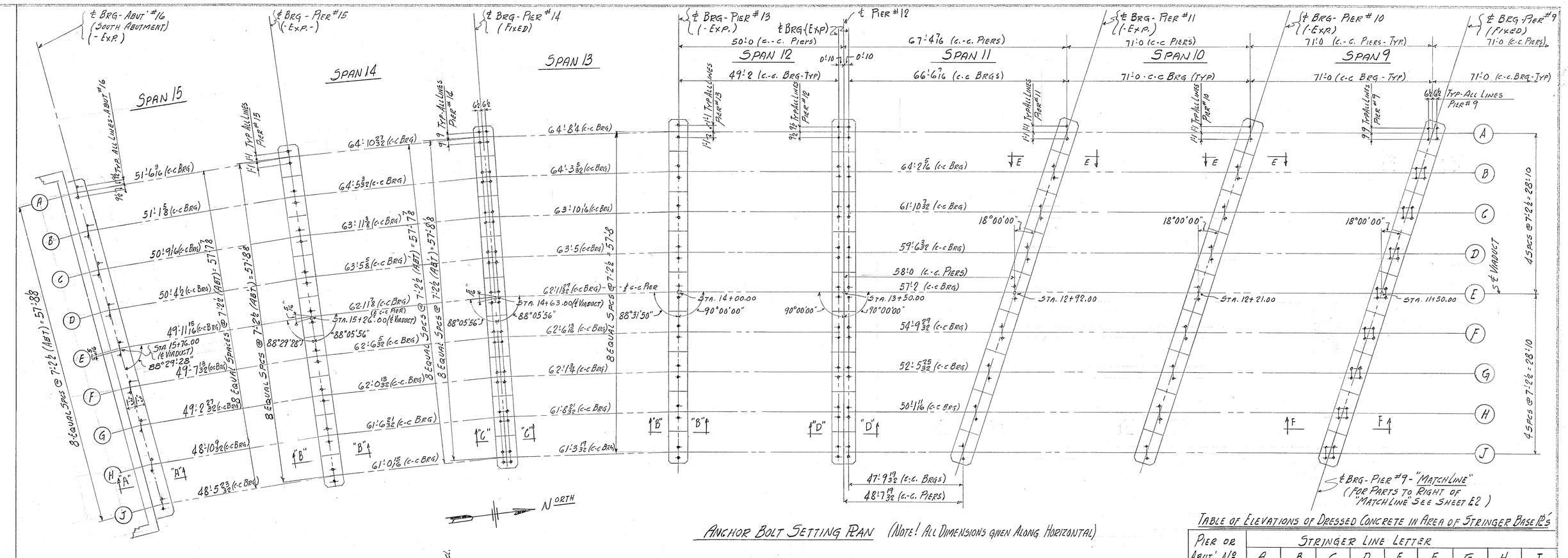
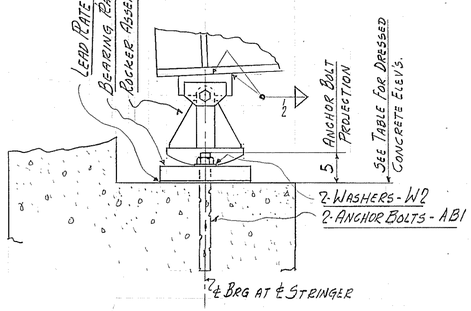


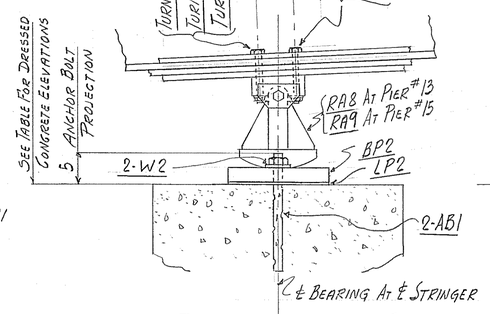
ANCHOR BOLT SETTING PLAN (NOTE! ALL DIMENSIONS GIVEN ALONG HORIZONTAL)

TABLE OF ELEVATIONS OF DRESSED CONCRETE IN AREA OF STRINGER BASE PL'S

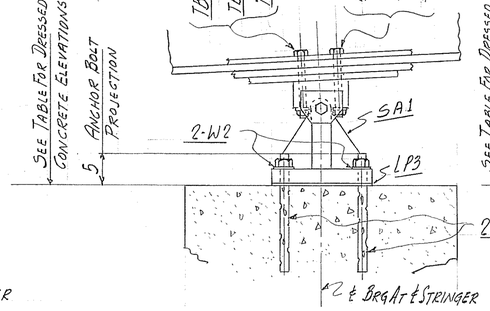
PIER OR ABUT. Nº	STRINGER LINE LETTER								
	A	B	C	D	E	F	G	H	J
16	82.45	82.34	82.23	82.12	82.02	81.91	81.80	81.69	81.59
15	84.34	84.25	84.15	84.04	83.93	83.82	83.72	83.61	83.49
14	87.09	86.99	86.89	86.78	86.67	86.56	86.46	86.35	86.23
13	89.25	89.23	89.18	89.14	89.10	88.99	88.88	88.78	88.65
12 (SPAN 12)	90.88	90.93	90.99	91.05	91.10	90.99	90.89	90.78	90.67
12 (SPAN 11)	90.93	90.99	91.05	91.06	91.13	91.02	90.92	90.83	90.73
11	92.34	92.43	92.50	92.50	92.57	92.41	92.27	92.11	91.95
10	93.04	93.19	93.29	93.39	93.48	93.35	93.23	93.11	92.94
9	92.91	93.10	93.23	93.37	93.50	93.41	93.32	93.24	93.10



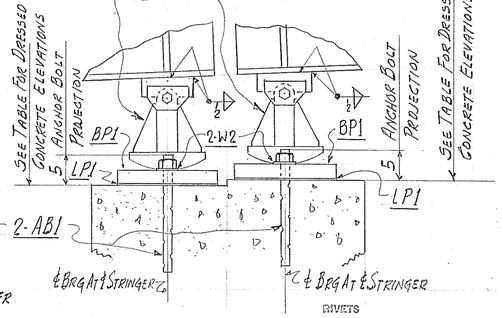
TYPICAL SECTION AT ABUTMENTS
(LOOKING WEST AT ABUT. #16)
(LOOKING EAST AT ABUT. #1)
SECTION "A-A"



TYPICAL SECTION AT EXP. BRG
(LOOKING WEST AT PIERS #13 & 15)
SECTION "B-B"



TYPICAL SECTION AT FIXED BRG
(LOOKING WEST AT PIER #14)
SECTION "C-C"

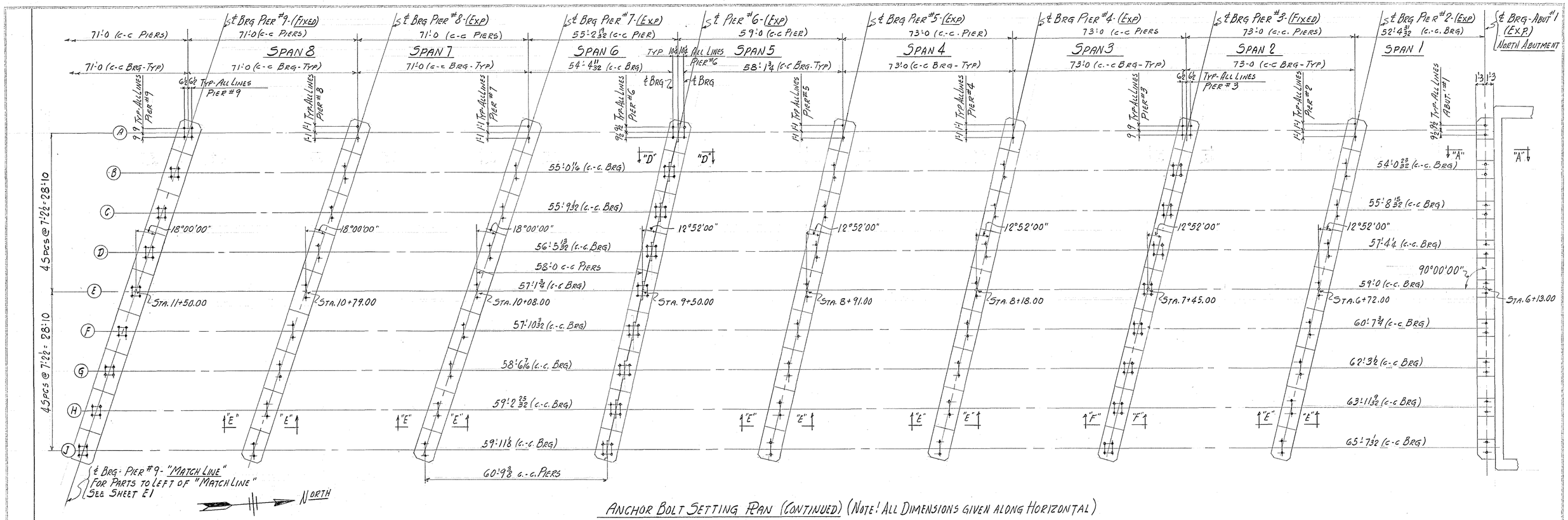


(LOOKING WEST AT PIER #12
(LOOKING EAST AT PIER #6
SECTION "D-D"

RIVETS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

ANCHOR BOLT SETTING PLAN

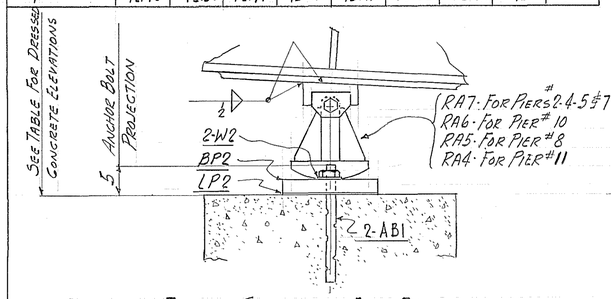
TEMP.	SOUTH THIRTY-FIFTH STREET VIADUCT
SUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	BETHLEHEM STEEL COMPANY
SHOP INSP.	FABRICATED STEEL CONSTRUCTION
PC. WK.	Drawings at Chicago - Fabrication at CHICAGO
B. SMITH	IN CHARGE L.D. HERB MADE BY W.V.D.
MCH.	CHECKED BY LDH 7-8-57 TRACED BY
ERECT.	REVISED LAST ASSEM. MK.
O. INSP.	SHOP NO. CONTRACT CG 4538 SHEET E1



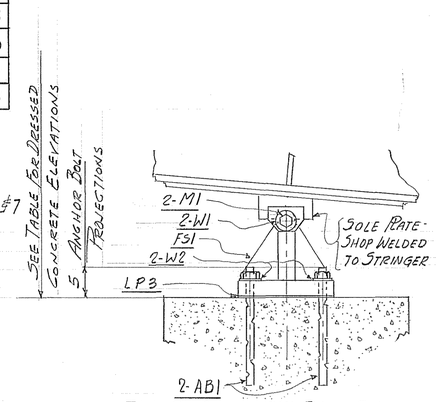
ANCHOR BOLT SETTING PLAN (CONTINUED) (NOTE! ALL DIMENSIONS GIVEN ALONG HORIZONTAL)

TABLE OF ELEVATIONS OF DRESSED CONCRETE IN AREA OF STRINGER BASE PLS (CONT'D)

PIER OR ABUT. Nº	STRINGER LINE LETTER								
	A	B	C	D	E	F	G	H	J
9	SEE ANCHOR BOLT SETTING DIAGRAM SHEET Nº E1								
8	91.38	91.60	91.77	91.94	92.10	92.05	92.00	91.95	91.85
7	88.98	89.21	89.41	89.61	89.82	89.79	89.77	89.76	89.68
6 (SPAN 6)	86.78	86.95	87.13	87.31	87.49	87.43	87.40	87.36	87.32
6 (SPAN 5)	86.69	86.87	87.05	87.22	87.40	87.36	87.33	87.29	87.25
5	84.07	84.31	84.49	84.67	84.85	84.81	84.77	84.73	84.63
4	80.97	81.20	81.38	81.55	81.73	81.69	81.66	81.62	81.53
3	78.04	78.26	78.44	78.62	78.80	78.76	78.72	78.68	78.60
2	74.82	75.02	75.20	75.36	75.54	75.56	75.52	75.49	75.42
1	72.70	72.80	72.91	73.01	73.11	73.06	72.95	72.84	72.73



TYPICAL SECTION AT EXP. BRG
(LOOKING WEST AT PIERS # 2-4-5-7 AND 8)
(LOOKING EAST AT PIERS # 10 AND 11)
SECTION "E-E"



TYPICAL SECTION AT FIXED BRG
(LOOKING WEST AT PIERS # 3 AND 9)
SECTION "F-F"

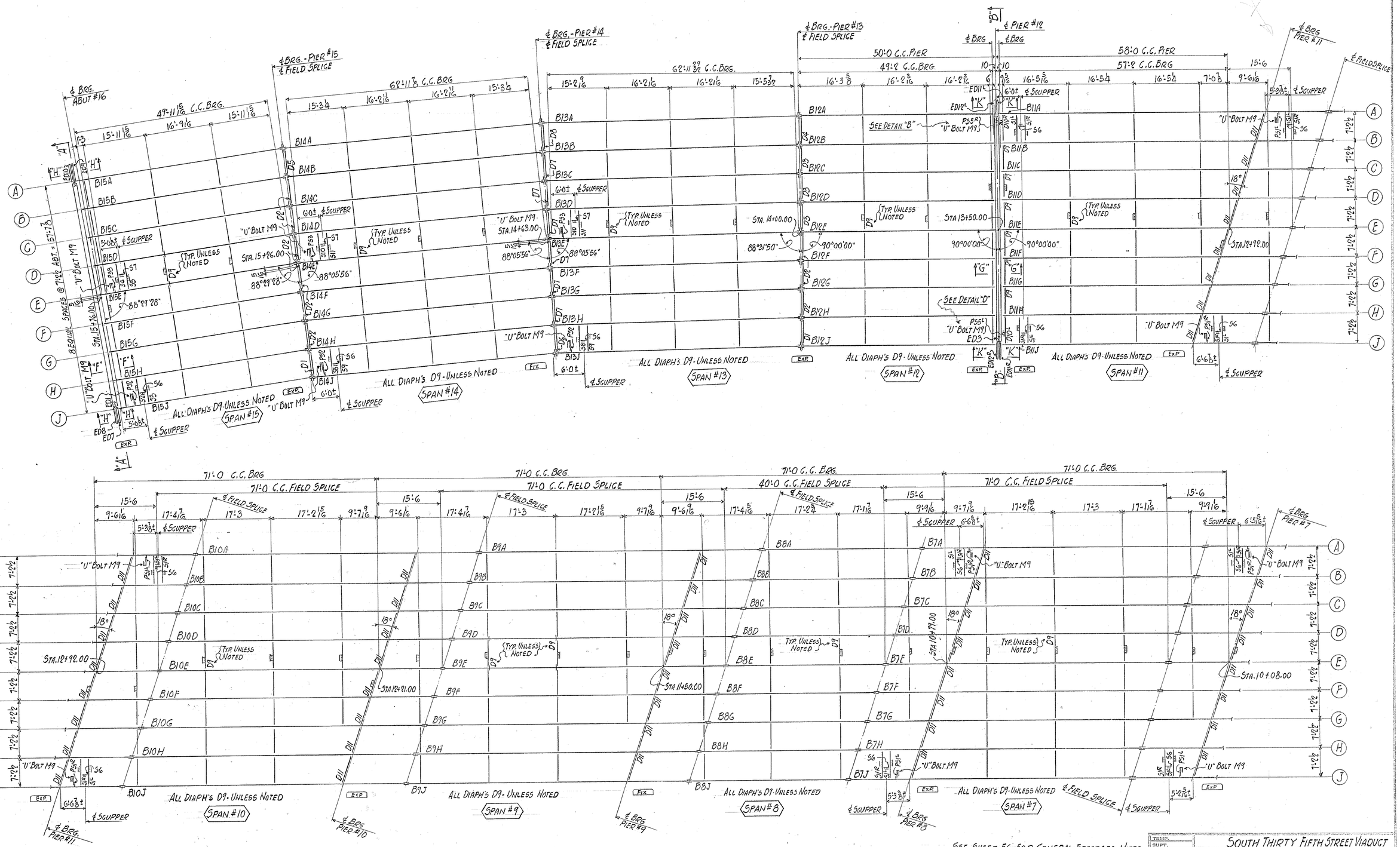
ERECTORS NOTES.
ALL EXPANSION SHOE ROCKERS TO BE SET VERTICAL UNDER FULL DEAD LOAD AT 68°F.

RIVETS
OPEN HOLES
BEAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

ANCHOR BOLT SETTING PLAN

DESIGN.	SOUTH THIRTY-FIFTH STREET VIADUCT
DUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	
SHOP INSP.	BETHLEHEM STEEL COMPANY
PC. VIK.	FABRICATED STEEL CONSTRUCTION
B. SMITH	Drawings at Chicago - Fabrication at CHICAGO
MCH.	IN CHARGE L.D. HERB MADE BY W.V.D.
ERECT.	CHECKED BY L.D.H. 7-8-57 TRACED BY
O. INSP.	REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CG4538 SHEET E2



BRIDGE DECK FRAMING PLAN

ABUT #16 TO PIER #7 - FOR CONTINUATION FROM PIER #7 TO ABUT #1 SEE SHEET E4

(DIMENSIONS ARE ON HORIZONTAL @ STRINGER W.L.)

N

SEE SHEET E6 FOR GENERAL ERECTORS NOTES

RIVETS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

SHOP NO.

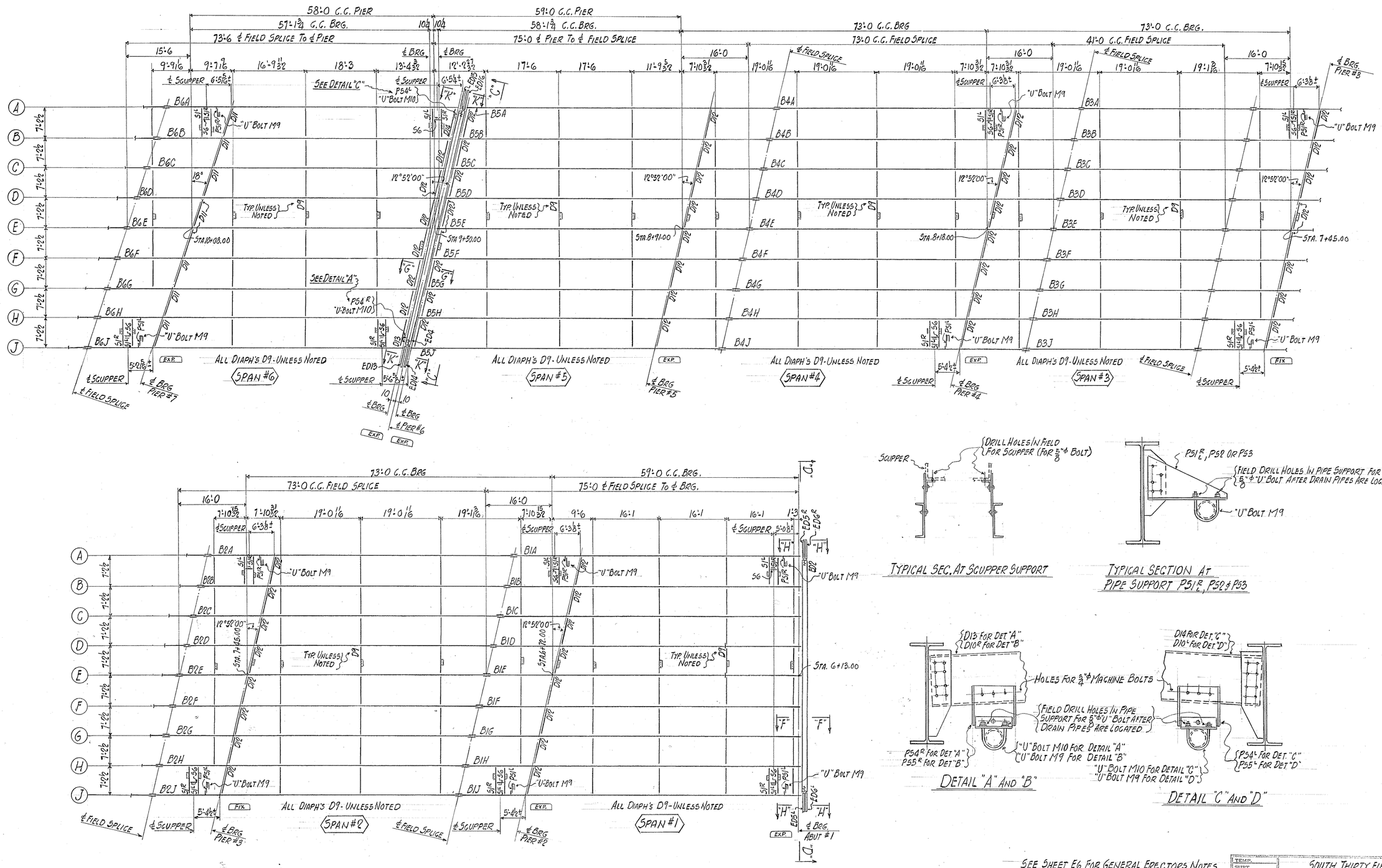
TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
FC. WK.	
B. SMITH	
MCH.	
ERECT.	
Q. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO

IN CHARGE HERB MADE BY J
CHECKED BY WYD 9-11-59 TRACED BY
REVISED LAST ASSEM. MK.

CONTRACT CG4538 SHEET E3



TYPICAL SEC. AT SCUPPER SUPPORT

TYPICAL SECTION AT PIPE SUPPORT PS1R, PS2 & PS3

DETAIL "A" AND "B"

DETAIL "C" AND "D"

BRIDGE DECK FRAMING PLAN (CONT.)

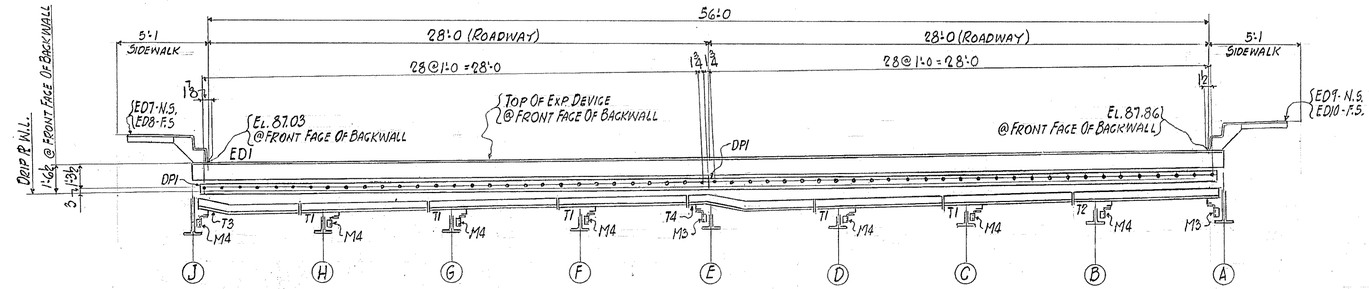
ABUT #1 TO PIER #7 - FOR CONTINUATION FROM PIER #7 TO ABUT #16 SEE SHEET E3

(DIMENSIONS ARE ON HORIZONTAL @ STRINGER W.L.)

SEE SHEET E6 FOR GENERAL ERECTORS NOTES

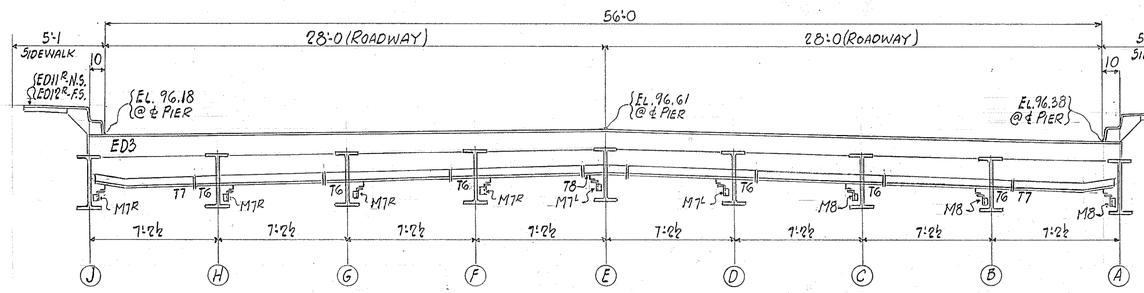
RIVETS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

TEMP.	SOUTH THIRTY FIFTH STREET VIADUCT
SUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	
SHOP INSP.	BETHLEHEM STEEL COMPANY
PC. WK.	FABRICATED STEEL CONSTRUCTION
B. SMITH	Drawings at Chicago - Fabrication at CHICAGO
MCH.	IN CHARGE HERB MADE BY el
ERECT.	CHECKED BY W.V.D. RHS TRACED BY
G. INSP.	REVISED LAST ASSEM. MK.
	SHOP NO. CONTRACT C64538 SHEET E4



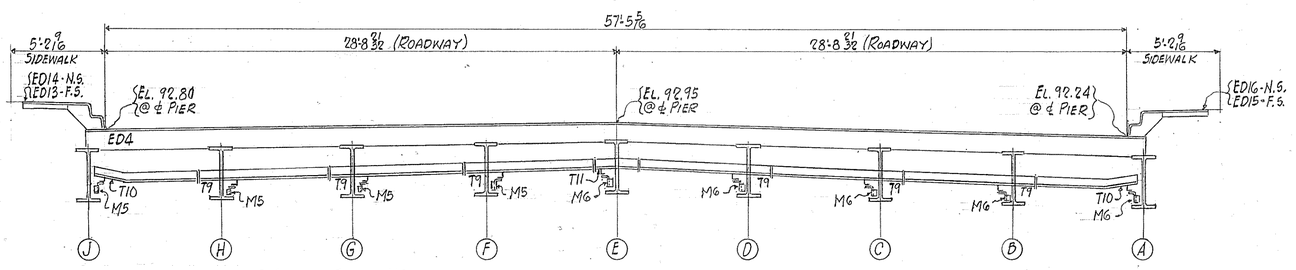
T-ASBESTOS GASKETS M11
USE ONE BETWEEN SPLICE OF TROUGHS
49-5/8"Φ x 2¼" Lg HEX HD GALV. BOLTS
(COMPLETE WITH HEX NUT & LOCK WASHER)
USE 7 AT EACH TROUGH SPLICE -

SECTION "A-A"
ABUT. #16



8-ASBESTOS GASKETS M12
USE ONE BETWEEN SPLICE OF TROUGHS
56-5/8"Φ x 2¼" Lg HEX HD GALV. BOLTS
(COMPLETE WITH HEX NUT & LOCK WASHER)
USE 7 AT EACH TROUGH SPLICE

SECTION "B-B"
PIER #12



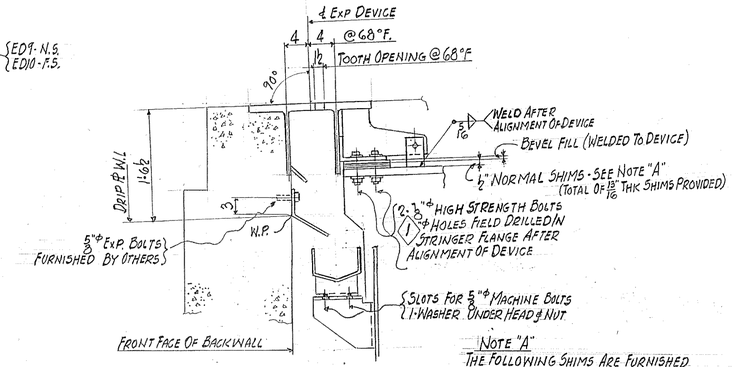
8-ASBESTOS GASKETS M12
USE ONE BETWEEN SPLICE OF TROUGHS,
56-5/8"Φ x 2¼" Lg HEX HD GALV. BOLTS
(COMPLETE WITH HEX NUT & LOCK WASHER)
USE 7 AT EACH TROUGH SPLICE -

SECTION "C-C"
PIER #6 (DIMENSIONS ALONG ℄ PIER)

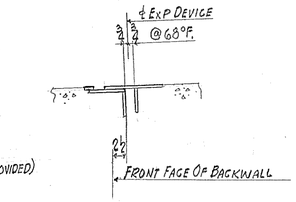
56-5/8"Φ x 2¼" Lg HEX HD GALV. BOLTS
(COMPLETE WITH HEX NUT & LOCK WASHER)
USE 7 AT EACH TROUGH SPLICE

8-ASBESTOS GASKETS M11
USE ONE BETWEEN SPLICE OF TROUGHS

SECTION "D-D" (ABUT #1)

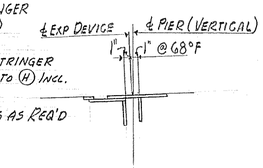


SECTION "F-F" (TYP.)
ABUT. #16 AND #1

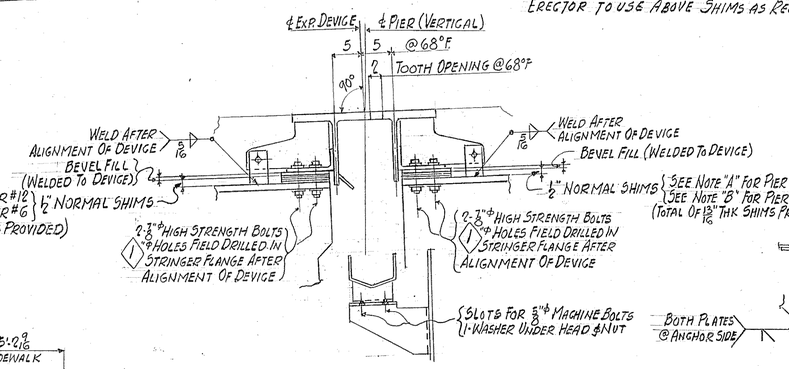


SECTION "H-H"
ABUT #16 AND #1

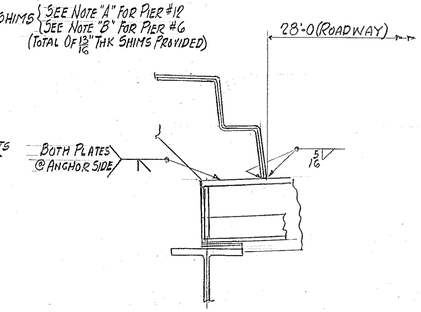
NOTE "A"
THE FOLLOWING SHIMS ARE FURNISHED FOR PROPER ALIGNMET OF DEVICE:
2-¼" THK MARKED M13 } FOR EACH STRINGER
2-⅛" THK MARKED M14 } @ LINE Ⓗ & Ⓙ
ONE-1/16" THK MARKED M23
2-¼" THK MARKED M15 } FOR EACH STRINGER
2-⅛" THK MARKED M16 } @ LINES Ⓑ TO Ⓗ INCL.
ONE-1/16" THK MARKED M24
ERECTOR TO USE ABOVE SHIMS AS REQ'D



SECTION "K-K"
PIER #12 AND #6



SECTION "G-G" (TYP.)
PIER #12 AND #6



TYPICAL DETAIL SHOWING WELDING OF SIDEWALK DEVICE TO ROADWAY DEVICE

NOTE "B"
THE FOLLOWING SHIMS ARE FURNISHED FOR PROPER ALIGNMENT OF DEVICE:
2-¼" THK MARKED M17 } FOR STRINGER @ LINE Ⓙ
2-⅛" THK MARKED M18
ONE-1/16" THK MARKED M25
2-¼" THK MARKED M19 } FOR EACH STRINGER @ LINES Ⓑ TO Ⓗ INCL.
2-⅛" THK MARKED M20
ONE-1/16" THK MARKED M26
2-¼" THK MARKED M21 } FOR STRINGER @ LINE Ⓐ
2-⅛" THK MARKED M22
ONE-1/16" THK MARKED M27
ERECTOR TO USE ABOVE SHIMS AS REQ'D

SEE SHEET E6 FOR GENERAL ERECTORS NOTES
SEE DESIGN DRAWING SHEET Nº 17 FOR ADDITIONAL EXP. DEVICE INFORMATION.

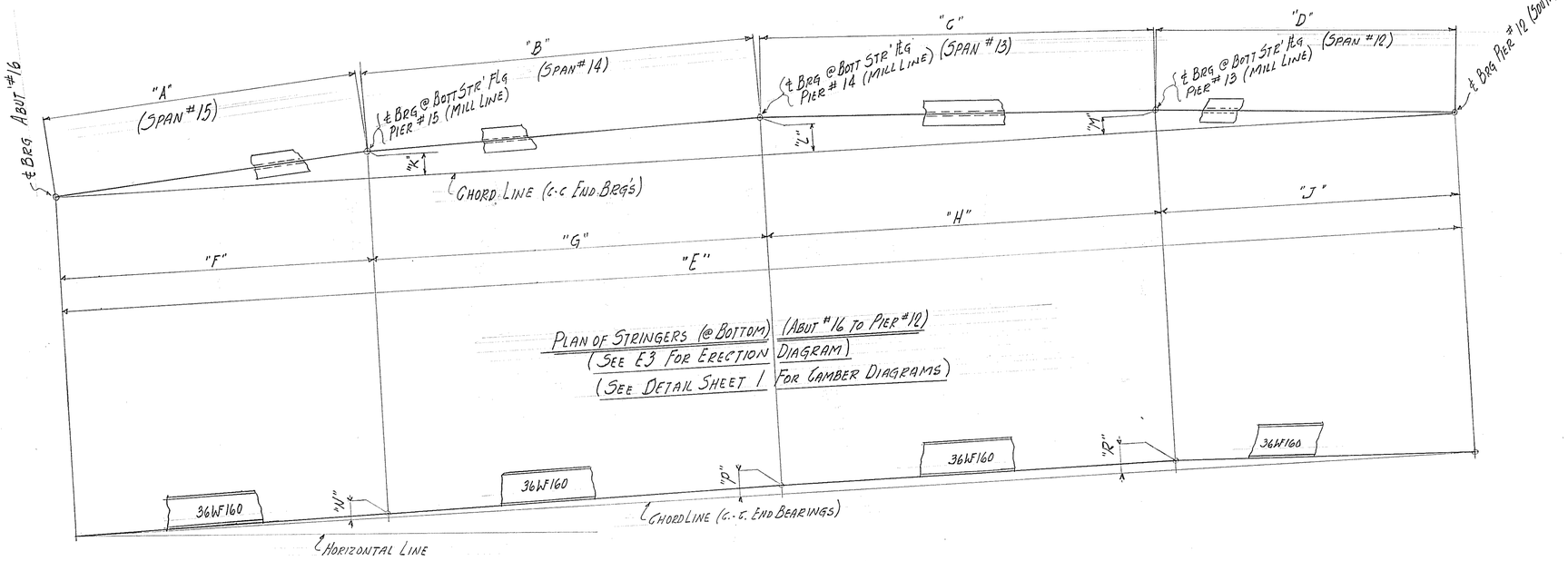
RIVETS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
Q. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY D
CHECKED BY W.V.D. 7-11-54 TRACED BY
REVISED LAST ASSEM. MK.

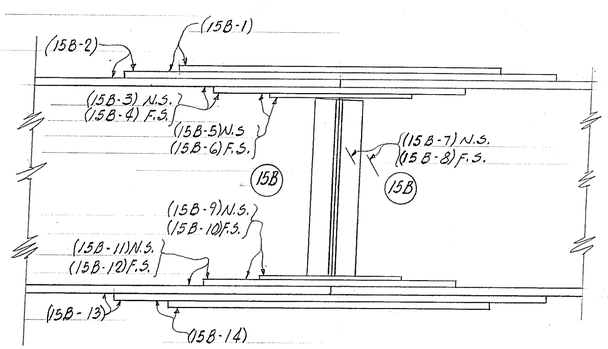
SHOP NO. CONTRACT CG4538 SHEET E5



YARD ASSEMBLY DIAGRAM (FOR STRINGERS IN SPANS #12-#13-#14 AND #15) SEE E3 FOR STRINGER MARKS

DIMENSIONS "A", "B", "C" & "D" ARE FROM ℄ TO ℄ BRG ALONG BOTTOM FLANGE OF BEAM.

DIMENSIONS	LINE "A"	LINE "B"	LINE "C"	LINE "D"	LINE "E"	LINE "F"	LINE "G"	LINE "H"	LINE "J"
"A"	51'-6 5/8	51'-2 1/16	50'-9 1/2	50'-5	50'-0 7/16	49'-7 7/8	49'-3 3/8	48'-10 13/16	48'-6 1/4
"B"	64'-11 1/2	64'-5 3/8	64'-0	63'-6 1/4	63'-0 1/2	62'-6 3/4	62'-1	61'-7 1/4	61'-1 1/2
"C"	64'-8 13/16	64'-3 3/4	63'-10 5/8	63'-5 9/16	63'-0 9/16	62'-7 7/16	62'-2 3/8	61'-9 1/4	61'-4 3/16
"D"	49'-2 1/4	49'-2 5/16	49'-2 5/16	49'-2 3/8	49'-2 7/16	49'-2 7/16	49'-2 7/16	49'-2 7/16	49'-2 7/16
"E"	230'-0 5/8	228'-9 3/8	227'-6	226'-2 7/8	224'-11 1/2	223'-8 1/4	222'-4 15/16	221'-1 9/16	219'-10 3/16
"F"	51'-4 3/8	50'-11 13/16	50'-7 5/16	50'-2 9/16	49'-10 1/4	49'-5 3/4	49'-1 3/16	48'-8 5/8	48'-4 1/16
"G"	64'-11 1/16	64'-5 3/8	63'-11 11/16	63'-6	63'-0 1/4	62'-6 1/2	62'-0 13/16	61'-7 1/16	61'-1 5/16
"H"	64'-8 1/8	64'-3 1/16	63'-9 15/16	63'-4 15/16	62'-11 7/8	62'-6 13/16	62'-1 3/4	61'-8 11/16	61'-3 5/8
"J"	49'-1 1/16	49'-1/8	49'-1 1/16	49'-1/8	49'-1/8	49'-1 3/16	49'-1 3/16	49'-1 3/16	49'-1 3/16
"K"	4'-4 3/16	4'-3 7/8	4'-3 9/16	4'-3 1/4	4'-2 15/16	4'-2 9/16	4'-2 5/16	4'-1 15/16	4'-1 5/8
"L"	5'-11 5/8	5'-11 1/4	5'-10 15/16	5'-10 9/16	5'-10 3/16	5'-9 3/4	5'-9 7/16	5'-9	5'-8 5/8
"M"	3'-3 1/2	3'-3 7/16	3'-3 3/8	3'-3 5/16	3'-3 1/4	3'-3 3/16	3'-3 1/16	3'-3	3'-2 15/16
"N"	2"	1 5/8"	1 1/4"	15/16"	9/16"	9/16"	9/16"	1/2"	5/8"
"P"	4 3/8"	3 1/2"	2 5/8"	1 13/16"	1 1/16"	1 1/16"	1 3/16"	1 1/4"	1 1/4"
"R"	3 3/8"	3 3/16"	2 1/16"	2"	1 5/16"	1 7/16"	1 5/8"	1 5/8"	1 15/16"



MATCH MARKING SKETCH (EXAMPLE AT SPLICE LINE (15) (℄ PIER) & STRINGER LINE LETTER (B))

MATCH MARKING NOTES

INTERSECTION OF SPLICE LINE NUMBER (℄ PIER) AND STRINGER LINE LETTER FORM SPLICE IDENTIFICATION MARK. THIS MARK WILL APPEAR ON ENDS OF STRINGERS THUS (15B). ALL SPLICE MATERIAL WILL HAVE THE SPLICE MARK PLUS A DIFFERENT SUFFIX NUMERAL FOR EACH INDIVIDUAL PIECE OF SPLICE MATERIAL THUS - (15B-1) - (15B-2) - (15B-3) - ETC. CORRESPONDING MARKS WILL ALSO BE ON THE STRINGER EXCEPT WHERE SHOWN OTHERWISE. FOR PROPER PLACING OF SPLICE MATERIAL THE MATCH MARK MUST BE KEPT TOWARD THE OUTSIDE AND IN A POSITION, CLOSELY RELATED WITH THE CORRESPONDING MATCH MARK ON THE STRINGER.

GENERAL ERECTORS NOTES:-

1) SEE E1 AND E2 FOR ANCHOR BOLT PLANS -
SEE E3 AND E4 FOR FRAMING PLANS -
SEE E5 FOR SECTIONS AND DETAILS -

2) ERECTION MARKS HAVE BEEN PAINTED ON THE MEMBERS IN THE SHOP, IN AN UPRIGHT POSITION, AND ON THE SAME ENDS OF THE MEMBERS AS THEY APPEAR ON THE FRAMING PLANS. MEMBERS MUST BE ERECTED WITH THE MARKS IN THESE SAME RELATIVE POSITIONS.

3) CONTINUOUS STRINGERS WHICH SPAN FROM ℄ BRG. ABUT. #16 TO ℄ BRG PIER #12 (SOUTH) HAVE HAD THEIR SPLICES REAMED WHILE SHOP (YARD) ASSEMBLED AND MATCH MARKED. FOR PROPER ERECTION SEE MATCH MARKING SKETCH AND NOTES ON THIS SHEET.

CONTINUOUS STRINGERS WHICH SPAN FROM ℄ BRG. ABUT #1 TO ℄ BRG-PIER #6 (NORTH) AND ℄ BRG-PIER #6 (SOUTH) TO ℄ BRG. PIER #12 (NORTH) HAVE HAD THEIR SPLICES REAMED TO A TEMPLATE.

4) ALL FIELD CONNECTIONS SHALL BE MADE WITH A-325 HIGH STRENGTH BOLTS. EXCEPT AS FOLLOWS:
ALL SPLICE CONNECTIONS (FLANGE AND WEB) SHALL BE RIVETED, INCLUDING DIAPHRAGM CONNECTIONS AT PIERS #13-#14 AND #15.
SOLE PLATES AT PIERS #13-#14 AND #15 SHALL BE CONNECTED WITH TURNED BOLTS. SEE E1 FOR MARKS OF TURNED BOLTS AND BEARING ASSEMBLIES.
SOLE PLATES FOR FIXED SHOES AT PIERS #3 AND #9 HAVE BEEN SHOP WELDED TO BOTTOM FLANGE OF STRINGERS.
ALL OTHER SOLE PLATES SHALL BE FIELD WELDED TO BOTTOM FLANGE OF STRINGER (AS INDICATED ON SHEETS E1 AND E2) SO THAT THE EXPANSION SHOE ROCKERS ARE VERTICAL UNDER FULL DEAD LOAD AT 68°F.
TROUGH SPLICE CONNECTIONS SHALL BE MADE WITH 5/8"Φ GALVANIZED BOLTS.
TROUGHS SHALL BE CONNECTED TO TROUGH SUP'TS WITH 5/8"Φ MACH. BOLTS (WASHER UNDER HD & NUT)
TROUGH SUP'TS SHALL BE CONNECTED TO STRINGERS WITH MACHINE BOLTS.
CHANNEL PIPE SUPPORTS, AT PIERS #6 & #12, SHALL BE CONNECTED TO CHANNEL DIAPH'S WITH MACHINE BOLTS. SEE SHEET E4
SEE SHEET E5 FOR FIELD WELDING REQUIRED AT EXPANSION DEVICES.
ERECTOR TO CONSULT RIVET AND BOLT TAKE-OFF SHEETS TO DETERMINE THE PROPER SIZE - LENGTH AND LOCATION OF RIVETS AND BOLTS TO BE USED.

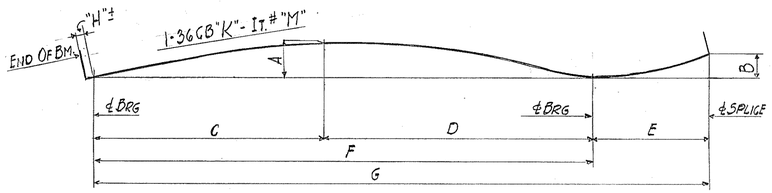
5) EXP. DEVICES HAVE BEEN SHOP ASSEMBLED AND SHIPPED AS A UNIT. SHIPPING ANGLES SHALL BE REMOVED AFTER CONCRETE HAS SET. SEE DESIGN DRAWING SHEET #17.

RIVETS
OPEN HOLES
SEAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
FG. WK.
B. SMITH
MCH.
ERECT.
Q. INSP.

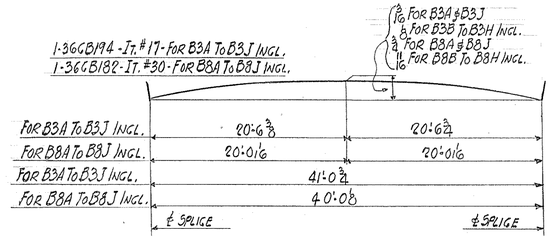
SOUTH THIRTY-FIFTH STREET VIADUCT
OVER C & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE De ROCHER MADE BY W.V.D.
CHECKED BY P. 8-27-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG 4538 SHEET E6

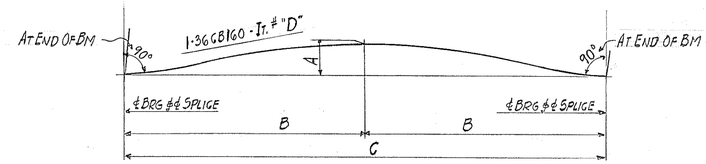


CAMBER DIAGRAM FOR BEAMS B1A TO B1J INCL. AND B5A TO B5J INCL.

