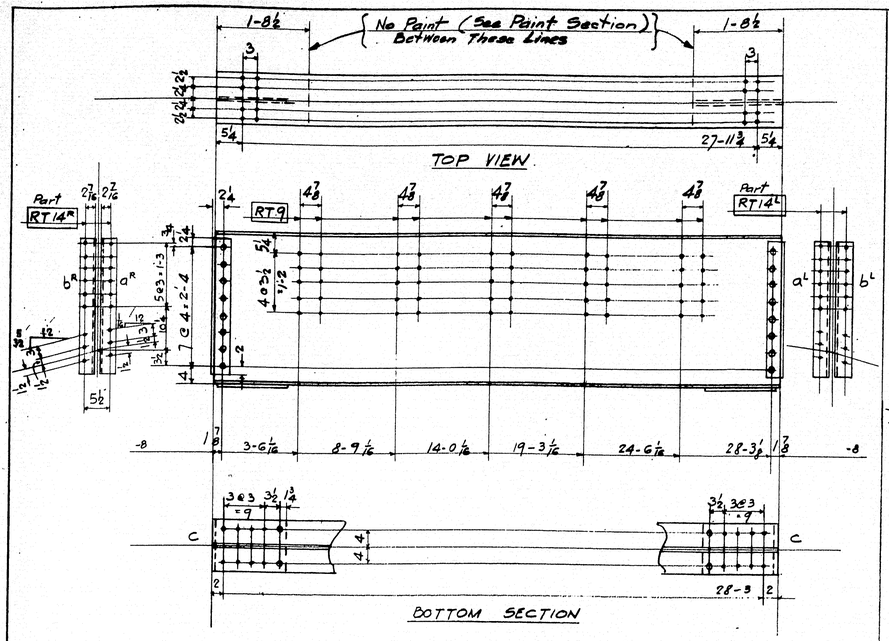
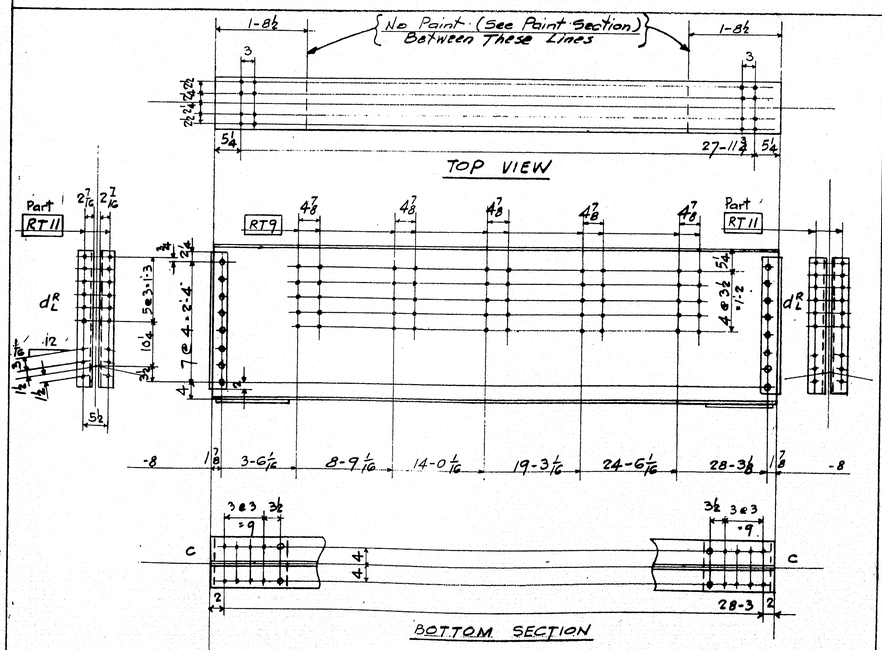
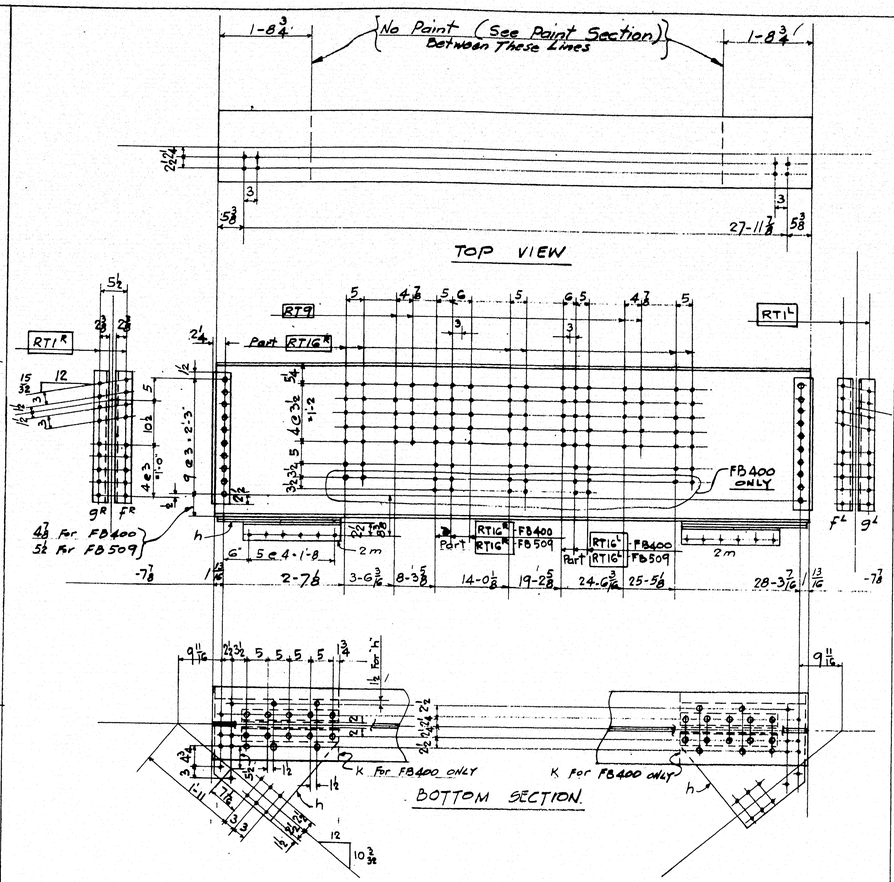


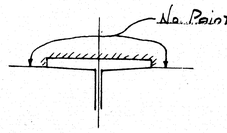
MAKE ONE BEAM - MARK FB601 } ALIKE WT. OF ONE 4721#
MAKE ONE BEAM - MARK FB605 }



MAKE ONE BEAM - MARK FB603 WT. OF ONE 4721



MAKE ONE BEAM - MARK FB400 WT. OF ONE 6992#
MAKE ONE BEAM - MARK FB509 do 5969#



PAINT SECTION

REQ'D. No	MARK	MADE UP OF No	Pc. Mk	SIZE	LGTH.	REMARKS	ORD.	WEIGHT	Nd Cuts
1	FB601	1		36WF160	28-5		9-418-20	4547.	-
1	FB605	1		36WF160	28-5		Do	4547.	-
		4	a^R	L-4x3½x7/16	2-8¼		9-422-6	114.	-
		4	b^R	Do	2-8¼		Do	114.	-
		4	c	# 12x5/16	1-4		9-423-6	68.	-
		40	Rivs.	7/8 ϕ				14.	-
1	FB603	1		36WF160	28-5		9-418-20	4547.	-
		4	d^R_L	L-4x3½x7/16	2-8¼		9-422-6	114.	-
		2	c				9-423-6	34.	-
		20	Rivs.	7/8 ϕ				7.	-
1	FB400	1		36WF230	28-5¼		9-418-17	6541.	-
1	FB509	1		36WF194	28-5¼		Do-18	5517.	-
		4	f^R_L	L-4x3½x7/16	2-7		9-422-6	109.	-
		4	g^R_L	Do	2-7		Do	109.	-
		4	h	# 29x3/8	2-5½		9-423-5	364.88	
		2	k	#16½x5/8	2-5½	FB400	119-18	173.	-
		8	m	L-4x3½x3/8	1-11½		119-9	143.	-
		100	Rivs.	7/8 ϕ				36.	-
				Gross wt				27098.	
				DED wt				88.	
				NET wt				27010.	
				PAINT				108.	
				TOTAL WT				27118.	

RT1^R_L - RT9 - RT11 - RT14^R_L - RT16^R_L (B - J)

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FLOOR BEAMS - SPANS 3, 4 & 5

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE UNLESS NOTED. RT

RIVETS 7/8 DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

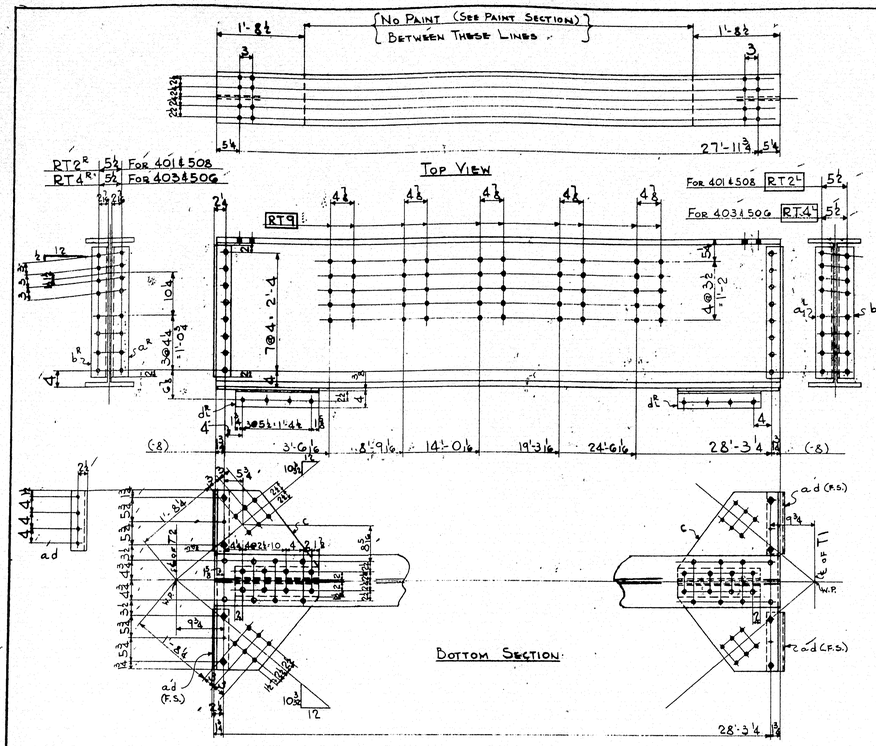
REVISIONS

HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

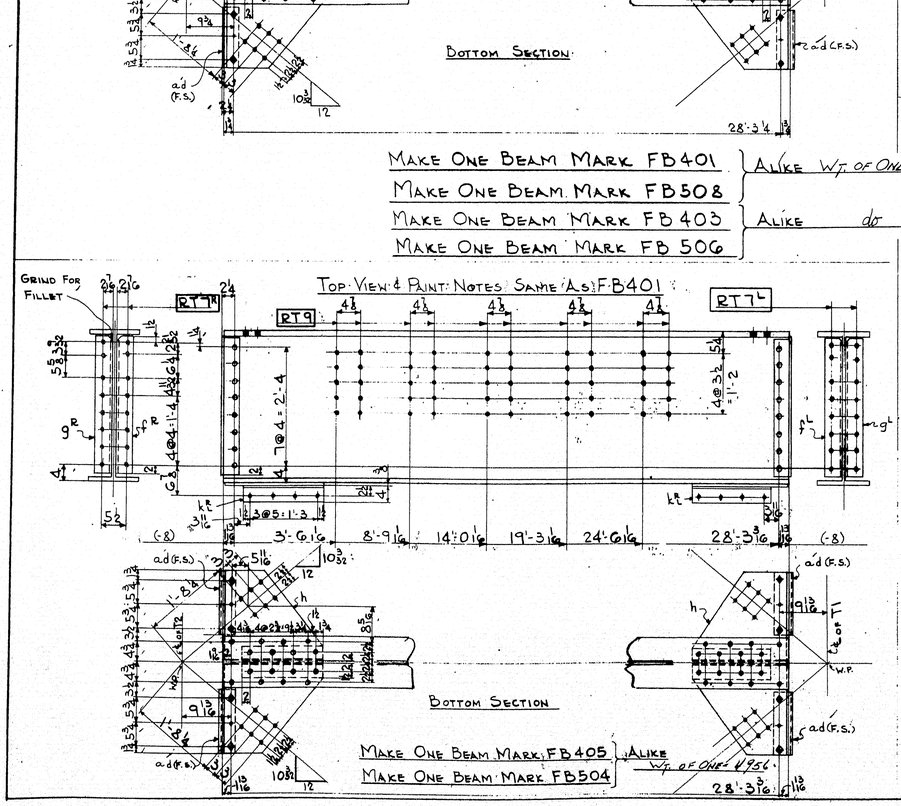
DRAWN MADE BY LK DATE 12-12-49
DRAWN CHECKED BY WD DATE 1-24-50
CONTRACT No. 6370 SHEET No. 140

48-152

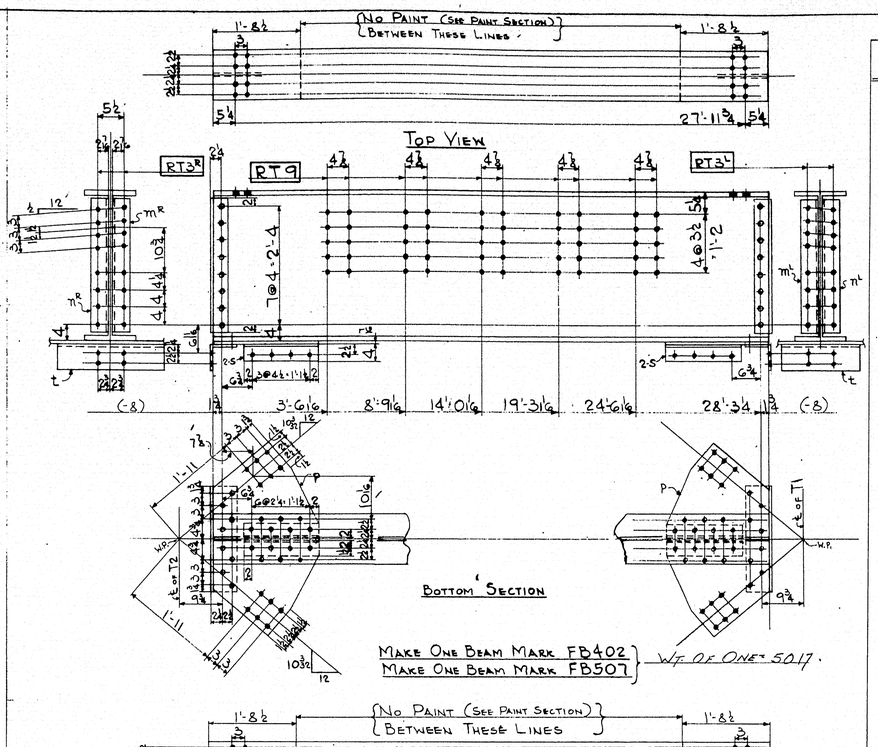
0 1 2 3 4 5 INCHES



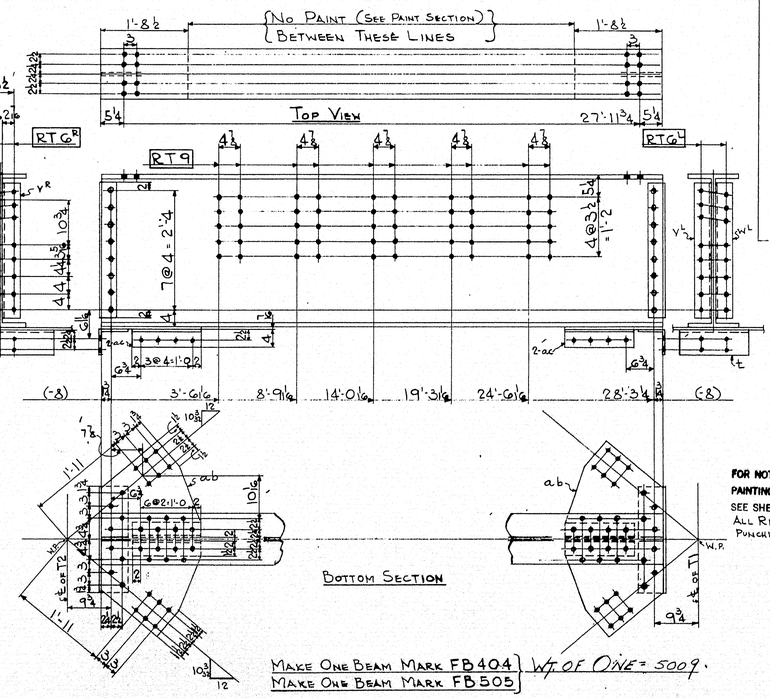
MAKE ONE BEAM MARK FB401 } ALIKE WT. OF ONE = 4976.
MAKE ONE BEAM MARK FB508
MAKE ONE BEAM MARK FB403 } ALIKE do = 4976.
MAKE ONE BEAM MARK FB506



MAKE ONE BEAM MARK FB405 } ALIKE WT. OF ONE = 4956.
MAKE ONE BEAM MARK FB504



MAKE ONE BEAM MARK FB402 } WT. OF ONE = 5017.
MAKE ONE BEAM MARK FB507

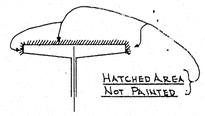


MAKE ONE BEAM MARK FB404 } WT OF ONE = 5009.
MAKE ONE BEAM MARK FB505

No	Mark	Req'd	Pc. Mk	Size	Length	Remarks	Ord.	Weight
1	FB401	1		36B160	28'-5		9-418-20	4547 -
1	FB403	1			28'-5			4547 -
1	FB506	1			28'-5			4547 -
1	FB508	1			28'-5			4547 -
		8	a^R	L4x3½x7/16	2'-8		9-422-6	226 -
		8	b^R	Do	2'-8		Do	226 -
		8	c	R 23⅝x⅜	3'-7		9-423-5	867 191
		16	d^R	L4x3½x⅜	1'-7⅛		119-9	242 -
		16	a d	Do	1'-3		Do	182 -
		192	Rivets	⅞" φ				69 -
		32	Bolts	⅞" φ	2½			17 -
1	FB405	1		36B160	28'-5		9-418-20	4547 -
1	FB504	1		Do	28'-5		Do	4547 -
		8	a d				119-9	91 -
		4	f^R	L4x3½x7/16	2'-8¾	GRIND FOR FILLET	9-422-6	116 -
		4	g^R	Do	2'-8¾		Do	116 -
		4	h	R 21¾ x⅜	3'-7		9-423-5	397 92
		8	k^R	L4x3½x⅜	1'-6		119-9	109 -
		96	Rivets	⅞" φ				35 -
		16	Bolts	⅞" φ	2½			8 -
1	FB402	1		36B160	28'-5		9-418-20	4547 -
1	FB507	1		Do	28'-5		Do	4547 -
		4	m^R	L4x3½x7/16	2'-8		9-422-6	113 -
		4	n^R	Do	2'-8		Do	113 -
		4	p	R 24 x 7/16	3'-9 3/16		113-15	544 143
		8	s	L4x3½x⅜	1'-5½		119-9	106 -
		4	t	L6x6x7/16	2'-1		9-422-7	143 -
		120	Rivets	⅞" φ				43 -
1	FB404	1		36B160	28'-5		9-418-20	4547 -
1	FB505	1		Do	28'-5		Do	4547 -
		4	v^R	L4x3½x7/16	2'-8		9-422-6	113 -
		4	y^R	Do	2'-8		Do	113 -
		4	a b	R 22⅜x7/16	3'-9 3/4		113-16	510 136
		8	a c	L4x3½x⅜	1'-4		119-9	97 -
		4	t				9-422-7	143 -
		120	Rivets	⅞" φ				43 -

Gross Wt 50252
Wt. Ded. 582
Net Wt. 49670
Paint 198
Total Wt. 49868

RT2R - RT3R - RTGR - RT7L - RT4R - RT9



Paint Section

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50
ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE UNLESS NOTED [RT]

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FLOOR BEAMS SPANS *3 & *5

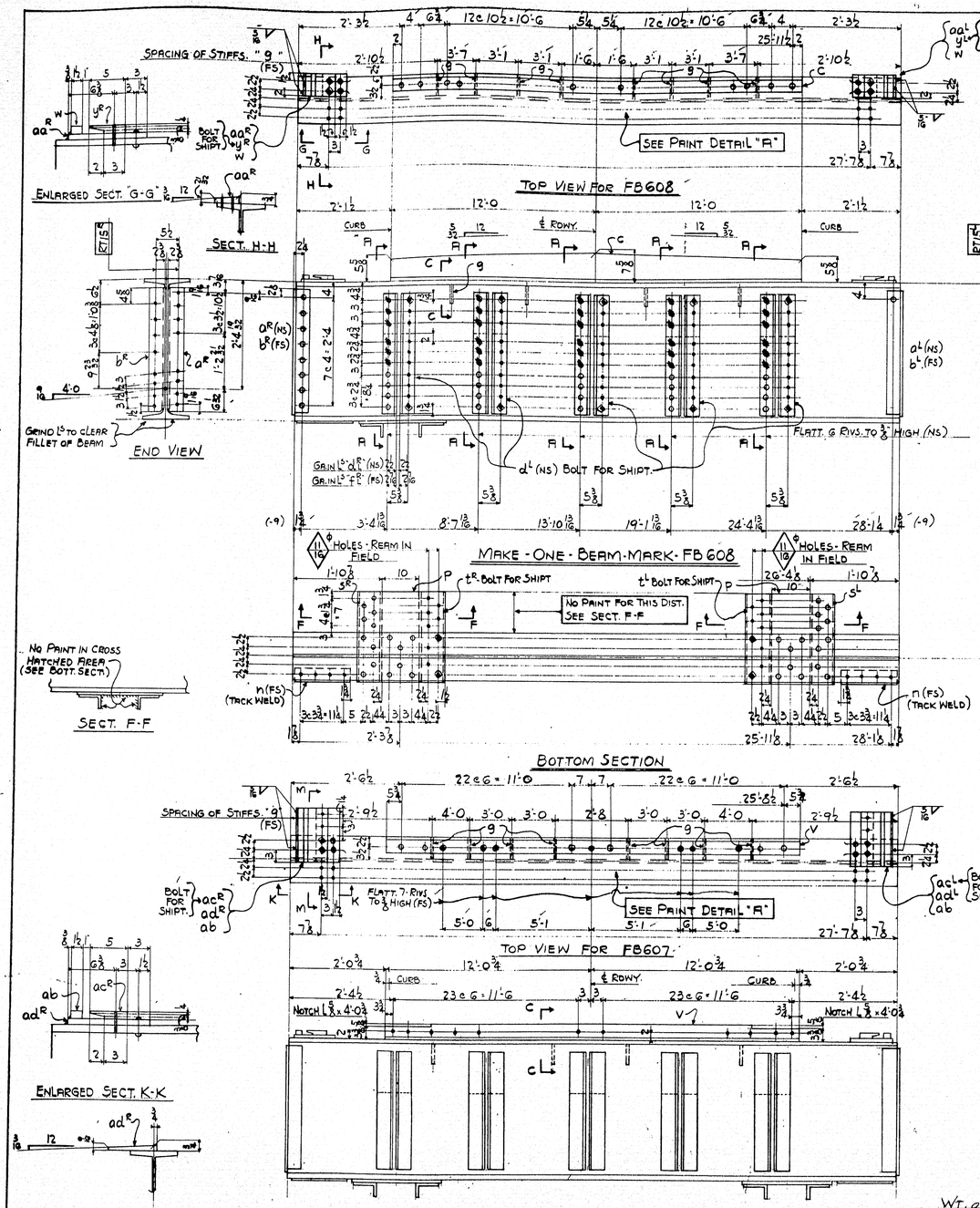
RIVETS ⅞" DIAM. OPEN HOLES 15/16" DIAM. UNLESS OTHERWISE NOTED

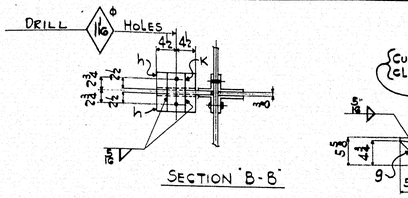
HARRIS STRUCTURAL STEEL CO.
418 FOURTH AVE., N. Y.

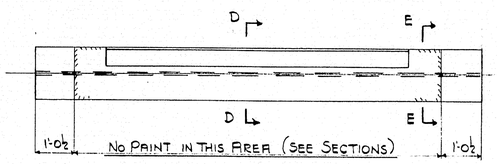
REVISIONS

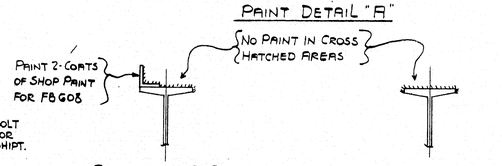
DRAW. MADE BY F.S.G. DATE 12-18-49
DRAW. CHECKED BY W.F. DATE 1-22-50
CONTRACT No. C378 SHEET No. 14

48-153









SHIPT. No.	REQ'D No.	MARK	MADE UP OF No	PC. MK.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT	Nat Cuts
G	1	FB608	1		36BI60	28'-3		9-418-21	4520	-
			2	a^L	L 4 x 3½ x 7/16	2'-8¾		9-422-6	58	-
			2	b^L	L 4 x 3½ x 7/16	2'-8¾		Do	58	-
			1	c	L 7 x 4 x ¾	24'-0	CUT L8x4	118-20	689	82
			10	d^L	L G x 4 x 7/16	2'-7		119-6	369	-
			10	f^L	L 4 x 3½ x 7/16	1'-8½		9-422-6	181	-
			8	g	PL 4¾ x ½	5'-5⅜		9-423-1	30	15
			10	h	L G x 4 x 7/16	9		119-6	107	-
			5	K	BAR 4 x 1	8½		118-25	48	6
			5	m	PL 12⅜ x ½	1'-8¼		9-423-1	178	34
			2	n	FILL 3 x 7/16	1'-2¾		9-423-6	8	-
			2	P	PL 22½ x ½	1'-11		Do-5	110	-
			2	s^L	L G x 3½ x ½	1'-11			45	-
			2	t^L	L G x 3½ x ½	1'-11			45	-
			2	W	BAR ½ x 1	6		106-6	5	-
			195	RIVS.	⅞ ϕ				70	-
			14	BOLTS	⅞ ϕ	2½			7	-
			4	BOLTS	⅞ ϕ	2½			1	-
			1	WELD	5/16 Δ	23'-0			4	-
			2	y^L	PL 5 x 1	G		106-6	17	4
			2	aa^L	PL G x ¾	10⅞	BEVELED	118-10	28	2
G	1	FB607	1		36BI60	28'-3		9-418-21	4520	
			2	a^L				9-422-6	58	-
			2	b^L				Do	58	-
			1	V	L 4 x 4 x ¾	24'-1½		118-4	446	13
			10	d^L				119-6	369	-
			10	f^L				9-422-6	181	-
			8	g				9-423-1	30	15
			5	K				118-25	48	6
			10	h				119-6	107	-
			5	m				9-423-1	178	34
			2	n				Do-6	8	-
			2	P				Do-5	110	-
			2	s^L					45	-
			2	t^L					45	-
			212	RIVS.	⅞ ϕ				76	-
			14	BOLTS	⅞ ϕ	2½			7	-
			4	BOLTS	⅞ ϕ	2½			1	-
			1	WELD	5/16 Δ	24'-0			4	-
			2	ab	BAR ½ x 1	1'-0¾		106-6	11	-
			2	ac^R	PL 5 x 1"	1'-0¾		Do	36	8
			2	ad^L	PL 12⅜ x ¾	10⅞	BEVELED	118-10	59	7
									Gross wt.	12975
									wt. DED.	226
									Net wt.	12799
									PAINT	51
									TOTAL wt.	12800

RT 15 ℄ -17

J
L

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X-50
ALL RIVET HOLES & OPEN HOLES PUNCHED, FULL SIZE UNLESS NOTED.
RT.

FLOOR BEAMS - SPAN #4

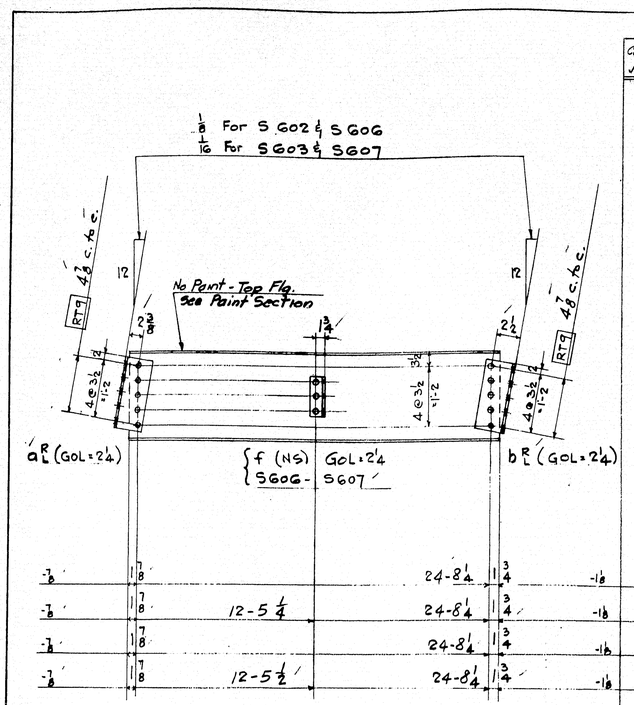
RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

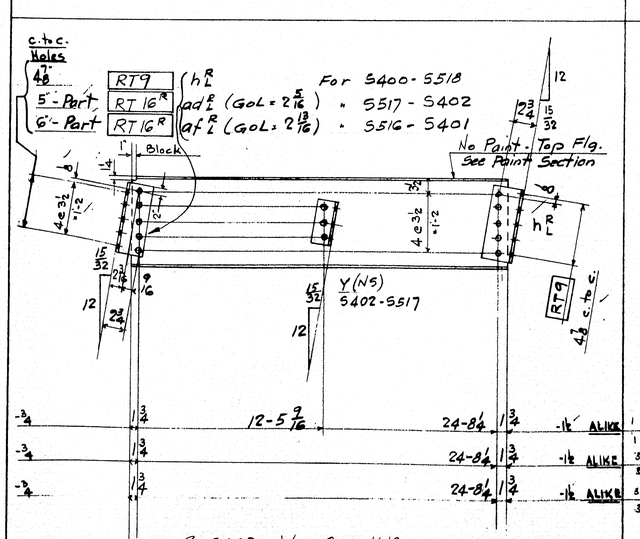
REVISIONS
R1 2/8/50 As Noted

DRAW. MADE BY JWV DATE 12/15/49
DRAW. CHECKED BY WP DATE 1-25-50
CONTRACT No. C378 SHEET No. 142

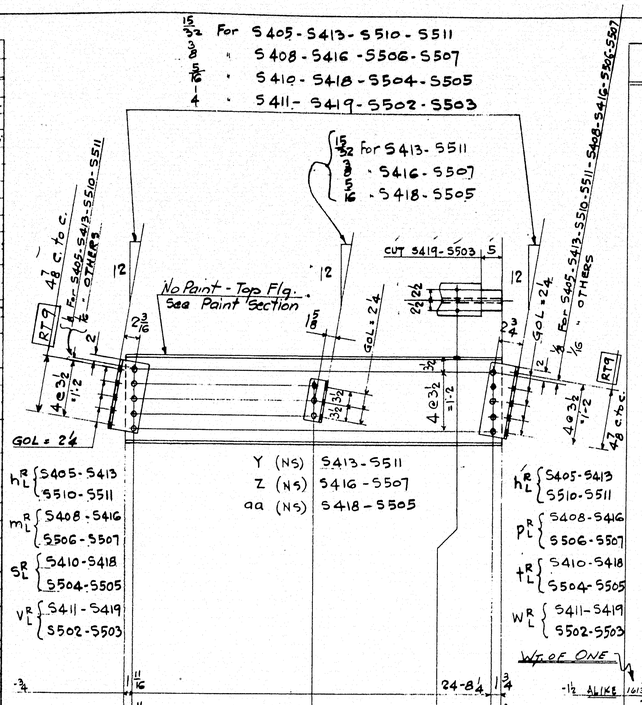
48-154



Cuts	REQ'D. No	MARK	MADE UP OF No	PC.MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
			40	a_L^R	L-4x3½x7/16	1-6		9-422-6	636.
			40	b_L^2	Do	1-6		Do	636.
			4	f	L-3½x3x5/16	10	{S606 S607	9-422-1	22.
			212	Rivs.	7/8				76.
			28	h_L^R			④ S400-S518 ② others	9-422-6	445.
			2	Y			S402-S517	9-422-1	11.
			4	ad_L^R	L-4x4x7/16	1-6	S517-S402	105-21	68.
			8	af_L^R	Do	1-6	S516-S401	Do	136.
			106	Rivs.	7/8				38.
	8	S602	8		21WFG2	24-10		9-418-81	12316.
	2	S606	2						3079.
	8	S603	8						12316.
	2	S607	2						3079.
1	1	S402	1		21WFG2	24-10		9-418-81	1539.
1	1	S517	1						1539.
3	2	S400	2						3079.
8	2	S518	2						3079.
5	2	S401	2						3079.
3	2	S516	2		21WFG2	24-10		9-418-81	3079.
									98252.

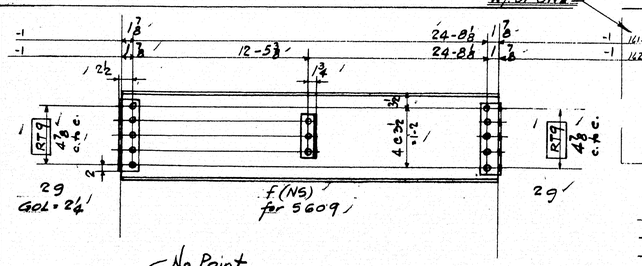


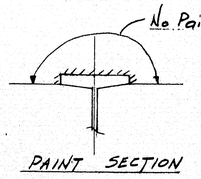
8-S602 Wt OF ONE = 1613.
2-S606 do = 1620.
8-S603 do = 1613.
2-S607 do = 1620.
1 S402 do = 1620.
1 S517 do = 1620.
2 S400 do = 1612.
2 S518 do = 1614.
2 S401 do = 1614.
2 S516 do = 1614.



Cuts	REQ'D. No	MARK	MADE UP OF No	PC.MK	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
			120	h_L^R	L-4x3½x7/16	1-6	S405-S413 S510-S511	9-422-6	1908.
			40	m_L^R			S408-S416		636.
			40	p_L^R			S506-S507		636.
			20	S_L^R			S410-S418		318.
			20	t_L^R			S504-S505		318.
			20	v_L^R			S411-S419		318.
			20	W_L^R	L-4x3½x7/16	1-6	S502-S503		318.
			6	Y	L-3½x3x5/16	10	S413-S511	9-422-1	33.
			4	Z	Do	10	S416-S507		22.
			2	aa	Do	10	S418-S505		11.
			736	Rivs.	7/8				265.
	12	S405	12		21WFG2	24-10		9-418-81	18474.
	12	S510	12						18474.
	3	S413	3						4618.
	3	S511	3						4618.
	8	S408	8						12316.
	8	S506	8						12316.
	2	S416	2						3079.
	2	S507	2						3079.
	4	S410	4						6158.
	4	S504	4						6158.
	1	S418	1						1539.
	1	S505	1						1539.
	4	S411	4						6158.
	4	S502	4						6158.
	1	S419	1						1539.
	1	S503	1		21WFG2	24-10			1539.
	8	S608	8		21WFG2	24-10		9-418-81	12316.
	2	S609	2		Do	24-10		Do	3079.
	2	f					S609	9-422-1	11.
	40	9	L-4x3½x7/16	1-6				9-422-6	6316.
	106	Rivs.	7/8						38.
									128625.

Wt OF ONE





PAINT SECTION

RT9 - RT16R

Gross Wt.	176877.
Wt. Ded.	20.
Net Wt.	176857.
Paint	707.
Tot. Wt.	177564.

ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

STRINGERS - SPANS 3, 4 & 5

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50
: ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE UNLESS NOTED RT

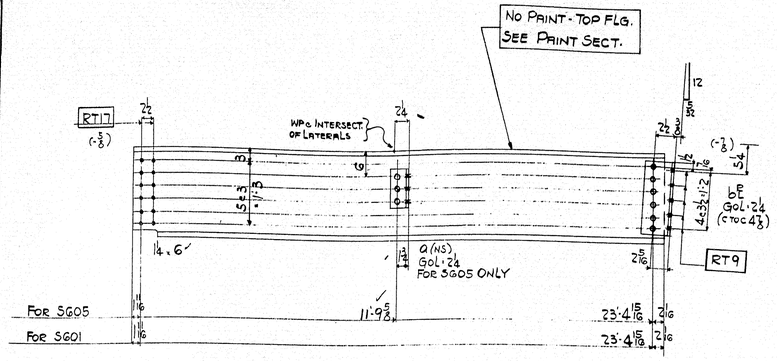
RIVETS 7/8" DIAM. OPEN HOLES 15/16" DIAM. UNLESS OTHERWISE NOTED

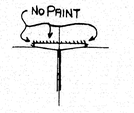
HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

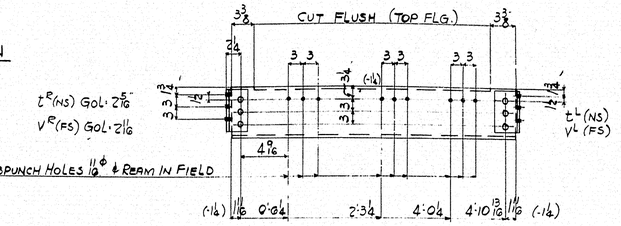
REVISIONS

DRAW. MADE BY LK DATE 12-16-49
DRAW. CHECKED BY W.P DATE 1-30-50
CONTRACT No. C378 SHEET No. 143

48-155

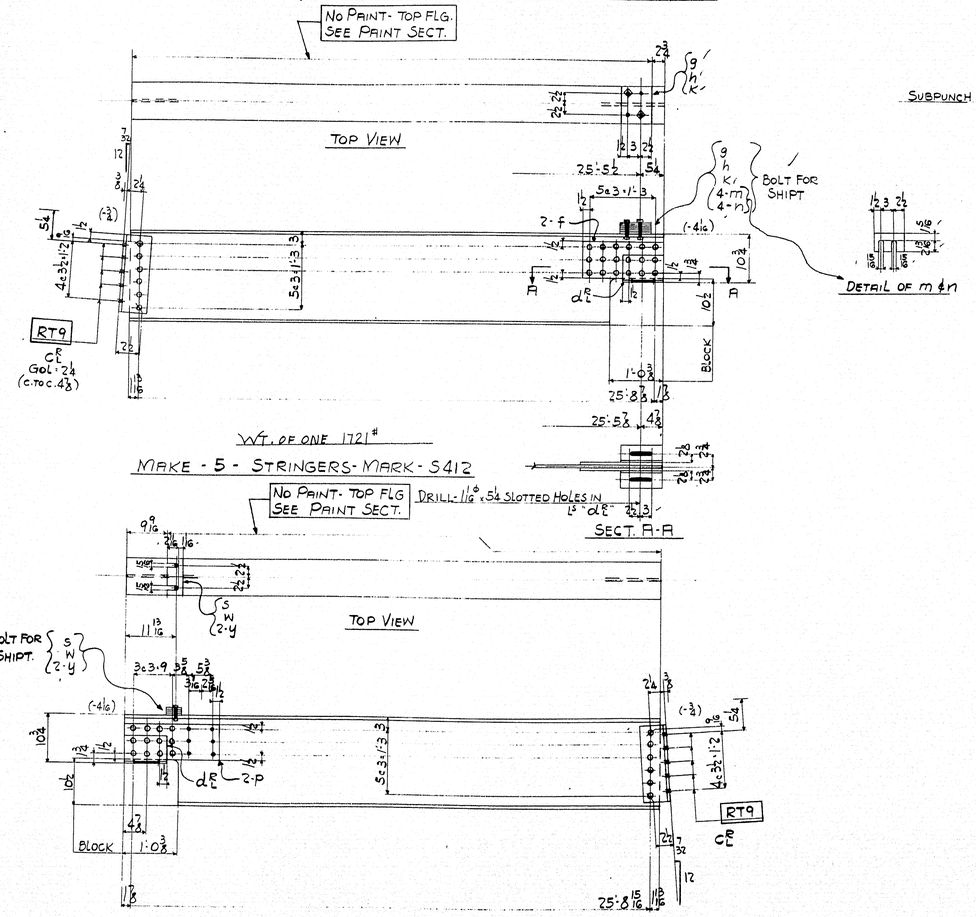






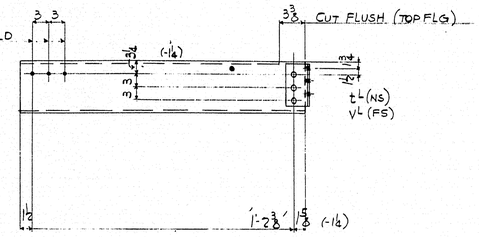
MAKE - 2 - STRINGERS - MARK - SG05 WT. OF ONE 1502#.
" - 8 - STRINGERS - " - SG01 do 1493#.

MAKE - 4 - DIAPHRAGMS - MARK - M500 WT OF ONE 159#.



WT. OF ONE 1721#
MAKE - 5 - STRINGERS - MARK - S412

MAKE - 5 - STRINGERS - MARK - S500 WT. OF ONE 1697#.



MAKE - ONE - DIAPHRAGM - MARK - M501 - AS SHOWN WT OF ONE 49#.
" - ONE - " - " - M502 - OPP. HAND do 49#.

