NOTE: BOLT SPLICE MAT'L BACK PAST END OF GDR. FOR SHIPMENT (CT & B FLG.)

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	ITEM PAGE	ITEM LINE
1		ONE GIRDER G6					-10	7					
2	a	1	PL	54		1/2	37	9 16	56x1/2	38	9 3/4	46	18
3	b	1	PL	54		16	57	3 16	56 1/2 x 16	57	8 1/2	44	18
4	c	1	PLU	16		18	37	7 1/2		38	7 3/4	41	38
5	d	1	PLU	16		18	37	9 1/8		38	7 3/4	41	38
6	f	1	PLU	16		3/4	57	3 3/8		58	2 1/4	37	15
7	g	1	PLU	16		3/4	57	1 1/2		58	2 1/4	37	15
8	h	2	PL	25 1/2		1/2	2	7 1/2	(BENT)	30	5 7/8	47	10c
9	K	2	L	7	34	1/2	0	11	(BENT)	40	0	36	39
10													
11	P	1	PL	14 1/2		Load Fitted	3	7 1/2		26	0	28	19
12	S	1	PL	14 1/2			4	6		26	0	28	19
13	t	1	PL	14 1/2			4	6		26	0	28	19
14	W	1	PL	14 1/2			4	6 1/2		26	0	28	19
15													
16	C 2CW#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
17	C 2CY#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
18	C 2bK#	2	PL	16		1/2	1	0 3/8				J	
19													
20	C 2a5#	1	PLU	13		3/8	4	2	(BENT)	33	6	47	11A
21	C 1ag R#	1	BR	7 1/2		3/4	4	6 3/4	(MIE)(FIE)	13	10 1/4	47	18
22	C 1b#	4	BR	7		1/2	4	6	(P2E)	13	10 1/4	47	19
23													
24													
25													
26	US2	1	UPPER SHOE						DET. ON DWG. #2				
27		18	325	3/8			0	2 3/4					
28		8	SB	3/8			0	3 1/2					
29		18	325	3/8			0	8				M	
30		36	HW	1 1/4	1/16	3/16							
31		2	SB	3/8			0	2 2					
32													
33													
34	FWL	1	WD			5/16	379	7					
35	FWS	1	WD			5/16	52	0					
36	FW	1	WD			1/2	1	2					
37	SDS	1	WD			1/16	4	6					
38	VGDS	1	WD			1/2	2	8					
39	SD	1	WD			3/16	-0	8					
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

GIRDER - G6 - 10

SECT. (A) (DEVELOPED)

SECT. (B)(C) (DEVELOPED)

SECT. (D) (DEVELOPED)

SECT. (E)

SECT. (G)

DETAIL "AA"

Dowels in R-US2 To Be Protected During Shipment.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/16" AND REAMED TO SIZE IN ASSEMBLED STEEL, WITH THE SOLID WITH CORRESPONDING PARTS ASSEMBLED.

ALL OPEN HOLES = NF 3

NO FIELD WELDING PERMITTED UNLESS SHOWN OR RECOMMENDED BY STEEL MILL.

USE ELECTRODES AS PER SPECIFICATIONS ELECTRODES OR AS STEEL FOR WELDING.

For location of details shown on this sheet refer to diagrams.

INST.-G-E

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-10	GIRDER (31 1/2 x 60 x 95-7 1/2)	

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
111 PARK AVE. NEW YORK 17, N.Y.
By Arnold Novitzky DEC 23 1969

PAY ITEM - 504.0111

GIRDER

MATERIAL A36 STEEL
SHOP RIVETS 7/8"ϕ
OPEN HOLES 15/16"ϕ
A325 FIELD BOLTS - 7/8"ϕ
SHOP CONTACT SURFACES No PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE I RED LEAD (LH)
REM - AS NOTED

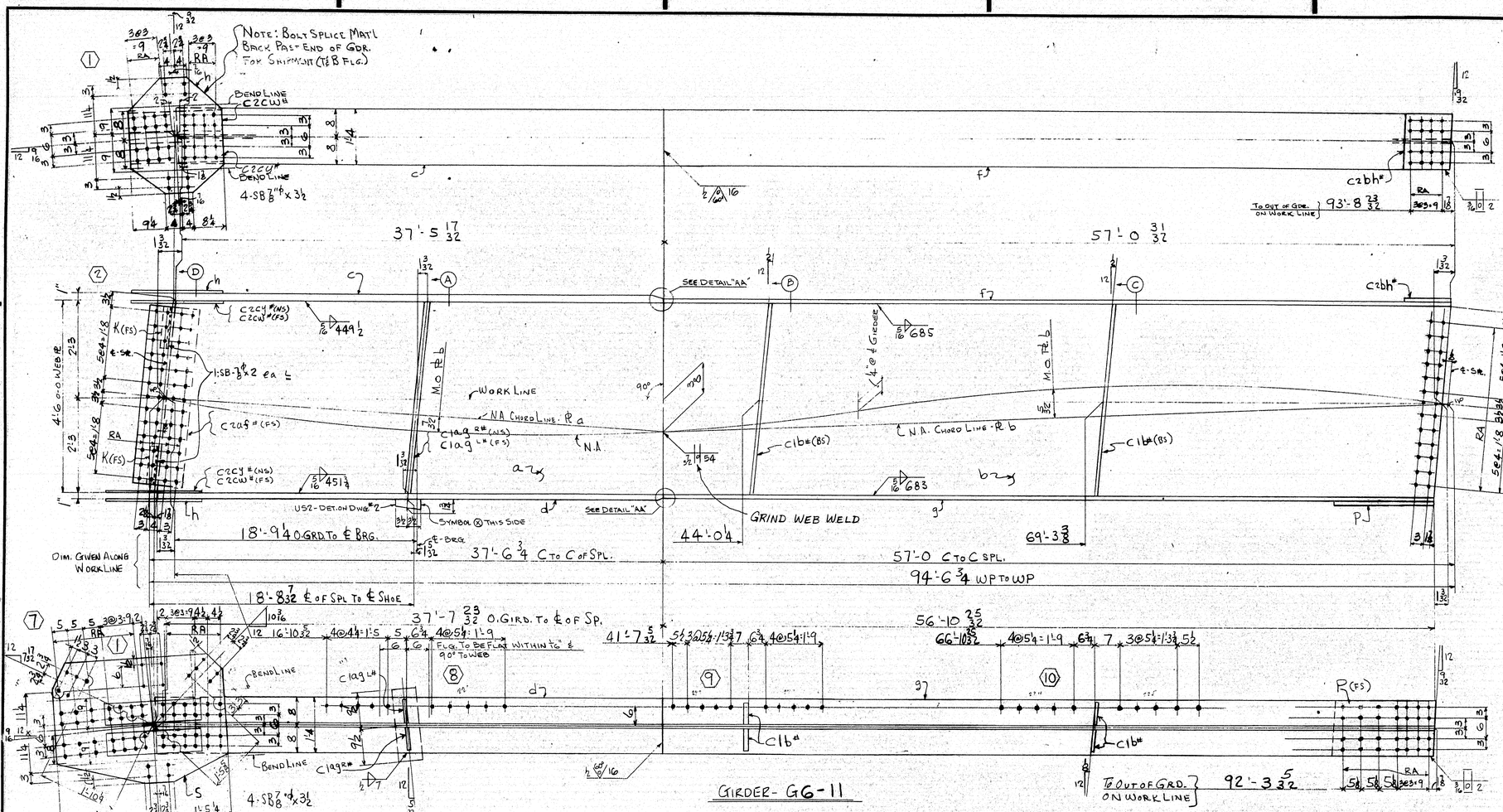
NO.	DATE	INIT.	REVISION

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE LINE
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY WEB DATE 9/9/69 IN CHARGE D.K. ALEXANDER
CHECKED BY FRG DATE 10-7-69 SHOP NO. 2
CONTRACT CT-6249-070 DRAWING NO. 381

107-196-6

NOV 1.7 1969



SHOP BILL									MILL ORDER	
				SECTION		LENGTH			LENGTH	ITEM
LOC	ASSEMBLY MARK	NO	SHAPE	SIZE	SIZE OR FOUNDS	THICK	FT.	IN.	REMARKS	FT. IN.	PAGE LOC
1		ONE	GIRDER	GG-11							
2	a	1	PL	54		1/2	37	7 3/32	56x1/2	38 0	46 19
3	b	1	PL	54		1/16	57	0 31/32	56 1/2 x 1/16	57 8 1/2	44 18
4	c	1	PLW	16		1"	37	5 23/32		38 0	41 17
5	d	1	PLW	16		1"	37	7 23/32		38 0	41 17
6	f	1	PLW	16		3/4	57	1 1/2		57 3 1/4	37 17
7	g	1	PLW	16		3/4	56	10 3/32		58 2 1/4	37 15
8	h	1	PL	2 1/2		1/2	2	7 2	(BENT)	30 5 7/8	47 10C
9	K	2	L	7	3 1/4	1/2	2	0 11	(BENT)	40 0	36 39
10	P	1	PL	16		1/4	2	4 1/4			J
11	S	1	PL	34 1/2		5/8	4	1 4	(BENT) CF36x5/8	27 3 3/8	47 07B
12											
13	C2CY#	2	BR	6 1/2		1/2	2	1 1/2		19 1	47 20
14	C2CW#	2	BR	6 1/2		1/2	2	1 1/2		19 1	47 20
15	C2bh#	1	PL	16		1/4	1	0 8			J
16	C2a9#	1	PLW	13		3/8	4	2	(BENT)	33 6	47 11A
17	C1a9BR	1	BR	7 1/2		3/4	4	6 3/32	(MIE)(FIE)	13 10 1/4	47 18
18	C1b#	4	BR	7		1/2	4	6	(FZE)	13 10 1/4	47 19
19											
20											
21											
22											
23											
24											
25											
26	US2	1	UPPER SHOE						DET. ON DWG #2		
27											
28		8	SB	8 7/16			0	3 1/2	HEX HD & NUT		M
29		2	SB	8 7/16			0	2			
30											
31											
32											
33											
34	FWL	1	WD			5/16	378	2			
35	FWS	1	WD			5/16	52	0			
36	FW	1	WD			1/2	1	2			
37	SDS	1	WD			7/16	4	6			
38	VGOS	1	WD			1/2	2	8			
39	SD	1	WD			3/16	0	8			
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											

INST.-6E

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	GG-11	GIRDER (342 X 60 X 95'-3 1/2)	

DOWELS IN R-US2 TO BE PROTECTED DURING SHIPMENT.

RA = HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES = NP 3

NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7016, 18, 28 LOW HYDROGEN ELECTRODES OR GR. SAW-2 FOR WELDING.

MAX. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	150 DEG.
OVER 2 1/2"	225 DEG.

MATERIAL A36 STEEL
BOLTS 7/8" A325
OPEN HOLES 15/16"
A325 FIELD BOLTS 7/8"
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE II RED LEAD (LN)
REAM - AS NOTED

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
111 EIGHTH AVE. NEW YORK 17, N.Y.
By Arnold Moorhouse OCT 29 1969

PAY ITEM - 504.711

GIRDER

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No. I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY WEB DATE 9/11/69 IN CHARGE D.K. BERTOLET
CHECKED BY R.R. DATE 10-1-69 SHOP NO. 2
CONTRACT CJ-6249-070 DRAWING NO. 382

SUBMITTAL 1 2 3 4 5 6 7 8 9 0
DATE
REVISION NO. DATE INIT.

For location of details shown on this sheet refer to diagrams.

107-197

NOV 17 1969

NOTE: BOLT SPLICE MAT'L BACK PAST END OF GDR. FOR SHIPMENT (T&B FLG) 4 S.B.-⅞"ϕ X 3

GIRDER - G6-12

SECT. (A) (DEVELOPED)

SECT. (B)(C) (DEVELOPED)

SECT. (B) (DEVELOPED)

SECT. (G)

DETAIL "AA"

DOWELS IN R-US2 TO BE PROTECTED DURING SHIPMENT.

RA - HOLES MARKED RA SHALL BE EMPLOYED OR ENLARGED TO ¹⁵/₁₆" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CORRECTING PARTS ASSEMBLED.

ALL OPEN HOLES = NP 3

NO FLAME WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN SHOP WELD.

USE E70XX OR E80XX FOR SHOP WELDING. USE E70XX OR E80XX FOR FIELD WELDING.

For location of details shown on this sheet refer to diagrams.

E9 & E10

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER WGT. PAGE	MILL ORDER WGT. LINE
1			ONE GIRDER G6-12										
2	a	1	PL	54		½	37	5 31/32	56"x½"	38	00	46	19
3	b	1	PL	54		16	56	10 13/32	56½"x7/16"	57	8½	42	18
4	c	1	PLW	16		1	37	3 31/32		38	00	41	17
5	d	1	PLW	16		1	37	6 31/32		38	00	41	17
6	f	1	PLW	16		¾	56	10 13/32		57	3¼	37	17
7	g	1	PLW	16		¾	56	8 31/32		57	3¼	37	17
8	h	2	PL	25½		½	2	7½	BENT	30	5⅞	47	100
9	K	2	L	7	3¼	½	0	11	CF 7X4X½ (BENT)	40	0	36	39
10													
11	C1 16*	4	BR	7		½	4	6	F2E	13	10¼	47	19
12	C1 aq L R*	1	BR	7½		¾	4	6 31/32	MIE FIE	13	10¼	47	18
13	C1 2af*	1	PLW	13		⅜	4	2	BENT	33	6	47	118
14	C1 2bh*	2	PL	16		¼	1	0⅞				J	
15	C1 2cw*	2	BR	6½		½	2	1½		19	1	47	20
16	C1 2cy*	2	BR	6½		½	2	1½		19	1	47	20
17													
18													
19													
20													
21													
22													
23													
24													
25													
26	US2	1	UPPER SHOE						DET. ON DWG. #2				
27													
28													
29													
30													
31		8	SB	⅞			0	3	RHH RHN				
32		2	SB	⅞			0	2½	RHH RHN			M	
33													
34	FWL	1	WD			5/16	376	8¾					
35	FWS	1	WD			5/16	52	0					
36	FW	1	WD			½	1	2					
37	SDS	1	WD			16	4	6					
38	VGOS	1	WD			½	2	8					
39	SD	1	WD			3/16	0	8					
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

INST.-6E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-12	GIRDER (31 11/16" X 59" X 94'-11⅛")	

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
PARK AVE. NEW YORK 17, N.Y.
BY Arnold Nawitzky OCT 29 1969

PAY ITEM - 504.711

GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. NO I-95-1(22)16
CONT. NO. 3 - NEW HAMPSHIRE LINE
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED WELDED CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY BAL DATE 9-8-69 IN CHARGE B.K. BARTHOLF
CHECKED BY FRS DATE 10-2-69 SHOP NO. 8
CONTRACT CT-6149-070 DRAWING NO. 383

MATERIAL A36 STEEL
SHOP BOLTS NONE
OPEN HOLES 15/16"
A325 FIELD BOLTS - ⅞
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE I RED LEAD (LH)
REAM - AS NOTED

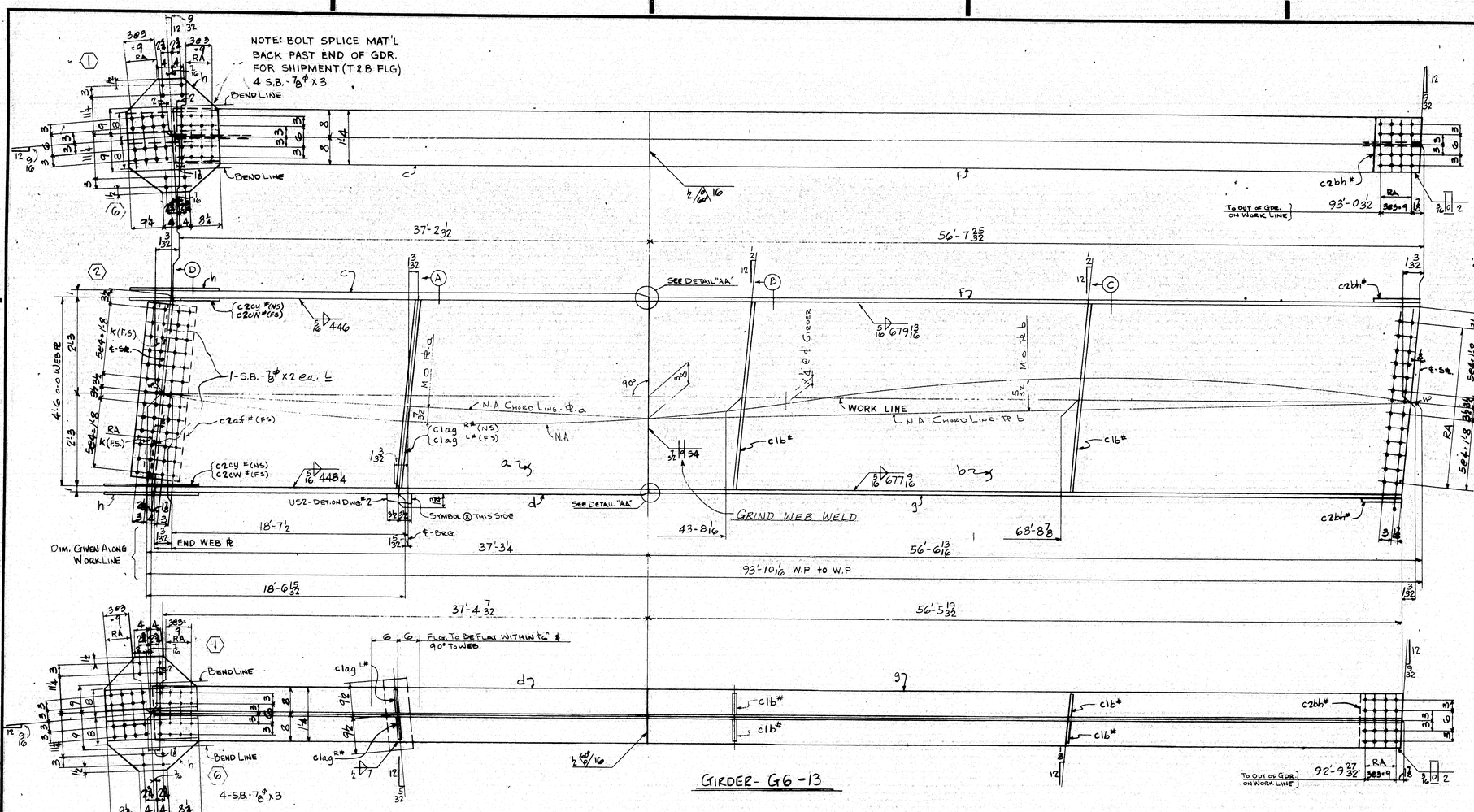
NO.	DATE	INIT.	REVISION

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

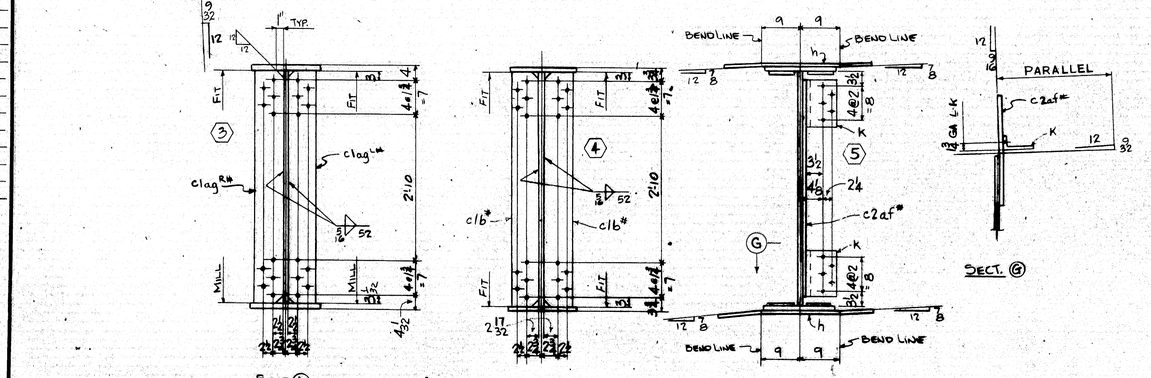
WSP. DWG. NO. 1

107-198

NOTE: BOLT SPLICE MAT'L BACK PAST END OF GDR. FOR SHIPMENT (T&B FLG) 4 S.B. - 7/8" x 3



GIRDER - G6 - 13



For location of details shown on this sheet refer to diagrams.

E9 & E10

DOWELS IN PL-U52 TO BE PROTECTED DURING SHIPMENT.

