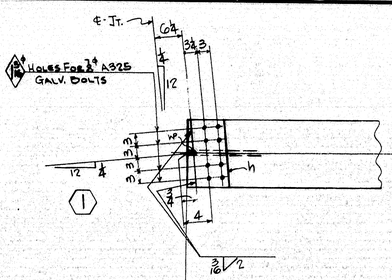

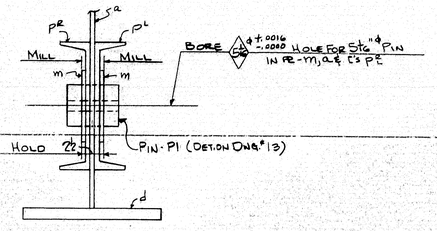

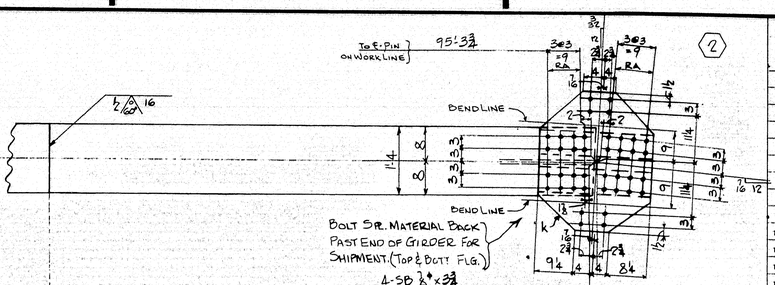

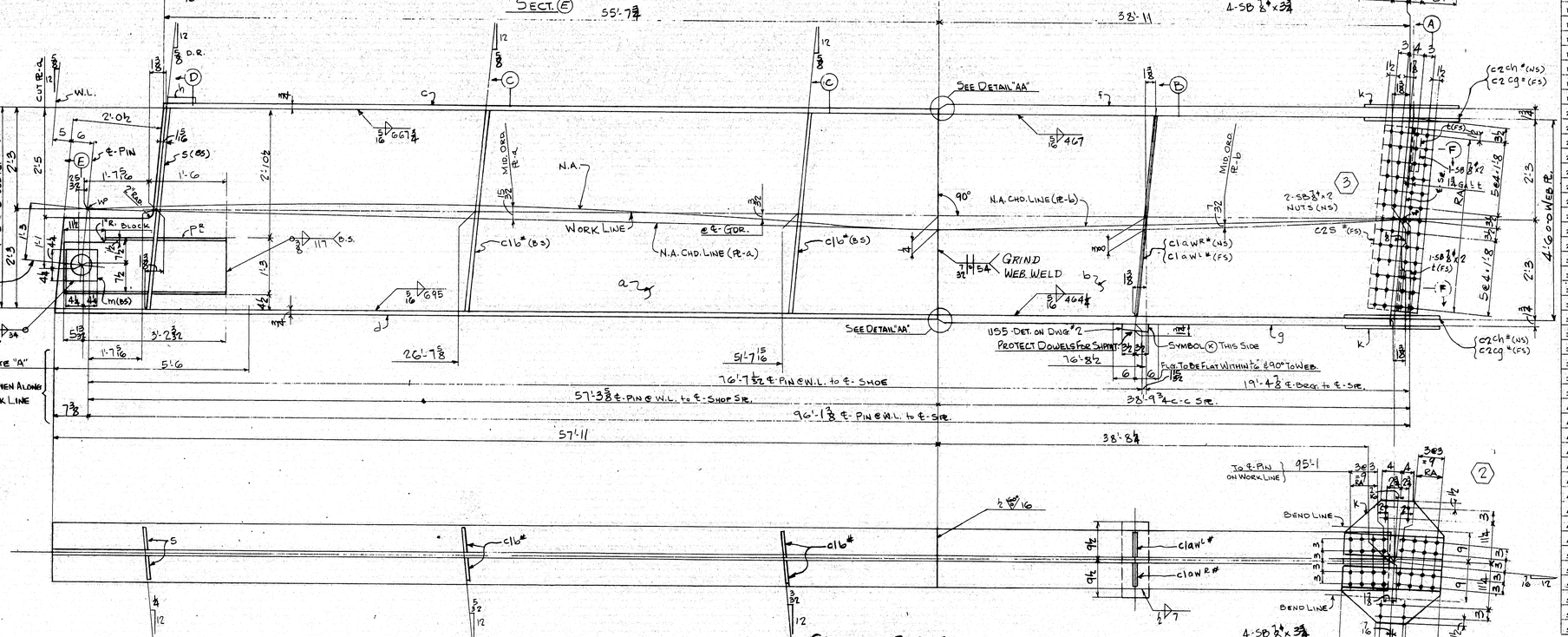

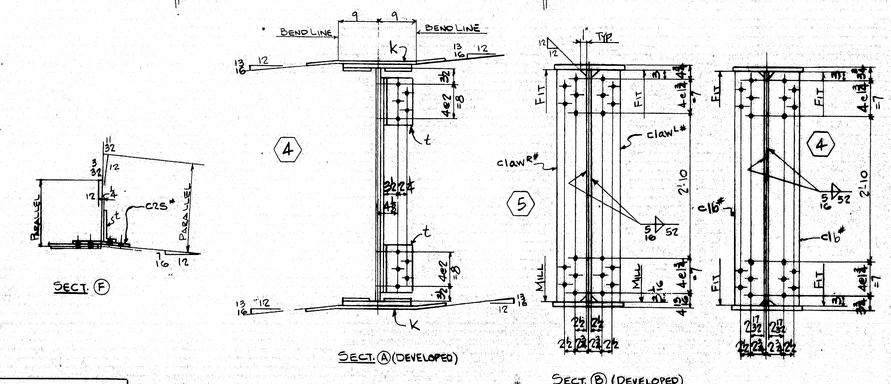

				SHOP BILL								MILL ORDER	
					SECTION			LENGTH				LENGTH	ITEM
	ASSEMBLY MARK	NO.	SHAPE	SIZE	AGS OR POUNDS	THICK	FT.	IN.	REMARKS		FT. IN.	PAGE
1		ONE-GIRDER-G16-3										
2	a	1	PL	54		1/16	57	11		SG 1/2 x 1/16	58 10	2 72
3	b	1	PL	54		1/2	38	11		SG x 1/2	39 6 1/2	2 74
4	c	1	PW	16		3/8	55	7 3/8			56 2	4 75
5	d	1	PW	16		3/8	57	11			58 6 1/2	4 72
6	f	1	PW	16		1 3/8	38	11 5/16			39 4 1/4	3 70
7	g	1	PW	16		1 3/8	38	8 5/16			39 4 1/4	3 70
8	h	1	PL	8		(15/16 x 1 1/16)	1	4 1/2		C.F. 2 #		J
9	k	2	PL	25 1/2		1/2	2	7 1/2	BENT		22 4	24 45
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS	C.F. 3 #		J
11	P1	1	C	15	40		3	7 1/2			44 8	24 42
12	S	2	BR	7		1/2	4	6	F2E		18 4	24 51
13	t	2	L	7	34	1/2	0	11	BENT.	CF 7x4x1/2	40 0	36 39
14												
13		4	SB	⅞"			0	2	H.H.H.N.			M
16												
17												
18												
19												
20												
21	C. 1 Mark #	1	BR	7 1/2		3/8	4	6 1/16	MIE-FIE		18 4	24 49
22	C. 16 #	4	BR	7		1/2	4	6	F2E		18 4	24 51
23	C. 25 #	1	PW	13		5/8	4	2	BENT		21 1	24 48
24	C. 2Cg #	2	BR	6 1/2		1/2	2	1 1/2			19 0	24 50
25	C. 2Ch #	2	BR	6 1/2		1/2	2	1 2			19 0	24 50
26	P1	1	PIN						DET. ON DWG # 13			
27	USS	1	UPPER SHOE						DET. ON DWG # 2			
28	SDS	1	WD							1/16	4 6	
29	N60S	1	WD							3/16	2 8	
30	FW	1	WD							1/16	0 4	
31	FW	1	WD							1/2	1 2	
32	FW	1	WD							5/8	25 2	
33	FWS	1	WD							5/16	68 5 1/2	
34	FWL	1	WD							5/16	382 3 4	
35												
36												
37		8	SB	⅞"			0	3 3/4	H.H.H.N.			M
38												
39												
40												
41												
42												
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49												
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52												
53												
54												
55												

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

INST-"16W"

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-3	GIRDER (51½ x 61'4 x 97-11)	

PAY ITEM-504711

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 RD DATE 9-2-69 IN CHARGE B.V. DIRECTORET
CHECKED BY EJ DATE 9/26 SHOP NO. 2
CONTRACT CJ-6284-010 DRAWING NO. 301

MATERIAL A36 STEEL
BOLTS ⅞"
OPEN HOLES 15/16" (UN)
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)
REAM-AS NOTED

REVISION	NO.	DATE	INIT.

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

MAX. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. + 300, 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.

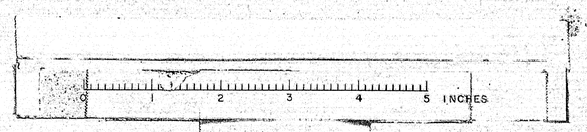
ALL OPEN HOLES @ NP 3 (UN)

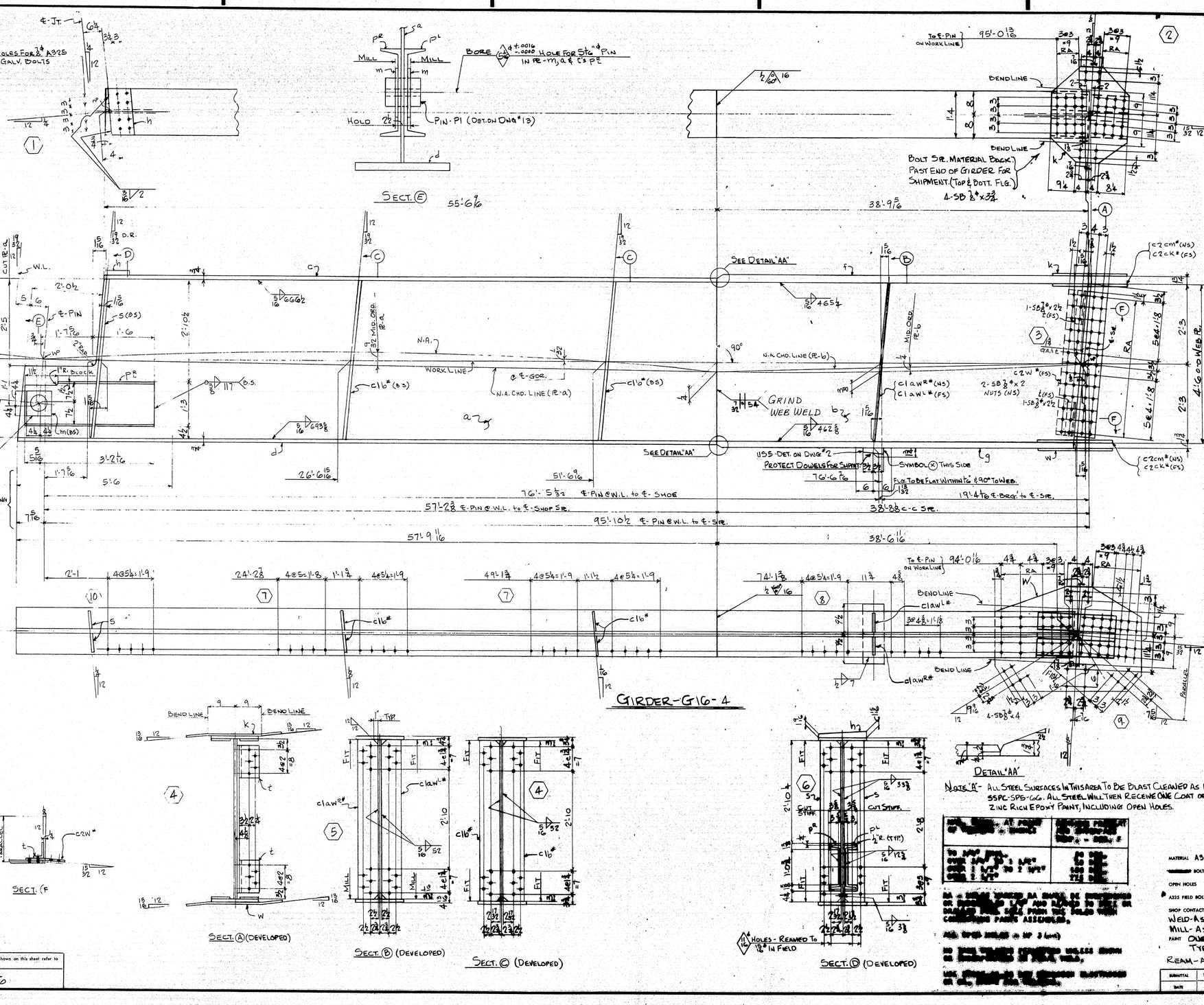
NO TACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

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

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 PAINT, INCLUDING OPEN HOLES.

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





Line	Assembly Mark	No.	Shape	Shop Bill Section Size	Size or Number	Thick	Length Ft.	Length In.	Remarks	Mill Order Length Ft.	Mill Order Length In.	Item Page	Item Line
1				ONE-Girder-G16-4									
2	a	1	PL	54		1/16	57	9 16	56z x 1/16	58	10	2	72
3	b	1	PL	54		½	38	9 7/8	56 x ½	39	6½	2	74
4	c	1	PLW	16		¾	55	6 ⅝		56	2	4	75
5	d	1	PLW	16		¾	57	9 16		58	6½	4	72
6	f	1	PLW	16		1⅜	38	9 7/8		39	4¼	3	70
7	g	1	PLW	16		1⅜	38	8 7/16		39	4¼	3	70
8	h	1	PL	8		(15/16 x 11/16)	1	4-⅝	C.F. 2 PR			J	
9	k	1	PL	25½		½	2	7½	BENT	22	4	24	45
10	m	2	PL	8½		½	0	8½	MIS C.F. ¾ PR			J	
11	PR	1	C	15	40		3	7⅜		44	8	24	42
12	S	2	BR	7		½	4	6	F2E	18	4	24	51
13	t	2	L	7	34	½	0	11	BENT C.F. 7x4x½	40	0	36	39
14	w	1	PL	35½		⅝	4	1	BENT 36X⅝ MULTS	4	1¼	28	15
15													
16		2	SB	⅞ϕ			0	2	H.H.H.N.				
17		2	SB	⅞ϕ			0	2½	↓			M	
18													
19													
20													
21	C	10W#	1	BR	7½		¾	4	6 6/16	MIE-F1E		18	4	24	49
22	C	16#	4	BR	7		½	4	6	F2E		18	4	24	51
23	C	2W#	1	PLW	13		⅝	4	2	BENT		21	1	24	48
24	C	2cm#	2	BR	6½		½	2	1½			19	0	24	50
25	C	2ck#	2	BR	6½		½	2	1½			19	0	24	50
26		P1	1	PIN					Det. on Dwg # 13				
27		USS	1	UPPER SHOE					Det. on Dwg # 2				
28		SDS	1	WD			1/16	4	6				
29		VGOS	1	WD			¼	2	8				
30		FW	1	WD			3/16	0	4				
31		FW	1	WD			½	1	2				
32		FW	1	WD			⅝	25	2				
33		FWS	1	WD			PL	68	5½				
34		FWL	1	WD			PL	381	3⅜				
35													
36													
37		4	SB	⅞ϕ			0	3½	H.H.H.N.			M	
38		4	SB	⅞ϕ			0	4	H.H.H.N.				
39													
40													
41													
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53													
54													
55													

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
OCT 17 1969
INST-16W"

Required List			
QTY	Shipping Mark	Description	Remarks
ONE	G16-4	GIRDER (35 x 61 4x 98-3)	

PAY ITEM- 506711

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 RD DATE 9-2-67 IN CHARGE D.K. DIRCKOFF
CHECKED BY RJ DATE 9/26 SHOP NO. 7
CONTRACT CJ-0289-010 DRAWING NO. 1,302

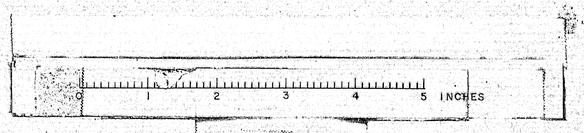
Revision No.	Date	Mat.
0		
9		
8		
7		
6		
5		
4		
3		
2		
1		

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

Material A36 Steel
Bolts ⅞ϕ
Open Holes 15/16ϕ (UN)
Ⓟ A325 Field Bolts ⅞ϕ
Shop Contact Surfaces No Paint (UN)
Weld-As Noted
Mill-As Noted
Paint One Coat AASHO-M72-Type II Red Lead (UN)
Ream-As Noted

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

1 102-103



GIRDER-G16-5

SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER PIECE MARK
1		ONE - GIRDER - G16-5										
2	a	1	PL	54		1/16	57	8 29/32	56 1/2 x 1/16	58	10	2
3	b	1	PL	54		1/2	38	7 17/32	56 x 1/2	39	6 1/2	2
4	c	1	PLW	16		3/4	55	5 13/32		56	2	4
5	d	1	PLW	16		3/4	57	8 13/32		57	9 3/4	4
6	f	1	PLW	16		1 1/8	38	7 7/8		39	2	3
7	g	1	PLW	16		1 1/8	38	5 1/16		39	2	3
8	h	1	PL	8	(11 1/16 x 1 1/8)		1	4 3/8	C.F. 2" ℄			J
9	k	2	PL	25 1/2		1/2	2	7 1/2	BENT	22	4	2
10	m	2	PL	8 1/2		1/2	0	8 1/2	M15 C.F. 3/4 ℄	4	5	J
11	PL	1	C	15	40		3	7		44	8	2
12	s	2	BR	7		1/2	4	6	F2E	18	4	2
13	t	2	L	7	3 1/4	1/2	0	11	BENT CF 7 x 4 x 1/2	40	0	3
14	w	1	PL	14 1/2		5/8	4	5 1/2	BENT	26	0	2
15	y	1	PL	14 1/2		5/8	4	6		26	0	2
16	aa	1	PL	14 1/2		5/8	4	6		26	0	2
17	ab	1	PL	14 1/2		5/8	3	8		26	0	2
18												
19		4	SD	3/4			0	2	H.H.H.N.			M
20												
21	C 1aWR	1	BR	7 1/2		3/4	4	6 1/16	M15-F1E	18	4	2
22	C 1bWR	4	BR	7		1/2	4	6	F2E	18	4	2
23	C 1WR	1	PLW	13		3/8	4	7	BENT	21	1	2
24	C 2CK	2	BR	6 1/2		1/2	7	1 1/2		19	0	2
25	C 2CM	2	BR	6 1/2		1/2	2	1 1/2		19	0	2
26	P1	1	PIN						DET. ON DWG #13			
27	USG	1	UPPER SHOE						DET. ON DWG #2			
28	SDS	1	WD			7/16	4	6				
29	VGDS	1	WD			3/4	2	8				
30	FW	1	WD			7/16	0	4				
31	FW	1	WD			1/2	1	2				
32	FW	1	WD			1/8	25	0				
33	FWS	1	WD			5/16	68	5 1/2				
34	FWL	1	WD			7/16	380	5				
35												
36												
37		8	SD	3/4			0	3 3/4	H.H.H.N.			
38		18	S25	7/8			0	7 3/4				
39		18	S25	7/8			0	3 1/2				M
40		36	HW	1 3/8	15/16	7/16						
41												
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51												
52												
53												
54												
55												

SECT. (E)

SECT. (F)

SECT. (A) (DEVELOPED)

SECT. (B) (DEVELOPED)

SECT. (C) (DEVELOPED)

SECTS. (E) (G) (H) (K)

SECT. (D) (DEVELOPED)

DETAIL 'AA'

NOTE "A" DIM. GIVEN ALONG WORK LINE

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 PAINT, INCLUDING OPEN HOLES.

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

E6

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

INST-16W"

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-5	GIRDER (34 3/4 x 5 1/2 x 97-3 3/32)	

PAY ITEM- 504711

GIRDER

MATERIAL A36 STEEL
BOLTS 3/4"
OPEN HOLES 15/16" (UN)
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)
REAM- 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 RD DATE 9-3-69 IN CHARGE B.L. PORTER
CHECKED BY RJ DATE 9/26 SHOP NO. 1
CONTRACT CT-0164-056 DRAWING NO. 303

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

NO.	DATE	BY	REVISION
0			
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3			
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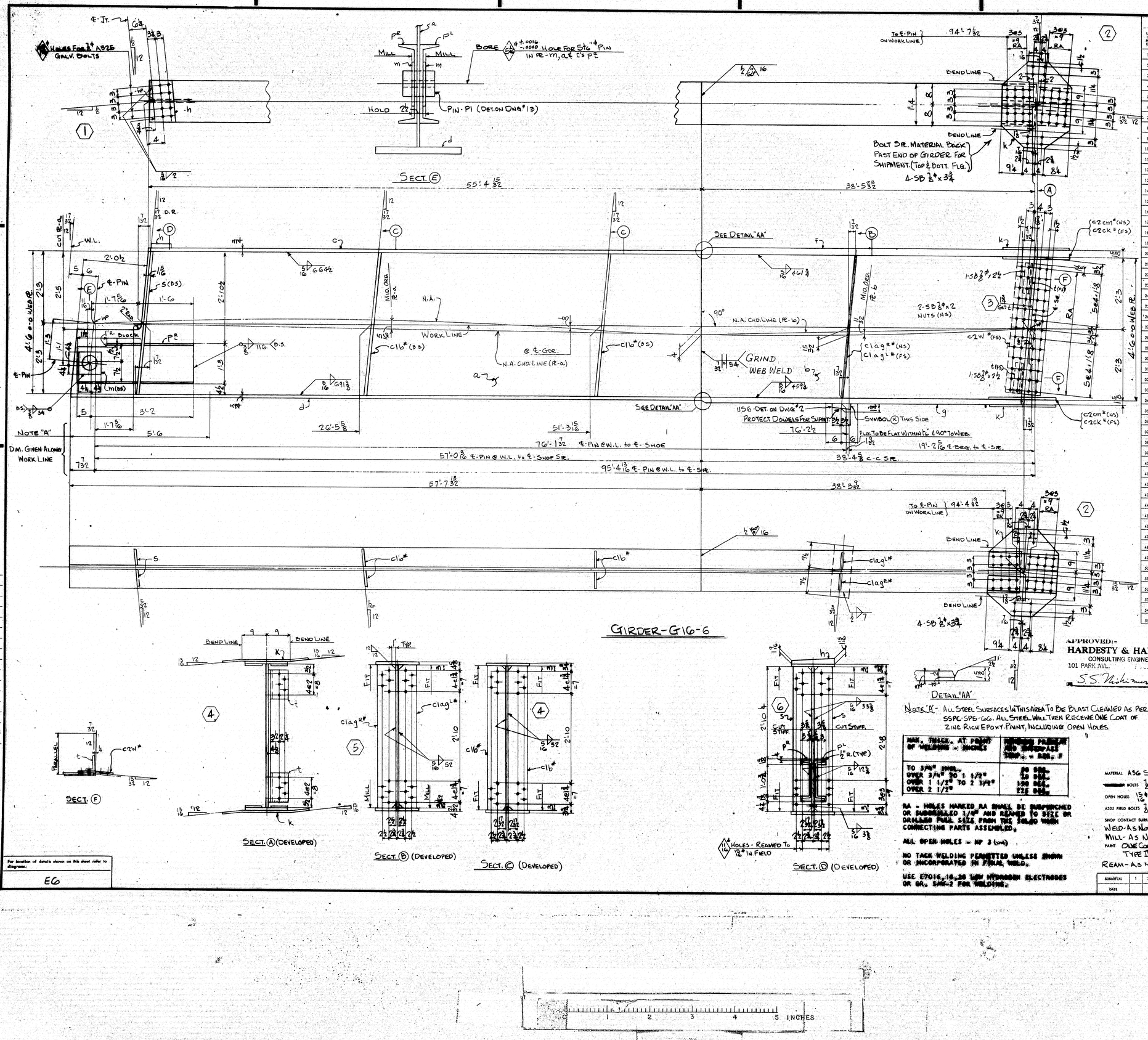
1 107-164



GIRDER-G16-6

ITEM	ASSEMBLY MARK	NO.	SHAPE	SHOP BILL SECTION SIZE	SIZE OR FOUNDS	THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	ITEM PAGE	ITEM LINE
1				ONE-GIRDER-G16-6									
2	a	1	PL	54		1/16	57	7 3/32	5GR x 1/16	58	10	2	72
3	b	1	PL	54		1/2	38	5 23/32	5GR x 1/2	39	0 1/2	2	74
4	c	1	PLW	16		3/4	55	4 13/32		56	2	4	75
5	d	1	PLW	16		3/4	57	7 13/32		57	9 3/4	4	73
6	f	1	PLW	16		1 3/8	38	5 1/2		39	2	3	71
7	g	1	PLW	16		1 3/8	38	3 1/16		39	2	3	71
8	h	1	PL	8		(15/16 x 1 1/16)	1	4 5/16	C.F. 2" Pt			J	
9	k	2	PL	25 1/2		1/2	2	7 1/2	BENT	22	4	24	45
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3/4 Pt			J	
11	Pt	1	C	15	40		3	7		44	8	24	42
12	S	2	BR	7		1/2	4	6	FZE	18	4	24	51
13	t	2	L	7	3 1/4	1/2	0	11	BENT CF 7x4x1/2	40	0	36	39
14													
15		2	SB	7/8"			0	2	H.H.H.N.				
16		2	SB	7/8"			0	2 1/2	↓			M	
17													
18													
19													
20													
21	C 109#	1	BR	7 1/2		3/8	4	6 3/32	MIE-FIE	18	4	24	49
22	C 16#	4	BR	7		1/2	4	6	FZE	18	4	24	51
23	C 2W#	1	PLW	13		5/8	4	2	BENT	21	1	24	48
24	C 2cm#	2	BR	6 1/2		1/2	2	1 1/2	↓	19	0	24	50
25	C 2ck#	2	BR	6 1/2		1/2	2	1 1/2		19	0	24	50
26		1	PIN						DET. ON DWG# 13				
27		1	USG	UPPER SHOE					DET. ON DWG# 2				
28		1	SOS		WD	7/16	4	6					
29		1	VGOS		WD	3/4	2	8					
30		1	FW		WD	7/16	0	4					
31		1	FW		WD	1/2	1	2					
32		1	FW		WD	5/8	25	0					
33		1	FWS		WD	5/16	68	5 1/2					
34		1	FWL		WD		379	5 3/4					
35													
36													
37		8	SD	7/8"			0	3 3/4	H.H.H.N.			M	
38													
39													
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APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE.
OCT 17 1969

INST-"16W"

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-6	GIRDER (31 1/2 x 61 x 9'-7")	

PAY ITEM-504711

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 RD DATE 9-3-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 9/26 SHOP NO. 2
CONTRACT CJ-6284-020 DRAWING NO. 304

REVISION

NO.	DATE	INIT.
0		
9		
8		
7		
6		
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2		
1		

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

MATERIAL A36 STEEL
BOLTS 7/8"
OPEN HOLES 15/16" (UN)
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)
REAM - AS NOTED

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

ALL OPEN HOLES ⌀ 15/16" (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.

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"	200 DEG.
OVER 2 1/2"	225 DEG.

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

a b c

0 1 2 3 4 5 INCHES

33433 (Rev. C 6-68)
OCT 23 1969

107-105

GIRDER-G16-7

LINE	ASSEMBLY MARK	NO.	SHAPE	SHOP BILL SECTION SIZE	SIZE OR FOUNDRY	THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	ITEM PAGE	ITEM LINE
1		ONE	- GIRDER - G16-7										
2	a	1	PL	54		7/16	57	6 29/32	54 x 7/16	57	10 3/4	2	73
3	b	1	PL	54		1/2	38	3 1/2	54 x 1/2	39	6 1/2	2	74
4	c	1	PLW	16		3/4	55	3 1/2		56	2	4	75
5	d	1	PLW	16		3/4	57	6 1/2		57	9 3/4	4	73
6	f,	1	PLW	16		1 3/8	38	4 11/16		39	2	3	71
7	g	1	PLW	16		1 3/8	38	1 3/4		39	2	3	71
8	h	1	PL	8		(15/16 - 3/16)	1	4 11/16	C.F. 2" Ø			J	
9	k	2	PL	25 1/2		1/2	2	7 1/2	BENT	22	4	2	45
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS	C.F. 3/4" Ø		J	
11	PL	1	C	15	40		3	7		44	8	2	42
12	s	2	BR	7		1/2	4	6	F2E	18	4	2	51
13	t,	2	L	7	3 1/4	1/2	0	11	BENT	CF 7x4x1/2	40	0	30	39
14													
15		4	SD	7/8 Ø			0	2	H.H.H.N.			M	
16													
17													
18													
19													
20													
21	C. 1a9 Ø*	1	BR	7 1/2		3/4	4	6 3/32	MIE-F1E	18	4	24	49
22	C. 16 Ø*	4	BR	7		1/2	4	6	F2E	18	4	24	51
23	C. 2a9 Ø*	1	PLW	13		3/8	4	2	BENT	21	1	24	48
24	C. 2c1 Ø*	2	BR	6 1/2		1/2	2	1 1/2		19	0	24	50
25	C. 2c9 Ø*	2	BR	6 1/2		1/2	2	1 1/2		19	0	24	50
26	PI	1	PIN						DET. ON DWG # 13				
27	US6	1	UPPER SHOE						DET. ON DWG # 2				
28	SDS	1	WD			1/16	4	6					
29	VGOS	1	WD				2	8					
30	FW	1	WD				0	4					
31	FW	1	WD				1	2					
32	FW	1	WD				25	0					
33	FWS	1	WD			1/16	68	5 1/2					
34	FWL	1	WD				378	6 1/2					
35													
36													
37		8	SD	7/8 Ø			0	3 3/4	H.H.H.N.			M	
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

PROVIDED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
S.S. Hanover OCT 17 1969

INST-16W

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-7	GIRDER (31½ x C1 x 96'-10)	

PAY ITEM- 504711

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 RD DATE 9-4-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 9/26 SHOP NO. 7
CONTRACT CI-6289-020 DRAWING NO. 305

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										

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

TO 3/16" INCL.	NO CHG
OVER 3/16" TO 1 1/2" INCL.	NO CHG
OVER 1 1/2" TO 2 1/2".	NO CHG
OVER 2 1/2"	NO CHG

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

ALL OPEN HOLES ⌀ NP 3 (UN)

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

USE E70XX-10-20 LOW HYDROGEN ELECTRODES OR EQ. SUBJECT TO APPROVAL.

DETAIL "AA"

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 PAINT, INCLUDING OPEN HOLES.

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

EG

SECT. (E) SECT. (A) (DEVELOPED) SECT. (B) (DEVELOPED) SECT. (C) (DEVELOPED) SECT. (D) (DEVELOPED) SECT. (F)

5 INCHES

OCT 28 1969

107-126

GIRDER-G16-8

	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.	MILL ORDER ITEM PAGE	MILL ORDER ITEM UNIT
1			ONE-GIRDER-G16-8										
2	a	1	PL	54		7/16	57	5 3/32	56@1 7/16	57	10 3/4	2	75
3	b	1	PL	54		1/2	38	2 3/32	56@1/2	39	6 1/2	2	74
4	c	1	PLW	16		3/4	55	2 3/32		56	2	4	75
5	d	1	PLW	16		3/4	57	5 3/32		57	9 3/4	4	78
6	f	1	PLW	16		1 5/8	38	2 1/16		38	4 1/4	12	19
7	g	1	PLW	16		1 5/8	38	0 1/4		38	4 4	12	19
8	h	1	PL	8		(15/16+13/16)	1	4	C.F. 2 PR			J	
9	k	2	PL	25 1/2		1/2	1	11 3/4	BENT	22	4	24	45
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3/4 PR			J	
11	PR	1	C	15	40		3	7		44	8	24	42
12	s	1	BR	7		1/2	4	6	F2E	18	4	24	51
13	t	2	L	7	3/4	1/2	0	11	BENT CF 7x4x1/2	40	0	30	39
14													
15		2	SB	7/8 ϕ			0	2	H.H.H.N.				
16		2	SB	1 1/8 ϕ			0	2 1/2	↓			M	
17													
18													
19													
20	C1 16bR*	1	BR	7 1/2		3/4	4	6 3/32	MIE-F1E	18	4	24	49
21	C1 19g*	1	BR	7 1/2		3/4	4	6 3/32	MIE-F1E	18	4	24	49
22	C1 16*	2	BR	7		1/2	4	6	F2E	18	4	24	51
23	C1 22a*	1	PLW	19		3/4	4	2	BENT	21	1	24	48
24	C1 20cP*	2	BR	6 1/2		1/2	2	1 1/2		19	0	24	50
25	C1 20cR*	2	BR	6 1/2		1/2	2	1 1/2		19	0	24	50
26	PI	1	PIN						DET. ON DWG.# 13				
27	US6	1	UPPER SHOE						DET. ON DWG.# 2				
28	SDS	1	WD			7/16	4	6					
29	VG6S	1	WD			7/16	2	8					
30	FW	1	WD			1/2	0	4					
31	FW	1	WD			1/2	1	2					
32	FW	1	WD			5/8	25	0					
33	FWS	1	WD			5/16	42	11					
34	FWL	1	WD			5/16	377	7 1/2					
35													
36													
37		8	SD	7/8 ϕ			0	3 3/4	H.H.H.N.			M	
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

SECT. (E)

SECT. (F)

SECT. (A) (DEVELOPED)

SECT. (B) (DEVELOPED)

SECT. (C) (DEVELOPED)

SECT. (D) (DEVELOPED)

DETAIL "AA"

4-SD 7/8 ϕ x 3 3/4

Note "A" - All steel surfaces in this area to be blast cleaned as per SSPC-SP7-66. All steel will then receive one coat of zinc rich epoxy paint, including open holes.

BA - Holes marked BA shall be subpunched or drilled full size and reamed to shall be drilled full size from the solid when connecting parts assembled.

All open holes = NF 3 (unc)

No tank welding permitted unless shown or indicated on the plans. WELD.

Use E70XX low hydrogen electrodes or eq. unless otherwise specified.