MARK	DIMENSION									
	A	B	C	D	E	F	G	H	K	M
B1A	4	3/8	21'-0	31'-5½	16'-0	52'-5½	68'-5½	10½	182	28
B1B	3/16	5/16	21'-8	32'-5 5/8	16'-0	54'-1 5/16	70'-1 5/16	8	182	26
B1C	4	5/16	22'-4	33'-5 1/16	16'-0	55'-9 1/16	71'-9 1/16	8	182	21
B1D	4	4	23'-0	34'-4 3/8	16'-0	57'-4 3/8	73'-4 3/8	8	194	15
B1E	3/8	5/16	23'-7	35'-5 5/8	16'-0	59'-0 5/8	75'-0 5/8	8	194	9
B1F	5/16	4	24'-3	36'-5 3/8	16'-0	60'-8 3/8	76'-8 3/8	8	230	7
B1G	3/8	4	24'-11	37'-5 3/8	16'-0	62'-4 3/8	78'-4 3/8	8	230	5
B1H	3/16	5/16	25'-7	38'-4 13/16	16'-0	63'-11 13/16	79'-11 13/16	8	230	3
B1J	3/8	5/16	26'-3	39'-4 3/8	16'-0	65'-7 3/8	81'-7 3/8	10½	230	2
B5A	3/16	3/8	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	9	194	12
B5B	5/16	4	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	8¼	194	13
B5C	3/16	4	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	8¼	194	13
B5D	3/16	4	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	8¼	194	13
B5E	3/8	5/16	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	8¼	194	13
B5F	5/16	4	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	8¼	194	13
B5G	3/16	4	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	8¼	194	13
B5H	5/16	4	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	8¼	194	13
B5J	3/16	3/8	23'-3	34'-11 3/8	16'-0	58'-2 3/8	74'-2 3/8	9	194	12

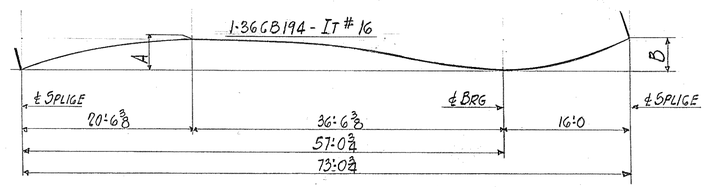


CAMBER DIAGRAM FOR BEAMS B3A TO B3J INCL. AND B8A TO B8J INCL.



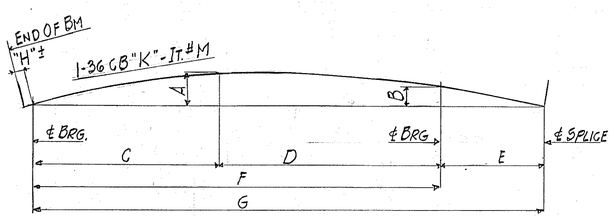
CAMBER DIAGRAM FOR BEAMS B13A TO B13J INCL. AND B14A TO B14J INCL.

MARK	DIMENSION			
	A	B	C	D
B13A	1 3/16	32'-4 13/32	64'-8 13/16	33
B13B	7/8	32'-4 3/8	64'-3 3/4	35
B13C	1 1/16	31'-11 5/16	63'-10 5/8	37
B13D	1/2	31'-8 25/32	63'-5 11/16	40
B13E	5/16	31'-6 5/32	63'-0 7/16	42
B13F	4	31'-3 23/32	62'-7 1/16	43
B13G	4	31'-1 5/16	62'-2 3/8	45
B13H	4	30'-10 3/8	61'-9 1/4	47
B13J	5/16	30'-8 3/32	61'-4 3/8	49
B14A	1/16	32'-5 3/4	64'-11 1/2	32
B14B	5/16	32'-2 3/8	64'-5 3/4	34
B14C	5/16	32'-0	64'-0	36
B14D	5/16	31'-9 5/8	63'-4 1/4	39
B14E	5/16	31'-6 1/4	62'-10 1/2	41
B14F	4	31'-3 3/8	62'-6 3/4	44
B14G	4	31'-0 1/2	62'-1	46
B14H	4	30'-9 5/8	61'-7 1/4	48
B14J	5/16	30'-6 3/4	61'-1 1/2	50



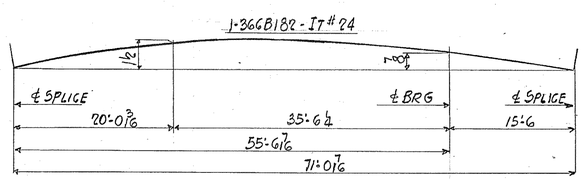
CAMBER DIAGRAM FOR BEAMS B2A TO B2J INCL. AND B4A TO B4J INCL.

MARK	DIMENSION	
	A	B
B2A	5/16	3/8
B2B	4	5/16
B2C	4	5/16
B2D	3/16	5/16
B2E	4	5/16
B2F	3/16	5/16
B2G	3/16	5/16
B2H	3/16	5/16
B2J	4	3/8
B4A	4	3/8
B4B	3/16	5/16
B4C	3/16	5/16
B4D	3/16	5/16
B4E	4	3/8
B4F	3/16	5/16
B4G	3/16	5/16
B4H	3/16	5/16
B4J	4	3/8

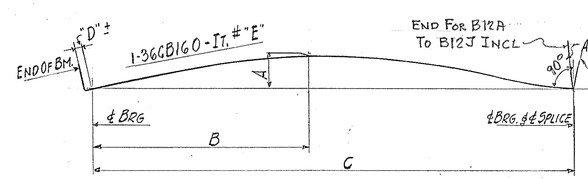


CAMBER DIAGRAM FOR BEAMS B6A TO B6J INCL. AND B11A TO B11J INCL.

MARK	DIMENSION									
	A	B	C	D	E	F	G	H	K	M
B6A	1/2	1 7/16	21'-9	32'-7 15/32	15'-6	54'-4 15/32	69'-10 15/32	9	182	27
B6B	1/16	1/16	22'-0	33'-1 5/32	15'-6	55'-1 5/32	70'-7 5/32	8¼	182	23
B6C	1/16	1/16	22'-4	33'-5 3/8	15'-6	55'-9 3/8	71'-3 3/8	8¼	182	22
B6D	1/2	7/16	22'-7	33'-11	15'-6	56'-6	72'-0	8¼	182	20
B6E	5/8	1/16	22'-11	34'-3 3/8	15'-6	57'-2 3/8	72'-8 3/8	8¼	182	18
B6F	5/8	1/16	23'-2	34'-8¼	15'-6	57'-10¾	73'-4¼	8¼	194	15
B6G	5/8	1/16	23'-5	35'-0 1/16	15'-6	58'-7 1/16	74'-1 1/16	8¼	194	14
B6H	3/4	1/16	23'-9	35'-6 3/8	15'-6	59'-3 3/8	74'-9 3/8	8¼	194	11
B6J	3/8	1/16	24'-0	35'-11¾	15'-6	59'-11½	75'-5¾	9	194	8
B11A	1 1/16	1/16	26'-7	39'-11 3/8	15'-6 1/16	66'-6 3/8	82'-0 1/16	8¼	230	1
B11B	1 7/16	3/4	25'-8	38'-6½	15'-6 1/16	64'-2½	79'-8 1/16	8	230	4
B11C	1 3/16	1 3/16	24'-9	37'-1 7/16	15'-6 1/16	61'-10 7/16	77'-4 1/2	8	230	6
B11D	1 5/8	3/8	23'-10	35'-8 1/16	15'-6 1/16	59'-6 1/16	75'-0 1/2	8	194	10
B11E	1 3/8	1	22'-10	34'-4¼	15'-6 1/16	57'-2¼	72'-8 5/8	8	182	19
B11F	1½	1	21'-11	32'-11 3/8	15'-6 1/16	54'-10 3/8	70'-4 3/8	8	182	25
B11G	1¼	1 5/16	21'-0	31'-6	15'-6 1/16	52'-6	68'-0 1/16	8	182	29
B11H	1 7/16	3/8	20'-1	30'-0 5/8	15'-6 1/16	50'-1 5/8	65'-8	8	160	31
B11J	1 1/16	1 3/16	19'-1	28'-8¾	15'-6 1/16	47'-9¾	63'-3 13/16	8¼	160	38

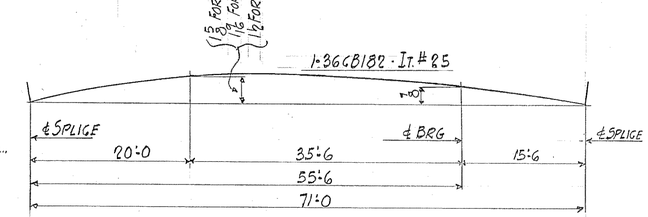


CAMBER DIAGRAM FOR BEAMS B7A TO B7J INCL.



CAMBER DIAGRAM FOR BEAMS B12A TO B12J INCL. AND B15A TO B15J INCL.

MARK	DIMENSION				
	A	B	C	D	E
B12A	1 1/16	19'-8	49'-2¼	8¾	58
B12B	1 1/16	19'-8	49'-2 5/16	8	59
B12C	3/4	19'-8	49'-2 5/16	8	59
B12D	1 3/16	19'-8	49'-2 5/16	8	59
B12E	7/8	19'-8	49'-2 7/16	8	59
B12F	7/8	19'-8	49'-2 7/16	8	59
B12G	7/8	19'-8	49'-2 7/16	8	59
B12H	7/8	19'-8	49'-2 7/16	8	59
B12J	1 3/8	19'-8	49'-2 7/16	8¾	58
B15A	5/16	20'-7	51'-6 3/8	10½	51
B15B	4	20'-6	51'-2 1/16	8	52
B15C	4	20'-4	50'-9½	8	53
B15D	4	20'-2	50'-5	8	54
B15E	4	20'-0	50'-0 7/16	8	55
B15F	3/16	19'-10	49'-7 7/16	8	56
B15G	3/16	19'-8	49'-3 3/8	8	57
B15H	3/16	19'-7	48'-10 13/16	8	60
B15J	4	19'-5	48'-6 3/4	10½	61



CAMBER DIAGRAM FOR BEAMS B9A TO B9J INCL. AND B10A TO B10J INCL.

NOTES:—

ONE BEAM REQ'D FOR EACH MARK ON THIS SHEET.

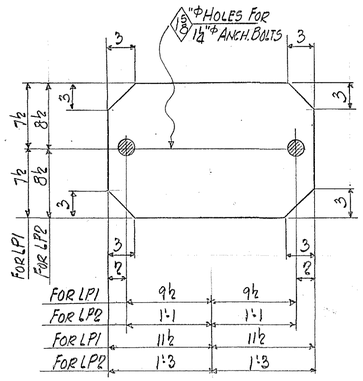
BEAMS ARE NOT TO BE CUT TO THE LENGTHS SHOWN ON THIS SHEET. SEE DETAIL DRAWINGS FOR EXACT LENGTHS OF BEAMS.

CAMBER SHALL VARY NOT MORE THAN ½" AND NOT LESS THAN ¼" FROM DEPTH SPECIFIED. CAMBER TO BE IN ACCORDANCE WITH CITY OF MILWAUKEE DEPT. OF PUBLIC WORKS SPECIFICATIONS FOR THIS CONTRACT.

RIVETS
OPEN HOLES
SEAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

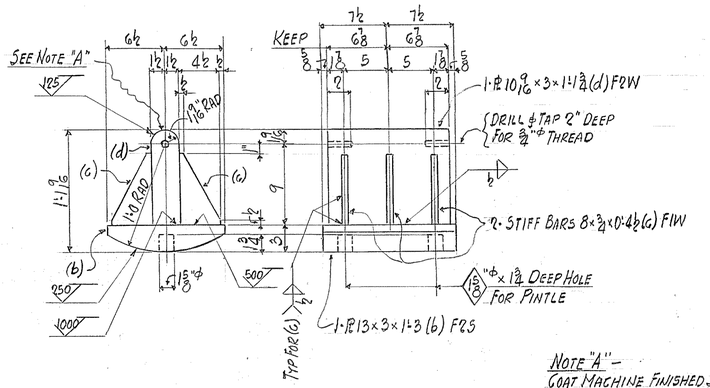
CAMBER DIAGRAMS

TEMP.	SOUTH THIRTY FIFTH STREET VIADUCT
SUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	BETHLEHEM STEEL COMPANY
MCH.	FABRICATED STEEL CONSTRUCTION
ERECT.	Drawings at Chicago - Fabrication at CHICAGO
Q. INSP.	IN CHARGE HERB MADE BY PJ
	CHECKED BY LDH 7-21-59 TRACED BY
	REVISED LAST ASSEM. MK.
SHOP NO.	CONTRACT CG4538 SHEET 1



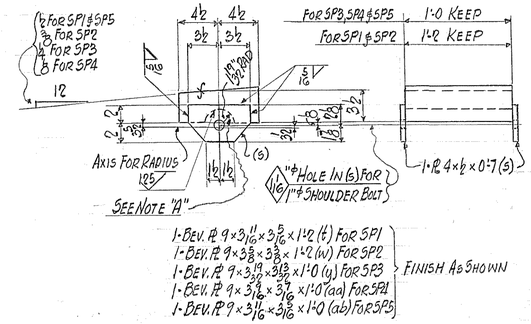
LEAD PLATE LP1 AND LP2

No PAINT



ROCKER R1

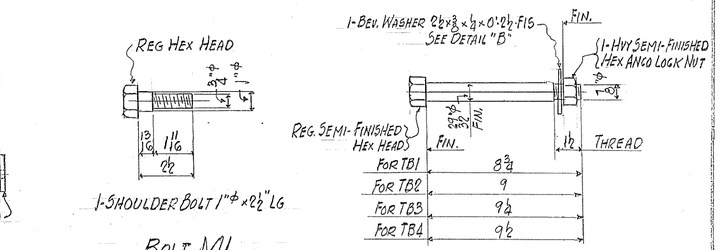
12'-5" OF ½" FIW



NOTE "A" –
COAT MACHINE FINISHED SURFACE WITH A HOT MIXTURE OF WHITE LEAD & TALLOW

SOLE PLATES SP1, SP2, SP3, SP4 AND SP5

1'-10" OF 5/16" FIW

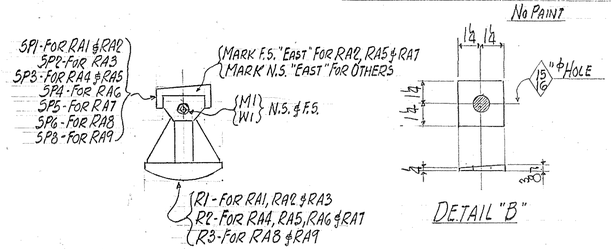


BOLT M1

No PAINT

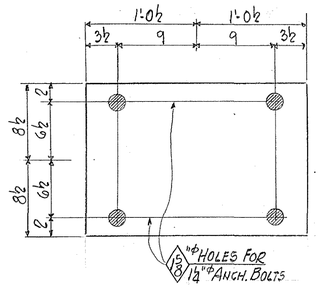
TURNED BOLTS TB1, TB2, TB3 AND TB4

No PAINT



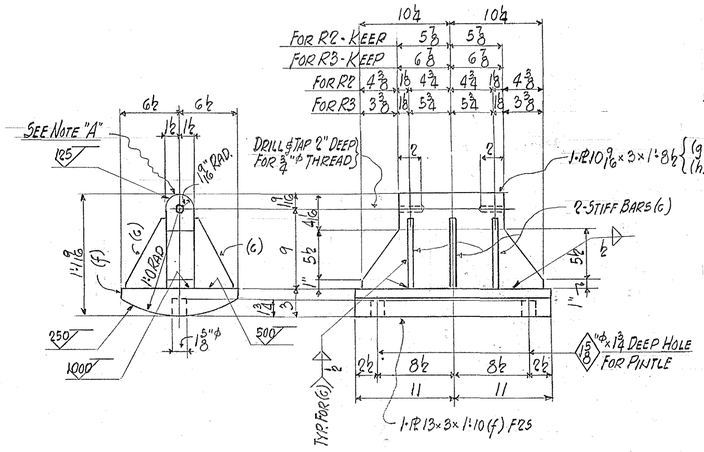
DETAIL "B"

ROCKER ASSEMBLIES RA1, RA2, RA3, RA4, RA5, RA6, RA7, RA8 AND RA9



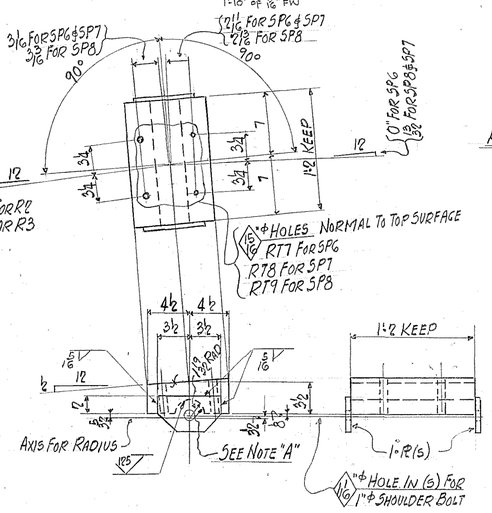
LEAD PLATE LP3

No PAINT



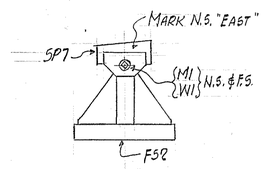
ROCKER R2 AND R3

15'-6½" OF ½" FIW

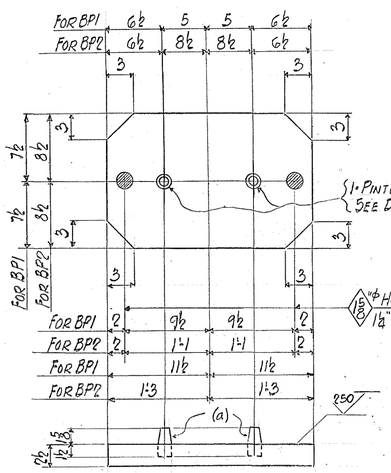


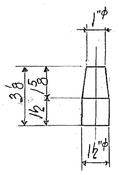
SOLE PLATE SP6, SP7 AND SP8

1'-10" OF 5/16" FIW



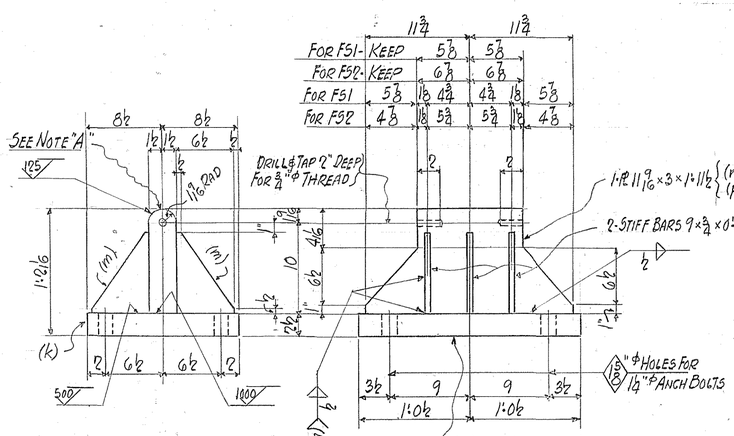
SHOE ASSEMBLY SA1





DETAIL "A"

BEARING PLATE BP1 AND BP2



FIXED SHOE FS1 AND FS2

19'-0½" OF ½" FIW

GENERAL NOTES:—

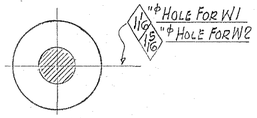
MATERIAL SPECS:
STRUCTURAL STEEL A.S.T.M.-A7
LEAD PLATES - A.S.T.M.-B29
TURNED BOLTS - A.I.S.I.-B1113

WORKMANSHIP SPECS:
A.A.S.H.O. AND CITY OF MILWAUKEE DEPT. OF PUBLIC WORKS SPECS FOR THIS CONTRACT.

SHOP INSPECTION:
NOTIFY MR. GEO. G. ASHTON

TOTAL NO REQ'D	DESCRIPTION	MARK
9	ROCKER ASSEMBLY	RA1
27	Do	RA2
18	Do	RA3
9	Do	RA4
9	Do	RA5
9	Do	RA6
36	Do	RA7
9	Do	RA8
9	ROCKER ASSEMBLY	RA9
9	SHOE ASSEMBLY	SA1
54	LEAD PLATE	LP1
81	Do	LP2
27	LEAD PLATE	LP3
54	BEARING PLATE	BP1
81	BEARING PLATE	BP2
54	ROCKER	R1
63	Do	R2
18	ROCKER	R3
18	FIXED SHOE	FS1
9	FIXED SHOE	FS2
36	SOLE PLATE	SP1
18	Do	SP2
18	Do	SP3
18	Do	SP4
45	Do	SP5
9	Do	SP6
9	SOLE PLATE	SP7
9	SOLE PLATE	SP8
324	WASHER	W1
378	WASHER	W2
324	BOLT	M1
34	TURNED BOLT	TB1
48	Do	TB2
20	Do	TB3
6	TURNED BOLT	TB4

SHIP ASSEMBLED TO RA1, RA2 & RA3 → 54
SHIP ASSEMBLED TO RA4, RA5, RA6 & RA7 → 63
SHIP ASSEMBLED TO RA8 & RA9 → 18
SHIP ASSEMBLED TO SA1 → 9
SHIP ASSEMBLED TO RA1 & RA2 → 36
SHIP ASSEMBLED TO RA3 → 18
SHIP ASSEMBLED TO RA4 & RA5 → 18
9-SHIPPED ASSEMBLED TO RA6, 9-SHIPPED ASSEMBLED TO BEAM → 18
36-SHIPPED ASSEMBLED TO RA7, 9-SHIPPED ASSEMBLED TO BEAM → 45
SHIP ASSEMBLED TO RA8 → 9
SHIP ASSEMBLED TO SA1 → 9
SHIP ASSEMBLED TO RA9 → 324
36-SHIPPED FOR FIELD ASSEMBLY, 288-SHIPPED ON ROCKER & SHOE ASSEMBLY → 324



1-CUT WASHER 2½"ϕ×No 8 GA THK - FOR W1
1-PL WASHER 3"ϕ×¼" THK - FOR W2

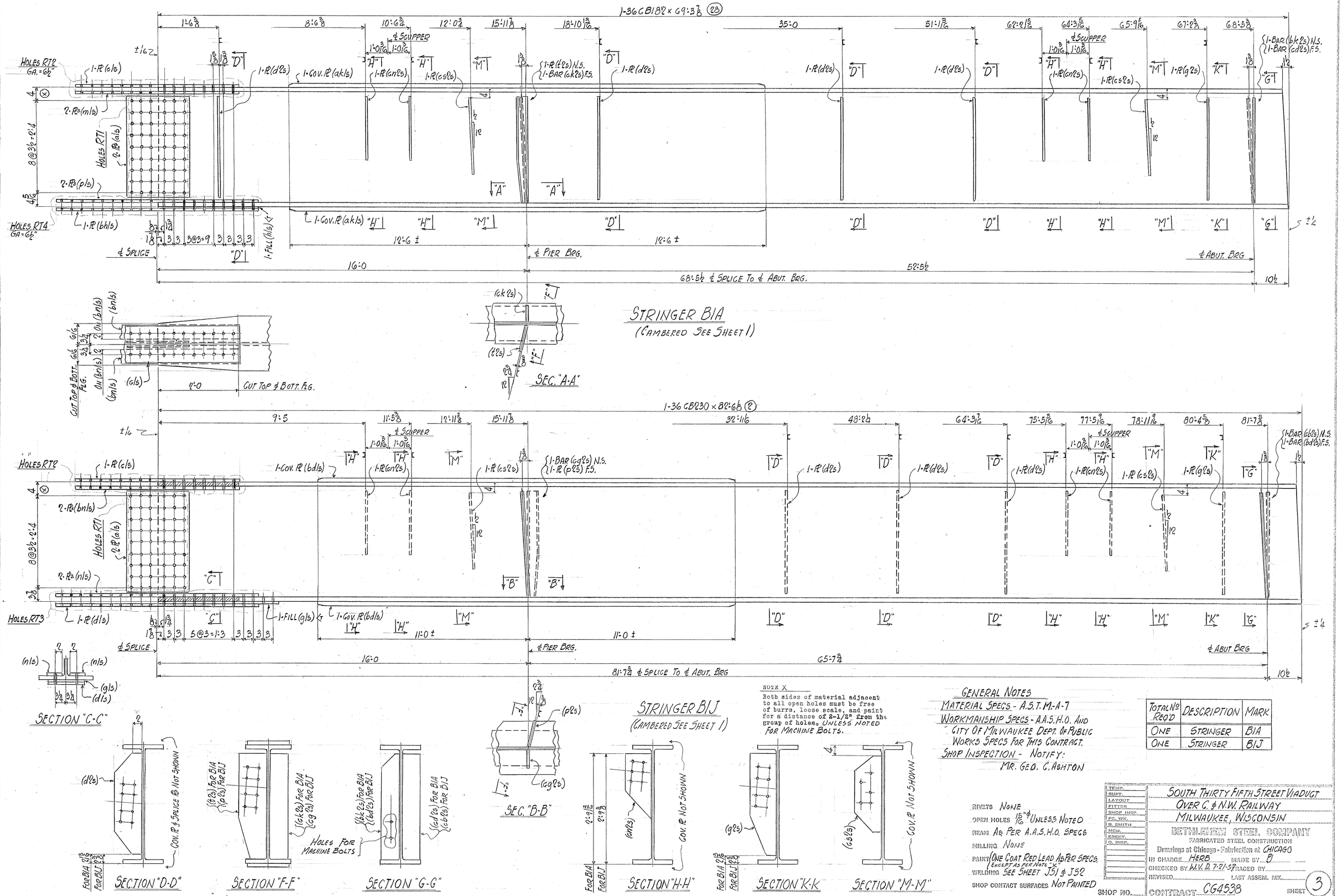
WASHER W1 AND W2

RIVETS NONE
OPEN HOLES AS NOTED
SEAM AS NOTED
MILLING AS NOTED
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS NOTED
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SHPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERE MADE BY B1
CHECKED BY L.P.H. 7-8-57 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT C64538 SHEET 2



NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. UNLESS NOTED FOR MACHINE BOLTS.

GENERAL NOTES

MATERIAL SPECS - A.S.T.M.-A-7

WORKMANSHIP SPECS - A.A.S.H.O. AND CITY OF MILWAUKEE DEPT. OF PUBLIC WORKS SPECS FOR THIS CONTRACT.

SHOP INSPECTION - NOTIFY: MR. GEO. C. ASHTON

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B1A
ONE	STRINGER	B1J

RIVETS NONE

OPEN HOLES 15/16" ϕ UNLESS NOTED

BEAM AS PER A.A.S.H.O. SPECS

MILLING NONE

PAINT ONE COAT RED LEAD AS PER SPECS. EXCEPT AS PER NOTE "X"

WELDING SEE SHEET J51 & J52

SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

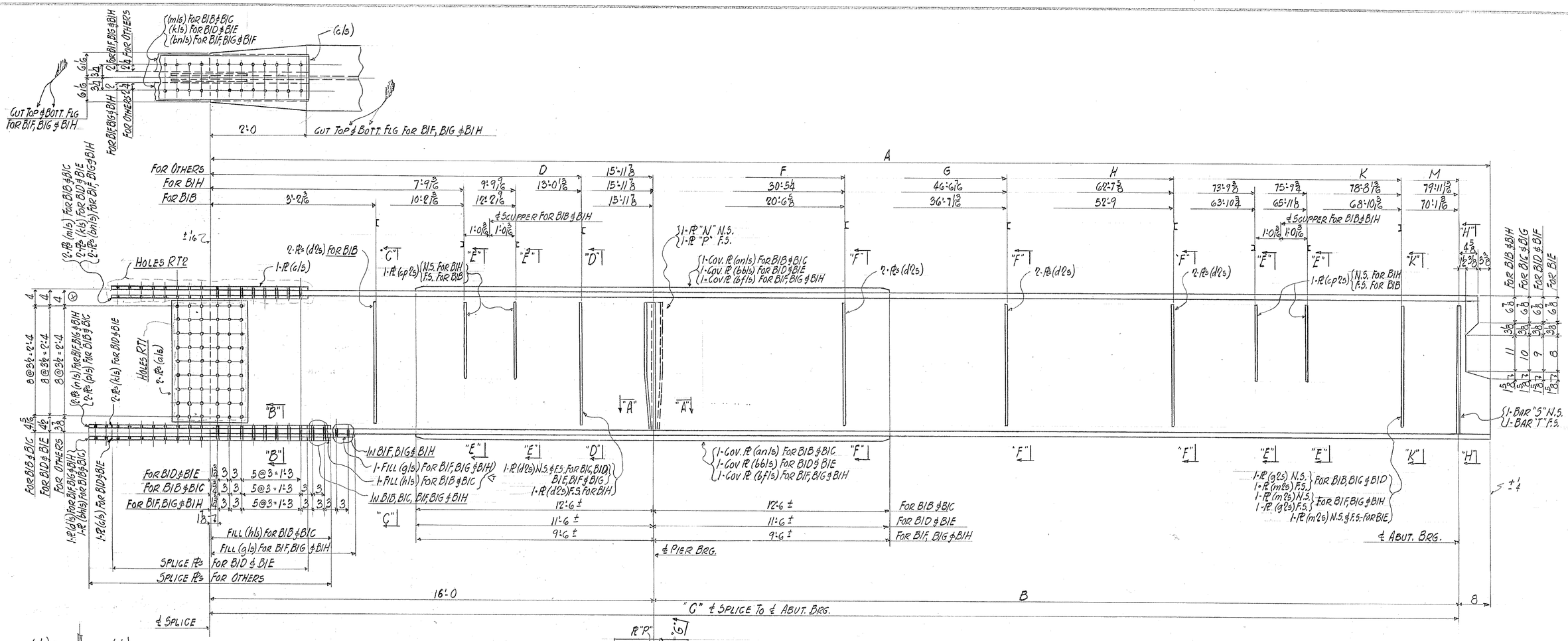
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO

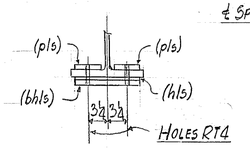
IN CHARGE HERB MADE BY B
CHECKED BY W.V.D. 7-21-57 TRACED BY
REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CG4538 SHEET 3

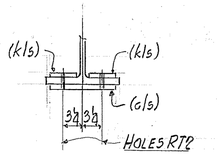
E4

B.P.1

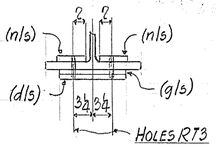




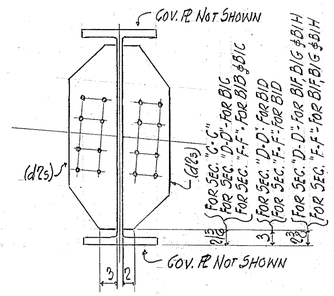
SECTION "B-B"
FOR B1B & B1C



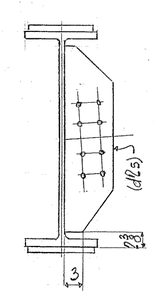
SECTION "B-B"
FOR B1D & B1E



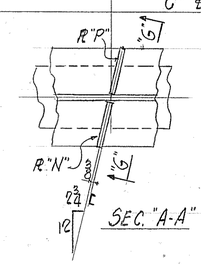
SECTION "B-B"
FOR B1F, B1G & B1H



SECTION "C-C" - FOR B1B
SEC. "D-D" (AS SHOWN FOR B1C & B1D) (OPP HAND FOR B1F & B1G)
SEC. "F-F" (AS SHOWN FOR B1B, B1C & B1D) (OPP HAND FOR B1F, B1G & B1H)



SECTION "D-D" - FOR B1H

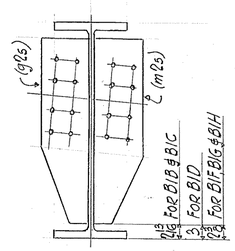


SEC. "A-A"

STRINGERS B1B, B1C, B1D, B1E, B1F, B1G AND B1H

(CAMBERED SEE SHEET 1)

MARK	DIMENSION A	B	C	D	F	G	H	K	M	N	P	S	T
B1B	1-36CB182 × 70'-9 3/16 (26)	54'-1 5/16	70'-1 5/16	—	—	—	—	—	—	(t2s)	(ab2s)	(bh2s)	(ag2s)
B1C	1-36CB182 × 72'-4 11/16 (21)	55'-9 1/16	71'-9 1/16	4'-9 7/16	22'-8 3/4	38'-3 9/16	54'-4 3/4	70'-5 15/16	71'-8 15/16	(t2s)	(ab2s)	(at2s)	(ag2s)
B1D	1-36CB194 × 74'-0 3/4 (15)	57'-4 7/8	73'-4 7/8	6'-5 3/4	23'-10 9/16	39'-11 3/8	56'-0 1/16	72'-1 3/4	73'-4 3/4	(w2s)	(ac2s)	(ba2s)	(ah2s)
B1E	1-36CB194 × 75'-8 1/2 (9)	59'-0 3/8	75'-0 3/8	8'-1 1/2	25'-5 15/16	41'-7 1/8	57'-8 7/16	73'-9 1/2	75'-0 1/2	(ac2s)	(ac2s)	(bg2s)	(ah2s)
B1F	1-36CB230 × 77'-4 3/4 (1)	60'-8 3/8	76'-8 3/8	9'-9 3/4	27'-1 11/16	43'-2 7/8	59'-4 1/16	75'-5 1/2	76'-8 1/4	(y2s)	(p2s)	(ad2s)	(bf2s)
B1G	1-36CB230 × 79'-0 1/16 (5)	62'-4 7/16	78'-4 7/16	11'-5 1/16	28'-9 1/2	44'-10 1/16	60'-11 7/8	77'-1 1/16	78'-4 1/16	(y2s)	(p2s)	(ad2s)	(bb2s)
B1H	1-36CB230 × 80'-7 13/16 (3)	63'-11 15/16	79'-11 15/16	—	—	—	—	—	—	(y2s)	(p2s)	(ad2s)	(bc2s)

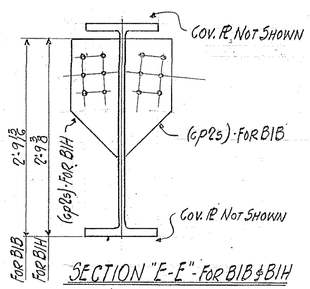


SEC. "K-K" FOR B1B, B1C & B1D
SEC. "K-K" OPP HAND FOR B1F, B1G & B1H

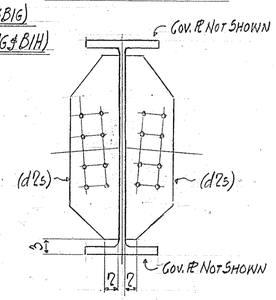
TOTAL NO REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B1B
ONE	↓	B1C
ONE		B1D
ONE		B1E
ONE		B1F
ONE	↓	B1G
ONE	STRINGER	B1H

NOTE X

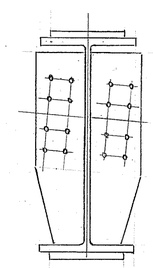
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.



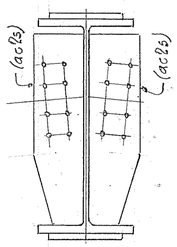
SECTION "E-E" - FOR B1B & B1H



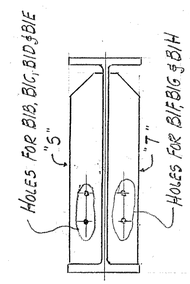
SECTION "D-D" AND "F-F" - FOR B1E



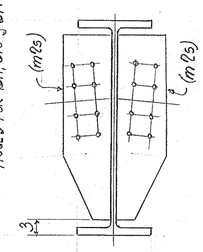
SEC. "G-G" - FOR B1B, B1C & B1D
SEC. "G-G" OPP HAND - FOR B1F, B1G & B1H



SECTION "G-G"
FOR B1E



SECTION "H-H"



SECTION "K-K"
FOR B1E

FOR GENERAL NOTES SEE SHEET 3

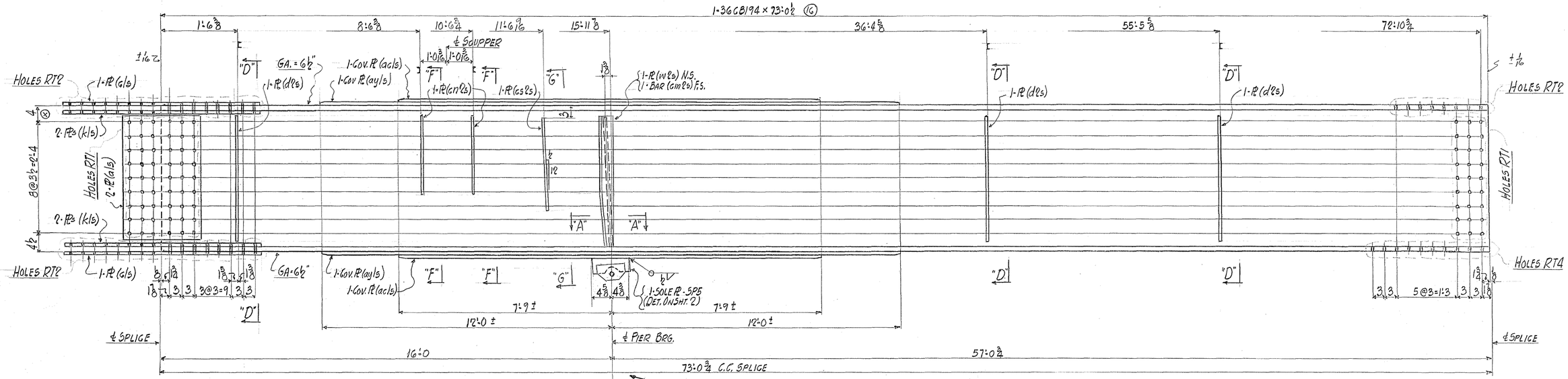
RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
BEAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS, EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
D. SMITH	
MCH.	
ERECT.	
Q. INSP.	

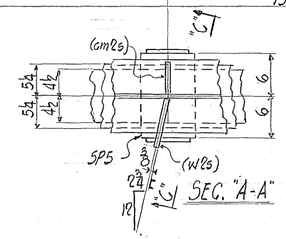
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

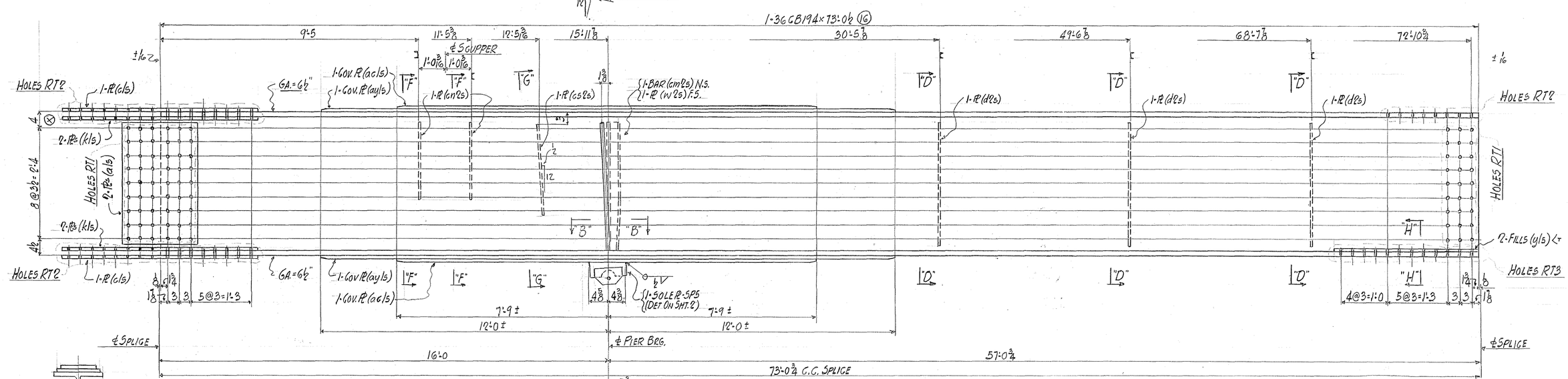
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PJ
CHECKED BY WVD 7-21-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 4

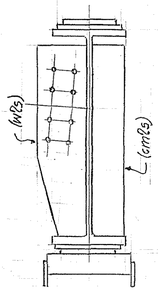
B.P. 1



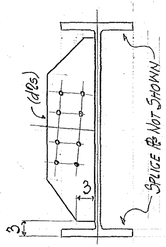
STRINGER B2A
(CAMBERED SEE SHEET 1)



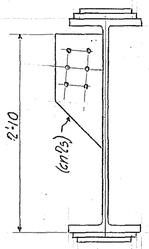




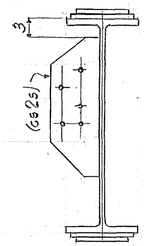
SECTION "C-C"



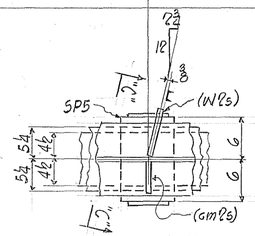
SECTION "D-D"



SECTION "F-F"

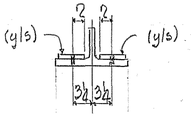


SECTION "G-G"



SEC. "B-B"

STRINGER B2J
(CAMBERED SEE SHEET 1)



SECTION "H-H"

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B2A
ONE	STRINGER	B2J

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE

OPEN HOLES 15/16" ϕ UNLESS NOTED

REAM AS PER A.A.S.H.O. SPECS.

MILLING NONE

PAINT {ONE COAT RED LEAD AS PER SPECS. (EXCEPT AS PER NOTE "X")

WELDING AS NOTED-ALSO SEE SHT J51 & J52

SHOP CONTACT SURFACES NOT PAINTED

SHOP NO.

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
SHEET.	
O. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

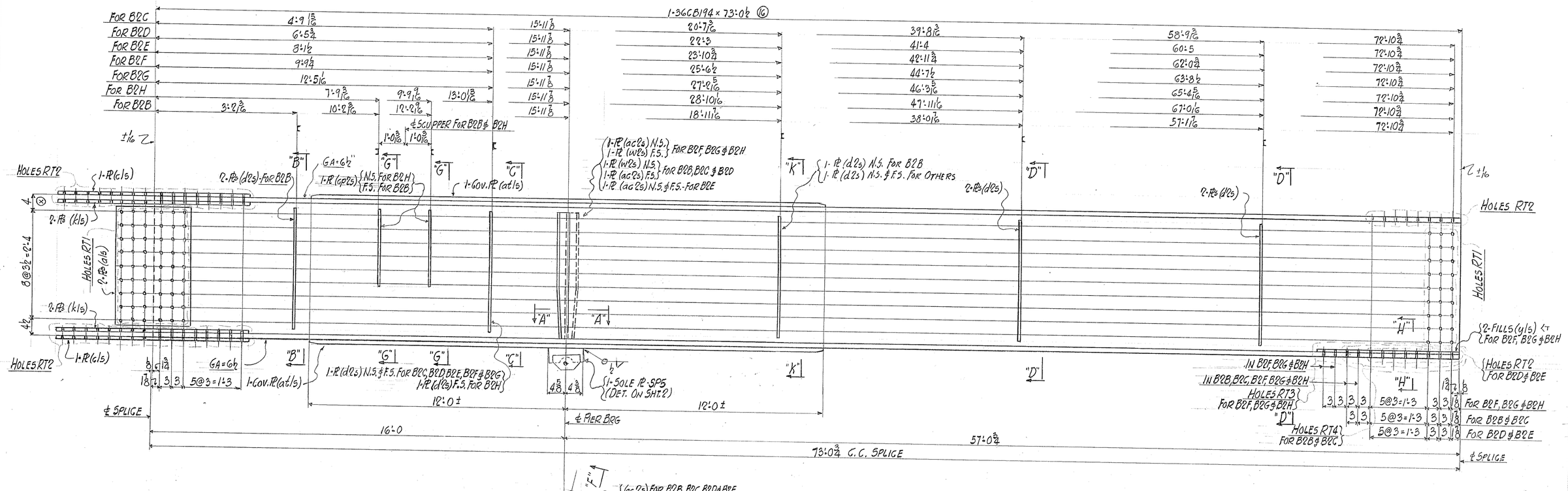
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO

IN CHARGE HERB MADE BY B
CHECKED BY W.V.D. 7-21-59 TRACED BY
REVISED LAST ASSEM. MK.