[redacted]

APPROVED-
HARDESTY & HANOVER
CONSULTING ENGINEERS
[redacted] PARK AVE. NEW YORK 17, N.Y.
BY Arnold Naiditch OCT 29 1969

PAY ITEM - 504.711

MATERIAL A36 STEEL
FIELD BOLTS NONE
OPEN HOLES 15/16"
A325 FIELD BOLTS - 7/8"
SHOP CONTACT SURFACES No PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE I RED LEAD (IN)
REAM - AS NOTED

NO.	DATE	REVISION

SUBMITTAL 1 2 3 4 5 6 7 8 9 0
DATE

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE END
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED WELDED CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown DIVISION
MADE BY B.A.L. DATE 9-9-69 IN CHARGE B.K.
CHECKED BY F.K.G. DATE 10-2-69 SHOP NO. 9
CONTRACT CT-6281-070 DRAWING NO. 384

GIRDER

WS2. PREP FIT TAP SCH. TAPE 1

107-189

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER ITEM PAGE	MILL ORDER ITEM LINE
1		ONE GIRDER G6-13											
2	a	1	PL	54		1/2	37	4 3/32	56 x 1/2	38	0	46	19
3	b	1	PL	54		1/16	56	7 25/32	56 1/2 x 1/16	57	8 1/2	44	18
4	c	1	PLU	16		1	37	2 3/32		38	0	41	17
5	d	1	PLU	16		1	37	4 3/32		38	0	41	17
6	f	1	PLU	16		3/4	56	7 31/32		57	3/4	37	17
7	g	1	PLU	16		3/4	56	5 31/32		57	3/4	37	17
8	h	2	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 7/8	47	10c
9	K	2	L	7	3 1/4	1/2	0	11	CF 7 X 4 X 1/2 (BENT)	40	0	36	39
10													
11	c1b*	4	BR	7		1/2	4	6	F2E	13	10 1/4	47	19
12	c1ag*	1	BR	7 1/2		3/4	4	6 3/32	MIE FIE	13	10 1/4	47	18
13	c2af*	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
14	c2bh*	2	PL	16		1/4	1	0 7/8				J	
15	c2cw*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
16	c2cy*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
17													
18													
19													
20													
21													
22													
23													
24													
25													
26	U52	1	UPPER SHOE						DET. ON DWG. #2				
27													
28													
29													
30													
31		8	SB	7/8			0	3	RHH RHN				
32		2	SB	7/8			0	2	RHH RHN			M	
33													
34	FWL	1	WD			5/16	375	4 1/4					
35	FWS	1	WD			5/16	52	0					
36	FW	1	WD			1/2	1	2					
37	SDS	1	WD			7/16	4	6					
38	VGDS	1	WD			1/2	2	8					
39	SD	1	WD			3/16	0	8					
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

INST.-GE

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-13	GIRDER (31 1/16 x 59 x 94'-6 3/4)	

NOTE: BOLT SPLICE MAT'L BACK PAST END OF GDR. FOR SHIPMENT (T & B FLG)
4-SB-7/8" x 3

BEND LINE

RA

END WEB PL

DIM. GIVEN ALONG WORK LINE

SEE DETAIL "AA"

SYMBOL ⊗ THIS SIDE

USZ - DET. ON DWG #2

GRIND WEB WELD

WORK LINE

N.A CHORD LINE - R-a

N.A CHORD LINE - R-b

℄ GIRDER

FLGS. TO BE FLAT WITHIN 1/16" & 90° TO WEB

37'-0 13/32

56'-5 5/32

18'-6 11/16

37'-1 5/8

18'-5 21/32

37'-2 19/32

56'-4 3/16

56'-2 31/32

43'-6 1/8

68'-5 3/4

93'-5 13/16 W.P. to W.P.

92'-7 25/32

92'-5 19/32

TO OUT OF GDR. ON WORK LINE

4'-6 o-o WEB PL

GIRDER - G6 - 14

4-SB-7/8" x 3

SECT. (A) (DEVELOPED)

SECT. (B)(C) (DEVELOPED)

SECT. (E) (DEVELOPED)

SECT. (G)

DETAIL "AA"

For location of details shown on this sheet refer to diagrams.

E9 & E10

DOWELS IN R-USZ TO BE PROTECTED DURING SHIPMENT.

RA - HOLES MARKED RA SHALL BE SHOP-REAMED OR BORED TO 1/16" AND REAMED TO SIZE OR DRILLED FROM SIZE FROM THE SOLID WITH CORRESPONDING PARTS ASSEMBLED.

ALL OPEN HOLES - NF 3

NO BACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE ELECTRODES AS PER LATEST ELECTRODE SPECIFICATIONS OF AWS. FOR SHIELDED ARC WELDING.

MATERIAL A36 STEEL
ERECTION BOLTS NONE
OPEN HOLES 13/16"ø
A325 FIELD BOLTS - 7/8
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE I RED LEAD (UN)
REAM - AS NOTED

SHOP BILL

UNIT	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE & PATTERN NUMBER	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT./IN.	MILL ORDER WGHT PAGE	MILL ORDER WGHT LINE
1		ONE	GIRDER	G6	-14							
2	a	1	PL	54		1/2	37	2 19/32	56 x 1/2	38 0	46	19
3	b	1	PL	54		1/16	56	5 5/32	56 1/2 x 1/16	56 9 1/2	44	15
4	c	1	PLV	16		1	37	0 13/32		38 0	41	17
5	d	1	PLV	16		1	37	2 19/32		38 0	41	17
6	f	1	PLV	16		3/4	56	5 5/32		57 3 1/4	37	17
7	g	1	PLV	16		3/4	56	3 5/8		57 3 1/4	37	17
8	h	2	PL	25 1/2		1/2	1	11 3/4	BENT	30 5 7/8	47	10C
9	K	2	L	7	3 1/4	1/2	0	11	CF 7X4X1/2 (BENT)	40 0	36	39
10												
11	c1b*	2	BR	7		1/2	4	6	F2E	13 10 1/4	47	19
12	c1ag L*	1	BR	7 1/2		3/4	4	6 3/32	MIE FIE	13 10 1/4	47	18
13	c1bc R*	1	BR	7 1/2		3/4	4	6 3/32	MIE FIE	13 10 1/4	47	18
14	c2af*	1	PLU	13		3/8	4	2	BENT	33 6	47	11A
15	c2bh*	2	PL	16		1/4	1	0 7/8			J	
16	c2cw*	2	BR	6 1/2		1/2	2	1 1/2		19 1	47	20
17	c2cy*	2	BR	6 1/2		1/2	2	1 1/2		19 1	47	20
18												
19												
20												
21												
22												
23												
24												
25												
26	USZ	1	UPPER SHOE						DET. ON DWG #2			
27												
28												
29												
30												
31		8	SB	7/8			0	3	RHH RHN			
32		2	SB	7/8			0	2 1/2	RHH RHN			M
33												
34	FWL	1	WD			5/16	373	11 1/4				
35	FWS	1	WD			5/16	34	8				
36	FW	1	WD			1/2	1	2				
37	SDS	1	WD			7/16	4	6				
38	VGDS	1	WD			1/2	2	8				
39	SD	1	WD			3/16	0	8				
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55												

INST.-GE

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-14	GIRDER (24 1/2 x 59 x 94-2 1/2)	

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
103 PARK AVE. NEW YORK 17 N.Y.
BY Arnold Hanover OCT 29 1969

PAY ITEM - 504.711

GIRDER

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No. I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE LINE
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown
MADE BY B.A.L. DATE 9-10-69 IN CHARGE D.K.
CHECKED BY JRS DATE 10-2-69 SHOP NO. 7
CONTRACT CI-6911-020 SHIPPING NO. 385

NO.	DATE	BY	REVISION
0			
9			
8			
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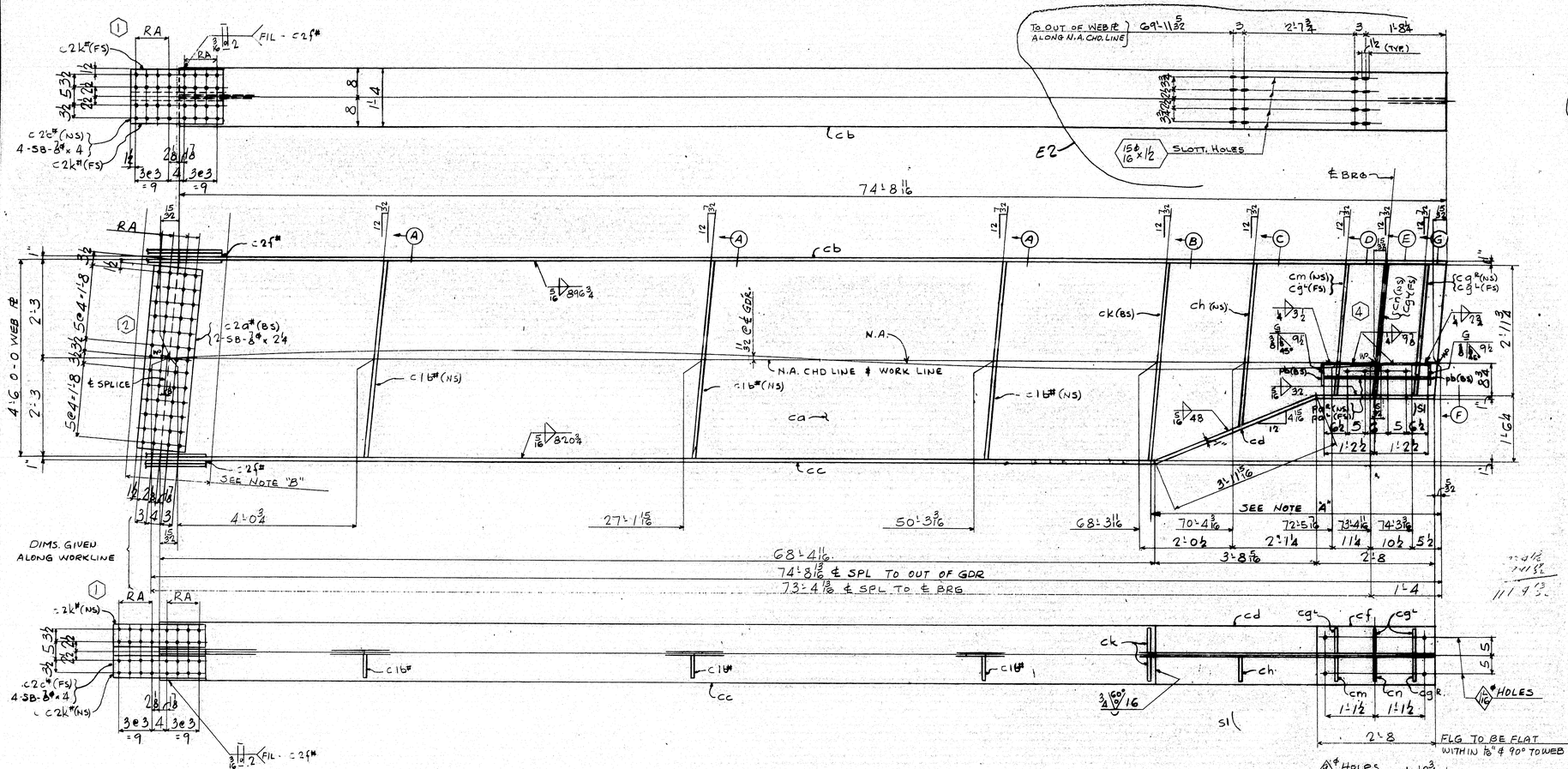
6			
5			
4			
3			
2			
1			

SUBMITTAL 1 2 3 4 5 6 7 8 9 0
DATE

WS2: PREP FIT FIN ASSEMBLY MACH TAPE L

107-200

0 1 2 3 4 5 INCHES



GIRDER G1-1

NOTE "C" - WELD TO BE WATER TIGHT.
"BL" INDICATES ONE COAT OF BLUE LACQUER BOTH SIDES OF STIFF.
NOTE "B" - ALL STEEL IN THIS AREA TO RECEIVE ONE COAT OF BLUE LACQUER.
NOTE "A" - ALL STEEL IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP6-GG. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY PAINT, INCLUDING HOLES.

RA - HOLES REAMED RA SHALL BE SUPERVISED BY INSPECTOR AND REAMED AFTER THE GIRDERS HAVE BEEN ASSEMBLED.

[redacted]

SHOP BILL

PIECE MARK	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION WEB OR FLGE WIDTH	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WEIGHT FT.	WEIGHT IN.	WEIGHT	
1		1	GIRDER				G1-1						
2	c a	1	PL	54		1/16	74	9 3/4	57x1/16	75	3	443	
3	c b	1	PLU	16		1	74	8 1/4		74	11 1/4	1067	
4	c c	1	PLU	16		1	68	4 1/2		68	8 1/4	979	
5	c d	1	PLU	16		1	6	7 1/2		290		5725	S1
6													
7	c g*	3	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 1/4	4718	
8	c h	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 1/4	4718	
9	c k	2	BR	7		1/2	4	6	(F2E)	13	10 1/4	4719	
10	p a*	1/1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK			J	
11	p b	4	PL	5		3/8	0	9 7/8	USE MR-50 STOCK			J	
12	c m	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 1/4	4718	
13	c n	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)			J	
14													
15													
16	c 16*	3	BR	7		1/2	4	6	(F2E)	13	10 1/4	4719	
17	c 2a*	2	PLU	13		3/8	4	2		211		2448	
18	c 2c*	2	PL	15		3/8	2	1				J	
19	c 2k*	4	PL	6 1/2		3/8	2	1				J	
20	c 25*	2	PL	15		5/8	1	0 3/8				J	
21													
22													
23		2	SB	7/8*			0	24	HEX HD & NUT				
24		8	SB	7/8*			0	4	HEX HD & NUT			M	
25													
26													
27	SD	1	WD			1/16	0	8					
28	FW	1	WD			1/4	14	5					
29	FWL	1	WD			1/16	299	6 3/8					
30	FWS	1	WD			1/16	86	12					
31	VGOS	1	WD				1	4					S1
32	T45	1	WD			3/8	3	2					
33													
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54													
55													

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
401 PARK AVE. NEW YORK 17, N.Y.
by Arnold Novitzky JAN 5 1970

INST. IW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
DUE	G1-1	GIRDER (16 x 58 1/4 x 75 1/16 lb)	

PAY ITEM 504.701

GIRDER

MATERIAL: PREFIX "C" - A36 STEEL; PREFIX "P" - A242 STEEL
FASTENER BOLTS 7/8" A325
OPEN HOLES 15/16" (U.N.)
A325 FIELD BOLTS 7/8" & 1" (GALL WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED.
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED

REVISION NO.	DATE	BY
[redacted]		

SUBMITTAL 1 2 3 4 5 6 7 8 9 0
DATE

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWB DATE 8-28-69 IN CHARGE B.K. BARTHOLET
CHECKED BY E DATE 10-6-69 SHOP NO. 1
CONTRACT CJG249-021 DRAWING NO. 386

LITTLEFIELD-1 108

* For location of details shown on this sheet refer to diagrams.

E12

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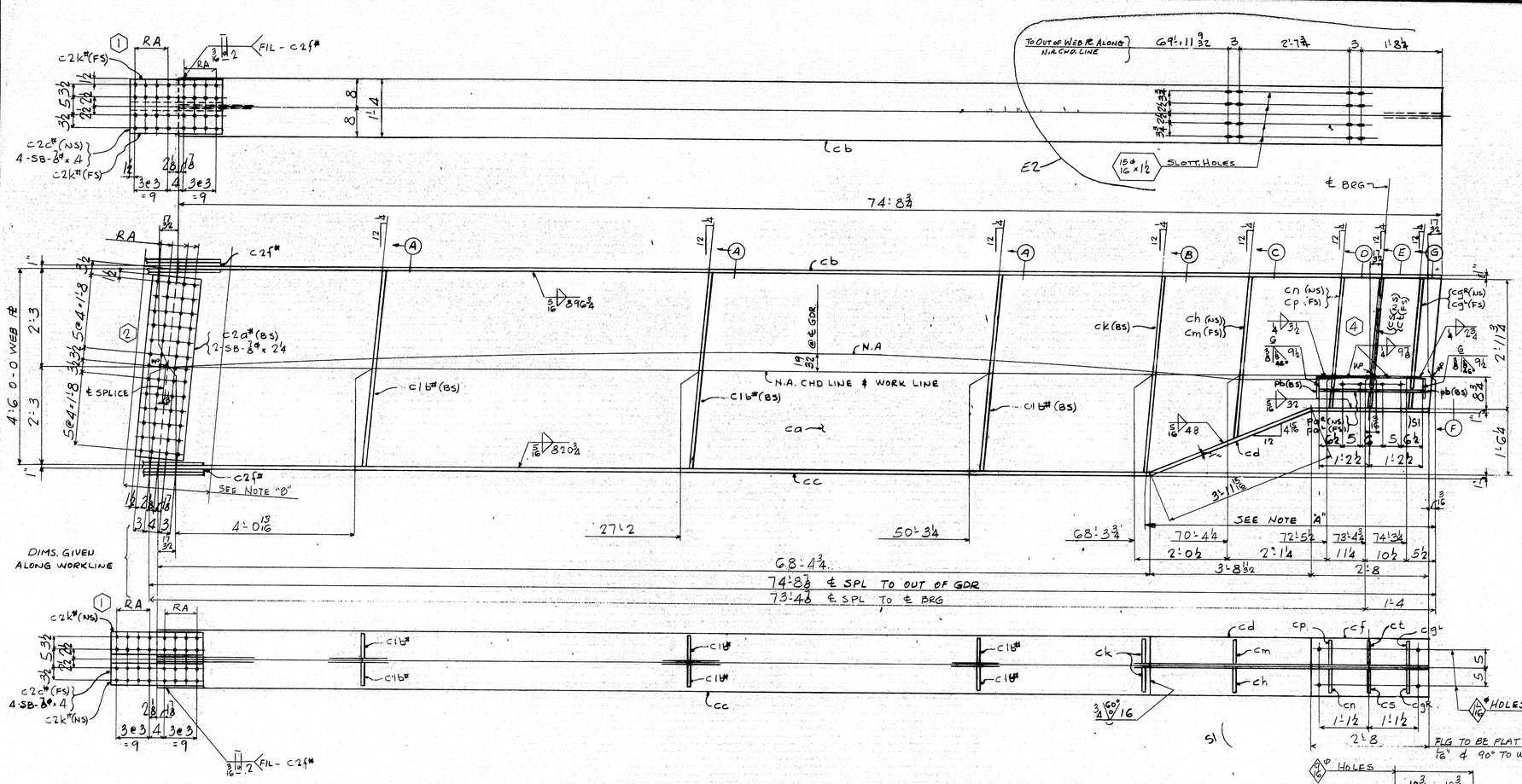

GIRDER G1-2

Note "C" - WELD TO BE WATER TIGHT.
"BL" - INDICATES ONE COAT OF BLUE LACQUER BOTH SIDES OF STIFF.
Note "B" - ALL STEEL IN THIS AREA TO RECEIVE ONE COAT OF BLUE LACQUER.
Note "A" - ALL STEEL IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-GG. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY PAINT, INCLUDING HOLES.