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

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

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

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

EG

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

INST-"16W"

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-8	GIRDER (254'x61'x96'-7)	

PAY ITEM- 504711

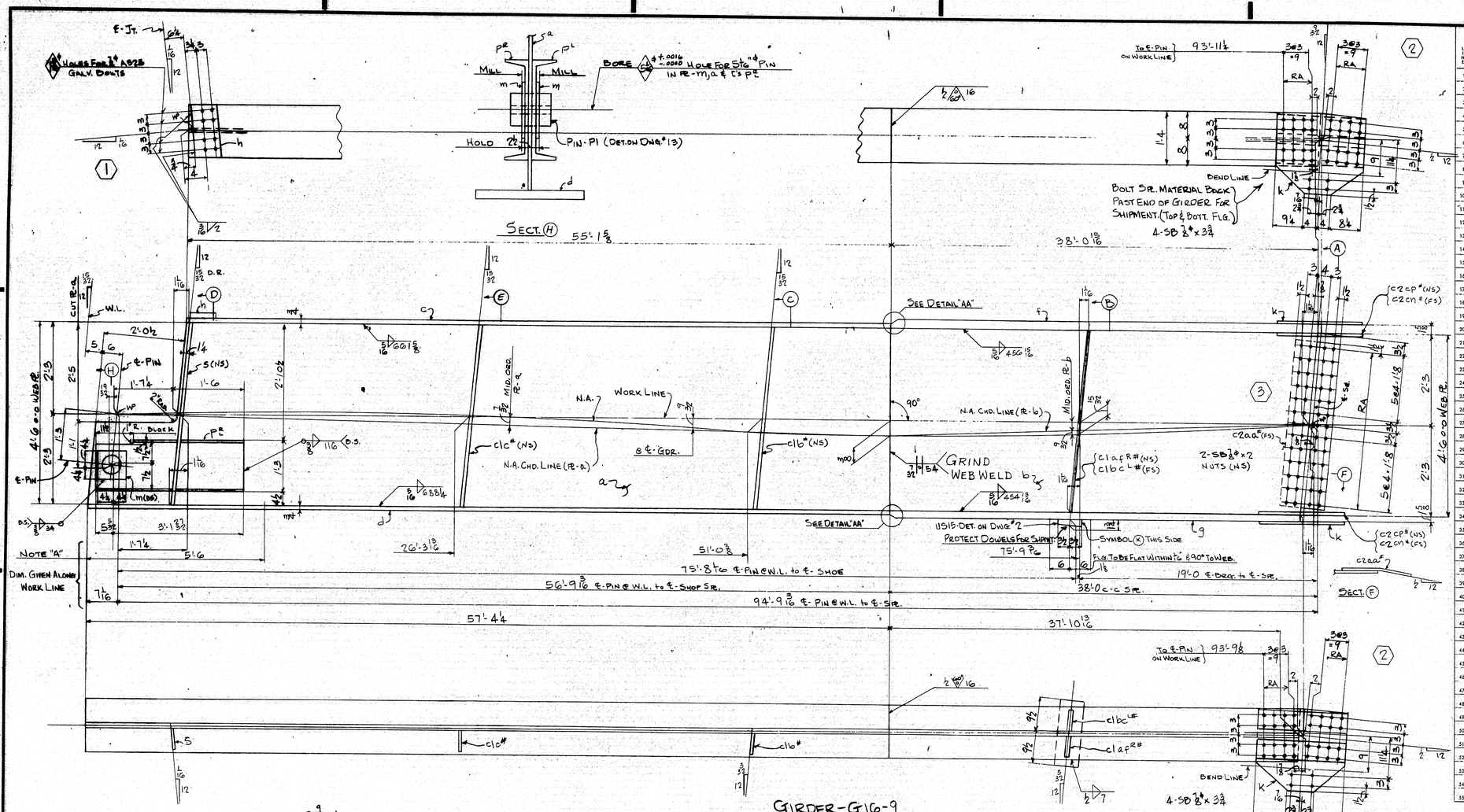
GIRDER

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 RD DATE 9-4-69 IN CHARGE B.V. BERTOLET
CHECKED BY RJ DATE 9/26 SHOP NO. 7
CONTRACT CJ-6229-020 DRAWING NO. 306

35433 Bhm.C 4-65 OCT 28 1965

107-107

0 1 2 3 4 5 INCHES



GIRDER-G16-9

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 PAINT, 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.

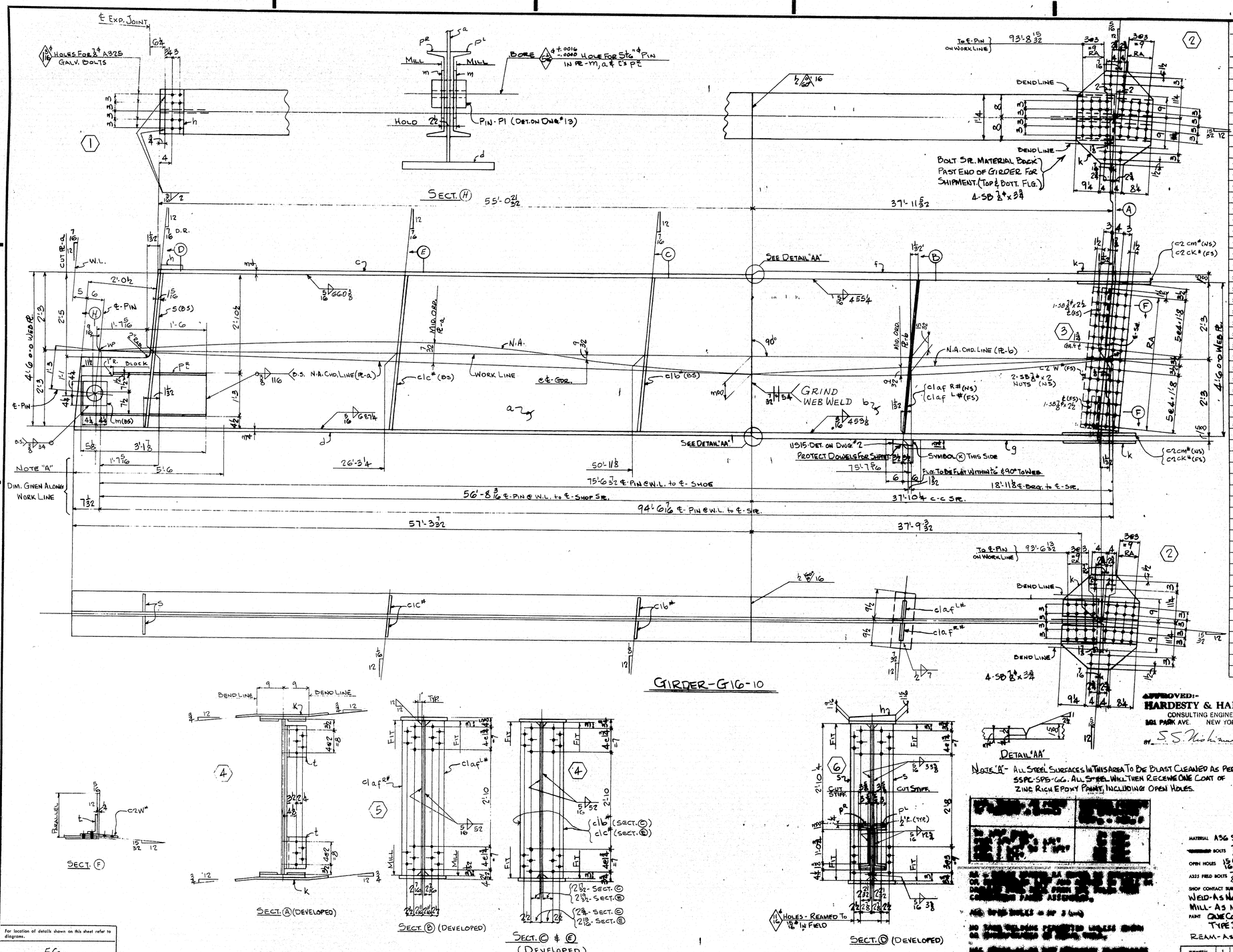
MATERIAL A36 STEEL
BOLTS 7/8"
OPEN HOLES 15/16" (UN)
A325 FIELD BOLTS 7/8"
SHOP CONTACT SURFACES NO PAINT (UN)
WELD-AS NOTED
MILL-AS NOTED
PAINT ONE COAT AASHO-M72-TYPE II RED LEAD (UN)
REAM-AS NOTED

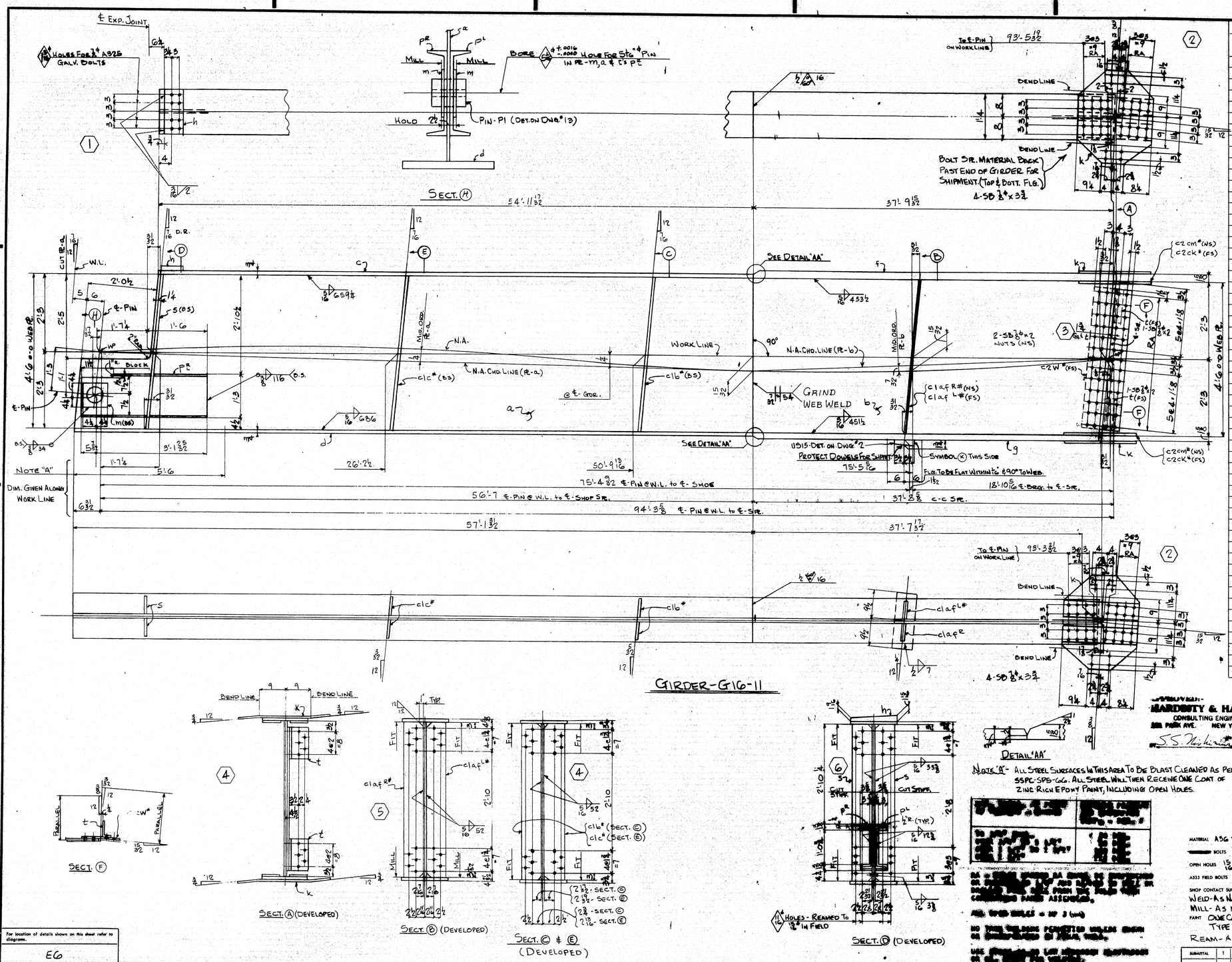
SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR FOUND	THICK	LENGTH FT.	LENGTH IN.	REMARKS
1			ONE-GIRDER-G16	9					
2	a	1	PL	54		1/16	57	4 1/2	5G1 x 1/16
3	b	1	PL	54		1/2	38	0 15/16	5G1 x 1/2
4	c	1	PLW	16		3/4	55	1 3/8	
5	d	1	PLW	16		3/4	57	4 1/4	
6	f	1	PLW	16		1 3/8	38	1 3/8	
7	g	1	PLW	16		1 3/8	37	11	
8	h	1	PL	8	(15/16 x 1 1/16)	1	4		C.F. 2" ft
9	k	2	PL	25 1/2		1/2	1	11 3/4	BENT
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3 3/4" ft
11	P1	1	C	15	40		3	7	
12	S	1	BR	7		1/2	4	6	F2E
13									
14		2	SB	7/8"			0	2	H.H.H.N.
15									
16									
17									
18									
19	C1c*	1	BR	7		1/2	4	6	F2E
20	C1bcL*	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE
21	C1aFR*	1	BR	7 1/2		3/4	4	6 1/2	MIE-FIE
22	C1b*	1	BR	7		1/2	4	6	F2E
23	C2aa*	1	PLW	13		7/8	4	2	BENT
24	C2cn*	2	BR	6 1/2		1/2	2	1/2	
25	C2cp*	2	BR	6 1/2		1/2	2	1/2	
26	P1	1	PIN						DET. ON DWG #13
27	U515	1	UPPER SHOE						DET. ON DWG. # 2
28	SOS	1	WD			1/16	4	6	
29	VGOS	1	WD			3/16	2	8	
30	FW	1	WD			1/16	0	4	
31	FW	1	WD			1/2	1	2	
32	FW	1	WD			7/8	25	0	
33	FWS	1	WD			5/16	42	11	
34	FWL	1	WD			5/16	378	3 3/8	
35									
36									
37		8	SB	7/8"			0	3 3/4	H.H.H.N.
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									

MILL ORDER

LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM LINE
57	10 3/4	2	73
38	5 1/4	2	75
56	2	4	75
57	9 3/4	4	73
38	4 1/4	12	19
38	4 1/4	12	19
		J	
22	4	24	45
		J	
44	8	24	42
18	4	24	51
			M
18	4	24	51
18	4	24	49
18	4	24	49
18	4	24	51
21	1	24	48
		J	
		J	


℄ EXP. JOINT
HOLES FOR ¾" A325 GALV. BOLTS
HOLD 22
PIN - P1 (DET. ON DWG #13)
SECT. (H)
55'-0 21/32
37'-11 5/32
931-8 15/32
TO ℄ PIN ON WORK LINE
BEND LINE
BOLT SR. MATERIAL BACK PAST END OF GIRDER FOR SHIPMENT. (TOP ℄ BOTT. FLG.)
4-SD ½"x3¾
SEE DETAIL "AA"
N.A.
WORK LINE
GRIND WEB WELD
MID. ORD. PL-a
MID. ORD. PL-b
N.A. CHD. LINE (PL-a)
N.A. CHD. LINE (PL-b)
11515 DET. ON DWG #2
PROTECT DOWELS FOR SHIPMENT
SYMBOL (K) THIS SIDE
F.G.s TO BE FLAT WITHIN ½ & 90° TO WEB.
NOTE "A"
DIM. GIVEN ALONG WORK LINE
56'-8 3/16 ℄ PIN @ W.L. to ℄ SHOP SPL.
94'-6 7/16 ℄ PIN @ W.L. to ℄ SPL.
57'-3 7/32
75'-6 3/32 ℄ PIN @ W.L. to ℄ SHOE
37'-9 3/32
37'-10¼ c-c SPL.
18'-11⅞ ℄ BEAR. to ℄ SPL.
26'-3¼
50'-11⅞
75'-7 9/16
1'R. BLOCK
℄ PIN
SYMM. ABT. ℄ PIN
2'-0½
1'-7 5/16
1'-6
5 (DS)
6 (DS)
m (DS)
5 @ 6 = 30
4'-6 WEB DP.
2'-5
2'-3
1'-1
4½
7½
5⅛
3'-1⅞
1'-7 9/16
5'-6
DS
34
116
c1c# (DS)
c16# (DS)
m (DS)
m (NS)
m (FS)
GGS ⅜
GGS ½
GGS ⅝
GGS ¾
GGS ⅞
GGS 1
GGS 1¼
GGS 1½
GGS 1¾
GGS 2
GGS 2¼
GGS 2½
GGS 2¾
GGS 3
GGS 3¼
GGS 3½
GGS 3¾
GGS 4
GGS 4¼
GGS 4½
GGS 4¾
GGS 5
GGS 5¼
GGS 5½
GGS 5¾
GGS



GIRDER-G16-11

LINE	ASSEMBLY MARK	NO.	SHAPE	SHOP BILL SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MARK DIMENSION LENGTH FT.	MARK DIMENSION LENGTH IN.	MARK DIMENSION PIECE MARK
1			ONE-GIRDER-G16-11									
2	a	1	PL	54		1/16	57	1 1/2	56x2 7/16	57	10 1/2	2 175
3	b	1	PL	54		½	37	9 1/2	56x2	38	5 1/4	2 173
4	c	1	PLW	16		⅜	54	11 1/2		56	2	4 175
5	d	1	PLW	16		⅜	57	1 1/2		57	9 3/4	4 173
6	f	1	PLW	16		1⅝	37	9 3/4		38	4 1/2	12 19
7	g	1	PLW	16		1⅝	37	7 3/4		38	4 1/2	12 19
8	h	1	PL	8		(11 15/16x15/16)	1	4	C.F. 2# /ft			J
9	k	2	PL	25½		½	2	7½	BENT	122	4	2445
10	m	2	PL	8½		½	0	8½	M15 C.F. 3¼ #/ft			J
11	P1	1	C	15	40		3	7		44	8	2442
12	S	2	BR	7		½	4	6	F2E	18	4	2451
13	t	2	L	7	3¼	½	0	11	BENT C.F. 7x4x½	40	0	3639
14												
15		4	SB	¾			0	2	H.H.H.N.			M
16												
17												
18												
19												
20	C1	1	BR	7		½	4	6	F2E	18	4	2451
21	C1	1	BR	7½		½	4	6½	M15-F1E	18	4	2449
22	C1	2	BR	7		½	4	6	F2E	18	4	2451
23	C1	1	PW	13		⅜	4	2	BENT	21	1	2448
24	C1	2	PL	6½		½	2	1½				J
25	C1	2	PL	6½		½	2	1½				J
26	P1	1	PIN						DET. ON DWG #13			
27	USI5	1	UPPER SHOE						DET. ON DWG #2			
28	SDS	1	WD			1/16	4	6				
29	VGDS	1	WD			⅜	2	8				
30	FW	1	WD			1/16	0	4				
31	FW	1	WD			½	1	2				
32	FW	1	WD			⅝	25	0				
33	FWS	1	WD			1/16	68	5½				
34	FWL	1	WD			1/16	376	0½				
35												
36												
37		8	SB	¾			0	3¾	H.H.H.N.			M
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												
54												
55												

INST-"16E"

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-11	GIRDER (31½x61x95'-11½)	

PAY ITEM-504711

GIRDER

MATERIAL A36 STEEL
BOLTS ⅞ø
OPEN HOLES 15/16ø (UN)
A325 FIELD BOLTS ⅞ø
SHOP CONTACT SURFACES NO PAINT (UN)
WELD-AS NOTED
MILL-AS NOTED
PAINT ONE COAT AASHO-M72-TYPE II RED LEAD (UN)
REAM-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 RD DATE 9-8-69 IN CHARGE B.K. DIETRICH
CHECKED BY RJ DATE 9/26 SHOP NO. 7
CONTRACT CJ-6284-020 DRAWING NO. 309

APPROVED: HARDESTY & HANOVER CONSULTING ENGINEERS 111 EIGHTH AVE. NEW YORK 11, N.Y. BY S.S. Nishkian OCT 17 1969

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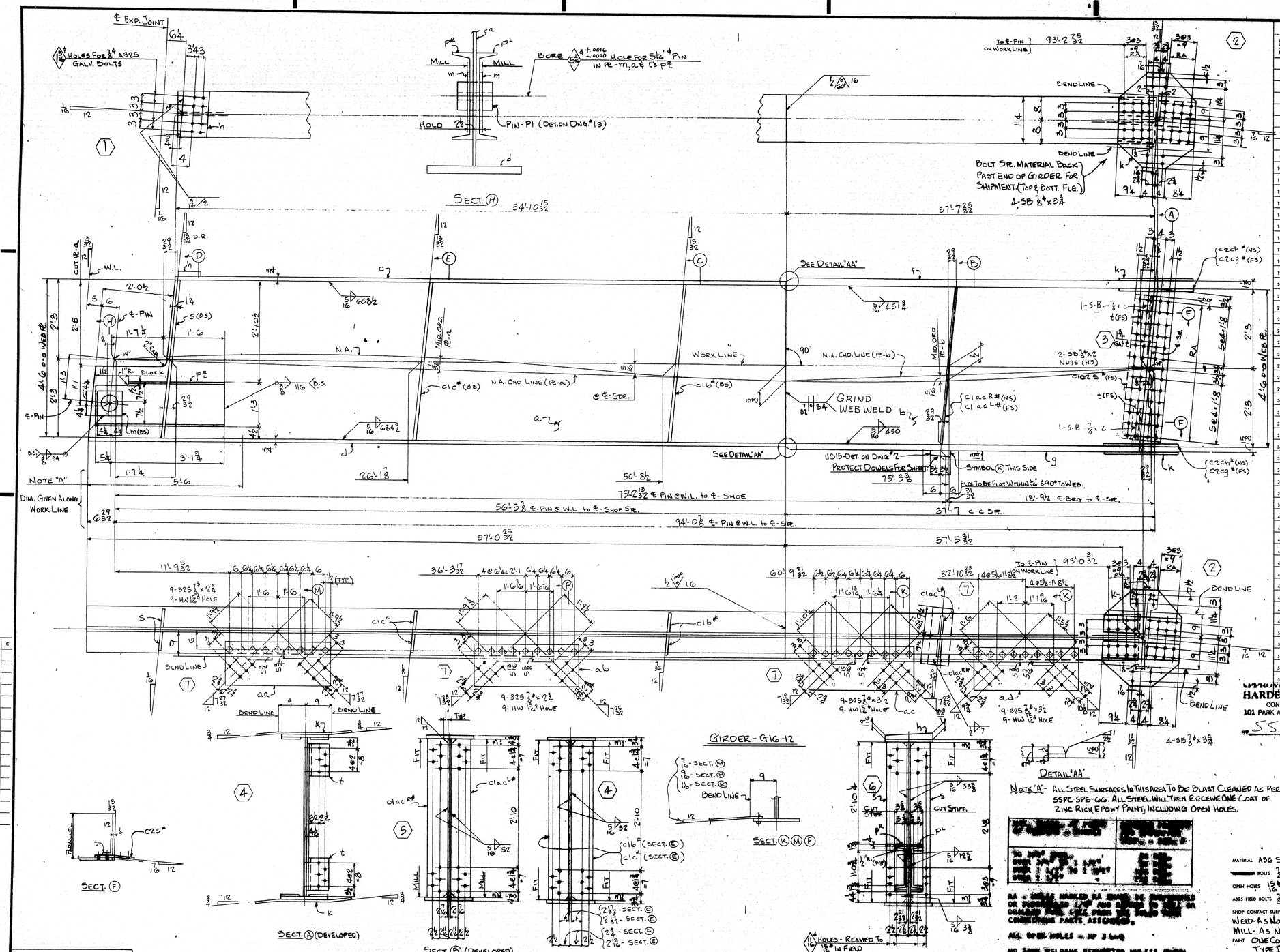
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

For location of details shown on this sheet refer to diagrams.
E6

33433 (Rev. C-4-68) OCT 2 8 1969

107-110

0 1 2 3 4 5 INCHES


℄ EXP. JOINT
6'-4"
3'-4 3/32"
3/8" HOLES FOR 3/4" A325 GALV. BOLTS
12
1/16
3'-3 3/32"
4'-6 0.0 WEB PL.
2'-9
2'-5
W.L.
CUT PL. 13/32
D.R.
2'-0 1/2"
5
6
℄-PIN
1'-7 1/4"
1'-6
S(BS)
2" RAD.
W
1" R. BLOCK
PL
1 1/16
1 1/4
1 1/4
1 1/4
29/32
C1(BS)
1 1/16
D.S.
7/8
34
5 1/2"
3'-1 3/4"
1'-7 1/4"
5'-6
NOTE "A"
DIM. GIVEN ALONG WORK LINE
SECT. (H) 54'-10 15/32
MILL
PL
PIN-P1 (DET. ON DWG #13)
HOLD 22"
BORE 5 3/4" +.0016 -.0020 HOLE FOR 5 3/4" PIN IN PL-M, & P'L P'L
SEE DETAIL "AA"
WORK LINE
N.A.
N.A. CHD. LINE (PL-A)
N.A. CHD. LINE (PL-B)
MID. ORD. PL-A
MID. ORD. PL-B
90°
C16* (BS)
C16* (FS)
@ ℄ GDR.
GRIND WEB WELD
7/32
5/8
29/32
5/16 450
5/16 451 7/8
5/16 684 3/4
5/16 685 1/2
SEE DETAIL "AA"
26'-1 7/8"
50'-8 1/2"
75'-2 19/32" ℄-PIN @ W.L. to ℄-SHOE
56'-5 3/8" ℄-PIN @ W.L. to ℄-SHOP SIR.
94'-0 7/8" ℄-PIN @ W.L. to ℄-SIR.
57'-0 25/32"
37'-5 31/32"
37'-7" c-c SIR.
18'-9 1/2" ℄-BRG. to ℄-SIR.
75'-3 3/8"
1 1/2 16
SYMBOL (X) THIS SIDE
FLG. TO BE FLAT WITHIN 1/16" & 90° TO WEB.
1 1/2 15 - DET. ON DWG #2
PROTECT DOWELS FOR SHIPMENT
TO ℄-PIN ON WORK LINE
93'-7 25/32
93'-0 31/32
BEND LINE
BOLT SR. MATERIAL BACK FAST END OF GIRDER FOR SHIPMENT. (TOP & BOTT. FLG.)
4-SB 7/8"x3 3/4
1-S.B.-7/8"x t(FS)
2-SB 7/8"x2 NUTS (NS)
1-S.B 7/8"x2
C2CH* (NS)
C2CG* (FS)
C1CG* (FS)
C1AC R# (NS)
C1AC L# (FS)
t(FS)
5e4-1/8
2'-3
4'-6 0.0 WEB PL.
RA
303 = 9 RA
4-SB 7/8"x3 3/4
9 1/4
8 1/4
8 1/4
1'-4
1'-6
1'-2
1'-11 7/8
1'-6 1/2
1'-6 3/4
1'-6 7/8
1'-6 13/16
1'-6 1/4
1'-6
1'-9 1/2
1'-10 1/4
1'-10 3/4
1'-11 3/4
2'-1
2'-1 1/8
2'-1 3/4
2'-2 1/4
2'-2 3/4
2'-3 1/4
2'-3 3/4
2'-4 1/4
2'-4 3/4
2'-5 1/4
2'-5 3/4
2'-6 1/4
2'-6 3/4
2'-7 1/4
2'-7 3/4
2'-8 1/4
2'-8 3/4
2'-9 1/4
2'-9 3/4
2'-10 1/4
2'-10 3/4
111'-9 5/32
36'-3 17/32
60'-9 21/32
87'-10 23/32
46'-5 1/2
11'-8 1/2
11'-9 5/32
11'-10 1/4
11'-10 3/4
11'-11 3/4
12'-0 1/4
12'-0 3/4
12'-1 1/4
12'-1 3/4
12'-2 1/4
12'-2 3/4
12'-3 1/4
12'-3 3/4
12'-4 1/4
12'-4 3/4
12'-5 1/4
12'-5 3/4
12'-6 1/4
12'-6 3/4
12'-7 1/4
12'-7 3/4
12'-8 1/4
12'-8 3/4
12'-9 1/4
12'-9 3/4

GIRDER-G16-13

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 PIECE
1		ONE-GIRDER-G16-13										
2	a	1	PL	54		1/16	56	11 25/32	SC&T 1/16	57	10 3/4	2 73
3	b	1	PL	54		1/2	37	5 31/32	SC&T	38	5 1/4	2 75
4	c	1	PLW	16		3/4	54	9 19/32		55	1	4 76
5	d	1	PLW	16		3/4	56	11 25/32		57	1	4 74
6	f	1	PLW	16		1 3/8	37	6 4		38	4 1/4	12 19
7	g	1	PLW	16		1 5/8	37	4 7/16		38	4 1/4	12 19
8	h	1	PL	8	(15/16 x 11/16)		1	4 7/16	C.F.2 PR			J
9	k	1	PL	25 1/2		1/2	2	7 1/2	BENT	22	4	2 45
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3/4 PR			J
11	PL	1	C	15	40		3	7		44	8	2 42
12	s	2	BR	7		1/2	4	6	F2E	18	4	2 51
13	t	2	L	7	3 1/4	1/2	0	11	CF 7x4x1/2	40	0	36 39
14	aa	1	PL	34 1/2		5/8	4	0 1/2	BENT 36X5/8 MULTS	41	4	28 15
15												
16		4	SB	3/4			0	2	H.H.H.N.			M
17												
18												
19												
20	C 16	2	BR	7		1/2	4	6	F2E	18	4	2 51
21	C 16c	1	BR	7 1/2		3/4	4	6	M1E-F1E	18	4	2 49
22	C 16	2	BR	7		1/2	4	6	F2E	18	4	2 51
23	C 25	1	PLW	13		5/8	4	2	BENT	21	1	2 48
24	C 2cg	2	PL	6 1/2		1/2	2	1/2				J
25	C 2ch	2	PL	6 1/2		1/2	2	1/2				J
26	P1	1	PIN						DET. ON DWG # 13			
27	US15	1	UPPER SHOE						DET. ON DWG # 2			
28	SOS	1	WD			7/16	4	6				
29	VGOS	1	WD			3/4	2	8				
30	FW	1	WD			3/16	0	4				
31	FW	1	WD			1/2	1	2				
32	FW	1	WD			5/8	25	0				
33	FWS	1	WD			5/16	68	5 1/4				
34	FWL	1	WD			5/16	373	5 3/8				
35												
36												
37		8	SB	3/4			0	3 3/4	H.H.H.N.			M
38												
39												
40												
41												
42												
43												
44												
45												
46												
47												
48												
49												
50												
51												
52												
53												

SECT. (H)

SECT. (A) (DEVELOPED)

SECT. (B) (DEVELOPED)

SECT. (C) & (E) (DEVELOPED)

SECT. (D) (DEVELOPED)

SECT. (F)

DETAIL "AA"

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 PAINT, INCLUDING OPEN HOLES.

[redacted]

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

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.

EG

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

INSTRUCTIONS

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-13	GIRDER (84 3/4 x 61 1/2 x 9C-9)	

PAY ITEM-504711

GIRDER

OWNER 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 ED DATE 9-9-69 IN CHARGE B.K. Engineer
CHECKED BY R.J. DATE 9/26 SHOP NO. 7
CONTRACT CJ-6289 (90) DRAWING NO. 311

207 of 422

℄ EXP. JOINT

HOLES FOR ⅞" A325 GALV. BOLTS

W.P.

PL MILL m BORE G 4.0016 -.0000 HOLE FOR Sta 4" PIN IN PL's m a

HOLD 7½

PIN-PI (DET. ON DWG #13)

SECT. E

54'-8 23/32

37'-4 5/32

TO ℄ PIN ON WORK LINE 92'-9 9/32

BOLT SR. MATERIAL BACK PAST END OF GIRDER FOR SHIPMENT. (TOP & BOTT. FLG.) 4-SB ⅞" x 3¾

TO ℄ PIN ON WORK LINE 92'-7 23/32

DETAIL 'AA'

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 PAINT, INCLUDING OPEN HOLES.

SECT. A (DEVELOPED)

SECT. B (DEVELOPED)

SECT. C & H (DEVELOPED)

SECT. D (DEVELOPED)

SECT. F

NOTE "A" DIM. GIVEN ALONG WORK LINE

56'-4 ℄ PIN & W.L. to ℄ SHOE SR.

93'-7½ ℄ PIN & W.L. to ℄ SHOE

56'-10 25/32

74'-10 29/32 ℄ PIN & W.L. to ℄ SHOE

37'-2 19/32

74'-11¾

18'-7¾ ℄ BRG. to ℄ SHOE

37'-3½ C-C SR.

50'-6 16/32

26'-0 8/32

GRIND WEB WELD

N.A. CHORD LINE (#.a)

N.A. CHORD LINE (#.b)

WORK LINE

MID. ORD. #.a

MID. ORD. #.b

SEE DETAIL "AA"

SYMBOL Ⓚ THIS SIDE

FLG. TO BE FLAT WITHIN ½° & 90° TO WEB.

