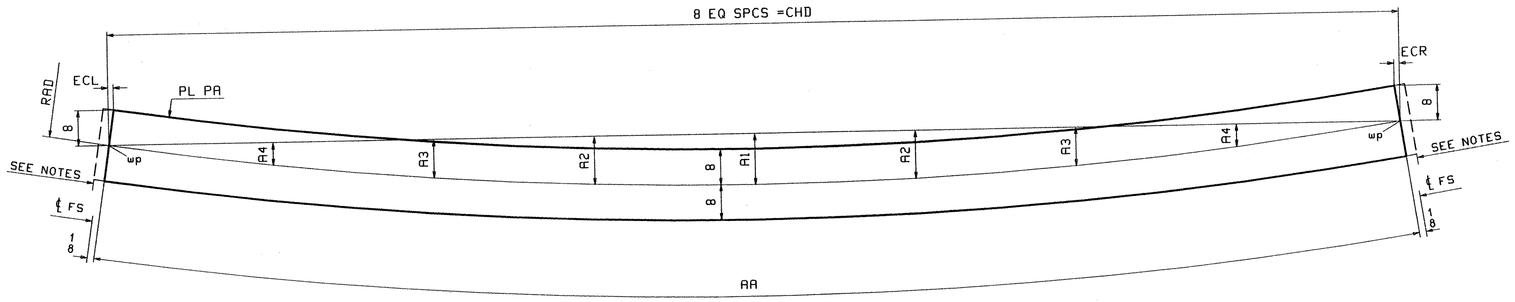
DRAWN BY	DATE
AB	07/22
CHKD BY	
JAK	07/24
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

JOB NO.	DRG. NO.
167	F1
	REV. △

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

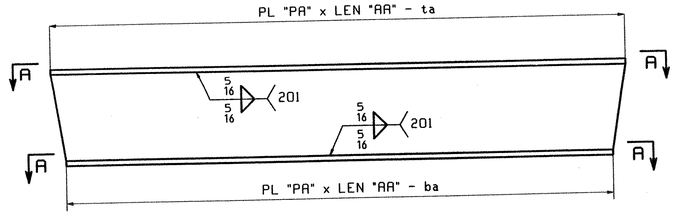
681-BR25B-FJ

JAK Thu Jul 25 09:26:54 EDT 2002 /users/jak/2243/f1.dwg



SECTION A-A

LOCATION	RAD	CHD	AA	A1	A2	A3	A4	ECL	ECR	PL PA (M270-50WT2)
G1B TOP FLG	745.19	69'-4 11/16	69'-5	9 11/16	9 1/16	7 1/4	4 1/4	3/8	3/8	PL 7/8 x 16 -ta (H2-3) (2/J)
G1B BTM FLG	745.19	69'-4 3/16	69'-4 1/2	9 11/16	9 1/16	7 1/4	4 1/4	3/8	3/8	PL 7/8 x 16 -ba (H2-3) (2/J)
G2B TOP FLG	752.69	63'-4 13/16	63'-5 1/16	8	7 1/2	6	3 1/2	5/16	5/16	PL 7/8 x 16 -ta (H2-3) (2/S)
G2B BTM FLG	752.69	63'-4 5/16	63'-4 9/16	8	7 1/2	6	3 1/2	5/16	5/16	PL 7/8 x 16 -ba (H2-3) (2/S)
G3B TOP FLG	760.19	62'-5 5/8	62'-5 13/16	7 11/16	7 1/4	5 3/4	3 3/8	5/16	5/16	PL 7/8 x 16 -ta (H2-3) (2/U)
G3B BTM FLG	760.19	62'-5 1/8	62'-5 5/16	7 11/16	7 3/16	5 3/4	3 3/8	5/16	5/16	PL 7/8 x 16 -ba (H2-3) (2/U)
G4B TOP FLG	767.69	65'-6 15/16	65'-7 3/16	8 7/16	7 7/8	6 5/16	3 11/16	5/16	5/16	PL 7/8 x 16 -ta (H2-3) (2/Q)
G4B BTM FLG	767.69	65'-6 7/16	65'-6 11/16	8 3/8	7 7/8	6 5/16	3 11/16	5/16	5/16	PL 7/8 x 16 -ba (H2-3) (2/Q)
G5B TOP FLG	775.19	60'-8 15/16	60'-9 1/8	7 1/8	6 11/16	5 3/8	3 1/8	5/16	5/16	PL 7/8 x 16 -ta (H2-3) (2/Y)
G5B BTM FLG	775.19	60'-8 7/16	60'-8 5/8	7 1/8	6 11/16	5 3/8	3 1/8	5/16	5/16	PL 7/8 x 16 -ba (H2-3) (2/Y)
G6B TOP FLG	782.69	61'-11 3/8	61'-11 9/16	7 3/8	6 7/8	5 1/2	3 1/4	5/16	5/16	PL 7/8 x 16 -ta (H2-3) (2/W)
G6B BTM FLG	782.69	61'-10 13/16	61'-11	7 3/8	6 7/8	5 1/2	3 3/16	5/16	5/16	PL 7/8 x 16 -ba (H2-3) (2/W)



FLANGE DIAGRAM FOR G1B THRU G6B

NOTES:

1. FOR GENERAL NOTES SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

RECEIVED
OK'D BY JJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RLW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/3/02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: FLG CUTTING DIAGRAMS

JOB: VT. ROUTE OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG-WILMINGTON
SEARSBURG BENINGTON

TENSOR 2243

PROJ NO. F-010-1(18)

CUSTOMER: VERMONT D.O.T.

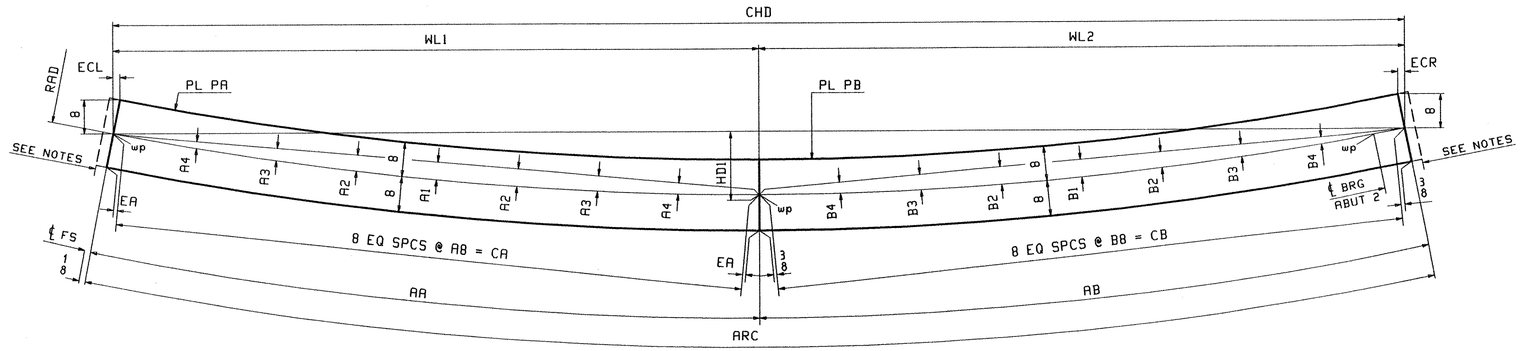
DRAWN BY	DATE
AB	07/22
CHKD BY	
JAK	07/24
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	F2
	REV. △

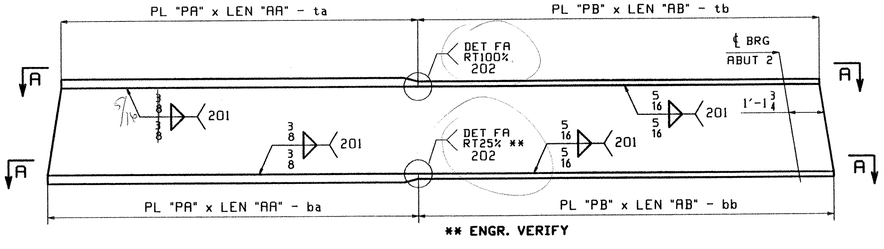
682-BR25B-F2

JAK Thu Jul 25 09:27:26 EDT 2002 /users/jak/2243/f2.dgn



SECTION A-A

LOCATION	RAD	ARC	CHD	AA	AB	EA	A1	A2	A3	A4	A8	CA	B1	B2	B3	B4	B8	CB	ECL	ECR	WL1	WL2	HD1	PL PA (M270-50WT2)	PL PB (M270-50WT2)
G1C TOP FLG	745.19	101'-1 7/16	101'-0 1/2	28'-0 1/16	73'-1 3/8	1/8	1 9/16	1 1/2	1 3/16	11/16	3'-6	28'-0 1/16	10 3/4	10 1/16	8 1/16	4 11/16	9'-1 5/8	73'-1	9/16	9/16	27'-11 5/8	73'-0 7/8	1'-4 7/16	PL 1 1/2 x 16 -ta (H2-3) (1/J)	PL 7/8 x 16 -tb (H2-3) (1/U)
G1C BTM FLG	745.19	101'-2 15/16	101'-2	28'-0 1/16	73'-2 7/8	1/8	1 9/16	1 1/2	1 3/16	11/16	3'-6	28'-0 1/16	10 13/16	10 1/8	8 1/8	4 3/4	9'-1 13/16	73'-2 1/2	9/16	9/16	27'-11 5/8	73'-2 3/8	1'-4 1/2	PL 1 1/2 x 16 -ba (H2-3) (1/J)	PL 7/8 x 16 -bb (H2-3) (1/Q)
G2C TOP FLG	752.69	105'-8 5/16	105'-7 1/4	33'-0 1/8	72'-8 3/16	3/16	2 3/16	2 1/16	1 5/8	15/16	4'-1 1/2	33'-0 1/16	10 1/2	9 7/8	7 7/8	4 5/8	9'-1	72'-7 7/8	9/16	9/16	32'-11 5/8	72'-7 5/8	1'-7 1/16	PL 1 1/2 x 16 -ta (H2-3) (1/C)	PL 7/8 x 16 -tb (H2-3) (1/W)
G2C BTM FLG	752.69	105'-9 3/4	105'-8 11/16	33'-0 1/8	72'-9 5/8	3/16	2 3/16	2 1/16	1 5/8	15/16	4'-1 1/2	33'-0 1/16	10 9/16	9 7/8	7 15/16	4 5/8	9'-1 3/16	72'-9 5/16	9/16	9/16	32'-11 5/8	72'-9 1/16	1'-7 1/8	PL 1 1/2 x 16 -ba (H2-3) (1/C)	PL 7/8 x 16 -bb (H2-3) (1/W)
G3C TOP FLG	760.19	105'-3 5/16	105'-2 5/16	33'-0 1/8	72'-3 3/16	3/16	2 1/8	2	1 5/8	15/16	4'-1 1/2	33'-0 1/16	10 5/16	9 11/16	7 3/4	4 1/2	9'-0 3/8	72'-2 7/8	9/16	9/16	32'-11 5/8	72'-2 11/16	1'-6 13/16	PL 1 1/2 x 16 -ta (H2-3) (1/C)	PL 7/8 x 16 -tb (H2-3) (2/A)
G3C BTM FLG	760.19	105'-4 3/4	105'-3 3/4	33'-0 1/8	72'-4 5/8	3/16	2 1/8	2	1 5/8	15/16	4'-1 1/2	33'-0 1/16	10 5/16	9 11/16	7 3/4	4 1/2	9'-0 9/16	72'-4 5/16	9/16	9/16	32'-11 5/8	72'-4 1/8	1'-6 13/16	PL 1 1/2 x 16 -ba (H2-3) (1/C)	PL 7/8 x 16 -bb (H2-3) (1/Y)
G4C TOP FLG	767.69	100'-10 1/2	100'-9 5/8	29'-0 1/16	71'-10 7/16	1/8	1 5/8	1 9/16	1 1/4	3/4	3'-7 1/2	29'-0 1/16	10 1/16	9 7/16	7 9/16	4 7/16	8'-11 3/4	71'-10 1/8	1/2	1/2	28'-11 11/16	71'-9 15/16	1'-4 1/4	PL 1 1/2 x 16 -ta (H2-3) (1/G)	PL 7/8 x 16 -tb (H2-3) (2/C)
G4C BTM FLG	767.69	100'-11 15/16	100'-11 1/16	29'-0 1/16	71'-11 7/8	1/8	1 5/8	1 9/16	1 1/4	3/4	3'-7 1/2	29'-0 1/16	10 1/8	9 1/2	7 5/8	4 7/16	8'-11 15/16	71'-11 9/16	1/2	1/2	28'-11 11/16	71'-11 3/8	1'-4 5/16	PL 1 1/2 x 16 -ba (H2-3) (1/G)	PL 7/8 x 16 -bb (H2-3) (2/C)
G5C TOP FLG	775.19	104'-6	104'-5 1/16	33'-0 1/8	71'-5 7/8	3/16	2 1/8	2	1 9/16	15/16	4'-1 1/2	33'-0 1/16	9 7/8	9 1/4	7 7/16	4 5/16	8'-11 3/16	71'-5 5/8	9/16	9/16	32'-11 5/8	71'-5 7/16	1'-6 1/4	PL 1 1/2 x 16 -ta (H2-3) (1/C)	PL 7/8 x 16 -tb (H2-3) (2/E)
G5C BTM FLG	775.19	104'-7 3/8	104'-6 7/16	33'-0 1/8	71'-7 1/4	3/16	2 1/8	2	1 9/16	15/16	4'-1 1/2	33'-0 1/16	9 15/16	9 5/16	7 7/16	4 5/16	8'-11 3/8	71'-7	9/16	9/16	32'-11 5/8	71'-6 13/16	1'-6 1/4	PL 1 1/2 x 16 -ba (H2-3) (1/C)	PL 7/8 x 16 -bb (H2-3) (2/E)
G6C TOP FLG	782.69	104'-1 11/16	104'-0 3/4	34'-0 1/8	70'-1 9/16	3/16	2 3/16	2 1/16	1 11/16	1	4'-3	34'-0 1/16	9 7/16	8 13/16	7 1/16	4 1/8	8'-9 3/16	70'-1 5/16	1/2	9/16	33'-11 5/8	70'-1 1/8	1'-6 1/4	PL 1 1/2 x 16 -ta (H2-3) (1/A)	PL 7/8 x 16 -tb (H2-3) (2/L)
G6C BTM FLG	782.69	104'-3	104'-2 1/16	34'-0 1/8	70'-2 7/8	3/16	2 3/16	2 1/16	1 11/16	1	4'-3	34'-0 1/16	9 7/16	8 7/8	7 1/16	4 1/8	8'-9 5/16	70'-2 5/8	9/16	9/16	33'-11 5/8	70'-2 7/16	1'-6 5/16	PL 1 1/2 x 16 -ba (H2-3) (1/A)	PL 7/8 x 16 -bb (H2-3) (2/L)



FLANGE DIAGRAM FOR G1C THRU G6C

NOTES:

1. FOR GENERAL NOTES AND WELD DETAIL FA SEE SHT. GN1.
2. TRIM FLANGES AFTER WELDING TO WEB.
3. H2-3 DENOTES MATERIAL SUBJECT TO CHARPY V-NOTCH TEST AT H FREQ. FOR ZONE 2 OF 15lbs @ 40 °F

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: | ELECTRODES: | HOLES: | SHOP BOLTS:

SURFACE PREP. & PAINT:

RECEIVED
OK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

DESCRIPTION: FLG CUTTING DIAGRAMS

JOB: VT. ROUTE OVER DEERFIELD RIVER
BRIDGE 258
SEARSBURG-WILMINGTON
SEARSBURG BENINGTON

TENSOR 2243

PROJ NO. F-010-1(18)

CUSTOMER: VERMONT D.O.T.

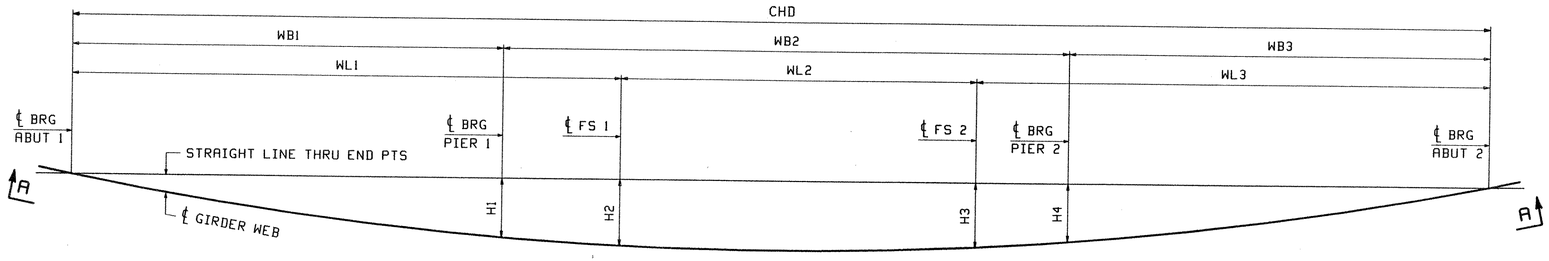
DRAWN BY	DATE
AB	07/22
CHKD BY	
JAK	07/24
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	F3
	REV. △

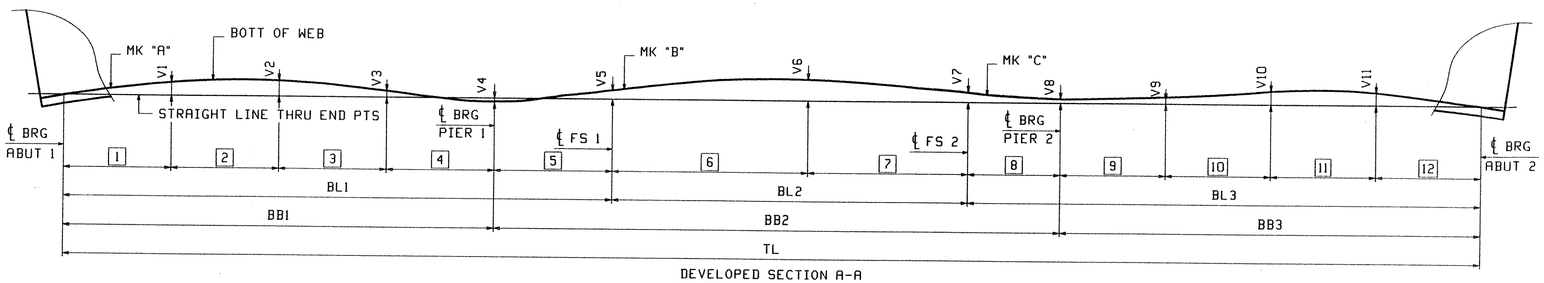
683-BR258-F3

JAK Thu Jul 25 09:26:14 EDT 2002 /users/jak/2247F3.dwg Rev0



PLAN VIEW GIRDER @ BOTT OF WEB

LINE	CHD	WB1	WB2	WB3	WL1	WL2	WL3	H1	H2	H3	H4	"A"	"B"	"C"
1	274'-11 7/16	83'-3 3/16	110'-4	81'-4 1/4	106'-3	69'-4 3/8	99'-4 1/16	10'-9 5/8	12'-1 7/16	11'-9 5/8	10'-7 15/16	G1A	G1B	G1C
2	272'-4 1/16	82'-0 9/16	109'-4 1/8	80'-11 3/8	105'-0 5/16	63'-4 9/16	103'-11 3/16	10'-5 1/2	11'-9 1/8	11'-8 9/16	10'-4 9/16	G2A	G2B	G2C
3	269'-10 11/16	80'-10 15/16	108'-4 15/16	80'-6 13/16	103'-10 3/4	62'-5 5/16	103'-6 5/8	10'-1 11/16	11'-5 1/8	11'-4 15/16	10'-1 3/8	G3A	G3B	G3C
4	267'-7	79'-10 1/4	107'-6 3/8	80'-2 3/8	102'-10 1/16	65'-6 11/16	99'-2 1/4	9'-10 1/16	11'-1 5/16	10'-11 1/2	9'-10 3/8	G4A	G4B	G4C
5	265'-4 7/8	78'-10 7/16	106'-8 3/8	79'-10 1/16	101'-10 1/4	60'-8 5/8	102'-10	9'-6 3/4	10'-9 13/16	10'-10 1/4	9'-7 9/16	G5A	G5B	G5C
6	263'-4 3/16	77'-11 3/8	105'-10 13/16	79'-6	98'-11 3/16	61'-11 1/8	102'-5 7/8	9'-3 9/16	10'-5 1/2	10'-7 3/16	9'-4 7/8	G6A	G6B	G6C



DEVELOPED SECTION A-A

DIMENSIONS GIVEN ALONG ℄ WEB

LINE	TL	BB1	BB2	BB3	BL1	BL2	BL3	1	2	3	4	5	6	7	8	9	10	11	12	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11
1	276'-6 3/8	84'-0 1/8	110'-5 3/16	82'-1 1/16	107'-0 5/16	69'-4 3/4	100'-1 5/16	31'-5 7/8	19'-0 9/16	19'-0 11/16	14'-5	23'-0 3/16	38'-1 7/8	31'-2 7/8	18'-0 1/4	19'-8 1/8	18'-7 3/4	18'-7 11/16	25'-1 1/2	1 13/16	1 7/16	1 1/4	1 1/8	1	2 1/2	1	1 1/8	1 5/8	1 5/8	1 13/16
2	273'-10 3/16	82'-9	109'-5 5/16	81'-7 7/8	105'-9 1/4	63'-4 13/16	104'-8 1/8	21'-5 3/4	19'-2 7/8	19'-2 7/8	22'-9 1/2	23'-0 1/4	30'-6 9/16	32'-10 1/4	23'-0 1/4	13'-8 15/16	18'-10 1/16	18'-9 15/16	30'-2 15/16	1 1/2	1 5/8	13/16	1 1/8	1	2 9/16	1 3/8	1 1/8	5/16	1 3/8	1 13/16
3	271'-4	81'-7	108'-6 1/8	81'-2 7/8	104'-7 5/16	62'-5 9/16	104'-3 1/8	11'-7 15/16	19'-5 1/16	19'-5 1/8	31'-0 7/8	23'-0 5/16	23'-0 3/8	39'-5 3/16	23'-0 1/4	26'-10 5/8	19'-0 1/4	19'-0 3/16	16'-3 13/16	1	1 13/16	1 3/8	1 1/8	1	2 7/16	1 3/8	1 1/8	1	1 3/4	1 5/16
4	268'-11 1/2	80'-6	107'-7 1/2	80'-10	103'-6 1/4	65'-6 15/16	99'-10 5/16	21'-7 7/16	19'-7 3/8	19'-7 9/16	19'-7 5/8	23'-0 1/4	33'-10 7/8	31'-8 1/16	19'-0 5/16	21'-2 11/16	19'-2 1/2	19'-2 7/16	21'-2 3/8	1 1/2	1 9/16	5/8	1 1/16	1 1/16	2 9/16	1 1/8	1 1/16	11/16	1 11/16	1 5/8
5	266'-8 11/16	79'-5 13/16	106'-9 3/8	80'-5 1/2	102'-6 1/16	60'-8 7/8	103'-5 3/4	12'-3 3/4	19'-9 11/16	19'-9 11/16	27'-6 11/16	23'-0 1/4	26'-8 7/8	34'-0	23'-0 1/4	15'-7 1/8	19'-4 3/4	19'-4 11/16	26'-0 15/16	1 1/16	1 1/8	1 7/16	1 1/4	1 1/16	1 1/16	2 9/16	1 7/16	1 1/16	3/8	1 1/2	1 13/16
6	264'-7 5/16	78'-6 7/16	105'-11 13/16	80'-1 1/16	99'-6 11/16	61'-11 1/4	103'-1 3/8	23'-1 11/16	20'-0	17'-11 5/8	17'-5 1/8	21'-0 1/4	21'-7 13/16	40'-3 7/16	23'-0 5/16	29'-7	19'-6 15/16	14'-8 3/4	16'-2 3/8	1 5/8	1 9/16	1/2	1 1/16	15/16	2 3/8	1 7/16	1 1/16	1 3/16	1 3/4	1 5/16

NOTES

FOR GENERAL NOTES SEE DWG GN1

ALL DIMENSIONS GIVEN AT BOTT OF WEB (UN)

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/3/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W			

SURFACE PREP. & PAINT:

-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)

-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

RECEIVED
CK'D BY DJV CK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RRW DATE 10-3-02

DESCRIPTION: SHOP ASSEMBLY	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER	ATD	09/05
BRIDGE 25B	CHKD BY	
SEARSBURG, VERMONT	DO	09/06
CONTRACTOR: J.A. McDONALD	APPROV BY	
TENSOR 2243	SUPERVISOR	W. J. GAITI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.

