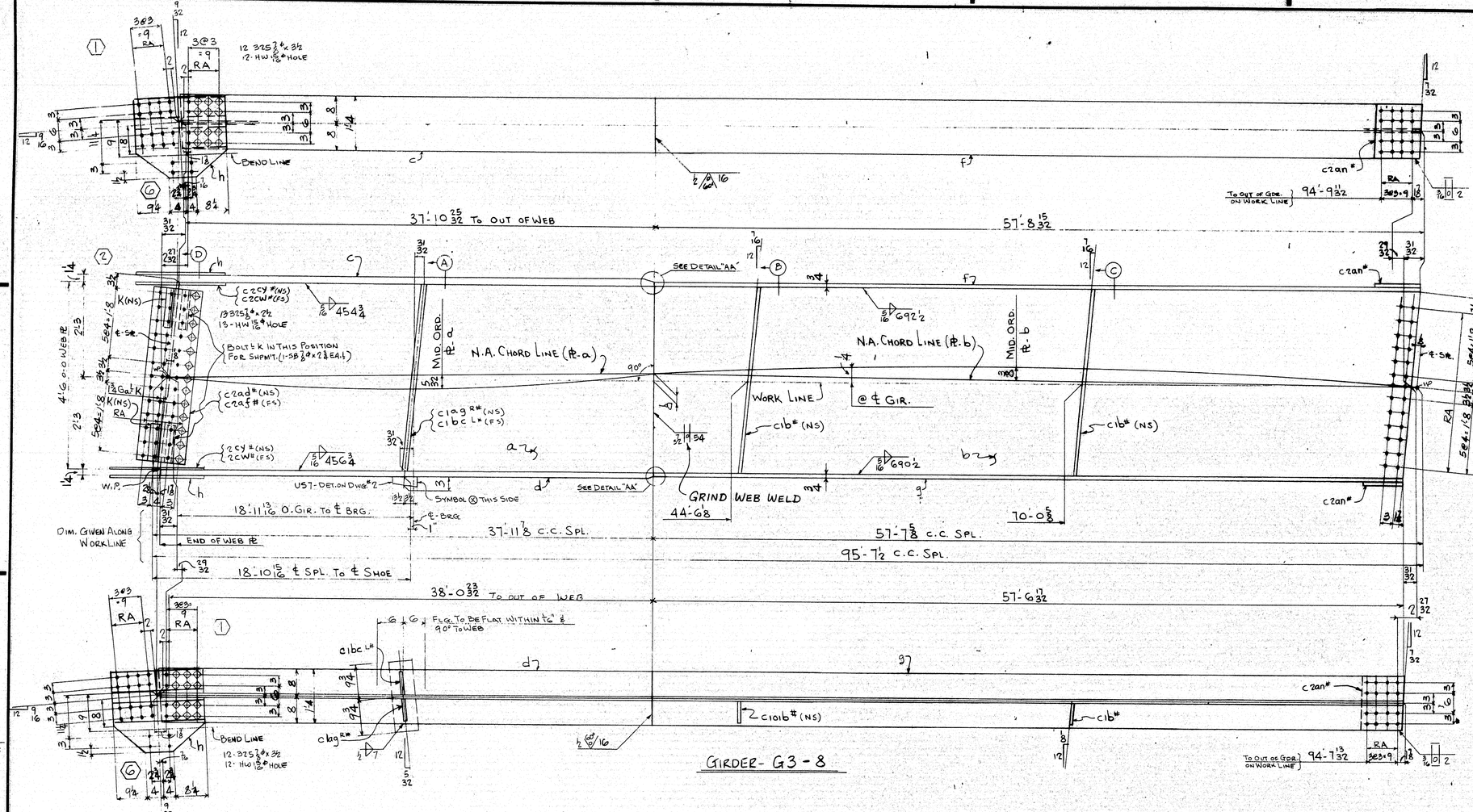
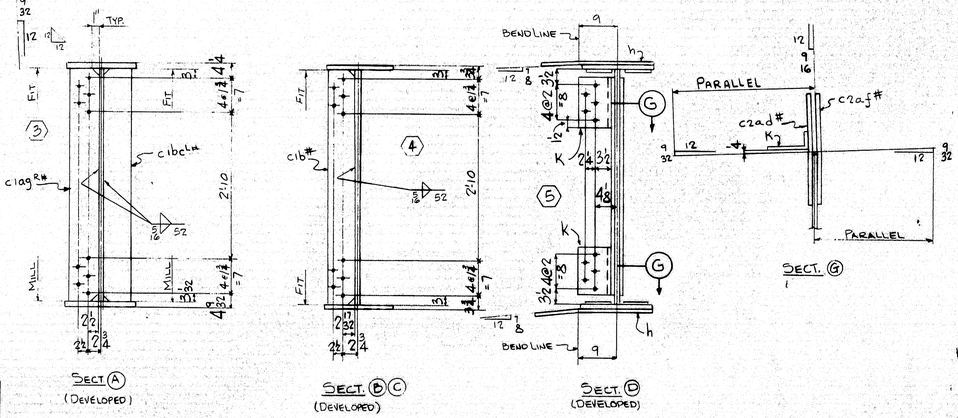




For location of details shown on this sheet refer to diagrams.

E11

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 E7018, 16, 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"	180 DEG.
OVER 2 1/2"	235 DEG.

SHOP BILL

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.	MILL ORDER ITEM PAGE	MILL ORDER ITEM LINE
1				ONE-GIRDER-G3-8									
2	a	1	PL	54		1/2	38	0 23/32	56x1/2	38	9 3/4	46	18
3	b	1	PL	54		1/16	57	8 15/32	56 1/2 x 1/16	58	8 1/4	44	17
4	c	1	PLV	16		1/4	37	10 13/16		38	7 3/4	40	18
5	d	1	PLV	16		1/4	38	0 7/8		38	7 3/4	40	18
6	f	1	PLV	16		3/4	57	8 5/8		58	2 4	37	15
7	g	1	PLV	16		3/4	57	6 1/16		58	2 4	37	15
8	h	2	PL	25 1/2		1/2	1	1 1/4	BENT	30	5 7/8	47	11C
9	K	2	L	7	34	1/2	0	11	BENT C.F. 7x4x1/2	40	0	36	39
10													
11													
12	c1b#	2	BR	7		1/2	4	6	F2E	13	10 4	47	19
13	c1ag#	1	BR	7 1/2		3/4	4	6 3/32	M1E - F1E	13	10 4	47	18
14	c1bc#	1	BR	7 1/2		3/4	4	6 3/32	M1E - F1E	13	10 4	47	18
15	c2cy#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
16	c2cw#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
17	c2ad#	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
18	c2af#	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
19	c2an#	2	PL	16		1/2	1	0 29/32				J	
20													
21													
22		2	SB	3/4			0	2 3/4				M	
23													
24													
25													
26	U57	1	UPPER SHOE						DET. ON DWG. #2				
27													
28		13	325	7/8			0	2 1/2					
29		24	325	3/4			0	3 1/2				M	
30		37	HW	1 3/4	16	8							
31													
32													
33													
34	EWL	1	WD			5/16	382	5					
35	EWS	1	WD			5/16	34	8					
36	FW	1	WD			1/2	1	2					
37	SDS	1	WD			1/16	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. - 3E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3 - 8	GIRDER (25 1/2 x 60 x 96'-10 8)	

PAY ITEM - 504.711

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

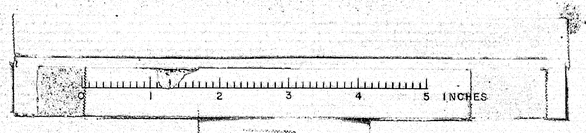
MATERIAL A36 STEEL
BOLTS 3/4 A325
OPEN HOLES 13/16
A325 FIELD BOLTS 3/4
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE I RED LEAD (LN)
REAM - AS NOTED

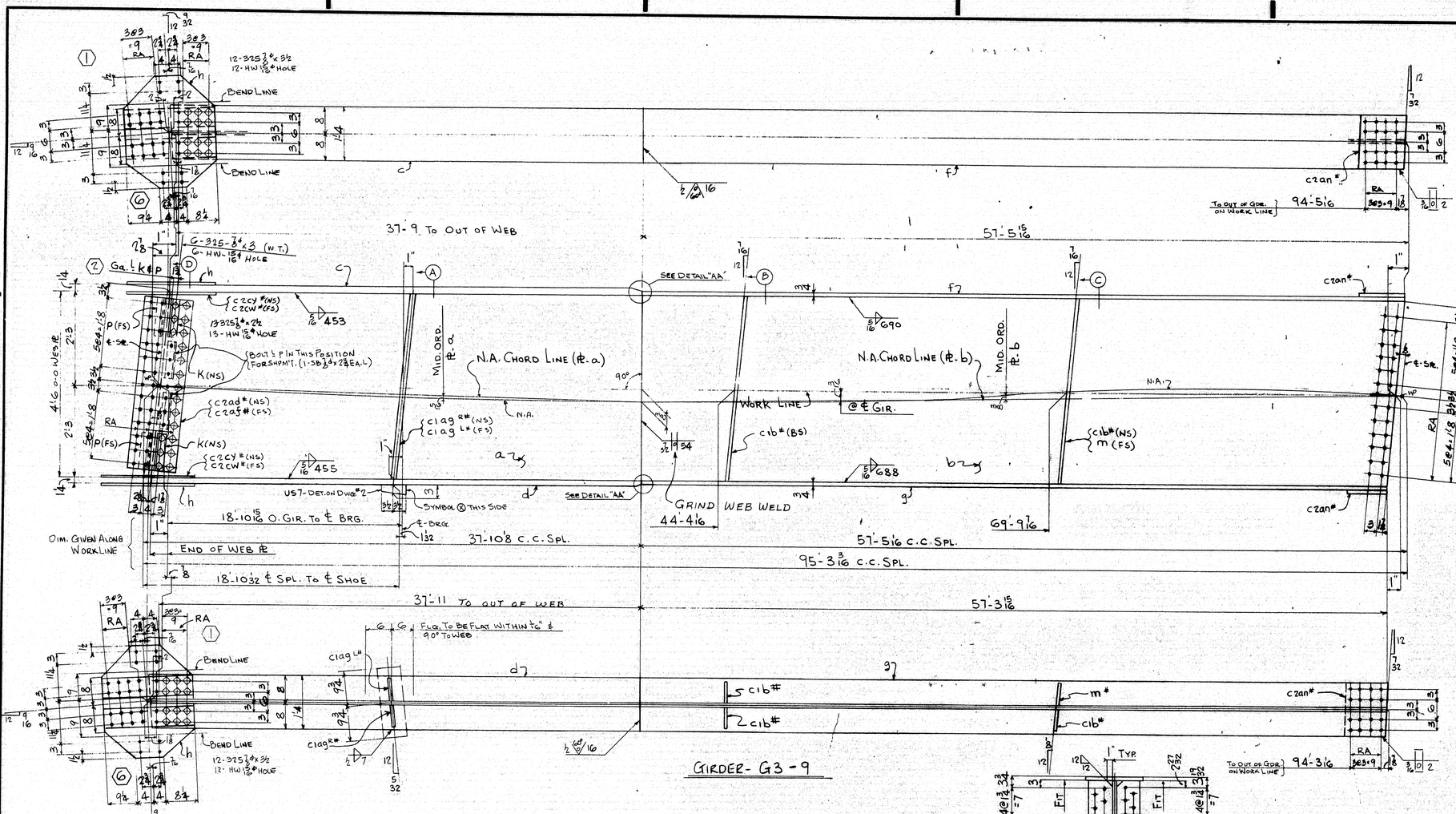
GIRDER - G3-8

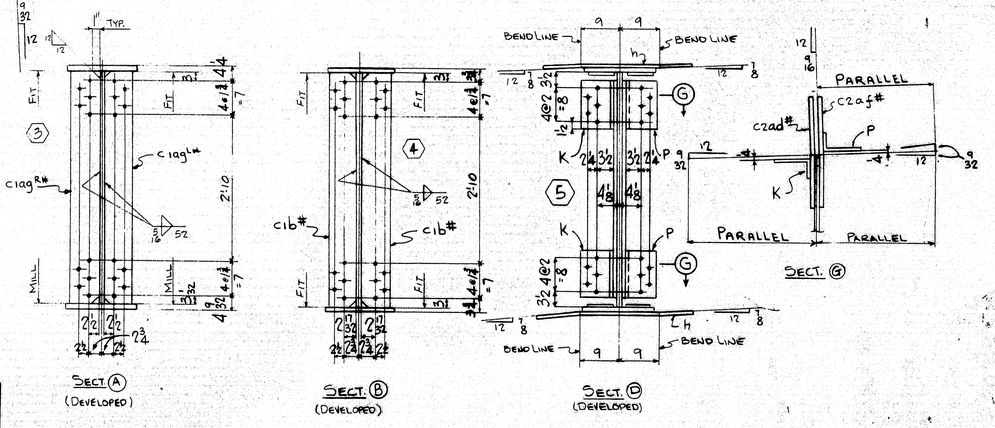
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. NO I-95-1(22)16
CONT. NO. 3 - NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY RHG DATE 9/9/69 IN CHARGE D.K. BERTOLET
CHECKED BY CB DATE 9/29/69 SHOP NO. 2
CONTRACT CT-6249-020 DRAWING NO. 337

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

107-157







LINE #	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WELD LENGTH FT.	WELD LENGTH IN.	WELD AREA
1		ONE	GIRDER	G3	-9							
2	a	1	PL	54		1/2	37	11	56 x 1/2	38	9 3/4	46 18
3	b	1	PL	54		1/16	57	5 15/16	56 1/2 x 1/16	58	8 1/4	24 17
4	c	1	PLV	16		1/4	37	9 13/16		38	7 3/4	40 18
5	d	1	PLV	16		1/4	37	11 13/16		38	7 3/4	40 18
6	f	1	PLV	16		3/8	57	6 1/16		58	2 1/4	37 18
7	g	1	PLV	16		3/8	57	4 1/16		58	2 1/4	37 18
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	BENT-C.F.T. 7x4x1/2	40	0	36 39
10	m	1	BR	7		1/2	4	6	F2E	13	10 1/4	47 19
11	P	2	L	7	3 1/4	1/2	0	11	BENT-C.F.T. 7x4x1/2	40	0	36 39
12												
13	c1b#	3	BR	7		1/2	4	6	F2E	13	10 1/4	47 19
14	c1ag#/	1	BR	7 1/2		3/4	4	6 3/32	MIE - FIE	13	10 1/4	47 18
15	c2cy#	2	BR	G 1/2		1/2	2	1 1/2		19	1	47 20
16	c2cw#	2	BR	G 1/2		1/2	2	1 1/2		19	1	47 20
17	c2ad#	1	PLV	13		3/8	4	2	BENT	33	6	47 11A
18	c2af#	1	PLV	13		3/8	4	2	BENT	33	6	47 11A
19	c2an#	2	PL	16		1/2	1	0 25/32				J
20												
21												
22		2	SB	7/8			0	2 3/4				M
23												
24												
25												
26	USI	1	UPPER SHOE						DET. ON DWG #2			
27		6	325	7/8			0	3				
28		13	325	7/8			0	2 1/2				
29		24	325	7/8			0	3 1/2				M
30		43	HW	1 1/4	1 5/16	5/16						
31												
32												
33												
34	FWL	1	WD			5/16	380	11 3/4				
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												
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INST.- 3E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-9	GIRDER (31 1/2 x 60 x 96-6)	

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY André Nourtsky OCT 29 1969

PAY ITEM - 504.711

GIRDER - G3-9

MATERIAL A36 STEEL
BOLTS 7/8" A325
OPEN HOLES 1 5/16"
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 (LIN)
REAM - AS NOTED

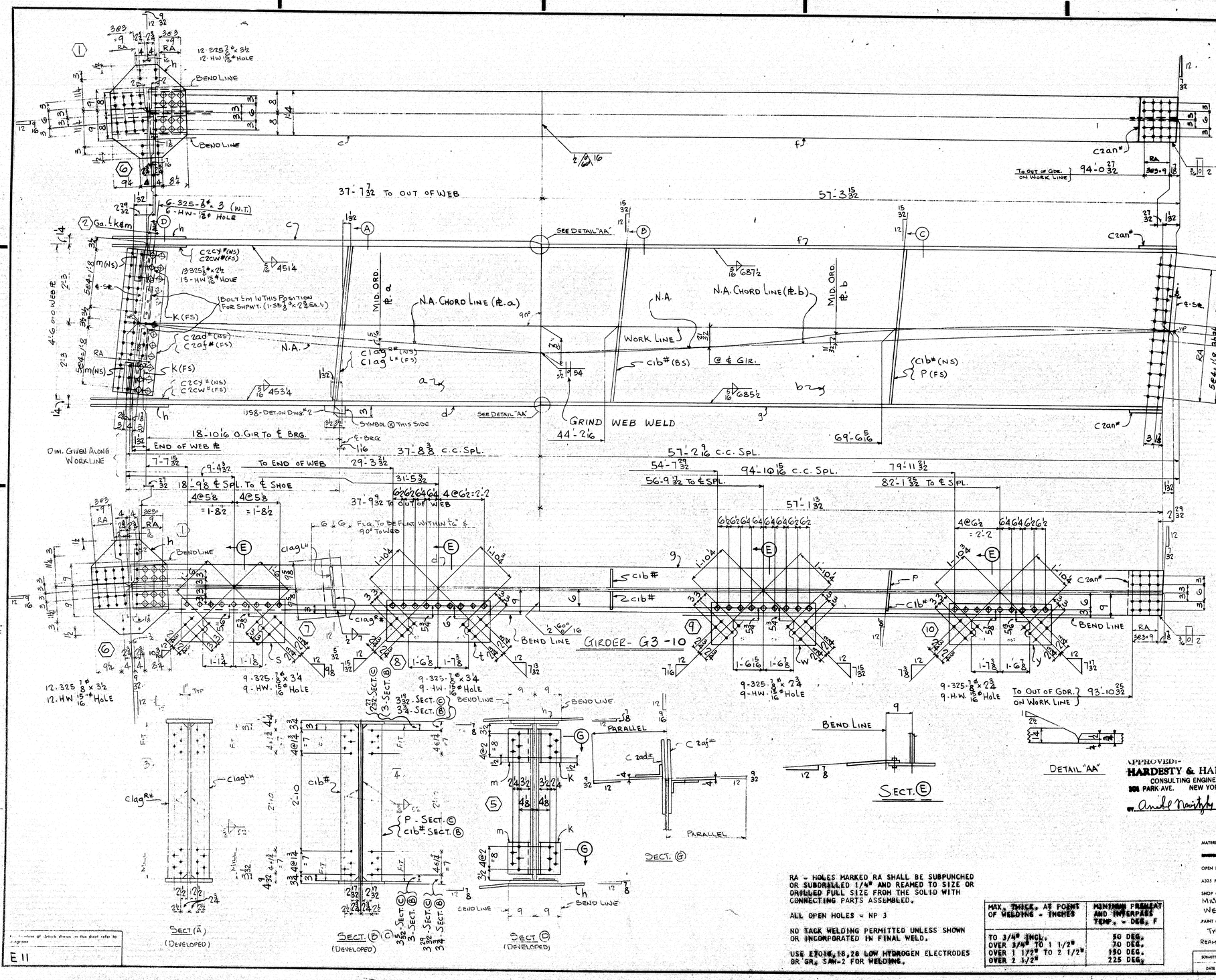
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. NO I-95-1(92)16
CONT. NO. 3 - NEW HAMPSHIRE APP
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY RHG DATE 9/10/69 IN CHARGE D.K. BERTOLET
CHECKED BY C.B. DATE 9/22/69 SHOP NO. 2
CONTRACT CJ-6769-070 DRAWING NO. 338

REVISION: NO. | DATE | INT.

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

For location of details shown on this sheet refer to diagrams.
E11

107-N-2



SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MAIN MEMBER LENGTH FT.	MAIN MEMBER LENGTH IN.	MAIN MEMBER PAGE
1		ONE	GIRDER	- G3	-10							
2	a	1	PL	54		1/2	37	9 3/4	54 x 1/2	38	9 3/4	46
3	b	1	PL	54		1/2	57	3 1/2	50 1/2 x 1/2	57	3 1/2	44
4	c	1	PLW	16		1/4	37	7 3/8		38	7 3/4	40
5	d	1	PLW	16	*	1/4	37	9 1/16		38	7 3/4	40
6	f	1	PLW	16		3/8	57	3 31/32		58	2 1/4	37
7	g	1	PLW	16		3/8	57	1 31/32		58	2 1/4	37
8	h	2	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 7/8	47
9	K	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7x4x1/2	40	0	36
10	m	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7x4x1/2	40	0	36
11	P	1	BR	7		1/2	4	6	F2E	13	10 1/4	47
12	S	1	PL	14 3/8		5/8	3	8	BENT			J
13	t	1	PL	14 1/2		5/8	4	6 1/2	BENT	26	0	28
14	w	1	PL	14 1/2		5/8	4	6	BENT	26	0	28
15	y	1	PL	14 1/2		5/8	4	6 1/2	BENT	26	0	28
16		2	SD	3/8	*		0	2 3/4				M
17												
18	c1ag#	1	BR	7 1/2		3/4	4	6 3/32	MIE - F1E	13	10 1/4	47
19	c1b#	3	BR	7		1/2	4	6	F2E	13	10 1/4	47
20	c2cy#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47
21	c2cw#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47
22	c2ad#	1	PLW	13		3/8	4	2	BENT	33	6	47
23	c2af#	1	PLW	13		3/8	4	2	BENT	33	6	47
24	c2an#	2	PL	16		1/2	1	0 3/32				J
25												
26	US8	1	UPPER SHOE						DET. ON DWG. #2			
27		6	325	7/8"			0	3				
28		13	325	7/8"			0	2 1/2				
29		24	325	7/8"			0	3 1/2				
30		79	HW	1 3/8"	15/16" Ø							M
31		18	325	7/8"			0	3 1/4				
32		18	325	7/8"			0	2 3/4				
33												
34	FWL	1	WD			5/16	379	7 3/4				
35	FW5	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	8	8				
39	SD	1	WD			3/16	0	8				
40												
41												
42												
43												
44												
45												
46												
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48												
49												
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51												
52												
53												
54												
55												

INST.-3E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-10	GIRDER (31 1/2 x 60 x 96'-2 3/8)	

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 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
101 PARK AVE. NEW YORK 17, N.Y.
BY Arnold Nortfy OCT 29 1969

PAY ITEM - 504.711

GIRDER - G3-10

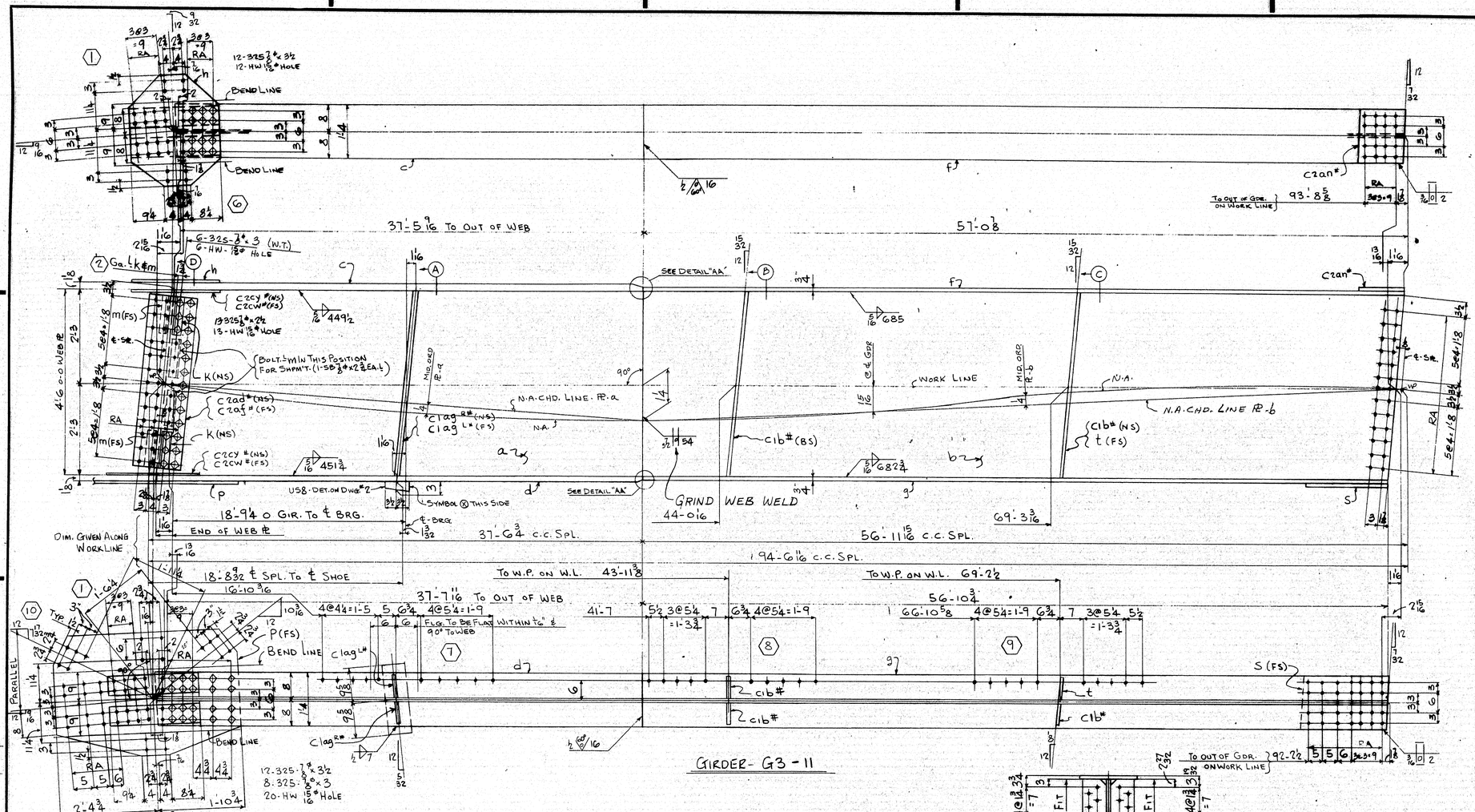
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE APP
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY RHG DATE 9/16/69 IN CHARGE D.K. BERTOLET
CHECKED BY CB DATE 9/29/69 SHOP NO. 2
CONTRACT CJ-6241-070 DRAWING NO. 339

REVISION: NO. | DATE | INIT.

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

107-16-3

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	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER WGT. PIECE
1		ONE-GIRDER-G3-11										
2	a	1	PL	54		1/2	37	7 1/16	54 x 1/2	38	0	4619
3	b	1	PL	54		1/16	57	0 3/8	56 1/2 x 1/16	57	8 1/2	4410
4	c	1	PLV	16		1/8	37	5 3/4		37	7 3/4	4139
5	d	1	PLV	16		1/8	37	7 3/8		38	7 3/4	41
6	f	1	PLV	16		3/4	57	1		57	3 1/4	3717
7	g	1	PLV	16		3/4	56	10 3/8		58	2 1/4	3715
8	h	1	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 3/8	4700
9	K	2	L	7	34	1/2	0	11	BENT C.F. 7x4x1/2	400		3689
10	m	2	L	7	34	1/2	0	11	BENT C.F. 7x4x1/2	400		3689
11	P	1	PL	35		5/8	4	3 1/2	BENT 36 x 5/8	27	3 3/8	4702
12	S	1	PL	16		1/2	2	4 3/4				J
13	t	1	BR	7		1/2	4	6	F2E	13	10 1/4	4719
14		2	SB	7/8*			0	2 3/4				M
15												
16	c1b#	3	BR	7		1/2	4	6	F2E	13	10 1/4	4719
17	c1ag L#	1	BR	7 1/2		3/4	4	6 3/32	MIE-FIE	13	10 1/4	4719
18	c2cy#	2	BR	6 1/2		1/2	2	1 1/2		19	1	4720
19	c2cw#	2	BR	6 1/2		1/2	2	1 1/2		19	1	4720
20	c2ad#	1	PL	13		3/8	4	2	BENT	33	6	47 11A
21	c2af#	1	PL	13		3/8	4	2	BENT	33	6	47 11A
22	c2an	1	PL	16		1/2	1	0 25/32				J
23												
24												
25												
26	USB	1	UPPER SHOE						DET. ON DWG #2			
27		14	325	7/8*			3					
28		13	325	7/8*			0	2 1/2				
29		24	325	7/8*			0	3 1/2				M
30		51	HW	13/16*		5/16						
31												
32												
33												
34	FWL	1	WD			5/16	378	1 3/4				
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.- 3E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-11	GIRDER (35 x 60 x 97'-1")	

PAY ITEM - 504.711

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

MIN. SIZE OF WELDS - INCHES	PREHEAT TEMP. - DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	150 DEG.
OVER 1 1/2" TO 2 1/2"	225 DEG.
OVER 2 1/2"	225 DEG.

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 GAS WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7015, E8015, E8018 C3 OR E8018 C3 ELECTRODES OR AS SPEC. 1441.2 FOR WELDING.

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 COAL COAT AASHO-M72 - TYPE I RED LEAD (LN)
REAM - As Noted

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 RMG DATE 9/18/69 IN CHARGE D.K. BERTOURT
CHECKED BY C.B. DATE 9/27/69 SHOP NO. 2
CONTRACT CT-6299-020 DRAWING NO. 340

GIRDER - G3-11

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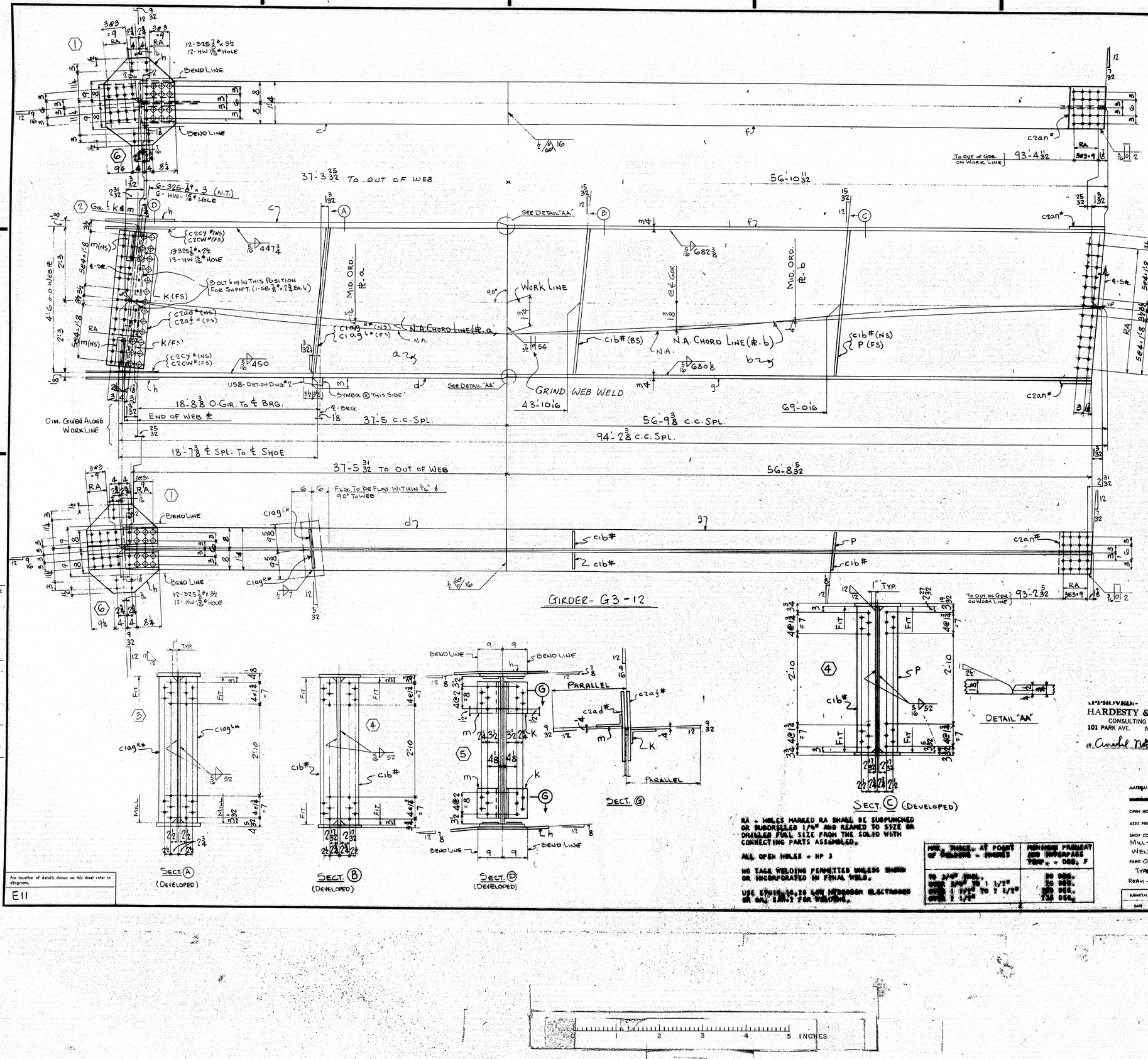
5			L
4			
3			
2			
1			

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

For location of details shown on this sheet refer to diagrams
E11

107 - 165

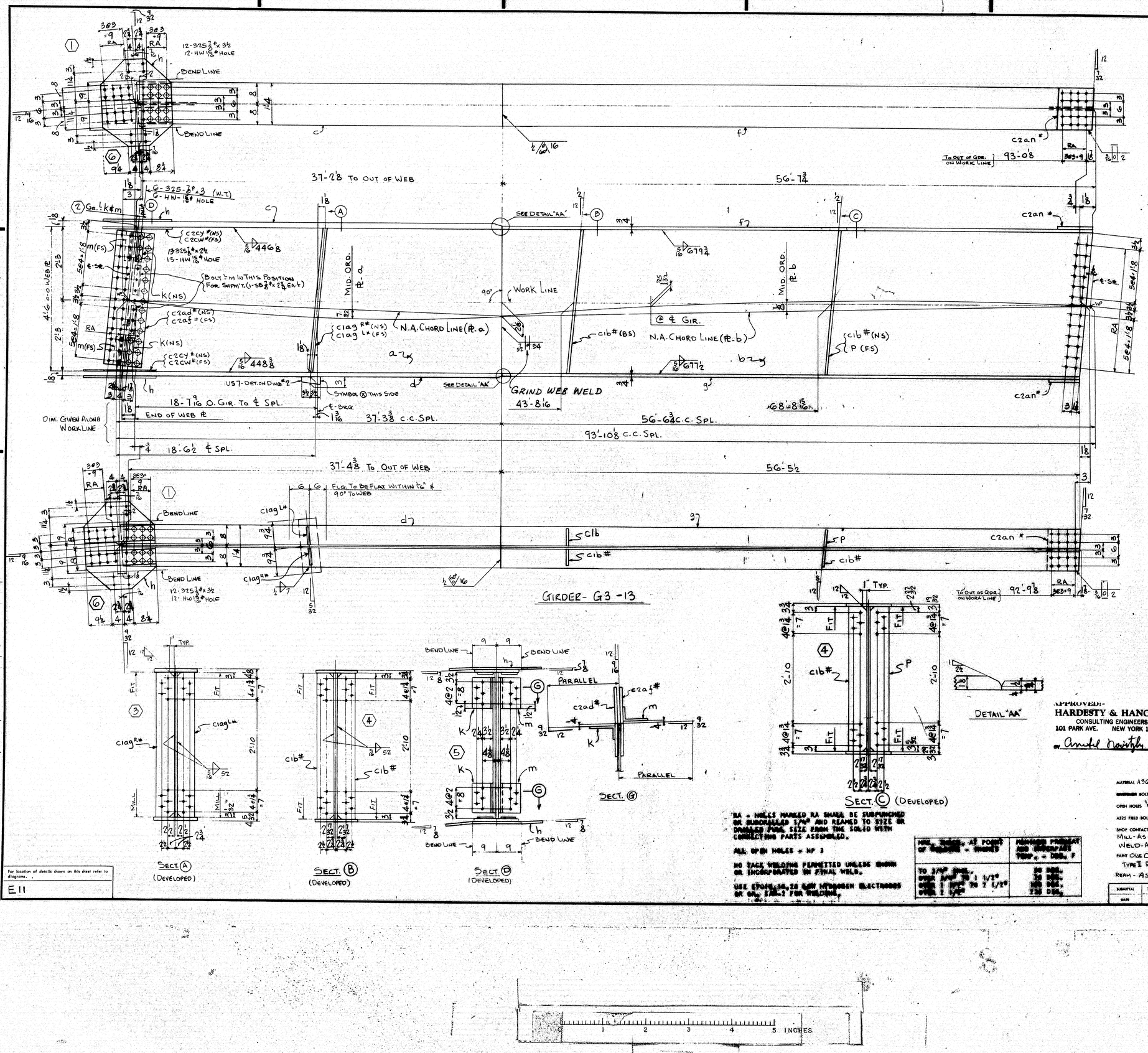


SHOP BILL

LOT	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	THICK	LENGTH FT.	LENGTH IN.	REMARKS
1			ONE GIRDER G3-12						
2	a	1	PL	54		1/2	37	5 31/32	56 x 1/2
3	b	1	PL	54		1/16	56	10 31/32	56 1/2 x 1/16
4	c	1	PLU	16		1/8	37	3 15/16	
5	d	1	PLU	16		1/8	37	6 8	
6	f	1	PLU	16		3/4	56	10 1/2	
7	g	1	PLU	16		3/4	56	8 15/16	
8	h	2	PL	25 1/2		1/2	2	7 1/2	BENT
9	K	2	L	7	34	1/2	0	11	BENT C.F. 7x4x1/2
10	m	2	L	7	34	1/2	0	11	BENT C.F. 7x4x1/2
11	P	1	BR	7		1/2	4	6	F2E
12									
13									
14	c1b#	3	BR	7		1/2	4	6	F2E
15	c1ag#	1	BR	7 1/2		3/4	4	6 3/32	MIE-FIE
16	c2cy#	2	BR	6 1/2		1/2	2	1 1/2	
17	c2cw#	2	BR	6 1/2		1/2	2	1 1/2	
18	c2ad#	1	PLU	13		3/8	4	2	BENT
19	c2af#	1	PLU	13		3/8	4	2	BENT
20	c2an#	2	PL	16		1/2	1	0 25/32	
21									
22		2	SB	3/8 ϕ			0	2 3/4	
23									
24									
25									
26	USB	1	UPPER SHOE						DET. ON DWG #2
27		6	325	1/2 ϕ			0	3	
28		13	325	3/4 ϕ			0	2 1/2	
29		24	325	1 ϕ			0	3 1/2	
30		43	HW	1 1/2	15/16	5/16			
31									
32									
33									
34	EWL	1	WD			5/16	376	8 1/2	
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									

MILL ORDER

LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM LOT
38	0	46	19
		44	18
37	7 3/4	41	39
38	7 3/4	41	38
57	3 1/4	37	17
57	3 1/4	37	17
30	5 3/8	47	10
40	0	36	39
40	0	36	39
13	10 1/4	47	19
13	10 1/4	47	19
13	10 1/4	47	18
19	1	47	20
19	1	47	20
33	6	47	11A
33	6	47	11A
			J
			M
			M



SHOP BILL

MARK	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
		ONE	GIRDER	G3	-13							
2	a	1	PL	54		½	37	4⅜	56 × ½	38	0	46 19
3	b	1	PL	54		½	(56	7¾	) DI 56½ × ½	57	8½	44 10
4	c	1	PLV	16		⅛	37	2⅝		37	7¾	41 32
5	d	1	PLV	16		⅛	37	4⅛		37	8¼	41 33
6	f	1	PLV	16		⅜	56	6⅝		57	3¼	37 17
7	g	1	PLV	16		⅜	56	5⅜		57	3¼	37 17
8	h	2	PL	25½		½	2	7½	BENT	30	5⅜	47 10
9	K	2	L	7	3¼	½	0	11	BENT C.F. 7×4×½	40	0	36 39
10	m	2	L	7	3¼	½	0	11	BENT C.F. 7×4×½	40	0	36 39
11	P	1	BR	7		½	4	6	F2E	13	10¼	47 19
12												
13	c1b#	3	BR	7		½	4	6	F2E	13	10¼	47 19
14	c1ag#/	1	BR	7½		¾	4	6 32	MIE-FIE	13	10¼	47 18
15	c2cy#	2	BR	6½		½	2	1½		19	1	47 20
16	c2cw#	2	BR	6½		½	2	1½		19	1	47 20
17	c2ad#	1	PLV	13		⅜	4	2	BENT	33	6	47 11A
18	c2af#	1	PLV	13		⅜	4	2	BENT	33	6	47 11A
19	c2an*	2	PL	16		½	1	0 5/32				J
20												
21												
22		2	SB	⅞			0	2¾				M
23												
24												
25												
26	UST	1	UPPER SHOE						DET. ON DWG #2			
27		6	325	¾ϕ			0	3				
28		13	325	¾ϕ			0	2½				
29		24	325	¾ϕ			0	3½				M
30		43	HW	1⅛	15/16	⅝						
31												
32												
33												
34	FWL	1	WD			5/16	315	3½				
35	FWS	1	WD			5/16	52	0				
36	FW	1	WD			½	1	2				
37	SDS	1	WD			7/16	4	6				
38	VGDS	1	WD			½	2	8				
39	SD	1	WD			⅝	0	8				
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												

INST.- 3E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-13	GIRDER (31½ × 60 × 95-1½)	

PAY ITEM - 504.711

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

MATERIAL A36 STEEL
SHOP BOLTS ⅞ϕ A325
OPEN HOLES 15/16ϕ
A325 FIELD BOLTS ⅞ϕ
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE I RED LEAD (LIN)
REAM - AS NOTED

MARK	NUMBER OF HOLES AT POINT OF REVERSE - INCHES	MINIMUM PITCH AND CORRESPONDING EDGE - DIST.
	TO 3/16" INCL.	3" DIST.
	OVER 3/16" TO 1 1/2"	3" DIST.
	OVER 1 1/2" TO 2 1/2"	4" DIST.
	OVER 2 1/2"	7/8 DIA.