PROTECT DOWELS FOR SHIPMENT

11516 - DET. ON DWG #2

GIRDER - G16 - 14

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

EG

SHOP BILL									MILL ORDER	
			SECTION			LENGTH			LENGTH	ITEM
ASSEMBLY MARK	NO.	SHAPE	SIZE	SIZE OR POUNDS	THICK	FT.	IN.	REMARKS	FT. IN.	PAGE LINE
	ONE - GIRDER - G16 - 14									
a	1	PL	54		1/16	56	10 25/32	56½ x 1/16	57 10¾	2 73
b	1	PL	54		½	37	4 29/32	56 x ½	38 5¼	2 75
c	1	PLT	16		7/16	54	8 23/32		55 1	4 76
d	1	PLT	16		7/16	56	10 25/32		57 1	4 74
f	1	PLT	16		1½	37	4½		37 6½	12 20
g	1	PLT	16		1½	37	7 15/16		37 6½	12 80
h	1	PL	8		(15/16 x 15/16)	1	4	C.F. 2 PR		J
k	2	PL	25½		½	2	7½	BENT	22 4	24 45
m	2	PL	8½		½	0	8½	MIS C.F. 4 PR		J
PR, PL	1/1	C	15	40		3	6¾		44 8	24 42
s	2	BR	7		½	4	6	F2E	18 4	24 51
t	2	L	7	34	½	0	11	BENT CF 7x4x½	40 0	36 39
	2	SB	⅞			0	2			M
	2	SB	¾			0	2½			
c1c#	2	BR	7		½	4	6	F2E	18 4	24 51
c1ac#, c1aL#	1/1	BR	7½		½	4	6	M1E-F1E	18 4	24 49
c1b#	2	BR	7		½	4	6	F2E	18 4	24 51
c2s #	1	PLT	13		7/16	4	2	BENT	21 1	24 48
c2ch#	2	PL	6½		½	2	1½			J
c2cg#	2	PL	6½		½	2	1½			J
PI	1	PIN						DET. ON DWG # 13		
USI6	1	UPPER SHOE						DET. ON DWG # 2		
SDS	1	WD			7/16	4	6			
VGOS	1	WD			3/4" PLY	2	8			
FW	1	WD			7/16	0	4			
FW	1	WD			½	1	2			
FW	1	WD			⅝	24	11			
FWS	1	WD			5/16	68	5½			
FWL	1	WD			5/16	312	4½			
	8	SB	⅞			0	3¾			M

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

INST-16E"

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-14	GIRDER (31½ x 61 x 95-3)	

PAY ITEM - 504711

GIRDER - G16-14

MATERIAL A36 STEEL
BOLTS ⅞"
OPEN HOLES 15/16" (UN)
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)
REAM - AS NOTED

REVISION		
NO.	DATE	INIT.
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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. 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 RHG DATE 9/3/69 IN CHARGE D.K. PRESCOTT
CHECKED BY RJ DATE 9/26 SHOP NO. 2
CONTRACT CT-0284-010 DRAWING NO. 312

1 107-113

0 1 2 3 4 5 INCHES

GIRDER-G16-15

SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS
1		ONE-GIRDER-G16-15							
2	a	1	PL	54		1/16	56	9 3/32	56 1/2 x 1/16
3	b	1	PL	54		1/2	37	2 15/32	56 x 1/2
4	c	1	PLW	16		3/4	54	7 13/32	
5	d	1	PLW	16		3/4	56	9 3/32	
6	f	1	PLW	16		1 1/2	37	2 13/16	
7	g	1	PLW	16		1 1/2	37	1 3/8	
8	h	1	PL	8		(15/16 x 13/16)	1	4 8	C.F. 2" R
9	k	2	PL	25 1/2		1/2	2	7 1/2	BENT
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3/4" R
11	P1	1	C	15	40		3	6 3/4	
12	S	2	BR	7		1/2	4	6	F2E
13	t	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7"x4"x1/2
14		4	SB	3/4"			0	12	
15									
16									
17									
18									
19									
20	c1c#	2	BR	7		1/2	4	6	F2E
21	c1c t*	2	BR	7 1/2		1/2	4	6	M1E-F1E
22	c1b*	2	BR	7		1/2	4	6	F2E
23	c2n*	1	PLW	13		5/8	4	2	BENT
24	c2cf*	2	PL	6 1/2		1/2	2	1 1/2	
25	c2cd*	2	PL	6 1/2		1/2	2	1 1/2	
26	P1	1	PIN						DET. ON DWG # 13
27	US16	1	UPPER SHOE						DET. ON DWG. # 2
28	SDS	1	WD					4 6	
29	VG0S	1	WD					2 8	
30	FW	1	WD					0 4	
31	FW	1	WD					1 2	
32	FW	1	WD				24	11	
33	FWS	1	WD				68	5 1/2	
34	FWL	1	WD				371	5 3/4	
35									
36									
37		8	SD	3/4"			0	3 3/4	
38									
39									
40									
41									
42									
43									
44									
45									
46									
47									
48									
49									
50									
51									
52									
53									
54									
55									

MILL ORDER

LENGTH FT.	LENGTH IN.	ITEM PAGE	ITEM LINE
57	10 3/8	2	73
38	5 1/4	2	75
55	1	4	76
57	1	4	74
37	6 1/2	12	20
37	6 1/2	12	20
		J	
22	4	24	45
		J	
44	8	24	42
18	4	24	51
18	4	24	49
18	4	24	51
21	1	24	48
		J	
		J	
		M	

GIRDER-G16-16

SHOP BILL											MILL ORDER	
LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	THICK	LENGTH FT.	LENGTH IN.	REMARKS		LENGTH FT. IN.	ITEM PAGE	ITEM LINE
1		ONE-GIRDER-G16					16						
2	a	1	PL	54		1/16	56	8 11/16	56½x1/16		57 10¾	2	73
3	b	1	PL	54		½	37	0 11/16	56x½		38 5¼	2	75
4	c	1	PLW	16		¾	54	6 5/16			55 1	4	76
5	d	1	PLW	16		¾	56	8 11/16			57 1	4	74
6	f	1	PLW	16		1½	37	1 1/16			37 6½	12	20
7	g	1	PLW	16		1½	36	11 11/16			37 6½	12	20
8	h	1	PL	8		(11/16x11/16)	1	4-8	C.F. 2 #/			J	
9	k	2	PL	25½		½	2	7½	BENT		22 4	24	45
10	m	2	PL	8½		½	0	8½	MIS	C.F. ¾ #/		J	
11	P1	1/1	C	15	40		3	6¾			44 8	24	42
12	s	2	BR	7		½	4	6	F2E		18 4	24	51
13	t	2	L	7	¾	½	0	11	BENT	CF 7x4x½	40 0	36	39
14		7	SB	⅞"			0	2					
15		2	SB	⅞"			0	2½				M	
16													
17													
18													
19													
20	c1c#	2	BR	7		½	4	6	F2E		18 4	24	51
21	c1ac#/c1bc#	1/1	BR	7½		¾	4	6	MIE-F1E		18 4	24	49
22	c1b#	2	BR	7		½	4	6	F2E		18 4	24	51
23	c2½d#	1	PLW	13		⅜	4	2	BENT		21 1	24	48
24	c2cc#	2	PL	6½		½	2	1½				J	
25	c2cb#	2	PL	6½		½	2	1½				J	
26	P1	1	PIN						DET. ON DWG.#13				
27	US16	1	UPPER SHOE						DET. ON DWG.# 2				
28	SDS	1	WD			1/16	4	6					
29	V60S	1	WD			3/16	2	8					
30	FW	1	WD			5/16	0	4					
31	FW	1	WD			½	1	2					
32	FW	1	WD			⅝	24	11					
33	FWS	1	WD			5/16	68	5½					
34	FWL	1	WD			5/16	370	9					
35													
36													
37		8	SB	⅞"			0	3¾				M	
38													
39													
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APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY S. S. Yoshimura OCT 17 1969

INST-16E

REQUIRED LIST			
QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-16	GIRDER (312x592x94-10¼	

PAY ITEM-504711

GIRDER-G16-16

MATERIAL	A36 STEEL
BOLTS	⅞"
OPEN HOLES	15/16" (UN)
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)
REAM	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 RHG DATE 9/4/69 IN CHARGE D.K. DIETRICH
CHECKED BY RJ DATE 9/26 SHOP NO. 7
CONTRACT CJ-6289-020 DRAWING NO. 314

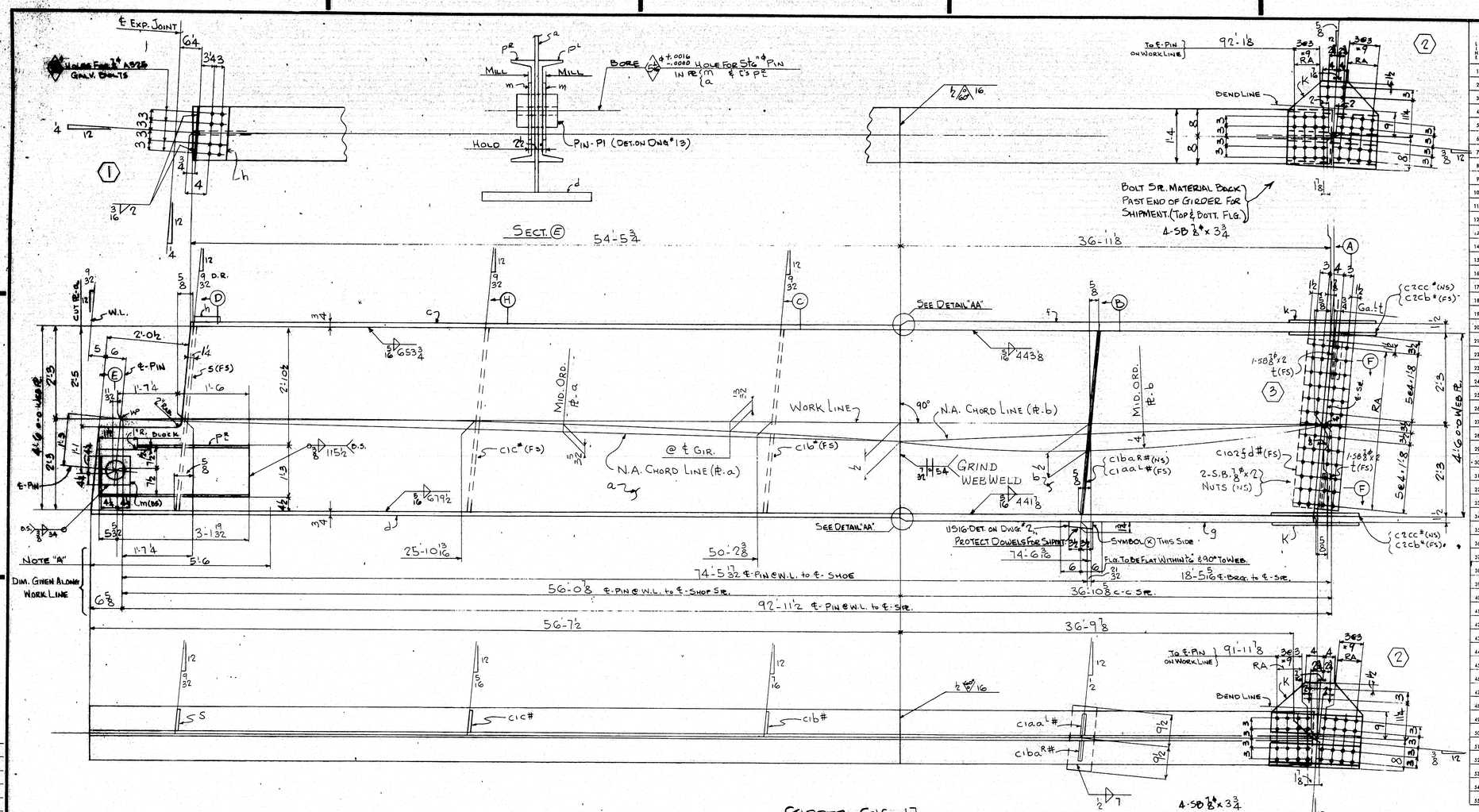
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

REVISION — NO. | DATE | INIT.

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

1 | 107-115

OCT 28 1969



GIRDER-G16-17

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR PATTERN NO.	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-	G16-		17							
2	a	1	PL	54		1/16	56	7 1/2	50 2 x 1/16	57	10 3/4	2	73
3	b	1	PL	54		1/2	36	11 8	50 x 1/2	38	5 4	2	75
4	c	1	PW	16		3/4	54	5 3/4		55	1	4	76
5	d	1	PW	16		3/4	56	7 2		57	1	4	74
6	f	1	PW	16		1 1/2	36	11 9		37	6 1/2	12	20
7	g	1	PW	16		1 1/2	36	10 5/16		37	6 1/2	12	20
8	h	1	PL	8		(15/16+11/16)	1	4 8	C.F. 2" R			J	
9	k	2	PL	25 1/2		1/2	1	11 3/4	BENT	22	4	24	45
10	m	2	PL	8 1/2		1/2	0	8 1/2	MIS C.F. 3/4" R			J	
11	PR	1	C	15	40		3	6 3/4		44	8	24	42
12	S	1	BR	7		1/2	4	6	F2E	18	4	24	51
13	t	2	L	7	3 1/4	1/2	0	11	BENT CF 7x4x1/2	40	0	36	39
14		4	SB	7/8			0	2				M	
15													
16													
17													
18													
19	C1C#	1	BR	7		1/2	4	6	F2E	18	4	24	51
20	C1aaL#	1	BR	7 1/2		3/4	4	6	MIE-F1E	18	4	24	49
21	C1baR#	1	BR	7 1/2		3/4	4	6	MIE-F1E	18	4	24	49
22	C1b#	1	BR	7		1/2	4	6	F2E	18	4	24	51
23	C25 3/4 d#	1	PW	13		3/8	4	2	BENT	21	1	24	48
24	C2cc*	2	PL	6 1/2		1/2	2	1/2				J	
25	C2cb*	2	PL	6 1/2		1/2	2	1/2				J	
26	P1	1	PIN						DET. ON DWG # 13				
27	US16	1	UPPER SHOE						DET. ON DWG. # 2				
28	SDS	1	WD			1/16	4	6					
29	VGOS	1	WD			1/4	2	8					
30	FW	1	WD			1/16	0	4					
31	FW	1	WD			1/8	1	2					
32	FW	1	WD			1/8	24	11					
33	FWS	1	WD			1/16	42	11					
34	FWL	1	WD			1/16	369	8 1/2					
35													
36													
37		8	SB	7/8			0	3 3/4				M	
38													
39													
40													
41													
42													
43													
44													
45													
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

MARDESICH & HANOVER
CONSULTING ENGINEERS
381 PARK AVE. NEW YORK 17, N.Y.
S.S. Nishkian OCT 17 1969

INST "16E"

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G16-17	GIRDER (233 3/4 x 61 x 94-7 1/2)	

PAY ITEM-504711

GIRDER - G16-17

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 PAINT, INCLUDING OPEN HOLES.

[redacted]

BA = BEVEL ANGLE TO BE FURNISHED TO SHOP BY ERECTOR AND SHALL BE USED BY SHOP IN SETTING PLATES FOR WELDING CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES = NF 3 (mm)

NO TYPE WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN SPECIAL WELD.

USE E7018, 10, 20 LOW HYDROGEN ELECTRODES OR QUALITY FOR WELDING.

MATERIAL A36 STEEL
BOLTS 7/8
OPEN HOLES 15/16 (UN)
A325 FIELD BOLTS 1"-8
SHOP CONTACT SURFACES NO PAINT (UN)
WELD-AS NOTED
MILL-AS NOTED
PAINT ONE COAT AASHO-M72-TYPE II RED LEAD (UN)
REAM-AS NOTED

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

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

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 RHG DATE 9/5/69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 9/26 SHOP NO. 2
CONTRACT CJ-6289-010 DRAWING NO. 315

For location of details shown on this sheet refer to diagrams.
E6

107-11.6

OCT 28 1969

0 1 2 3 4 5 INCHES

GIRDER - G2-1

SHOP BILL										MILL ORDER		
				SECTION			LENGTH			LENGTH		WGT.
ASSEMBLY MARK	NO.	SHAPE	Size	Size or Pounds	Thick	Ft.	In.	REMARKS		Ft.	In.	Pcs.
	ONE - GIRDER - G2-1											
a	1	PL	54		1/2	38	11 1/2	56 x 1/2 x		39	5 3/4	26 06
b	1	PL	54		7/16	57	4 15/16	56 1/2 x 7/16 x		57	8 1/2	44 18
c	1	PL	54		1/2	38	0 1/2	56 x 1/2 x		38	5 3/4	40 35
d	1	PL	16		1/4	38	10 3/8			39	2 3/4	40 17
f	1	PLU	16		1/4	38	11 3/8			39	2 3/4	40 17
g	2	PLU	16		3/4	57	4 15/16			58	2 1/4	37 15
h	1	PLU	16		1 5/8	38	0 1/2			38	3 3/4	39 17
K	1	PLU	16		1 5/8	37	11 1/2			38	3 3/4	39 17
m*	2	PL	25 1/2		1/2	1	11 3/4	BENT		30	5 7/8	47 10c
n	2	L	7	34	1/2	0	11	BENT SB 7 x 4 x 1/2		40	0	36 39
c1b*	4	BR	7		1/2	4	6	(FIE)		13	10 1/4	47 19
c1ab*	2	BR	7 1/2		3/4	4	6	(MIE) (FIE)		13	10 1/4	47 18
c1ba*	2	BR	7 1/2		3/4	4	6	(MIE) (FIE)		13	10 1/4	47 18
c2ch*	2	BR	6 1/2		1/2	2	1 1/2			19	1	47 20
c2cg*	2	BR	6 1/2		1/2	2	1 1/2			19	1	47 20
c2p*	1	PW	13		3/8	4	2	(BENT)		3	3 6	47 11A
c2s*	1	PW	13		3/8	4	2	(BENT)		3	3 6	47 11A
US9	1	UPPER SHOE						(DET. ON DWG #2)				
US13	1	UPPER SHOE						(DET. ON DWG #2)				
	13	325	3/8			0	2 1/2					
	24	325	3/8			0	3 1/2					
	37	HW	1 3/4	15/16	3/16							M
	2	SB	3/8			0	2					
FWS	1	WD			5/16	69	4					
FWL	1	WD			5/16	537	4					
FW	1	WD			1/2	2	4					
SDS	1	WD			1/16	9	0					
VGOS	1	WD			1/2	5	4					

INSTALLMENT "2W"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-1	GIRDER (252 x 60 x 135' 4 1/2)	

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
RIVETS OR BOLTS - 7/8" Φ A325
OPEN HOLES - 15/16" Φ
A325 FIELD BOLTS - 7/8" Φ
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

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

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

USE E7016, 18, 28 LOW-HYDROGEN ELECTRODES OR GR. 3 AW-2 FOR WELDING.

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

E11 & E12

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

REVISION: NO. | DATE | BY

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN OPERATION - ROOM POTTSTOWN WORKS
MADE BY E.T.H. DATE IN CHARGE B.K. BERTOLET
CHECKED BY R.S. DATE 10/29/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 316

107-117

NOV 17 1969

LINE NO.	ASSEMBLY MARK	NO.	SHAPE	SECTION Size	SECTION Size of Pounds	Thick	LENGTH Ft.	LENGTH In.	REMARKS	MILL ORDER LENGTH Ft.	MILL ORDER LENGTH In.	ITEM Page	ITEM Line
1			ONE - GIRDER - G2-2										
2	a	1	PL	54		½	38	9 13/16	56 x 4 x	39	5 3/4	20	06
3	b	1	PL	54		7/16	57	5 1/16	56 2 X 7/16	57	8 1/2	44	18
4	c	1	PL	54		½	38	0 9/16	56 x 4 x	38	5 3/4	40	25
5	d	1	PLU	16		1/4	38	8 15/16		39	2 3/4	40	17
6	f	1	PLU	16		1/4	38	10 1/2		39	2 3/4	40	17
7	g	2	PLU	16		3/4	57	5 1/16		58	2 1/4	37	15
8	h	1	PLU	16		1 5/8	38	0 9/16		38	3 3/4	39	17
9	K	1	PLU	16		1 5/8	37	11 7/16		38	3 3/4	39	17
10	m	2	PL	25 1/2		½	2	7½	BENT	30	5 3/8	47	MC
11	n	2	L	7	3 3/4	½	0	11	BENT C.F. 7 x 4 x ½	40	0	36	39
12	P	2	L	7	3 3/4	½	0	11	BENT C.F. 7 x 4 x ½	40	0	36	39
13													
14	C1ab'#	2	BR	7½		¾	4	6	(M1E) (F1E)	13	10¼	47	18
15	C1b'#	8	BR	7		½	4	6	(F2E)	13	10½	47	19
16	C2P'#	1	PW	13		⅜	4	2	(BENT)	33	6	47	11A
17	C2g'#	1	PW	13		⅜	4	2	(BENT)	33	6	47	11A
18	C2ch'#	2	BR	G½		½	2	1½		19	1	47	20
19	C2cg'#	2	BR	G½		½	2	1½		19	1	47	20
20	US 9	1	UPPER	SHOE					(DET. ON DWG #2)				
21	US 13	1	UPPER	SHOE					(DET. ON DWG #2)				
22													
23		13	325	b d			0	7½					
24		24	325	b d			0	3½					
25		43	HW	1 3/4	15/16	7/16							M
26		6	325	b d			0	3					
27		2	SB	b d			0	2 3/4					
28													
29	FWS	1	WD			5/16	104	0					
30	FWL	1	WD			5/16	536	11½					
31													
32	FW	1	WD			½	2	4					
33	SDS	1	WD			1/16	1	9	0				
34	VGOS	1	WD			½	5	4					
35													
36													
37													
38													
39													
40													
41													
42													

INSTALLMENT - 2W

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2 - 2	GIRDER (31½ x 60 x 135: 4½)	

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

PAY ITEM - 504.711

GIRDER - G2-2

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

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.

NO.	DATE	BY	REVISION
D1	11/26	SENT	

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

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
FOTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY E.T.H. DATE IN CHARGE B.K. BERTOLET
CHECKED BY R.J. DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 317

10.7 - 11A

For location of details shown on this sheet refer to diagrams, E11 & E12

! 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. 3 AW-2 FOR WELDING.

ONE COAT OF BLUE LACQUER

DETAIL - AA

SECT. B-F (DEVELOPED)

SECT. C-G (DEVELOPED)

SECT. D (DEVELOPED)

SECT. E

GIRDER - G2-2

0 1 2 3 4 5 INCHES

GIRDER - G2-3

SHOP BILL										MILL ORDER	
					SECTION		LENGTH			LENGTH	ITEM
ASSEMBLY MARK	NO	SHAPE	SIZE	Pounds per Foot	THICK	FT.	IN.	REMARKS		FT. IN.	PROJ. LINE
	ONE - GIRDER - G2-3										
a	1	PL	54		1/2	38	8 5/16	56 x 1/2 x		39 5 3/4	26 06
b	1	PL	54		1/16	57	6	56 1/2 x 1/16 x		58 8 1/4	44 17
c	1	PL	54		1/2	38	0 3/8	56 x 1/2		38 5 3/4	46 35
d	1	PLU	16		1/4	38	7 1/8			39 2 3/4	40 17
f	1	PLU	16		1/4	38	8 1/4			39 2 3/4	40 17
g	2	PLU	16		3/4	57	6			58 2 1/4	37 15
h	1	PLU	16		1 5/8	38	0 3/8			38 3 3/4	39 17
K	1	PLU	16		1 5/8	37	11 1/2			38 3 3/4	39 17
m	2	PL	29 1/2		1/2	2	7 1/2	BENT		30 5 7/8	47 10c
n	2	L	7	34	1/2	0	11	BENT C.F. 7 x 4 x 1/2		40 0	36 39
P	2	L	7	34	1/2	0	11	BENT C.F. 7 x 4 x 1/2		40 0	36 39
c1ab# 2/2		BR	7 1/2		3/4	4	6	(MIE) (FIE)		13 10 4	47 18
c1b #	8	BR	7		1/2	4	6	(FIE)		13 10 4	47 19
c2p #	1	PLU	13		3/8	4	2	(BENT)		33 6	47 11A
c2s #	1	PLU	13		3/8	4	2	(BENT)		33 6	47 11A
c2ch #	2	BR	6 1/2		1/2	2	1 1/2			19 1	47 20
c2cg #	2	BR	6 1/2		1/2	2	1 1/2			19 1	47 20
US 1	1	UPPER SHOE						(DET. ON DWG #2)			
US 13	1	UPPER SHOE						(DET. ON DWG #2)			
	6	325	5/8 ϕ			0	3				
	13	325	5/8 ϕ			0	1 1/2				
	24	325	5/8 ϕ			0	3 1/2				M
	43	HW	1 3/4		5/16						
	2	SB	7/8 ϕ			0	2 3/4				
FWS	1	WD			5/16	104	0				
FWL	1	WD			5/16	536	6 3/4				
FN	1	WD			1/2	2	4				
SDS	1	WD			1/16	9	0				
V60S	1	WD			1/2	5	4				

INSTALLMENT - "2W"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-3	GIRDER (37 1/2 x 60" x 135 : 4)	

PAY ITEM - 504.711

GIRDER - G2-3

ONE COAT OF BLUE LACQUER

HARDESTY & HANOVER
CONSULTING ENGINEERS
401 PARK AVE. NEW YORK 17, N.Y.
BY Arnold Nowitzky DEC 23 1969

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8" ϕ A325
OPEN HOLES - 1 3/8" ϕ
A325 FIELD BOLTS - 7/8" ϕ
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

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 - NO 3

NO FIELD WELDING PERMITTED UNLESS SHOWN OR SPECIFICALLY NOTED ON FINAL WELD.

USE ONLY LOW HYDROGEN ELECTRODES OR EQUAL FOR WELDING.

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

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

NO.	DATE	BY	REVISION
D1	4/20	S-PMT	

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY E.T.H. DATE IN CHARGE B.E. BERTOLET
CHECKED BY RJ DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 318

107-119

33435 (Rev. 1-63) NOV 17 1969

For location of details shown on this sheet refer to diagrams.
E11 & E12

DETAIL - AA

SECT. (B)-(F) (DEVELOPED)

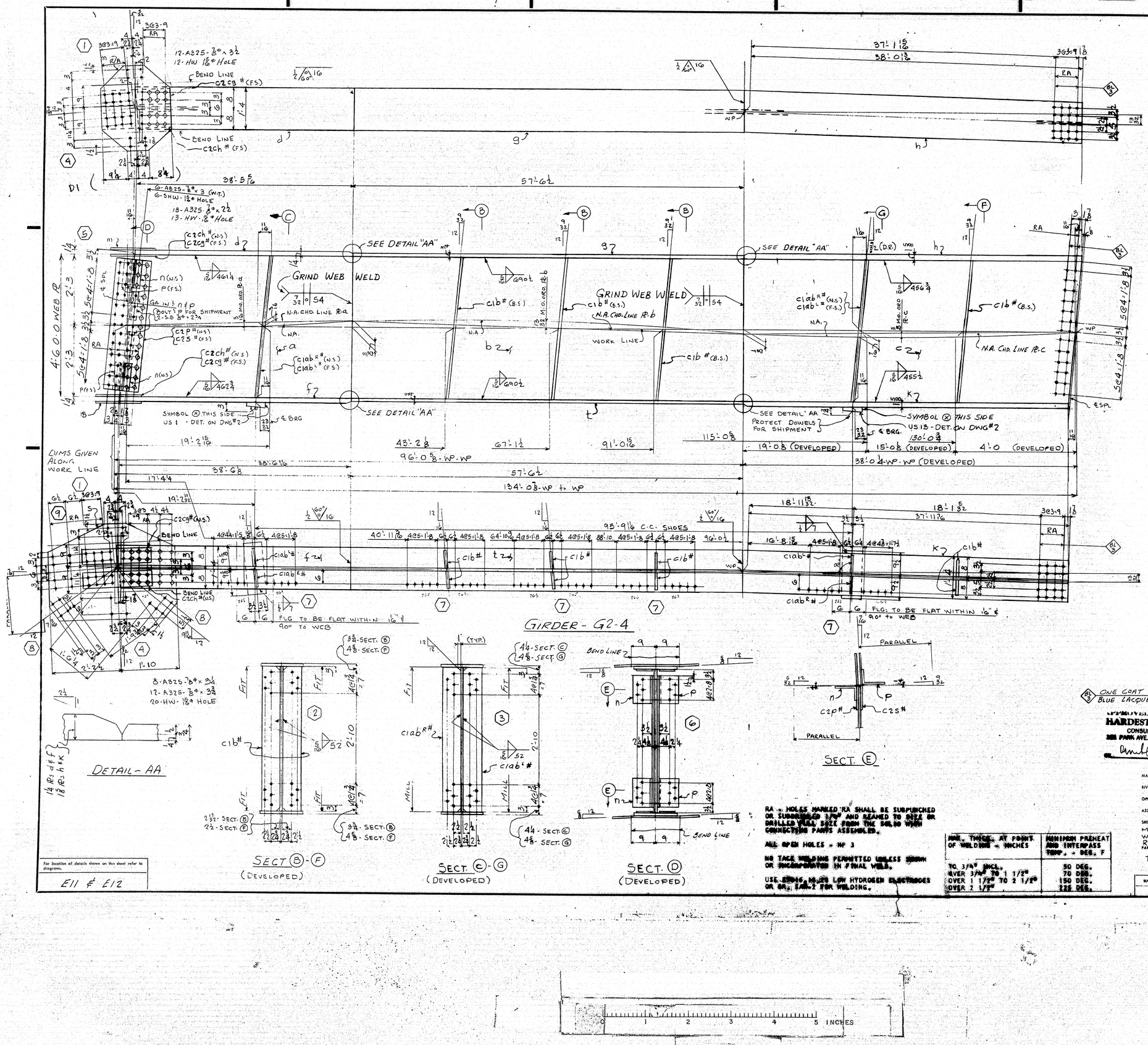
SECT. (E)-(G) (DEVELOPED)

SECT. (D) (DEVELOPED)

SECT. (E)

DIMS GIVEN ALONG WORK LINE

0 1 2 3 4 5 INCHES



LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION Size	Size or Pounds	Thick	LENGTH Ft.	In.	REMARKS	MBL ORDER LENGTH Ft.	In.	WGHT Pcs	Lbs
1		ONE - GIRDER - G2-4											
2	a	1	PL	54		½	38	6 1/16	56 x ½ x	39	5¾	266	06
3	b	1	PL	54		1/16	57	6½	56 1/16 x ½ x	58	8¼	44	17
4	c	1	PL	54		½	38	0 1/8	56 x ½ x	38	5¾	46	35
5	d	1	PLU	16		1¼	38	5 1/16		38	7¾	40	18
6	f	1	PLU	16		1¼	38	6 1/16		39	2¾	40	17
7	g	1	PLU	16		¾	57	6½		58	2¼	37	15
8	h	1	PLU	16		1⅜	38	0 1/8		38	3¾	39	17
9	K	1	PLU	16		1⅜	37	11 7/16		38	3¾	39	17
10	m	1	PL	25½		½	2	7½	BENT	30	5⅞	47	10C
11	n	2	L	7	3¼	½	0	11	BENT C.F. 7 x 4 x ½	40	0	36	39
12	P	2	L	7	3¼	½	0	11	BENT C.F. 7 x 4 x ½	40	0	36	39
13	s	1	PL	35		⅝	4	0½	BENT)	27	3⅜	47	17B
14	t	1	PLU	16		¾	57	6½		58	2¼	37	15
15	C1B #	8	BR	7		½	4	6	(FIE)	13	10¼	47	19
16	C1AB # N.S. / F.S.	2	BR	7½		¾	4	6	(MIE) (FIE)	13	10¼	47	18
17	C2CG #	2	BR	6½		½	2	1½		19	1	47	20
18	C2CH #	2	BR	6½		½	2	1½		19	1	47	20
19	C2P #	1	PW	13		⅝	4	2	BENT	33	6	47	11A
20	US 1	1	UPPER SHOE						(DET. ON DWG #2)				
21	US 13	1	UPPER SHOE						(DET. ON DWG #2)				
22	C2S #	1	PW	13		⅝	4	2	BENT	33	6	47	11A
23		13	325	⅞			0	2½					
24		12	325	⅞			0	3½					
25		51	HW	1⅛	1/16	3/16							M
26		8	325	⅞			0	3¼					
27		2	SB	⅞			0	2¾					
28													
29	FWS	1	WD			5/16	104	0					
30	FWL	1	WD			5/16	536	7½					
31													
32	FW	1	WD			½	2	4					
33	SDS	1	WD			1/16	9	0					
34	VGOS	1	WD			½	5	4					
35		6	325	⅞			0	3					
36		12	325	⅞			0	3¾					M
37													
38													
39													
40													
41													
42													
43													

INSTALLMENT - "2W"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-4	GIRDER (31½ x 60 x 136 1/16 - 4)	

PAY ITEM - 504.711

GIRDER - G2-4

ONE COAT OF BLUE LACQUER

APPROVED: HARDESTY & HANOVER CONSULTING ENGINEERS 205 PARK AVE. NEW YORK 17, N.Y. DEC 23 1969

MATERIAL - A36 STEEL
RIVETS OR BOLTS - ⅞ø A325
OPEN HOLES - 1⅛ø
A325 FIELD BOLTS - ⅞ø
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

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

RA - HOLES MARKED "RA" SHALL BE SUBPUNCHED OR SUBDRILLED 3/16" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WHEN CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NP 3

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

USE E7016, M-23 LOW HYDROGEN ELECTRODES OR OR, EAW-2 FOR WELDING.

For location of details shown on this sheet refer to diagrams. E11 & E12

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

NO.	DATE	INIT	REVISION
1	10/20	RJ	

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM: POTTSTOWN WORKS
MADE BY E.T.H. DATE
IN CHARGE B.K. BERTOLET
CHECKED BY R.J. DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 319

3433 (Rev. 1-63) NOV 17 1969

107720

GIRDER - G2-5

DETAIL - "AA"

SECTS. (H) (J) (K) (L) (M) (P)

GIRDER - G2-5

WORK THIS DWG. WITH DWG. #320A

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

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
NEW YORK 17, N.Y.
OCT 29 1969

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

FOR NOTES SEE DWG. #320A

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

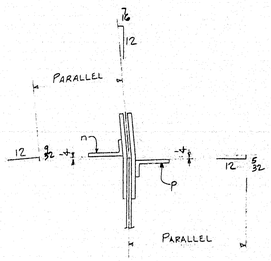
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

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

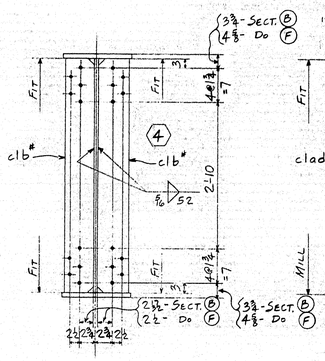
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY CCM DATE 9-24-69 IN CHARGE B. K. BERTOLAT
CHECKED BY RT DATE 10/20/69 SHOP NO. 2
CONTRACT W-6249-080 DRAWING NO. 320

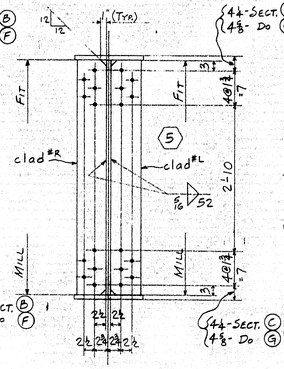
107-121



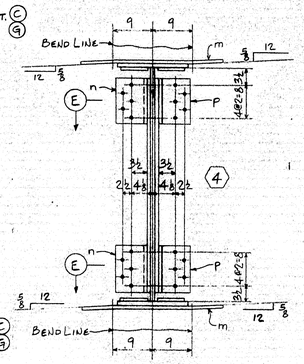
SECT. (E)



SECT. (B)-(F)
(DEVELOPED)



SECT. (C)-(G)
(DEVELOPED)



SECT. (D)
(DEVELOPED)

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR FOLDER	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 - G2-5											
2													
3	a	1	PL	54		1/2	38	5	56×1/2	39	5 3/4	26	06
4	b	1	PL	54		7/16	57	7 1/16	56 1/2×7/16	58	8 1/4	44	17
5	c	1	PL	54		1/2	38	0 3/8	56×1/2	38	5 3/4	46	35
6	d	1	PLW	16		1 1/4	38	3 5/8		38	7 3/4	40	18
7	f	1	PLW	16		1 1/4	38	5 1/8					
8	g	1	PLW	16		3/4	57	7 1/16		58	2 1/4	37	15
9	h	1	PLW	16		1 5/8	38	0 3/8		38	3 3/4	39	17
10	k	1	PLW	16		1 5/8	37	11 3/8					
11	m	2	PL	25 1/2		1/2	2	7 1/2	BENT	30	5 3/8	47	10C
12	n	2	L	7	3 1/2	1/2	0	11	BENT. CF-7×4×1/2	40	0	36	39
13	P	2	L	7	3 1/2	1/2	0	11		40	0	36	39
14	ac	1	PLW	16		3/4	57	7 1/16		58	2 1/4	37	15
15	c:1b#	8	BR	7		1/2	4	6	(F2E)	13	10 1/4	47	19
16	c:1ad#R 2/2	1	BR	7 1/2		3/4	4	6	(F1E)(M1E)	13	10 1/4	47	18
17	c:2p#	1	PLW	13		3/8	4	2	(BENT)	33	6	47	11A
18	c:2s#	1	PLW	13		3/8	4	2		33	6	47	11A
19	c:2cg#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
20	c:2ch#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
21													
22	US1	1	UPPER SHOE						(DET. ON DWG.#2)				
23	US13	1	UPPER SHOE						(DET. ON DWG.#2)				
24		13	325	7/8#			0	2 1/2					
25		18	325	7/8#			0	2 3/4					
26		18	325	7/8#			0	3 1/4	H-H-H-H-H				
27		42	325	7/8#			0	3 1/2				M	
28		97	HW	1 3/8	15/16#	3/16							
29		6	325	7/8			0	3					
30		2	SB	7/8			0	2 3/4					
31													
32	FWS	1	WD			5/16	104	0					
33	FWL	1	WD			5/16	535	9 3/4					
34													
35	FW	1	WD			1/2	2	4					
36	SDS	1	WD			7/16	9	0					
37	VGOS	1	WD			1/2	5	4					
38													
39													
40	s	1	PL	14 1/2		5/8	3	8		26	0	28	19
41	t	1	PL	14 1/2		5/8	4	3 1/2		26	0	28	19
42	w	1	PL	14 1/2		5/8	4	3 1/2	BENT	26	0	28	19
43	y	1	PL	14 1/2		5/8	4	3 1/2		26	0	28	19
44	aa	1	PL	14 1/2		5/8	4	8 1/2		26	0	28	19
45	ab	1	PL	14 1/2		5/8	4	3		26	0	28	19
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

PAY ITEM - 504-711
INST. - 2W

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

REQUIRED LIST			
QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-5	GIRDER (60×34 3/4×135 L 1 3/4)	

WORK THIS DWG. WITH DWG. #320

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

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

USE E7018, 10,20 LOW HYDROGEN ELECTRODES OR EQ. SAW-2 FOR WELDING.

MIN. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO AND INCL. 3/4"	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.

(3) INDICATES ONE COAT OF BLUE LACQUER.
MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8" A325
OPEN HOLES - 15/16"
A325 FIELD BOLTS - 7/8"
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
PAINT - ONE COAT AASHO-M72 TYPE II RED LEAD (U.N.)
REAM - AS NOTED.