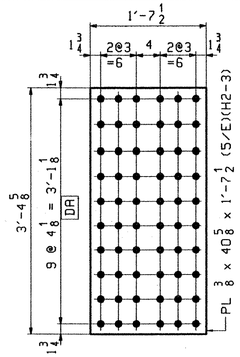
75 SPRING HILL ROAD SACO, MAINE 04072

PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	SA1
	REV. △

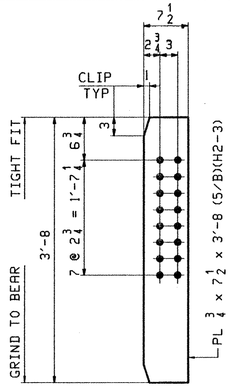
684-BR25B-SA1

ATD Fri Sep 6 17:34:42 EDT 2002 /users/jobs/2243/SA1 : Rev0

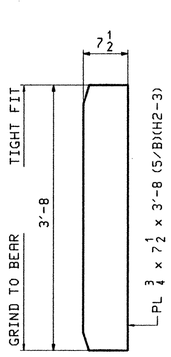


D.O.R.

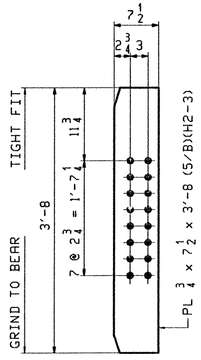
24 ~ x1a



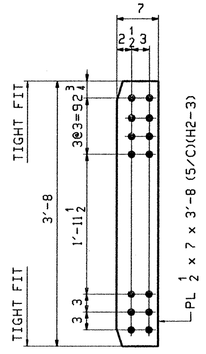
20 ~ x1f
ABUT 1 & 2



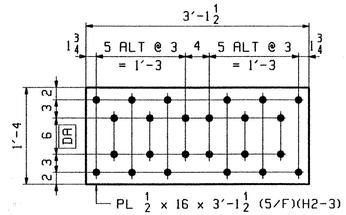
8 ~ x1g
ABUT 1 & 2
PIER 1 & 2



20 ~ x1h
PIER 1 & 2

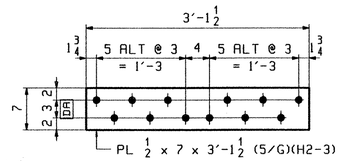


144 ~ x1k
INT



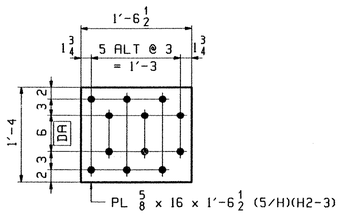
D.O.R.

24 ~ x1b



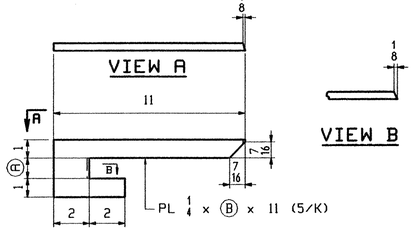
D.O.R.

48 ~ x1c



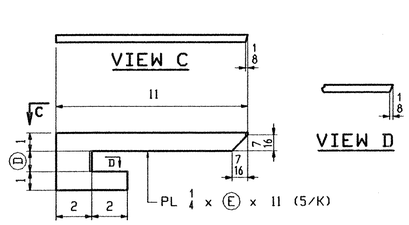
D.O.R.

24 ~ x1d



DRIP PL @ LINE 1

MARK	REQ'D	A	B
x1aa	3	1 1/2	3 1/2
x1ab	2	7/8	2 7/8



DRIP PL @ LINE 6

MARK	REQ'D	D	E
x1ac	3	1 1/2	3 1/2
x1ad	2	7/8	2 7/8

RECEIVED
OK'D BY DTV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/3/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"Ø (UN)
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER STANDARDS

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
ATD	08/28
CHKD BY	
DO	09/04
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

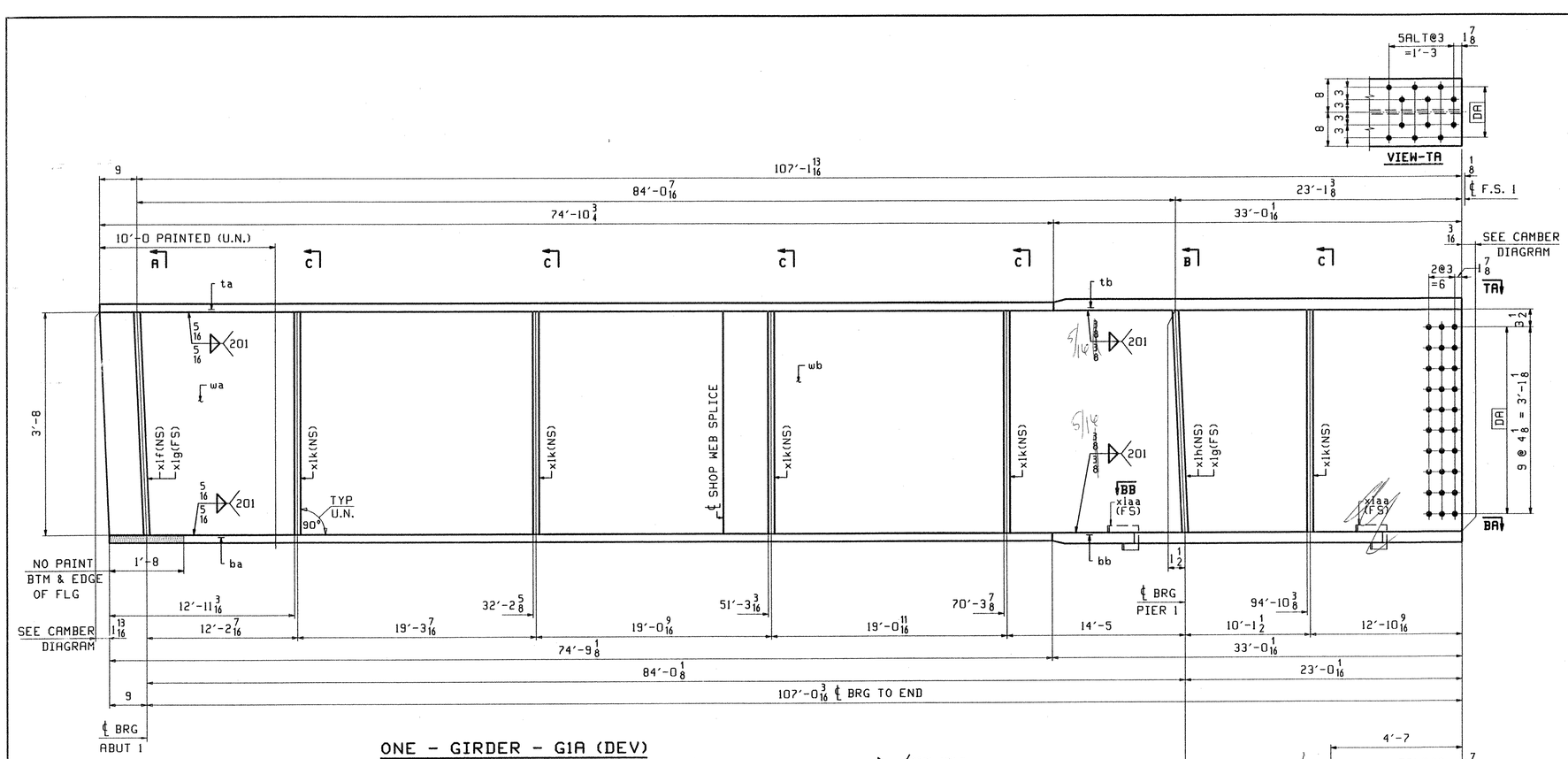
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	X1
	REV. △

685-BR25B-X1

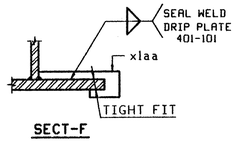
ATD Fri Sep 6 15:04:38 EDT 2002 /users/jobs/2243/x1 | dwg

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									1	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIA	1		GIRDER				21277	
3	N		1	wa	PL $\frac{1}{2}$x44 $\frac{7}{8}$	49	10 $\frac{13}{16}$	(M270-50WT2) (H2-3)		
4	C		1	wb	PL $\frac{1}{2}$x45	58	0 $\frac{1}{4}$	(M270-50WT2) (H2-3)		
1	L		1	ta	PL $\frac{7}{8}$x16	74	10 $\frac{7}{8}$	(M270-50WT2) (H2-3)		
1	C		1	tb	PL 1 $\frac{1}{2}$x16	33	0 $\frac{1}{16}$	(M270-50WT2) (H2-3)		
1	L		1	ba	PL $\frac{7}{8}$x16	74	9 $\frac{1}{8}$	(M270-50WT2) (H2-3)		
1	C		1	bb	PL 1 $\frac{1}{2}$x16	33	0 $\frac{1}{16}$	(M270-50WT2) (H2-3)		
5	B		1	x1f	PL $\frac{3}{4}$x7 $\frac{1}{2}$	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1g	PL $\frac{3}{4}$x7 $\frac{1}{2}$	3	8	(M270-50WT2) (H2-3)		
5	C		5	x1k	PL $\frac{1}{2}$x7	3	8	(M270-50WT2) (H2-3)		
5	B		1	x1h	PL $\frac{3}{4}$x7 $\frac{1}{2}$	3	8	(M270-50WT2) (H2-3)		
5	K		2	x1aa	PL $\frac{1}{4}$x3 $\frac{1}{2}$	0	11			

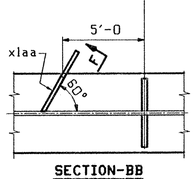


ONE - GIRDER - GIA (DEV)

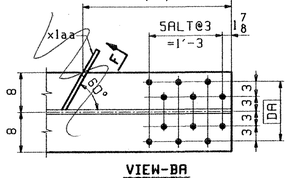
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.



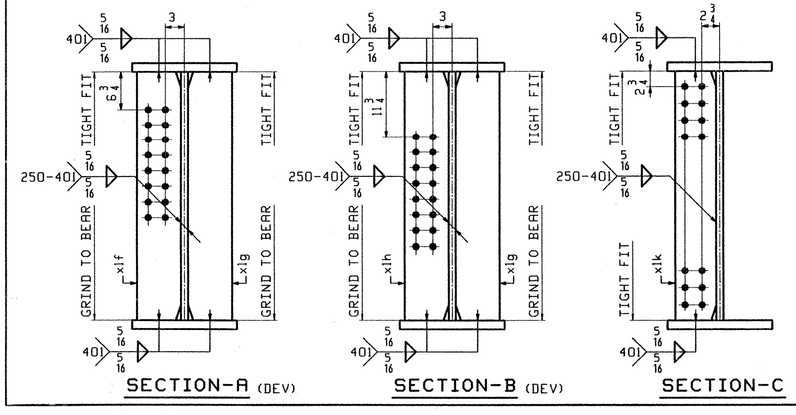
SECT-F



SECTION-BB

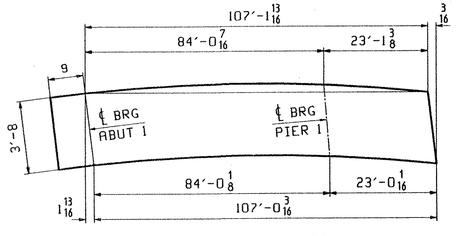


VIEW-BA



SECTION-A (DEV) SECTION-B (DEV) SECTION-C

RECEIVED
OK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RLW DATE 10-3-02



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

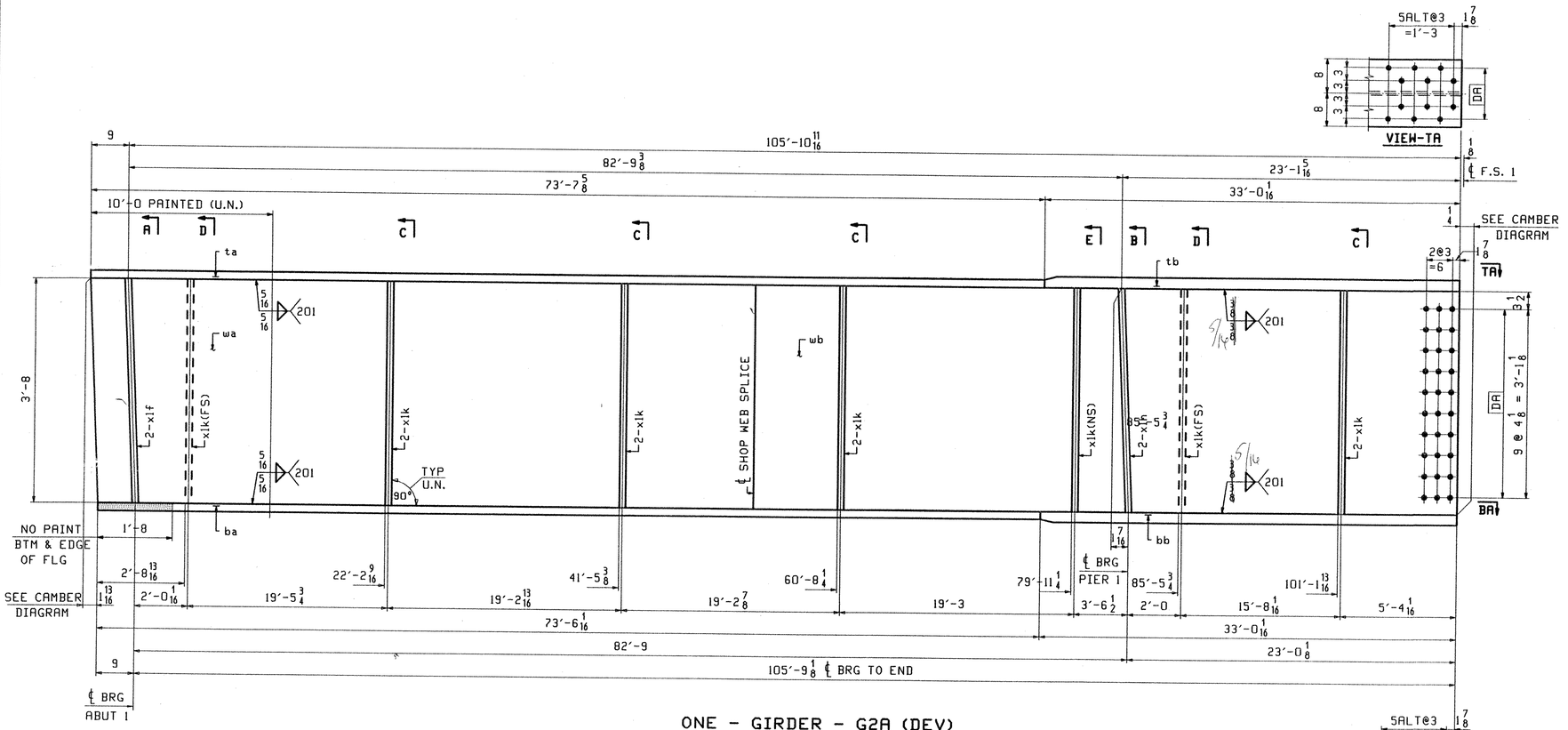
DESCRIPTION: GIRDER - GIA	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER	ATD	08/30
BRIDGE 25B	CHKD BY	
SEARSBURG, VERMONT	DO	09/04
CONTRACTOR: J.A. McDONALD	APPROV BY	
TENSOR 2243	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	1
	REV. △

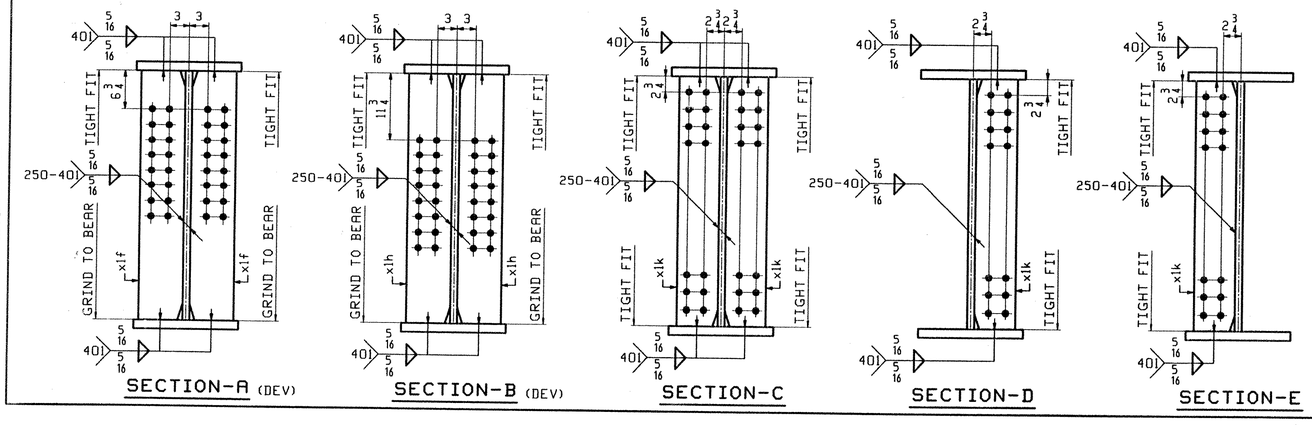
686-BR25B-SS1

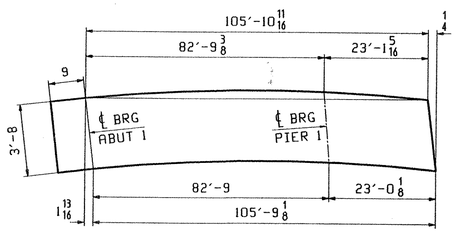
ATD F:\Sec 8 15:37:42 EDT 2002 c:\work\jobs\2243\1 : Rev0



ONE - GIRDER - G2A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.





ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									2	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G2A	1		GIRDER				21318	
3	N		1	wa	PL 1/2x44 7/8	49	10 13/16	(M270-50W T2) (H2-3)		
4	E		1	wb	PL 1/2x45	56	9 3/16	(M270-50W T2) (H2-3)		
1	N		1	ta	PL 7/8x16	73	7 5/8	(M270-50W T2) (H2-3)		
1	C		1	tb	PL 1 1/2x16	33	0 1/16	(M270-50W T2) (H2-3)		
1	S		1	ba	PL 7/8x16	73	6 1/16	(M270-50W T2) (H2-3)		
1	C		1	bb	PL 1 1/2x16	33	0 1/16	(M270-50W T2) (H2-3)		
5	B		2	x1f	PL 3/4x7 1/2	3	8	(M270-50W T2) (H2-3)		
5	C		11	x1k	PL 1/2x7	3	8	(M270-50W T2) (H2-3)		
5	B		2	x1h	PL 3/4x7 1/2	3	8	(M270-50W T2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9.13.02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY DJV CK'D BY
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RKW DATE 10-3-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15 "ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

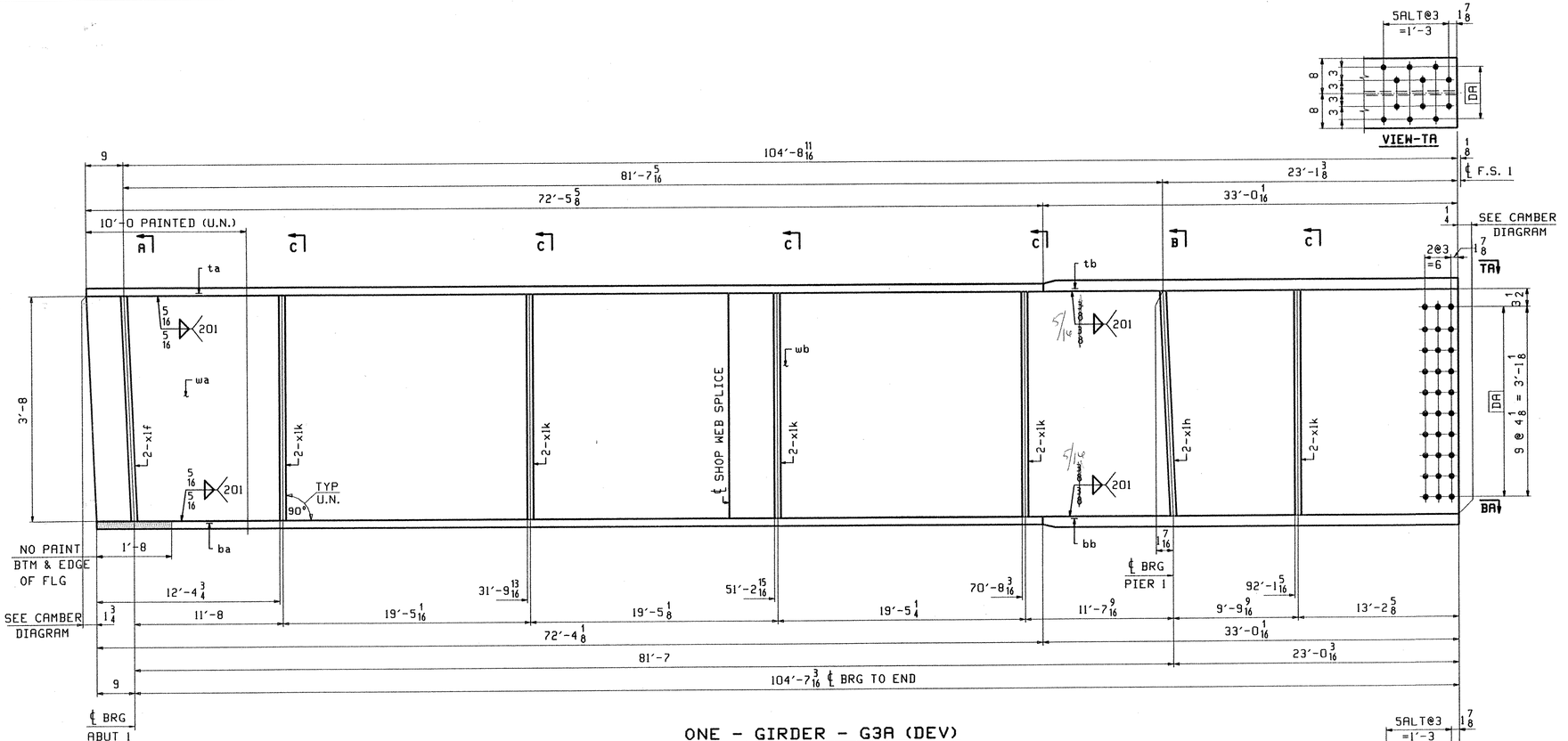
DESCRIPTION: GIRDER - G2A	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER BRIDGE 25B SEARSBURG, VERMONT CONTRACTOR: J.A. McDONALD	ATD	08/30
	CHK'D BY	
	DO	09/04
	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

TENSOR 2243

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

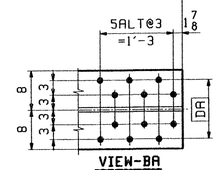
JOB NO.	DRG. NO.
167	2
	REV. △

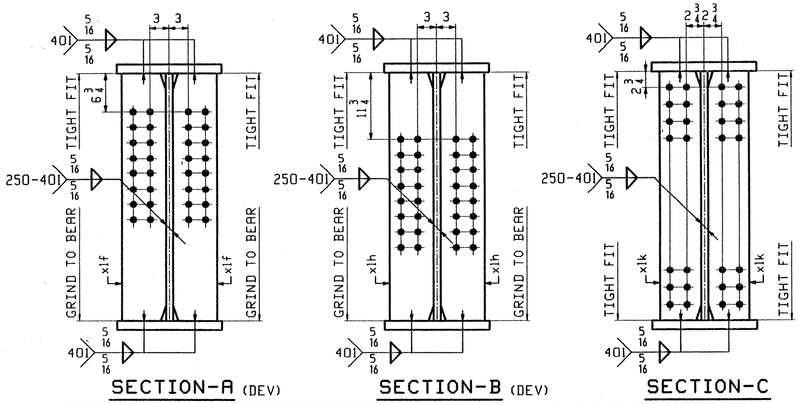
687-BR25B-502



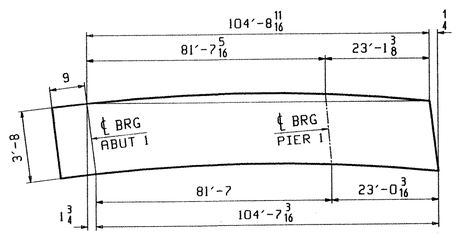
ONE - GIRDER - G3A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.





SECTION-A (DEV) SECTION-B (DEV) SECTION-C



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									3	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G3A	1		GIRDER				21084	
3	N		1	wa	PL 1/2x45	49	10 3/4	(M270-50WT2) (H2-3)		
4	G		1	wb	PL 1/2x45	55	7 1/4	(M270-50WT2) (H2-3)		
1	Y		1	ta	PL 7/8x16	72	5 5/8	(M270-50WT2) (H2-3)		
1	C		1	tb	PL 1 1/2x16	33	0 1/16	(M270-50WT2) (H2-3)		
1	Y		1	ba	PL 7/8x16	72	4 1/8	(M270-50WT2) (H2-3)		
1	C		1	bb	PL 1 1/2x16	33	0 1/16	(M270-50WT2) (H2-3)		
5	B		2	x1f	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	C		10	x1k	PL 1/2x7	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1h	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		

RECEIVED
CK'D BY DJV CK'D BY
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RLW DATE

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G3A

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

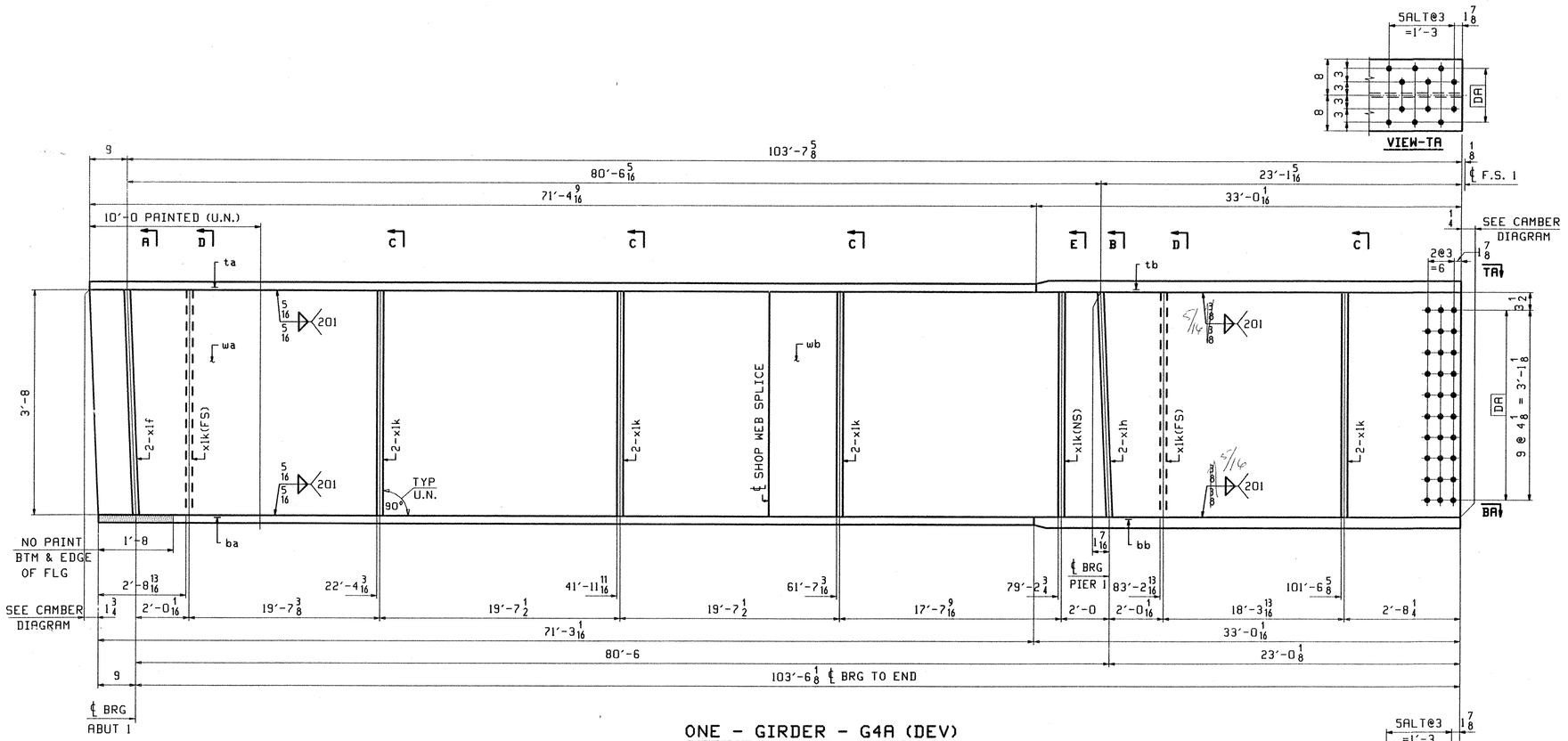
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
ATD	08/30
CHKD BY	
DO	09/04
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

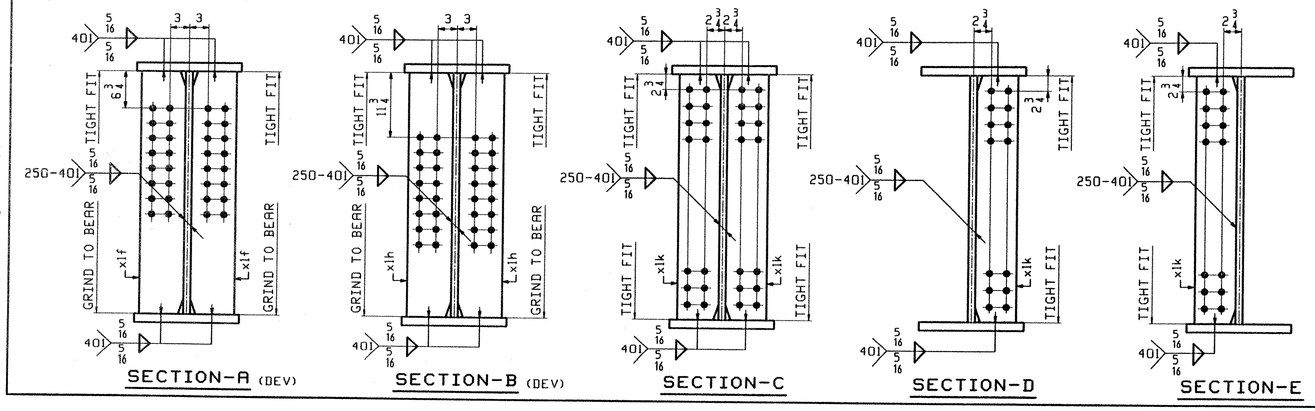
JOB NO.	DRG. NO.
167	3
	REV. △

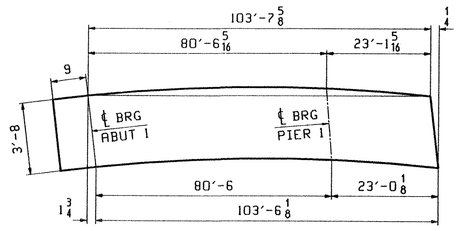
688-BP25B SS3



ONE - GIRDER - G4A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.





ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

RECEIVED
CK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4A	1		GIRDER				20941	
3	N		1	wa	PL 1/2x45	49	10 3/4	(M270-50WT2) (H2-3)		
4	J		1	wb	PL 1/2x45	54	6 3/16	(M270-50WT2) (H2-3)		
2	E		1	ta	PL 7/8x16	71	4 9/16	(M270-50WT2) (H2-3)		
1	C		1	tb	PL 1 1/2x16	33	0 1/16	(M270-50WT2) (H2-3)		
2	G		1	ba	PL 7/8x16	71	3 1/16	(M270-50WT2) (H2-3)		
1	C		1	bb	PL 1 1/2x16	33	0 1/16	(M270-50WT2) (H2-3)		
5	B		2	x1f	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	C		11	x1k	PL 1/2x7	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1h	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	7/3/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16" ø
SHOP BOLTS:

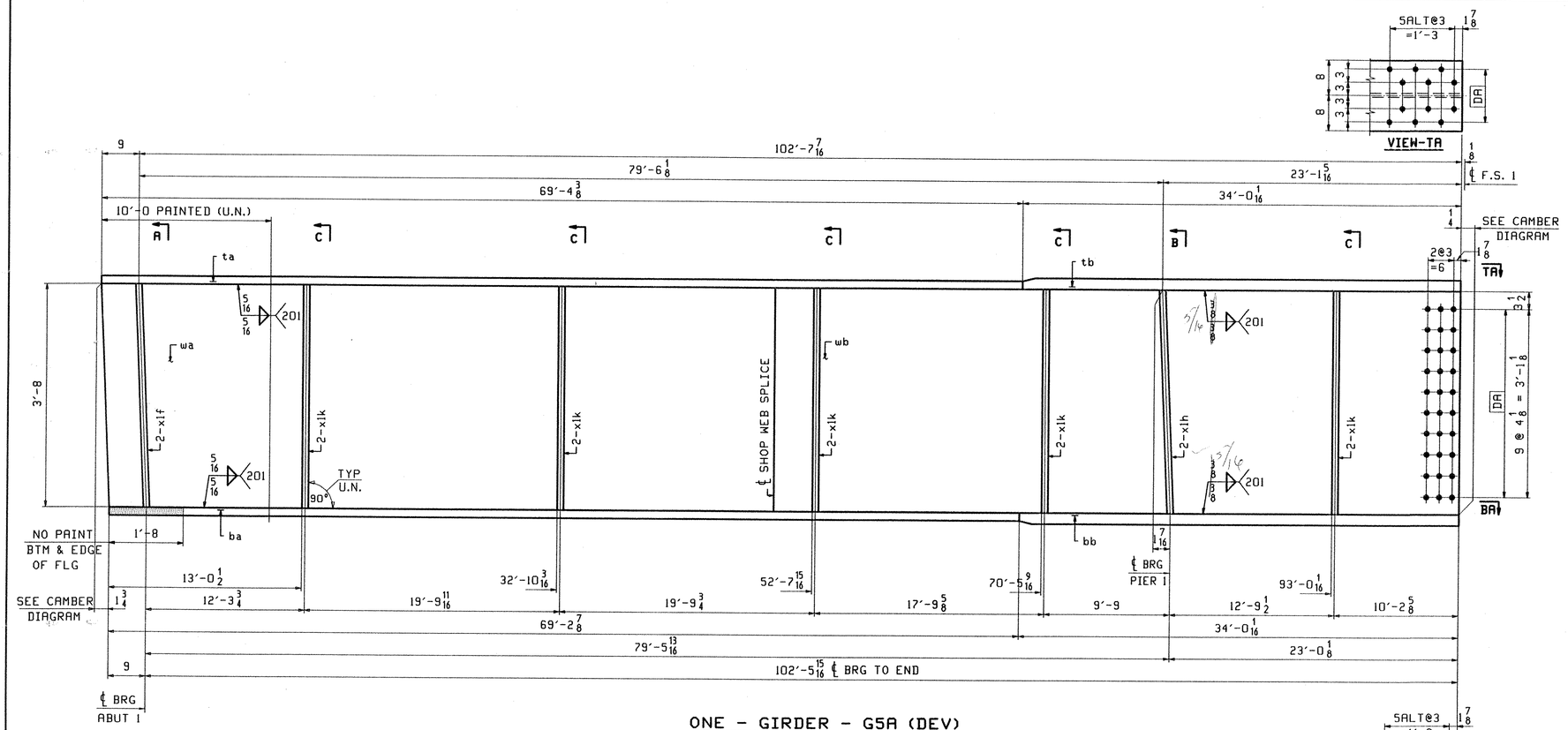
SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION:	GIRDER - G4A	DRAWN BY	DATE
JOB:	VT. ROUTE 9 OVER DEERFIELD RIVER	ATD	08/30
	BRIDGE 25B	CHKD BY	
	SEARSBURG, VERMONT	DO	09/04
TENSOR 2243	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	NHF-010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

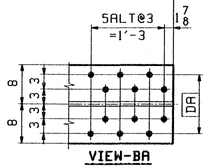
JOB NO. 167 | DRG. NO. 4 | REV. △

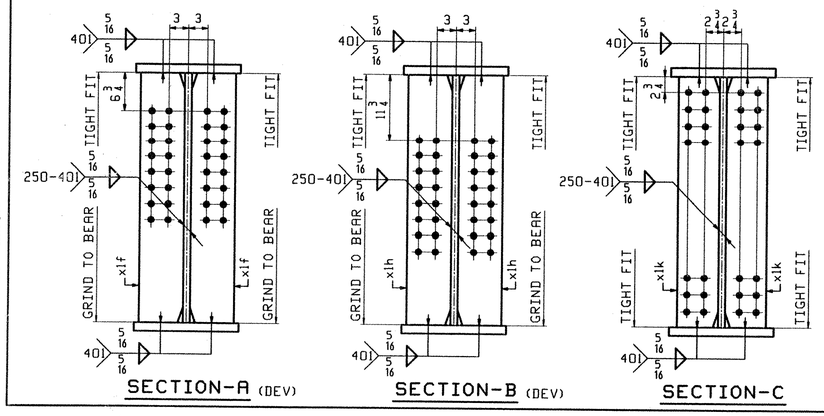
684-BR25B-ss4

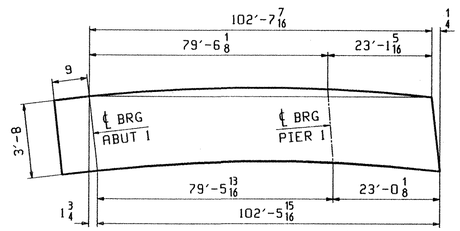


ONE - GIRDER - G5A (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.