SHIPT NO.	REQ'D NO	REQ'D MARK	MADE UP OF NO	MADE UP OF PC MK	MADE UP OF SIZE	MADE UP OF LENGTH	REMARKS	ORD	WEIGHT	CUTS
6	2	SG05	2		21BG2	23'-7		9-418-82	2924.	17
6	8	SG01	8		21BG2	23'-7		Do	11696.	70
			2	a	L3½x3½x⅞	9		9-422-1	10.	—
			20	bE,	L4.3½x7/16	1'-6		9-422-6	318.	—
			GG	RIVS.	⅞ϕ				24.	—
4	5	S412	5		21BG2	25'-10½		9-418-80	8029.	145
			10	cE	L4x3½x7/16	1'-6		9-422-6	159.	—
			10	dE	LG.4x7/16	9'-3		119-6	112.	—
			10	f	PL.9x7/16	1'-6		113-23	205.	—
			5	g	PL.7x¾	8'-4		119-15	62.	—
			5	h	7x½	8'-4		9-423-1	41.	—
			5	K	7x⅜	8'-4		Do-5	31.	—
			20	m	7x⅞	4'-8		119-28	20.	—
			20	n	7x7/16	4'-8		Do.	10.	—
			120	RIVS.	⅞ϕ				43.	—
			10	BOLTS	⅞ϕ	2½			5.	—
5	5	S500	5		21BG2	25'-10½		9-418-80	8029.	145
			10	cE				9-422-6	159.	—
			10	dE				119-6	112.	—
			10	P	PL.9x7/16	1'-9⅜		113-23	238.	—
			5	S	PL.3½x¼	8¼			11.	—
			5	W	PL.3½x⅜	8¼		119-27	6.	—
			10	y	PL.3½x7/16	8¼			6.	—
			90	RIVS.	⅞ϕ				32.	—
			10	BOLTS	⅞ϕ	2½			5	—
5	4	M500	4		12C25	5'-0½		9-418-83	504.	8
			8	tE	L4.3½x⅜	10½		119-9	64.	—
			8	VE	Do.	10½		Do	64.	—
			24	RIVS.	⅞ϕ				9.	—
5	1	M501	1		12C25	1'-4'		9-418-74	33.	1
OPP. HAND	5	1	M502	1		12C25	1'-4'		Do	33.	1
			2	tE				119-9	16	—
			2	VE				Do.	16.	—
			6	RIVS.	⅞ϕ				2	—

RT9-17

Gross Wt.	33028.
Wt. Ded.	387.
Net Wt.	32641.
Paint	131.
Tot. Wt.	32772.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE UNLESS NOTED. RT

STRINGERS & DIAPHS. - SPAN 4

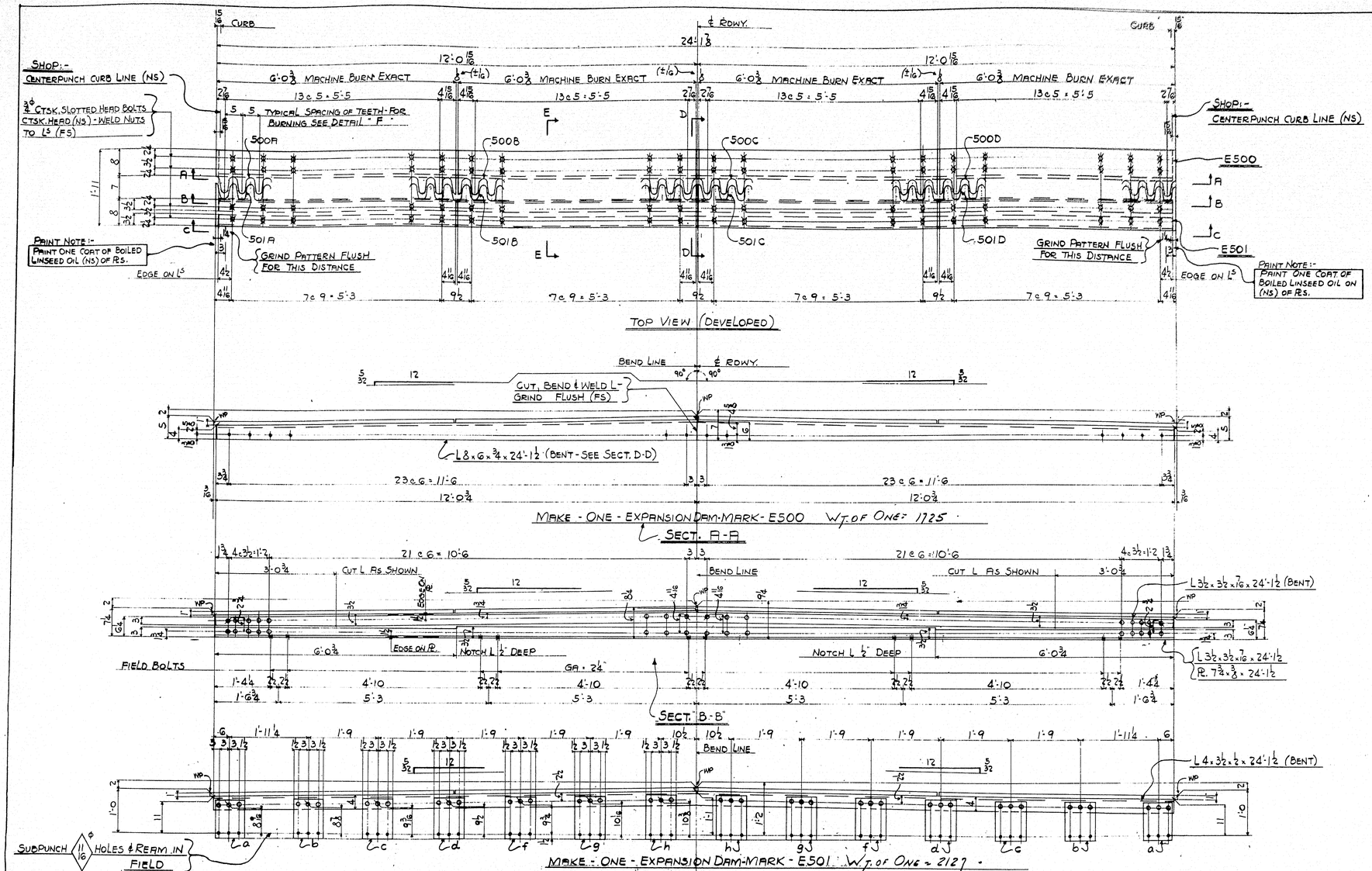
RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

REVISIONS		

DRAWN MADE BY JWV DATE 12/23/49
DRAWN CHECKED BY WK DATE 12-29-50
CONTRACT No. C378 SHEET No. 144

48-156



SHIPT NO.	REQ'D NO.	MARK	MADE UP OF No.	Pc. Mk.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT	CUT'S
	1	E500	1		L 8 x 6 x ¾	24'-1½	BENT	118-3	816 —	K
			1	500A	PL 13 x 1" A.W.S.M.E. DIAMOND	G'-0⅜	CUT FROM 21½ x 1" WITH 501A	32830	273 50	
			1	500B		G'-0⅜	501B		273 50	
			1	500C		G'-0⅜	501C		273 50	
			1	500D		G'-0⅜	501D		273 50	
			64	BOLTS	¾ϕ CTSK. SLOTTED HD.	2¾	HEX. NUTS	32896	8. —	
			1	WELD	⅜ Δ	1'-0			1. —	
			1	WELD	⅜ Δ	11'-0			1. —	
	1	E501	1		L 4 x 3½ x ½	24'-1½	BENT	118-6	287 —	
			1		L 3½ x 3½ x 16	24'-1½	BENT	118-8	236 —	
			1		L 3½ x 3½ x 16	24'-1½	Do		236 —	
			1		PL 7¾ x ⅜	24'-1½		9-423-7	239 —	
			1	501A	PL 13 x 1" A.W.S.M.E. DIAMOND	G'-0⅜	CUT FROM 21½ x 1" WITH 500A	32830	273 50	
			1	501B		G'-0⅜	500B		273 50	
			1	501C		G'-0⅜	500C		273 50	
			1	501D		G'-0⅜	500D		273 50	
			2	a	PL 9 x ⅜	11⅝		114-10	22. —	
			2	b		11⅞			23. —	
			2	c		1'-0⅛			23 —	
			2	d		1'-0⅜			24. —	
			2	f		1'-0¾			24. —	
			2	g		1'-1⅛			25. —	
			2	h		1'-1⅜			26 —	
			146	RIVS.	⅞ϕ				53. —	
			64	BOLTS	¾ϕ CTSK. SLOTTED HD.	2¾	HEX. NUTS	123-2	8. —	
			1	WELD	⅜ Δ	11'-0			1. —	
								GROSS WT.	4237.	
								WT. DED.	400.	
								NET WT.	3837.	
								PAINT	15.	
								TOTAL WT.	3852.	

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE UNLESS NOTED.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

ROADWAY EXPANSION DAMS AT L17

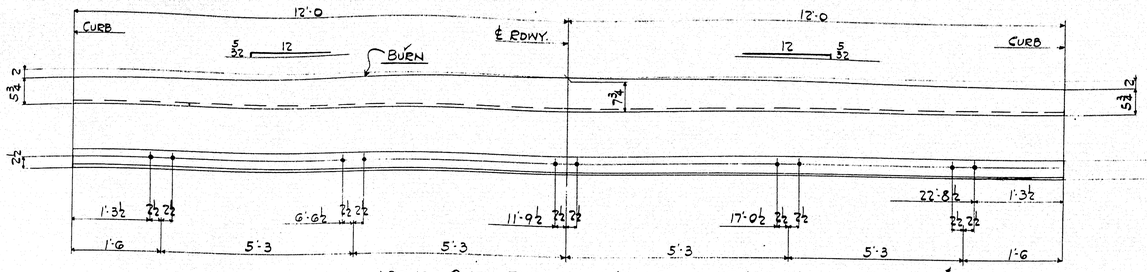
RIVETS ⅞ϕ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

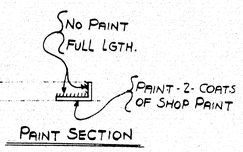
REVISIONS			

DRAW. MADE BY JWV DATE 12/30/49
DRAW. CHECKED BY RLJ DATE 1/26/50
CONTRACT No. 9378 SHEET No. 45

48-157

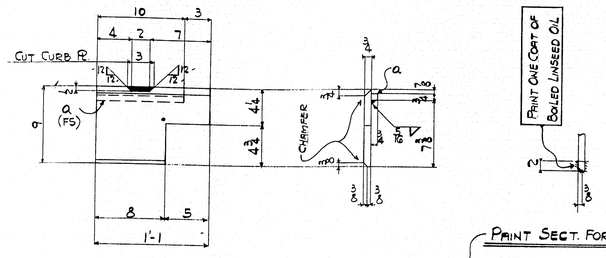


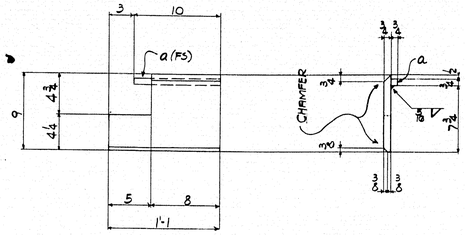
MAKE - ONE - EXPANSION L - MARK - E400 WT. OF ONE = 617#



PAINT SECTION

SECT No	REQ'D No	MARK	MADE UP OF No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT	Jt Cuts
	1	E400	1		L 7 3/4 x 4 x 3/4	24'-0	CUT L 8 x 4	118-20	689	76
AS SHOWN	1	E502	4		PL 9 x 3/4	1'-1		118-11	99	22
OPP. HAND	1	E504								
AS SHOWN	1	E302								
OPP. HAND	1	E304								
			4	a	BAR 3/4 x 3/4	10		118-12	6	-
			1	WELD	5/16 Δ	3'-4			1	-
AS SHOWN	1	E503	4		PL 9 x 3/4	1'-1		118-11	99	21
OPP. HAND	1	E505								
AS SHOWN	1	E303								
OPP. HAND	1	E305								
			4	a				118-12	6	-
			1	WELD	5/16	2'-8			1	-
AS SHOWN	1	E506	2		PL 4 1/2 R.W. SUPER DIAMOND	2'-1		32830	30	2
OPP. HAND	1	E508	2		PL 10 x 3/8 R.W. SUPER	2'-1		114-8	53	
AS SHOWN	1	E306	2		PL 4 1/2 R.W. SUPER DIAMOND	2'-04		32830	29	2
OPP. HAND	1	E308	2		PL 10 x 3/8	2'-04		114-8	54	-
			24/16	b	BAR 3/4 x 3/4	6 1/2±	BENT	118-12	25	-
				PLUG WELDS	5/16 ϕ					-
			1	WELD	4Δ	7:0			1	-
AS SHOWN	1	E507	2		PL 25 x 2 R.W. SUPER DIAMOND	1'-5		32830	129	2
OPP. HAND	1	E509								
AS SHOWN	1	E307								
OPP. HAND	1	E309	2		PL 24 1/2 x 2 R.W. SUPER DIAMOND	1'-5		32830	123	2
			24/1	b / WELD		7:0		118-12	25 / 1	- / -
							GROSS WT.		1367.	
							WT. DED.		127.	
							NET WT.		1240.	
							PAINT		5	
							TOT. WT.		1245	

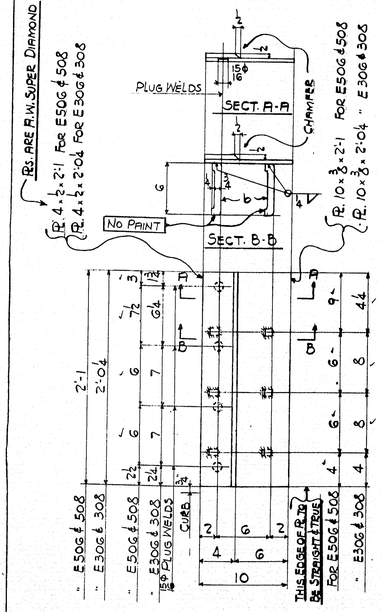




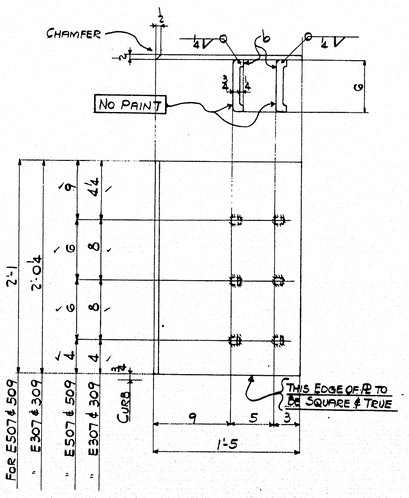
PAINT SECT. FOR CURB PLS.

MAKE - ONE - CURB PL. - MARK - E502 - AS SHOWN
" - ONE - " " - " - E504 - OPP. HAND
" - ONE - " " - " - E302 - AS SHOWN
" - ONE - " " - " - E304 - OPP. HAND
WT. OF ONE = 21#

MAKE - ONE - CURB PL. - MARK - E503 - AS SHOWN
" - ONE - " " - " - E505 - OPP. HAND
" - ONE - " " - " - E303 - AS SHOWN
" - ONE - " " - " - E305 - OPP. HAND
WT. OF ONE = 21#



MAKE - ONE - SIDEWALK PL. - MARK - E506 - AS SHOWN
" - ONE - " " - " - E508 - OPP. HAND
" - ONE - " " - " - E306 - AS SHOWN
" - ONE - " " - " - E308 - OPP. HAND
WT. OF ONE = 47#
do = 46



MAKE - ONE - SIDEWALK PL. - MARK - E507 - AS SHOWN
" - ONE - " " - " - E509 - OPP. HAND
" - ONE - " " - " - E307 - AS SHOWN
" - ONE - " " - " - E309 - OPP. HAND
WT. OF ONE = 69#
do = 68

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL OPEN HOLES PUNCHED: FULL SIZE.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

ROADWAY EXP. AT L9; SIDEWALK EXP. AT L17 & PIER #6

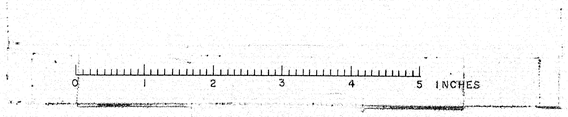
RIVETS - DIAM.	OPEN HOLES UNLESS OTHERWISE NOTED	15/16 DIAM.

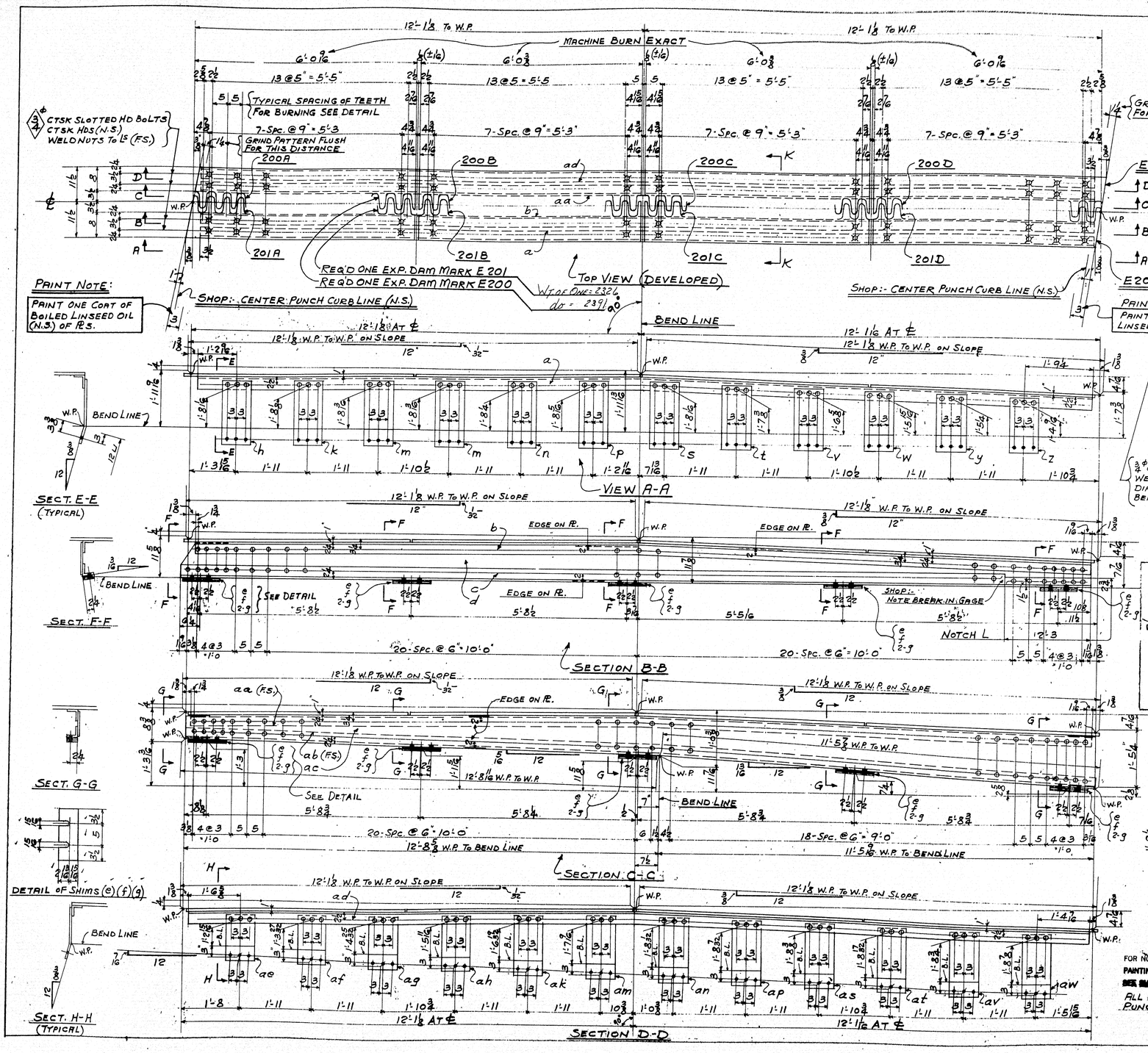
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

REVISIONS		

DRAWN MADE BY JWV DATE 1/3/50
DRAWN CHECKED BY NLJ DATE 1/24/50
CONTRACT No. C 578 SHEET No. 46

48-158





SHIPMT	REQ'D No.	MARK	No.	Pc. Mk	MADE UP OF SIZE	LGTH	REMARK	ORDER WEIGHT	Lbs
	1	E 201							
			1	a	L 4"×3½"×½"	23'-11½"	BENT	9-422-9	285 -
			1	b	L 3½"×3½"×½"	23'-11½"	BENT	122-24	235 -
			1	c	Do.	24'-2⅜"	Do.		237 3
			1	d	ℓR 10⅜"×⅜"	24'-2⅜"		9-423-5	320 55
	5		e	SHIMS	3"×¼"	1'-0			16. 2
	5		f	"	3"×⅛"	1'-0		119-27	8. 1
	10		g	"	3"×1/16"	1'-0			8. 1
	1		h	ℓ 9"×⅜"	2'-2½"	BENT	122-19		25 -
	1		k		2'-2½"				25 -
	2		m		2'-2¾"				51 -
	1		n		2'-2⅜"				26 -
	1		p		2'-2¾"				26 -
	1		s		2'-2½"				25 -
	1		t		2'-2				25 -
	1		v		2'-1¼"				24 -
	1		w		2'-0⅞"				23 -
	1		y		1'-11⅜"				23 -
	1		z	Do.	1'-11	Do.	Do.		20 -
	1	201A	ℓR 13×1		G-0 1/16	CUT FROM 2½"×1" WITH 200A	R.W. SUPER DIAMOND	32830	275 52
	1	201B			G'-0⅜"	200B			273 51
	1	201C			G'-0⅝"	200C			273 51
	1	201D	Do.		G'-0⅝"	Do. 200D			274 51
	64	CTSK SLOTTED HD BOLTS	¾ ϕ		2½	HEX. NUTS	123-2		8. -
	143	RIVS.	⅞ ϕ						51 -
	10	BOLTS	⅞ ϕ		2½				5. -
	1	WELD	⅛		11'-0				1. -
	1	E 200							
	1	aa	L 3½"×3½"×⅞"		23'-11½"	BENT		122-24	235 -
	1	ab	Do.		24'-2⅛"	BENT.	Do.		237 -
	1	ac	ℓR 20⅜"×⅜"		24'-2⅛"			9-423-5	620 266
	1	ad	L 4"×3½"×½"		23'-11½"	BENT.		9-422-9	285 -
	1	ae	ℓ 9"×⅜"		1'-9	BENT		123-19	20 -
	1	af			1'-10				21 -
	1	ag			1'-10⅞"				22 -
	1	ah			1'-11¾"				23 -
	1	ak			2'-0⅜"				24 -
	1	am			2'-1⅞"				25 -
	1	an			2'-2¼"				25 -
	1	ap			2'-2½"				25 -
	1	as			2'-2¼"				25 -
	1	at			2'-2⅜"				26 -
	1	av			2'-3				26 -
	1	aw	Do.		2'-3	Do.			26 -
	5	e							16 2
	5	f						119-27	8 1
	10	g							8 1
	1	200A	ℓR 13×1		G-0 1/16	CUT FROM 2½"×1" WITH 201A	R.W. SUPER DIAMOND	32830	273 51
	1	200B			G'-0⅜"	201B			273 51
	1	200C			G'-0⅝"	201C			273 51
	1	200D	Do.		G'-0⅝"	Do. 201D			275 52
	64	CTSK SLOTTED HD BOLTS	¾ ϕ		2½	HEX. NUTS	123-2		8. -
	142	RIVS.	⅞ ϕ						51. -
	10	BOLTS	⅞ ϕ		2½				5. -
	1	WELD	⅛		11'-0				1. -

Gross Wt.	5420.
Wt. Ded.	722.
Net Wt.	4698.
Paint	19.
Tot. Wt.	4717.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

EXPANSION DAM AT PIER #1

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET No. 3.

ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE.

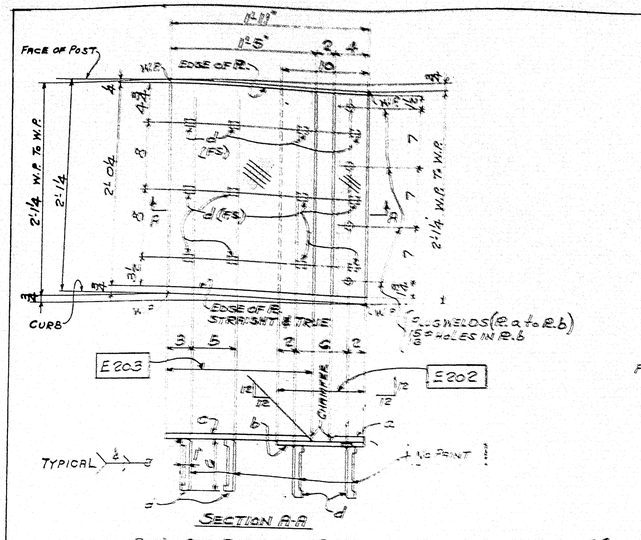
RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

REVISIONS

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

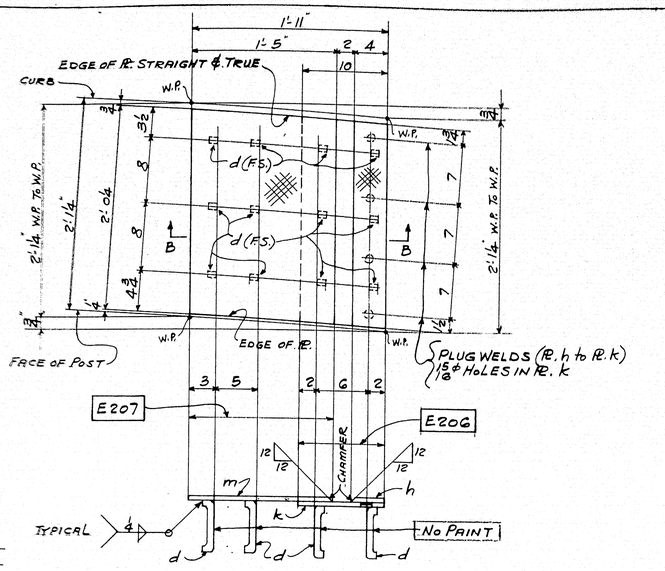
DRAW. MADE BY FT DATE 1/3/50
DRAW. CHECKED BY HLJ DATE 1/24/50
CONTRACT No. C378 SHEET No. 47

48-159



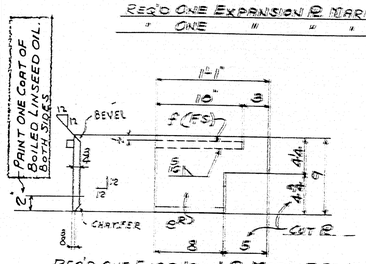
SECTION A-A

REQ'D ONE EXPANSION PL. MARK E202 WEIGHT ONE = 48.
" ONE " " " E203 do. = 68.

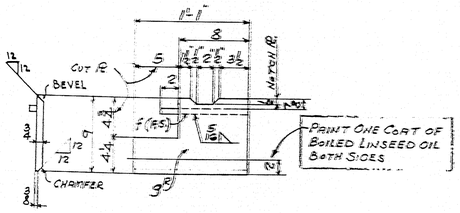


SECTION B-B

REQ'D ONE EXPANSION PL. MARK E206 WT. OF ONE = 48.
" ONE " " " E207 do. = 68.



REQ'D ONE EXPANSION PL. MARK E204 AS SHOWN
REQ'D ONE EXPANSION PL. MARK E208 OPP HAND
} WT OF ONE = 22.



REQ'D ONE EXPANSION PL. MARK E205 AS SHOWN
" ONE " " " E209 OPP. HAND
} WT OF ONE = 22.

SHIPMT	REQ'D No.	REQ'D MARK	MADE UP OF No.	PL. MK	SIZE	LGTH	REMARKS	ORDER	WEIGHT	CUT
			1	a	PL 24½×½	4 13/16	A.W. SUPER DIAMOND	32830	17	2
			1	b	PL 10×⅜	2'-0 9/16		114-8	26	-
	1	E202	6	d	BARS ⅜×⅜	6 2½	BENT [	118-12	6	-
			1	WELD	¼ Δ	2'-0			1	-
			4	PLUG	WELDS 15/16 ø				1	-
			1	c	PL 24½×½	1'-5 13/16	A.W. SUPER DIAMOND	32830	64	3
	1	E203	6	d				118-12	6	-
			1	WELD	¼ Δ	2'-0			1	-
			2	c	PL 9×⅜	1'-1		118-11	50	10
AS SHOWN	1	E204	2	f	BAR ⅜×⅜	10		118-12	3	-
OPP. HAND	1	E208	1	WELD	5/16 Δ	1'-8			1	-
			2	g	PL 9×⅜	1'-1		118-11	50	11
AS SHOWN	1	E205	2	f				118-12	3	-
OPP. HAND	1	E209	1	WELD	5/16 Δ	1'-4			1	-
			1	h	PL 24½×½	4 13/16	A.W. SUPER DIAMOND	32830	17	2
			1	k	PL 10×⅜	2'-0 9/16		114-8	26	-
	1	E206	6	d				118-12	6	-
			1	WELD	¼ Δ	2'-0			1	-
			4	PLUG	WELDS 15/16 ø				1	-
			1	m	PL 24½×½	1'-5 13/16	A.W. SUPER DIAMOND	32830	64	3
	1	E207	6	d				118-12	6	-
			1	WELD	¼ Δ	2'-0			1	-

GROSS WT.	350
WT. DED.	31
NET WT.	319
PAINT	1
TOTAL WT.	320

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ARROWSIC, BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

EXPANSION DAMS AT PIER #1

RIVETS / DIAM. OPEN HOLES / DIAM. UNLESS OTHERWISE NOTED

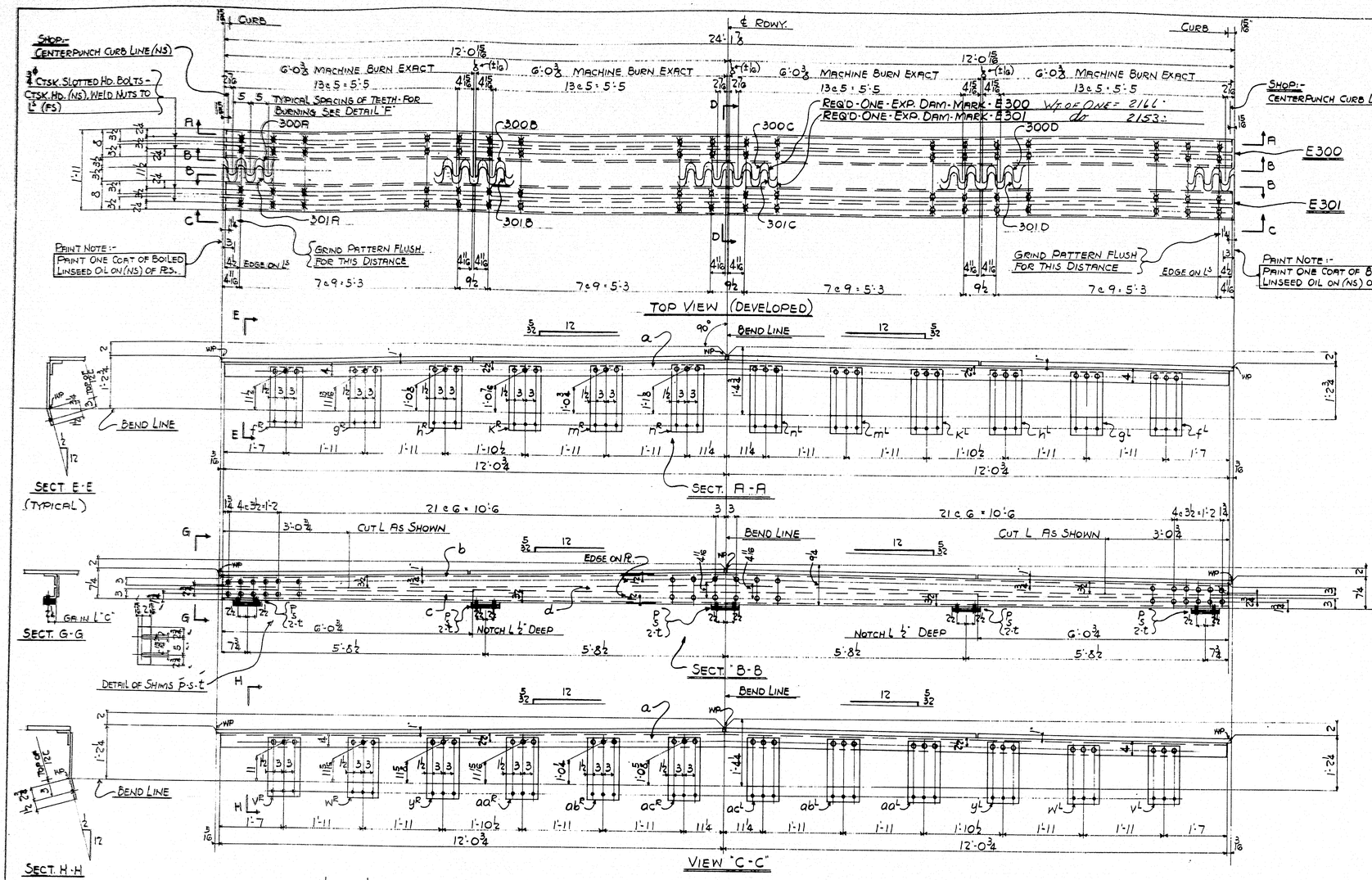
REVISIONS

HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

DRAW. MADE BY FT DATE 1-5-50
DRAW. CHECKED BY [illegible] DATE 1/24/50
CONTRACT No. C378 SHEET No. 148

0 1 2 3 4 5 INCHES

48-160



SHIPT. No.	No	MARK	No	PC. MK	SIZE	LENGTH	REMARKS	DED.	WEIGHT	
	1	E300								
			1	a	L 4 x 3½ x ½	24'-1½	BENT	9-422-9	287	-
			1	b	L 3½ x 3½ x 7/16	24'-1½	BENT	122-24	236	2
			1	c	L 3½ x 3½ x 7/16	24'-1½		Do	236	9
			1	d	PL 7¾ x ⅜	24'-1½		9-423-5	238	30
			2	f^R	PL 9 x ⅜	1'-5¾	BENT	122-19	34	-
			2	g^R		1'-6⅛			35	-
			2	h^R		1'-6⅛			35	-
			2	k^R		1'-6¾			36	-
			2	m^R		1'-7			36	-
			2	n^R	PL 9 x ⅜	1'-7⅛	BENT		37	-
			5	P	FILL 3¾ x ¼	10½			14	-
			5	S	" 3¾ x ⅜	10½		119-27	7	-
			10	t	" 3¾ x 1/16	10½			7	-
			1	300A	PL 13 x 1 W/O DIAMOND	G'-0⅜	CUT FROM PL 21½ x 1 WITH 301A	32830	273	49
			1	300B		G'-0⅜	301B		273	49
			1	300C		G'-0⅜	301C		273	49
			1	300D		G'-0⅜	301D		273	49
			64	BOLTS	¾ CTSK SLOTTED HD	2½	HEX. NUTS	123-2	8	-
			10	BOLTS	⅞ Φ	2½			5	-
			140	RIVS.	⅞ Φ				50	-
			1	WELD	⅜	11'-0			1	-
	1	E301								
			1	a				9-422-9	287	-
			1	b				122-24	236	2
			1	c				Do	236	9
			1	d				9-423-5	238	30
			5	P					14	-
			5	S				119-27	7	-
			10	t					7	-
			2	v^L	PL 9 x ⅜	1'-4¾	BENT	122-19	32	-
			2	w^L		1'-5⅛			33	-
			2	y^L		1'-5⅜			33	-
			2	aa^L		1'-5¾			34	-
			2	ab^L		1'-6			34	-
			2	ac^L	PL 9 x ⅜	1'-6⅜	BENT		35	-
			1	301A	PL 13 x 1 W/O DIAMOND	G'-0⅜	CUT FROM PL 21½ x 1 WITH 300A	32830	273	49
			1	301B		G'-0⅜	300B		273	49
			1	301C		G'-0⅜	300C		273	49
			1	301D		G'-0⅜	300D		273	49
			64	BOLTS	¾ CTSK SLOTTED HD	2½	HEX. NUTS	123-2	8	-
			10	BOLTS	⅞ Φ	2½			5	-
			140	RIVS.	⅞ Φ				50	-
			1	WELD	⅜	11'-0			1	-

GROSS WT. 4776
WT. DED. 474
NET WT. 4302
PAINT 17
TOTAL WT. 4319

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

ROADWAY EXPANSION DAM AT PIER #6

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X 50
ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE.

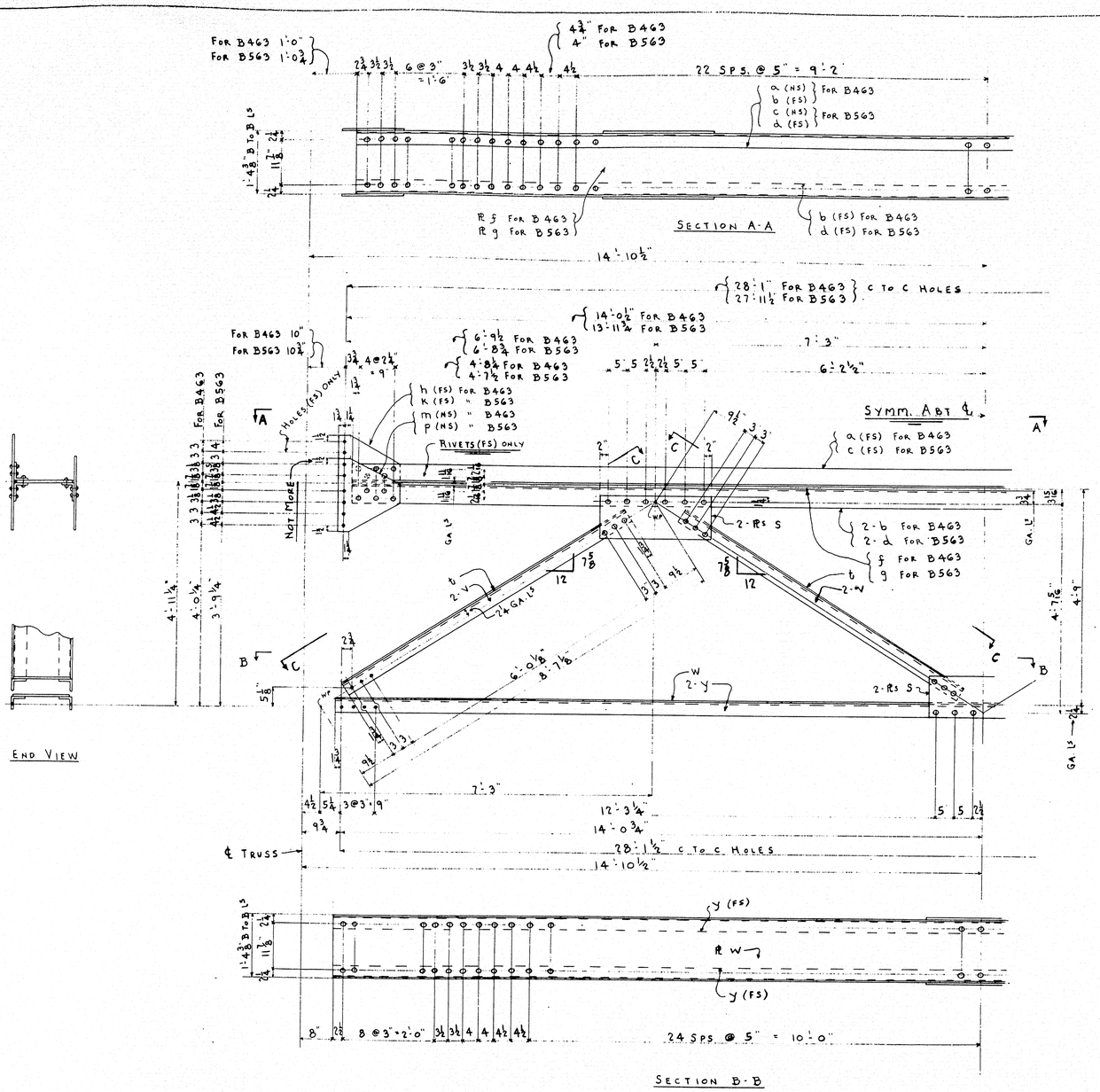
RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

REVISIONS

DRAW. MADE BY JWV DATE 1/7/50
DRAW. CHECKED BY [illegible] DATE 1/24/50
CONTRACT No. 5378 SHEET No. 149

48-161



READ		MADE UP OF						CUT
No	MARK	No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT	K
1	B463								
1	B563								
		1	a	L 5 × 3½ × 3/8	27'-9		9-418-99	289.	—
		2	b	Do	27'-9		Do	577.	—
		1	f	R 15¾ × 3/8	27'-9	B463	9-419-44	557.	—
		2	h	R 16 × 3/8	2'-1		9-423-5	85.	10
		2	m	Do	1'-7		Do	64.	9
		1	c	L 5 × 3½ × 3/8	27'-7½		9-418-99	287.	—
		2	d	Do	27'-7½		Do	575.	—
		1	g	R 15¾ × 3/8	27'-7½	B563	9-419-44	555.	—
	—	2	K	R 16 × 3/8	2'-5½		9-423-5	100.	10
	—	2	P	Do	1'-10½		Do	77.	9
		12	S	R 11½ × 5/16	2'-5		9-423-6	355.	—
		8	t	R 15¾ × 5/16	7'-3⅜		9-419-45	977.	—
		16	v	L 3½ × 3½ × 3/8	7'-3⅜		9-418-100	993.	—
		2	w	R 15¾ × 5/16	28'-5		9-419-46	951.	—
		4	y	L 3½ × 3½ × 3/8	28'-5		9-418-100	966.	—
		122	Rivs	⅞ ϕ				442.	—

GROSS WT.	7850.
WT. DED.	38.
NET WT.	7812.
PAINT	31.
TOTAL WT.	7843.