GIRDER - G2-5

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

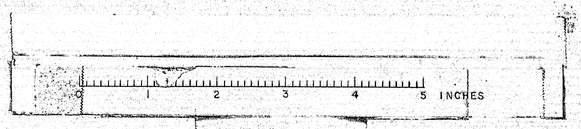
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY CCM DATE 9-24-69 IN CHARGE A.K. BERTOLET
CHECKED BY R.J. DATE 10/28/69 SHOP NO. 2 41
CONTRACT CJ-6249-020 DRAWING NO. 320A

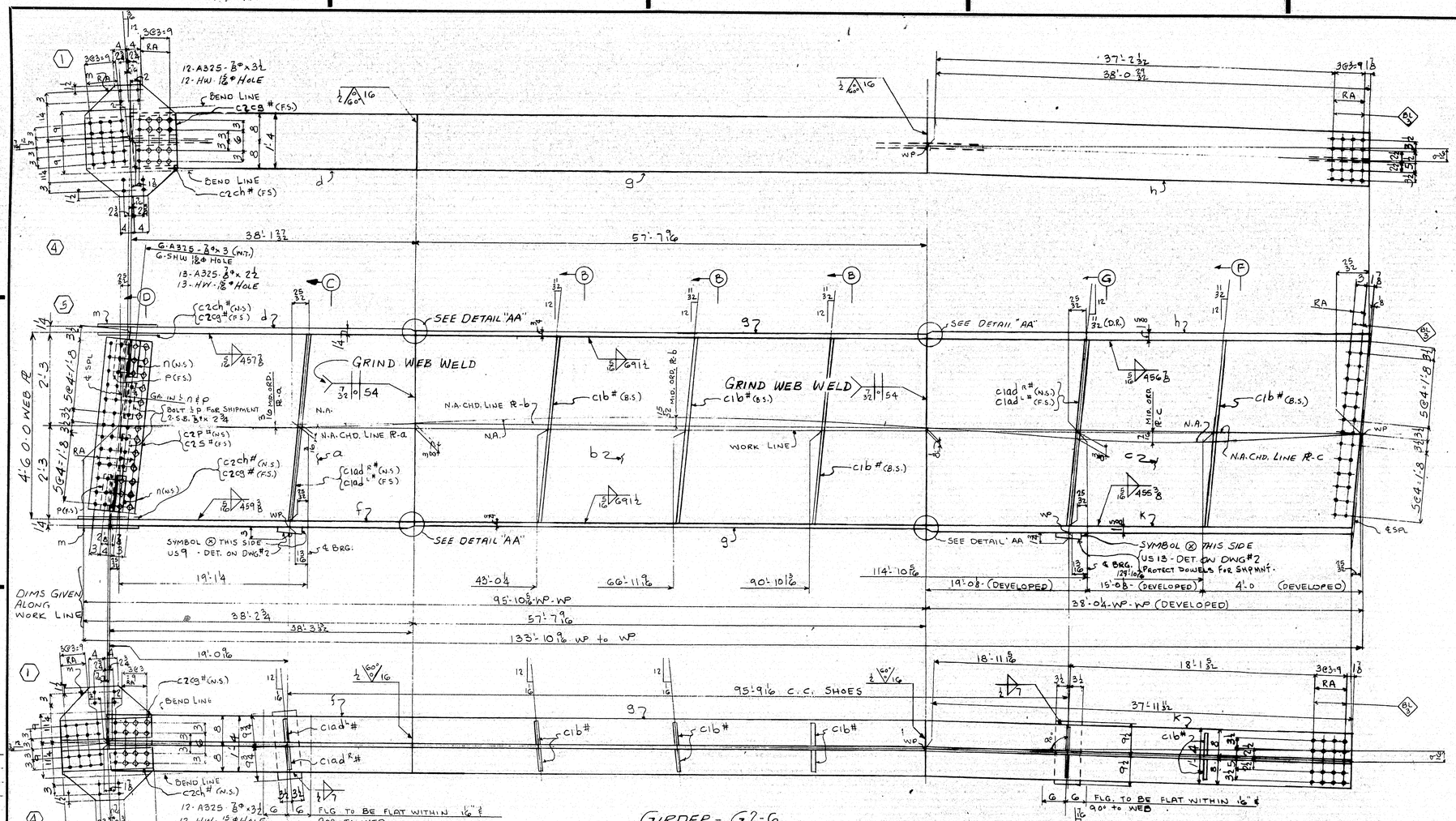
For location of details shown on this sheet refer to diagrams.

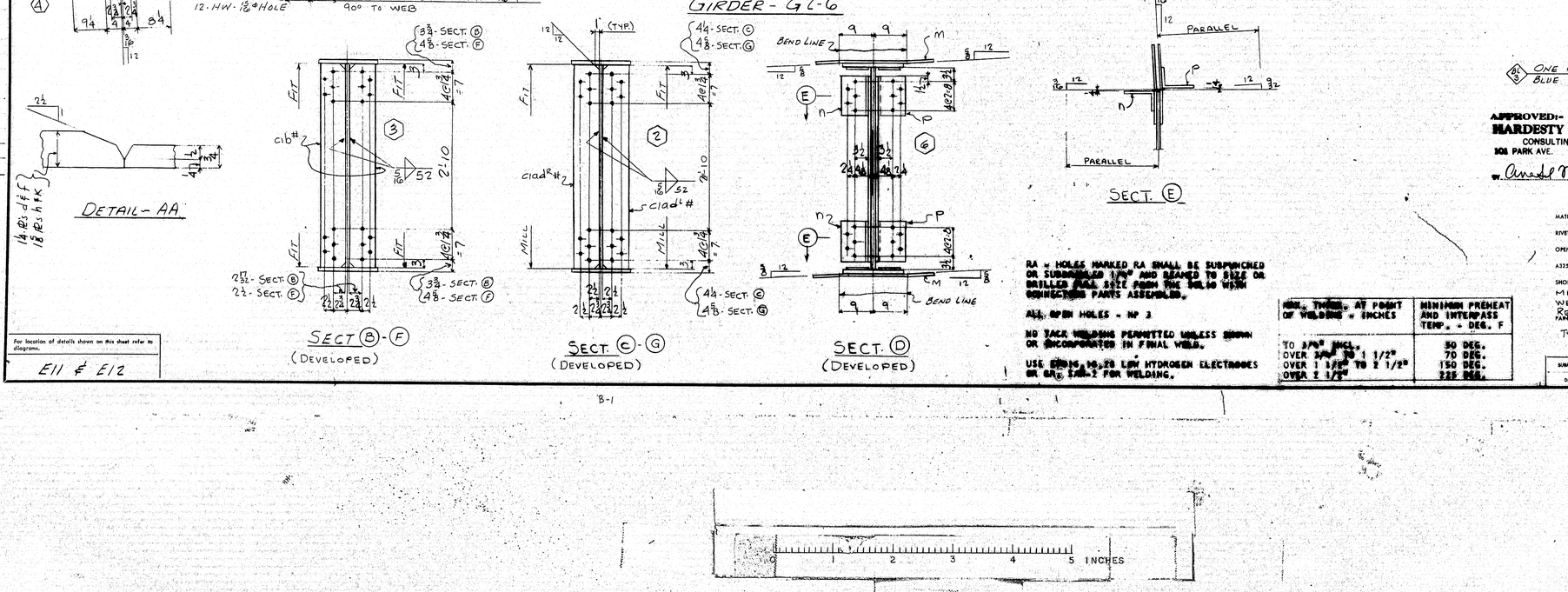


107-122

NOV 1 7 1969

SHOP BILL										MILL ORDER	
ASSEMBLY MARK	NO.	SHAPE	SECTION Size	Size or Pounds	Thick	LENGTH Ft.	In.	REMARKS	LENGTH Ft.	In.	ITEM Piece	Item
ONE - GIRDER - G2-6												
a	1	PL	54		1/2	38	3 13/32	54x1/2		39	5 3/4	26 00
b	1	PL	54		7/16	57	7 9/16	54x7/16		58	8 1/4	44 17
c	1	PL	54		1/2	38	0 29/32	54x1/2		38	5 3/4	46 35
d	1	PLU	16		1/4	38	1 31/32			38	7 3/4	40 18
f	1	PLU	16		1/4	38	3 31/32			38	7 3/4	40 18
g	2	PLU	16		3/4	57	7 9/16			58	2 1/4	37 15
h	1	PLU	16		1 5/8	38	0 29/32			38	3 3/4	39 17
K	1	PLU	16		1 5/8	37	11 31/32			38	3 3/4	39 17
m	2	PL	25 1/2		1/2	2	7 1/2	BENT		30	5 3/8	47 10c
n	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7x4x1/2		40	0	36 39
P	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7x4x1/2		40	0	36 39
C1b#	8	BR	7		1/2	4	6	(F2E)		13	10 4	47 19
C1ad L# R#	2 2	BR	7 1/2		3/4	4	6	(F1E) (M1E)		13	10 4	47 18
C1P#	1	PLU	13		3/8	4	2	BENT		33	6	47 11A
C2S#	1	PLU	13		3/8	4	2	BENT		33	6	47 11A
C2C9#	2	BR	6 1/2		1/2	2	1 1/2			19	1	47 20
C2Ch#	2	BR	6 1/2		1/2	2	1 1/2			19	1	47 20
US9	1	UPPER SHOE						(DET. ON DWG #2)				
US13	1	UPPER SHOE						(DET. ON DWG #2)				
	6	325	3/4			0	3					
	13	325	3/4			0	2 1/2					
	24	325	3/4			0	3 1/2					M
	43	HW	3/4	15/16	3/8							
	2	SB	3/4			0	2 3/4					
FWS	1	WD			5/16	104	0					
FWL	1	WD			3/8	535	5					
FW	1	WD			1/2	2	4					
SDS	1	WD			1/16	9	0					
VGOS	1	WD			1/2	5	4					





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 BACK WELDING PERMITTED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7018, M-23 LOW HYDROGEN ELECTRODES OR GR. E.M.-2 FOR WELDING.

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

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

E11 & E12

B-1

ONE COAT OF BLUE LACQUER

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

INSTALLMENT - "2W"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-6	GIRDER (31 1/2 x 60 x 135'-0 5/8)	

PAY ITEM - 504.711

GIRDER - G2-6

MATERIAL - A36 STEEL
RIVETS OR BOLTS - 7/8ϕ A325
OPEN HOLES - 1 1/8ϕ
A325 FIELD BOLTS - 7/8ϕ
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY E.T.H. DATE — IN CHARGE B.E. BERTOLET
CHECKED BY RJ DATE 10/20/69 — SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 321

NO.	DATE	INIT.	REVISION

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

5433 (Rev A 1-63)

107-123

NOV 17 1969

L N E	ASSEMBLY MARK	NO.	SHAPE	SECTION Size or Pounds	Thick	LENGTH Ft.	In.	REMARKS	MILL ORDER LENGTH Ft.	In.	ITEM Page	Line
1		ONE - GIRDER - G2-7										
2	a	1	PL	54	1/2	38	1 1/16	56 x 1/2 x	39	5 3/4	26	06
3	b	1	PL	54	7/16	57	8 7/8	56 1/2 x 7/16 x	58	8 1/4	44	17
4	c	1	PL	54	1/2	38	0 15/16	56 x 1/2 x	38	5 3/4	40	35
5	d	1	PLW	16	1/4	38	0 15/16		38	7 3/4	40	18
6	f	1	PLW	16	1/4	38	1 1/16		38	7 3/4	40	18
7	g	2	PLW	16	3/4	57	8 7/8		58	2 1/4	37	15
8	h	1	PLW	16	1 5/8	38	0 15/16		38	3 3/4	39	17
9	K	1	PLW	16	1 5/8	37	11 15/16		38	3 3/4	39	17
10	m	2	PL	25 1/2	1/2	1	11 3/4	BENT	30	5 7/8	47	10c
11												
12	P	2	L	7	3/4	1/2	0	11 BENT G.F. T.A. + 1/2	40	0	36	39
13	c 16#	4	BR	7		1/2	4	6 (FZE)	13	10 1/4	47	19
14	c 16d#	2	BR	7 1/2		3/4	4	6 (MIE) (FIE)	13	10 1/4	47	18
15	c 2P#	1	PLU	13		3/8	4	2 BENT	33	6	47	11A
16	c 25#	1	PW	13		3/8	4	2 BENT	33	6	47	11A
17	c 2cg#	2	BR	G 1/2		1/2	2	1 1/2	19	1	47	20
18	c 2ch#	2	BR	G 1/2		1/2	2	1 1/2	19	1	47	20
19	c 16b#	2	BR	7 1/2		3/4	4	6 (MIE) (FIE)	13	10 1/4	47	18
20	US9	1	UPPER SHOE					(DET. ON DWG #2)				
21	US13	1	UPPER SHOE					(DET. ON DWG #2)				
22		6	325	7/8		0	3					
23		13	325	7/8		0	2 1/2					
24		24	325	7/8		0	3 1/2					M
25		43	HW	1 3/4	15/16	3/16						
26												
27												
28												
29	FWS	1	WD		5/16	69	4					
30	FWL	1	WD		5/16	535	0 1/4					
31												
32	FW	1	WD		1/2	2	4					
33	SDS	1	WD		1/16	9	0					
34	VGOS	1	WD		1/2	5	4					
35												
36												
37												
38												
39												
40												
41												
42												

GIRDER - G2-7

DETAIL - AA

SECT. (B) - (F) (DEVELOPED)

SECT. (E) - (G) (DEVELOPED)

SECT. (D) (DEVELOPED)

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
T 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2"	70 DEG.
OVER 1 1/2" TO 2 1/2"	150 DEG.
OVER 2 1/2"	225 DEG.

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

E11 & E12

ONE COAT OF BLUE LACQUER

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

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

INSTALLMENT - "2W"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-7	GIRDER (25 1/2 x 60 x 134 19 7/8)	

PAY ITEM - 504.711

GIRDER - G2-7

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

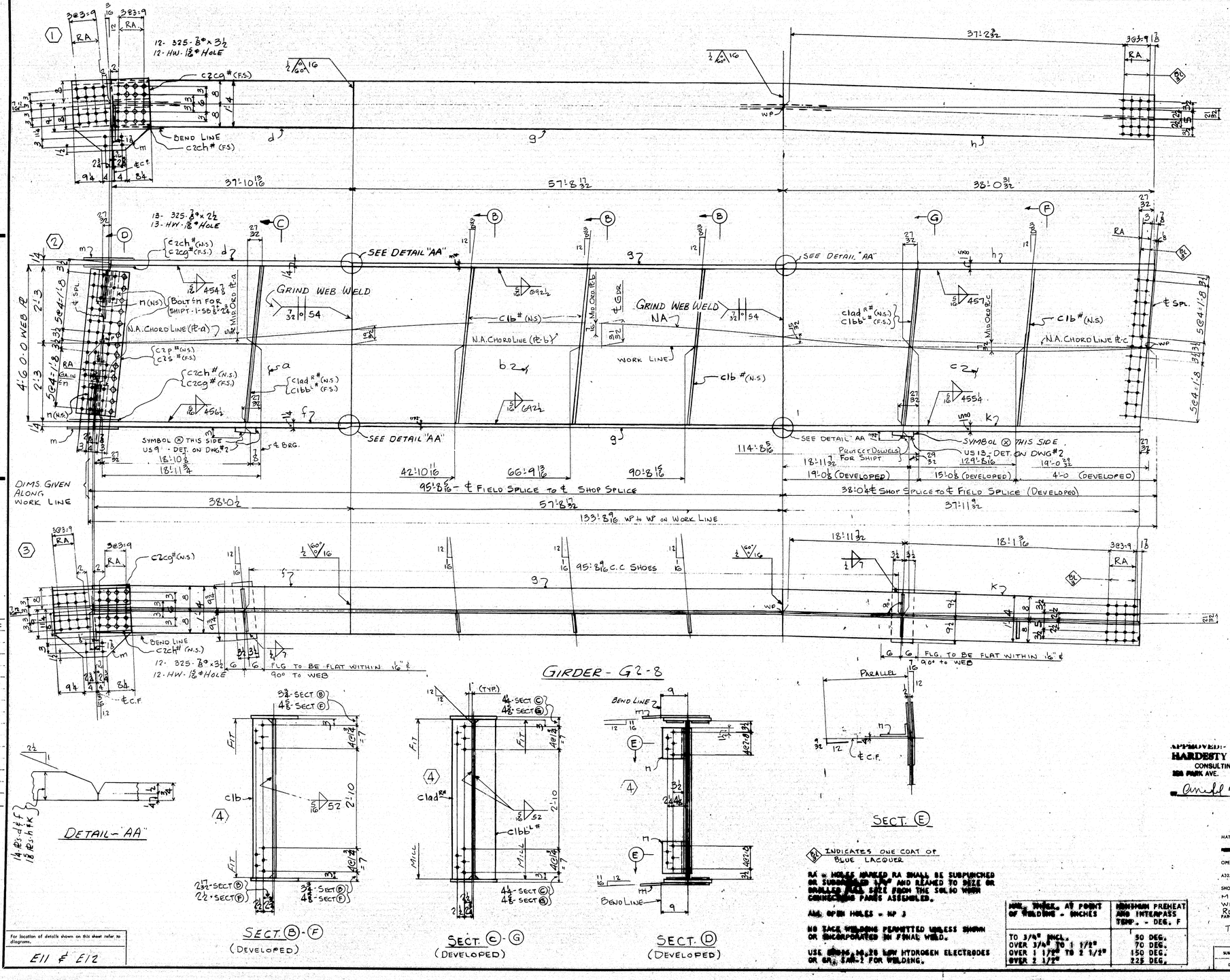
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
BETHLEHEM DRAFTING ROOM — POTTSTOWN WORKS
MADE BY E.T.H. DATE — IN CHARGE B.K. BERTOLET
CHECKED BY R.J. DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 322

REVISION: NO. | DATE | INIT.

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

107-124

NOV 1 1969



SHOP BILL											MILL ORDER			
ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION Size	SECTION Size or Pounds	LENGTH Thick	LENGTH Ft.	LENGTH In.	REMARKS		LENGTH Ft.	LENGTH In.	ITEM Pcs	ITEM Lbs
1			ONE - GIRDER - G2-8											
2	a	1	PL	54		½	38	0 1/2	54 x ½		38	7	26	07
3	b	1	PL	54		5/16	57	8 11/32	54½ x 5/16		58	8¼	44	17
4	c	1	PL	54		½	38	0 31/32	54 x ½		38	5¾	46	35
5	d	1	PLU	16		1/4	37	10 15/16			38	7¾	40	18
6	f	1	PLU	16		1/4	38	0 3/32			38	7¾	40	18
7	g	2	PLU	16		3/4	57	8 15/16			58	2¼	37	15
8	h	1	PLU	16		1 5/8	38	1			38	3¾	39	17
9	K	1	PLU	16		1 5/8	37	11 5/16			38	3¾	39	17
10	m	2	PL	25½		½	1	11¾	BENT		30	5 7/8	47	10c
11	n	2	L	7	3¼	½	0	11	BENT C.F. 7 x 4 x ½		40	0	36	99
12														
13	clad a#	2	BR	7½		¾	4	6	(FIE) (MIE)		13	10¼	47	18
14	c1b#	4	BR	7		½	4	6	(FZE)		13	10¼	47	19
15	c1bb L#	2	BR	7½		¾	4	6	(FIE) (MIE)		13	10¼	47	18
16	c2p#	1	PW	13		⅜	4	2	BENT		33	6	47	11A
17	c2s#	1	PW	13		⅜	4	2	BENT		33	6	47	11A
18	c2cg	2	BR	6½		½	2	1½			19	1	47	20
19	c2ch#	2	BR	6½		½	2	1½			19	1	47	20
20	US9	1	UPPER SHOE						(DET. ON DWG #2)					
21	US13	1	UPPER SHOE						(DET. ON DWG #2)					
22														
23		13	325	⅞ø		0	2½							
24		24	325	⅞ø		0	3½						M	
25		37	HW	1⅛ø	15/16	3/32								
26		2	SB	⅞"		0	2¾							
27														
28														
29	FWS	1	WD			5/16	69	4						
30	FWL	1	WD			5/16	534	8¾					1	
31														
32	FW	1	WD			½	2	4						
33	SOS	1	WD			1/16	9	0						
34	VGOS	1	WD			1/2	5	4						
35														
36														
37														
38														
39														
40														
41														
42														

INSTALLMENT - "2E"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-8	GIRDER (60½ x 25½ x 1.34-11)	

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
111 FIFTH AVE. NEW YORK 17, N.Y.
Arnold Hardesty DEC 23 1969

PAY ITEM - 504.711

GIRDER - G2-8

MATERIAL - A36 STEEL
BOLTS - ⅞ø 325
OPEN HOLES - 15/16ø
A325 FIELD BOLTS - ⅞ø
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

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.

(1) INDICATES ONE COAT OF BLUE LACQUER

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

ALL OPEN HOLES - NO 3

NO FACE WELDING PERMITTED UNLESS SHOWN OR SPECIFICATED ON FINAL WELD.

USE E6015, E6018 LOW HYDROGEN ELECTRODES OR EQ. FOR WELDING.

For location of details shown on this sheet refer to diagrams.
E11 & E12

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

REVISION

NO.	DATE	INT.

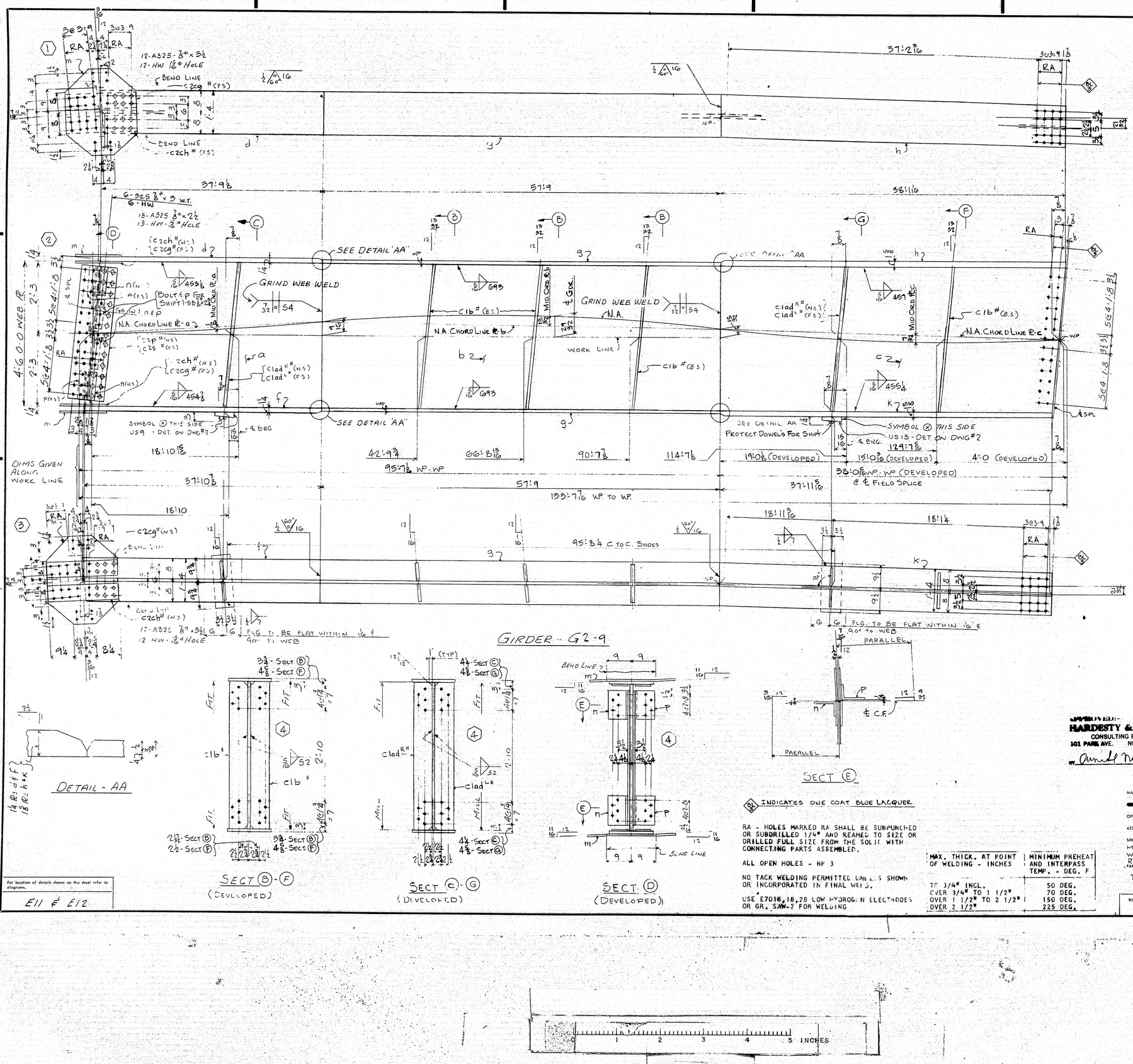
CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
STRUCTURE: PROJECT NO. I-95-1(22) 16
CONT. NO. 3 NEW HAMPSHIRE APPROACH

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY DML DATE 9-19-69 IN CHARGE B.E. BERTOLET
CHECKED BY RJ DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 323

107-175

33435 (Rev.A 1-68)



SHOP BILL									MILL ORDER			
				SECTION		LENGTH			LENGTH		ITEM	
ASSEMBLY MARK	NO	SHAPE	Size	Size or Pounds	ENDS	Ft.	In.	REMARKS	Ft.	In.	Pages	Line
ONE GIRDER - G2-9												
a	1	PL	54		½	37	10 7/8	56×½	38	9 3/4	46	18
b	1	PL	54		7/16	57	9	56½×7/16	58	8¼	44	17
c	1	PL	54		½	38	1/16	56×½	38	5¾	46	35
d	1	PLU	16		14	37	9¼		38	7¾	40	18
f	1	PLU	16		14	37	11		38	7¾	40	18
g	2	PLU	16		¾	57	9		58	2¼	37	15
h	1	PLU	16		15/16	38	1⅛		38	3¾	39	17
K	1	PLU	16		1⅛	37	11⅛		38	3¾	39	17
m	2	PL	25½		½	2	7½	BENT	30	5⅞	47	10c
n	2	L	7	3½	½	0	11	BENT C.F. 7×4×½	40	10	36	39
P	2	L	7	3½	½	0	11	BENT C.F. 7×4×½	40	10	36	39
C16#	8	BR	7		½	4	6	(FZE)	13	10¼	47	19
C lad L&R #	2	BR	7½		½	4	6	(FIE) (MIE)	13	10¼	47	18
C 2p#	1	PW	13		5/16	4	2	BENT	33	6	47	IIA
C 2s#	1	PW	13		5/16	4	2	BENT	33	6	47	IIA
C 2cg#	2	BR	G2½		½	2	1½		19	1	47	20
C 2ch#	2	BR	G2½		½	2	1½		19	1	47	20
US9	1	UPPER SHOE						(DET. ON DWG #2)				
US13	1	UPPER SHOE						(DET. ON DWG #2)				
	6	325	⅞"ø			0	3					
	13	325	⅞"ø			0	2½					
	24	325	⅞"ø			0	3½					M
	43	HW	⅞"ø		15/16 3/16							
	2	SB	⅞"ø			0	2 3/4					
FWS	.	WD			5/16	104	0					
FWL	1	WD			5/16	534	4½					
FW	1	WD			½	2	4					
SDS	1	WD			1/16	9	0					
VGOS	1	WD			½	5	4					

INSTALLMENT - 2E

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-9	GIRDER (60½×31½×134-10)	

PAY ITEM - 504.711

GIRDER - G2.9

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

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

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.

INDICATES ONE COAT BLUE LACQUER

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.

E11 & E12

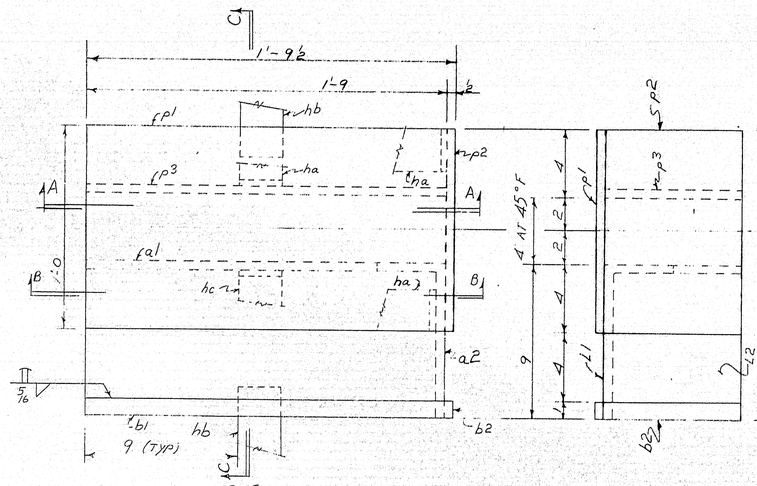
SUBMITTAL DATE | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | REVISION DATE

CUSTOMER
MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
STR. TYPE
PROJECT NO. I-95-1(22)16
CONT. NO. 3 NEW HAMPSHIRE APPROACH

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
DETAIL DRAWING ROOM POTTSTOWN WORKS
MADE BY DML DATE 9-16-69 IN CHARGE B.E. BERTOLET
CHECKED BY RJ DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 324

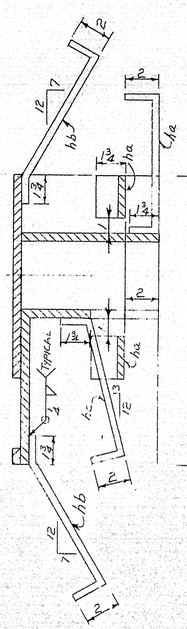
107-126

STATE HIGHWAY NOV 1 F 1969

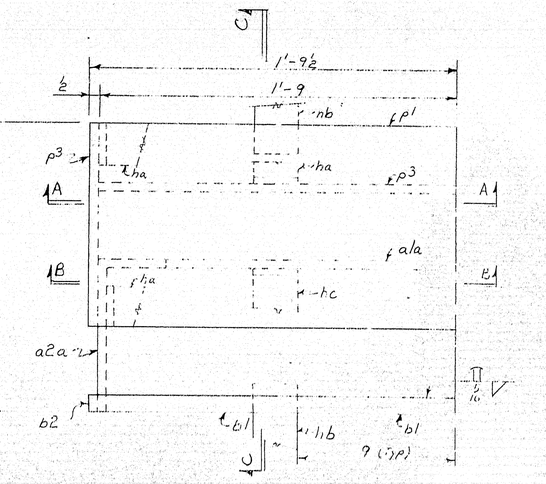


CJL - 3 REQ'D

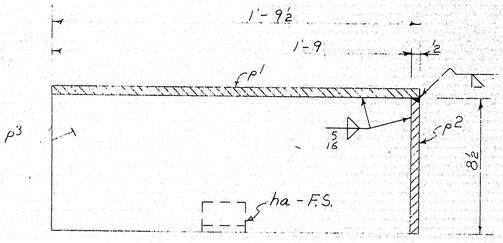
END VIEW



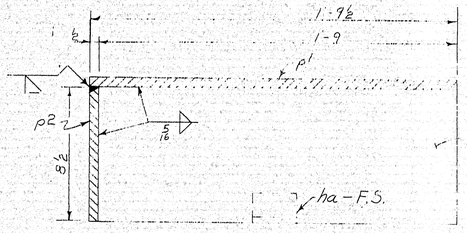
SECTION C-C



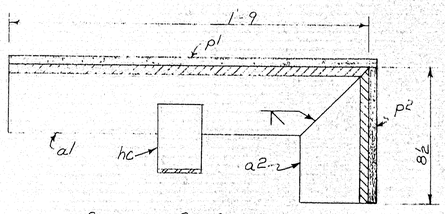
CJR - 3 REQ'D



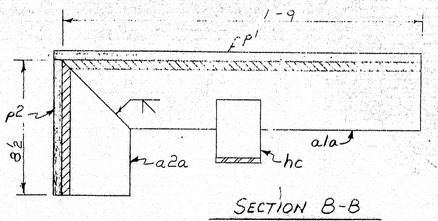
SECTION A-A



SECTION A-A



SECTION B-B



SECTION B-B

PAINT NOTE

No Paint on Anchor, side of ℄'s, & L's.

APPROVED
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
FEB 9 1970

SHIP MARK	NO.	MARK	SHAPE	LENGTH	WT.	ITEM NO.	REMARKS
CJL	3		ASSEMBLY		—		
CJR	3		ASSEMBLY		—		
	6	p1	PL 12 X ½	1 9½		11	A242
	6	p2	PL 8½ X ½	1 0		11	A242
	6	p3	PL 8½ X ½	1 9		12	A242
	3	a1	L³ x 4 x ½	1 9		9	A242
	3	a1a	L³ x 4 x ½	1 9		↓	A242
	3	a2	L³ x 4 x ½	0 8½		↓	A242
	3	a2a	L⁴ x 4 x ½	0 8½		9	A242
	6	b1	Bar 1 x ½	1 9½		10	A242
	6	b2	Bar 1 x ½	0 8½		10	A242
	18	ha	Bar 2½ x ⅜	1 3		13	A36
	12	hb	Bar 2½ x ⅜	1 3		13	A36
	6	hc	Bar 2½ x ⅜	1 3		13	A36

Corrosion Resisting

ITEM 502.263
PROJECT No. 195-1(22)16
CONTRACT No. 4

STEEL: ASTM. AS NOTED
WELDING ELECTRODE E70-L.H.
SHOP CONN: WELDED
FIELD CONN: NONE
HOLES: NONE
PAINT: ONE COAT ZINC RICH EPOXY AS NOTED
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

BRUSH CURB EXPANSION JOINT

PRINT DIST.		
FA	1-7-70	3
Shop	1-29-70	4
DIST	2-17-70	10

REV.		
CHECKED	1-8-70	J.P.F.
DRAWN	12-30-69	C.M.F.