RECEIVED
OK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED AS NOTED
BY RRW DATE 10-30-02

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									5	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5A	1		GIRDER				20791	
3	N		1	wa	PL 1/2x45	49	10 3/4	(M270-50WT2) (H2-3)		
4	L		1	wb	PL 1/2x45	53	6	(M270-50WT2) (H2-3)		
2	N		1	ta	PL 7/8x16	69	4 3/8	(M270-50WT2) (H2-3)		
1	A		1	tb	PL 1 1/2x16	34	0 1/16	(M270-50WT2) (H2-3)		
2	N		1	ba	PL 7/8x16	69	2 7/8	(M270-50WT2) (H2-3)		
1	A		1	bb	PL 1 1/2x16	34	0 1/16	(M270-50WT2) (H2-3)		
5	B		2	x1f	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	C		10	x1k	PL 1/2x7	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1h	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	F13'02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

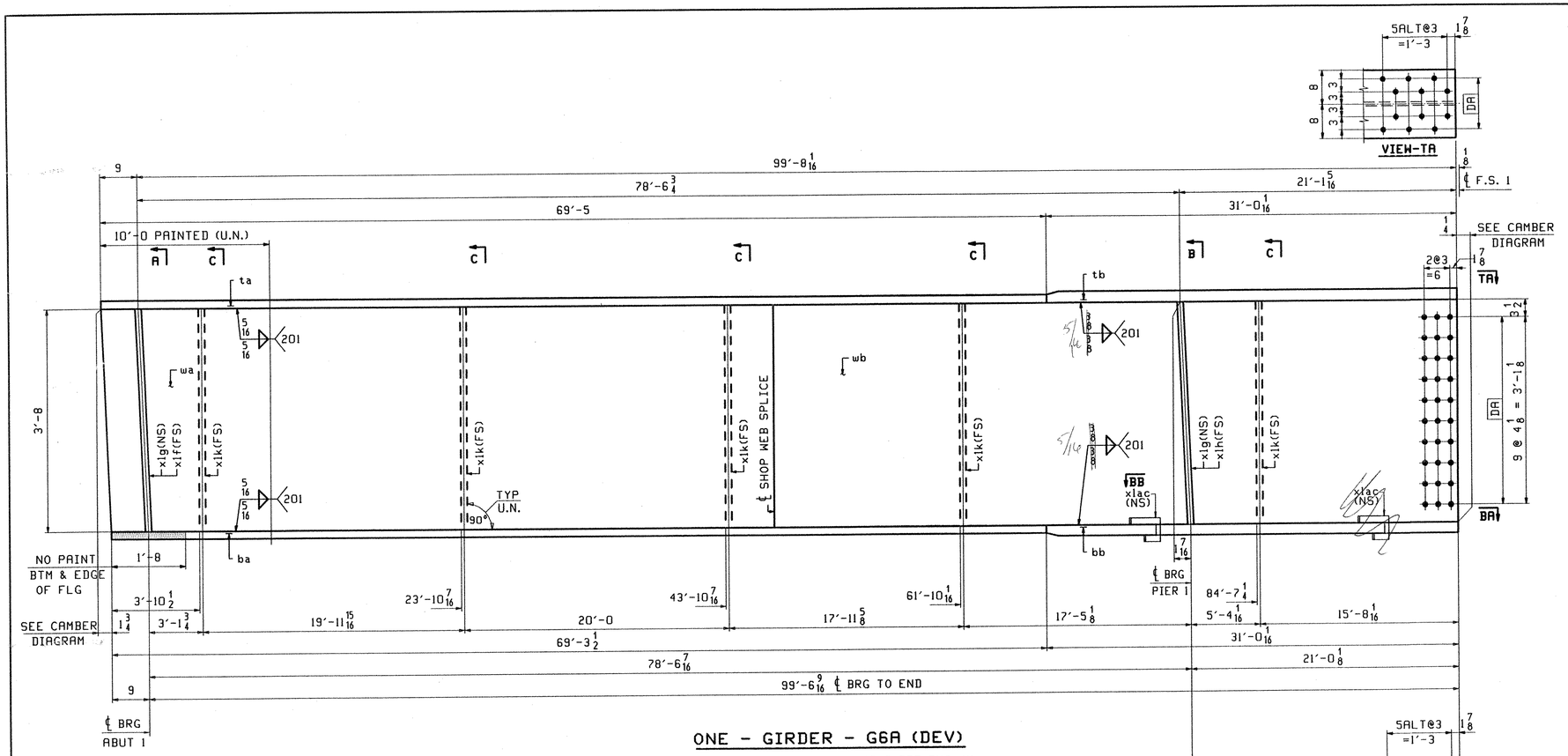
DESCRIPTION: GIRDER - G5A	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER	ATD	08/30
BRIDGE 25B	CHKD BY	
SEARSBURG, VERMONT	DO	09/04
CONTRACTOR: J.A. McDONALD	APPROV BY	
TENSOR 2243	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	5
	REV. △

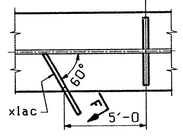
690-BR25B-SS4

RTD Fri Sep 13 14:48:13 EDT 2002 c:\work\jobs\2243\5 ; Rev:0

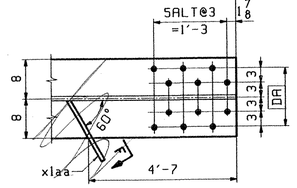


ONE - GIRDER - G6A (DEV)

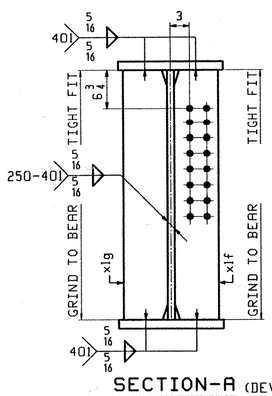
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C1.
3. FOR FLANGE DIAGRAM SEE DWG. F1.
4. FOR GENERAL NOTES SEE SHT. GN1.



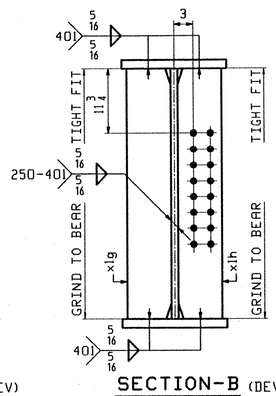
SECTION-BB



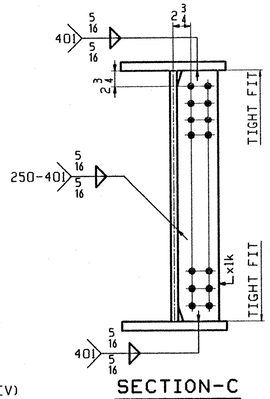
VIEW-BA



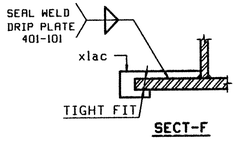
SECTION-A (DEV)



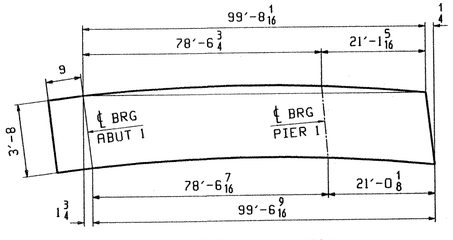
SECTION-B (DEV)



SECTION-C



SECT-F



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C1

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									6	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G6A	1		GIRDER				19867	
3	N		1	wa	PL 1/2x45	49	10 3/4	(M270-50WT2) (H2-3)		
4	Q		1	wb	PL 1/2x45	50	6 5/8	(M270-50WT2) (H2-3)		
2	N		1	ta	PL 7/8x16	69	5	(M270-50WT2) (H2-3)		
1	E		1	tb	PL 1 1/2x16	31	0 1/16	(M270-50WT2) (H2-3)		
2	N		1	ba	PL 7/8x16	69	3 1/2	(M270-50WT2) (H2-3)		
1	E		1	bb	PL 1 1/2x16	31	0 1/16	(M270-50WT2) (H2-3)		
5	B		2	xlg	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	B		1	xlf	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	C		5	xlk	PL 1/2x7	3	8	(M270-50WT2) (H2-3)		
5	B		1	xlh	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	K		2	xlac	PL 1/4x3 1/2	0	11			

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
OK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 10-3-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G6A	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER	ATD	08/30
BRIDGE 25B	CHKD BY	
SEARSBURG, VERMONT	DO	09/04
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

TENSOR 2243

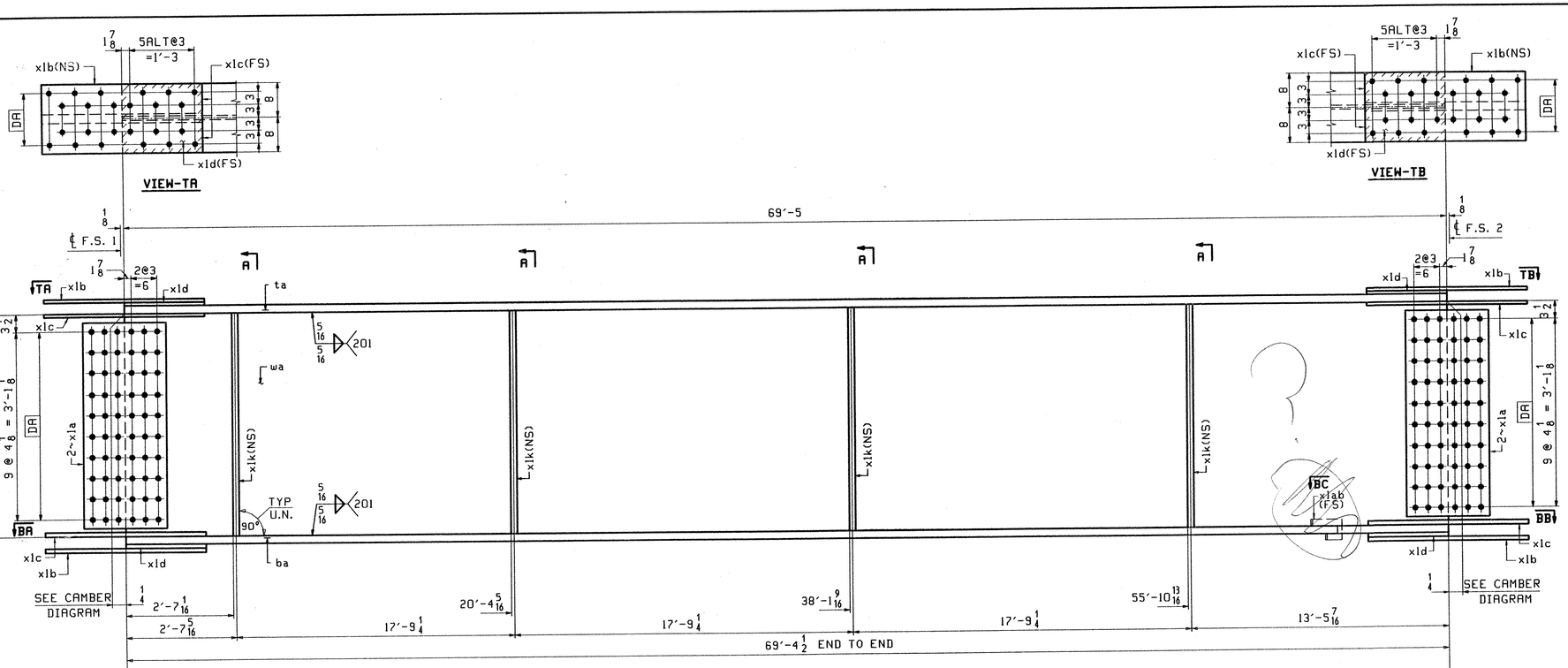
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

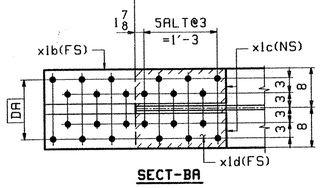
JOB NO.	DRG. NO.
167	6
	REV. △

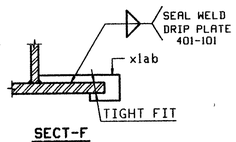
691-B225B-SSG

Fri Sep 6 17:15:50 EDT 2002 /users/jmw/2243/6.1Rev0

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									7	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIB	1		GIRDER				13355	
3	A		1	wa	PL $\frac{1}{2}$x45$\frac{9}{16}$	69	5	(M270-50WT2) (H2-3)		
2	J		1	ta	PL $\frac{7}{8}$x16	69	5	(M270-50WT2) (H2-3)		
2	J		1	ba	PL $\frac{7}{8}$x16	69	4$\frac{1}{2}$	(M270-50WT2) (H2-3)		
5	E		4	xla	PL $\frac{3}{8}$x40$\frac{5}{8}$	1	7$\frac{1}{2}$	(M270-50WT2) (H2-3)		
5	F		4	xlb	PL $\frac{1}{2}$x16	3	1$\frac{1}{2}$	(M270-50WT2) (H2-3)		
5	G		8	xlc	PL $\frac{1}{2}$x7	3	1$\frac{1}{2}$	(M270-50WT2) (H2-3)		
5	H		4	xld	PL $\frac{5}{8}$x16	1	6$\frac{1}{2}$			
5	C		4	xlk	PL $\frac{1}{2}$x7	3	8	(M270-50WT2) (H2-3)		
5	K		1	xlab	PL $\frac{1}{2}$x2$\frac{7}{8}$	0	11			

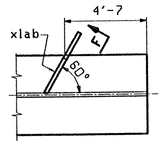


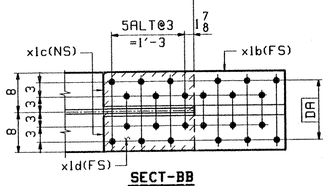


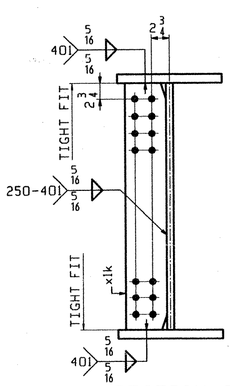


ONE - GIRDER - G1B (DEV)

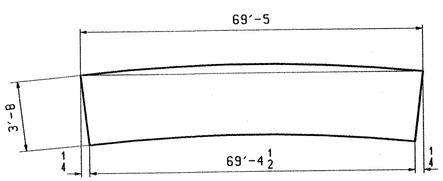
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.







RECEIVED
CK'D BY DJK CK'D BY
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RRW DATE 10-3-02



REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/3/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

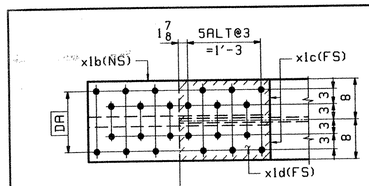
DESCRIPTION:	GIRDER - G1B	DRAWN BY	DATE
JOB:	VT. ROUTE 9 OVER DEERFIELD RIVER	ATD	08/30
	BRIDGE 258	CHKD BY	
	SEARSBURG, VERMONT	DO	09/04
TENSOR 2243	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	NHF-010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

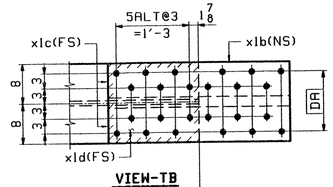
JOB NO.	DRG. NO.
167	7
	REV.

692-B175B-SD

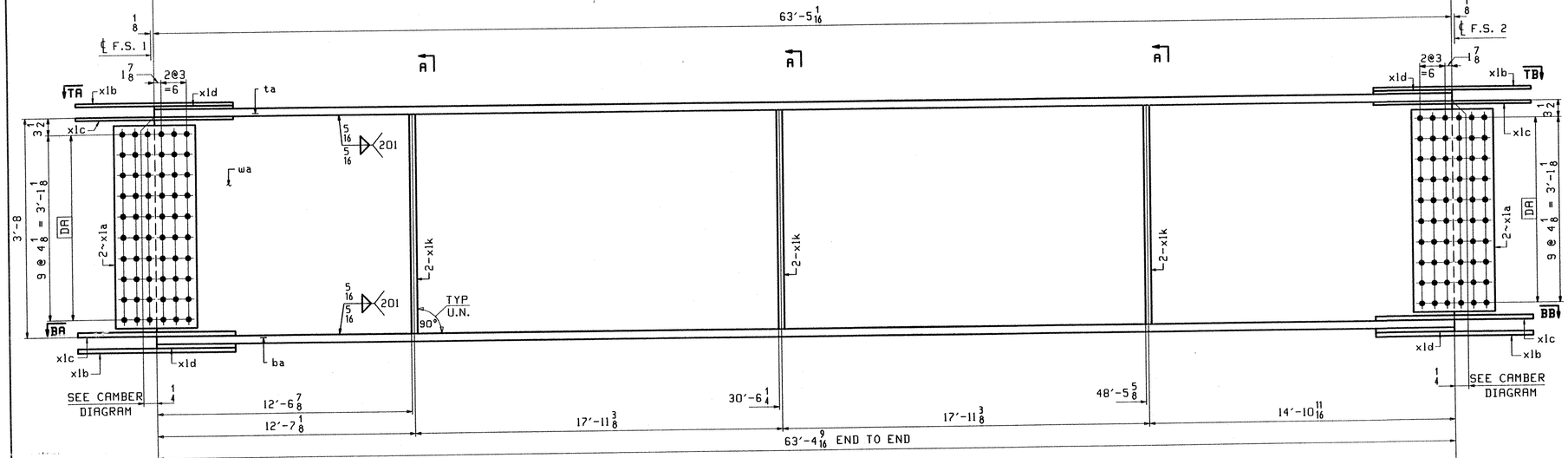
ATD Fri Sep 6 16:13:39 EST 2002 /users/jobs/2243/7 Rev0

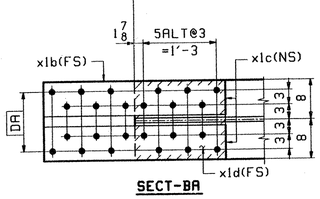


VIEW-TA

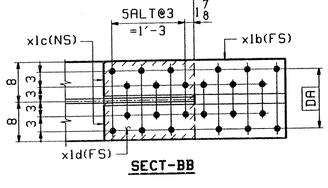


VIEW-TB





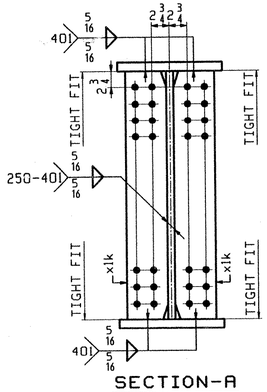
SECT-BA



SECT-BB

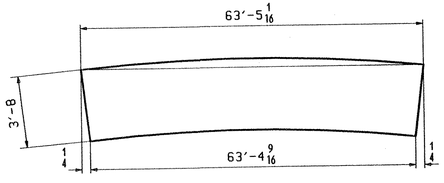
ONE - GIRDER - G2B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



SECTION-A

RECEIVED
OK'D BY PJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RLW DATE 10-3-02



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
								JOB NO.	DRAWING NO. 8	REV.
		G2B	1		GIRDER				12384	
3	E		1	wa	PL 1/2x45 3/8	63	5 1/16	(M270-50WT2) (H2-3)		
2	S		1	ta	PL 7/8x16	63	5 1/16	(M270-50WT2) (H2-3)		
2	S		1	ba	PL 7/8x16	63	4 9/16	(M270-50WT2) (H2-3)		
5	E		4	x1a	PL 3/8x40 5/8	1	7 1/2	(M270-50WT2) (H2-3)		
5	F		4	x1b	PL 1/2x16	3	1 1/2	(M270-50WT2) (H2-3)		
5	G		8	x1c	PL 1/2x7	3	1 1/2	(M270-50WT2) (H2-3)		
5	H		4	x1d	PL 5/8x16	1	6 1/2			
5	C		6	x1k	PL 1/2x7	3	8	(M270-50WT2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/3/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15 @ 15/16"ø
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G2B
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
PROJ NO. NHF-010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

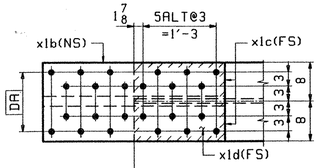
DRAWN BY: ATD — DATE: 08/30
CHK'D BY: — DATE:
DO: 09/05
APPROV BY: — DATE:
SUPERVISOR: W. J. GATTI
Q.A. — DATE:

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

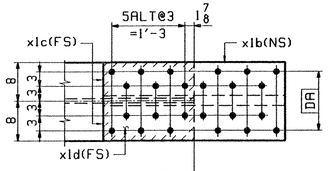
JOB NO. 167 — DRG. NO. 8 — REV. △

693-BR25B-ESS

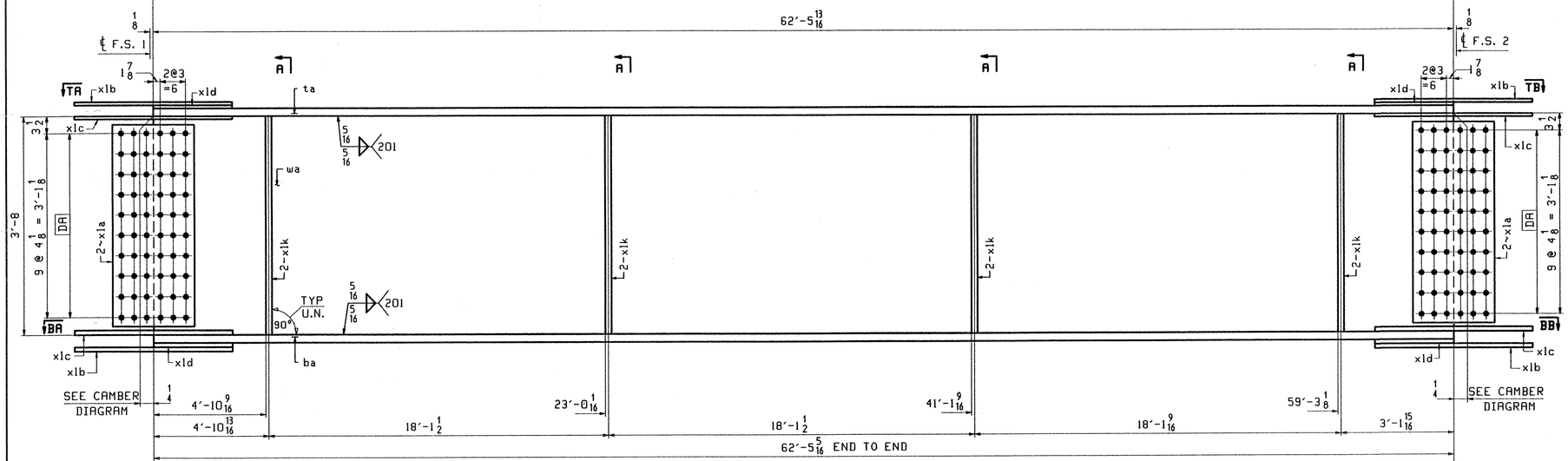
Fri Sep 6 16:16:02 EDT 2002 //www1/pbs/25428/8 Rev0

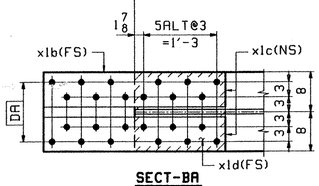


VIEW-TA

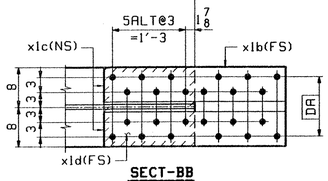


VIEW-TB





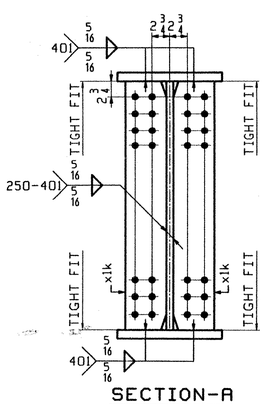
SECT-BA



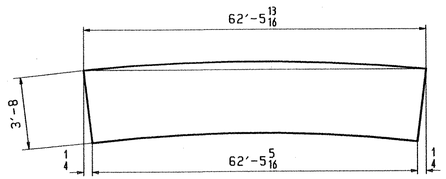
SECT-BB

ONE - GIRDER - G3B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



SECTION-A



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									9	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G3B	1		GIRDER				12303	
3	G		1	wa	PL 1/2 x45 5/16	62	5 13/16	(M270-50WT2) (H2-3)		
2	U		1	ta	PL 1 1/8 x16	62	5 13/16	(M270-50WT2) (H2-3)		
2	U		1	ba	PL 7/8 x16	62	5 5/16	(M270-50WT2) (H2-3)		
5	E		4	x1a	PL 3/8 x40 5/8	1	7 1/2	(M270-50WT2) (H2-3)		
5	F		4	x1b	PL 1/2 x16	3	1 1/2	(M270-50WT2) (H2-3)		
5	G		8	x1c	PL 1/2 x7	3	1 1/2	(M270-50WT2) (H2-3)		
5	H		4	x1d	PL 5/8 x16	1	6 1/2			
5	C		8	x1k	PL 1/2 x7	3	8	(M270-50WT2) (H2-3)		