ONE PORTAL REQD MARK B463 WT. OF ONE = 3910.
ONE " " " B563 do = 3933.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2
(AT LB-U9) (AT U17-L18)

PORTALS B463 & B563

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

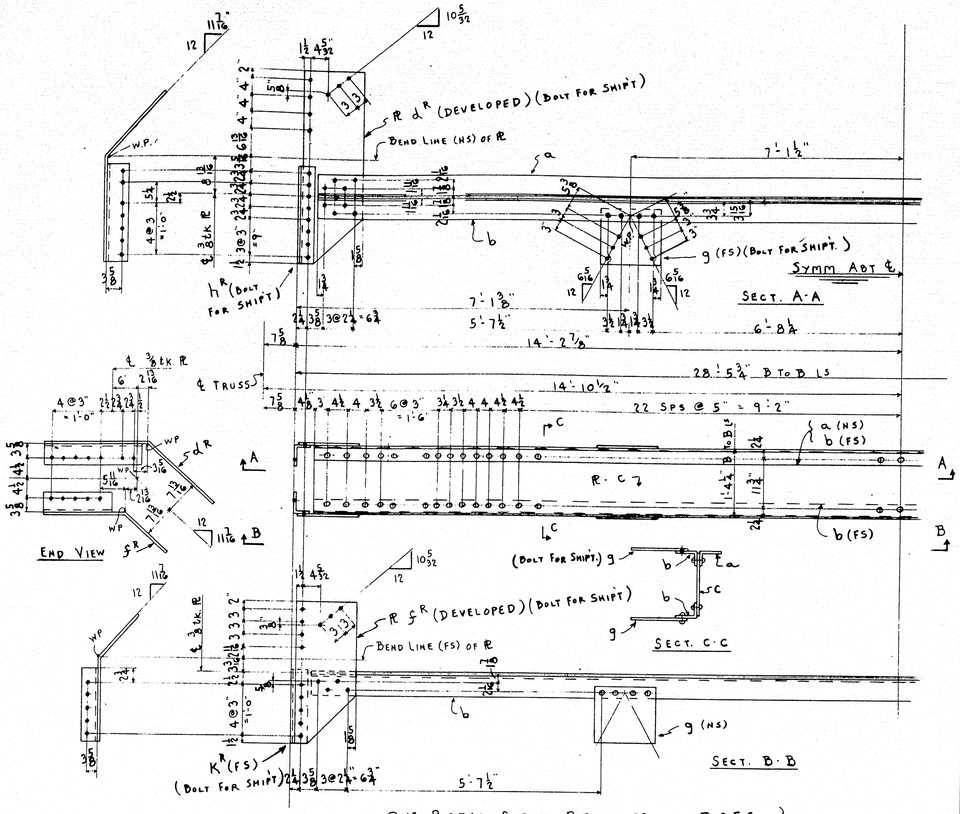
RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

REVISIONS

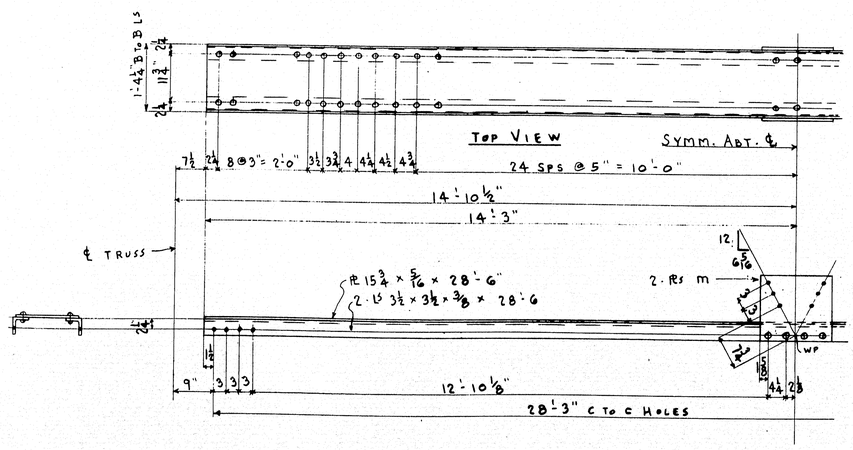
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

DRAW. MADE BY SOK DATE 11-17-49
DRAW. CHECKED BY W.P. DATE 1-31-50
CONTRACT No. C378 SHEET No. 150

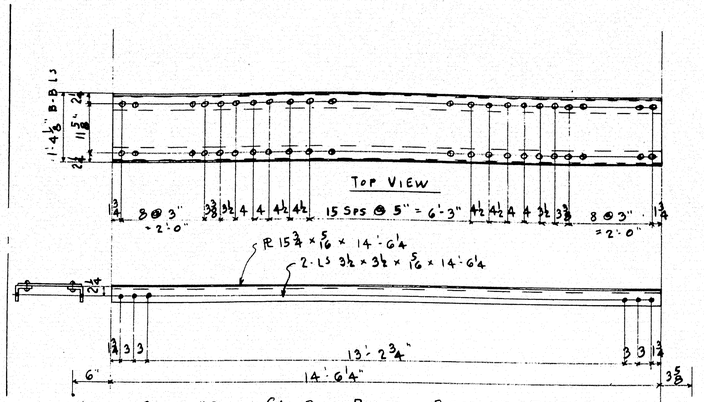
48-162



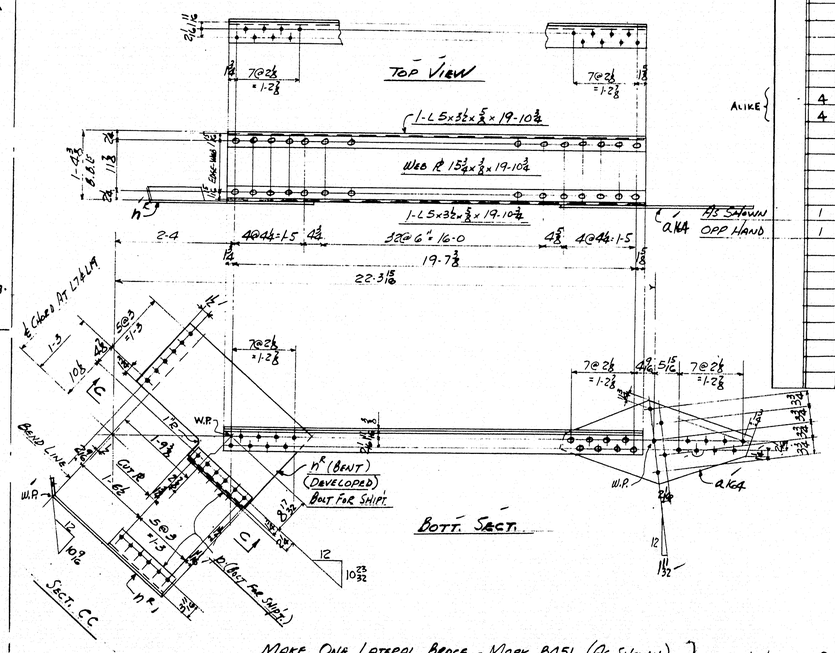
ONE Portal Strut Reqd. Mark B656 } Alike Wt. of One: 1693.
ONE " " " " B660



ONE Portal Strut Reqd. Mark B656A } Alike Wt. of One: 1066.
ONE " " " " B660A



Wt of One: 486. { 4 Pcs. Portal Reqd Mk B656D } Alike
{ 4 " " " " B660B }



Make One Lateral Brace - Mark B451 (As Shown) } Ft Wt of One: 1267.
Make One Lateral Brace - Mark B527 (Opp Hand)

Reqd. No	Mark	No	Pc Mk	Made Up Of Size	Length	Remarks	Ord.	Wt Cwt	Weight
ONE	B656								
ONE	B660								
		2	a	L 5×3½×⅝	27'-9½		1110-18		484 -
		4	b	Do	27'-9½		Do.		969 -
		2	c	R 15¾×⅜	27'-9½		9-419-47		1117 -
		4	d R	R 13½×⅜	3'-10	Bent	9-423-5		264 23
		4	f R	Do	2'-9	↓	Do.		189 23
		8	g	R 13×⅝	1'-2		9-423-6		129 -
		4	h L	L 5×3½×⅜	1'-11		119-8		80 -
		4	K L	Do	1'-4¼		Do.		56 -
		316	Rivs	⅞ ϕ					114 -
		40	Bolts	⅞ ϕ	2½				21 -
ONE	B656A								
ONE	B660A								
		4		L 3½×3½×⅜	28'-6		9-418-101		969 -
		2		R 15¾×⅝	28'-6		9-419-49		954 -
		4	m	R 15×⅝	1'-4		9-423-6		85 -
		324	Rivs	⅞ ϕ					117 -
4	B656B								
4	B660B								
		16		L 3½×3½×⅝	14'-6¼		9-418-103		1673 -
		8		R 15¾×⅝	14'-6¼		9-419-48		1943 -
		704	Rivs	⅞ ϕ					253 -
1	B451								
1	B527								
		4		L 5×3½×⅜	19'-10¾		9-418-91		1337 -
		2		Web R 15¾×⅜	19'-10¾		9-419-54		800 -
		2	n L	R 23½×⅜	3'-3¼	Bent	9-423-5		194 22
		2	p	L 5×3½×⅜	1'-6		119-8		31 -
		2	a 164	R 18×⅜	3'-5½	Same As Lw Sht. a 164	9-423-5		159 47
		188		⅞ ϕ Rivs					68 -
		8		⅞ ϕ Bolts	2½				4 -

Gross Wt. 12008.
Wt. Ded. 115.
Net Wt. 11893.
Paint 47.
Total Wt. 11940.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2
PORTAL L9-U10 & L17-U16

B451-B527-B656-B656A-B656B-B660-B660A-B660B

For notes on specifications, material, painting, punching, drilling, reaming, etc. see sheet X50.

Rivets ⅞ diam., open holes 15/16 diam. unless otherwise noted

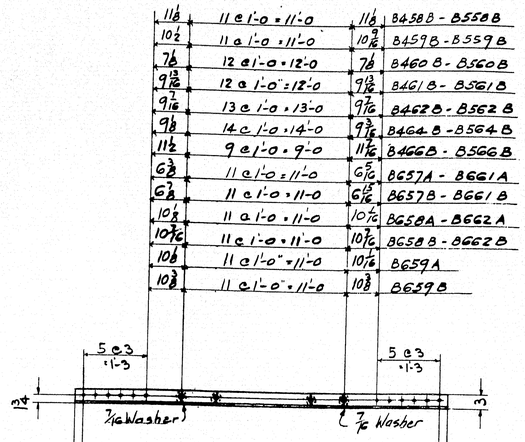
Revisions

Harris Structural Steel Co.
619 Fourth Ave., N. Y.

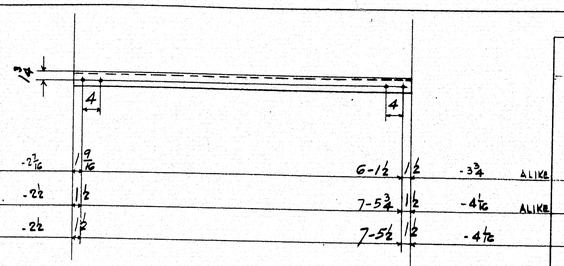
Draw. made by S Date 12-10-47
Draw. checked by WP & FT Date 1-31-56
Contract No. C378 Sheet No. 151

48-163

0 1 2 3 4 5 INCHES



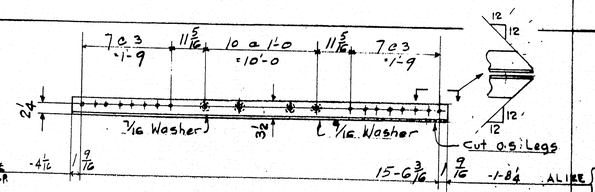
REQ'D. NO	REQ'D. MARK	MADE UP OF NO	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
		48	Washer	2 1/16 x 7/16 Thk		15/16 ϕ Hole		17.
		250	Washer	2 1/16 x 3/8 Thk		15/16 ϕ Hole		68.
		298	Riv.	7/8 ϕ				107.
1	B458B	2		L-3½x3x5/16	15-7¼		9-422-5	206.
1	B558B	2			15-7¼			206.
1	B459B	2			15-6¼			205.
1	B559B	2			15-6¼			205.
1	B460B	2			15-11¼			210.
1	B560B	2			15-11¼			210.
1	B461B	2			16-4¾		9-422-4	216.
1	B561B	2			16-4¾		-4	216.
1	B462B	2			17-4		-3	229.
1	B562B	2			17-4		-3	229.
1	B464B	2			18-3½		-7	241.
1	B564B	2			18-3½		-7	241.
1	B466B	2			13-8		-1	180.
1	B566B	2			13-8		-1	180.
1	BG57A	2			14-9¾		9-422-5	195.
1	BG61A	2			14-9¾			195.
1	BG57B	2			14-11			197.
1	BG61B	2			14-11			197.
1	BG58A	2			15-5¼			204.
1	BG62A	2			15-5¼			204.
1	BG58B	2			15-6			205.
1	BG62B	2			15-6			205.
1	BG59A	2			15-5¼			204.
1	BG59B	2		L-3½x3x5/16	15-5¾			204.
		4	Washer	2 1/16 x 7/16 Thk		15/16 ϕ Hole		1.
		18	Washer	2 1/16 x 3/8 Thk		15/16 ϕ Hole		5.
		22	Riv.	7/8 ϕ				8.
1	B457B	2		L-4x3½x3/8	15-7¾		112-6	285.
1	B557B	2		Do	15-7¾		112-6	285.
		4	Washer	2 1/16 x 9/16 Thk		15/16 ϕ Hole		2.
		26	Washer	2 1/16 x 2 Thk		15/16 ϕ Hole		9.
		30	Riv.	7/8 ϕ				11.
1	B465B	2		L-4x3½x3/8	19-0		112-7	346.
1	B565B	2		Do	19-0		112-7	346.
						TOTAL		6474.

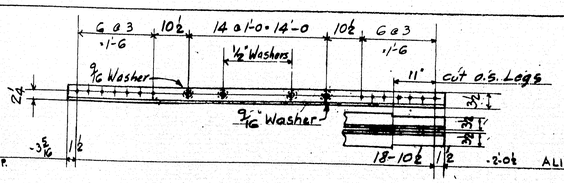


B657D-B661D WT. of ONE 38#
B658D ϕ B662D do 46#
B659 D do 46#

REQ'D. NO	REQ'D. MARK	MADE UP OF NO	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
1	BG57D	1		L-3x3x5/16	G-3		112-18	38
1	BG61D	1			G-3			38
1	BG58D	1			7-7¼			46
1	BG62D	1			7-7¼			46
1	BG59D	1		L-3x3x5/16	7-7			46
								214.
								+ 6474.
						Gross wt.		6688.
						wt. DED.		6.
						Net wt.		6682.
						Paint		26.
						TOTAL wt.		6708.

J W.





FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL WASHERS 3/8" THICK UNLESS NOTED.

B457B-B557B WT. of ONE 291#
B465B-B565B WT. of ONE 357#

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

SWAY BRACING

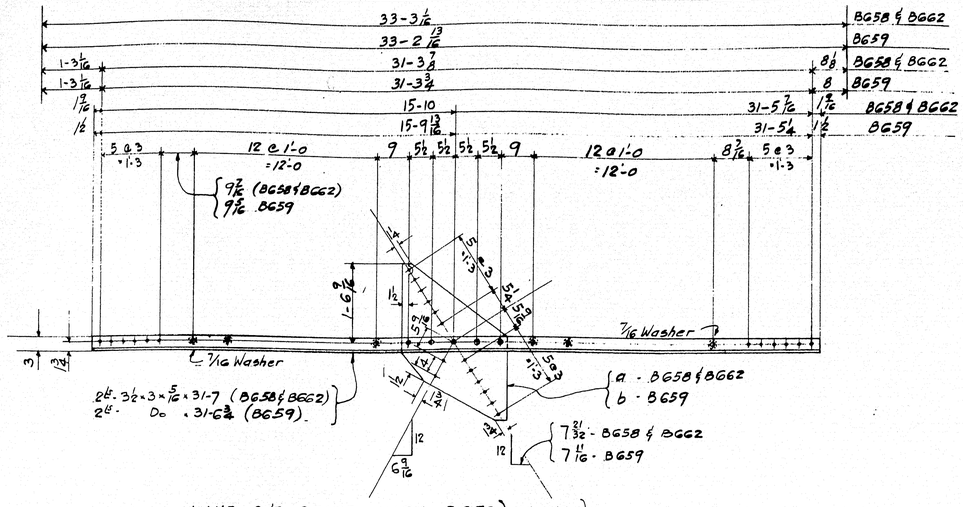
RIVETS 7/8 DIAM. · OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

REVISIONS

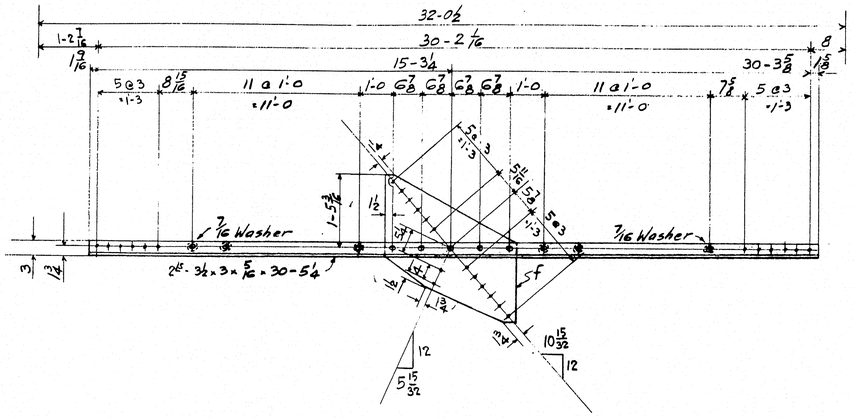
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

DRAW. MADE BY LK DATE 12-30-49
DRAW. CHECKED BY WP DATE 2-2-50
CONTRACT No. C378 SHEET No. 152

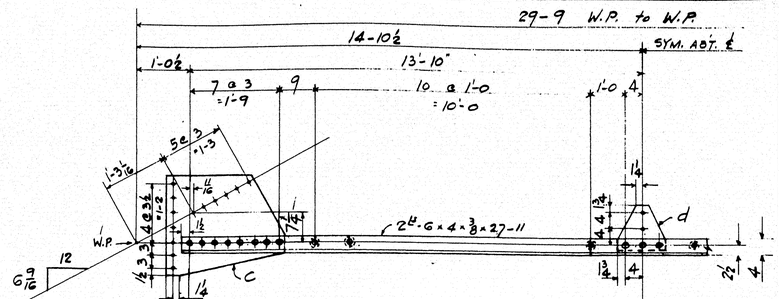
48-164



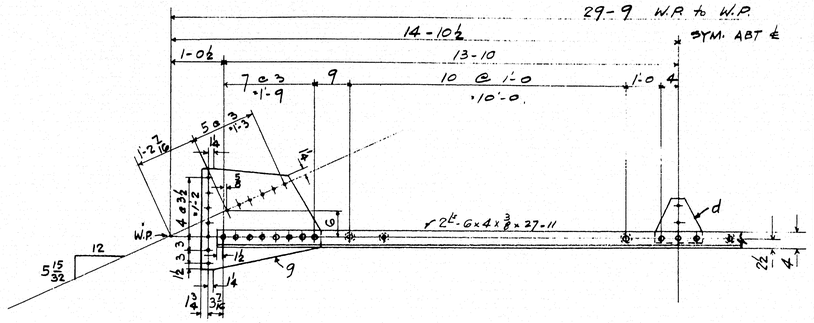
MAKE ONE BRACE - MARK BG58 } ALIKE
MAKE ONE BRACE - MARK BGG2 }
MAKE ONE BRACE - MARK BG59 } WT. OF ONE = 501.



MAKE ONE BRACE - MARK BG57 } ALIKE WT. OF ONE = 486.
MAKE ONE BRACE - MARK BGG1 }



WT. OF ONE = 840 { MAKE ONE BRACE - MARK BG58C / MAKE ONE BRACE - MARK BGG2C / MAKE ONE BRACE - MARK BG59C } ALIKE



WT. OF ONE = 838 { MAKE ONE BRACE - MARK BG57C / MAKE ONE BRACE - MARK BGG1C } ALIKE

REQ'D. Nº	MARK	Nº	PC. MK.	MADE UP OF SIZE	LGTH.	REMARKS	ORD.	WEIGHT	CUTS
1	BG58	2		L-3 1/2 x 3 x 5/16	31-7		9-422-5	417	—
1	BGG2	2		Do	31-7			417	—
1	BG59	2		Do	31-6 3/4		↓	417	—
		2	a	℄ 2 5/4 x 3/8	3-1 3/8	BG58-BGG2	9-423-5	201	73
		1	b	Do	3-1 3/8	BG59	Do	100	36
		6	Washer	2 1/16 x 7/16 thk		15/16 ℄ Hole		2	—
		72	Washer	2 1/16 x 3/8 thk		Do		19	—
		93	Riv.	7/8 ℄				33	—
1	BG58C	2		L-6 x 4 x 3/8	27-11		112-4	687	—
1	BGG2C	2		Do	27-11			687	—
1	BG59C	2		Do	27-11		↓	687	—
		6	c	℄ 2 3/4 x 3/8	2-3 3/4		9-423-5	415	60
		3	d	℄ 1 1/4 x 3/8	1 1/4		Do	42	9
		66	Washer	2 1/16 x 3/8 thk		15/16 ℄ Hole		18	—
		123	Riv.	7/8 ℄				44	—
1	BG57	2		L-3 1/2 x 3 x 5/16	30-5 1/4		9-422-5	402	—
1	BGG1	2		Do	30-5 1/4		Do	402	—
		2	f	℄ 30 3/4 x 3/8	2-10 1/2		9-423-5	226	97
		4	Washer	2 1/16 x 1/16 thk		15/16 ℄ Hole		1	—
		44	Washer	2 1/16 x 3/8 thk		Do		12	—
		58	Riv.	7/8 ℄				21	—
1	BG57C	2		L-6 x 4 x 3/8	27-11		112-4	687	—
1	BGG1C	2		Do	27-11		Do	687	—
		4	g	℄ 2 3/4 x 3/8	2-3 3/4		9-423-5	277	45
		2	d				Do	28	6
		44	Washer	2 1/16 x 3/8 thk		15/16 ℄ Hole		12	—
		82	Riv.	7/8 ℄				30	—
				Gross wt.				6971	
				Wt. DED.				326	
				Net. Wt.				6645	
				Paint				26	
				TOTAL WT.				6671	

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL WASHERS 3/8" THICK UNLESS NOTED.

SWAY BRACING

RIVETS 7/8 DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

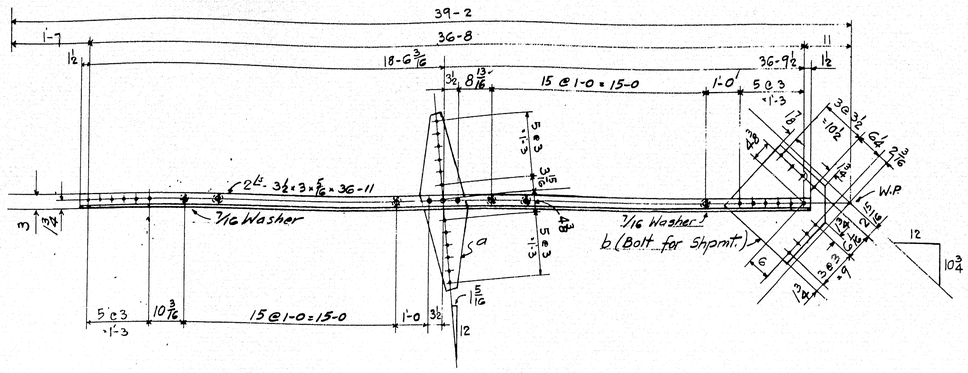
HARRIS STRUCTURAL STEEL CO.
610 FOURTH AVE., N. Y.

REVISIONS

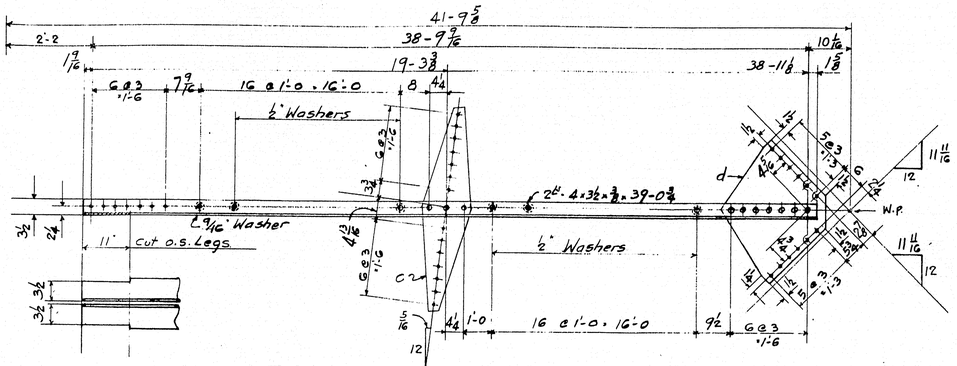
DRAW. MADE BY. LK DATE. 12-29-49
DRAW. CHECKED BY. W.P DATE. 2-2-50
CONTRACT No. C 378 SHEET No. 153

0 1 2 3 4 5 INCHES

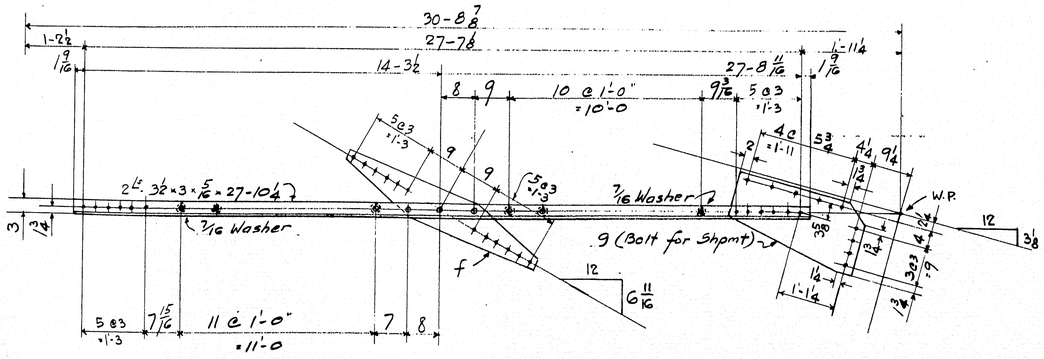
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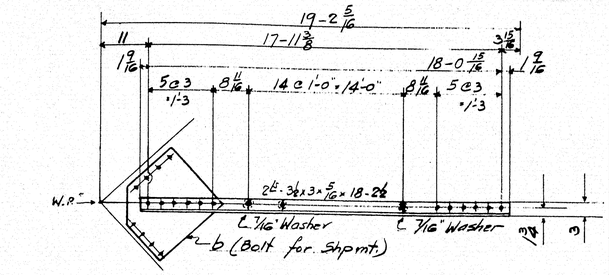
MAKE ONE BRACE - MARK B4G4 } ALIKE WT. OF ONE 579 #
MAKE ONE BRACE - MARK B5G4 }



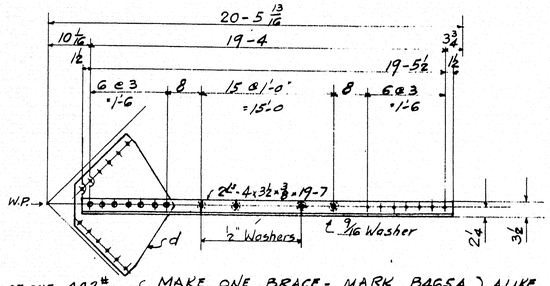
MAKE ONE BRACE - MARK B4G5 } ALIKE WT. OF ONE 814 #
MAKE ONE BRACE - MARK B5G5 }



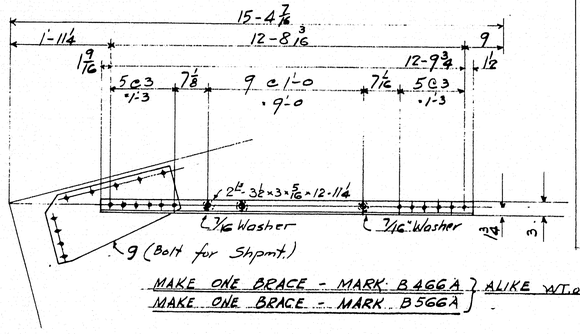
MAKE ONE BRACE - MARK B4G6 } ALIKE WT. OF ONE 472 #
MAKE ONE BRACE - MARK B5G6 }



WT. OF ONE 290 # { MAKE ONE BRACE - MARK B4G4A } ALIKE
{ MAKE ONE BRACE - MARK B5G4A }



WT. OF ONE 443 # { MAKE ONE BRACE - MARK B4G5A } ALIKE
{ MAKE ONE BRACE - MARK B5G5A }



MAKE ONE BRACE - MARK B4G6A } ALIKE WT. OF ONE 225 #
MAKE ONE BRACE - MARK B5G6A }

REQ'D. Nº	MARK	MADE UP OF Nº	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT	SHT. CUTS
1	B4G4	2		L-3½x3x5/16	36-11		9-422-2	487	-
1	B5G4	2		Do	36-11		Do	487	-
		2	a	⌀ 10 x ⅜	3-4¾		9-423-5	87	2 6
		2	b	⌀ 18¾ x ⅜	1-8⅜		Do	81	4
		4	Washer	2½ x 7/16 thk		15/16⌀ Hole		1	-
		60	Washer	2½ x ⅜ thk		Do		16	-
		70	Riv.	⅞⌀				25	-
		4	Bolt	⅞⌀	2½			2	-
1	B4G4A	2		L-3½x3x5/16	18-2½		9-422-2	240	-
1	B5G4A	2		Do	18-2½		Do	240	-
		2	b				9-423-5	81	4
		4	Washer	2½ x 7/16 thk		15/16⌀ Hole		1	-
		26	Washer	2½ x ⅜ thk		Do		7	-
		30	Riv.	⅞⌀				11	-
		4	Bolt	⅞⌀	2½			2	-
1	B4G5	2		L-4x3½x⅜	39-0¾		112-7	711	1
1	B5G5	2		Do	39-0¾		Do	711	1
		2	c	⌀ 12 x ½	3-11		9-423-1	160	5C
		2	d	⌀ 24¼ x ½	2-0¼		Do	167	2C
		2	Washer	2½ x 7/16 thk		15/16⌀ Hole		1	-
		66	Washer	2½ x ½ thk		Do		24	-
		88	Riv.	⅞⌀				32	-
1	B4G5A	2		L-4x3½x⅜	19-7		112-7	356	-
1	B5G5A	2		Do	19-7		Do	356	-
		2	d				9-423-1	167	2C
		2	Washer	2½ x 9/16 thk		15/16⌀ Hole		1	-
		30	Washer	2½ x ½ thk		Do		111	-
		46	Riv.	⅞⌀				17	-
1	B4G6	2		L-3½x3x5/16	27-10¼		9-422-1	368	-
1	B5G6	2		Do	27-10¼		9-422-1	368	-
		2	f	⌀ 10 x ⅜	4'-3		9-423-5	108	2T
		2	g	⌀ 16½ x ½	2-7		Do	109	1B
		4	Washer	2½ x 7/16 thk		15/16⌀ Hole		1	-
		42	Washer	2½ x ⅜ thk		Do		11	-
		52	Riv.	⅞⌀				19	-
		4	Bolt	⅞⌀	2½			2	-
1	B4G6A	2		L-3½x3x5/16	12-11¼		9-422-1	171	-
1	B5G6A	2		Do	12-11¼		9-422-1	171	-
		2	g				9-423-5	109	1B
		4	Washer	2½ x 7/16 thk		15/16⌀ Hole		1	-
		16	Washer	2½ x ⅜ thk		Do		4	-
		20	Riv.	⅞⌀				7	-
		4	Bolt	⅞⌀	2½			2	-

Gross Wt.	5933
Wt. D.E.D.	209
Net Wt.	5724
Paint	22
TOTAL Wt.	5746

J
W.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

SWAY BRACING

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL WASHERS ⅜" THICK UNLESS NOTED

RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

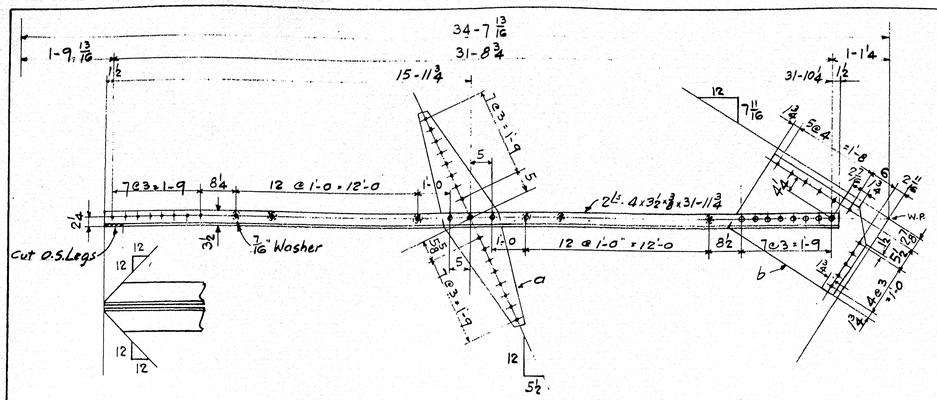
REVISIONS

HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

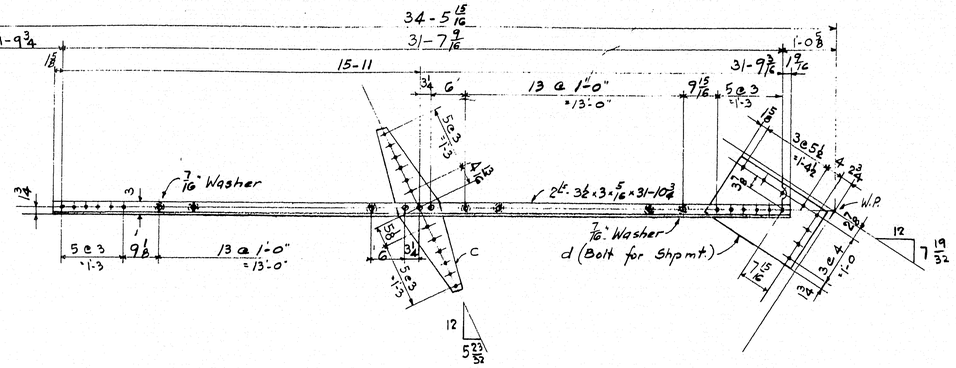
DRAW. MADE BY LK DATE 12-27-49
DRAW. CHECKED BY W.P. DATE 1-2-50
CONTRACT No. C378 SHEET No. 154

0 1 2 3 4 5 INCHES

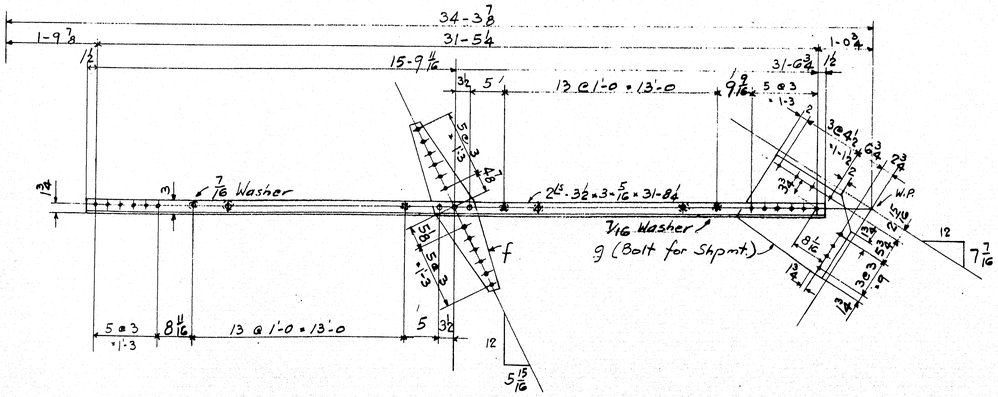
48-166



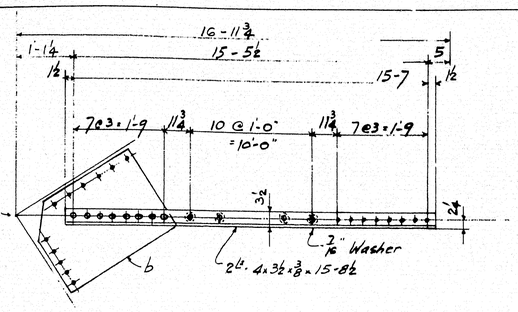
MAKE ONE BRACE - MARK B457 } ALIKE WT. OF ONE = 721
MAKE ONE BRACE - MARK B557



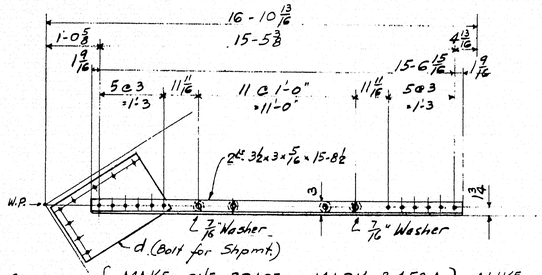
MAKE ONE BRACE - MARK B458 } ALIKE WT. OF ONE = 523
MAKE ONE BRACE - MARK B558



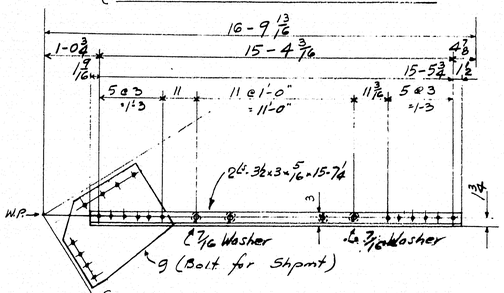
MAKE ONE BRACE - MARK B459 } ALIKE WT. OF ONE = 525
MAKE ONE BRACE - MARK B559



WT OF ONE = 363 { MAKE ONE BRACE - MARK B457A / MAKE ONE BRACE - MARK B557A } ALIKE



WT OF ONE = 256 { MAKE ONE BRACE - MARK B458A / MAKE ONE BRACE - MARK B558A } ALIKE



WT OF ONE = 262 { MAKE ONE BRACE - MARK B459A / MAKE ONE BRACE - MARK B559A } ALIKE

REQ'D.		MADE UP OF							
Nº	MARK	Nº	Pc. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT	
1	B457	2		L-4 x 3 1/2 x 3/8	31-11 3/4		112-6	582	1
1	B557	2		L - Do	31-11 3/4		Do	582	1
		2	a	PL 13 x 3/8	4-6 3/4		9-423-5	151	50
		2	b	PL 21/4 x 3/8	2-5 1/2		Do	133	2
		2	Washer	2 1/16 ø x 7/16 thk.		15/16 ø Hole		1	
		50	Washer	2 1/16 ø x 3/8 thk.		Do		14	
		74	Rivs.	7/8 ø				27	
1	B457A	2		L-4 x 3 1/2 x 3/8	15-8 1/2		112-6	286	
1	B557A	2		L - Do	15-8 1/2		Do	286	
		2	b				9-423-5	133	2
		2	Washer	2 1/16 ø x 7/16 thk		15/16 ø Hole		1	
		20	Washer	2 1/16 ø x 3/8 thk		Do		5	
		38	Rivs.	7/8 ø				14	
1	B458	2		L-3 1/2 x 3 x 5/16	31-10 3/4		9-422-5	421	
1	B558	2		L - Do	31-10 3/4		Do	421	
		2	c	PL 10 x 3/8	3-6 1/2		9-423-5	90	10
		2	d	PL 15 3/4 x 3/8	2'-0		Do	80	
		4	Washer	2 1/16 ø x 7/16 thk		15/16 ø Hole		1	
		52	Washer	2 1/16 ø x 3/8 thk		Do		14	
		62	Rivs.	7/8 ø				22	
		4	Bolts	7/8 ø	2 1/2			2	
1	B458A	2		L-3 1/2 x 3 x 5/16	15-8 1/2		9-422-5	207	
1	B558A	2		L - Do	15-8 1/2		Do	207	
		2	d				9-423-5	80	
		4	Washer	2 1/16 ø x 7/16 thk		15/16 ø Hole		1	
		20	Washer	2 1/16 ø x 3/8 thk		Do		5	
		24	Rivs.	7/8 ø				9	
		4	Bolts	7/8 ø	2 1/2			2	
1	B459	2		L-3 1/2 x 3 x 5/16	31-8 1/4		9-422-5	418	
1	B559	2		L - Do	31-8 1/4		Do	418	
		2	f	PL 10 x 3/8	3-6 1/2		9-423-5	90	10
		2	g	PL 18 1/2 x 3/8	2'-0		Do	94	2
		4	Washer	2 1/16 - 7/16 thk		15/16 ø Hole		1	
		52	Washer	2 1/16 - 3/8 thk		Do		14	
		62	Riv.	7/8 ø				22	
		4	Bolt	7/8 ø	2 1/2			2	
1	B459A	2		L-3 1/2 x 3 x 5/16	15-7 1/4		9-422-5	206	
1	B559A	2		L - Do	15-7 1/4		Do	206	
		2	9				9-423-5	94	2
		4	Washer	2 1/16 - 7/16 thk		15/16 ø Hole		1	
		20	Washer	2 1/16 - 3/8 thk		Do		5	
		24	Riv.	7/8 ø				9	
		4	Bolt	7/8 ø	2 1/2			2	

Gross Wt.	5359
Wt. DED.	80
Net Wt.	5279
PAINT	21
TOTAL Wt.	5300

J L

CUTS K

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

SWAY BRACING

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL WASHERS 3/8" THICK UNLESS NOTED.