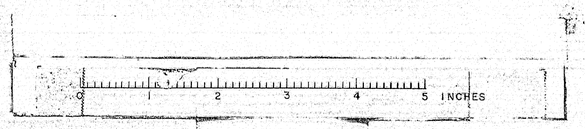
Bancroft & Martin Inc.
South Portland, Maine 04106

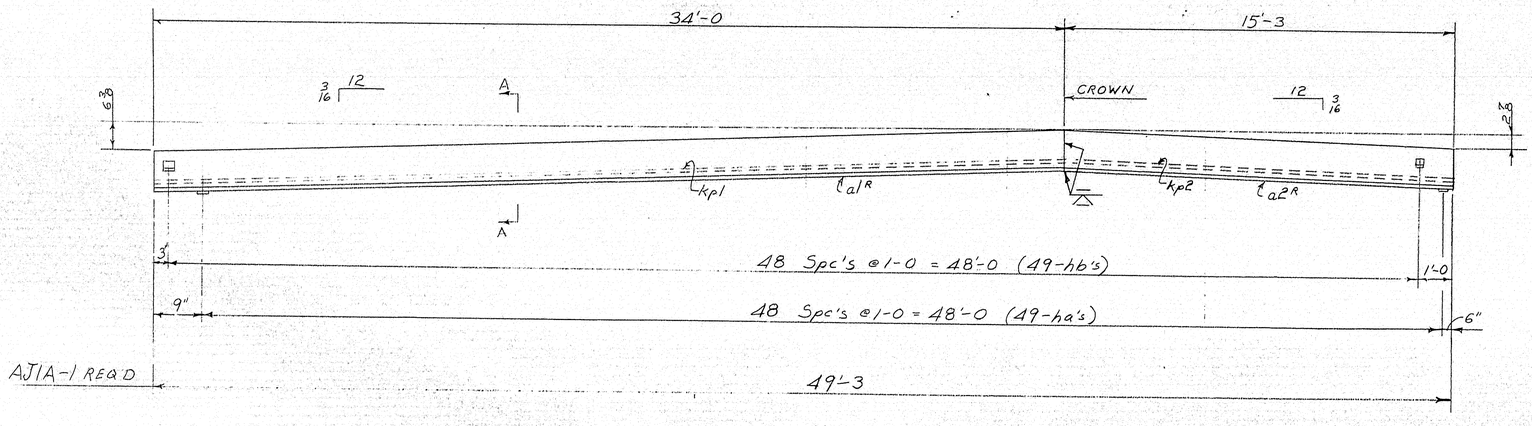
JOB: I95 BRIDGE, MAINE APPROACH
KITTERY, MAINE

CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

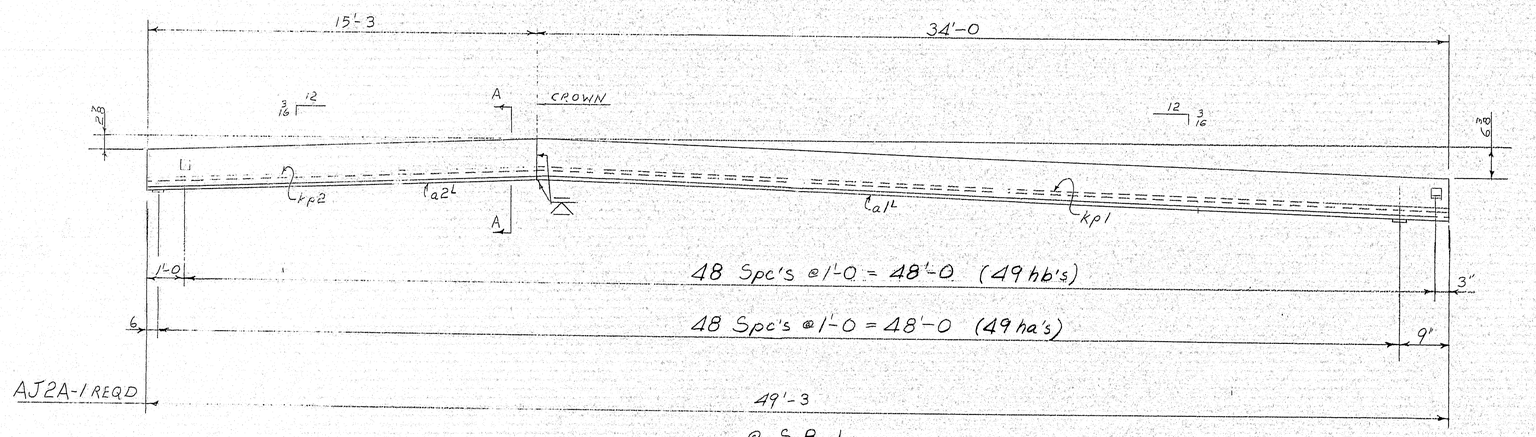
ORDER NO.	JOB NO.	DRAWING NO.
	69-486	HI-ME

1.07-127

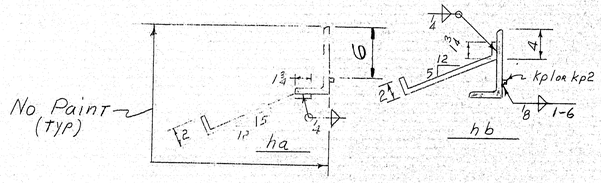




@ N. B. LANE



@ S. B. LANE



SECT. A-A

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	ITEM NO.	REMARKS
AJ1A			ASSEMBLY			—		
AJ2A			DO			—		
	2	a1	L8 x 4 x 5/8	34	0			A242
	2	a2	L8 x 4 x 5/8	15	3			A242
	2	kp1	Bar 1/2 x 1/2	34	0			A242
	2	kp2	Bar 1/2 x 1/2	15	3			A242
	98	ha	Bar 2 1/2 x 3/8	1	3			A36
	98	hb	Bar 2 1/2 x 3/8	1	3			A36

ITEM 502.263
PROJECT No. I-95-1(22)16
CONTRACT No. 4

STEEL: ASTM. AS NOTED IN BILL
WELDING ELECTRODE E70 - L.H.
SHOP CONN: WELDED
FIELD CONN: NONE
HOLES: NONE
PAINT: ONE COAT ZINC RICH EPOXY AS NOTED
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

ARMORED JOINT @ ABUTMENT

PRINT DIST.		
F.A.	1-9-70	3
Shop	1-29-70	4
DIST	2-17-70	10

REVISED
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
FEB 9 1970

Bancroft & Martin Inc.
South Portland, Maine 04106

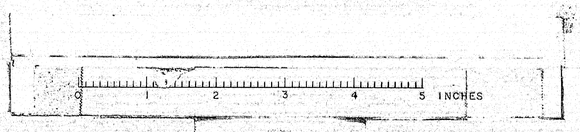
JOB: I95 BRIDGE, MAINE APPROACH
KITTERY, MAINE

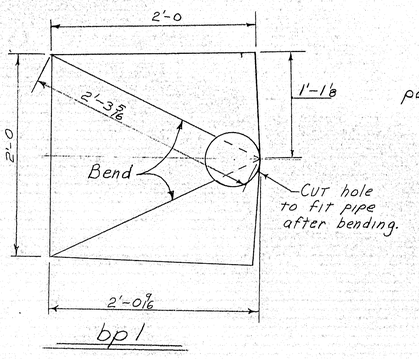
CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

REV.		
CHECKED	1-8-70	J.P.F.
DRAWN	12-29-69	C.M.F.

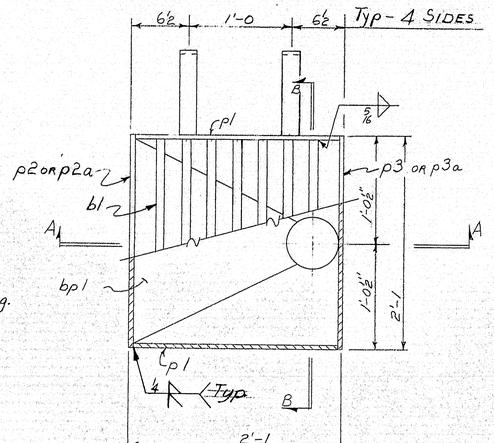
ORDER NO.	JOB NO.	DRAWING NO.
	69-486	J1-ME

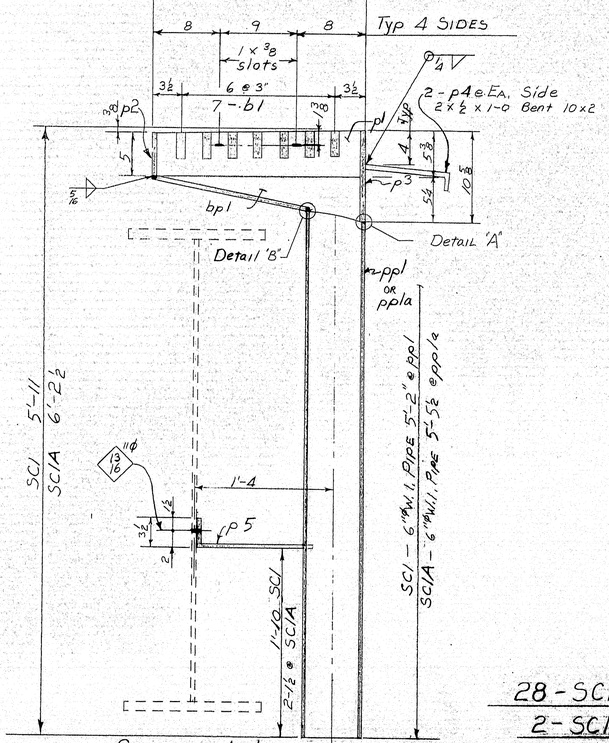
107-128



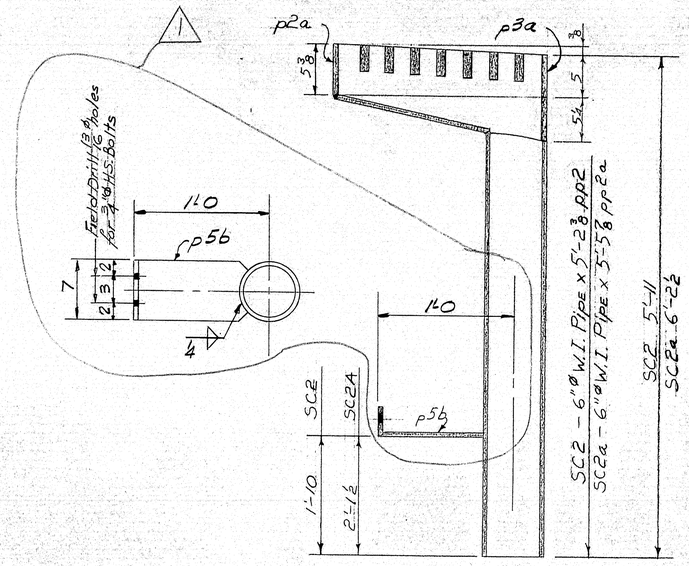


bp1





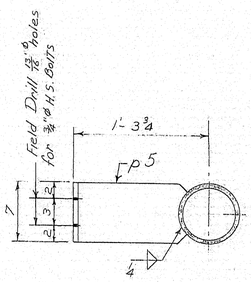
SECTION A-A FOR SC1 & SC1A

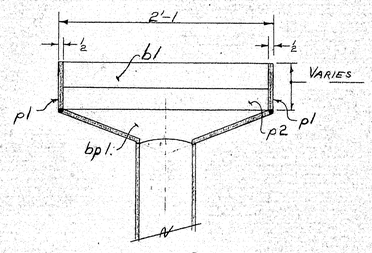


SECTION A-A - FOR SC2 & SC2A

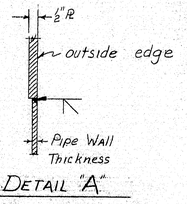
28 - SC2 @ MEDIAN CURB.

2 - SC2A @ MEDIAN CURB ABUTS.

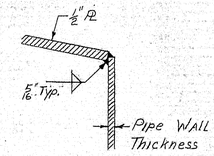




SECTION B-B



DETAIL "A"



DETAIL "B"

28 - SC1 @ EXT. CURB

2 - SC1A @ EXT. CURB - ABUTMENT.

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY J.J. Henderson FEB 9 1970

SHIP	BILL OF MATERIAL			JOB NO. 69-486	DWG. NO. K1-ME

MARK	NO.	MARK	SHAPE	LENGTH		WT.	ITEM NO.		REMARKS
SC1	28		SCUPPERS			—			
SC1A	2		Do			—			
	120	p1	Bar 5⅜ x ½	2	0		3		
	30	p2	Bar 5" x ½	2	1		2		
	30	p3	R 10⅝ x ½	2	1		4		
	480	p4	Bar 2 x ½	1	0		7		bent 10" x 2"
	420	b1	Bar 3 x 1	2	0		6		
	60	bp1	R 24 1/16 x ½	2	2¼		5		
⚠1	30	p5	Bar 7 x ½	1	5		8		bend & Fit
⚠1	30	p5b	Do	1	1½		8		bend & Fit
	28	pp1	6"Φ W.I. Pipe	5	2		1		
	2	pp1a	6"Φ W.I. Pipe	5	5½		1		
	28	pp2	6"Φ W.I. Pipe	5	2⅜		1		
	2	pp2a	6"Φ W.I. Pipe	5	5⅜		1		
FIELD	124		¾"Φ H.S. BOLT	0	2¼				
Do	124		¾"Φ H.S. Washer						
SC2	28		SCUPPERS			—			
SC2A	2		Do			—			
	30	p2a	Bar 5⅜ x ½	2	1		2		
	30	p3a	R 10¼ x ½	2	1		4		

ITEM 502.263
PROJECT No. I-95-1(22)16
CONTRACT No. 4

STEEL: ASTM. W. I
WELDING ELECTRODE E70
SHOP CONN: WELDED
FIELD CONN: FIELD DRILL & BOLTED
HOLES: AS NOTED
PAINT: GALVANIZED PER A.S.T.M. A123.
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

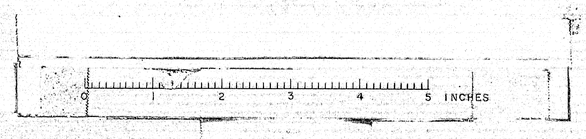
SCUPPERS FOR MAINE APPROACH

PRINT DIST.		
F.A.	1-9-70	3
Shop	1-29-70	4
DIST	2-17-70	10
SHOP	4-10-70	4

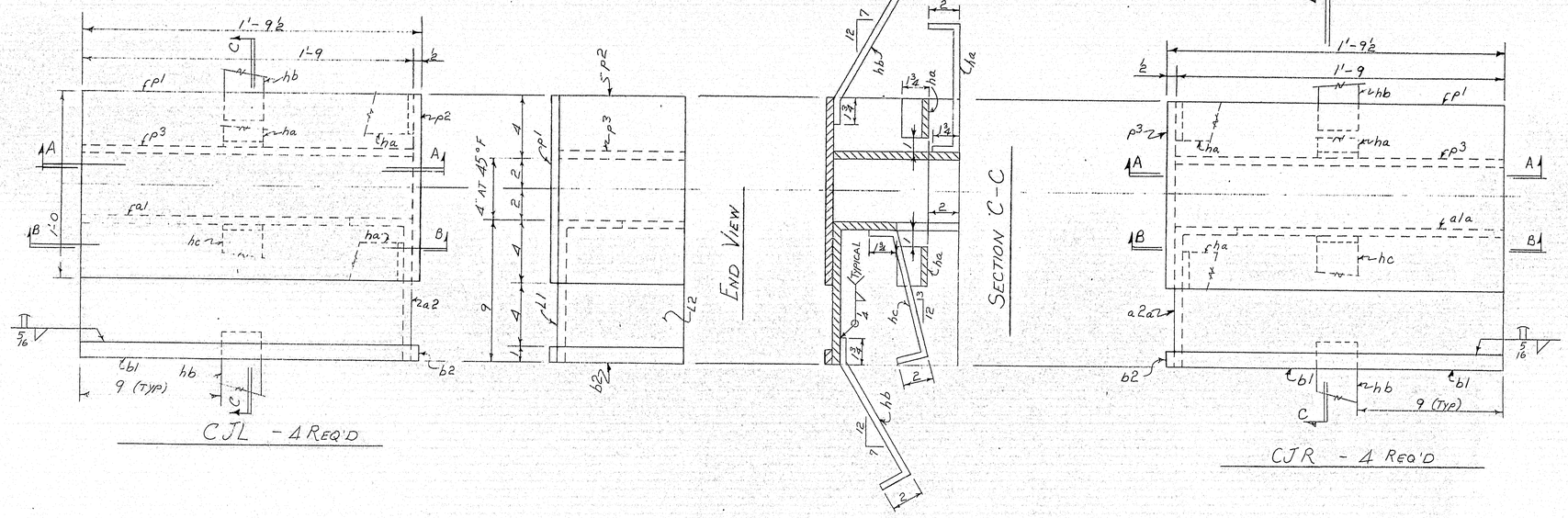
Bancroft & Martin Inc.
South Portland, Maine 04106

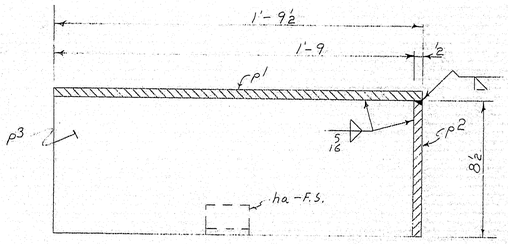
JOB: I95 BRIDGE, MAINE APPROACH
KITTERY, MAINE
CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

			ORDER NO.	JOB NO.	DRAWING NO.
⚠ REV.	4-9-70	J.P.F.			
CHECKED	1-8-70	J.P.F.		69-486	K1-ME
DRAWN	12-19-69	C.M.F.			

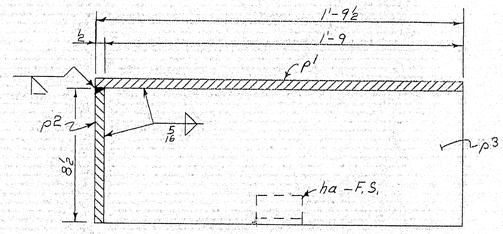


107-129

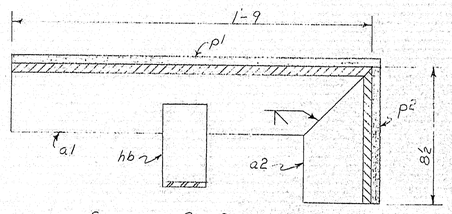




SECTION A-A



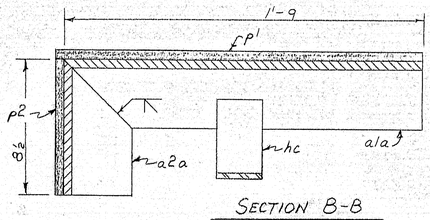
SECTION A-A



SECTION B-B

PAINT NOTE

No Paint on Anchor side of R's & L's.



SECTION B-B

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY J. F. Hardesty FEB 9 1970

SHIP	BILL OF MATERIAL			JOB NO. 69-487	DWG. NO. H1-NH			
MARK	NO.	MARK	SHAPE	LENGTH	WT.	ITEM NO.		REMARKS
CJL	4		Assembly		—			
CJR	4		Assembly		—			
	8	p1	R 12 x ½	1 9½				A242
	8	p2	R 8½ x ½	1 0				A242
	8	p3	R 8½ x ½	1 9				A242
	4	a1	L9 x 4 x ½	1 9				A242
	4	a1a	L9 x 4 x ½	1 9				A242
	4	a2	L9 x 4 x ½	0 8½				A242
	4	a2a	L9 x 4 x ½	0 8½				A242
	8	b1	Bar 1 x ½	1 9½				A242
	8	b2	Bar 1 x ½	0 8½				A242
	24	ha	Bar 2½ x ⅜	1 3				A36
	16	hb	Bar 2½ x ⅜	1 3				A36
	8	hc	Bar 2½ x ⅜	1 3				A36

Corrosion Resisting

ITEM 502.261
PROJECT No. I-95-1(22)16
CONTRACT No 4

STEEL: ASTM. AS NOTED
WELDING ELECTRODE E70 - L.H.
SHOP CONN: WELDED
FIELD CONN: NONE
HOLES: NONE
PAINT: ONE COAT ZINC RICH EPOXY - AS NOTED
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

BRUSH CURB EXPANSION JOINT

PRINT DIST.		
F.A.	1-12-70	3
Shop	1-29-70	4
DIST	2-17-70	10

Bancroft & Martin Inc.
South Portland, Maine 04106

JOB: I95 BRIDGE, N.H. APPROACH PORTSMOUTH, N.H

CUSTOMER: CIANCHETTE BROS.

DESIGNER: HARDESTY & HANOVER

REV.		ORDER NO.	JOB NO.	DRAWING NO.
CHECKED	1-9-70 J.P.F.			
DRAWN	12-30-69 C.M.F.		69-487	H1-NH

107-130

SHIP	BILL OF MATERIAL			JOB NO. 69-487		DWG. NO. J1-NH		
MARK	NO.	MARK	SHAPE	LENGTH	WT.	ITEM NO.		REMARKS
AJ1R	1		L8x4x5/8	23	9			
AJ1L	1		L8x4x5/8	42	54			A242
AJ2R	1		L8x4x5/8	48	6			A242
AJ2L	1		L8x4x5/8	23	9			A242
	1	kp1	Bar 1/2 x 1/2	42	54			A242
	2	kp2	Bar 1/2 x 1/2	23	9			A242
	1	kp3	Bar 1/2 x 1/2	48	6			A242
	138	ha	Bar 2 1/2 x 3/8	1	3			A36
	138	hb	Bar 2 1/2 x 9/8	1	3			A36

APPROVED
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
FEB 9 1970

ITEM 502.261
PROJECT No. I-95-1(22)16
CONTRACT No. 4

STEEL: ASTM. AS NOTED IN BILL
WELDING ELECTRODE E70
SHOP CONN: WELDED
FIELD CONN: NONE
HOLES: NONE
PAINT: ONE COAT ZINC RICH EPOXY - AS NOTED
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

ARMORED JOINT @ ABUTMENT

PRINT DIST.		
F.A.	1-12-70	3
Shop	1-29-70	4
DIST	2-17-70	10

REV.		
CHECKED	1-10-70	J.P.F.
DRAWN	12-30-69	C.M.F.

Bancroft & Martin Inc.
South Portland, Maine 04106

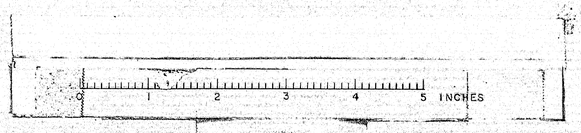
JOB: I95 BRIDGE, N.H. APPROACH
PORTSMOUTH, N.H.

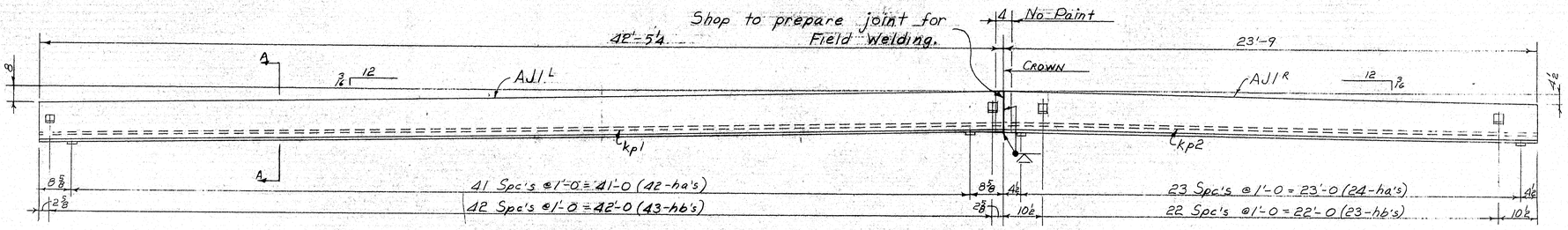
CUSTOMER: CIANCHETTE BROS.

DESIGNER: HARDESTY & HANOVER

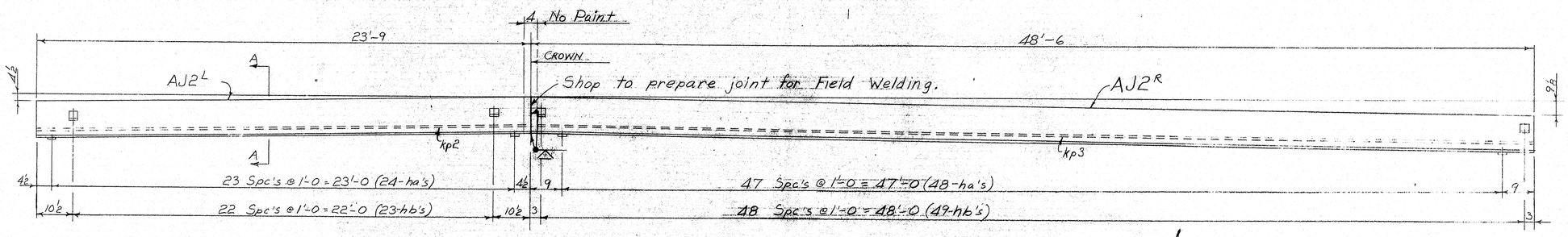
ORDER NO.	JOB NO.	DRAWING NO.
	69-487	J1-NH

107-131

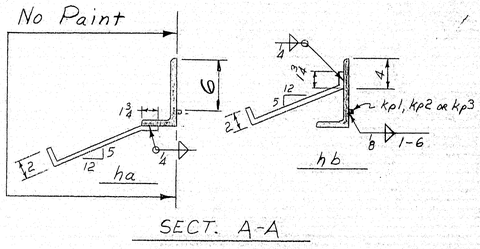




AJ1R - ONE REQ'D
AJ1L - ONE REQ'D
@ S.B. LANE



AJ2R - ONE REQ'D
AJ2L - ONE REQ'D
@ N.B. LANE



SECT. A-A

APPROVED:-
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
BY J.F. Hardesty
FEB 9 1970

PROJECT No. I-95-1(22)16
CONTRACT No. 4

ARMORED JOINT @ ABUTMENT		
PRINT DIST.		
F.A.	1-12-70	3
Shop	1-29-70	4
D.O.T	2-17-70	10
REV.		
CHECKED	1-10-70	J.P.F.
DRAWN	12-30-69	C.M.F.

Bancroft & Martin Inc.
South Portland, Maine 04106

JOB: I95 BRIDGE, N.H. APPROACH
PORTSMOUTH, N.H.

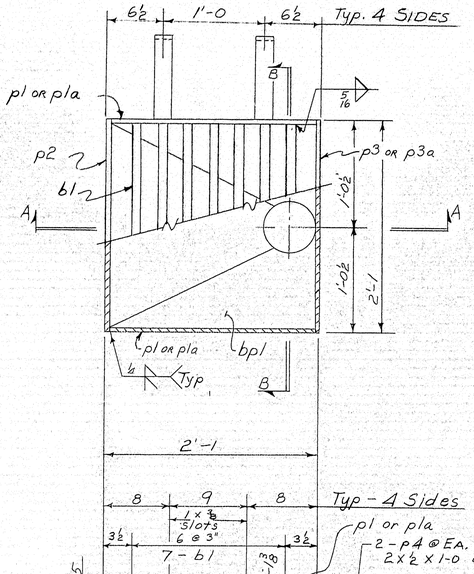
CUSTOMER: CIANCHETTE BROS.

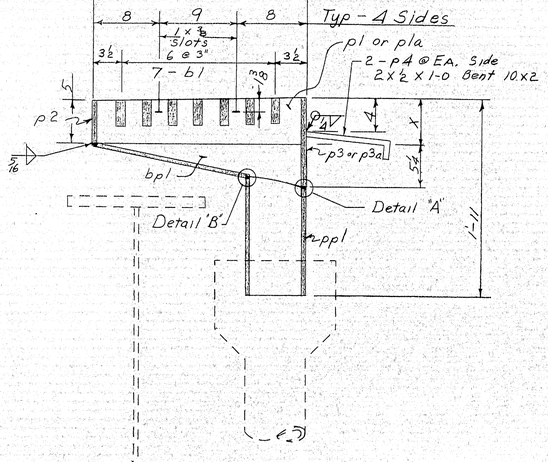
DESIGNER: HARDESTY & HANOVER

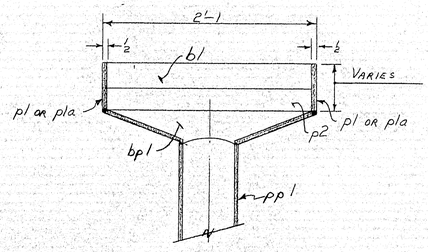
ORDER NO.	JOB NO.	DRAWING NO.
	69-487	J1-N'H

K&E ALBANENE® TRACING PAPER

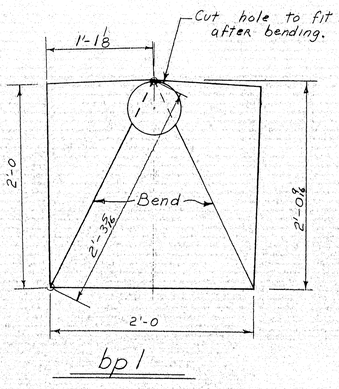
0 1 2 3 4 5 INCHES

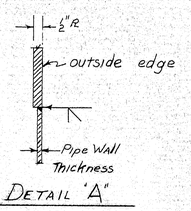


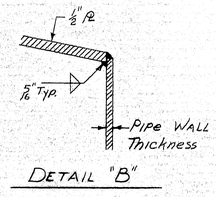




MARK	No	SHAPE	X	PIER No.	TYPE	No
p1	2	Bar $5\frac{9}{16}$ x ½ x 2-0	$5\frac{9}{16}$	16S	SC1	1
p3	1	PL $10\frac{13}{16}$ x ½ x 2-1				
p1a	6	Bar $6\frac{3}{8}$ x ½ x 2-0	$6\frac{3}{8}$	13S-8S-4S	SC2	3
p3a	3	PL $11\frac{5}{8}$ x ½ x 2-1				







APPROVED
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
FEB 9 1970

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	ITEM NO.	REMARKS
SC1	1		SCUPPER			—		
SC2	3		SCUPPERS			—		
	2	p1	Bar $5\frac{9}{16}$ x ½	2	0		2	
	6	p1a	Bar $6\frac{3}{8}$ x ½	2	0		3	
	4	p2	Bar 5 x ½	2	1		3	
	1	p3	PL $10\frac{13}{16}$ x ½	2	1		4	
	3	p3a	PL $11\frac{5}{8}$ x ½	2	1		4	
	32	p4	Bar 2 x ½	1	0		6	Bent 10"x2"
	4	bp1	PL $24\frac{7}{16}$ x ½	2	24		1	
	28	b1	Bar 3 x 1	2	0		5	
	4	pp1	8" ϕ W.I. PIPE	1	3		9	Cut to Fit

BILL OF MATERIAL — JOB NO. 69-487 — DWG. NO. K1-NH

ITEM 502.261
PROJECT No. I95-1(22)16
CONTRACT No. 4

STEEL: ASTM. W. I
WELDING ELECTRODE E70
SHOP CONN: WELD
FIELD CONN: FIELD DRILL & BOLTED
HOLES: AS NOTED
PAINT: GALVANIZED PER A.S.T.M. A123
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

SCUPPER @ EAST FACIA STRINGER PIER 16S, 13S, 8S & 4S.

PRINT DIST.		
F.A.	1-12-70	3
Shop	1-29-70	4
DIST	2-17-70	10

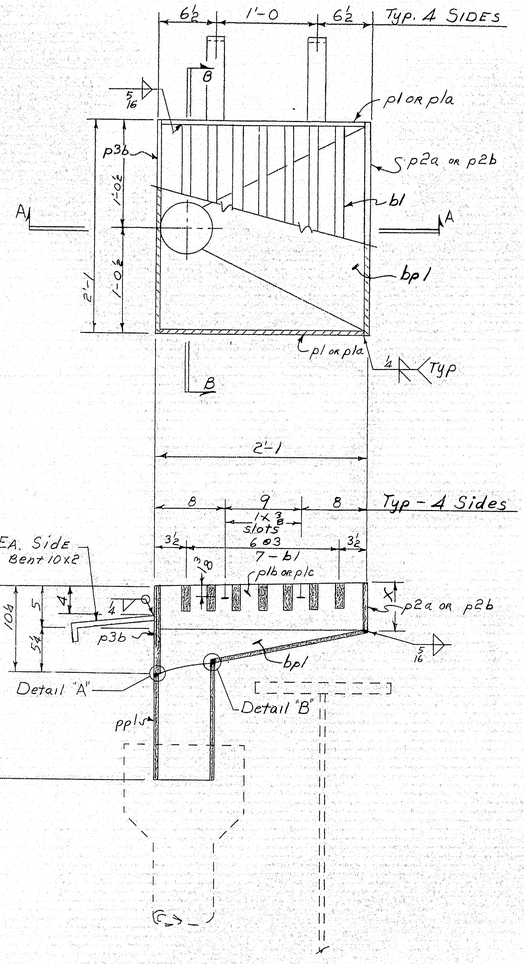
Bancroft & Martin Inc.
South Portland, Maine 04106

JOB: I95 BRIDGE, N.H. APPROACH PORTSMOUTH, N.H.
CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

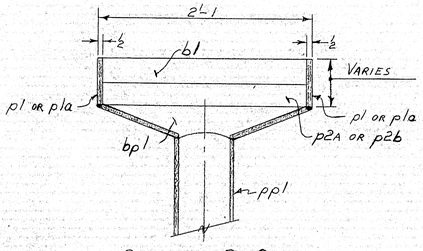
REV.		
CHECKED	1-9-70	J.P.F
DRAWN	12-22-69	C.M.F

ORDER NO.	JOB NO.	DRAWING NO.
	69-487	K1-NH

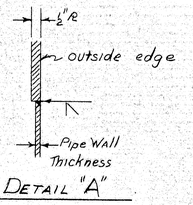
107-133



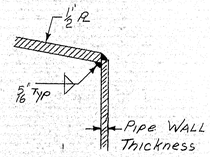
Mark	No	Shape	X	Pier No.	Type	No.
p1	2	Bar 5 9/16 x ½ x 2-0	5 9/16	16S	SC3	1
p2a	1	Bar 5 9/16 x ½ x 2-1				
p1a	6	Bar 6 3/8 x ½ x 2-0	6 3/8	13S-8S-4S	SC4	3
p2b	3	Bar 6 3/8 x ½ x 2-1				



SECTION B-B



DETAIL "A"



DETAIL "B"

NOTE:
FOR DETAILS OF bp1
SEE DWG 69-487-K1

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y
FEB 9 1970

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	ITEM NO.		REMARKS
SC3	1		SCUPPER			—			
SC4	3		SCUPPERS			—			
	2	p1	Bar 5 9/16 x ½	2	0		2		
	6	p1a	Bar 6 3/8 x ½	2	0		3		
	1	p2a	Bar 5 9/16 x ½	2	1		3		
	3	p2b	Bar 6 3/8 x ½	2	1		3		
	4	p3b	PL 10½ x ½	2	1		4		
	32	p4	Bar 2 x ½	1	0		6		bent 10"x2"
	4	bp1	PL 24 9/16 x ½	2	2¼		1		
	28	b1	Bar 3 x 1	2	0		5		
	4	pp1	8" ø W.I. PIPE	1	3		9		CUT to Fit

ITEM 502.261
PROJECT No. I95-1(22)16
CONTRACT No. 4

STEEL: ASTM. W. I
WELDING ELECTRODE E70
SHOP CONN: WELD
FIELD CONN: FIELD DRILL & BOLTED
HOLES: AS NOTED
PAINT: GALVANIZED PER A.S.T.M. A123
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

SCUPPER @ WEST SIDE MALL STRINGER PIER 16S, 13S, 8S & 4S

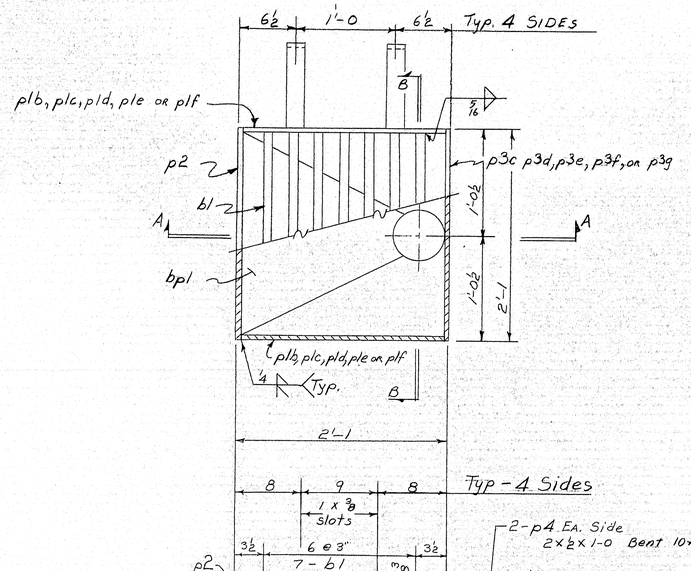
PRINT DIST.		
F.A.	1-12-70	3
Shop	1-29-70	4
DIST	2-17-70	10

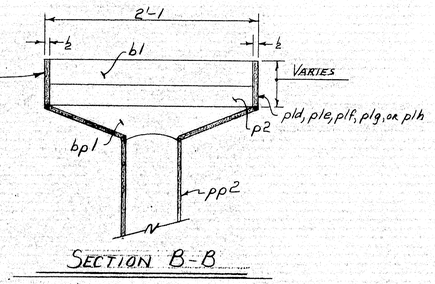
Bancroft & Martin Inc.
South Portland, Maine 04106

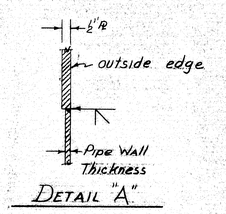
JOB: I 95 BRIDGE, N.H. APPROACH
PORTSMOUTH, N.H.
CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

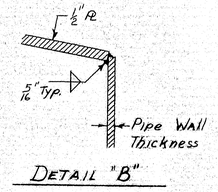
REV.		
CHECKED	1-9-70	J.P.F.
DRAWN	12-22-69	C.M.F.