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
CK'D BY JV OK'D BY
SEP 16 2002
RESUBMIT APPROVED ✓
BY RCW DATE 10-3-02

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"Ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

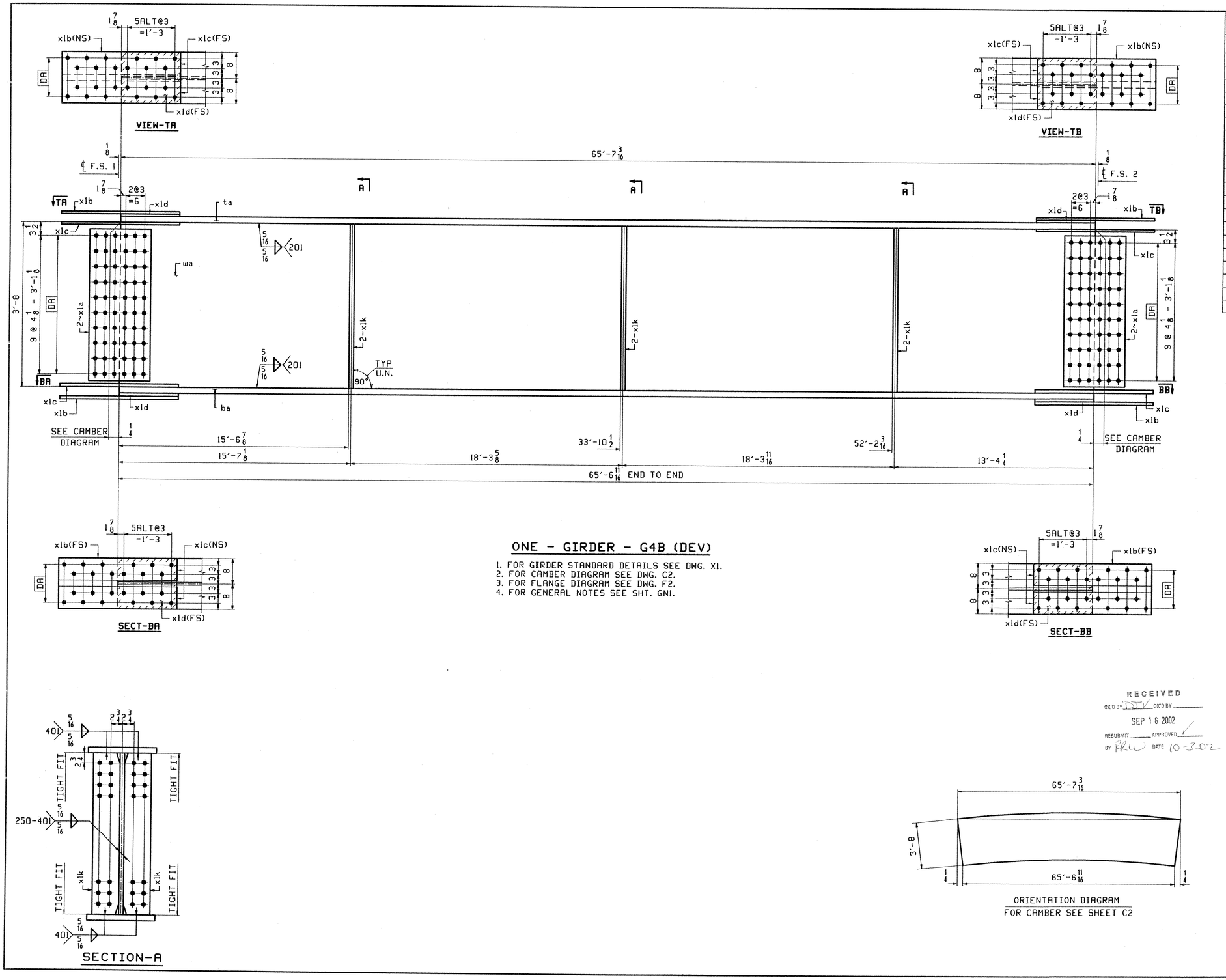
DESCRIPTION: GIRDER - G3B	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER BRIDGE 25B SEARSBURG, VERMONT CONTRACTOR: J.A. McDONALD	ATD	08/30
	CHKD BY	
	DO	09/05
TENSOR 2243	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	9
	REV. 1

694-BR25 B-559

RTD Fri Sep 6 15:17:44 EDT 2002 /users/jobs/2243/9.1 Rev=0



ONE - GIRDER - G4B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.

ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									10	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4B	1		GIRDER				12766	
3	C		1	wa	PL 1/2x45 7/16	65	7 3/16	(M270-50WT2) (H2-3)		
2	Q		1	ta	PL 7/8x16	65	7 3/16	(M270-50WT2) (H2-3)		
2	Q		1	ba	PL 7/8x16	65	6 11/16	(M270-50WT2) (H2-3)		
5	E		4	x1a	PL 3/8x40 5/8	1	7 1/2	(M270-50WT2) (H2-3)		
5	F		4	x1b	PL 1/2x16	3	1 1/2	(M270-50WT2) (H2-3)		
5	G		8	x1c	PL 1/2x7	3	1 1/2	(M270-50WT2) (H2-3)		
5	H		4	x1d	PL 5/8x16	1	6 1/2			
5	C		6	x1k	PL 1/2x7	3	8	(M270-50WT2) (H2-3)		

RECEIVED
CK'D BY DJV CK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RRW DATE 10-3-02

OUT FOR APPROVAL	9-13-02									
OUT FOR APPROVAL										
ISSUED TO SHOP										
FIELD & OFFICE										
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

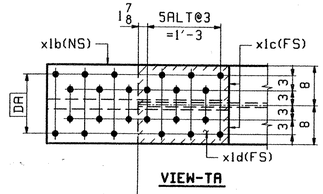
DESCRIPTION: GIRDER - G4B	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER BRIDGE 25B SEARSBURG, VERMONT CONTRACTOR: J.A. McDONALD	ATD	08/30
	CHKD BY	
	DO	09/05
	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

TENSOR 2243

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	10
	REV. △

695-BR25B-SS10



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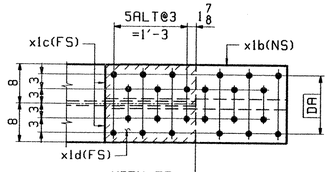
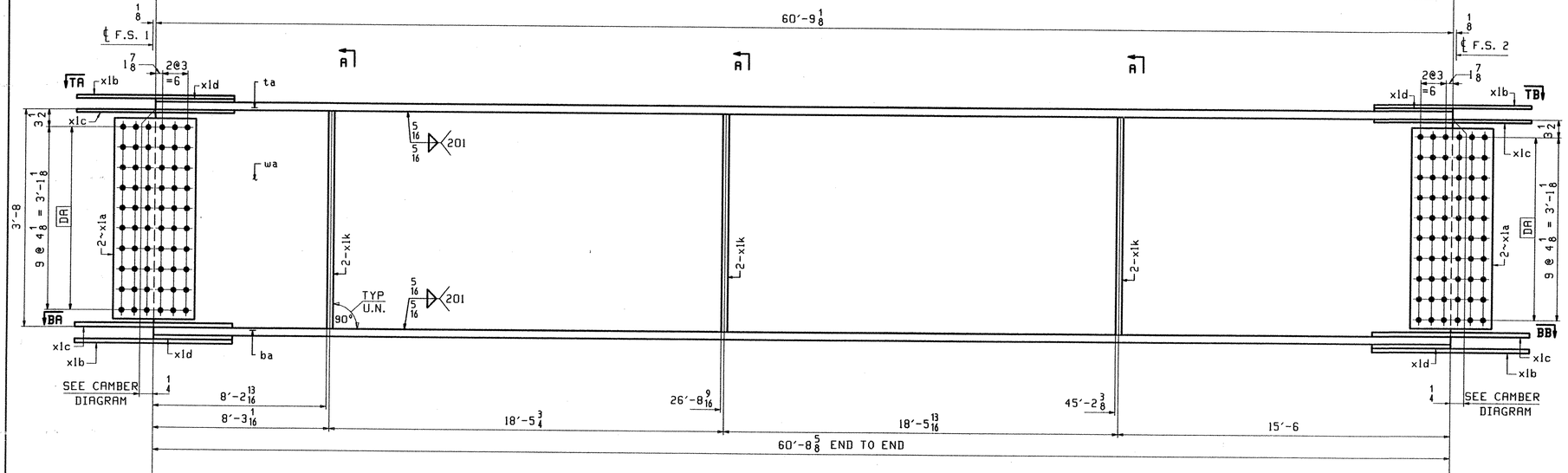
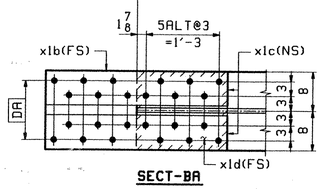
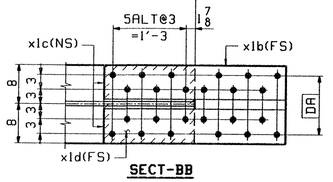


VIEW-TB





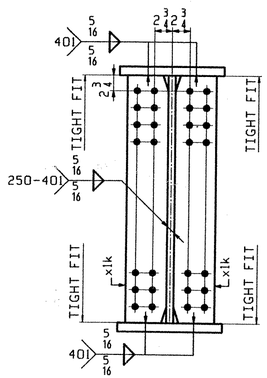
SECT-BA



SECT-BB

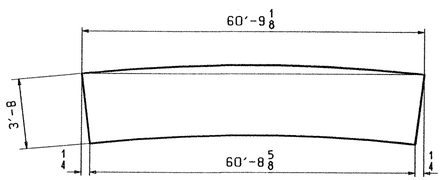
ONE - GIRDER - G5B (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



SECTION-A

RECEIVED
CK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.		REV.
									11		
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		G5B	1		GIRDER				11918		
3	L		1	wa	PL 1/2x45 5/16	60	9 1/8	(M270-50WT2) (H2-3)			
2	Y		1	ta	PL 7/8x16	60	9 1/8	(M270-50WT2) (H2-3)			
2	Y		1	ba	PL 7/8x16	60	8 5/8	(M270-50WT2) (H2-3)			
5	E		4	x1a	PL 3/8x40 5/8	1	7 1/2	(M270-50WT2) (H2-3)			
5	F		4	x1b	PL 1/2x16	3	1 1/2	(M270-50WT2) (H2-3)			
5	G		8	x1c	PL 1/2x7	3	1 1/2	(M270-50WT2) (H2-3)			
5	H		4	x1d	PL 5/8x16	1	6 1/2				
5	C		6	x1k	PL 1/2x7	3	8	(M270-50WT2) (H2-3)			

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/13/02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W

ELECTRODES:

HOLES: 15/16"ø

SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G5B

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

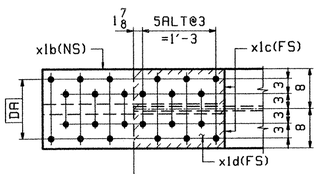
DRAWN BY	DATE
ATD	08/30
CHKD BY	
DO	09/05
APPROV BY	
SUPERVISOR	M. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	11
	REV. △

696-BR25B SS11

ATD Fri Sep 6 16:19:57 EDT 2002 /users/jobs/2243/11.1 RevD



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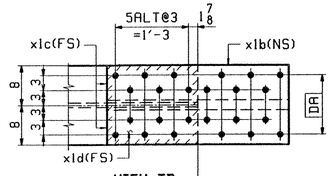
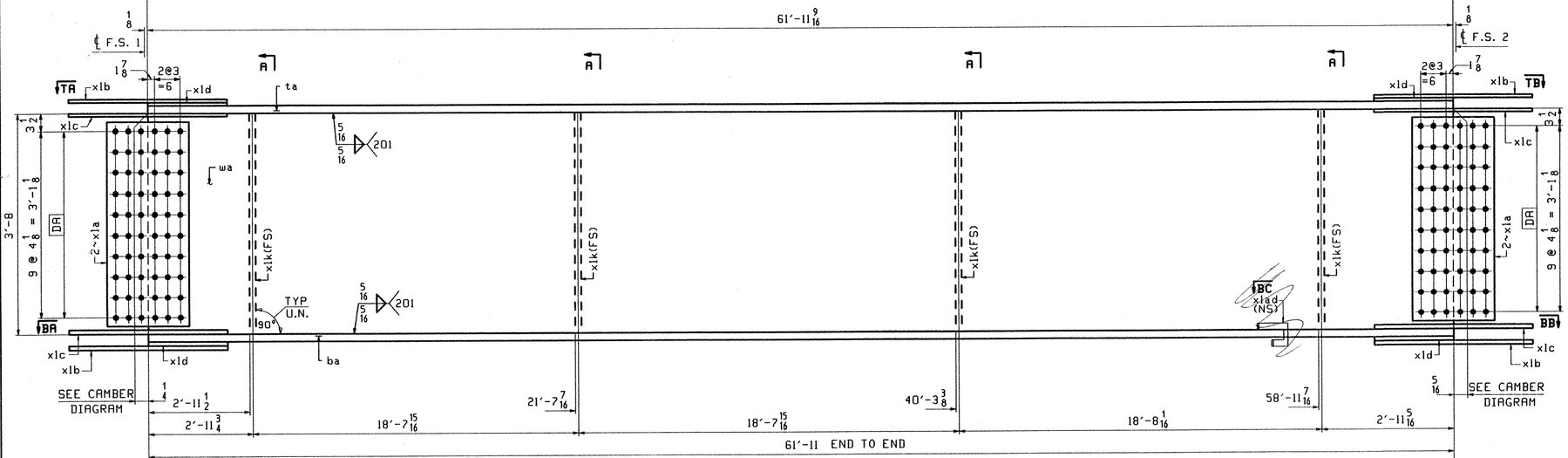
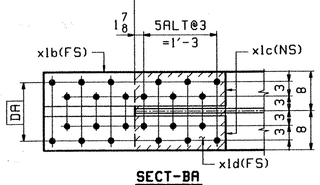
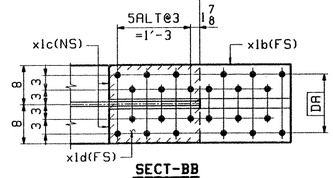


VIEW-TB





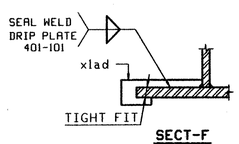
SECT-BA



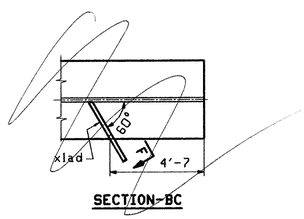
SECT-BB

ONE - GIRDER - G6B (DEV)

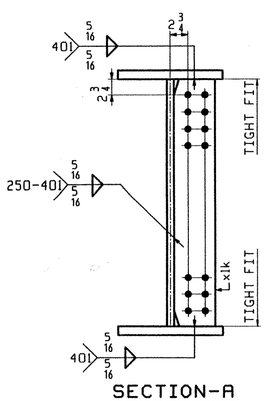
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C2.
3. FOR FLANGE DIAGRAM SEE DWG. F2.
4. FOR GENERAL NOTES SEE SHT. GN1.



SECT-F



SECTION-BC



SECTION-A

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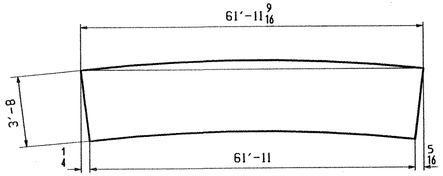
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RKV DATE 10-3-02



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C2

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.		REV.
									12		
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		G6B	1		GIRDER				12047		
3	J		1	wa	PL 1/2 x 45 3/8	61	11 9/16	(M270-50WT2) (H2-3)			
2	H		1	ta	PL 7/8 x 16	61	11 9/16	(M270-50WT2) (H2-3)			
2	H		1	ba	PL 7/8 x 16	61	11	(M270-50WT2) (H2-3)			
5	E		4	x1a	PL 3/8 x 40 5/8	1	7 1/2	(M270-50WT2) (H2-3)			
5	F		4	x1b	PL 1/2 x 16	3	1 1/2	(M270-50WT2) (H2-3)			
5	G		8	x1c	PL 1/2 x 7	3	1 1/2	(M270-50WT2) (H2-3)			
5	H		4	x1d	PL 5/8 x 16	1	6 1/2				
5	C		4	x1k	PL 1/2 x 7	3	8	(M270-50WT2) (H2-3)			
5	K		1	x1ad	PL 1/4 x 2 7/8	0	11				

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/13/02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16" ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G6B	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER BRIDGE 25B SEARSBURG, VERMONT CONTRACTOR: J.A. McDONALD	ATD	08/30
	CHK'D BY	
	DO	09/05
	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

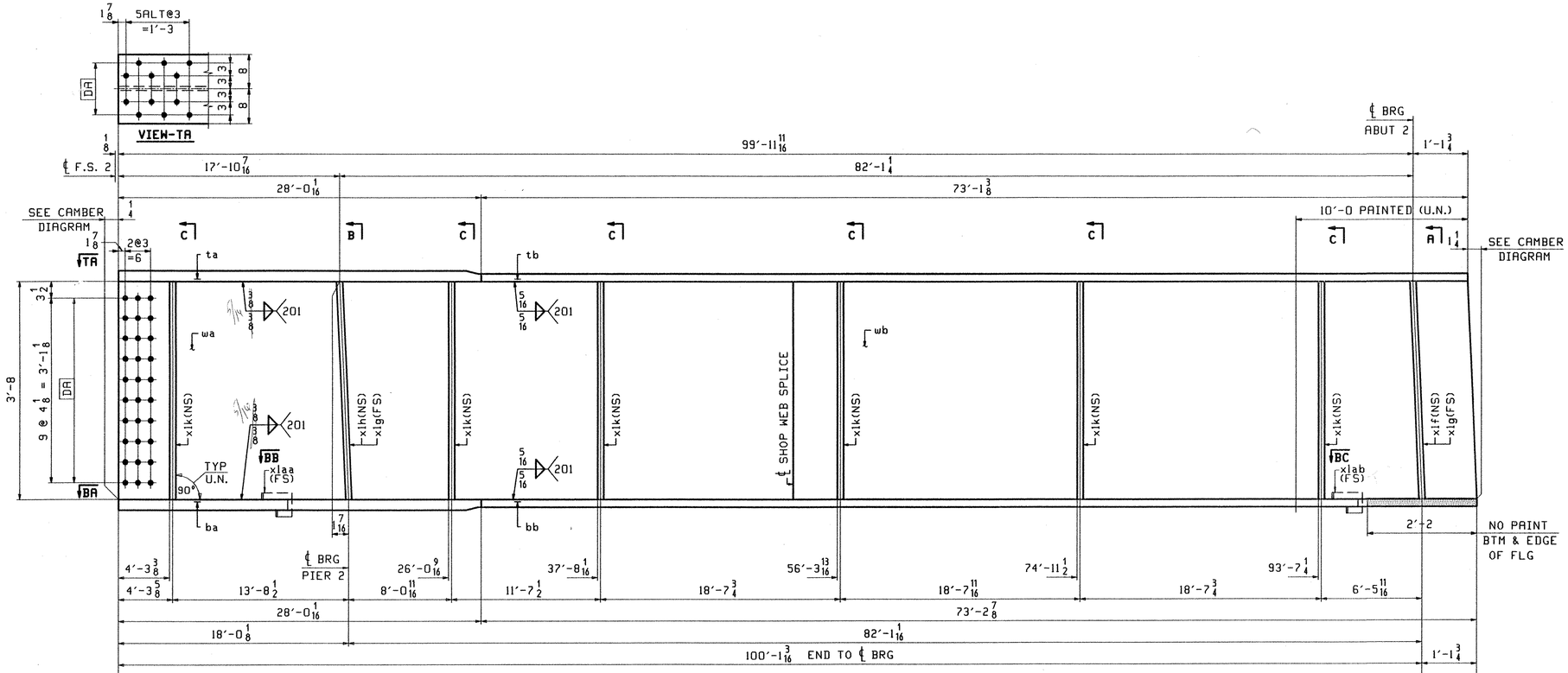
TENSOR 2243

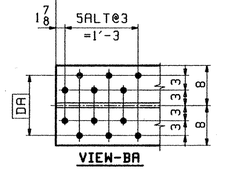
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

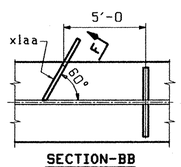
JOB NO.	DRG. NO.
167	12
	REV. △

697-BR25B-SS12

RTD Fri Sep 6 16:42:03 EDT 2002 /users/jobs/2243/12 : Rev=0

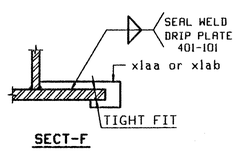


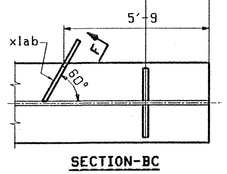


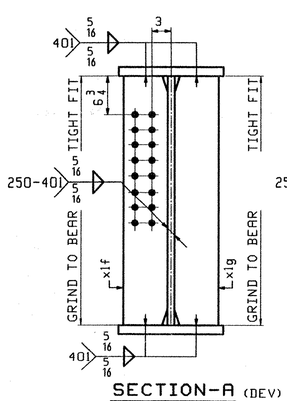


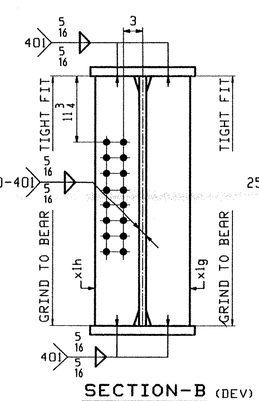
ONE - GIRDER - G1C (DEV)

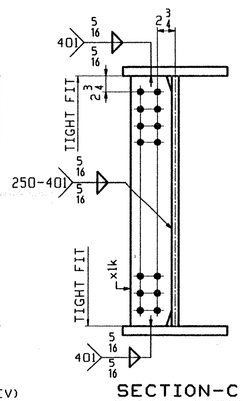
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.