RIVETS 7/8 DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

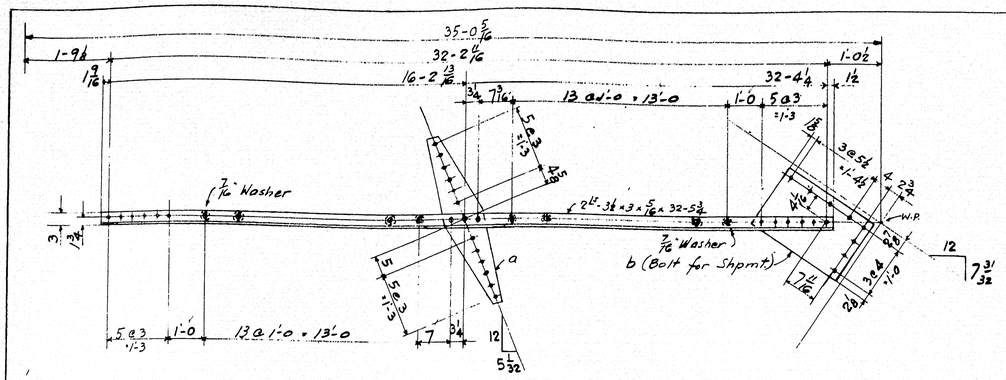
REVISIONS

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

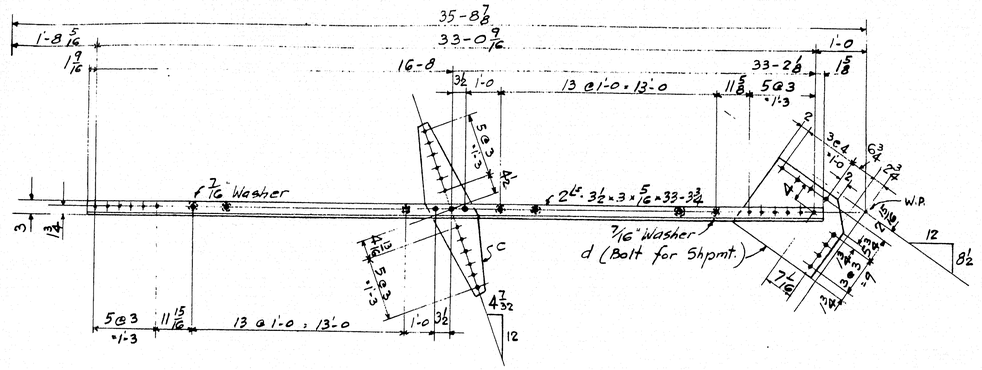
DRAW. MADE BY LK DATE 12-21-49
DRAW. CHECKED BY W.P DATE 2-2-50
CONTRACT No. C378 SHEET No. 55

48-167

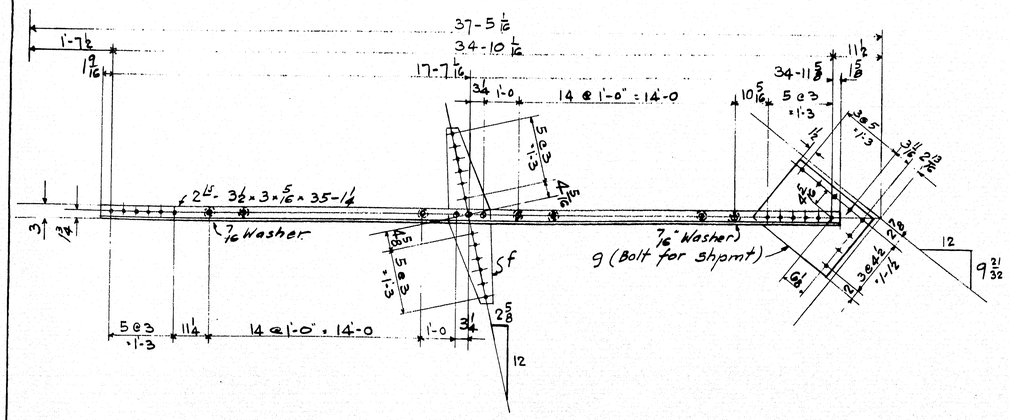
0 1 2 3 4 5 INCHES



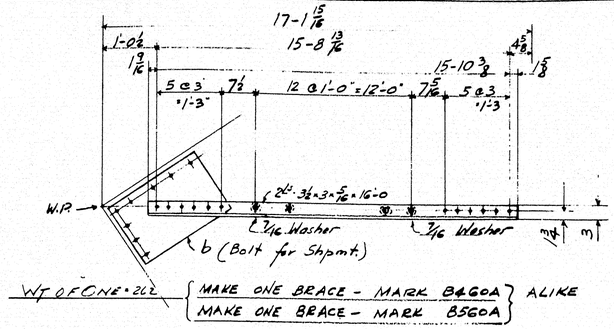
MAKE ONE BRACE - MARK B 460 } ALIKE Wt. OF ONE = 521
MAKE ONE BRACE - MARK B 560 }



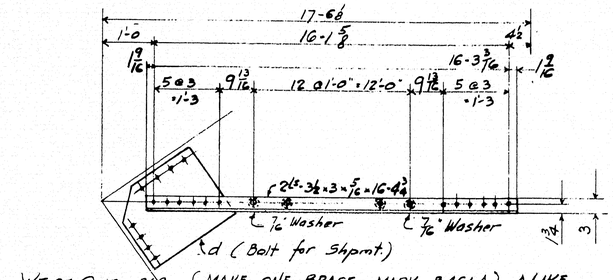
MAKE ONE BRACE - MARK B 461 } ALIKE Wt. OF ONE = 536
MAKE ONE BRACE - MARK B 561 }



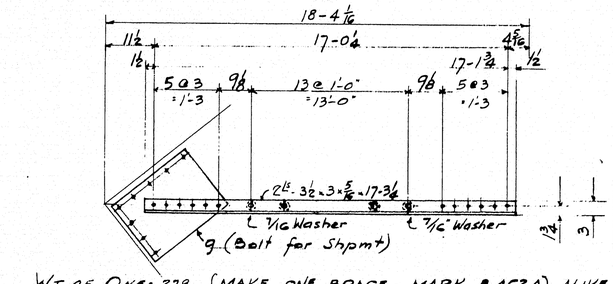
MAKE ONE BRACE - MARK B 462 } ALIKE Wt. OF ONE = 558
MAKE ONE BRACE - MARK B 562 }



Wt of One = 262 { MAKE ONE BRACE - MARK B 460A } ALIKE
{ MAKE ONE BRACE - MARK B 560A }



Wt of One = 269 { MAKE ONE BRACE - MARK B 461A } ALIKE
{ MAKE ONE BRACE - MARK B 561A }



Wt of One = 279 { MAKE ONE BRACE - MARK B 462A } ALIKE
{ MAKE ONE BRACE - MARK B 562A }

REQ'D.		MADE UP OF							
Nº	MARK	Nº	Pc. Mk.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT	32nds Cuts
1	B460	2		L 3 1/2 x 3 x 5/16	32-5 3/4		9-422-5	429	-
1	B560	2		Do	32-5 3/4		Do	429	-
		2	a	# 10 x 3/8	3-6 1/4		9-423-5	90	32
		2	b	# 16 1/2 x 3/8	2-0		Do	82	-
		4	Washer	2 1/16 ϕ x 7/16 thk		1 5/16 ϕ Hole		1	-
		52	Washer	2 1/16 ϕ x 3/8 thk		Do		14	-
		62	Riv.	7/8 ϕ				22	-
		4	Bolt	7/8 ϕ	2 1/2			2	-
1	B460A	2		L 3 1/2 x 3 x 5/16	16'-0		9-422-5	211	-
1	B560A	2		Do	16-0		Do	211	-
		2	b				9-423-5	82	-
		4	Washer	2 1/16 ϕ x 7/16 thk		1 5/16 ϕ Hole		1	-
		22	Washer	2 1/16 ϕ x 3/8 thk		Do		6	-
		26	Riv.	7/8 ϕ				9	-
		4	Bolt	7/8 ϕ	2 1/2			2	-
1	B461	2		L 3 1/2 x 3 x 5/16	33-3 3/4		9-422-4	440	-
1	B561	2		Do	33-3 3/4		Do	440	-
		2	c	# 10 x 3/8	3-6		9-423-5	89	26
		2	d	# 18 1/2 x 3/8	1-10 1/2		Do	89	3
		4	Washer	2 1/16 ϕ x 7/16 thk		1 5/16 ϕ Hole		1	-
		52	Washer	2 1/16 ϕ x 3/8 thk		Do		14	-
		62	Riv.	7/8 ϕ				22	-
		4	Bolt	7/8 ϕ	2 1/2			2	-
1	B461A	2		L 3 1/2 x 3 x 5/16	16-4 3/4		9-422-4	216	-
1	B561A	2		Do	16-4 3/4		Do	216	-
		2	d				9-423-5	89	3
		4	Washer	2 1/16 ϕ x 7/16 thk		1 5/16 ϕ Hole		1	-
		22	Washer	2 1/16 ϕ x 3/8 thk		Do		6	-
		26	Riv.	7/8 ϕ				9	-
		4	Bolt	7/8 ϕ	2 1/2			2	-
1	B462	2		L 3 1/2 x 3 x 5/16	35-1 1/4		9-422-3	463	-
1	B562	2		Do	35-1 1/4		Do	463	-
		2	f	# 10 x 3/8	3-5 1/2		9-423-5	88	27
		2	g	# 17 1/2 x 3/8	1-10		Do	82	-
		4	Washer	2 1/16 ϕ x 7/16 thk		1 5/16 ϕ Hole		1	-
		56	Washer	2 1/16 ϕ x 3/8 thk		Do		15	-
		66	Riv.	7/8 ϕ				24	-
		4	Bolt	7/8 ϕ	2 1/2			2	-
1	B462A	2		L 3 1/2 x 3 x 5/16	17-3 1/4		9-422-3	228	-
1	B562A	2		Do	17-3 1/4		Do	228	-
		2	g				9-423-5	82	-
		4	Washer	2 1/16 ϕ x 7/16 thk		1 5/16 ϕ Hole		1	-
		24	Washer	2 1/16 ϕ x 3/8 thk		Do		6	-
		28	Riv.					10	-
		4	Bolt		2 1/2			2	-

Gross Wt.	4922.
Wt. DED.	91.
Net Wt.	4831.
Paint	19.
TOTAL Wt.	4850.

J
L

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL WASHERS 3/8" THICK UNLESS NOTED.

SWAY BRACING

RIVETS 7/8 DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

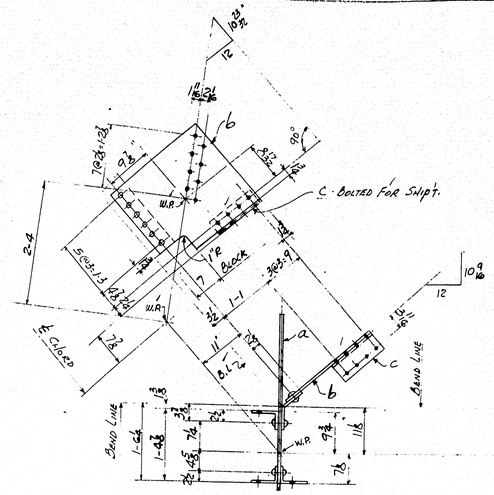
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

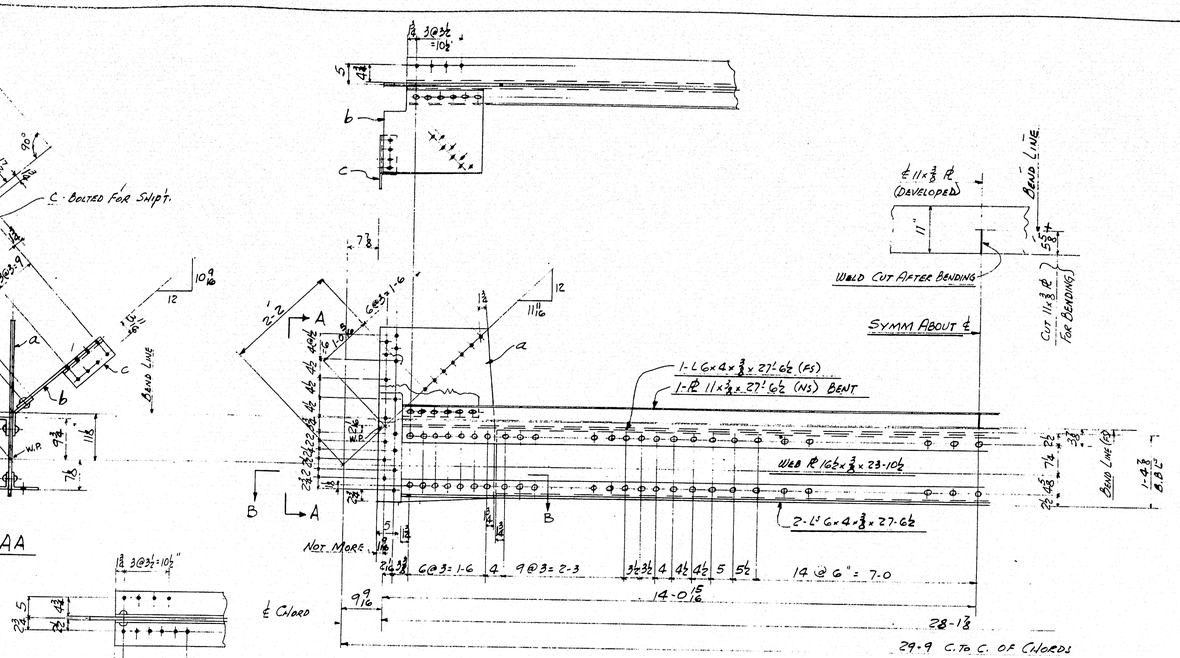
REVISIONS

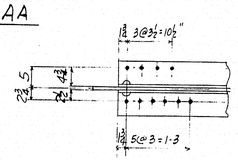
DRAW. MADE BY LK DATE 12-23-49
DRAW. CHECKED BY WB DATE 2-2-50
CONTRACT No. C 378 SHEET No. 156

48-168

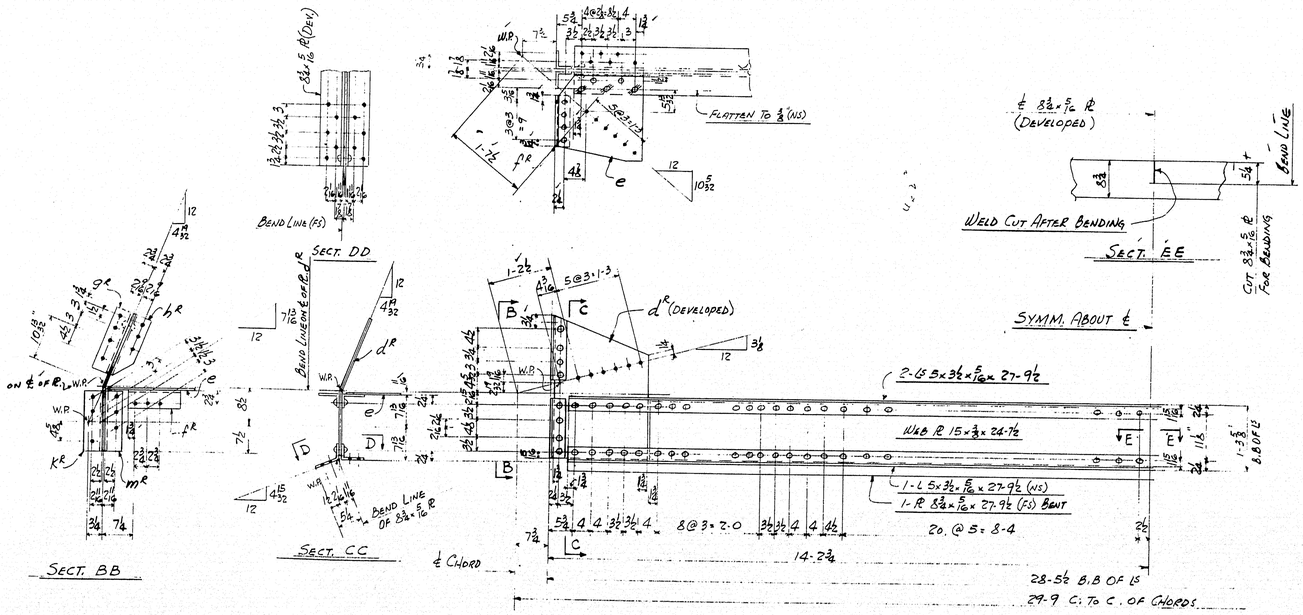
0 1 2 3 4 5 INCHES







MAKE ONE STRUT - MARK B449
MAKE ONE STRUT - MARK B528
} ALIKE WT OF ONE = 2425.



MAKE ONE STRUT - MARK B453
MAKE ONE STRUT MARK B524
} ALIKE WT. OF ONE = 1861

SHIPT NO	REQ'D NO	REQ'D MARK	MADE UP OF NO	PC MK	SIZE	LENGTH	REMARKS	ORD	WEIGHT	LOTS
4	1	B449								
5	1	B528								
			6		L 6×4×⅜	27-6½		111-3	2032	—
			2		PL 11×⅜	27-6½	BENT	9-442-12	773	—
			2		WEB PL 16½×⅜	23-10½		Do -12	1005	—
			4	a	PL 2⅝×½	3-5½		9-423-1	629	12
			4	b	PL 23½×⅜	2-1½		Do-5	253	12
			4	c	L 5×3½×⅜	1-0		119-8	42	—
			8		⅞ø BOLTS	2½			4	—
			324		⅞ø RIVS				117	—
4	1	B453								
5	1	B524								
			6		L 5×3½×5/16	27-9½		9-418-106	1451	—
			2		PL 8½×5/16	27-9½	BENT	9-442-14	517	—
			2		WEB PL 15×⅜	24-7½		9-419-52	942	—
			4	d℄	PL 22×⅜	2-10	BENT	9-423-5	318	40
			4	e	PL 19½×⅜	1-8½		Do	170	12
			4	f℄	L 4×3½×⅜	1-0½		119-9	38	—
			4	g℄	DO	1-3⅜			48	—
			4	h℄	DO	1-3⅜			48	2
			4	k℄	DO	1-3			46	1
			4	m℄	DO	1-3			46	1
			380		⅞ø RIVS				137	—
								GROSS WT.	8616	
								WT. DED.	78	
								NET WT.	8538	
								PAINT	34	
								TOTAL WT.	8572	

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

STRUTS (BOTTOM CHORD)

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

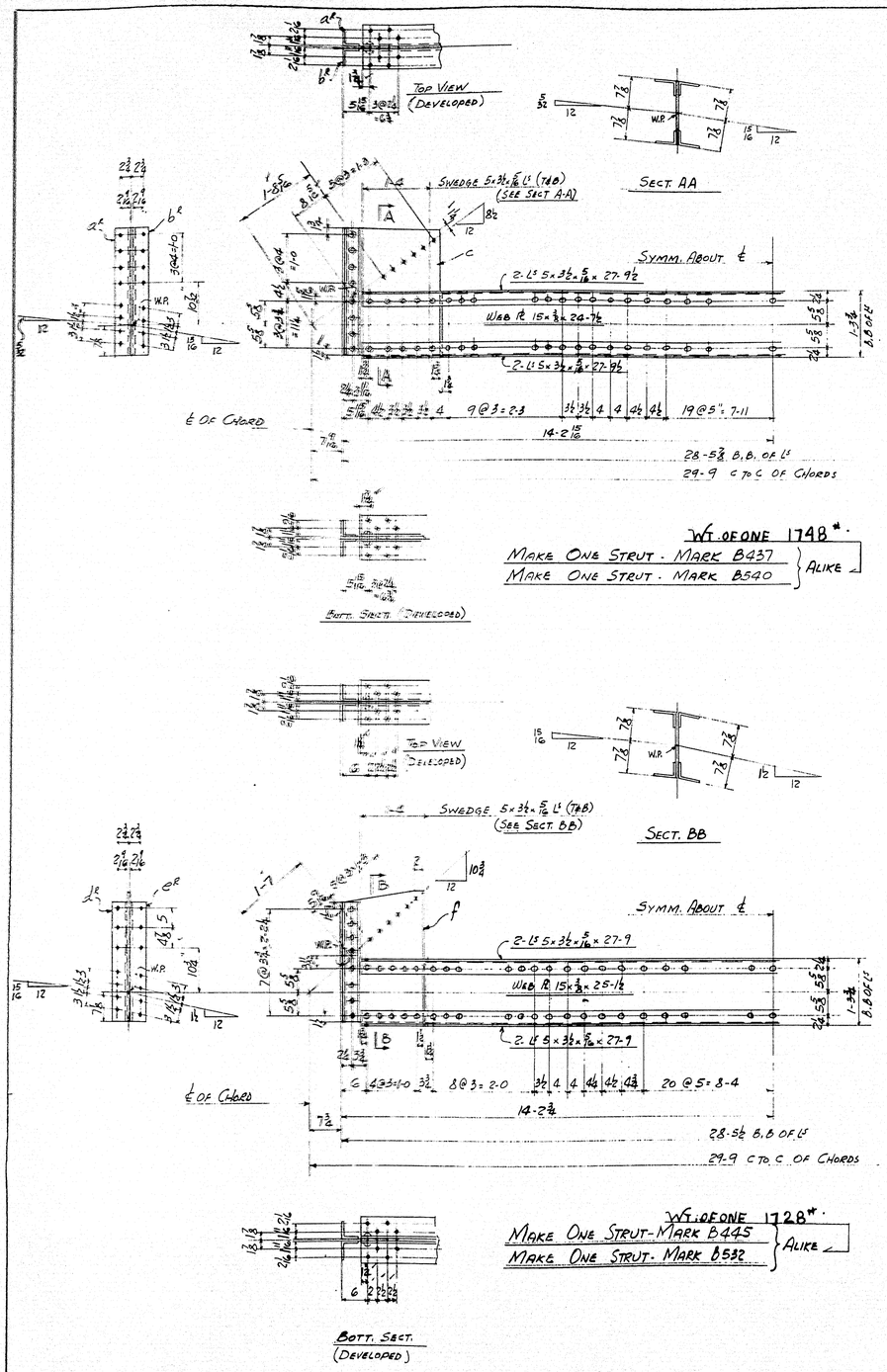
RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

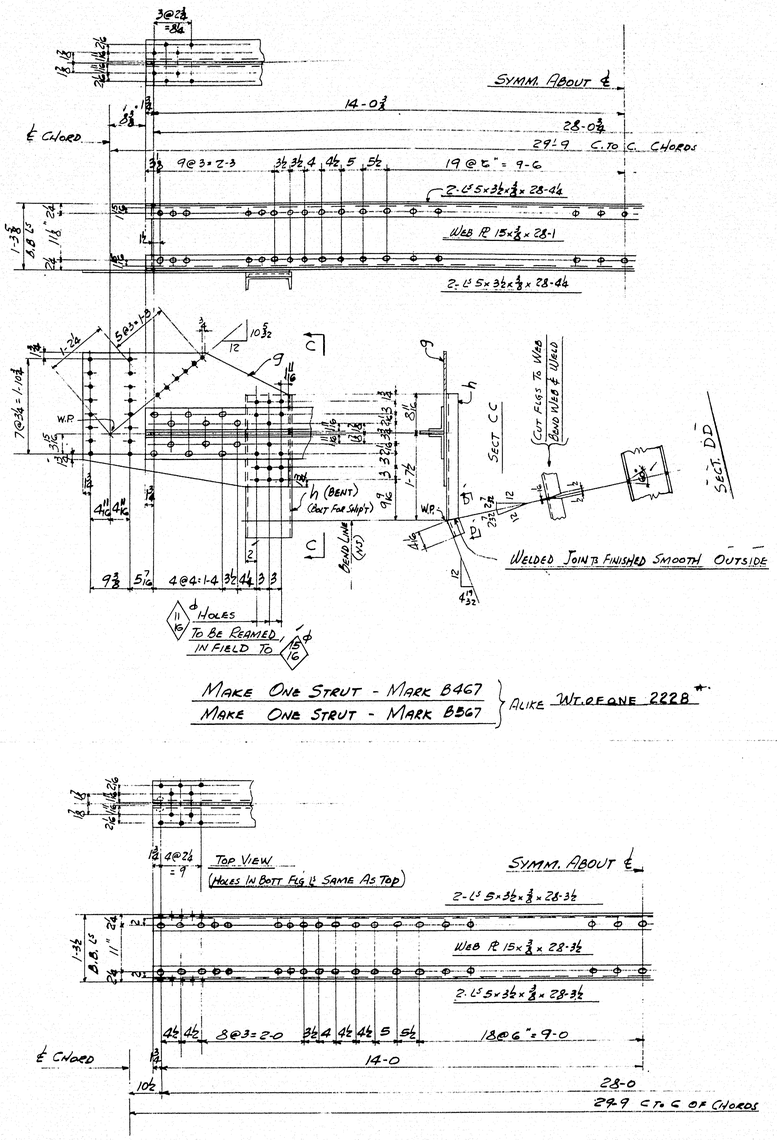
REVISIONS

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

DRAW. MADE BY CZ DATE 12-22-49
DRAW. CHECKED BY FT DATE 1-20-50
CONTRACT No. 2378 SHEET No. 157

48-169





Shipt. No	No	Reqd Mark	Made Up Of No	Pc Mk	Size	Length	Remarks	Ord	Weight	Cut
4	1	B437	1							K
5	1	B540	1							
			8		L's 5x3½x5/16	27-9½		9-418-107	1934	—
			2		Web PL 15x⅜	28-7½		9-419-52	942	—
			4	a²	L 4x3½x⅜	2-7		119-9	94	—
			4	b²	Do	2-7		Do	94	—
			4	C	PL 22½x⅜	2-7		9-423-5	293	—
			348		¾ϕ Rivs				125	—
4	1	B445								
5	1	B532	8		L's 5x3½x5/16	27-9		9-418-107	1931	—
			2		Web PL 15x⅜	25-1½		9-419-51	961	—
			4	d²	L 4x3½x⅜	2-5½		119-9	89	—
			4	e²	Do	2-5½		Do	89	—
			4	f	PL 19x⅜	2-7½		9-423-5	255	B
			348		¾ϕ Rivs				125	—
4	1	B467								
5	1	B567	8		L's 5x3½x⅜	28-4½		9-418-105	2359	—
			2		Web PL 15x⅜	28-1		9-419-50	1074	—
			4	g	PL 32½x7/16	4-0		9-423-2	768	95
			4	h	10C20.	2-8½	Bent For Shipt	119-3	215	—
			324	-	¾ϕ Rivs				117	—
			8		⅞ϕ Bolts	2½			2	—
6	2	BG43	8		L's 5x3½x⅜	28-3½		9-418-105	2354	—
			2		Web PL 15x⅜	28-3½		9-419-50	1082	—
			276		¾ϕ Rivs				99	—

Gross Wt. 15002
Wt. Ded. 103
Net Wt. 14899
Paint 59
Total Wt. 14958

W. J

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

Top ℄ Struts - (Bottom Chord)

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

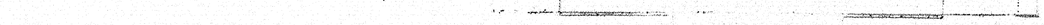
Rivets ⅞ Diam. Open Holes 15/16 Diam. Unless Otherwise Noted

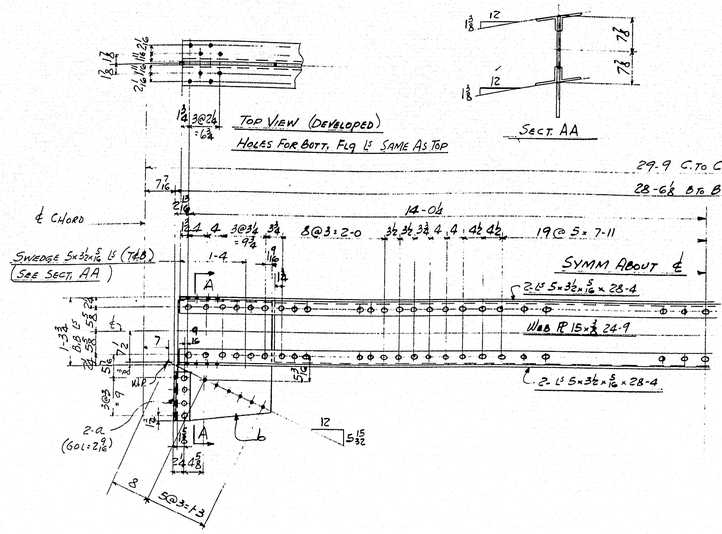
Revisions

Harris Structural Steel Co.
620 Fourth Ave., N. Y.

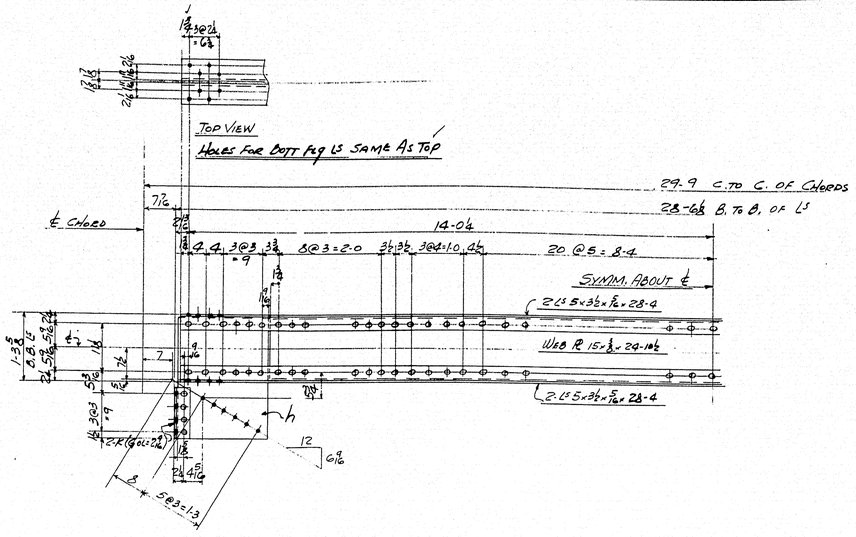
Drawn Made By C2 Date 12-22-49
Drawn Checked By FT Date 1-24-50
Contract No. C378 Sheet No. 158

48-170





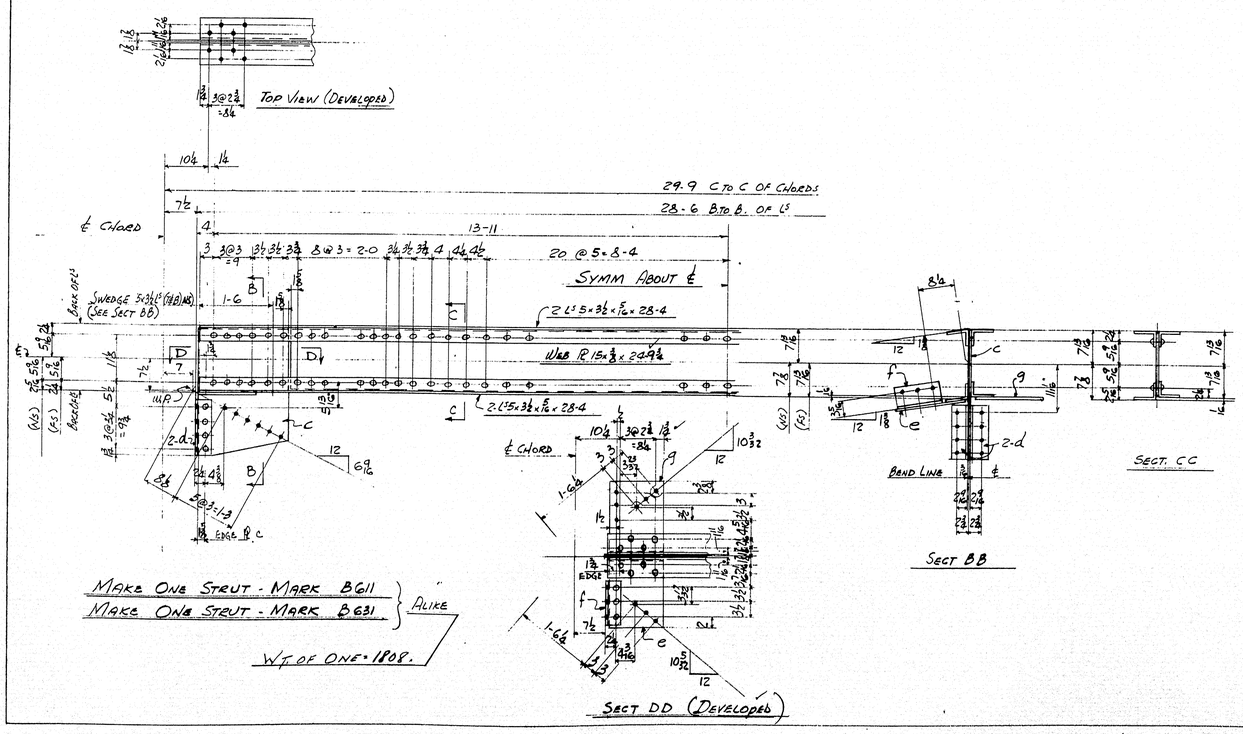
MAKE ONE STRUT - MARK BG07
MAKE ONE STRUT - MARK BG35
} ALIKE WT. OF ONE = 1697.



MAKE ONE STRUT - MARK BG15 WT. OF ONE = 1692.

SHT. No.	REQ'D No.	MARK	MADE UP OF No.	PL MK	SIZE	LENGTH	REMARKS	ORD	WEIGHT	CUT
G	1	BG07								K
G	1	BG35								
			8		L 5×3½×⅝	28-4	SWEDGE 2 ENDS	9-418-106	1972	—
			2		WEB PL 15×⅜	24-9		9-419-50	947	—
			8	a	L 4×3½×⅜	1-0½		119-9	76	—
			4	b	PL 2½×⅜	2-5¼		9-423-5	268	5
			340		⅞ϕ RIVS				122	—
G	1	BG11								
G	1	BG31								
			8		L 5×3½×⅝	28-4	SWEDGE ENDS ON 4 Ls ONLY	9-418-106	1972	—
			2		PL 15×⅜	24-9½		9-419-50	949	—
			4	c	PL 21×⅜	2-6		9-423-5	268	8
			8	d	L 4×3½×⅜	1-1¼		119-9	80	—
			4	e	PL 12×⅜	1-4		9-423-5	81	—
			4	f	L 5×3½×⅜	10"		119-8	35	—
			4	g	PL 12×½	1-4½		9-423-5	86	—
			384		⅞ϕ RIVS				138	—
G	1	BG15								
			4		L 5×3½×⅝	28-4		9-418-106	986	—
			1		PL 15×⅜	24-10½		9-419-50	476	—
			2	h	PL 20⅜×⅜	2-4¾		9-423-5	127	—
			4	k	L 4×3½×⅜	1-0		119-9	36	—
			170		⅞ϕ RIVS				61	—

GROSS WT. 8680.
WT. DED. 13.
NET WT. 8667.
PAINT 35.
TOTAL WT. 8702.



MAKE ONE STRUT - MARK BG11
MAKE ONE STRUT - MARK BG31
} ALIKE
WT. OF ONE = 1808.

STRUTS (TOP CHORD)

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

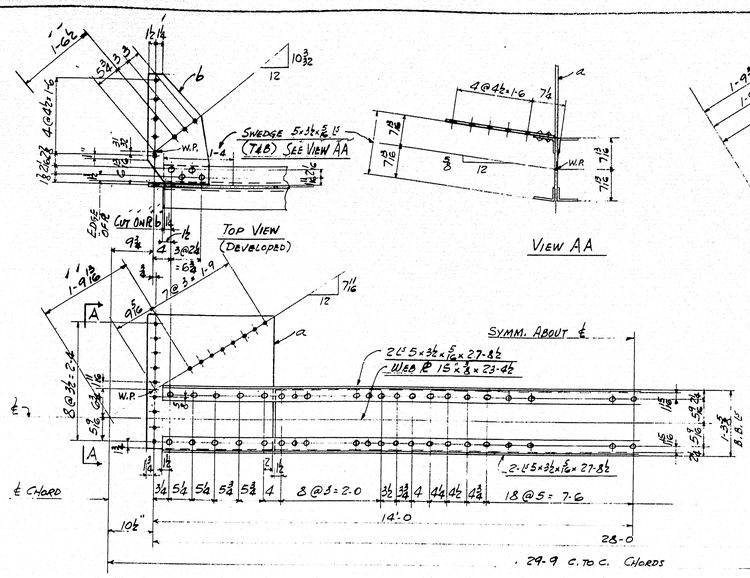
REVISIONS
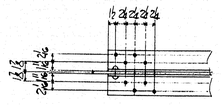
HARRIS STRUCTURAL STEEL CO.
618 FOURTH AVE., N. Y.

DRAW. MADE BY CZ DATE 12-29-49
DRAW. CHECKED BY ET DATE 1-23-50
CONTRACT No. 2378 SHEET No. 154

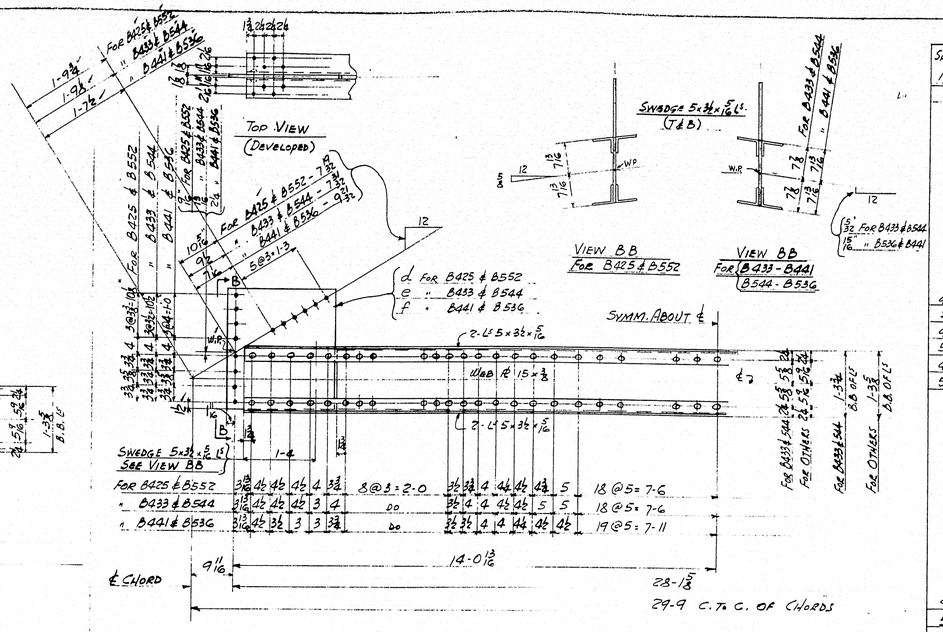
48-171

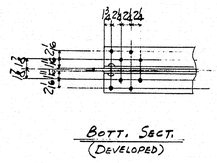
0 1 2 3 4 5 INCHES





MAKE ONE STRUT MARK B421
MAKE ONE STRUT MARK B536
} ALIKE WT. OF ONE = 1732.



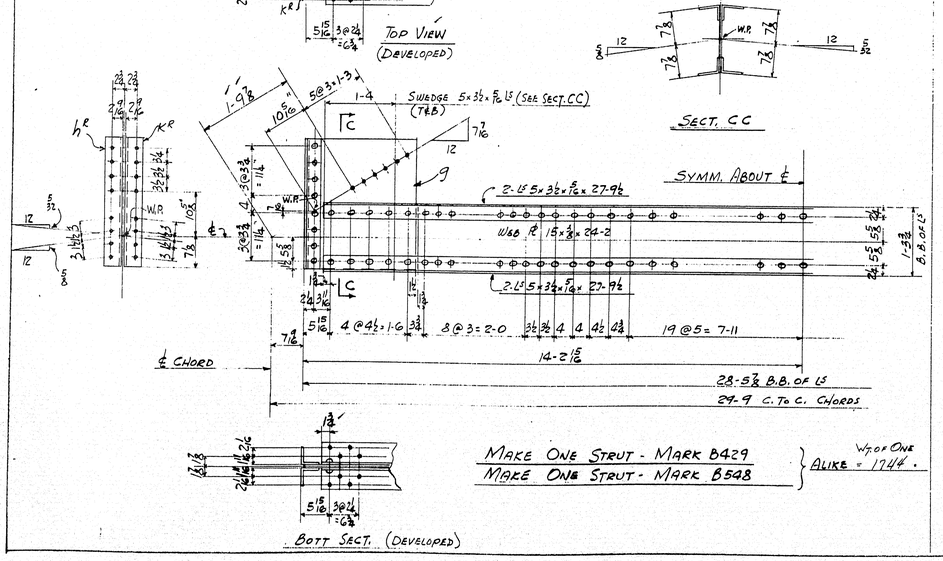


MAKE ONE STRUT - MARK B425 } ALIKE 1641.
B552
B433 } ALIKE 1643.
B544
B441 } ALIKE 1639.
MAKE ONE STRUT - MARK B536

Wt. of One

Shipt No	Req'd No	Mark No	Pc Mk	Size	Length	Remarks	Ord	Weight	Cuts
4	1	B421							
5	1	B536							
			8	L 5×3½×5/16	27-8½		9-418-107	1929.	
			2	Web R 15×⅜	23-4½		9-419-53	895.	
			4	a R 32×⅜	2-5		9-423-5	395.	
			4	b R 13⅜×⅜	2-1⅞		Do.	151.	33
			316	⅞ϕ Rivs				114.	
4	1	B425							
5	1	B552							
4	1	B433							
5	1	B544							
4	1	B441							
5	1	B536							
			24	L 5×3½×5/16	27-9½	Swedge 2 Ends	9-418-107	5803.	
			2	Web R 15×⅜	24-3	For B425 & B552	9-419-52	928.	
			2	Do	24-4½	" B433 & B544	Do	933.	
			2	Do	24-10	" B441 & B536	9-419-51	950.	
			4	d R 20⅝×⅜	2-9½	For B425 & B552	9-423-5	294.	
			4	e R 23⅜×⅜	2-5	" B433 & B544		293.	
			4	f R 21×⅜	2-6⅜	" B441 & B536		269.	
			932	⅞ϕ Rivs				336.	
4	1	B429							
5	1	B548							
			8	L 5×3½×5/16	27-9½	Swedge 2 Ends	9-418-107	1934.	
			2	Web R 15×⅜	24-2		9-419-52	925.	
			4	g R 25×⅜	2-7½		9-423-5	314.	
			4	hℓ L 4×3½×⅜	2-5½			90.	
			4	kℓ Do	2-5½			90.	
			340	⅞ϕ Rivs				122.	
				Gross Wt.				16765.	
				Wt. Ded.				33.	
				Net Wt.				16732.	
				Paint				66.	
				Total Wt.				16798.	