RA - HOLES MARKED RA SHALL BE [illegible]

[illegible]

[illegible]

For location of details shown on this sheet refer to diagrams.
E12

SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR PATTERN	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER PIECE	MILL ORDER WGT.
1		1	GIRDER			G1-2							
2	c a	1	PL	54		1/2	74	9 7/32	57x 7/16	753		43	15
3	c b	1	PLU	16		1	74	8 3/4		74	11 4	37	21
4	c c	1	PLU	16		1	68	4 3/4		68	8 4	37	22
5	c d	1	PLU	16		1	6	7 15/16		29	0	37	25
6													
7	c g*	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 4	47	18
8	c h	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 4	47	18
9	c k	2	BR	7		1/2	4	6	(F2E)	13	10 4	47	19
10	p a*	1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK			J	
11	p b	4	PL	5		3/8	0	9 7/8	USE MR-50 STOCK			J	
12	c m	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 4	47	18
13	c n	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 4	47	18
14	c p	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 4	47	18
15	c s	1	PL	15 1/2		3/4	2	11 3/4	(MIE)(FIE)			J	
16	c 16*	6	BR	7		1/2	4	6	(F2E)	13	10 4	47	19
17	c 2a*	2	PLU	13		3/8	4	2		21	1	24	48
18	c 2c*	2	PL	15		3/8	2	1				J	
19	c 2k*	4	PL	6 1/2		5/8	2	1				J	
20	c 2f*	2	PL	15		5/8	1	0 5/8				J	
21	c t	1	PL	15 1/2		3/4	2	11 3/4	(MIE)(FIE)			J	
22													
23		2	SB	5/8*			0	2 4	HEX HD & NUT				
24		8	SB	8*			0	4	HEX HD & NUT			M	
25													
26													
27	SD	1	WD			1/16	0	8					
28	FW	1	WD			4	14	5					
29	FWL	1	WD			5/16	299	7					
30	FWS	1	WD			5/16	119	2					
31	VGOS	1	WD			1	1	4	S1				
32	T45	1	WD			3/8	3	2					
33													
34													
35													
36													
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S1

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
909 PARK AVE. NEW YORK 17, N.Y.
BY André Nawitzky JAN 6 1970

INST. IW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-2	GIRDER (16x58 1/16x75'-10 1/4")	

PAY ITEM 504.701

GIRDER

MATERIAL	PREFIX "C" - A36 STEEL PREFIX "P" - A242 STEEL		
FASTENERS	BOLTS 8* A325		
	OPEN HOLES 15/8* (U.N.)		
	A325 FIELD BOLTS 7/8* & 1* (GALV WHERE NOTED)		
	SHOP CONTACT SURFACES NO PAINT MILL - AS NOTED WELD - AS NOTED		
PAINT	ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)		
REAM	AS NOTED		

NO.	DATE	INIT.	REVISION
F3	7/23	JD	
F1	7/16	DAL	

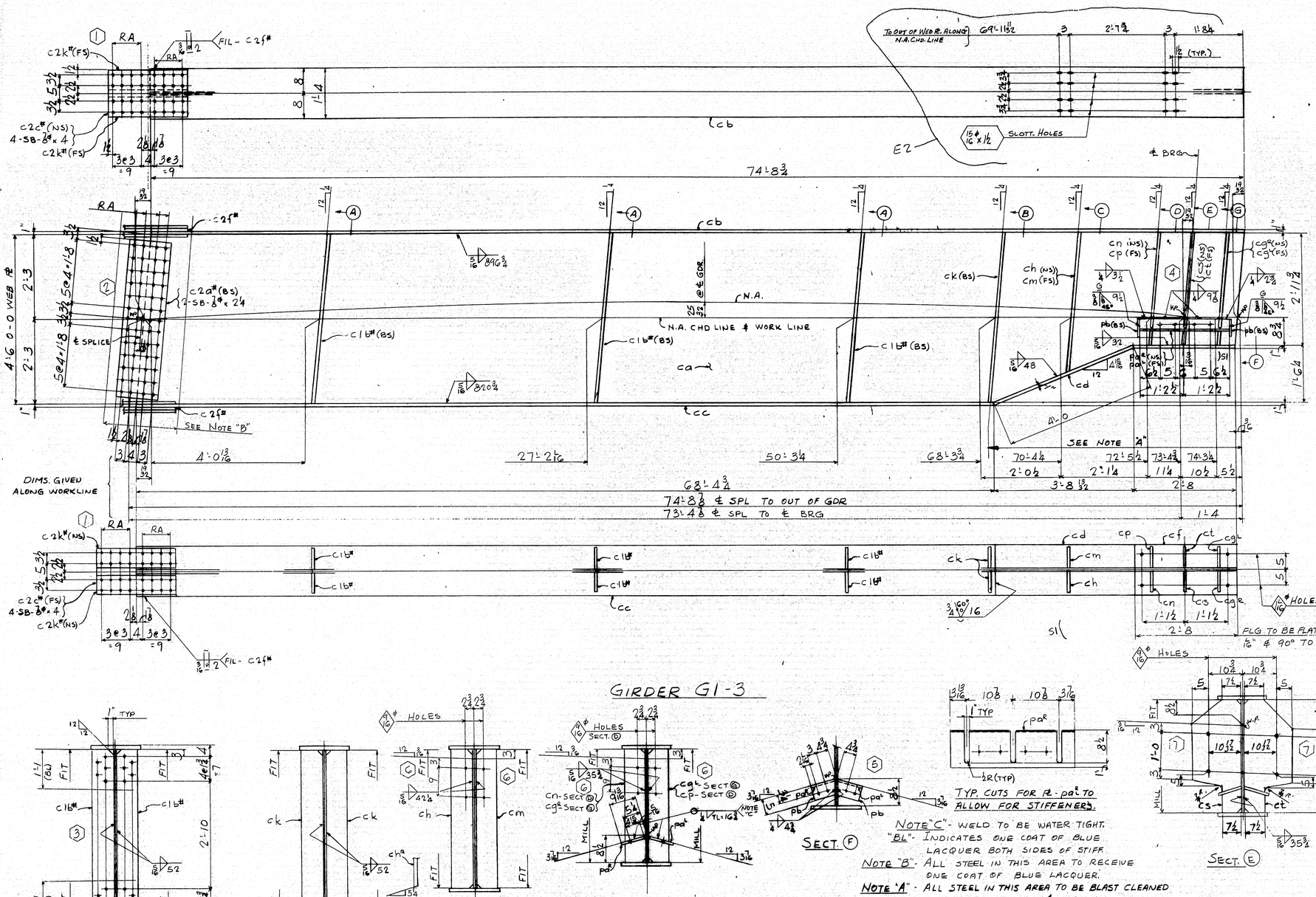
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWG DATE 8-28-69 IN CHARGE B.K. BEETOLET
CHECKED BY ℄ DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 387

108-2

33433 (Rev.C-6-68) NOV 17 1966

GIRDER G1-3



	a	b	c
g			
b			
c			
d			
f			
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h			
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p			
s			
t			
w			
y			

For location of details shown on this sheet refer to diagrams.

E12

NOTE "C" - WELD TO BE WATER TIGHT.
"BL" - INDICATES ONE COAT OF BLUE LACQUER BOTH SIDES OF STIFF.

NOTE "B" - ALL STEEL IN THIS AREA TO RECEIVE ONE COAT OF BLUE LACQUER.

NOTE "A" - ALL STEEL IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SPS-GG. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY PAINT, INCLUDING HOLES.

RA = HOLES REAMED. RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/16" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH touching PLATE ASSEMBLED.

ALL HOLES, AS PUNCH OR DRILLED - SMOOTH

ALL HOLES REAMED OR DRILLED IN FINAL POSITION.

ALL HOLES REAMED BY MECHANICAL ELECTRONIC METHODS.

TYP. CUTS FOR R - pa^R TO ALLOW FOR STIFFENERS.

MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
50 DEG.
70 DEG.
100 DEG.
175 DEG.

MATERIAL: Prefix "C" - A36 STEEL; Prefix "P" - A242 STEEL
BOLTS 7/8 A325
OPEN HOLES 15/16 (U.N.O.)
A325 FIELD BOLTS 7/8 & 1 (GALV. WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.O.)
REAM - AS NOTED

SHOP BILL										MILL ORDER	
	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	LENGTH FT.	LENGTH IN.	ITEM PIECE
1		1	+ GIRDER			G1-3						
2	c a	1	PL	54		1/16	74	9 1/2	57 x 1/16	75	3	43 15
3	c b	1	PLU	16		1	74	8 3/4		74	11 1/4	37 21
4	c c	1	PLU	16		1	68	4 3/4		68	8 1/4	37 22
5	c d	1	PLU	16		1	6	8		29	0	37 25 S
6												
7	c g^R	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 1/4	47 16
8	c h	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 1/4	47 16
9	c k	2	BR	7		1/2	4	6	(F2E)	13	10 1/4	47 19
10	p a^R	1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK			J
11	p b	4	PL	5		3/8	0	9 5/16	USE MR-50 STOCK			J
12	c m	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 1/4	47 18
13	c n	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 1/4	47 18
14	c p	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 1/4	47 18
15	c s	1	PL	15 1/2		3/4	2	11 3/4	(MIE)(FIE)			J
16	c 1b#	6	BR	7		1/2	4	6	(F2E)	13	10 1/4	47 19
17	c 2a#	2	PLU	13		3/8	4	2		21	1	24 48
18	c 2c#	2	PL	15		5/8	2	1				J
19	c 2k#	4	PL	6 1/2		5/8	2	1				J
20	c 2f#	2	PL	15		5/8	1	0 3/8				J
21	c t	1	PL	15 1/2		3/4	2	11 3/4	(MIE)(FIE)			J
22												
23		2	SB	5/8#			0	2 4	HEX HD # NUT			
24		8	SB	8#			0	4	HEX HD # NUT			M
25												
26												
27	SD	1	WD			3/16	0	8				
28	FW	1	WD			4	14	5				
29	FWL	1	WD			5/16	299	7 1/4				
30	FWS	1	WD			5/16	119	2				
31	VGOS	1	WD			1	1	4	S1			
32	T45	1	WD			3/8	3	2				
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APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
Arnold Hanover JAN 5 1970

INST. IW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
DUE	G1-3	GIRDER (16 x 58 1/4 x 75-10 3/4)	

PAY ITEM 504.701

GIRDER

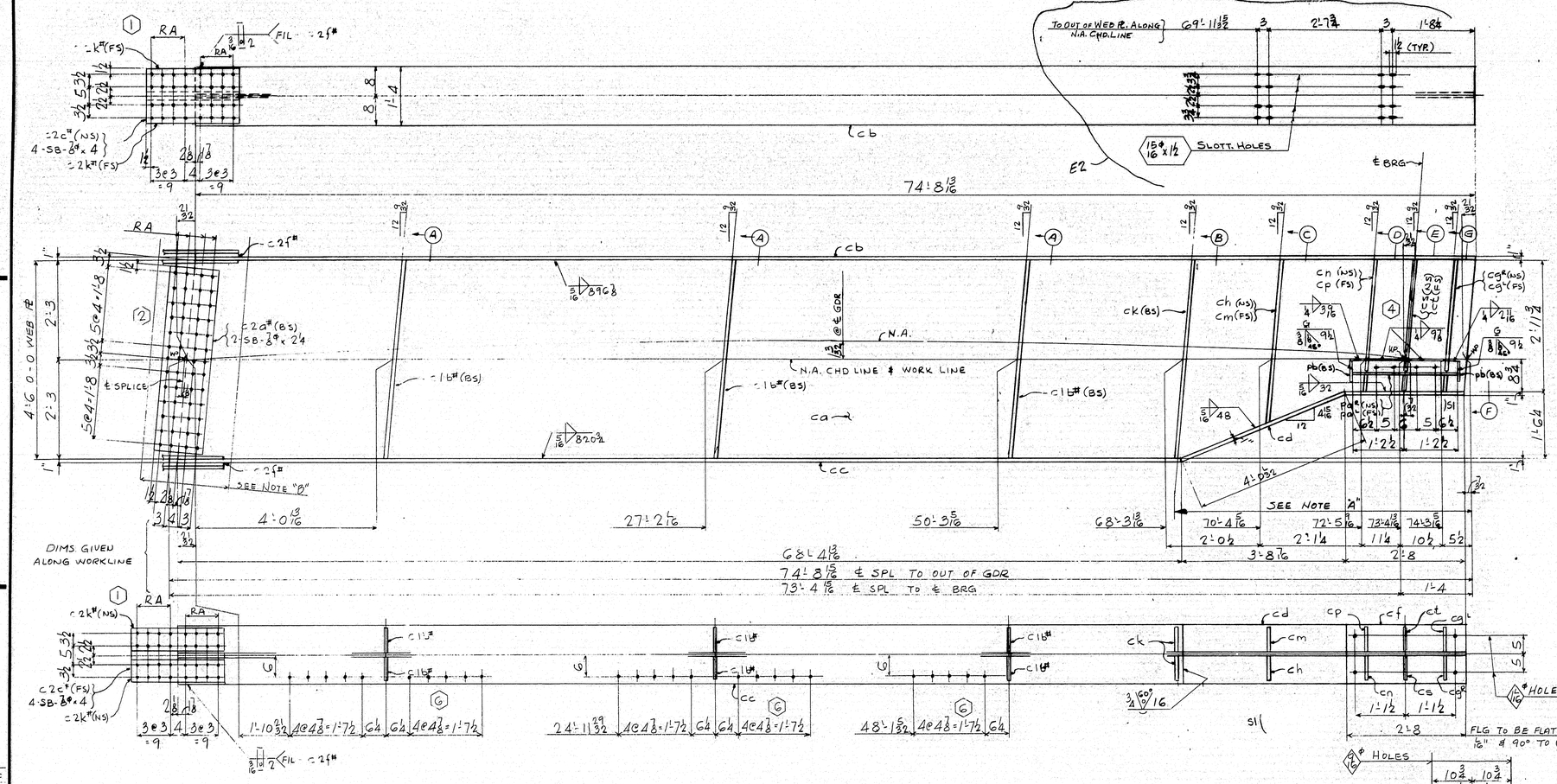
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

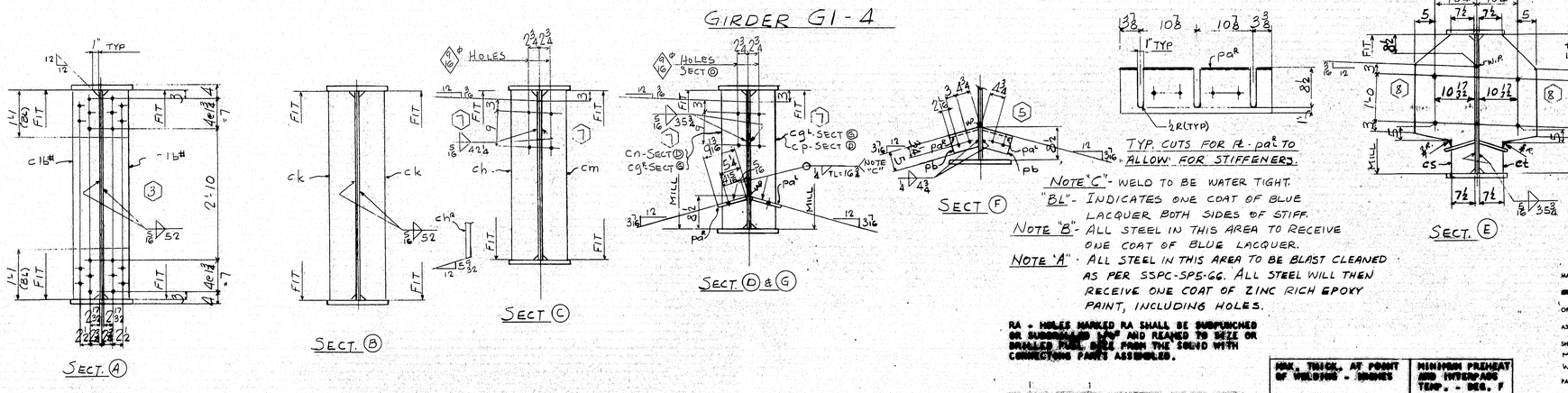
	NO.	DATE	INIT.
REVISION	E2	12/5	1/69
	S1	12/15/69	BAL

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWG DATE 8-29-69 IN CHARGE B.K. BERTOLET
CHECKED BY E DATE 12-5-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 388

1 108-3

NOV 17 1969





GIRDER G1-4

TYP. CUTS FOR ℞-pa⁵ TO ALLOW FOR STIFFENERS.

NOTE "C" - WELD TO BE WATER TIGHT.

"BL" - INDICATES ONE COAT OF BLUE LACQUER BOTH SIDES OF STIF.

NOTE "B" - ALL STEEL IN THIS AREA TO RECEIVE ONE COAT OF BLUE LACQUER.

NOTE "A" - ALL STEEL IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-GC. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY PAINT, INCLUDING HOLES.

RA = HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTIONS PARTS ASSEMBLED.

NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7018-A1-H4R LOW HYDROGEN ELECTRODES OR OR. EQUAL FOR WELDING.

MIN. TRICAL. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	150 DEG.
OVER 2 1/2"	225 DEG.

For location of details shown on this sheet refer to diagrams.

E12

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1		1	GIRDER	G1-4					
2	c a	1	PL	54		1/16	74	10 3/8	57 X 16/16
3	c b	1	PLU	16		1	74	8 1/16	
4	c c	1	PLU	16		1	68	4 13/16	
5	c d	1	PLU	16		1	6	8 3/4	
6									
7	c g [e]	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)
8	c h	1	BR	7 1/2		3/4	3	8 1/4	(F2E)
9	c k	2	BR	7		1/2	4	6	(F2E)
10	p a [2]	1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK
11	p b	4	PL	5		3/8	0	9 1/16	USE MR-50 STOCK
12	c m	1	BR	7 1/2		3/4	3	8 1/4	(F2E)
13	c n	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)
14	c p	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)
15	c s	1	PL	15 1/2		3/4	2	11 3/4	(MIE)(FIE)
16	c 1b#	6	BR	7		1/2	4	6	(F2E)
17	c 2a#	2	PLU	13		3/8	4	2	
18	c 2c#	2	PL	15		3/8	2	1	
19	c 2k#	4	PL	6 1/2		3/8	2		
20	c 2f#	2	PL	15		5/8	1	0 3/8	
21	c t	1	PL	15 1/2		3/4	2	11 3/4	(MIE)(FIE)
22									
23		2	SB			0	2	1/4	HEX HD # NUT
24		8	SB			0	4		HEX HD # NUT
25									
26									
27	SD	1	WD			1/16	0	8	
28	FW	1	WD			1/4	14	5	
29	FWL	1	WD			1/16	299	7 1/2	
30	FWS	1	WD			1/16	119	2	
31	VGOS	1	WD			1	1	4	SI
32	T4S	1	WD			3/8	13	2	
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									

MILL ORDER

LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM LINE
75	3	43	15
74	11	37	21
74	8	37	21
68	8	37	22
29	0	37	25
13	10	47	18
13	10	47	18
13	10	47	19
		J	
		J	
13	10	47	18
13	10	47	18
13	10	47	18
13	10	47	19
		J	
21	1	24	48
		J	
		J	
		J	
		J	
		M	

SI

SI

SI

HARDESTY & HANOVER
CONSULTING ENGINEERS
[illegible] PARK AVE. NEW YORK 17, N.Y.

BY Andrew Novitsky JAN 5 1970

INST. IW

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-4	GIRDER (16 x 58 1/4 x 75'-10 3/8")	

PAY ITEM 504.701

GIRDER

MATERIAL { PREFIX "C" - A36 STEEL / PREFIX "P" - A242 STEEL
BOLTS 3/4" A325
OPEN HOLES 13/16" (U.N.)
A325 FIELD BOLTS 3/4 @ 1 3/8" (GALV. WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT NO I-95-1(22)16
CONTR NO 3 NEW HAMPSHIRE APP.

STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWB DATE 9-2-69 IN CHARGE B.K. BARTOLET
CHECKED BY [illegible] DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 389

REVISION

NO.	DATE	INIT.
0		
1		
2		
3		
4		
5		
6		
7		
8		
9		
0		

SUBMITTAL DATE

1	2	3	4	5	6	7	8	9	0

NOV 12 1969

188-4

GIRDER G1-5

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE ON POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER ITEM PAGE	MILL ORDER ITEM LINE
1		1	G	IRDER		G1-5							
2	ca	1	PL	54		1/16	74	10 4/16	57x1/16	75	3	43	15
3	cb	1	PLU	16		1	74	8 13/16		74	11 4/16	37	21
4	cc	1	PLU	16		1	68	4 13/16		68	8 4/16	37	22
5	cd	1	PLU	16		1	6	8 6/16		290		37	25
6													
7	cg^R	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 4/16	47	18
8	ch	1	BR	7 1/2		3/4	3	8 4/16	(F2E)	13	10 4/16	47	18
9	ck	2	BR	7		1/2	4	6	(F2E)	13	10 4/16	47	19
10	pa^R	1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK			J	
11	pb	4	PL	5		3/8	0	9 7/16	USE MR-50 STOCK			J	
12	cm	1	PL	14 1/2		5/8	4	3		26	0	28	19
13	cn	1	PL	14 1/2		5/8	4	3	(BENT)	26	0	28	19
14													
15													
16	c 16^#	6	BR	7		1/2	4	6	(F2E)	13	10 4/16	47	19
17	c 2a^#	2	PLU	13		3/8	4	2		21	1	24	48
18	c 2c^#	2	PL	15		5/8	2	1				J	
19	c 2k^#	4	PL	6 1/2		5/8	2	1				J	
20	c 2f^#	2	PL	15		5/8	1	0 3/8				J	
21		18	325	7/8^#			0	3					
22		18	HN	1 3/8^#	15/8^#	3/16							
23		2	SB	5/8^#			0	2 4	HEX HD & NUT			M	
24		8	SB	8^#			0	4	HEX HD & NUT				
25													
26													
27	SD	1	WD			13/16	0	8					
28	FW	1	WD			1/4	14	5					
29	FWL	1	WD			5/16	299	7 3/4					
30	FWS	1	WD			5/16	119	2					
31	VGOS	1	WD			1	1	4	SI				
32	T45	1	WD			3/8	3	2					
33													
34	cp	1	BR	7 1/2		3/4	3	8 4/16	(F2E)	13	10 4/16	47	18
35	cs	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 4/16	47	18
36	ct	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 4/16	47	18
37	cw	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)			J	
38	cy	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)			J	
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

SHOP BILL — MILL ORDER

HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.

JAN 5 1970

INST. IW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-5	GIRDER (27'x58 1/4"x76 1/16")	

PAY ITEM 504.701

NOV 17 1969

GIRDER

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.

STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWG DATE 9-3-69 IN CHARGE B.K. BERTOLET
CHECKED BY [illegible] DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 390

MATERIAL { PREFIX "C" - A36 STEEL / PREFIX "P" - A242 STEEL
BOLTS 7/8^# A325
OPEN HOLES 15/8^# (U.N.)
A325 FIELD BOLTS 7/8^# (GALV WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

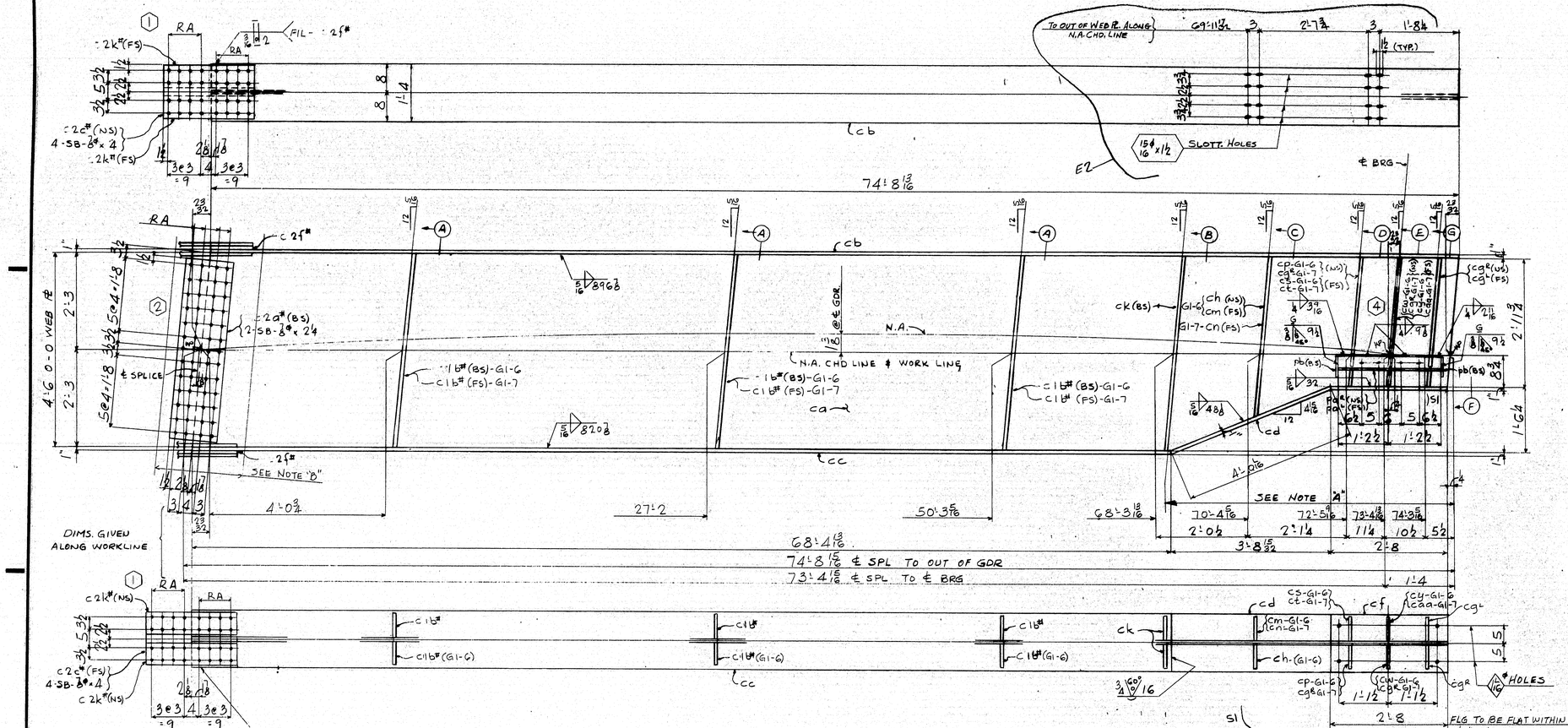
REVISION

NO.	DATE	INIT.
C1	12/5/69	RD
S1	12/16/69	RD

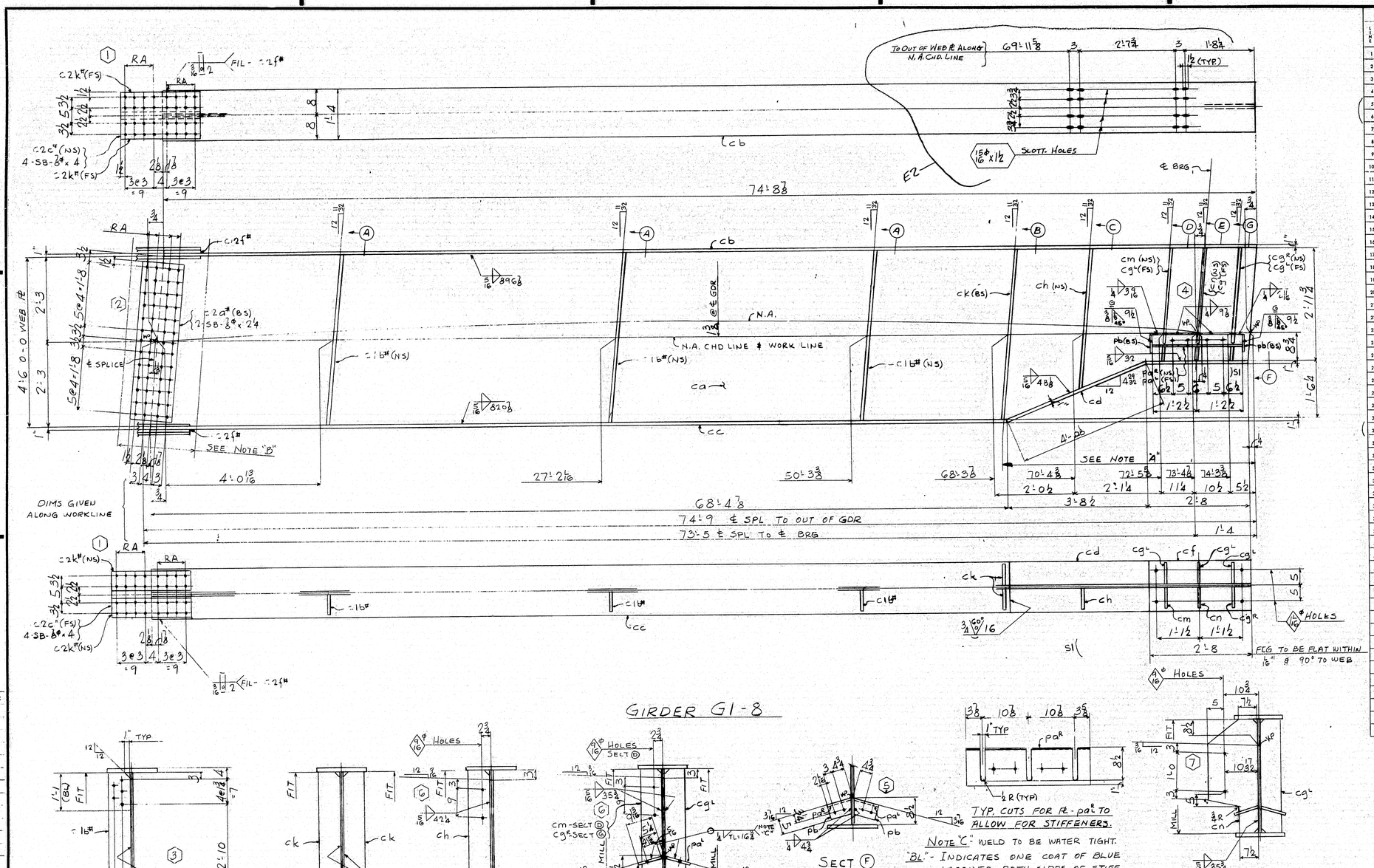
For location of details shown on this sheet refer to diagrams.

E12

33453 (Rev. C 6-67)


RA
FIL - 2f#
2k# (FS)
2c# (NS)
4-SB-8/8 x 4
2k# (FS)
3@3 4 3@3 = 9
8 8 1'-4
TO OUT OF WEB ℄ ALONG N.A. CHD. LINE
69'-11 3/4
3 27'-7 3/4 3 1'-8 1/2
1/2 (TYP.)
15/16 x 1 1/2 SLOTT. HOLES
E2
℄ BRG
74'-8 13/16
cb
ca
cc
cd
ck
cp-G1-G
cg^R G1-7 (NS)
cq-G1-G
ct-G1-7 (FS)
Gl-G (ch (NS)
cm (FS)
Gl-7-cn (FS)
cg^R (NS)
cg^L (FS)
cy-G1-G (NS)
caa-G1-7 (FS)
pb (BS)
pb (FS)
4'-6 0-0 WEB ℄
2'-3
5@4 1/8
℄ SPLICE
2c# (BS)
2-SB-8/8 x 24
c 1b# (BS)-G1-G
c 1b# (FS)-G1-7
N.A.
N.A. CHD LINE ℄ WORK LINE
1'-10 @ ℄ GDR
5/16 89'-6
5/16 82'-0
2f#
SEE NOTE "B"
4'-0 3/4
27'-2
50'-3 5/16
68'-3 15/16
70'-4 5/16
72'-5 9/16
73'-4 13/16
74'-3 15/16
2'-0 1/2
2'-1 1/4
3'-8 15/32
1'-2 1/2
1'-2 1/2
SEE NOTE "A"
4'-0 9/16
2'-1 3/4
1'-6 1/4
DIMS. GIVEN ALONG WORKLINE
68'-4 13/16
74'-8 15/16 ℄ SPL TO OUT OF GDR
73'-4 15/16 ℄ SPL TO ℄ BRG
c 2k# (NS)
c 2c# (FS)
4-SB-8/8 x 4
c 2k# (NS)
c 1b#
c 1b# (G1-6)
5/16 FIL - C 2f#
5 1/2
3/4 60° 15/16
51
2'-8
FLG TO BE FLAT WITHIN 1/16" @ 90° TO WEB
9/16 ø HOLES
10 3/4
7 1/2
5
FIT
MILL
1'-0
3/32 G1-G-6 2 G1-7
CUT IN DOTTED LINE FOR cgR-G1-7
cw-G1-G
cgR-G1-7
cy-G1-G
caa-G1-7
SECT. (E)
SECT. (A)
SECT. (B)
SECT. (C)
SECT. (D) & (G)
SECT. (F)
GIRDER G1-6
DO G1-7
HOLES SECT (B)
HOLES SECT (C)
HOLES FOR G1-G SECT (D)
HOLES FOR SECT (D) G1-6 & G1-7
3/32 G1-G-6 2 G1-7
cp-SECT (B)-G1-G (SECT (G)-G1-6 SECT (S) (G1-7)
cgR SECT (S) (G1-7)
cm-G1-G
cn-G1-7
ch
G1-G
ch^a
cy-G1-G
caa-G1-7
pa^R
pb
3/16 x 1 1/2 x 1'-0 PL
3/16 x 1 1/2 x 1'-0 PL
3/16 x 1 1/2 x 1'-0 PL

GIRDER G1-8



SHOP BILL									MILL ORDER	
				SECTION		LENGTH			LENGTH	ITEM
	ASSEMBLY MARK	NO.	SHAPE	SIZE	SIZE OR POUNDS	THICK	FT.	IN.	REMARKS	FT. IN.	PAGE LINE
1		1	G	IRDER		G1-8					
2	ca	1	PL	54		1/16	74	10 3/8	57x7/16	75 3	43 15
3	cb	1	PLU	16		1	74	8 3/8		74 11 4	37 21
4	cc	1	PLU	16		1	68	4 3/8		68 8 4	37 22
5	cd	1	PLU	16		1	6	8 3/8		29 0	37 25 S1
6											
7	cg	3	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13 10 4	47 18
8	ch	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13 10 4	47 18
9	ck	2	BR	7		1/2	4	6	(F2E)	13 10 4	47 19
10	pa	1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK	J	
11	pb	4	PL	5		3/8	0	9 1/2	USE MR-50 STOCK	J	
12	cm	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13 10 4	47 18
13	cn	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)	J	
14											
15											
16	cb	3	BR	7		1/2	4	6	(F2E)	13 10 4	47 19
17	ca	2	PLU	13		3/8	4	2		33 6	47 11A
18	cc	2	PL	15		5/8	2	1		J	
19	2k	4	PL	6 1/2		5/8	2	1		J	
20	2f	2	PL	15		5/8	1	0 3/8		J	
21											
22											
23		2	SB	5/8			0	2 4	HEX HD ℄ NUT		
24		8	SB	3/4			0	4	HEX HD ℄ NUT	M	
25											
26											
27	SD	1	WD			5/16	0	8			
28	FW	1	WD			5/16	14	5			
29	FWL	1	WD			5/16	299	7 3/4			
30	FWS	1	WD			5/16	86	1/2			
31	VGOS	1	WD			1	1	4	S1		
32	74S	1	WD			3/8	3	2			
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
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44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.

BY Arthur Nowitzky JAN 5 1970

INST. IE

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-8	GIRDER (16x58 1/4 x 75'-11)	

PAY ITEM 504.701

NOTE "C" - WELD TO BE WATER TIGHT.
"BL" - INDICATES ONE COAT OF BLUE LACQUER BOTH SIDES OF STIFF.
NOTE "B" - ALL STEEL IN THIS AREA TO RECEIVE ONE COAT OF BLUE LACQUER.
NOTE "A" - ALL STEEL IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-GG. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY PAINT, INCLUDING HOLES.

TYP. CUTS FOR R - pa TO ALLOW FOR STIFFENERS.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7016, 10, 28 LOW HYDROGEN ELECTRODES OR GR. SM-2 FOR WELDING.

MAX. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	150 DEG.
OVER 2 1/2"	225 DEG.

For location of details shown on this sheet refer to diagrams.
E12

GIRDER

MATERIAL {PREFIX "C" - A36 STEEL / PREFIX "P" - A242 STEEL}
FASTENING BOLTS 3/4" A325
OPEN HOLES 15/16" (U.N.)
A325 FIELD BOLTS 3/4" @ (GALV WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED

NO.	DATE	INIT.	REVISION
E2	12/23/69	VED	ADD HOLES
S1	12/16/69	VED	ADD

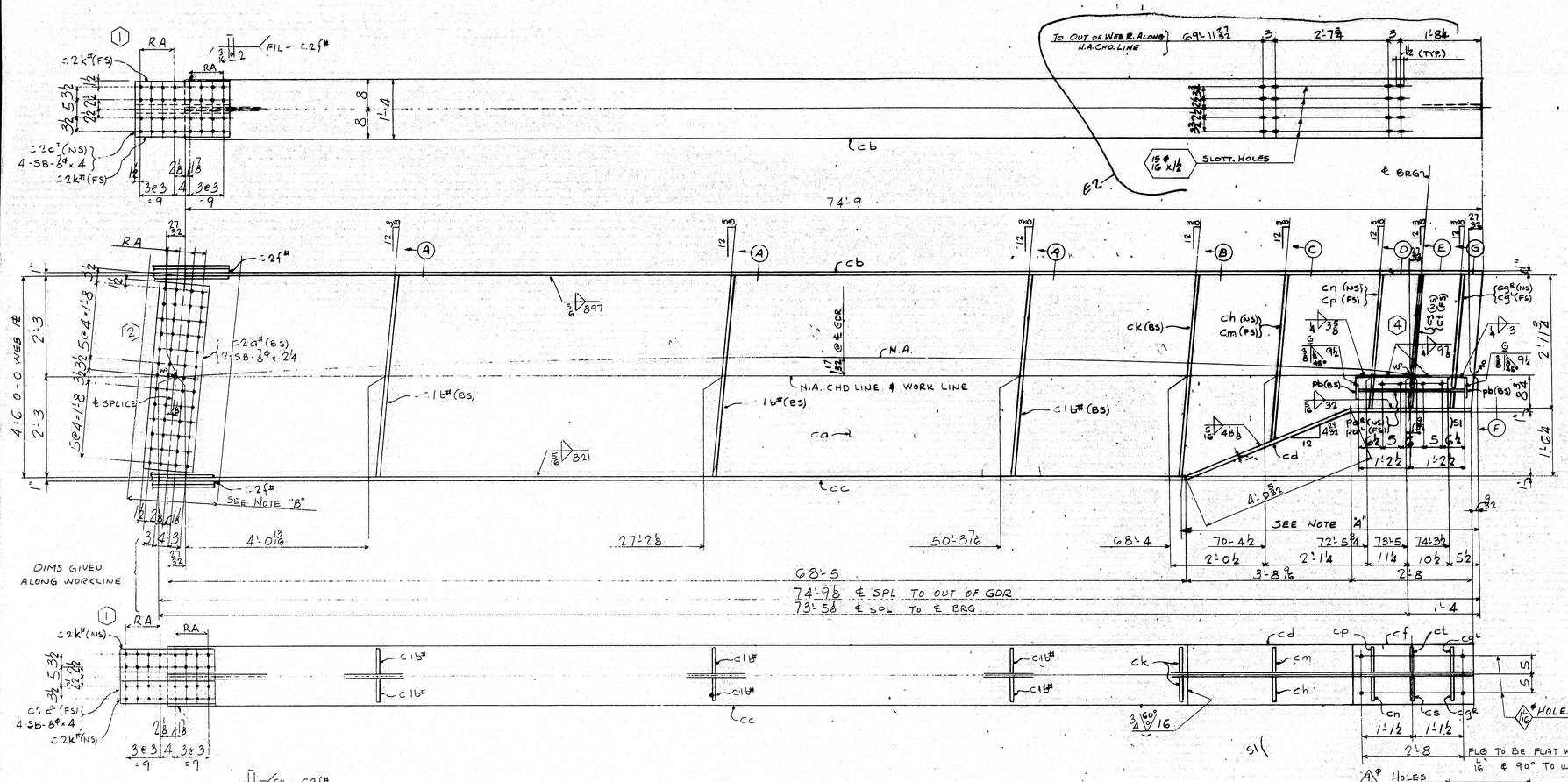
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWG DATE 8-29-69 IN CHARGE B.K. BARTOLET
CHECKED BY E DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 392

35433 (Rev. C 4-69)

NOV 17 1969

108-7



SHOP BILL									MAIL ORDER	
ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	LENGTH FT.	LENGTH IN.	ITEM PIECE MARK
1		1	GIRDER	G1-9								
2	c.a	1	PL	54		7/16	74	10 15/16	57x7/16	75	3	43 15
3	c.b	1	PLU	16		1	74	9		74	11¼	37 21
4	c.c	1	PLU	16		1	68	5		68	8¼	37 22
5	c.d	1	PLU	16		1	6	8 5/32		20	2	37 26
6												
7	c.g^R	1	BR	7½		¾	2	11¾	(M1E)(F1E)	13	10¼	47 18
8	c.h	1	BR	7½		¾	3	8¼	(F2E)	13	10¼	47 18
9	c.k	2	BR	7		½	4	6	(F2E)	13	10¼	47 19
10	pa^R	1	PL	9½		⅜	2	5	USE MR-50 STOCK			J
11	p.b	4	PL	5		⅜	0	9½	USE MR-50 STOCK			J
12	c.m	1	BR	7½		¾	3	8¼	(F2E)	13	10¼	47 18
13	c.n	1	BR	7½		¾	2	11¾	(M1E)(F1E)	13	10¼	47 18
14	c.p	1	BR	7½		¾	2	11¾	(M1E)(F1E)	13	10¼	47 18
15	c.s	1	PL	15½		¾	2	11¾	(M1E)(F1E)			J
16	c. 16#	6	BR	7		½	4	6	(F2E)	13	10¼	47 19
17	c. 20#	2	PLU	13		⅜	4	2		33	6	47 18
18	c. 26#	2	PL	15		⅜	2	1				J
19	c. 2k#	4	PL	6½		5/16	2	1				J
20	c. 25#	2	PL	15		⅜	1	0⅜				J
21	c.t	1	PL	15½		¾	2	11¾	(M1E)(F1E)			J
22												
23		2	SB	⅞			0	24	HEX HD ⑧ NUT			M
24		8	SB	8⑧			0	4	HEX HD ⑧ NUT			M
25												
26												
27	SD	1	WD			5/16	0	8				
28	FW	1	WD			¼	14	5				
29	FWL	1	WD			5/16	299	8½				
30	FWS	1	WD			5/16	119	2				
31	VGOS	1	WD			1	1	4	SI			
32	T45	1	WD			⅞	3	2				
33												
34												
35												
36												
37												
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53												
54												
55												

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE NEW YORK 17, N.Y.
BY Arnold Nowitz JAN 5 1970

INST. IE

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-9	GIRDER (16x584x75'-11½)	

PAY ITEM 504.701

GIRDER

MATERIAL: PREFIX "C" - A36 STEEL; PREFIX "P" - A242 STEEL
FASTENING BOLTS ⅞ø A325
OPEN HOLES 15/16ø (U.N.)
A325 FIELD BOLTS ⅞ø & 1ø (GALV WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED

MAX. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	150 DEG.
OVER 2 1/2"	225 DEG.

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

NO.	DATE	INIT.	REVISION
F2	7/25	ED	
F1	11/20	BAL	

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.