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 FACE WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7018, 5/32 ϕ LOW HYDROGEN ELECTRODES OR OR. STD.-1 FOR WELDING.

For location of details shown on this sheet refer to diagrams.
E11

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

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

CUSTOMER
MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. NO. I-95-1(12)16
CONT. NO. 3 - NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY RHG DATE 9/11/69 IN CHARGE D.K. BERTOLET
CHECKED BY CB DATE 9/29/69 SHOP NO. 2
CONTRACT CJ-0129-020 DRAWING NO. 342

GIRDER - G3-13

1 107-156

5 INCHES

NOV 1, 1968

GIRDER - G3 - 14

SHOP BILL

ITEM NO.	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE ON PLAN OR ELEVATION	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	TOTAL LENGTH FT.	TOTAL LENGTH IN.	TOTAL WEIGHT
1		ONE - GIRDER - G3 - 14										
2	a	1	PL	54		1/2	37	7 31/32	56 x 1/2	38	0	
3	b	1	PL	54		1/16	56	5 31/32	56 1/2 x 1/16	56	9 1/2	
4	c	1	PLW	16		1/8	37	0 1/2		37	7 1/2	
5	d	1	PLW	16		1/8	37	2 13/16		37	7 1/2	
6	f	1	PLW	16		1/4	56	5 31/32		57	3 1/4	
7	g	1	PLW	16		1/4	56	3 31/32		57	3 1/4	
8	h	2	PL	25 1/2		1/2	1	11 3/4	BENT	30	5 7/8	
9	K	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7 x 4 x 1/2	400		
10	m	1	BR	7		1/2	4	6	F2E	13	10 1/4	
11												
12	c1b*	1	BR	7		1/2	4	6	F2E	13	10 1/4	
13	c1ag1*	1	BR	7 1/2		3/4	4	6 31/32	MIE - FIE	13	10 1/4	
14	c1bc*	1	BR	7 1/2		3/4	4	6 31/32	MIE - FIE	13	10 1/4	
15	c2cy*	2	BR	6 1/2		1/2	2	1/2		19	1	
16	c2cw*	2	BR	6 1/2		1/2	2	1/2		19	1	
17	c2ad*	1	PLW	13		3/8	4	2	BENT	33	6	
18	c2af*	1	PLW	13		3/8	4	2	BENT	33	6	
19	c2an*	2	PL	16		1/2	1	0 31/32				
20												
21												
22												
23												
24												
25												
26	UST	1	UPPER SHOE						DET. ON DWG #2			
27		6	325	3/4"			0	3				
28		13	325	3/4"			0	2 1/2				
29		24	325	3/4"			0	3 1/2				
30		43	HW	1 3/4"	15/16"	3/16						
31												
32												
33												
34	FWL	1	WD			9/16	373	10 1/2				
35	FW5	1	WD			5/16	34	8				
36	FW	1	WD			1/2	1	2				
37	SDS	1	WD			1/16	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. - 3E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3 - 14	GIRDER (25 1/2 x 60 x 94 - 9/16)	

PAY ITEM - 504.711

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

NOTE "B"
SHOP TO USE REMOVABLE PAINT FOR STENCILING

MATERIAL A36 STEEL
ENGINEER BOLTS 3/4" A325
OPEN HOLES 15/16"
A325 FIELD BOLTS 3/4"
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
0			
9			
8			
7			
6			
5			
4			
3			
2			
1			

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 APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY RHG DATE 9/12/69 IN CHARGE B.K. BARTOLET
CHECKED BY C.B DATE 9/29/69 SHOP NO. 2
CONTRACT CJ-6241-020 DRAWING NO. 343

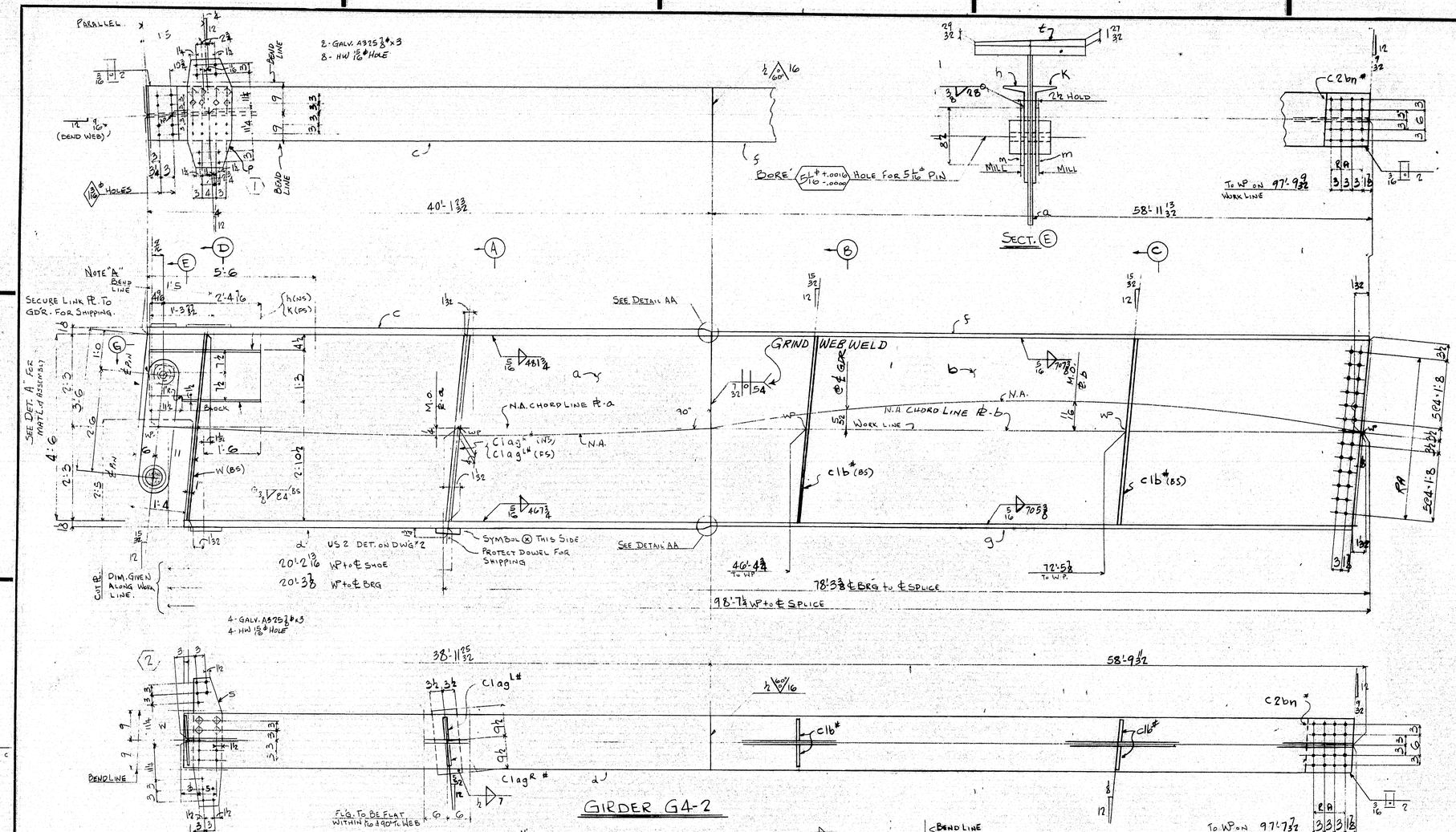
For location of details shown on this sheet refer to diagrams
E11

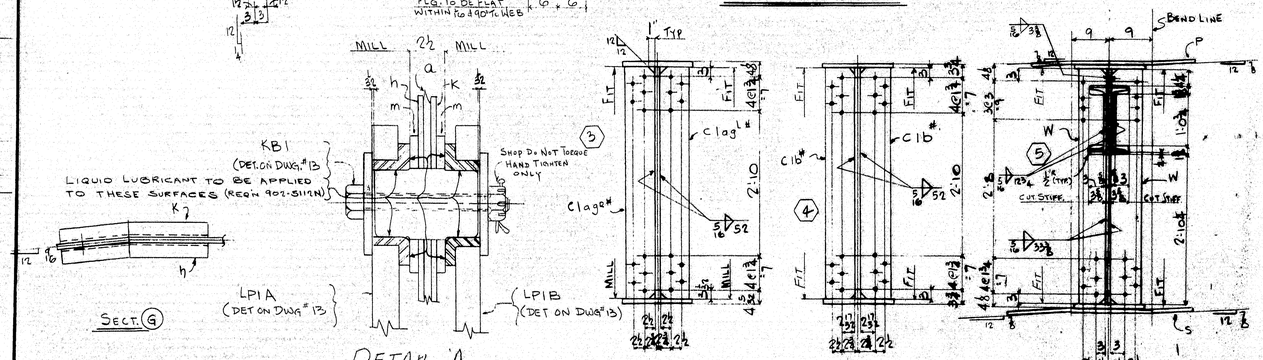
207 - 157

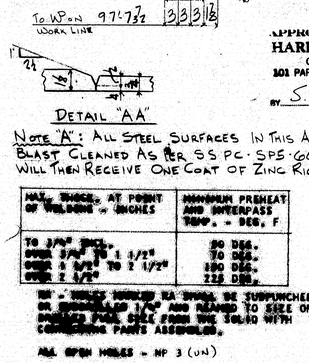
5 INCHES

GIRDER G4-1

| SHOP BILL | | |







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

E71

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	ABBR. LENGTH FT.	ABBR. LENGTH IN.	ABBR. LENGTH FRACT.	ABBR. WGT.
1				ONE GIRDER G4-2									
2	a	1	PL	54		1/2	40	2 3/32	BENT 54×1/2	40	9 3/4		40 16
3	b	1	PL	64		1/16	58	11 13/32	56×1/16	59	6 1/2		44 16
4	C	1	PLU	16		1/8	40	10		40	6 1/2		41 32
5	d	1	PLU	16		1/8	38	11 25/32		39	4 3/4		41 37
6	f	1	PLU	16		3/4	58	11 1/16		59	4 1/2		37 16
7	g	1	PLU	16		3/4	58	9 1/2		59	4 1/2		37 16
8	h	1	C	15	40		2	9	BENT	44	7 3/8		47 16
9	K	1	C	15	40		2	9	BENT	44	7 3/8		47 16
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. 8 1/2 R.)			J	
11	P	1	PL	13		1/2	2	7 3/8	BENT	20	7		24 32
12	S	1	PL	8 1/2		1/2	3	1 3/8	BENT C.F. 10×1/2	13	0 1/4		24 35
13	t	1	PL	8		15/32 29/32	1	4	C.F. 10×1/8			J	
14	W	2	BR	7		1/2	4	6	F2E	13	10 1/4		47 19
15													
16	c 1a g2 *	1	BR	7 3/4		3/4	4	6 3/4	MIE F1E	13	10 1/4		47 18
17	c 1b *	4	BR	7		1/2	4	6	F2E	13	10 1/4		47 19
18	c 2bn *	2	PL	16		5/8	1	0 3/8				J	
19													
20													
21													
22													
23													
24													
25	US2	1	UPPER SHOE						DET. ON DWG. 2				
26													
27	FW	1	WD			3/8	20	4					
28	FWL	1	WD			5/16	393	8 1/2					
29	FWS	1	WD			5/16	68	10					
30	FW	1	WD			1/2	1	2					
31	SDS	1	WD			7/16	4	6					
32	VGOS	1	WD			3/4	2	8					
33	SD	1	WD			3/16	1	0					
34													
35		12	STS	7/8			0	3	GALVANIZED				902-62.00(N)
36		12	HW	1 1/8	15/16	3/16			do				902-62.00(N)
37													
38	LP1A	1	LINK PL ASSEMBLY						DET. ON DWG. 13				
39	LP1B	1	LINK PL ASSEMBLY										
40	KB1	1	KEEPER BOLT										
41	P1	1	PIN										
42													
43													
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 S.S. Tsiknas OCT 17 1969

INST.-4W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-2	GIRDER (51 3/4 × 60 × 99'-2 1/2)	1 lot

PAY ITEM-504.711
GIRDER

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" INCL.	70 DEG.
OVER 1 1/2" TO 2 1/2" INCL.	150 DEG.
OVER 2 1/2"	225 DEG.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8ϕ
OPEN HOLES 15/16ϕ (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

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

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 APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY RD DATE 9-11-69 IN CHARGE B.K. BERTOLET
CHECKED BY RG DATE 9-29-69 SHOP NO. 4
CONTRACT CJ-6249-020 DRAWING NO. 345

107-159

GIRDER G4-3

SHOP BILL

PIECE MARK	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH ft	LENGTH in.	REMARKS	WEIGHT ft.	WEIGHT in.	WEIGHT lbs.
1			ONE GIRDER G4-3									
2	a	1	PL	54		1/2	40	0 1/8	BENT 36k+4	40	9 3/4	4[illegible]
3	b	1	PL	54		1/16	58	8 1/2	36k+16	58	6 1/2	14[illegible]
4	c	1	PLU	16		1/8	40	0 1/8		40	6 1/2	47 [illegible]
5	d	1	PLU	16		1/8	38	10 1/32		39	4 3/4	4[illegible]
6	f	1	PLU	16		3/4	58	9		59	4 1/2	37 16
7	g	1	PLU	16		3/4	58	6 15/16		59	4 1/2	37 16
8	h	1	C	15	40		2	9	BENT	44	7 3/8	47 00
9	k	1	C	15	40		2	9	BENT	44	7 3/8	47 00
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. & P.)			J
11	P	1	PL	13		1/2	2	7 3/4	BENT	20	7	24 34
12	S	1	PL	8 1/2		1/2	3	1 1/2	BENT C.F 10 x 1/2	13	10 1/4	24 36
13	t	1	PL	8		31/32 or 29/32	1	4	C.F 10 x 1 1/8			J
14	W	2	BR	7		1/2	4	6	F.I.E	13	10 1/4	47 19
15												
16	c1a9	1	BR	7 1/2		3/4	4	6 5/32	MIE F.I.E	13	10 1/4	47 18
17	c1b	4	BR	7		1/2	4	6	F.I.E	13	10 1/4	47 19
18	c2bn	2	PL	16		5/8	1	0 3/8				J
19												
20												
21												
22												
23												
24												
25	US2	1	UPPER SHOE						DET. ON DWG. 12			
26												
27	FW	1	WD			3/8	29	4				
28	FWL	1	WD			5/16	392	3 1/4				
29	FWS	1	WD			5/16	68	10				
30	FW	1	WD			1/2	1	12				
31	SDS	1	WD			1/16	4	6				
32	V60S	1	WD			3/4	12	8				
33	SD	1	WD			3/16	1	0				
34												
35		12	325	7/8			0	3	GALVANIZED			902-6200N
36		12	HW	7/8	15/16	F16			do			902-6200N
37												
38	LP1A	1	LINK PL. ASSEMBLY						DET. ON DWG. 13			
39	LP1B	1	LINK PL. ASSEMBLY									
40	KB1	1	KEEPER BOLT									
41	P1	1	PIN									
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
NEW YORK 17, N.Y.
BY J.S. Nicholson OCT 17 1969

INST.-4W'

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-3	GIRDER (57'-9 1/16" x 98'-10 1/2")	

PAY ITEM-304.711

GIRDER

MATERIAL: A36 STEEL
RIVETS OR BOLTS: 7/8"
OPEN HOLES: 5/16" (U.N.)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD-AS NOTED
MILL-AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

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.

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 - NF 3 (UN)

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

USE E7018-A1-H4R WATER RESISTANT ELECTRODES OR OTHER E7018 FOR WELDING.

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

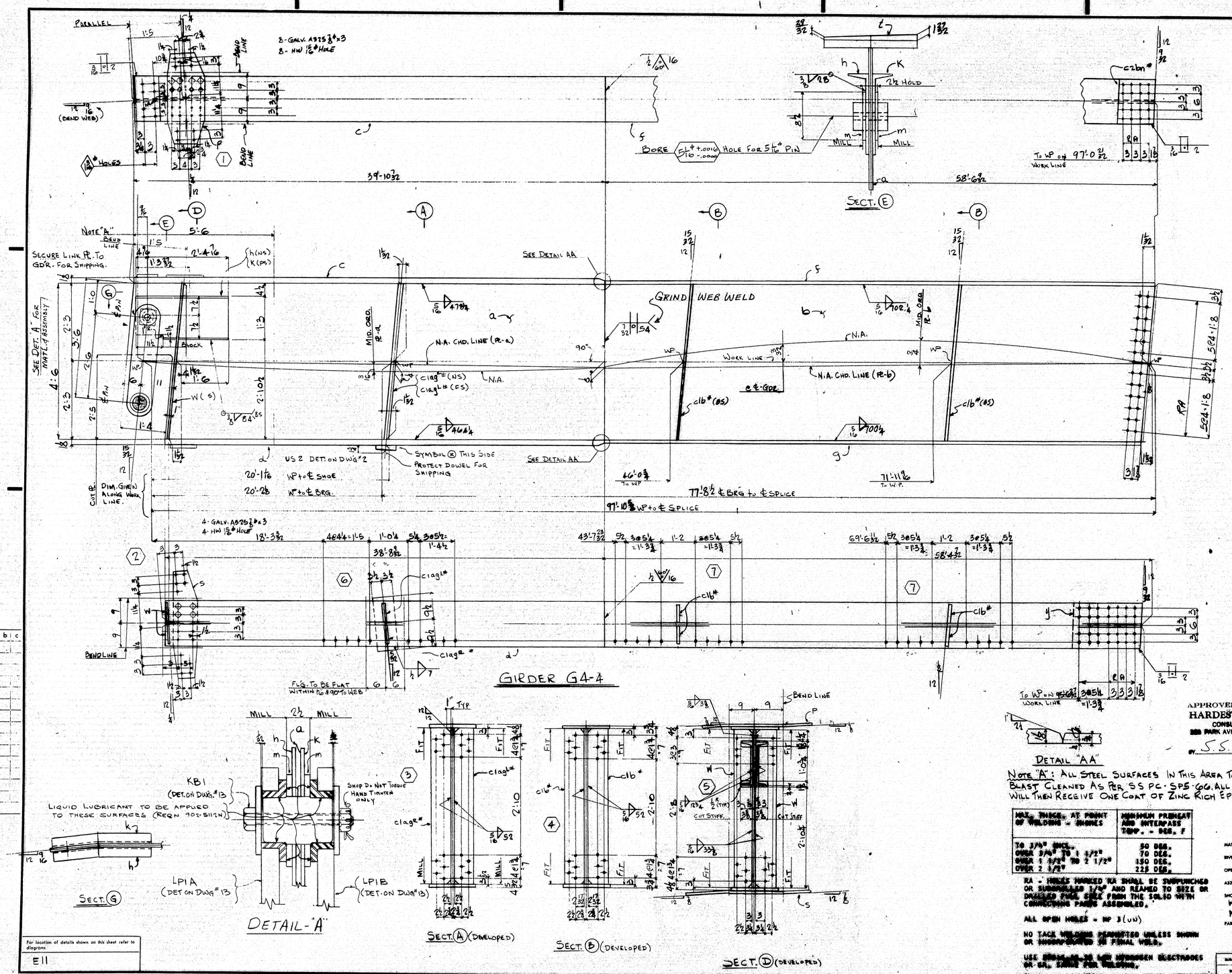
SUBMITTAL DATE: 1 2 3 4 5 6 7 8 9 0

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: 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 RO DATE 9-17-69 IN CHARGE D.K. BARTOLET
CHECKED BY RC DATE 9-27-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 346

For location of details shown on this sheet refer to diagram: E11

1/07-160

NOV 17 1969



SHOP BILL

ITEM NO.	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION FOR OR DIAM.	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WEIGHT EA. FT.	WEIGHT EA. IN.	WEIGHT TOT.	WEIGHT CODE
1				ONE GIRDER G4-4									
2	a	1	PL	54		1/2	39	11 3/32	BENT 36x4	40	9 3/4	40	9 3/4
3	b	1	PL	54		1/16	58	6 3/32	36x2 1/16	59	6 1/2	59	6 1/2
4	c	1	PLV	16		1/8	39	10 3/4		40	0 3/4	40	0 3/4
5	d	1	PLV	16		1/8	38	8 3/32		39	4 3/4	39	4 3/4
6	f	1	PLV	16		3/4	58	6 1/16		59	4 1/2	59	4 1/2
7	g	1	PLV	16		3/4	58	4 3/8		59	2 1/2	59	2 1/2
8	h	1	C	15	40		2	9	BENT	44	7 3/8	44	7 3/8
9	k	1	C	15	40		2	9	BENT	44	7 3/8	44	7 3/8
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. & F.)			1	J
11	P	1	PL	13		1/2	2	7 3/8	BENT	20	7	20	7
12	S	1	PL	8 1/2		1/2	3	1 3/4	BENT CF10X1 3/8	13	0 1/4	26	0 1/2
13	t	1	FL	8		13/32 x 29/32	1	4	CF10X1 3/8			1	J
14	W	2	BR	7		1/2	4	6	F2E	13	10 1/4	47	19
15	y	1	BR	16		5/8	2	4 3/8				1	J
16	c	1	ag #	1		3/4	4	6 1/2	MIE F1E	13	10 1/4	47	18
17	c	1	b #	4	BR	1/2	4	6	F2E	13	10 1/4	47	19
18	c	1	bn #	1	PL	5/8	1	0 1/8					J
19													
20													
21													
22													
23													
24													
25	US2	1	UPPER SHOE						DET. ON DWG. 2				
26													
27	FW	1	WD			3/8	20	4					
28	FWL	1	WD			5/16	390	10					
29	FWS	1	WD			5/16	68	10					
30	FW	1	WD			1/2	1	2					
31	SDS	1	WD			7/16	4	6					
32	V60S	1	WD			3/4	2	8					
33	SD	1	WD			3/16	1	0					
34													
35		12	325	7/8			0	3	GALVANIZED				902-62.00M
36		12	HW	1	15/16	3/16			do				902-62.00M
37													
38	LP1A	1	LINK PL. ASSEMBLY						DET. ON DWG. 13				
39	LP1B	1	LINK PL. ASSEMBLY										
40	KB1	1	KEEPER BOLT										
41	P1	1	PIN										
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

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

INST.-4W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-4	GIRDER (97'9 x 60 x 98 G)	

PAY ITEM-504.711
GIRDER

NOTE "A": ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SS PC-SP5-GG. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY-INCLUDING OPEN HOLES

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.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/16" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - ø 3 (UN)

NO TACK WELDING PERMITTED UNLESS SHOWN OR SUBSEQUENTLY REMOVED IN FINAL WELD.

USE [illegible] OR LOW HYDROGEN ELECTRODES OR GAS SHIELD FOR WELDING.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8
OPEN HOLES - 15/16 ø (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

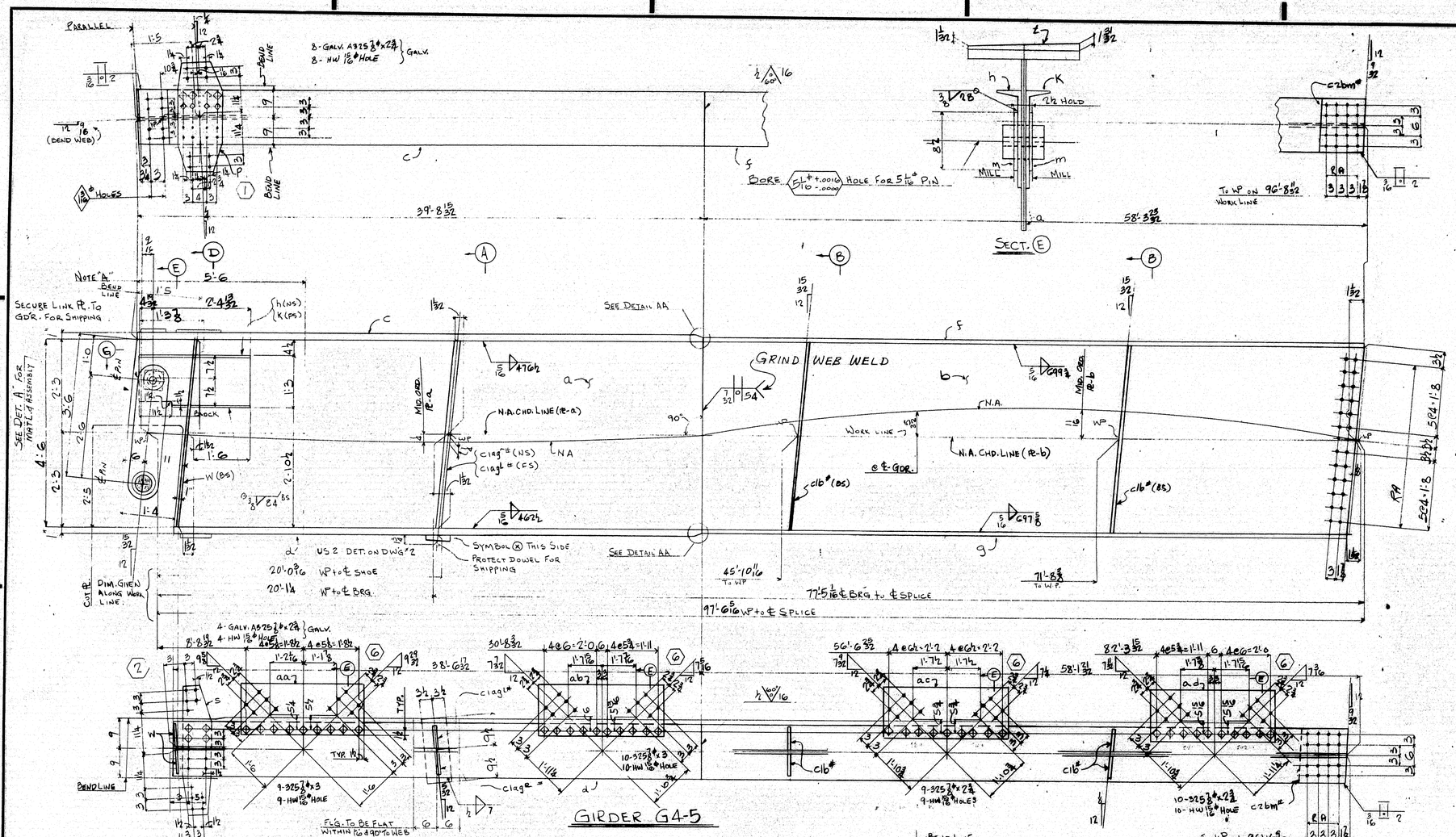
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

NO.	DATE	INIT.
REVISION		

OWNER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: 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 | PATTSTOWN WORKS
MADE BY RD DATE 9-12-69 IN CHARGE D.K. BARTHOLET
CHECKED BY RG DATE 9-24-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 347

For location of details shown on this sheet refer to diagrams
E11

107-161
NOV 1 1969



For location of details shown on this sheet refer to diagrams

E11

SHOP BILL

PIECE NO.	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WEIGHT EACH	WEIGHT TOTAL
1				ONE GIRDER G4-5							
2	a	1	PL	54		1/2	39	9 5/8	BENT 36-4	4009	4009
3	b*	1	PL	54		1/16	58	3 1/2	36-10	5801	5801
4	c	1	PLU	16		1	39	8 3/8		3911 1/2	4115
5	d	1	PLU	16		1	38	6 1/2		3900	4116
6	f	1	PLU	16		3/4	58	3 3/8		5941/2	3716
7	g	1	PLU	16		3/4	58	1 3/8		5941/2	3716
8	h	1	C	15	40		2	9	BENT	447 3/8	4719
9	K	1	C	15	40		2	9	BENT	447 3/8	4719
10	m	2	PL	8 1/2		1 5/8	0	8 1/2	MIS (C.F. 5/8 R.)		J
11	P	1	PL	13		1/2	2	7 3/8	BENT	207	2434
12	S	1	PL	8 1/2		1/2	3	1 3/4	BENT C.F. 10 x 1/2	1301/4	2435
13	t	1	PL	8		1 3/32 x 1 3/32	1	4	C.P. 12 x 2 5/8		J
14	W	2	BR	7		1/2	4	6	F2E	1301/4	4719
15											
16	c 1a9 E*	1	BR	7 1/2		3/4	4	6 5/32	MIE F1E	1301/4	4718
17	c 1b*	4	BR	7		1/2	4	6	F2E	1301/4	4719
18	c 2bm*	2	PL	16		1/2	1	0 3/8		202	2440
19	aa	1	PL	14 1/2		5/8	3	8	BENT	260	2819
20	ab	1	PL	14 1/2		5/8	4	11	BENT	260	2819
21	ac	1	PL	14 1/2		5/8	4	7	BENT	260	2819
22	ad	1	PL	14 1/2		5/8	4	8	BENT	260	2819
23											
24											
25	US2	1	UPPER SHOE						DET. ON DWG. 2		
26											
27	FW	1	WD			3/8	20	4			
28	FWL	1	WD			5/16	389	4 1/2			
29	FWS	1	WD			5/16	68	10			
30	FW	1	WD			1/2	1	2			
31	SDS	1	WD			1/16	4	6			
32	VGDS	1	WD			3/4	2	8			
33	SD	1	WD			3/16	1	0			
34		19	325	3/4*			0	2 3/4			
35		19	325	3/4*			0	3			M
36		38	HW	1 1/8	15/16	3/16					
37		12	325	3/4*			0	2 3/4	GALVANIZED		902-6200N
38	LPIA	1	LINK PL. ASSEMBLY						DET. ON DWG. 13		
39	LPIB	1	LINK PL. ASSEMBLY								
40	KB1	1	KEEPER BOLT								
41	PI	1	PIN								
42		12	HW	1 3/4	15/16	3/16			GALVANIZED		902-6200N
43											
44											
45											
46											
47											
48											
49											
50											
51											
52											
53											
54											
55											

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.

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 (UN)

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

USE E70XX OR E8018-C3 LOW HYDROGEN ELECTRODES OR GR. SAME FOR WELDING.

MATERIAL: A36 STEEL
RIVETS OR BOLTS: 3/4"
OPEN HOLES: 15/16" (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES: NO PAINT (UN)
WELD: AS NOTED
MILL: AS NOTED
PAINT: ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

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

INST.-4W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-5	GIRDER (51 3/4 x 5/8 x 96'-1/2)	

PAY ITEM-504.711
GIRDER

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

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)10
CONT. NO. 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM — PITTSBURGH WORKS
MADE BY RO DATE 9-12-69 IN CHARGE S.K. BERTOLET
CHECKED BY RG DATE 9-24-69 SHOP NO. 2
CONTRACT CJ-6249-030 DRAWING NO. 348

1 107-162

NOV 17 1969

0 1 2 3 4 5 INCHES

GIRDER G4-6

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WEIGHT FT.	WEIGHT IN.	WEIGHT LBS.
1				ONE GIRDER G4-6								
2	a	1	PL	54		½	39	7 13/16	BENT 36×½	40	9¾	442
3	b	1	PL	54		9/16	58	1/16	BENT 36×9/16	58	8¼	627
4	c	1	PLU	16		1	39	7		39	11½	421
5	d	1	PLU	16		1	38	4 13/16		39	0	416
6	f	1	PLU	16		¾	58	11¼		59	4½	376
7	g	1	PLU	16		¾	57	11⅛		59	4½	376
8	h	1	C	15	40		2	9	BENT	44	7⅜	477
9	k	1	C	15	40		2	9	BENT	44	7⅜	477
10	m	2	PL	8½		15/32	0	8½	MIS (C.F. ¾ R.)			J
11	P	1	PL	13		½	2	7¾	BENT	20	7	243
12	S	1	PL	8½		½	3	1¾	BENT CF10×½	13	0¼	243
13	t	1	PL	8		1½×1½	1	4	CF12K2B			J
14	W	2	BR	7		½	4	6	F&E	13	10¼	471
15												
16	c 1a9#	1	BR	7½		¾	4	6 8½	MIE F&E	13	10¼	471
17	c 16#	4	BR	7		½	4	6	F&E	13	10¼	471
18	c 2bm#	2	PL	16		½	1	0⅜		20	2	244
19												
20												
21												
22												
23												
24												
25	US2	1	UPPER SHOE						DET. ON DWG. 2			
26												
27	FW	1	WD			3/8	20	4				
28	FWL	1	WD			5/16	387	11½				
29	FWS	1	WD			5/16	68	10				
30	FN	1	WD			½	1	2				
31	SDS	1	WD			1/16	4	6				
32	VGOS	1	WD			¾	2	8				
33	SD	1	WD			3/16	1	0				
34												
35		12	S25	¾		0	27		GALVANIZED			902-62
36		12	HW	1½	15/16	3/16			do			902-62
37												
38	LP1A	1	LINK PL ASSEMBLY						DET. ON DWG. 13			
39	LP1B	1	LINK PL ASSEMBLY									
40	KB1	1	KEEPER BOLT									
41	P1	1	PIN									
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												

PARALLEL

8-GALV. A325 ¾"ø×2¾ BOLTS
8-HW 15/16"ø HOLE

(BEND WEB)

BEND LINE

12 HOLES

39'-6 13/16

58'-1 1/16

BORE 5 +.0010 -.0000 HOLE FOR 5 +1/16 PIN

SECT. E

TO WP ON WORK LINE 96'-4 1/2

c2bm#

NOTE "A" BEND LINE

SECURE LINK PL. TO GDR. FOR SHIPPING.