CONTRACT CG4538 SHEET 5

REV (A) 1-15-6

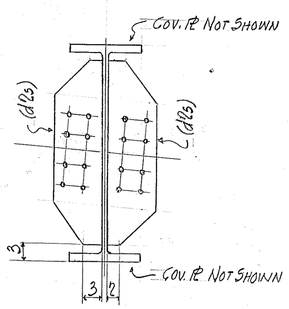
E4



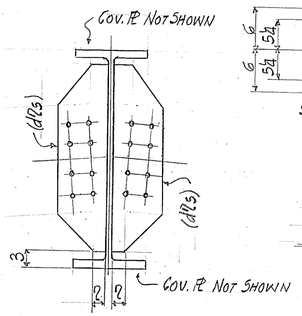
STRINGERS B2B, B2C, B2D, B2E, B2F, B2G AND B2H
(CAMBERED SEE SHEET 1)

SECTION "A-A"

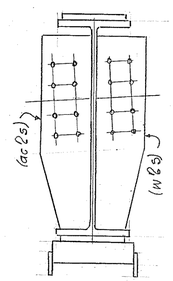
SECTION "H-H"



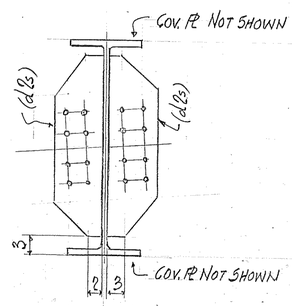
SECTION "B-B"-FOR B2B
SECTION "C-C"-FOR B2C & B2D
SECTION "D-D"-FOR B2B, B2C & B2D
SECTION "K-K"-FOR B2C & B2D



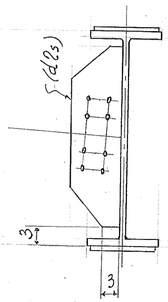
SECTION "C-C"-"D-D" & "K-K" FOR B2E



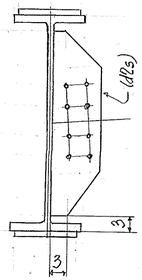
SEC. "F-F"-FOR B2F, B2G & B2H



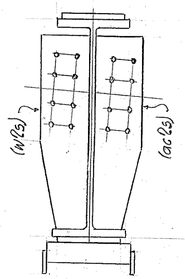
SEC. "C-C"-FOR B2F & B2G
SEC. "D-D" & "K-K" FOR B2F, B2G & B2H



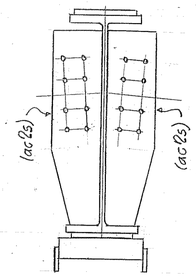
SEC. "K-K" FOR B2B



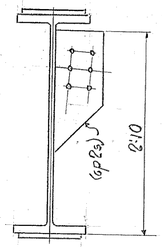
SECTION "C-C"-FOR B2H



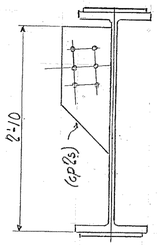
SECTION "F-F"
FOR B2B, B2C & B2D



SECTION "F-F"
FOR B2E



SECTION "G-G"
FOR B2B



SECTION "G-G"
FOR B2H

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B2B
ONE		B2C
ONE		B2D
ONE		B2E
ONE		B2F
ONE		B2G
ONE	STRINGER	B2H

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

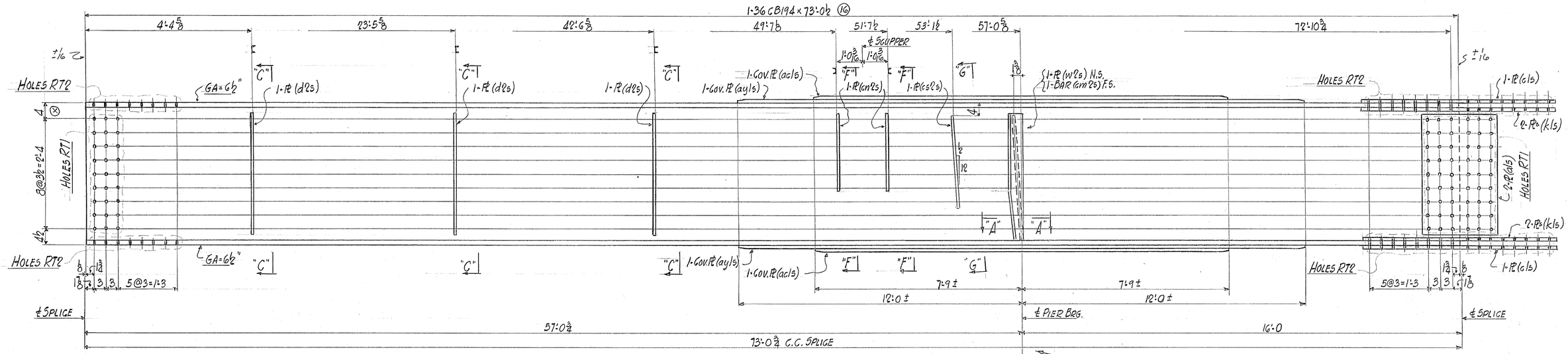
RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
REAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT { ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING AS NOTED · ALSO SEE SHT 351 & 352
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

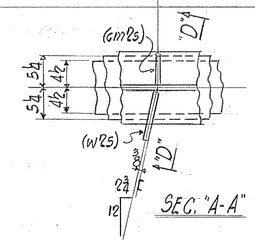
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

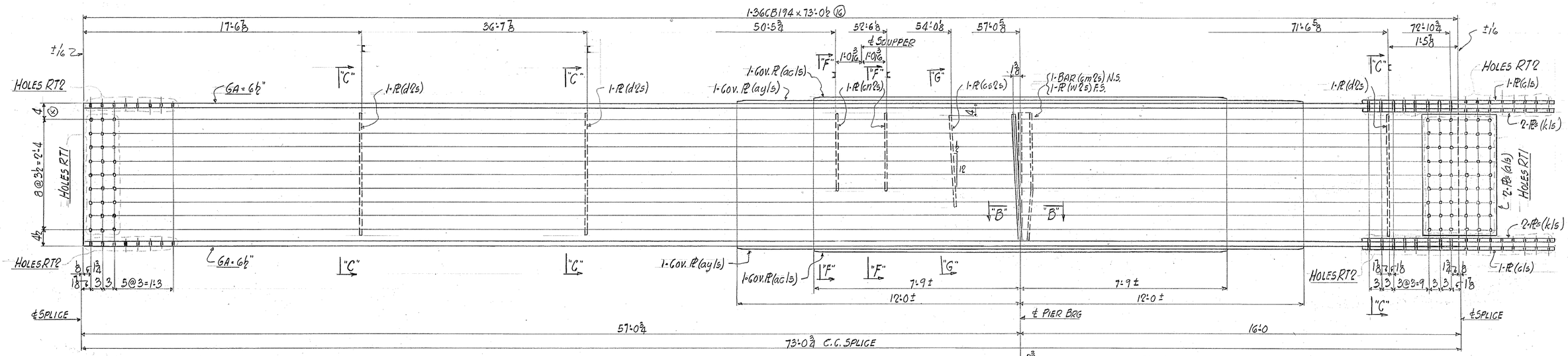
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY DJ
CHECKED BY WVD 7-21-57 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 6

E4

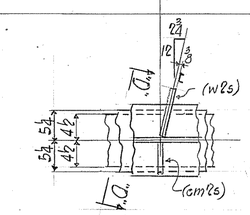


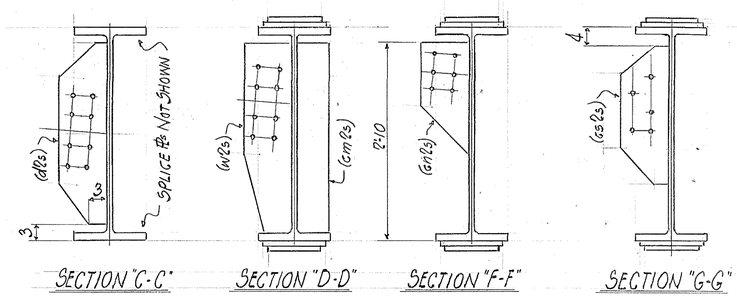
STRINGER B4A
(CAMBERED SEE SHEET 1)





STRINGER B4J
(CAMBERED SEE SHEET 1)





TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B4A
ONE	STRINGER	B4J

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE

OPEN HOLES 15/16" ϕ UNLESS NOTED

BEAM AS PER A.A.S.H.O. SPECS

MILLING NONE

PAINT { ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"

WELDING SEE SHEET J51 & J52

SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
D. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

Drawings at Chicago - Fabrication at CHICAGO

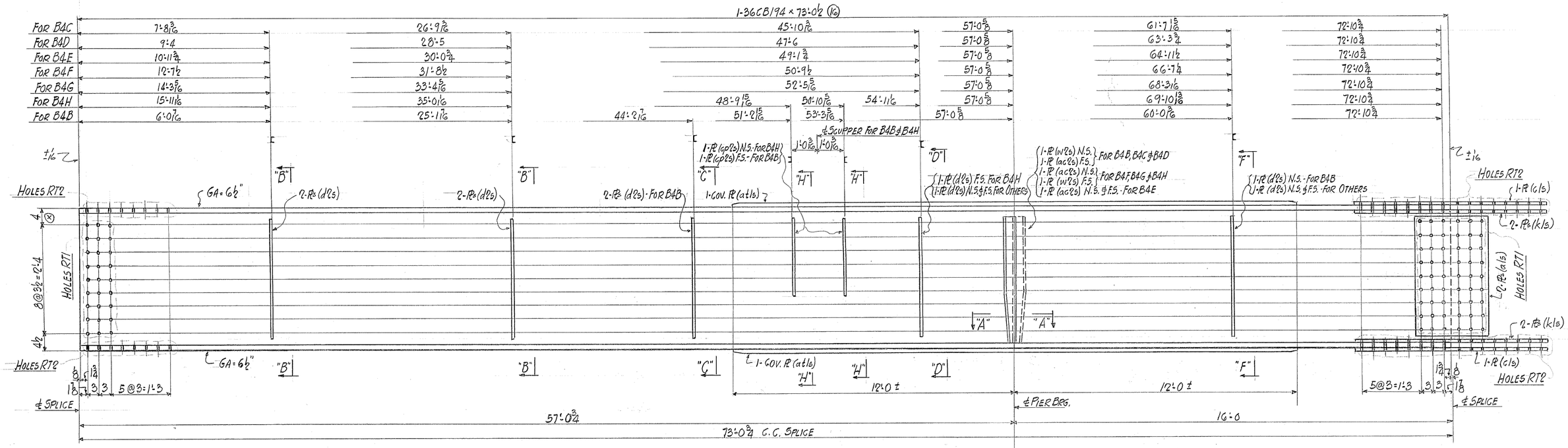
IN CHARGE HERB MADE BY B/

CHECKED BY WYD 7-21-59 TRACED BY

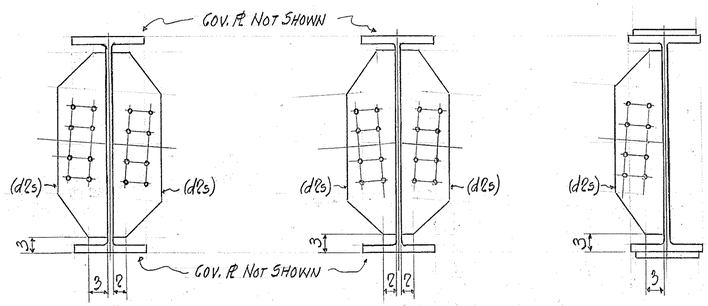
REVISED LAST ASSEM. MK.

CONTRACT C64538 SHOP NO. SHEET 7

B.P. 1



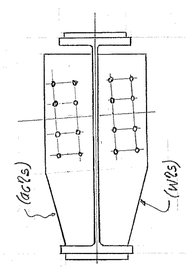
STRINGERS B4B, B4C, B4D, B4E, B4F, B4G AND B4H
(CAMBERED SEE SHEET 1)



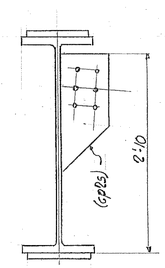
SEC. "B-B" - FOR B4B, B4C & B4D
SEC. "C-C" - FOR B4B
SEC. "D-D" & "F-F" - FOR B4C & B4D

SEC. "B-B", "D-D" & "F-F"
FOR B4E

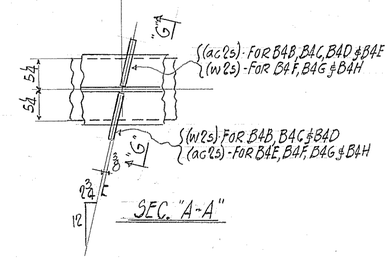
SEC. "F-F" - FOR B4B



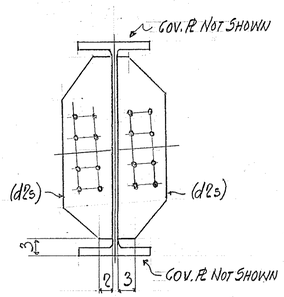
SECTION "G-G"
FOR B4F, B4G & B4H



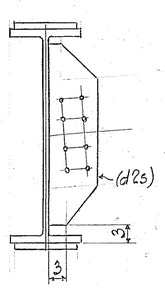
SECTION "H-H"
FOR B4B



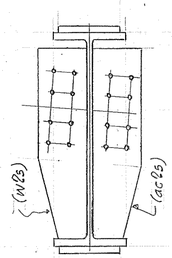
SEC. "A-A"



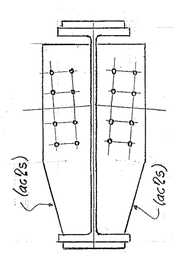
SEC. "B-B" & "F-F" - FOR B4F, B4G & B4H
SEC. "D-D" - FOR B4F & B4G



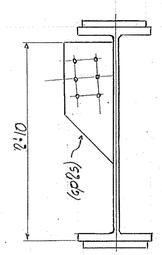
SEC. "D-D" - FOR B4H



SECTION "G-G"
FOR B4B, B4C & B4D



SECTION "G-G"
FOR B4E



SECTION "H-H"
FOR B4H

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B4B
ONE	↓	B4C
ONE	↓	B4D
ONE	↓	B4E
ONE	↓	B4F
ONE	↓	B4G
ONE	STRINGER	B4H

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE
OPEN HOLES 15/16" DIA UNLESS NOTED
BEAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

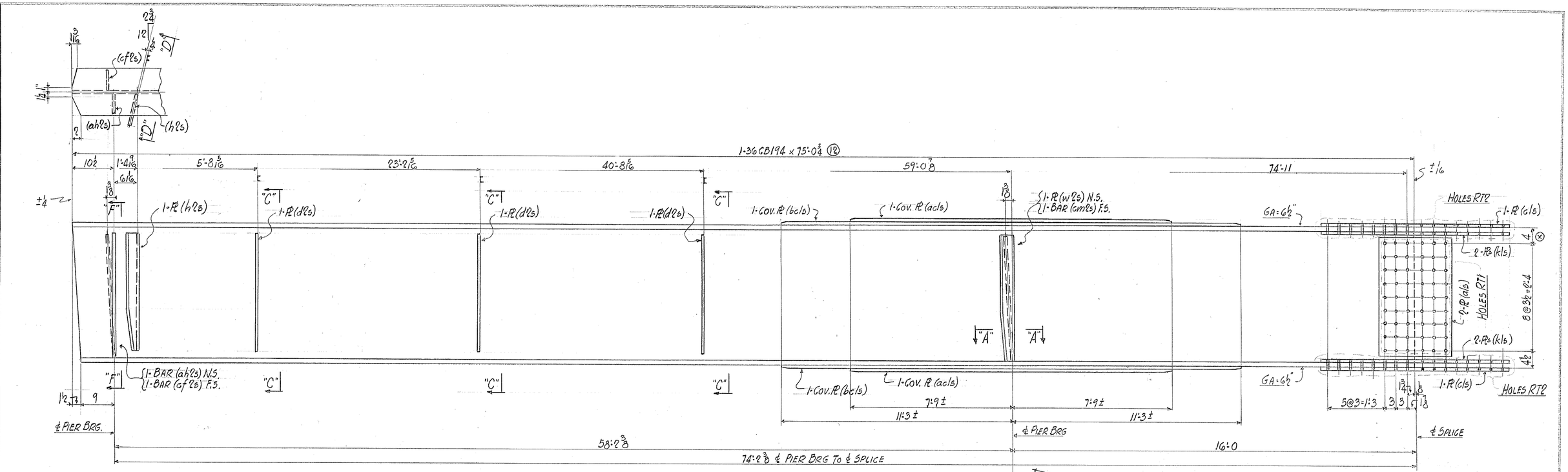
TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
Q. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

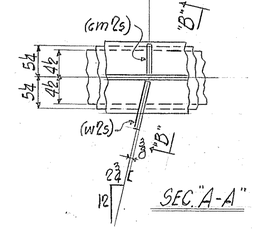
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY EJ
CHECKED BY WVD 7-21-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 8

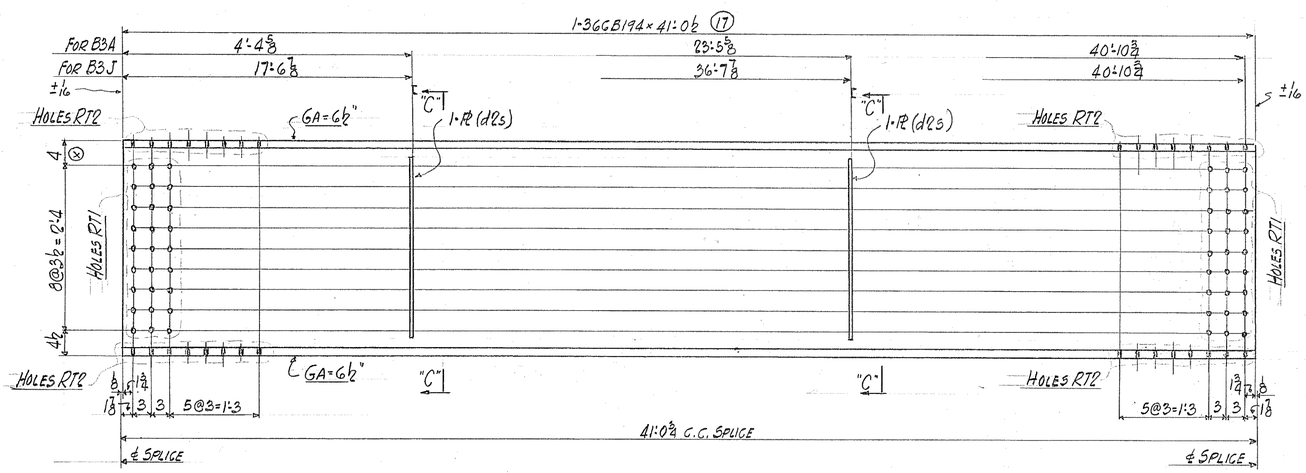
E4

B.P.1

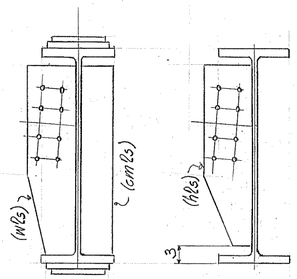


STRINGER B5A
(CAMBERED SEE SHEET 1)

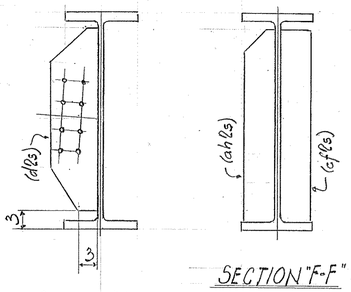




STRINGER B3A
STRINGER B3J OPP. HAND TO SKETCH
(CAMBERED SEE SHEET 1)



SECTION "B-B" SECTION "D-D"



SECTION "C-C" SECTION "F-F"

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B5A
ONE	STRINGER	B3A
ONE	STRINGER	B3J

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
REAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT {ONE COAT REDLEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

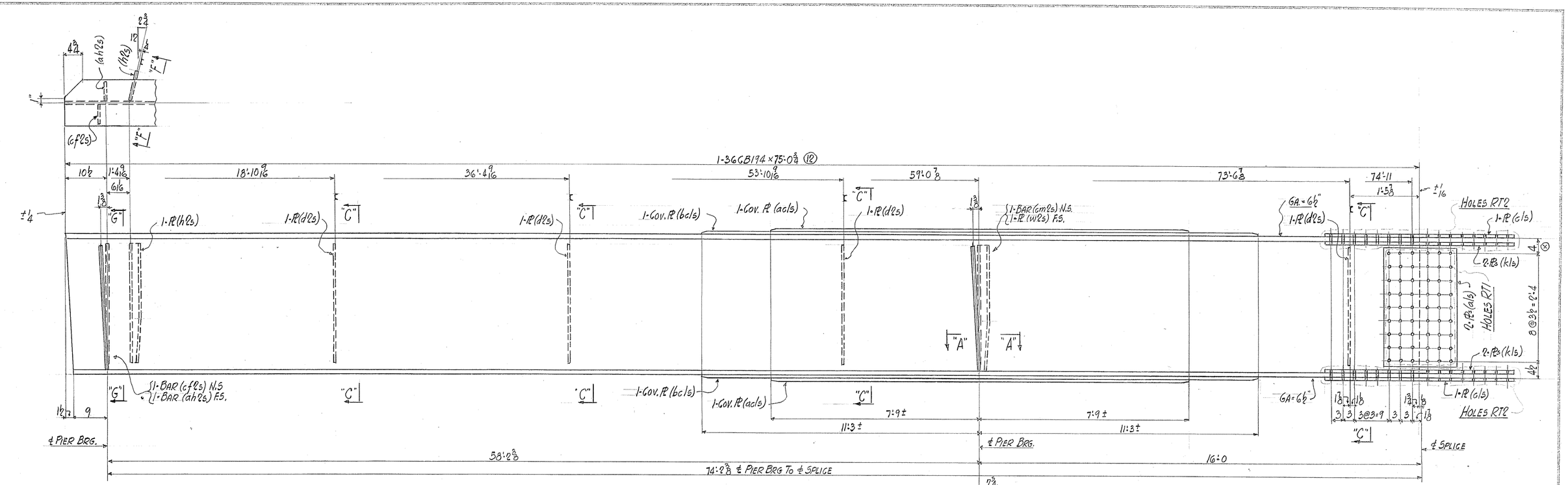
TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
D. SMITH	
MCH.	
ERECT.	
O. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

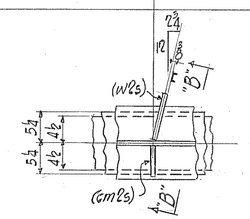
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY B
CHECKED BY W.V.D. 7-21-52 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 9

E4-

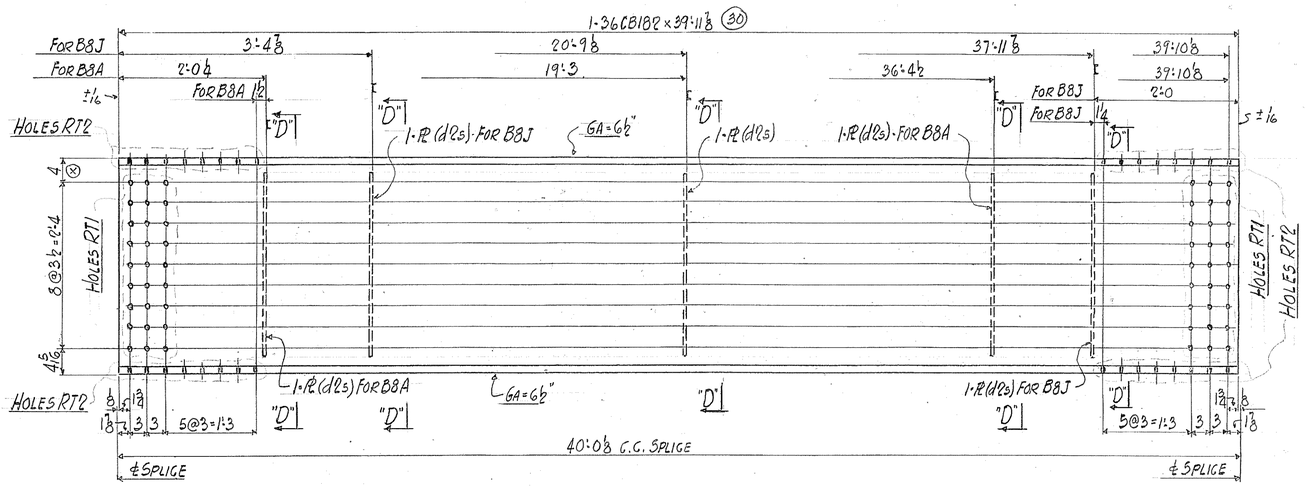
B.P. 1-2



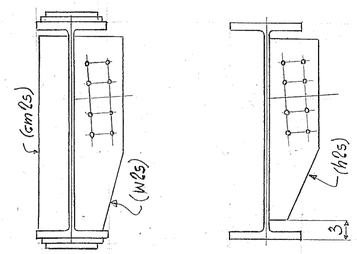
STRINGER B5J
(CAMBERED - SEE SHEET 1)



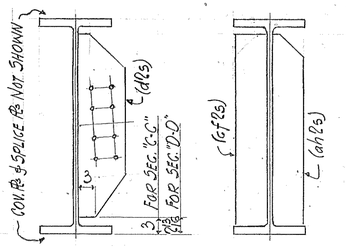
SEC. "A-A"



STRINGER B8J
STRINGER B8A OPP. HAND TO SKETCH
(CAMBERED SEE SHEET 1)



SECTION "B-B" SECTION "F-F"



SEC. "C-C" & "D-D" SECTION "G-G"

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B5J
ONE	STRINGER	B8A
ONE	STRINGER	B8J

NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

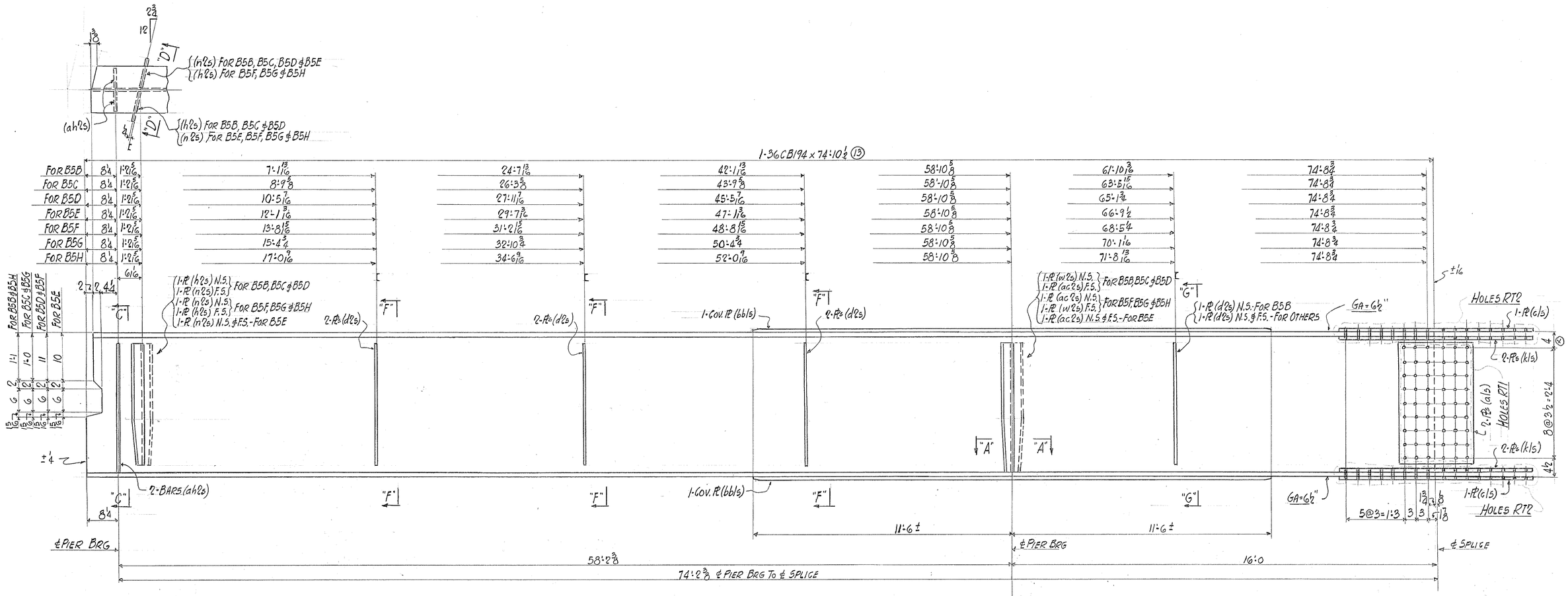
RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
BEAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT { ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J31 & J32
SHOP CONTACT SURFACES NOT PAINTED

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
G. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N. W. RAILWAY
MILWAUKEE, WISCONSIN

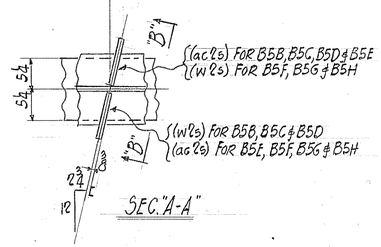
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PJ
CHECKED BY W.V.D. 7-31-5 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 10

E3-E7

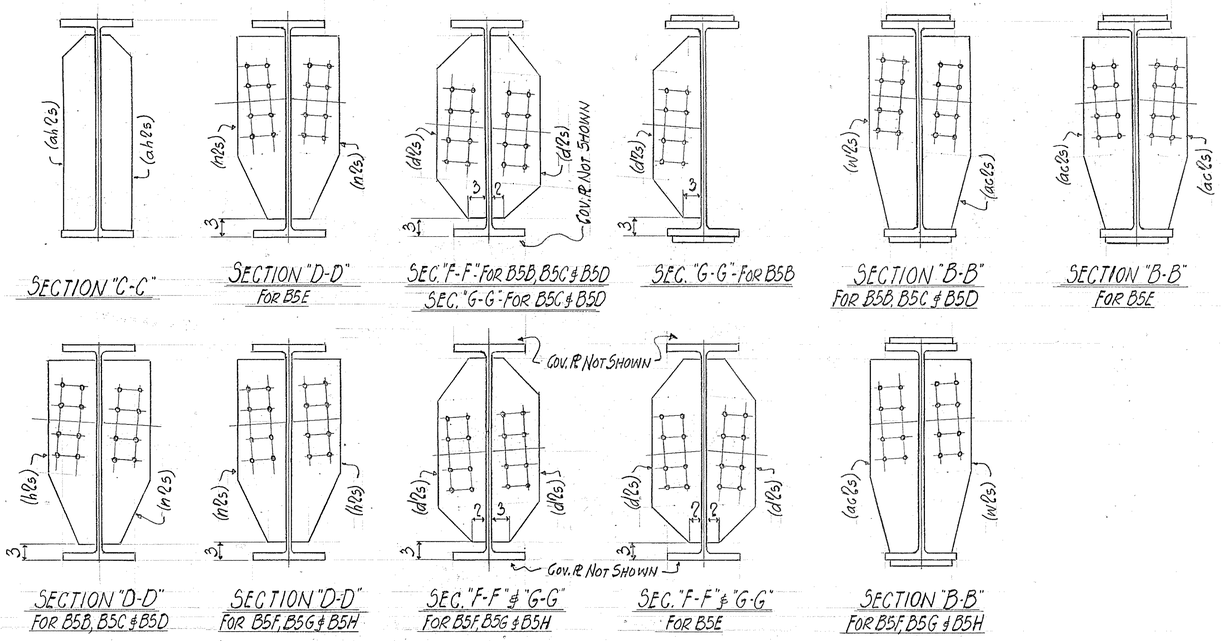


STRINGERS B5B, B5C, B5D, B5E, B5F, B5G AND B5H

(CAMBERED SEE SHEET 1)



SEC. "A-A"



TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B5B
ONE		B5C
ONE		B5D
ONE		B5E
ONE		B5F
ONE		B5G
ONE	STRINGER	B5H

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE

OPEN HOLES 15/16" ϕ UNLESS NOTED

BEAM AS PER A.A.S.H.O. SPECS.

MILLING NONE

PAINT { ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"

WELDING SEE SHEET J51 & J52

SHOP CONTACT SURFACES NOT PAINTED

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
C. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N. W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

Drawings at Chicago - Fabrication at CHICAGO

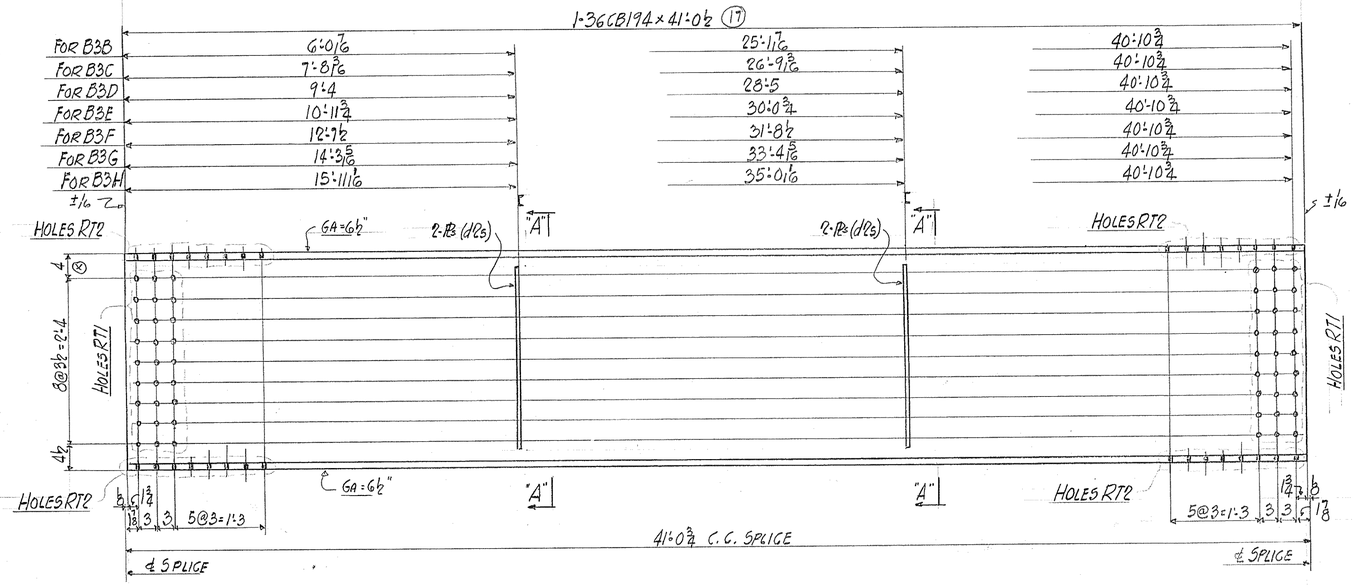
IN CHARGE HERB MADE BY D

CHECKED BY W.V.D. 7-21-59 TRACED BY

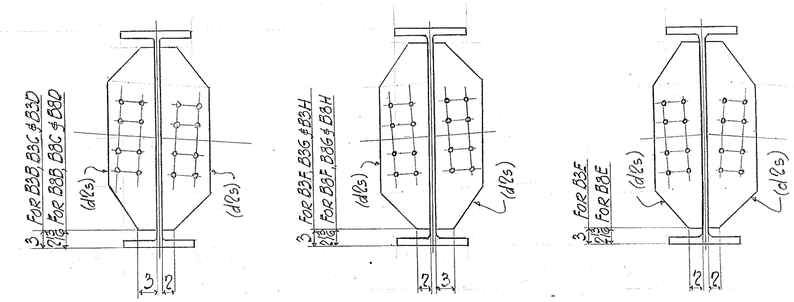
REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CG4538 SHEET 11

E4



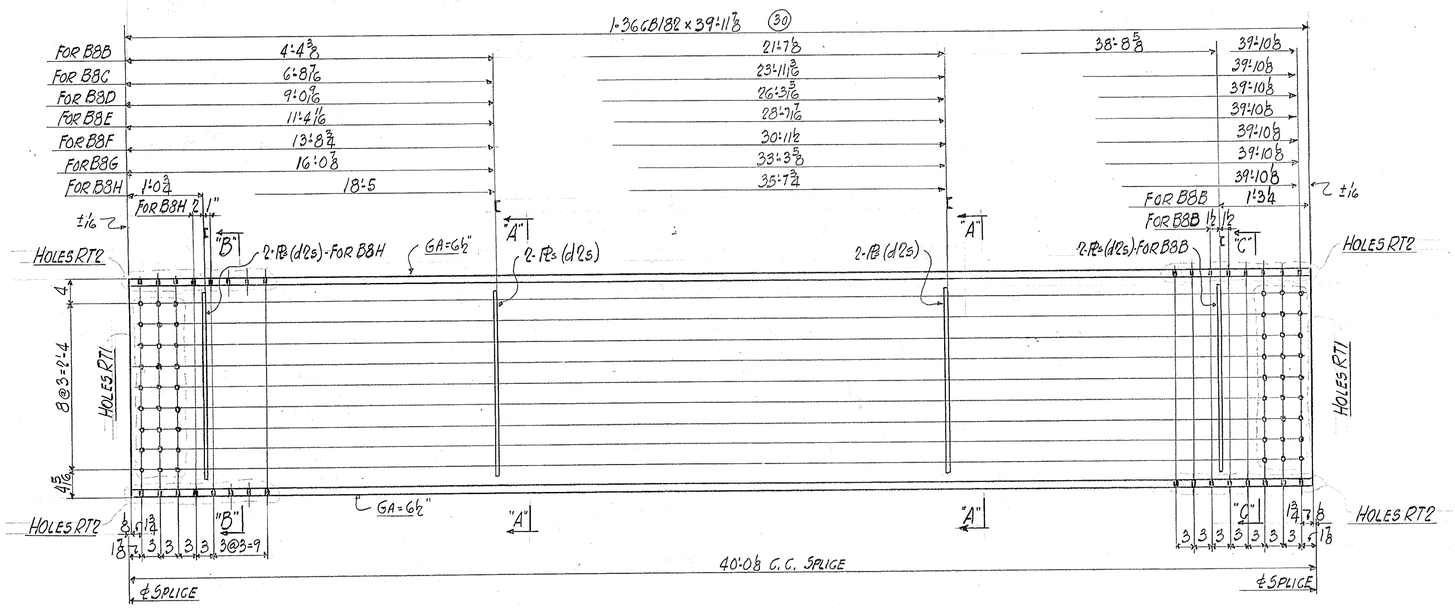
STRINGERS B3B, B3C, B3D, B3E, B3F, B3G AND B3H
(CAMBERED SEE SHEET 1)



SEC. "A-A" - FOR {B3B, B3C, B3D, B8B, B8C & B8D}
SEC. "C-C" - FOR B3B

SEC. "A-A" - FOR {B3F, B3G, B3H, B8F, B8G & B8H}
SEC. "B-B" FOR B8H

SECTION "A-A"
FOR B3E & B8E



STRINGERS B8B, B8C, B8D, B8E, B8F, B8G AND B8H
(CAMBERED SEE SHEET 1)

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B3B
ONE		B3C
ONE		B3D
ONE		B3E
ONE		B3F
ONE		B3G
ONE		B3H
ONE		B8B
ONE		B8C
ONE		B8D
ONE		B8E
ONE		B8F
ONE		B8G
ONE	STRINGER	B8H

NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

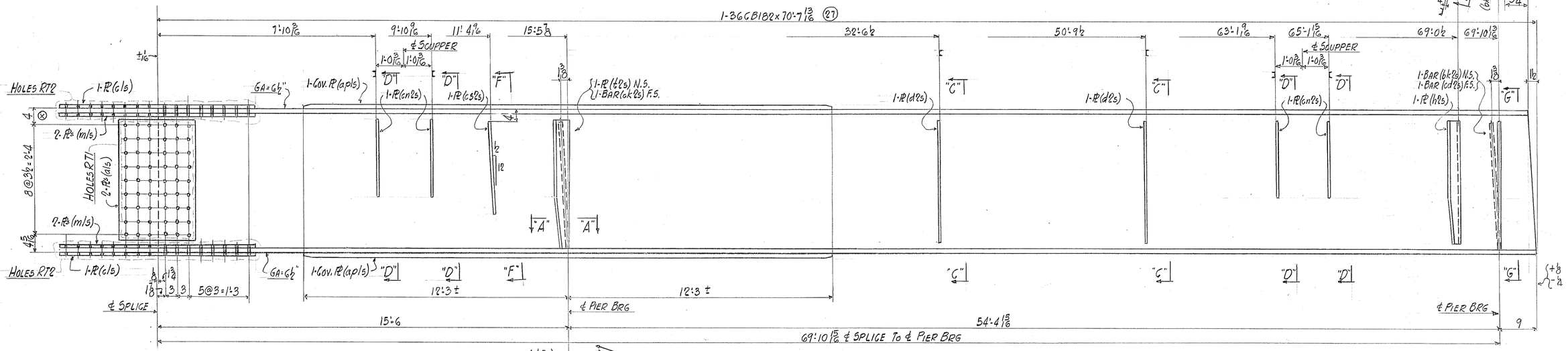
RIVETS NONE
OPEN HOLES 15/16"ϕ UNLESS NOTED
REAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT {ONE COAT RED LEAD AS PER SPECS. EXCEPT AS PER NOTE X}
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

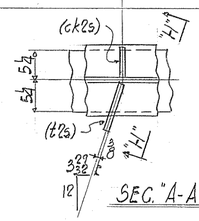
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PJ
CHECKED BY W.V.D. 7-21-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 12

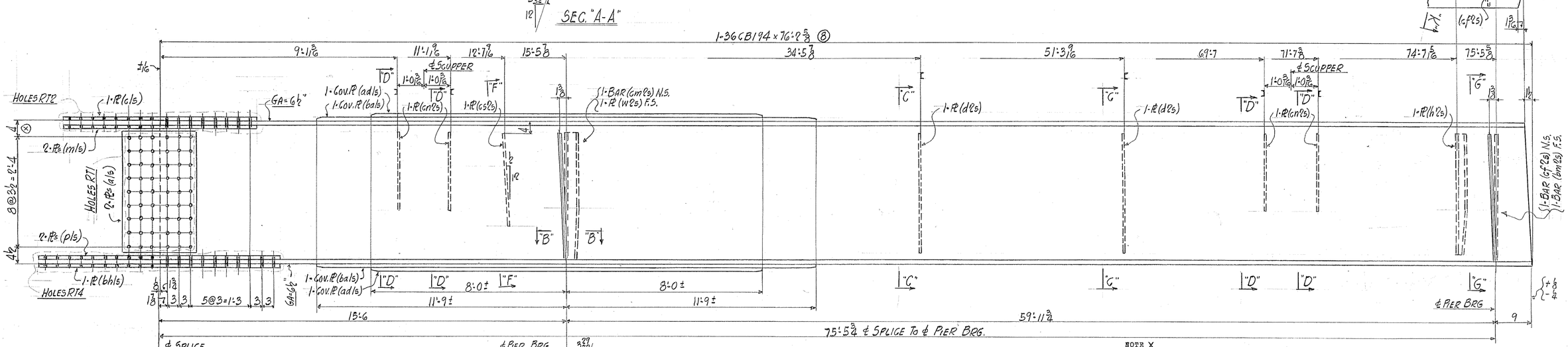
E3-64



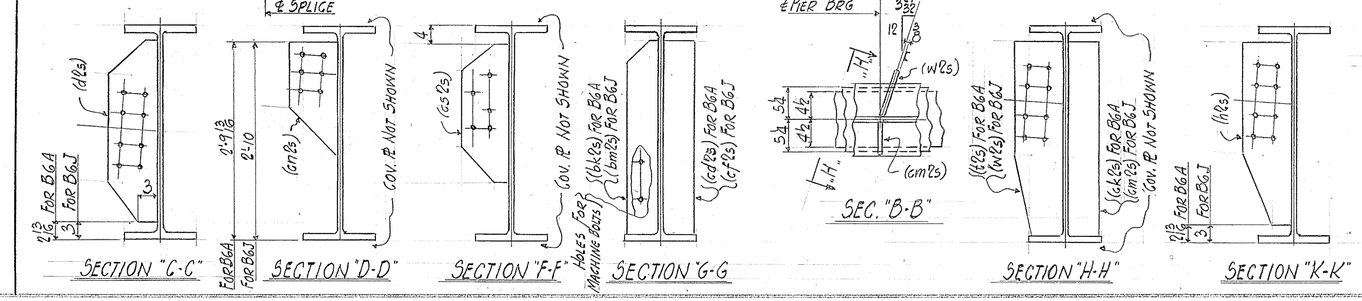
STRINGER B6A
(CAMBERED - SEE SHEET 1)



SEC. "A-A"



STRINGER B6J
(CAMBERED - SEE SHEET 1)



NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. UNLESS NOTED FOR MACHINE BOLTS.
FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
SEAM AS PER A.A.S.H.O. SPECS.
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

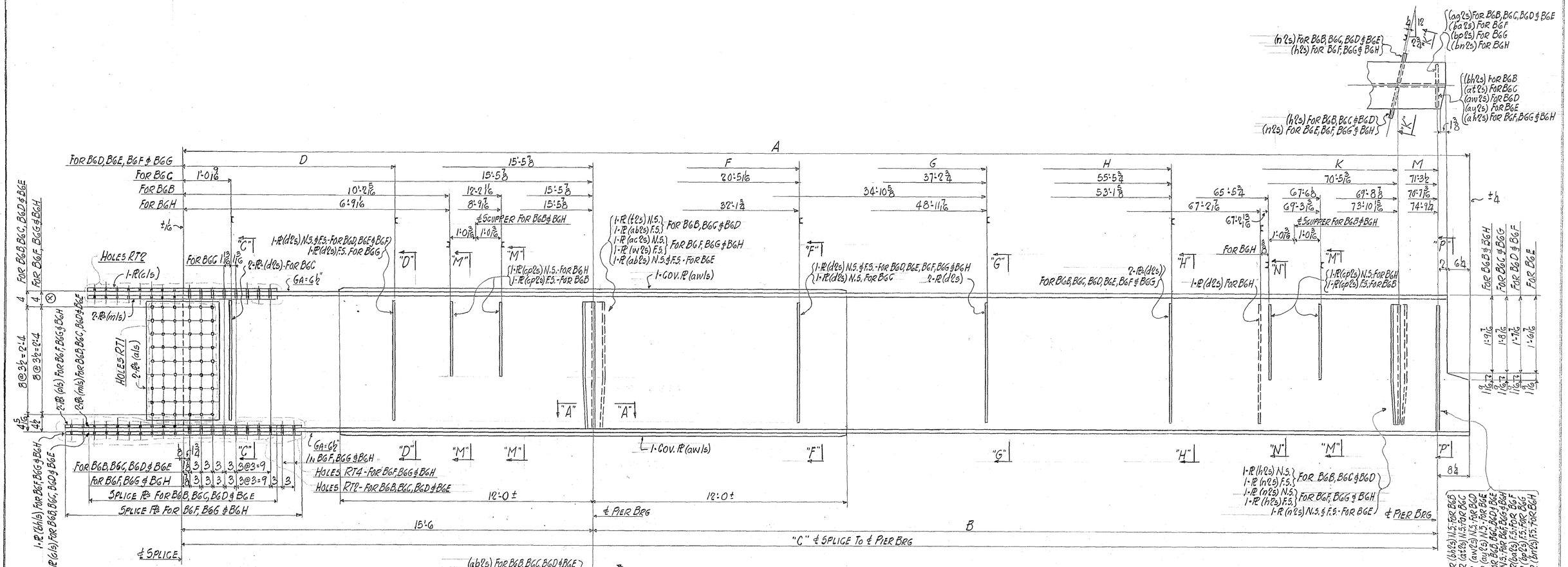
TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B6A
ONE	STRINGER	B6J

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PCL. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY B
CHECKED BY WRD 8-4-57 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 13

E 4



STRINGERS B6B, B6C, B6D, B6E, B6F, B6G AND B6H
(CAMBERED SEE SHEET 1)

MARK	A	B	C	D	F	G	H	K	M
B6B	1-36 GB 182 × 71'-3 1/16 (23)	55'-1 5/16	70'-7 7/16	—	—	—	—	—	—
B6C	1-36 GB 182 × 71'-11¾ (22)	55'-4⅞	71'-3⅜	—	—	—	—	—	—
B6D	1-36 GB 182 × 72'-8⅜ (20)	56'-6	72'-0	3'-4 11/16	22'-9¼	39'-6 15/16	57'-9 15/16	71'-1 11/16	71'-11⅜
B6E	1-36 GB 182 × 73'-4½ (18)	57'-2⅜	72'-8⅜	5'-8 1/16	25'-1⅜	41'-11 1/16	60'-2 1/16	71'-11 5/16	72'-8¼
B6F	1-36 GB 194 × 74'-0⅜ (15)	57'-10¾	73'-4¾	8'-0⅜	27'-5½	44'-3 9/16	62'-6 9/16	72'-6 15/16	73'-4⅜
B6G	1-36 GB 194 × 74'-9 7/16 (14)	58'-7 1/16	74'-1 1/16	10'-5	29'-9⅜	46'-7 7/16	64'-10 7/16	73'-2⅜	74'-0 15/16
B6H	1-36 GB 194 × 75'-5½ (11)	59'-3⅜	74'-9⅜	—	—	—	—	—	—

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. UNLESS NOTED FOR MACHINE BOLTS

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B6B
ONE		B6C
ONE		B6D
ONE		B6E
ONE		B6F
ONE		B6G
ONE	STRINGER	B6H

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE

OPEN HOLES 15/16" ⌀ UNLESS NOTED

REAM AS PER A.A.S.H.O. SPECS

MILLING NONE

PAINT ONE COAT RED LEAD AS PER SPECS (EXCEPT AS PER NOTE "X")

WELDING SEE SHEET 151 & 152

SHOP CONTACT SURFACES NOT PAINTED

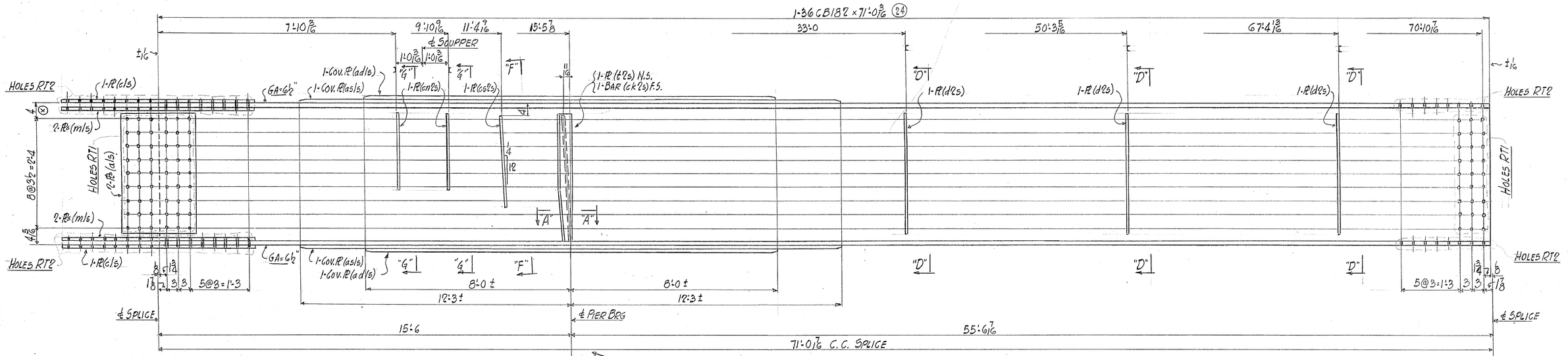
ENGR.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
D. SMITH	
MCH.	
ERECT.	
O. INSP.	