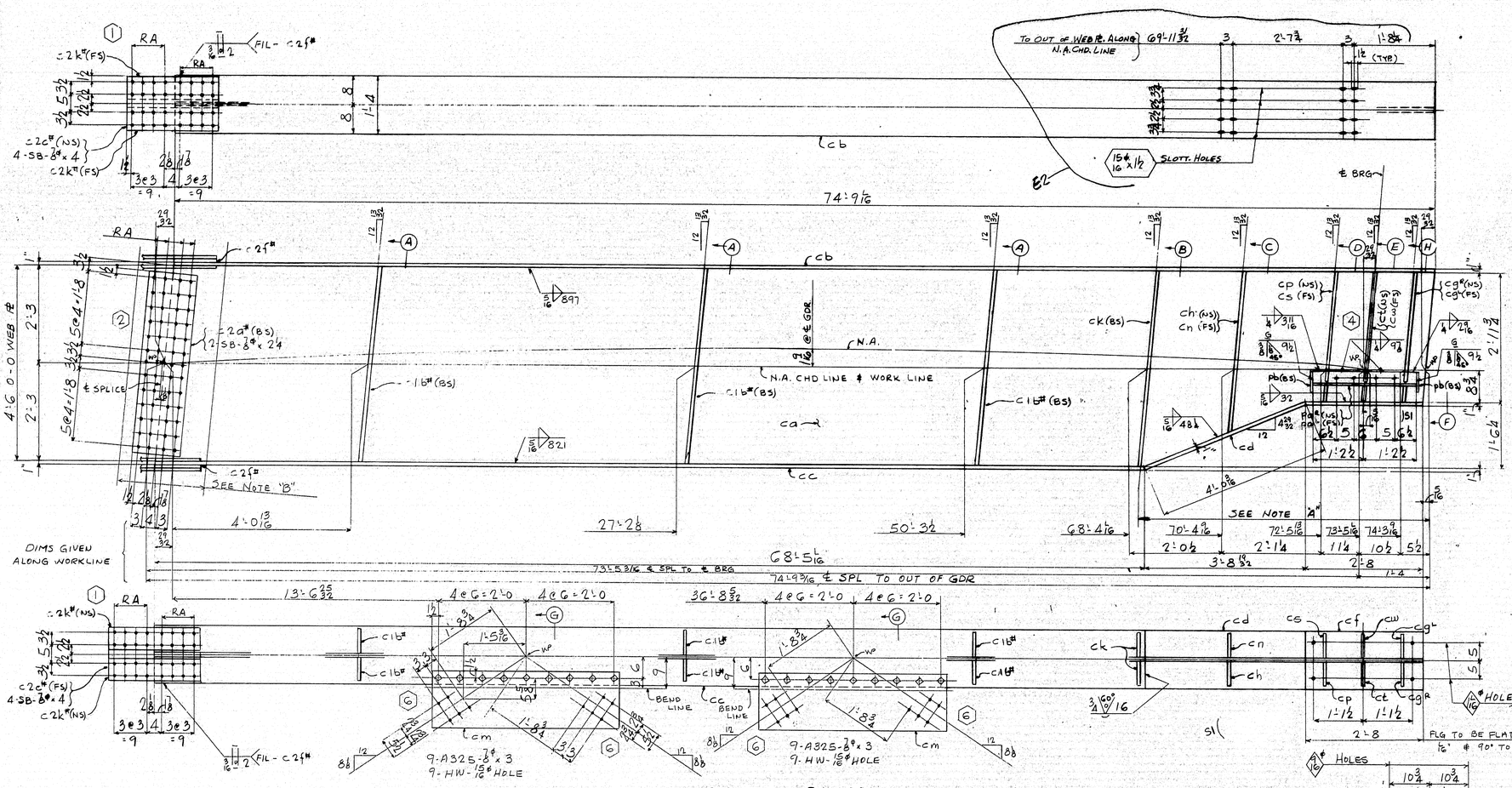
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWG DATE 8-29-69 IN CHARGE B.K. BRETOLET
CHECKED BY E DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 393

For location of details shown on this sheet refer to diagrams.
E12

1.85-8

0 1 2 3 4 5 INCHES

GIRDER G1-10



SECT. (A) SECT. (B) SECT. (C) SECT. (D) & (H) SECT. (E) SECT. (F) SECT. (G)

NOTE "C" - WELD TO BE WATER TIGHT.

"BL" - INDICATES ONE COAT OF BLUE LACQUER BOTH SIDES OF STIFF.

NOTE "B" - ALL STEEL IN THIS AREA TO RECEIVE ONE COAT OF BLUE LACQUER.

NOTE "A" - ALL STEEL IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SPS-GG. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY PAINT, INCLUDING HOLES.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7018 OR E8018 LOW HYDROGEN ELECTRODES OR OR EQUAL FOR WELDING.

MIN. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	100 DEG.
OVER 2 1/2"	225 DEG.

For location of details shown on this sheet refer to diagrams.

E12

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR FOUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1		1	G1-10 ORDER						
2	c a	1	PL	54		7/8	74	10 3/4	57 x 7/16
3	c b	1	PLU	16		1	74	9 7/16	
4	c c	1	PLU	16		1	68	8 5/16	
5	c d	1	PLU	16		1	6	8 5/16	
6									
7	c g L	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)
8	c h	1	BR	7 1/2		3/4	3	8 1/4	(F2E)
9	c k	2	BR	7		1/2	4	6	(F2E)
10	p a L	1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK
11	p b	4	PL	5		3/8	0	9 7/16	USE MR-50 STOCK
12	c m	2	PL	14 1/2		5/8	4	3	(BENT)
13	c n	1	BR	7 1/2		3/4	3	8 1/4	(F2E)
14	c p	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)
15	c s	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)
16	c 1b#	6	BR	7		1/2	4	6	(F2E)
17	c 2a#	2	PLU	13		3/8	4	2	
18	c 2c#	2	PL	15		5/8	2	1	
19	c 2k#	4	PL	6 1/2		5/8	2	1	
20	c 2f#	2	PL	15		5/8	1	0 3/8	
21		18	3 2S	7/8			0	3	
22		18	HW	1 5/8	15/16	3/16			
23		2	SB	5/8			0	2 4	HEX HD & NUT
24		8	SB	3/4			0	4	HEX HD & NUT
25	c t	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)
26	c w	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)
27	SD	1	WD			1/16	0	8	
28	FW	1	WD			4/16	14	5	
29	FWL	1	WD			5/16	299	8 1/2	
30	FWS	1	WD			7/16	119	2	
31	VGOS	1	WD			1.	1	4	SI
32	T4S	1	WD			3/8	3	2	
33									
34									
35									
36									
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52									
53									
54									
55									

MILL ORDER

LINE	LENGTH FT.	LENGTH IN.	FINAL PAGE	FINAL LINE	
1					
2	75	3	42	15	
3	74	11 4	37	21	
4	68	8 1/4	37	22	
5	20	2	37	22	SI
6					
7	13	10 1/4	47	18	
8	13	10 1/4	47	18	
9	13	10 1/4	47	19	
10			J		
11			J		
12	26	0	28	19	
13	13	10 1/4	47	18	
14	13	10 1/4	47	18	
15	13	10 1/4	47	18	
16	13	10 1/4	47	19	
17	33	6	47	11A	
18			J		
19			J		
20			J		
21			M		
22					
23					
24					
25			J		
26			J		
27					
28					
29					
30					
31					SI
32					
33					
34					
35					
36					
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54					
55					

HARDESTY & HANOVER
CONSULTING ENGINEERS
111 PARK AVE. NEW YORK 17, N.Y.
BY Arnold Northy JAN 5 1970

INST. IE

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-10	GIRDER (27 x 58 1/4 x 75' 11 1/2)	

PAY ITEM 504.701

MATERIAL { PREFIX "C" - A36 STEEL / PREFIX "P" - A242 STEEL
FASTENER BOLTS 7/8" A325
OPEN HOLES 15/16" (U.N.O.)
A325 FIELD BOLTS 7/8" ℄ (GALV. WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.O.)
REAM - AS NOTED

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

REVISION

NO.	DATE	INIT.
E2	7/23	VRD
S1	11/69	BAL

GIRDER

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.

STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY GWG DATE 9-3-69 IN CHARGE B.K. BERTOLET
CHECKED BY E DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 394

108-5

Nov. 17, 1966

GIRDER G1-11

SHOP BILL									MILL ORDER	
ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM SEQ
	1	GIRDER	G1-11									
ca	1	PL	54		1/16	74	10 15/16	57x1/16	75	3	43	15
cb	1	PLV	16		1	74	9 1/16		74	11 1/4	37	21
cc	1	PLV	16		1	68	8 1/4		68	8 1/4	37	22
cd	1	PLV	16		1	6	8 3/32		20	2	37	26 SI
cg, ch	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 1/4	47	18
ch	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 1/4	47	18
ck	2	BR	7		1/2	4	6	(F2E)	13	10 1/4	47	19
pa, pa'	1	PL	9 1/2		3/8	2	5	USE MR-50 STOCK			J	
pb	4	PL	5		3/8	0	9 7/16	USE MR-50 STOCK			J	
cm	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 1/4	47	18
cn	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 1/4	47	18
cp	1	BR	7 1/2		3/4	2	11 3/4	(M1E)(F1E)	13	10 1/4	47	18
cs	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)			J	
cl, 16#	6	BR	7		1/2	4	6	(F2E)	13	10 1/4	47	19
cl, 20#	2	PLV	13		3/8	4	2		33	6	47	11A
cl, 2c#	2	PL	15		3/8	2	1				J	
cl, 2k#	4	PL	6 1/2		3/8	2	1				J	
cl, 2f#	2	PL	15		5/8	1	0 3/8				J	
ct	1	PL	15 1/2		3/4	2	11 3/4	(M1E)(F1E)			J	
	2	SB	7/8		0	2	4	HEX HD & NUT				
	8	SB	8		0	4		HEX HD & NUT			M	
SD	1	WD			1/16	0	8					
FW	1	WD			1/4	14	5					
FWL	1	WD			5/16	299	8 3/4					
FWS	1	WD			5/16	119	2					
VGOS	1	WD			1	1	4	SI				
T45	1	WD			3/8	3	2					

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
15 PARK AVE. NEW YORK 17, N.Y.
BY Arnold Moultry JAN 5 1970

INST. IE

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
DUE	G1-11	GIRDER (16x58 1/4 x 75'-11 3/4")	

PAY ITEM 504.701

GIRDER

MATERIAL: PREFIX "C" - A36 STEEL; PREFIX "P" - A242 STEEL
FASTENER BOLTS 7/8" A325
OPEN HOLES 15/16" (U.N.)
A325 FIELD BOLTS 7/8" & 1" (GALV. WHERE NOTED)
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED

NO.	DATE	INIT.	REVISION
E2	12/23	KD	
S1	12/16/69	BAL	

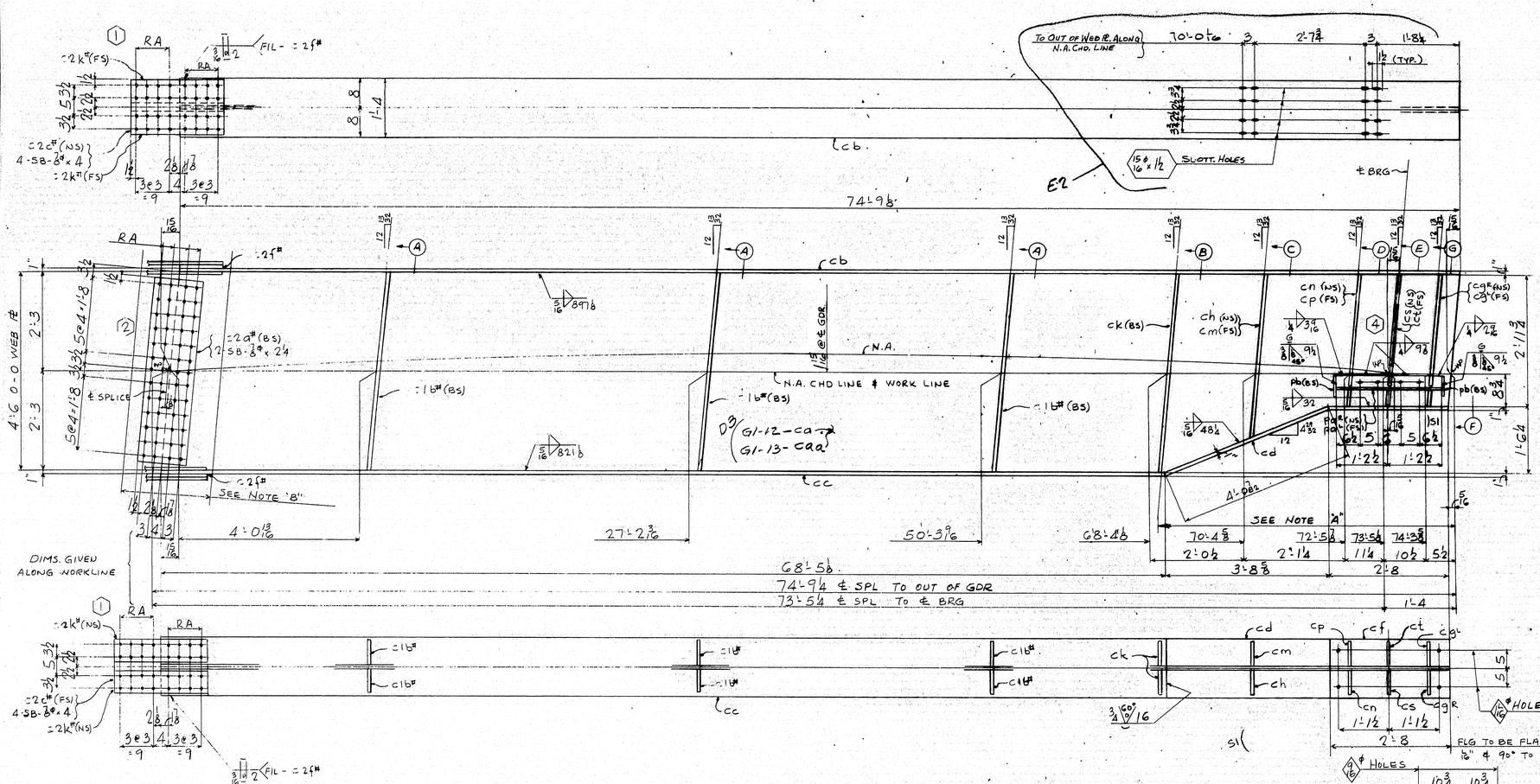
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWG DATE 9-2-69 IN CHARGE B.K. BERTOLET
CHECKED BY E DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 395

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

For location of details shown on this sheet refer to diagrams.
E12

108-10

SCALE 0 1 2 3 4 5 INCHES



GIRDER G1-12
G1-13 D3

NOTE "C" - WELD TO BE WATER TIGHT.
"BL" - INDICATES ONE COAT OF BLUE LACQUER BOTH SIDES OF STIFF.
NOTE "B" - ALL STEEL IN THIS AREA TO RECEIVE ONE COAT OF BLUE LACQUER.
NOTE "A" - ALL STEEL IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-63. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY PAINT, INCLUDING HOLES.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED ¼" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTIONS PARTS ASSEMBLED.

NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7018 OR E8018 LOW HYDROGEN ELECTRODES OR OR, EQUAL FOR WELDING.

MIN. TEMP. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO ¾" INCL.	50 DEG.
OVER ¾" TO 1 1/2" INCL	150 DEG.
OVER 1 1/2"	225 DEG.

For location of details shown on this sheet refer to diagrams.

E12

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MARK LENGTH FT.	MARK LENGTH IN.	MARK WEIGHT
1		2	G	IRDER		G1-12			1-G1-13			
2	c a	1	PL	54		1/16	74	11	G1-12 D3 57x1/16	75	3	28 5
3	c b	2	PLU	16		1	74	9⅜		74	11¼	37 21
4	c c	2	PLU	16		1	68	5⅜		68	8¼	37 22
5	c d	2	PLU	16		1	6	8½		20	2	37 26
6	c aa	1	PL	54		1/16	74	11	G1-13 D3			
7	c g R	2/2	BR	7½		¾	2	11¾	(M1E)(F1E)	13	10¼	47 18
8	c h	2	BR	7½		¾	3	8¼	(F2E)	13	10¼	47 18
9	c k	4	BR	7		½	4	6	(F2E)	13	10¼	47 19
10	p a R	3/2	PL	9½		⅜	2	5	USE MR-50 STOCK			J
11	p b	8	PL	5		⅜	0	9⅞	USE MR-50 STOCK			J
12	c m	2	BR	7½		¾	3	8¼	(F2E)	13	10¼	47 18
13	c n	2	BR	7½		¾	2	11¾	(M1E)(F1E)	13	10¼	47 18
14	c p	2	BR	7½		¾	2	11¾	(M1E)(F1E)	13	10¼	47 18
15	c s	2	PL	15½		¾	2	11¾	(M1E)(M1E)			J
16	c 16#	12	BR	7		½	4	6	(F2E)	13	10¼	47 19
17	c 20#	4	PLU	13		⅜	4	2		33	6	47 11A
18	c 2c#	4	PL	15		⅝	2	1				J
19	c 2k#	8	PL	6½		⅝	2	1				J
20	c 2f#	4	PL	15		⅝	1	0⅜				J
21	c t	2	PL	15½		¾	2	11¾	(M1E)(F1E)			J
22												
23		4	SB	⅝#			0	24	HEX HD & NUT			
24		16	SB	⅜#			0	4	HEX HD & NUT			M
25												
26												
27	SD	2	WD			2nd	0	8				
28	FW	2	WD			4	14	5				
29	FWL	2	WD			5/16	299	9				
30	FWS	2	WD			5/16	119	2				
31	VGOS	2	WD			1	1	4	SI			
32	T45	2	WD			3/8	3	2				
33												
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D3 ( ) SI

STRUCTURAL ENGINEERS
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.

BY Arnold Moorhead JAN 5 1970

INST. IE

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-12	GIRDER (16 x 58½ x 75'-11¾)	[redacted]
ONE	G1-13	DO (DO DO)	[redacted]

PAY ITEM 504.701

D3

GIRDERS

MATERIAL: PREFIX "C" - A36 STEEL; PREFIX "P" - A242 STEEL
FASTENER BOLTS: ⅞ A325
OPEN HOLES: 15/16 (U.N.)
A325 FIELD BOLTS: ⅞ & 1" (GALV. WHERE NOTED)
SHOP CONTACT SURFACES: NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT: ONE COAT AASHO-M-72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED

NO.	DATE	INIT.	REVISION
D	9/5	BAL	
C	8/8	RD	
B	12/16	BAL	
A			

SUBMITTAL 1 2 3 4 5 6 7 8 9 0
DATE

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CWG DATE 8-29-69 IN CHARGE B.K. BARTOLET
CHECKED BY E DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 396

108-11

0 1 2 3 4 5 INCHES

GIRDER G1-14

SHOP BILL

LOT	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	AMOUNT FT.	AMOUNT IN.	AMOUNT LBS.
1		1	GIRDER			G1-14						
2	ca	1	PL	54		1/16	74	11	57X1/16	753		49
3	cb	1	PLU	16		1	74	9 1/8		74	11/4	4972
4	cc	1	PLU	16		1	68	5 3/8		68	3/4	4579
5	cd	1	PLU	16		1	6	8 3/4		202		3776
6												
7	cg^R	3/1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 1/4	471
8	ch	1	BR	7 1/2		3/4	3	8 1/4	(F2E)	13	10 1/4	471
9	ck	2	BR	7		1/2	4	6	(F2E)	13	10 1/4	4719
10	pa^R	1/	PL	9 1/2		3/8	2	5	USE MR-50 STOCK			J
11	pb	4	PL	5		3/8	0	9 3/4	USE MR-50 STOCK			J
12	cm	1	BR	7 1/2		3/4	2	11 3/4	(MIE)(FIE)	13	10 1/4	4718
13	cn	1	PL	15 1/2		3/4	2	11 3/4	(MIE)(FIE)			J
14												
15												
16	c 1b#	3	BR	7		1/2	4	6	(F2E)	13	10 1/4	4719
17	c 2a#	2	PLU	13		3/8	4	2		33	6	4711A
18	c 2c#	2	PL	15		5/8	2	1				J
19	c 2k#	4	PL	6 1/2		5/8	2	1				J
20	c 2f#	2	PL	15		5/8	1	0 3/8				J
21												
22												
23		2	SB	5/8 φ			0	2 4	HEX HD & NUT			
24		8	SB	5/8 φ			0	4	HEX HD & NUT			M
25												
26												
27	SD	1	WD			3/16	0	8				
28	FW	1	WD			4	14	5				
29	FWL	1	WD			5/16	299	9				
30	FWS	1	WD			7/16	86	1/2				
31	VGOS	1	WD			1	1	4	)S1			
32	T4S	1	WD			3/8	3	2				
33												
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APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY Arnold Hanover JAN 5 1970

INST. 1E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G1-14	GIRDER (16'-5 3/4" x 75'-11 3/4")	