ORDER NO.	JOB NO.	DRAWING NO.
	69-487	K2-NH









Note :
For Details of bp1
see Dwg 69-487-K1

MARK	No	SHAPE	X	PIER No.	TYPE	No.
plb	2	Bar 6 3/16 x ½ x 2-0	6 3/16	15S	SC5	1
p3c	1	R 11 7/16 x ½ x 2-1				
plc	4	Bar 6 7/16 x ½ x 2-0	6 7/16	10S#11S	SC6	2
p3d	2	R 11 11/16 x ½ x 2-1				
pld	2	Bar 6 3/8 x ½ x 2-0	6 3/8	6S	SC7	1
p3e	1	R 11 5/8 x ½ x 2-1				
ple	2	Bar 6 x ½ x 2-0	6	2S	SC8	1
p3f	1	R 11¼ x ½ x 2-1				
plf	2	Bar 5 9/16 x ½ x 2-0	5 9/16	1S	SC9	1
p3g	1	R 10 13/16 x ½ x 2-1				

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	ITEM NO.	REMARKS
SC5	1		SCUPPER			—		
SC6	2		Do			—		
SC7	1		Do			—		
SC8	1		Do			—		
SC9	1		Do			—		
	2	plb	Bar 6 3/16 x ½	2	0		3	
	4	plc	Bar 6 7/16 x ½	2	0		↓	
	2	pld	Bar 6 3/8 x ½	2	0		↓	
	2	ple	Bar 6 x ½	2	0		3	
	2	plf	Bar 5 9/16 x ½	2	0		2	
	6	p2	Bar 5 x ½	2	1		2	
	1	p3c	R 11 7/16 x ½	2	1		4	
	2	p3d	R 11 11/16 x ½	2	1		↓	
	1	p3e	R 11 5/8 x ½	2	1		↓	
	1	p3f	R 11¼ x ½	2	1		↓	
	1	p3g	R 10 13/16 x ½	2	1		4	
	48	p4	Bar 2 x ½	1	0		6	bent 10x2
	6	p5	Bar 7 x ½	1	3		7	bend & Fit
	6	bp1	R 24 1/8 x ½	2	2¼		1	
	42	bl	Bar 3 x 1	2	0		5	
	6	pp2	8" ⌀ W.I. Pipe	5	6½		9	Cut to Fit
Field	14		¾" ⌀ H.S. BOLT	0	2¼			
Do	14		¾" ⌀ H.S. Washer					

BILL OF MATERIAL — JOB NO. 69-487 — DWG. NO. K3-NH

ITEM 502.261
PROJECT No. I95-1(22)16
CONTRACT No. 4

STEEL: ASTM. W. I.
WELDING ELECTRODE E70
SHOP CONN: WELD
FIELD CONN: FIELD DRILL & BOLTED
HOLES: AS NOTED
PAINT: GALVANIZED PER A.S.T.M. A123
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

SCUPPER & EAST FACIA STRINGER PIER 15S, 11S, 10S, 6S, 2S & 1S

PRINT DIST.		
F.A.	1-12-70	3
Shop	1-29-70	4
DIST	2-17-70	10

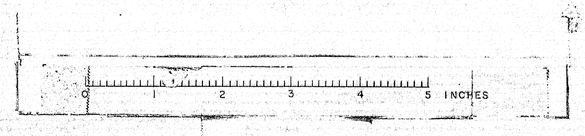
Bancroft & Martin Inc.
South Portland, Maine 04106

JOB: I 95 BRIDGE, N.H. APPROACH PORTSMOUTH, N.H.
CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

REV.		
CHECKED	1-9-70	J.P.F.
DRAWN	12-23-69	C.M.F.

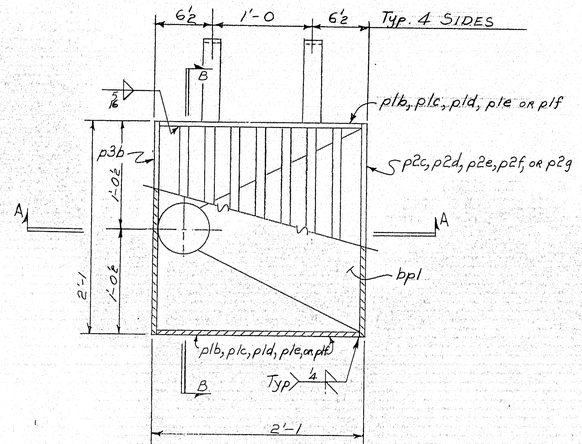
ORDER NO.	JOB NO.	DRAWING NO.
	69-487	K3-N.H.

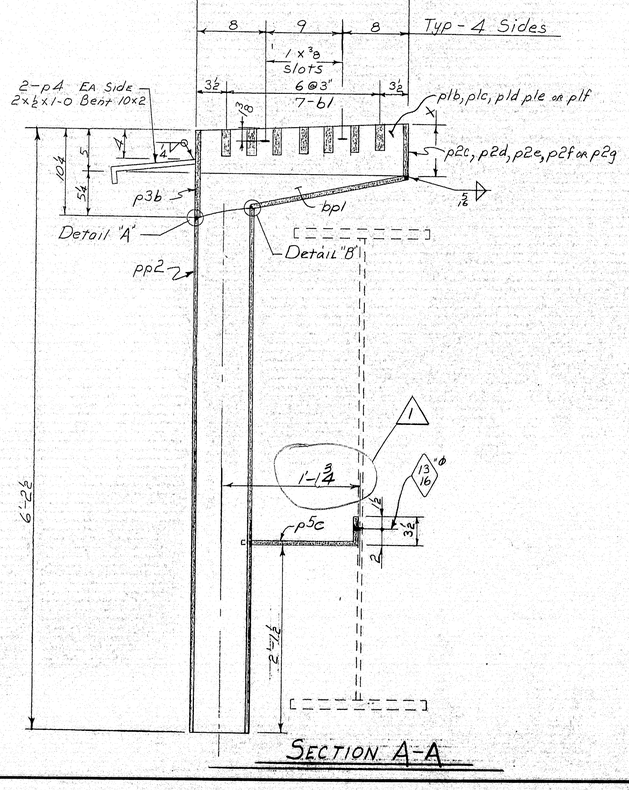
APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
FEB 9 1970
BY J.F. Hardesty
FEB 9 1970

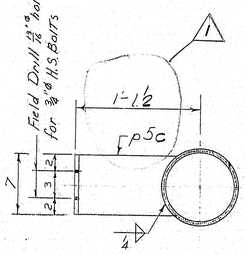


107-135

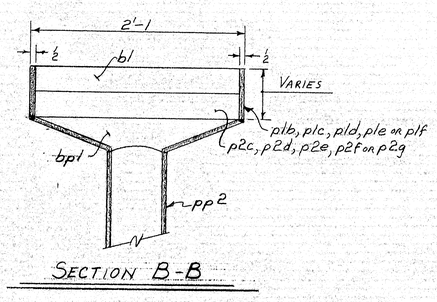
NOTE:
For Details of bp1
see Dwg 69-487-K1.



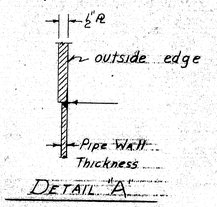




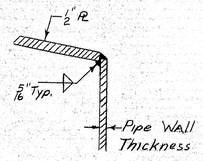
MARK	No.	SHAPE	X	PIER No.	TYPE	No
p1b	2	Bar $6\frac{3}{16}$ x ½ x 2-0	$6\frac{3}{16}$	15S	SC10	1
p2c	1	Bar $6\frac{3}{16}$ x ½ x 2-1				
p1c	4	Bar $6\frac{7}{16}$ x ½ x 2-0	$6\frac{7}{16}$	10S & 11S	SC11	2
p2d	2	Bar $6\frac{7}{16}$ x ½ x 2-1				
p1d	2	Bar $6\frac{9}{16}$ x ½ x 2-0	$6\frac{9}{16}$	6S	SC12	1
p2e	1	Bar $6\frac{9}{16}$ x ½ x 2-1				
p1e	2	Bar 6 x ½ x 2-0	6	2S	SC13	1
p2f	1	Bar 6 x ½ x 2-1				
p1f	2	Bar $5\frac{9}{16}$ x ½ x 2-0	$5\frac{9}{16}$	1S	SC14	1
p2g	1	Bar $5\frac{9}{16}$ x ½ x 2-1				



SECTION B-B



DETAIL "A"



DETAIL "B"

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
101 PARK AVE. NEW YORK 17, N.Y.
FEB 9 1970

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	ITEM NO.		REMARKS
SC10	1		Scupper			—			
SC11	2		Do			—			
SC12	1		Do			—			
SC13	1		Do			—			
SC14	1		Do			—			
	2	p1b	Bar $6\frac{3}{16}$ x ½	2	0		3		
	4	p1c	Bar $6\frac{7}{16}$ x ½	2	0				
	2	p1d	Bar $6\frac{9}{16}$ x ½	2	0				
	2	p1e	Bar 6 x ½	2	0		3		
	2	p1f	Bar $5\frac{9}{16}$ x ½	2	0		2		
	1	p2c	Bar $6\frac{3}{16}$ x ½	2	1		3		
	2	p2d	Bar $6\frac{7}{16}$ x ½	2	1				
	1	p2e	Bar $6\frac{9}{16}$ x ½	2	1				
	1	p2f	Bar 6 x ½	2	1				
	1	p2g	Bar $5\frac{9}{16}$ x ½	2	1		3		
	6	p3b	R $10\frac{1}{4}$ x ½	2	1		4		
	48	p4	Bar 2 x ½	1	0		6		bent 10x2
	6	p5c	Bar 7 x ½	1	$1\frac{3}{4}$		7		bend & Fit
	6	bp1	R $24\frac{9}{16}$ x ½	2	$24\frac{1}{4}$		1		
	42	b1	Bar 3 x 1	2	0		5		
	6	pp2	8" Ø W.I. Pipe	5	6½		9		Cut To Fit
Field	14		¾" Ø H.S. Bolt	0	$2\frac{1}{4}$				
Do	14		¾" Ø H.S. Washer						

ITEM 502.261
PROJECT No. I95-1(22)16
CONTRACT No. 4

STEEL: ASTM. W. I.
WELDING ELECTRODE E70
SHOP CONN: WELD
FIELD CONN: FIELD DRILL & BOLTED
HOLES: AS NOTED
PAINT: GALVANIZED PER A.S.T.M. A123
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

SCUPPER @ WEST MALL STRINGER PIER 15S, 11S, 10S, 6S, 2S & 1S

PRINT DIST.		
FA	1-12-70	3
Shop	1-29-70	4
DIST	2-17-70	10
SHOP	4-10-70	4

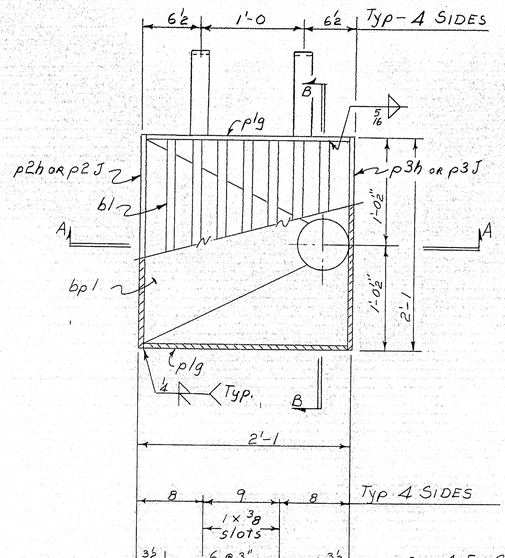
Bancroft & Martin Inc.
South Portland, Maine 04106

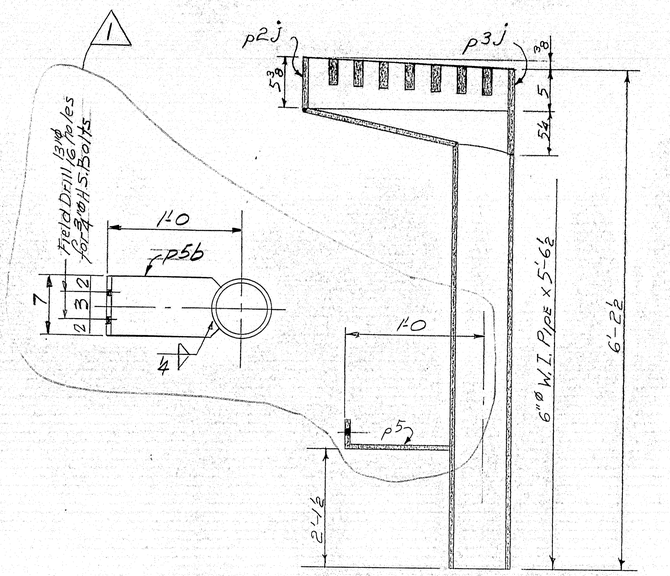
JOB: I 95 BRIDGE, N.H. APPROACH
PORTSMOUTH, N.H
CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

REV.	4-9-70	J.P.F.	ORDER NO.	JOB NO. 69-487
CHECKED	1-9-70	J.P.F.		DRAWING NO. K4-N.H
DRAWN	12-24-69	G.M.F.		

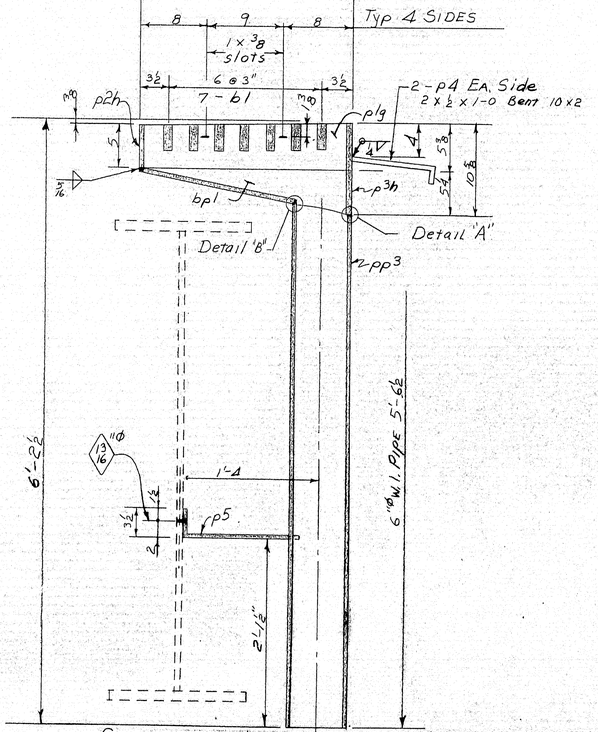
107-136

Note:
For Details of bp1,
see Dwg. 69-487-K1

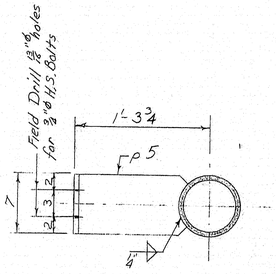


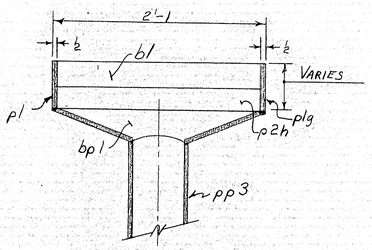


SECTION A-A FOR SC16
6 REQ'D @ MEDIAN CURB

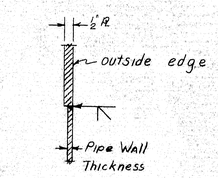


SECTION A-A FOR SC15 @ EXT. CURB - 6 REQ'D

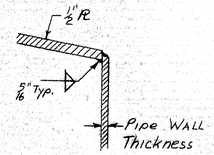




SECTION B-B



DETAIL "A"



DETAIL "B"

SHIP MARK	NO.	MARK	SHAPE	LENGTH		WT.	ITEM NO.		REMARKS
SC15	6		SCUPPERS			—			
SC16	6		Do			—			
	24	p1g	Bar 5⅜ x ½	2	0		2		
	6	p2h	Bar 5" x ½	2	1		3		
	6	p3h	R 10⅜ x ½	2	1		4		
	48	p4	Bar 2 x ½	1	0		6		bent 10 x 2
	84	b1	Bar 3 x 1	2	0		5		
	12	bp1	R 24¾ x ½	2	2¼		1		
⚠1	6	p5	Bar 7 x ½	1	5		7		bend & Fit
	6	p2j	Bar 5⅜ x ½	2	1		3		
	6	p3j	R 10¼ x ½	2	1		4		
⚠1	6	p5b	Bar 7" x ½	1	1½				BEND & FIT
	12	pp3	6" ø W.I. PIPE	5	6½		9		Cut to Fit
Field	26		¾" ø H.S. BOLT	0	2¼				
Do	26		¾" ø H.S. Washer						

ITEM 502.261
PROJECT No F-95-1(22),16
CONTRACT No. 4

STEEL: ASTM. W.I.
WELDING ELECTRODE E70
SHOP CONN: WELDED
FIELD CONN: FIELD DRILL & BOLTED
HOLES: AS NOTED
PAINT: GALVANIZED PER A.S.T.M. A123.
SPECIAL CLEANING: BLAST CLEAN
APPROVED: 1/27/70

SCUPPERS @ PIER 17S, 18S, & ABUTMENT

PRINT DIST.		
F.A.	1-12-70	3
Shop	1-29-70	4
DIST	2-17-70	10
Shop	4-10-70	4

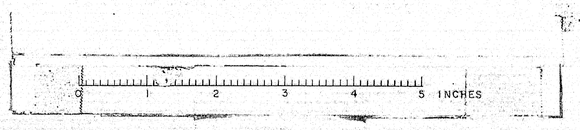
Bancroft & Martin Inc.
South Portland, Maine 04106

JOB: I95 BRIDGE, N.H. APPROACH PORTSMOUTH, N.H
CUSTOMER: CIANCHETTE BROS.
DESIGNER: HARDESTY & HANOVER

⚠				
REV.	4-9-70	J.P.F.	ORDER NO.	JOB NO. 69-487	DRAWING NO. K5-NH
CHECKED	1-8-70	J.P.F.		
DRAWN	12-29-69	C.M.F.		

RECEIVED HARDESTY & HANOVER CONSULTING ENGINEERS 101 PARK AVE. NEW YORK 17, N.Y. FEB 9 1970
BY E.F. Wanderstock

107-137



GIRDER-G210

DETAIL-AA

SECT (H) (J) (K) (L) (M) (P)

WORK THIS DWG. WITH DWG. #325A

GIRDER - G2-10

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

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

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY DML DATE 9-26-69 IN CHARGE B.K. BERTOLAT
CHECKED BY RJ DATE 10/20/69 SHOP NO. 2
CONTRACT GJ-6249-020 DRAWING NO. 325-1

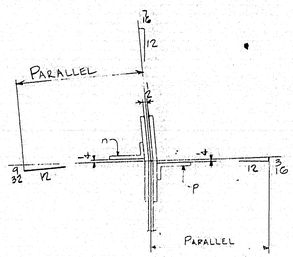
MATERIAL
RIVETS OR BOLTS
OPEN HOLES
A325 FIELD BOLTS
SHOP CONTACT SURFACES
PAINT
FOR NOTES SEE DWG 325A

NO	DATE	INIT.	REVISION

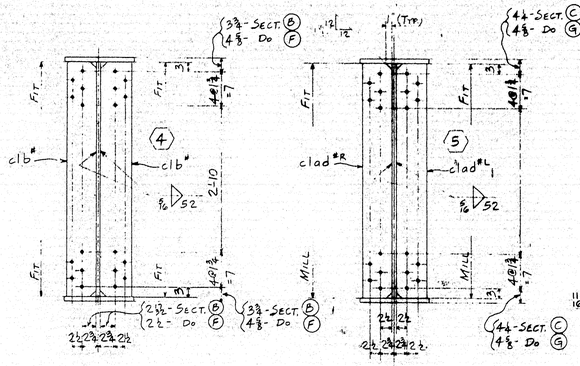
SUBMITTAL DATE

107-138

NOV 1 8 1969

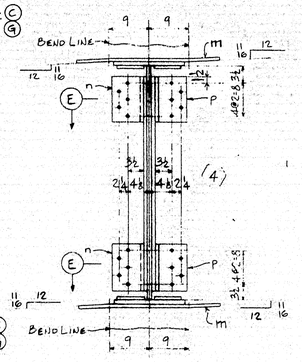


SECT. (E)



SECT. (B)-(F)
(DEVELOPED)

SECT. (C)-(G)
(DEVELOPED)



SECT. (D)
(DEVELOPED)

SHOP BILL

ITEM	ASSEMBLY MARK	NO	SHAPE	SECTION SIZE	SECTION SIZE OR FOUNDS	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 - G2-10											
2													
3	a	1	PL	54		½	37	9⅝	56W × ½	38	9¾	46	18
4	b	1	PL	54		7/16	57	9⅝	56½ × 7/16	58	8¼	44	17
5	c	1	PL	54		½	38	1⅛	56W × ½	38	5¾	46	35
6	d	1	PLU	16		14	37	7⅛		38	7⅛	40	18
7	f	1	PLU	16		14	37	9⅝					
8	g	1	PLU	W6		¾	57	9⅝		58	24	37	15
9	h	1	PLU	16		1⅜	38	1⅛		38	3¾	39	17
10	k	1	PLU	16		1⅜	37	11¼					
11	m	2	PL	25½		½	2	7½	BENT	22	4	24	45
12	n	2	L	7	3½	½	0	11	BENT CF-7×4×½	40	0	36	39
13	p	2	L	7	3½	½	0	11		40	0	36	39
14	ac	1	PLU	16		¾	57	9⅝		58	24	37	15
15	c1b*	8	BR	7		½	4	6	(F2E)	13	10¼	47	19
16	c1ad*R	2	BR	7½		¾	4	6	(F1E)(M1E)	13	10¼	47	18
17	c2p*	1	PLU	13		⅜	4	2	(BENT)	33	6	47	11A
18	c2s*	1	PLU	13		⅜	4	2		33	6	47	11A
19	c2cg*	2	BR	G½		½	2	1½		19	1	47	20
20	c2ch*	2	BR	G½		½	2	1½		19	1	47	20
21													
22	US1	1	UPPER SHOE						(DET. ON DWG #2)				
23	US13	1	UPPER SHOE						(DET. ON DWG #2)				
24		13	325	⅞*			0	2½					
25		18	325	⅞*			0	2¾					
26		18	325	⅞*			0	3¼	H H H - H H N				
27		42	325	⅞*			0	3½					
28		97	HW	1⅜*		F6*	3/16						
29		6	325	⅞*			0	3					
30		2	SB	⅞*			0	2¾					
31													
32	FWS	1	WD			16	104	0					
33	FWL	1	WD			F6	534	0¼					
34													
35	FW	1	WD			½	2	4					
36	SDS	1	WD			7/16	9	0					
37	V60S	1	WD			½	5	4					
38													
39													
40	s	1	PL	14½		⅝	3	7¼		26	0	28	19
41	t	1	PL	14½		⅝	4	3½		26	0	28	19
42	w	1	PL	14½		⅝	4	3½	BENT	26	0	28	19
43	y	1	PL	14½		⅝	4	3½		26	0	28	19
44	aa	1	PL	14½		⅝	4	3½		26	0	28	19
45	ab	1	PL	14½		⅝	4	3		26	0	28	19
46													
47													
48													
49													
50													
51													
52													
53													
54													
55													

INST. "2E"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-10	GIRDER (60½×54¾×134:9)	

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

PAY ITEM-504-711

GIRDER-G2-10

WORK THIS DWG. WITH DWG. #325

(BL) ONE COAT OF BLUE LACQUER

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.

OH - OPEN HOLES - NO 3

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

USE E7018, E6018 LOW HYDROGEN ELECTRODES OR EQUAL. E60-S FOR WELDING.

MIN. THICK. AT POINT OF WELDING - INCHES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO AND INCL. 1 1/8"	50 DEG.
OVER 1 1/8" TO 2 1/2"	70 DEG.
OVER 2 1/2" TO 4"	150 DEG.
OVER 4"	225 DEG.

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

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

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

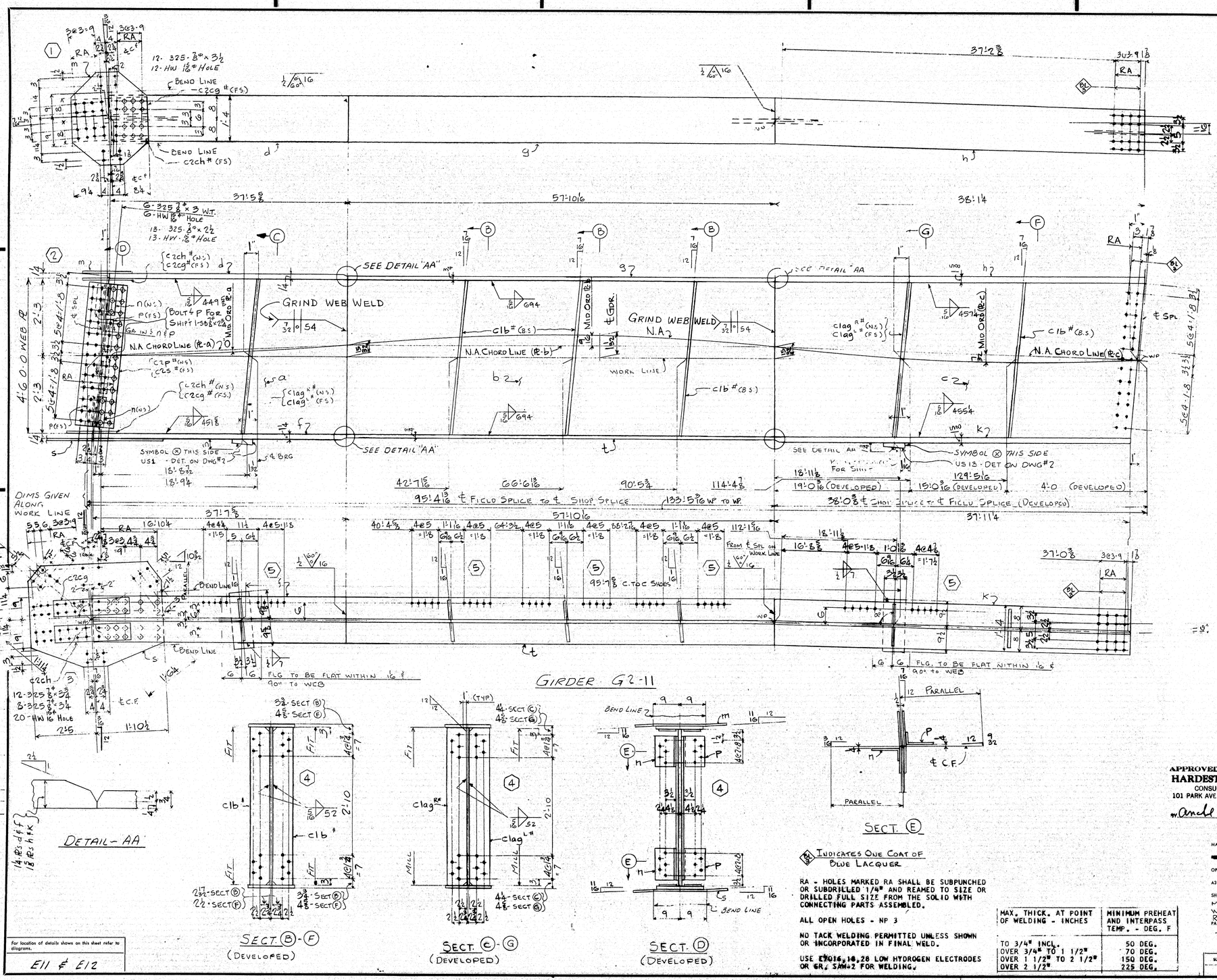
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY DML DATE 9-26-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 10/20/69 SHOP NO. 2 97
CONTRACT CJ-6249-020 DRAWING NO. 325A

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

b c

0 1 2 3 4 5 INCHES

107-139



SHOP BILL

ASSEMBLY MARK	NO	SHAPE	SIZE	SECTION Sizes of Parts	Thick	LENGTH Ft	In.	REMARKS
ONE GIRDER - G2-11								
a	1	PL	54		1/2	37	7 5/8	56 x 1/2
b*	1	PL	54		1/16	57	10 1/16	56 1/2 x 7/8
c	1	PL	54		1/2	38	1 1/4	56 x 1/2
d	1	PLU	16		1 1/4	37	5 3/4	
f	1	PLU	16		1 1/4	37	7 3/4	
g	1	PLU	16		3/4	57	10 1/16	
h	1	PLU	16		1 5/8	38	1 1/4	
K	1	PLU	16		1 5/8	37	11 1/4	
m	1	PL	25 1/2		1/2	2	7 1/2	BENT
n	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7 x 4 x 1/2
P	2	L	7	3 1/4	1/2	0	11	BENT C.F. 7 x 4 x 1/2
S	1	PL	35		5/8	4	3 1/2	BENT
C 1b#	8	BR	7		1/2	4	6	(F2E)
C 1ag1 R#2	2	BR	7 1/2		3/4	4	6 3/4	(F1E) (M1E)
C 2P#	1	PW	13		3/8	4	2	BENT
C 2S#	1	PW	13		3/8	4	2	BENT
C 2ch#	2	BR	G 1/2		1/2	2	1 1/2	
C 2cg#	2	BR	G 1/2		1/2	2	1 1/2	
US1	1	UPPER SHOE						(DET. ON DWG #2)
US13	1	UPPER SHOE						(DET. ON DWG #2)
	8	325	7/8 ϕ			0	3 1/4	
	13	325	7/8 ϕ			0	2 1/2	
	12	325	7/8 ϕ			0	3 1/2	
	12	325	7/8 ϕ			0	3 3/4	
	51	HW	1 1/16 ϕ		15/16	3/16		
	6	325	1 1/16 ϕ			0	3	
	2	SD	1 1/16 ϕ			0	2 3/4	
FWS	1	WD			5/16	104	0	
FWL	1	WD			5/16	533	7 3/4	
FW	1	WD			1/2	2	4	
SDS	1	WD			1/16	9	0	
VGOS	1	WD			1/2	5	4	
℄	1	PLU	16		3/4	57	10 1/16	

MILL ORDER LENGTH Ft.	In.	ITEM Page	No.
38	0	46	19
58	8 3/4	44	17
38	5 3/4	46	35
37	8 3/4	40	19
38	7 3/4	40	18
58	2 4	37	15
38	3 3/4	39	17
38	3 3/4	39	17
22	4	24	45
40	0	36	39
40	0	36	39
27	3 3/8	47	08
13	10 3/4	47	19
13	10 3/4	47	18
33	6	47	11
33	6	47	11
19	1	47	20
19	1	47	20
58	24	37	15

INSTALLMENT - "2E"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-11	GIRDER (60 1/2 x 34 1/2 x 136'-0")	

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

PAY ITEM - 504.711

GIRDER - G2-11

MATERIAL - A36 STEEL
BOLTS - 7/8 ϕ A325
OPEN HOLES - 1 1/16 ϕ
A325 FIELD BOLTS - 7/8 ϕ
SHOP CONTACT SURFACES - NO PAINT
MILLING: AS NOTED
WELDING: AS NOTED
REAMING: AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

Ⓑ INDICATES ONE COAT OF BLUE LACQUER

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.

NO.	DATE	REVISION

SUBMITTAL | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10
DATE

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY DML DATE 9-25-69 IN CHARGE B.K. BERTOLET
CHECKED BY RJ DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 326

107-140

35433 (Rev. 7-68) NOV 1 7 1969

GIRDER - G2-12

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION Size	SECTION Size or Pounds	SECTION Thick	LENGTH Ft.	LENGTH In.	REMARKS	PIECE MARK LENGTH Ft.	PIECE MARK LENGTH In.	PIECE MARK
1		ONE - GIRDER - G2-12										
2	a	1	PL	54		½	37	5⅞	56×½	38	00	
3	b	1	PL	54		7/16	57	10⅛	56×7/16	58	8¼	
4	c	1	PL	54		½	38	1¼	56×½	38	5¾	
5	d	1	PLU	16		1¼	37	4		37	8¼	
6	f	1	PLU	16		1¼	37	6		37	8¾	
7	g	2	PLU	16		¾	57	10⅛		58	2¾	
8	h	1	PLU	16		1⅜	38	1¼		38	5¾	
9	K	1	PLU	16		1⅜	37	11¼		38	3¾	
10	m	2	PL	25½		½	2	7½	BENT	2	2¼	
11	n	2	L	7	3½	½	0	11	BENT C.F. 7×4×½	4	0	
12	P	2	L	7	3½	½	0	11	BENT C.F. 7×4×½	4	0	
13												
14	c1b#	8	BR	7		½	4	6	(FZE)	13	10¼	
15	c1ag# / c1al#	2	BR	7½		½	4	6½	(FIE) (MIE)	13	10¼	
16	c2P#	1	PW	13		⅜	4	2	BENT	33	6	
17	c2S#	1	PW	13		⅜	4	2	BENT	33	6	
18	c2cg	2	BR	6½		½	2	1½		19	1	
19	c2ch	2	BR	6½		½	2	1½		19	1	
20	US1	1	UPPER SHOE						(DET. ON DWG #2)			
21	US13	1	UPPER SHOE						(DET. ON DWG #2)			
22		6	325	⅞			0	5				
23		13	325	⅞			0	2½				
24		24	325	⅞			0	3½				
25		43	HW	1¾	15/16	1/16						
26		2	SB	⅞			0	2⅜				
27												
28												
29	FWS	1	WD			5/8	104	0				
30	FWL	1	WD			5/16	533	3½				
31												
32	FW	1	WD			½	2	4				
33	SOS	1	WD			1/16	9	0				
34	VGOS	1	WD			½	5	4				
35												
36												
37												
38												
39												
40												
41												
42												

DETAIL - AA

SECT. (B)-(F) (DEVELOPED)

SECT. (C)-(G) (DEVELOPED)

SECT. (D) (DEVELOPED)

SECT. (E)

(S1) INDICATES ONE COAT BLUE LACQUER

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

ALL OPEN HOLES = NP 3

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

USE E60XX, E70XX LOW HYDROGEN ELECTRODES OR EQUAL FOR WELDING.

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

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

E11 & E12

INSTALLMENT - "2E"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-12	GIRDER (60½×31½×134'-6½)	

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

PAY ITEM - 504.711

GIRDER - G2-12

MATERIAL - A36 STEEL
SHOP BOLTS - ⅞ø 325
OPEN HOLES - 1⅛ø
A325 FIELD BOLTS - ⅞ø
SHOP CONTACT SURFACES - NO PAINT
MILLING: AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-D, TYPE II RED LEAD (U.N.)