J
BY W.



MAKE ONE STRUT - MARK B429
MAKE ONE STRUT - MARK B548
} ALIKE = 1744. Wt of One

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

STRUTS (BOTTOM CHORD)

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X-50

RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

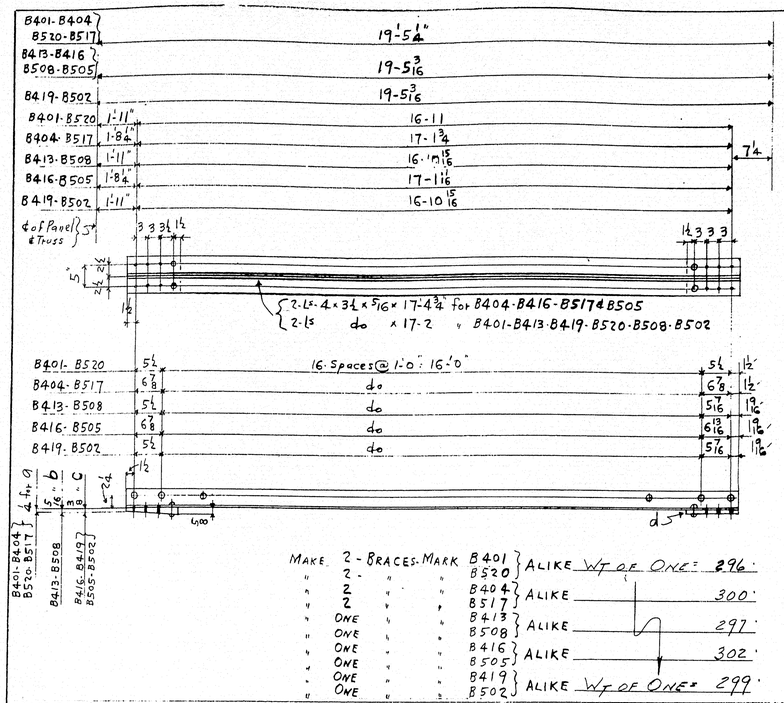
REVISIONS

HARRIS STRUCTURAL STEEL CO.
119 FOURTH AVE., N. Y.

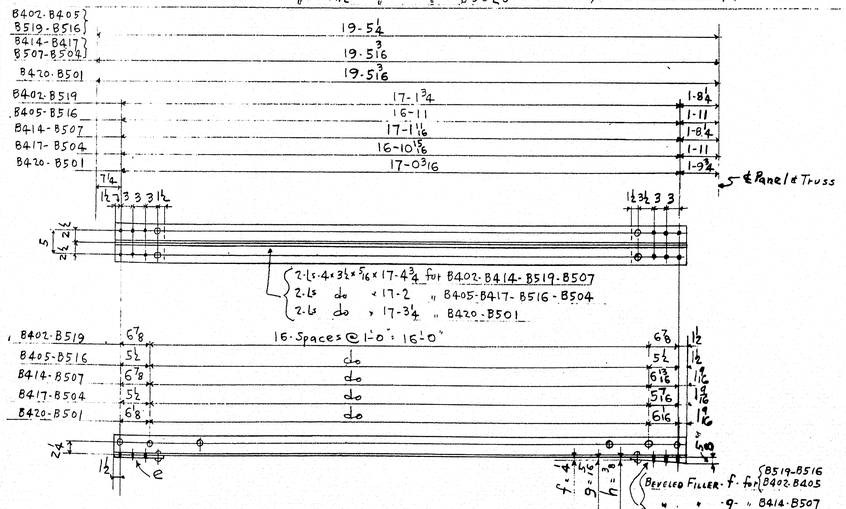
DRAW. MADE BY CZ DATE 12-16-49
DRAW. CHECKED BY FT DATE 1-25-50
CONTRACT No. C 373 SHEET No. 160

48-172

0 1 2 3 4 5 INCHES



MAKE 2 - BRACES MARK B401 } B520 } ALIKE WT OF ONE = 296
" 2 " " B404 } B517 } ALIKE 300
" 2 " " B413 } B508 } ALIKE 297
" ONE " " B416 } B505 } ALIKE 302
" ONE " " B419 } B502 } ALIKE WT OF ONE = 299



MAKE 2 BRACES MARK B402 } B519 } ALIKE WT OF ONE = 307
" 2 " " B405 } B516 } ALIKE 303
" 2 " " B414 } B507 } ALIKE 308
" ONE " " B417 } B504 } ALIKE 305
" ONE " " B420 } B501 } ALIKE WT OF ONE = 307

READ No	MARK	No	Pc MK	MADE UP OF SIZE	LENGTH	REMARKS	ORD	WEIGHT
2	B401							
2	B520							
1	B413							
1	B508	16		L 4 x 3 1/2 x 5/16	17-2		14-9-418-95 2-109-9	2115 -
1	B419							
1	B502							
2	B404							
2	B517							
1	B416	12		L 4 x 3 1/2 x 5/16	17-4 3/4		109-9	1608 -
1	B505							
		8	a	Pls 8 x 5/8	1-0 1/2	BEVELED for B401-B404 " B520-B517	119-19	141 - 42
		2	b	Pls 8 x 5/8	1-0 1/2	" B413-B508		35 - 9
		4	c	Pls 8 x 5/8	1-0 1/2	" B416-B419 " B505-B502		71 - 14
		14	d	Pls 8 x 3/8	1-0		9-423-5	143 -
		322		Rivets 7/8" ø				116 -
2	B402							
2	B519							
1	B414	12		L 4 x 3 1/2 x 5/16	17-4 3/4		109-9	1608 -
1	B507							
1	B420	4		L 4 x 3 1/2 x 5/16	17-3 1/4		109-9	532 -
1	B501							
2	B405							
2	B516							
1	B417	12		L 4 x 3 1/2 x 5/16	17-2		9-418-95	1587 -
1	B504							
		14	e	Pls 8 x 5/8	1-0		119-19	238 -
		8	f	Pls 8 x 5/8	1-0 1/2	for B519-B516 " B402-B405		141 - 42
		2	g	Pls 8 x 5/8	1-0 1/2	" B414-B507		35 - 9
		4	h	Pls 8 x 5/8	1-0 1/2	" B417-B420 " B504-B501		71 - 14
		322		Rivets 7/8" ø				116 -
						BEVELED		
						Gross Wt.		8557 -
						Wt. DED.		130 -
						Net Wt.		8427 -
						PAINT		33 -
						TOTAL Wt.		8460 -

J
B.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-184 (2)
CONTRACT No. 2

BRACES - B401-B407-B404-B405-B413
B414-B416-B417-B419-B420
B501-B502-B504-B505-B507
B508-B516-B517-B519-B520

*SEE NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET #80

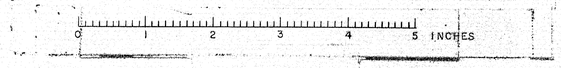
RIVETS 7/8 DIAM. OPEN HOLES 15/16 DRILL UNLESS OTHERWISE NOTED

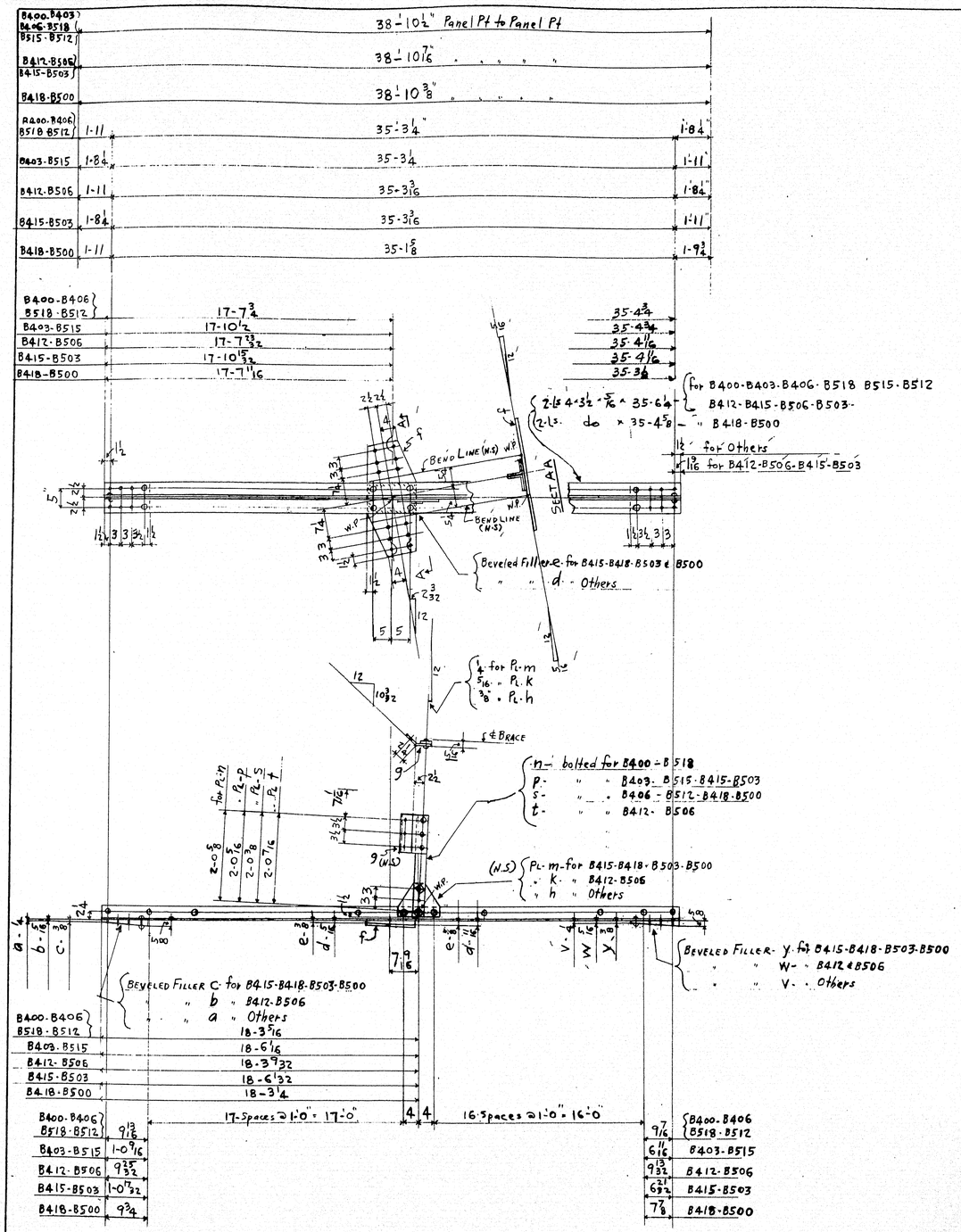
HARRIS STRUCTURAL STEEL CO.
110 FOURTH AVE., N. Y.

REVISIONS

DRAWN MADE BY N.M. DATE 12-20-43
DRAWN CHECKED BY W.P. DATE 2-3-44
CONTRACT No. 2378 SHEET No. 161

48-173





REQUIRED LIST

MAKE ONE BRACE MARK	B400		
" ONE " "	B406	ALIKE WT. OF ONE = 676	
" ONE " "	B512		
" ONE " "	B518		
" 2 " "	B403	ALIKE WT. OF ONE = 676	
" 2 " "	B515		
" ONE " "	B412	ALIKE WT. OF ONE = 676	
" ONE " "	B506		
" ONE " "	B415	ALIKE WT. OF ONE = 673	
" ONE " "	B503		
" ONE " "	B418	ALIKE WT. OF ONE = 672	
" ONE " "	B500		

READ No	READ MARK	MADE UP OF No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT
1	B400							
1	B406					ALIKE		
1	B512							
1	B518							
2	B403					ALIKE		
2	B515	24		15-4"x3½"x 5/16	35-6¼		109-9	6564 —
1	B412					ALIKE		
1	B506							
1	B415					ALIKE		
1	B503							
1	B418					ALIKE		
1	B500	4		15-4"x3½"x 5/16	35-4⅝		9-418-95	1090 —
		8	a	Pls 8"x 5/8	1-0½	beveled	119-19	141. 24
		2	b	Pls 8"x 5/8	1-0½	beveled		35. 6
		4	c	Pls 8"x 5/8	1-0½	beveled		71. 12
		10	d	Pls 8"x 11/16	1-1	beveled	119-16	202. —
		4	e	Pls 8"x 5/8	1-1	beveled	D2-19	73. —
		14	f	Pls 13"x 3/8	2-6½	bent	9-423-5	590. 100
		14	g	Pl 10"x 5/16	0-7½	bent	9-423-6	94. —
		8	h	Pls 9"x 5/16	0-11	for B400-B406-B518-B512 & B403-B515-B418		70. 8
		2	K	Pls 9"x 5/16	0-11	" B412-B506		18. 2
		4	m	Pls 9"x 5/16	0-11	" B415-B503 & B400-B500		35. 4
		2	n	Bar 3"x 3/8	2-3 5/8	" B400-B518	114-11	18. —
		6	p	Bar 3"x 3/8	2-3 5/16	" B403-B515 & B415-B503		52. —
		4	s	Bar 3"x 3/8	2-3 3/8	" B406-B418 & B512-B500		35. —
		2	t	Bar 3"x 3/8	2-3 7/16	" B412-B506		18. —
		8	v	Pls 8"x 5/8	1-0½	beveled	119-9	141. 24
		2	w	Pls 8"x 3/8	1-0½	beveled		35. 6
		4	y	Pls 8"x 5/8	1-0½	beveled		71. 12
		672		RIVETS 7/8"				242. —
		28		BOLTS 7/8"	x 2½			15. —
						GROSS WT		9610.
						WT. DED.		198.
						NET WT.		9412.
						PAINT		38.
						TOTAL WT.		9450.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2
BRACES. B400-B403-B406-B412-B415-B418
" B500-B503-B506-B512-B515-B518

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET K80

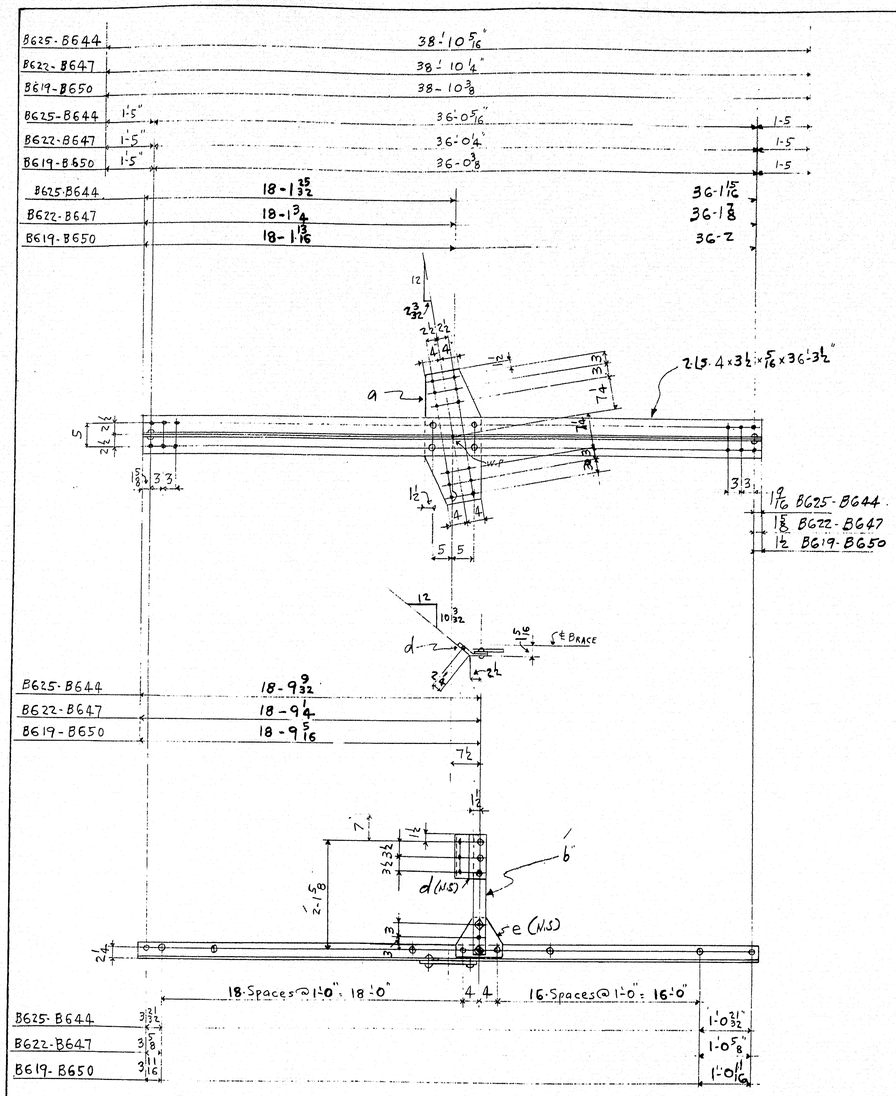
SHEET 9" GAGE OPEN HOLES 15/16" GAGE UNLESS OTHERWISE NOTED

REVISIONS

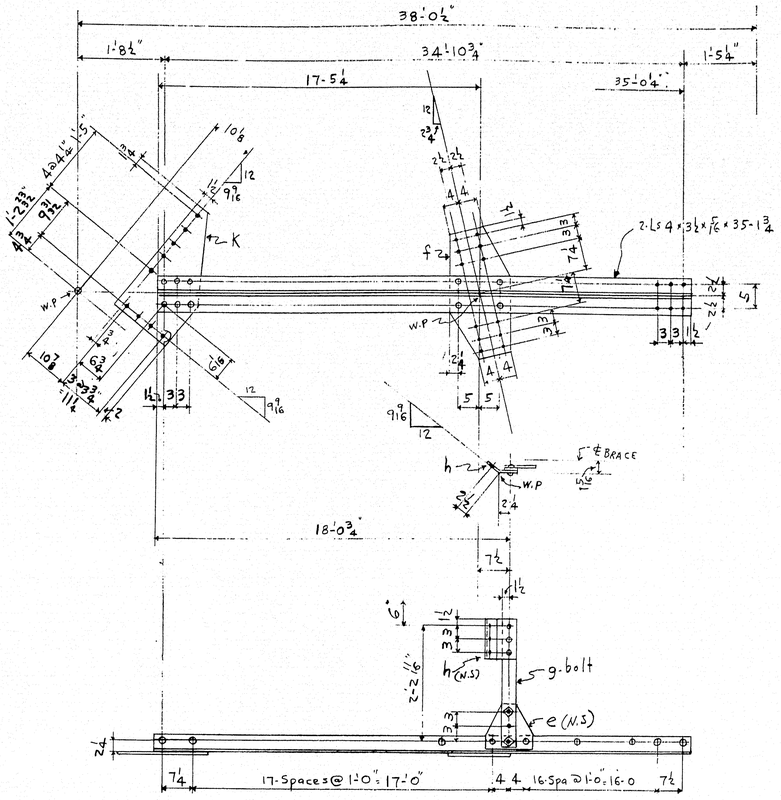
HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

DRAW. MADE BY N M DATE 12-19-49
DRAW. CHECKED BY W P DATE 2-3-50
CONTRACT No. 5378 SHEET No. 162

48-174



MAKE ONE BRACE MARK B625 } ALIKE
" ONE " " B644 }
" ONE " " B622 } ALIKE
" ONE " " B647 }
" ONE " " B619 } ALIKE
" ONE " " B650 }
Wt. OF ONE = 637.



MAKE ONE BRACE MARK B616 } ALIKE
" ONE " " B653 }
Wt. OF ONE = 655.

REQD No	MARK	No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT
1	B625					ALIKE		
1	B644							
1	B622	12		6 x 4 x 3/4 x 5/16	36-3 1/4	ALIKE	9-418-95 109-9	3353. —
1	B647							
1	B619					ALIKE		
1	B650							
		6	a	Pls 13 x 3/8	2-6 1/2		9-423-5	253. 40
		6	b	Bars 3 x 3/8	2-4 5/8		114-11	55. —
		6	d	Pls 9 x 5/16	0-8	bent	9-423-6	38. —
		6	e	Pls 9 x 5/16	0-11		Db	53. 7
		270		Rivets 7/8" ϕ				97. —
		12		Bolts 7/8" ϕ x 2 1/2"				6. —
1	B616							
1	B653	4		Ls 4 x 3 1/2 x 5/16	35-1 3/4	ALIKE	9-418-95	1083. —
		2	f	Pls 14 1/2 x 3/8	2-6 1/2		9-423-5	94. 18
		2	g	Bars 3 x 3/8	2-5 3/4		114-11	19. —
		2	h	Pls 9 x 5/16	0-7 3/4	bent	9-423-6	12. —
		2	e				Dc	18. 2
		2	K	Pls 15 1/2 x 3/8	2-6 1/4		9-423-5	100. 40
		100		Rivets 7/8" ϕ				36. —
		4		Bolts 7/8" ϕ x 2 1/2"				2. —
						Gross wt.		5219.
						wt. DED.		107.
						Net wt.		5112.
						Paint		20.
						TOTAL wt.		5132.

QUS K

J

B.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BRACES · B616-B619-B622-B625
B644-B647-B650-B653

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

SHEETS 7/8 DRAM. OPEN HOLES 15/16 DRAM. UNLESS OTHERWISE NOTED

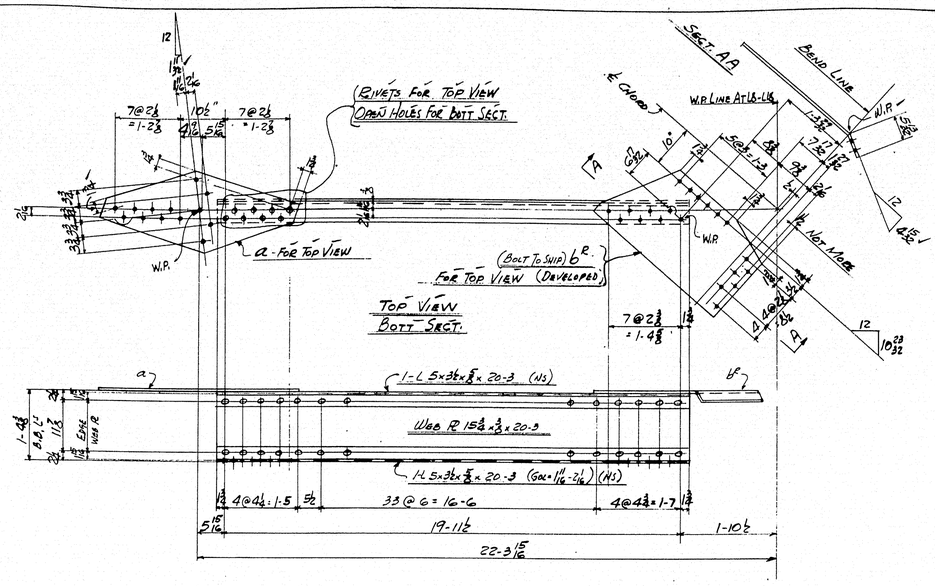
REVISIONS

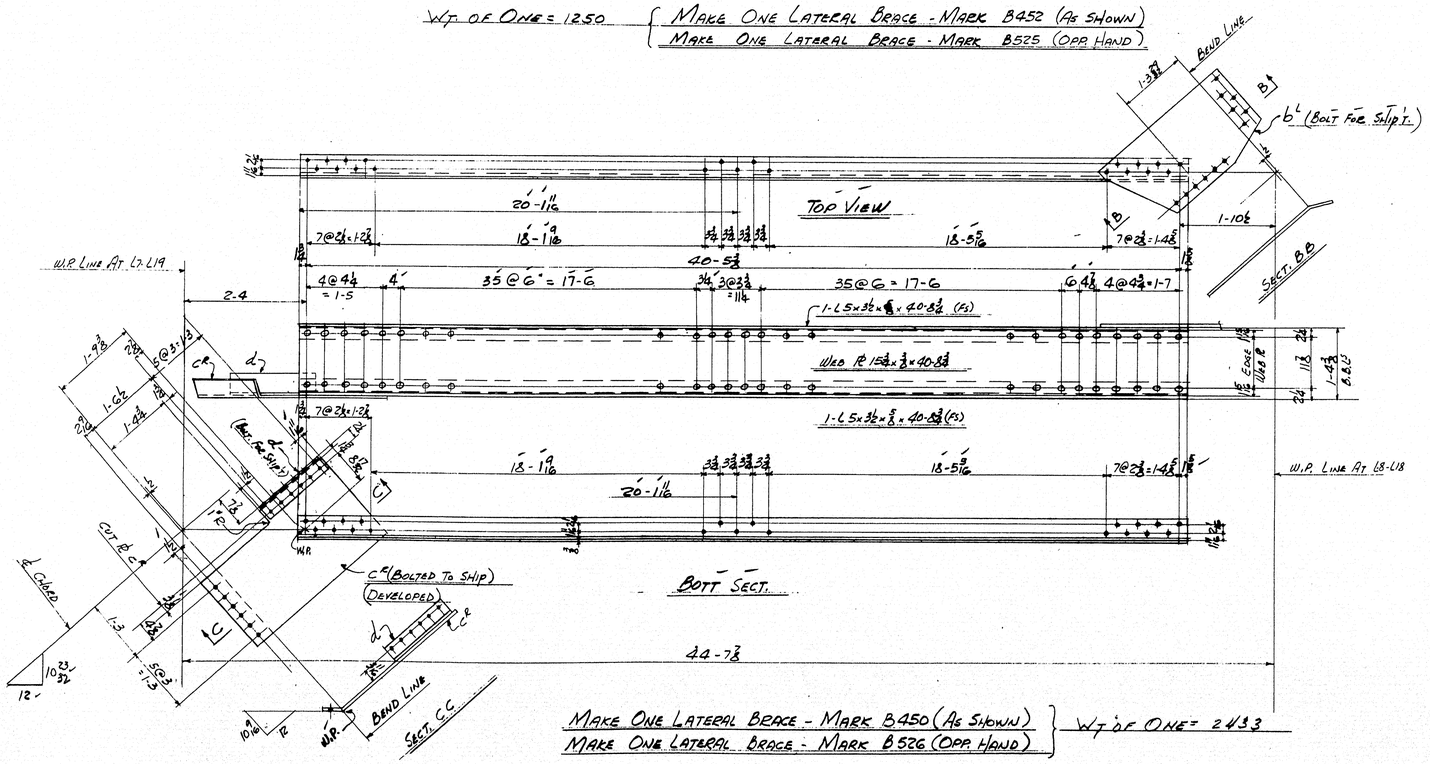
HARRIS STRUCTURAL STEEL CO.
119 FOURTH AVE., N. Y.

DRAWN MADE BY N M DATE 12-21-49
DRAWN CHECKED BY W P DATE 2-3-50
CONTRACT No. C 378 SHEET NO. 163

48-175

0 1 2 3 4 5 INCHES





SHIPT MK	REQ'D No	REQ'D MARK	MADE UP OF No	PC. MK	SIZE	LENGTH	REMARKS			NET CWTS
AS SHOWN	4	1	B452							
OPP HAND	5	1	B525							
			2		WEB PL 15⅝ x ⅜	20-3		9-419-54	813.	-
			4		L 5 x 3½ x ⅝	20-3		9-418-91	1361.	-
			1	a	PL 18 x ½	3-5½		9-423-5	159.	46
			1	b^R	PL 19½ x ½	3-0½	BENT	Do	152.	19
			168		⅞ ϕ RIVS				68.	-
			4		⅞ ϕ BOLTS	2½			2.	-
AS SHOWN	1	B450								
OPP HAND	1	B526								
			2		WEB PL 15⅝ x ⅜	40-8½		9-419-55	1636.	-
			4		L 5 x 3½ x ⅝	40-8½		9-418-92	2737.	-
			2	b^L				9-423-5	152.	19
			2	c^L	PL 23½ x ½	3-3½	BENT	Do	194.	14
			2	d	L 5 x 3½ x ⅜	1-6		119-8	31.	-
			344		⅞ ϕ RIVS				124.	-
			12		⅞ ϕ BOLTS	2½			6.	-
					GROSS WT				7435.	
					WT DED.				98.	
					NET WT.				7337.	
					PAINT				69.	
					TOTAL WT				7406.	

J

B'

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

LATERAL BRACING (BOTTOM)

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X80

RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

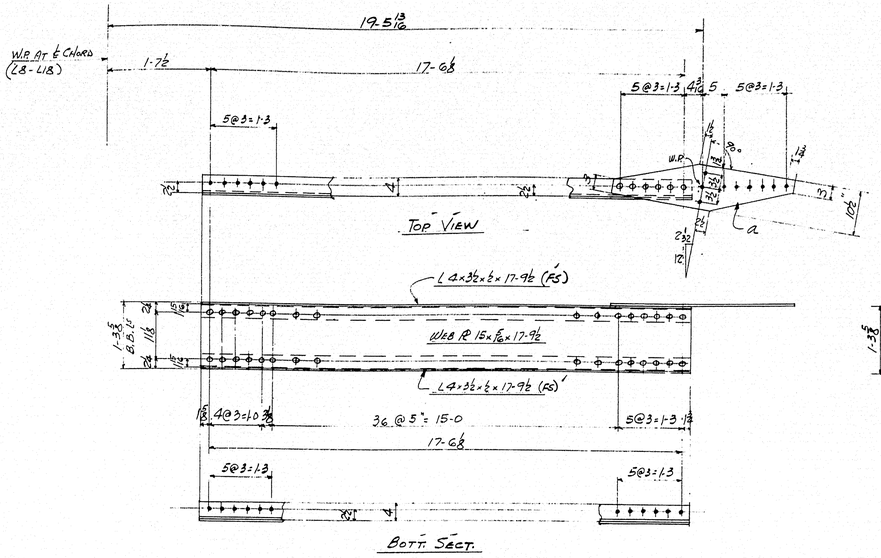
REVISIONS

HARRIS STRUCTURAL STEEL CO.
608 FOURTH AVE., N. Y.

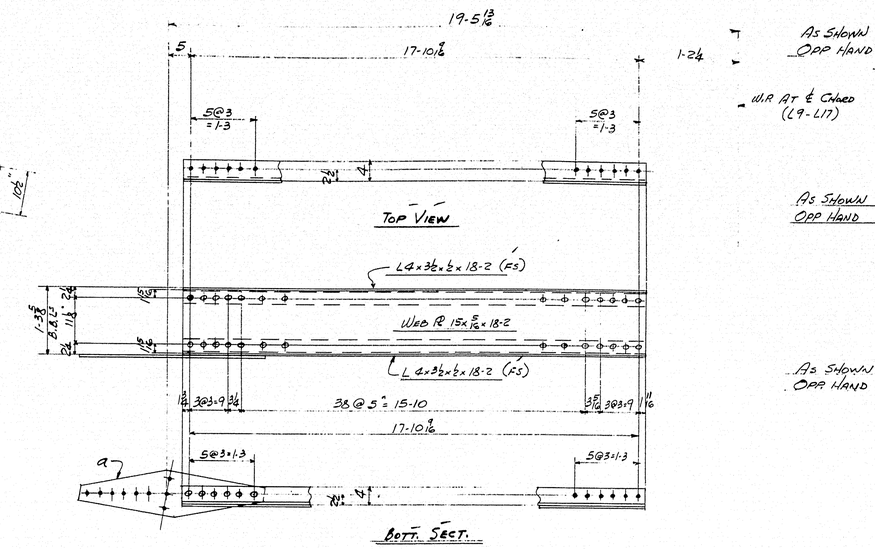
DRAWN MADE BY CZ DATE 1-9-50
DRAW. CHECKED BY FT DATE 1-26-50
CONTRACT No. C378 SHEET No. 164

48-176

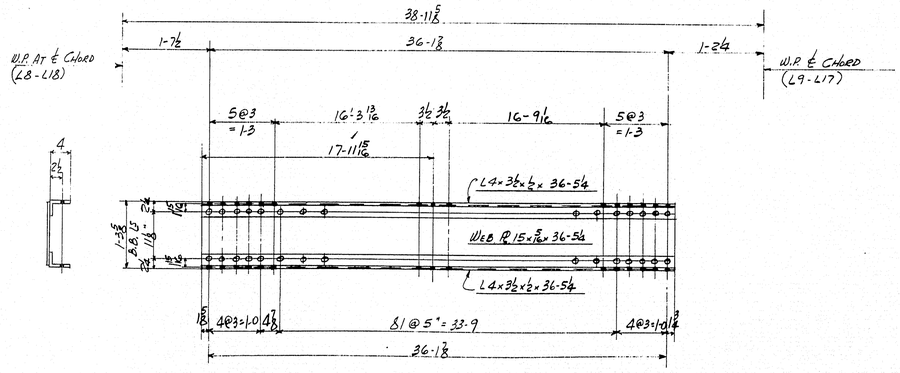
0 1 2 3 4 5 INCHES



MAKE ONE LATERAL BRACE - MARK B455 (AS SHOWN)
MAKE ONE LATERAL BRACE - MARK B523 (OPP. HAND)
} WT. OF ONE = 790.



MAKE ONE LATERAL BRACE - MARK B456 (AS SHOWN)
MAKE ONE LATERAL BRACE - MARK B521 (OPP HAND)
} WT. OF ONE = 805.



MAKE ONE LATERAL BRACE - MARK B454 (AS SHOWN)
MAKE ONE LATERAL BRACE - MARK B522 (OPP. HAND)
} WT OF ONE = 1520

REQ'D No.	MARK	MADE UP OF No.	Pc Mk	SIZE	LENGTH	REMARKS	OLD	WEIGHT
1	B455							
1	B523							
		4		L 4x3½x½	17-9½		9-418-93	847.-
		2		WEB PL 15x5/16	17-9½		9-419-57	567.-
		2	a	PL 10½x½	3-6½		9-423-1	126.38
		200		⅞ϕ RIVS				72.-
1	B456							
1	B521							
		4		L 4x3½x½	18-2		9-418-93	865.-
		2		WEB PL 15x5/16	18-2		9-419-57	579.-
		2	a				9-423-1	126.38
		200		⅞ RIVS				72.-
1	B454							
1	B522							
		4		L 4x3½x½	36-5¼		9-418-94	1735.-
		2		WEB PL 15x5/16	36-5¼		9-419-56	1162.-
		364		⅞ϕ RIVS				131.-
						Gross Wt.		6282.
						Wt. DED.		76.
						Net Wt.		6206.
						PAINT		24.
						TOTAL Wt.		6230.

AS SHOWN / OPP HAND — 1-24 — W.P. AT ℄ CHORD (L9-L17)

AS SHOWN / OPP HAND

AS SHOWN / OPP HAND

J 13

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BOTTOM LATERALS

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

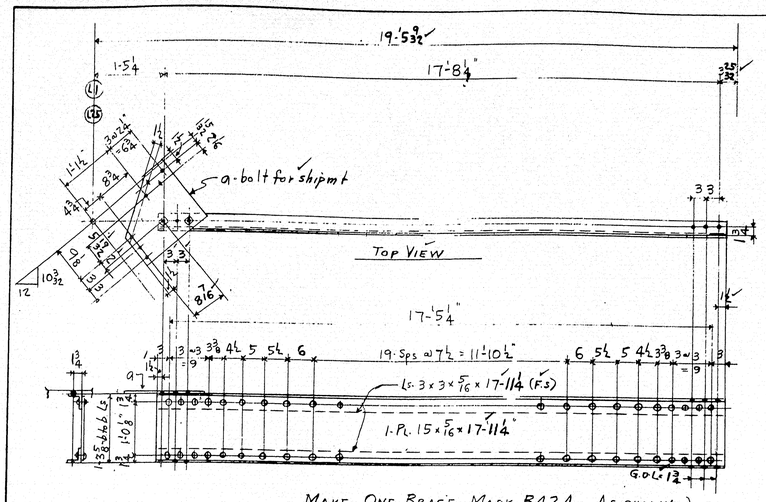
REVISIONS

HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

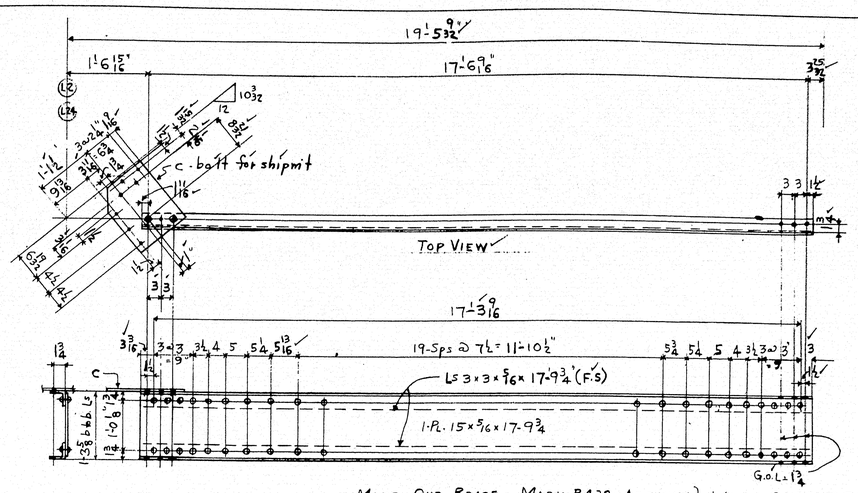
DRAW. MADE BY CZ DATE 1-5-50
DRAW. CHECKED BY ET DATE 1-26-50
CONTRACT No. C375 SHEET No. 165

48-177

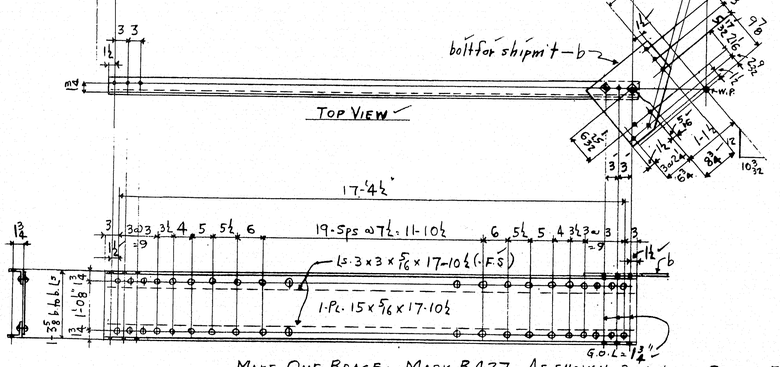
0 1 2 3 4 5 INCHES



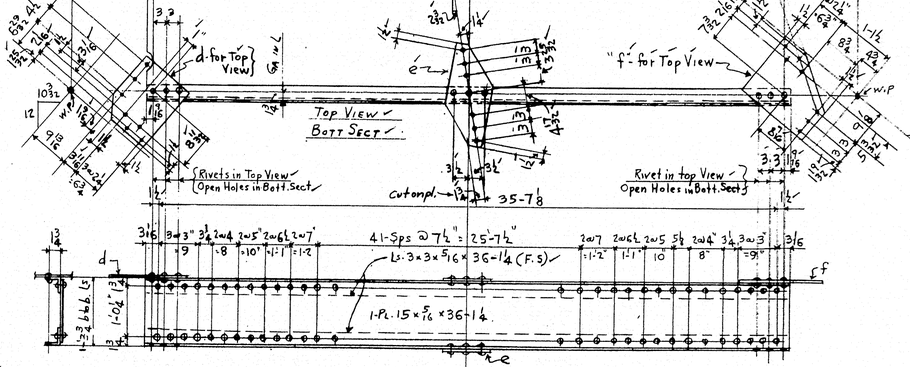
MAKE ONE BRACE MARK B424 AS SHOWN
" ONE " " B555 OPP HAND
} WT. OF ONE = 561.



MAKE ONE BRACE MARK B428 AS SHOWN
" ONE " " B551 OPP HAND
} WT. OF ONE = 555.



MAKE ONE BRACE MARK B427 - AS SHOWN
" ONE " " B549 - OPP HAND
} WT. OF ONE = 560.



MAKE ONE BRACE MARK B430 - AS SHOWN
" ONE " " B546 - OPP HAND
} WT. OF ONE = 1158.

	REQD NO	MARK	MADE UP OF NO	PC MK	SIZE	LENGTH	REMARKS	ORD	WEIGHT	LBS CUTS
AS SHOWN	1	B424								
OPP HAND	1	B555								
			4		L 3 x 3 x 5/16	17-11 1/4		9-418-96	438.	-
			2		PL 15 x 5/16	17-11 1/4		9-419-57	572.	-
			2	a	PL 16 3/4 x 3/8	1-6 1/2		9-423-5	66.	12
			144		Rivets 7/8" ø				52.	-
			4		Bolts 7/8" ø x 2 1/2				2.	-
AS SHOWN	1	B427								
OPP HAND	1	B549								
			4		L 3 x 3 x 5/16	17-10 1/2		9-418-96	436.	-
			2		PL 15 x 5/16	17-10 1/2		9-419-57	570.	-
			2	b	PL 16 3/4 x 3/8	1-6 1/2		9-423-5	66.	10
			144		Rivets 7/8" ø				52.	-
			4		Bolts 7/8" ø	2 1/2			2	-
AS SHOWN	1	B428								
OPP HAND	1	B551								
			4		L 3 x 3 x 5/16	17-9 3/4		9-418-96	435.	-
			2		PL 15 x 5/16	17-9 3/4		9-419-57	548.	-
			2	c	PL 13 3/4 x 3/8	1-5 1/2		114-4	50.	2
			144		Rivets 7/8" ø				52.	-
			4		Bolts 7/8" ø	2 1/2			2.	-
AS SHOWN	1	B430								
OPP HAND	1	B546								
			4		L 3 x 3 x 5/16	36-1 1/4		9-418-96	881.	-
			2		PL 15 x 5/16	36-1 1/4		9-419-56	1151.	-
			4	e	PL 10 x 3/8	1-10		9-423-5	93.	24
			2	f	PL 16 4 x 3/8	1-6 1/2		Do	64.	9
			292		Rivets 7/8" ø				105.	-
			2	d	PL 13 1/2 x 3/8	1-5 4		114-4	50.	2
								Gross Wt.	5707.	
								Wt. DED.	61.	
								Net Wt.	5646.	
								Paint	22.	
								TOTAL Wt.	5668.	