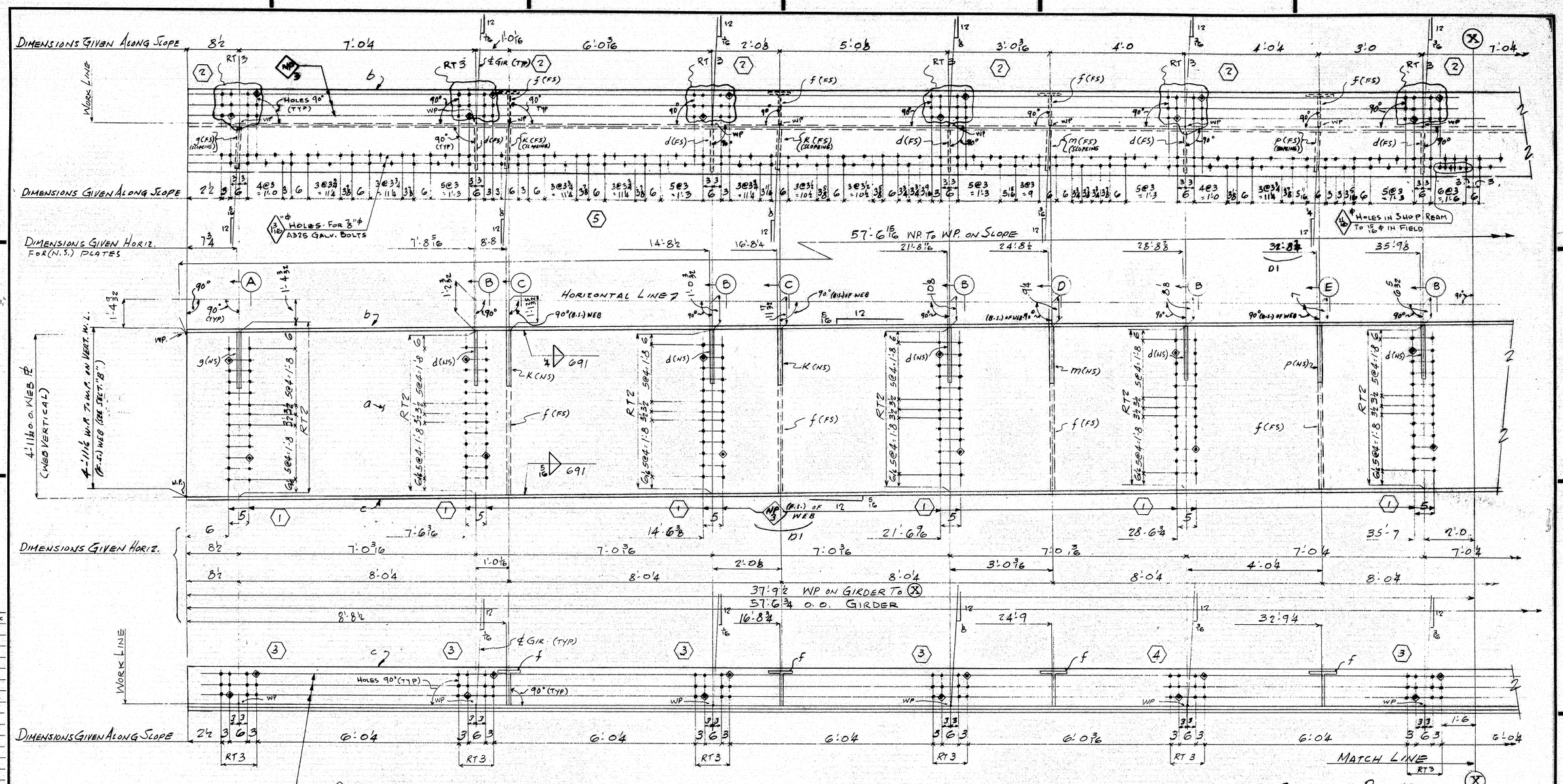
PAY ITEM 504.701

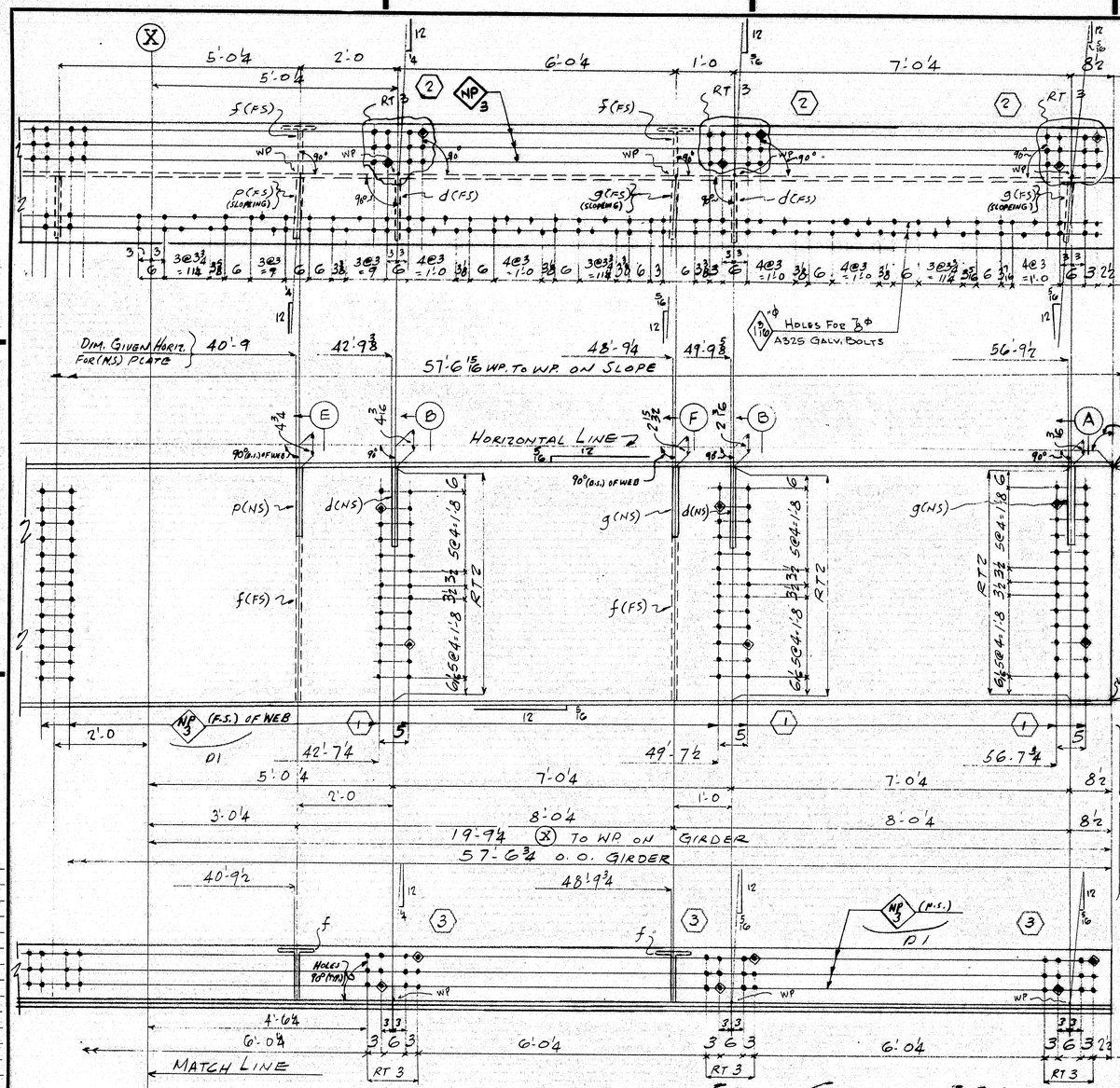
GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONTR Nº 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY CWG DATE 9-2-69 IN CHARGE B.K. BRETCELT
CHECKED BY E DATE 10-6-69 SHOP NO. 2
CONTRACT CJG249-021 DRAWING NO. 397

For location of details shown on this sheet refer to diagrams.
E12

7188-12


DIMENSIONS GIVEN ALONG SLOPE
WORK LINE
HOLES 90° (TYP)
WP
RT 3
℄ GIR (TYP)
f (FS)
g (FS) (SLOPEING)
K (FS) (SLOPEING)
d (FS)
m (FS) (SLOPEING)
p (FS) (SLOPEING)
DIMENSIONS GIVEN ALONG SLOPE
3/16" ϕ HOLES FOR 7/8" ϕ A325 GALV. BOLTS
ϕ HOLES IN SHOP REAM TO 15/16" ϕ IN FIELD
57'-6 15/16" WP TO WP ON SLOPE
DIMENSIONS GIVEN HORIZ. FOR (N.S.) PLATES
HORIZONTAL LINE Z
90° (TYP)
90° (B.S.) OF WEB
4'-11 1/2" O.O. WEB ℄ (WEB VERTICAL)
4'-11 6/16" W.P. TO W.P. ON VERT. W.L. (F.S.) WEB (SEE SECT. "B")
WP
g (NS)
d (NS)
K (NS)
f (FS)
m (NS)
p (NS)
RT 2
6 SEQ 1/8
691
(F.S.) OF WEB
101
DIMENSIONS GIVEN HORIZ.
7'-6 3/16
14'-6 3/8
21'-6 9/16
28'-6 3/4
35'-7
37'-9 1/2 WP ON GIRDER TO ⓧ
57'-6 3/4 O.O. GIRDER
WORK LINE
℄ GIR. (TYP)
HOLES 90° (TYP)
90° (TYP)
DIMENSIONS GIVEN ALONG SLOPE
RT 3
(N.S.)
MATCH LINE
CROSS GIRDER @ PIER 16 W
Sta. 527+08.00
CROSS GIRDER - CG1
WORK THIS DWG. WITH DWG. Nº 501A
FOR NOTES SEE DWG. Nº 501A
MATERIAL
RIVETS OR BOLTS
OPEN HOLES
A325 FIELD BOLTS
SHOP CONTACT SURFACES
PAINT
APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
SEP 30 1960
For location of details shown on this sheet refer to diagrams.
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
STRUCTURE PROJECT Nº I-95-1 (22) 16
CONT. Nº 3 NEW HAMPSHIRE APPROACH
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY VRP DATE 7/31/62 IN CHARGE DKB
CHECKED BY ℄ DATE 8/20/62 SHOP NO. 2
CONTRACT SF 6249-030 DRAWING NO. 501
NO. DATE INIT. REVISION
SUBMITTAL DATE
WGA PREP FIT FIN ASSEMBLY MACH. TAPE 108-13
0 1 2 3 4 5 INCHES



LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1			1-CROSS GIRDER - CG1						
2									
3	a	1	PL	59½		½	57	8½	G2 x k x
4	b	1	PLU	30		½	57	6⅛	
5	c	1	PLU	14		1	57	6⅛	
6	d	7	PL	16		¾	2	1⅛	
7	f	6	IT	12	39.95		4	11⅜	
8	g	3	PL	16½		1½	2	4⅛	
9	K	2	PL	16½		1½	2	4⅛	
10	m	1	PL	16½		1½	2	4⅛	
11	P	2	PL	16½		1½	2	4⅛	
12	S	16	PL	8½		½	0	8½	M 15 (CC.F. ¾"R)
13	t	12	BR	1		⅜	0	11	
14									
15									
16	LP1A	8							DET. ON DWG. # 13
17	LP1B	8							DET. ON DWG. # 13
18	KB1	8							DET. ON. DWG # 13
19	P1	8							" " " "
20									
21									
22									
23									
24									
25									
26									
27									
28	FWL	1	WD			¼	115	2	
29	FWL	1	WD			5/16	115	2	
30	FW	1	WD			⅜	162	2½	
31	FW	1	WD			5/16	12	2	
32	FW	1	WD			¼	12	2	
33	T45D	1	WD			¾	9	0½	
34	T45D	1	WD			1½	10	8	
35	T45B	1	WD			⅜	6	2	
36									
37									
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									

SHOP BILL — MILL ORDER

	LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM LINE
	58	8½	24	24
	58	5½	24	21
	58	5½	24	27
	20	0	24	40
	39	6	24	41
			4	
			4	
			4	
			4	
			4	
			4	

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY Arnold Hardesty DEC 30 1969

INST. 17W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS	CODE
ONE	CG1	GIRDER (60"x 30"x 57'-7)		030

WORK THIS DWG. WITH DWG. # 501A

PAY ITEM - 504.711

CROSS GIRDER @ PIER 16W (Csta. 527+08.00)

MATERIAL ASTM - A36
RIVETED OR BOLTS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
A325 FIELD BOLTS ⅞ ϕ - Plain & Galv.
SHOP CONTACT SURFACES MILL - NONE, REAM - NONE
PAINT - SEE PAINT SKETCH
WELD - AS NOTED

ALL OPEN HOLES SHALL RECEIVE ONE COAT OF ZINC RICH EPOXY UNLESS NOTED (P)
NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.
USE E7018, 10-20 LOW HYDROGEN ELECTRODES OR EQ. LOADS FOR WELDING.

MAX. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 3/4" INCL.	50°
OVER 3/4" TO 1 1/2" INCL.	150°
OVER 1 1/2" TO 2 1/2" INCL.	225°
OVER 2 1/2"	300°

RE-ENTRANT CUTS ¾"

HOLES MARKED RT TO BE SUB-PUNCHED 4" AND REAMED OR DRILLED FROM THE SOLID TO A METAL TEMPLET

NO.	DATE	INIT.	REVISION
D2	1-26-70	DRnd	
D1	11/24/69	JG	

SUBMITTAL 1 2 3 4 5 6 7 8 9 0
DATE

CUSTOMER MAINE STATE HIGHWAY COMMISSION
STRUCTURE PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONT Nº 3 NEW HAMPSHIRE APPROACH
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY TRP DATE 5-12-69 IN CHARGE AKB
CHECKED BY [illegible] DATE 8-22-69 SHOP NO. 2
CONTRACT SJ6249.030 DRAWING NO. 501A

35433 (Rev.C 4-68)

MICRO PREP ✓ FIT FIN JASMBLY MACH 1 TAPE 1 108-14 © 1968

0 1 2 3 4 5 INCHES

DIMENSIONS GIVEN ALONG SCOPE

DIMENSIONS GIVEN ALONG SCOPE (N.S.) PLATES

DIMENSIONS GIVEN ALONG SLOPE (N.S.) PLATES

DIMENSIONS GIVEN HORIZONTAL

DIMENSIONS GIVEN ALONG SLOPE

WORK LINE

℄ HORIZONTAL LINE

65'-9¼ WP TO WP ON SLOPE

48'-0⅜ WP ON GIRDER TO ℄ (X)

65'-9⅛ O. TO O. GIRDER

Φ HOLES FOR ¾" Φ A325 BOLTS GALV. (UNLESS NOTED)

Φ HOLES REAM TO 15/16 Φ IN FIELD

90° FOR HOLES (TYP)

WP

℄ GDR.

MATCH LINE

For location of details shown on this sheet refer to diagrams.

CROSS GIRDER - CG2

WORK THIS DWG WITH DWG. # 502A

CROSS GIRDER @ PIER 16E

FOR NOTES SEE DWG. N.º 502A

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
111 EIGHTH AVE. NEW YORK 17, N.Y.
BY _____ SEP 30 1969

MATERIAL	
RIVETS OR BOLTS	
OPEN HOLES	
A325 FIELD BOLTS	
SHOP CONTACT SURFACES	
PAINT	

NO.	DATE	INIT.	REVISION
D1	10/16/69		

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1 (22) 16
CONT. Nº 3 NEW HAMPSHIRE APPROACH
STRUCTURAL STEEL

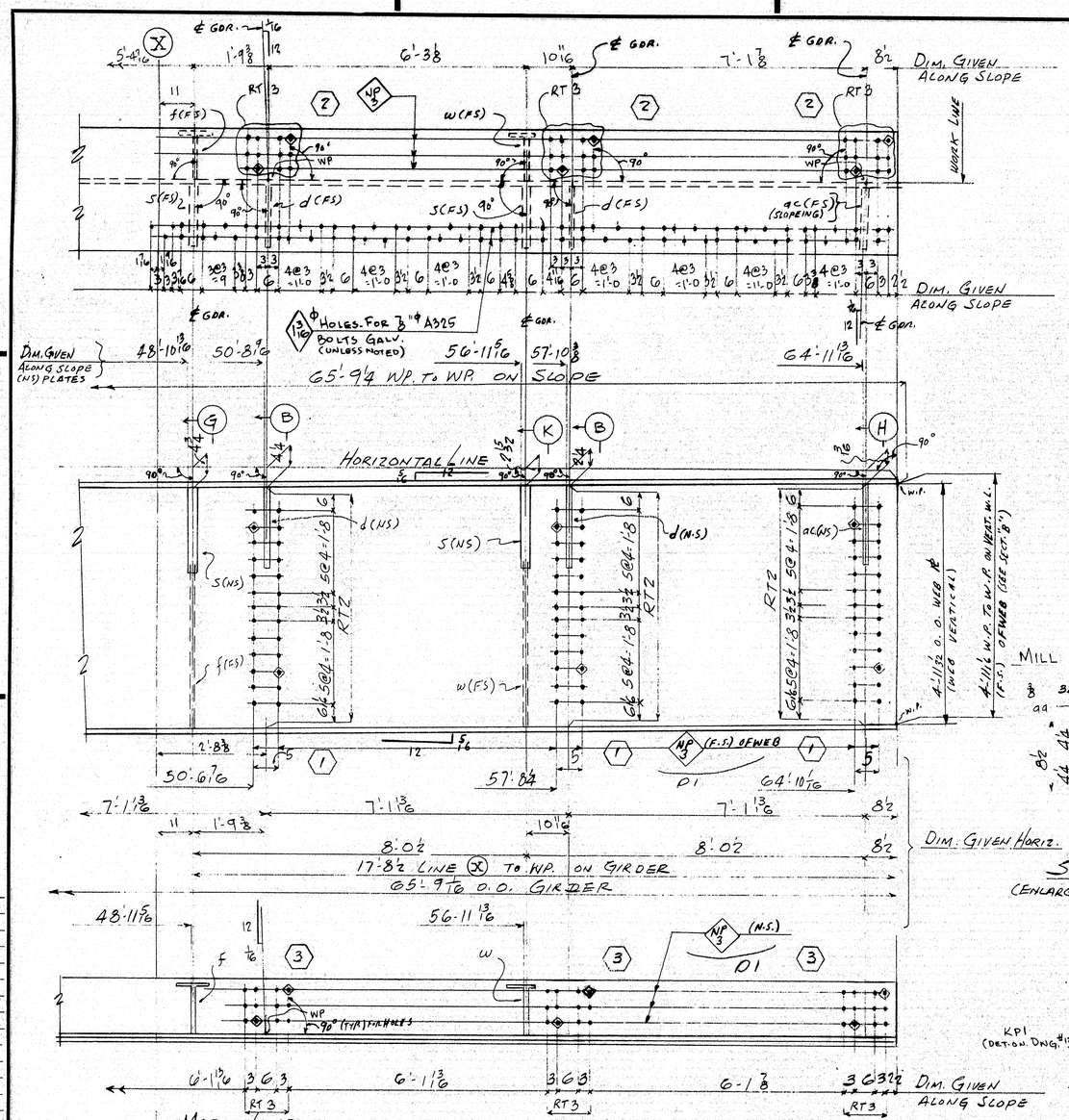
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

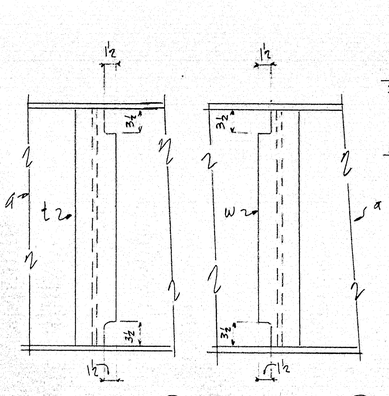
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY JRP DATE 8-18-69 IN CHARGE BKB
CHECKED BY ℄ DATE 8-21-69 SHOP NO. 2
CONTRACT SI6249-030 DRAWING NO. 507

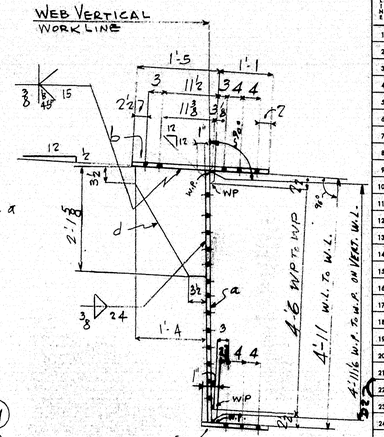
WS2 PREP FIT FIN ASSEMBLY MACH 1 TAPE 1

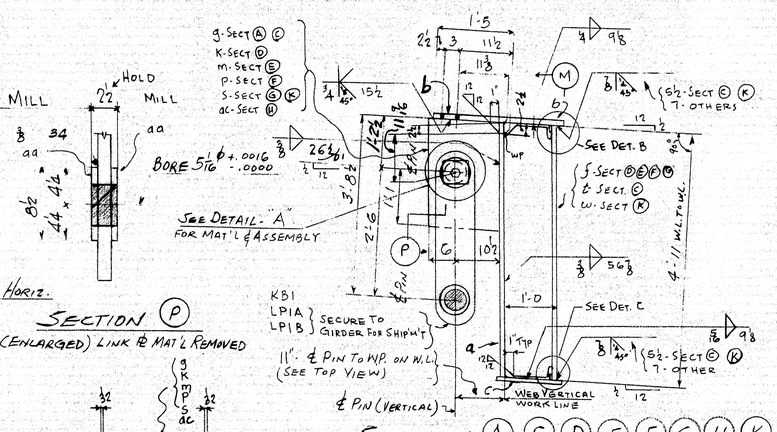
108-25

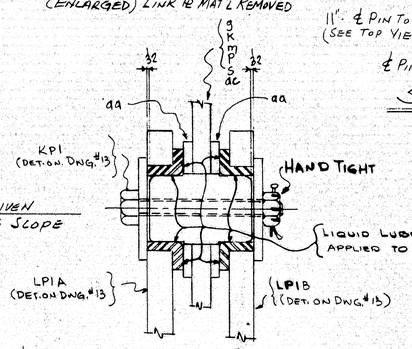
0 1 2 3 4 5 INCHES

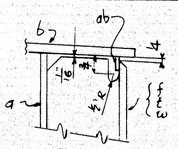


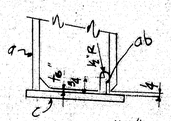












CROSS GIRDER CG2

NOTE. A
ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-GG. ALL STEEL WILL RECEIVE ONE COAT OF ZINC RICH EPOXY

NOTE. "B"
ONE COAT AASHO M72-TYPE II RED LEAD.