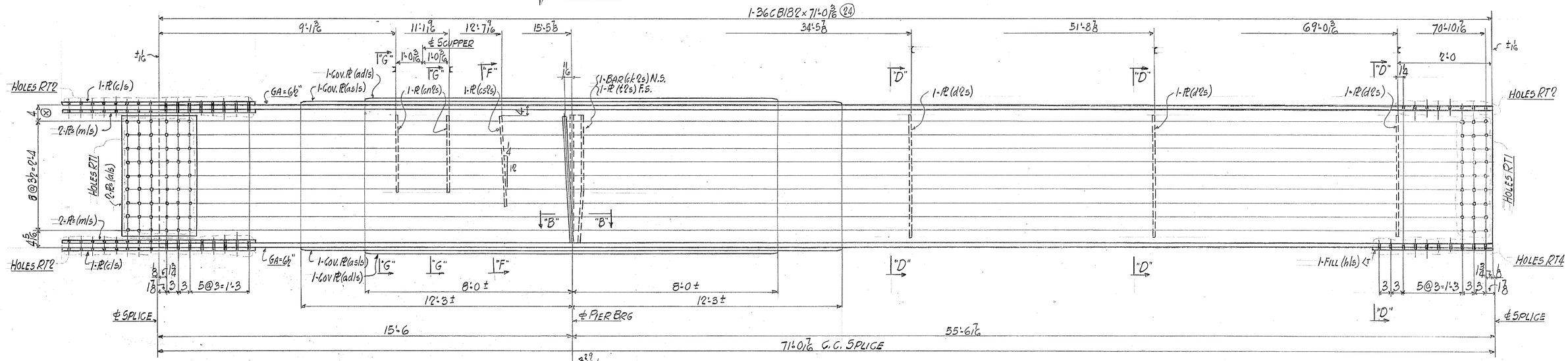
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N. W. RAILWAY
MILWAUKEE, WISCONSIN

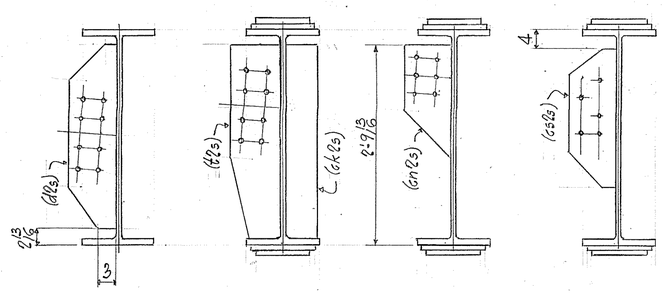
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO

IN CHARGE HERB MADE BY PI
CHECKED BY W.V.D. 8-4-59 TRACED BY
REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT C64538 SHEET 14







NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B7A
ONE	STRINGER	B7J

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE

OPEN HOLES 15/16" ϕ UNLESS NOTED

BEAM AS PER A.A.S.H.O. SPECS

MILLING NONE

PAINT { ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"

WELDING SEE SHEET J51 & J52

SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
D. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

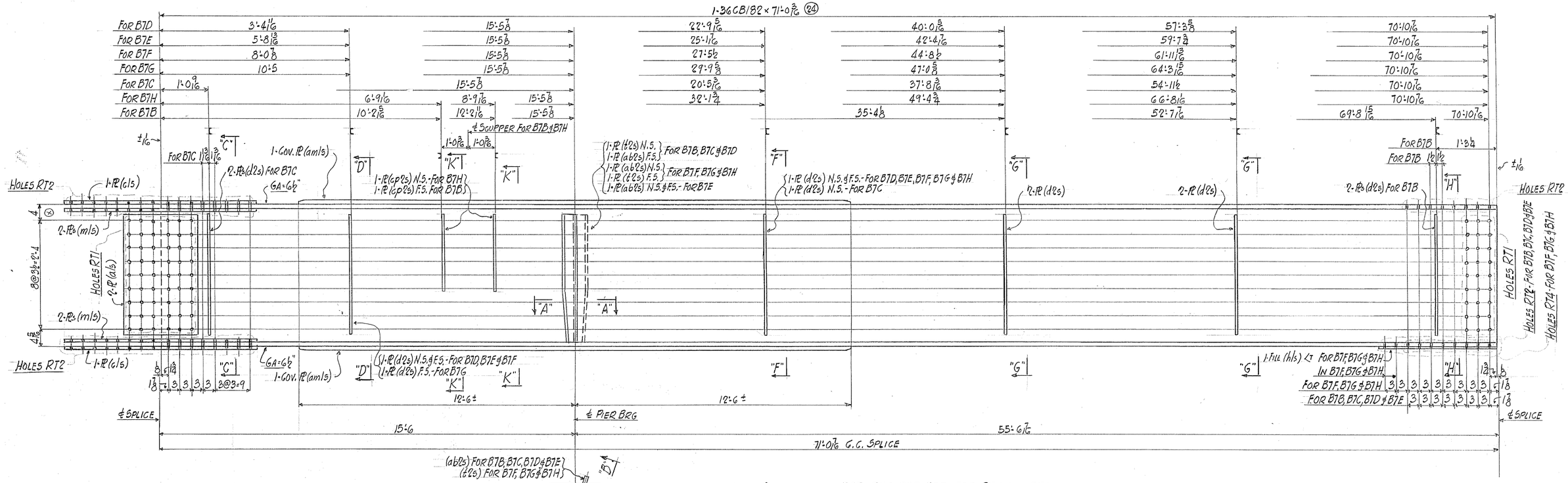
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY D
CHECKED BY K.Y.D. 8-4-59 TRACED BY
REVISED LAST ASSEM. MK.

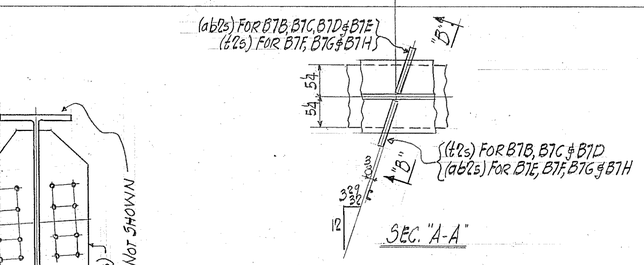
SHOP NO. CONTRACT CG4538 SHEET 15

E3

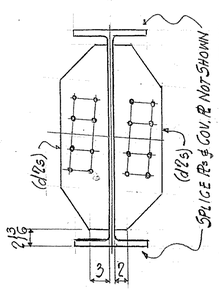
Rev. (A) 9-11-59



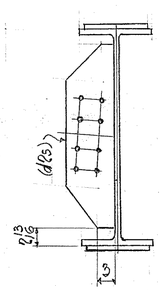
STRINGERS B7B, B7C, B7D, B7E, B7F, B7G AND B7H
(CAMBERED SEE SHEET 1)



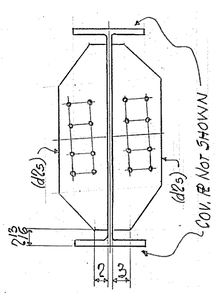
SEC. "A-A"



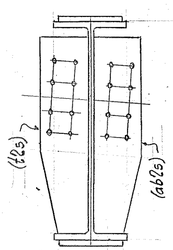
SEC. "C-C" - FOR B7C
SEC. "D-D" & "F-F" - FOR B7D
SEC. "G-G" - FOR B7B, B7C & B7D
SEC. "H-H" - FOR B7B



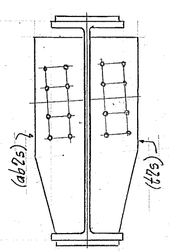
SECTION "F-F"
FOR B7C



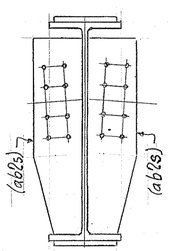
SEC. "D-D" - FOR B7F
SEC. "F-F" & "G-G" - FOR B7F, B7G & B7H



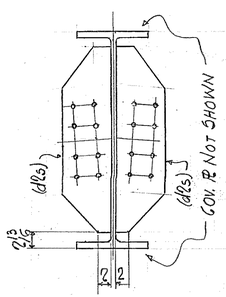
SECTION "B-B"
FOR B7B, B7C & B7D



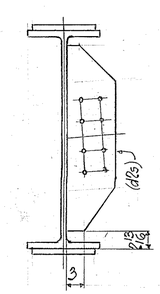
SECTION "B-B"
FOR B7F, B7G & B7H



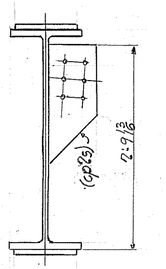
SECTION "B-B"
FOR B7E



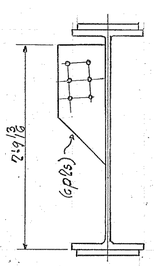
SEC. "D-D", "F-F" & "G-G"
FOR B7E



SECTION "D-D"
FOR B7G



SECTION "K-K"
FOR B7B



SECTION "K-K"
FOR B7H

TOTAL No REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B7B
ONE		B7C
ONE		B7D
ONE		B7E
ONE		B7F
ONE		B7G
ONE	STRINGER	B7H

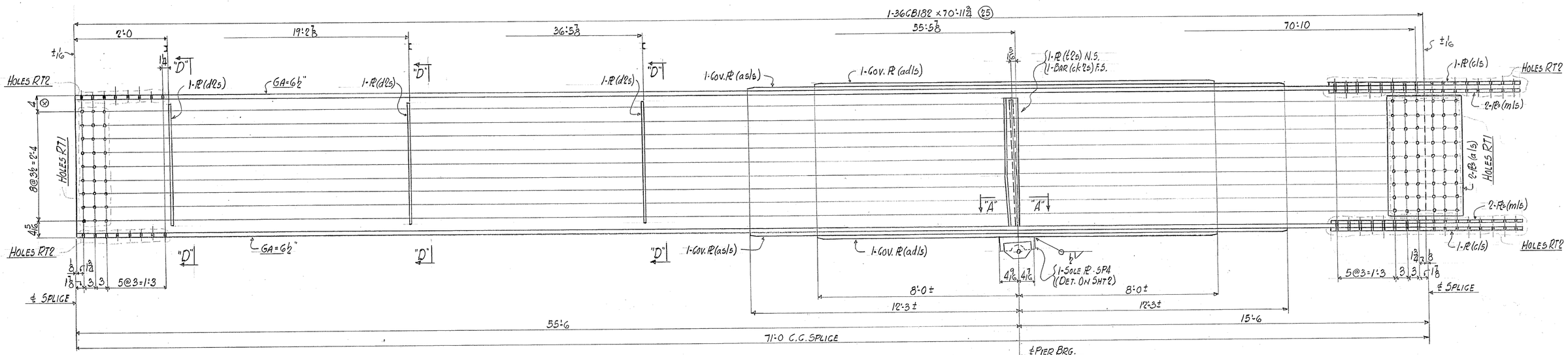
NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

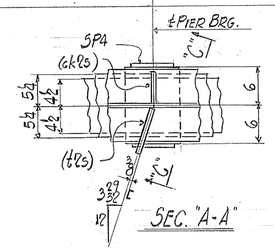
RIVETS NONE
OPEN HOLES 15/16" UNLESS NOTED
BEAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS (EXCEPT AS PER NOTE "X")
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

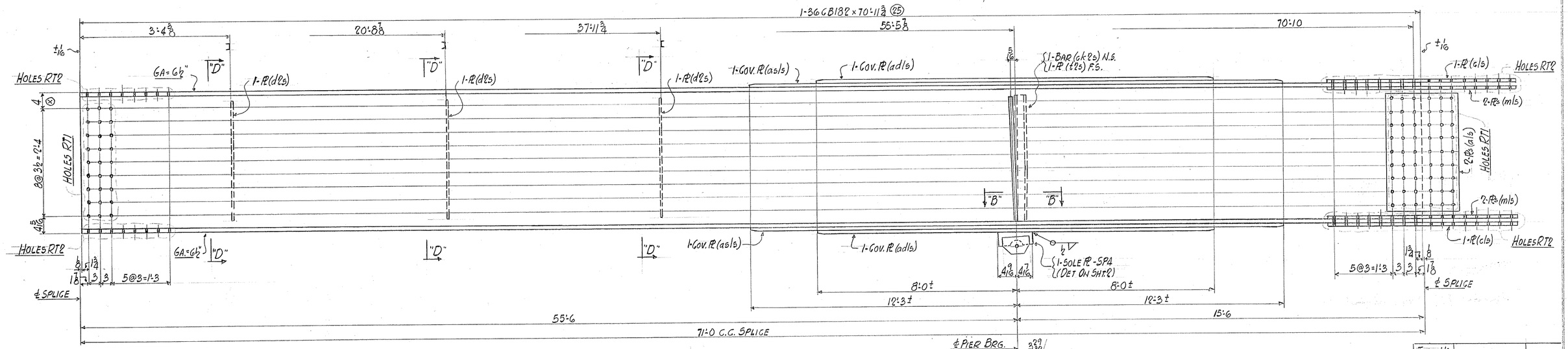
TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
G. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PJ
CHECKED BY W.W.D. 8-4-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 16

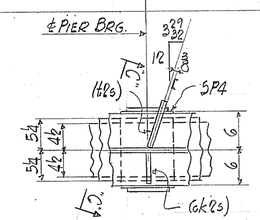


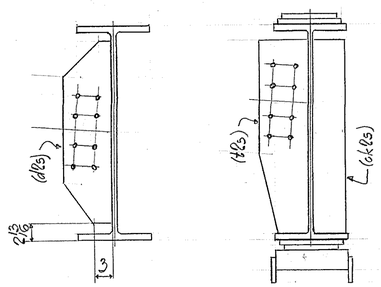
STRINGER B9A
(CAMBERED SEE SHEET 1)





STRINGER B9J
(CAMBERED SEE SHEET 1)





NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

TOTAL No REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B9A
ONE	STRINGER	B9J

FOR GENERAL NOTES SEE SHEET 3

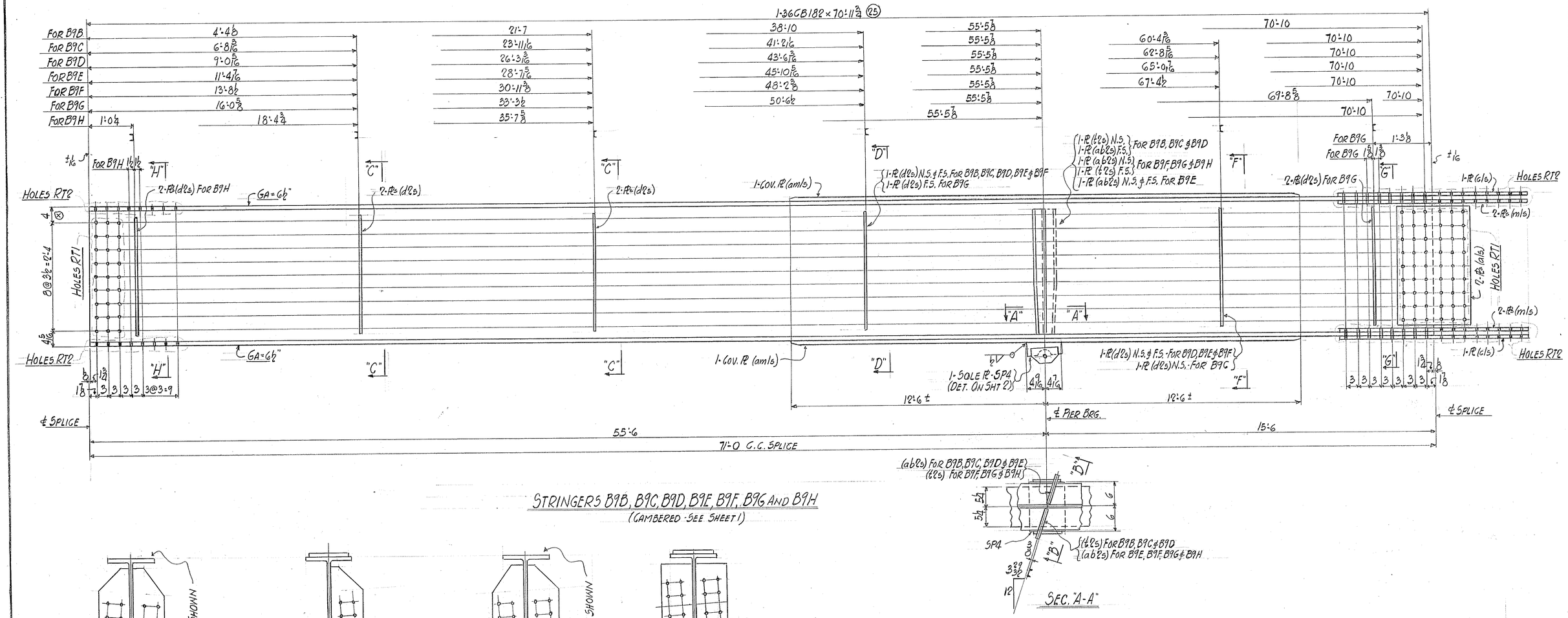
RIVETS NONE
OPEN HOLES 15/16" ⌀ UNLESS NOTED
REAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS. (EXCEPT AS PER NOTE "X")
WELDING AS NOTED - ALSO SEE SHT. J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
SHECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

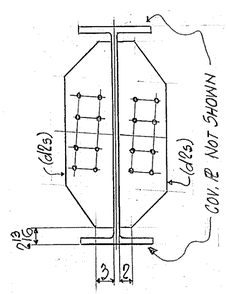
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY DI
CHECKED BY N.Y.D. 8-4-57 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 17

E3

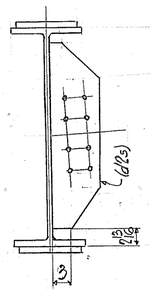


STRINGERS B9B, B9C, B9D, B9E, B9F, B9G AND B9H
(CAMBERED - SEE SHEET 1)

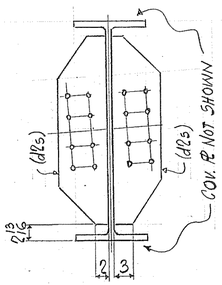
SEC. "A-A"



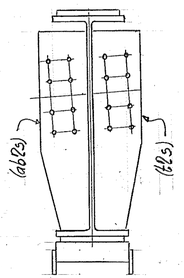
SEC. "C-C" & "D-D" - FOR B9B, B9C & B9D
SEC. "F-F" FOR B9D



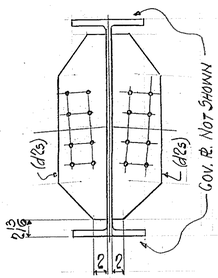
SECTION "D-D"
FOR B9G



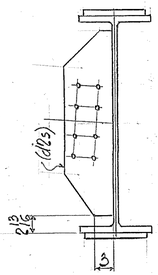
SEC. "C-C" - FOR B9F, B9G & B9H
SEC. "D-D" & "F-F" - FOR B9F
SEC. "G-G" - FOR B9G
SEC. "H-H" - FOR B9H



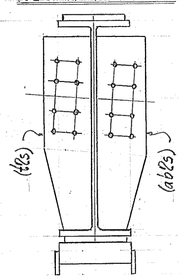
SECTION "B-B"
FOR B9F, B9G & B9H



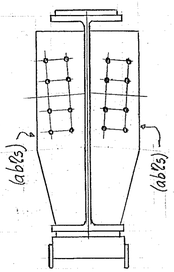
SEC. "C-C", "D-D" & "F-F"
FOR B9E



SECTION "F-F"
FOR B9G



SECTION "B-B"
FOR B9B, B9C & B9D



SECTION "B-B"
FOR B9E

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B9B
ONE		B9C
ONE		B9D
ONE		B9E
ONE		B9F
ONE		B9G
ONE	STRINGER	B9H

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

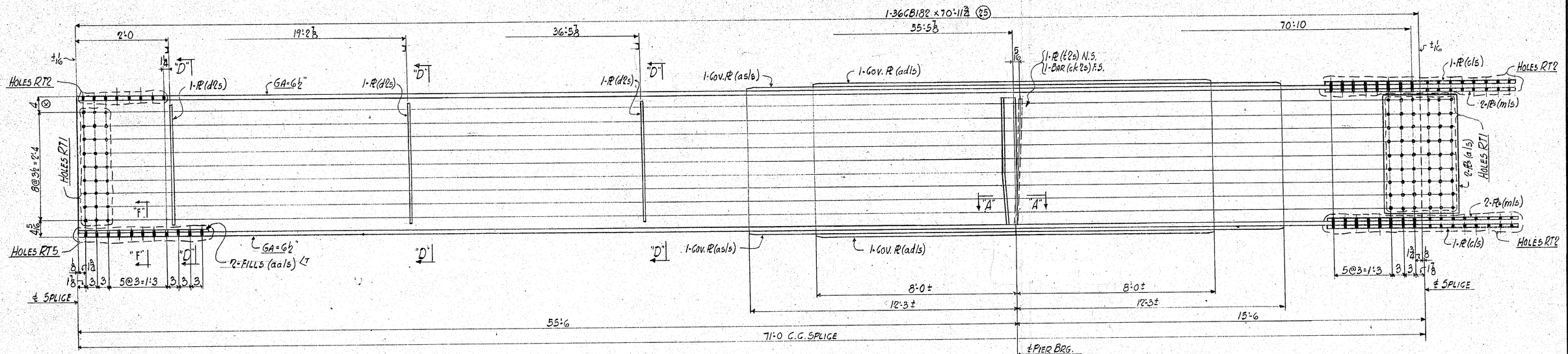
RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
REAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE X
WELDING AS NOTED - ALSO SEE SHT. J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
D. SMITH
MCH.
ERECT.
O. INSP.

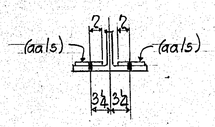
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY P.
CHECKED BY M.V.D. 8-4-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG 4538 SHEET 18

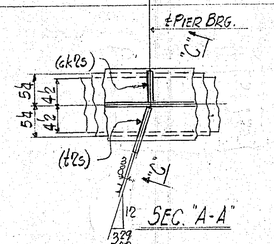
B|P 2



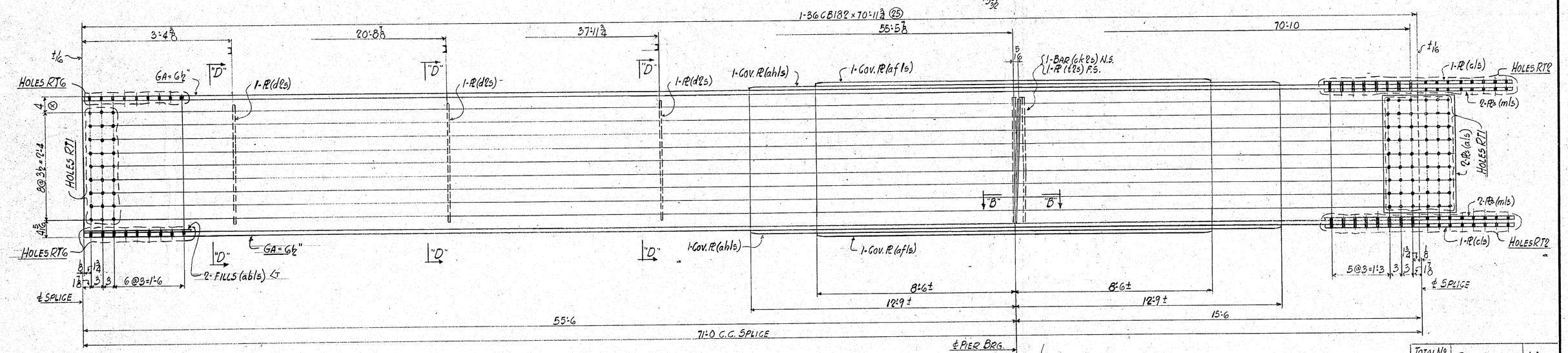
STRINGER B10A
(CAMBERED SEE SHEET 1)



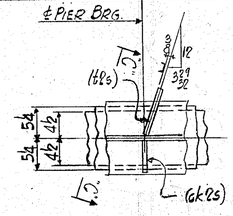
SECTION "F-F"



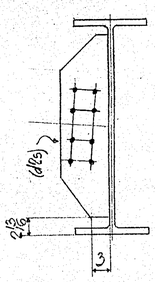
SEC. "A-A"



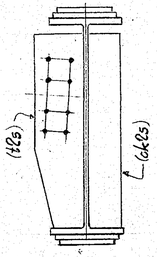
STRINGER B10J
(CAMBERED SEE SHEET 1)



SEC. "B-B"



SECTION "D-D"



SECTION "C-C"

NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B10A
ONE	STRINGER	B10J

FOR GENERAL NOTES SEE SHEET 3

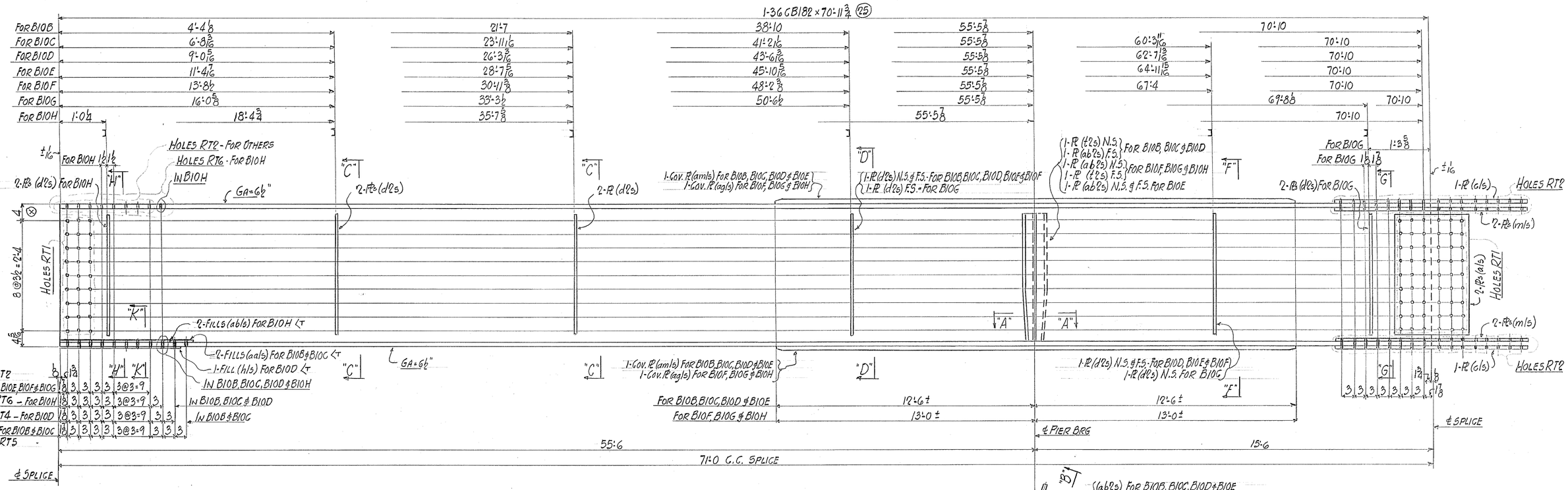
RIVETS NONE
OPEN HOLES 15/16" ϕ UNLESS NOTED
REAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT { ONE COAT RED LEAD AS PER SPECS. (EXCEPT AS PER NOTE "X")
WELDING SEE SHEET J31 & J32
SHOP CONTACT SURFACES NOT PAINTED

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

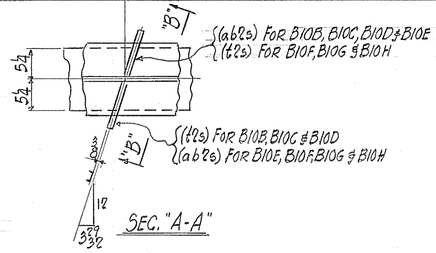
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PI
CHECKED BY N.V.D. 8-4-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 19

E3

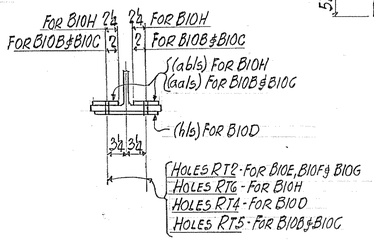


STRINGERS B10B, B10C, B10D, B10E, B10F, B10G AND B10H

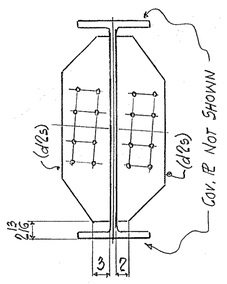
(CAMBERED SEE SHEET 1)



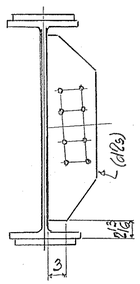
SEC. "A-A"



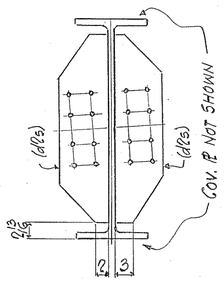
SECTION "K-K"



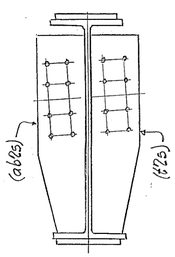
SEC. "C-C" & "D-D" - FOR B10B, B10G & B10D
SEC. "F-F" - FOR B10D



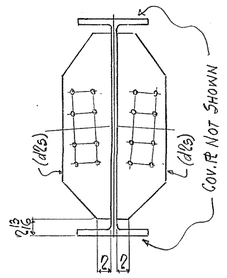
SECTION "D-D"
FOR B10G



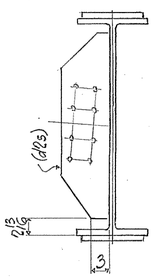
SEC. "C-C" - FOR B10F, B10G & B10H
SEC. "D-D" & "F-F" - FOR B10F
SEC. "G-G" - FOR B10G
SEC. "H-H" - FOR B10H



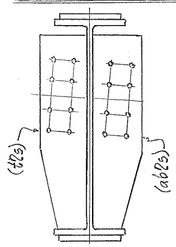
SECTION "B-B"
FOR B10F, B10G & B10H



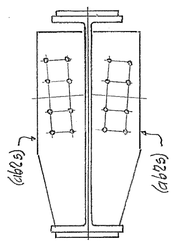
SEC. "C-C", "D-D" & "F-F"
FOR B10E



SECTION "F-F"
FOR B10G



SECTION "B-B"
FOR B10B, B10C & B10D



SECTION "B-B"
FOR B10E

TOTAL No REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B10B
ONE		B10C
ONE		B10D
ONE		B10E
ONE		B10F
ONE		B10G
ONE	STRINGER	B10H

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

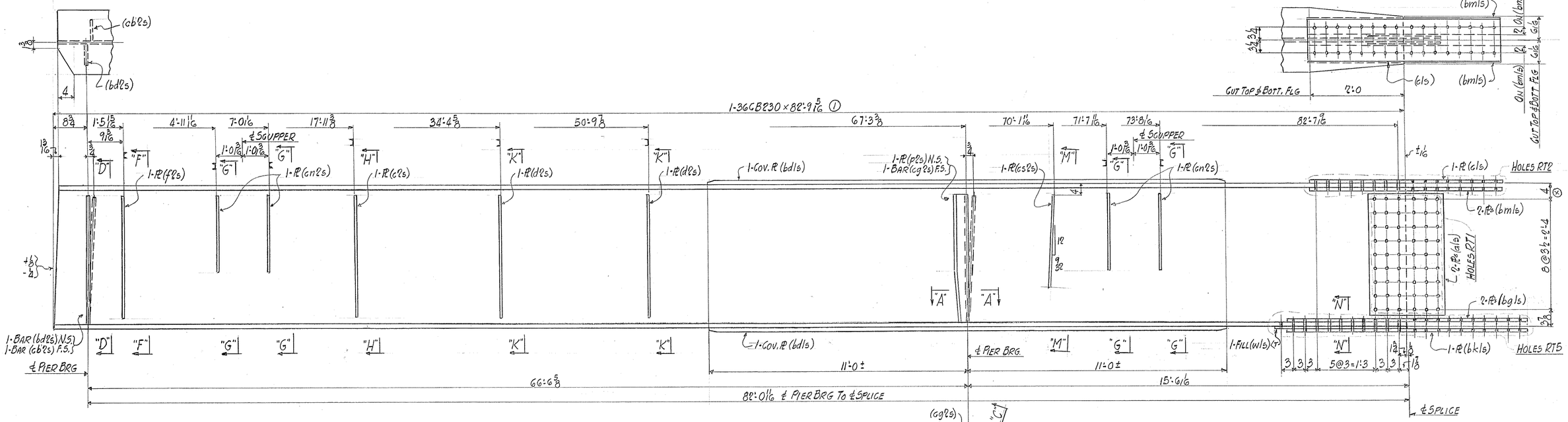
RIVETS NONE
OPEN HOLES 15/16" Φ UNLESS NOTED
REAM AS PER A.A.S.H.O. SPECS
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE X
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

SHOP NO.

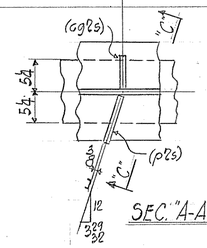
TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

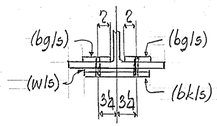
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PI
CHECKED BY W.V.D. 8-4-59 TRACED BY
REVISED LAST ASSEM. MK.
CONTRACT CG4538 SHEET 20



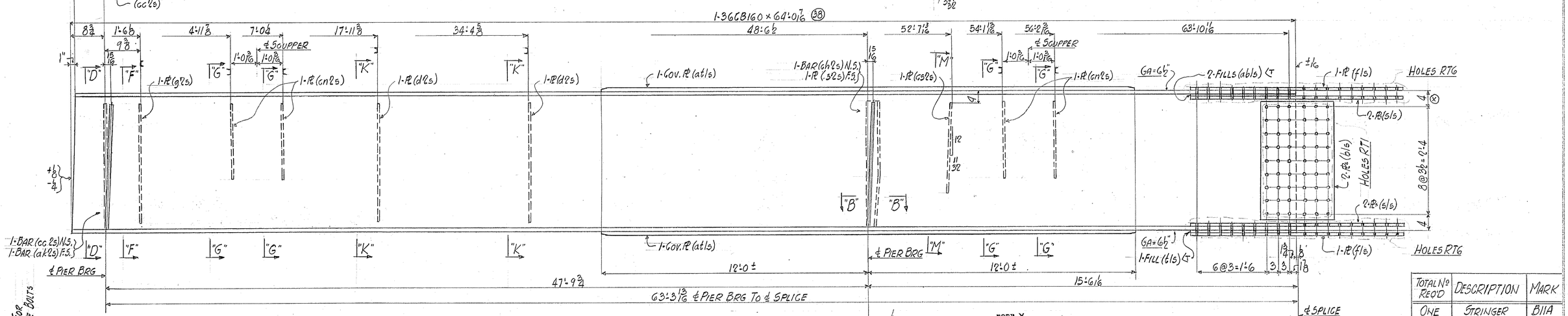
STRINGER B11A
(CAMBERED SEE SHEET 1)



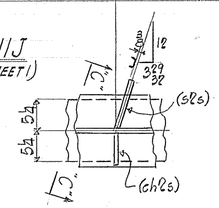
SEC. "A-A"



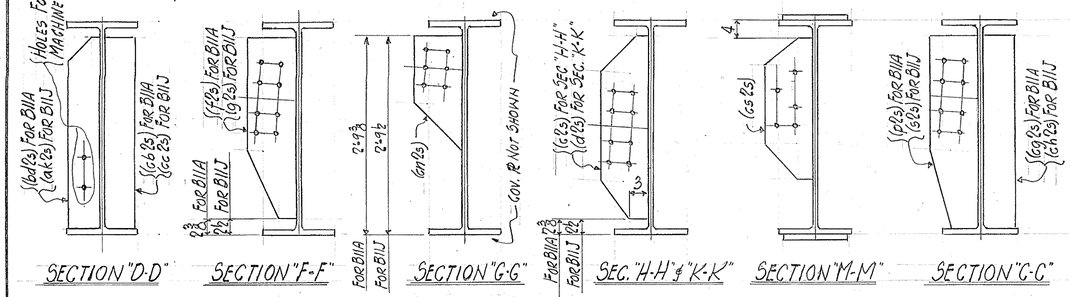
SECTION "N-N"



STRINGER B11J
(CAMBERED SEE SHEET 1)



SEC. "B-B"



SECTION "D-D" SECTION "F-F" SECTION "G-G" SEC. "H-H" & "K-K" SECTION "M-M" SECTION "C-C"

TOTAL No REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B11A
ONE	STRINGER	B11J

NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. UNLESS NOTED FOR MACHINE BOLTS

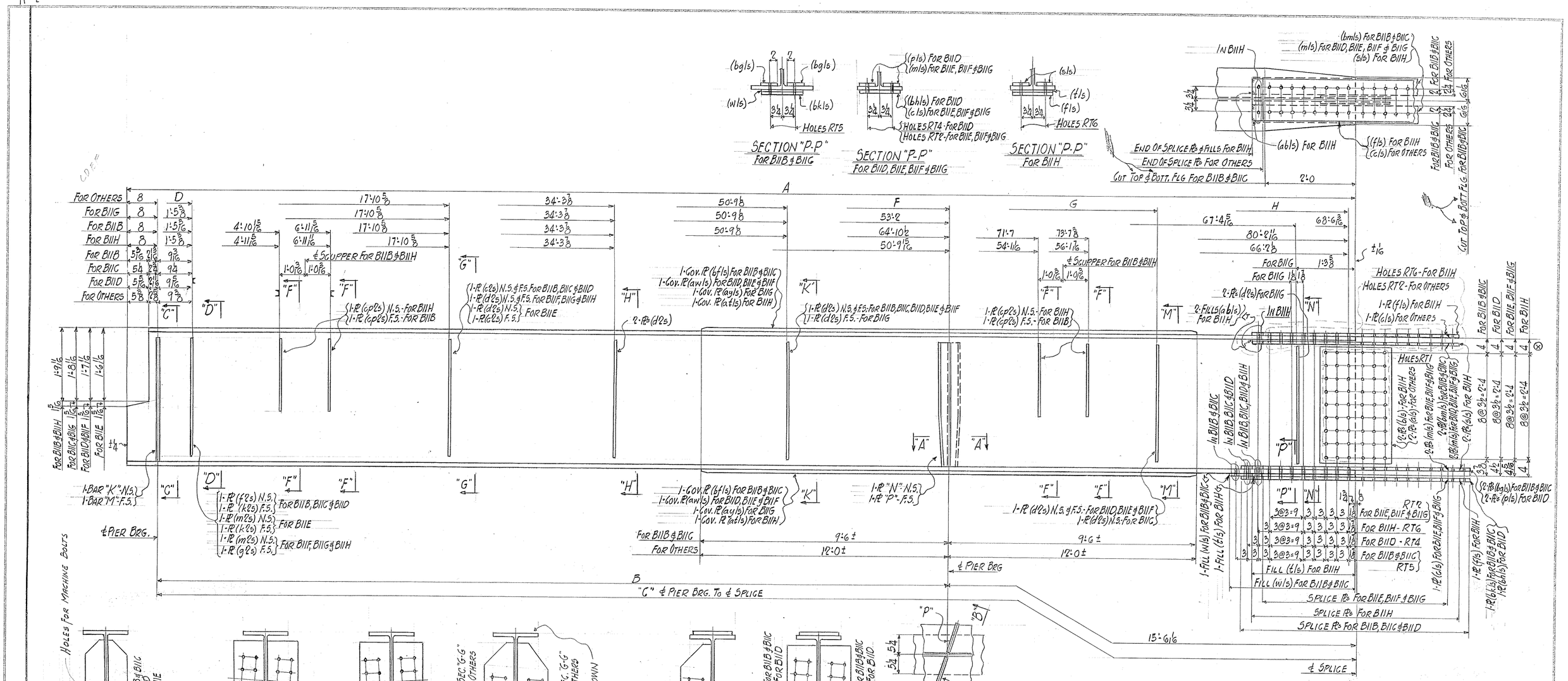
FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE
OPEN HOLES 13/16" ϕ UNLESS NOTED
BEAM AS PER A.A.S.H.O. SPECS.
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J51 & J52
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY BJ
CHECKED BY W.V.D.B. 4-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 21



STRINGERS B11B, B11C, B11D, B11E, B11F, B11G AND B11H

(CAMBERED - SEE SHEET 1)

MARK	DIMENSION									
	A	B	C	D	F	G	H	K	M	N	P
B11B	1-36GB230×80'-4 7/16" ④	64'-2 1/16"	79'-2 3/16"	—	—	—	—	(bc'2s)	(ad'2s)	(p'2s)	(y'2s)
B11C	1-36GB230×78'-0 3/8" ⑥	61'-10 7/16"	77'-4 1/2"	1'-5 1/4"	62'-6 7/16"	67'-4 5/16"	77'-10 3/8"	(bb'2s)	(ad'2s)	(p'2s)	(y'2s)
B11D	1-36GB194×75'-8 3/8" ⑩	59'-6 7/16"	75'-0 1/2"	1'-5 3/16"	60'-2 7/16"	67'-4 7/16"	75'-6 3/8"	(ba'2s)	(ab'2s)	(w'2s)	(ac'2s)
B11E	1-36GB182×73'-4 5/8" ⑰	57'-2 1/4"	72'-8 5/16"	1'-5 3/8"	57'-10 1/4"	67'-4 3/8"	73'-2 1/16"	(ay'2s)	(ag'2s)	(ab'2s)	(ab'2s)
B11F	1-36GB182×71'-0 1/2" ㉕	54'-10 1/2"	70'-4 5/8"	1'-5 3/8"	55'-6 1/8"	67'-4 5/8"	70'-10 5/8"	(ag'2s)	(aw'2s)	(ab'2s)	(f'2s)
B11G	1-36GB182×68'-7 15/16" ㉓	52'-2 1/4"	68'-0 1/16"	—	—	—	—	(ag'2s)	(at'2s)	(ab'2s)	(f'2s)
B11H	1-36GB160×66'-3 3/8" ㉛	50'-1 15/16"	65'-8	—	—	—	—	(af'2s)	(am'2s)	(aa'2s)	(s'2s)

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. UNLESS NOTED FOR MACHINE BOLTS.