J
B
Wt.

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X80

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BRACES B424 · B427 · B428 · B430
" B546 · B549 · B551 · B555

HARRIS STRUCTURAL STEEL CO.
342 FOURTH AVE., N. Y.

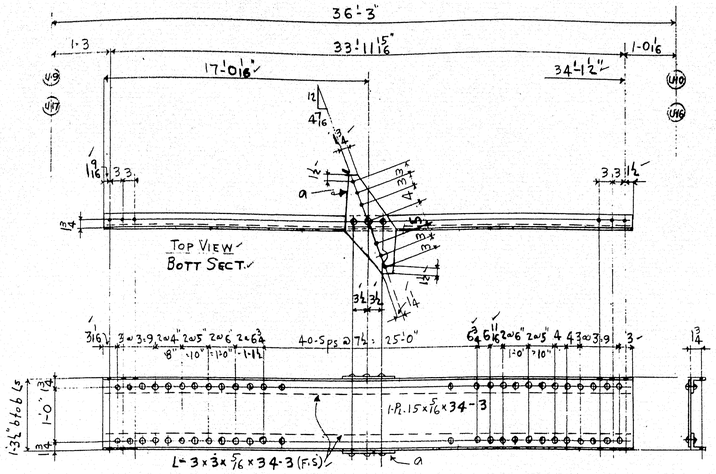
DRAWN TO SCALE — OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

REVISIONS

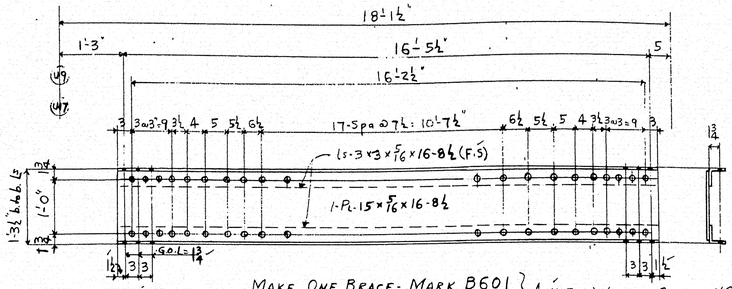
DRAWN MADE BY NM DATE 1-5-50
DRAWN CHECKED BY FT DATE 1-30-50
CONTRACT No. C378 SHEET No. 166

48-178

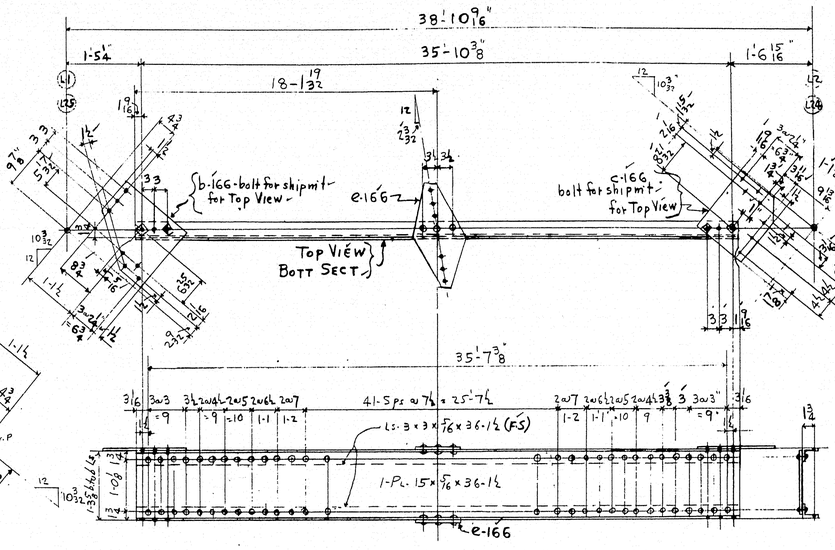
0 1 2 3 4 5 INCHES



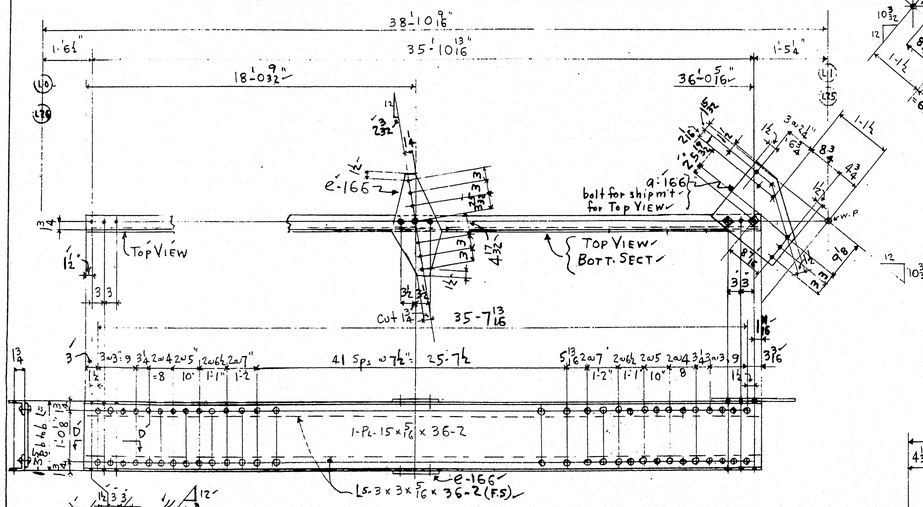
MAKE ONE BRACE MARK B600 AS SHOWN } WT. OF ONE = 1047.
" ONE " " B640 OPP HAND }



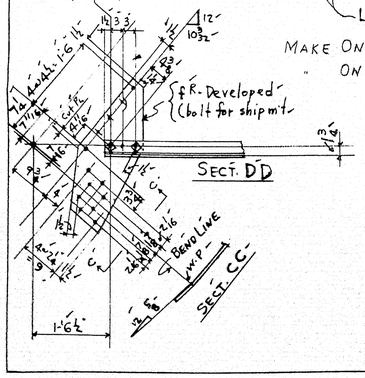
MAKE ONE BRACE - MARK B601 } ALIKE WT. OF ONE = 497.
" ONE " " B642 }

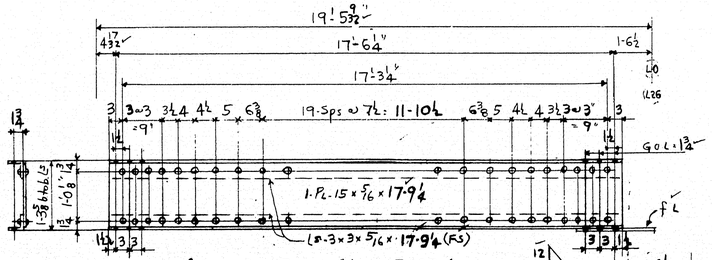


MAKE ONE BRACE - MARK B426 AS SHOWN } WT. OF ONE = 1159.
" ONE " " B550 OPP HAND }

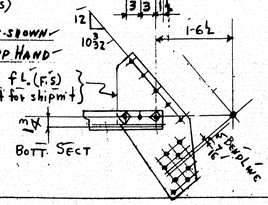


MAKE ONE BRACE - MARK B422 - AS SHOWN } WT OF ONE = 1175.
" ONE " " B554 - OPP HAND. }





WT OF ONE = 569. { MAKE ONE BRACE - MARK B423 AS SHOWN
" ONE " " B553 OPP HAND }



SHPT No	REQ'D No	MARK	MADE UP OF No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT	CUTS
AS SHOWN	1	B600					} ALIKE			
OPP. HAND	1	B640								
			4		L 5 x 3 1/2 x 5/16	34-3		3-9-418-97 & -98	836	-
			2		Pls 15" x 5/16"	34-3		9-419-58	1092	-
			4	a	Pls 10" x 3/8"	1-10 7/16		114-8	97	34
			264		Rivets 7/8" ϕ				95	-
	1	B601					} ALIKE			
	1	B642								
			4		L 5 x 3 1/2 x 5/16	16-8 1/2		9-418-97	408	-
			2		Pls 15" x 5/16"	16-8 1/2		9-419-59	533	-
			136		Rivets 7/8" ϕ				49	-
AS SHOWN	1	B422								
OPP HAND	1	B554								
			4		L 5 x 3 x 5/16	36-2		9-418-96	883	-
			2		Pls 15" x 5/16"	36-2		9-419-56	1153	-
			4	e-166	Pls 10" x 3/8"	1-10	} SAME AS SH. #166	114-8	93	26
			2	a-166	Pls 16 1/2" x 3/8"	1-6 1/2		9-423-5	66	12
			280		Rivets 7/8" ϕ				101	-
			8		Bolts 7/8" ϕ x 2 1/2"				4	-
			2	f.R.	Pls 16" x 3/8"	2-8 5/8"	bent	9-423-5	111	33
AS SHOWN	1	B426								
OPP HAND	1	B550								
			4		L 5 x 3 x 5/16	36-1 1/2		9-418-96	882	-
			2		Pls 15" x 5/16"	36-1 1/2		9-419-56	1152	-
			4	e-166	Pls			114-8	93	26
			2	b-166	Pls 16 1/2" x 3/8"	1-6 1/2	} SAME AS SH. #166	9-423-5	66	10
			2	c-166	Pls 13 1/2" x 3/8"	1-5 1/2		114-4	50	2
			280		Rivets 7/8" ϕ				101	-
			8		Bolts 7/8" ϕ x 2 1/2"				4	-
AS SHOWN	1	B423								
OPP HAND	1	B553								
			4		L 5 x 3 x 5/16	17-9 1/4		9-418-96	434	-
			2		Pls 15" x 5/16"	17-9 1/4		9-419-57	567	-
			144		Rivets 7/8" ϕ				52	-
			4		Bolts 7/8" ϕ x 2 1/2"				2	-
	2	f.R.					bent	9-423-5	111	33
							Gross Wt.		9035	-
							DED. Wt.		176	-
							NET Wt.		8859	-
							PAINT		35	-
							TOTAL Wt.		8894	-

13-
J
W.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BRACES - B422 - B423 - B426 - B550 - B553 - B554
" B600 - B601 - B640 - B642

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

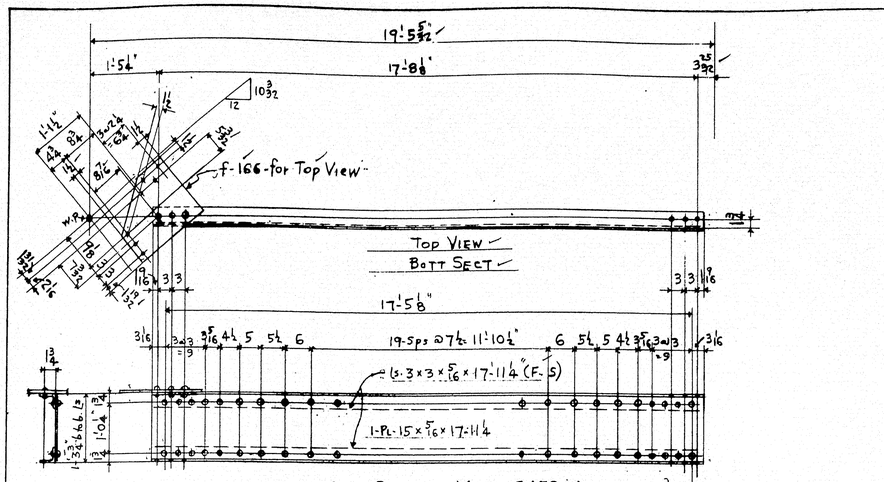
RIVETS 7/8 DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

REVISIONS

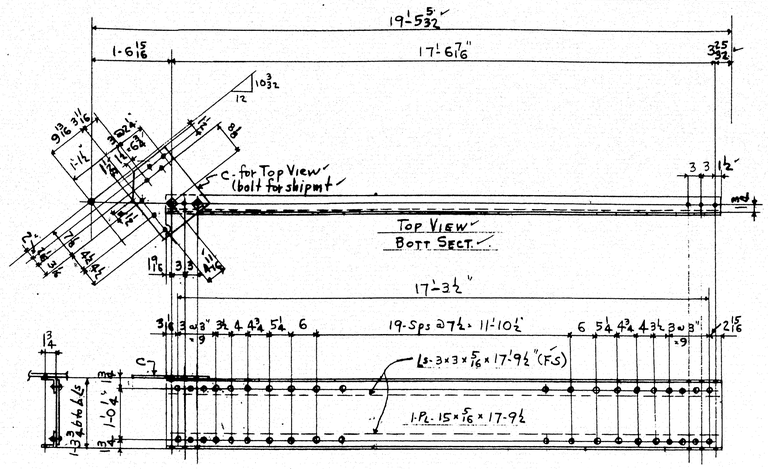
HARRIS STRUCTURAL STEEL CO.
610 FOURTH AVE., N. Y.

DRAWN, MADE BY: H-M DATE: 1-4-50
DRAWN, CHECKED BY: FT DATE: 2-1-50
CONTRACT No. C378 SHEET No. 167

48-179



MAKE ONE BRACE MARK B432 AS SHOWN
" ONE " " B547 OPP HAND
} Wt of One = 562.



Wt of One = 553. { MAKE ONE BRACE MARK B436 AS SHOWN
" ONE " " B543 OPP HAND

MAKE ONE BRACE MARK B431 - AS SHOWN
" ONE " " B545 - OPP HAND
} Wt of One = 552.

MAKE ONE BRACE MARK B435 AS SHOWN
" ONE " " B541 OPP HAND
} Wt of One = 561.

			MADE UP OF						
	No.	MARK	No.	Pc. Mk	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
AS SHOWN	1	B432							
OPP HAND	1	B547							
			4		L 5 x 3 x 5/16	17-11 1/4		9-418-96	438 -
			2		PLS 15 x 5/16	17-11 1/4		9-419-57	572 -
			2	f-166	PLS 16 1/2 x 3/8	1-6 1/2	Same as sheet #166	9-423-5	64 9
			150		Rivets 7/8" ø				54 -
AS SHOWN	1	B431							
OPP HAND	1	B545							
			4		L 5 x 3 x 5/16	17-8 3/4		9-418-96	433 -
			2		PLS 15 x 5/16	17-8 3/4		9-419-57	565 -
			2	d-166	PLS 13 1/2 x 3/8	1-5 1/2	Same as sheet #166	114-4	50 2
			150		Rivets 7/8" ø				54 -
AS SHOWN	1	B436							
OPP HAND	1	B543							
			4		L 5 x 3 x 5/16	17-9 1/2		9-418-96	434 -
			2		PLS 15 x 5/16	17-9 1/2		9-419-57	567 -
			2	c	PLS 13 1/2 x 3/8	1-5		114-4	49 2
			144		Rivets 7/8" ø				52 -
			4		Bolts 7/8" ø	x 2 1/2			2 -
AS SHOWN	1	B435							
OPP HAND	1	B541							
			4		L 5 x 3 x 5/16	17-10 1/2		9-418-96	436 -
			2		PLS 15 x 5/16	17-10 1/2		9-419-57	570 -
			2	d	PLS 16 1/2 x 3/8	1-6 1/2		9-423-5	66 9
			144		Rivets 7/8" ø				52 -
			4		Bolts 7/8" ø	x 2 1/2			2 -
								GROSS WT.	4460.
								WT DED.	22.
								NET WT.	4438.
								PAINT	18.
								TOTAL WT.	4456.

Wt. in Cwts

B-J-W.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-184 (2)
CONTRACT No. 2

BRACES - B431 - B432 - B435 - B436
B541 - B543 - B545 - B547

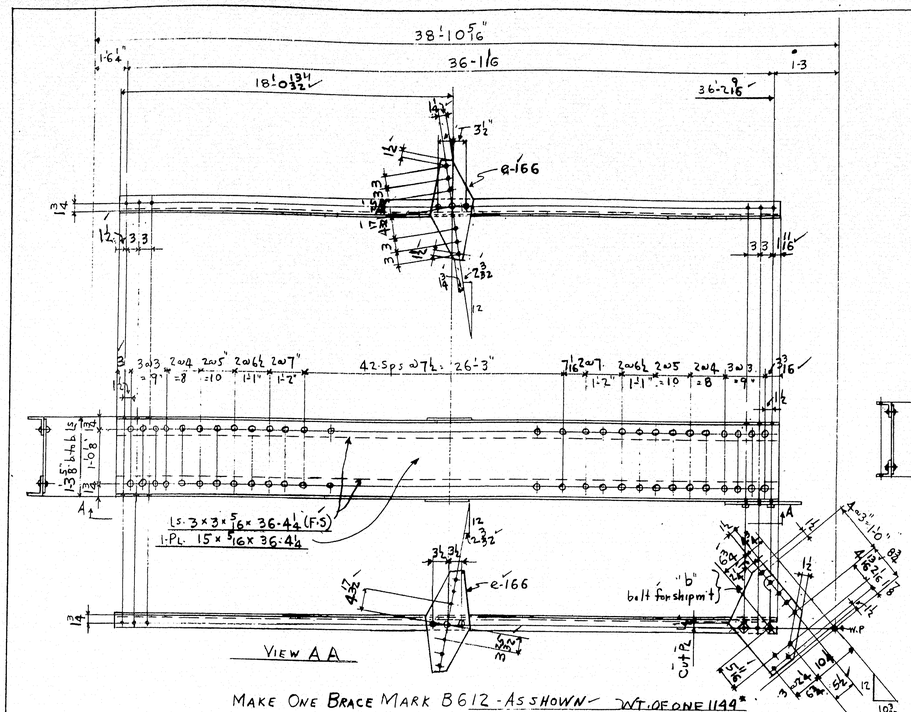
FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET #20

RIVETS 7/8 DIAM. OPEN HOLES 15/16 DRILL UNLESS OTHERWISE NOTED

REVISIONS

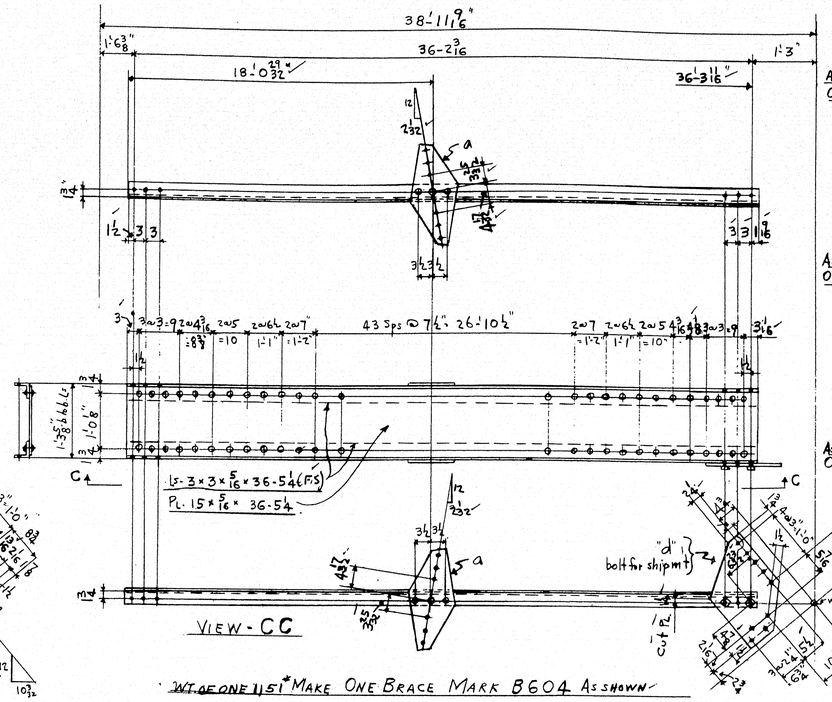
MORRIS STRUCTURAL STEEL CO.
500 FOURTH AVE., N. Y.

DRAWN MADE BY N.M DATE 1-6-50
DRAWN CHECKED BY FT DATE 2-1-50
CONTRACT No. C378 SHEET No. 168



VIEW AA

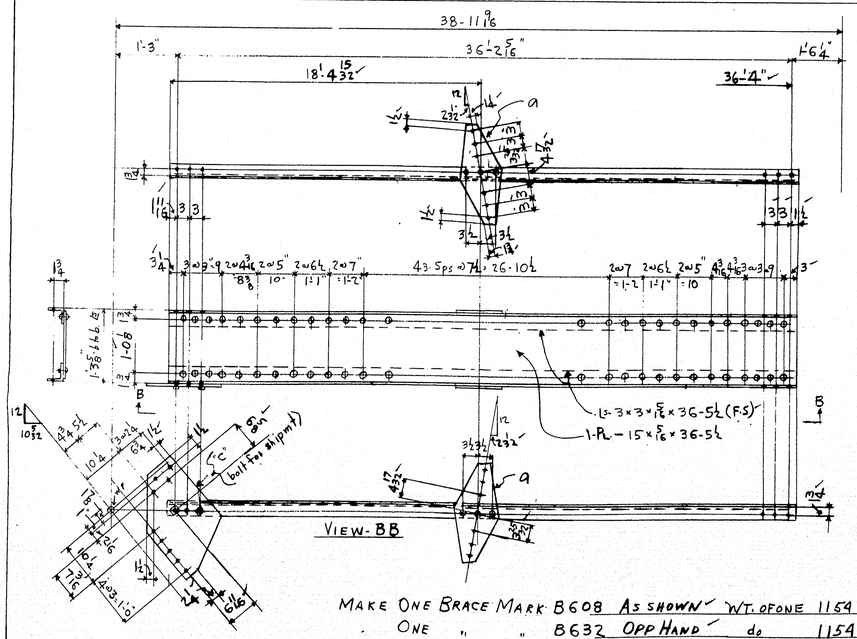
MAKE ONE BRACE MARK B612 - AS SHOWN ~ WT. OF ONE 1149#
" ONE " " B628 OPP HAND ~ do 1149#



VIEW - CC

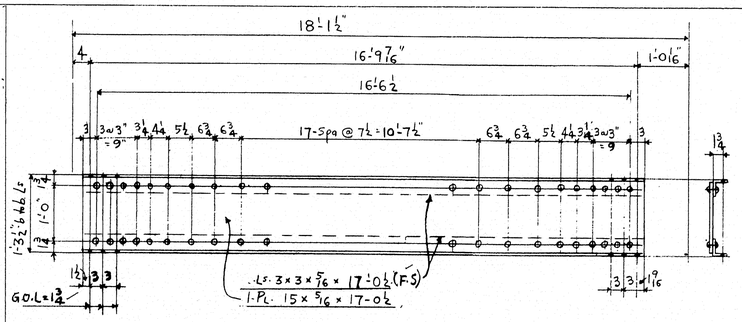
WT. OF ONE 1151# MAKE ONE BRACE MARK B604 AS SHOWN ~
do 1151# " ONE " " B636 OPP HAND ~

	REQ'D No	REQ'D MARK	MADE UP OF No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT
AS SHOWN ~	1	B612							
OPP HAND ~	1	B628							
			4		L 3 x 3 x 5/16	36-4 1/4		9-418-96	887 —
			2		Pls 15 x 5/16	36-4 1/4		9-419-56	1159 —
			4	e-166	Pls 10 x 3/8	1-10	same as sheet of 166 ~	114-8	93 20
			2	b	Pls 15 1/2 x 3/8	1-9 7/8	bolt	9-423-5	72 12
			276		Rivets 7/8" *				99 —
			4		Bolts 7/8" * x 2 1/2 ~				2 —
AS SHOWN ~	1	B608							
OPP HAND ~	1	B632							
			4		L 3 x 3 x 5/16	36-5 1/2		9-418-96	890 —
			2		Pls 15 x 5/16	36-5 1/2		9-419-56	1162 —
			4	a	Pls 10 x 3/8	1-10		114-8	93 12
			2	c	Pls 15 1/2 x 3/8	2-0 1/2	bolt	9-423-5	81 16
			276		Rivets 7/8 *				99 —
			4		Bolts 7/8" * x 2 1/2 ~				2 —
AS SHOWN ~	1	B604							
OPP HAND ~	1	B636							
			4		L 3 x 3 x 5/16	36-5 1/4		9-418-96	889 —
			2		Pls 15 x 5/16	36-5 1/4		9-419-56	1162 —
			4	a	Pls			114-8	93 12
			2	d	Pls 15 1/2 x 3/8	1-10 3/4	bolt	9-423-5	75 16
			276		Rivets 7/8 *				99 —
			4		Bolts 7/8" * x 2 1/2 ~				2 —
	1	B602					} ALIKE		
	1	B641							
			4		L 3 x 3 x 5/16	17-0 1/2		9-418-97	416 —
			2		Pls 15 x 5/16	17-0 1/2		9-419-59	543 —
			136		Rivets 7/8" *				49 —
							Gross Wt.		7967.
							Wt DED		88.
							NET Wt.		7879.
							PAINT		31.
							Total Wt.		7910.



VIEW - BB

MAKE ONE BRACE MARK B608 AS SHOWN ~ WT. OF ONE 1154#.
ONE " " B632 OPP HAND ~ do 1154#



MAKE ONE BRACE MARK B602 } ALIKE WT. OF ONE 506#.
" ONE BRACE " B641 }

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X 50

ARROWSIC BRIDGE OVER SABANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BRACES - B602 - B604 - B608 - B612
" B628 - B632 - B636 - B641

DRILL 7/8 DIAM. UNLESS OTHERWISE NOTED OPEN HOLES 15/16 DIAM.

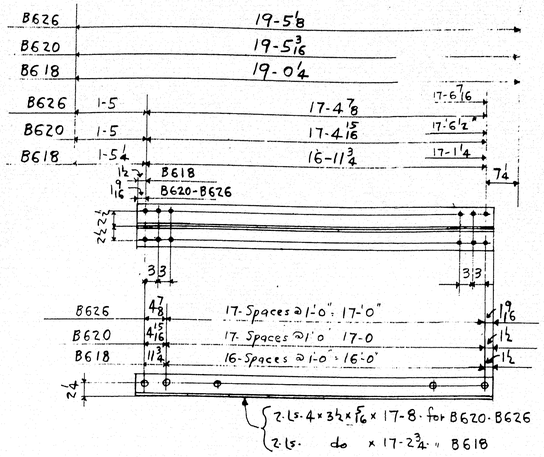
REVISIONS

HARRIS STRUCTURAL STEEL CO.
110 FOURTH AVE., N. Y.

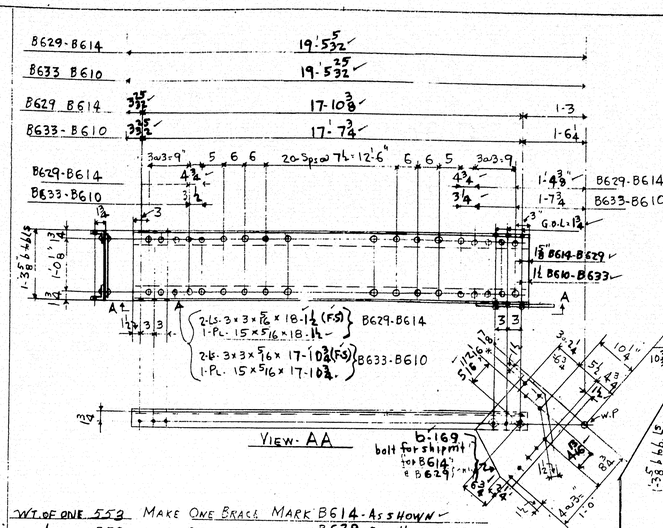
DRAW. MADE BY N M DATE 12-30-49
DRAW. CHECKED BY F T DATE 2-1-50
CONTRACT No. C378 SHEET No. 169

48-181

0 1 2 3 4 5 INCHES

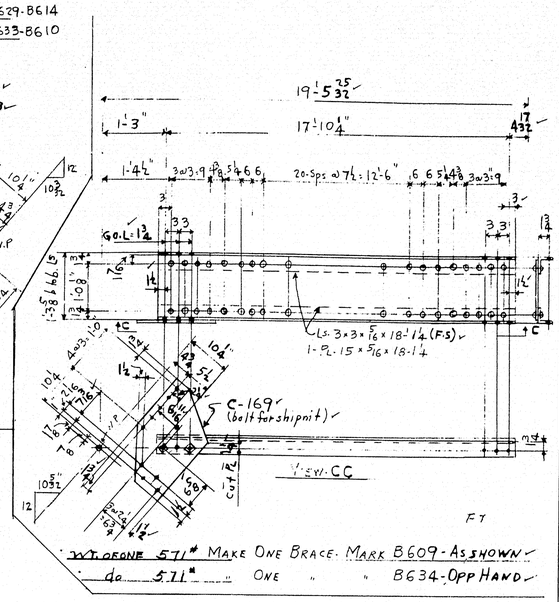


WT OF ONE 280# MAKE 8 BRACES MARK B626
do 280# " 4 " " B620 W.P.
do 273# " 2 " " B618



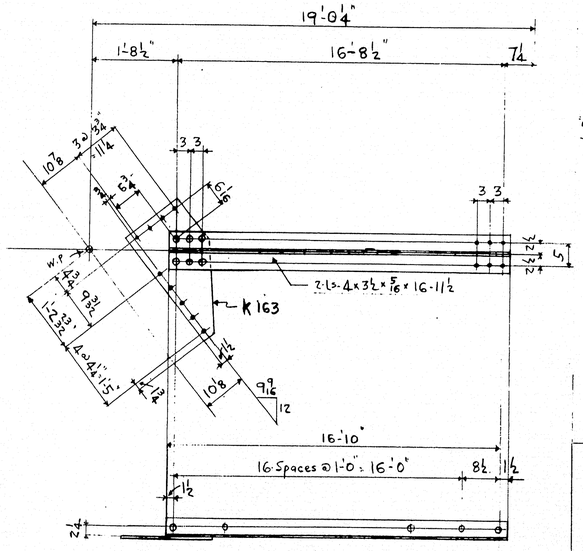
WT OF ONE 553 MAKE ONE BRACE MARK B614 AS SHOWN
do 553 " ONE " " B629 OPP HAND
do 547 " ONE " " B610 AS SHOWN
do 547 " ONE " " B633 OPP HAND

FT

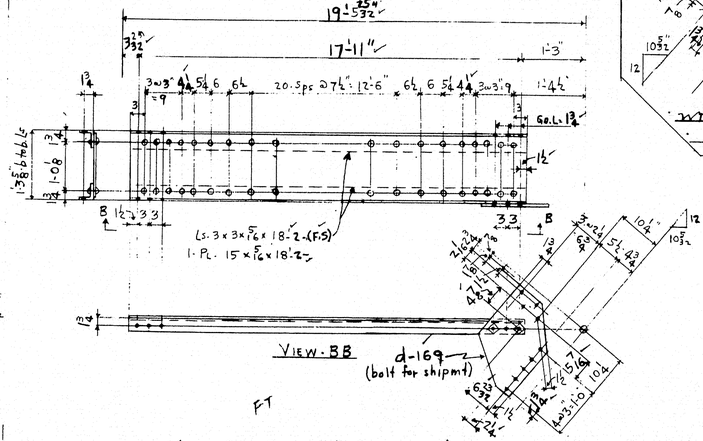


WT OF ONE 571# MAKE ONE BRACE MARK B609 AS SHOWN
do 571# " ONE " " B634 OPP HAND

FT

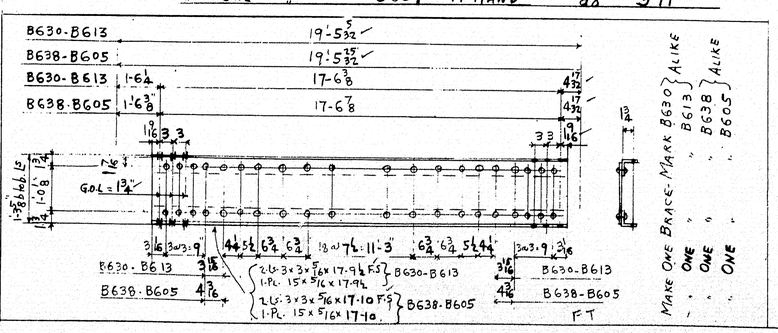


WT OF ONE 309# MAKE ONE BRACE MARK B617 } ALIKE
do 309# " ONE " " B655 }
W.P



FT

MAKE ONE BRACE MARK B606 AS SHOWN WT OF ONE 571#
" ONE " " B637 OPP HAND do 571#



FT

WT OF ONE FOR
do B630 528
do B613 528
do B638 529
do B605 529

REQ'D No	MARK	No	Pc MK	MADE UP OF SIZE	LENGTH	REMARKS	ORD	WEIGHT
8	B626							
4	B620	34		L4×3½×5/16	17-8		9-418-95	3265 -
2	B618	4		L4×3½×5/16	17-2¾		Do	531 -
		264		Rivets ⅞"				95 -
1	B617					} ALIKE		
1	B655							
		4		L4×3½×5/16	16-11½		9-418-95	522 -
		2	K 163	Pls 15½×⅜	2-6¼	same as sheet #163	9-423-5	100 24
		48		Rivets ⅞"				17 -
1	B614					As SHOWN		
1	B629					OPP HAND		
1	B610					As SHOWN		
1	B633					OPP HAND		
		4		L3×3×5/16	18-1¼	} For B629 & B614	9-418-96	442 -
		2		Pls 15×5/16	18-1¼		9-419-57	578 -
		4		L3×3×5/16	17-10⅜	} For B633 & B610	9-418-96	437 -
		2		Pls 15×5/16	17-10⅜		9-419-57	571 -
		280		Rivets ⅞"				101 -
		4		Bolts ⅞" × 2¼		(Same as sh 169)		2 -
		2	b-169	Pls 15½×⅜	1-9⅜	for B614 & B629	9-423-5	72 11
1	B606					As SHOWN		
1	B637					OPP HAND		
		4		L3×3×5/16	18-2		9-418-96	443 -
		2		Pls 15×5/16	18-2		9-419-57	579 -
		2	d 169	Pls 15½×⅜	1-10¾	same as sheet #169	9-423-5	75 11
		140		Rivets ⅞"				50 -
		4		Bolts ⅞" × 2¼				2 -
1	B630					} ALIKE		
1	B613							
1	B638					} ALIKE		
1	B605							
		4		L3×3×5/16	17-9½	} For B630 & B613	9-418-96	434 -
		2		Pls 15×5/16	17-9½		9-419-57	567 -
		4		L3×3×5/16	17-10	} For B638 & B605	9-418-96	435 -
		2		Pls 15×5/16	17-10		9-419-57	568 -
		280		Rivets ⅞"				101 -
1	B609					As SHOWN		
1	B634					OPP HAND		
		4		L3×3×5/16	18-1¼		9-418-96	442 -
		2		Pls 15×5/16	18-1¼		9-419-57	577 -
		2	C-169	Pls 15½×⅜	2-0½	same as sheet #169	9-423-5	81 16
		140		Rivets ⅞"				50 -
		4		Bolts ⅞" × 2¼				2 -

Gross wt. 11139.
Wt. DED. 62.
NET WT. 11077.
PAINT 45.
Total Wt. 11122.

3-J

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BRACES- B605-B606-B609-B610-B613-B614
" B617-B618-B620-B626-B629-B630
" B633-B634-B637-B638-B655

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

RIVETS ⅞ DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

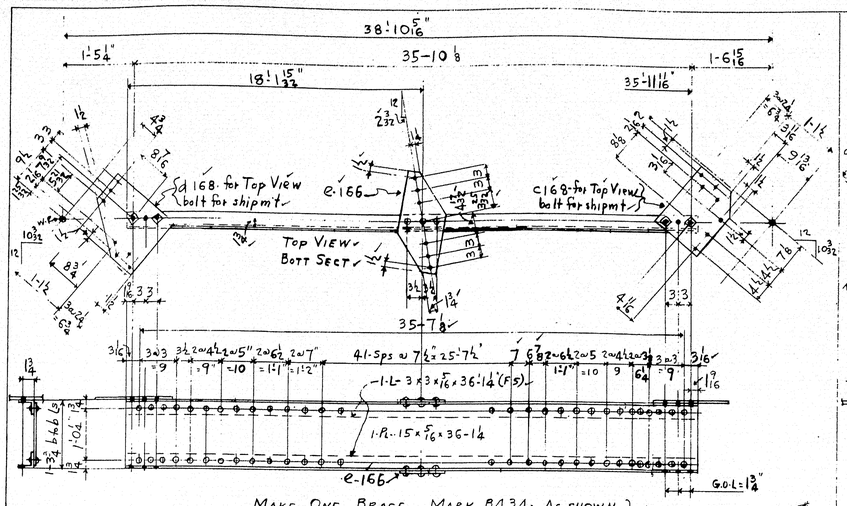
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE.

REVISIONS		

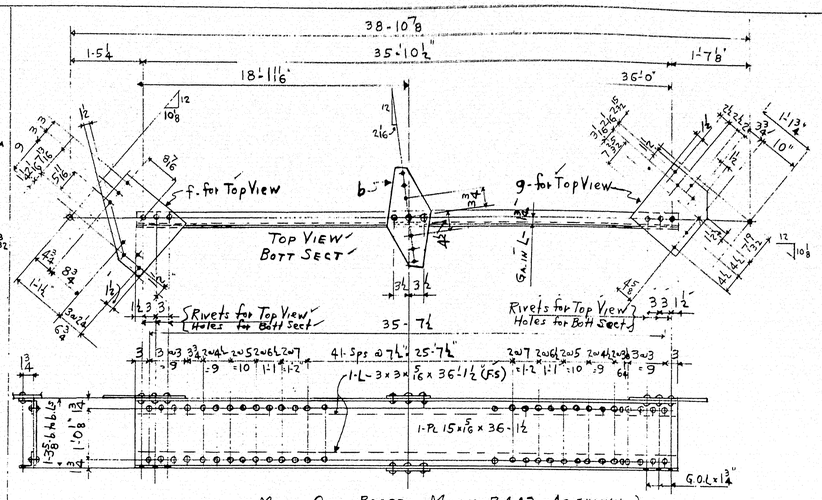
DRAWN MADE BY K-M 12-28-49
DRAWN CHECKED BY W.P & FT 2-1-50
CONTRACT No. C378 SHEET No. 170

0 1 2 3 4 5 INCHES

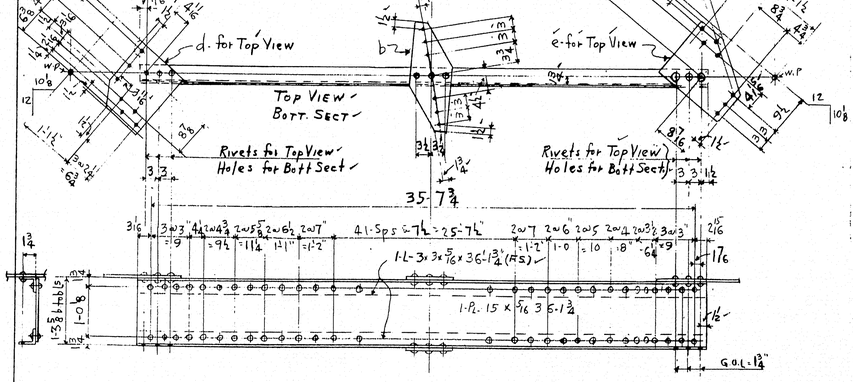
48-182



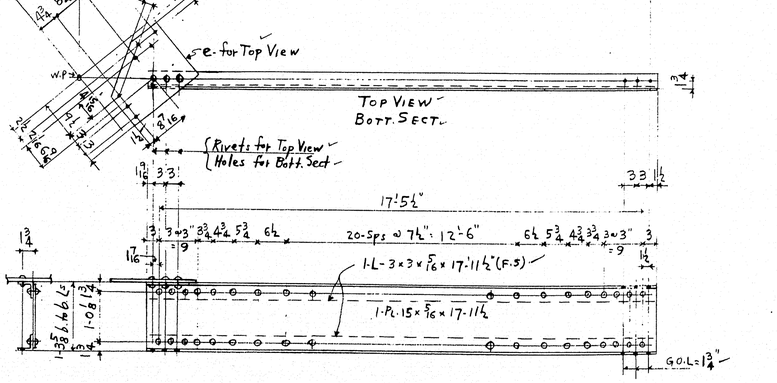
MAKE ONE BRACE MARK B434 AS SHOWN
" ONE " " B542 OPP HAND
WT OF ONE = 1165#.



MAKE ONE BRACE MARK B442 AS SHOWN
" ONE " " B534 OPP HAND
WT OF ONE = 1159.



MAKE ONE BRACE - MARK B438 - AS SHOWN
" ONE " " B538 OPP HAND
WT OF ONE = 1157.



MAKE ONE BRACE MARK B440 AS SHOWN
" ONE " " B537 OPP HAND
WT OF ONE = 562.