SEE DET. "A" FOR MATL. & ASSEMBLY

5'-6

1'-5

2'-4 13/32

h (NS) K (FS)

SEE DETAIL AA

GRIND WEB WELD

N.A. CHD. LINE (R-a)

N.A.

c1a9# (NS)
c1a9# (FS)

W (BS)

BACK

MID. ORD R-a

MID. ORD R-b

N.A. CHD. LINE (R-b)

WORK LINE

e.t. GDR.

c16# (BS)

c16# (GS)

SYMBOL Ⓧ THIS SIDE PROTECT DOWEL FOR SHIPPING

SEE DETAIL AA

US2 DET. ON DWG. 2

19'-11 11/32 WP to ℄ SHOE

20'-0 7/16 WP to ℄ BRG.

CUT TO DIM. GIVEN ALONG WORK LINE.

4-GALV. A325 ¾"ø×2¾ BOLTS
4-HW 1½"ø HOLE

45'-8 3/4 To WP

77'-1 9/16 ℄ BRG to ℄ SPLICE

71'-5¼ To W.P.

97'-2 WP to ℄ SPLICE

594-1'-8

38'-4 15/16

57'-10 15/16

c2bm#

c16#

c16#

To WP on 96'-4 1/2 WORK LINE

DETAIL "AA"

NOTE "A": ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER S'S PC-SPS-66, ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

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.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/8" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NP 3(UN)

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

USE E9016-A1-20 LOW HYDROGEN ELECTRODES OR EQ. SUBJ. FOR WELDING.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - ¾"ø
OPEN HOLES 15/16"ø (UN)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

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

INST.-4W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-6	GIRDER (97¾"×594"×97'-4")	

PAY ITEM-504.711
GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: 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 RD DATE 9-15-69 IN CHARGE B.K. BERTOLET
CHECKED BY TG DATE 9-24-69 SHOP NO. 2
CONTRACT CS-6249-020 DRAWING NO. 349

REVISION

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

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

For location of details shown on this sheet refer to diagram.
E11

KB1 (DET. ON DWG. # 13)
LIQUID LUBRICANT TO BE APPLIED TO THESE SURFACES (REQN 902-61.2N))
K7
LP1A (DET. ON DWG # 13)
LP1B (DET. ON DWG # 13)
SHOP DO NOT TORQUE HAND TIGHTEN ONLY

SECT. G

DETAIL-A

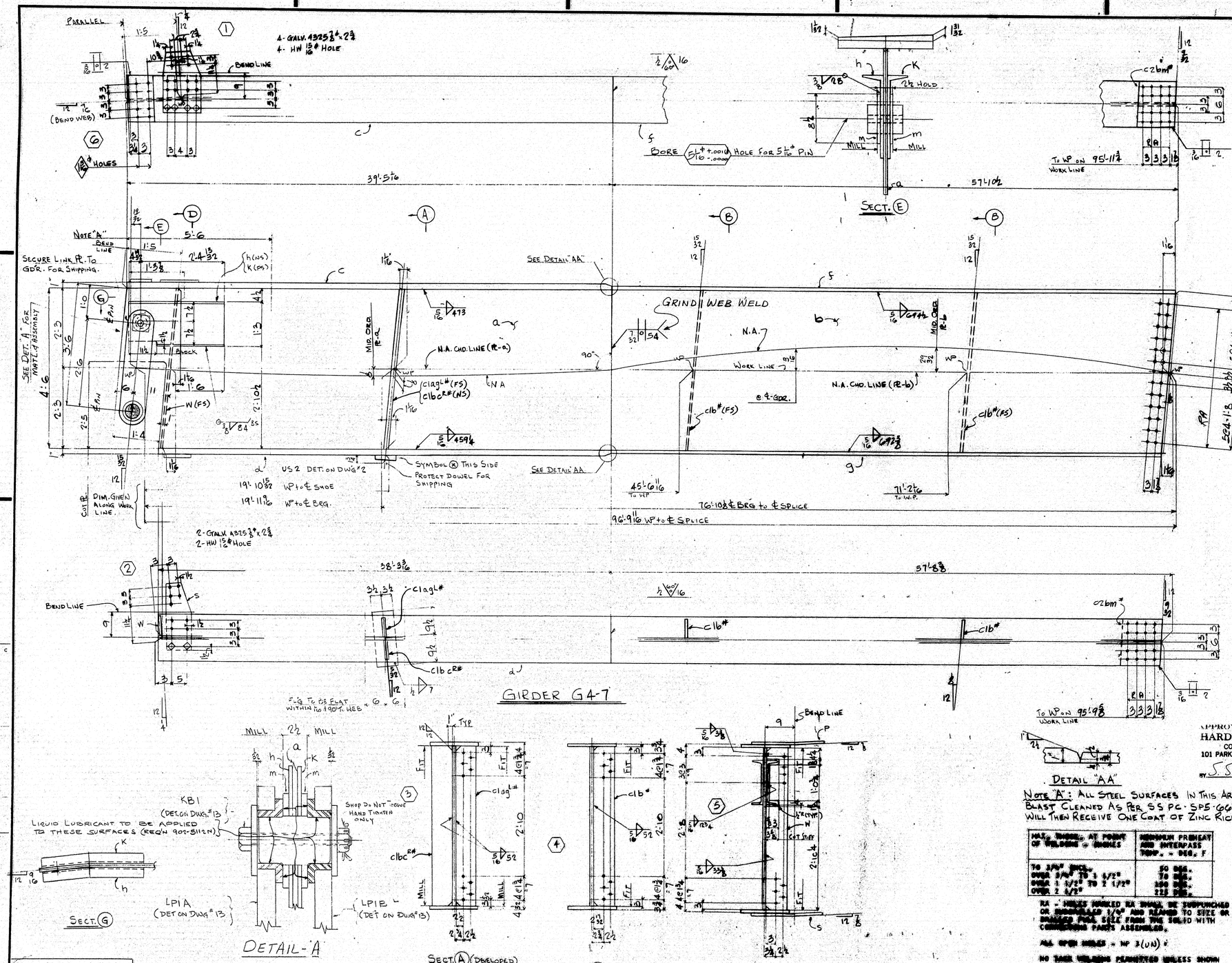
SECT. A (DEVELOPED)

SECT. B (DEVELOPED)

SECT. D (DEVELOPED)

GIRDER G4-6

107-163



SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WEIGHT EACH PIECE FT.	WEIGHT EACH PIECE IN.	WEIGHT EACH PIECE LBS.	WEIGHT TOTAL LBS.
1			ONE GIRDER G4-7										
2	a	1	PL	54		1/2	39	6 1/8	BENT 56+a	40	9 3/4	46 10	
3	b	1	PL	54		1/16	57	10 1/4	56+b	58	8 1/4	44 17	
4	c	1	PLV	16		1	39	5 1/4		39	11 1/2	411 15	
5	d	1	PLV	16		1	38	3 15/16		39	0	41 16	
6	f	1	PLV	16		3/4	57	10 11/16		58	2 1/4	37 15	
7	g	1	PLV	16		3/4	57	8 1/16		58	2 1/4	37 13	
8	h	1	C	15	40		2	9	BENT	44	7 3/8	47 [illegible]	
9	K	1	C	15	40		2	9	BENT	44	7 3/8	47 [illegible]	
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. 8 R.)			J	
11	P	1	PL	13		1/2	1	8 3/8	BENT	20	7	24 34	
12	S	1	PL	8 1/2		1/2	1	11 3/8	BENT C.F. 10x1/2	13	0 1/4	24 35	
13	t	1	PL	8		15/32x4 1/2	1	4	C.F. 12x26			J	
14	w	1	BR	7		1/2	4	6	F2E	13	10 1/4	47 19	
15													
16	c 1a g1#	1	BR	7 1/2		3/4	4	6 1/2	MIE F1E	13	10 1/4	47 18	
17	c 1b#	2	BR	7		1/2	4	6	F2E	13	10 1/4	47 19	
18	c 2b m#	2	PL	16		1/2	1	0 B		20	2	24 46	
19	c 1b c#	1	BR	7 1/2		3/4	4	6 3/8	MIE F1E	13	10 1/4	47 18	
20													
21													
22													
23													
24													
25	US2	1	UPPER SHOE						DET. ON DWG. 2				
26													
27	FW	1	WD			3/8	20	4					
28	FWL	1	WD			5/16	386	6 1/4					
29	FWS	1	WD			5/16	42	11					
30	FN	1	WD			1/2	1	2					
31	SDS	1	WD			1/16	4	6					
32	V60S	1	WD			3/4	2	8					
33	SD	1	WD			3/16	1	0					
34													
35		G	325	3/4		0	2 3/4		GALVANIZED			902-62 (10)	
36		G	HW	1 1/2	15/16	5/16			do			902-62 (10)	
37													
38	LP1A	1	LINK PL. ASSEMBLY						DET. ON DWG. 13				
39	LP1B	1	LINK PL. ASSEMBLY										
40	KB1	1	KEEPER BOLT										
41	P1	1	PIN										
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

FULL SHIPMENT

LENGTH FT.	LENGTH IN.	WEIGHT EACH PIECE LBS.	WEIGHT TOTAL LBS.
40	9 3/4	46 10	
58	8 1/4	44 17	
39	11 1/2	411 15	
39	0	41 16	
58	2 1/4	37 15	
58	2 1/4	37 13	
44	7 3/8	47 [illegible]	
44	7 3/8	47 [illegible]	
		J	
20	7	24 34	
13	0 1/4	24 35	
		J	
13	10 1/4	47 19	
13	10 1/4	47 18	
13	10 1/4	47 19	
20	2	24 46	
13	10 1/4	47 18	

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" INCL.	70 DEG.
OVER 1 1/2" TO 2 1/2" INCL.	150 DEG.
OVER 2 1/2"	225 DEG.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR DRILLED 1/8" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NP 3(UN)

NO FIELD WELDING PERMITTED UNLESS SHOWN OR DOCUMENTED IN FINAL WELD.

USE [illegible]-75 LOW HYDROGEN ELECTRODES OR [illegible] FOR WELDING.

MATERIAL: A36 STEEL
RIVETS OR BOLTS - 7/8"
OPEN HOLES 15/16" (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN) WELD-AS NOTED MILL-AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

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

REVISION

NO.	DATE	INIT.
0		
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APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY S.S. Nishimura OCT 17 1960

INST. 4W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-7	GIRDER (25 1/2 x 57 1/2 x 7-5)	

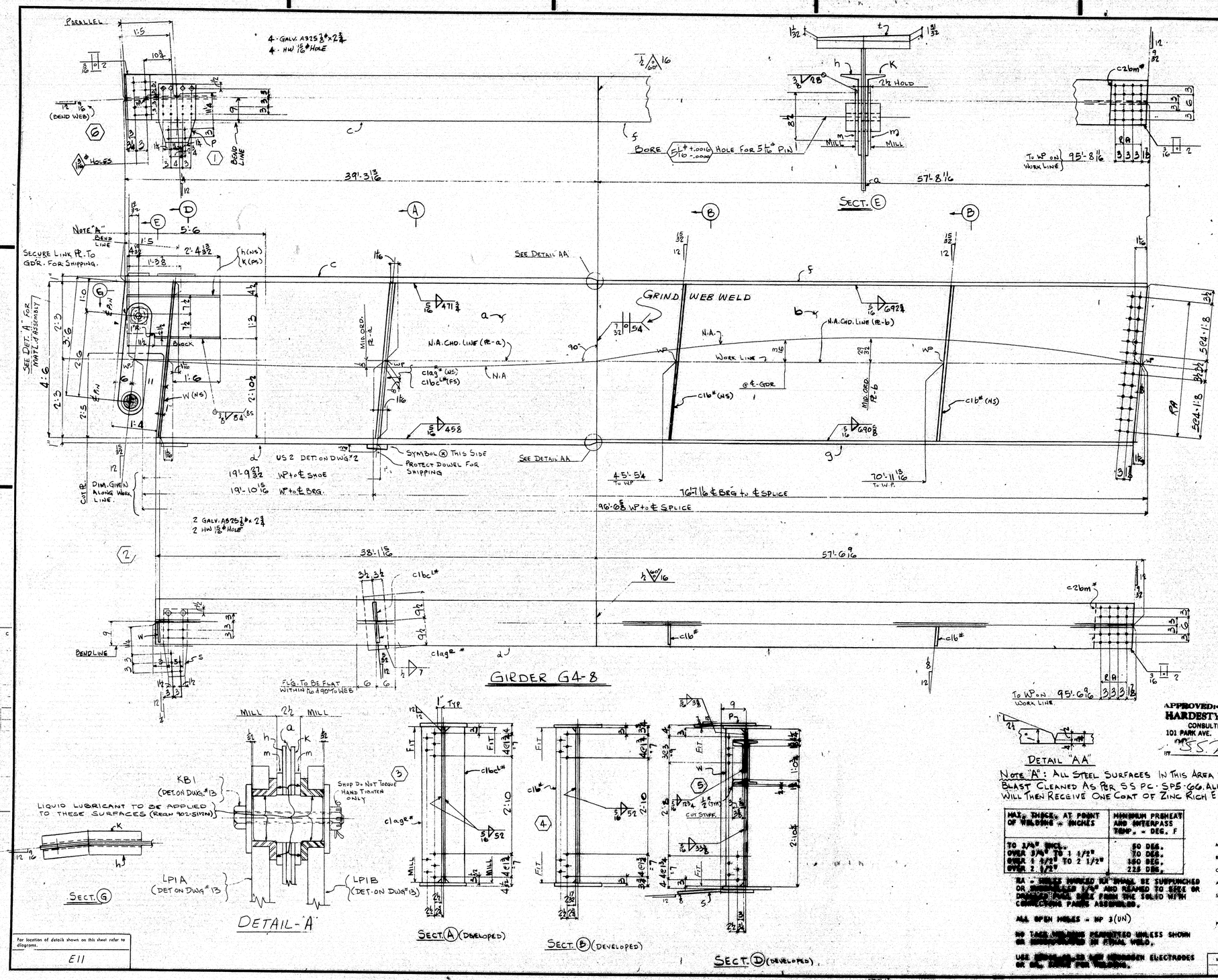
PAY ITEM-504.711
GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
DESIGNATION: 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 RD DATE 9-15-69 IN CHARGE B.K. BERTOLET
CHECKED BY TCG DATE 9-24-69 SHOP NO. 2
CONTRACT CJ-6229-020 DRAWING NO. 350

For location of details shown on this sheet refer to diagrams.
E11

107-164

INCHES



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

E11

SHOP BILL

No.	Assembly Mark	No.	Shape	Section: Size	Section: Size or Pounds	Section: Thick	Length: Ft.	Length: In.	Remarks	Weight: Ft.	Weight: In.	
1			ONE GIRDER G4-8									
2	a	1	PL	54		1/2	39	4 13/16	BENT 36x4	40	1 3/4	
3	b	1	PL	54		1/16	57	8 1/16	36x2	58	8 1/4	
4	c	1	PLU	16		1	39	4		39	11 1/2	
5	d	1	PLU	16		1	38	11 15/16		39	0	
6	f	1	PLU	16		3/4	57	8 3/8		58	2 4	
7	g	1	PLU	16		3/4	57	6 3/4		58	2 4	
8	h	1	C	15	40		2	9	BENT	44	7 3	
9	K	1	C	15	40		2	9	BENT	44	7 3	
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. 8 1/2 R.)			J
11	P	1	PL	13		1/2	1	8 3/8	BENT	20	7	24 34
12	S	1	PL	8		1/2	1	11 3/8	BENT C.F. 10x1/2	13	0 4	24 35
13	t	1	PL	8		13/32 x 1 1/2	1	4	C.F. 12x2 3/8			J
14	W	1	BR	7		1/2	4	6	F2E	13	4	47 19
15												
16	c 10g#	1	BR	7 1/2		3/4	4	6 5/32	MIE F1E	13	4	47 18
17	c 16#	2	BR	7		1/2	4	6	F2E	13	4	47 19
18	c 26m#	2	PL	16		1/2	1	0 3/8		20	2	24 46
19	c 16bc#	1	BR	7 1/2		1/2	4	6 5/32	MIE F1E	13	4	47 18
20												
21												
22												
23												
24												
25	US2	1	UPPER SHOE						DET. ON DWG. 2			
26												
27	FW	1	WD			3/8	39	4				
28	FWL	1	WD			5/16	38	8				
29	FWS	1	WD			5/16	42	11				
30	FW	1	WD			1/2	1	2				
31	SDS	1	WD			1/16	4	6				
32	VGOS	1	WD			3/4	2	8				
33	SD	1	WD			3/16	1	0				
34												
35		6	A325	3/4ø			0	2 3/4	GALVANIZED			902-62.00
36		6	HW	13/16ø	15/16	3/16			do			902-62.00
37												
38	LP1A	1	LINK PL. ASSEMBLY						DET. ON DWG. 13			
39	LP1B	1	LINK PL. ASSEMBLY									
40	KB1	1	KEEPER BOLT									
41	P1	1	PIN									

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

INST.-4E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-8	GIRDER (26# x 97 3/8 x 97'-1 1/8)	

Note "A": All steel surfaces in this area to be blast cleaned as per SSPC-SP5-66. All steel will then receive one coat of zinc rich epoxy including open holes

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.

RA - Holes marked RA shall be subpunched or drilled 1/4" and reamed to size or drilled full from the solid with connecting parts assembled.

All open holes - NP 3(UN)

No edge planing permitted unless shown on approved detail or final weld.

Use low-hydrogen electrodes or SAE E6015 for welding.

Material - A36 steel
Rivets or bolts - 3/4ø
Open holes - 15/16ø (U.N.)
A325 field bolts
Shop contact surfaces - No paint (UN)
Weld - As Noted
Mill - As Noted
Paint - One coat AASHO-M72-Type II red lead (UN)

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

No.	Date	Rev.	Revision
0			
9			
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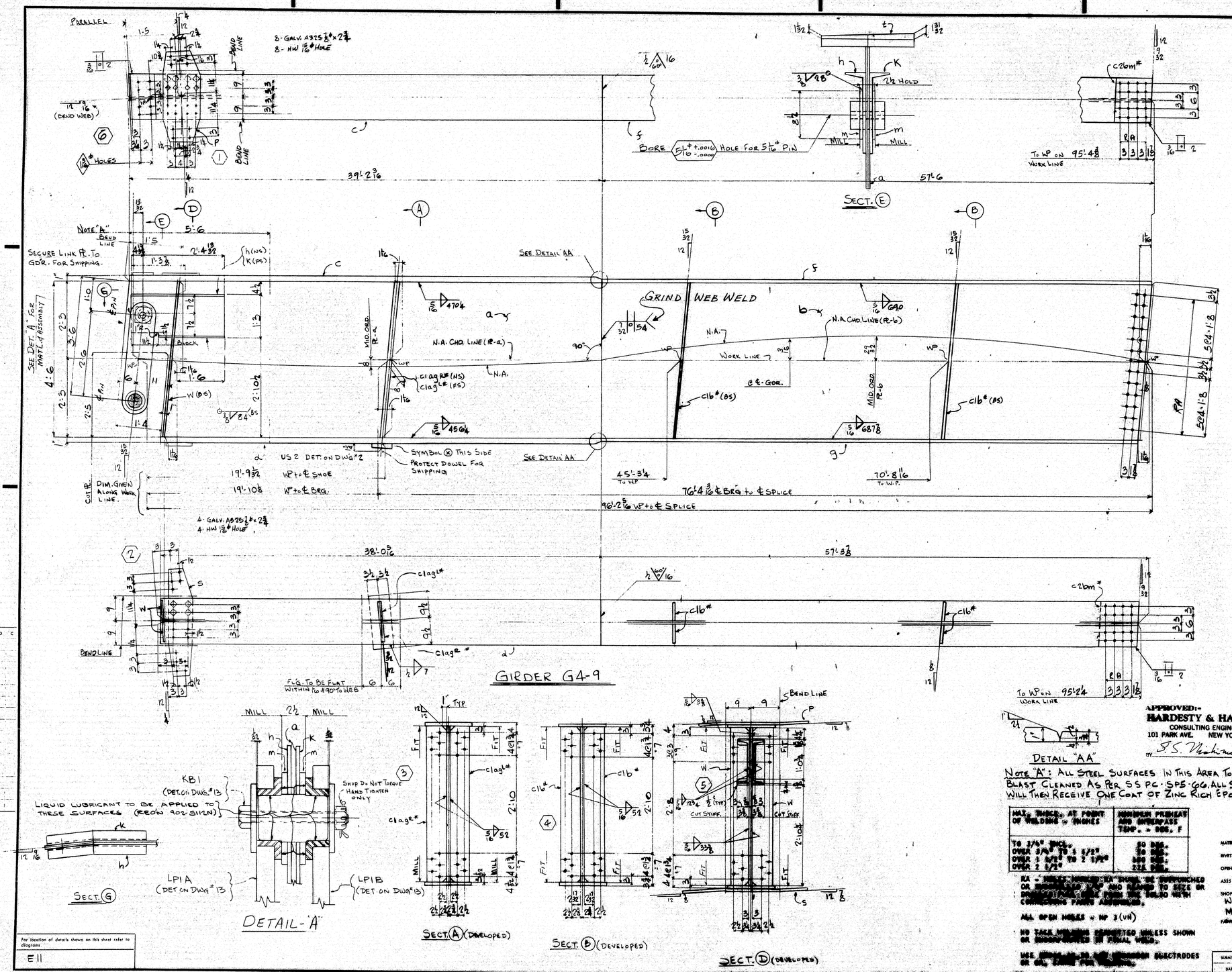
0	11/7/69	KAL	

Pay Item-504.711
GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: 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 RO DATE 9-10-69 IN CHARGE D.K. BERTOLET
CHECKED BY RS DATE 9-25-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 351

107-165

0 1 2 3 4 5 INCHES



SHOP BILL														
PIECE MARK	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR NUMBER	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WEIGHT LENGTH FT.	WEIGHT LENGTH IN.	WEIGHT LENGTH 16THS	WEIGHT EACH PIECE LBS.
1				ONE GIRDER G4-9									
2	a	1	PL	54		1/2	39	3 3/16	BENT 56+1/2	39	8 1/2		2447
3	b	1	PL	54		1/16	57	6	56+1/16	58	8 1/4		2447
4	c	1	PLU	16		1	39	2 3/8		39	11 1/2		4715
5	d	1	PLU	16		1	38	0 5/8		39	0		4116
6	f	1	PLU	16		3/4	57	6 7/16		58	2 1/4		3715
7	g	1	PLU	16		3/4	57	4 1/16		58	2 1/4		3715
8	h	1	C	15	40		2	9	BENT	40	10 3/8		4786
9	k	1	C	15	40		2	9	BENT	40	10 3/8		4786
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. 3/8 R.)			J	
11	P	1	PL	13		1/2	2	7 3/8	BENT	20	7		2434
12	S	1	PL	8 1/2		1/2	3	1 3/4	BENT CF 10 x 1/2	13	10 1/4		2435
13	t	1	PL	8		13/32 x 1 3/32	1	4	CF 12 x 2b			J	
14	W	2	BR	7		1/2	4	6	F2E	13	10 1/4		4719
15													
16	c 12m#	1	BR	7 1/2		3/4	4	6 3/32	NIE FIE	13	10 1/4		4718
17	c 16	1	BR	7		1/2	4	6	F2E	13	10 1/4		4719
18													
19	c 26m#	2	PL	16		1/2	1	0 5/8		20	2		2446
20													
21													
22													
23													
24													
25	US2	1	UPPER SHOE						DET. ON DWG. 2				
26													
27	FW	1	WD			3/8	20	4					
28	FWL	1	WD			5/16	334	14					
29	FWS	1	WD			5/16	68	10					
30	FN	1	WD			1/2	1	2					
31	SDS	1	WD			1/16	4	6					
32	VGOS	1	WD			3/4	2	8					
33	SD	1	WD			5/16	1	0					
34													
35		12	BLS	7/8" ø			0	2 3/4	GALVANIZED				902-62
36		12	HW	1 1/8	15/16	3/16			do				902-62
37													
38	LP1A	1	LINK PL ASSEMBLY						DET. ON DWG. 13				
39	LP1B	1	LINK PL ASSEMBLY										
40	KB1	1	KEEPER BOLT										
41	P1	1	PIN										
42													
43													
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 J.S. Nishimura OCT 17 1969

INST.-4E'

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-9	GIRDER (57'-6 x 57'-6 x 96'-4")	

PAY ITEM-306.711
GIRDER

NOTE "A": ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SS PC-SPS-GG, ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

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"	150 DEG.
OVER 1 1/2" TO 2 1/2"	300 DEG.
OVER 2 1/2"	225 DEG.

N.A. - [illegible] SHALL BE STRUCTURED OR [illegible] AND REVIEWED TO SUIT DESIGN [illegible] FROM THE FIELD WELDS CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES = NP 3 (UN)

NO TACK WELDING PERMITTED UNLESS SHOWN OR [illegible] IN FINAL WELD.

USE [illegible] ELECTRODES OR EQ.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8" ø
OPEN HOLES - 15/16" ø (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72 TYPE II RED LEAD (UN)

REVISION NO.	DATE	INIT.
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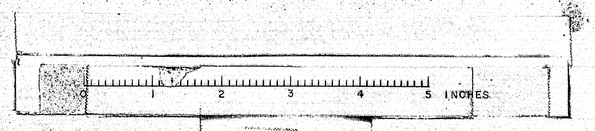
0		

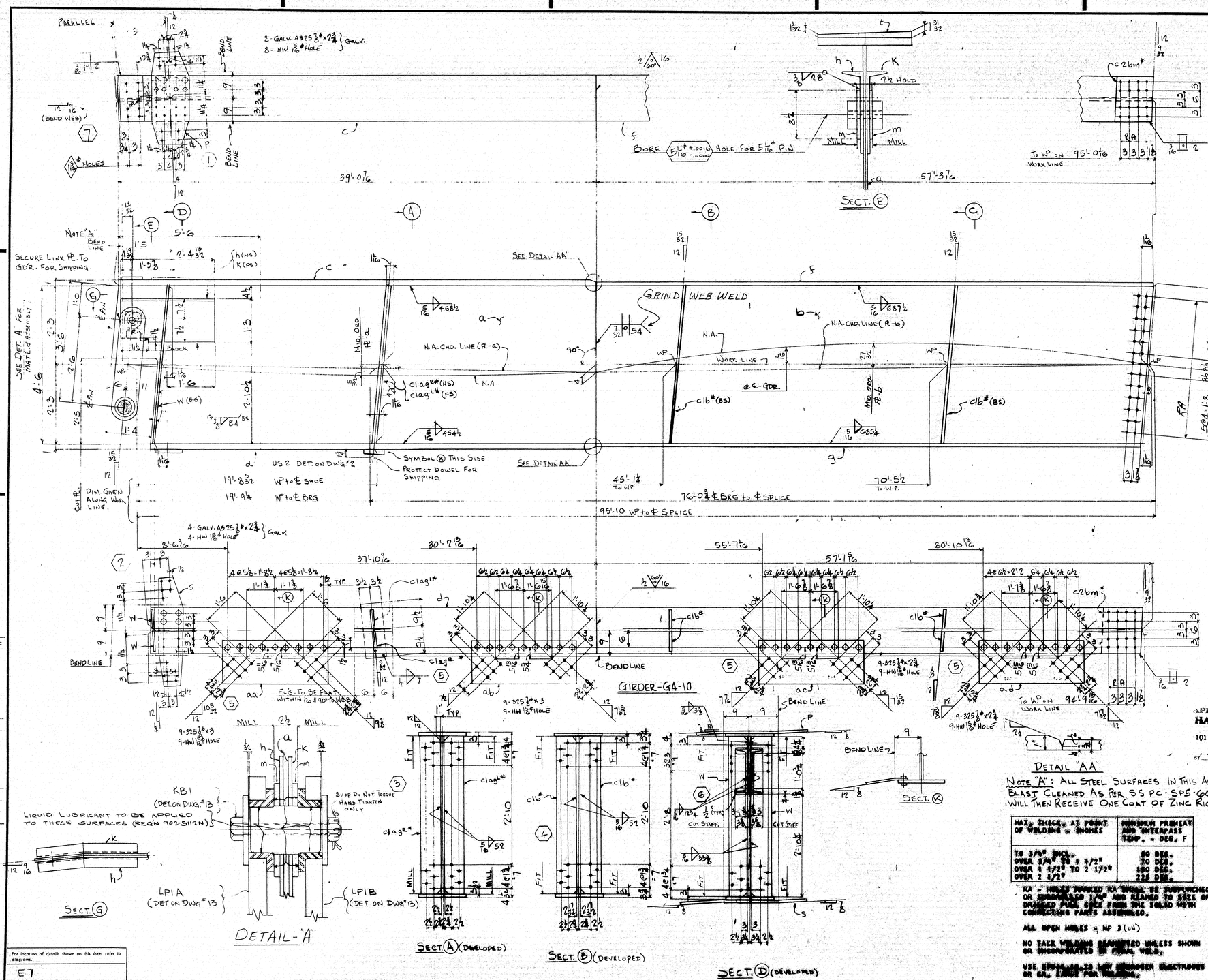
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

PURCHASER: MAINE STATE HIGHWAY COMMISSION
DESIGNATION: 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 RO DATE 9-10-69 N CHANG B.K. BERTOLET
CHECKED BY RKS DATE 9-25-69 SHOP NO. 2
CONTRACT CJ-6269-020 DRAWING NO. 352

For location of details shown on this sheet refer to diagrams
E11

107-166





SHOP BILL										MILL ORDER	
ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	LENGTH FT. IN.	ITEM PAIR	ITEM UNIT
1				ONE GIRDER G4-10								
2	a	1	PL	54		½	39	1⅛	BENT 56 x ½	39 8½	46	17
3	b	1	PL	54		7/16	57	3⅛	56½ x 7/16	57 8½	44	18
4	c	1	PLU	16		1	39	0⅝		39 11½	41	15
5	d	1	PLU	16		1	37	10⅛		39 0	41	16
6	f	1	PLU	16		¾	57	3⅝		58 2¼	37	15
7	g	1	PLU	16		¾	57	1½		58 2¼	37	15
8	h	1	C	15	40		2	9	BENT	40 10⅜	47	00
9	K	1	C	15	40		2	9	BENT	40 10⅜	47	00
10	m	2	PL	8½		15/32	0	8½	MIS (C-F ⅜ R.)		J	
11	P	1	PL	13		½	2	7⅞	BENT	20 7	24	34
12	S	1	PL	8½		½	3	1½	BENT C.F. 10 x ½	13 0¼	24	35
13	t	1	PL	8		31/32	1	4	C.F. 12 x ⅞		J	
14	W	2	BR	7		½	4	6	F2E	13 10¼	47	19
15												
16	c 12g#	1	BR	7½		¾	4	6½	MIE F1.E	13 10¼	47	18
17	c 16#	4	BR	7		½	4	6	F2E	13 10¼	47	19
18	c 26bm#	2	PL	16		½	1	0⅞		20 2	24	46
19												
20	aa	1	PL	14½		⅝	3	8	BENT	26 0	28	19
21	ab	1	PL	14½		⅝	4	6	BENT	26 0	28	19
22	ac	1	PL	14½		⅝	4	6	BENT	26 0	28	19
23	ad	1	PL	14½		⅝	4	6½	BENT	26 0	28	19
24												
25	US2	1	UPPER SHOE						DET. ON DWG. 2			
26												
27	FW	1	WD			⅜	20	4				
28	FWL	1	WD			5/16	382	7½				
29	FWS	1	WD			5/16	68	10				
30	FW	1	WD			½	1	2				
31	SDS	1	WD			7/16	4	6				
32	V60S	1	WD			¾	2	8				
33	SD	1	WD			3/16	1	0				
34		18	325	⅞ϕ			0	3				
35		18	325	⅞ϕ			0	2¾				
36		36	HW	1⅛ϕ	15/16	3/16						
37		12	325	⅞ϕ			0	2¾	GALV.		902-62.00	M
38	LP1A	1	LINK PL. ASSEMBLY						DET. ON DWG. 13			
39	LP1B	1	LINK PL. ASSEMBLY									
40	KB1	1	KEEPER BOLT									
41	P1	1	PIN									
42												
43		12	HW	1⅛ϕ	15/16	3/16			GALV.		902-62.00	M
44												
45												
46												
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48												
49												
50												
51												
52												
53												
54												
55												

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY SS Mishkevich OCT 17 1969

INST.-4E

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-10	GIRDER (37½ x 59¾ x 96'-5½)	

PAY ITEM: 504.711
GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: 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, PENNA.
MADE BY RD DATE 9-10-69 IN CHARGE B.K. BARTHOLET
CHECKED BY RDE DATE 9-25-69 SHOP NO. 2
CONTRACT CS-6249-020 DRAWING NO. 353

MATERIAL - A36 STEEL
RIVETS OR BOLTS - ⅞ϕ
OPEN HOLES - 15/16ϕ (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

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.

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 (UN)

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

USE E70XX-XX OR E80XX-XX LOW HYDROGEN ELECTRODES OR EQ. FOR WELDING.