(5) OPEN HOLES

R1

ALL OPEN HOLES (NP 3) SHALL RECEIVE ONE COAT OF ZINC RICH EPOXY UNLESS NOTED

NO FACE WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E6010, 16, OR LOW HYDROGEN ELECTRODES OR EQ. LIKELY FOR WELDING.

MIN. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP., + 100, F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	150 DEG.
OVER 2 1/2"	220 DEG.

HOLES MARKED RT TO BE SUB-PUNCHED ¼" AND REAMED OR DRILLED FROM THE SOLID TO A METAL TEMPLET

RE-ENTRANT CUTS ¾" RAD.

For location of details shown on this sheet refer to diagrams.

SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER ITEM PAGE	MILL ORDER ITEM LINE
1													
2				1-CROSS GIRDER - CG2									
3													
4	a	1	PLS	59½		½	65	10⅜	62'-2"	66	B	24	45
5	b	1	PLU	30		½	65	9¼		66	B	24	44
6	c	1	PL	14		1	65	9¼		66	B	24	46
7	d	8	PL	16		¾	2	1⅜	SEE DETAIL	20	0	24	43
8	f	5	IT	12	39.95		4	11⅜	4:12	35	6	24	41
9	g	2	PL	10½		1½	2	4⅞				J	
10	K	1	PL	16½		1½	2	4⅞				J	
11	m	2	PL	16½		1½	2	4⅞				J	
12	P	1	PL	16½		1½	2	4⅞				J	
13	S	2	PL	16½		1½	2	4⅞				J	
14	t	1	IT	12	39.95		4	11⅜		35	6	24	41
15	w	1	IT	12	39.95		4	11⅜		35	6	24	41
16	aa	13	PL	8½		½	0	8½	MIS (CF ¾")			J	
17	ab	14	BR	1		⅜	0	11				J	
18	ac	1	PL	16½		1½	2	4⅞	SEE CUTTING SK. ABOVE			J	
19	LP1A	9							DET. ON DWG #13				
20	LP1B	9							DET. ON DWG #13				
21	KB1	9							DET. ON DWG. #13				
22	P1	9							" " " "				
23													
24	FWL	1	WD			¼	131	9¼					
25	FWL	1	WD			5/16	131	9¼					
26	FW	1	WD			⅜	185	4¼					
27	FW	1	WD			5/16	13	8¼					
28	FW	1	WD			¼	13	8¼					
29	T4SD	1	WD			¾	10	4					
30	T4SD	1	WD			1½	12	0					
31	T4SB	1	WD			⅞	10	3					
32													
33													
34													
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55													

INST. 17E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS	CODE
ONE	CG2	GIRDER (60'4 x 30¾ x 66'-10⅞)		031

PAY ITEM 504.711

WORK THIS DWG. WITH DWG. #502

CROSS GIRDER @ PIER 16E (Sta. 527+08.00)

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY Charles Nowitz DEC 30 1969

MATERIAL ASTM A36
RIVETS OR BOLTS NONE
OPEN HOLES 15/16 ϕ UNLESS NOTED
A325 FIELD BOLTS ⅞ϕ GALV.
SHOP CONTACT SURFACES NOT PAINTED
MILL - NONE
REAM - AS NOTED
PAINT - SEE PAINT SKETCH
WELD - AS NOTED

NO.	DATE	REVISION
D2	11/14/69	ADD
D1	12/6/67	T-2

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
STRUCTURE PROJECT NO I-95-1 (22) 16
CONT NO 3 NEW HAMPSHIRE APPROACH
STRUCTURAL STEEL

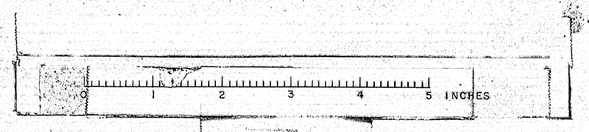
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY VRP DATE 8-19-69 IN CHARGE BRB
CHECKED BY ℄ DATE 8-21-69 SHOP NO. 2
CONTRACT SJ6249-030 DRAWING NO. 502A

WS2 PREP FIT FIN ASSEMBLY MACH 1 TAPE 1

108-16

35433 (Rev.C 4-68)



DIMENSIONS GIVEN ALONG SCOPE

DIMENSIONS GIVEN ALONG SLOPE

DIMENSIONS GIVEN HORIZ. FOR (FS) PLATES

DIMENSIONS GIVEN HORIZ.

DIMENSIONS GIVEN ALONG SLOPE

WORK LINE

HORIZONTAL LINE

MATCH LINE

48'-10 13/16 WP. TO WP. ON SLOPE

37'-2 3/4 WP ON GIRDER TO LINE (X)

48'-9 13/16 O. TO O. GIRDER

CROSS GIRDER - CG3

WORK THIS DWG WITH DWG # 503A

SEE DWG. No. 503A FOR NOTES

MAINE STATE HIGHWAY COMMISSION

PISCATAQUA RIVER BRIDGE

PROJECT No. I-95-1(22)16

CONT. No. 3 NEW HAMPSHIRE APPROACH

BETHLEHEM STEEL CORPORATION

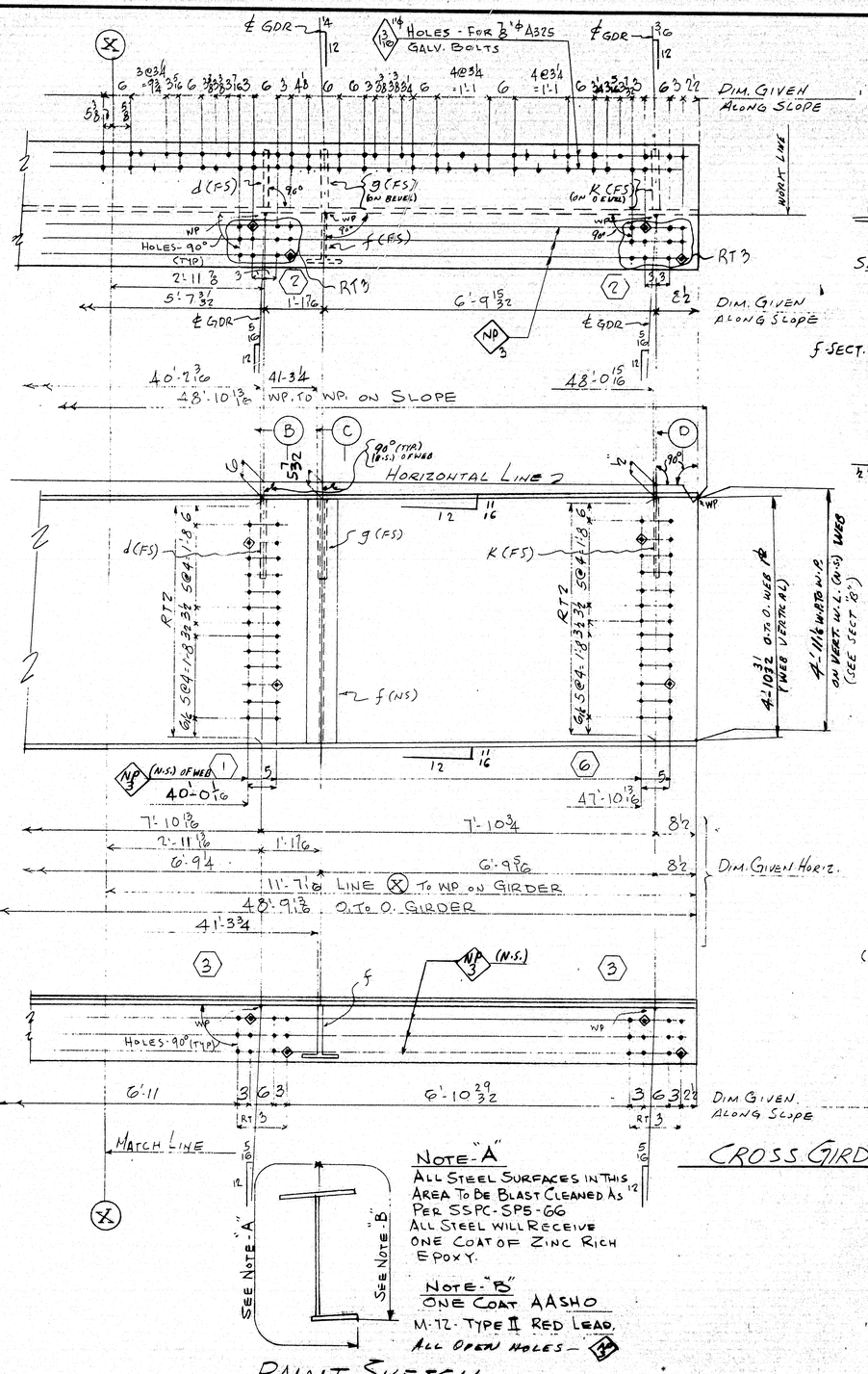
POTTSTOWN

CONTRACT SJ6249-030 DRAWING NO. 503

APPROVED: HARDESTY & HANOVER CONSULTING ENGINEERS 111 PARK AVE. NEW YORK 17, N.Y. SEP 30 1969

For location of details shown on this sheet refer to diagram.

108-17



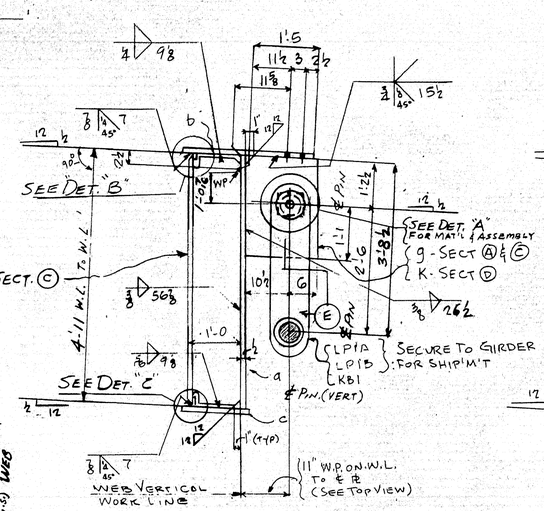
NOTE - "A"

ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-66
ALL STEEL WILL RECEIVE ONE COAT OF ZINC RICH EPOXY.

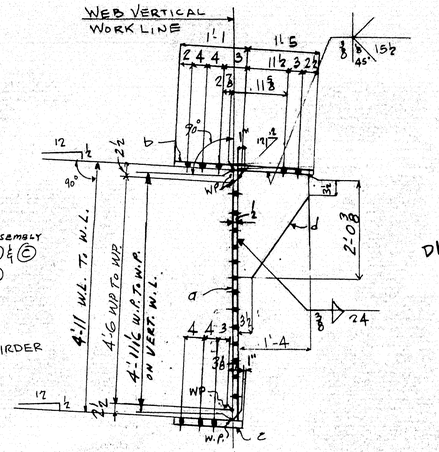
NOTE - "B"

ONE COAT AASHO M-72 TYPE II RED LEAD.
ALL OPEN HOLES — (3)

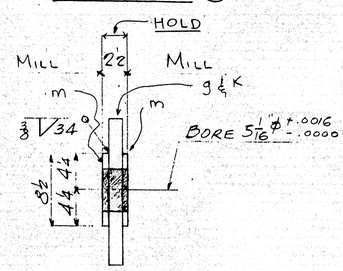
PAINT SKETCH



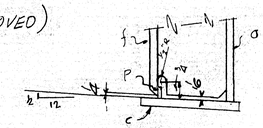
SECTION Ⓐ Ⓒ Ⓓ
(DEVELOPED)



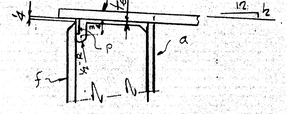
SECTION Ⓑ



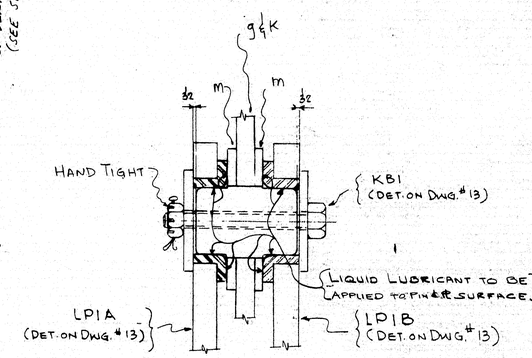
SECTION Ⓔ
(WITH LINK PL. MAT'L REMOVED)



DETAIL - C



DETAIL - B



DETAIL - "A"

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION Size	SECTION Size or Pounds	SECTION Thick	LENGTH Ft.	LENGTH In.	REMARKS	MILL ORDER LENGTH Ft.	MILL ORDER LENGTH In.	MILL ORDER Heat	MILL ORDER Item
1													
2				1-CROSS GIRDER - CG3									
3													
4	g	1	PLS	58 1/2		1/2	49	2 1/4	62 × 3 ×	50	0	24	26
5	b	1	PL	30		1/2	48	10 1/8		49	9	24	23
6	c	1	PLU	14		1	48	10 1/8		49	9	24	29
7	d	5	PL	16		3/4	2	1		20	0	24	43
8	f	6	IT	12	39.95		4	11 3/8		35	6	24	41
9	9	7	PL	16 1/2		1 1/2	2	4 3/8					J
10	K	1	PL	16 1/2		1 1/2	2	4 3/8					J
11													
12	LP1A	8							DET. ON DWG # 13				
13	LP1B	8							DET. ON DWG # 13				
14	KB1	8							DET. ON DWG # 13				
15	P1	8							" " "				
16													
17													
18	FWL	1	WD			4	97	9 1/2					
19	FWL	1	WD			5/16	97	9 1/2					
20	FW	1	WD			3/8	154	2 1/2					
21	FW	1	WD			5/16	9	1 1/2					
22	FW	1	WD			4	9	1 1/2					
23	T45D	1	WD			3/4	16	5 1/2					
24	T45D	1	WD			1 1/2	10	8					
25	T45B	1	WD			1/8	7	0					
26													
27													
28	M	16	PL	8 1/2		1/2	0	8 1/2	(MIS) CCE 3/4"				J
29	P	12	BR	1		3/8	0	11					J
30													
31													
32													
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35													
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37													
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42													
43													

D1

WORK THIS DWG. WITH DWG. # 503

PAY ITEM - 504.711

INST. 8W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS	CODE
ONE	CG3	GIRDER (60 1/2" × 30 3/4" × 48'-10 1/8")		030

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY S.S. Nishimura OCT 1 1969

CROSS GIRDER BETWEEN PIERS 4 & 5 Csfa. 534 51.07

HOLES MARKED RT TO BE SUB-PUNCHED 1/4" AND REAMED OR DRILLED FROM THE SOLID TO A METAL TEMPLET
RE-ENTRANT CUT 3/4"

SHALL RECEIVE ONE COAT OF ZINC RICH EPOXY UNLESS NOTED (3)

ALL OPEN HOLES

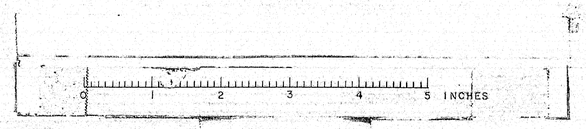
NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE ETOOL-48-EB LOW HYDROGEN ELECTRODES OR EQ. FOR ALL WELDING.

MATERIAL - ASTM - A36
RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
REAM - AS NOTED
MILLING - AS NOTED
PAINT - SEE PAINT SKETCH
WELDING - AS NOTED
SHOP CONTACT SURFACES NOT PAINTED
A325 FIELD BOLTS - Plain & Galv.

TEMP.	MAINE STATE HIGHWAY COMMISSION
SUPT.	PISCATAQUA RIVER BRIDGE
LAYOUT	PROJECT NO. I-95-1 (22) 16
FITTED	CONT. N.H. & NEW HAMPSHIRE APPROACH
SHOP INSP.	BETHLEHEM STEEL CORPORATION
PC. WK.	FABRICATED STEEL CONSTRUCTION
B. SMITH	POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MCH.	IN CHARGE DCS MADE BY JRP 8-15-69
ERECT.	CHECKED BY C.B. 8-27-69 TRACED BY
O. INSP.	REVISED D1 INST COST LAST ASSEM. MK.
WEIGHTS	SHOP NO. 2 CONTRACT 56249-030 SHEET 503 A

PRINT 1 SHEET 1/28-70



DIMENSIONS GIVEN ALONG SLOPE

DIMENSIONS GIVEN ALONG SLOPE

DIMENSIONS GIVEN HORIZ. FOR (FS) PLATES

DIMENSIONS GIVEN HORIZ.

DIMENSIONS GIVEN ALONG SLOPE

WORK LINE

HOLES FOR 7/8 ϕ A325 BOLTS GALV. (U.N.)

HOLES - REAM TO 15/16 ϕ IN FIELD

90° FOR HOLES (TYP)

HORIZONTAL LINE

48'-11¼ WP. TO WP. ON SLOPE

4'-11/16 WP TO WP ON WEB NO. MEASURED 2'-0" FROM FACE OF TOP FLG. 4'-10⅜ WEB 12 (WEB VERTICAL)

37'-2⅞ WP ON GIRDER TO LINE
48'-10¼ O. TO O. GIRDER

MATCH LINE

CROSS GIRDER - CG 4

WORK THIS DWG. WITH DWG. # 504A

FOR NOTES SEE DWG. NO. 504A

HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
SEP 30 1969

	MATERIAL	RIVETS OR BOLTS	OPEN HOLES	A325 FIELD BOLTS	SHOP CONTACT SURFACES	PAINT
SUBMITTAL						
DATE						

NO.	DATE	INIT.	REVISION
0			
9			
8			
7			
6			
5			
4			
3			
2			
1			

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: PISCATAQUA RIVER BRIDGE
PROJECT Nº I-95-1(22)16
CONT. Nº 3 NEW HAMPSHIRE APPROACH

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM: POTTSTOWN WORKS
MADE BY: JRP DATE: IN CHARGE: BRB
CHECKED BY: DATE: 9-4-69 SHOP NO.: 2
CONTRACT: SJ6249-090 DRAWING NO.: 504

34663 (1-65)

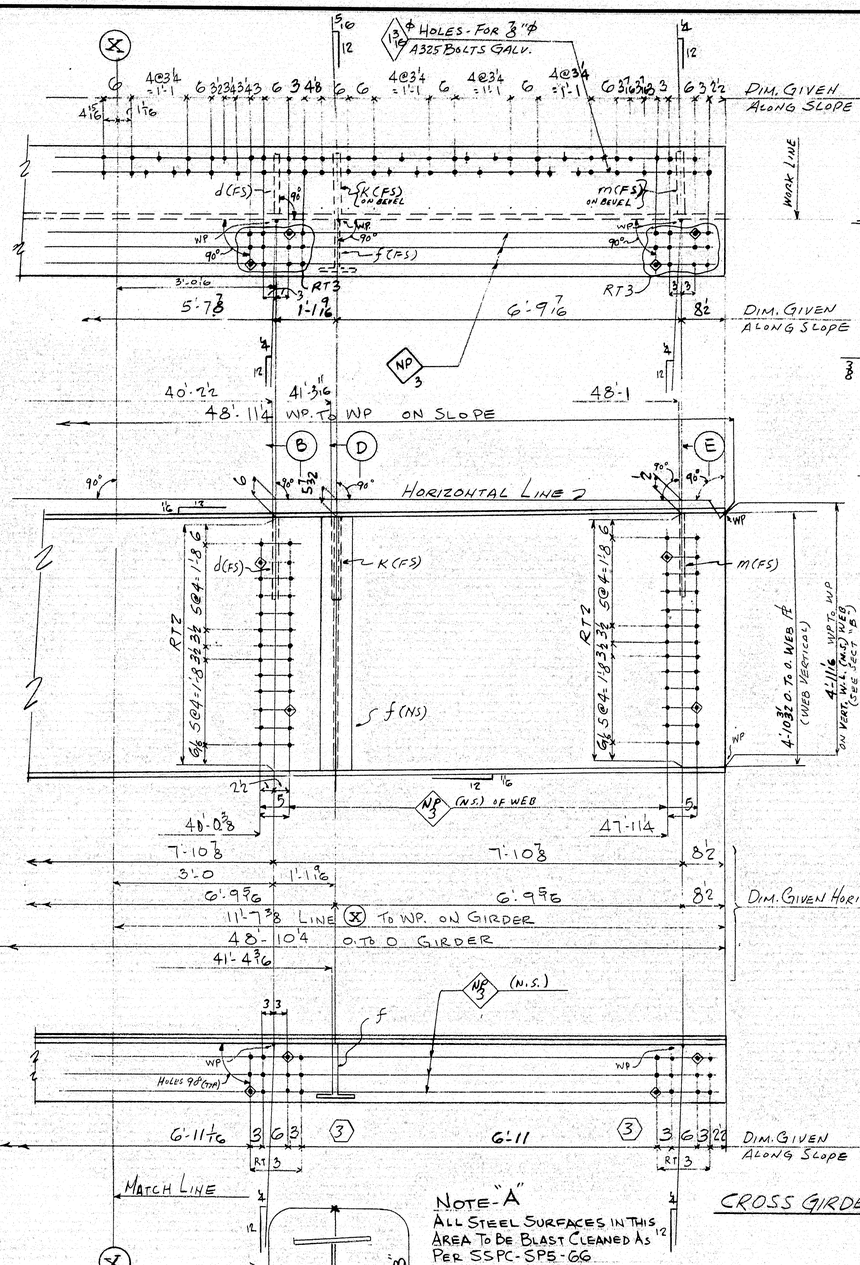
108-19

SEP 26

For location of details shown on this sheet refer to diagrams.