	READ		MADE UP OF						
	No	MARK	No	PcMk	SIZE	LENGTH	REMARKS	ORD	WEIGHT
AS SHOWN	1	B434							
OPP HAND	1	B542							
			4		L 3x3x⅝	36-1¼		9-418-96	881 -
			2		Pls 15x⅝	36-1¼		9-419-56	1151 -
			2	d-168	Pls 13¾x⅜	1-6½	Same as Sheet # 168	9-423-5	66 10
			4	e-166	Pls 10x⅜	1-10	Same as Sheet # 166	114-8	93 13
			2	c-168	Pls 13¾x⅜	1-5	same as Sheet # 168	114-4	49 2
			280		Rivets ⅞" d				101 -
			8		Bolts ⅞" d, 2¼				4 -
AS SHOWN	1	B438							
OPP HAND	1	B538							
			4		L 3x3x⅝	36-1¾		9-418-96	882 -
			2		Pls 15x⅝	36-1¾		9-419-56	1152 -
			2	d	Pls 13¾x⅜	1-5¾		114-4	51 4
			4	b	Pls 10x⅜	1-10		114-8	93 28
			2	e	Pls 16x⅜	1-6½		9-423-5	63 8
			292		Rivets ⅞" d				105 -
AS SHOWN	1	B442							
OPP HAND	1	B534							
			4		L 3x3x⅝	36-1½		9-418-96	882 -
			2		Pls 15x⅝	36-1½		9-419-56	1152 -
			2	f	Pls 16¾x⅜	1-6½		9-423-5	66 10
			4	b	Pls			114-8	93 28
			2	g	Pls 13¾x⅜	1-5¼		9-423-5	50 2
			292		Rivets ⅞" d				105 -
AS SHOWN	1	B440							
OPP HAND	1	B537							
			4		L 3x3x⅝	17-11½		9-418-96	438 -
			2		Pls 15x⅝	17-11½		9-419-57	573 -
			2	e	Pls			9-423-5	63 8
			146		Rivets ⅞" d				53 -
								Gross wt.	8166 -
								wt DED	113 -
								NET WT.	8053 -
								PAINT	33 -
								TOTAL WT.	8086 -

L 3 J W.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BOTTOM CHORD BRACING

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X80

RIVETS ⅞" DIAM. OPEN HOLES 15/16" DIAM. UNLESS OTHERWISE NOTED

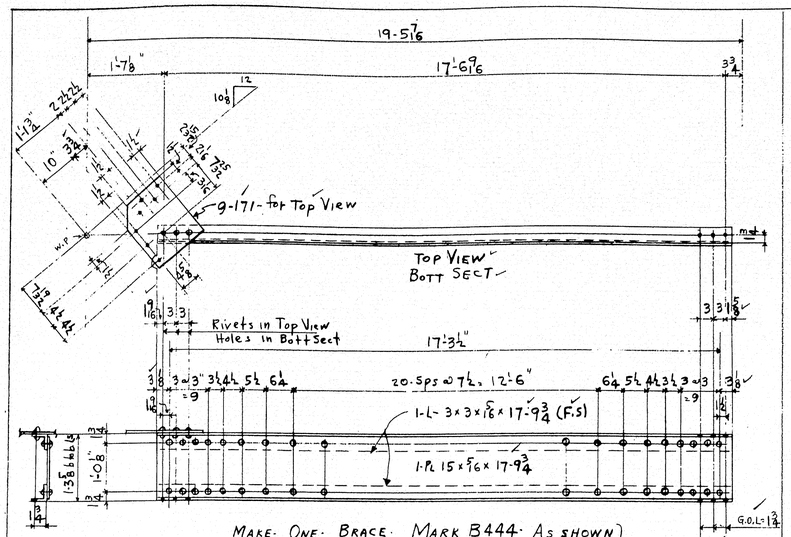
REVISIONS

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

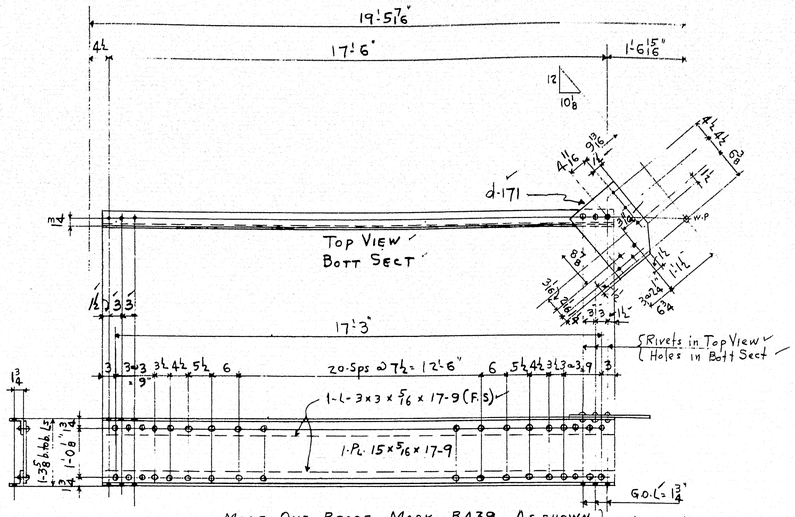
DRAW. MADE BY N M DATE 1-11-50
DRAW. CHECKED BY F T DATE 2-3-50
CONTRACT No. C378 SHEET No. 171

48-183

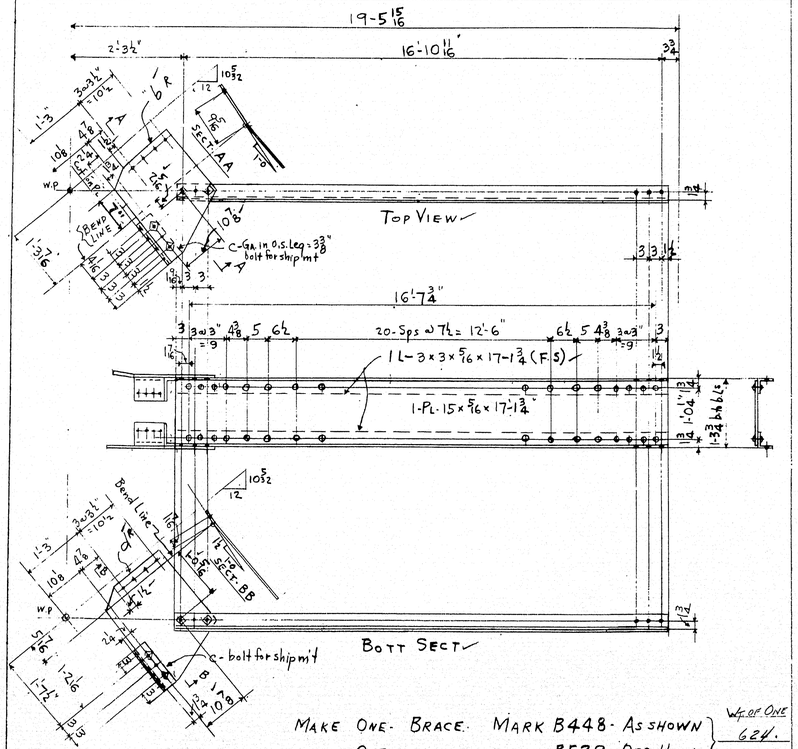
0 1 2 3 4 5 INCHES



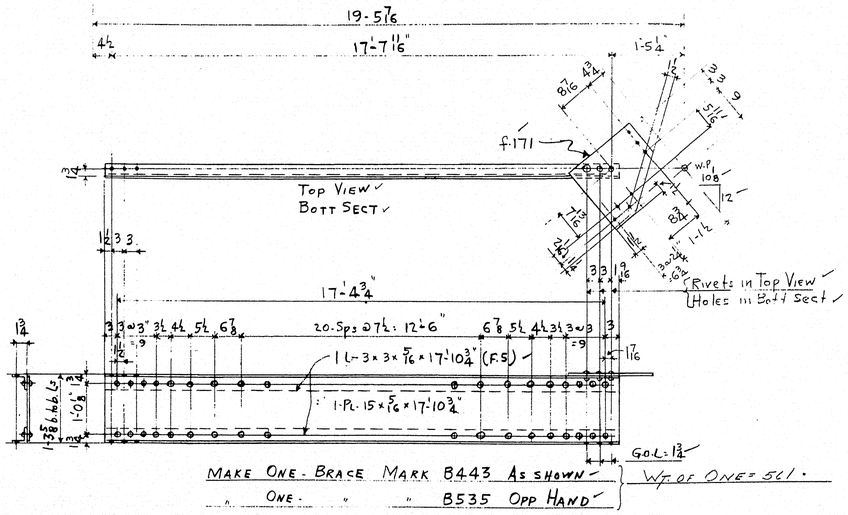
MAKE ONE BRACE MARK B444 - AS SHOWN
" ONE " " B533 - OPP HAND
Wt of ONE = 554.



MAKE ONE BRACE MARK B439 - AS SHOWN
" ONE " " B539 - OPP HAND
Wt of ONE = 553.



MAKE ONE BRACE MARK B448 - AS SHOWN
" ONE " " B529 - OPP HAND
Wt of ONE 624.



MAKE ONE BRACE MARK B443 AS SHOWN
" ONE " " B535 OPP HAND
Wt of ONE = 561.

READ No	READ MARK	MADE UP OF No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT	Cuts
1	B444								
1	B533								
AS SHOWN OPP HAND		4		L 3 x 3 x 5/16	17-9 3/4		9-418-96	435.	
		2		Pls 15 x 5/16	17-9 3/4		9-419-57	568.	
		2	9-171	Pls 13 3/4 x 3/8	1-5 4	same 9# sheet # 171	9-423-5	50	2
		146		Rivets 7/8" ϕ				53.	
1	B448								
1	B529								
AS SHOWN OPP HAND		4		L 3 x 3 x 5/16	17-1 3/4		3- 9-418-96 1- Do -97	418.	
		2		Pls 15 x 5/16	17-1 3/4		9-419-57	547.	
		2	b 2	Pls 18 3/4 x 3/8	2-0	bent	9-423-5	96.	10
		4	c	L 5 x 3 1/2 x 3/8	1-0		119-8	42.	
		2	d 2	Pls 18 3/4 x 3/8	2-2 1/4	bent	9-423-5	105.	11
		132		Rivets 7/8" ϕ				48.	
		16		Bolts 7/8" ϕ x 2 1/2				8.	
1	B439								
1	B539								
AS SHOWN OPP HAND		4		L 3 x 3 x 5/16	17-9		9-418-96	433.	
		2		Pls 15 x 5/16	17-9		9-419-57	566.	
		2	d-171	Pls 13 3/4 x 3/8	1-5 3/4	same 9# sheet # 171	114-4	51.	2
		146		Rivets 7/8" ϕ				53.	
1	B443								
1	B535								
		4		L 3 x 3 x 5/16	17-10 3/4		9-418-96	437.	
		2		Pls 15 x 5/16	17-10 3/4		9-419-57	571.	
		2	f-171	Pls 16 3/4 x 3/8	1-6 1/2	same 9# sheet # 171	9-423-5	66.	10
		146		Rivets 7/8" ϕ				53.	
							Gross Wt	4600.	
							Wt DED	35.	
							Net Wt.	4565.	
							Paint	19.	
							Total Wt	4584.	

13 J W.

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET K50

RIVETS 7/8 DIAM. OPEN HOLES 15/16 DRILL UNLESS OTHERWISE NOTED

REVISIONS

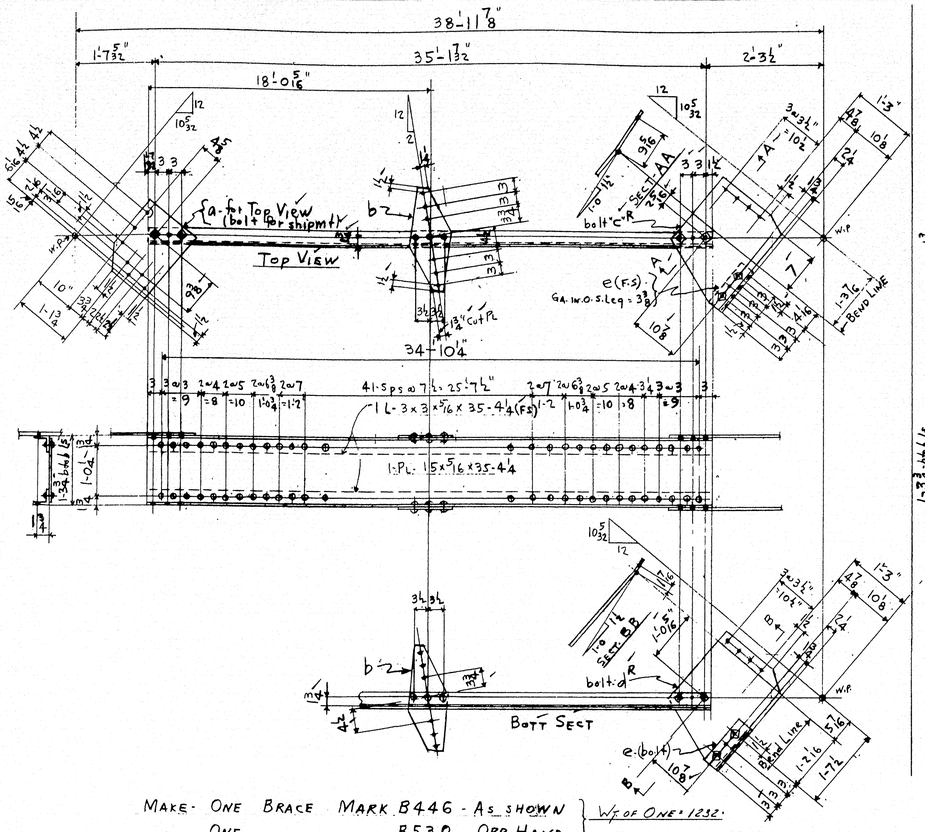
HARRIS STRUCTURAL STEEL CO
419 FOURTH AVE., N.Y.

DRAWN, MADE BY M.M DATE 1-12-50
DRAWN, CHECKED BY F.T. DATE 2-3-50
CONTRACT NO. C378 SHEET No 172

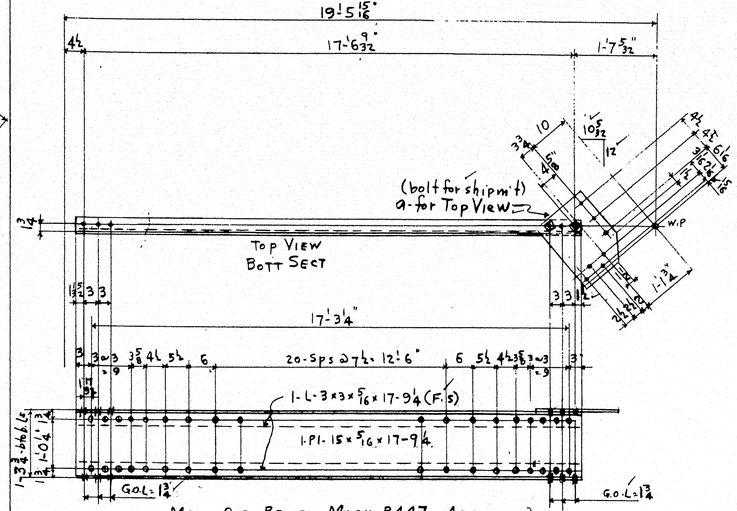
ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-354
CONTRACT No 2

BOTTOM CHORD BRACING

48-184



MAKE ONE BRACE MARK B446 - AS SHOWN
" ONE " " B530 OPP HAND
} WT OF ONE = 1232.



MAKE ONE BRACE MARK B447 AS SHOWN
" ONE " " B531 OPP HAND
} WT OF ONE = 554.

	REQ'D No	MARK	MADE UP OF No	Pc Mk	SIZE	LENGTH	REMARKS	ORD	WEIGHT	CUTS
AS SHOWN	1	B446								K
OPP HAND	1	B530								
			4		L 3 x 3 x 5/16	35-4 1/4		9-418-96	863	—
			2		Pls 15 x 5/16	35-4 1/4		9-419-56	1127	—
			2	a	Pls 13 3/4 x 3/8	1-6 1/4		9-423-5	53	2
			4	b	Pls 10 x 3/8	1-10		114-8	93	11
			2	c	Pls 18 3/4 x 3/8	2-0	bent	9-423-5	96	10
			2	d	Pls 18 3/4 x 3/8	2-2 1/4	bent	Do	105	10
			4	e	L 5 x 3 1/2 x 3/8	1-0		119-8	42	—
			272		Rivets 7/8" ø				98	—
			20		Bolts 7/8" ø x 2 1/2				10	—
AS SHOWN	1	B447								
OPP HAND	1	B531								
			4		L 3 x 3 x 5/16	17-9 1/4		9-418-96	434	—
			2		Pls 15 x 5/16	17-9 1/4		9-419-57	567	—
			2	a	Pls			9-423-5	53	2
			140		Rivets 7/8" ø				50	—
			4		Bolts 7/8" ø	2 1/2			2	—
								Gross Wt.	3593	
								Wt. DED.	35	
								NET Wt.	3558	
								PAINT	14	
								TOTAL Wt.	3572	

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

BOTTOM CHORD BRACING

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X80

RIVETS 7/8" DIAM. OPEN HOLES 15/16" DIAM. UNLESS OTHERWISE NOTED

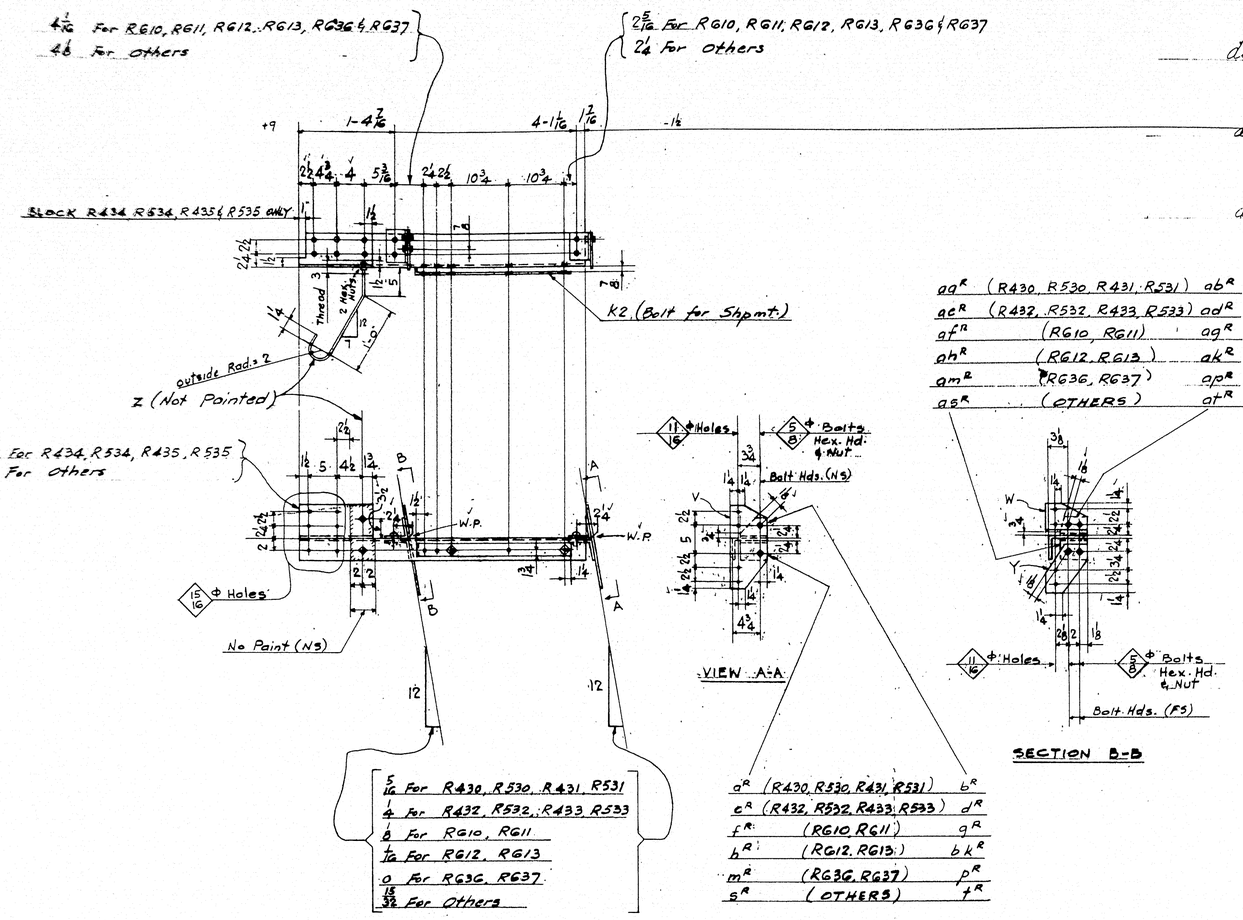
MAINE STRUCTURAL STEEL CO.
149 FOURTH AVE., N. Y.

REVISIONS

DRAW. MADE BY N M DATE 1-16-50
DRAW. CHECKED BY FT DATE 2-3-50
CONTRACT No. C378 SHEET No. 173

48-185

0 1 2 3 4 5 INCHES



aq^R (R430, R530, R431, R531)	ab^R
ae^R (R432, R532, R433, R533)	ad^R
af^R (R610, R611)	ag^R
ah^R (R612, R613)	ak^R
am^R (R636, R637)	ap^R
as^R (OTHERS)	at^R

5/16 For R430, R530, R431, R531	
1/4 For R432, R532, R433, R533	
0 For R610, R611	
7/16 For R612, R613	
0 For R636, R637	
15/32 For Others	

a^R (R430, R530, R431, R531)	b^R
e^R (R432, R532, R433, R533)	d^R
f^R (R610, R611)	g^R
h^R (R612, R613)	bk^R
m^R (R636, R637)	p^R
s^R (OTHERS)	t^R

WT OF ONE = 132.
do = 128.
do = 132.
do = 131.
do = 132.

	REQ'D.		MADE UP OF						
	Nº	MARK	Nº	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
AS SHOWN	15	R414	15		L-6 x 4 x 1/2	4-2 1/2		108-3	1023
AS SHOWN	15	R514	15						1023
OPP. HAND	15	R415	15						1023
OPP. HAND	15	R515	15						1023
AS SHOWN	1	R434	1	✓					68
AS SHOWN	1	R534	1	✓					68
OPP. HAND	1	R435	1	✓					68
OPP. HAND	1	R535	1	✓					68
AS SHOWN	2	R430	2	✓					136
AS SHOWN	2	R530	2	✓					136
OPP. HAND	2	R431	2	✓					136
OPP. HAND	2	R531	2	✓					136
AS SHOWN	4	R432	4	✓					273
AS SHOWN	4	R532	4	✓					273
OPP. HAND	4	R433	4	✓					273
OPP. HAND	4	R533	4	✓					273
AS SHOWN	6	R610	6	✓					409
OPP. HAND	6	R611	6	✓					409
AS SHOWN	6	R612	6	✓					409
OPP. HAND	6	R613	6	✓					409
AS SHOWN	6	R636	6	✓					409
OPP. HAND	6	R637	6	✓	L-6 x 4 x 1/2	4-2 1/2			409
	8	a^R	8		L-3 1/2 x 3 1/2 x 5/16	5	Bent	108-8	24
	8	b^R	8						24
	16	c^R	16						48
	16	d^R	16						48
	12	f^R	12						36
	12	g^R	12						36
	12	h^R	12						36
	12	bk^R	12				Bent		36
	12	m^R	12						36
	12	p^R	12						36
	64	s^R	64				Bent		1941
	64	t^R	64		L-3 1/2 x 3 1/2 x 5/16	5	Do		1941
	124	V	124		PL G 4 x 5/16	1-3 ✓		9-419-43	1031
	124	W	124		PL G 3 x 5/16	5 ✓			353
	124	Y	124		Do	8 1/2 ✓			580
	248	Z	248		3/4 ϕ Rod	2-1 A&T	2 Hex. Nuts (Bent) — 8 req'd	115-28 115-29	834
	8	aa^R	8		L-3 1/2 x 3 1/2 x 5/16	5 1/4	Bent	108-8	25
	8	ab^R	8						25
	16	ac^R	16						51
	16	ad^R	16						51
	12	af^R	12						38
	12	ag^R	12						38
	12	ak^R	12						38
	12	ak^R	12				Bent		38
	12	am^R	12						38
	12	ap^R	12						38
	64	aq^R	64				Bent		203
	64	ar^R	64		L-3 1/2 x 3 1/2 x 5/16	5 1/4	Do		203
	4	av^R	4		L-6 x 6 x 7/16	1-0 3/4		9-418-89	737
	120	aw^R	120		Do	1-0 3/4		Do	2188
	124	K2	124		Bar 3 1/2 x 5/16	2-6 A&T	Same as shown 2 (Bent)	108-13	1153
	1240	Riv.	1240		3/4 ϕ				298
	744	Bolt	744		5/8 ϕ	1 1/2	Hex. Hd. & Nut	32443	134
	248	Bolt	248		3/4 ϕ	2 1/2			79

GROSS WT. 16711..
WT. DED. 440..
NET WT. 16271..
PAINT 65..
TOTAL WT. 16336..

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

RAILING POSTS - SPANS 3, 4 & 5.

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

RIVETS 3/4 DIAM. OPEN HOLES 13/16 DIAM. UNLESS OTHERWISE NOTED

HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

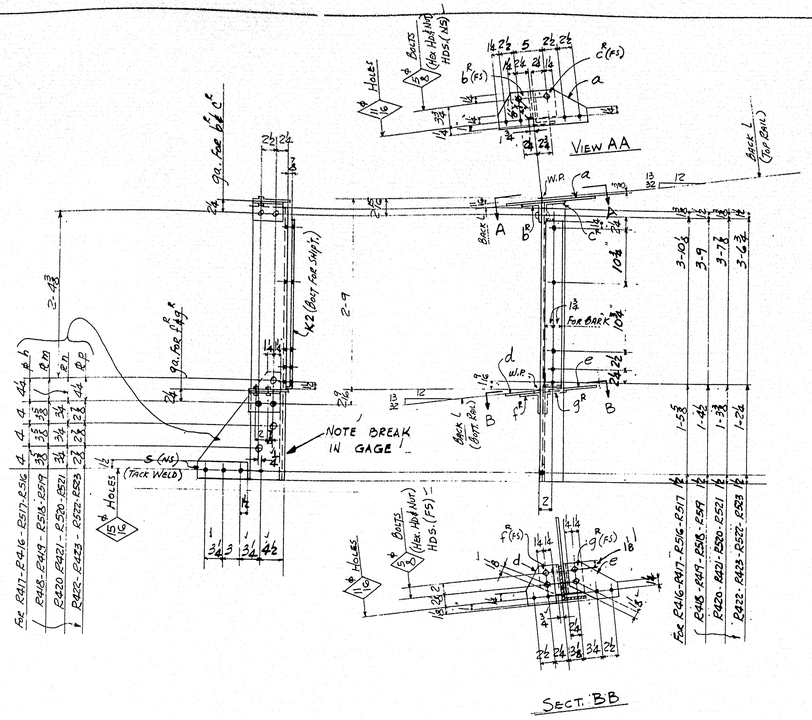
REVISIONS

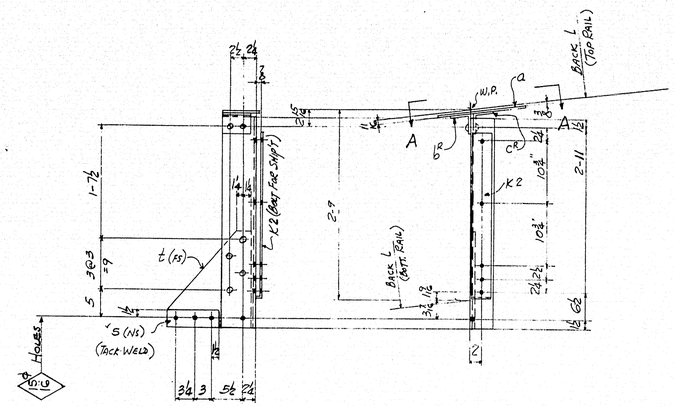
DRAWN MADE BY LK DATE 1-6-50
DRAW. CHECKED BY [illegible] DATE 2-11-50
CONTRACT No. C378 SHEET No. 174

WORK THIS SHEET WITH SH. #105

48-186

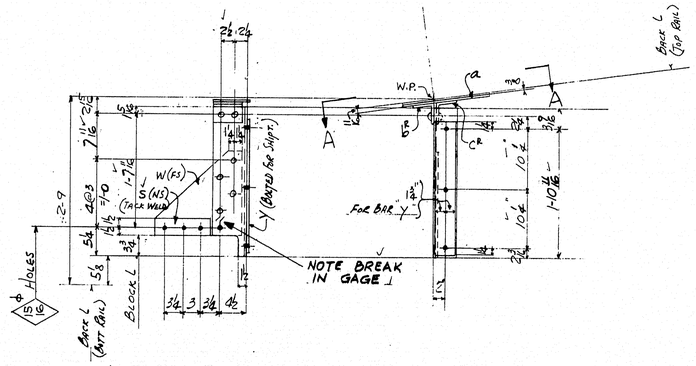
0 1 2 3 4 5 INCHES





WT. of ONE 92" MAKE ONE POST - MARK R424 (As Shown)
do 92" R425 (Opp. Hand)
do 92" R524 (As Shown)
do 92" MAKE ONE POST - MARK R525 (Opp. Hand)

WT. of ONE 127" MAKE ONE POST - MARK R416 (As Shown)
do 127" R417 (Opp. Hand)
do 127" R516 (As Shown)
do 127" R517 (Opp. Hand)
do 124" R418 (As Shown)
do 124" R419 (Opp. Hand)
do 124" R518 (As Shown)
do 124" R519 (Opp. Hand)
do 120" R420 (As Shown)
do 120" R421 (Opp. Hand)
do 120" R520 (As Shown)
do 120" R521 (Opp. Hand)
do 118" R422 (As Shown)
do 118" R423 (Opp. Hand)
do 118" R522 (As Shown)
do 118" MAKE ONE POST - MARK R523 (Opp. Hand)



WT. of ONE 76" MAKE ONE POST - MARK R426 (As Shown)
do 76" R427 (Opp. Hand)
do 77" R526 (As Shown)
do 77" MAKE ONE POST - MARK R527 (Opp. Hand)

CUTS	Reqd No	Mark	Made Up Of No	Pc Mk	Size	Length	Remarks	Ord	Weight	
	1	R416	1		L 6 in x 4 in x 7/16 in	3-11 1/2	As Shown	108-3	64	—
	1	R417	1			3-11 1/2	Opp Hand		64	—
	1	R516	1			3-11 1/2	As Shown		64	—
	1	R517	1			3-11 1/2	Opp Hand		64	—
	1	R418	1			3-10 1/2	As Shown		63	—
	1	R419	1			3-10 1/2	Opp Hand		63	—
	1	R518	1			3-10 1/2	As Shown		63	—
	1	R519	1			3-10 1/2	Opp Hand		63	—
	1	R420	1			3-9 1/4	As Shown		61	—
	1	R421	1			3-9 1/4	Opp Hand		61	—
	1	R520	1			3-9 1/4	As Shown		61	—
	1	R521	1			3-9 1/4	Opp Hand		61	—
	1	R422	1			3-8 1/4	As Shown		60	—
	1	R423	1			3-8 1/4	Opp Hand		60	—
	1	R522	1			3-8 1/4	As Shown		60	—
	1	R523	1		L 6 in x 4 in x 7/16 in	3-8 1/4	Opp Hand		60	—
			16	a	R 6 in x 5/16 in	1-3		9-419-43	133	17
			16	b^R	L 3 1/2 in x 3 1/2 in x 5/16 in	5	Bent	108-8	48	5
			16	c^R	Do	5	Bent	Do	48	—
			16	d	R 6 3/4 in x 5/16 in	5		9-419-43	46	5
			16	e	R 6 3/4 in x 5/16 in	8 1/4		Do	75	22
			16	f^R	L 3 1/2 in x 3 1/2 in x 5/16 in	5 1/4	Bent	108-8	51	2
			16	g^R	Do	5 1/4	Bent	Do	51	—
		1-4	4	h	R 14 3/4 in x 3/8 in	1-7		108-10	119	36
		5-8	4	m	Do	1-6			113	36
		9-12	4	n	Do	1-4 3/4			105	36
		13-16	4	p	Do	1-3 1/4			99	36
			16	S	Fill 3 in x 1/2	9 1/2		108-14	64	—
			16	K2	Bar 3 1/2 in x 5/16 in	2-6 Abt.	Bent - Same as Sht 2	108-13	149	—
			112		3/4 ϕ Rivs				27	—
			96		5/8 ϕ Bolts	1 1/2	Hex Hd & Nut	32943	17	—
			32		3/4 ϕ Bolts	2 1/2			10	—
	1	R424	1		L 6 in x 4 in x 7/16 in	3-0 1/2	As Shown	108-3	49	—
	1	R425	1		Do	3-0 1/2	Opp Hand		49	—
	1	R524	1		Do	3-0 1/2	As Shown		49	—
	1	R525	1		Do	3-0 1/2	Opp Hand		49	—
			4	a				9-419-43	33	17
			4	b^R				108-8	12	5
			4	c^R				Do	12	—
			4	k2				108-13	37	5
			4	t	R 14 3/4 in x 3/8 in	1-5		108-10	107	30
			4	S	Fill 3 in x 1/2	9 1/2		108-14	16	—
			24		3/4 ϕ Rivs				6	—
			8		3/4 ϕ Bolts	2 1/2			3	—
			8		5/8 ϕ Bolts	1 1/2	Hex Hd & Nut	32943	1	—
	1	R426	1		L 6 in x 4 in x 7/16 in	2-2 1/4	As Shown	108-3	35	2
	1	R427	1			2-2 1/4	Opp Hand		35	2
	1	R526	1			2-2 1/4	As Shown		35	2
	1	R527	1		L 6 in x 4 in x 7/16 in	2-2 1/4	Opp Hand		35	2
			4	a				9-419-43	33	4
			4	b^R				108-8	12	5
			4	c^R				Do	12	—
			4	Y	Bar 3 1/2 in x 5/16 in	1-11		108-13	29	—
			4	W	R 14 3/4 in x 3/8 in	1-2 1/4		108-10	93	30
			4	S				108-14	16	—
			24		3/4 ϕ Rivs				6	—
			8		3/4 ϕ Bolts	2 1/2			3	—
			8		5/8 ϕ Bolts	1 1/2	Hex Hd & Nut	32943	1	—

Gross Wt. 2915.
Wt. Ded. 295.
Net Wt. 2620.
Paint 10.
Total Wt. 2630.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

Railing Posts

Rivets 3/4 diam. Open holes 13/16 diam. unless otherwise noted

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

REVISIONS

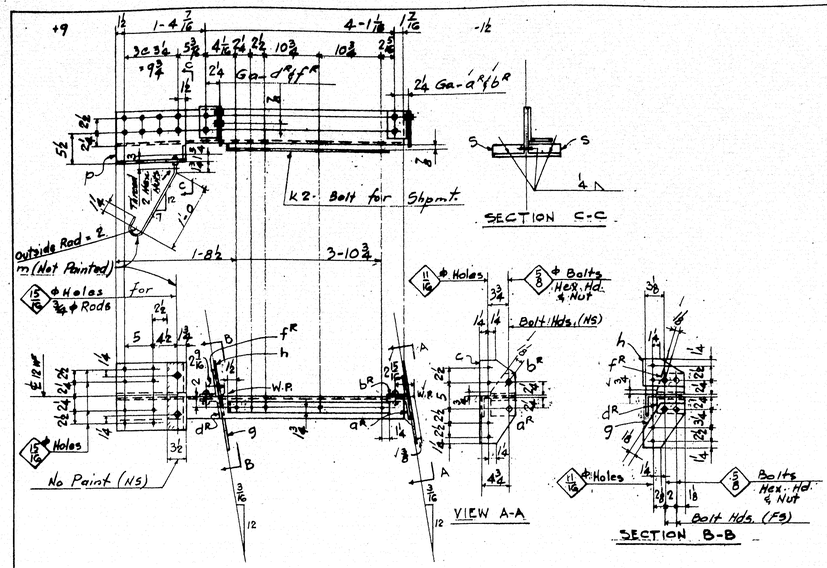
DRAW. MADE BY CZ DATE 1-9-50
DRAW. CHECKED BY HLJ DATE 2-11-50
CONTRACT No. C 278 SHEET No. 175

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X 50

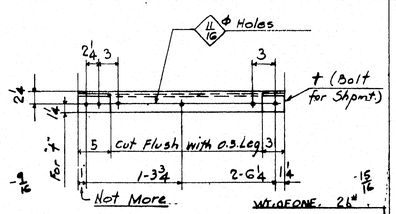
WORK THIS SHEET WITH SH. #105

0 1 2 3 4 5 INCHES

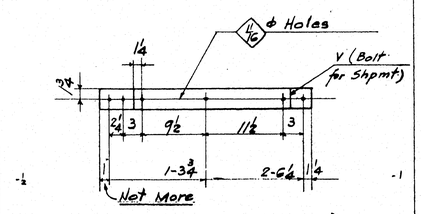
48-187



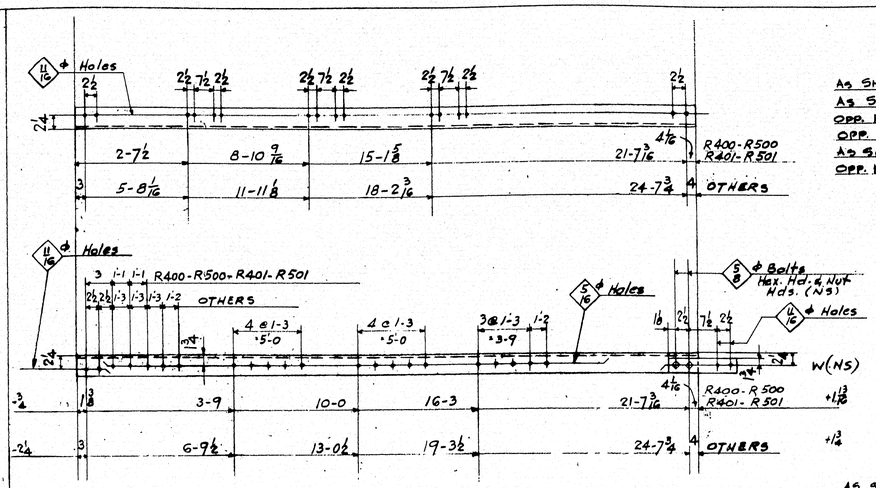
MAKE 4 POSTS - MARK R436 - AS SHOWN
" 4 " - " R536 - AS SHOWN } ALIKE WT. OF ONE 157#
" 8 " - " R608 - AS SHOWN
" 4 " - " R437 - OPP. HAND
" 4 " - " R537 - OPP. HAND } ALIKE WT. OF ONE 157#
" 8 " - " R609 - OPP. HAND



MAKE 2 POSTS - MARK R462 - AS SHOWN
" 2 " - " R632 - AS SHOWN } ALIKE
" 2 " - " R562 - AS SHOWN
" 2 " - " R463 - OPP. HAND
" 2 " - " R633 - OPP. HAND } ALIKE
" 2 " - " R563 - OPP. HAND
WT. OF ONE 26#.



MAKE 6 PIECES - MARK R464
" 12 " - " R634
" 6 " - " R564 } ALIKE
WT. OF ONE 18#.



MAKE ONE RAIL - MARK R400 - AS SHOWN } ALIKE WT. OF ONE 191#
" ONE " - " R500 - AS SHOWN
" ONE " - " R401 - OPP. HAND } ALIKE do 191#
" ONE " - " R501 - OPP. HAND
" 4 RAILS - " R402 - AS SHOWN } ALIKE do 217#
" 4 " - " R502 - AS SHOWN
" 4 " - " R403 - OPP. HAND } ALIKE do 217#
" 4 " - " R503 - OPP. HAND

	REQ'D. NO	MARK	MADE UP OF NO	PC. MK	SIZE	LGTH.	REMARKS	ORD.	WEIGHT	NO. CUTS
AS SHOWN	4	R436	4		L-6x4x½	4-2½		108-3	273	-
AS SHOWN	4	R536	4						273	-
OPP. HAND	4	R437	4						273	-
OPP. HAND	4	R537	4						273	-
AS SHOWN	8	R608	8						546	-
OPP. HAND	8	R609	8		L-6x4x½	4-2½			546	-
			32	a^R_L	L-3½x3½x$\frac{5}{16}$	5	Bent	108-8	97	-
			32	b^R_L	Do	5	Do	Do	97	13
			32	c	PL 6x$\frac{5}{16}$	1-3		9-419-43	264	40
			32	d^R_L	L-3½x3½x$\frac{5}{16}$	5¼	Bent	108-8	101	-
			32	f^R_L	Do	5¼	Do	Do	101	-
			32	g	PL 6$\frac{3}{8}$x$\frac{5}{8}$	8¼		9-419-43	150	49
			32	h	Do	5		Do	91	12
			64	m	¾ ϕ Rod	1-10 A.B.	2 Hex. Nuts & 2 Washers per Rod	111-28 111-29	191	-
			32	K2	Bar 3½x$\frac{5}{16}$	2-6 A.B.	2 Holes for ¾ Bolts	108-13	298	-
			32	P	Pt. 12WFG5	1-0¾		SN456	2205	903
			384	Riv.	¾ ϕ				92	-
			192	Bolt	¾ ϕ	1½	Hex. Hd. & Nut	32943	35	-
			64	Bolt	¾ ϕ	2½			20	-
			64	s	PL 2¾x$\frac{3}{8}$	5$\frac{13}{16}$		9-423-5	93	-
			1	Weld	¼ △	42-8			5	-
AS SHOWN	2	R462	2		L-3½x3½x$\frac{5}{16}$	2-7½		108-8	38	4
OPP. HAND	2	R463	2						38	4
AS SHOWN	2	R632	2						38	4
OPP. HAND	2	R633	2						38	4
AS SHOWN	2	R562	2						38	4
OPP. HAND	2	R563	2		L-3½x3½x$\frac{5}{16}$	2-7½			38	4
			12	t	Bar 3x$\frac{5}{16}$	2-7½		9-419-43	101	-
			24	Bolts	⅝ ϕ	2½			5	-
	6	R464	6		Bar 3½x$\frac{5}{16}$	2-7½		108-13	59	-
	12	R634	12		Do	2-7½			117	-
	6	R564	6		Do	2-7½			59	-
			24	V	Bar 3½x$\frac{5}{16}$	1-11½			175	-
			48	Bolts	⅝ ϕ	2½			10	-
AS SHOWN	1	R400	1		L-3½x3½x⅜	21-11¼		108-5	186	-
AS SHOWN	1	R500	1						186	-
OPP. HAND	1	R401	1						186	-
OPP. HAND	1	R501	1			21-11¼			186	-
AS SHOWN	4	R402	4			24-11¾			849	-
AS SHOWN	4	R502	4						849	-
OPP. HAND	4	R403	4						849	-
OPP. HAND	4	R503	4		L-3½x3½x⅜	24-11¾			849	-
			20	W	PL 3x$\frac{5}{16}$	1-2¾		9-419-43	78	-
			40	Bolts	⅝ ϕ	1½	Hex. Hd. & Nut	32943	7	-
								GROSS WT.	11005	
								WT. DED.	1041	
								NET WT.	9964	
								PAINT	40	
								TOTAL WT.	10004	

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

WORK THIS SHEET WITH SH.#105

POSTS & RAILINGS - SPANS 3 & 5.