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE

OPEN HOLES 15/16" ϕ UNLESS NOTED

REAM AS PER A.A.S.H.O. SPECS.

MILLING NONE

PAINT ONE COAT RED LEAD AS PER SPECS. EXCEPT AS PER NOTE "X"

WELDING SEE SHEET 3 & 3A

SHOP CONTACT SURFACES NOT PAINTED

TOTAL No REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B11B
ONE		B11C
ONE		B11D
ONE		B11E
ONE		B11F
ONE		B11G
ONE	STRINGER	B11H

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
Q. INSP.

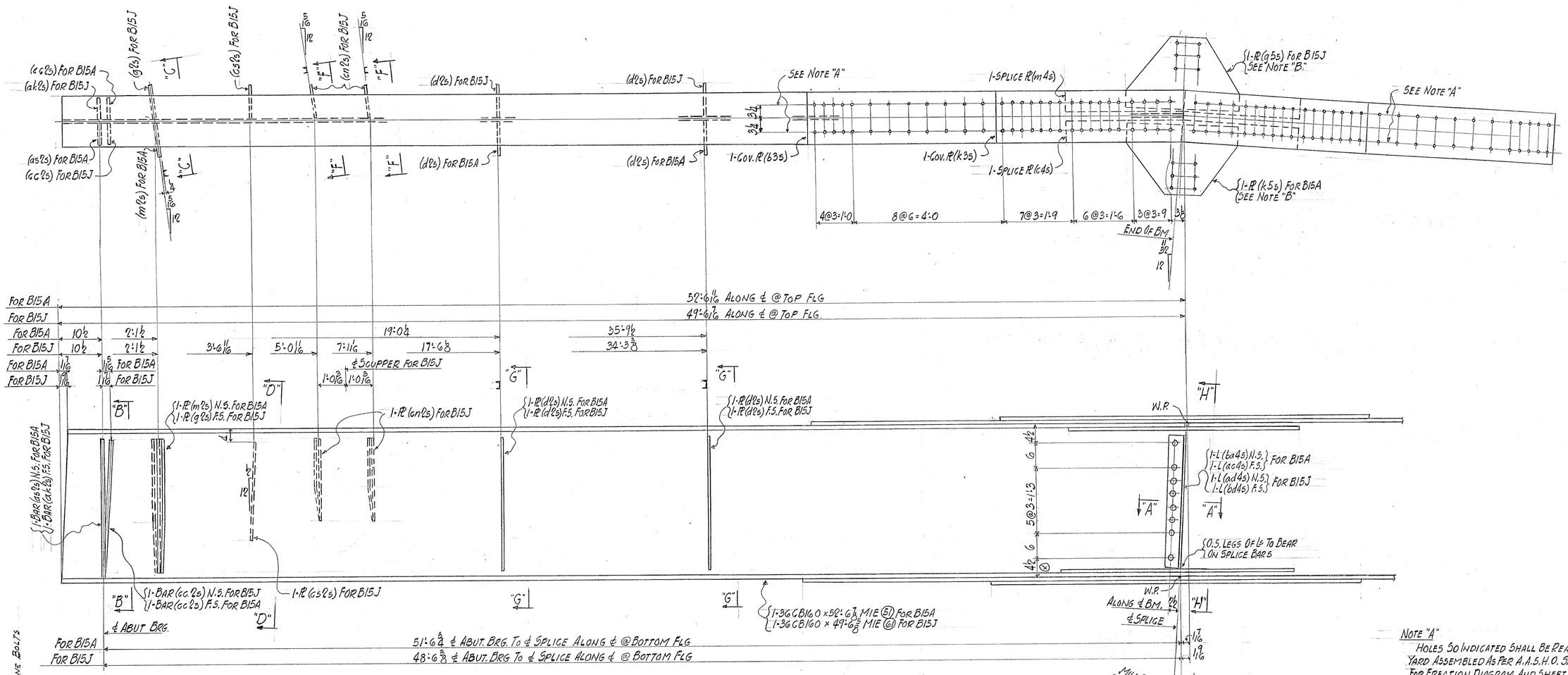
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO

IN CHARGE HERB MADE BY PJ
CHECKED BY NVD 8-4-57 TRACED BY
REVISED LAST ASSEM. MK.

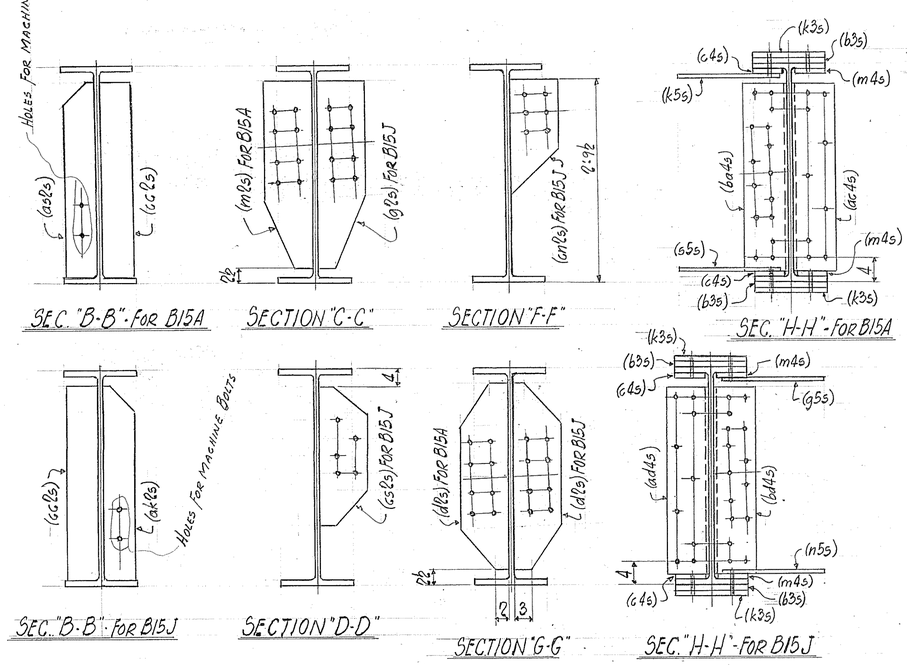
SHOP NO. CONTRACT CG4538 SHEET 22

E3



STRINGER B15A AND B15J

(CAMBERED SEE SHEET 1)



NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. UNLESS NOTED FOR MACHINE BOLTS.

TOTAL No REQ'D.	DESCRIPTION	MARK
ONE	STRINGER	B15A
ONE	STRINGER	B15J

NOTE "A"

HOLES SO INDICATED SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECS. SEE SHEET E8 FOR ERECTION DIAGRAM AND SHEET E6 FOR YARD ASSEMBLY DIAGRAM AND MATCH MARKING SKETCH AND NOTES

NOTE "B"

FOR CORRECT POSITIONING OF GUSSET PLATES FOR REAMING SEE STANDARD SHEET J35.

FOR GENERAL NOTES SEE SHEET 3

RIVETS 7/8" ϕ

OPEN HOLES 15/16" ϕ UNLESS NOTED

REAM SEE NOTE "A"

MILLING AS NOTED

PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"

WELDING SEE SHEET J32

SHOP CONTACT SURFACES NOT PAINTED

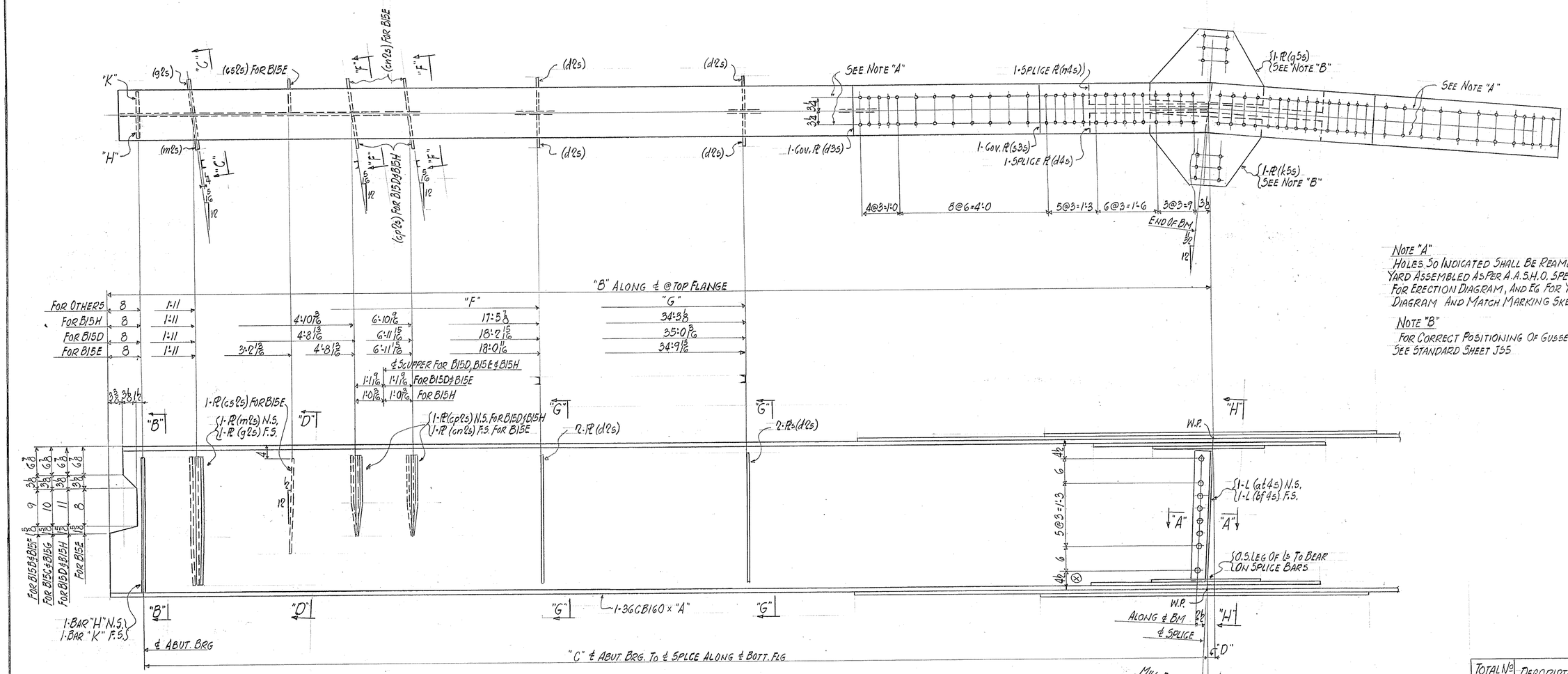
TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY D
CHECKED BY W.V.D. 8-13-57 TRACED BY
REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CG4538 SHEET 23

E3



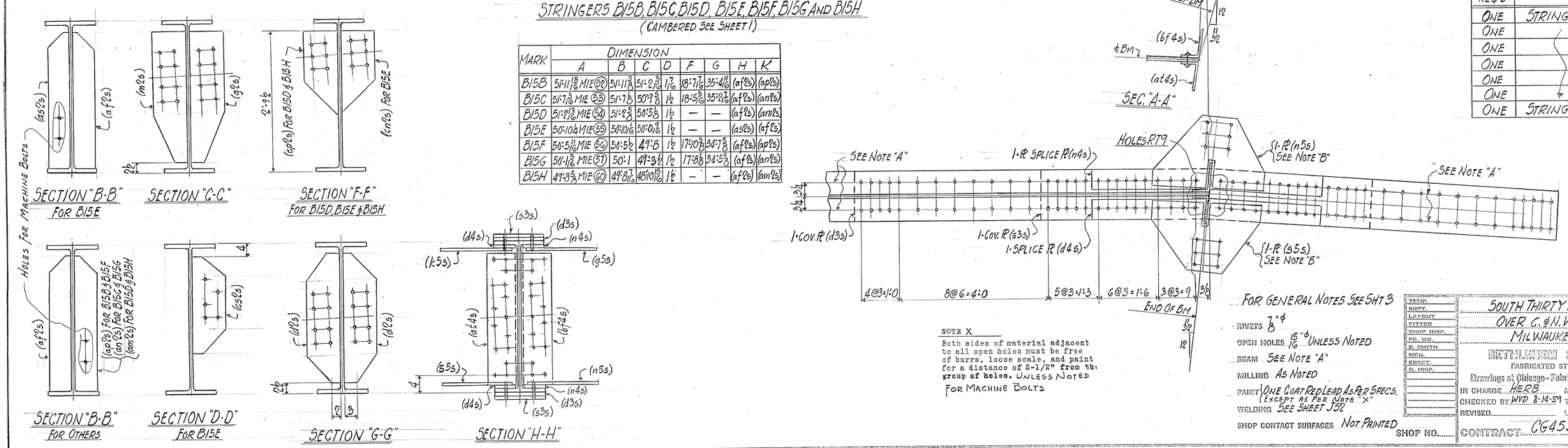
NOTE "A"
HOLES SO INDICATED SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECS SEE SHEET E3 FOR ERECTION DIAGRAM, AND E6 FOR YARD ASSEMBLY DIAGRAM AND MATCH MARKING SKETCH AND NOTES.

NOTE "B"
FOR CORRECT POSITIONING OF GUSSET PLATES FOR REAMING SEE STANDARD SHEET J55

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B15B
ONE		B15C
ONE		B15D
ONE		B15E
ONE		B15F
ONE		B15G
ONE	STRINGER	B15H

STRINGERS B15B, B15C, B15D, B15E, B15F, B15G AND B15H
(CAMBERED SEE SHEET 1)

MARK	DIMENSION A	B	C	D	F	G	H	K
B15B	51'-11 1/8 MIE (58)	51'-11 3/8	51'-2 3/16	1 7/16	18'-7 7/16	35'-4 11/16	(af2s)	(ap2s)
B15C	51'-7 7/8 MIE (53)	51'-7 3/8	50'-9 3/8	1 1/2	18'-5 3/16	35'-2 7/16	(af2s)	(an2s)
B15D	51'-2 13/16 MIE (54)	51'-2 5/8	50'-5 3/8	1 1/2	—	—	(af2s)	(am2s)
B15E	50'-10 3/4 MIE (55)	50'-10 1/16	50'-0 9/16	1 1/2	—	—	(as2s)	(af2s)
B15F	50'-5 11/16 MIE (56)	50'-5 1/2	49'-8	1 1/2	17'-10 3/8	34'-7 5/8	(af2s)	(ap2s)
B15G	50'-1 3/8 MIE (57)	50'-1	49'-3 1/2	1 1/2	17'-8 1/8	34'-5 3/8	(af2s)	(an2s)
B15H	49'-8 5/8 MIE (60)	49'-8 7/16	48'-10 15/16	1 1/2	—	—	(af2s)	(am2s)



NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. UNLESS NOTED FOR MACHINE BOLTS

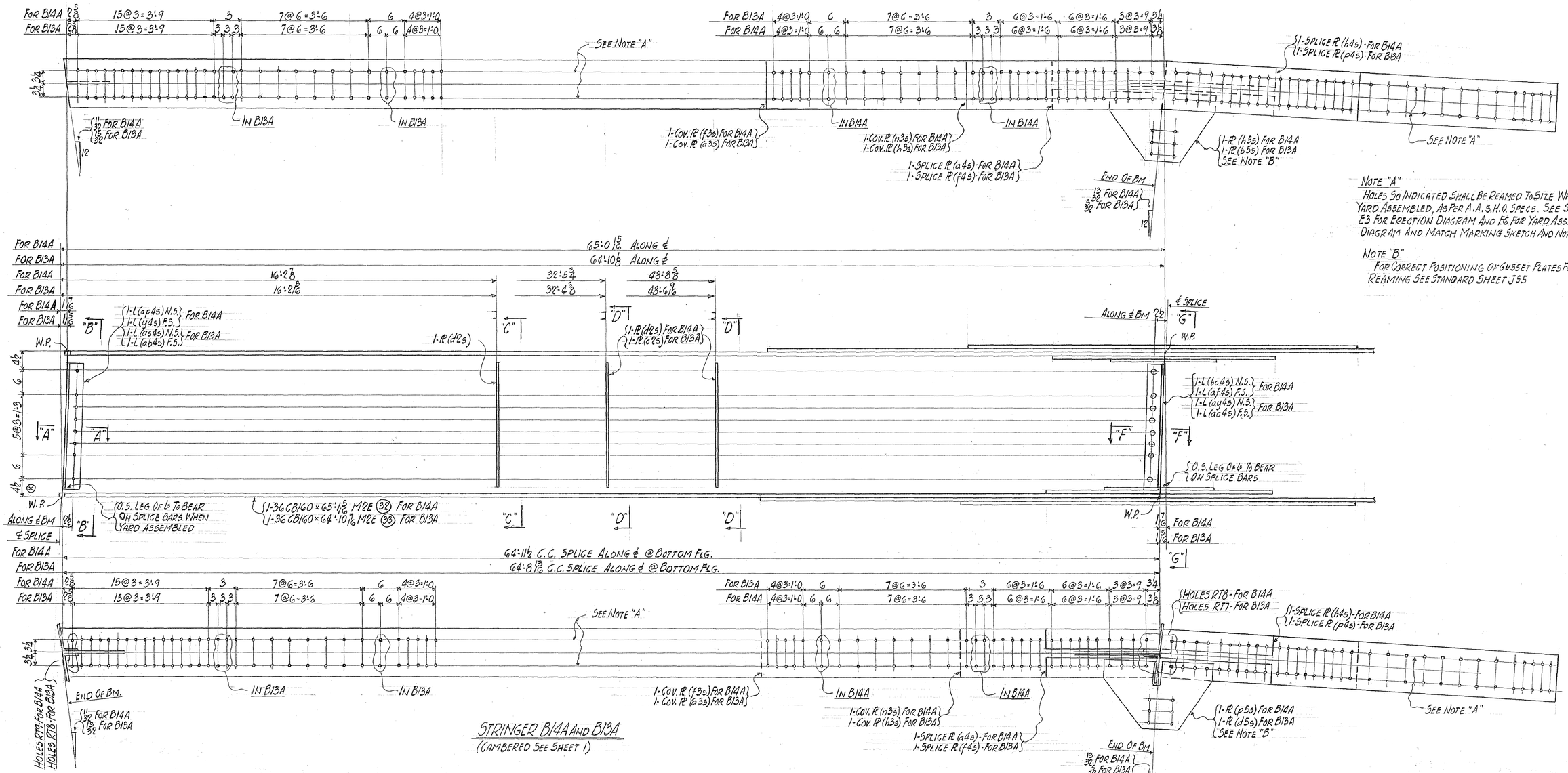
FOR GENERAL NOTES SEE SHT 3

RIVETS 7/8" ϕ
OPEN HOLES 15/16" ϕ UNLESS NOTED
REAM SEE NOTE "A"
MILLING AS NOTED
PAINT ONE COAT RED LEAD AS PER SPECS. (EXCEPT AS PER NOTE "X")
WELDING SEE SHEET J52
SHOP CONTACT SURFACES NOT PAINTED

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N. W. RAILWAY
MILWAUKEE, WISCONSIN

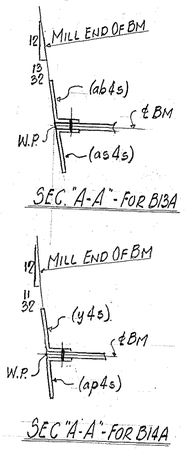
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE H.E.R.B. MADE BY E.
CHECKED BY WVD 8-14-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 24



STRINGER B14A AND B13A
(CAMBERED SEE SHEET 1)

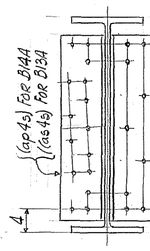
NOTE "A"
HOLES SO INDICATED SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED, AS PER A.A.S.H.O. SPECS. SEE SHEET E3 FOR ERECTION DIAGRAM AND EG FOR YARD ASSEMBLY DIAGRAM AND MATCH MARKING SKETCH AND NOTES.

NOTE "B"
FOR CORRECT POSITIONING OF GUSSET PLATES FOR REAMING SEE STANDARD SHEET J35

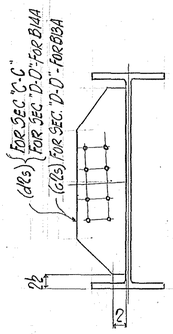


SEC. "A-A" - FOR B13A

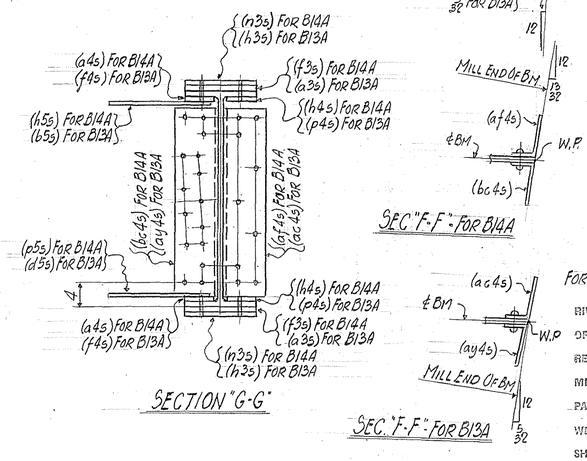
SEC. "A-A" - FOR B14A



SECTION "B-B"



SEC. "C-C" & "D-D"



SECTION "G-G"

SEC. "F-F" - FOR B14A

SEC. "F-F" - FOR B13A

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B14A
ONE	STRINGER	B13A

NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

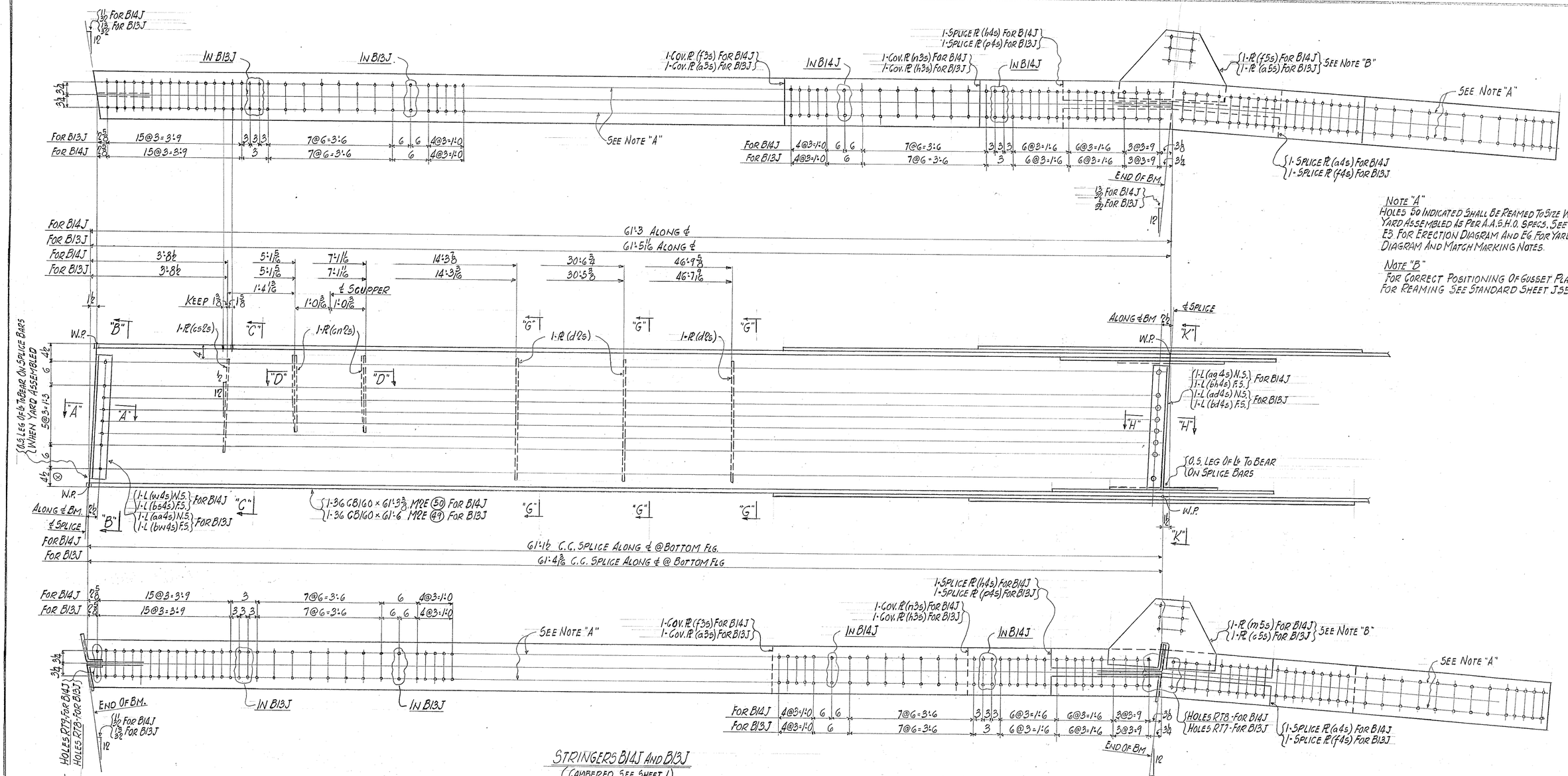
FOR GENERAL NOTES SEE SHEET 3

RIVETS 7/8" ϕ
OPEN HOLES 15/16" ϕ UNLESS NOTED
REAM SEE NOTE "A"
MILLING AS NOTED
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J52
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
D. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N. W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY BI
CHECKED BY WYD 8-14-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO.
CONTRACT CG4538
SHEET 25



NOTE "A"
HOLES SO INDICATED SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECS. SEE SHEET E3 FOR ERECTION DIAGRAM AND E6 FOR YARD ASSEMBLY DIAGRAM AND MATCH MARKING NOTES.

NOTE "B"
FOR CORRECT POSITIONING OF GUSSET PLATES FOR REAMING SEE STANDARD SHEET J55

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B14J
ONE	STRINGER	B13J

NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

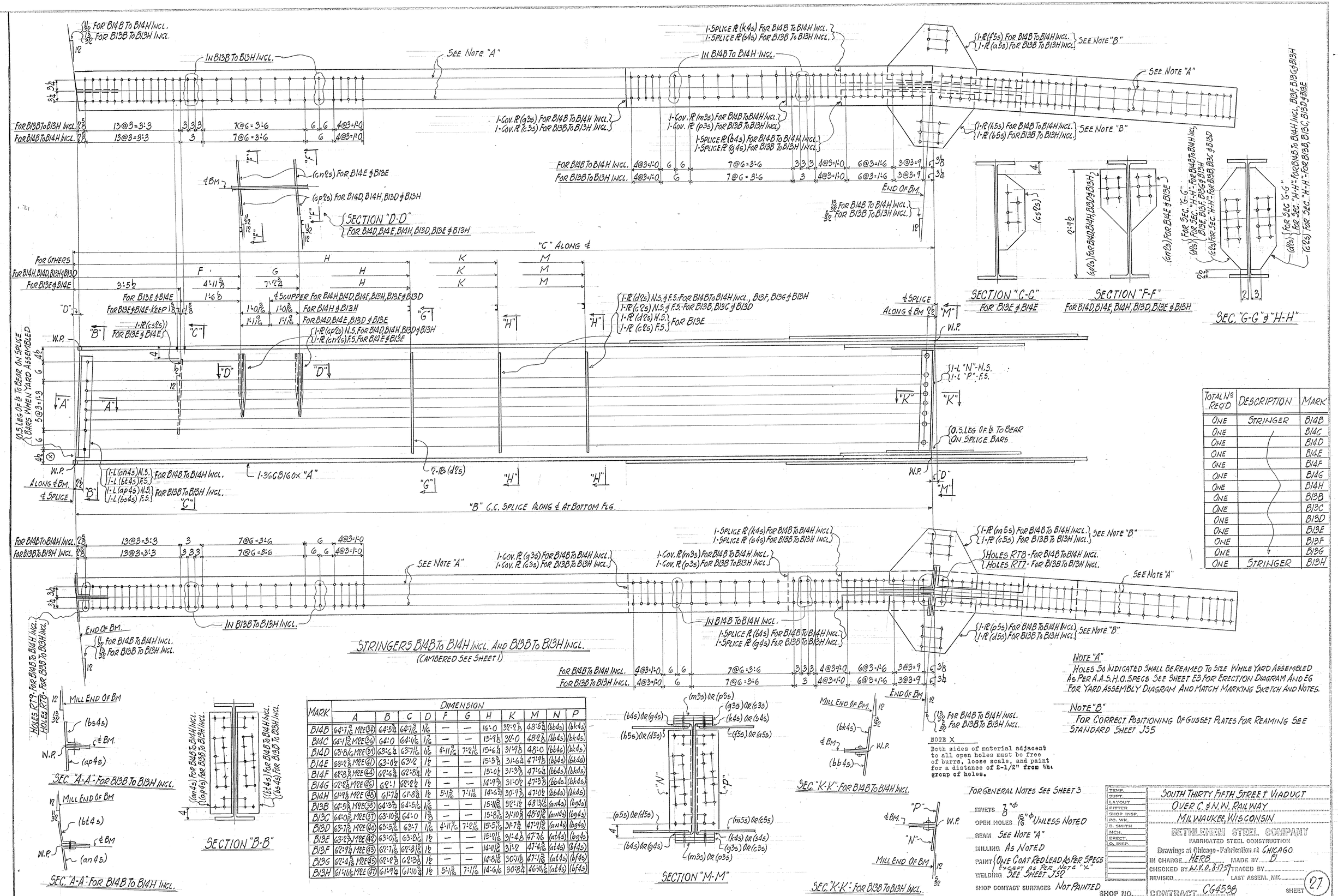
FOR GENERAL NOTES SEE SHEET 3

RIVETS 8"φ
OPEN HOLES 15/16"φ UNLESS NOTED
REAM SEE NOTE "A"
MILLING AS NOTED
PAINT ONE COAT RED LEAD AS PER SPECS (EXCEPT AS PER NOTE "X")
WELDING SEE SHEET J52
SHOP CONTACT SURFACES NOT PAINTED

TRSP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
FG. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

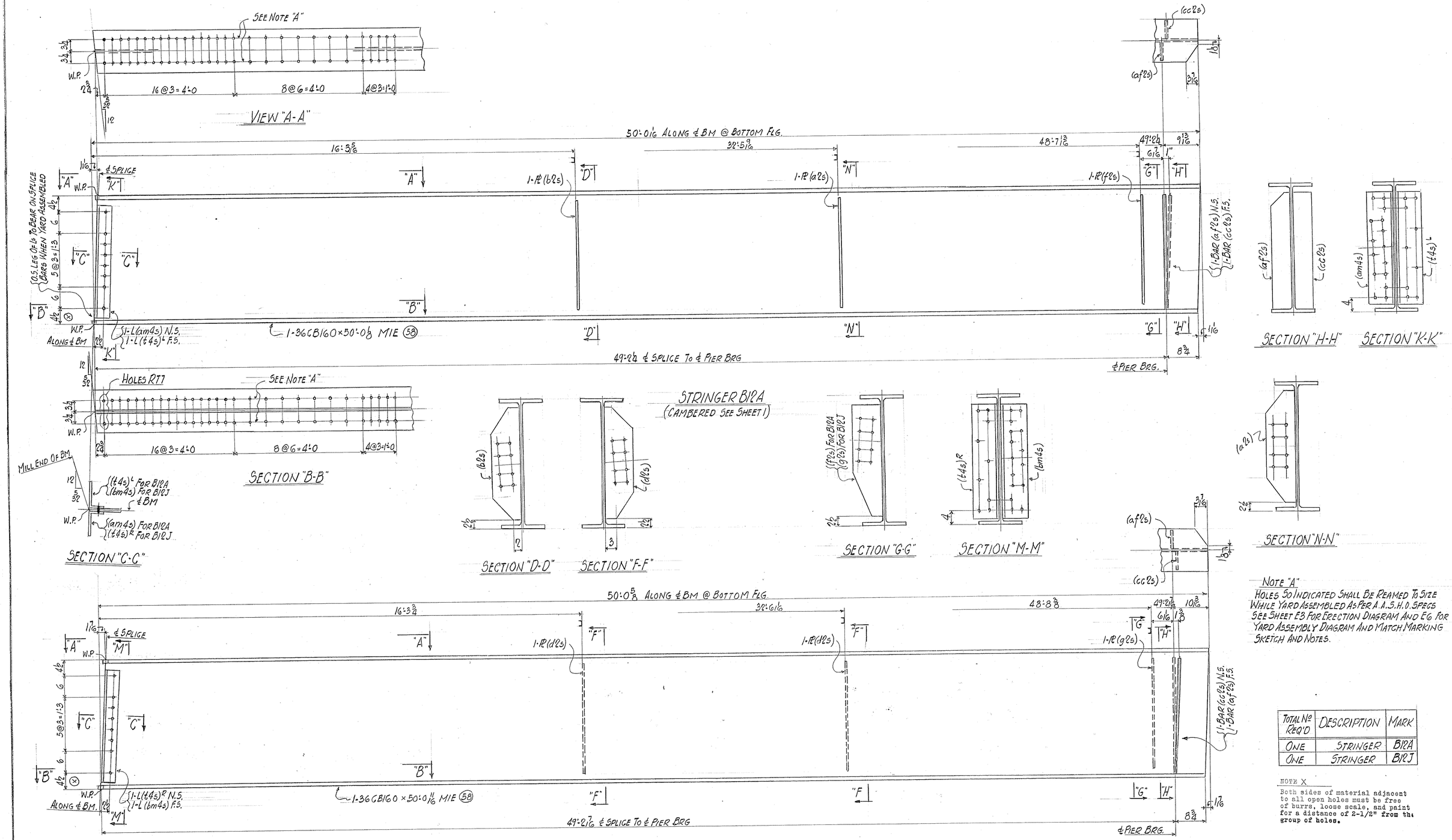
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY BI
CHECKED BY WVD 8-14-57 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 26



TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B14B
ONE		B14C
ONE		B14D
ONE		B14E
ONE		B14F
ONE		B14G
ONE		B14H
ONE		B13B
ONE		B13C
ONE		B13D
ONE		B13E
ONE		B13F
ONE		B13G
ONE	STRINGER	B13H

MARK	DIMENSION										
	A	B	C	D	F	G	H	K	M	N	P
B14B	64'-7 9/16 MPE (31)	64'-5 3/4	64'-7 9/16	1 1/16	—	—	16'-0	32'-0 3/8	48'-5 3/4	(bb4s)	(bk4s)
B14C	64'-1 15/16 MPE (30)	64'-0	64'-1 1/16	1 1/16	—	—	15'-9 1/8	32'-0	48'-2 3/8	(bb4s)	(bk4s)
B14D	63'-8 1/16 MPE (29)	63'-6 1/4	63'-7 1/16	1 1/16	4'-11 7/16	7'-2 1/16	15'-6 1/4	31'-9 3/8	48'-0	(bb4s)	(bk4s)
B14E	63'-0 3/8 MPE (41)	63'-0 1/2	63'-0	1 1/2	—	—	15'-3 3/8	31'-6 1/4	47'-9 3/8	(bb4s)	(bk4s)
B14F	62'-8 3/8 MPE (44)	62'-6 3/4	62'-8 3/4	1 1/2	—	—	15'-0 1/2	31'-3 3/8	47'-6 1/4	(bb4s)	(bk4s)
B14G	62'-2 3/8 MPE (46)	62'-1	62'-2 1/2	1 1/2	—	—	14'-9 5/8	31'-0 1/2	47'-3 3/8	(bb4s)	(bk4s)
B14H	61'-9 1/2 MPE (48)	61'-7 1/4	61'-8 3/4	1 1/2	5'-1 5/16	7'-1 11/16	14'-6 3/4	30'-9 3/8	47'-0 1/2	(bb4s)	(bk4s)
B13B	64'-5 3/4 MPE (35)	64'-3 3/4	64'-5 1/16	1 5/16	—	—	15'-11 5/16	32'-1 1/2	48'-3 1/16	(aw4s)	(bg4s)
B13C	64'-0 5/8 MPE (37)	63'-10 5/8	64'-0	1 3/8	—	—	15'-8 7/16	31'-10 5/8	48'-0 15/16	(aw4s)	(bg4s)
B13D	63'-7 1/2 MPE (40)	63'-5 7/16	63'-7	1 1/16	4'-11 7/16	7'-2 1/16	15'-5 7/16	31'-7 3/4	47'-9 15/16	(aw4s)	(bg4s)
B13E	63'-2 3/8 MPE (42)	63'-0 1/16	63'-2 1/16	1 1/2	—	—	15'-0 11/16	31'-4 3/8	47'-7 1/16	(at4s)	(bg4s)
B13F	62'-9 3/4 MPE (43)	62'-7 1/16	62'-8 15/16	1 1/2	—	—	14'-11 13/16	31'-1 1/2	47'-4 7/16	(at4s)	(bf4s)
B13G	62'-4 7/16 MPE (45)	62'-2 3/8	62'-3 7/8	1 1/2	—	—	14'-8 15/16	30'-11 1/8	47'-1 5/16	(at4s)	(bf4s)
B13H	61'-11 1/16 MPE (47)	61'-9 3/4	61'-10 3/4	1 1/2	5'-1 5/16	7'-1 1/16	14'-6 1/16	30'-8 3/4	46'-10 11/16	(at4s)	(bf4s)



NOTE "A"
HOLES SO INDICATED SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECS SEE SHEET E3 FOR ERECTION DIAGRAM AND E6 FOR YARD ASSEMBLY DIAGRAM AND MATCH MARKING SKETCH AND NOTES.

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B12A
ONE	STRINGER	B12J

NOTE X
Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

FOR GENERAL NOTES SEE SHEET 3

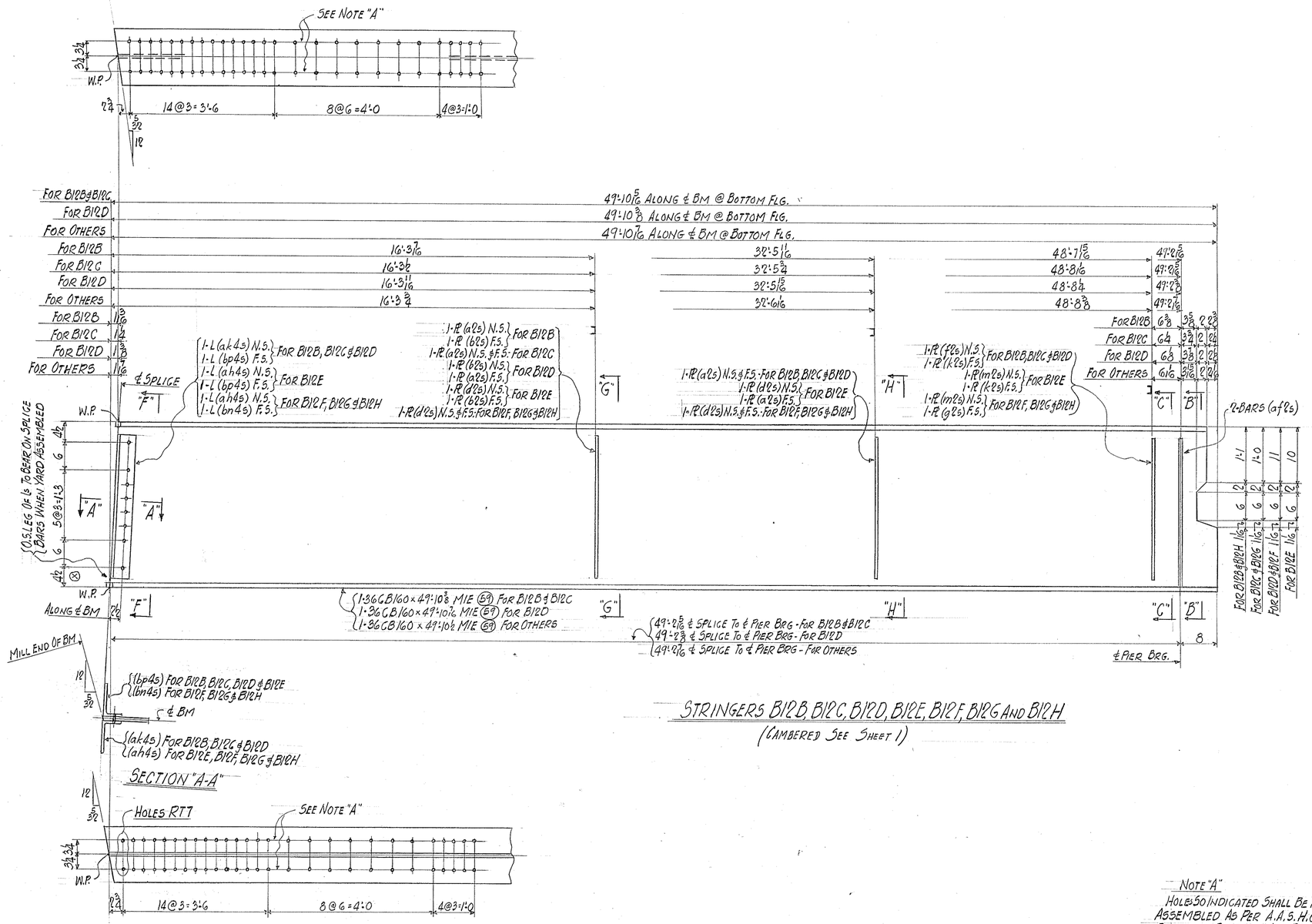
RIVETS NONE
OPEN HOLES 1 5/16" ϕ UNLESS NOTED
BEAM SEE NOTE "A"
MILLING AS NOTED
PAINT ONE COAT RED LEAD AS PER SPECS EXCEPT AS PER NOTE "X"
WELDING SEE SHEET J32
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

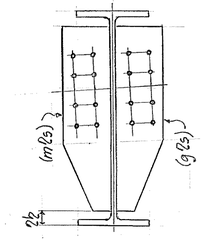
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY D
CHECKED BY NVD 8/8/59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 28

E3

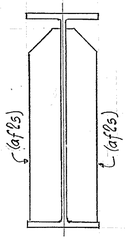


STRINGERS B12B, B12C, B12D, B12E, B12F, B12G AND B12H

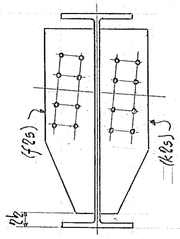
(CAMBERED SEE SHEET 1)



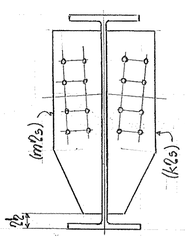
SECTION "G-G"
FOR B12F, B12G & B12H



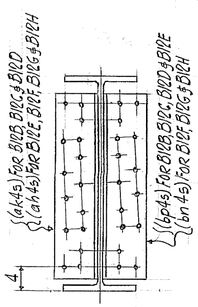
SECTION "B-B"



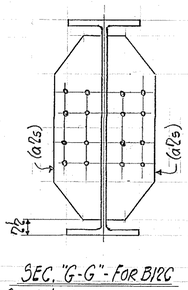
SECTION "C-C"
FOR B12B, B12C & B12D



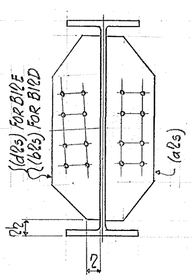
SECTION "C-C"
FOR B12E



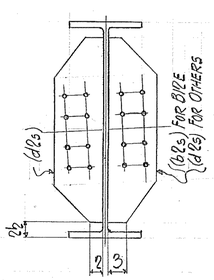
SECTION "F-F"



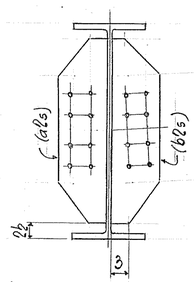
SEC. "G-G" - FOR B12C
SEC. "H-H" - FOR B12B, B12C & B12D



SEC. "G-G" - FOR B12D
SEC. "H-H" - FOR B12E



SEC. "G-G" - FOR B12E, B12F, B12G & B12H
SEC. "H-H" FOR B12F, B12G & B12H



SECTION "G-G"
FOR B12B

NOTE "A"

HOLES SO INDICATED SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECS. SEE SHEET E3 FOR ERECTION DIAGRAM AND E6 FOR YARD ASSEMBLY DIAGRAM AND MATCH MARKING SKETCH AND NOTES

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes.