	a	b	c
a			
b			
c			
d			
f			
g			
h			
k			
m			
n			
p			
t			
w			
y			

0 1 2 3 4 5 INCHES

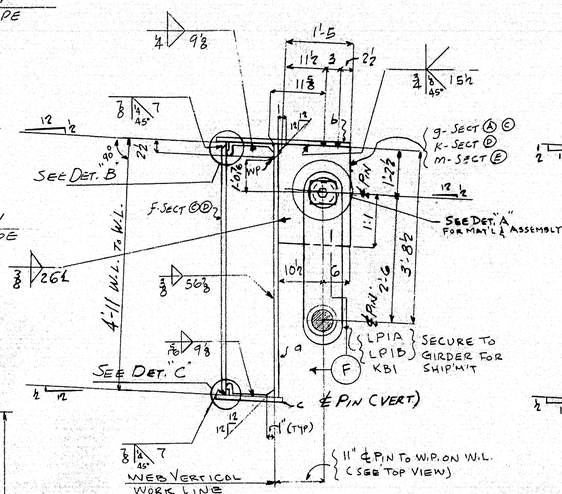


CROSS GIRDER - CG4

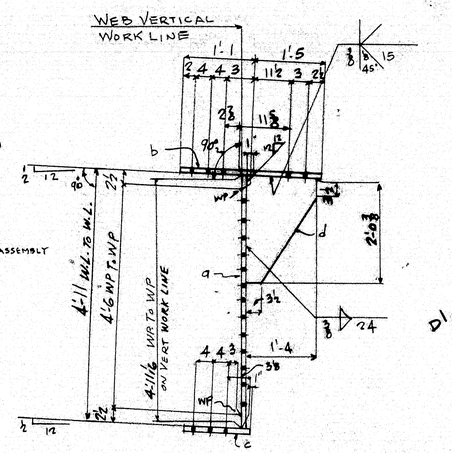
NOTE-"A"
ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-66. ALL STEEL WILL RECEIVE ONE COAT OF ZINC RICH EPOXY.

NOTE-"B"
ONE COAT AASHO M-72-TYPE II RED LEAD. ALL OPEN HOLES - (15)

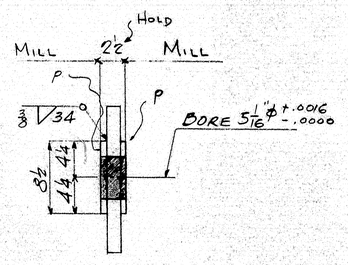
PAINT SKETCH



SECTION Ⓐ Ⓒ Ⓓ Ⓔ

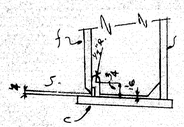


SECTION Ⓑ

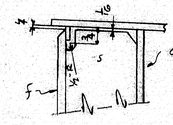


SECTION Ⓕ (WITH LINK PL REMOVED)

DETAIL-"A"



DETAIL-"C"



DETAIL-"B"

	a	b	c
a			
b			
c			
d			
f			
g			
h			
k			
m			
n			
p			
s			
t			
w			
y			

SHOP BILL

Mark	Assembly Mark	No.	Shape	Section Size	Section Size or Pounds	Section Thick	Length ft.	Length in.	Remarks
1									
2			1-CROSS GIRDER - CG4						
3									
4	g	1	PL	58½		½	49	2⅛	62# Ht
5	b	1	PLU	30		½	48	11¼	
6	c	1	PLU	14		1	48	11¼	
7	d	5	PL	16		¾	2	1	
8	f	6	IT	12	39.95		4	11⅝	
9	g	2	PL	16½		1½	2	#8	
10	K	5	PL	16½		1¼	2	4⅜	
11	m	1	PL	16½		1½	2	4⅜	
12	P	16	PL	8½		½	0	8½	(MIS) (CCE 8½)
13	S	12	BR	1		½	0	11	
14									
15									
16	LPIA	8							Det on Dwg # 13
17	LPIB	8							Det on Dwg # 13
18	KBI	8							Det on Dwg # 13
19	PI	8							" " " "
20									
21									
22									
23	FWL	1	WD			¼	97	10½	
24	FWL	1	WD			5/16	97	10½	
25	FW	1	WD			⅜	154	2½	
26	FW	1	WD			5/16	9	1½	
27	FW	1	WD			¼	9	1½	
28	TASD	1	WD			¾	6	5½	
29	TASB	1	WD			1½	10	8	
30	TASB	1	WD			⅜	7	0	
31									
32									
33									
34									
35									
36									
37									
38									
39									
40									
41									
42									

MILL CHECK

Mark	Length ft.	Length in.	Prog.
g	50	0	24
b	49	9	24
c	49	9	24
d	20	0	24
f	35	6	24
g			J
K			J
m			J
P			J
S			J

PAY ITEM - 504.711

INST. 8E

REQUIRED LIST

Qty	Shipping Mark	Description	Remarks	Code
ONE	CG4	GIRDER (60'-4" x 30¾" x 49'-2 11/16")		030

HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
S. S. Hardesty OCT 8 1969

CROSS GIRDER BETWEEN PIERS 9 & 85 (Sta. 534+51.67)

ALL OPEN HOLES shall receive one coat of zinc rich epoxy unless noted (NP 3)

HOLES MARKED RT TO BE SUB-PUNCHED AND REAMED OR DRILLED FROM THE SOLID TO A METAL TEMPLET

Re Entrant Cuts - ¾"

Mat'l Thick at point of welding - Inches	Minimum Fillet Size Inches
To ½" incl.	¼
Over ½" to ¾" incl.	5/16
Over ¾" to 1" incl.	⅜
Over 1" to 1½" incl.	½
Over 1½" to 2" incl.	⅝
Over 2" to 2½" incl.	¾
Over 2½" to 3" incl.	⅞
Over 3" to 4" incl.	1
Over 4" to 5" incl.	1⅛
Over 5" to 6" incl.	1¼

USE E70XX, LH OR LOW HYDROGEN ELECTRODES OR EQUAL FOR WELDING.

Material - ASTM - A36
RIVETS None
OPEN HOLES 15/16 ϕ unless noted
REAM - As Noted
MILLING - None
PAINT - See Paint Sketch.
WELDING - As Noted
SHOP CONTACT SURFACES NOT PAINTED
A325 FIELD BOLTS - Plain & Galv.

TEMP.	
DUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MISC.	
STRUCT.	
O. INSP.	
WEIGHTS	

MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT No. I-95-1 (22) 16
CONT. N.H. & NEW HAMPSHIRE APPROACH
BETHLEHEM STEEL CORP.
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
IN CHARGE BKB MADE BY JRP
CHECKED BY EAA-67 TRACED BY
REVISED D1 not sent LAST ASSEM. MK.
SHOP NO. 2 CONTRACT 56249-030 SHEET 504 A

1/08-20

SEP 26 1969

DIMENSIONS GIVEN ALONG SLOPE

DIMENSIONS GIVEN ALONG SLOPE

DIMENSIONS GIVEN HORIZ. FOR (FS) PLATES

DIMENSIONS GIVEN HORIZ.

DIMENSIONS GIVEN ALONG SLOPE

Φ 3/16 HOLES - FOR 7/8" Φ A325 BOLTS - GALV. (UNLESS NOTED)

Φ 11/16 HOLES - REAM TO 15/16 Φ IN FIELD

WORK LINE

90° FOR HOLES (TYP)

HORIZONTAL LINE

57'-4 25/32 WP TO WP ON SLOPE

38'-4 11/16 WP TO LINE (X)

57'-3 3/8 O. TO O. GIRDER

MATCH LINE (X) (Sta. 529+73.33)

CROSS GIRDER

4'-11 1/16 WP TO WP ON VERT. WEB (N.S.) WEB (SEE SECT. 'B') 4'-10 31/32 O. O. WEB (WEB VERTICAL)

DETAIL-B

DETAIL-C

CROSS GIRDER - CG5

WORK THIS DWG. WITH DWG #505A

FOR NOTES SEE DWG. Nº 505A

APPROVED: HARDESTY & HANOVER CONSULTING ENGINEERS 205 PARK AVE. NEW YORK 17, N.Y.

BY S.S. Nishimura SEP 30 1969

SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

NO.	DATE	INIT.
	REVISION	

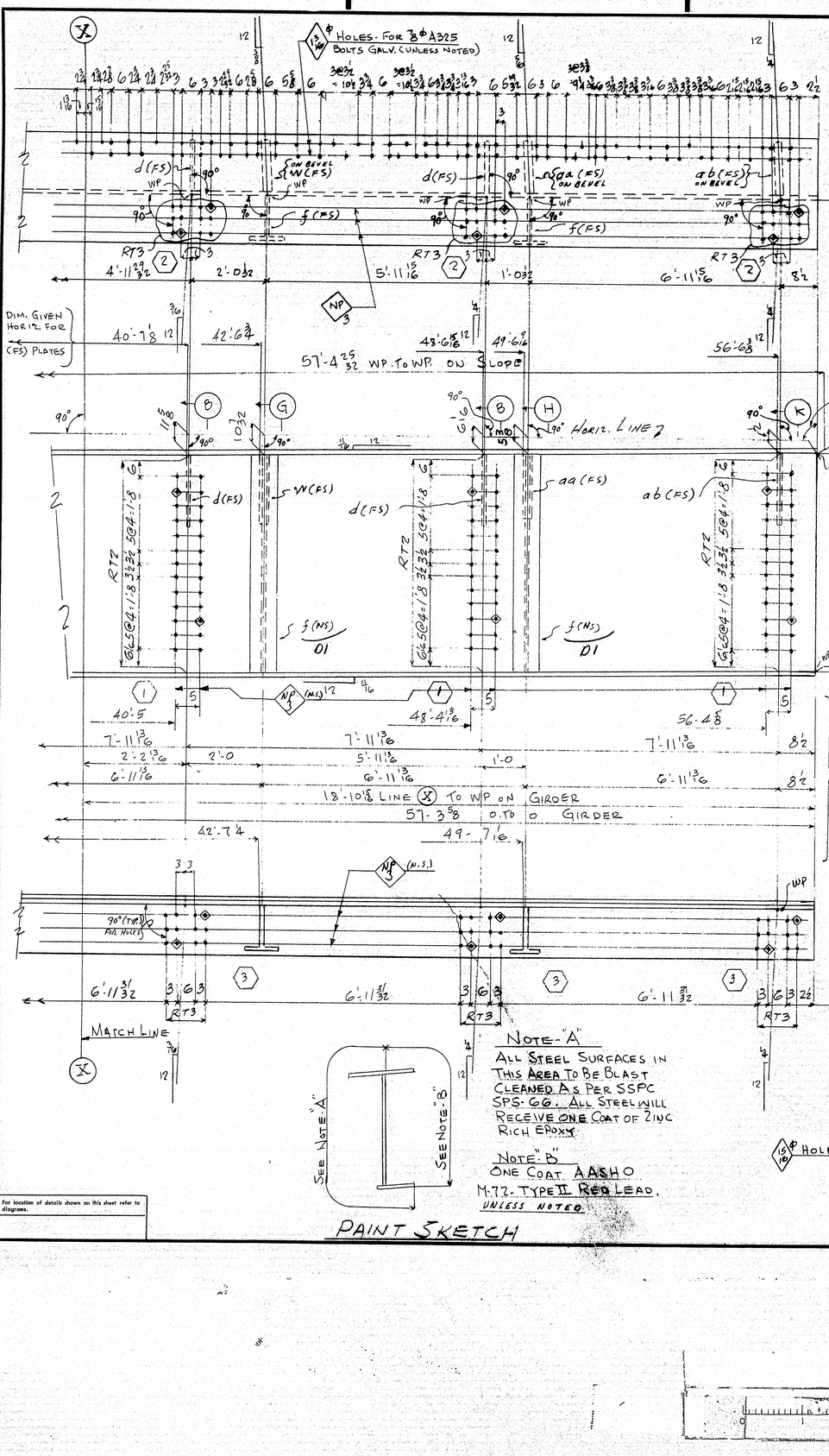
CONTRACT: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
STRUCTURE: PROJECT Nº I-95-1(77)16
CONT. Nº 3 NEW HAMPSHIRE APPROACH

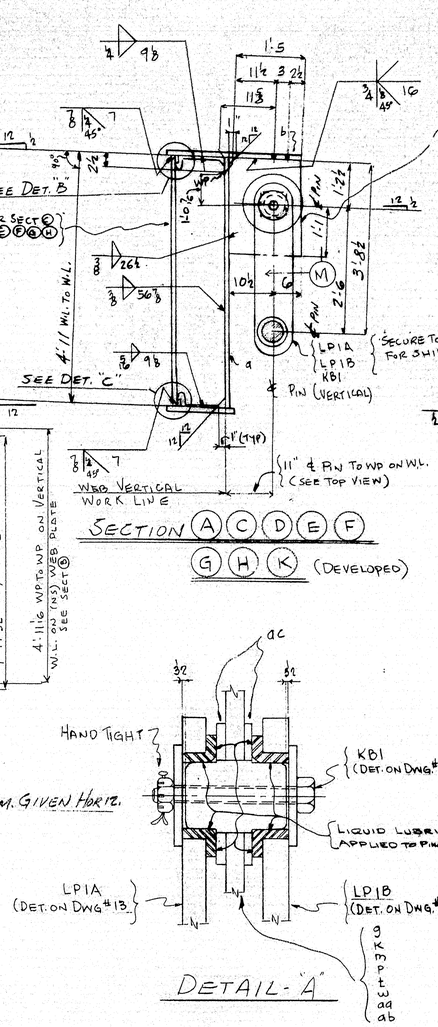
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

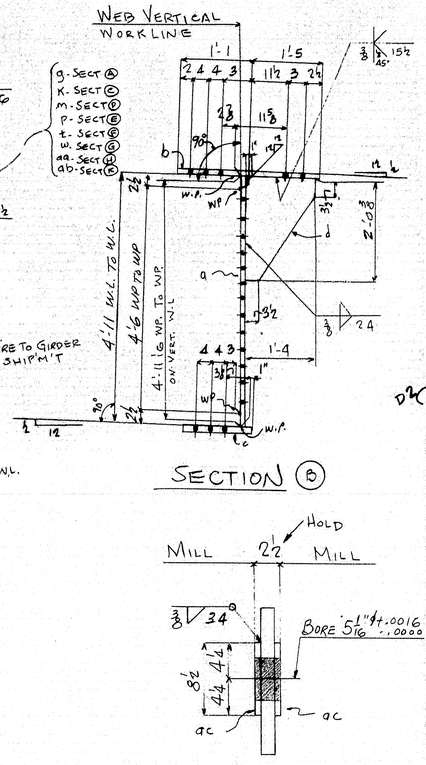
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY JRP DATE IN CHARGE BRB
CHECKED BY E DATE 9-4-69 SHOP NO. 2
CONTRACT SJ6249-030 DRAWING NO. 505

For insertion of details shown on this sheet refer to diagrams.

WS2: PREP TAPE 108-21







Shop Bill									Mill Order	
Item	Assembly Mark	No.	Shape	Section Size	Section Size or Pounds	Section Thick	Length Ft.	Length In.	Remarks	Length Ft.	Length In.	Item Page	Item Line
				I-Cross Girder CG-5									
4	a	1	PL	58 31/32		½	57	8 15/16	62 x ½	58	8½	24	24
5	b	1	PL	30		½	57	4 25/32		58	5½	24	21
6	c	1	PLD	14		1	57	4 25/32	2:10 (cab)	58	5½	24	27
7	d	6	PL	16		¾	2	1		10	0	24	93
8	f	7	IT	12	39.95		4	11⅜	4'-8½ (cab)	05	6	24	91
9	g	1	PL	16½		1½	2	4 15/16				J	
10	K	1	PL	16½		1½	2	4⅜					
11	m	1	PL	16½		1½	2	4⅜					
12	P	2	PL	16½		1½	2	4⅜					
13	t	1	PL	16½		1½	2	4⅜					
14	w	1	PL	16½		1½	2	4⅜					
15	aa	1	PL	16½		1½	2	4⅜					
16	ab	1	PL	16½		1½	2	4⅜					
17													
18	ac	18	PL	8½		½	0	8½	M15 (CCF 8½")			J	
19	ad	14	BR	1		½	0	11				J	
20													
21	LPIA	9							Det. on Dwg # 13				
22	LPIB	9							Det. on Dwg # 13				
23	KB1	9							Det. on Dwg # 13				
24	P1	9							" " " "				
25													
26													
27	FWL	1	WD			¼	114	9½					
28	FWL	1	WD			5/16	114	9½					
29	FW	1	WD			⅜	129	4¼					
30	FW	1	WD			5/16	10	7¾					
31	FW	1	WD			¼	10	7¾					
32	T45D	1	WD			¾	7	6					
33	T45D	1	WD			1½	12	0					
34	T45B	1	WD			⅞	8	2					
35													
36													
37													
38													
39													
40													
41													
42													
43													
44													
45	Loose Material												
46	SH107	164	PL	12		⅛	1	4				J	
47													
48													
49													
50													
51													
52													
53													
54													
55													

Work This Dwg. With Dwg # 505

Cross Girder @ Pier 13 (Sta. 329+73.33)

Pay Item - 504.711

Installment					Required List				
17E	17W	8W	8E	13E	Qty	Shipping Mark	Description	Remarks	Code
				1	ONE	CG5	Girder (60⅛ x 30⅜ x 57.8¾)		030
40	36	28	28	32	164	SH107	Shim		030

Approved:- HARDESTY & HANOVER, Consulting Engineers, 101 Park Ave. New York 17, N.Y. S.S. Yoshimura Oct 8 1969

Holes marked RT to be sub-punched - ¼" and reamed or drilled from the solid to a metal templet

All open holes - Shall receive one coat of Zinc Rich Epoxy. Unless Noted (HP 3)

No tack welding permitted unless shown or incorporated in final weld.

Use E7016, 18, 28 low hydrogen electrodes or Gr. 3 A-5.5 for welding.

Max. Thick. at Point of Welding - Inches	Minimum Preheat and Interpass Temp. - Deg. F
To 3/4" Incl.	50 Deg.
Over 3/4" to 1 1/2"	70 Deg.
Over 1 1/2" to 2 1/2"	150 Deg.
Over 2 1/2"	225 Deg.

Material ASTM-A36
Rivets or Bolts None
Open Holes 15/16ϕ Unless Noted
A325 Field Bolts ⅞ϕ Plain & Galv.
Shop Contact Surfaces Not Painted
Mill - None
Ream - As Noted
Paint - See Paint Sketch
Weld - As Noted

Submittal	1	2	3	4	5	6	7	8	9	0
Date										

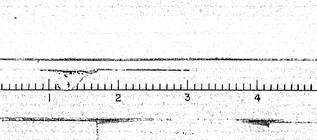
No.	Date	Init.	Revision
D1	11/24/69	JK	
D2	12/10/69	JK	
D3	1/14/70	JK	

Customer: Maine State Highway Commission
Piscataqua River Bridge
Structure: Project No. I-95-1(22)16
Cont. No. 3 New Hampshire Approach

BETHLEHEM STEEL CORPORATION
Fabricated Steel Construction
Pottstown Drafting Room, Pottstown, Works
Made by JRP Date _____ In Charge BKB
Checked by _____ Date 9-4-69 Shop No. 2
Contract 96249-030 Drawing No. 505A

Note "A"
All steel surfaces in this area to be blast cleaned as per SSPC SPS-6G. All steel will receive one coat of Zinc Rich Epoxy

Note "B"
One coat AASHO M-72-Type II Red Lead, unless noted.



For location of details shown on this sheet refer to diagrams.

	a	b	c
a			
b			
c			
d			
f			
g			
g1			
k			
m			
p			
s			
t			
w			
y			

188-22