REVISION NO.	DATE	INIT.
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9		

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

For location of details shown on this sheet refer to diagrams.
E7

107-167

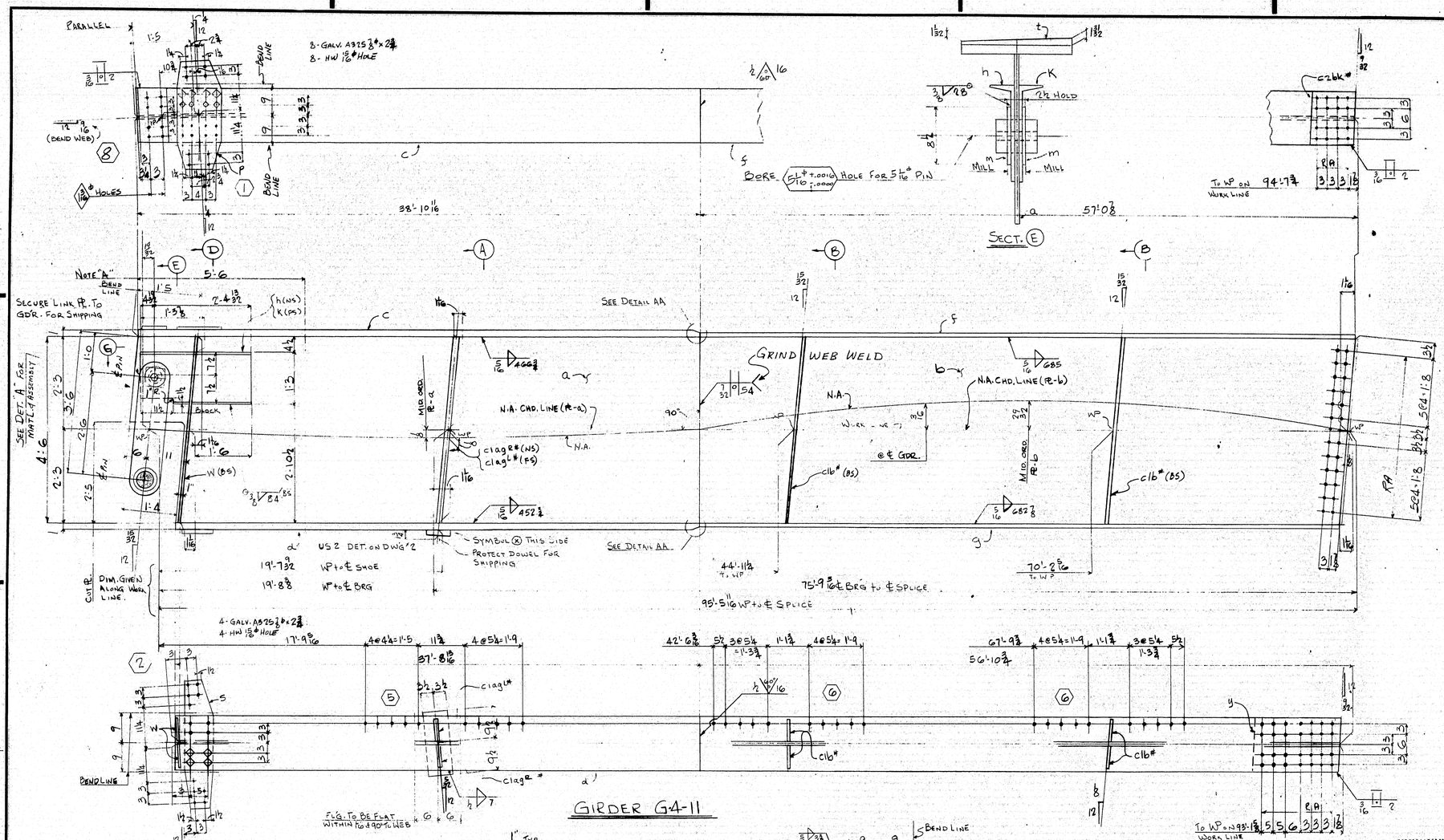
GIRDER G4-12

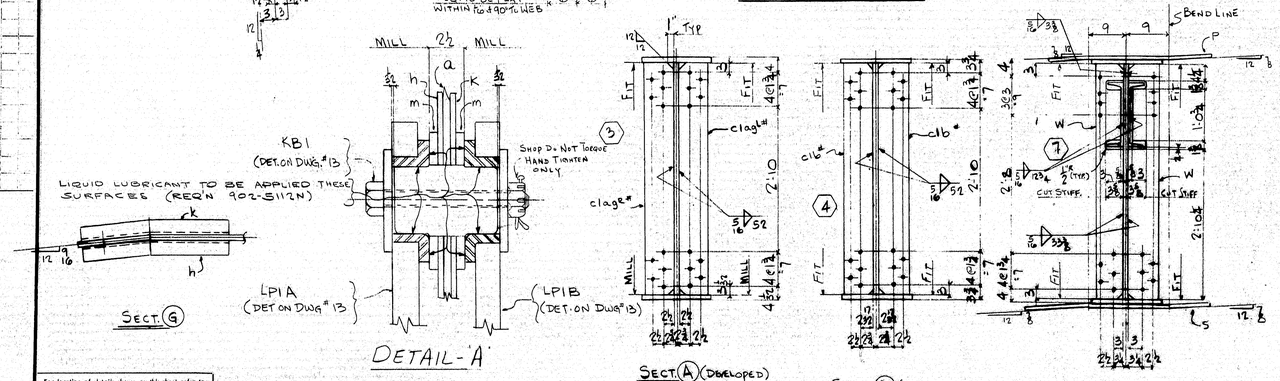
SHOP BILL

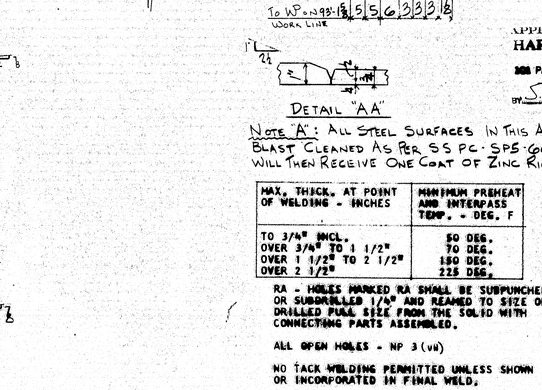
ASSEMBLY MARK	NO	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	THICK	LENGTH FT.	LENGTH IN.	REMARKS
		ONE GIRDER G4-12						
a	1	PL	54		1/2	38	10 1/16	BENT 56 x 1/2
b	1	PL	54		1/16	56	10 1/16	BENT 56 x 1/16
c	1	PLU	16		1	38	9 1/4	
d	1	PLU	16		1	37	7 1/16	
f	1	PLU	16		3/4	56	10 3/8	
g	1	PLU	16		3/4	56	8 1/4	
h	1	C	15	40		2	9	BENT
k	1	C	15	40		2	9	BENT
m	2	PL	8 1/2		1/32	0	8 1/2	MIS (C-F 3/4 R.)
P	1	PL	13		1/2	2	7 3/4	BENT
S	1	PL	8 1/2		1/2	3	1 3/4	BENT C-F 10 x 1/2
t	1	PL	8		13/32 x 1/2	1	4	C-F 12 x 2B
W	2	BR	7		1/2	4	6	F2E
c1a9 & c1b9	1	BR	7 1/2		3/4	4	6 3/32	MIE F1E
c1b	4	BR	7		1/2	4	6	F2E
c2bk	2	PL	16		3/8	1	0 3/8	
US2	1	UPPER SHOE						DET. ON DWG. 2
FW	1	WD			3/8	20	4	
FWL	1	WD			5/16	379	11	
FWS	1	WD			5/16	68	10	
FW	1	WD			1/2	1	2	
SPS	1	WD			1/16	4	6	
VGOS	1	WD			3/4	2	8	
SD	1	WD			3/16	1	0	
	12	STS	2 3/4 x 8		0	2	3/4	GALVANIZED
	12	HW	1 3/4	15/16	3/16			do
LP1A	1	LINK PL ASSEMBLY						DET. ON DWG. 13
LP1B	1	LINK PL ASSEMBLY						
KB1	1	KEEPER BOLT						
P1	1	PIN						

MILL ORDER

ITEM	LENGTH FT.	LENGTH IN.	PAGE	LINE
a	39	8 1/2	46	17
b	57	8 1/2	44	18
c	39	0	41	16
d	38	0	41	17
f	57	3 1/4	37	17
g	57	3 1/4	37	17
h	40	10 3/8	47	06
k	40	10 3/8	47	06
m			J	
P	20	7	24	34
S	13	0 1/4	24	35
t			J	
W	13	10 1/4	47	19
c1a9 & c1b9	13	10 1/4	47	18
c1b	13	10 1/4	47	19
c2bk			J	







Note "A": All steel surfaces in this area to be blast cleaned as per SS PC-SP5-GG. All steel will then receive one coat of zinc rich epoxy including open holes

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.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/8" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NP 3 (UN)

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

USE E70T6, 18, 28 LOW HYDROGEN ELECTRODES OR GR. SAW-2 FOR WELDING.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8
OPEN HOLES - 15/16ø (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO M72 - TYPE II RED LEAD (UN)

For location of details shown on this sheet refer to diagrams.
E11

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1			ONE GIRDER G4-11						
2	a	1	PL	54		1/2	38	11 1/16	BENT 56-1/2
3	b	1	PL	54		7/16	57	0 3/8	56-7/16
4	c	1	PLU	16		1	38	10 3/8	
5	d	1	PLU	16		1	37	8 1/8	
6	f	1	PLU	16		3/4	57	1 1/16	
7	g	1	PLU	16		3/4	56	10 1/8	
8	h	1	C	15	40		2	9	BENT
9	k	1	C	15	40		2	9	BENT
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. 3/8 R.)
11	P	1	PL	13		1/2	2	7 3/8	BENT
12	S	1	PL	8 1/2		1/2	3	1 3/8	BENT C.F. 10x1/2
13	t	1	PL	8		13/32 x 11/2	1	4	C.F. 12x2 3/8
14	w	2	BR	7		1/2	4	6	F2E
15	y	1	PL	16		3/8	2	4 3/8	
16	1a 9/8"ø	1	BR	7 1/2		3/4	4	6 27/32	MIE FIE
17	1b 1"ø	4	BR	7		1/2	4	6	F2E
18	c 2bk"	1	PL	16		3/8	1	0 3/8	
19									
20									
21									
22									
23									
24									
25	US2	1	UPPER SHOE						DET. ON DWG. 2
26									
27	FW	1	WD			3/8	20	4	
28	FWL	1	WD			5/16	381	2 3/4	
29	FWS	1	WD			5/16	68	10	
30	FW	1	WD			1/2	1	2	
31	SDS	1	WD			1/2	4	6	
32	VGDS	1	WD			3/4	2	8	
33	SD	1	WD			3/16	1	0	
34									
35		12	325	7/8			0	23	GALVANIZED
36		12	HW	1 3/4	15/16	3/8			DO
37									
38	LP1A	1	LINK PL ASSEMBLY						DET. ON DWG. 13
39	LP1B	1	LINK PL ASSEMBLY						
40	KB1	1	KEEPER BOLT						
41	P1	1	PIN						
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									

MILL ORDER

LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM
39	8 1/2	46	17
57	8 1/2	44	18
39	11 1/2	41	15
38	0	41	17
57	3 1/4	37	17
58	2 1/4	37	15
40	10 3/8	47	20
40	10 3/8	47	20
		J	
20	7	24	34
13	10 1/4	24	35
		J	
13	10 1/4	47	19
		J	
13	10 1/4	47	18
13	10 1/4	47	19
		J	

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

INST.-45

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-11	GIRDER (37 7/8 x 59 3/8 x 564'-1")	

PAY ITEM-504.711
GIRDER

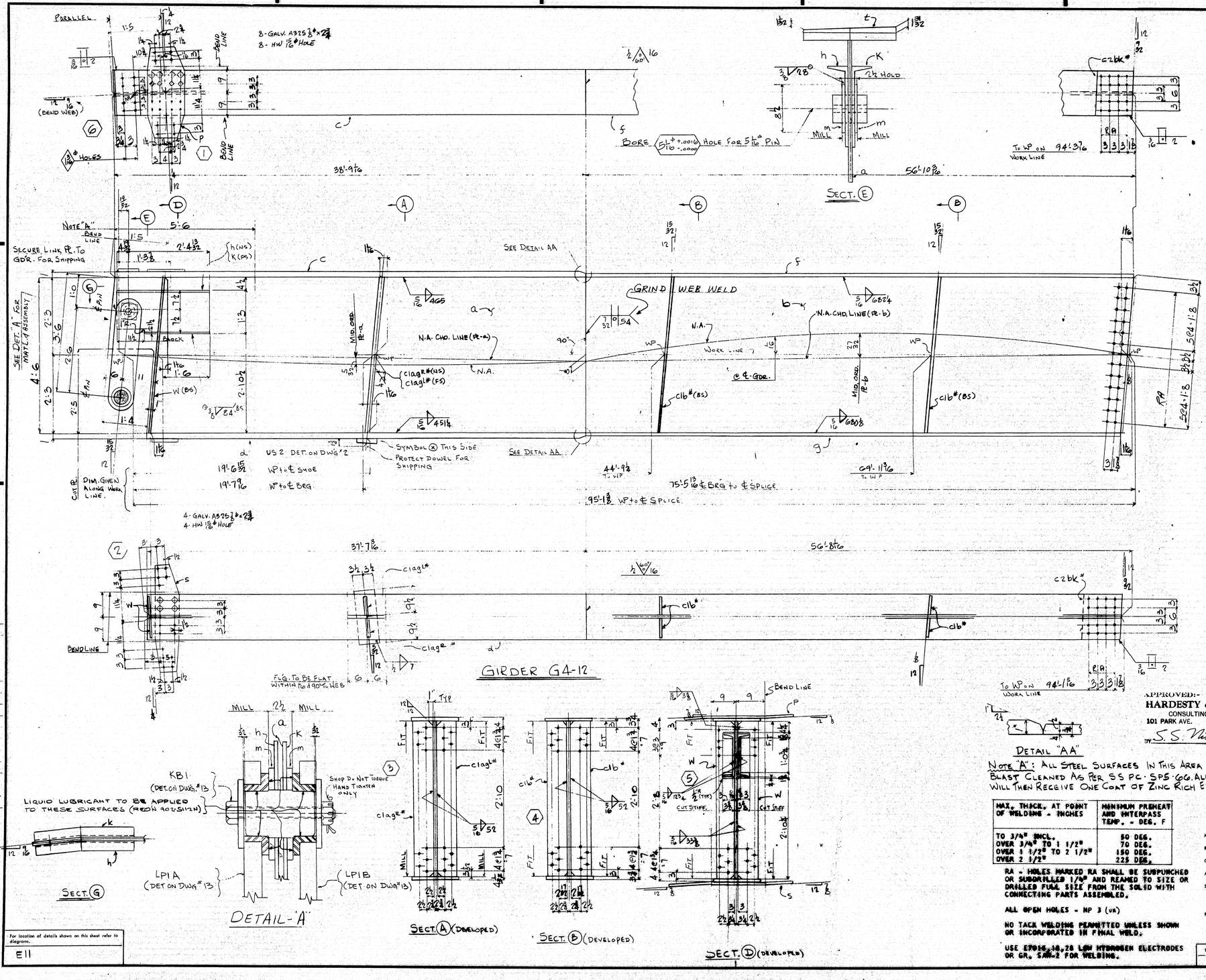
CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: PISCATAQUA RIVER BRIDGE
PROJECT No. I 95-1(22)16
CONT. No. 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM ..... POTTSTOWN WORKS
MADE BY RD DATE 9-11-69 IN CHARGE D.K. BERTOLET
CHECKED BY RE DATE 9-25-69 SHOP NO. 2
CONTRACT CJ-6289-020' DRAWING NO. 354

REVISION: NO. | DATE | INIT.

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

33403 (Rev. C-6-67)
NOV 17 1969

107-169



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 PAGE	MILL ORDER LINE
1				ONE GIRDER G4-12									
2	a	1	PL	54		1/2	38	10 3/8	BENT 56 x 1/2	39	8 1/2	46	17
3	b	1	PL	54		7/16	56	10 3/8	56 x 7/16	57	8 1/2	44	18
4	c	1	PLU	16		1	38	9 1/4		39	0	41	16
5	d	1	PLU	16		1	37	7 7/16		38	0	41	17
6	f	1	PLU	16		3/4	56	10 3/8		57	3 1/4	37	17
7	g	1	PLU	16		3/4	56	8 1/4		57	3 1/4	37	17
8	h	1	C	15	40		2	9	BENT	40	10 3/8	47	060
9	k	1	C	15	40		2	9	BENT	40	10 3/8	47	060
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. 3/8 PL.)			J	
11	P	1	PL	13		1/2	2	7 7/8	BENT	20	7	24	34
12	S	1	PL	8 1/2		1/2	3	1 3/8	BENT C.F. 10 x 1/2	13	0 1/4	24	35
13	t	1	PL	8		13/32 x 11/2	1	4	C.F. 12 x 2 3/8			J	
14	W	2	BR	7		1/2	4	6	F2E	13	10 1/4	47	19
15													
16	c 1a g#	1	BR	7 1/2		3/4	4	6 3/32	MIE F1E	13	10 1/4	47	18
17	c 1b#	4	BR	7		1/2	4	6	F2E	13	10 1/4	47	19
18	c 2bk#	2	PL	16		3/8	1	0 3/8				J	
19													
20													
21													
22													
23													
24													
25	US2	1	UPPER SHOE						DET. ON DWG. 2				
26													
27	FW	-	WD			3/8	20	4					
28	FWL	-	WD			5/16	379	11					
29	FWS	-	WD			5/16	68	10					
30	FW	-	WD			1/2	-	2					
31	SDS	-	WD			5/16	4	6					
32	VGOS	-	WD			3/4	2	8					
33	SD	-	WD			3/16	-	0					
34													
35		12	S25	7/8" ø		0	27		GALVANIZED			902-62	00N
36		12	HW	1 3/4	15/16	3/16			do			902-62	00N
37													
38	LP1A	1	*	LINK PL ASSEMBLY					DET. ON DWG. 13				
39	LP1B	1	*	LINK PL ASSEMBLY									
40	KB1	1		KEEPER BOLT									
41	P1	1		PIN									
42													
43													
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 S.S. Nishimura OCT 17 1969

INST.-4E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-12	GIRDER (3'-7 7/8" x 3'-9 1/4" x 95'-8 3/8")	

PAY ITEM-504.711
GIRDER

NOTE "A": ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SS PC-SP5-66. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

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.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/8" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NP 3 (UN)

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

USE E7018, 18, 28 LOW HYDROGEN ELECTRODES OR GR. SAW-2 FOR WELDING.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8"ø
OPEN HOLES - 15/16"ø (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO M72-TYPE II RED LEAD (UN)

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

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: 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 RD DATE 7-11-69 IN CHARGE D.K. BERTOLET
CHECKED BY MS DATE 7-25-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 355

For location of details shown on this sheet refer to diagrams.
E11

107-170

GIRDER G4-13

PARALLEL

3 - GALV. A325 7/8" ø x 2 3/4
3 - HW 15/16" ø HOLE

BEND LINE

(BEND WEB)

12 HOLES

BEND LINE

38'-7 15/16

BORE 5 1/16" +.001 TO -.000 HOLE FOR 5 1/16" PIN

MILL

MILL

SECT. E

56'-7 7/8

To WP on Work Line 93'-11 8

NOTE "A" BEND LINE

SECURE LINK PL. TO GDR. FOR SHIPPING.

SEE DET. "A" FOR MATL. & ASSEMBLY

BLOCK

W (BS)

SEE DETAIL AA

GRIND WEB WELD

SEE DETAIL AA

N.A. CHD. LINE (PL-a)

N.A.

N.A. CHD. LINE (PL-b)

N.A.

Work Line

℄ - GDR.

MID. ORD. PL-a

MID. ORD. PL-b

SYMBOL Ⓚ THIS SIDE
PROTECT DOWEL FOR SHIPPING

US 2 DET. ON DWG #2

19'-5 19/32 WP to ℄ SHOE

19'-6 11/16 WP to ℄ BRG.

DIM. GIVEN ALONG WORK LINE.

CUT PL.

4 - GALV. A325 7/8" ø x 2 3/4
4 - HW 15/16" ø HOLE

44'-7 1/2 T. WP

75'-2 3/8 ℄ BRG to ℄ SPLICE

94'-9 1/16 WP to ℄ SPLICE

69'-8 To W.P.

594'-1 8

FLG. TO BE FLAT WITHIN 1/16 TO WEB

37'-5 1/16

56'-5 1/2

BEND LINE

Shop D. Not Torque Hand Tighten Only

KBI (DET. ON DWG # 13)

LIQUID LUBRICANT TO BE APPLIED TO THESE SURFACES (REF'N 902-5112N)

LPIA (DET. ON DWG # 13)

LPIB (DET. ON DWG # 13)

SECT. G

DETAIL-A

SECT. A (DEVELOPED)

SECT. B (DEVELOPED)

SECT. D (DEVELOPED)

DETAIL "AA"

Note "A": All steel surfaces in this area to be blast cleaned as per SS PC-SP5-GG. All steel will then receive one coat of zinc rich epoxy including open holes

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.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/8" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NO 3 (UN)

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

USE E7016-XX-28 LOW HYDROGEN ELECTRODES OR EQ. SUBJ. FOR WELDING.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8"
OPEN HOLES 15/16" ø (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT (UN)
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)

For location of details shown on this sheet refer to diagrams. E11

SHOP BILL

PIECE MARK	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR FOUNDED	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	WEIGHT LENGTH FT.	WEIGHT LENGTH IN.	WEIGHT EACH PIECE
			ONE GIRDER G4-13									
	a	1	PL	54		1/2	38	8 1/16	BENT 56 w/ ℄	39	8 1/2	4417
	b	1	PL	54		1/16	56	7 3/8	56 ℄ w/ ℄	57	8 1/2	4418
	c	1	PLU	16		1	38	7 1/2		39	0	4116
	d	1	PLU	16		1	37	5 3/8		38	0	4117
	f	1	PLU	16		3/4	56	7 15/16		57	3 1/4	3717
	g	1	PLU	16		3/4	56	5 1/16		57	3 1/4	3717
	h	1	C	15	40		2	9	BENT	40	10 3/8	4716
	k	1	C	15	40		2	9	BENT	40	10 3/8	4716
	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C.F. 5 1/4 ℄)			J
	P	1	PL	13		1/2	2	7 3/8	BENT	20	7	2634
	S	1	PL	8 1/2		1/2	3	1 3/8	BENT C.F. 10 x 1/2	13	0 1/4	2485
	t	1	PL	8		13/32 x 11 1/2	1	4	C.F. 12 x 2 3/8			J
	W	12	BR	7		1/2	4	6	F2E	13	10 4	4719
	c1a g#	1	BR	7 1/2		3/4	4	6 3/32	MIE F1E	13	10 4	4718
	c1b#	4	BR	7		1/2	4	6	F2E	13	10 4	4719
	c2bk#	2	PL	16		3/8	1	0 7/8				J
	US2	1	UPPER SHOE						DET. ON DWG. 2			
	FW	1	WD			3/8	20	4				
	FWL	1	WD			5/16	378	3 3/4				
	FWS	1	WD			5/16	68	10				
	FN	1	WD			1/2	1	2				
	SDS	1	WD			1/16	4	6				
	V60S	1	WD			3/4	7	8				
	SD	1	WD			3/16	1	0				
		12	325	7/8" ø			0	2 3/4	GALVANIZED			902-6200M
		12	HW	1 3/8	15/16	3/16			do.			902-6200M
	LP1A	1	LINK PL ASSEMBLY						DET. ON DWG. 13			
	LP1B	1	LINK PL ASSEMBLY									
	KB1	1	KEEPER BOLT									
	P1	1	PIN									

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

INST.-45

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-13	GIRDER (67 3/8" x 59 7/8" x 95 1/4")	

PAY ITEM-504.711
GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
STRUCTURE: PROJECT No. I-95-1(22)16
CONT. NO. 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM PATTERSON WORKS
MADE BY RD DATE 9-11-69 IN CHARGE D.K. BERTHELET
CHECKED BY JHG DATE 9-25-69 SHOP NO. 2
CONTRACT CS-6249-020 DRAWING NO. 356

REVISION

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DATE										

1.07 - 671

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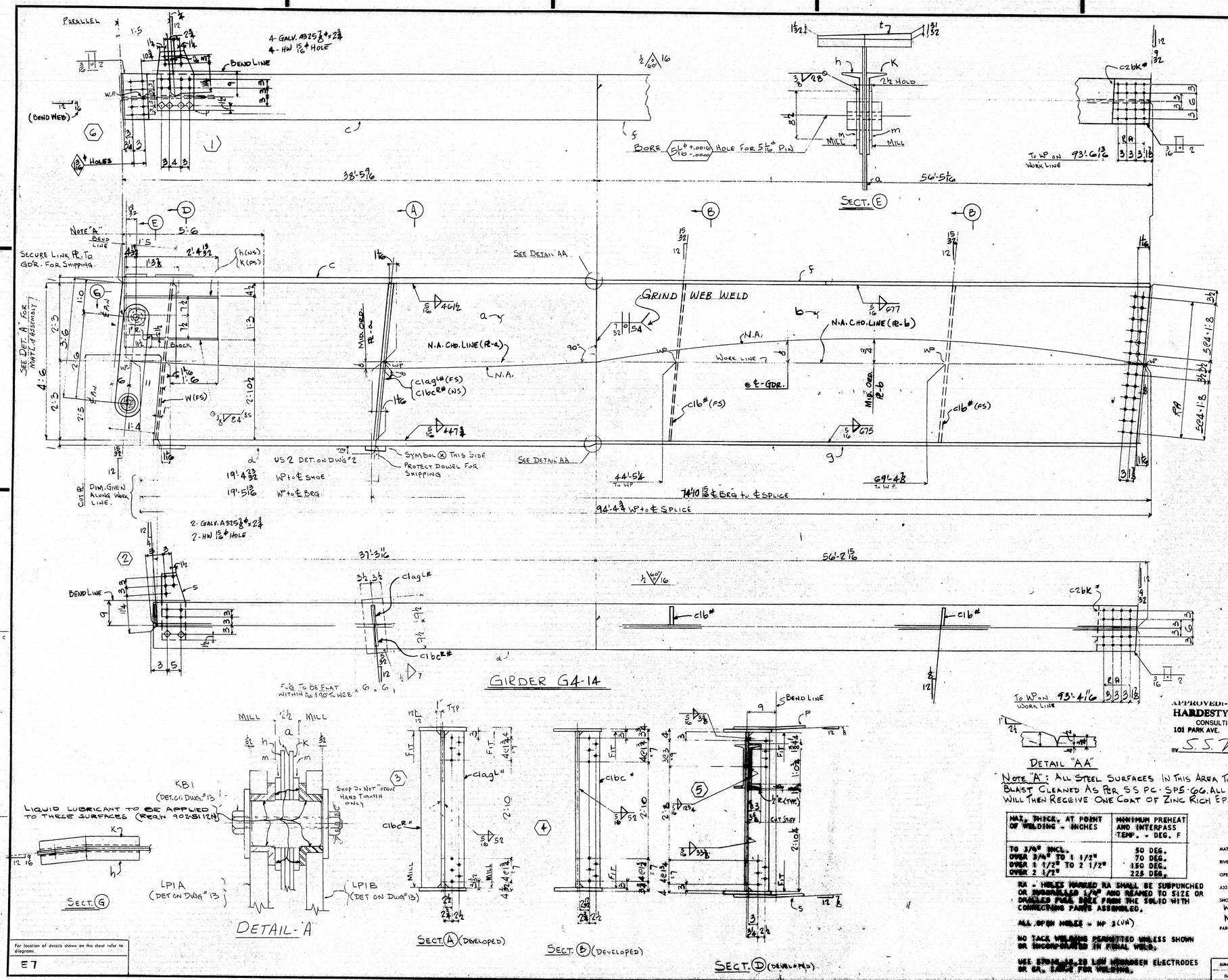


MAX. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	150 DEG.
OVER 2 1/2"	225 DEG.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR DRILLED 1/16" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NP 3(UN)

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

USE E7018-A1-H8 LOW HYDROGEN ELECTRODES OR EQ. EXCEPT FOR WELDING.

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8"ϕ
OPEN HOLES - 15/16"ϕ (U.N)
A325 FIELD BOLTS
SHOP CONTACT SURFACES - NO PAINT(UN) WELD-AS NOTED MILL-AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II-RED LEAD(UN)

SHOP BILL

NO	ASSEMBLY MARK	NO	SHAPE	SECTION SIZE	SECTION SIZE OR FOLIOS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER PAGE
1			ONE GIRDER G4-14									
2	a	1	PL	54		1/2	38	6 1/16	BENT 56-1/4	39	8 1/2	42 17
3	b	1	PL	54		7/16	56	5 1/2	56 1/4-7/16	56	9 1/2	44 19
4	c	1	PLU	16		1	38	5 3/4		39	0	41 17
5	d	1	PLU	16		1	37	3 11/16		38	0	41 17
6	f	1	PLU	16		3/4	56	5 3/4		57	3 1/4	37 17
7	g	1	PLU	16		3/4	56	3 3/8		57	3 1/4	37 17
8	h	1	C	15	40		2	9	BENT	40	10 3/8	47 20
9	k	1	C	15	40		2	9	BENT	40	10 3/8	47 20
10	m	2	PL	8 1/2		15/32	0	8 1/2	MIS (C-F. 3/4 R.)			J
11	P	1	PL	13		1/2		8 3/8	BENT	20	7	24 34
12	S	1	PL	8 1/2		1/2	1	11 3/8	BENT C.F. 10 x 1/2	13	10 1/4	24 35
13	t	1	PL	8		13/32 x 8 1/2	1	4	C.F. 12 x 2 3/8			J
14	W	1	BR	7		1/2	4	6	F2E	13	10 1/4	47 19
15												
16	C1a9L#	1	BR	7 1/2		3/4	4	6 5/32	MIE F1E	13	10 1/4	47 18
17	C1b#	2	BR	7		1/2	4	6	F2E	13	10 1/4	47 19
18	C1bc R#	1	BR	7 1/2		3/4	4	6 5/32	MIE F1E	13	10 1/4	47 18
19	C2bK#	2	PL	16		3/8	1	0 3/8				J
20												
21												
22												
23												
24												
25	US2	1	UPPER SHOE						DET. ON DWG. 2			
26												
27	FW	1	WD			3/8	20	4				
28	FWL	1	WD			5/16	376	10 1/4				
29	FWS	1	WD			5/16	42	11				
30	FW	1	WD			1/2	1	2				
31	SDS	1	WD			7/16	4	6				
32	VGOS	1	WD			3/4	2	8				
33	SD	1	WD			3/16	1	0				
34												
35		G	325	7/8			0	2 3/4	GALVANIZED			902-62
36		G	HW	1 1/4	15/16	5/8	C		do			902-62
37												
38	LP1A	1	LINK PL. ASSEMBLY						DET. ON DWG. 13			
39	LP1B	1	LINK PL. ASSEMBLY									
40	KB1	1	KEEPER BOLT									
41	P1	1	PIN									
42												
43												
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 S. S. Markman OCT 17 1969

INST.: 4E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G4-14	GIRDER (267"x 5 7/8"x 75'-0")	

PAY ITEM: 504.711
GIRDER

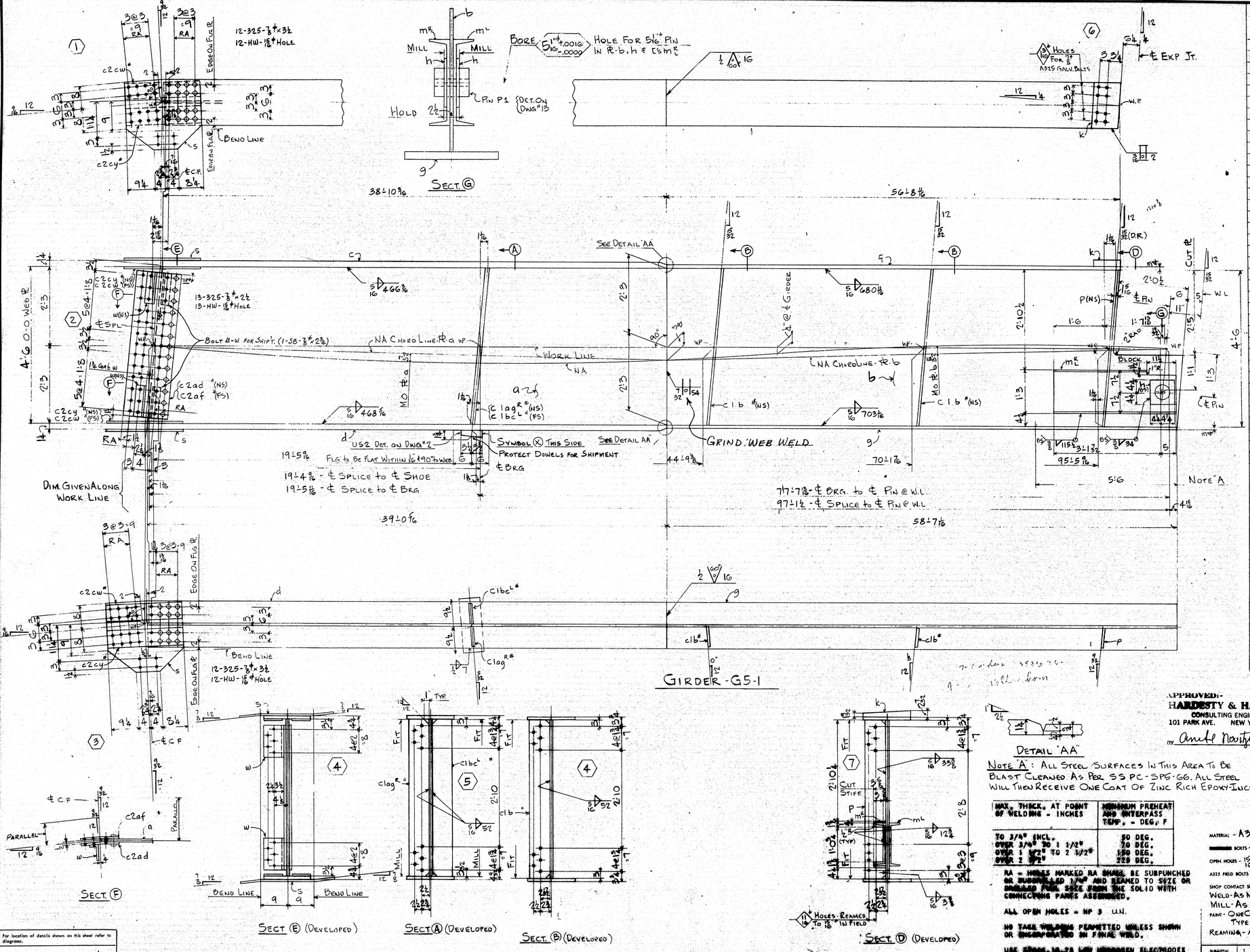
CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: PISCATAQUA RIVER BRIDGE
PROJECT NO. I 95-1(22)16
CONT. NO. 3 NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY RD DATE 9-11-69 IN CHARGE D.K. BERTOLET
CHECKED BY [illegible] DATE 9-25-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 357

REVISION: NO. | DATE | INIT.

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

For location of details shown on this sheet refer to diagrams: E7

107-172



		SHOP BILL									ADDITIONS			
	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS		LENGTH FT.	LENGTH IN.	PIECE MARK	
1		ONE-GIRDER-G5-1												
2	a	1	PL	54		½	39	0⅝		56×½	39	8½	46	117
3	b	1	PL	54		7/16	58	8⅛		56½×7/16	59	6½	44	16
4	c	1	PLU	16		¼	38	10⅜		16×¼	39	2⅜	40	15
5	d	1	PLU	16		¼	39	0½		" "				
6	f	1	PLU	16		⅜	56	8⅜		16×⅜	57	3¼	37	17
7	g	1	PLU	16		⅜	58	7⅛		" "	59	4½	37	16
8	C2ad	1	PLU	13		⅜	4	2	BENT		33	6	47	118
9	C2cw	2	BR	6½		½	2	1½			19	1	47	120
10	C2cy	2	BR	6½		½	2	1½			19	1	47	120
11	C1agR	1	BR	7½		¾	4	6⅜	MIE-FIE		13	10¼	47	118
12	C1bcL	1	BR	7½		¾	4	6⅜	MIE-FIE		13	10¼	47	118
13	C1b	2	BR	7		½	4	6	F2E		13	10¼	47	119
14	C2af	1	PLU	13		⅜	4	2	BENT		33	6	47	118
15	P	1	BR	7		½	4	6	F2E		13	10¼	47	119
16	h	2	PL	8½		½	0	8½	MIS	CF ¾ ℔			J	
17	k	1	PL	8		(22½×1⅜)W	1	4½	BEV.	CF 34×2⅜			J	
18	US2	1	UPPER SHOE						DET. ON DWG #2					
19	P1	1	PIN						DET. ON DWG #13					
20	mL	1	C	15	40		3	6⅜			40	10⅜	47	062
21	S	2	PL	25½		½	1	11¼	BENT		30	5⅛	47	100
22	W	2	L	7	3¼	½	0	11	BENT	CF 7×4×½	40	0	36	39
23														
24	FW	1	WD			3/16	24	11						
25	FWL	1	WD			5/16	386	4½						
26	FWS	1	WD			5/16	42	11						
27	FW	1	WD			½	1	2						
28	SDS	1	WD			1/16	4	6						
29	VGOS	1	WD			¾	2	8						
30														
31	SD	1	WD			3/16	0	4						
32														
33														
34		13	325	⅞ϕ			0	2½	HHH-HHN					
35		24	325	⅞ϕ			0	3½						
36		37	HW	1⅛ϕ		1/16	3/16							M
37		2	SB	⅞ϕ			0	2½	HH & HN					
38														
39														
40														
41														
42														
43														
44														
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48														
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51														
52														
53														
54														
55														

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

INST. "5W"

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-1	GIRDER (60×24½×9⅛ & 8½)	

PAY ITEM 504.711

GIRDER

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT NO I-95-1(22)10.
CONT. NO. 3 - NEW HAMPSHIRE APP
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CCM DATE 9-10-69 IN CHARGE B.K. DIBJOLIET
CHECKED BY RJ DATE 10/13/69 SHOP NO. 2
CONTRACT CJ-G241-020 DRAWING NO. 358

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

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

MATERIAL - A36 STEEL
BOLTS - ⅞"ϕ
OPEN HOLES - 15/16"ϕ (U.N.)
A325 FIELD BOLTS - ⅞"ϕ
SHOP CONTACT SURFACES NO PAINT
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (LN)
REAMING - 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.

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 U.N.

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

USE E6015, 16, OR 18 LOW HYDROGEN ELECTRODES OR EQ. FOR WELDING.