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	STRINGER	B12B
ONE		B12C
ONE		B12D
ONE		B12E
ONE		B12F
ONE		B12G
ONE	STRINGER	B12H

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE

OPEN HOLES 15/16" ϕ UNLESS NOTED

REAM SEE NOTE "A"

MILLING AS NOTED

PAINT ONE COAT RED LEAD AS PER SPEC 6 EXCEPT AS PER NOTE "X"

WELDING SEE SHEET J52

SHOP CONTACT SURFACES NOT PAINTED

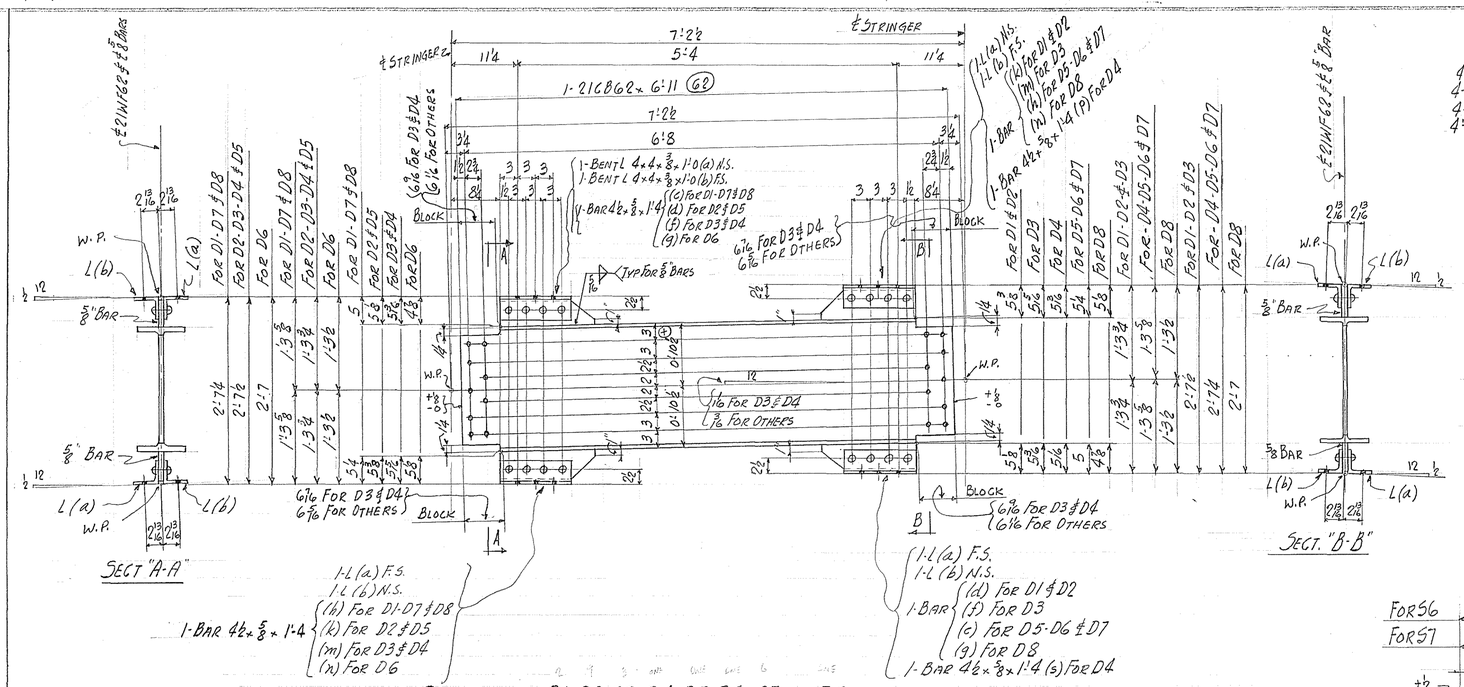
TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
Q. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

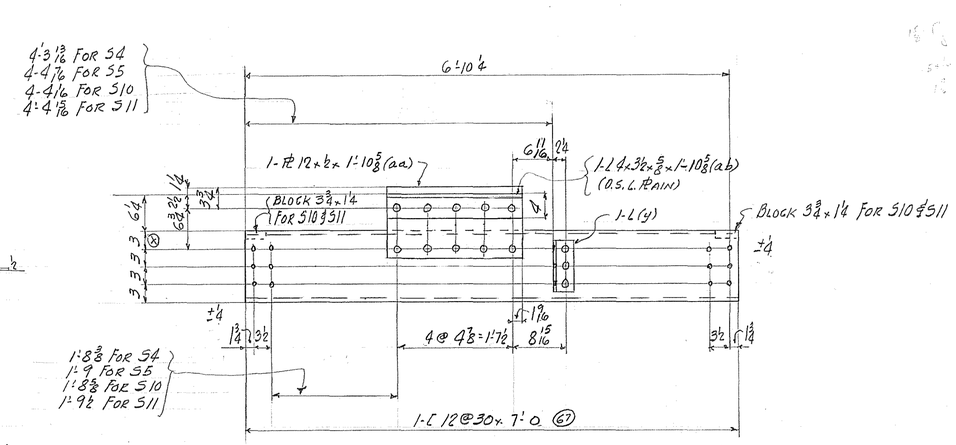
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO

IN CHARGE HERB MADE BY PI
CHECKED BY W.V.D. 8-18-59 TRACED BY
REVISED LAST ASSEM. MK.

SHOP NO.
CONTRACT CG4538
SHEET 29

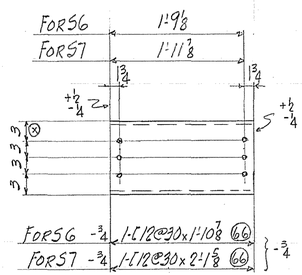


DIAPHRAGMS D1-D2-D3-D4-D5-D6-D7 AND D8

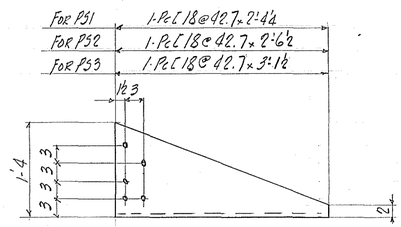


SCUPPER SUPPORT S4 AND S10

SCUPPER SUPPORT S5 & S11 (OPP HAND TO SKETCH)

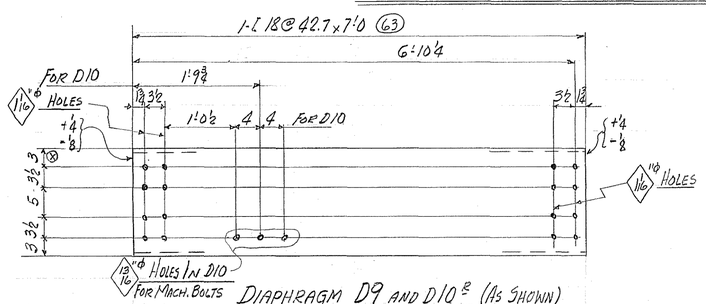


SCUPPER SUPPORTS S6 AND S7



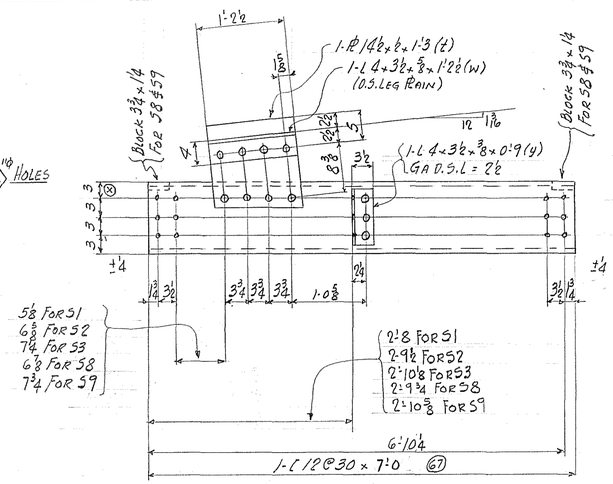
PIPE SUPPORTS P51R-P52 & P53 (AS SHOWN)

PIPE SUPPORT P51L



DIAPHRAGM D9 AND D10R (AS SHOWN)

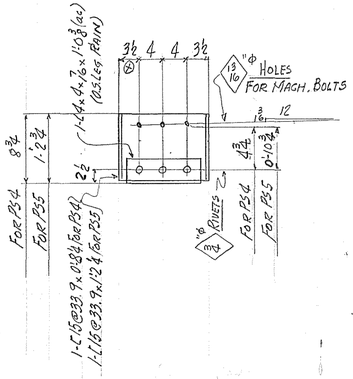
DIAPHRAGM D10L



SCUPPER SUPPORTS S1R-S2 & S8 (AS SHOWN)

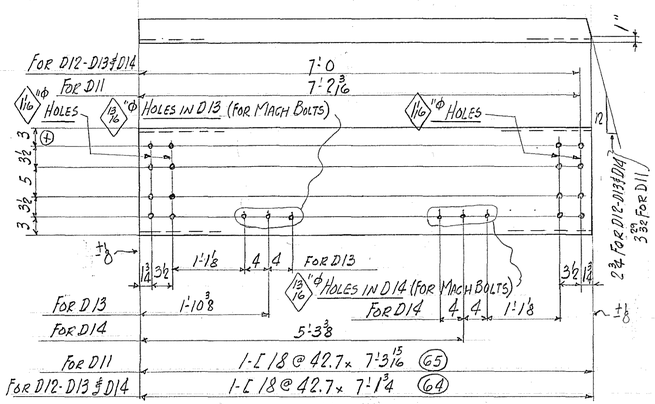
SCUPPER SUPPORT S1L

SCUPPER SUPPORT S3 AND S9 (OPP HAND TO SKETCH



PIPE SUPPORT P54R & P55R

PIPE SUPPORT P54L & P55L



DIAPHRAGMS D11-D12-D13 AND D14

TOTAL Nº REQ'D	DESCRIPTION	MARK	TOTAL Nº REQ'D	DESCRIPTION	MARK
2	DIAPHRAGMS	D1	ONE	SCUPPER SUPPORTS	S4
9		D2	ONE		S5
3		D3	21		S6
ONE		D4	3	DO	S7
ONE		D5	7	PIPE SUPPORTS	P51R
ONE		D6	7		P51L
6		D7	3		P52
ONE		D8	3		P53
403		D9	ONE		P54R
ONE		D10R	ONE		P54L
ONE		D10L	ONE		P55R
40		D11	ONE	DO	P55L
46		D12	2	SCUPPER SUPPORT	S8
ONE		D13	2		S9
ONE	DO	D14	2		S10
18	SCUPPER SUPPORTS	S1R	2	DO	S11
18		S1L			
ONE		S2			
ONE	DO	S3			

FOR GENERAL NOTES SEE SHEET 3

RIVETS 7/8" ϕ UNLESS NOTED

OPEN HOLES 15/16" ϕ UNLESS NOTED

BEAM NONE

MILLING NONE

PAINT ONE COAT OF RED LEAD AS PER SPECS UNLESS NOTED - SEE NOTE "X"

WELDING As SHOWN PER SPECIAL PROVISIONS

SHOP CONTACT SURFACES NOT PAINTED

NOTE X

Both sides of material adjacent to all open holes must be free of burrs, loose scale, and paint for a distance of 2-1/2" from the group of holes. EXCEPT HOLES MARKED FOR MACHINE BOLTS

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

SOUTH THIRTY-FIFTH STREET VIADUCT

OVER C. & N.W. RAILWAY

MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY

FABRICATED STEEL CONSTRUCTION

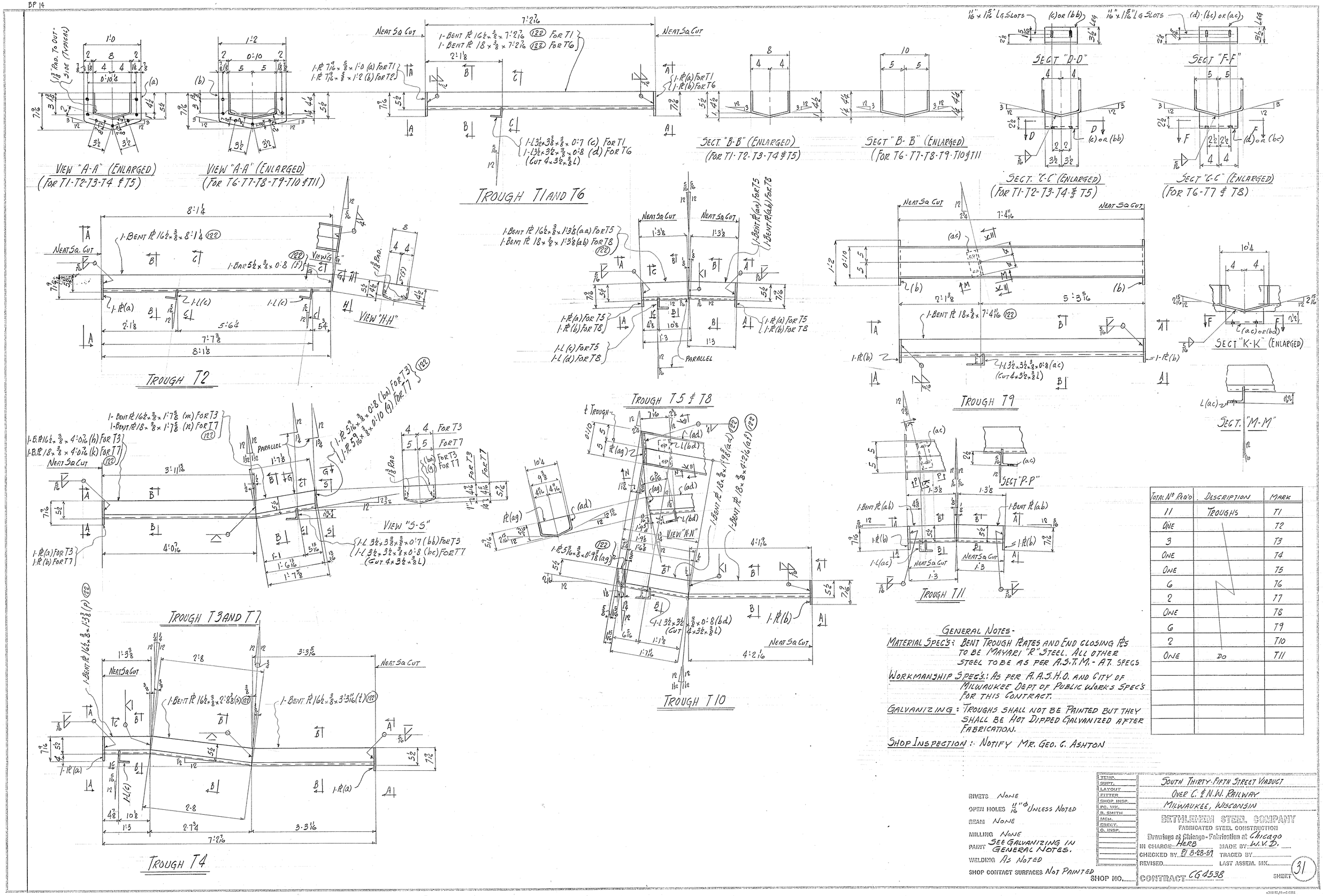
Drawings at Chicago - Fabrication at Chicago

IN CHARGE HERB MADE BY N.V.D.

CHECKED BY B 8-27-59 TRACED BY

REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CG4538 SHEET 30



GENERAL NOTES-

MATERIAL SPEC'S: BENT TROUGH PLATES AND END CLOSING PL'S TO BE MAYARI "R" STEEL. ALL OTHER STEEL TO BE AS PER A.S.T.M.-A7 SPECS

WORKMANSHIP SPEC'S: AS PER A.A.S.H.O. AND CITY OF MILWAUKEE DEPT OF PUBLIC WORKS SPEC'S FOR THIS CONTRACT.

GALVANIZING: TROUGHS SHALL NOT BE PAINTED BUT THEY SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.

SHOP INSPECTION: NOTIFY MR. GEO. C. ASHTON

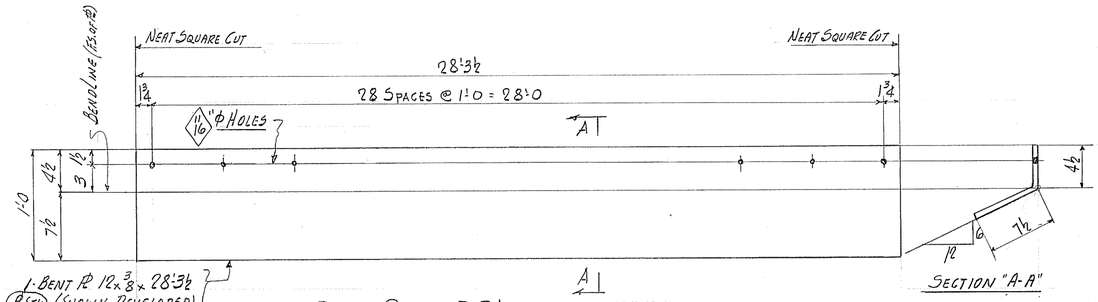
TOTAL Nº REQ'D	DESCRIPTION	MARK
11	TROUGHS	T1
ONE		T2
3		T3
ONE		T4
ONE		T5
6		T6
2		T7
ONE		T8
6		T9
2		T10
ONE	DO	T11

RIVETS NONE
OPEN HOLES $\frac{11}{16}$" ϕ UNLESS NOTED
BEAM NONE
MILLING NONE
PAINT SEE GALVANIZING IN GENERAL NOTES.
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. VIC.
B. SMITH
MCH.
ERECT.
O. INSP.

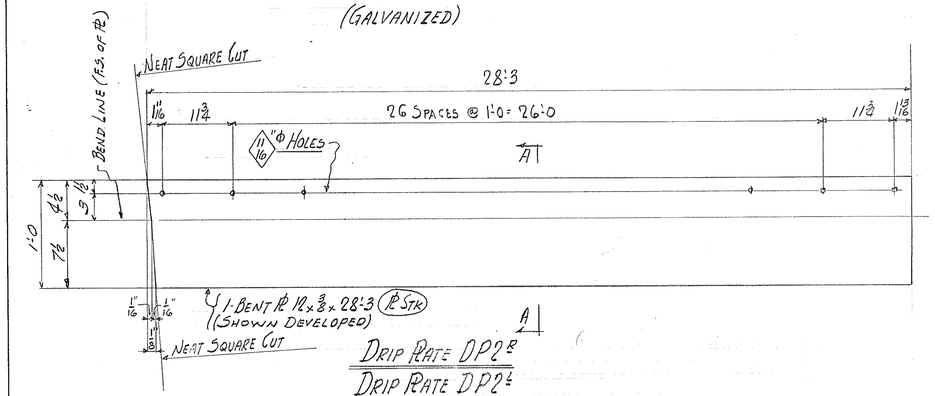
SOUTH THIRTY-FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at Chicago
IN CHARGE HERB MADE BY W.V.D.
CHECKED BY P/B 8-28-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 31



DRIP PLATE DP1

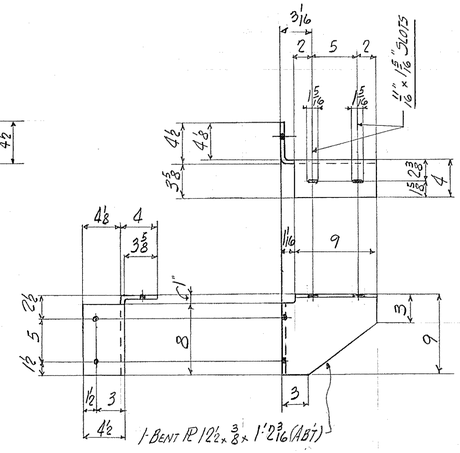
(GALVANIZED)



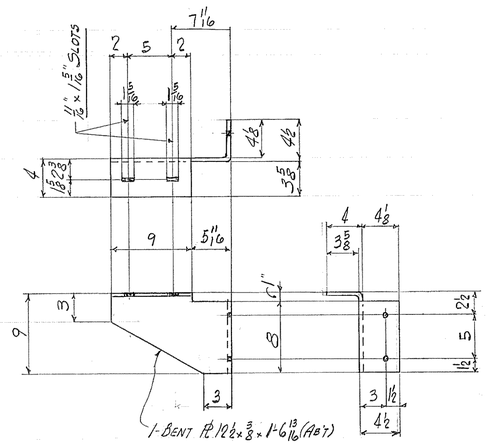
DRIP PLATE DP2R

DRIP PLATE DP2L

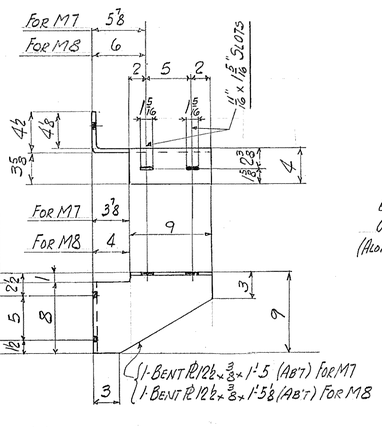
(GALVANIZED)



TROUGH SUPPORT M6



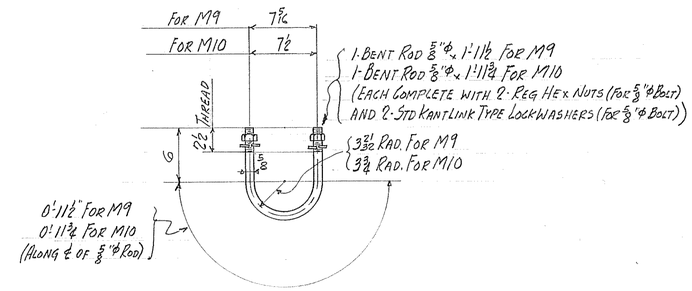
TROUGH SUPPORT M5



TROUGH SUPPORT M7R

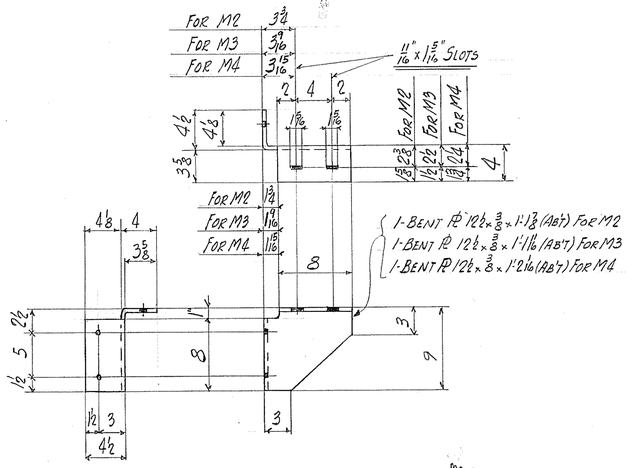
TROUGH SUPPORT M7L

TROUGH SUPPORT M8 (OPP HAND TO SKETCH)



"U"-BOLTS M9 AND M10

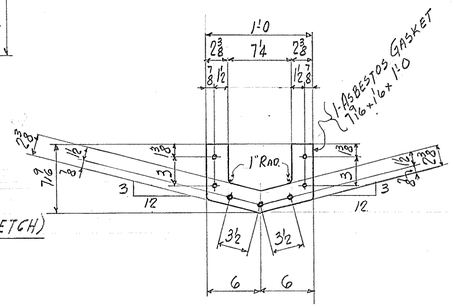
(GALVANIZED)



TROUGH SUPPORT M2R AND M4

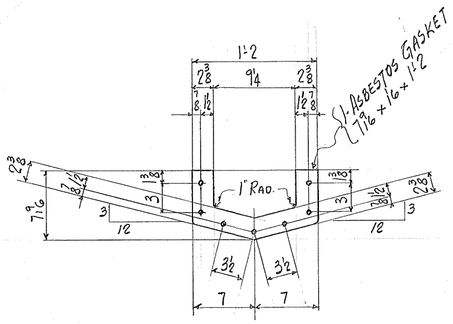
TROUGH SUPPORT M2L

TROUGH SUPPORT M3 (OPP HAND TO SKETCH)



ASBESTOS GASKET M11 – 17/16" Φ HOLES

(NO PAINT)



ASBESTOS GASKET M12 – 17/16" HOLES

(NO PAINT)

TOTAL Nº REQ'D	DESCRIPTION	MARK
2	DRIP PLATES	DP1
ONE	DO	DP2R
ONE	DO	DP2L
5	TROUGH SUPPORTS	M2R
4		M2L
2		M3
7		M4
4		M5
5		M6
4		M7R
2		M7L
3	DO	M8
22	"U" BOLTS	M9
2	DO	M10
15	ASBESTOS GASKETS	M11
16	DO	M12
230 (13-EXCESS)	5/8" Φ x 2¼ LG HEX HD. GALVANIZED BOLTS - COMPLETE WITH ONE HEX NUT & LOCKWASHER	

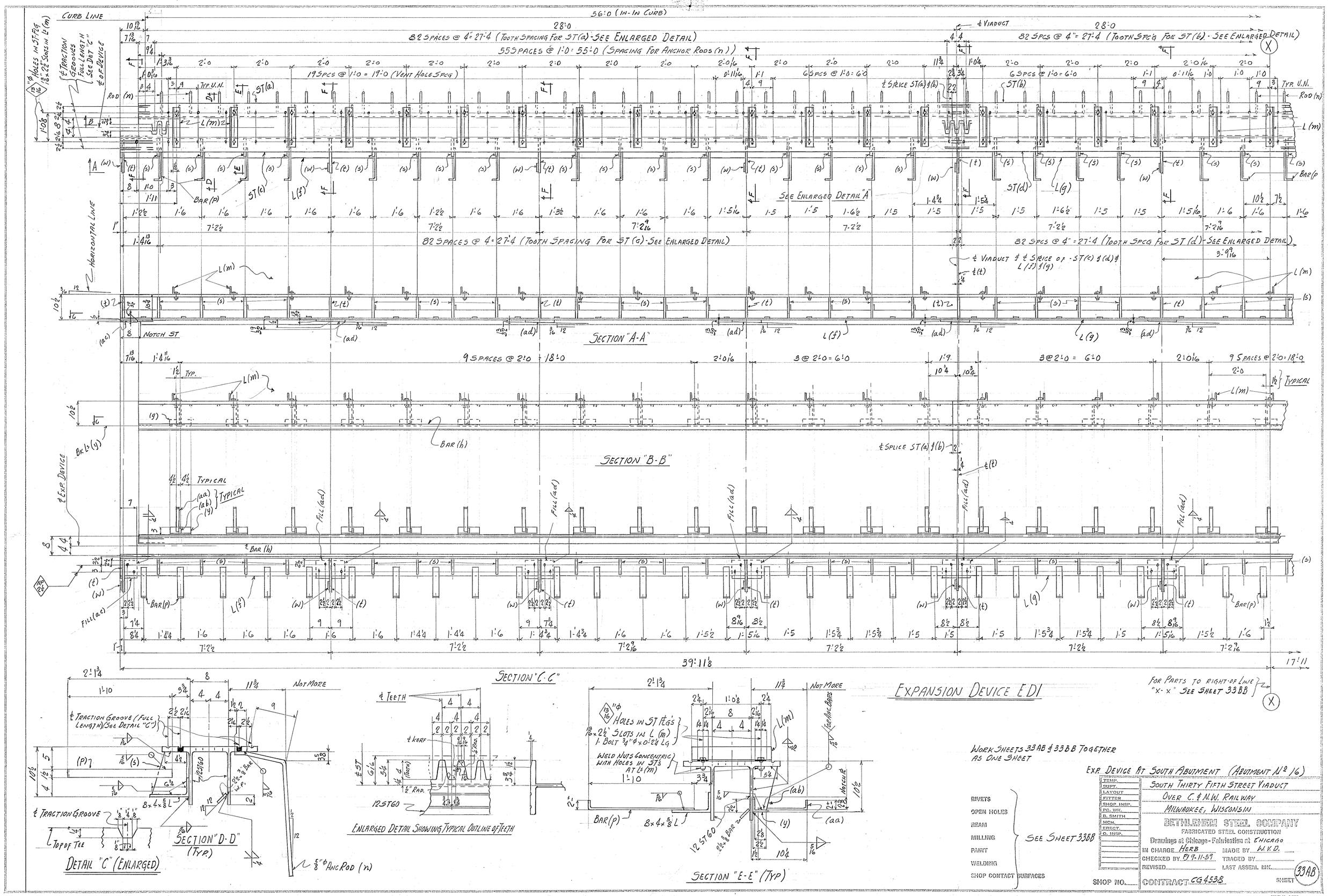
SHOP NOTE:
ALL ITEMS INDICATED GALVANIZED SHALL NOT BE PAINTED, BUT SHALL BE HOT DIPPED GALVANIZED AFTER SHOP FABRICATION.

FOR GENERAL NOTES SEE SHEET 3

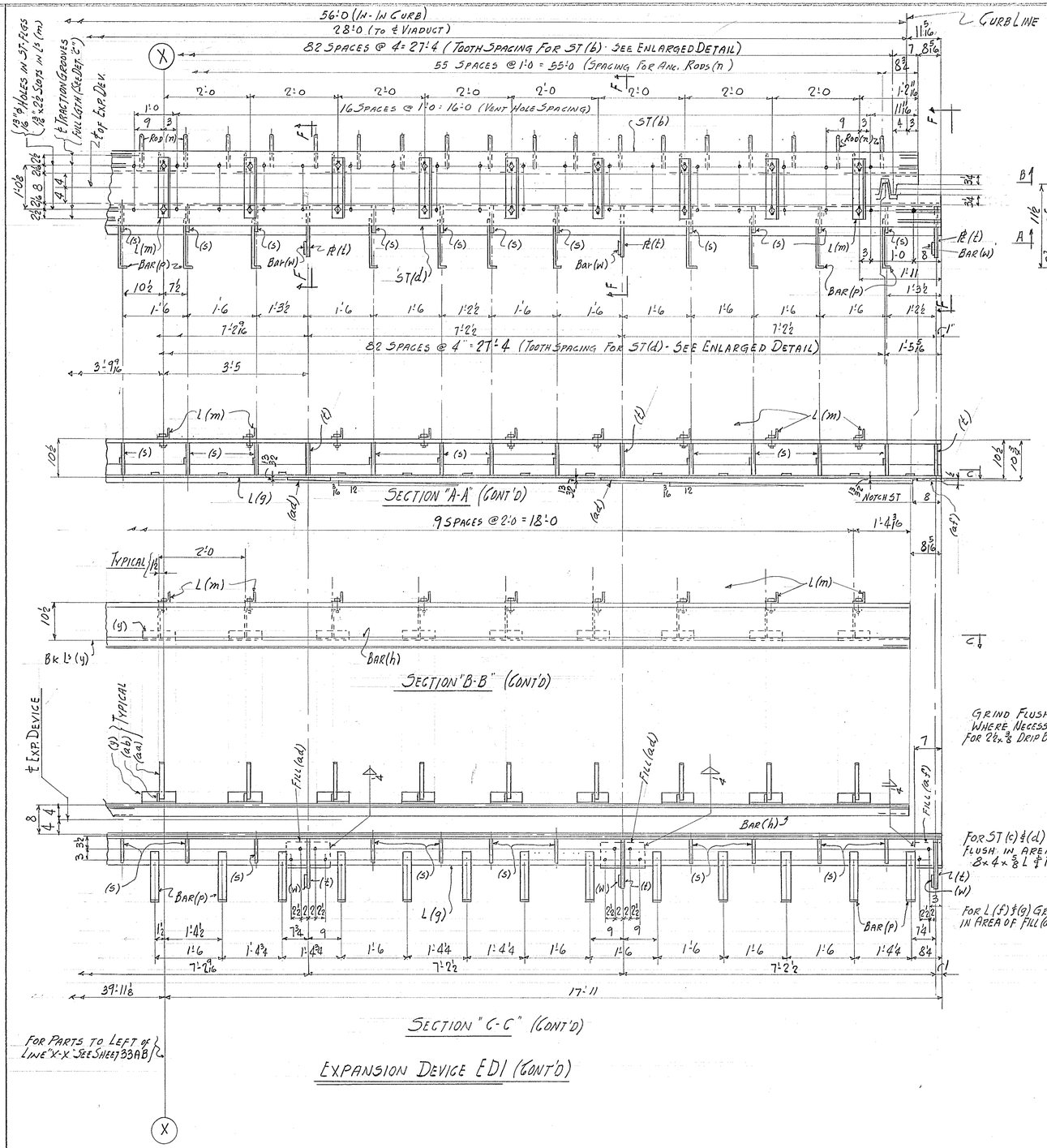
RIVETS NONE
OPEN HOLES 13/16" Φ UNLESS NOTED
BEAM NONE
MILLING NONE
PAINT ONE COAT OF RED LEAD AS PER SPEC'S - UNLESS NOTED
WELDING NONE
SHOP CONTACT SURFACES NONE

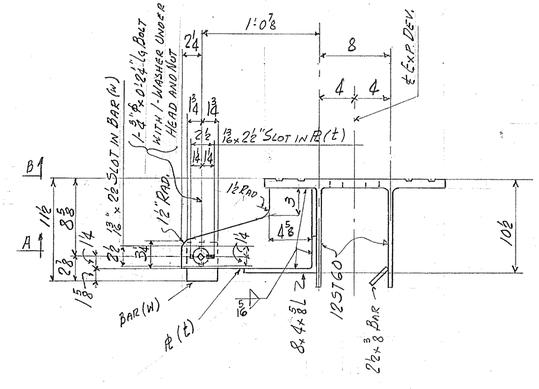
TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
R. SMITH	
MCH.	
ERECT.	
O. INSP.	

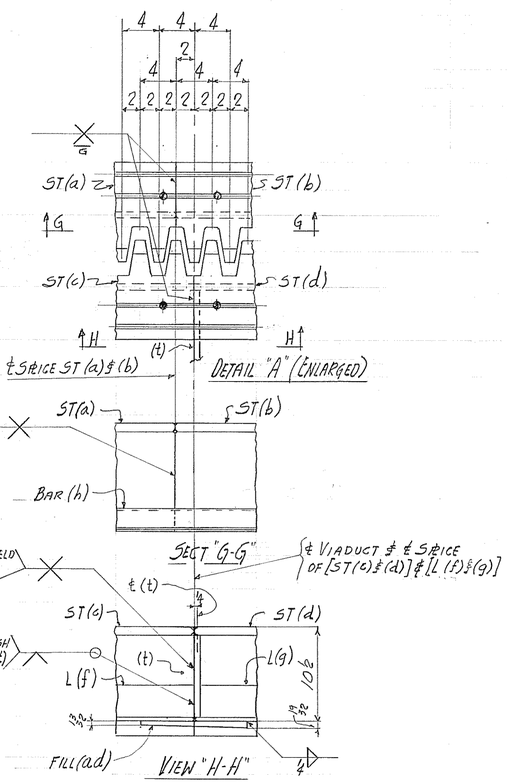
SOUTH THIRTY-FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at Chicago
IN CHARGE HERB MADE BY W.V.D.
CHECKED BY P.J.B. 9-28-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 32
REV. (A) 10-9-59



CURB LINE
56'-0 (IN-IN CURB)
28'-0
82 SPACES @ 4" = 27'-4 (TOOTH SPACING FOR ST(a) - SEE ENLARGED DETAIL)
55 SPACES @ 1'-0 = 55'-0 (SPACING FOR ANCHOR RODS (n))
19 SPCS @ 1'-0 = 19'-0 (VENT HOLE SPCG)
6 SPCS @ 1'-0 = 6'-0
82 SPCS @ 4" = 27'-4 (TOOTH SPCG FOR ST(b) - SEE ENLARGED DETAIL)
℄ VIADUCT
℄ SPLICE ST(a) & (b)
SEE ENLARGED DETAIL "A"
82 SPACES @ 4" = 27'-4 (TOOTH SPACING FOR ST(c) - SEE ENLARGED DETAIL)
82 SPCS @ 4" = 27'-4 (TOOTH SPCG FOR ST(d) - SEE ENLARGED DETAIL)
℄ VIADUCT & ℄ SPLICE OF ST(c) & (d) & L(f) & (g)
HORIZONTAL LINE
NOTCH ST
SECTION "A-A"
9 SPACES @ 2'-0 = 18'-0
3 @ 2'-0 = 6'-0
TYPICAL
SECTION "B-B"
℄ SPLICE ST(a) & (b)
℄ EXP. DEVICE
FILL (ad)
BAR (h)
BAR (p)
39'-11 1/8
17'-11
SECTION "C-C"
EXPANSION DEVICE EDI
FOR PARTS TO RIGHT OF LINE "X-X" SEE SHEET 33BB
℄ TRACTION GROOVE (FULL LENGTH) (SEE DETAIL "C")
℄ TRACTION GROOVE
TOP OF TEE
DETAIL "C" (ENLARGED)
SECTION "D-D" (TYP.)
5/8" ϕ ANC ROD (n)
℄ TEETH
℄ KERF
12 ST 60
ENLARGED DETAIL SHOWING TYPICAL OUTLINE OF TEETH
HOLES IN ST FLG'S
1 3/16 x 2 1/2" SLOTS IN L (m)
1 BOLT 3/4" ϕ x 0'-2 1/4 LG
WELD NUTS CONCENTRIC WITH HOLES IN STS AT L's (m)
SECTION "E-E" (TYP)
WORK SHEETS 33AB & 33BB TOGETHER AS ONE SHEET
EXP. DEVICE AT SOUTH ABUTMENT (ABUTMENT No 16)
RIVETS
OPEN HOLES
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES
SEE SHEET 33BB
TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.
SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB
MADE BY W.V.D.
CHECKED BY 9-11-59
TRACED BY
REVISED
LAST ASSEM. MK.
SHOP NO.
CONTRACT CG4538
SHEET 33AB







BILL OF MATERIAL FOR ONE ED1

1- 12ST60 x 28'-1 (a) (116)
1- 12ST60 x 28'-5 (b) (116)
1- 12ST60 x 28'-10 13/16 (c) (116)
1- 12ST60 x 28'-11 13/16 (d) (116)
1- L 8 x 4 x ⅜ x 28'-10 13/16 (f) } (118)
1- L 8 x 4 x ⅜ x 28'-11 13/16 (g) }
1- DRIP BAR 2½ x ⅜ x 57'-10⅛ (h) (120)

28 L's 3 x 3 x ¼ x 1'-4⅝ (m)
56 BENT RODS ⅝" Φ x 2'-6 (n)
72 BENT BARS 1½ x ⅜ x 2'-0 (p)
32- PL's 8 15/16 x ½ x 0'-6¾ (s)
9- PL's 8 15/16 x ½ x 1'-2 13/16 (t)
9- BARS 3½ x ½ x 0'-4⅞ (w)
9- BOLTS ¾" Φ x 2½" Lg
18 CUT WASHERS FOR ¾" Φ BOLTS

28 L's 3 x 2½ x ⅜ x 0'-9 (y)
28- BENT BARS 1 x ⅜ x 1'-0¼ (aa)
28- BARS 5¼ x ½ x 0'-9 13/16 (ab)
1- BEV. FILL 7 x (½ x 19/32) x 0'-7½ (ac) FIS
7- BEV. FILLS 12 x (13/32 x 19/32) x 0'-7½ (ad) FIS
1- BEV. FILL 7 x (13/32 x ½) x 0'-7½ (ad') FIS

56- BOLTS ¾" Φ x 0'-2¼ (FOR L's (m))
(WELD NUTS TO ST's CONCENTRIC WITH HOLES)

TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	EXPANSION DEVICE	ED1

WORK SHEETS 33AB & 33BB TOGETHER AS ONE SHEET
FOR GENERAL NOTES SEE SHEET 3

EXP. DEVICE AT SOUTH ABUTMENT (ABUT Nº 16)

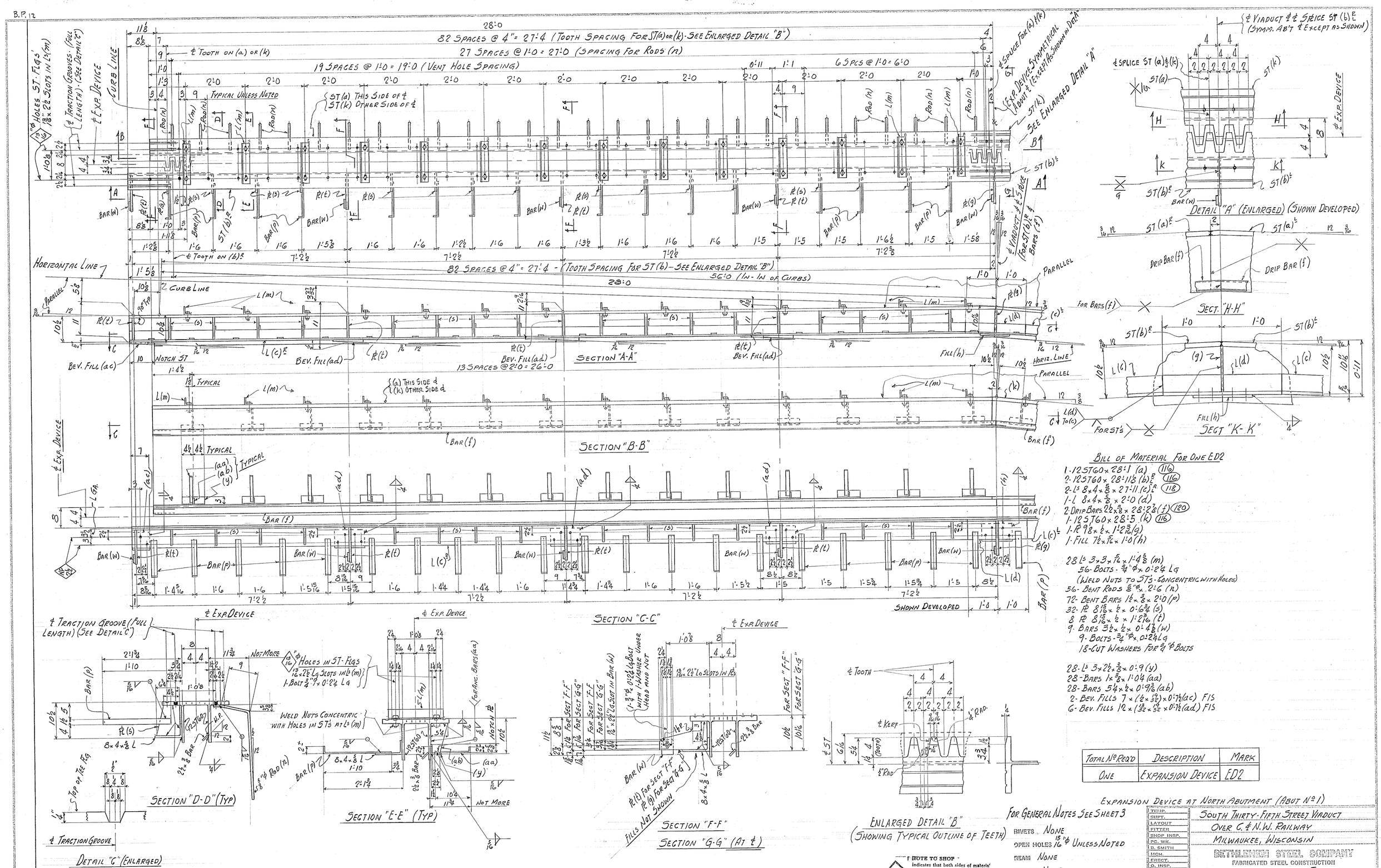
RIVETS NONE
OPEN HOLES 15/16" Φ UNLESS NOTED
SEAM NONE
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPEC'S EXCEPT AS NOTED - SEE NOTE TO SHOP
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED

NOTE TO SHOP
indicates that both sides of materials adjacent to open holes so designated must be free of burrs, loose scale, and paint for a distance of "A" inches from the group of holes.
When the "A" dimension is omitted then this instruction applies to both sides of the entire surface so designated.

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PG. WK.
B. SMITH
MCH.
ERECT.
Q. INSP.

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY N.V.D.
CHECKED BY 09-11-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 33BB



Bill of Material For One ED2

1-12ST60 × 28'-1 (a) (116)
2-12ST60 × 28'-11⅛ (b) R/L (116)
2-Ls 8 × 4 × ⅝ × 27'-11 (c) R/L (118)
1-L 8 × 4 × ⅝ × 2'-0 (d)
2-Drip Bars 2½ × ⅜ × 28'-2⅞ (f) (120)
1-12ST60 × 28'-5 (k) (116)
1-Pl 9⅛ × ½ × 1'-2 3/16 (g)
1-Fill 7½ × 5/16 × 1'-0 (h)

28 Ls 3 × 3 × 5/16 × 1'-4⅝ (m)
56-Bolts - ¾"φ × 0'-2¼ Lg
(Weld Nuts to ST's - Concentric with Holes)
56-Bent Rods ⅝"φ × 2'-6 (n)
72-Bent Bars 1½ × ⅜ × 2'-0 (p)
32-Pl 8 15/16 × ½ × 0'-6¾ (s)
8 Pl 8 15/16 × ½ × 1'-2 3/16 (t)
9-Bars 3½ × ½ × 0'-4⅞ (w)
9-Bolts - ¾"φ × 0'-2¼ Lg
18-Cut Washers For ¾"φ Bolts

28-Ls 3 × 2½ × ⅜ × 0'-9 (y)
28-Bars 1 × ⅜ × 1'-0¼ (aa)
28-Bars 5¼ × ½ × 0'-9 3/16 (ab)
2-Bev. Fills 7 × (½ × 19/32) × 0'-7½ (ac) FIS
6-Bev. Fills 12 × (13/32 × 19/32 × 0'-7½ (ad) FIS

Total No. Req'd	Description	Mark
One	Expansion Device	ED2

Expansion Device at North Abutment (About No. 1)

For General Notes See Sheet 3

RIVETS None
OPEN HOLES 15/16"φ Unless Noted
BEAM None
MILLING None
PAINT One Coat of Red Lead as Per Spec's Except As Noted - See Note to Shop
WELDING As Noted
SHOP CONTACT SURFACES Not Painted

NOTE TO SHOP - indicates that both sides of material adjacent to open holes so designated must be free of burrs, loose scale, and paint for a distance of "A" inches from the group of holes.
When the "A" dimension is omitted then this instruction applies to both sides of the entire surface so designated.