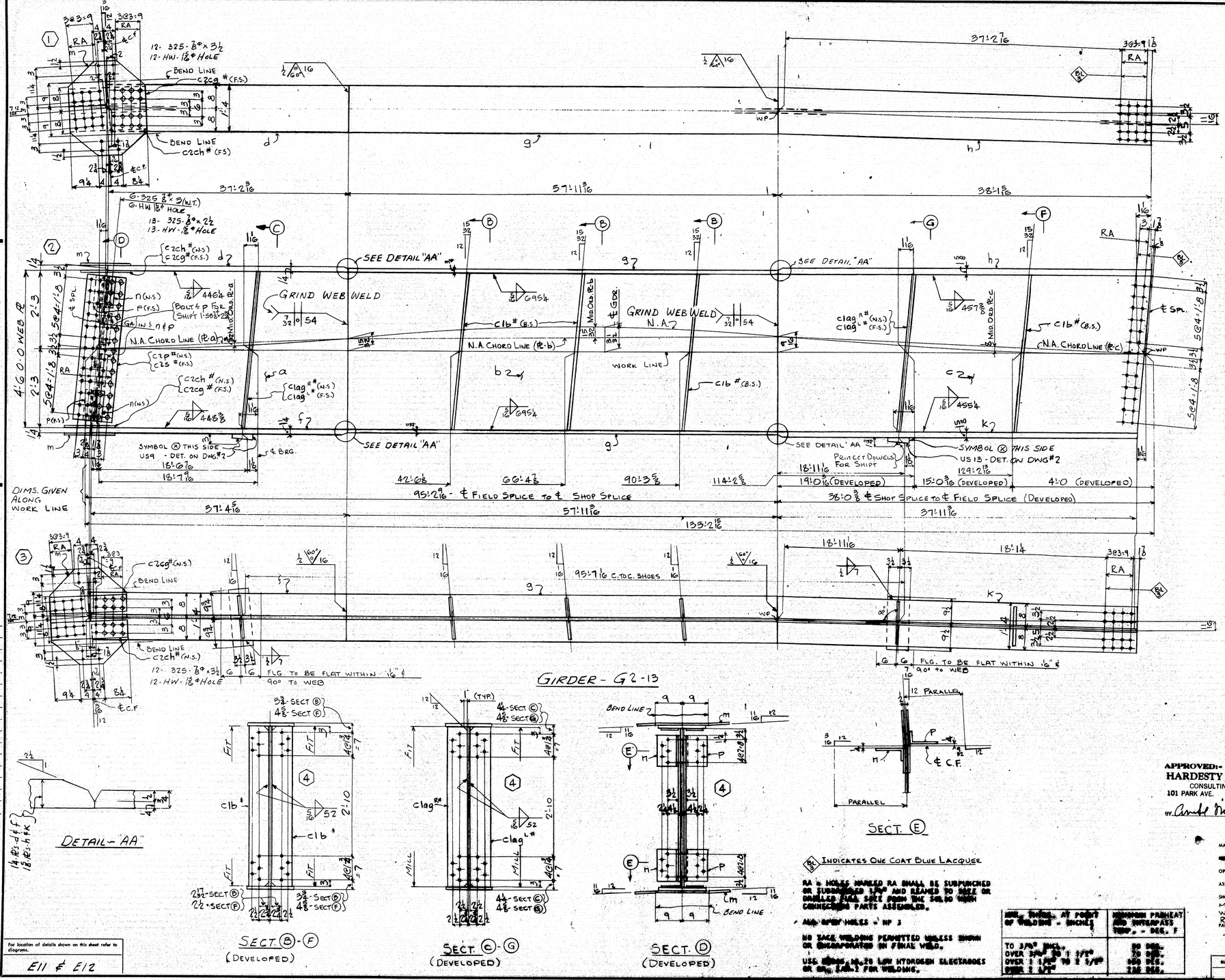
NO.	DATE	BY	REVISION
0	9/68	DML	

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

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM POTTSTOWN WORKS
MADE BY DML DATE 9-18-69 IN CHARGE B.K. BERTOLET
CHECKED BY R.J. DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 327

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

107-141



GIRDER - G2-13

Ⓑ INDICATES ONE COAT BLUE LACQUER

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

* ALL OPEN HOLES = NF 3

NO FACE WELDING PERMITTED UNLESS SHOWN OR RECOMMENDED ON FINAL WELD.

USE E60XX, H.I. 28 LOW HYDROGEN ELECTRODES OR EQ. [A.W.S.] FOR WELDING.

MIN. TEMP. AT POINT OF WELDING - DEGREES	MINIMUM PREHEAT AND INTERPASS TEMP. - DEG. F
TO 32° INCL.	50 DEG.
OVER 32° TO 0° INCL.	70 DEG.
OVER 0° TO 32° INCL.	150 DEG.
OVER 32°	220 DEG.

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

E11 & E12

SHOP BILL

ITEM	ASSEMBLY MARK	NO.	SHAPE	SECTION: Size	SECTION: Size or Pounds	SECTION: Thick	LENGTH: Ft.	LENGTH: In.	REMARKS	MILL ORDER: LENGTH: Ft.	MILL ORDER: LENGTH: In.	MILL ORDER: Pieces
1		ONE - GIRDER - G2-13										
2	a	1	PL	54		½	37	4⅝	54×½	38	0	44
3	b	1	PL	54		7/16	57	11⅜	54×7/16	58	8¼	44
4	c	1	PL	54		½	38	1⅜	54×½	38	5¾	46
5	d	1	PLU	16		¼	37	2⅛		37	8¼	40
6	f	1	PLU	16		¼	37	4⅝		37	8¼	40
7	g	2	PLU	16		¾	57	11⅜		58	2¼	37
8	h	1	PLU	16		⅝	38	1⅜		38	3¾	39
9	K	1	PLU	16		⅝	37	11⅜		38	3¾	39
10	m	2	PL	25½		½	2	7½	BENT	22	4	24
11	n	2	L	7	3½	½	0	11	BENT C.F. 7×4×½	40	0	36
12	P	2	L	7	3½	½	0	11	BENT C.F. 7×4×½	40	0	36
13												
14	c1b#	8	BR	7		½	4	6	(FZE)	13	10¼	47
15	c1ag L# 3½	2	BR	7½		⅝	4	6½	(FIE)(MIE)	13	10¼	47
16	c2p#	1	PLU	13		⅝	4	2	BENT	33	6	47
17	c2s#	1	PLU	13		⅝	4	2	BENT	33	6	47
18	c2cg#	2	BR	6½		½	2	1½		19	1	47
19	c2ch#	2	BR	6½		½	2	1½		19	1	47
20	US9	1	UPPER SHOE						(DET. ON DWG #2)			
21	US13	1	UPPER SHOE						(DET. ON DWG #2)			
22		6	325	⅞*			0	3				
23		13	325	⅞*			0	2½				
24		24	325	⅞*			0	3½				
25		43	HW	1¼*	15/16	5/16						
26		2	SB	⅝*			0	2¾				
27												
28												
29	FWS	1	WD			5/16	104	0				
30	FWL	1	WD			5/16	532	11½				
31												
32	FW	1	WD			½	2	4				
33	SDS	1	WD			1/16	9	0				
34	VGOS	1	WD			½	5	4				
35												
36												
37												
38												
39												
40												
41												
42												
43												

INSTALLMENT - "2E"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-13	GIRDER (60½×31½×134'-5½)	

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

PAY ITEM - 504.711

GIRDER - G2-13

MATERIAL - A36 STEEL
BOLTS - ⅞" ø A325
OPEN HOLES - 1⅛" ø
A325 FIELD BOLTS - ⅞" ø
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

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

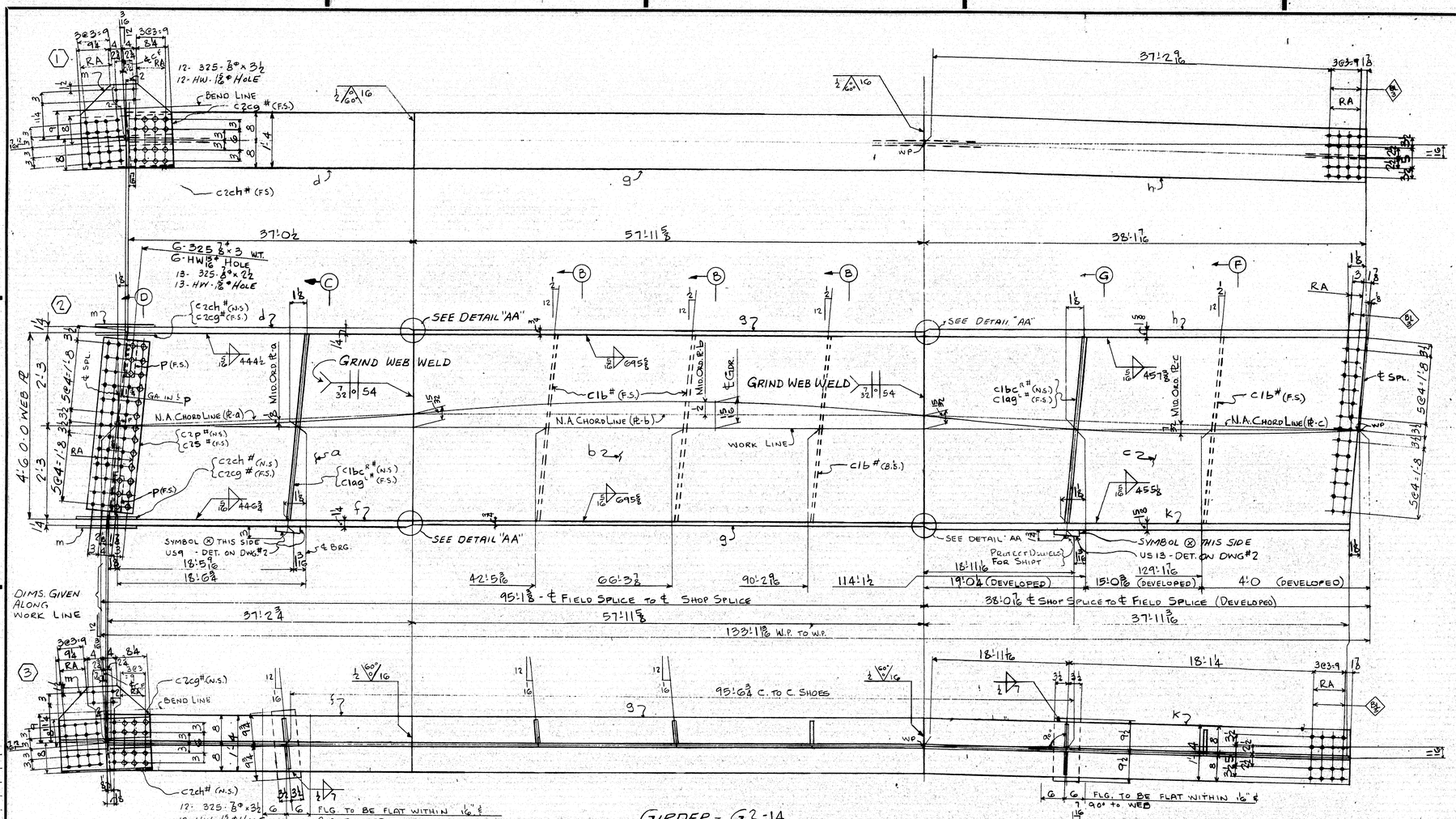
CUSTOMER: MAINE STATE HIGHWAY COMMISSION
STRUCTURE: PISCATAQUA RIVER BRIDGE
PROJECT No. I-95-1(32)16
CONT. No. 3 NEW HAMPSHIRE APPROACH

BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

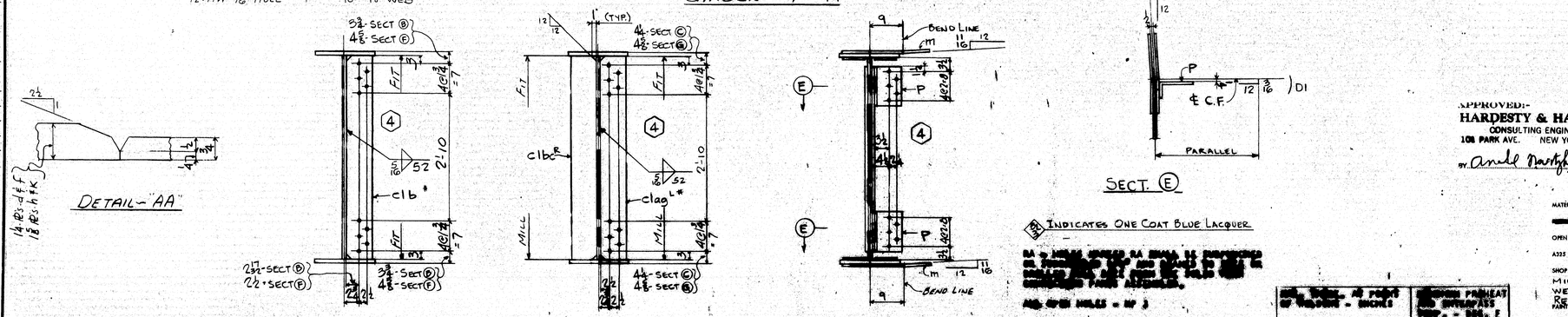
POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY DML DATE 9-19-69 IN CHARGE E.C. BERTOLET
CHECKED BY RJ DATE 10/23/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 328

107-142

3433 (Rev A-1-63) NOV 17 1969



GIRDER - G2-14



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

E11 ℄ E12

(A) INDICATES ONE COAT BLUE LACQUER.

[redacted]

[redacted]	[redacted]
TO 3/4" INCL. OVER 3/4" TO 1 1/2" INCL. OVER 1 1/2"	50 DEG. 150 DEG. 200 DEG.

MATERIAL - A36 STEEL
BOLTS - ⅞ø 325
OPEN HOLES - 1⅛ø
A325 FIELD BOLTS - ⅞ø
SHOP CONTACT SURFACES - NO PAINT
MILLING - AS NOTED
WELDING - AS NOTED
REAMING - AS NOTED
PAINT - ONE COAT AASHO-M72-TYPE II RED LEAD (U.N.)

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			

D. GAL

SHOP BILL

MARK	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 PIECE	MILL ORDER WT.
1		ONE-GIRDER-G2-14											
2	a	1	PL	54		½	37	2¾	56×½	38	0	42	19
3	b	1	PL	54		7/16	57	11⅜	56½×7/16	58	8¾	64	29
4	c	1	PL	54		½	38	1⅛	56×½	38	5¾	46	35
5	d	1	PLV	16		¼	37	0⅝		37	8¾	40	19
6	f	1	PLV	16		¼	37	2⅝		37	8¾	40	19
7	g	2	PLV	16		¾	57	11⅜		58	8¾	64	29
8	h	1	PLV	16		15/16	38	1½		38	5¾	39	17
9	k	1	PLV	16		⅞	37	11¼		38	3¾	39	17
10	m	2	PL	25½		½	1	11¾	BENT	22	4	24	45
11													
12	P	2	L	7	3¼	½	0	11	BENT C.E. 7 x 4 x ½	40	0	36	39
13	C1bc R#	2	BR	7½		½	4	6½	(FIE) (MIE)	13	10¼	47	18
14	C1b #	4	BR	7		½	4	6	(FZE)	13	10¼	47	19
15	C1ag L #	2	BR	7½		½	4	6½	(FIE) (MIE)	13	10¼	47	18
16	C2p #	1	PLV	13		⅜	4	2	BENT	33	6	47	11A
17	C2s #	1	PLV	13		⅜	4	2	BENT	33	6	47	11A
18	C2cg	2	BR	6½		½	2	1½		19	1	47	20
19	C2ch	2	BR	6½		½	2	1½		19	1	47	20
20	US9	1	UPPER SHOE						(DET. ON DWG #2)				
21	US13	1	UPPER SHOE						(DET. ON DWG #2)				
22		6	325	⅞ø			0	3					
23		13	325	⅞ø			0	2½					
24		24	325	⅞ø			0	3½					M
25		43	HW	1⅛ø		15/16		3/16					
26													
27													
28													
29	FWS	1	WD			5/16	69	4					
30	FWL	1	WD			5/16	332	6					
31													
32	FW	1	WD			½	2	4					
33	SDS	1	WD			7/16	9	0					
34	VGOS	1	WD			½	5	4					
35													
36													
37													
38													
39													
40													
41													
42													

INSTALLMENT - "2E"

REQUIRED LIST

QTY.	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G2-14	GIRDER (60½ x 25½ x 133'-5)	

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

PAY ITEM - 504.711

OCT 29 1969

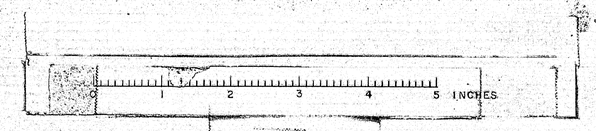
GIRDER - G2-14

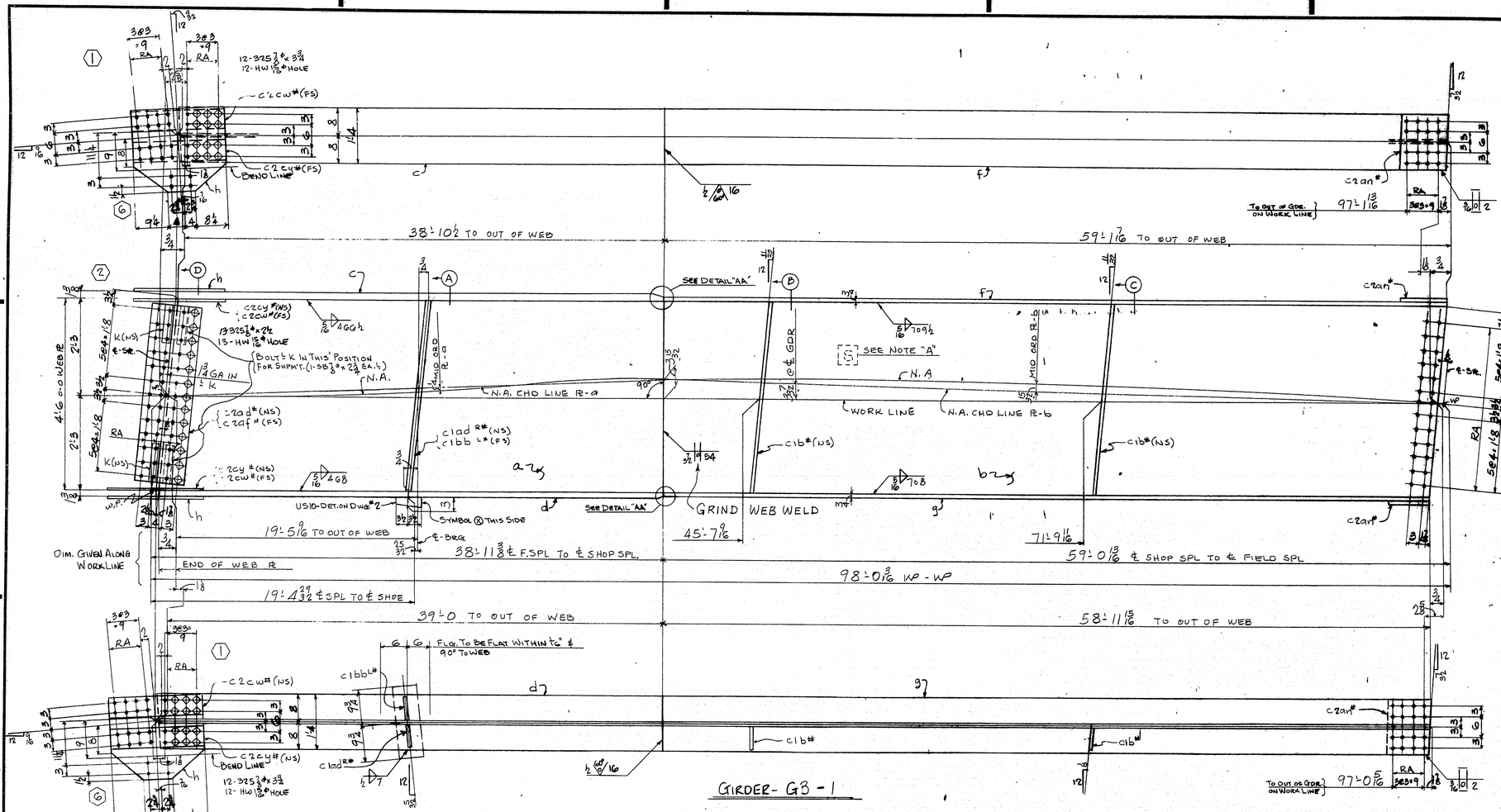
CUSTOMER MAINE STATE HIGHWAY COMMISSION
STRUCTURE PISCATAQUA RIVER BRIDGE
PROJECT NO. I-95-1(22)16
CONT. NO. 3 NEW HAMPSHIRE APPROACH

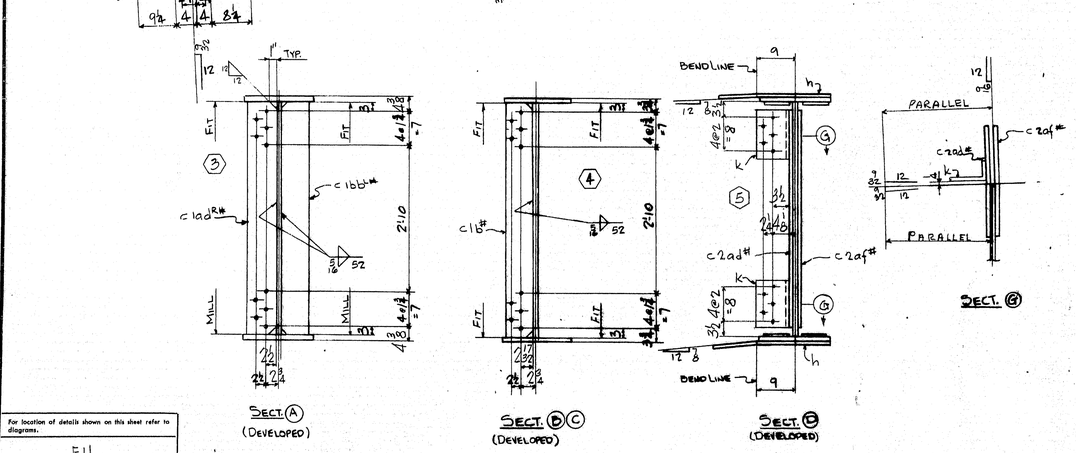
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION

FOTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY DML DATE 9-23-69 IN CHARGE B.E. BEETOLET
CHECKED BY RJ DATE 10/20/69 SHOP NO. 2
CONTRACT CJG249-020 DRAWING NO. 329

107-143







NOTE "A" - SHOP TO USE REMOVABLE PAINT FOR STENCILING.

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	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER PARK	MILL ORDER MK
1		ONE GIRDER G3 - 1											
2	a	1	PL	54		1/2	39	0	56 x 1/2	39	8 1/2	46	17
3	b	1	PL	54		16	59	1 7/8	56 1/2 x 16	59	6 1/2	44	16
4	c	1	PLW	16		1 3/8	38	10 1/16		39	2 3/4	40	16
5	d	1	PLW	16		1 3/8	39	0 1/16		39	2 3/4	40	16
6	f	1	PLW	16		1/2	59	1 3/8		59	4 1/2	37	16
7	g	1	PLW	16		1/2	59	0 1/2		59	4 1/2	37	16
68	h	2	PL	25 1/2		1/2	1	11 1/2	(BENT)	30	5 1/8	47	10C
9	k	2	L	7	3 1/4	1/2	0	11	(BENT) C.F. 7 x 4 x 1/2 L	40	0	36	39
10													
11													
12	C1 AD#	1	BR	7 1/2		3/4	4	6	(MIE)(FIE)	13	10 1/4	47	18
13	C1 BB#	1	BR	7 1/2		3/4	4	6	(MIE)(FIE)	13	10 1/4	47	18
14	C1 B#	2	BR	7		1/2	4	6	(FIE)	13	10 1/4	47	19
15	C2 AD#	1	PLW	13		3/8	4	2	(BENT)	30	6	47	11A
16	C2 AF#	1	PLW	13		3/8	4	2	(BENT)	33	6	47	11A
17	C2 CW#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
18	C2 CY#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
19	C2 AN#	2	RL	16		1/2	1	0 25/32				J	
20													
21													
22		2	SB	1 1/8			0	2 3/4				M	
23													
24													
25													
26	US10	1	UPPER SHOE						DET. ON DWG. #2				
27													
28		13	325	7/8			0	2 1/2					
29		24	325	1/8			0	8 3/4				M	
30		37	HW	1 1/8		15/16							
31													
32													
33													
34	FWL	1	WD			5/16	392	0					
35	FWS	1	WD			5/16	34	8					
36	FW	1	WD			1/2	1	2					
37	SDS	1	WD			1/16	4	6					
38	VGDS	1	WD			3/4	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.-BW

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-1	GIRDER (23 3/8 x 60 x 99 2 1/2)	

PAY ITEM - 304.711

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

MATERIAL A36 STEEL
SHOP BOLTS 7/8" 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 (LN)
REAM - AS NOTED

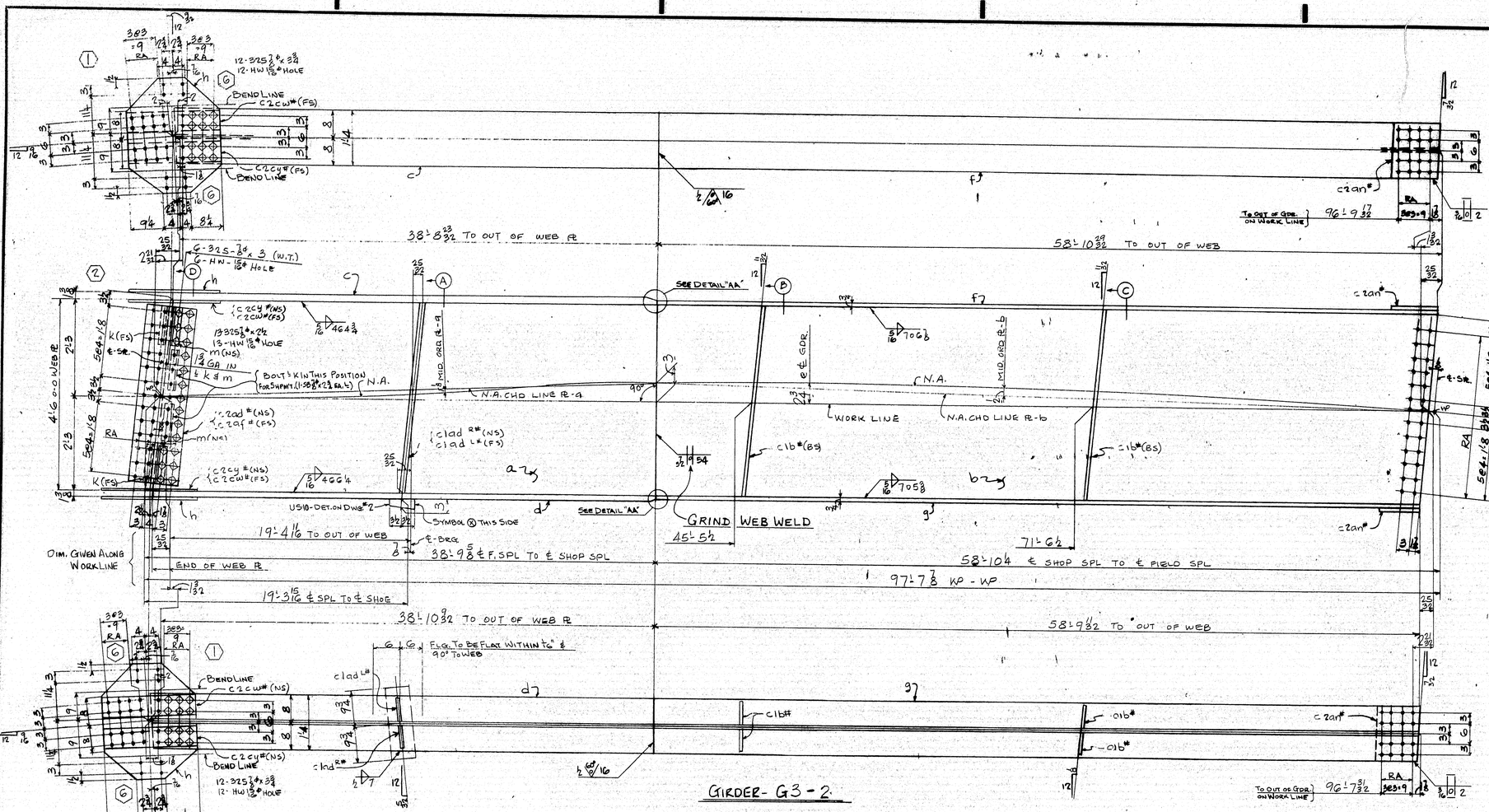
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

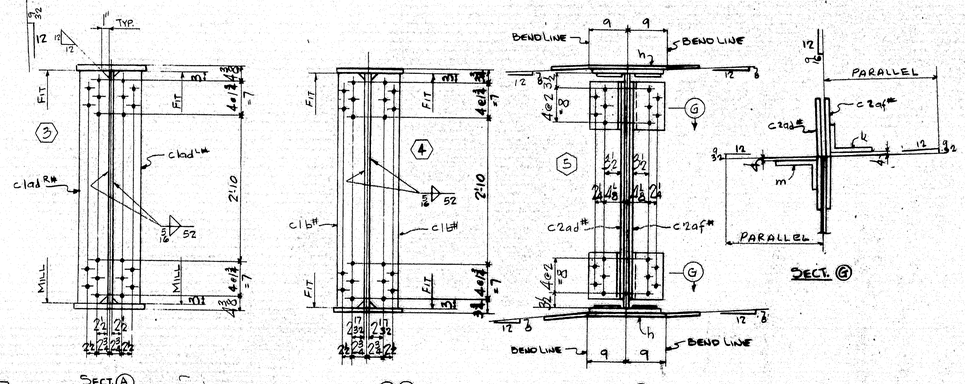
NO.	DATE	INIT.	REVISION
0			
9			
8			
7			
6			
5			
4			
3			
2			
1			

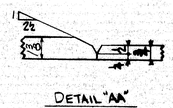
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(12)16
CONT. No. 3 - NEW HAMPSHIRE END
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATING DIVISION
POTTSTOWN DRAFTING ROOM Pottstown
MADE BY CWG DATE 9-5-69 CHECKED BY GB DATE 9-24-69
CONTRACT CT-6241-678 SHEET No. 330

GIRDER - G3 - 1

107-144







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 PAGE
1			ONE GIRDER G3-2									
2	a	1	PL	54		1/2	38	10 29/32	54 x 1/2	39	8 1/2	46 17
3	b	1	PL	54		1/16	58	10 29/32	50 1/2 x 1/16	59	6 1/2	46 17
4	c	1	PLU	16		1 3/8	38	8 15/16		39	2 3/4	40 16
5	d	1	PLU	16		1 3/8	38	10 1/2		39	2 3/4	40 16
6	f	1	PLU	16		3/4	58	11 1/16		59	4 1/2	58 08
7	g	1	PLU	16		3/4	58	9 1/2		59	4 1/2	58 08
8	h	2	PL	25 1/2		1/2	2	7 1/2	(BENT)	5	6 1/2	47 10A
9	k	2	L	7 3 1/2		1/2	0	11	(BENT) C.F.7 x 4 x 1/2	40	0	36 39
10	m	2	L	7 3 1/2		1/2	0	11	(BENT) C.F.7 x 4 x 1/2	40	0	36 39
11												
12												
13	C1	1 ad#	BR	7 1/2		3/4	4	6	(MIE)(FIE)	13	10 1/4	47 18
14	C1	1 b#	BR	7		1/2	4	6	(F2E)			J
15	C1	2 ad#	PLU	13		3/8	4	2	(BENT)	33	6	47 11A
16	C1	2 af#	PLU	13		3/8	4	2	(BENT)	33	6	47 11A
17	C1	2 cw#	BR	6 1/2		1/2	2	1 1/2		19	1	47 20
18	C1	2 cy#	BR	6 1/2		1/2	2	1 1/2		19	1	47 20
19	C1	2 an#	PL	16		1/2	1	0 25/32				J
20												
21		2	SB	8			0	2 3/4				M
22												
23												
24												
25												
26	US10	1	UPPER SHOE						DET. ON DWG #2			
27		G	325	8			0	3				
28		13	325	8			0	2 1/2				
29		24	325	8			0	3 3/4				M
30		43	HW	18	15/8	3/16						
31												
32												
33												
34	FWL	1	WD			5/16	390	6 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			3/4	2	8				
39	SD	1	WD			3/16	0	8				
40												
41												
42												
43												
44												
45												
46												
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48												
49												
50												
51												
52												
53												
54												
55												

INST.-3W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-2	GIRDER (3 1/2 x 60 1/2 x 98'-10 1/2)	

APPROVED:
HARDESTY & HANOVER
CONSULTING ENGINEERS
NEW YORK 17, N.Y.
By Arnold Novitzky OCT 29 1969

PAY ITEM - 504.711

GIRDER G3-2

MATERIAL A36 STEEL
BOLTS 7/8" A325
OPEN HOLES 15/8"
A325 FIELD BOLTS 8"
SHOP CONTACT SURFACES No Paint
MILL - As Noted
WELD - As Noted
PAINT ONE COAT AASHO-M72 - TYPE I RED LEAD (LN)
REAM - As Noted

REVISION NO.	DATE	INIT.
1	10-29	RLP

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

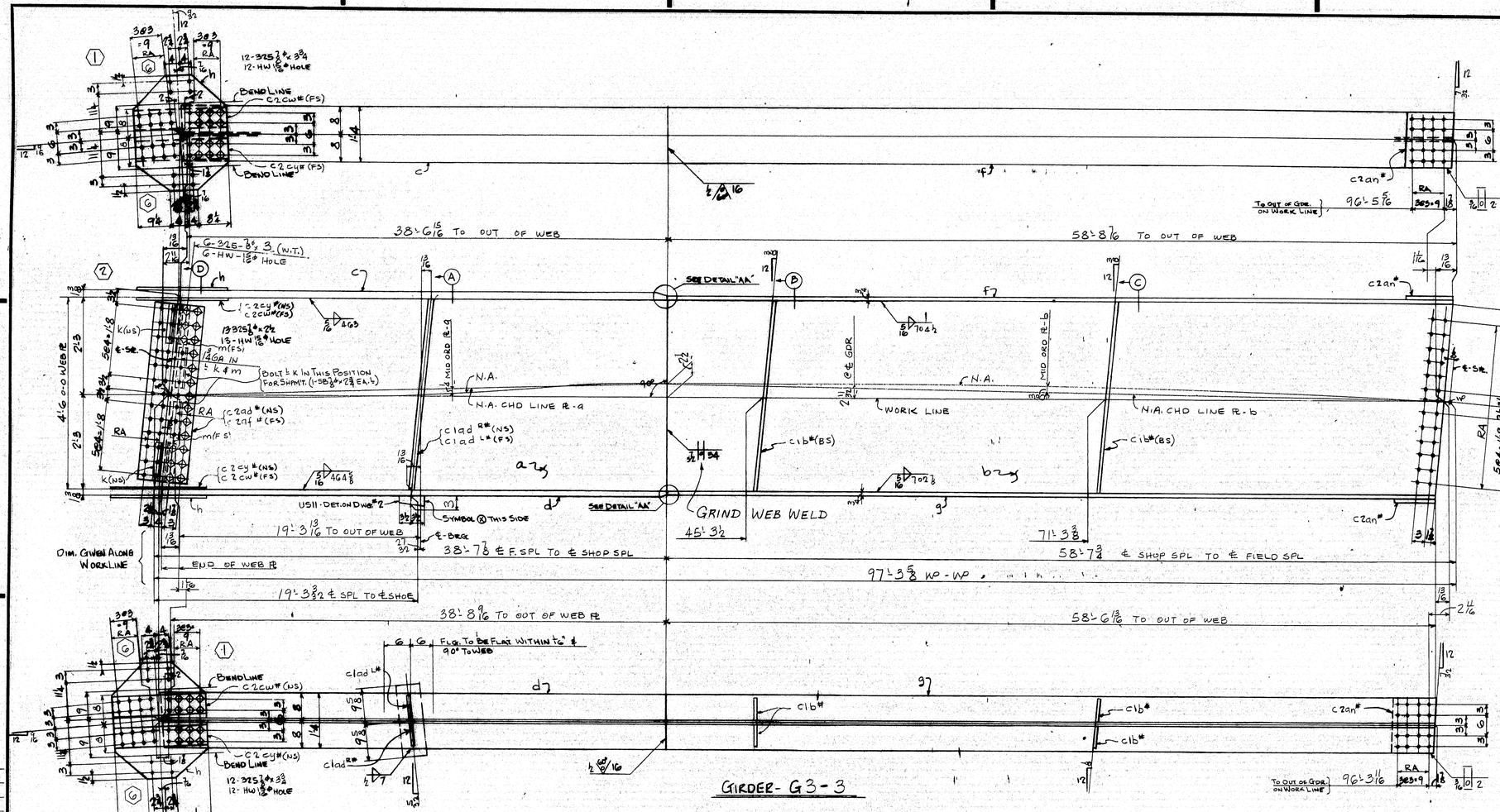
CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE LINE
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY CWG DATE 9-8-69 IN CHARGE D.K. BARTQUIST
CHECKED BY GB DATE 9-24-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 331