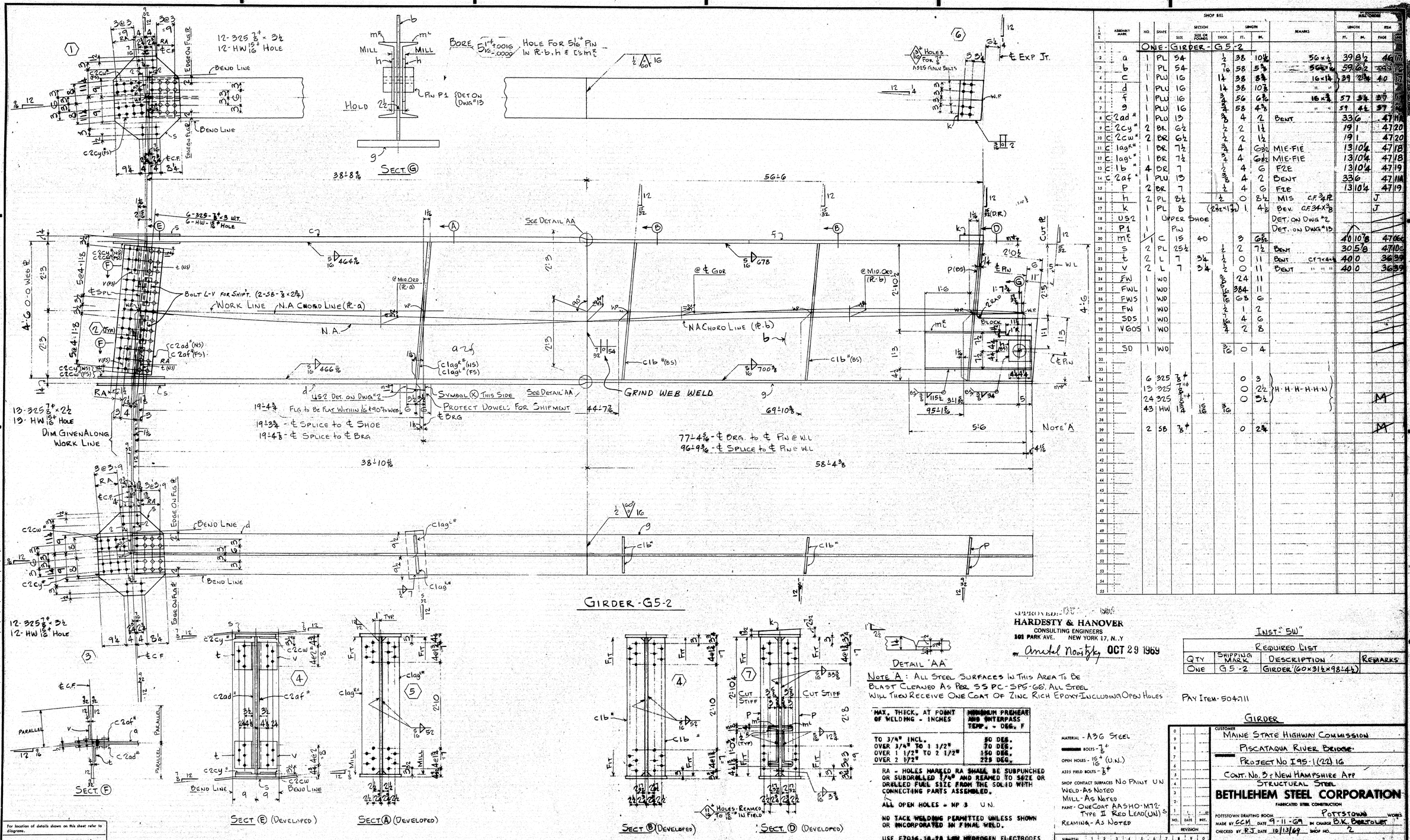
NOTE A: ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP6-GC. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

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

E10

℄ 2° - TAN A : B

10-7-/73



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	MILL ORDER PAGE
1		ONE-GIRDER-G5-2											
2	a	1	PL	54		1/2	38	10 1/2	50 x 1/2	39	8 1/2	46	17
3	b	1	PL	54		7/16	58	5 3/8	50 x 7/16	59	6 1/2	44	12
4	c	1	PLU	16		1 1/2	38	8 1/2	16 x 1 1/2	39	2 1/2	40	17
5	d	1	PLU	16		1 1/2	38	10 3/8	" "				
6	f	1	PLU	16		3/4	56	6 1/16	16 x 3/4	57	3 1/2	39	16
7	g	1	PLU	16		3/4	58	4 3/8	" "	59	4 1/2	37	16
8	C 2ad #	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
9	C 2cy #	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
10	C 2cw #	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
11	C lag R #	1	BR	7 1/2		3/4	4	6 3/8	MIE-FIE	13	10 1/4	47	18
12	C lag L #	1	BR	7 1/2		3/4	4	6 3/8	MIE-FIE	13	10 1/4	47	18
13	C 1b "	4	BR	7		1/2	4	6	FIE	13	10 1/4	47	19
14	C 2af "	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
15	P	2	BR	7		1/2	4	6	FIE	13	10 1/4	47	19
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F 3/4 R			J	
17	k	1	PL	8		(2 3/4 x 1 1/2)	1	4 3/8	REV. C.F 3 1/4 x 3/8			J	
18	US2	1	UPPER SHOE						DET. ON DWG #2				
19	P1	1	PIN						DET. ON DWG #13				
20	m℄	1	C	15	40		3	6 5/8		40	10 3/8	47	06
21	S	2	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 3/8	47	10C
22	t	2	L	7	3 1/4	1/2	0	11	BENT C.F 1 x 6 1/4	40	0	36	39
23	V	2	L	7	3 1/4	1/2	0	11	BENT " " "	40	0	36	39
24	FW	1	WD			3/16	24	11					
25	FWL	1	WD			3/16	384	11					
26	FWS	1	WD			3/16	68	6					
27	FW	1	WD			1/2	1	2					
28	SDS	1	WD			1/2	4	6					
29	VGOS	1	WD			3/4	2	8					
30													
31	SD	1	WD			3/16	0	4					
32													
33													
34		6	325	7/8"+			0	3					
35		13	325	7/8"+			0	22	H·H·H·H·H·N			M	
36		24	325	7/8"+			0	3 1/2					
37		43	HW	1 1/16	15/16	3/16							
38													
39		2	SB	7/8"+	-		0	2 3/4				M	
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

MAX. THICK. AT POINT OF WELDING - INCHES | MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F

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.

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 U.N.

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

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

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

MATERIAL - A36 STEEL
BOLTS - 7/8"+
OPEN HOLES - 15/16"+ (U.N.)
A325 FIELD BOLTS - 7/8"+
SHOP CONTACT SURFACES NO PAINT U.N.
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UNI) S REAMING - AS NOTED

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

INST: 5W"

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-2	GIRDER (60 x 31 1/2 x 98'-4 1/2")	

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 CCM DATE 9-11-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 10/13/69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 359

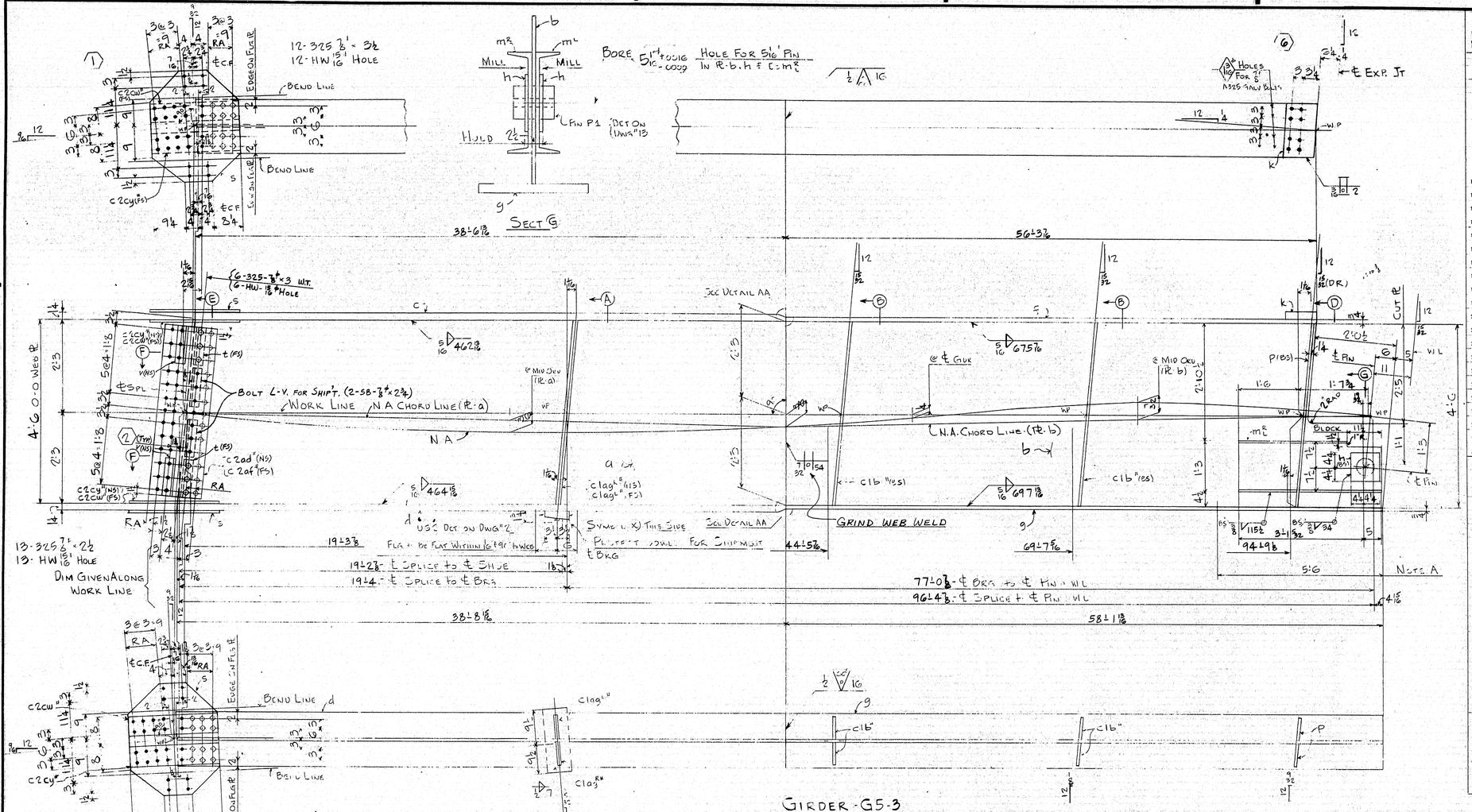
REVISION NO. | DATE | INIT.

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

For location of details shown on this sheet refer to diagrams.
E10

* 2" - TAN A - B.

107-174



Mark	No.	Shape	Size	Size or Pounds	Thick.	Length Ft.	Length In.	Remarks
One-Girder-G5-3								
a	1	PL	54		1/2	38	8 1/8	56 x 1/2
b	1	PL	54		7/16	58	2 15/16	56 1/2 x 7/16
c	1	PLV	16		1 1/4	38	7	16 x 1 1/4
d	1	PLV	16		1 1/4	38	9 1/8	" "
f	1	PLV	16		3/4	56	3 1/4	16 x 3/4
g	1	PLV	16		3/4	58	1 15/16	" "
c 2ad"	1	PLV	13		3/8	4	2	Bent
c 2cw"	2	BR	6 1/2		1/2	2	1 1/2	
c 2cy"	2	BR	6 1/2		1/2	2	1 1/2	
c 1ag"	1	BR	7 1/2		3/4	4	6 3/32	Mie-Fie
c 1ag"	1	BR	7 1/2		3/4	4	6 3/32	Mie-Fie
c 1b"	4	BR	7		1/2	4	6	F2e
c 2af"	1	PLV	13		3/8	4	2	Bent
P	2	BR	7		1/2	4	6	F2e
h	2	PL	8 1/2		1/2	0	8 1/2	Mis C.F. 3/4" R
k	1	PL	8	(23/32 x 1 3/4)		1	4 8	Bev. C.F. 34 x 23/8
US2	1	Upper Shoe						Det. on Dwg "2
P1	1	Pin						Det. on Dwg "13
m1	1	C	15	40		3	6 3/32	
s	1/2	PL	25 1/2		1/2	2	7 1/2	Bent
t	2	L	7	3 1/4	1/2	0	11	Bent C.F. 7/16 x 4 1/2
v	2	L	7	3 1/4	1/2	0	11	Bent " " "
FW	1	WD			3/16	24	11	
FWL	1	WD			5/16	383	6	
FWS	1	WD			5/16	68	6	
FW	1	WD			1/2	1	2	
SDS	1	WD			3/16	4	6	
VGDS	1	WD			3/4	2	8	
SD	1	WD			3/16	0	4	
	6	325	7/8			0	3	H H H-H H N
	13	325	7/8			0	2 1/2	
	24	325	7/8			0	3 1/2	
	43	HW	1 1/4	15/16	3/16			
	2	SB	7/8			0	2 3/4	

Mill Order Length Ft.	Mill Order Length In.	Item Page	Item Line
39	8 1/2	46	17
58	8 1/4	44	17
39	8 3/4	40	17
57	3 1/4	37	17
59	4 1/2	37	16
33	6	47	11A
19	1	47	20
19	1	47	20
13	10 1/4	47	18
13	10 1/4	47	18
13	10 1/4	47	19
33	6	47	11A
13	10 1/4	47	19
		J	
		J	
40	10 3/8	47	06
30	5 7/8	47	10C
40	0	36	39
40	0	36	39
		M	
		M	

Girder-G5-3

Note A: All steel surfaces in this area to be blast cleaned as per SSPC-SP6-G6. All steel will then receive one coat of zinc rich epoxy-including open holes.

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.

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 UN

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

Use E7016, 18, 28 low hydrogen electrodes or GR. SAW-2 for welding.

Material - A36 steel
Bolts - 7/8"
Open holes - 15/16" (U.N.)
A325 field bolts - 7/8"
Shop contact surfaces No Paint UN
Weld - As Noted
Mill - As Noted
Paint - One Coat AASHO M72 Type II Red Lead (UN)
Reaming - As Noted

Approved:-
HARDESTY & HANOVER
Consulting Engineers
101 Park Ave. New York 17, N.Y.
By Arnold Nowitz OCT 29 1969

Inst: "SW"

Required List

Qty	Shipping Mark	Description	Remarks
One	G5-3	Girder (60 x 31 1/2 x 98-0 3/8)	

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 CCM Date 9-11-69 In charge B.K. Bertolet
Checked by RJ Date 10/13/69 Shop No. 2
Contract CJ-G249-020 Drawing No. 360

No	Date	Init.	Revision

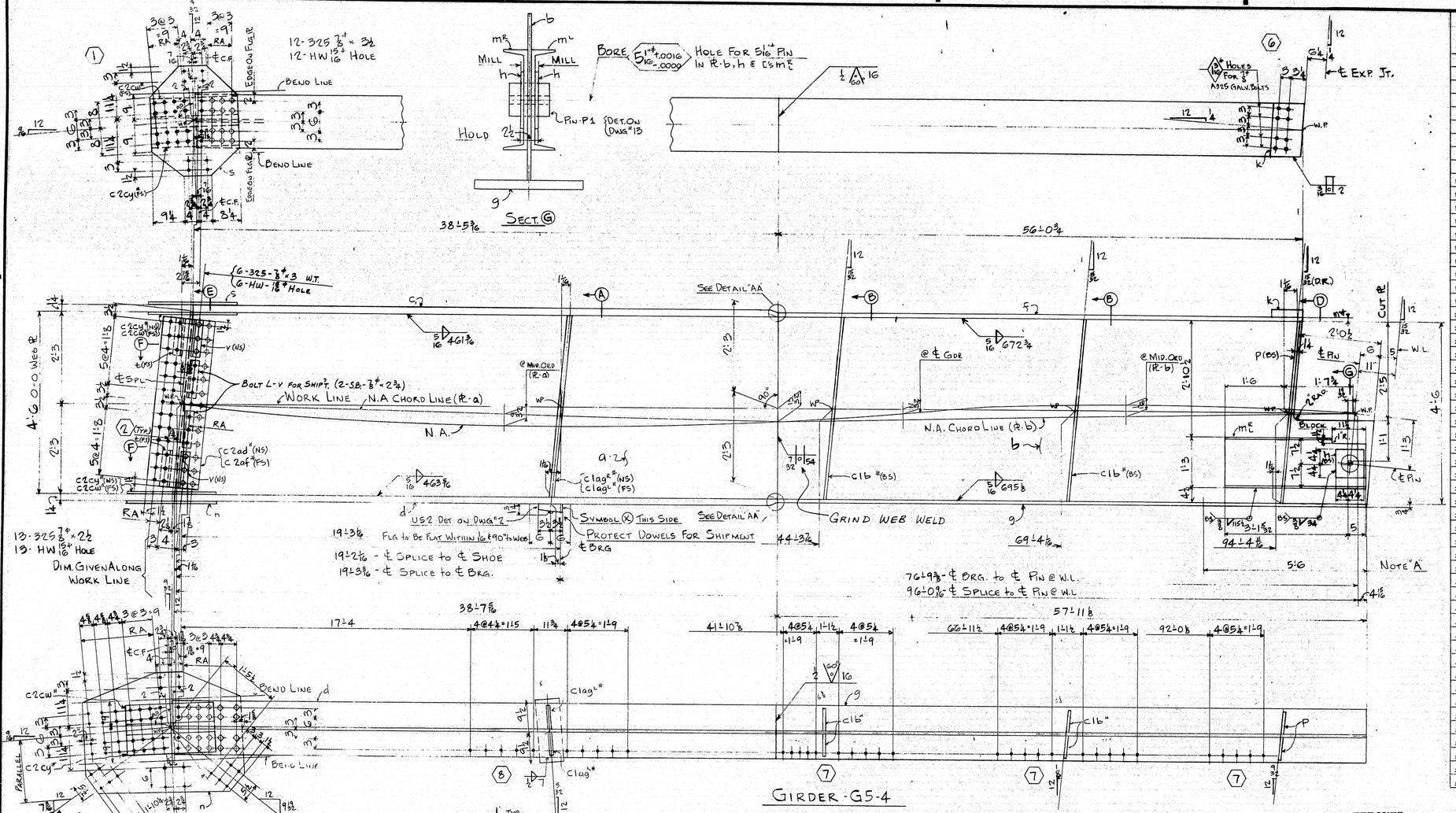
Submittal 1 2 3 4 5 6 7 8 9 10
Date

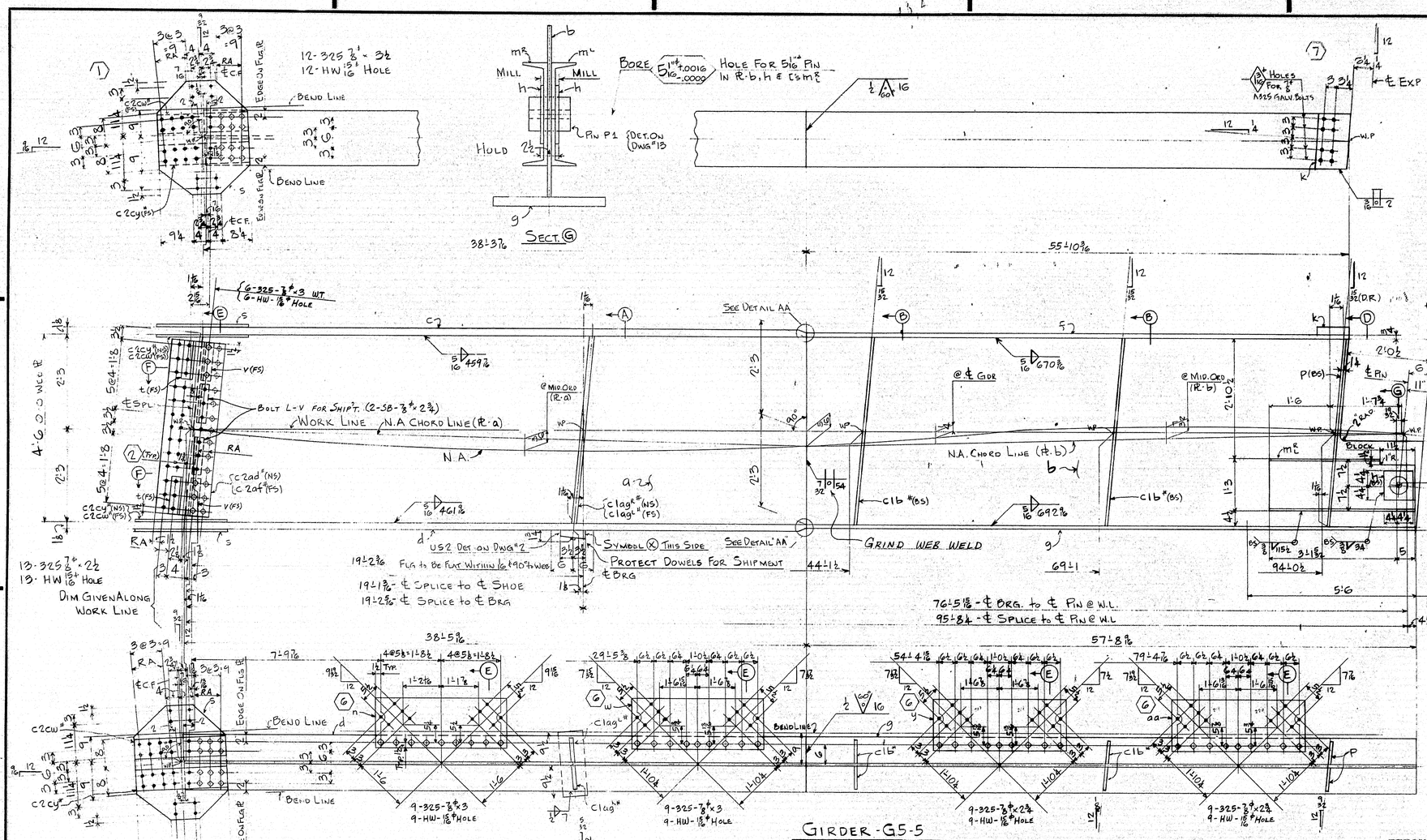
For location of details shown on this sheet refer to diagrams.
E10

* 2. 1 - TAN A = B.

107-175

33433 (Rev. C-4-65) NOV 17 1966


12-325 7/8" x 3 1/2
12-HW 15/16" Hole
Edge of Flg. R
Bend Line
Bend Line
Edge of Flg. R
c2cy(FS)
E.C.F.
E.C.F.
9 1/2
3 1/4
Mill
Mill
Hold
2 1/2
Pin-P1 {Det. on Dwg #13
Bore 5 1/16" +.0016 -.0000 Hole for 5 1/16" Pin in R-b, h & Esm't
g
Sect. G
38 - 5 3/16
12
6 Holes for 7/8" A325 Galv. Bolts
3 3/4
℄ Exp. Jt.
W.P.
k
3/8 x 12
G-325-7/8" x 3 W.T.
G-HW-15/16" Hole
E
S
5@4'-1 1/8
4'-6 Web R
2'-3
2'-3
5@4'-1 1/8
c2cy(NS)
c2cw(NS)
c2cy(FS)
F
t(FS)
v(NS)
℄ SPL.
Bolt L-V for Ship't (2-SB-7/8" x 2 3/4)
Work Line
N.A. Chord Line (R-a)
RA
c2ad"(NS)
c2af"(FS)
v(NS)
c2cy(NS)
c2cw(FS)
RA
t
n
13-325 7/8" x 2 1/2
13-HW 15/16" Hole
Dim. Given Along Work Line
RA
3@3=9
RA
3@3=9
c2cw
c2cy
Bend Line
d
Bend Line
Parallel
Parallel
12-325 7/8" x 3 3/4
12-HW 15/16" Hole
8-325-7/8" x 3 1/4
℄ to Cross Frame
3
℄ C.F.
c2af"
a
t
v
c2ad"
Parallel
Parallel
Sect. (F)
4
c2af"
c2ad
v
t
c2cy
c2cw
Bend Line
Bend Line
Sect. (E) (Developed)
TYP.
Fit
Fit
clag"
clag"
5
2'-10
Mill
Mill
Sect. (A) (Developed)
A
B
C
D
E
F
G
See Detail "AA"
5/16 461 3/16
5/16 672 3/4
@ Mid. Ord. (R-a)
@ ℄ Girder
@ Mid. Ord. (R-b)
P(BS)
℄ Pin
W.L.
Cut ℄
2'-10 1/2
1'-6
1:6
1:7 3/4
2'-6
2'-5
1'-11
1:1
1'-3
4'-6
Block 11" x 1'-6
N.A.
N.A. Chord Line (℄ b)
a
b
m℄
mL
c16"(BS)
c16"(BS)
c16"(BS)



GIRDER - G5-5

MK	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT. IN.	MILL ORDER WGHT. PAGE	
1		ONE-GIRDER-G5-5										
2		a	1	PL	54		1/2	38	5 3/8	56×1/2	38 9 3/4	40 18
3		b	1	PL	54		7/16	57	9 9/16	56×1/2	58 8 1/4	44 17
4		c	1	PLU	16		1 1/16	38	3 3/8	16×1 1/16	38 7 3/4	41 20
5		d	1	PLU	16		1 1/16	38	5 3/4	" "		
6		f	1	PLU	16		3/4	55	10 3/4	16×3/4	55 11 1/4	37 19
7		g	1	PLU	16		3/4	57	8 5/16	" "	58 2 1/4	37 15
8	C 2ad *	1	PLU	13		3/8	4	2	BENT	33 6		47 11A
9	C 2cw *	2	BR	6 1/2		1/2	2	1 1/2		19 1		47 20
10	C 2cy *	2	BR	6 1/2		1/2	2	1 1/2		19 1		47 20
11	C lag *	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE	13 10 1/4		47 18
12	C lag *	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE	13 10 1/4		47 18
13	C 1b *	4	BR	7		1/2	4	6	FZE	13 10 1/4		47 19
14	C 2af *	1	PLU	13		3/8	4	2	BENT	33 6		47 11A
15	P	2	BR	7		1/2	4	6	FZE	13 10 1/4		47 18
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3 1/2"			J
17	k	1	PL	8	(23 1/2×1/2)	1	4	3	BEV. C.F. 34×23/8			J
18	US2	1	UPPER SHOE						DET. ON DWG #2			
19	P1	1	PIN						DET. ON DWG #13			
20	m	1	C	15	40		3	6 3/32		40 10 3/8		47 06
21	s	2	PL	25 1/2		1/2	2	7 1/2	BENT	30 5 3/8		47 10C
22	t	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7×4×1/2	40 0		36 39
23	v	2	L	7	3 1/4	1/2	0	11	BENT " " "	40 0		36 39
24	FW	1	WD			3/16	24	11				
25	FWL	1	WD			3/16	380	7 1/2				
26	FWS	1	WD			3/16	68	6				
27	FW	1	WD			1/2	1	2				
28	SDS	1	WD			1/16	4	6				
29	VGOS	1	WD			1/4	2	8				
30												
31	SO	1	WD			3/16	0	4				
32												
33		24	325	7/8			0	3				
34		18	325	7/8			0	2 3/4				
35		13	325	7/8			0	2 1/2	H·H·H·H·H·H			M
36		24	325	7/8			0	3 1/2				
37		79	HW	1/4	15/16	3/16						
38												
39		2	SB	7/8			0	2 3/4				M
40												
41												
42												
43	n	1	PL	14 1/2		5/8	3	8	BENT	26 0	28 19	
44	w	1	PL	14 1/2		5/8	4	6	BENT	26 0	28 19	
45	y	1	PL	14 1/2		5/8	4	6	BENT	26 0	28 19	
46	aa	1	PL	14 1/2		5/8	4	6	BENT	26 0	28 19	
47												
48												
49												
50												
51												
52												
53												
54												
55												

INST. "SW"

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-5	GIRDER (59 7/8 × 34 1/2 × 96-10 3/8)	

PAY ITEM 504.711

GIRDER

TEMP. 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"	150 DEG.
OVER 1 1/2" TO 2 1/2"	200 DEG.
OVER 2 1/2"	250 DEG.

BA = BACKING MATERIAL BA SHALL BE DISPUNCHED OR DRILLED 3/16" AND COUNTER SUNK TO FREE OR ENLARGE HOLE WHERE HOLE IS SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES = NO 3 U.N.

NO EDGE WELDING PERMITTED UNLESS SHOWN OR CONSTRUCTED IN FINAL WELD.

USE SAME WELD AND ELECTRODES ON ALL CONTACT WELDS.

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

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

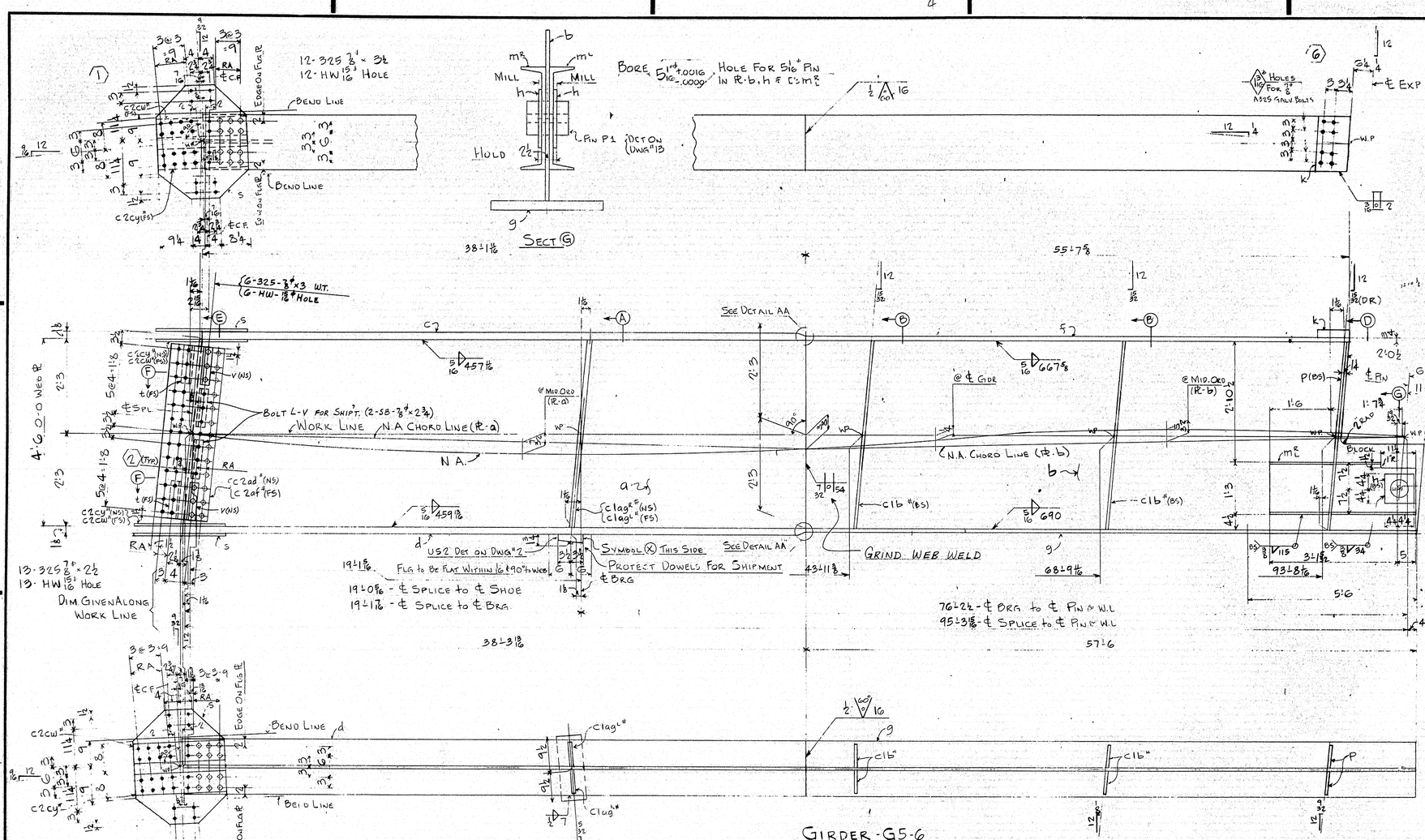
CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT NO I95-1(22) 16
CONT. NO 3 - NEW HAMPSHIRE APP
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MARK BY CGM DATE 9-15-69 IN CHARGE B.K. BERGNER
CHECKED BY RJ DATE 10/13/69 SHEET NO. 2
CONTRACT CS-G229-010 DRAWING NO. 362

REVISION: NO. | DATE | INIT.

SUBMITTAL 1 2 3 4 5 6 7 8 9 0
AS BUILT

For location of details shown on this sheet refer to diagrams.
E10

4 2- — TRIAL A.B. 10/24/77



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.	Item: Page	Item: Line
1				ONE-GIRDER-G5-6									
2	a	1	PL	54		1/2	38	3 1/8	56 x 1/2	38	9 3/4	46	18
3	b	1	PL	54		7/16	57	7	56 1/2 x 7/16	58	8 1/4	44	17
4	c	1	PLU	16		1 1/8	38	1 7/8	16 x 1 1/8	38	7 3/4	41	38
5	d	1	PLU	16		1 1/8	38	4	" "				
6	f	1	PLU	16		3/4	55	7 1/8	16 x 3/4	55	11 4	37	19
7	g	1	PLU	16		3/4	57	6	" "	58	24	37	15
8	C 2ad #	1	PLU	13		3/4	4	2	Bent	33	6	47	11A
9	C 2cw #	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
10	C 2cy #	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
11	C 1ag R #	1	BR	7 1/2		3/4	4	6 3/4	MIE-FIE	13	10 4	47	18
12	C 1ag L #	1	BR	7 1/2		3/4	4	6 3/4	MIE-FIE	13	10 4	47	18
13	C 1b "	4	BR	7		5/8	4	6	FZE	13	10 4	47	19
14	C 2af "	1	PLU	13		3/4	4	2	Bent	33	6	47	11A
15	P	2	BR	7		1/2	4	6	FZE	13	10 4	47	19
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 2 3/4 #			J	
17	k	1	PL	8		(2 3/32 x 1/32)	1	4 3/8	Bev. C.F. 34 x 2 3/8			J	
18	US2	1	Upper Shoe						Det. on Dwg #2				
19	P1	1	Pin						Det. on Dwg #13				
20	m ℄	1	C	15	40		3	6 5/32		40	10 3/8	47	06C
21	S	2	PL	25 1/2		1/2	2	7 1/2	Bent	30	5 3/8	47	10C
22	t	2	L	7	34	1/2	0	11	Bent CF 7-6-69	40	0	36	39
23	V	2	L	7	34	1/2	0	11	Bent " " "	40	0	36	39
24	FW	1	WD			3/16		24	11				
25	FWL	1	WD			3/16		379	24				
26	FWS	1	WD			3/16		68	6				
27	FW	1	WD			1/2	1	2					
28	SDS	1	WD			1/16	4	6					
29	VGOS	1	WD			3/4	2	8					
30													
31	SD	1	WD			3/16	0	4					
32													
33													
34		6	325	7/8			0	3	H H H-H H N				
35		13	325	7/8			0	2 1/2				M	
36		24	325	7/8			0	3 1/2					
37		43	HW	1 1/4	15/16	3/16							
38													
39		2	SB	7/8			0	2 3/4				M	
40													
41													
42													
43													
44													
45													
46													
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48													
49													
50													
51													
52													
53													
54													
55													

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

E10

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

Inst. "SW"

Required List			
Qty	Shipping Mark	Description	Remarks
One	G5-6	Girder (59 7/8 x 31 1/2 x 961 1/16)	

Pay Item-504.711

Girder

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.

RA - Holes marked RA shall be subpunched or subdrilled 1/4" and reamed to 5/32 or drilled full size from the solid with connecting parts assembled.

All open holes - NP 3 U.N.

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

Use Eposa 10.28 low hydrogen electrodes or Gr. 3 for welding.