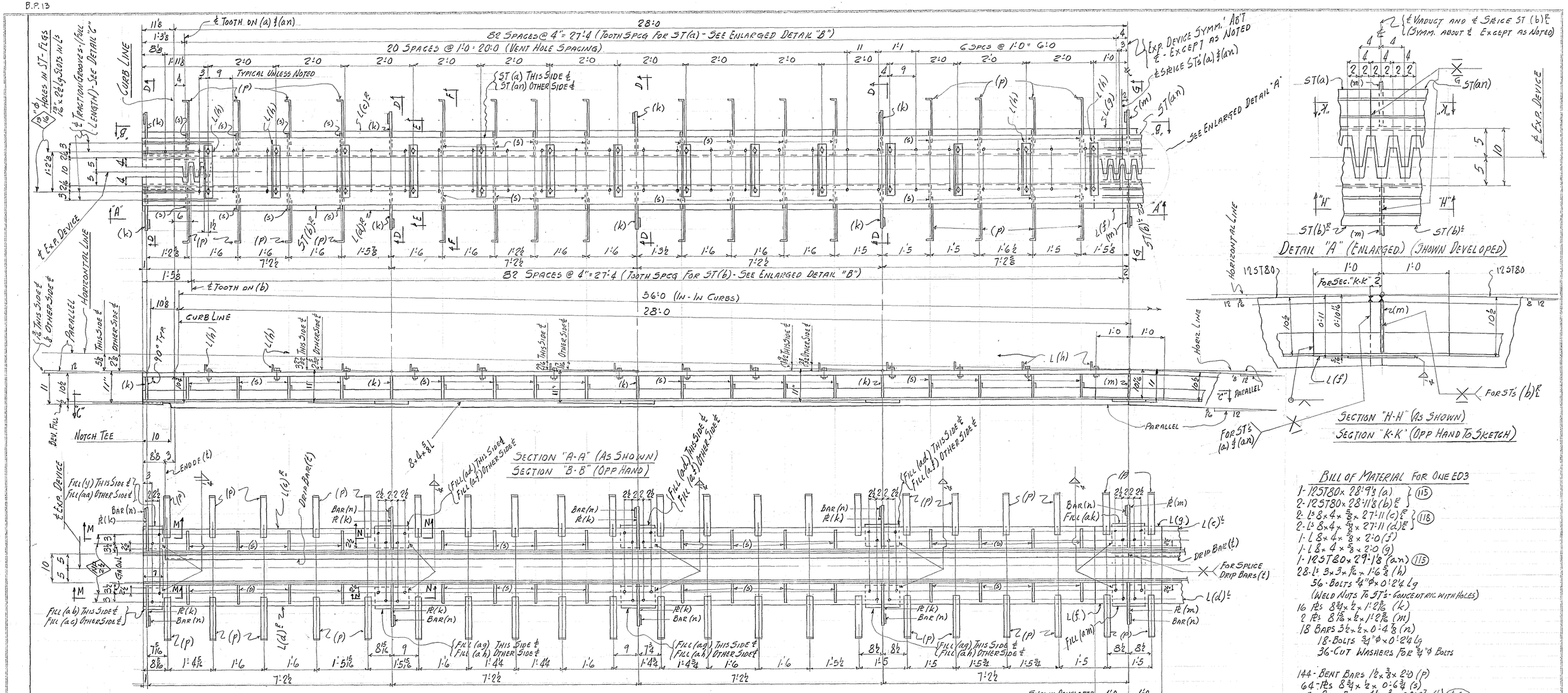
SHOP NO.

TEMP. / SUPT. / LAYOUT / FITTER / SHOP INSP. / PC. WK. / D. SMITH / MCH. / ERECT. / O. INSP.

South Thirty-Fifth Street Viaduct
Over C. & N.W. Railway
Milwaukee, Wisconsin

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at Chicago

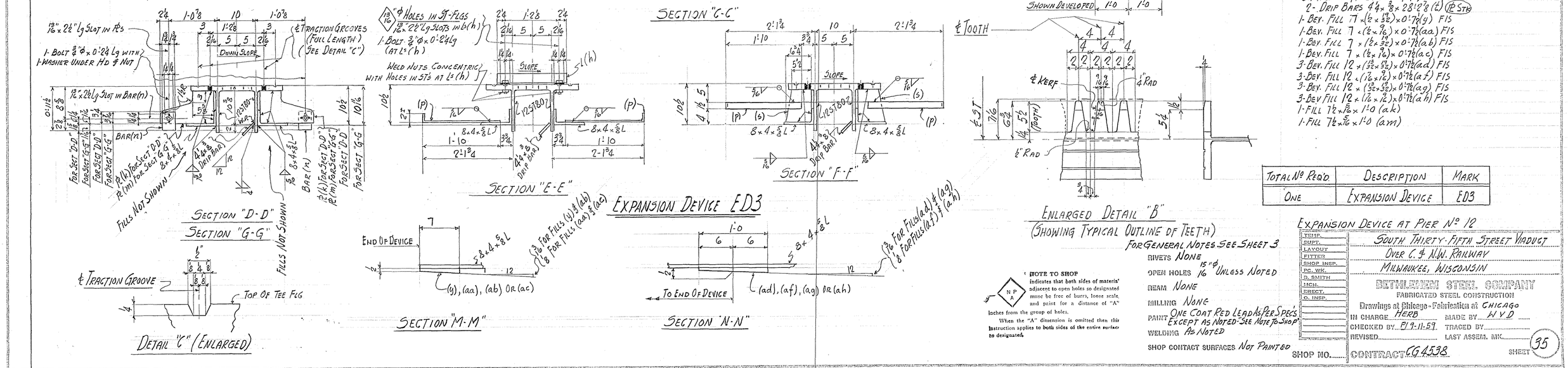
IN CHARGE Herb — MADE BY W.V.D.
CHECKED BY B 9-11-59 — TRACED BY
REVISED — LAST ASSEM. MK.
CONTRACT CG 4538 — SHEET 34



BILL OF MATERIAL FOR ONE ED3

1- 12ST80 × 28'-9½ (a)	(115)
2- 12ST80 × 28'-11⅛ (b)	
2- L 8 × 4 × ⅝ × 27'-11 (c)	(118)
2- L 8 × 4 × ⅝ × 27'-11 (d)	
1- L 8 × 4 × ⅝ × 2'-0 (f)	
1- L 8 × 4 × ⅝ × 2'-0 (g)	
1- 12ST80 × 29'-1⅛ (an)	(115)
28- L 3 × 3 × 5/16 × 1'-6⅝ (h)	
56- Bolts ¾"φ × 0'-2¼ Lg (Weld Nuts To ST's - Concentric With Holes)	
16 Pl's 8¾ × ½ × 1'-2 9/16 (k)	
2 Pl's 8 15/16 × ½ × 1'-2 9/16 (m)	
18 Bars 3½ × ½ × 0'-4⅜ (n)	
18- Bolts ¾"φ × 0'-2¼ Lg	
36- Cut Washers For ¾"φ Bolts	
144- Bent Bars 1½ × ⅜ × 2'-0 (p)	
64- Pl's 8¾ × ½ × 0'-6¾ (s)	
2- Drip Bars 4¼ × ⅜ × 28'-10⅞ (t)	(12 STH)
1- Bev. Fill 7 × (½ × 3/32) × 0'-7½ (y)	FIS
1- Bev. Fill 7 × (½ × 5/16) × 0'-7½ (aa)	FIS
1- Bev. Fill 7 × (½ × 3/32) × 0'-7½ (ab)	FIS
1- Bev. Fill 7 × (½ × 5/16) × 0'-7½ (ac)	FIS
3- Bev. Fill 12 × (3/32 × 3/32) × 0'-7½ (ad)	FIS
3- Bev. Fill 12 × (5/16 × 5/16) × 0'-7½ (af)	FIS
3- Bev. Fill 12 × (3/32 × 3/32) × 0'-7½ (ag)	FIS
3- Bev. Fill 12 × (5/16 × 5/16) × 0'-7½ (ah)	FIS
1- Fill 7½ × 5/16 × 1'-0 (ak)	
1- Fill 7½ × 5/16 × 1'-0 (am)	

Total No Req'd.	Description	Mark
One	Expansion Device	ED3



NOTE TO SHOP
indicates that both sides of material adjacent to open holes so designated must be free of burrs, loose scale, and paint for a distance of "A" inches from the group of holes.
When the "A" dimension is omitted then this instruction applies to both sides of the entire surface so designated.

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE
OPEN HOLES 15/16"φ UNLESS NOTED
REAM NONE
MILLING NONE
PAINT ONE COAT RED LEAD AS PER SPEC'S EXCEPT AS NOTED - SEE NOTE TO SHOP
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED

EXPANSION DEVICE AT PIER No 12

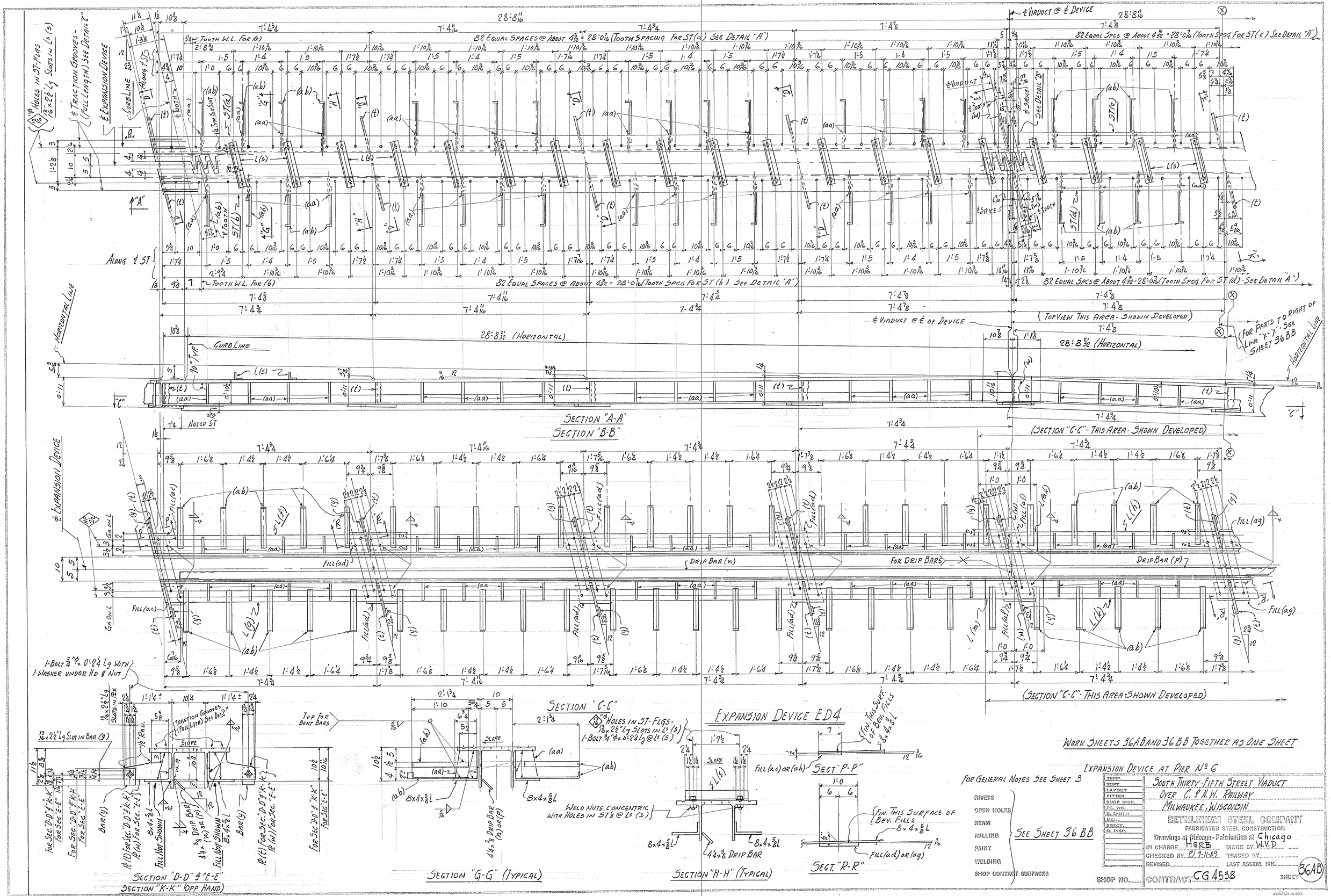
SOUTH THIRTY-FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION

Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY W.Y.D.
CHECKED BY P.9-11-59 TRACED BY
REVISED LAST ASSEM. MK.

TEMP. / SUPT. / LAYOUT / FITTER / SHOP INSP. / PC. WK. / B. SMITH / MCH. / ERECT. / O. INSP.

SHOP NO. CONTRACT CG 4538 SHEET 35



Work Sheets 36AB and 36BB Together as One Sheet

Expansion Device at Pier No 6

For General Notes See Sheet 3

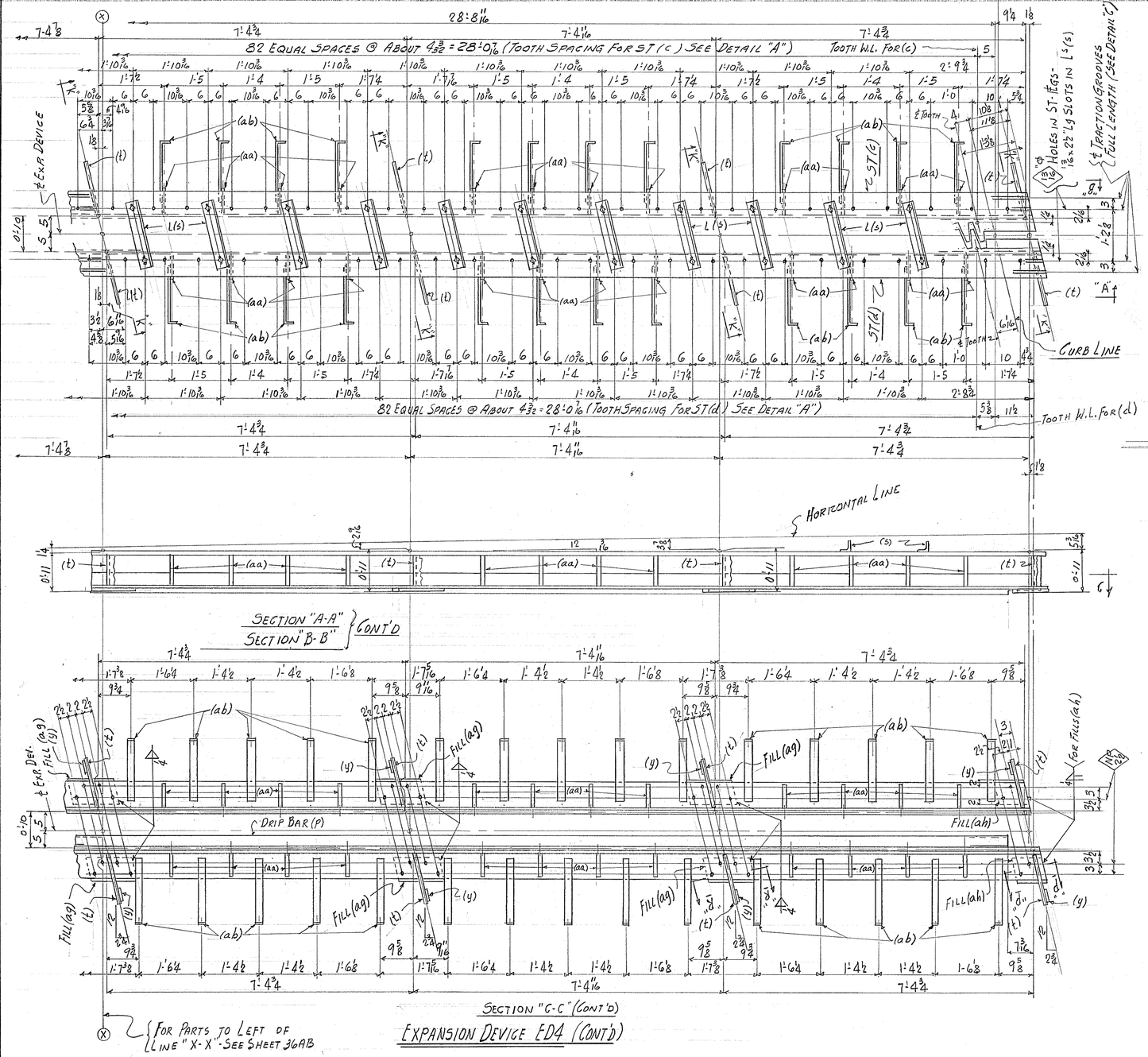
Rivets	See Sheet 36 BB
Open Holes	
Ream	
Milling	
Paint	
Welding	
Shop Contact Surfaces	

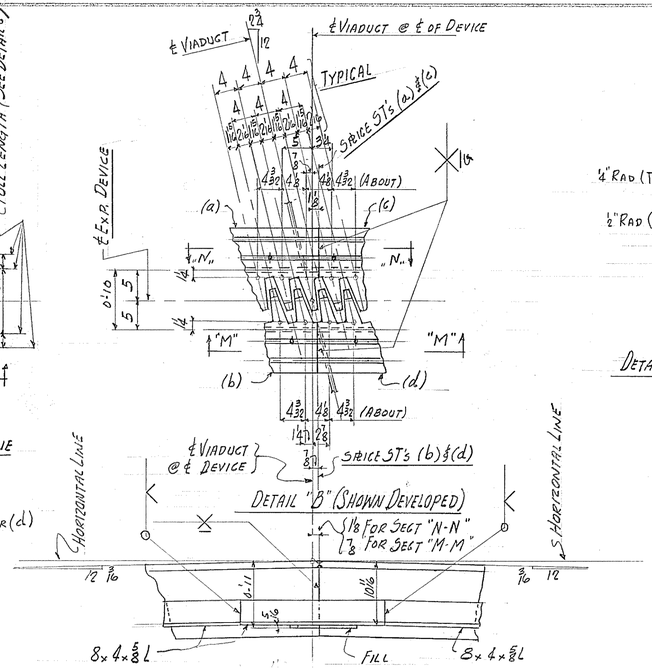
Temp.	South Thirty-Fifth Street Viaduct
Supt.	Over C. & N.W. Railway
Layout	Milwaukee, Wisconsin
Fitter	
Shop Insp.	
Pc. Wk.	
B. Smith	
Mch.	
Erect.	
O. Insp.	

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at Chicago

IN CHARGE HERB MADE BY W.V.D
CHECKED BY EJ 9-11-59 TRACED BY
REVISED LAST ASSEM. MK.

SHOP NO. CONTRACT CG 4538 SHEET 36AB

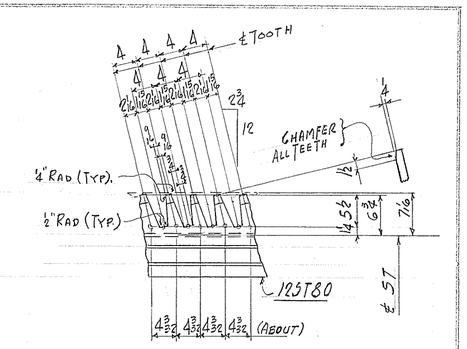




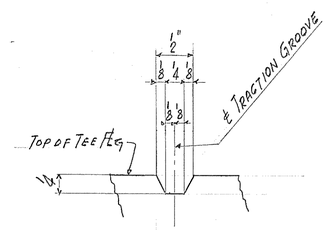
DETAIL "B" (SHOWN DEVELOPED)

SECTION "M-M"

SECTION "N-N" (OPP. HAND)



DETAIL "A" - (SHOWING TYPICAL OUTLINE OF TEETH)



DETAIL "C" (ENLARGED)

EXPANSION DEVICE ED4 (CONT'D)

BILL OF MATERIAL FOR ONE ED4

1-12ST80 x 29'-11 15/16 (a)
1-12ST80 x 29'-8 3/4 (b)
1-12ST80 x 29'-6 3/4 (c)
1-12ST80 x 29'-9 15/16 (d)
} (114)

1-L 8 x 4 x 5/8 x 28'-9 1/8 (f)
1-L 8 x 4 x 5/8 x 28'-7 15/16 (g)
1-L 8 x 4 x 5/8 x 28'-7 15/16 (h)
1-L 8 x 4 x 5/8 x 28'-9 1/8 (k)
} (117)

1-L 8 x 4 x 5/8 x 2'-0 (m)

1-DRIP BAR 4 1/4 x 3/8 x 28'-11 1/8 (n)
1-DRIP BAR 4 1/4 x 3/8 x 29'-0 7/8 (p)
} (# STK)

30-Ls 3 x 3 x 5/16 x 1'-7 (s)
60-BOLTS 3/4" Φ x 0'-2 4 LONG
(WELD NUTS TO ST's CONCENTRIC WITH HOLES)
16-Rs 8 3/4 x 2 x 1'-2 7/16 (t)
2-Rs 8 7/16 x 1/2 x 1'-2 7/16 (w)
18-BARS 3 1/2 x 1/2 x 0'-4 7/8 (y)
18-BOLTS 3/4" Φ x 0'-2 4 LONG
36-CUT WASHERS FOR 3/4" Φ BOLTS
64 Rs 8 3/4 x 2 x 0'-6 3/4 (aa)
144-BENT BARS 1 1/2 x 3/8 x 2'-0 (ab)

2-BEV. FILLS 7 x (1/2 x 19/32) x 0'-8 13/16 (ac) FIS
6-BEV. FILLS 12 x (13/32 x 19/32) x 0'-9 15/16 (ad) FIS
2-FILLS 12 x 5/16 x 0'-9 15/16 (ae)
6-BEV. FILLS 12 x (13/32 x 19/32) x 0'-9 15/16 (ag) FIS
2-BEV. FILLS 7 x (1/2 x 19/32) x 0'-8 13/16 (ah) FIS

1-L 8 x 4 x 5/8 x 2'-0 (ak)

TOTAL No. REQ'D	DESCRIPTION	MARK
ONE	EXP. DEVICE	ED4

WORK SHEETS 36AB & 36BB TOGETHER AS ONE SHEET
FOR GENERAL NOTES SEE SHEET 3

NOTE TO SHOP
N P A
indicates that both sides of materials adjacent to open holes so designated must be free of burrs, loose scale, and paint for a distance of "A" inches from the group of holes.
When the "A" dimension is omitted then this instruction applies to both sides of the entire surface so designated.

RIVETS NONE
OPEN HOLES 15/16" Φ UNLESS NOTED
REAM NONE
MILLING NONE
PAINT ONE COAT RED LEAD PAINT AS PER SPEC'S - EXCEPT AS NOTED - SEE NOTE TO SHOP
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED
SHOP NO.

EXPANSION DEVICE AT PIER No. 6

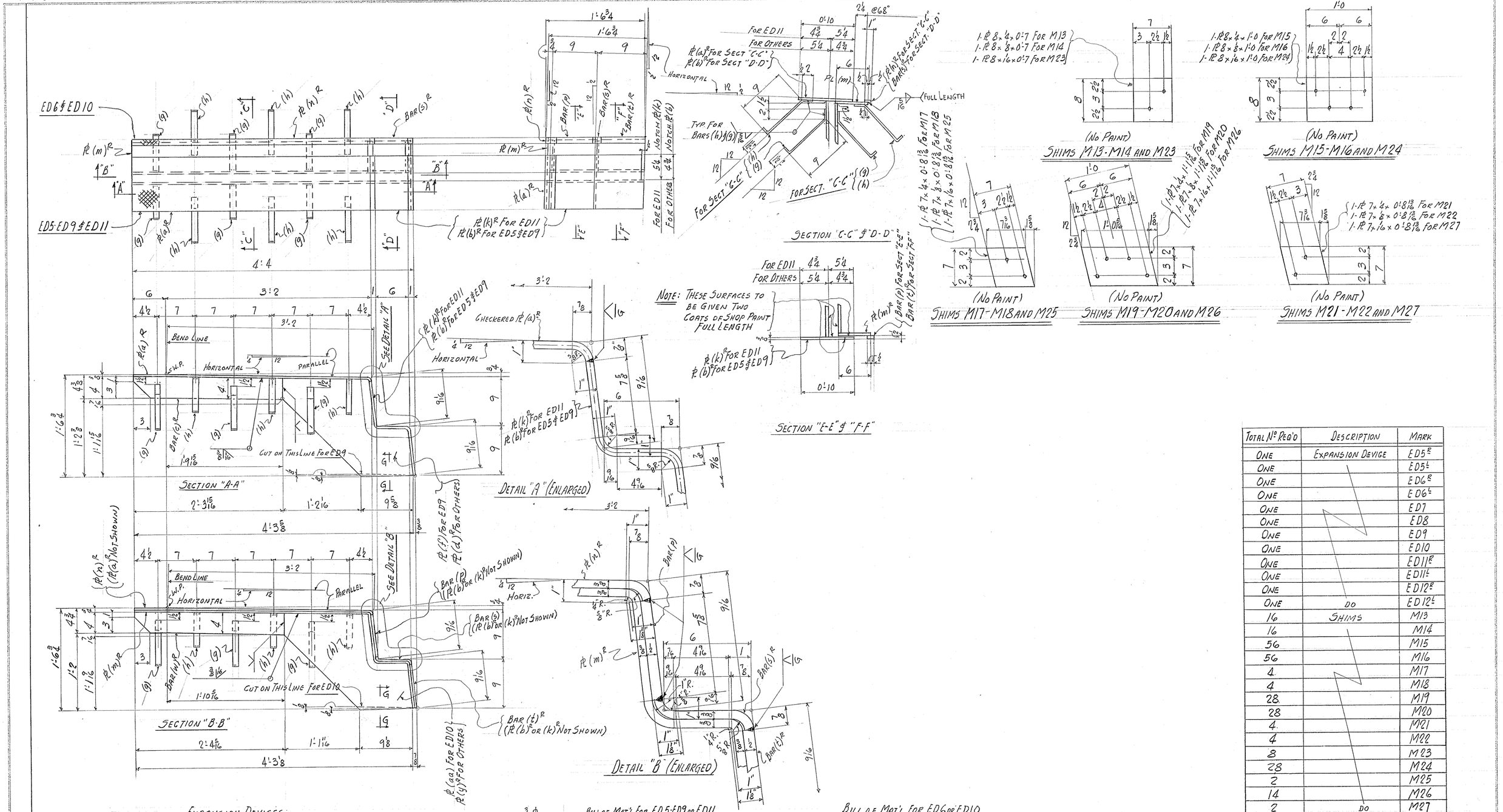
SOUTH THIRTY-FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
O. INSP.

IN CHARGE HERB. MADE BY W.V.D.
CHECKED BY PJ 9-11-59 TRACED BY
REVISED LAST ASSEM. MK.
CONTRACT CG 4538 SHEET 36BB

B.P. 12-13



TOTAL Nº REQ'D	DESCRIPTION	MARK
ONE	EXPANSION DEVICE	ED5R
ONE		ED5L
ONE		ED6R
ONE		ED6L
ONE		ED7
ONE		ED8
ONE		ED9
ONE		ED10
ONE		ED11R
ONE		ED11L
ONE		ED12R
ONE	DO	ED12L
16	SHIMS	M13
16		M14
56		M15
56		M16
4		M17
4		M18
28		M19
28		M20
4		M21
4		M22
8		M23
28		M24
2		M25
14		M26
2	DO	M27

EXPANSION DEVICES -
ED5R & ED7 - ALIKE
ED6R - ED8 & ED12R ALIKE
ED11R
ED5L - ED6L ED11L & ED12L
ED9 & ED10 (OPP HAND TO SKETCH)

NOTE! THE FOLLOWING DEVICES SHALL BE ASSEMBLED TOGETHER FOR FIT:
(ED5R WITH ED6R)
(ED5L WITH ED6L)
(ED7 WITH ED8)
(ED9 WITH ED10)
(ED11R WITH ED12R)
(ED11L WITH ED12L)
} SEE ERECTION DRAWINGS E3-E4 AND E5

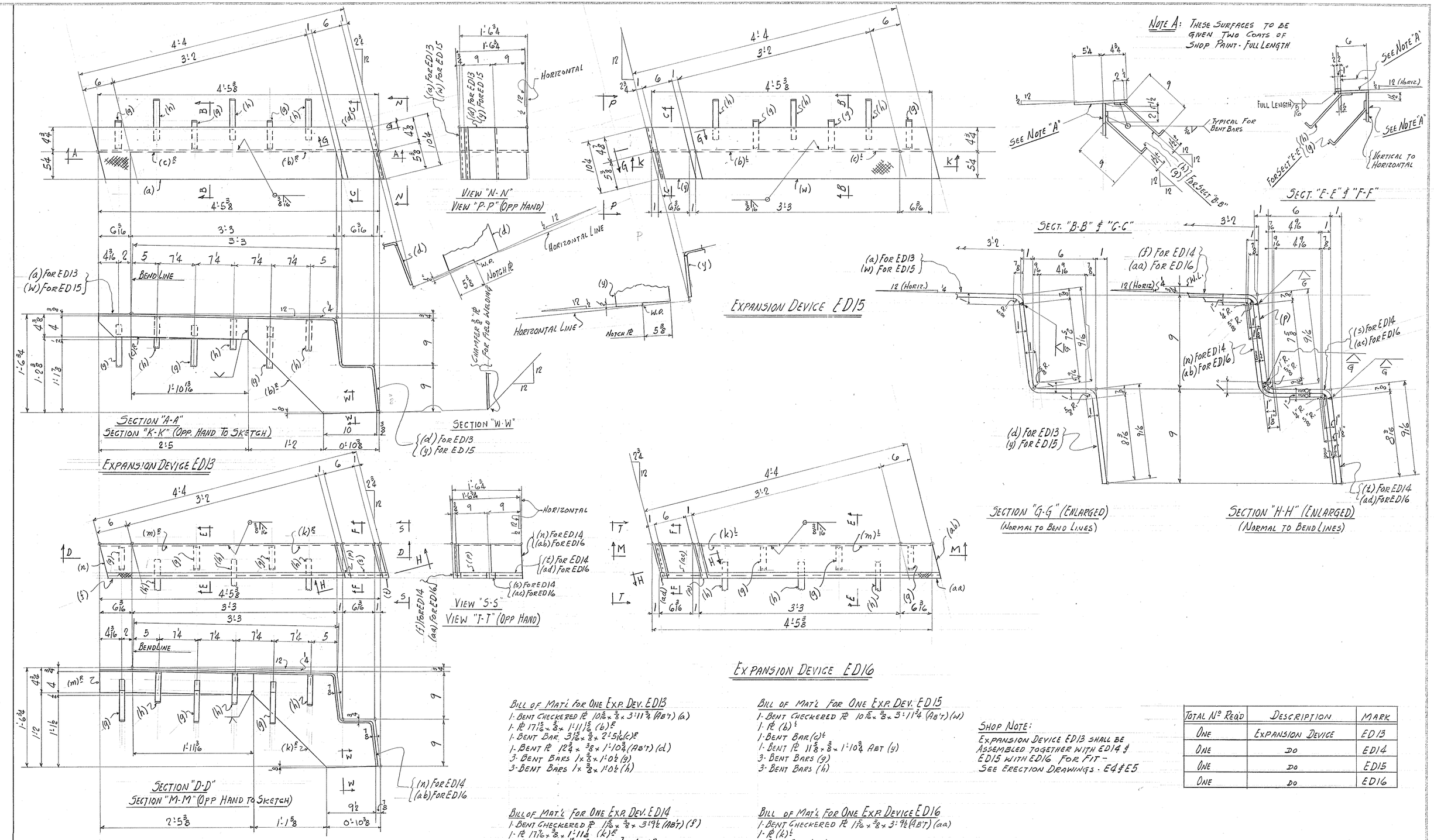
BILL OF MAT'L FOR ED5-ED9 OR ED11
1- CHECKERED PL 10 1/16 x 3/8 x 3'-8 5/16 (AB'T) (a)R (BENT)
1- PL 10 3/4 x 3/8 x 1'-10 3/4 (AB'T) (b)R (BENT) FOR ED5 & ED9
1- PL 10 3/4 x 3/8 x 1'-10 3/4 (AB'T) (k)R (BENT) FOR ED11
1- BAR 3 15/16 x 3/8 x 2'-4 (c)R (BENT)
1- PL 18 x 3/8 x 1'-11 3/8 (d)R FOR ED5 & ED11
1- PL 17 3/8 x 3/8 x 1'-11 3/8 (f) FOR ED9
3- BENT BARS 1 x 3/4 x 1'-0 1/2 (g)
3- BENT BARS 1 x 3/8 x 1'-0 1/2 (h)

BILL OF MAT'L FOR ED6 OR ED10
1- PL 6 3/4 x 3/8 x 5'-6 3/8 (AB'T) (m)R (BENT)
1- CHECKERED PL 11/16 x 3/8 x 3'-8 5/16 (AB'T) (n)R (BENT)
1- BAR 1 x 1/2 x 0'-7 3/8 (p)
1- BAR 1 1/8 x 3/8 x 0'-7 (AB'T) (s)R (BENT)
1- BAR 1 x 1/2 x 0'-8 3/16 (t)R
1- BAR 3 15/16 x 3/8 x 2'-4 3/8 (w)R (BENT)
1- PL 17 1/8 x 3/8 x 1'-10 3/4 (y)R FOR ED6
1- PL 17 1/2 x 3/8 x 1'-10 3/4 (aa) FOR ED10
3- BENT BARS (g)
3- BENT BARS (h)

FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE
OPEN HOLES 15/16" Φ
REAM NONE
MILLING NONE
PAINT ONE COAT RED LEAD PAINT AS PER SPECS UNLESS NOTED
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED

TEMP.	SOUTH THIRTY-FIFTH STREET VIADUCT
SUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	BETHLEHEM STEEL COMPANY
SHOP INSP.	FABRICATED STEEL CONSTRUCTION
PC. WK.	Drawings at Chicago-Fabrication at CHICAGO
D. SMITH	IN CHARGE HERB — MADE BY W.V.D.
MCH.	CHECKED BY RJ 9-11-59 — TRACED BY
ERECT.	REVISED — LAST ASSEM. MK.
O. INSP.	SHOP NO. — CONTRACT CG4538 — SHEET 37



BILL OF MAT'L FOR ONE EXP. DEV. ED13

1- BENT CHECKERED PL $10\frac{5}{8} \times \frac{3}{8} \times 3'\text{-}11\frac{3}{4}$ (AB'T) (a)
1- PL $17\frac{15}{16} \times \frac{3}{8} \times 1'\text{-}11\frac{15}{16}$ (b)E
1- BENT BAR $3\frac{15}{16} \times \frac{3}{8} \times 2'\text{-}5\frac{1}{16}$ (c)E
1- BENT PL $12\frac{3}{4} \times \frac{3}{8} \times 1'\text{-}10\frac{3}{4}$ (AB'T) (d)
3- BENT BARS $1 \times \frac{3}{8} \times 1'\text{-}0\frac{1}{2}$ (g)
3- BENT BARS $1 \times \frac{3}{8} \times 1'\text{-}0\frac{1}{2}$ (h)

BILL OF MAT'L FOR ONE EXP. DEV. ED15

1- BENT CHECKERED PL $10\frac{5}{8} \times \frac{3}{8} \times 3'\text{-}11\frac{3}{4}$ (AB'T) (w)
1- PL (b)L
1- BENT BAR (c)L
1- BENT PL $11\frac{5}{8} \times \frac{3}{8} \times 1'\text{-}10\frac{3}{4}$ ABT (y)
3- BENT BARS (g)
3- BENT BARS (h)

BILL OF MAT'L FOR ONE EXP. DEV. ED14

1- BENT CHECKERED PL $1\frac{5}{16} \times \frac{3}{8} \times 3'\text{-}9\frac{1}{2}$ (AB'T) (f)
1- PL $17\frac{1}{16} \times \frac{3}{8} \times 1'\text{-}11\frac{1}{8}$ (k)E
1- BENT BAR $3\frac{15}{16} \times \frac{3}{8} \times 2'\text{-}5\frac{1}{16}$ (m)E
1- BENT PL $8\frac{1}{8} \times \frac{3}{8} \times 5'\text{-}8\frac{3}{4}$ (AB'T) (n)
1- BAR $1 \times \frac{1}{2} \times 0'\text{-}7\frac{7}{8}$ (p)
1- BENT BAR $1\frac{5}{16} \times \frac{3}{8} \times 0'\text{-}7\frac{3}{16}$ (AB'T) (s)
1- BAR $1 \times \frac{1}{2} \times 0'\text{-}8\frac{3}{16}$ (t)
3- BENT BARS (g)
3- BENT BARS (h)

BILL OF MAT'L FOR ONE EXP. DEVICE ED16

1- BENT CHECKERED PL $1\frac{5}{16} \times \frac{3}{8} \times 3'\text{-}9\frac{1}{2}$ (AB'T) (aa)
1- PL (k)L
1- BENT BAR (m)L
1- BENT PL $10\frac{3}{8} \times \frac{3}{8} \times 5'\text{-}9\frac{1}{2}$ (AB'T) (ab)
1- BAR (p)
1- BENT BAR $1\frac{5}{16} \times \frac{3}{8} \times 0'\text{-}7\frac{3}{16}$ (AB'T) (ac)
1- BAR $1 \times \frac{1}{2} \times 0'\text{-}8\frac{3}{16}$ (ad)
3- BENT BARS (g)
3- BENT BARS (h)

SHOP NOTE:
EXPANSION DEVICE ED13 SHALL BE ASSEMBLED TOGETHER WITH ED14 & ED15 WITH ED16 FOR FIT - SEE ERECTION DRAWINGS - E4 & E5

TOTAL No. REQ'D	DESCRIPTION	MARK
ONE	EXPANSION DEVICE	ED13
ONE	DO	ED14
ONE	DO	ED15
ONE	DO	ED16

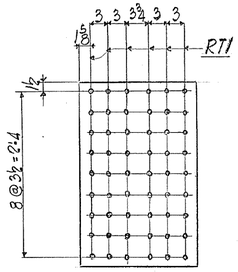
FOR GENERAL NOTES SEE SHEET 3

RIVETS NONE
OPEN HOLES NONE
REAM NONE
MILLING NONE
PAINT ONE COAT RED LEAD PAINT AS PER SPECS - UNLESS NOTED
WELDING AS NOTED
SHOP CONTACT SURFACES NOT PAINTED

TEMP.
SUPT.
LAYOUT
FITTER
SHOP INSP.
PC. WK.
B. SMITH
MCH.
ERECT.
Q. INSP.

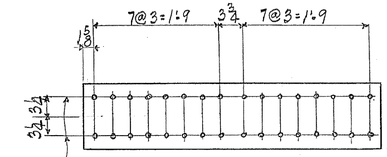
SOUTH THIRTY-FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at Chicago
IN CHARGE HERB MADE BY W.V.D.
CHECKED BY 8-9-11-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG 4538 SHEET 38



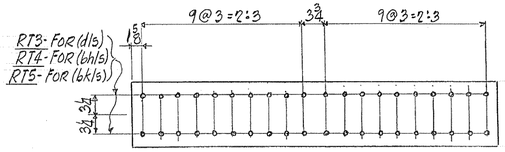
1-PL 19×7/16×2'-7-FOR (a1s)
1-PL 19×3/8×2'-7-FOR (b1s)

158-WEB SPLICE PLATE (a1s)
4-WEB SPLICE PLATE (b1s)



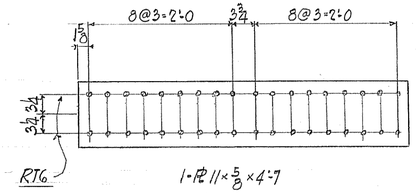
1-PL 11×3/4×4'-1

143-FLANGE SPLICE PLATE (g1s)



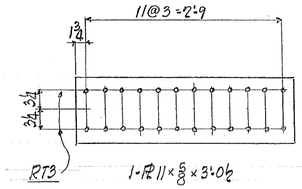
1-PL 11×3/4×5'-1

4-FLANGE SPLICE PLATE (d1s)
8-FLANGE SPLICE PLATE (bh1s)
3-FLANGE SPLICE PLATE (bk1s)
ALIKE EXCEPT FOR RT



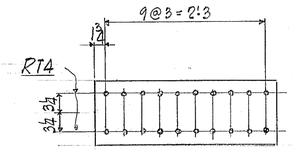
1-PL 11×5/8×4'-7

4-FLANGE SPLICE PLATE (f1s)



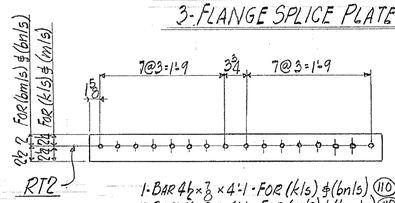
1-PL 11×5/8×3'-0½

4-FLANGE SPLICE FILL (g1s)



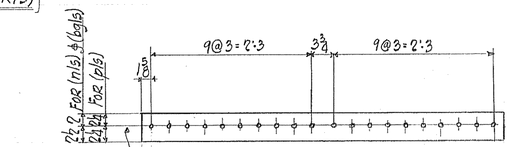
1-PL 11×5/8×2'-6½

8-FLANGE SPLICE FILL (h1s)



1-BAR 4½×3/8×4'-1-FOR (k1s) & (bn1s) (110)
1-BAR 4½×3/4×4'-1-FOR (m1s) & (bm1s) (112)

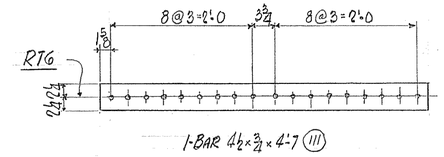
116-FLANGE SPLICE BAR (k1s)
156-FLANGE SPLICE BAR (m1s)
6-FLANGE SPLICE BAR (bm1s)
8-FLANGE SPLICE BAR (bn1s)



RT3-FOR (n1s)
RT4-FOR (p1s)
RT5-FOR (bg1s)

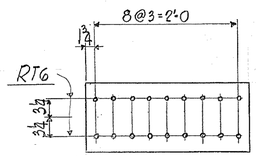
1-BAR 4½×3/8×5'-1-FOR (n1s) (109)
1-BAR 4½×3/4×5'-1-FOR (p1s) & (bg1s) (111)

8-FLANGE SPLICE BAR (n1s)
16-FLANGE SPLICE BAR (p1s)
6-FLANGE SPLICE BAR (bg1s)



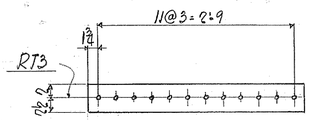
1-BAR 4½×3/4×4'-7 (111)

8-FLANGE SPLICE BAR (s1s)



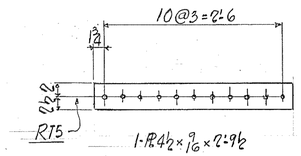
1-PL 11×3/8×2'-3½

2-FLANGE SPLICE FILL (t1s)



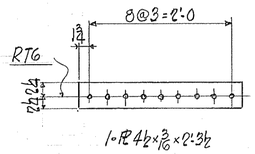
1-PL 4½×3/8×3'-0½

8-FLANGE SPLICE FILL (y1s)



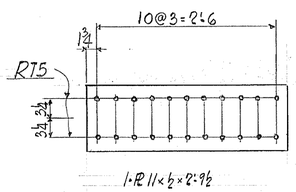
1-PL 4½×9/16×2'-9½

6-FLANGE SPLICE FILL (aa1s)



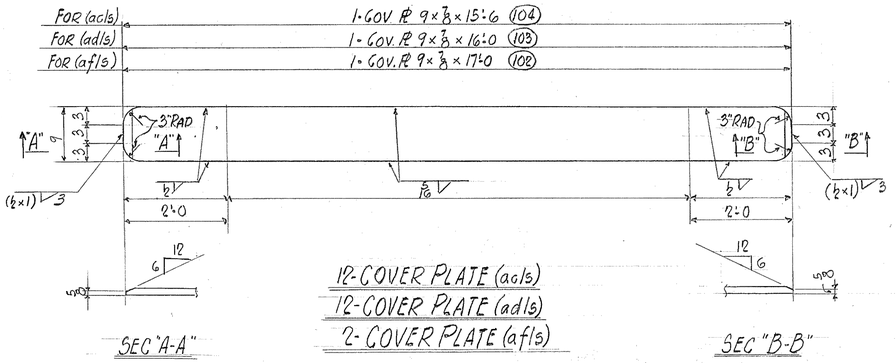
1-PL 4½×3/16×2'-3½

8-FLANGE SPLICE FILL (ab1s)



1-PL 11×1/2×2'-9½

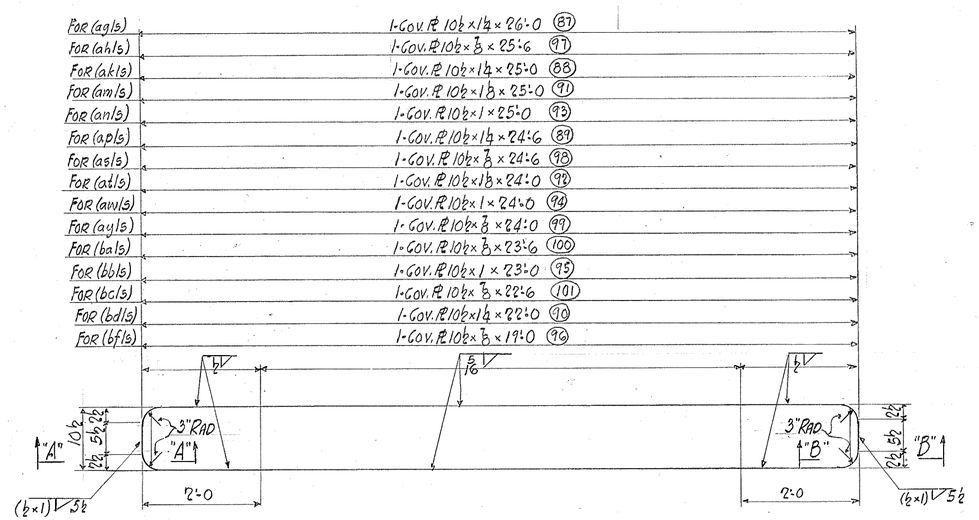
3-FLANGE SPLICE FILL (w1s)



SEC "A-A"

12-COVER PLATE (ac1s)
12-COVER PLATE (ad1s)
2-COVER PLATE (af1s)

SEC "B-B"



COVER PLATES (ag1s), (ah1s), (ak1s), (am1s), (an1s), (ap1s), (as1s), (at1s), (aw1s), (ay1s), (ba1s), (bb1s), (bc1s), (bd1s) AND (bf1s)

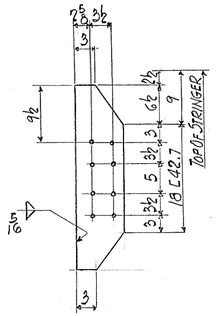
MARK	(ag1s)	(ah1s)	(ak1s)	(am1s)	(an1s)	(ap1s)	(as1s)	(at1s)	(aw1s)	(ay1s)	(ba1s)	(bb1s)	(bc1s)	(bd1s)	(bf1s)
TOTAL REQ'D	6	2	2	36	4	2	10	32	20	10	2	18	4	4	10

NOTE:-
SHEARED EDGES OF MATERIAL OVER 5/8" IN THICKNESS SHALL BE EDGED PLANED 1/4"

RIVETS NONE
OPEN HOLES 15/16" ϕ
BEAM AS PER A.A.S.H.O. SPECS.
MILLING NONE
PAINT NONE
WELDING AS NOTED
SHOP CONTACT SURFACES NONE

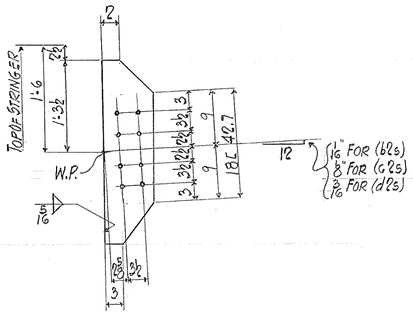
SHOP NO.