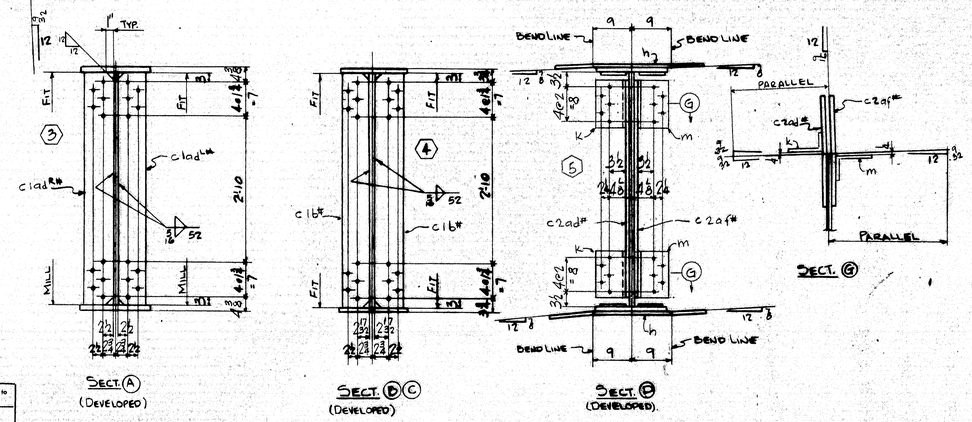
For location of details shown on this sheet refer to diagrams.
E11

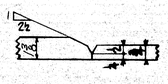
SECT. (A) (DEVELOPED) SECT. (D)(C) (DEVELOPED) SECT. (B) (DEVELOPED)

0 1 2 3 4 5 INCHES

107-145







LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER ITEM PAGE
1		ONE GIRDER G-3-3										
2	a	1	PL	54		½	38	8 7/16	56"x½"	39	8½	46 117
3	b	1	PL	54		16	58	8 7/16	56½"x16"	59	6½	44 116
4	c	1	PLW	16		1 3/8	38	7 6		39	2¾	40 116
5	d	1	PLW	16		1 3/8	38	8 3/4		39	2¾	40 116
6	f	1	PLW	16		¾	58	8 3/8		59	4½	37 116
7	g	1	PLW	16		¾	58	7		59	4½	37 116
8	h	2	PL	25½		½	2	7½	(BENT)	30	5 7/8	47 100
9	k	2	L	7	3½	½	0	11	(BENT) C.F. 7"x4"x½"L	40	0	36 39
10	m	2	L	7	3½	½	0	11	(BENT) C.F. 7"x4"x½"L	40	0	36 39
11												
12												
13	C1ad#	1	BR	7½		¾	4	6	(M1E)(F1E)	13	10¼	47 18
14	C1b#	4	BR	7		½	4	6	(F2E)	13	10¼	47 19
15	C2ad#	1	PLW	13		⅜	4	2	(BENT)	33	6	47 11A
16	C2af#	1	PLW	13		⅜	4	2	(BENT)	33	6	47 11A
17	C2cw#	2	BR	G½		½	2	1½		19	1	47 20
18	C2cy#	2	BR	G½		½	2	1½		19	1	47 20
19	C2an#	2	PL	16		½	1	0 25/32				J
20												
21		2	SB	¾ø			0	2¾				M
22												
23												
24												
25												
26	US11	1	UPPER SHOE						DET. ON DWG #2			
27		G	325	⅛ø			0	3				
28		13	325	⅞ø			0	2½				
29		24	375	⅞ø			0	3½				M
30		43	HW	1⅛ø	15/16ø	⅜ø						
31												
32												
33												
34	FWL	1	WD			5/16	389	2				
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			⅝	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.- 3W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-3	GIRDER (31½ x 61 x 98'-6)	

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

PAY ITEM - 504.711

GIRDER G3-3

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

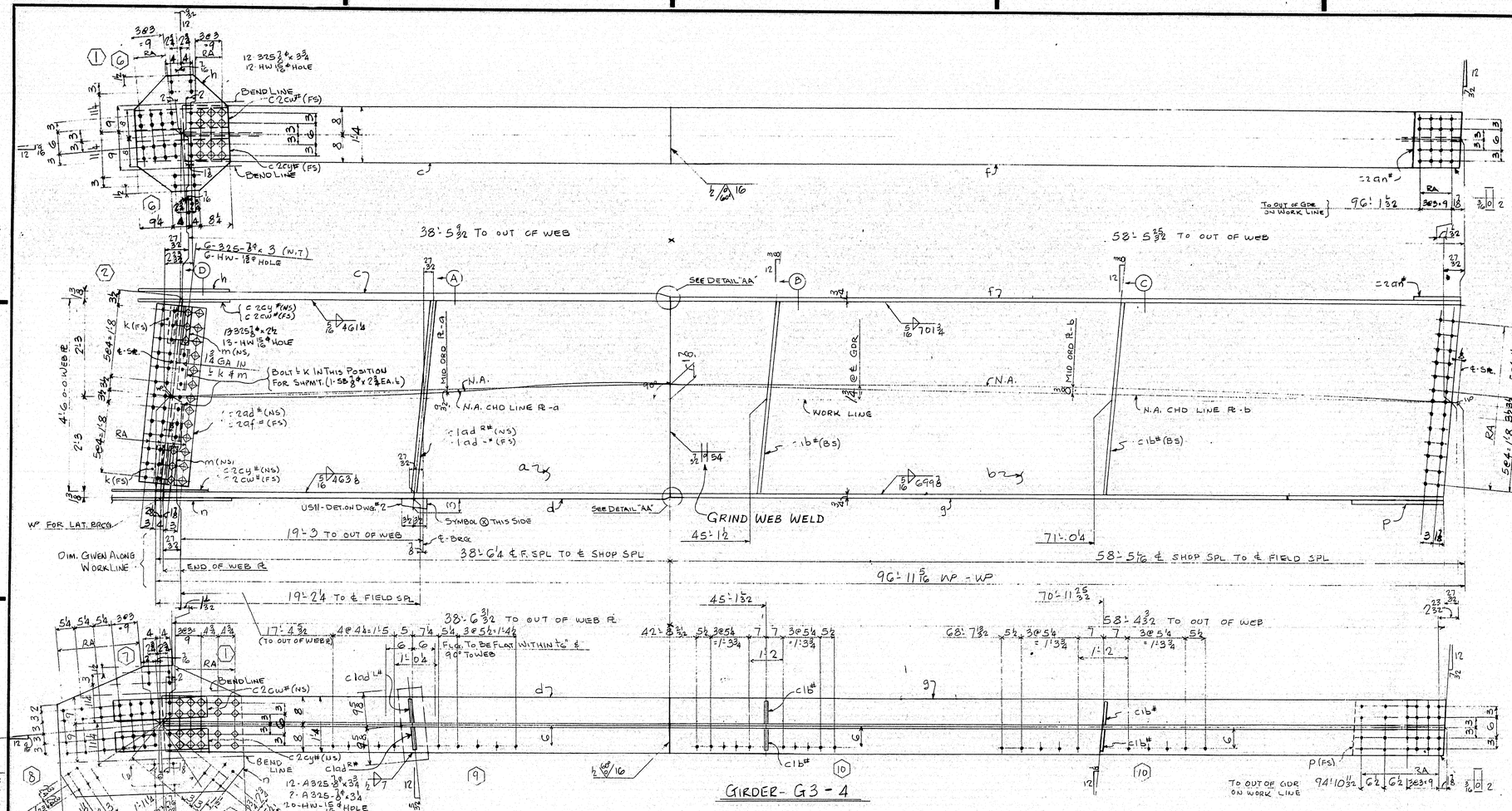
CUSTOMER: MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. NO I-95-1(22)16
CONT. NO. 3 - NEW HAMPSHIRE APP
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY CWG DATE 9-8-69 IN CHARGE D.K. BERTOLET
CHECKED BY CB DATE 9-26-69 SHOP NO. 2
CONTRACT CT-6249-020 DRAWING NO. 332

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.
E11

107-146



LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR POUNDS	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER ITEM PAGE	MILL ORDER ITEM LINE
1		ONE	GIRDER	G3-4									
2	a	1	PL	54		1/2	38	6 3/32	56 X 1/2	39	8 1/2	46	17
3	b	1	PL	54		16/16	58	5 25/32	56 1/2 X 16/16	59	6 1/2	44	16
4	c	1	PLV	16		18/16	38	5 25/32		39	2 3/4	40	16
5	d	1	PLV	16		13/16	38	7 3/32		39	2 3/4	40	16
6	f	1	PLV	16		3/4	58	5 25/32		59	4 1/2	37	16
7	g	1	PLV	16		3/4	58	4 1/2		59	4 1/2	37	16
8	h	1	PL	25 1/2		1/2	2	7 1/2	(BENT) F	30	5 3/8	47	10C
9	k	2	L	7	3 1/4	1/2	0	11	(BENT) C.F. 7x4x1/2 L	40	0	36	39
10	m	2	L	7	3 1/4	1/2	0	11	(BENT) C.F. 7x4x1/2 L	40	0	36	39
11	n	1	PL	35 1/2		5/8	4	2 3/4	(BENT) 36 X 5/8 MULTS	27	3 3/8	47	07B
12	p	1	PL	16		1/2	2	2 5/8				J	
13													
14	c1ad#	1	BR	7 1/2		3/4	4	6	(M1E)(F1E)	13	10 1/4	47	18
15	c1b#	4	BR	7		1/2	4	6	(F2E)	13	10 1/4	47	19
16	c2ad#	1	PLV	13		3/8	4	2	(BENT)	33	6	47	11A
17	c2af#	1	PLV	13		3/8	4	2	(BENT)	33	6	47	11A
18	c2cw#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
19	c2cy#	2	BR	6 1/2		1/2	2	1 1/2		19	1	47	20
20	c2an#	1	PL	16		1/2	1	0 25/32				J	
21													
22													
23		2	SB	7/8			0	2 3/4				M	
24													
25													
26	US11	1	UPPER SHOE						DET. ON DWG. #2				
27		8	325	3/4			0	3 1/4					
28		15	325	3/4			0	2 1/2					
29		24	325	3/4			0	3 3/4				M	
30		51	HW	1 3/4	16/16	3/16							
31		6	325	3/4			0	3					
32													
33													
34	FWL	1	WD			2/16	387	8					
35	FWS	1	WD			2/16	52	0					
36	FW	1	WD			1/2	1	2					
37	SDS	1	WD			7/16	4	6					
38	VGDS	1	WD			3/4	2	8					
39	SD	1	WD			2/16	0	8					
40													
41													
42													
43													
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51													
52													
53													
54													
55													

INST.- 3W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-4	GIRDER (35 1/2 x 60 3/4 x 99'-6")	

PAY ITEM - 504.711

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

GIRDER G3-4

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 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 APR.
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM — POTTSTOWN WORKS
MADE BY CWG DATE 9-10-69 — IN CHARGE B.K. BERTOLET
CHECKED BY CB DATE 9-26-69 — SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 333

SUBMITTAL DATE — REVISION NO | DATE | MD

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

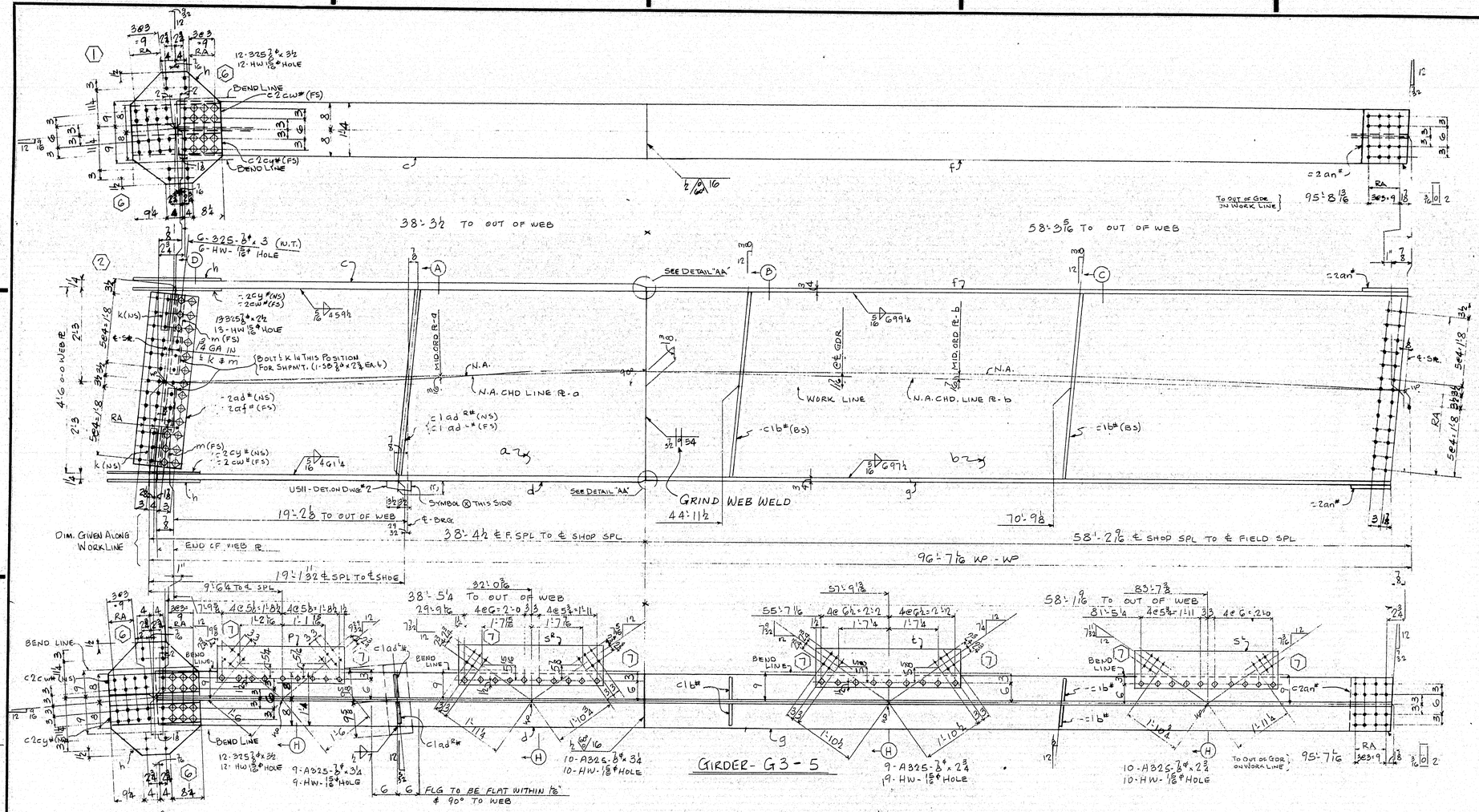
RA - HOLES MARKED RA SHALL BE SUBPUNCHED OR SUBDRILLED 1/4" AND REAMED TO SIZE OR DRILLED FULL SIZE FROM THE SOLID WITH CONNECTING PARTS ASSEMBLED.

ALL OPEN HOLES - NP 3

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

USE 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.



LINE	ASSEMBLY MARK	NO	SHAPE	SECTION SIZE	SECTION SIZE OR FOUNDS	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	G 3 - 5									
2	a	1	PL	54		½	38	5¼	56"x½"	38	9¾	40	18
3	b	1	PL	54		15/16	58	3⅞	56½"x15/16"	58	8¼	44	17
4	c	1	PLV	16		¼	38	3⅛		38	7¾	40	18
5	d	1	PLV	16		¼	38	5⅞		38	7¾	40	18
6	f	1	PLV	16		¾	58	3½		59	4½	37	16
7	g	1	PLV	16		¾	58	1¾		59	4½	37	16
8	h	2	PL	25½		½	2	7½	(BENT)	30	5⅞	47	10C
9	k	2	L	7	3¼	½	0	11	(BENT) C.F. 7"x4"x½" L	40	0	36	39
10	m	2	L	7	3¼	½	0	11	(BENT) C.F. 7"x4"x½" L	40	0	36	39
11	p	1	PL	14½		5/8	3	8	(BENT)	26	0	28	19
12	s℄	1	PL	14½		5/8	4	8	(BENT)	26	0	28	19
13	t	1	PL	14½		5/8	4	7	(BENT)	26	0	28	19
14													
15													
16	C1ad℄#	1	BR	7½		¾	4	6	(MIE)(FIE)	13	10¾	47	18
17	C1b#	4	BR	7		½	4	6	(F2E)	13	10¾	47	19
18	C1ad#	1	PW	13		3/8	4	2	(BENT)	33	6	47	11A
19	C2af#	1	PW	13		3/8	4	2	(BENT)	33	6	47	11A
20	C2cw#	2	BR	6½		½	2	1½		19	1	47	20
21	C2cy#	2	BR	6½		½	2	1½		19	1	47	20
22	C2an#	2	PL	16		½	1	0 25/32					J
23													
24		2	SB	⅞#			0	2¾					M
25													
26	USII	1	UPPER SHOE						DET. ON DWG #2				
27		19	325	⅞#			0	3¼					
28		13	325	⅞#			0	2½					
29		24	325	⅞#			0	3½					
30		19	325	⅞#			0	2⅜					M
31		81	HW	⅞#	15/16#	⅞							
32		6	325	⅞#			0	3					
33													
34	FWL	1	WD			5/16	386	3					
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			¾	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.- 3W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-5	GIRDER (31½x66x97'-9⅞)	

PAY ITEM - 504.711

GIRDER G3-5

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

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 diagram.

E11

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

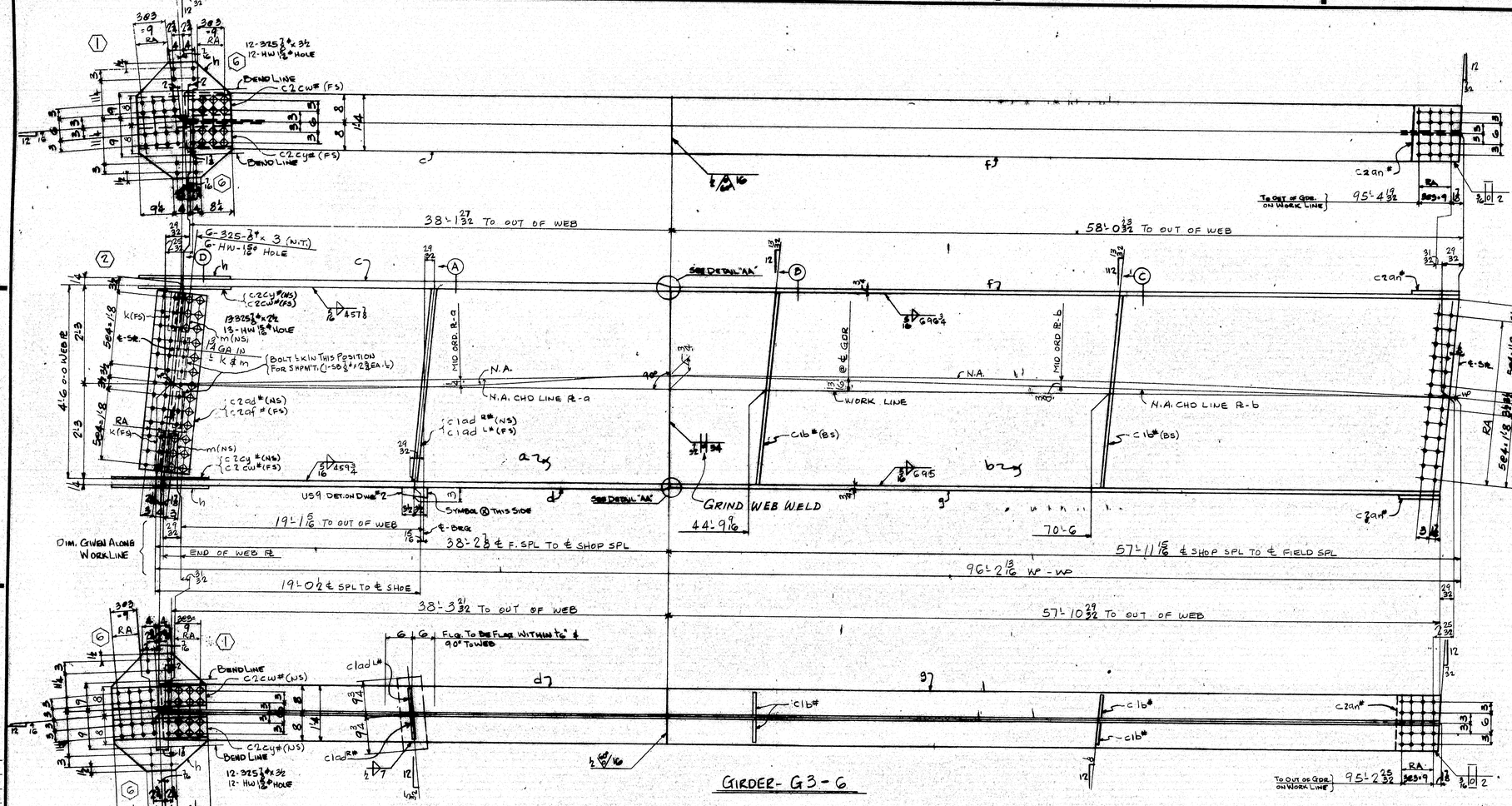
MATERIAL A36 STEEL
BOLTS ¾" A325
OPEN HOLES 15/16"
A325 FIELD BOLTS ⅞"
SHOP CONTACT SURFACES NO PAINT MILL-AS INDICATED WELD-AS NOTED
PAINT ONE COAT AASHO-M72-TYPE II RED LEAD (IN) REAM-AS INDICATED

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
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 CWG DATE 9-15-69 IN CHARGE B.K. BERTOLET
CHECKED BY CB DATE 9-26-69 SHOP NO. 2
CONTRACT CJ-6299-020 DRAWING NO. 334

107-147



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

E11

SHOP BILL

LINE	ASSEMBLY MARK	NO.	SHAPE	SECTION SIZE	SECTION SIZE OR FOLDING	SECTION THICK	LENGTH FT.	LENGTH IN.	REMARKS	MILL ORDER LENGTH FT.	MILL ORDER LENGTH IN.	MILL ORDER PIECE MARK
1				ONE GIRDER G3-6								
*2	a	1	PL	54		1/2	38	3 7/32	56x1/2	38	9 3/4	46 18
3	b	1	PL	54		1/16	58	0 23/32	56 1/2 x 1/16	58	8 1/4	44 17
4	c	1	PLW	16		1 1/4	38	2		38	7 3/4	40 18
5	d	1	PLW	16		1 1/4	38	3 1/8		38	7 3/4	40 18
6	f	1	PLW	16		3/4	58	0 3/8		59	4 1/2	37 16
7	g	1	PLW	16		3/4	57	11 1/16		59	4 1/2	37 16
8	h	2	PL	25 1/2		1/2	2	7 1/2	(BENT)	30	5 7/8	47 100
9	k	2	L	7	3 1/2	1/2	0	11	(BENT) C.P. 7 x 4 x 1/2	40	0	36 39
10	m	2	L	7	3 1/2	1/2	0	11	(BENT) C.P. 7 x 4 x 1/2	40	0 1	36 39
11												
12												
13	C1 adj*	1	BR	7 1/2		3/4	4	6	(M1E)(F1E)	13	10 1/4	47 18
14	C1 b*	4	BR	7		1/2	4	6	(F2E)	13	10 1/4	47 19
15	C1 2ad*	1	PLW	13		3/8	4	2	(BENT)	33	6	47 118
16	C1 2af*	1	PLW	13		3/8	4	2	(BENT)	33	6	47 118
17	C1 2cw*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47 20
18	C1 2cy*	2	BR	6 1/2		1/2	2	1 1/2		19	1	47 20
19	C1 2an*	2	PL	16		1/2	1	0 25/32				J
20												
21												
22		2	SB	3/8*			0	2 3/4				M
23												
24												
25												
26	USO	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				M
30		43	HW	1 1/16*	15/16*	3/16						
31												
32												
33												
34	FWL	1	WD			7/16	384	10 1/4				
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			3/4	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.-3W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-6	GIRDER (31 1/2 x 60 x 95-5 1/2)	

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

PAY ITEM - 504.711

GIRDER G3-6

MATERIAL A36 & STEEL
[redacted] BOLTS 3/4* A325
OPEN HOLES 1 1/16*
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

REVISION

NO.	DATE	INIT.

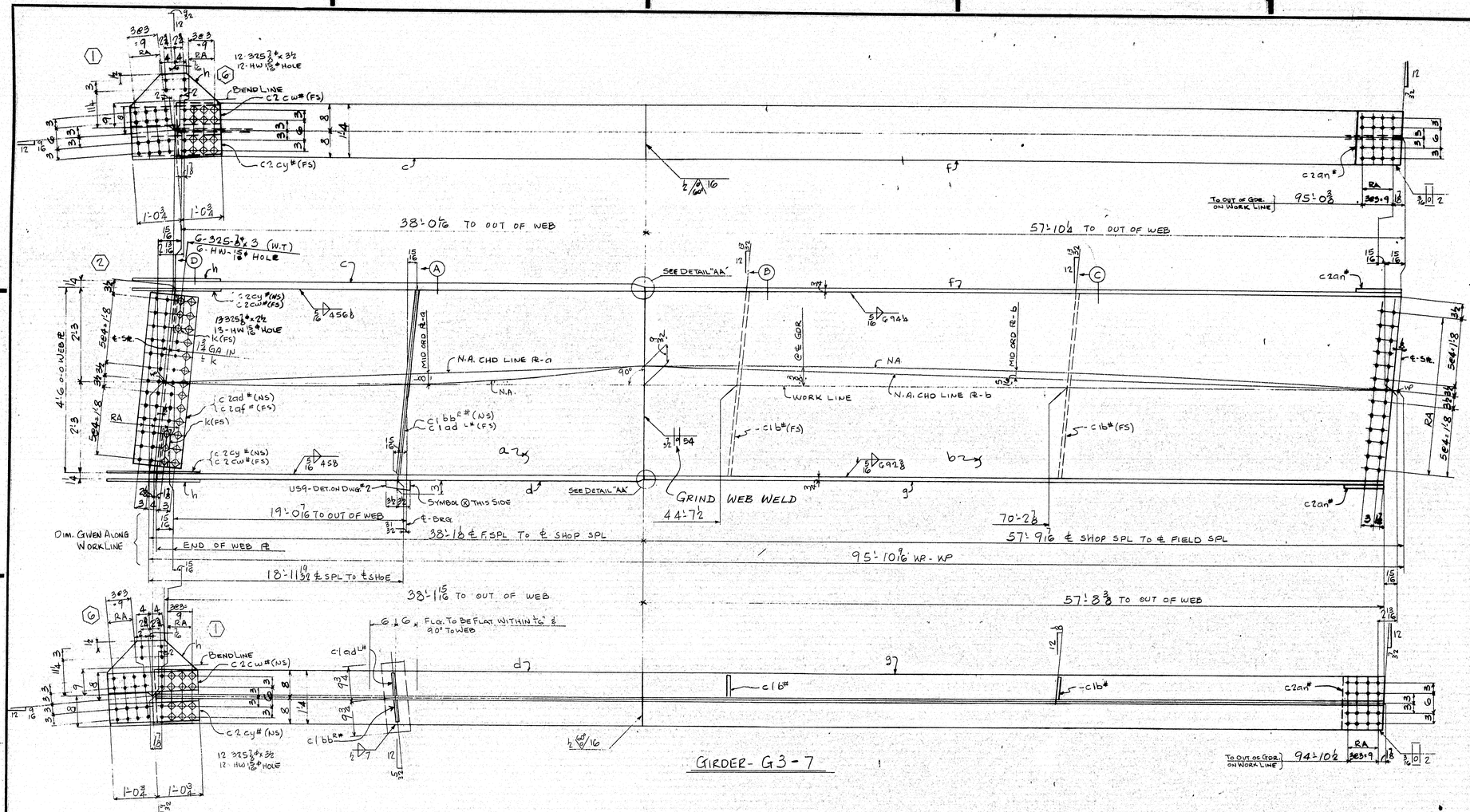
SUBMITTAL	1	2	3	4	5	6	7	8	9	0
DATE										

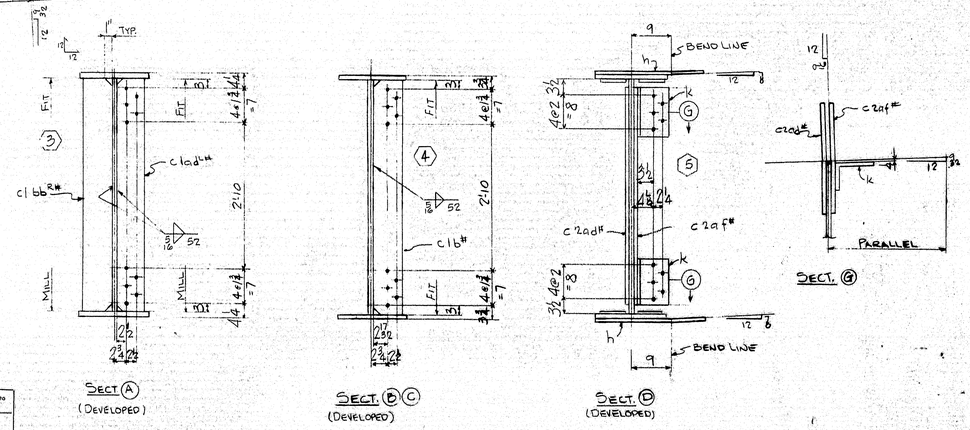
CUSTOMER MAINE STATE HIGHWAY COMMISSION
PISCATAQUA RIVER BRIDGE
PROJECT. No I-95-1(22)16
CONT. No. 3 - NEW HAMPSHIRE LINE
STRUCTURAL STEEL
BETHLEHEM STEEL CORPORATION
FABRICATED STEEL CONSTRUCTION
POTTSTOWN DRAFTING ROOM Pottstown WORKS
MADE BY CWG DATE 9-9-69 IN CHARGE D.K. BERTOLET
CHECKED BY CB DATE 9-26-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 335

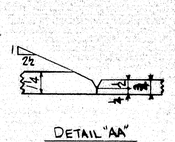
3343 (Rev. C-6-65)

107-149

1998







SHOP BILL

Item	Assembly Mark	No.	Shape	Section: Size	Section: Wt. or Pounds	Section: Thick	Length: Ft.	Length: In.	Remarks	Mill Orders: Length Ft.	Mill Orders: Length In.	Mill Orders: Page	Mill Orders: Unit
1		ONE GIRDER G3 -7											
2	a	1	PL	54		½	38	1 15/16	56 x ½	38	9 3/4	46	18
3	b	1	PL	54		16	57	10¼	56½ x 16	58	8¼	44	17
4	c	1	PLV	16		½	38	0¼		38	7¾	40	18
5	d	1	PLV	16		½	38	2⅜		38	7¾	40	18
6	f	1	PLV	16		⅜	57	10 1/16		58	2¼	37	15
7	g	1	PLV	16		⅜	57	8 1/16		58	2¼	37	15
8	h	2	PL	25½		½	1	11¾	(BENT)	30	5⅞	47	10C
9	k	2	L	7	31¼	½	0	11	(BENT) CUT 7 x 4 x ½	40	0	36	39
10													
11													
12	C c1bb# (NS) C c1ad# (FS)	1	BR	7½		¾	4	6	(MIE)(FIE)	13	10¼	47	18
13	C c1ad#	1	BR	7½		¾	4	6	(MIE)(FIE)	13	10¼	47	18
14	C c1b#	2	BR	7		½	4	6	(F2E)	13	10¼	47	19
15	C c2ad#	1	PLV	13		⅜	4	2	(BENT)	33	6	47	11A
16	C c2af#	1	PLV	13		⅜	4	2	(BENT)	33	6	47	11A
17	C c2cw#	2	BR	6½		½	2	1½		19	1	47	20
18	C c2cy#	2	BR	6½		½	2	1½		19	1	47	20
19	C c2an#	2	PL	16		½	1	0 25/32					J
20													
21													
22													
23													
24													
25													
26	US9	1	UPPER SHOE						DET. ON DWG. #2				
27		6	325	⅞			0	3					
28		13	325	⅞			0	2½					
29		24	325	⅞			0	3½					M
30		43	HW	1⅛	15/16	5/16							
31													
32													
33													
34	FWL	1	WD			5/16	383	5¼					
35	FWS	1	WD			5/16	34	8					
36	FW	1	WD			½	1	2					
37	SDS	1	WD			5/16	4	6					
38	VGDS	1	WD			¾	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.- 3W

REQUIRED LIST

QTY	SHIPPING MARK	DESCRIPTION	REMARKS
ONE	G3-7	GIRDER (25½ x 60 x 97'-1⅜)	

PAY ITEM - 504.711

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

MATERIAL A36 STEEL
BOLTS ⅞ 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 I RED LEAD (LN)
REAM - AS NOTED

NOTE: ALL FOOTS OF WELDS = SIXTIES

	MINIMUM PREHEAT AND INTERPASS TEMP. = DEG. F
TO 3/4" INCL.	50 DEG.
OVER 3/4" TO 1 1/2" INCL.	150 DEG.
OVER 1 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 BACK WELDING REQUIRED UNLESS SHOWN OR INCORPORATED IN FINAL WELD.

USE E7018-H4, 28 KSI MINIMUM ELECTRODES OR EQ. E48-T FOR WELDING.

REVISION

NO	DATE	INIT.
0		
9		
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5		
4		
3		
2		
1		

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

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 EWG DATE 9-9-69 IN CHARGE D.K. BERTOLET
CHECKED BY CB DATE 9-26-69 SHOP NO. 2
CONTRACT CJ-6249-020 DRAWING NO. 336

GIRDER G3-7

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

107-150