Material - A36 Steel
Bolts - 7/8"
Open Holes - 15/16" (U.N.)
A325 Field Bolts - 8"
Shop Contact Surfaces No Paint U.N.
Weld - As Noted
Mill - As Noted
Paint - One Coat AASHO-M72 Type II Red Lead (U.N.)
Reaming - As Noted

Customer: Maine State Highway Commission
Piscataqua River Bridge
Project No I95-1(22) 16
Cont. No. 3 - New Hampshire App.
Structural Steel
Bethlehem Steel Corporation
Fabricated Steel Construction
Pottstown Drafting Room — Pottstown Works
Made by CCM Date 9-15-69 In charge B.K. Bertolet
Checked by RJ Date 10/3/69 Shop No. 2
Contract CJ-6229-020 Drawing No. 363

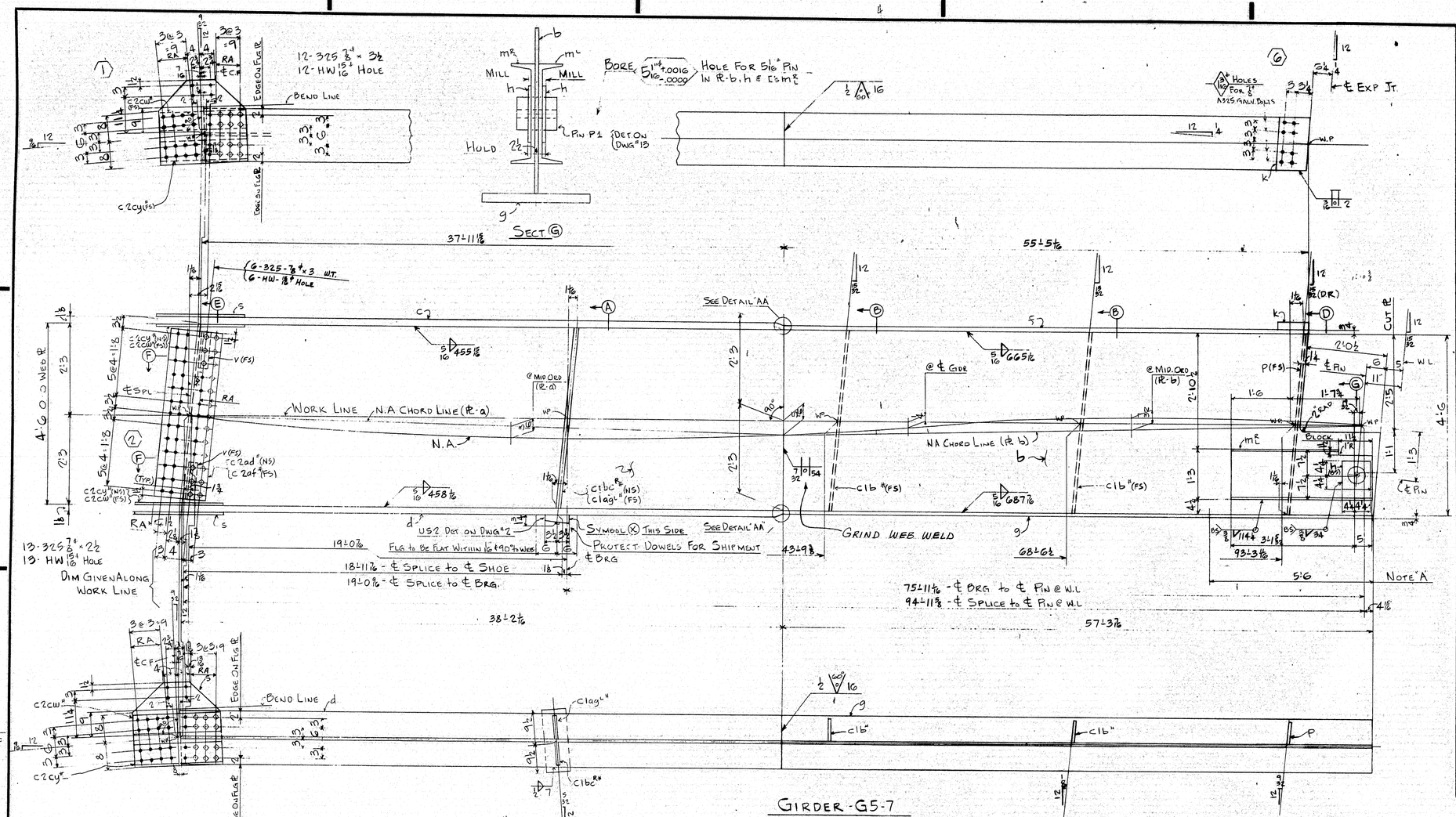
Revision: No. | Date | Init.

Submittal / Date: 1 2 3 4 5 6 7 8 9

* 2" - Tan A-B.

187-178

NOV 1 7 1969



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

E10

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.

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 U.N.

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

USE E70XX, 10, 20 LOW HYDROGEN ELECTRODES OR GR. SAW-2 FOR WELDING.

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

SHOP BILL

ITEM NO.	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION WEIGHT OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1			ONE GIRDER G5-7						
2	a	1	PL	54		½	38	2⅜	50 x ½
3	b	1	PL	54		7/16	57	4⅞	50½ x 7/16
4	c	1	PLW	16		1b	38	0⅛	16 x 1b
5	d	1	PLW	16		1b	38	24	" "
6	f	1	PLW	16		¾	55	5¼	16 x ¾
7	g	1	PLW	16		¾	57	3⅞	" "
8	C 2ad #	1	PLW	13		⅜	4	2	BENT
9	C 2cw #	2	BR	6½		½	2	1½	
10	C 2cy #	2	BR	6½		½	2	1½	
11	C 1bc R#	1	BR	7½		¾	4	6 3/32	MIE-FIE
12	C 1ag L#	1	BR	7½		¾	4	6 3/32	MIE-FIE
13	C 1b #	2	BR	7		½	4	6	F2E
14	C 2af #	1	PLW	13		⅜	4	2	BENT
15	P	1	BR	7		½	4	6	F2E
16	h	2	PL	8½		½	0	8½	MIS C.F. ¾ /ft
17	k	1	PL	8	(2½ x 1 3/16)	1	4	8	BEV. C.F. 34 x 2 3/8
18	US2	1	UPPER SHOE						DET. ON DWG #2
19	P1	1	PIN						DET ON DWG #13
20	m2	1	C	15	40	3	6	8½	
21	S	2	PL	25½		½	1	11¾	BENT
22									
23	V	2	L	7	34	½	0	11	BENT CF 7 x 4 x ½
24	FW	1	WD			3/16	24	11	
25	FWL	1	WD			3/16	377	9	
26	FWS	1	WD			3/16	42	11	
27	FW	1	WD			½	1	2	
28	SDS	1	WD			7/16	4	6	
29	VGDS	1	WD			¾	2	8	
30									
31	SD	1	WD			5/16	0	4	
32									
33									
34		6	325	7/8			0	3	H·H H-H·H N
35		13	325	7/8			0	2½	
36		24	325	7/8			0	3½	
37		43	HW	1¾		15/16	3/8		
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									

MILL ORDER

LENGTH FT.	LENGTH IN.	WGHT PAGE	WGHT LBS.
38	9¾	46	18
58	8¼	44	17
38	7⅜	41	38
"	"		
55	11¼	37	19
58	2¼	37	15
33	6	47	11A
19	1	47	20
19	1	47	20
13	10¼	47	18
13	10¼	47	18
13	10¼	47	19
33	6	47	11A
13	10¼	47	19
		J	
		J	
40	10⅞	47	06
30	5⅜	47	10
40	0	36	39

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

INST. "SW"

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-7	GIRDER (59⅞ x 23¼ x 96 6/8)	

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 CCM DATE 9-16-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 10/13/69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 364

REVISION

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

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

* 2" - TAN A = B.

107-179

NOV 17

GIRDER-G5-8

ITEM	ASSEMBLY MARK	NO	SHAPE	SECTION SIZE	SECTION SIZE OR POUND	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-G5-8											
2	a	1	PL	54		1/2	38	0 15/16	56 x 1/2	38	9 1/4	46	18
3	b	1	PL	54		7/16	57	2 1/2	56 1/2 x 7/16	57	8 1/2	44	18
4	c	1	PLU	16		1 1/8	37	11	16 x 1 1/8	38	7 3/4	41	38
5	d	1	PLU	16		1 1/8	38	1 1/8	" "	38	7 3/4	41	38
6	f	1	PLU	16		3/4	55	3 1/4	16 x 3/4	55	11 1/4	37	19
7	g	1	PLU	16		3/4	57	1 1/2	" "	58	2 1/4	37	15
8	C 2ad"	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
9	C 2CW"	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
10	C 2cy"	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
11	C lagR"	1	BR	7 1/2		3/4	4	6 3/4	MIE-FIE	13	10 1/4	47	1B
12	C lbcL"	1	BR	7 1/2		3/4	4	6 3/4	MIE-FIE	13	10 1/4	47	1B
13	C 1b"	2	BR	7		1/2	4	6	F2E	13	10 1/4	47	19
14	C 2af"	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
15	P	1	BR	7		1/2	4	6	F2E	13	10 1/4	47	19
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS CF 3/4 PB			J	
17	k	1	PL	8	(8 1/2 x 1 3/4)		1	4 1/2	BEV. CF 3/4 x 2 3/8			J	
18	US2	1	UPPER SHOE						DET. ON DWG #2				
19	P1	1	PIN						DET. ON DWG #13				
20	m[E]	1	C	15	40		3	6 1/2		40	10 3/8	47	16C
21	S	2	PL	25 1/2		1/2	1	11 1/4	BENT) D1	30	5 3/8	47	10C
22	t	2	L	7	3 1/4	1/2	0	11	BENT CF 1/4 x 4	40	0	36	39
23													
24	FW	1	WD			3/8	24	11					
25	FWL	1	WD			5/16	376	5 3/4					
26	FWS	1	WD			5/16	42	11					
27	FW	1	WD			1/2	1	2					
28	SDS	1	WD			1/16	4	6					
29	VGOS	1	WD			1/4	2	8					
30													
31	SD	1	WD			7/16	0	4					
32													
33													
34													
35		13	325	7 1/8			0	2 1/2	H·H·H·H·H·N				
36		24	325	7 1/8			0	5 1/2	H·H·H·H·H·N			M	
37		37	HW	1 3/4		15/16	3/16						
38													
39		2	SB	3/8			0	2 3/4				M	
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

SHOP BILL — MILL ORDER

Bore 5 1/16 +.016 -.000 Hole For 5 1/16" Pin In R-b, h & [mE

Holes For 7/8" A325 H.S.A.B. Bolts

Bend Line

Edge of Flg

Exp Jt

W.P.

Bolt Lt For Shipt 1-5B 7/8 x 2 1/2

Work Line N A Chord Line (R-a)

N.A.

N.A. Chord Line (R-b)

@ Mid. Ord (R-a)

@ Mid. Ord (R-b)

@ ℄ Gdr

℄ Pin

Block

See Detail AA

Grind Web Weld

Symbol Ⓧ This Side

Protect Vowels For Shipment

℄ Brg

Flg t Be Flat Within 1/16 & 90° to Web

US2 Det on Dwg #2

Dim Given Along Work Line

18:11 7/8

18:10 7/8 - ℄ Splice to ℄ Shoe

19:0 - ℄ Splice to ℄ Brg

38:0 15/16

37:10 15/16

55:3 5/8

43:7 15/16

68:4 5/16

75:8 5/16 ℄ Brg. to ℄ Pin @ W.L

94:8 5/16 ℄ Splice to ℄ Pin @ W.L

57:1 1/2

93:0 3/8

5:6

Note "A"

Cut

W.L.

Girder G5-8

Sect (E) (Developed)

Sect (A) (Developed)

Sect (B) (Developed)

Sect (D) (Developed)

Detail "AA"

Holes Reamed To 15/16" In Field

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

E10

Note "A": All steel surfaces in this area to be blast cleaned as per SSPC-SP5-63. All steel will then receive one coat of zinc rich epoxy including open holes

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"	250 Deg.

RA = Holes marked RA shall be subpunched or drilled full size from the solid with commercial parts assembled.

All drill holes = 13/16" U.N.

No base metal is permitted unless shown or incorporated in final weld.

Use E70XX, XX-LH low hydrogen electrodes or equal for welding.

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

Inst: 5E"

Required List

Qty	Shipping Mark	Description	Remarks
One	G5-8	Girder (60 3/8 x 25 1/4 x 96'-4 1/4")	

Pay Item-504.711

Material - A36 Steel
Bolts - 7/8"
Open Holes - 15/16" (U.N.)
A325 Field Bolts - 7/8"
Shop Contact Surfaces No Paint U.N.
Weld-As Noted
Mill-As Noted
Paint - One Coat AASHO-M72-Type II Red Lead (UN)
Reaming-As Noted

No.	Date	Init.	Revision
9	11/5/69	BAL	

Submittal 1 2 3 4 5 6 7 8 9

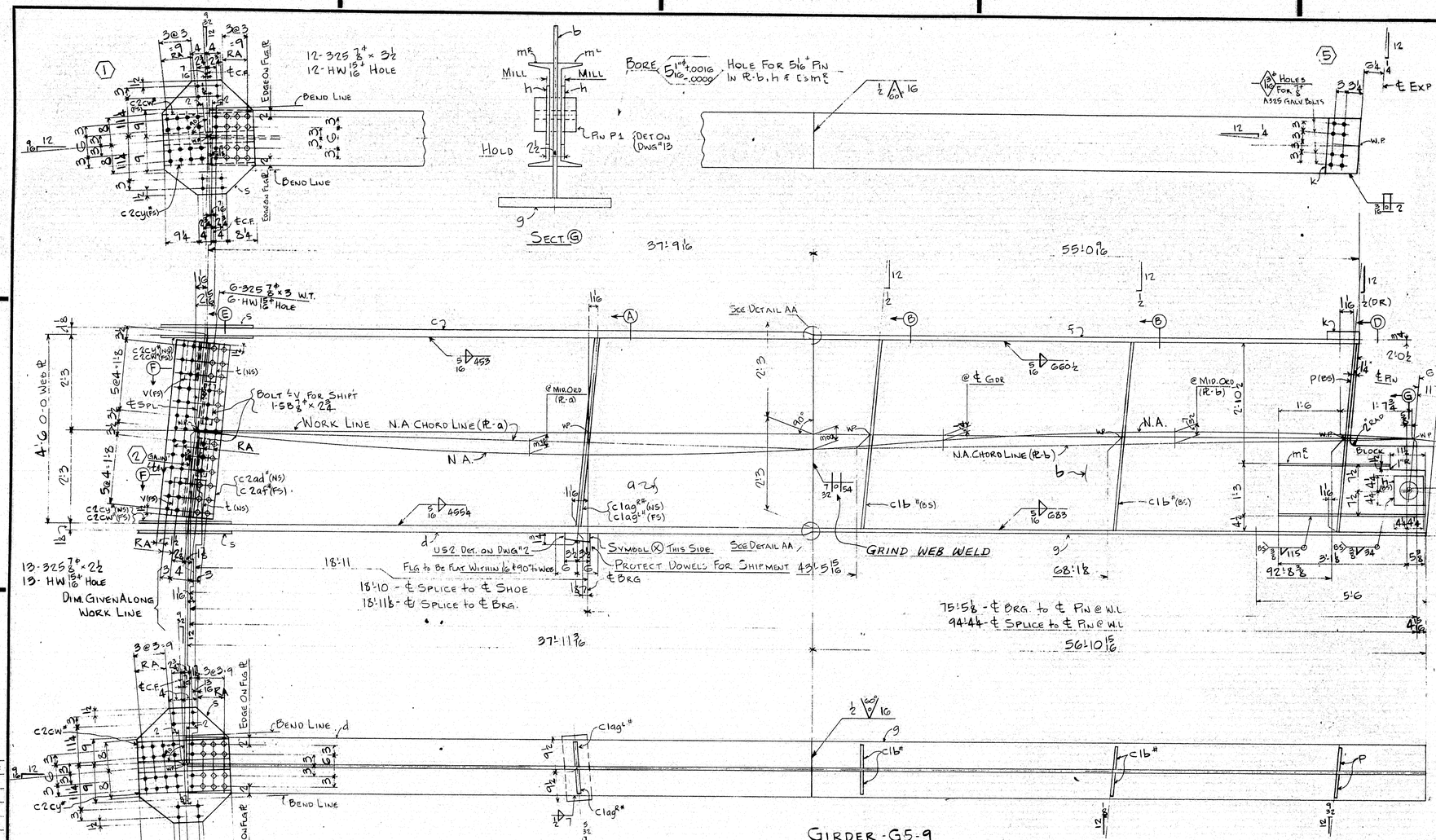
Girder

Customer: Maine State Highway Commission
Piscataqua River Bridge
Project No I 95-1(12) 16
Cont. No. 3 - New Hampshire App
Structural Steel
Bethlehem Steel Corporation
Fabricated Steel Construction
Pottstown Drafting Room — Pottstown Works
Made by DML Date 9-15-69 In Charge B.K. Bressler
Checked by RJ Date 10/7 Shop No. 2
Contract CJ-6299-010 Drawing No. 365

℄ 2°17'32" = Tan A = .060263

107-180

Scale: 0 1 2 3 4 5 INCHES



For location of details shown on this sheet refer to diagrams.
E10

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1			ONE-GIRDER-G5-9						
2	a	1	PL	54		1/2	37	11 3/16	56 - 1/2
3	b	1	PL	54		7/16	56	11 5/16	56 1/2 - 1/16
4	c	1	PLU	16		1 1/8	37	9 3/4	16 x 1 1/8
5	d	1	PLU	16		1 1/8	37	11 3/8	" "
6	f	1	PLU	16		3/4	55	0 1/16	16 x 3/4
7	g	1	PLU	16		3/4	56	10 15/16	" "
8	C 2ad#	1	PLU	13		3/8	4	2	BENT
9	C 2cw#	2	BR	6 1/2		1/2	2	1 1/2	
10	C 2cy#	2	BR	6 1/2		1/2	2	1 1/2	
11	L lag#	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE
12	L lag#	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE
13	C 1b #	4	BR	7		1/2	4	6	F2E
14	C 2af#	1	PLU	13		3/8	4	2	BENT
15	P	2	BR	7		1/2	4	6	F2E
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3/4 ℄
17	k	1	PL	8	(2 3/32 x 1 3/32)	1	4	8	Bev. C.F. 34 x 28
18	US2	1	UPPER SHOE						DET. ON DWG #2
19	P1	1	PIN						DET ON DWG #13
20	mℓ	1	C	15	40		3	6 1/2	
21	S	2	PL	25 1/2		1/2	2	7 1/2	BENT
22	t	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7 x 4 x ℄
23	V	2	L	7	3 1/4	1/2	0	11	BENT " " " "
24	FW	1	WD			3/8	24	11	
25	FWL	1	WD			15/16	375	3 1/2	
26	FWS	1	WD			15/16	68	6	
27	FW	1	WD			1/2	1	2	
28	SDS	1	WD			1 1/4	4	6	
29	VGDS	1	WD			1 1/4	2	8	
30									
31	SD	1	WD			9/16	0	4	
32									
33									
34		6	325	7 7/8"			0	3	H-H-H-H-H-N
35		13	325	7 15/16"			0	2 1/2	H-H-H-H-H-N
36		24	325	7 3/4"			0	3 1/2	H-H-H-H-H-N
37		43	HW	1 1/4	15/16	9/16			
38									
39		2	SB	7 1/8"			0	2 3/4	
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
38	9 3/4	46	18
37	8 1/2	44	18
38	7 3/8	41	38
36	7 3/8	41	38
55	11 1/4	37	19
57	3 1/4	37	17
33	6	47	11A
19	1	47	20
19	1	47	20
13	10 1/4	47	18
13	10 1/4	47	18
13	10 1/4	47	19
33	6	47	11A
13	10 1/4	47	19
		J	
		J	
40	10 3/8	47	06C
30	5 7/8	47	10C
40	0	36	39
40	0	36	39

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.

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 U.N.

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

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

MATERIAL - A36 STEEL
BOLTS - 7/8"
OPEN HOLES - 15/16" (U.N.)
A325 FIELD BOLTS - 7/8"
SHOP CONTACT SURFACES NO PAINT U.N.
WELD-AS NOTED
MILL-AS NOTED
PAINT - ONECOAT AASHO-M72 TYPE II RED LEAD (UN)
REAMING - AS NOTED

Note A: All Steel Surfaces In This Area To Be Blast Cleaned As Per SSPC-SP5-66. All Steel Will Then Receive One Coat Of Zinc Rich Epoxy Including Open Holes

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

INST. "5E"

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-9	GIRDER (60 3/8 x 31 1/2 x 96'-0")	

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

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

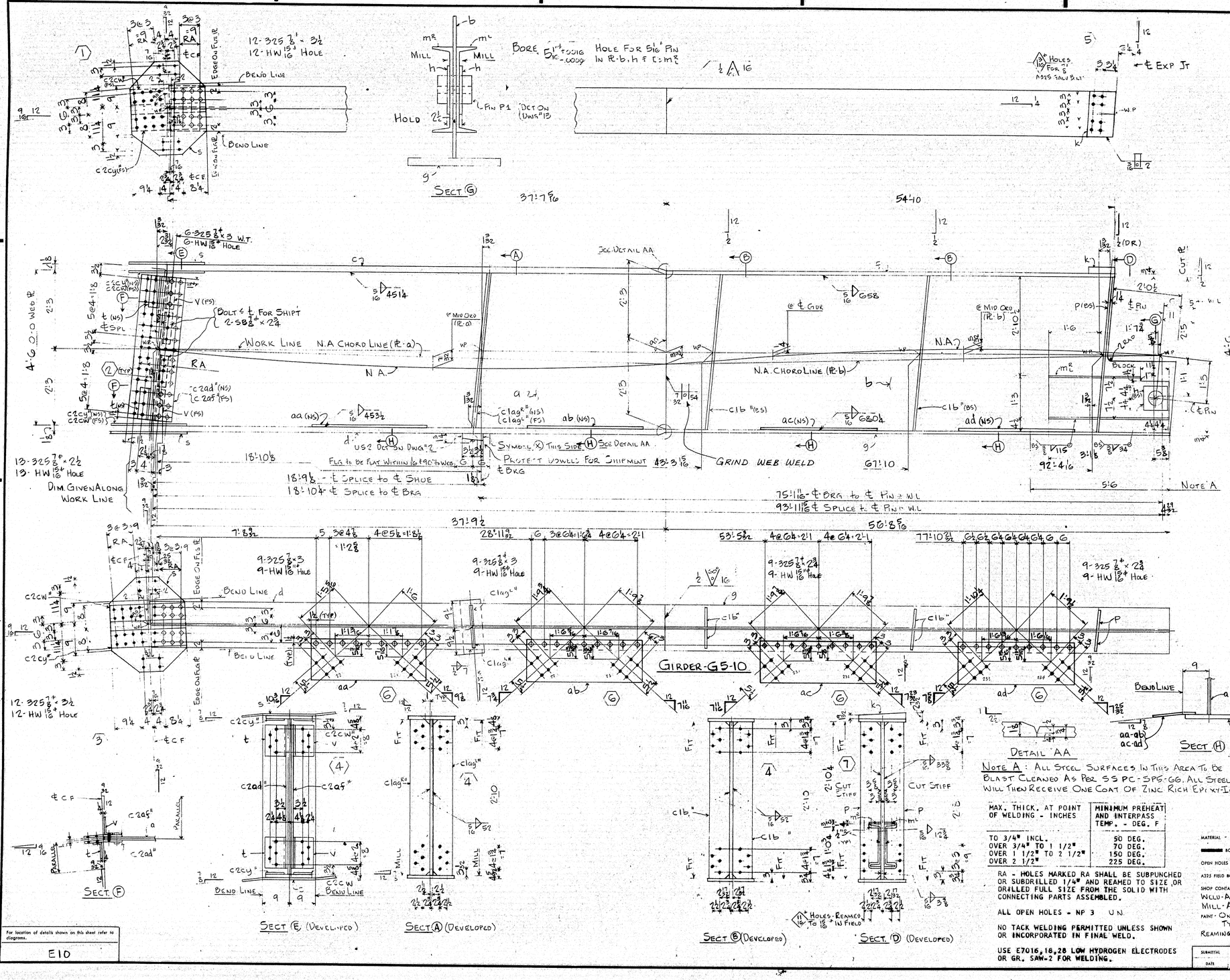
SUBMITTAL 1 2 3 4 5 6 7 8 9 0
DATE

BETHLEHEM DRAFTING ROOM Pottstown WORKS
MADE BY DML DATE 9-10-69 IN CHARGE B.K. Bertolet
CHECKED BY RJ DATE 10/7 SHOP NO. 2
CONTRACT CJ-G249-020 DRAWING NO. 366

* 2°-18'-09" - TAN A = 3.60491

107-181

NOV 17 1969



				SHOP BILL								MILL ORDER			
					SECTION		LENGTH					LENGTH		ITEM	
LOC	ASSEMBLY MARK	NO	SHAPE	SIZE	SIZE OR POUNDS	THICK	FT	IN.	REMARKS			FT.	IN.	PAGE	LINE
			ONE-GIRDER-G5-10												
	a	1	PL	54		½	37	9½		56 × ½		38	9¾	46	18
	b	1	PL	54		7/16	56	9 5/16		56½ × 16		57	8½	44	18
	c	1	PLW	16		1⅜	37	7½		16 × 1⅜		38	7¾	41	38
	d	1	PLW	16		1⅜	37	9 1/16		" "		38	7¾	41	38
	f	1	PLW	16		¾	54	10⅝		16 × ¾		55	11¾	37	19
	g	1	PLW	16		¾	56	8 1/16		" "		57	3¾	37	17
	C 2ad"	1	PLW	13		⅜	4	2	BENT			33	6	47	11A
	C 2cy"	2	BR	6½		½	2	1½				19	1	47	20
	C 2cw"	2	BR	6½		½	2	1½				19	1	47	20
	C lag"	1	BR	7½		¾	4	6½	MIE-FIE			13	10¾	47	18
	C lag1"	1	BR	7½		¾	4	6½	MIE-FIE			13	10¾	47	18
	C 1b "	4	BR	7		½	4	6	FZE			13	10¾	47	19
	C 2af"	1	PLW	13		⅜	4	2	BENT			33	6	47	11A
	P	2	BR	7		½	4	6	FZE			13	10¾	47	19
	h	2	PL	8½		½	0	8½	MIS	C.F. ¾ #				J	
	k	1	PL	8		(2 3/32 × 1 3/16)	1	4½	BEV.	C.F. 34 × 2 3/8				J	
	US2	1	UPPER SHOE						DET. ON DWG "2						
	P1	1	PIN						DET ON DWG "13						
	m2	1	C	15	40		3	6½				40	10⅜	47	00
	℄	2	PL	25½		½	2	7½	BENT			30	5⅜	47	10C
	t	2	L	7	3¼	½	0	11	BENT	C.F. 7 × 4 × ½		40	0	36	39
	V	2	L	7	3¼	½	0	11	BENT	" " "		40	0	36	39
	FW	1	WD					24	11						
	FWL	1	WD					313	10						
	FWS	1	WD					68	6						
	FW	1	WD					1	2						
	SDS	1	WD					4	6						
	VGDS	1	WD					2	8						
	SD	1	WD												
		18	325	7/8			0	23/4	H-H H-HH N						
		24	325	7/8			0	3	H-H H-H N						
		13	325	7/8			0	2½	H H H-H N						
		24	325	7/8			0	3½	H H H-H N						M
		79	HW	15/16		5/16									
		2	SB	7/8			0	23/4	HH-HN						
	aa	1	PL	14½		⅝	3	7⅛	BENT			26	0	28	19
	ab	1	PL	14½		⅝	4	4¾	BENT			26	0	28	19
	ac	1	PL	14½		⅝	4	5	BENT			26	0	28	19
	ad	1	PL	14½		⅝	4	5	BENT.			26	0	28	19

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

INST: 5E"

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-10	GIRDER (60⅞ × 34½ × 95'7½")	

PAY ITEM: 504.711

NOTE A: ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP6-66. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

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.

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 U.N.

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

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

MATERIAL - A36 STEEL
BOLTS - ⅞"
OPEN HOLES - 15/16" (U.N.)
A325 FIELD BOLTS - ⅞"
SHOP CONTACT SURFACES NO PAINT UN
WELD - AS NOTED
MILL - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (UN)
REAMING - AS NOTED

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

NO.	DATE	INIT.
REVISION		

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 DML DATE 9-11-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 10/7 SHOP NO. 2
CONTRACT CJ-G249-020 DRAWING NO. 367

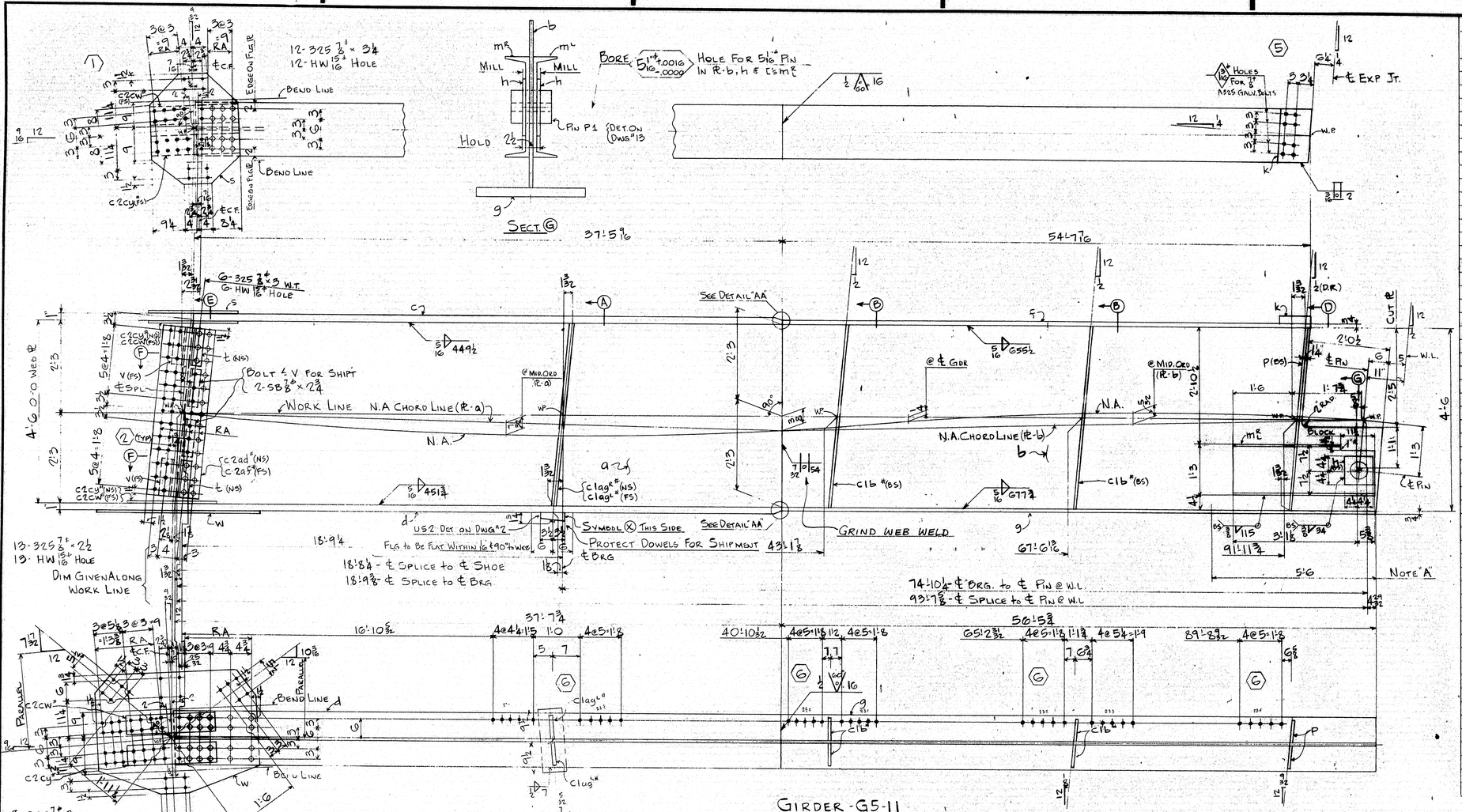
GIRDER

For location of details shown on this sheet refer to diagrams.
E10

* 2°-18'-40" - TAN A = 8.60593

107-12

33433 (Rev. C 4-65)



GIRDER - G5-11

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION WEB OR FLANGE	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER WEIGHT PIECE	MILL ORDER WEIGHT TOTAL
1	ONE - GIRDER - G5-11												
2	a	1	PL	54		1/2	37	7 3/4	56 x 1/2	38	0	446	1516
3	b	1	PL	54		7/16	56	6 3/4	56 1/2 x 7/16	57	8 1/2	441	1501
4	c	1	PLW	16		1"	37	5 3/4	16 x 1"	38	0	411	1398
5	d	1	PLW	16		1"	37	7 1/8	" "	38	0	411	1398
6	f	1	PLW	16		3/4	54	7 1/8	16 x 3/4	54	8 1/2	371	2004
7	g	1	PLW	16		3/4	56	5 3/4	" "	57	3 1/4	377	2035
8	C 2ad*	1	PLW	13		3/8	4	2	BENT	33	6	47.8	1A
9	C 2cw*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47.20	
10	C 2cy*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47.20	
11	C 1ag*	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE	13	10 1/4	47.18	
12	C 1ag*	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE	13	10 1/4	47.18	
13	C 1b*	4	BR	7		1/2	4	6	F2E	13	10 1/4	47.19	
14	C 2af*	1	PLW	13		3/8	4	2	BENT	33	6	47.8	1A
15	P	2	BR	7		1/2	4	6	F2E	13	10 1/4	47.19	
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3/4 R			J	
17	k	1	PL	8		(2.34 x 1/2)	1	4 8	BEV. C.F. 3.34 x 3/8			J	
18	US2	1	UPPER SHOE						DET. ON DWG #2				
19	P1	1	PIN						DET. ON DWG #13				
20	m℄	1	C	15	40		3	6 1/2		40	10 3/8	47.9	1A
21	S	1	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 3/8	47.10	1A
22	t	2	L	7	5 1/4	1/2	0	11	BENT C.F. 7 x 4 x 1/2	40	0	36.3	1A
23	V	2	L	7	5 1/4	1/2	0	11	BENT " " "	40	0	36.3	1A
24	FW	1	WD			3/4	24	11					
25	FWL	1	WD			3/16	312	5					
26	FWS	1	WD			3/16	68	6					
27	FW	1	WD			1/2	1	2					
28	SDS	1	WD			1/4	4	6					
29	VGDS	1	WD			1/4	2	8					
30													
31	SD	1	WD			5/16	0	4					
32													
33		2	SB	7/8			0	2 3/4					
34		14	325	7/8			0	3	H-H-H-H-H-N				
35		13	325	7/8			0	2 1/2	H-H-H-H-H-H-N				
36		12	325	7/8			0	3 1/4	H-H-H-H-H-H-N				M
37		12	325	7/8			0	3 1/2	H-H-H-H-H-H-N				
38		51	HW	1"	15/16	3/16							
39													
40	W	1	PL	34 1/2		5/8	4	2	BENT 36 x 5/8 MULTS	4	4	4	28.17
41													
42													
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44													
45													
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51													
52													
53													
54													
55													

SHOP BILL

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

INST. "5E"

REQUIRED LIST			
QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-11	GIRDER (60 x 54 x 96-6")	

PAY ITEM - 504.11

NOTE "A": ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP6-63. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

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"	150 DEG.
OVER 1 1/2" TO 2 1/2"	225 DEG.
OVER 2 1/2"	300 DEG.

[redacted] ALL OPEN HOLES = NO. 3 / U.N.