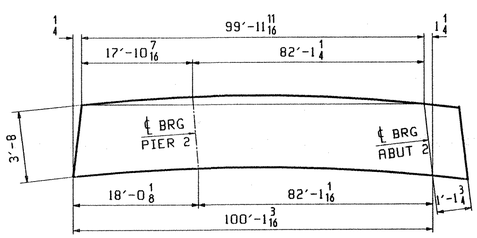












ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		GIC	1		GIRDER				19846	
4	N		1	wa	PL 1/2x45	52	1 1/4	(M270-50W T2) (H2-3)		
3	Q		1	wb	PL 1/2x45	49	1 13/16	(M270-50W T2) (H2-3)		
1	J		1	ta	PL 1 1/2x16	28	0 1/16	(M270-50W T2) (H2-3)		
1	U		1	tb	PL 7/8x16	73	1 3/8	(M270-50W T2) (H2-3)		
1	J		1	ba	PL 1 1/2x16	28	0 1/16	(M270-50W T2) (H2-3)		
1	Q		1	bb	PL 7/8x16	73	2 7/8	(M270-50W T2) (H2-3)		
5	C		6	xlk	PL 1/2x7	3	8	(M270-50W T2) (H2-3)		
5	B		1	xlh	PL 3/4x7 1/2	3	8	(M270-50W T2) (H2-3)		
5	B		2	xlg	PL 3/4x7 1/2	3	8	(M270-50W T2) (H2-3)		
5	B		1	xlf	PL 3/4x7 1/2	3	8	(M270-50W T2) (H2-3)		
5	K		1	xlaa	PL 1/4x3 1/2	0	11			
5	K		1	xlab	PL 1/4x2 7/8	0	11			

JOB NO. | DRAWING NO. 13 | REV.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/30/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
OK'D BY RJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RJV DATE 10-3-02

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16" ø
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - GIC
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD
TENSOR 2243
PROJ NO. NHF-010-1(18)
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

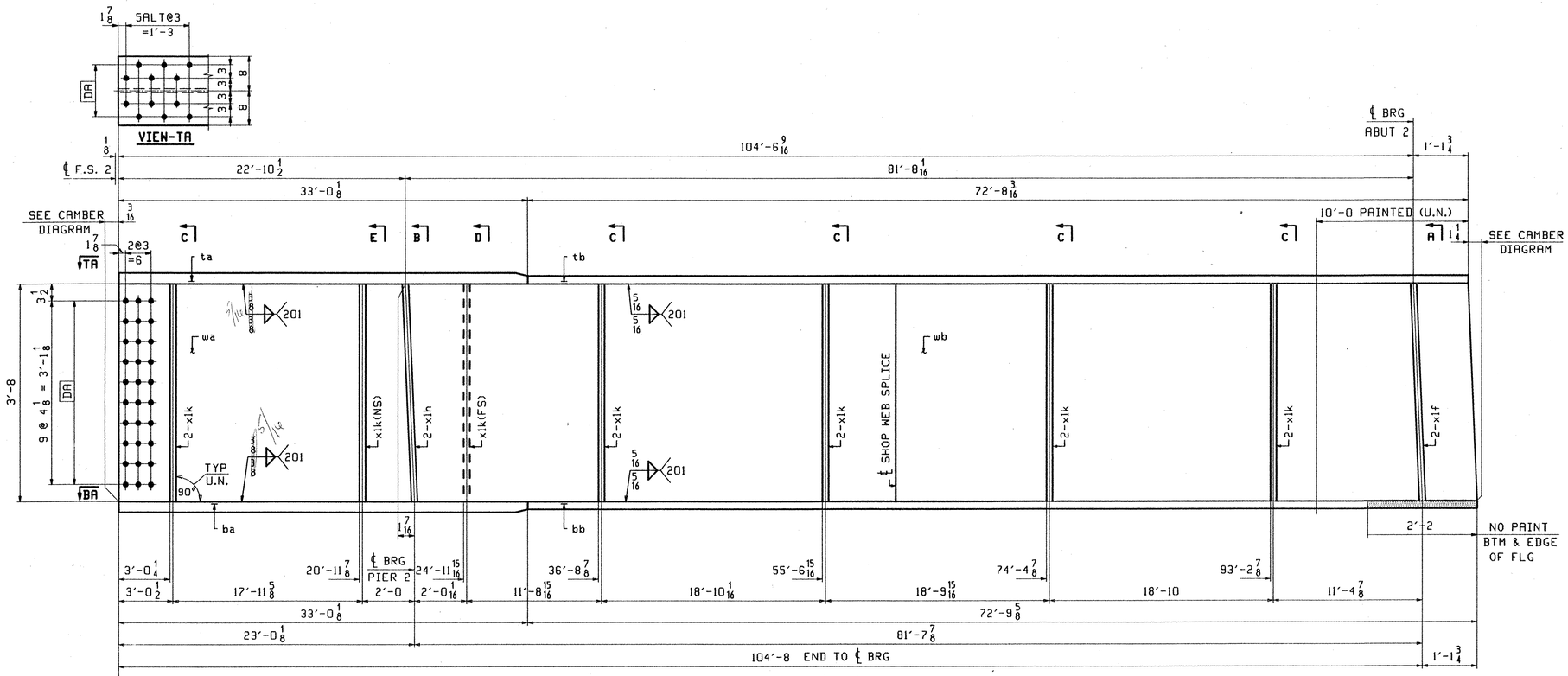
DRAWN BY	DATE
ATD	08/30
CHKD BY	
DO	09/05
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

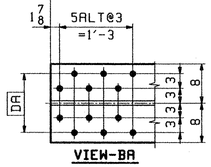
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 167 | DRG. NO. 13 | REV.

698 BRZ58-5513

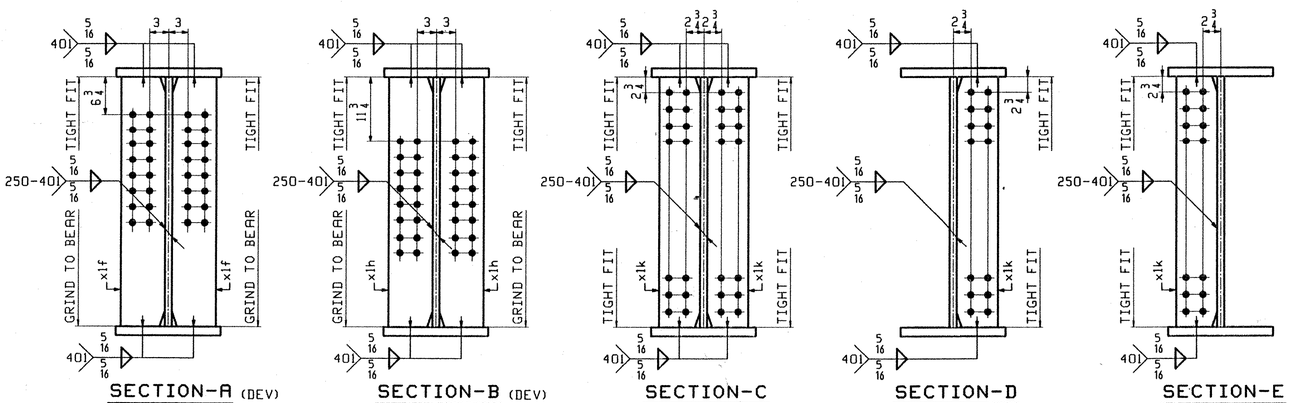
ABM INFO		SHIP	BILL OF MATERIAL						JOB NO.	DRAWING NO.	REV.
										14	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES	
		G2C	1		GIRDER				21219		
3	S		1	wa	PL $\frac{1}{2}$x45	56	$8\frac{1}{16}$	(M270-50WT2) (N2-3)			
3	Q		1	wb	PL $\frac{1}{2}$x44 $\frac{7}{8}$	49	$1\frac{13}{16}$	(M270-50WT2) (N2-3)			
1	C		1	ta	PL $1\frac{1}{2}$x16	33	$0\frac{1}{8}$	(M270-50WT2) (N2-3)			
1	W		1	tb	PL $\frac{7}{8}$x16	72	$8\frac{3}{16}$	(M270-50WT2) (N2-3)			
1	C		1	ba	PL $1\frac{1}{2}$x16	33	$0\frac{1}{8}$	(M270-50WT2) (N2-3)			
1	W		1	bb	PL $\frac{7}{8}$x16	72	$9\frac{5}{8}$	(M270-50WT2) (N2-3)			
5	C		12	x1k	PL $\frac{1}{2}$x7	3	8	(M270-50WT2) (N2-3)			
5	B		2	x1h	PL $\frac{3}{4}$x7 $\frac{1}{2}$	3	8	(M270-50WT2) (N2-3)			
5	B		2	x1f	PL $\frac{3}{4}$x7 $\frac{1}{2}$	3	8	(M270-50WT2) (N2-3)			



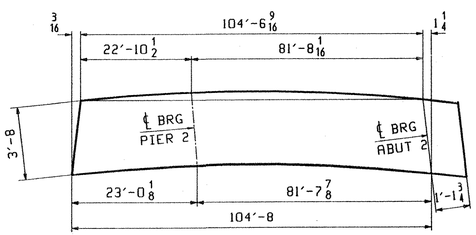


ONE - GIRDER - G2C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.



RECEIVED
OK'D BY SJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RRW DATE 10-3-02



ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		$\frac{15}{16}$"ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G2C

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

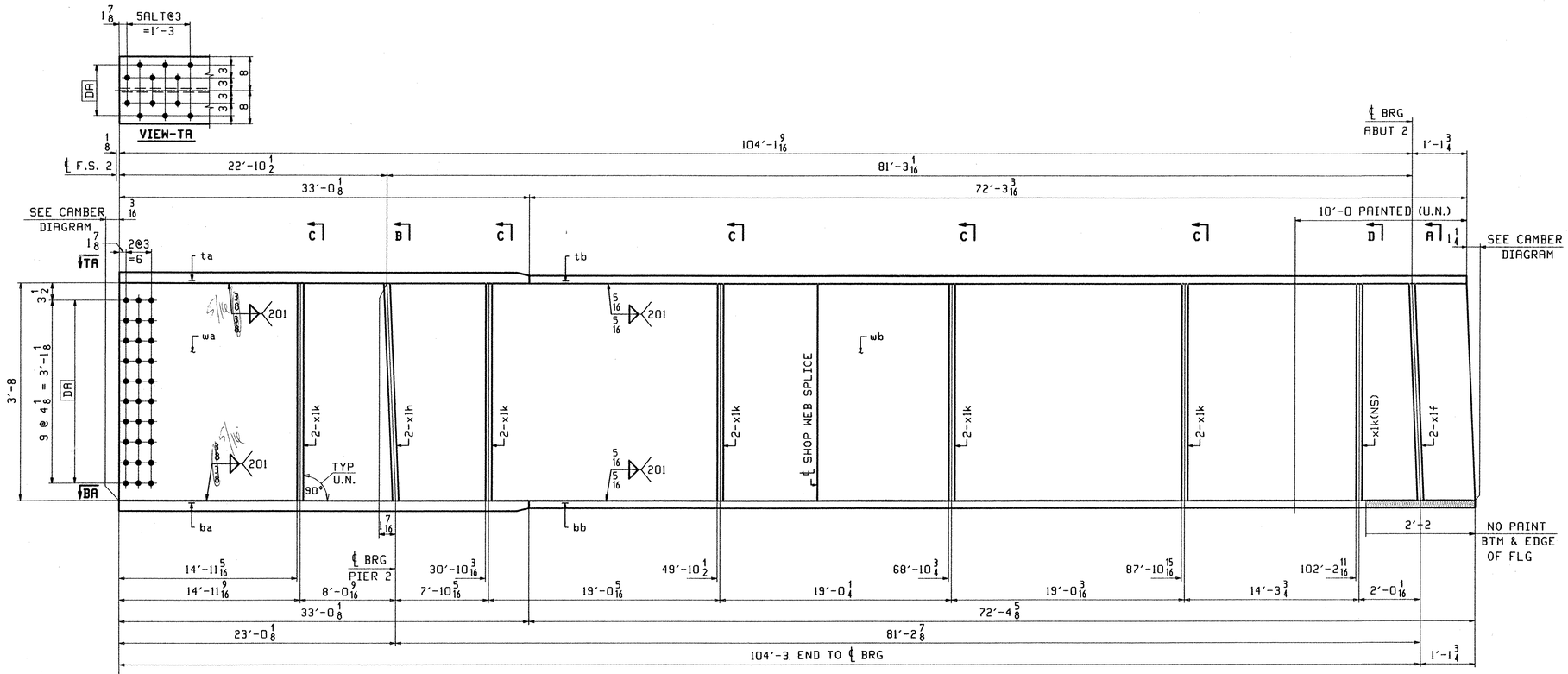
DRAWN BY	DATE
ATD	09/02
CHKD BY	
DO	09/05
APPROV BY	
SUPERVISOR	W. J. CATTI
Q.A.	

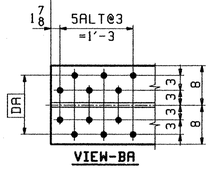
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	14
	REV. △

699-BR25B-SS14

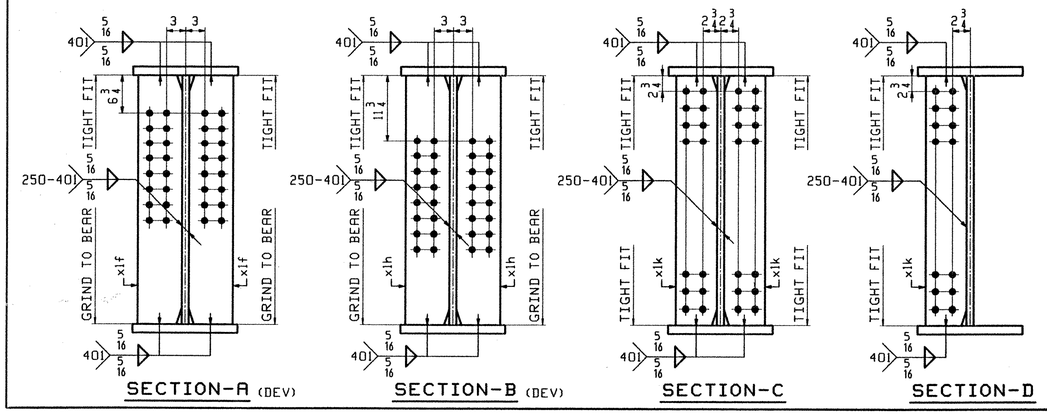
ATD Fri Sep 6 16:26:47 EDT 2002 /users/jobs/2243/14.dwg

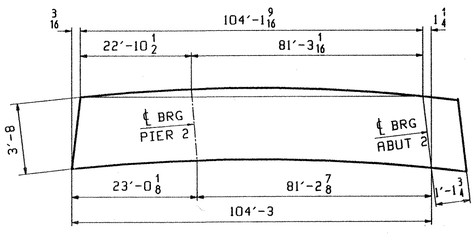




ONE - GIRDER - G3C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.





ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

RECEIVED
CK'D BY RTK CK'D BY _____
SEP 16 2002
RESUBMIT _____ APPROVED As Noted
BY RLW DATE 10-3-02

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G3C	1		GIRDER				21104	
3	U		1	wa	PL 1/2x45	56	3 1/16	(M270-50WT2) (M2-3)		
3	Q		1	wb	PL 1/2x44 2/8	49	1 13/16	(M270-50WT2) (M2-3)		
1	C		1	ta	PL 1 1/2x16	33	0 1/8	(M270-50WT2) (M2-3)		
2	A		1	tb	PL 7/8x16	72	3 3/16	(M270-50WT2) (M2-3)		
1	C		1	ba	PL 1 1/2x16	33	0 1/8	(M270-50WT2) (M2-3)		
1	Y		1	bb	PL 7/8x16	72	4 5/8	(M270-50WT2) (M2-3)		
5	C		11	x1k	PL 1/2x7	3	8	(M270-50WT2) (M2-3)		
5	B		2	x1h	PL 3/4x7 1/2	3	8	(M270-50WT2) (M2-3)		
5	B		2	x1f	PL 3/4x7 1/2	3	8	(M270-50WT2) (M2-3)		

BILL OF MATERIAL — JOB NO. — DRAWING NO. 15 — REV.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9/13/02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"Ø
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G3C

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

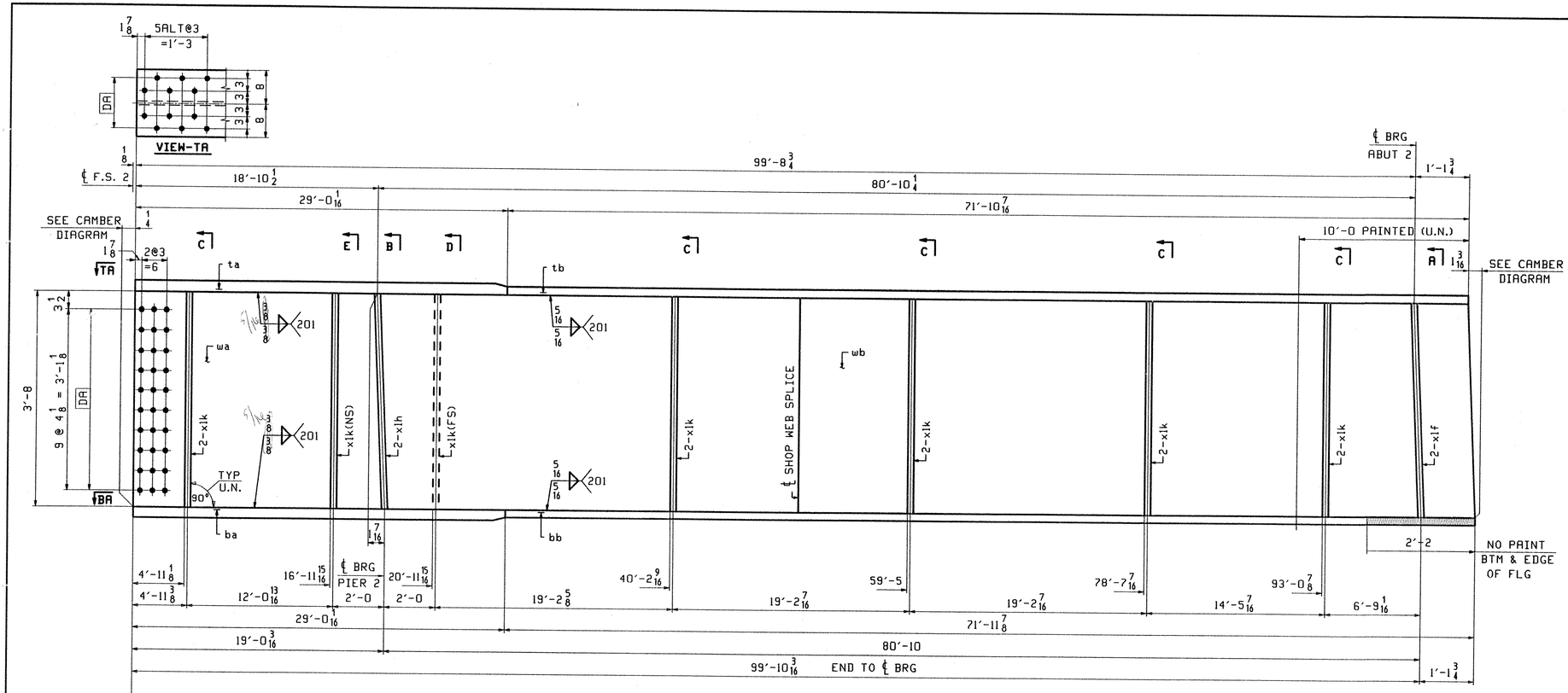
DRAWN BY	ATD
DATE	09/02
CHKD BY	
DO	09/05
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

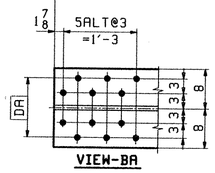
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 167 — DRG. NO. 15 — REV. △

700-BR25B-S&15

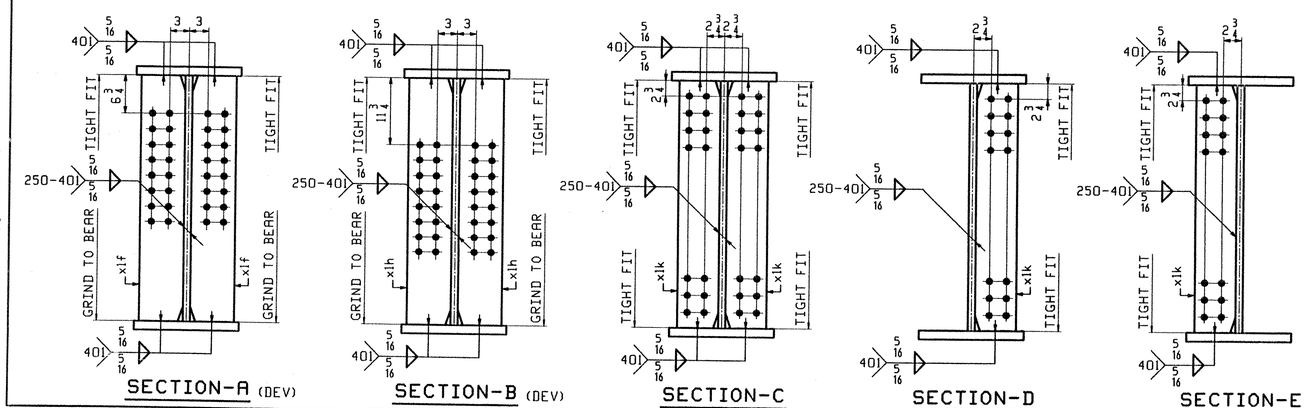
ATD Fri Sep 6 16:01:47 EST 2002 /users/jobs/2243/15.1 Rev0

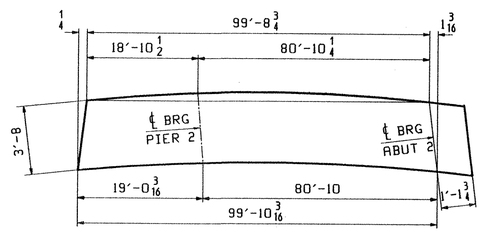




ONE - GIRDER - G4C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.





ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G4C	1		GIRDER				20129	
4	A		1	wa	PL 1/2x45	51	10 1/4	(M270-50WT2) (H2-3)		
3	Q		1	wb	PL 1/2x45	49	11 13/16	(M270-50WT2) (H2-3)		
1	G		1	ta	PL 1 1/2x16	29	0 1/16	(M270-50WT2) (H2-3)		
2	C		1	tb	PL 7/8x16	71	10 9/16	(M270-50WT2) (H2-3)		
1	G		1	ba	PL 1 1/2x16	29	0 1/16	(M270-50WT2) (H2-3)		
2	C		1	bb	PL 7/8x16	71	11 7/8	(M270-50WT2) (H2-3)		
5	C		12	x1k	PL 1/2x?	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1h	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1f	PL 3/4x7 1/2	3	8	(M270-50WT2) (H2-3)		

BILL OF MATERIAL

JOB NO.

DRAWING NO. 16

REV.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-13-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
OK'D BY: DJK OK'D BY:
SEP 16 2002
RESUBMIT APPROVED As Noted
BY RLW DATE 10-7-02

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16"ø
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G4C

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

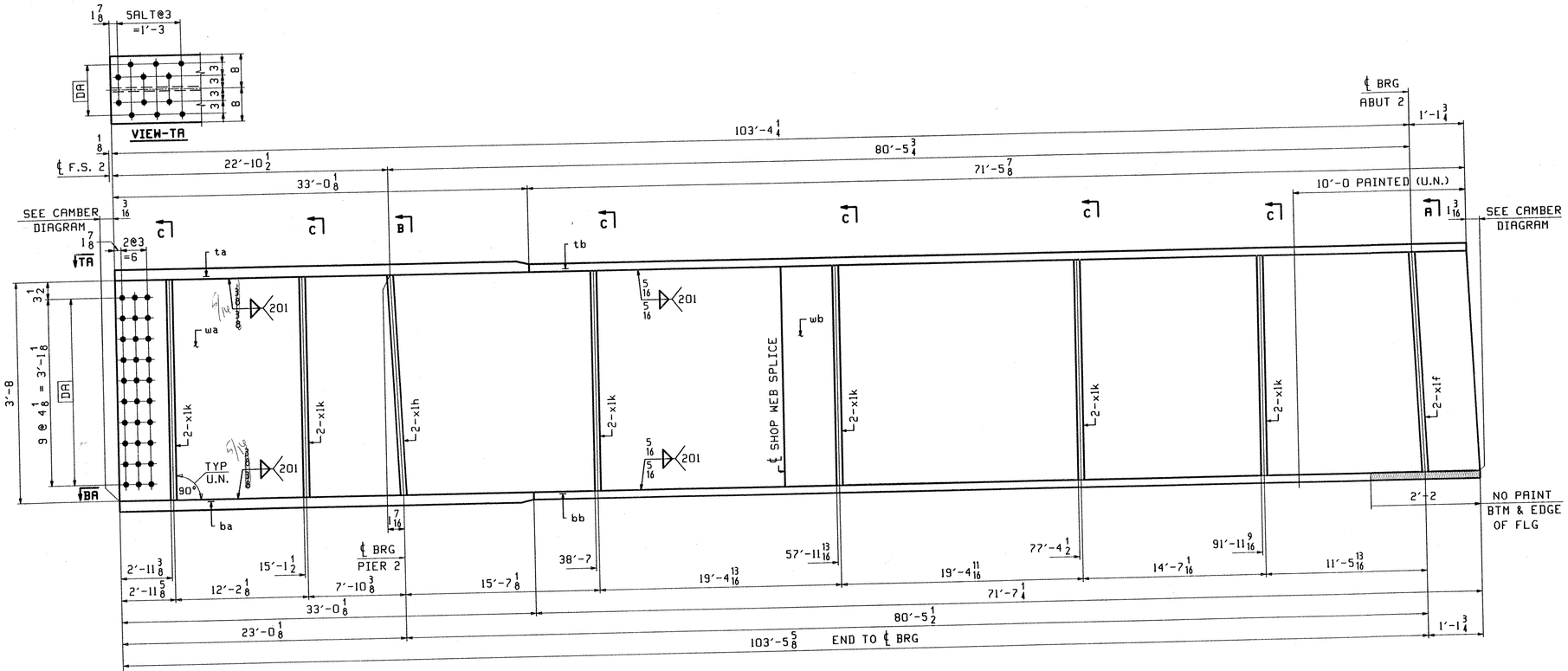
	DRAWN BY	DATE
	ATD	09/02
CHKD BY		
DO		09/05
APPROV BY		
SUPERVISOR	W. J. GATTI	
Q.A.		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 167 DRG. NO. 16 REV. △

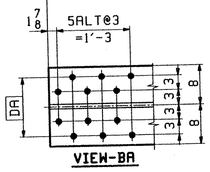
701-BR25B-5516

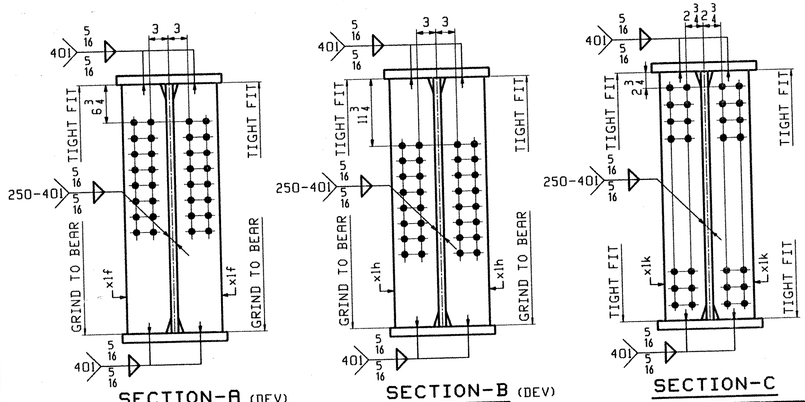
RTD Fri Sep 6 16:24:58 EDT 2002 /users/pbm/2401/8.dwg

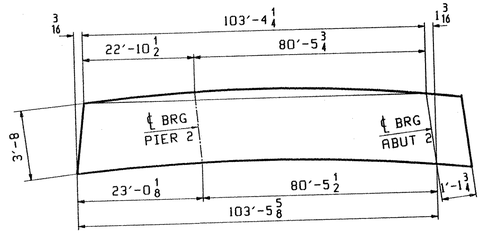


ONE - GIRDER - G5C (DEV)

1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.







ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									17	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G5C	1		GIRDER				21024	
3	W		1	wa	PL 1/2x45	55	5 11/16	(M270-50WT2) (H2-3)		
3	Q		1	wb	PL 1/2x45	49	1 13/16	(M270-50WT2) (H2-3)		
1	C		1	ta	PL 1 1/2x16	33	0 1/8	(M270-50WT2) (H2-3)		
2	E		1	tb	PL 7/8x16	71	5 7/8	(M270-50WT2) (H2-3)		
1	C		1	ba	PL 1 1/2x16	33	0 1/8	(M270-50WT2) (H2-3)		
2	E		1	bb	PL 7/8x16	71	7 1/4	(M270-50WT2) (H2-3)		
5	C		12	x1k	PL 1/2x7	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1h	PL 3/8x7 1/2	3	8	(M270-50WT2) (H2-3)		
5	B		2	x1f	PL 3/8x7 1/2	3	8	(M270-50WT2) (H2-3)		

RECEIVED
CK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RLW DATE 10-3-02

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/3/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL:	ELECTRODES:	HOLES:	SHOP BOLTS:
M270-50W		15/16"ø	

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G5C	DRAWN BY	DATE
JOB: VT. ROUTE 9 OVER DEERFIELD RIVER	ATD	09/02
BRIDGE 25B	CHKD BY	
SEARSBURG, VERMONT	DO	09/05
CONTRACTOR: J.A. McDONALD	APPROV BY	
	SUPERVISOR	W. J. GATTI
PROJ NO. NHF-010-1(18)	Q.A.	
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION		

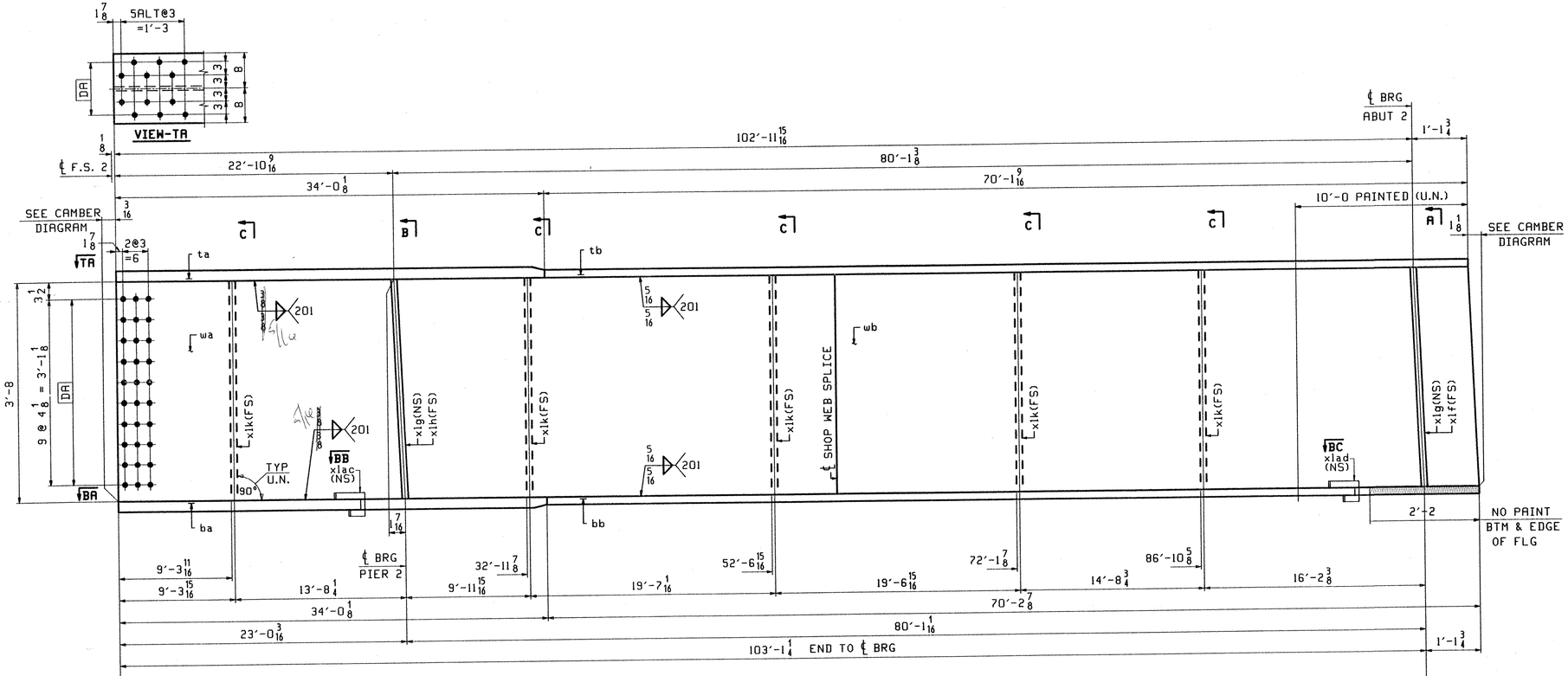
TENSOR 2243

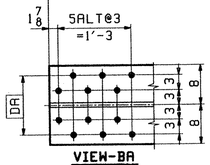
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

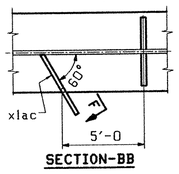
JOB NO.	DRG. NO.
167	17
	REV. △

702-BR25B-SS17

ATD Fri Sep 6 16:36:34 EDT 2002 /users/jobs/224/17 - Rev0

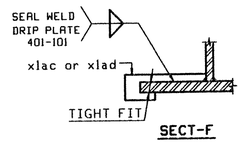


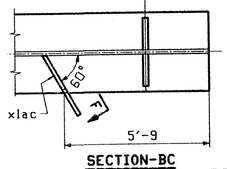


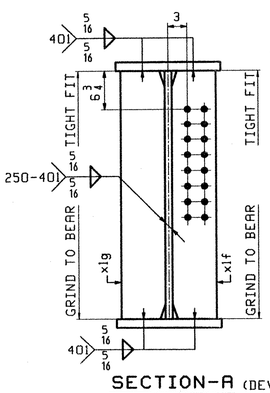


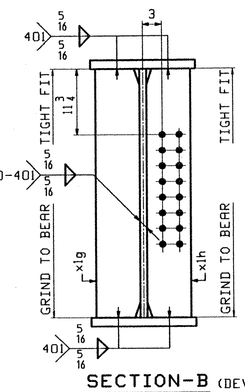
ONE - GIRDER - G6C (DEV)

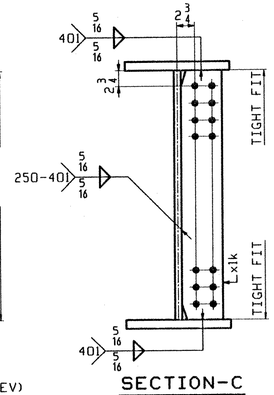
1. FOR GIRDER STANDARD DETAILS SEE DWG. X1.
2. FOR CAMBER DIAGRAM SEE DWG. C3.
3. FOR FLANGE DIAGRAM SEE DWG. F3.
4. FOR GENERAL NOTES SEE SHT. GN1.

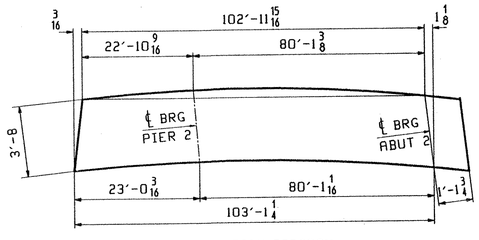












ORIENTATION DIAGRAM
FOR CAMBER SEE SHEET C3

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									18	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		G6C	1		GIRDER				20729	
3	Y		1	wa	PL 1/2x45	55	1 5/16	(M270-50WT2) (M2-3)		
3	Q		1	wb	PL 1/2x45	49	1 13/16	(M270-50WT2) (M2-3)		
1	A		1	ta	PL 1 1/2x16	34	0 1/8	(M270-50WT2) (M2-3)		
2	L		1	tb	PL 7/8x16	70	1 9/16	(M270-50WT2) (M2-3)		
1	A		1	ba	PL 1 1/2x16	34	0 1/8	(M270-50WT2) (M2-3)		
2	L		1	bb	PL 7/8x16	70	2 7/8	(M270-50WT2) (M2-3)		
5	C		5	xlk	PL 1/2x7	3	8	(M270-50WT2) (M2-3)		
5	B		2	xlg	PL 1/2x7 1/2	3	8	(M270-50WT2) (M2-3)		
5	B		1	xlh	PL 1/2x7 1/2	3	8	(M270-50WT2) (M2-3)		
5	B		1	xlf	PL 1/2x7 1/2	3	8	(M270-50WT2) (M2-3)		
5	K		1	xlac	PL 1/4x3 1/2	0	11			
5	K		1	xlad	PL 1/4x2 7/8	0	11			

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9/13/02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

RECEIVED
SEP 16 2002
CK'D BY DJV CK'D BY
RESUBMIT APPROVED As Noted
BY RKW DATE 10-3-02

MATERIAL: M270-50W
ELECTRODES:
HOLES: 15/16" ø
SHOP BOLTS:

SURFACE PREP. & PAINT:
-STEEL WITHIN 10'-0 ENDS OF GIRDERS SHALL BE PAINTED (SEE GN1)
-ALL OTHER STEEL SHALL BE BLAST CLEANED AND LEFT UNPAINTED.

DESCRIPTION: GIRDER - G6C

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

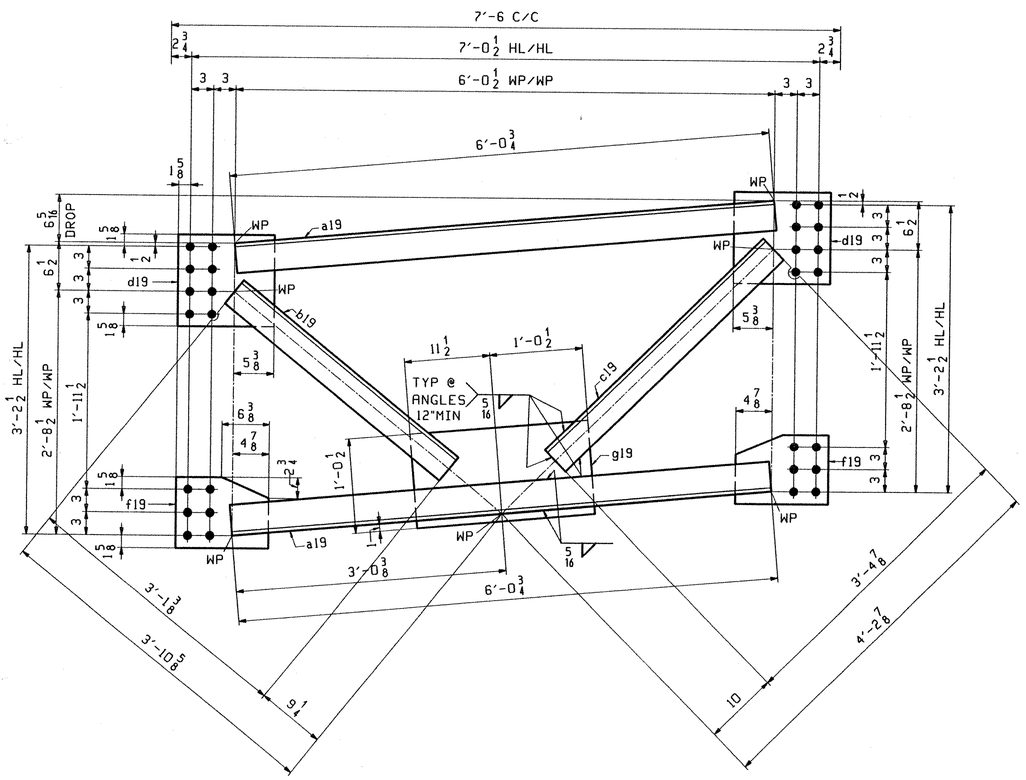
DRAWN BY	DATE
ATD	09/02
CHKD BY	
DO	09/05
APPROV BY	
SUPERVISOR	W. J. GITTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	18
	REV. △

703-BR25B-5518

DO Mon Sep 9 08:03:23 EDT 2002 /users/jobs/2243/18.1 Rev:0



66 ~ INTERMEDIATE CROSSFRAMES ~ 19CF1 (UNPAINTED)

6 ~ INTERMEDIATE CROSSFRAMES ~ 19CF2 (PAINTED)

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
									19	
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		19CF1	66		CROSSFRAME				413	
6	B		132	a19	L 4x4x5/8	6	0 3/4	(M270-50WT2) (H2-3)		
6	C		66	b19	L 4x4x5/8	3	1 3/8	(M270-50WT2) (H2-3)		
6	C		66	c19	L 4x4x5/8	3	4 7/8	(M270-50WT2) (H2-3)		
6	D		132	d19	PL 1/2x12 1/4	1	1	(M270-50WT2) (H2-3)		
6	E		132	f19	PL 1/2x9 1/4	1	0 1/2	(M270-50WT2) (H2-3)		
6	F		66	g19	PL 1/2x12 1/2	2	0	(M270-50WT2) (H2-3)		
		19CF2	6		CROSSFRAME				413	
6	B		12	a19	L 4x4x5/8	6	0 3/4	(M270-50WT2) (H2-3)		
6	C		6	b19	L 4x4x5/8	3	1 3/8	(M270-50WT2) (H2-3)		
6	C		6	c19	L 4x4x5/8	3	4 7/8	(M270-50WT2) (H2-3)		
6	D		12	d19	PL 1/2x12 1/4	1	1	(M270-50WT2) (H2-3)		
6	E		12	f19	PL 1/2x9 1/4	1	0 1/2	(M270-50WT2) (H2-3)		
6	F		6	g19	PL 1/2x12 1/2	2	0	(M270-50WT2) (H2-3)		

OUT FOR APPROVAL	9-13-02									
OUT FOR APPROVAL										
ISSUED TO SHOP										
FIELD & OFFICE										
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: | ELECTRODES: | HOLES: 15/16 Ø | SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: CROSSFRAMES

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
VWJ	08/19
CHKD BY	
DO	09/04
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