TRIP.	SOUTH THIRTY FIFTH STREET VIADUCT
SUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	BETHLEHEM STEEL COMPANY
SHOP INSP.	FABRICATED STEEL CONSTRUCTION
PC. WK.	Drawings at Chicago - Fabrication at CHICAGO
B. SMITH	IN CHARGE HERB MADE BY D
MCH.	CHECKED BY W.V.D. 7/21/57 TRACED BY
ERECT.	REVISED LAST ASSEM. MK.
O. INSP.	CONTRACT CG4538 63 SHEET J51



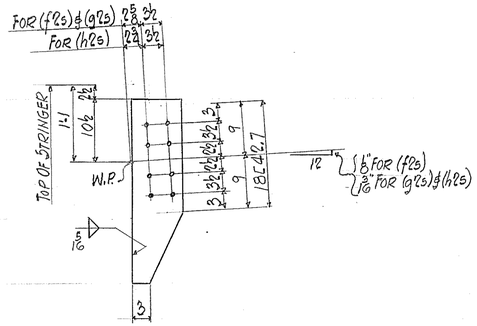
1-BAR 8 × ½ × 2'-7 (106)

12- DIAPHRAGM CONNECTION PLATE (a2s)



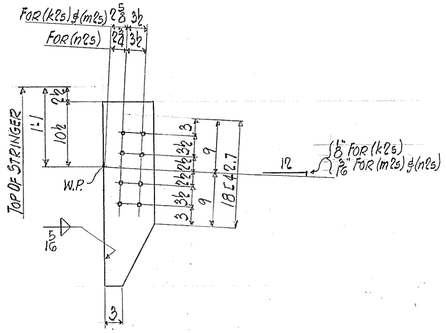
1-BAR 8 × ½ × 2'-7 (106)

4- DIAPHRAGM CONNECTION PLATE (b2s)
24- DIAPHRAGM CONNECTION PLATE (c2s)
106 - DIAPHRAGM CONNECTION PLATE (d2s)



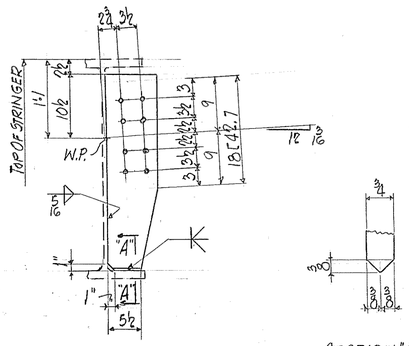
1-BAR 8 × ½ × 2'-7 (106)

8- DIAPHRAGM CONNECTION PLATE (f2s)
24- DIAPHRAGM CONNECTION PLATE (g2s)
16- DIAPHRAGM CONNECTION PLATE (h2s)



1-BAR 8 × ½ × 2'-7 (106)

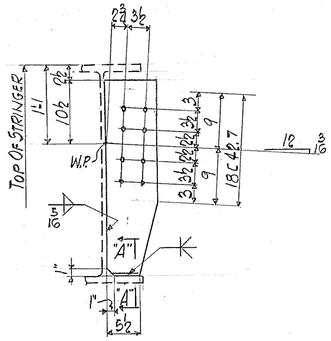
8- DIAPHRAGM CONNECTION PLATE (k2s)
24- DIAPHRAGM CONNECTION PLATE (m2s)
16- DIAPHRAGM CONNECTION PLATE (n2s)



SECTION "A-A"

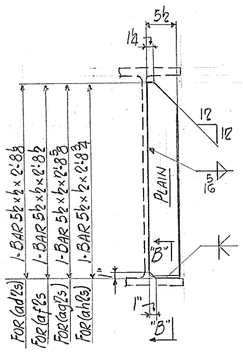
1-BAR 8 × 3/8 × 2'-3 1/2 - FOR (p2s)
1-BAR 8 × 3/8 × 2'-3 1/2 - FOR (s2s)
1-BAR 8 × 3/8 × 2'-8 5/8 - FOR (t2s)
1-BAR 8 × 3/8 × 2'-8 3/4 - FOR (w2s)
(105)

7- DIAPHRAGM CONNECTION PLATE (p2s)
2- DIAPHRAGM CONNECTION PLATE (s2s)
33- DIAPHRAGM CONNECTION PLATE (t2s)
30- DIAPHRAGM CONNECTION PLATE (w2s)

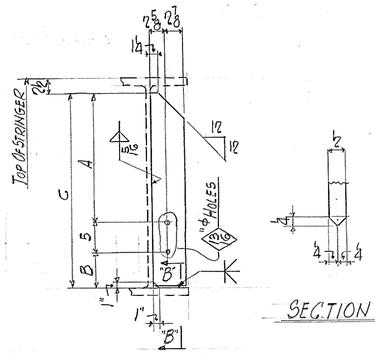


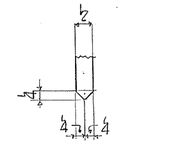
1-BAR 8 × 3/8 × 2'-8 3/8 - FOR (y2s)
1-BAR 8 × 3/8 × 2'-8 1/2 - FOR (aa2s)
1-BAR 8 × 3/8 × 2'-8 5/8 - FOR (ab2s)
1-BAR 8 × 3/8 × 2'-8 3/4 - FOR (ac2s)
(105)

5- DIAPHRAGM CONNECTION PLATE (y2s)
ONE- DIAPHRAGM CONNECTION PLATE (aa2s)
35- DIAPHRAGM CONNECTION PLATE (ab2s)
31- DIAPHRAGM CONNECTION PLATE (ac2s)



5- BEARING STIFFENER (ad2s)
24- BEARING STIFFENER (af2s)
9- BEARING STIFFENER (ag2s)
22- BEARING STIFFENER (ah2s)

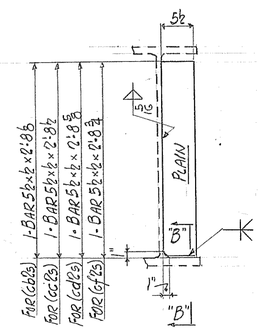




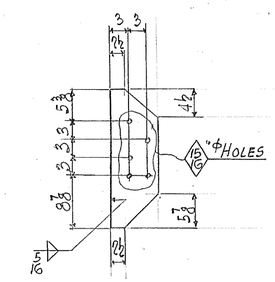
SECTION "B-B"

BEARING STIFFENERS (ak2s), (am2s), (an2s), (ap2s), (as2s), (at2s), (aw2s), (ay2s), (ba2s), (bb2s), (bc2s), (bd2s), (bf2s), (bg2s), (bh2s) (bk2s), (bm2s), (bn2s) AND (bp2s)

MARK	DIMENSION A	B	C	REQ'D
(ak2s)	1'-9 7/16	6 1/16	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	2
(am2s)	1'-10 3/4	4 3/4	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	3
(an2s)	1'-9 3/4	5 3/4	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	2
(ap2s)	1'-8 3/4	6 3/4	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	2
(as2s)	1'-8 3/4	7 1/4	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	2
(at2s)	1'-9 3/4	5 3/8	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	3
(aw2s)	1'-8 3/4	6 1/8	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	2
(ay2s)	1'-8 3/4	7 7/8	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	2
(ba2s)	1'-8 3/4	7	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	3
(bb2s)	1'-9 3/4	5 3/8	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	2
(bc2s)	1'-10 3/4	4 3/8	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	2
(bd2s)	1'-9 1/16	5 1/16	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	2
(bf2s)	1'-8 3/4	6 3/8	1-BAR 5 1/2 × 1/2 × 2'-8 1/2	ONE
(bg2s)	1'-8 3/4	7 1/2	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	ONE
(bh2s)	1'-10 3/4	4 3/8	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	2
(bk2s)	1'-9 7/16	6 5/16	1-BAR 5 1/2 × 1/2 × 2'-8 5/8	2
(bm2s)	1'-9 1/16	6 9/16	1-BAR 5 1/2 × 1/2 × 2'-8 3/8	ONE
(bn2s)	1'-10 3/4	5	1-BAR 5 1/2 × 1/2 × 2'-8 3/4	ONE
(bp2s)	1'-9 3/4	6	1-BAR 5 1/2 × 1/2 × 2'-8 3/4	ONE

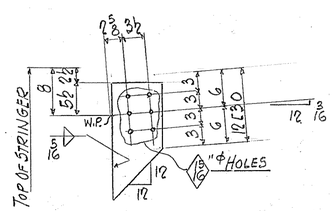


2- BEARING STIFFENER (cb2s)
5- BEARING STIFFENER (cc2s)
3- BEARING STIFFENER (cd2s)
2- BEARING STIFFENER (cf2s)



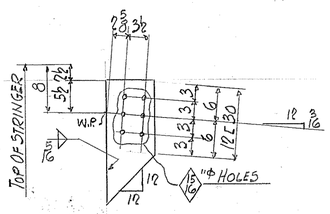
1-PL 8 × ½ × 1'-11 1/2

20- PIPE SUPPORT PLATE (cs2s)



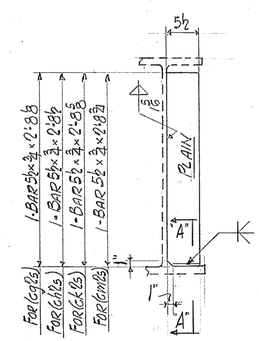
1-PL 8 × ½ × 1'-7 3/8

48- DIAPHRAGM CONNECTION PLATE (cn2s)



1-PL 8 × ½ × 1'-7 5/8

48- DIAPHRAGM CONNECTION PLATE (cp2s)



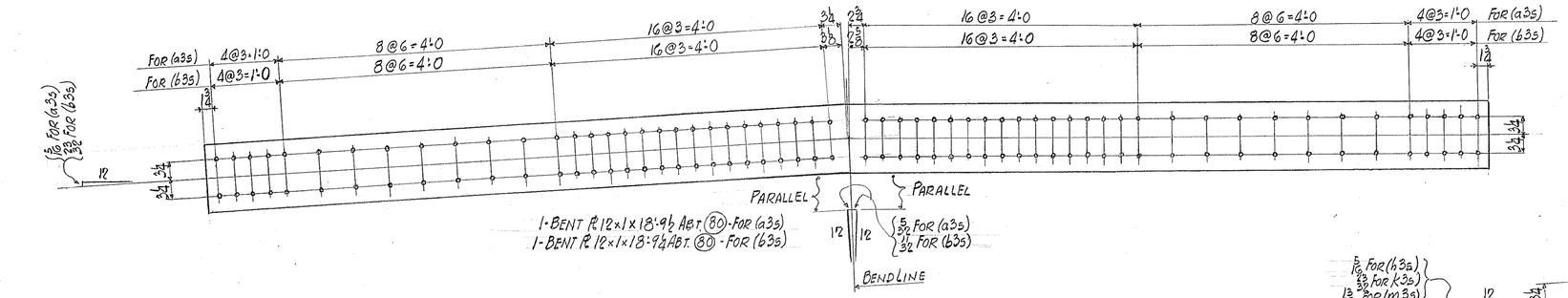
2- BEARING STIFFENER (cg2s)
ONE- BEARING STIFFENER (ch2s)
8- BEARING STIFFENER (ck2s)
7- BEARING STIFFENER (cm2s)

RIVETS NONE
OPEN HOLES 1 1/16" Φ UNLESS NOTED
SEAM NONE
MILLING AS NOTED
PAINT NONE
WELDING AS NOTED
SHOP CONTACT SURFACES NONE

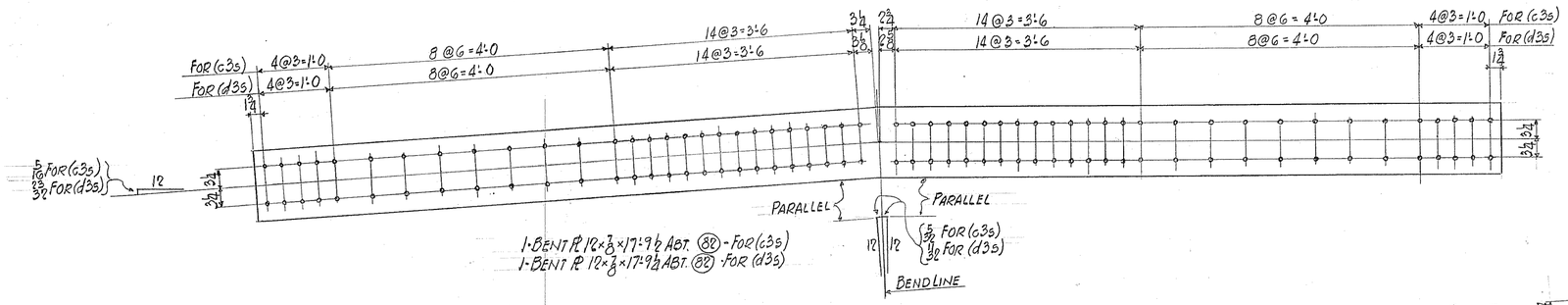
TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

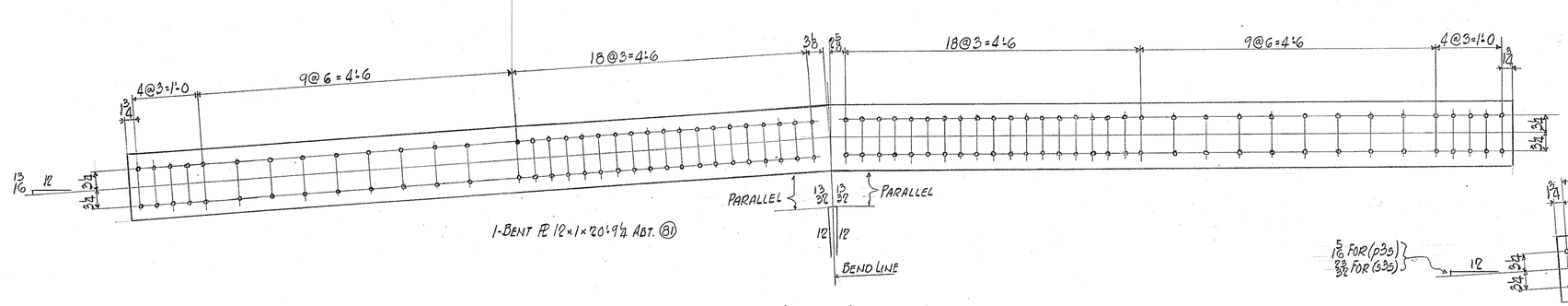
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago • Fabrication at CHICAGO
IN CHARGE HERB MADE BY BI
CHECKED BY W.V.D. 7-21-37 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 152



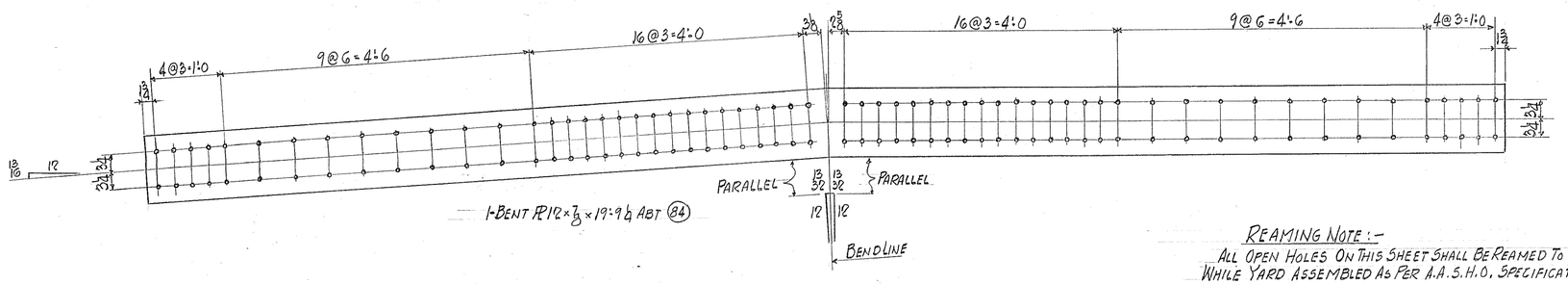
4-COVER PLATE (a3s)
4-COVER PLATE (b3s)



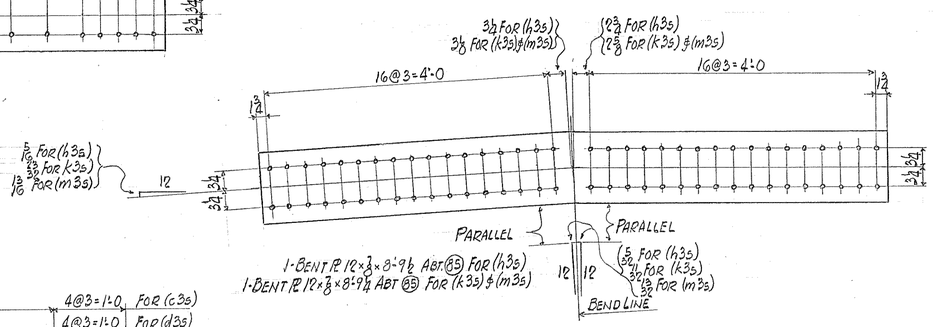
14-COVER PLATE (c3s)
14-COVER PLATE (d3s)



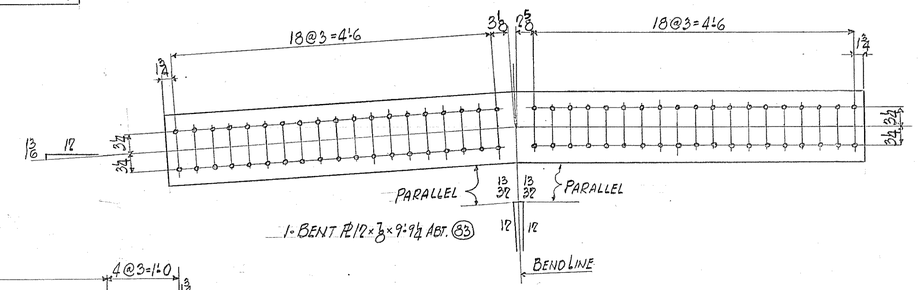
4-COVER PLATE (f3s)



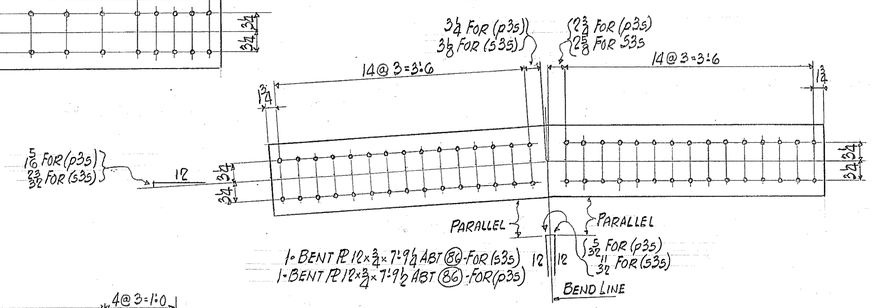
14-COVER PLATE (g3s)



4-COVER PLATE (h3s)
4-COVER PLATE (k3s)
14-COVER PLATE (m3s)



4-COVER PLATE (n3s)

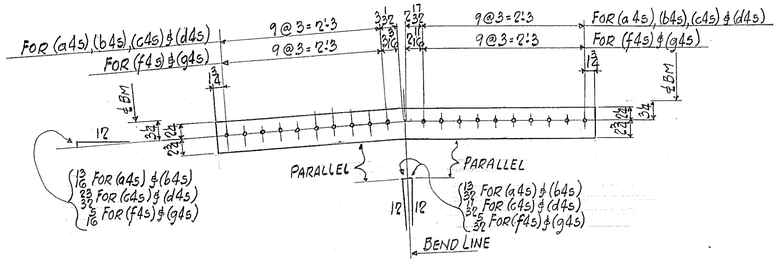


14-COVER PLATE (p3s)
14-COVER PLATE (s3s)

REAMING NOTE :-
ALL OPEN HOLES ON THIS SHEET SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECIFICATIONS.

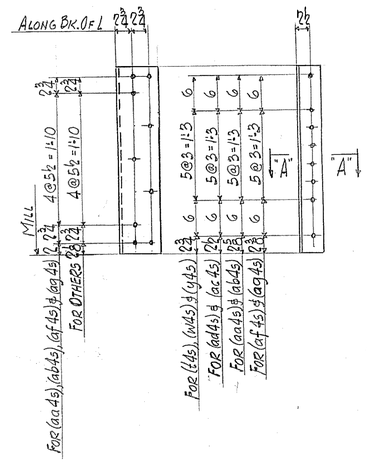
RIVETS NONE
OPEN HOLES 15/16" ϕ
REAM SEE REAMING NOTE
MILLING NONE
PAINT NONE
WELDING NONE
SHOP CONTACT SURFACES NONE

TEMP.	SOUTH THIRTY FIFTH STREET VIADUCT
SUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	
SHOP INSP.	BETHLEHEM STEEL COMPANY
PC. WK.	FABRICATED STEEL CONSTRUCTION
B. SMITH	Drawings at Chicago - Fabrication at CHICAGO
MCH.	IN CHARGE HERB MADE BY P
ERECT.	CHECKED BY W.V.D. 7-21-57 TRACED BY
D. INSP.	REVISED LAST ASSEM. MK.
	SHOP NO. CONTRACT CG4538 SHEET 153

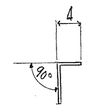


1-BENT BAR 5×1×5'-3 1/16 ABT.-FOR (a4s) (PL STK)
1-BENT BAR 5×3/4×5'-3 1/16 ABT.-FOR (b4s) (107)
1-BENT BAR 5×3/4×5'-3 1/16 ABT.-FOR (c4s) (107)
1-BENT BAR 5×3/4×5'-3 1/16 ABT.-FOR (d4s) (108)
1-BENT BAR 5×3/4×5'-3 3/8 ABT.-FOR (f4s) (107)
1-BENT BAR 5×3/4×5'-2 3/8 ABT.-FOR (g4s) (108)

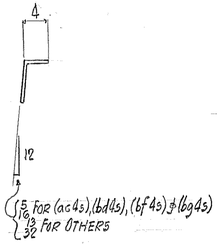
4-SPLICE PLATE (a4s)
14-SPLICE PLATE (b4s)
4-SPLICE PLATE (c4s)
14-SPLICE PLATE (d4s)
4-SPLICE PLATE (f4s)
14-SPLICE PLATE (g4s)



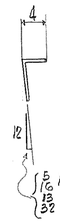
1-L 7×4×1/2×2'-7 3/8 MIE - FOR (t4s)
1-BENT L 7×4×1/2×2'-7 3/8 MIE - FOR OTHERS



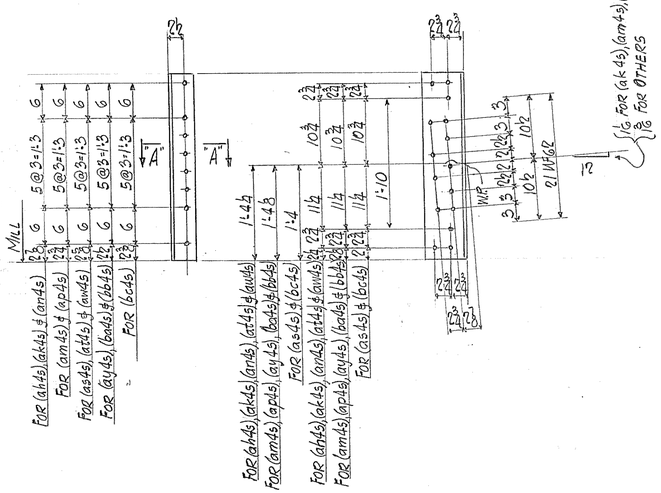
SECTION "A-A"
FOR (t4s), (ah4s), (ak4s), (am4s), (bm4s), (bn4s) & (bp4s)



SECTION "A-A"
FOR (y4s), (ab4s), (ac4s), (af4s), (bd4s), (bf4s), (bg4s), (bh4s), (bk4s), (bs4s), (bt4s) & (bw4s)



SECTION "A-A"
FOR (w4s), (aa4s), (ad4s), (ag4s), (an4s), (ap4s), (as4s), (at4s), (aw4s), (ay4s), (ba4s), (bb4s) & (bc4s)



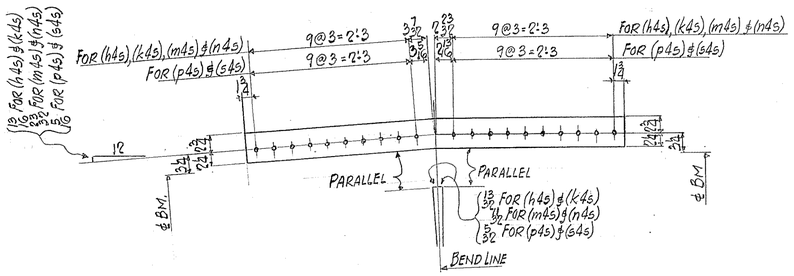
1-L 7×4×1/2×2'-7 3/8 MIE - FOR (ah4s), (ak4s) & (am4s)
1-BENT L 7×4×1/2×2'-7 3/8 MIE - FOR OTHERS

SPLICE ANGLE (t4s) R
SPLICE ANGLES (w4s), (aa4s), (ac4s) AND (af4s)
SPLICE ANGLES (y4s), (ab4s), (ad4s) AND (ag4s) OPP. HAND TO SKETCH

MARK	(t4s) R	(t4s) L	(w4s)	(y4s)	(aa4s)	(ab4s)	(ac4s)	(ad4s)	(af4s)	(ag4s)
Nº REQ'D	ONE	ONE	ONE	ONE	ONE	ONE	2	2	ONE	ONE

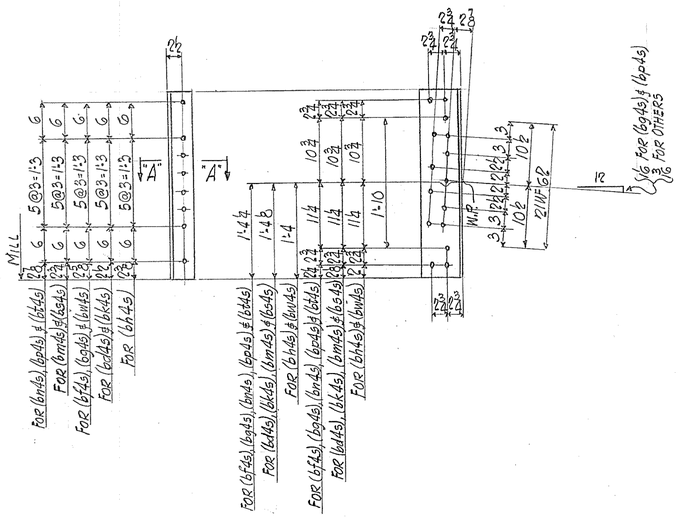
SPLICE ANGLES (ah4s), (ak4s), (am4s), (an4s), (ap4s) AND (as4s)
SPLICE ANGLES (at4s), (aw4s), (ay4s), (ba4s), (bb4s) AND (bc4s) OPP. HAND TO SKETCH

MARK	(ah4s)	(ak4s)	(am4s)	(an4s)	(ap4s)	(as4s)	(at4s)	(aw4s)	(ay4s)	(ba4s)	(bb4s)	(bc4s)
Nº REQ'D	4	3	ONE	7	8	ONE	11	3	ONE	ONE	7	ONE



1-BENT BAR 5×1×5'-3 7/16 ABT.-FOR (h4s) (PL STK)
1-BENT BAR 5×3/4×5'-3 7/16 ABT.-FOR (k4s) (107)
1-BENT BAR 5×3/4×5'-3 7/16 ABT.-FOR (m4s) (107)
1-BENT BAR 5×3/4×5'-3 7/16 ABT.-FOR (n4s) (108)
1-BENT BAR 5×3/4×5'-3 3/8 ABT.-FOR (p4s) (107)
1-BENT BAR 5×3/4×5'-3 3/8 ABT.-FOR (s4s) (108)

4-SPLICE PLATE (h4s)
14-SPLICE PLATE (k4s)
4-SPLICE PLATE (m4s)
14-SPLICE PLATE (n4s)
4-SPLICE PLATE (p4s)
14-SPLICE PLATE (s4s)



1-L 7×4×1/2×2'-7 3/8 MIE - FOR (bm4s), (bn4s) & (bp4s)
1-BENT L 7×4×1/2×2'-7 3/8 MIE - FOR OTHERS

SPLICE ANGLE (bd4s), (bf4s), (bg4s), (bh4s) AND (bk4s)
SPLICE ANGLE (bm4s), (bn4s), (bp4s), (bs4s), (bt4s) AND (bw4s) OPP. HAND TO SKETCH

MARK	(bd4s)	(bf4s)	(bg4s)	(bh4s)	(bk4s)	(bm4s)	(bn4s)	(bp4s)	(bs4s)	(bt4s)	(bw4s)
Nº REQ'D	2	10	4	ONE	7	ONE	3	4	8	7	ONE

REAMING NOTE:-
ALL OPEN HOLES IN SPLICE PLS SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECIFICATION.

NOTE:
SHEARED EDGES OF MATERIAL OVER 5/8" IN THICKNESS SHALL BE EDGE PLANED 1/4"

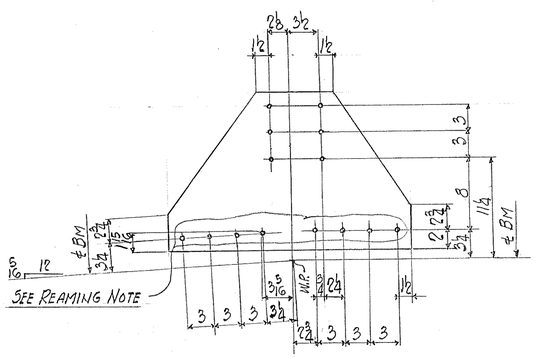
RIVETS NONE
OPEN HOLES 15/16" ϕ
REAM SEE REAMING NOTE
MILLING AS NOTED
PAINT NONE
WELDING NONE
SHOP CONTACT SURFACES NONE

TEMP.	
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

SOUTH THIRTY FIFTH STREET VIADUCT
OVER C. & N.W. RAILWAY
MILWAUKEE, WISCONSIN

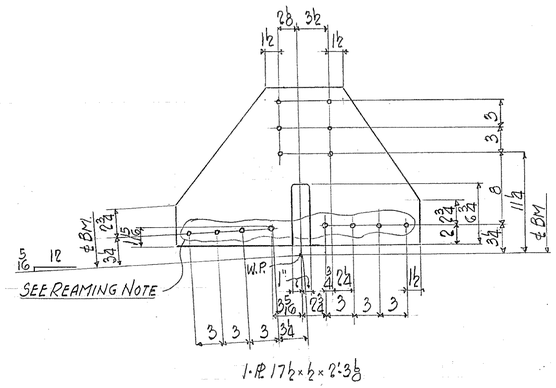
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PJ
CHECKED BY W.V.D. 7/9/59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET 154

B.P.11



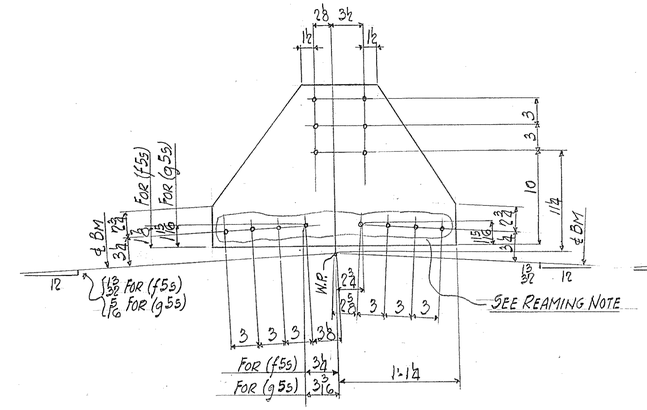
1-PL 17½ × ½ × 2'-3⅜

8-GUSSET PLATE (a5s)



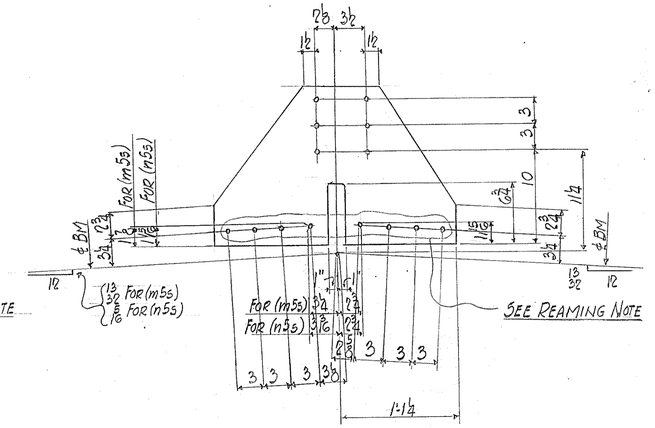
1-PL 17½ × ½ × 2'-3⅜

8-GUSSET PLATE (c5s)



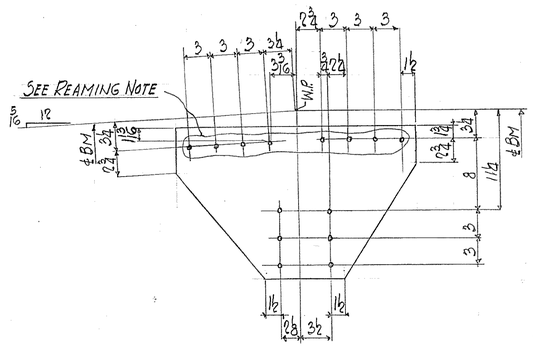
1-PL 17½ × ½ × 2'-3

8-GUSSET PLATE (f5s)
8-GUSSET PLATE (g5s)



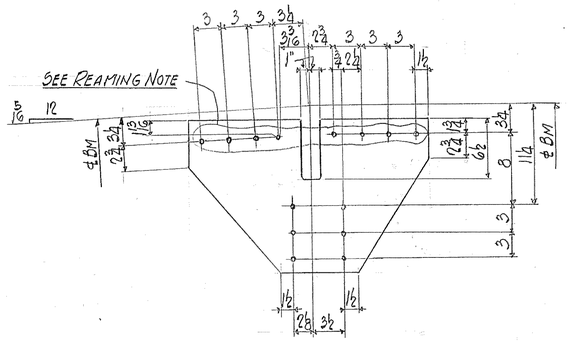
1-PL 17½ × ½ × 2'-3

8-GUSSET PLATE (m5s)
8-GUSSET PLATE (n5s)



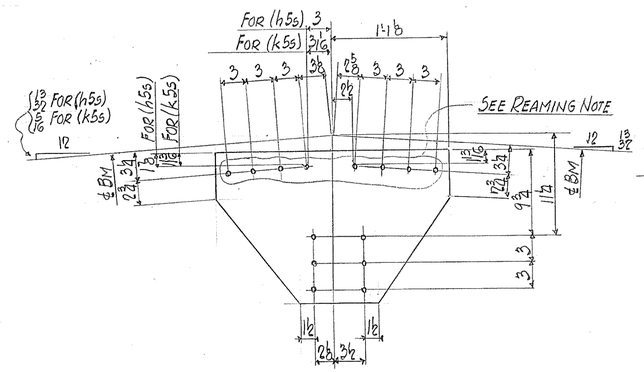
1-PL 17¼ × ½ × 2'-3

8-GUSSET PLATE (b5s)



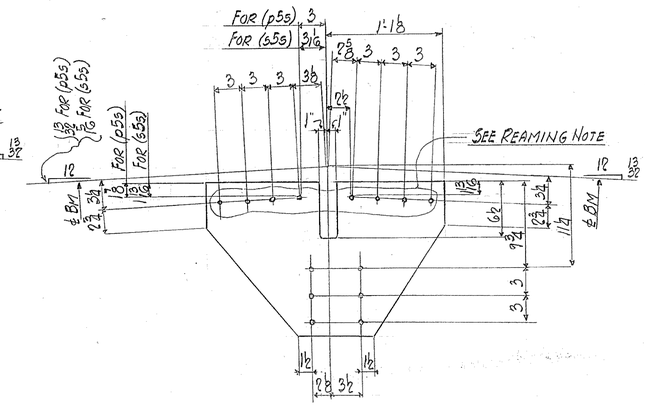
1-PL 17¼ × ½ × 2'-3

8-GUSSET PLATE (d5s)



1-PL 17¼ × ½ × 2'-2¾

8-GUSSET PLATE (h5s)
8-GUSSET PLATE (k5s)



1-PL 17¼ × ½ × 2'-2¾

8-GUSSET PLATE (p5s)
8-GUSSET PLATE (s5s)

REAMING NOTE:-
OPEN HOLES NOTED SHALL BE REAMED TO SIZE WHILE YARD ASSEMBLED AS PER A.A.S.H.O. SPECIFICATIONS

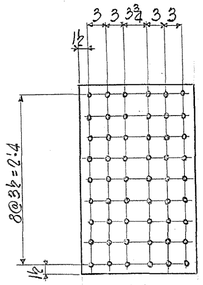
SHOP NOTE:-
MARK N.S. SURFACE OF ALL PLATES "TOP"

RIVETS NONE
OPEN HOLES 15/16"φ
REAM SEE REAMING NOTE
MILLING NONE
PAINT NONE
WELDING NONE
SHOP CONTACT SURFACES NONE

TEMP.	SOUTH THIRTY FIFTH STREET VIADUCT OVER C. & N.W. RAILWAY MILWAUKEE, WISCONSIN
SUPT.	
LAYOUT	
FITTER	
SHOP INSP.	
PC. WK.	
B. SMITH	
MCH.	
ERECT.	
O. INSP.	

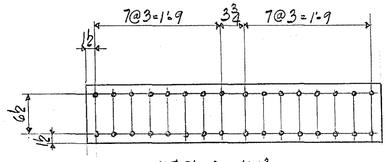
BETHLEHEM STEEL COMPANY
FABRICATED STEEL CONSTRUCTION
Drawings at Chicago - Fabrication at CHICAGO
IN CHARGE HERB MADE BY PJ
CHECKED BY W.V.D. 7-9-59 TRACED BY
REVISED LAST ASSEM. MK.
SHOP NO. CONTRACT CG4538 SHEET J55

REV (A) 12-21-59



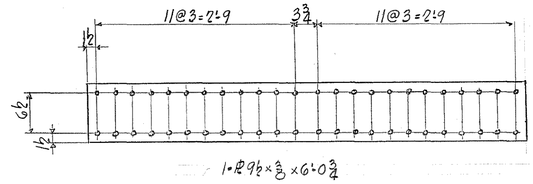
1-PL 18¾ × ⅜ × 2'-7

REAMING TEMPLATE RT1
USED 324 TIMES



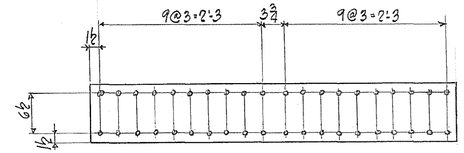
1-PL 9½ × ⅜ × 4'-0¾

REAMING TEMPLATE RT2
USED 715 TIMES



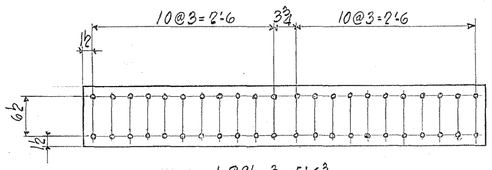
1-PL 9½ × ⅜ × 6'-0¾

REAMING TEMPLATE RT3
USED 32 TIMES



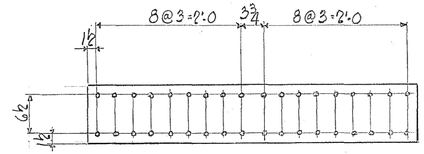
1-PL 9½ × ⅜ × 5'-0¾

REAMING TEMPLATE RT4
USED 48 TIMES



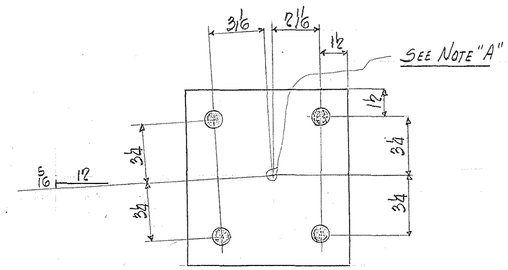
1-PL 9½ × ⅜ × 5'-6¾

REAMING TEMPLATE RT5
USED 24 TIMES



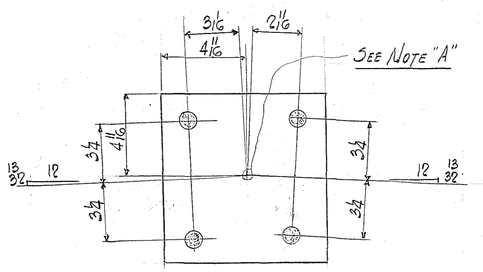
1-PL 9½ × ⅜ × 4'-6¾

REAMING TEMPLATE RT6
USED 30 TIMES



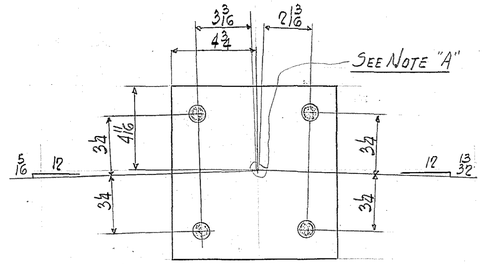
1-PL 8 13/16 × ⅜ × 0'-9 9/16

REAMING TEMPLATE RT7
USED 18 TIMES



1-PL 9 × ⅜ × 0'-9½

REAMING TEMPLATE RT8
USED 18 TIMES



1-PL 9¼ × ⅜ × 0'-9½

REAMING TEMPLATE RT9
USED 18 TIMES

NOTE "A" WORK POINT AT TOP OF SOLE PLATE AND AT BOTTOM OF COVER PLATES ON STRINGERS.

RIVETS
OPEN HOLES 15/16" ϕ IN BUSHINGS
REAM
MILLING
PAINT
WELDING
SHOP CONTACT SURFACES

TEMP.	SOUTH THIRTY FIFTH STREET VIADUCT
SUPT.	OVER C. & N.W. RAILWAY
LAYOUT	MILWAUKEE, WISCONSIN
FITTER	
SHOP INSP.	BETHLEHEM STEEL COMPANY
PG. WK.	FABRICATED STEEL CONSTRUCTION
D. SMITH	Drawings at Chicago - Fabrication at CHICAGO
MCH.	IN CHARGE HERB MADE BY D
ERECT.	CHECKED BY M.V. D. 8-18-57 TRACED BY
O. INSP.	REVISED LAST ASSEM. MK.
	SHOP NO. CONTRACT CG4538 SHEET RT1