[redacted]

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

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 DWL DATE 9-12-69 IN CHARGE D.K. BRADLEY
CHECKED BY RJ DATE 10/7 SHOP NO. 2
CONTRACT CJ-G221-020 DRAWING NO. 366

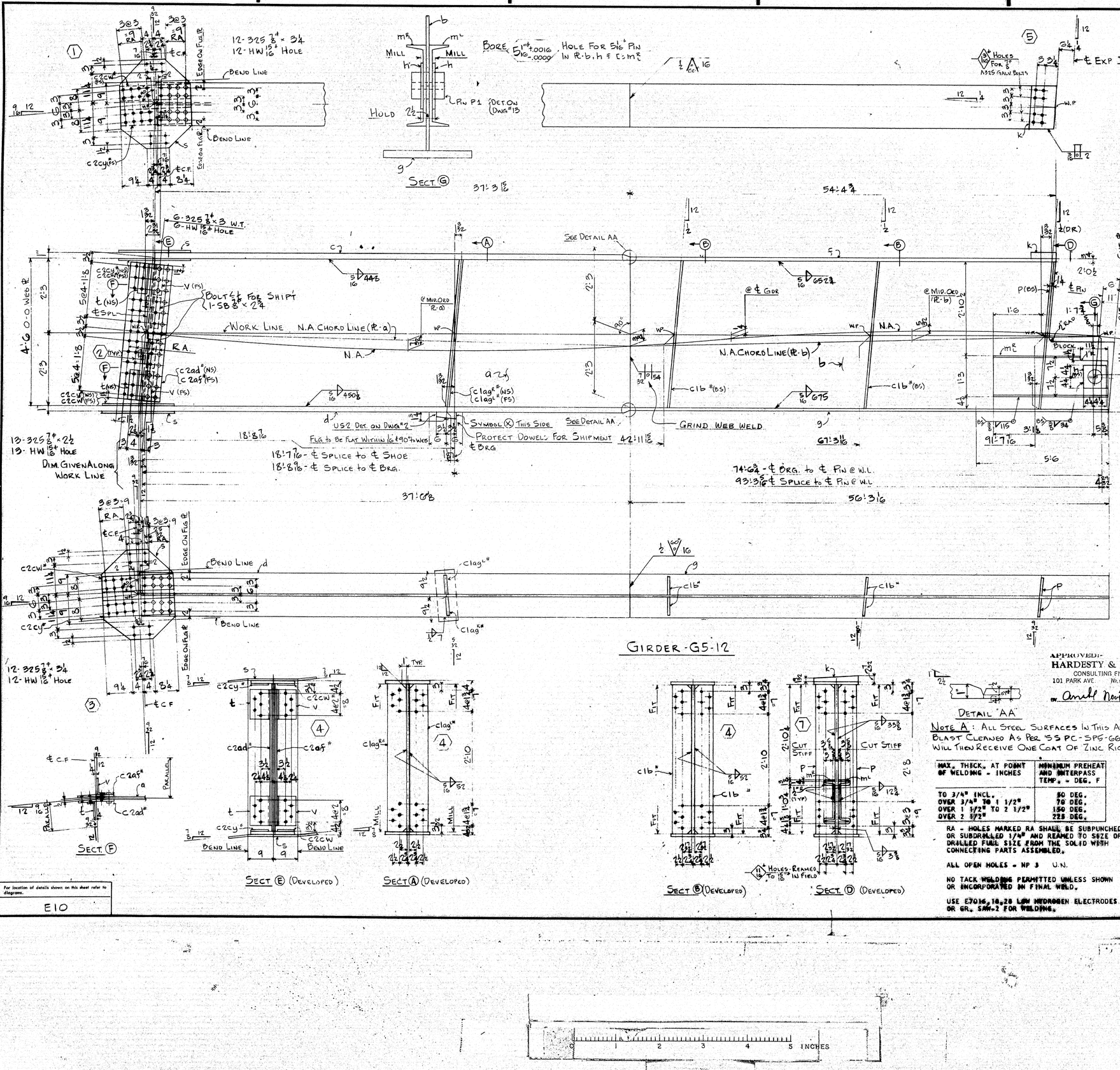
REVISION NO. | DATE | BY

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

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

E10

℄ 2-19-'12 - TWIN A-SCOTCH ... 107 26



SHOP BILL										MILL ORDER	
LINE	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
1			ONE-GIRDER-G5-12										
2	a	1	PL	54		1/2	37	6 1/8	56 x 1/2	38	0	46	19
3	b	1	PL	54		7/16	56	4 7/16	56 1/2 x 7/16	56	9 1/2	44	19
4	c	1	PLU	16		1"	37	4 1/8	16 x 1"	38	0	41	17
5	d	1	PLU	16		1"	37	6 5/16	" "	38	0	41	17
6	f	1	PLU	16		3/4	54	4 1/8	16 x 3/4	54	8 1/2	37	20
7	g	1	PLU	16		3/4	56	3 1/16	" "	57	3 1/4	37	17
8	C 2ad#	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
9	C 2cw#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
10	C 2cy#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
11	C 1ag#	1	BR	7 1/2		3/4	4	6 3/4	MIE-FIE	13	10 1/4	47	18
12	C 1ag#	1	BR	7 1/2		3/4	4	6 3/4	MIE-FIE	13	10 1/4	47	18
13	C 1b #	4	BR	7		1/2	4	6	FIE	13	10 1/4	47	19
14	C 2af #	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
15	P	2	BR	7		1/2	4	6	FIE	13	10 1/4	47	19
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS CF 3/4 x 8 1/2			J	
17	k	1	PL	8	(23 1/2 - 15 1/2)	1	4	3	BEV. CF 3/4 x 2 3/8			J	
18	US2	1	UPPER SHOE						DET. ON DWG #2				
19	P1	1	PIN						DET. ON DWG #13				
20	m#	11	C	15	40		3	6 1/2		40	10 3/8	47	06C
21	S	2	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 3/8	47	10C
22	t	2	L	7	3 1/4	1/2	0	11	BENT CF 7 x 4 x 1/2	40	0	36	39
23	V	2	L	7	3 1/4	1/2	0	11	BENT " " "	40	0	36	39
24	FW	1	WO			3/8	24	11					
25	FWL	1	WO			3/8	370	11 3/4					
26	FWS	1	WO			3/8	68	6					
27	FW	1	WO			1/2	1	2					
28	SDS	1	WO			7/16	4	6					
29	VGOS	1	WO			1/4	2	8					
30													
31	SD	1	WO			5/16	0	4					
32													
33													
34		6	325 7/8				0	3	H-H-H-H-H-N				
35		13	325 7/8				0	2 1/2	H-H-H-H-H-N				
36		24	325 7/8				0	3 1/4	H-H-H-H-H-N			M	
37		43	HW 15/16	1 1/4		15/16		3/16					
38													
39		2	SD 7/8				0	2 3/4				M	
40													
41													
42													
43													
44													
45													
46													
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48													
49													
50													
51													
52													
53													
54													
55													

GIRDER-G5-12

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

INST: 5E"

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-12	GIRDER (60 Bx 31/2x94:11)	

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 DML DATE 9-10-69 IN CHARGE B.K. BERTOLET
CHECKED BY R.J. DATE 10/7 SHOP NO. 2
CONTRACT KJ-G249-020 DRAWING NO. 369

REVISION

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

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

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 U.N.

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

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

Note A: ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SSPC-SP5-GG. ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

For location of details shown on this sheet refer to diagrams.
E10

* 2°19'43" - TAN A = 0.60922

107 - 184

GIRDER-G5-13

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	LENGTH 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-G5-13											
2	a	1	PL	54		1/2	37	4 3/8	56 x 1/2	38	0	46	19
3	b	1	PL	54		7/16	56	1 1/2	56 1/2 x 7/16	56	9 1/2	44	19
4	c	1	PLU	16		1"	37	2 3/8	16 x 1"	38	0	41	17
5	d	1	PLU	16		1"	37	4 3/8	" "	38	0	41	17
6	f	1	PLU	16		3/4	54	2 1/8	16 x 3/4	54	8 1/4	37	20
7	g	1	PLU	16		3/4	56	0 1/2	" "	57	3 1/4	37	17
8	C 2ad"	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
9	C 2cw"	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
10	C 2cy"	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
11	C lagR"	1	BR	7 1/2		3/4	4	6 3/8	MIE-FIE	13	10 1/4	47	18
12	C lagL"	1	BR	7 1/2		3/4	4	6 3/8	MIE-FIE	13	10 1/4	47	18
13	C 1b "	4	BR	7		1/2	4	6	FZE	13	10 1/4	47	19
14	C 2af"	1	PLU	13		3/8	4	2	BENT	33	6	47	11A
15	P	2	BR	7		1/2	4	6	FZE	13	10 1/4	47	19
16	h	2	PL	8 1/2		1/2	0	8 1/2	MIS CF 3/4" Ft			J	
17	k	1	PL	8	(2 3/32 x 9/16)	1	4	8 1/2	Bev. GF 34 x 2 3/8			J	
18	US2	1	UPPER SHOE						DET. ON DWG #2				
19	P1	1	PIN						DET ON DWG #13				
20	mL	1	C	15	40		3	6 1/2		40	10 7/8	47	06C
21	S	2	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 3/8	47	10C
22	t	2	L	7	34	1/2	0	11	BENT CF 7x4x1/2	40	0	36	39
23	V	2	L	7	34	1/2	0	11	BENT " " "	40	0	36	39
24	FW	1	WD			24	11						
25	FWL	1	WD			3 5/16	369	6 3/4					
26	FWS	1	WD			3 5/16	68	6					
27	FW	1	WD			1/2	1	2					
28	SDS	1	WD			1 1/16	4	6					
29	VGOS	1	WD			3/4	2	8					
30													
31	SD	1	WD			3/16	0	4					
32													
33		2	SB	7/8			0	2 3/4					
34		6	325	7/8			0	3	H·H H-H·H-N				
35		13	325	7/8			0	2 1/2	H H H-H·H-N			M	
36		24	325	7/8			0	3 1/4	H·H H-H·H-N				
37		43	HW	1 1/4	15/16	3/16							

MILL ORDER

ITEM LENGTH FT.	ITEM LENGTH IN.	ITEM PAGE	ITEM LINE
38	0	46	19
56	9 1/2	44	19
38	0	41	17
38	0	41	17
54	8 1/4	37	20
57	3 1/4	37	17
33	6	47	11A
19	1	47	20
19	1	47	20
13	10 1/4	47	18
13	10 1/4	47	18
13	10 1/4	47	19
33	6	47	11A
13	10 1/4	47	19
40	10 7/8	47	06C
30	5 3/8	47	10C
40	0	36	39
40	0	36	39

REQUIRED LIST — INST. "5E"

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G5-13	GIRDER (60 8 x 31 1/2 x 94' 6 1/2")	

PAY ITEM - 504.711

HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
Arnold Nasty/jp OCT 29 1969

GIRDER

CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT NO I95-1(22) 16
CONT. NO. 3 - NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY DML DATE 9-11-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 10/7 SHOP NO. 2
CONTRACT CJ-G249-020 DRAWING NO. 370

REVISION: NO. | DATE | INIT.

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

MATERIAL - A36 STEEL
BOLTS - 7/8"
OPEN HOLES - 15/16" (U.N.)
A325 FIELD BOLTS - 7/8"
SHOP CONTACT SURFACES NO PAINT UN
WELD-AS NOTED
MILL-AS NOTED
PAINT - ONECOAT AASHO-M72-TYPE II RED LEAD(UN)
REAMING - 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.

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 U.N.

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

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

NOTE A: ALL STEEL SURFACES IN THIS AREA TO BE BLAST CLEANED AS PER SS PC-SP6-63 ALL STEEL WILL THEN RECEIVE ONE COAT OF ZINC RICH EPOXY INCLUDING OPEN HOLES

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

E10

1 NOV 17 1969

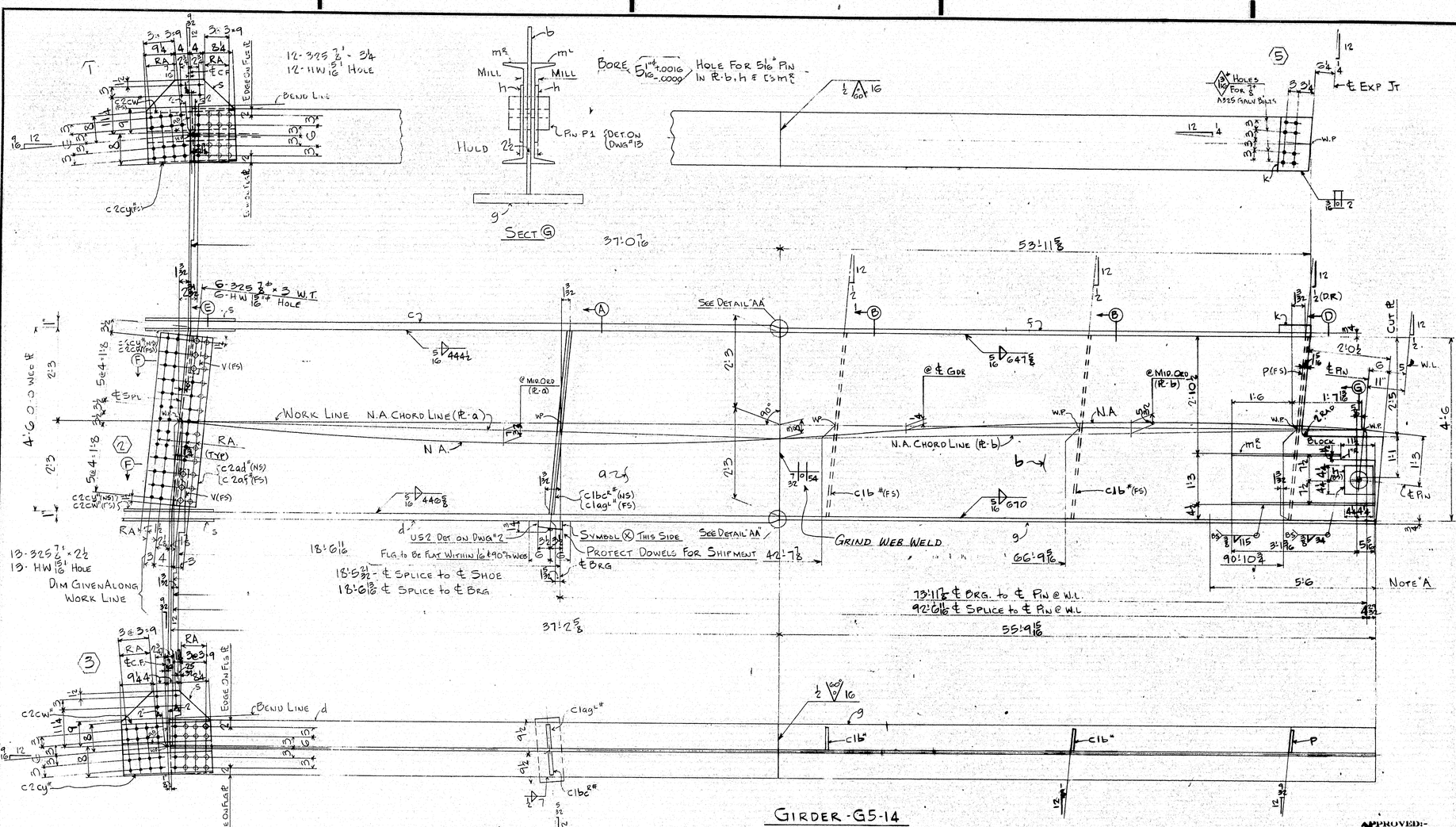
107-185

∠ 2°-20'-16" — TAN A = 0.041092

GIRDER - G5-14

SHOP BILL — ONE-GIRDER-G5-14

ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUND	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER PAGE
a	1	PL	54		1/2	37	2 5/8	56×1/2	38	0	46
b	1	PL	54		7/16	55	10 1/8	56×7/16	56	9 1/2	44
c	1	PLU	16		1"	37	0 5/8	16×1	38	0	41
d	1	PLU	16		1"	37	2 1/16	" "	38	0	41
f	1	PLU	16		3/4	53	11 3/4	16×3/4	54	4 1/2	34
g	1	PLU	16		3/4	55	9 15/16	" "	57	3 1/2	37
C 2ad*	1	PLU	13		3/8	4	2	BENT	33	6	47 HA
C 2cw*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47 20
C 2cy*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47 20
C 1bc*	1	BR	7 1/2		3/4	4	6 3/32	MIE-FIE	13	10 1/4	47 18
C 1ag1*	1	BR	7 1/2		3/4	4	6 3/32	MIE-FIE	13	10 1/4	47 18
C 1b*	2	BR	7		1/2	4	6	F2E	13	10 1/4	47 19
C 2a5*	1	PLU	13		3/8	4	2	BENT	33	6	47 HA
P	1	BR	7		1/2	4	6	F2E	13	10 1/4	47 19
h	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F.3 1/2 R			J
k	1	PL	8		(2 1/2×1 3/16)	1	4 8	BEV. C.F.34×2 3/8			J
US2	1	UPPER SHOE						DET. ON DWG #2			
P1	1	PIN						DET. ON DWG #15			
m*	1	C	15	40		3	6 1/2				
s	2	PL	25 1/2		1/2	1	11 3/4	BENT	30	5 7/8	47 HC
									40	10 7/8	47 HC
V	2	L	7	34	1/2	0	11	BENT C.F. 7×4×1/2	400		36 39
FW	1	WD			3/4	24	11				
FWL	1	WD			5/16	368	1 1/2				
FWS	1	WD			5/16	42	11				
FW	1	WD			1/2	1	2				
SDS	1	WD			1/2	4	6				
VGDS	1	WD			1/2	2	8				
SD	1	WD			9/16	0	4				
	6	325	7/16			0	3	H·H·H·H·H·N			
	13	325	7/16			0	2 1/2	H·H·H·H·H·N			
	24	325	7/16			0	3 1/4	H·H·H·H·H·N			M
	43	HW	1 1/16	1 1/8	9/16						



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

E6

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

MATERIAL	SHOP CONTACT SURFACES	WELD	MILL	PAINT
A36 STEEL	NO PAINT U.N.	AS NOTED	AS NOTED	ONE COAT AASHO-M72 TYPE II RED LEAD (UN)

BOLTS - 7/8" | OPEN HOLES - 15/16" (U.N.) | A325 FIELD BOLTS - 7/8" | REMARKS - AS NOTED

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
DCT 29 1969

INST. 5E

QTY.	SHIPPING MARK	DESCRIPTION
ONE	G5-14	GIRDER (CO), 25'-9 15/16" LG.

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
FABRICATED STEEL CONSTRUCTION
BETHLEHEM STEEL CORPORATION
POTTSTOWN DRAFTING ROOM Pottstown
MADE BY DML DATE 9-15-69 IN CHARGE D.K. Bierstecker
CHECKED BY R.J. DATE 10/7 SHOP NO. 2
CONTRACT S7-G501-220 DRAWING NO. 371

REVISION

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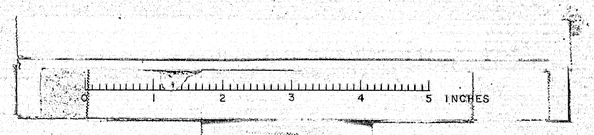
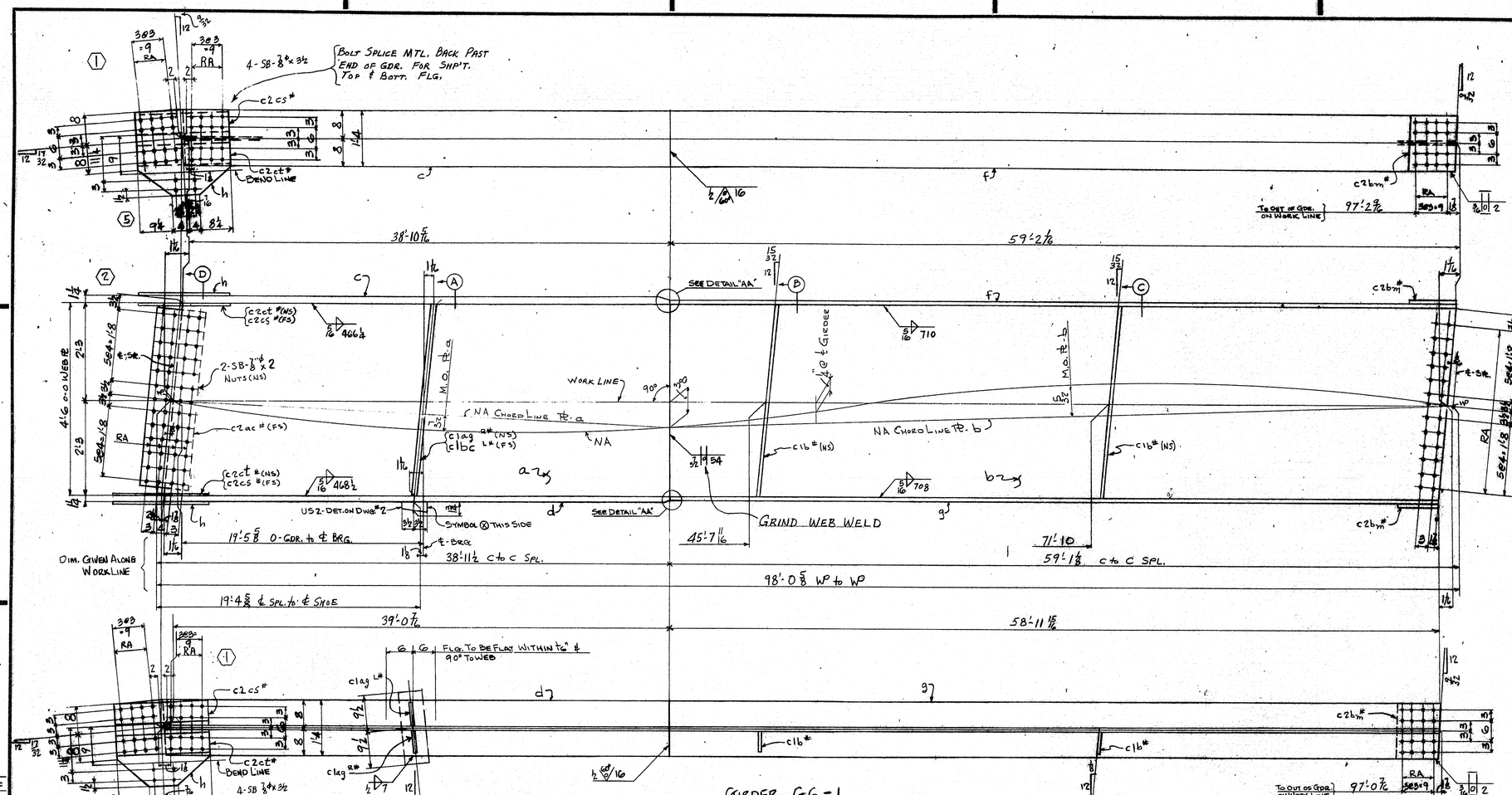
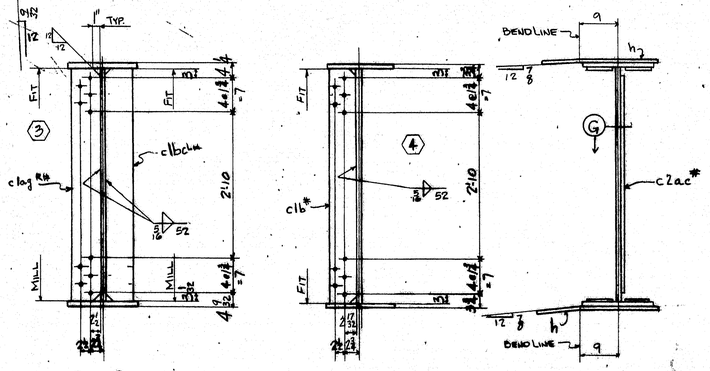
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

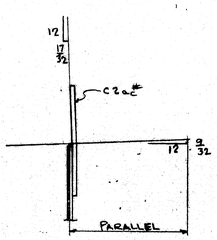
℄ 2-20-46 — THOS. A. BOULTON

107-182









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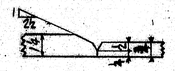

DETAIL "AA"

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

E9 E10

DOWELS IN R-US2 TO BE PROTECTED DURING SHIPMENT.

[redacted]

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

PAY ITEM - 504.711

INST. - GW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-1	GIRDER 24 x 59½ x 98'9⅞	

GIRDER G6-1

MATERIAL A36 STEEL
ASSEMBLING BOLTS ⅞"ϕ
OPEN HOLE 15/16"ϕ
A325 FIELD BOLTS ⅞"ϕ
SHOP CONTACT SURFACES NO PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72-TYPE I RED LEAD (LIN)
REAM - AS NOTED

NO.	DATE	REVISION
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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(12)16
CONT. NO. 3 - NEW HAMPSHIRE END
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN SHAPING MILL
MADE BY DEW DATE 9/8/69 CHECKED BY FEC DATE 9-27-69
CONTRACT CT-6241-832

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 WIDTH PAGE	MILL ORDER WIDTH LINE
1		ONE GIRDER G6-1											
2	a	1	PL	54		½	39	0 7/16	54 x ½	39	8½	46	17
3	b	1	PL	54		16	59	2 7/16	54½ x 16	59	6½	44	16
4	c	1	PLU	16		1¼	38	10⅝		39	2¾	40	17
5	d	1	PLU	16		1⅛	39	0⅝		39	2¾	40	17
6	f	1	PLU	16		¾	59	2⅞		59	4½	37	16
7	g	1	PLU	16		¾	59	0⅞		59	4½	37	16
8	h	2	PL	25½		½	1	11¼		22	4	24	45
9													
10													
11													
12	c1ag R*	1	BR	7½		¾	4	6 3/32	(MIE) (FIE)	13	10¼	47	18
13	c1b*	2	BR	7		½	4	6	(F2E)	13	10¼	47	19
14	c2cs*	2	BR	6½		½	2	1½		19	1	47	20
15	c2ct*	2	BR	6½		½	2	1½		19	1	47	20
16	c2ac*	1	PLU	13		⅜	4	2	(BEVEL)	33	6	47	11A
17	c2bm*	2	PL	16		½	1	0⅞		20	2	24	46
18	c1bc L*	1	BR	7½		¾	4	6 3/32	(MIE) (FIE)	13	10¼	47	18
19													
20													
21													
22													
23													
24													
25													
26	USZ	1	UPPER SHOE						DET. ON DWG #2				
27													
28		8	SB	⅞			0	3½				M	
29		2	SB	⅞			0	2					
30													
31													
32													
33													
34	FWL	1	WD			5/16	392	1½					
35	FWS	1	WD			5/16	34	8					
36	FW	1	WD			½	1	2					
37	SDS	1	WD			1/16	4	6					
38	VGDS	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													

BOLT SPLICE MTL BACK PAST END OF GDR. FOR SHP'T. T&B FLG.

GIRDER- G6-2

SECT. (A) (DEVELOPED)

SECT. (B)(C) (DEVELOPED)

SECT. (D) (DEVELOPED)

DETAIL "AA"

DOWELS IN P-U52 TO BE PROTECTED DURING SHIPMENT.

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

E9 E10

SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIDE OR PATTERN	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1		ONE-GIRDER-G6-2							
2	a	1	PL	54		1/2	38	10 11/16	SC x 1/2
3	b	1	*PL	54		1/16	58	11 7/16	SC 1/2 x 7/16
4	c	1	PLU	16		1 1/4	38	8 3/8	
5	d	1	PLU	16		1 1/4	38	10 3/8	
6	f	1	PLU	16		3/8	58	11 3/8	
7	g	1	PLU	16		3/8	58	9 5/8	
8	h	2	PL	2 5/8	·	1/2	2	7 1/2	(BENT)
9	k	2	L	7	3 1/2	1/2	0	11	(BENT) (SEE DWG. #3 & #4)
10									
11									
12									
13	c	lag R* / 1	BR	7 1/16		3/8	4	6 1/32	(MIE)(PIE)
14	c	1b*	4	BR	7		1/2	4	6 (F2E)
15	c	2cs*	2	BR	6 1/2		1/2	2	1 1/2
16	c	2ct*	2	BR	6 1/2		1/2	2	1 1/2
17									
18	c	2ac*	1	PLU	13		3/8	4	2 (BENT)
19	c	2bm*	2	PL	16		1/2	1	0 7/8
20									
21									
22									
23									
24									
25									
26	U52	1	UPPER SHOE						DET. ON DWG. #2
27									
28									
29		8	SB	7/8*			0	8 1/2	
30		2	SB	3/8*			0	2 1/2	
31									
32	SD	1	WD			3/16	0	8	
33									
34	FWL	1	WD			5/16	390	8 3/8	
35	FWS	1	WD			5/16	52	0	
36	FW	1	WD			1/2	1	2	
37	SDS	1	WD			3/16	4	6	
38	VGDS	1	WD			1/2	2	8	

MAIL ORDER

ITEM	LENGTH FT.	LENGTH IN.	WEIGHT PIECE	WEIGHT UNIT
2	39	8 1/2	46	17
3	59	6 1/2	44	16
4	39	2 3/4	40	17
5	39	2 3/8	40	17
6	59	4 1/2	37	16
7	59	4 1/2	37	16
8	22	4	24	45
9	40	0	36	39
13	13	10 1/4	47	18
14	13	10 1/4	47	19
15	19	1	47	20
16	19	1	47	20
18	33	6	47	11A
19	20	2	24	46

INST.-6W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-2	GIRDER 3 1/4 x 57 1/2 x 98'-5	

APPROVED:- HARDESTY & HANOVER, CONSULTING ENGINEERS, 101 PARK AVENUE, NEW YORK 17, N.Y. Arnold Hardesty OCT 29 1969

PAY ITEM - 506.711

GIRDER G6-2

MATERIAL A36 STEEL
BOLTS 7/8"
OVERSIZED 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 (LH)

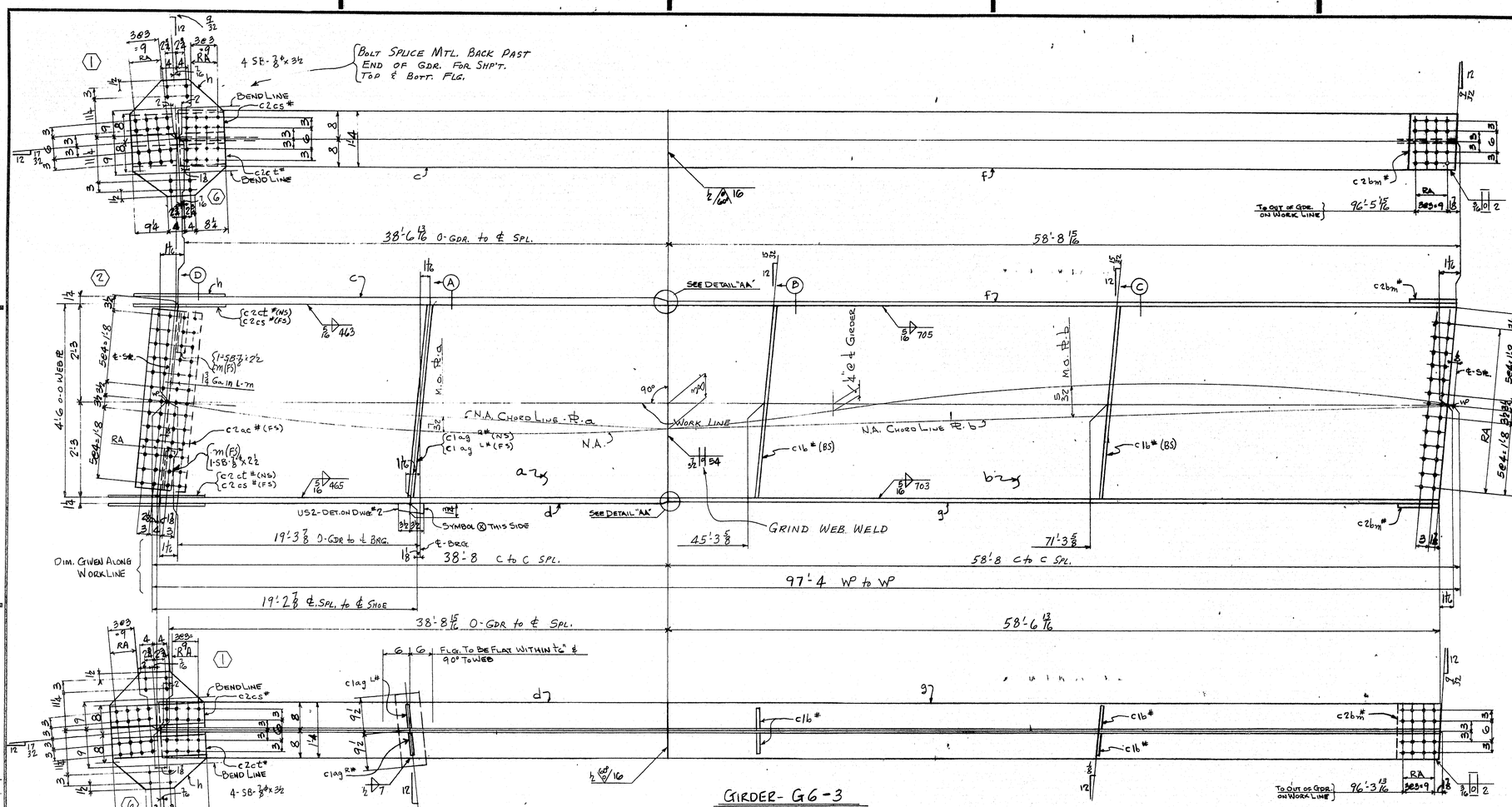
NO.	DATE	REVISION
0		
9		
8		
7		
6		
5		
4		
3		
2		
1		

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

OWNER: 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 BRANCH POTTSTOWN
MADE BY DEW DATE 7/1/69 DETAILED BY B.R. DEPARTMENT
CHECKED BY JRG DATE 7-21-69 SHOP NO.
CONTRACT CT-6111-220 DRAWING NO. 173

107-188

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	Mill Order: Length Ft.	Mill Order: Length In.	Mill Order: Page	Mill Order: Line
1		ONE GIRDER G6-3											
2	a	1	PL	54		½	38	8 15/16	SC x ℄	39	8½	46	17
3	b	1	PL	54		1/16	58	8 15/16	SC ℄ x ℄	59	6½	44	16
4	c	1	PLW	16		1¾	38	7		39	2 3/4	40	17
5	d	1	PLW	16		1¾	38	9⅜		39	2 3/4	40	17
6	f	1	PLW	16		⅞	58	9⅜		59	4½	37	16
7	g	1	PLW	16		⅞	58	7		59	4½	37	16
8	h	2	PL	25½		½	2	7½	(BENT)	22	4	24	45
9	m	2	L	7	3¾	½	0	11	(BENT) C.F. 7x4x½	40	0	36	39
10													
11													
12													
13	c1ag a# R#	1	BR	7½		¾	4	6 5/32	(MIE) (FIE)	13	10¼	47	18
14	c1b#	4	BR	7		½	4	6	(FIE)	13	10¼	47	19
15	c2cs#	2	BR	6½		½	2	1½		19	1	47	20
16	c2ct#	2	BR	6½		½	2	1½		19	1	47	20
17	c2ac#	1	PLU	13		⅜	4	2	(BENT)	33	6	47	11A
18	c2bm#	2	PL	16		½	1	0 3/8		20	2	24	46
19													
20													
21													
22													
23													
24													
25													
26	USZ	1	UPPER SHOE						DET. ON DWG #2				
27													
28													
29		8	SB	⅞			0	8½					
30		2	SB	⅞			0	2½				M	
31													
32													
33													
34	FWL	1	WD			5/16	389	3					
35	FWS	1	WD			5/16	52	0					
36	FW	1	WD			½	1	2					
37	SDS	1	WD			7/16	4	6					
38	VGDS	1	WD			½	2	8					
39	SD	1	WD			⅜	0	8					
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

Sect. A (Developed) — Sect. B C (Developed) — Sect. G (Developed)

Dowels in R-USZ To Be Protected During Shipment.

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
205 PARK AVE. NEW YORK 17, N.Y.
BY Chadwick Doherty OCT 29 1969

INST.- GW

Required List

Qty	Shipping Mark	Description	Remarks
ONE	G6-3	GIRDER 31½ x 59⅛ x 98'-0½	

PAY ITEM - 504.711

Material A36 Steel
Fabrication Bolts ⅞
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 II Red Lead (LN)

GIRDER - G6-3

Customer: Maine State Highway Commission
Piscataqua River Bridge
Project No I-95-1(22)10
Cont. No. 3 - New Hampshire Line
Structural Steel
Bethlehem Steel Corporation
Fabricated Steel Construction
Pottstown Drafting Room Pottstown
Made by DEW Date 9/6/67 In Charge D.K. Mosher
Checked by [illegible] Date 9-27-67 Shop No.
Contract CT-5189-038 Shipping No. 374

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

No.	Date	Init.	Revision
0			
9			
8			
7			
6			
5			
4			
3			
2			
1			

For location of details shown on this sheet refer to diagrams.
E9 E10

Bolt Splice Mtl. Back Past End of Gdr. For Ship't. Top & Bott. Flg.

4-SE ⅞"ϕ x 3½

Bend Line c2cs*

c2ct* Bend Line

Move ½K for Ship'l & Bolt To Spl. Pl & U52 EB 1-SB-⅞"ϕ x 2½

c2ac* (FS)

K(FS)

(c2ct* (NS) (c2cs* (FS)

c2ct* (NS) (c2cs* (FS)

U52-Det. on Dwg* 2

Symbol Ⓧ This Side

See Detail "AA"

Grind Web Weld

N.A. Chord Line Pt. a

N.A. Chord Line Pt. b

N.A.

Work Line

M.O. Pt. a

M.O. Pt. b

c16* (BS)

c16* (BS)

c2bm*

To Out of Gdr. on Work Line

Dim. Given Along Work Line

19'-3 ℄ Gdr. to ℄ Brg.

38'-6½ c to c Spl.

19'-2 ℄ Spl. to ℄ Shoe

17'-3 15/16

38'-7 7/16

58'-5 7/16 c to c Spl.

96'-11 11/16 WP to WP

58'-44

42'-8 7/16

68'-7 3/8

94'-9½

Flgs. To Be Flat Within ½° & 90° To Web

c1b*

c2ac*

clag L*

clag R*

c2ct*

Bend Line

4-SB-⅞"ϕ x 3½

GIRDER- G6-4

Sect. Ⓐ (Developed)

Sect. ⓑⓒ (Developed)

Sect. Ⓓ (Developed)

Sect. Ⓖ

Detail "AA"

Dowels in R-U52 To Be Protected During Shipment.