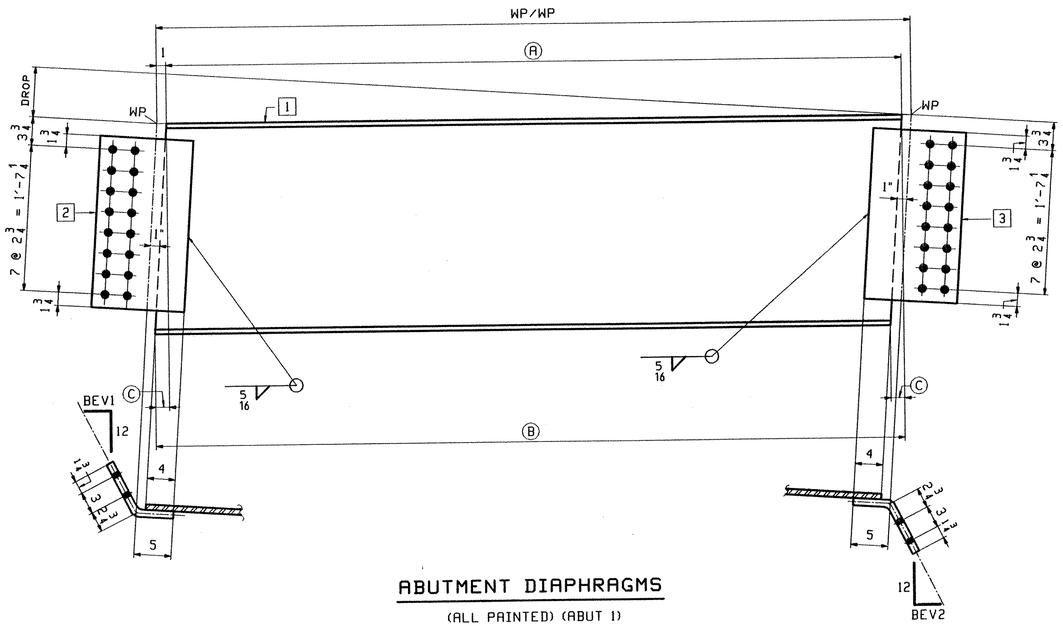
CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	19
	REV. △

RECEIVED
CK'D BY DJV CK'D BY
SEP 16 2002
RESUBMIT APPROVED ✓
BY RRW DATE 10-3-02

704-BR 25B-5519

ABM INFO		SHIP	BILL OF MATERIAL					JOB NO.	DRAWING NO.	REV.
PAGE	LINE	MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
									20	
		20D1	1		ABUT DIAPH				1070	
6	K		1	a20	W 27x84	11	$9\frac{5}{16}$	(M270-50WT2) (H2-3)		
6	J		1	b20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{1}{2}$	(M270-50WT2) (H2-3)BENT		
6	J		1	c20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
		20D2	1		ABUT DIAPH				1049	
6	L		1	d20	W 27x84	11	$6\frac{7}{16}$	(M270-50WT2) (H2-3)		
6	J		1	f20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
6	J		1	g20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
		20D3	1		ABUT DIAPH				1030	
6	M		1	h20	W 27x84	11	$3\frac{3}{4}$	(M270-50WT2) (H2-3)		
6	J		1	k20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
6	J		1	m20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
		20D4	1		ABUT DIAPH				1013	
6	N		1	n20	W 27x84	11	$1\frac{5}{16}$	(M270-50WT2) (H2-3)		
6	J		1	p20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
6	J		1	s20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
		20D5	1		ABUT DIAPH				997	
6	P		1	t20	W 27x84	10	$10\frac{15}{16}$	(M270-50WT2) (H2-3)		
6	J		1	v20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{7}{16}$	(M270-50WT2) (H2-3)BENT		
6	J		1	w20	PL $\frac{1}{2}$x22$\frac{3}{4}$	1	$0\frac{1}{2}$	(M270-50WT2) (H2-3)BENT		



ABUTMENT DIAPHRAGMS

(ALL PAINTED) (ABUT 1)

MARK	REQ'D	DROP	WP/WP	Ⓐ	Ⓑ	Ⓒ	BEV1	BEV2	1	2	3
20D1	1	$1\frac{5}{8}$	11'-11	11'-9	11'-9 5/16	5/16	$6\frac{15}{16}$	$7\frac{3}{16}$	a20	b20	c20
20D2	1	$1\frac{13}{16}$	11'-8 1/16	11'-6 1/16	11'-6 7/16	3/8	$7\frac{1}{8}$	$7\frac{3}{8}$	d20	f20	g20
20D3	1	$1\frac{15}{16}$	11'-5 3/8	11'-3 3/8	11'-3 3/4	3/8	$7\frac{3}{8}$	$7\frac{9}{16}$	h20	k20	m20
20D4	1	$2\frac{1}{8}$	11'-2 7/8	11'-0 7/8	11'-1 5/16	7/16	$7\frac{9}{16}$	$7\frac{3}{4}$	n20	p20	s20
20D5	1	$2\frac{1}{4}$	11'-0 1/2	10'-10 1/2	10'-10 15/16	7/16	$7\frac{3}{4}$	$7\frac{15}{16}$	t20	v20	w20

RECEIVED
OK'D BY DJV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

FOR GENERAL NOTES SEE GN1.

OUT FOR APPROVAL	9-13-02									
OUT FOR APPROVAL										
ISSUED TO SHOP										
FIELD & OFFICE										
REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER

MATERIAL:	ELECTRODES:	HOLES: 15/16ø	SHOP BOLTS:

SURFACE PREP. & PAINT:

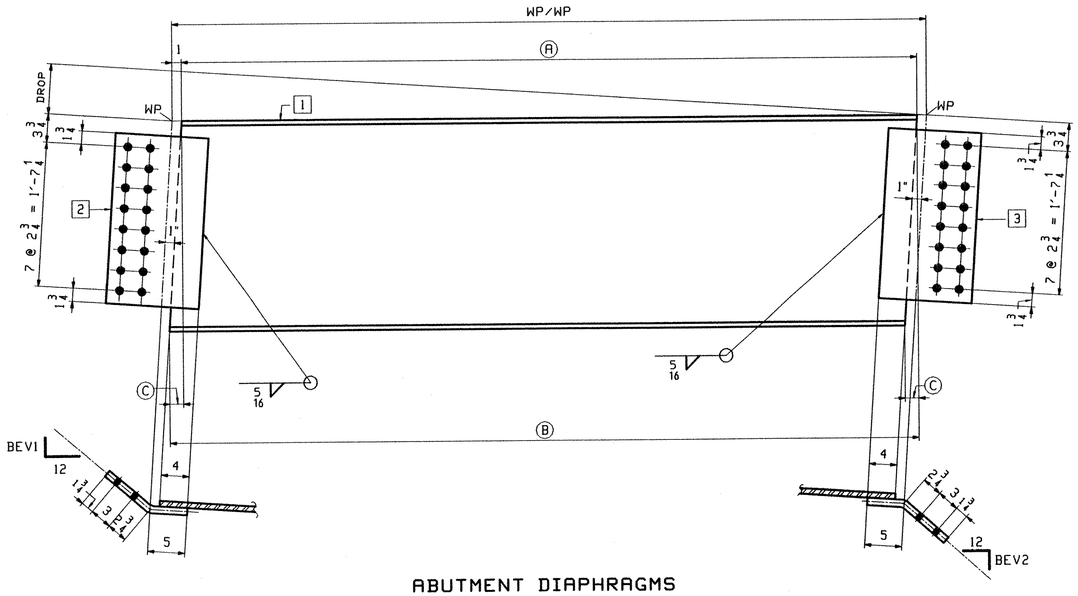
DESCRIPTION:	ABUTMENT DIAPHRAGMS	DRAWN BY	DATE
JOB:	VT. ROUTE 9 OVER DEERFIELD RIVER	VWJ	08/19
	BRIDGE 25B	CHKD BY	
	SEARSBURG, VERMONT	DO	09/04
TENSOR 2243	CONTRACTOR: J.A. McDONALD	APPROV BY	
		SUPERVISOR	W. J. GATTI
PROJ NO.	NHF-010-1(18)	Q.A.	
CUSTOMER:	VERMONT AGENCY OF TRANSPORTATION		

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	20
	REV. △

705-BR25B-S520

Fri Sep 6 09:38:18 EDT 2002 rivers.jobs/2243/20 Rev0



ABUTMENT DIAPHRAGMS

(ALL PAINTED) (ABUT 2)

MARK	REQ'D	DROP	WP/WP	Ⓐ	Ⓑ	Ⓒ	BEV1	BEV2	1	2	3
21D1	1	4 7/16	7'-8 15/16	7'-6 15/16	7'-8 3/16	1 1/4	9 11/16	9 9/16	a21	b21	c21
21D2	1	4 9/16	7'-8 1/2	7'-6 1/2	7'-7 13/16	1 5/16	9 9/16	9 7/16	d21	f21	g21
21D3	1	4 5/8	7'-8	7'-6	7'-7 5/16	1 5/16	9 3/8	9 5/16	h21	k21	m21
21D4	1	4 5/8	7'-7 9/16	7'-5 9/16	7'-6 15/16	1 3/8	9 1/4	9 3/16	n21	p21	s21
21D5	1	4 11/16	7'-7 1/8	7'-5 1/8	7'-6 1/2	1 3/8	9 3/16	9 1/16	t21	v21	w21

BILL OF MATERIAL

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		21D1	1		ABUT DIAPH				726	
7	M		1	a21	W 27x84	7	8 3/16	(M270-50WT2) (H2-3)		
6	J		1	b21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	c21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		21D2	1		ABUT DIAPH				723	
7	M		1	d21	W 27x84	7	7 13/16	(M270-50WT2) (H2-3)		
6	J		1	f21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	g21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		21D3	1		ABUT DIAPH				719	
7	N		1	h21	W 27x84	7	7 5/16	(M270-50WT2) (H2-3)		
6	J		1	k21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	m21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		21D4	1		ABUT DIAPH				717	
7	N		1	n21	W 27x84	7	6 15/16	(M270-50WT2) (H2-3)		
6	J		1	p21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	s21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		21D5	1		ABUT DIAPH				714	
7	P		1	t21	W 27x84	7	6 1/2	(M270-50WT2) (H2-3)		
6	J		1	v21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	w21	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		

JOB NO. | DRAWING NO. 21 | REV.

RECEIVED
CK'D BY DDV OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

FOR GENERAL NOTES SEE GN1.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-13-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: | ELECTRODES: | HOLES: 15/16Ø | SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: ABUTMENT DIAPHRAGMS

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

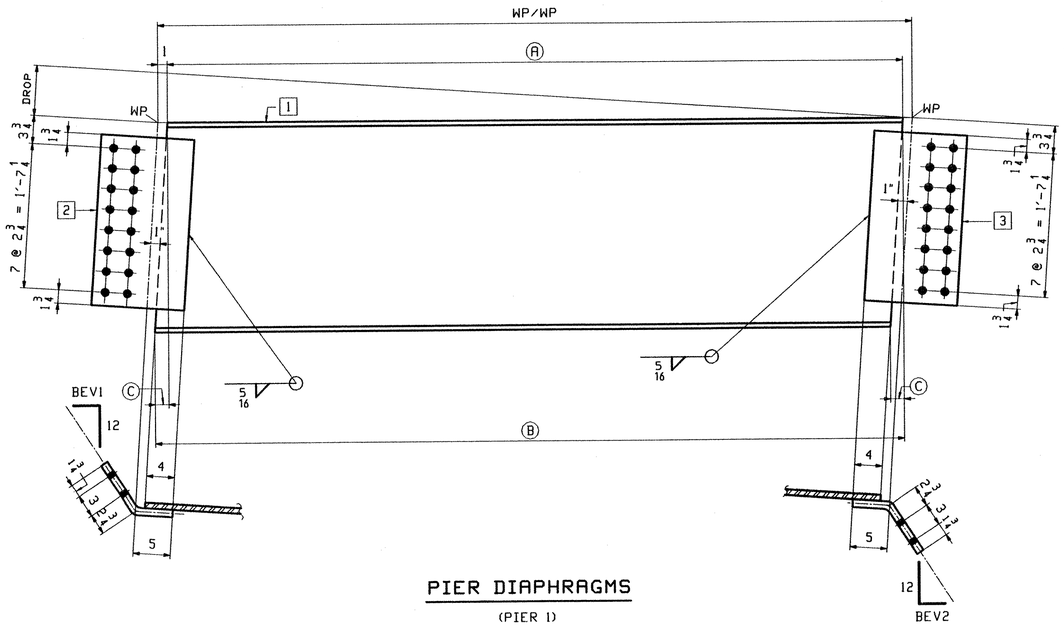
DRAWN BY	DATE
VWJ	08/20
CHKD BY	
DO	09/04
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO.	DRG. NO.
167	21
	REV. △

M06-BR25B-SS21

VWJ Fri Sep 6 10:10:30 EDT 2002 /users/jobs/2243/21 Rev0



PIER DIAPHRAGMS

(PIER 1)

MARK	REQ'D	DROP	WP/WP	Ⓐ	Ⓑ	Ⓒ	BEV1	BEV2	1	2	3
22D1	1	$2\frac{15}{16}$	10'-2 1/8	10'-0 1/8	10'-0 3/4	5/8	$8\frac{3}{4}$	$8\frac{15}{16}$	a22	b22	c22
22D2	1	$3\frac{1}{16}$	10'-0 7/16	9'-10 7/16	9'-11 1/8	11/16	$8\frac{15}{16}$	$9\frac{1}{8}$	d22	f22	g22
22D3	1	$3\frac{3}{16}$	9'-10 7/8	9'-8 7/8	9'-9 9/16	11/16	$9\frac{1}{8}$	$9\frac{5}{16}$	h22	k22	m22
22D4	1	$3\frac{1}{4}$	9'-9 3/8	9'-7 3/8	9'-8 1/8	3/4	$9\frac{5}{16}$	$9\frac{1}{2}$	n22	p22	s22
22D5	1	$3\frac{3}{8}$	9'-7 15/16	9'-5 15/16	9'-6 11/16	3/4	$9\frac{1}{2}$	$9\frac{11}{16}$	t22	v22	w22

BILL OF MATERIAL

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		22D1	1		PIER DIAPH				926	
7	B		1	a22	W 27x84	10	0 3/4	(M270-50WT2) (M2-3)		
6	J		1	b22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
6	J		1	c22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
		22D2	1		PIER DIAPH				915	
7	C		1	d22	W 27x84	9	11 1/8	(M270-50WT2) (M2-3)		
6	J		1	f22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
6	J		1	g22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
		22D3	1		PIER DIAPH				904	
7	D		1	h22	W 27x84	9	9 9/16	(M270-50WT2) (M2-3)		
6	J		1	k22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
6	J		1	m22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
		22D4	1		PIER DIAPH				894	
7	E		1	n22	W 27x84	9	8 1/8	(M270-50WT2) (M2-3)		
6	J		1	p22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
6	J		1	s22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
		22D5	1		PIER DIAPH				883	
7	F		1	t22	W 27x84	9	6 11/16	(M270-50WT2) (M2-3)		
6	J		1	v22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		
6	J		1	w22	PL 1/2x22 3/4	1	0 1/2	(M270-50WT2) (M2-3)BENT		

JOB NO.

DRAWING NO. 22 REV.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.	NO.	DIA.	LGT	TYPE	WASHER
	OUT FOR APPROVAL	9-18-02									
	OUT FOR APPROVAL										
	ISSUED TO SHOP										
	FIELD & OFFICE										

MATERIAL: | ELECTRODES: | HOLES: 15/16Ø | SHOP BOLTS:

SURFACE PREP. & PAINT:

RECEIVED
CK'D BY DJK CK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RKW DATE 10-3-02

FOR GENERAL NOTES SEE GN1.

DESCRIPTION: PIER DIAPHRAGMS

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

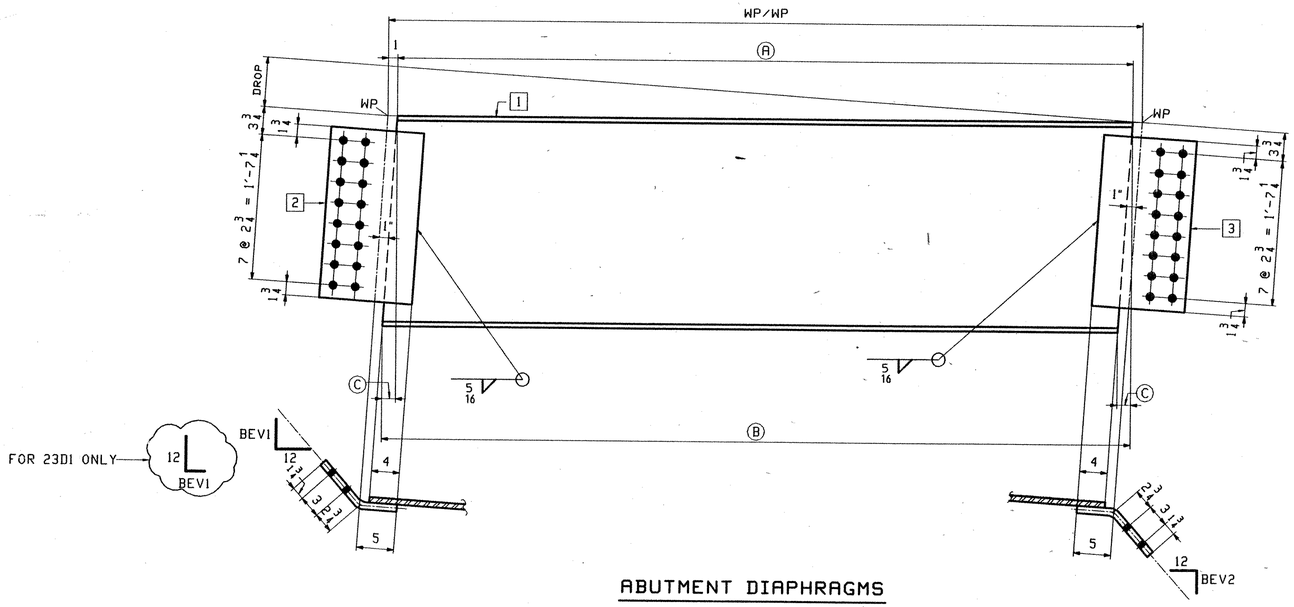
CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
VWJ	08/23
CHKD BY	
DO	09/04
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
75 SPRING HILL ROAD SACO, MAINE 04072
PHONE (207) 282-7360 FAX. (207) 282-1179

JOB NO. 167 | DRG. NO. 22 | REV. 1

407-BR25B-SS22



ABUTMENT DIAPHRAGMS

(PIER 2)

MARK	REQ'D	DROP	WP/WP	Ⓐ	Ⓑ	Ⓒ	BEV1	BEV2	1	2	3
23D1	1	3 7/8	8'-7	8'-5	8'-6	1	11 13/16	12	a23	b23	c23
23D2	1	3 7/8	8'-6 3/16	8'-4 3/16	8'-5 3/16	1	12	11 13/16	d23	f23	g23
23D3	1	3 15/16	8'-5 3/8	8'-3 3/8	8'-4 7/16	1 1/16	11 13/16	11 5/8	h23	k23	m23
23D4	1	4	8'-4 5/8	8'-2 5/8	8'-3 11/16	1 1/16	11 5/8	11 7/16	n23	p23	s23
23D5	1	4 1/16	8'-3 7/8	8'-1 7/8	8'-2 15/16	1 1/16	11 7/16	11 1/4	t23	v23	w23

ABM INFO PAGE	ABM INFO LINE	SHIP MARK	QTY	MARK	MATERIAL	LENGTH FT	LENGTH INCHES	REMARKS	WT	PROCUREMENT NOTES
		23D1	1		PIER DIAPH				794	
7	G		1	a23	W 27x84	8	6	(M270-50WT2) (H2-3)		
6	J		1	b23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	c23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		23D2	1		PIER DIAPH				789	
7	H		1	d23	W 27x84	8	5 3/16	(M270-50WT2) (H2-3)		
6	J		1	f23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	g23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		23D3	1		PIER DIAPH				783	
7	J		1	h23	W 27x84	8	4 7/16	(M270-50WT2) (H2-3)		
6	J		1	k23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	m23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		23D4	1		PIER DIAPH				778	
7	K		1	n23	W 27x84	8	3 11/16	(M270-50WT2) (H2-3)		
6	J		1	p23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	s23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
		23D5	1		PIER DIAPH				773	
7	L		1	t23	W 27x84	8	2 15/16	(M270-50WT2) (H2-3)		
6	J		1	v23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		
6	J		1	w23	PL 1/2x22 3/4	1	0 7/16	(M270-50WT2) (H2-3)BENT		

BILL OF MATERIAL — JOB NO. — DRAWING NO. 23 — REV.

RECEIVED
OK'D BY DT OK'D BY
SEP 16 2002
RESUBMIT APPROVED
BY RLW DATE 10-3-02

FOR GENERAL NOTES SEE GN1.

REV.	REMARKS	DATE	DWN	CHK	APP	Q.A.
	OUT FOR APPROVAL	9-13-02				
	OUT FOR APPROVAL					
	ISSUED TO SHOP					
	FIELD & OFFICE					

NO.	DIA.	LGT	TYPE	WASHER

MATERIAL: | ELECTRODES: | HOLES: 15/16ø | SHOP BOLTS:

SURFACE PREP. & PAINT:

DESCRIPTION: PIER DIAPHRAGMS

JOB: VT. ROUTE 9 OVER DEERFIELD RIVER
BRIDGE 25B
SEARSBURG, VERMONT
CONTRACTOR: J.A. McDONALD

TENSOR 2243

PROJ NO. NHF-010-1(18)

CUSTOMER: VERMONT AGENCY OF TRANSPORTATION

DRAWN BY	DATE
VWJ	08/23
CHKD BY	
DO	09/04
APPROV BY	
SUPERVISOR	W. J. GATTI
Q.A.	

CASCO BAY STEEL STRUCTURES, INC.
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JOB NO.	DRG. NO.
167	23
	REV. △

7000-BR25B-GS23

vwj Fr: Sep 6 11:25:14 EDT 2002 c:\ae+e\jobs\2243-23 : Rev=0