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

				SHOP BILL								FULL ORDER			
LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR PATTERN	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	LENGTH FT.	LENGTH IN.	WGT. POUNDS	WGT. MM
1				ONE- GIRDER- G6-4									
2	a	1	PL	54		½	38	7 7/16	54x½	39	8½	46	17
3	b	1	PL	54		1/16	58	6 3/8	54x 7/16	59	6½	58	61
4	c	1	PLU	16		1 7/8	38	5 4		38	7 3/4	40	18
5	d	1	PLU	16		1 9/16	38	7 3/8		39	2 3/4	40	17
6	f	1	PLU	16		⅜	58	6 9/16		59	4½	37	16
7	g	1	PLU	16		⅜	58	4 7/16		59	4½	37	16
8	h	1	PL	25½		½	2	7½	(BENT)	22	4	24	45
9	n	1	PL	35		⅝	4	2⅝	(BENT) CF3GX⅝	27	3 3/8	47	86
10	k	2	L	7	3 4	½	0	11	(BENT) CF. 7x4 x½	40	0	36	39
11													
12													
13													
14	c1ag R*	1	BR	7½		¾	4	6½	(MIE)(FIE)	13	10½	47	18
15	c1b*	4	BR	7		½	4	6	(PIE)	13	10½	47	19
16	c2cs*	2	BR	6½		½	2	1½		19	1	47	20
17	c2ct*	2	BR	6½		½	2	1½		19	1	47	20
18	c2ac*	1	PLU	13		⅜	4	2	(BENT)	33	6	47	114
19	c2bm*	1	PL	16		½	1	0⅞		20	2	24	46
20	P	1	PL	16		½	2	2⅞		20	2	24	46
21													
22													
23													
24													
25													
26	U52	1		UPPER SHOE					DET. ON DWG* 2				
27													
28													
29		8	SB	⅞"			0	3½				M	
30		2	SB	⅞"			0	2½					
31													
32													
33													
34	FWL	1	WD			5/16	387	9 3/4					
35	FWS	1	WD			5/16	52	0					
36	FW	1	WD			½	1	2					
37	SDS	1	WD			1/16	4	6					
38	VGDS	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.-GW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-4	GIRDER 35½ x 58 x 97'-8½	

PAY ITEM - 504.711

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY Arnold Northy OCT. 29 1964

MATERIAL A36 STEEL
BOLTS ⅞"ϕ
OPEN HOLES 15/16"ϕ
A325 FIELD BOLTS - ⅞"ϕ
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	BY	REVISION
5	3-10	ELB	

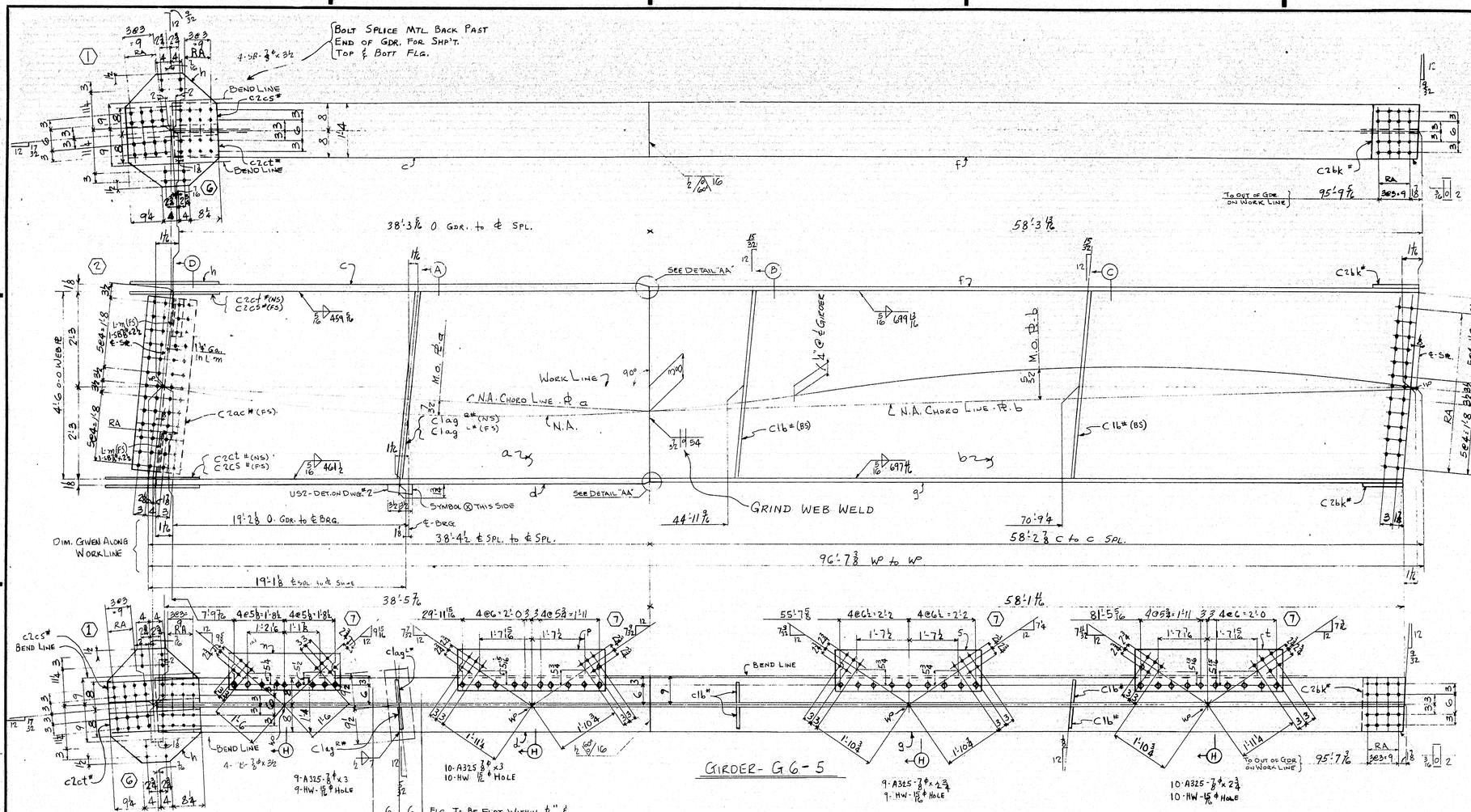
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

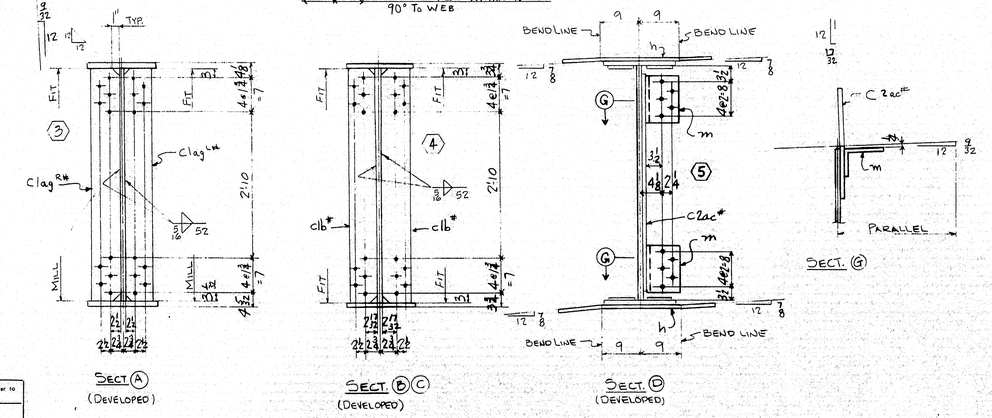
GIRDER G6-4

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(19)16
CONT. No. 3 - NEW HAMPSHIRE END
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATING DIVISION
POTTSTOWN DRAFTING ROOM Pottstown Pa.
MADE BY DEW DATE 9/1/63 DETAILER R.L.
CHECKED BY ERG DATE 9-27-63 SHOP NO.
CONTRACT CT-6144-038 DELIVERY NO. 37

107-190

0 1 2 3 4 5 INCHES





LN	ASSEMBLY MARK	NO	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	THICK	LENGTH FT.	LENGTH IN.	REMARKS
1		ONE	GIRDER	G6	-5				
2	a	1	PL	54		½	38	5⅞	56×½
3	b	1	PL	54		16	58	3⅛	56½×⅞
4	c	1	PLV	16		1⅛	38	3½	
5	d	1	PLV	16		1⅛	38	5⅜	
6	f	1	PLV	16		¾	58	4	
7	g	1	PLV	16		¾	58	1⅛	
8	h	2	PL	25½		½	2	7½	(BENT)
9	m	2	L	7	34	½	0	11	(BENT) 5"-7"x4"x½ SF. (BENT)
10	n	1	PL	14½		⅝	3	8	
11	P	1	PL	14½		⅝	4	8	(BENT)
12	s	1	PL	14½		⅝	4	7	(BENT)
13	t	1	PL	14½		⅝	4	8	(BENT)
14									
15									
16	C1ag*	4	BR	7½		¾	4	6½	(MIE) (FIE)
17	C1b*	4	BR	7		½	4	6	(FIE)
18	C2ac*	1	PLU	13		⅜	4	2	(BENT)
19	C2bk*	2	PL	16		⅜	1	0⅜	
20	C2cs*	2	BR	6½		½	2	1½	
21	C2ct*	2	BR	6½		½	2	1½	
22									
23									
24									
25									
26	US2	1	UPPER SHOE						DET. ON DWG.* 2
27		19	325	⅞ø			0	2¾	
28		8	SB	⅞ø			0	3½	
29		19	325	⅞ø			0	3	
30		38	HW	1⅛ø	16 ø	3/16			
31		2	SB	⅞ø			0	2½	
32									
33									
34	FWL	1	WD			5/16	386	4½	
35	FWS	1	WD			5/16	52	0	
36	FW	1	WD			½	1	2	
37	SDS	1	WD			7/16	4	6	
38	VGDS	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									

MILL ORDER

LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM LINE
38	9¾	46	18
58	8¼	44	17
38	7¾	41	38
38	7⅜	41	38
59	4½	37	16
59	4½	37	16
30	5⅜	47	10C
40	0	36	39
26	0	28	19
26	0	28	19
26	0	28	19
26	0	28	19
13	10¼	47	18
13	10¼	47	19
33	6	47	11A
19	1	47	20
19	1	47	20

INST.- GW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-5	GIRDER (3½"x59½"x97'-3⅜")	

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

PAY ITEM - 304.711

GIRDER G6-5

MATERIAL A36 STEEL
BOLTS ⅞ø A325
OPEN HOLES 1⅛ø
A325 FIELD BOLTS ⅞ø
SHOP CONTACT SURFACES No PAINT
MILL - AS NOTED
WELD - AS NOTED
PAINT ONE COAT AASHO-M72 - TYPE II RED LEAD (LN)
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.

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.

For location of details shown on this sheet refer to diagrams.
E9 E10

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

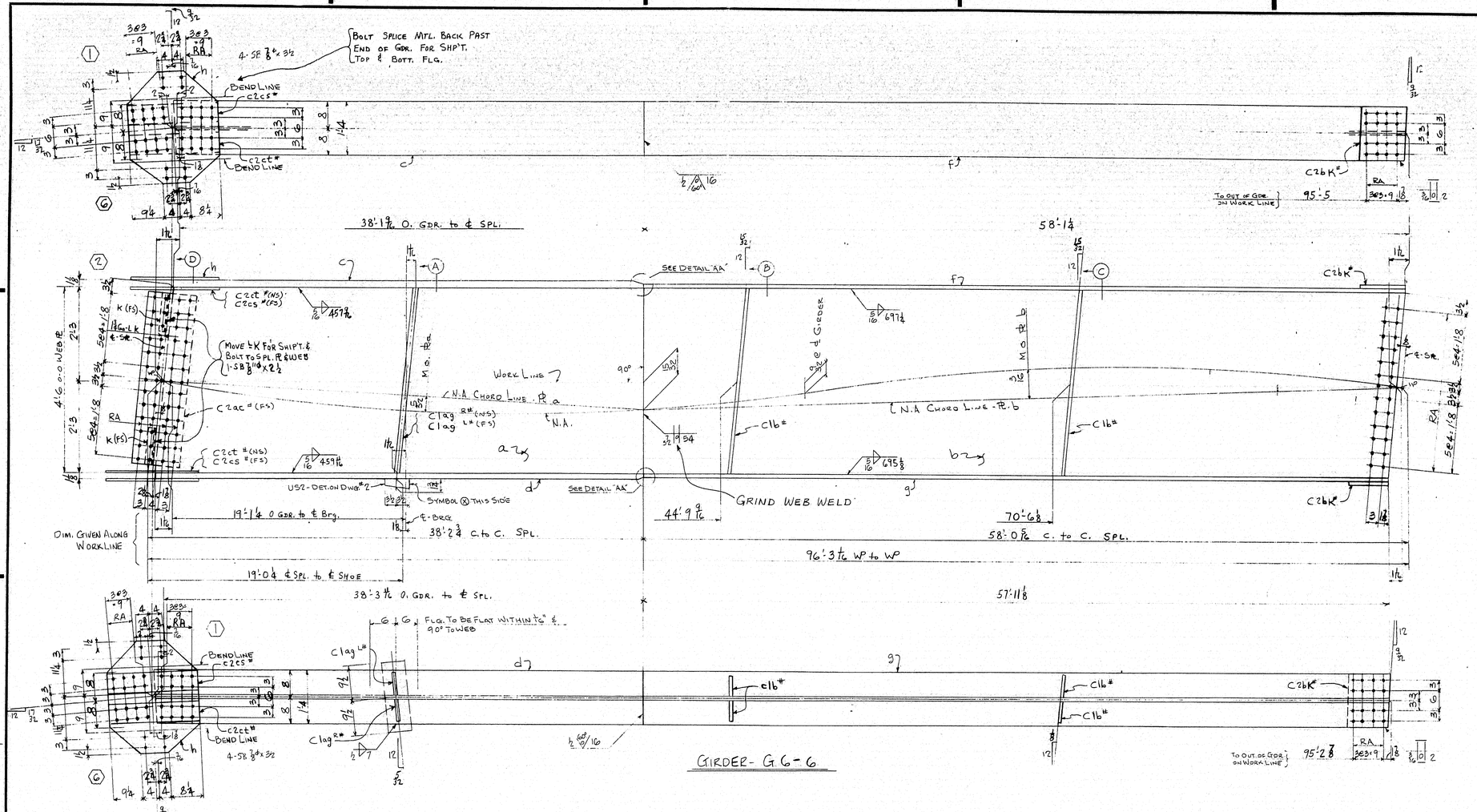
NO	DATE	INIT.	REVISION

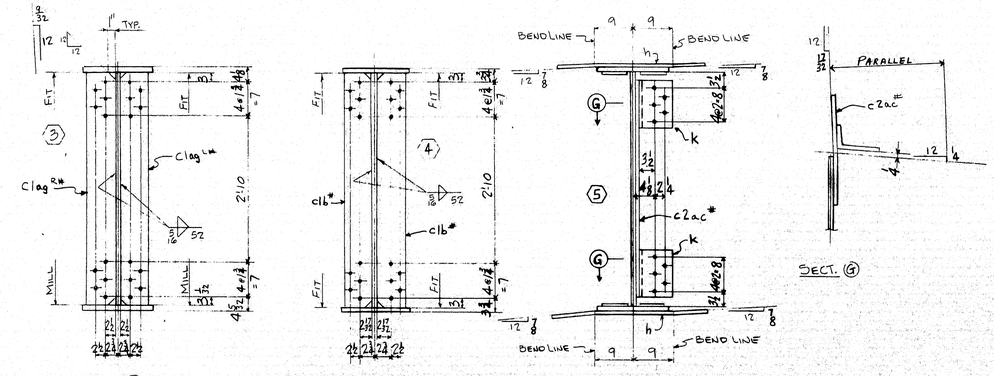
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE APP.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY DEW DATE 9/18/69 IN CHARGE B.K. BERTOLET
CHECKED BY [illegible] DATE 9-27-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 376

107-191

0 1 2 3 4 5 INCHES

NOV 1 7 1969





LINE	ASSEMBLY MARK	NO	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1		ONE	GIRDER	G6-6					
2	a	1	PL	54		½	38	3 11/16	5G x ½
3	b	1	PL	54		7/16	58	1¾	5G ½ x 2
4	c	1	PLV	16		1⅛	38	1⅜	
5	d	1	PLV	16		1⅛	38	3⅞	
6	f	1	PLV	16		¾	58	1 7/16	
7	g	1	PLV	16		¾	57	11 5/16	
8	h	2	PL	25½		½	2	7½	(BENT)
9	k	2	L	7	3¼	½	0	11	(BENT) C.P. 7x4x½
10									
11									
12									
13	c1a g R*	1	BR	7½		¾	4	6½	(W/E) (F/E)
14	c1b*	4	BR	7		½	4	6	(F/E)
15	c2cs*	2	BR	6½		½	2	1½	
16	c2ct*	2	BR	6½		½	2	1½	
17	c2ac*	1	PLU	13		⅜	4	2	(BENT)
18	c2bK*	2	PL	16		⅜	1	0⅞	
19									
20									
21									
22									
23									
24									
25									
26	USZ	1	UPPER SHOE						DET. ON DWG* 2
27									
28			C.	⅞			0	3½	
29									
30		2	SB	⅞			0	2½	
31									
32									
33									
34	FWL	1	WD			5/16	38	11¼	
35	FWS	1	WD			5/16	52	0	
36	FW	1	WD			½	1	2	
37	SDS	1	WD			7/16	4	6	
38	VGDS	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									

MILL ORDER

LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM LINE
38	9¾	46	18
58	8¼	44	17
38	7¾	41	38
38	7¾	41	38
59	4½	37	16
59	4½	37	16
30	5⅞	47	10c
40	0	36	39
13	10¼	47	18
13	10¼	47	19
19	1	47	20
19	1	47	20
33	6	47	11A

J

M

INST.- G.W.

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-6	GIRDER (3½ x 59½ x 97'-0)	

PAY ITEM - 504.711

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

GIRDER G6-6

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 DEW DATE 9/16/69 IN CHARGE D.K. BERTOLET
CHECKED WRG DATE 9-30-69 SHOP NO. 2
CONTRACT SI-6249-020 DRAWING NO. 377

MATERIAL A36 STEEL
BOLTS ⅞" ϕ A325
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 II RED LEAD (LN)
REAM - As Noted

REVISION: NO. | DATE | INIT.
SUBMITTAL DATE

For location of details shown on this sheet refer to diagram.
E9 E10

DOWELS IN P-US2 TO BE PROTECTED DURING SHIPMENT.

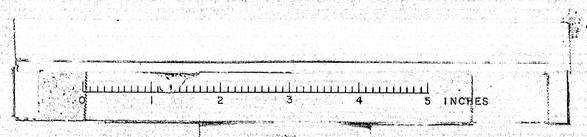
RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

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.



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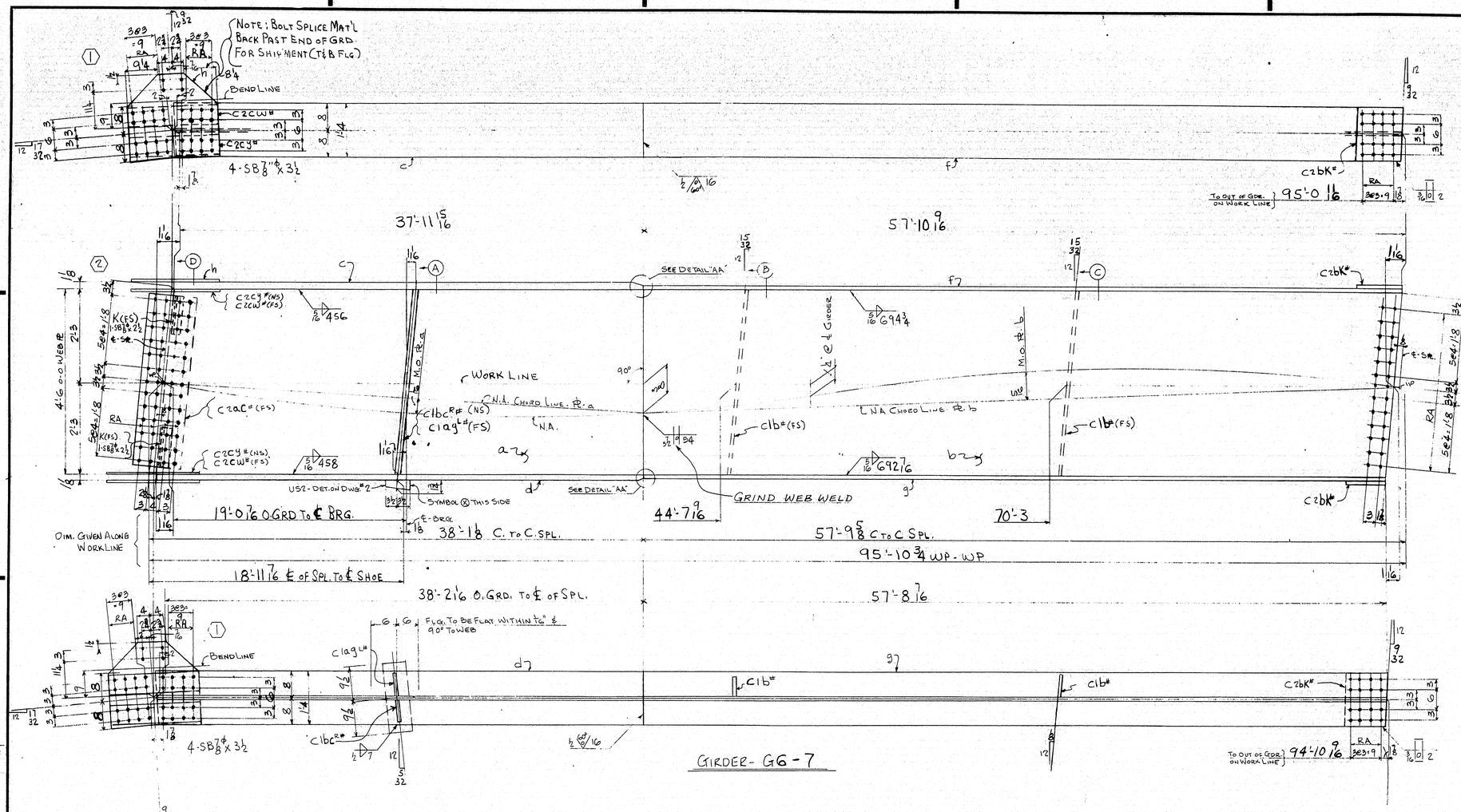
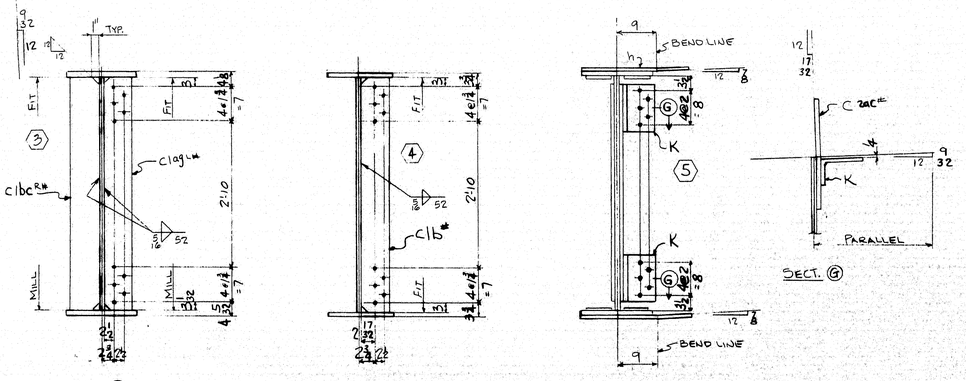
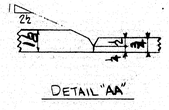
NOV 17 1969







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.	ITEM PAGE	ITEM LINE
1		ONE GIRDER GG-7											
2	a	1	PL	54		1/2	38	2 1/16	5G x 1/2	38	9 3/4	46	18
3	b	1	PL	54		1/16	57	10 9/16	5G 1/2 x 7/16	58	8 1/4	44	17
4	c	1	PLV	16		1/8	38	0 1/8		38	7 3/4	41	38
5	d	1	PLV	16		1/8	38	2 1/4		38	7 3/4	41	38
6	f	1	PLV	16		3/4	57	10 3/4		58	2 1/4	37	15
7	g	1	PLV	16		3/4	57	8 3/8		58	2 1/4	37	15
8	h	2	PL	25 1/2		1/2	1	11 3/4		30	5 7/8	47	10c
9	K	2	L	7	34	1/2	0	11	(BENT) CF 7X4X1/2	40	0	36	39
10													
11													
12	C2CY#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
13	C2CW#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
14	C2aC#	1	PLV	13		3/8	4	2	(BENT)	33	6	47	11A
15	C2bK#	2	PL	16		3/8	1	0 3/8					J
16	C1bc R#	1	BR	7 1/2		3/4	4	6 3/32	MIE FIE	13	10 1/4	47	18
17	C1ag L#	1	BR	7 1/2		3/4	4	6 3/32	MIE FIE	13	10 1/4	47	18
18	C1b#	2	BR	7		1/2	4	6	F2E	13	10 1/4	47	19
19													
20													
21													
22													
23													
24													
25													
26	USZ	1	UPPER SHOE						DET. ON DWG. #2				
27		8	SB	7/8ϕ			0	3 1/2					M
28		2	SB	7/8ϕ			0	2 1/2					
29													
30													
31													
32													
33													
34	FWL	1	WD			9/16	383	6					
35	FWS	1	WD			9/16	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					
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

SHOP BILL — MILL ORDER

INST. - GW

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-7	GIRDER (2.5 x 60 x 96'-7")	

PAY ITEM - 504.711

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY Andrew Hardesty OCT 29 1969

GIRDER

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. NO I-95-1(92)16
CONT. NO. 3 - NEW HAMPSHIRE APR
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY WEB DATE 9/15/69 IN CHARGE D.K. BERTOLET
CHECKED BY RGS DATE 9-30-69 SHOP NO. 2
CONTRACT CJ-6241-070 DRAWING NO. 378

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

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

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

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.

DOWELS IN R-USZ TO BE PROTECTED DURING SHIPMENT.

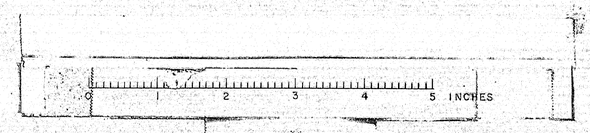
RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

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.

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



107-193

NOTE: BOLT SPLICE MAT'L BACK PLT END OF GDR FOR SHIPMENT (T&B FLG.)

C2CW# (FS)

C2CY# (NS) BEND LINE 4-SB 7/8" x 3 1/2

37'-10 13/16

57'-8 5/8

SEE DETAIL "AA"

WORK LINE

N.A. CHORD LINE: PT. a

N.A. CHORD LINE: PT. b

C2a5# (FS) 2-SB 7/8" x 2

C1a9RH (NS) C1bC# (FS)

C2CY# (NS) C2CW# (FS)

C1b# (NS)

C2bK#

C2CY# (NS) C2CW# (FS)

US2 - DET. ON DWG #2

SYMBOL ⊗ THIS SIDE

SEE DETAIL "AK"

GRIND WEB WELD

18'-11 7/8 O. GRD. TO BRG.

DIM. GIVEN ALONG WORK LINE

38'-0 C TO C SPL.

44'-6 3/16

70'-0 3/4

57'-7 11/16 C. TO C. SPL.

95'-7 11/16 WP TO WP

18'-10 7/8 ℄ OF SPL. TO ℄ SHOE

38'-0 15/16 O. GRD. TO ℄ OF SPL.

57'-6 1/2

94'-9 5/8

94'-7 1/2

TO OUT OF GDR. ON WORK LINE

RA 365-9

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

C1bC1# BEND LINE 4-SB 7/8" x 3 1/2

C1a9# C1b#

GIRDER - G6 - 8

SECT. (A) (DEVELOPED)

SECT. (B)(C) (DEVELOPED)

SECT. (D) (DEVELOPED)

DETAIL "AK"

DOWELS IN P-US2 TO BE PROTECTED DURING SHIPMENT.

RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FROM SIZE AND NO. HOLES WITH GDR. PARTS ASSEMBLED.

ALL OPEN HOLES ⌀ 13/16

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

USE E70XX, E9018, E9018 LOW HYDROGEN ELECTRODES OR OR. STD. 2 FOR WELDING.

MATL OF	PLATES	SHAPES
TO 3/4" INCL.	36 KSI	36 KSI
OVER 3/4" TO 2 1/2"	36 KSI	36 KSI
OVER 2 1/2" TO 4"	36 KSI	36 KSI

MATERIAL A36 STEEL
BOLTS 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 (LIN)
REAM - AS NOTED

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

	a	b	c
a			
b			
c			
d			
e			
f			
g			
h			
j			
k			

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1		ONE	GIRDER	G6	-8				
2	a	1	PL	54		1/2	38	0 15/16	50 x 1/2
3	b	1	PL	54		1/16	57	8 5/8	50 1/2 x 1/16
4	c	1	PLU	16		1/8	37	11	
5	d	1	PLU	16		1/8	38	1/8	
6	f	1	PLU	16		3/4	57	8 3/8	
7	g	1	PLU	16		3/4	57	6 1/16	
8	h	2	PL	25 1/2		1/2	1	11 1/4	(BENT)
9									
10									
11	C 2CW#	2	BR	G 2		1/2	2	1 1/2	
12	C 2CY#	2	BR	G 2		1/2	2	1 1/2	
13	C 2bK#	2	PL	16		3/8	1	0 8	
14	C 2a5#	1	PLU	13		3/8	4	2	(BENT)
15	C 1a9RH	1	BR	7 1/2		3/4	4	6 3/2	(M1E) (F1E)
16	C 1b#	2	BR	7		3/4	4	6	(F2E)
17	C 1bC#	1	BR	7 1/2		3/4	4	6 3/2	(M1E) (F1E)
18									
19									
20									
21									
22									
23									
24									
25									
26	US2	1	UPPER SHOE						DET. ON DWG #2
27									
28		8	SB	7/8"			0	3 1/2	HEX HD & NUT
29		2	SB	7/8"			0	2	
30									
31									
32									
33									
34	FWL	1	WD			15/16	382	5 1/2	
35	FWS	1	WD			15/16	34	8	
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									

M&L ORDER

LENGTH FT.	LENGTH IN.	WGHT. PIECE	WGHT. LINE
38	9 3/4	46	18
58	8 4	44	17
38	7 3/4	41	38
38	7 3/4	41	38
58	2 4	37	15
58	2 4	37	15
30	5 8	47	10c
19	1	47	20
19	1	47	20
			J
33	6	47	11A
13	10 4	47	18
13	10 4	47	19
13	10 4	47	18

INST. - 6E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-8	GIRDER (24 x 60 x 96:5)	

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

PAY ITEM - 504.711

GIRDER

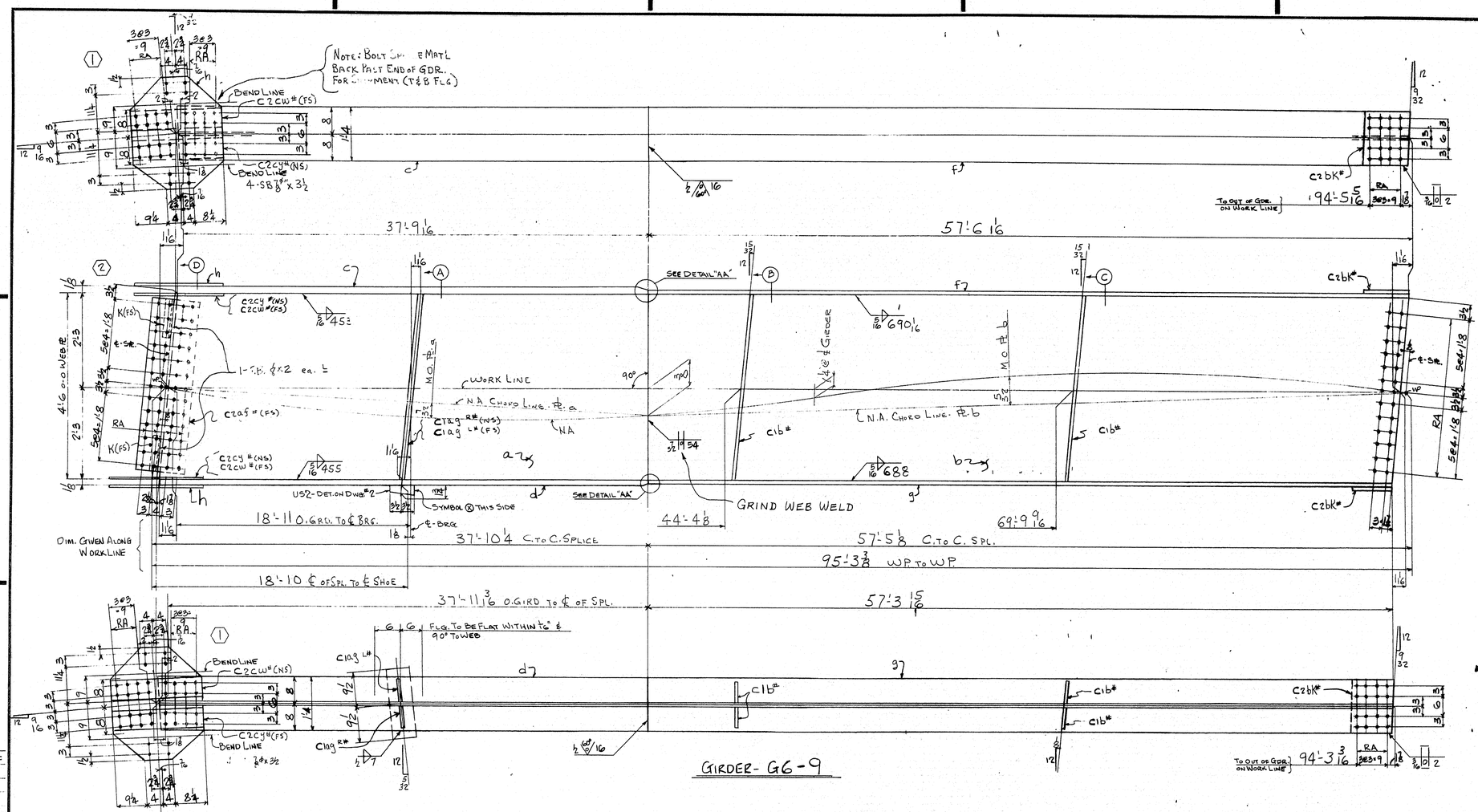
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

NO.	DATE	INIT.
	REVISION	

CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. NO. I-95-1(9)10
CONT. NO. 3 - NEW HAMPSHIRE
STRUCTURE STATE
BETHLEHEM STEEL CORPORATION
FABRICATED BY CONTRACTOR
POTTSTOWN DRAWING ROOM Pottstown
MADE BY WEB DATE 9/8/69 IN CHARGE
CHECKED RG DATE 11-1-69 SHOP NO.
CONTRACT CT-6144-B10 SHEET NO. 37

107-192

0 1 2 3 4 5 INCHES



	ASSEMBLY MARK	NO.	SHAPE	SHOP BILL SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	ITEM PAGE	ITEM LINE
1		ONE	GIRDER	G6	-9								
2	a	1	PL	54		1/2	37	11 3/8	56 x 1/2	38	9 3/4	40	18
3	b	1	PL	54		1/16	57	6 1/16	50 1/2 x 1/16	58	8 1/4	44	17
4	c	1	PLV	16		1 1/2	37	9 1/4		38	7 3/4	41	38
5	d	1	PLV	16		1 1/2	37	11 3/8		38	7 3/4	41	38
6	f	1	PLV	16		3/4	57	6 1/4		58	2 1/4	37	15
7	g	1	PLV	16		3/4	57	4 3/8		58	2 1/4	37	15
8	h	2	PL	2 5/8		1/2	2	7 1/2	(BENT)	30	5 3/8	47	10C
9	K	2	L	7	3 1/4	1/2	0	11	(BENT)	40	0	36	39
10													
11													
12	C 2CW#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
13	C 2CY#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
14	C 2BK#	2	PL	16		3/8	1	0 3/8				J	
15													
16	C 2AS#	1	PLV	13		3/8	4	2	(BENT)	33	6	47	11A
17	C 1AG R# L#	1	BR	7 1/2		3/4	4	6 3/32	(MIB) (FIE)	13	10 4	47	18
18													
19	C 1B#	4	BR	7		1/2	4	6	(F2E)	13	10 4	47	19
20													
21													
22													
23													
24													
25													
26	US2	1	UPPER SHOE						DET. ON DWG #2				
27													
28		8	SB	7/8"			0	3 1/2	HEX HD & NUT				
29		2	SB	7/8"			0	2				M	
30													
31													
32													
33													
34	FWL	1	WD			5/16	381	0 1/2					
35	FWS	1	WD			5/16	53	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													

INST-6E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G6-9	GIRDER (3 1/2 x 60 x 96'-0")	

PAY ITEM - 504.711

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

DOWELS IN R-US2 TO BE PROTECTED DURING SHIPMENT.

[redacted]

MATERIAL A36 STEEL
ENDBEARING BOLTS 7/8"
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 (LN)

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

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

GIRDER

OWNER 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 9/4/69 AS CHANGED D.L. BARCLAY
CHECKED BY RRS DATE 10-1-69 SHOP NO.
CONTRACT CT-6141-B20 DRAWING NO. 380

107-175

NOV 17 1969

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

0 1 2 3 4 5 INCHES