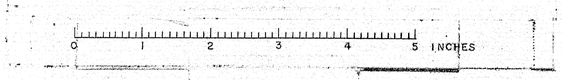
RIVETS ¾ DIAM. OPEN HOLES 13/16 DIAM. UNLESS OTHERWISE NOTED

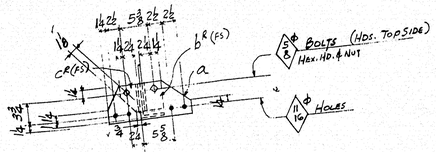
REVISIONS

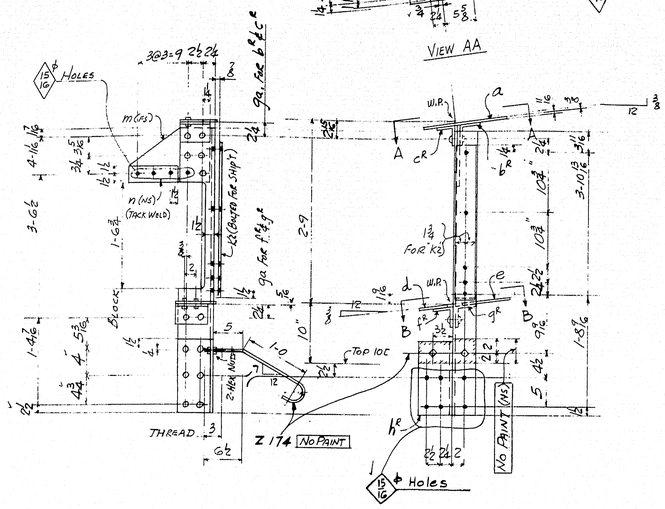
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

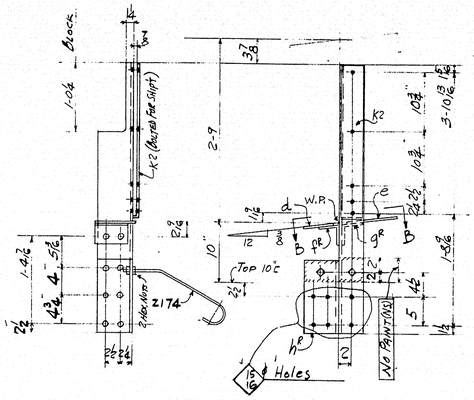
DRAW. MADE BY LK DATE 1-11-50
DRAW. CHECKED BY TLJ DATE 2-11-50
CONTRACT No. C378 SHEET No. 176

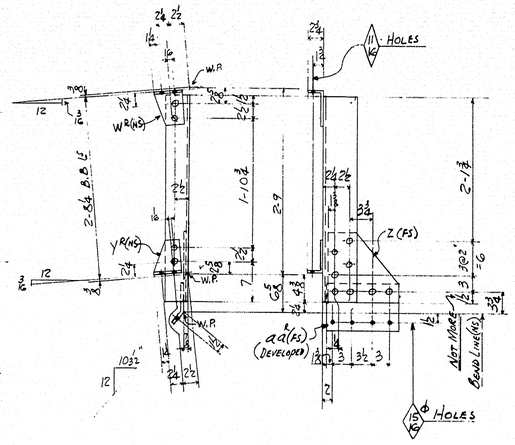
48-188

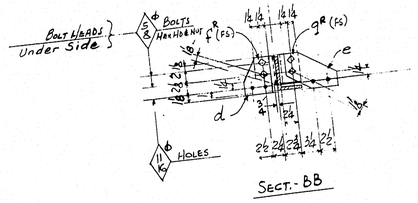


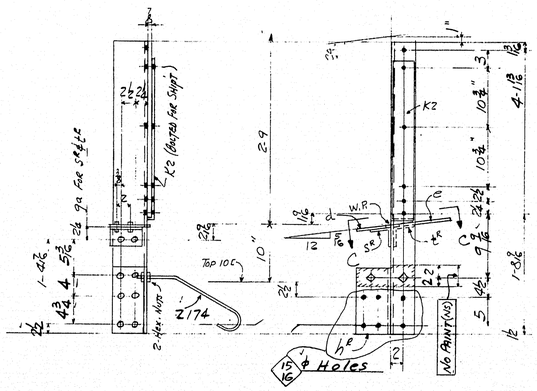


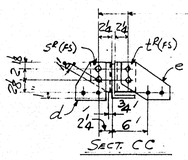












WT. of one 117° Make One Post - Mark R468 (As shown)
do 117° R470 (Opp Hand)
do 117° R568 (As shown)
do 117° Make One Post - Mark R569 (Opp. Hand)

Make 2 Posts - Mark R638 (As shown)
Make 2 Posts - Mark R639 (Opp Hand)
Wt. of one R638 8½"
do R639 8½"

Make One Post - Mark R428 (As shown) Wt of one 152#
R429 (Opp Hand) do 152#
R528 (As shown) do 152#
Make One Post - Mark R529 (Opp Hand) do 152#

Make One Post - Mark R469 (As shown) Wt. of one 120#
R471 (Opp Hand) do 120#
R570 (As shown) do 120#
Make One Post - Mark R571 (Opp Hand) do 120#

Reqd No	Mark	Mk No	Pc Mk	Size	Length	Remarks	Ord	Weight
1	R428	1		L 6"x4"x⅝"	4-2½	As Shown	108-3	68
1	R429	1		do	4-2½	Opp. Hand		68
1	R528	1		do	4-2½	As Shown		68
1	R529	1		do	4-2½	Opp. Hand		68
		4	a	PL 6"x1⅝"	1-3½		9-419-43	34
		4	b^R	L 3½"x3½"x⅝"	5	Bent	108-8	12
		4	c^R	Do	5	Bent	Do	12
		4	d	PL 6⅜"x⅞"	5		9-419-43	11
		4	e	Do	8½		Do	19
		4	f^R	L 3½"x3½"x⅝"	5½	Bent	108-8	13
		4	g^R	Do	5½	Bent	Do	13
		4	h^R	L 6"x4"x⅞"	1-0½		9-418-89	73
		4	K2	Bar 3½"x⅞"	2-6 Abt	Bent Same As Sht #2	108-13	37
		4	m	PL 14½"x⅜"	9½		108-10	58
		4	n	Fill 3"x½"	9½		108-14	16
		8	Z174	¾ϕ Rod	2-1 Abt	Bent 2 Hex. Nuts ea.	118-28 118-29	27
		24		¾ϕ Bolts	1½	Hex. Hd & Nut	32943	4
		8		⅝ϕ Bolts	2½			3
		52		½ϕ Rivs				12
1	R468	1		L 6"x4"x½"	4-0⅛	As Shown	108-3	65
1	R470	1		Do	4-0⅛	Opp Hand		65
1	R568	1		Do	4-0⅛	As Shown		65
1	R569	1		Do	4-0⅛	Opp. Hand		65
		4	d				9-419-43	11
		4	e				Do	19
		4	f^R				108-8	13
		4	g^R				Do	13
		4	h^L				9-418-89	73
		4	K2				108-13	37
		8	Z174			2 Hex. Nuts ea.	118-28 118-29	27
		16		⅝ϕ Bolts	1½	Hex. Hd & Nut	32943	3
		8		¾ϕ Bolts	2½			3
		32		½ϕ Rivs				8
1	R469	1		L 6"x4"x½"	4-3	As Shown	108-3	69
1	R471	1		Do	4-3	(Opp Hand)		69
1	R570	1		Do	4-3	As Shown		69
1	R571	1		Do	4-3	Opp Hand		69
		4	d				9-419-43	11
		4	e				Do	19
		4	s^R	L 3½"x3½"x⅝"	5½	Bent	108-8	13
		4	t^R	Do	5½	Bent	Do	13
		4	h^R				9-418-89	73
		4	K2				108-13	37
		8	Z174			2 Hex. Nuts ea.	118-28 118-29	27
		16		⅝ϕ Bolts	1½	Hex Hd & Nut	32943	3
		8		¾ϕ Bolts	2½			3
		32		½ϕ Rivs				8
2	R638	2		L 6"x4"x⅝"	3-0¢	As Shown	108-3	98
2	R639	2		Do	3-0¢	Opp Hand	Do	98
		4	W^R	L 6"x2¾"x⅜"	4⅞	Cut G"x L	112-4	20.4
		4	Y^R	Do	4⅞	Do	Do	20.4
		4	Z	PL 12"x⅜"	1-0⅛		108-10	62.12
		4	aa^R	PL 12"x⅛"	8¼	Bent	9-423-4	51
		48		¾ϕ Rivs				12
								1927

Gross Wt. 1927
Wt. Ded. 35
Net Wt. 1892
Paint 8
Total Wt. 1900

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

RAILING POSTS

Rivets ¾" diam. open holes ⅞" diam. unless otherwise noted

HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

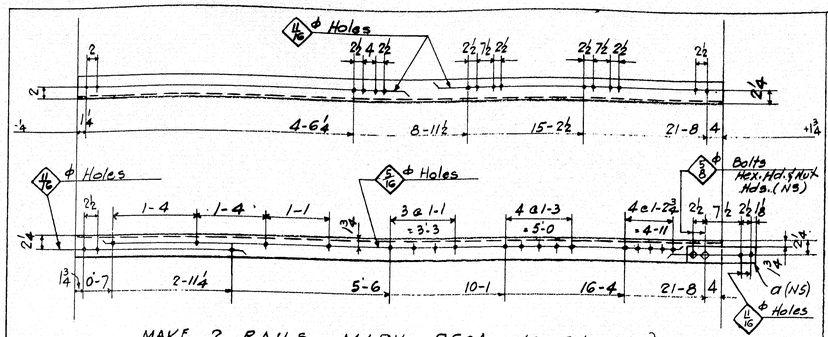
REVISIONS

Draw. made by CZ Date 1-12-50
Draw. checked by TLW Date 2-11-50
Contract No. C378 Sheet No. 177

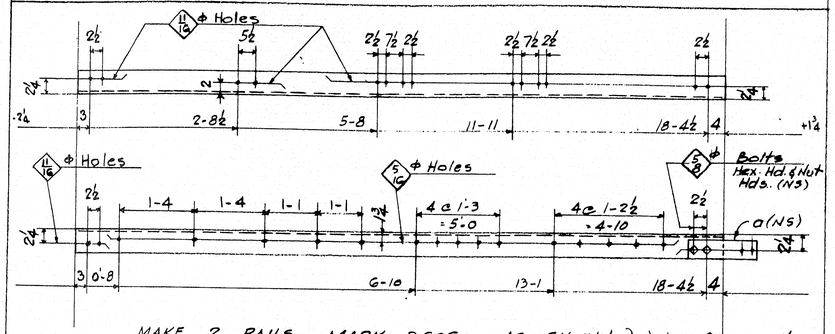
For notes on specifications, material, painting, punching, drilling, reaming, etc. see sheet X50

Work this sheet with Sh. #174

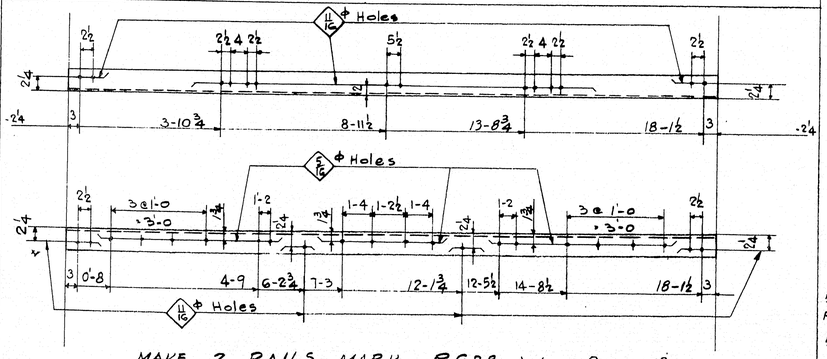
48-189



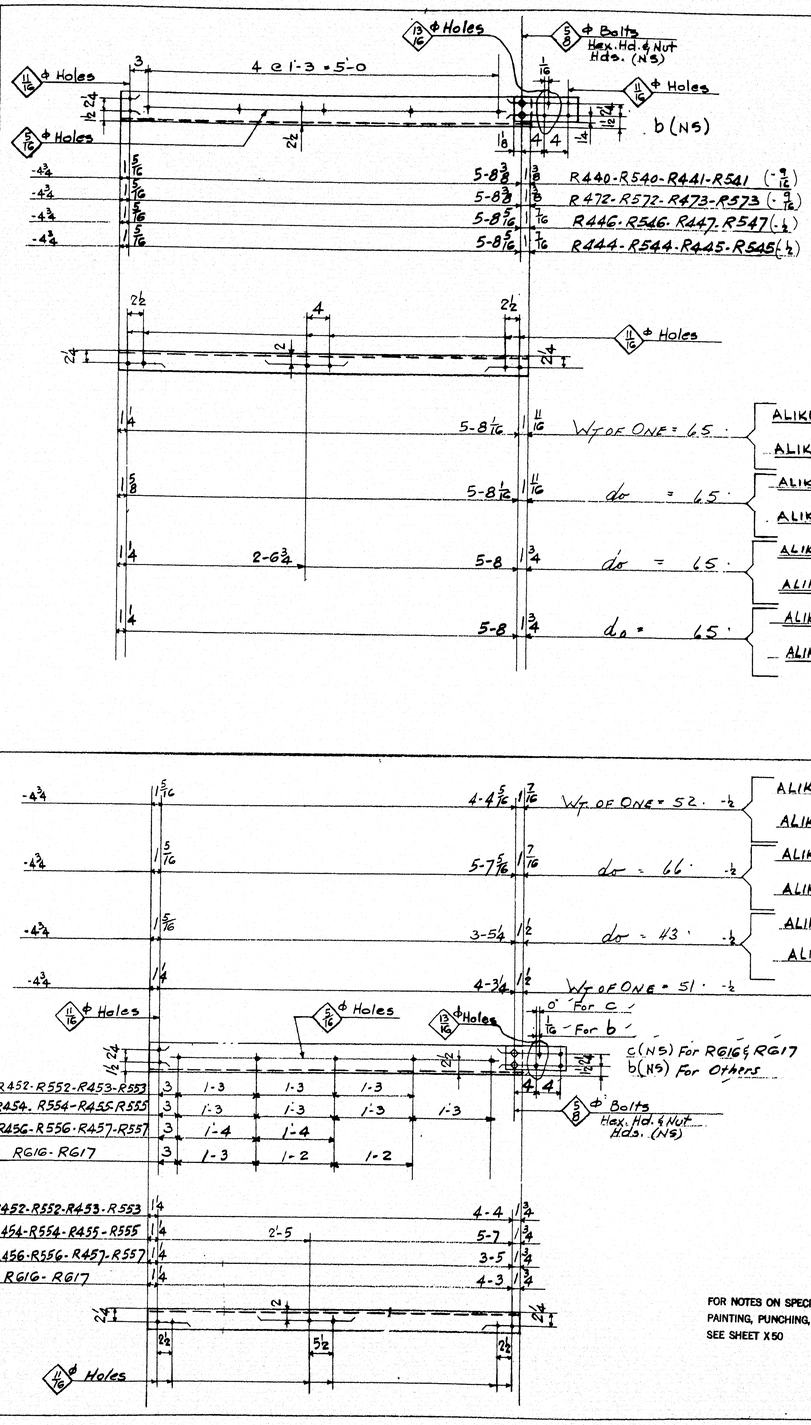
MAKE 2 RAILS - MARK R604 - AS SHOWN
" 2 " - " R605 - OPP. HAND
} Wt OF ONE = 193.



MAKE 2 RAILS - MARK R606 - AS SHOWN
" 2 " - " R607 - OPP HAND
} Wt OF ONE = 164.



MAKE 2 RAILS - MARK R628 Wt OF ONE = 158.



	REQ'D.				MADE UP OF				
	Nº	MARK	Nº	PC. MK	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
AS SHOWN	2	RG04	2		L-3½×3½×⅜	22'-0		108-5	374.
OPP. HAND	2	RG05	2		Do	22-0		Do	374.
			4	a	PL 3×5/16	1'-2¾		9-419-43	16.
			8	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1.
AS SHOWN	2	RG06	2		L-3½×3½×⅜	18-8½		108-5	318.
OPP. HAND	2	RG07	2		Do	18-8½		Do	318.
			4	a	PL 3×5/16	1'-2¾		9-419-43	16.
			8	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1.
	2	RG28	2		L-3½×3½×⅜	18-4½		108-5	312.
			88	b	PL 4¾×5/16	10¼		9-419-43	378.
			176	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	32.
ALIKE AS SHOWN	17	R440	17		L-5×3½×⅜	5-9¾		9-418-87	1027.
AS SHOWN	17	R540	17						1027.
ALIKE OPP. HAND	17	R441	17						1027.
OPP. HAND	17	R541	17						1027.
ALIKE AS SHOWN	3	R472	3						181.
AS SHOWN	3	R572	3						181.
ALIKE OPP. HAND	3	R473	3						181.
OPP. HAND	3	R573	3						181.
ALIKE AS SHOWN	1	R446	1						60.
AS SHOWN	1	R546	1						60.
ALIKE OPP. HAND	1	R447	1						60.
OPP. HAND	1	R547	1						60.
ALIKE AS SHOWN	1	R444	1						60.
AS SHOWN	1	R544	1						60.
ALIKE OPP. HAND	1	R445	1						60.
OPP. HAND	1	R545	1		L-5×3½×⅜	5-9¾		9-418-87	60.
ALIKE AS SHOWN	2	R452	2		L-5×3½×⅜	4-5¾		9-418-87	93.
AS SHOWN	2	R552	2						93.
ALIKE OPP. HAND	2	R453	2						93.
OPP. HAND	2	R553	2			4-5¾			93.
ALIKE AS SHOWN	1	R454	1			5-8¾			60.
AS SHOWN	1	R554	1						60.
ALIKE OPP. HAND	1	R455	1						60.
OPP. HAND	1	R555	1			5-8¾			60.
ALIKE AS SHOWN	1	R456	1			3-6¾			37.
AS SHOWN	1	R556	1						37.
ALIKE OPP. HAND	1	R457	1						37.
OPP. HAND	1	R557	1			3-6¾			37.
AS SHOWN	6	RG16	6			4-4¾			275.
OPP. HAND	6	RG17	6		L-5×3½×⅜	4-4¾			275.
			16	b	PL 4¾×5/16	10¼		9-419-43	69.
			56	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	10.
			12	c	PL 4¾×5/16	10¼		9-419-43	52.
								Gross Wt.	8893.
								Wt. Ded.	
								Net Wt.	8893.
								Paint	35.
								Tot. Wt.	8928.

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

RAILINGS - SPANS 3, 4 & 5

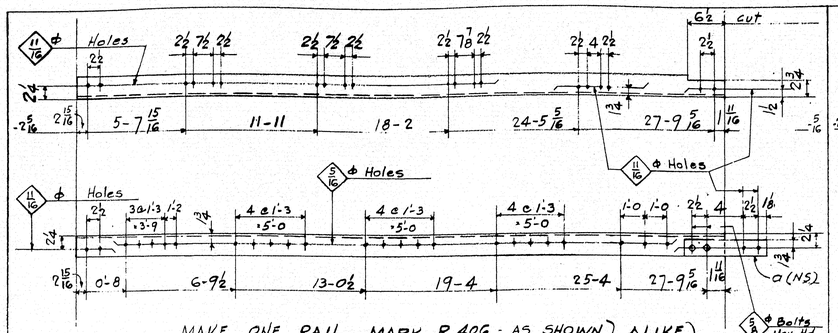
BOLTS 5/8 DIAM. OPEN HOLES AS DIMS. NOTED UNLESS OTHERWISE NOTED

REVISIONS

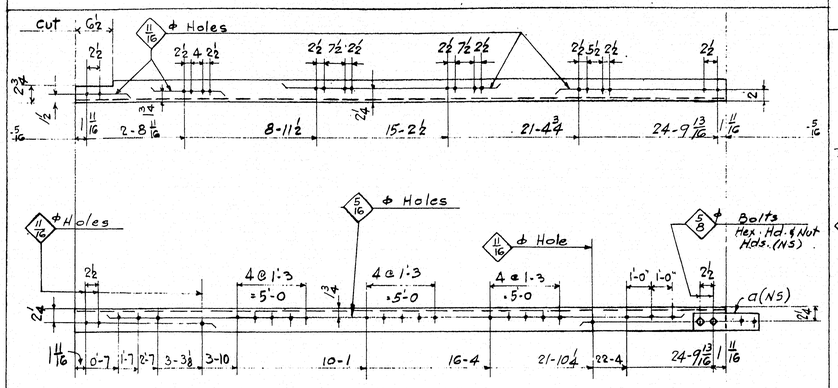
MARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

DRAW. MADE BY LK DATE 1-23-50
DRAW. CHECKED BY HLJ DATE 2-11-50
CONTRACT No. C378 SHEET No. 178

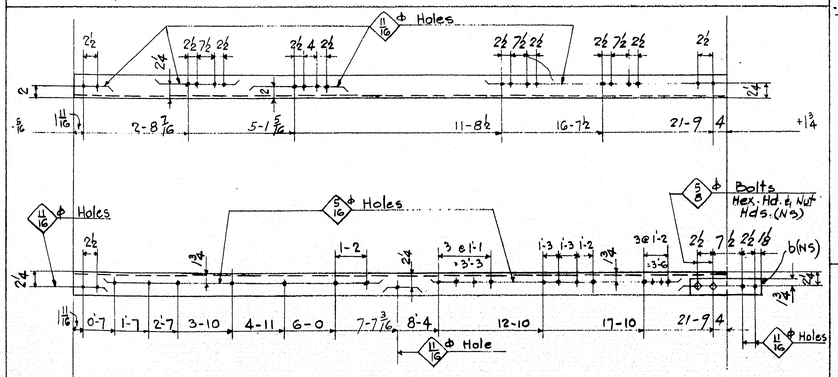
48-190



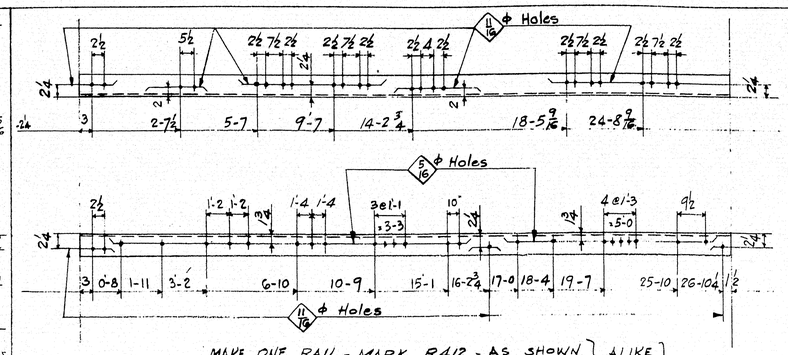
MAKE ONE RAIL - MARK R406 - AS SHOWN } ALIKE
" ONE " - " R506 - AS SHOWN }
" ONE " - " R407 - OPP. HAND } ALIKE
" ONE " - " R507 - OPP. HAND }
Wt. OF ONE = 241.



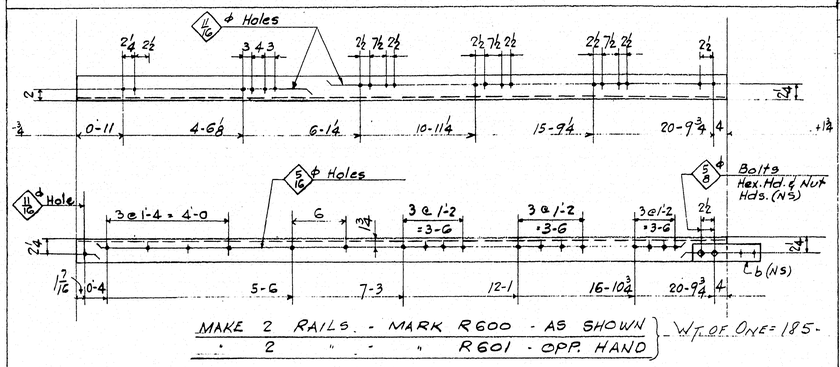
MAKE ONE RAIL - MARK R408 - AS SHOWN } ALIKE
" ONE " - " R508 - AS SHOWN }
" ONE " - " R409 - OPP. HAND } ALIKE
" ONE " - " R509 - OPP. HAND }
Wt. OF ONE = 216.



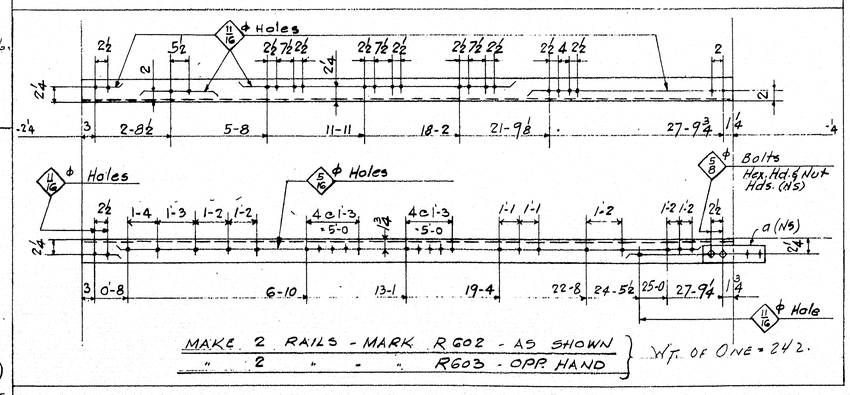
MAKE ONE RAIL. MARK R410 - AS SHOWN } ALIKE
" ONE " - " R510 - AS SHOWN }
" ONE " - " R411 - OPP. HAND } ALIKE
" ONE " - " R511 - OPP. HAND }
Wt. OF ONE = 193.



MAKE ONE RAIL - MARK R412 - AS SHOWN } ALIKE
" ONE " - " R512 - AS SHOWN }
" ONE " - " R413 - OPP. HAND } ALIKE
" ONE " - " R513 - OPP. HAND }
Wt. OF ONE = 230.



MAKE 2 RAILS - MARK R600 - AS SHOWN } Wt. OF ONE = 185.
" 2 " - " R601 - OPP. HAND }



MAKE 2 RAILS - MARK R602 - AS SHOWN } Wt. OF ONE = 242.
" 2 " - " R603 - OPP. HAND }

	REQ'D.		MADE UP OF						
	No.	MARK	No.	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
AS SHOWN	1	R406	1		L-3½×3½×⅜	27-11		108-5	237.
AS SHOWN	1	R506	1		Do	↓		↓	237.
OPP. HAND	1	R407	1		Do				237.
OPP. HAND	1	R507	1		Do	27-11			239.
			4	a	PL 3×⅝	11¼		9-419-43	12
			8	Bolts	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1
AS SHOWN	1	R408	1		L-3½×3½×⅜	24-11½		108-5	212
AS SHOWN	1	R508	1		Do	↓		↓	212
OPP. HAND	1	R409	1		Do				212
OPP. HAND	1	R509	1		Do	24-11½			212
			4	a				9-419-43	12
			8	Bolts	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1
AS SHOWN	1	R410	1		L-3½×3½×⅜	22-1		108-5	188
AS SHOWN	1	R510	1		Do	↓		↓	188
OPP. HAND	1	R411	1		Do				188
OPP. HAND	1	R511	1		Do	22-1			188
			4	b	PL 3×⅝	1-2¾		9-419-43	16
			8	Bolts	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1
AS SHOWN	1	R412	1		L-3½×3½×⅜	26-11¾		108-5	229
AS SHOWN	1	R512	1		Do	↓		↓	229
OPP. HAND	1	R413	1		Do				229
OPP. HAND	1	R513	1		Do	26-11¾			229
AS SHOWN	2	R600	2		L-3½×3½×⅜	21-1¾		108-5	360
OPP. HAND	2	R601	2		Do	21-1¾		Do	360
			4	b				9-419-43	16
			8	Bolts	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1
AS SHOWN	2	R602	2		L-3½×3½×⅜	27-11		108-5	475
OPP. HAND	2	R603	2		Do	27-11		Do	475
			4	a				9-419-43	12
			8	Bolts	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1
							Gross Wt.		5207.
							Wt. Ded.		
							Net Wt.		5207.
							Paint.		21.
							Tot. Wt.		5228.

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

⅝ DIAM. OPEN HOLES AS DIAM. NOTED
BOLTS UNLESS OTHERWISE NOTED

REVISIONS

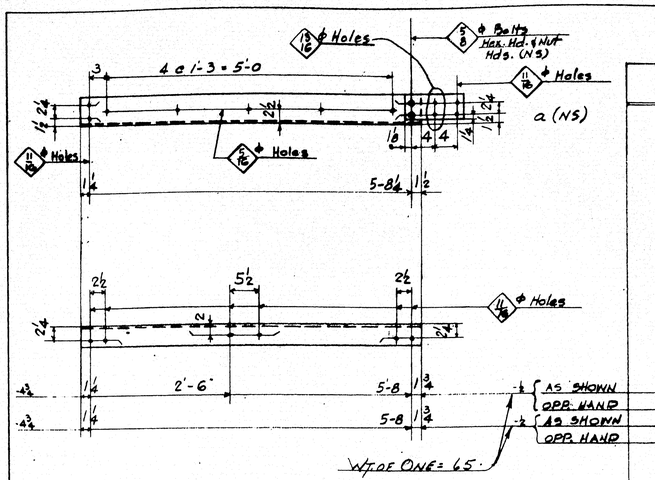
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

DRAW. MADE BY LK DATE 1-18-50
DRAW. CHECKED BY HLH DATE 2-11-50
CONTRACT No. C 378 SHEET No. 179

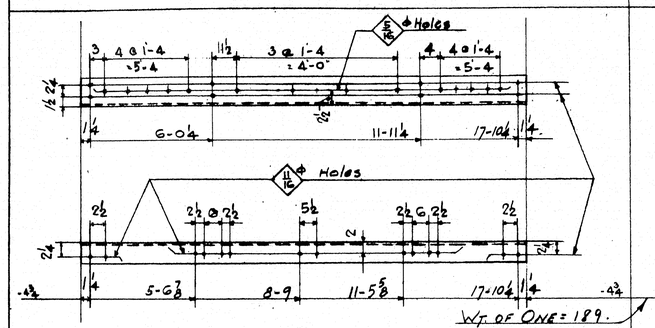
ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

RAILINGS - SPANS 3, 4 & 5.

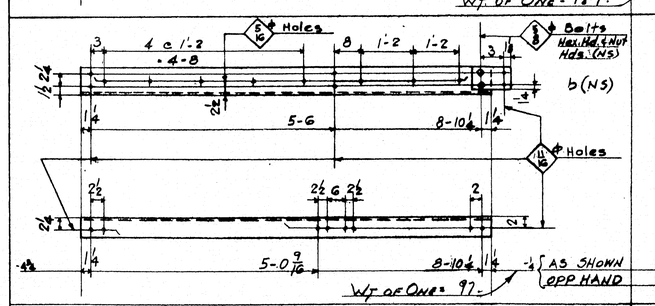
48-191



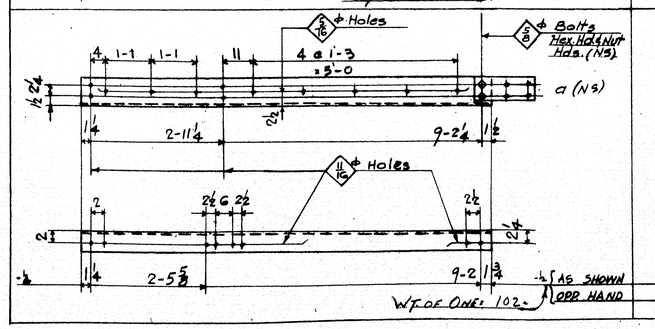
REQ'D.	MARK	MADE UP OF №	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
		32	a	PL 4½ × 5/16	10¼		9-419-43	137.
		64	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	12.
4	RG18	4		L-5×3½×⅜	5-9¾		9-418-87	242.
4	RG19	4						242.
12	RG20	12						725.
12	RG21	12		L-5×3½×⅜	5-9¾			725.



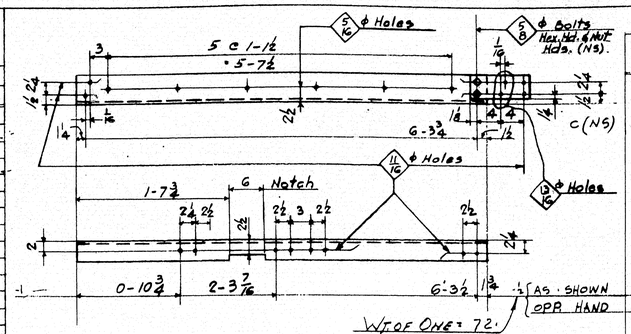
REQ'D.	MARK	MADE UP OF №	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
2	RG30	2		L-5×3½×⅜	17-11½		9-418-87	379.



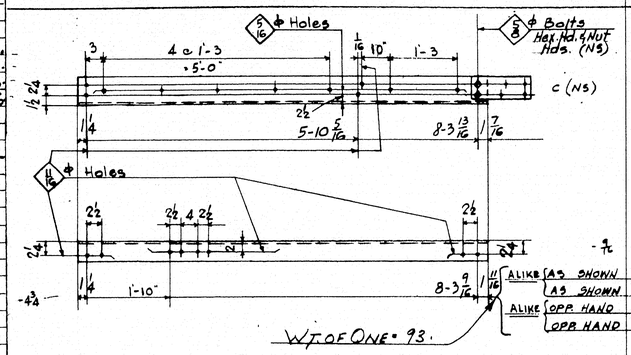
REQ'D.	MARK	MADE UP OF №	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
		4	b	PL 4½ × 5/16	5¼		9-419-43	9.
		8	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1.
2	RG22	2		L-5×3½×⅜	8-11½		9-418-87	186.
2	RG23	2		Do	8-11½		Do	186.



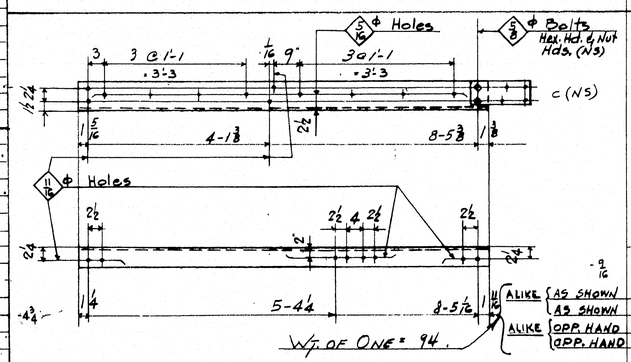
REQ'D.	MARK	MADE UP OF №	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
		4	a				9-419-43	17.
		8	Bolts	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1.
2	RG24	2		L-5×3½×⅜	9-3¾		9-418-87	194.
2	RG25	2		Do	9-3¾		Do	194.
								3245.



REQ'D.	MARK	MADE UP OF №	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
2	RG14	2		L-5×3½×⅜	G-5¼	AS SHOWN	9-418-87	139.
2	RG15	2		Do	G-5¼	OPP. HAND	Do	139.



REQ'D.	MARK	MADE UP OF №	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
		4	c				9-419-43	17.
		8	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1.
1	R458	1		L-5×3½×⅜	8-5¼	ALIKE AS SHOWN	9-418-87	88.
1	R558	1				AS SHOWN		88.
1	R459	1				ALIKE OPP. HAND		88.
1	R559	1		L-5×3½×½	8-5¼	OPP. HAND		88.



REQ'D.	MARK	MADE UP OF №	PC. MK.	SIZE	LGTH.	REMARKS	ORD.	WEIGHT
		4	c				9-419-43	17.
		8	Bolt	⅝ ϕ	1½	Hex. Hd. & Nut	32943	1.
1	R450	1		L-5×3½×⅜	8-6¾	ALIKE AS SHOWN	9-418-87	89.
1	R550	1				AS SHOWN		89.
1	R451	1				ALIKE OPP. HAND		89.
1	R551	1		L-5×3½×⅜	8-6¾	OPP. HAND		89.
								1030.
						Gross Wt.		3245.
						Wt. Det.		9275.
						Net. Wt.		2.
						Paint		4273.
						Tot. Wt.		17.
								4290.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

L
W.

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

RAILINGS - SPAN 4

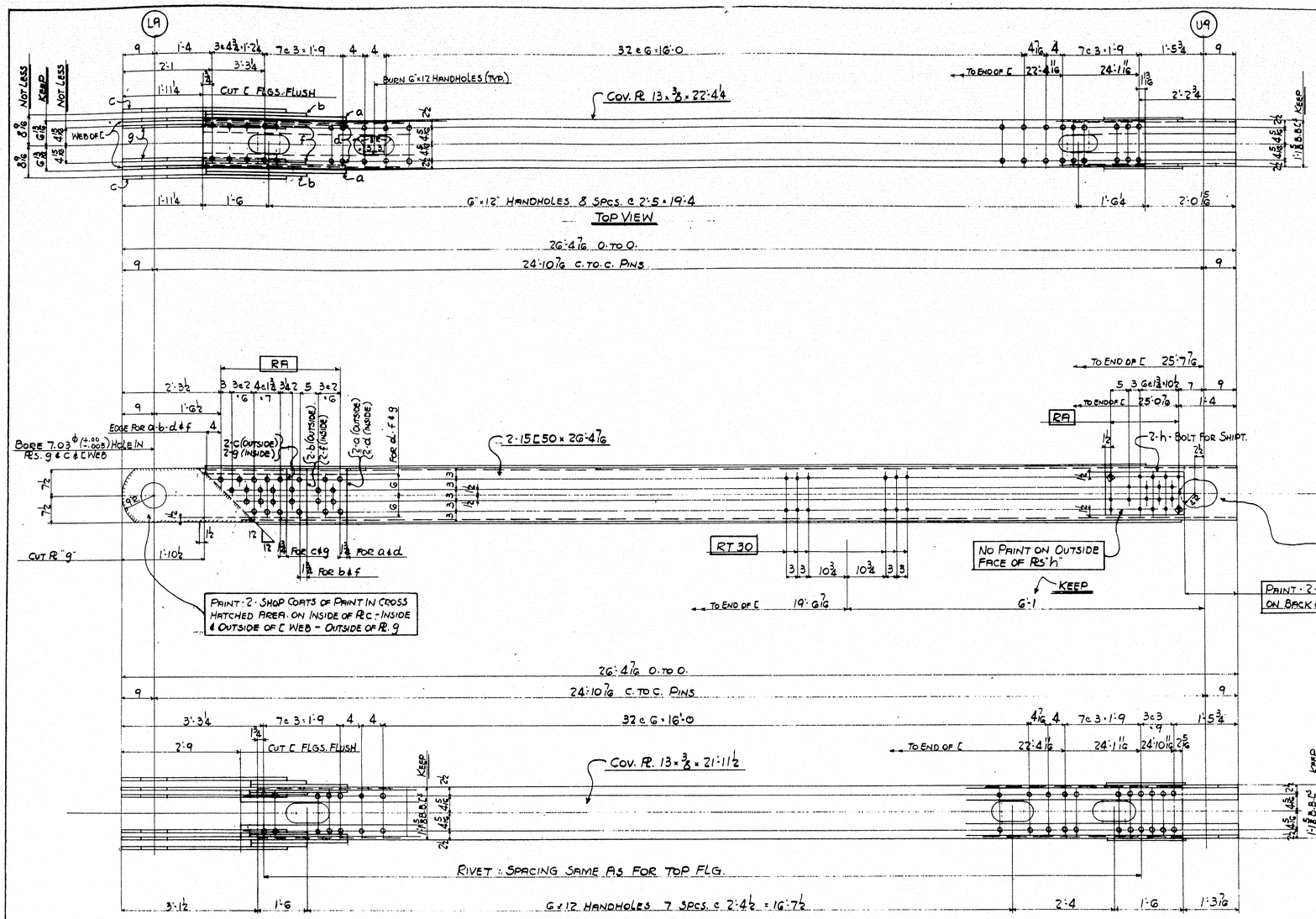
BOLTS ⅝ DIAM. OPEN HOLES 1/16 DIAM. UNLESS OTHERWISE NOTED

REVISIONS

MARRIS STRUCTURAL STEEL CO.
618 FOURTH AVE., N. Y.

DRAWN, MADE BY LK DATE 1-26-50
DRAWN, CHECKED BY ML DATE 2-1-50
CONTRACT No. C378 SHEET No. 180

48-192



SHIPT No.	REQ'D No	MARK	No	PL MK	SIZE	LENGTH	REMARKS	ORD	WEIGHT	% CUT
4	1	L9-U9 (T1)								
4	1	L9-U9 (T2)								
			4		15 E 50	26'-4 7/16	CUT 26'-5 1/4	9-418-43	5274	195
			2	COVS.	PL 13 x 3/8	22'-4 1/4	CUT 22'-8	9-419-16	741	119
			2	COVS.	PL 13 x 3/8	21'-11 1/2	" 22'-8	Do	728	119
			4	a	PL 15 x 3/8	3'-2		9-442-8	566	108
			4	b	Do.	2'-3			401	108
			4	c	PL 15 x 3/8	3'-9 1/4			673	56
			4	d	PL 12 x 5/8	3'-2		3-9-442-10 1-119-19	323	50
			4	f	PL 12 x 5/8	2'-3		9-442-11	184	41
			4	g	PL 15 x 3/4	3'-9 1/4		Do-9	578	48
			4	h	FILL 12 x 1/8	1'-9 1/2		119-27	37	-
			8	BOLTS	7/8 Φ	2 1/2			4	-
			540	RIVS.	7/8 Φ				199	-
								Gross Wt.	9103	
								Wt. Det.	844	
								Net Wt.	8859	
								Paint	35	
								Tot. Wt.	8894	

RT 30

L J. W.

MAKE - ONE - HANGER - MARK - L9-U9 (T1)
" - ONE - " - " - L9-U9 (T2)
} WT. OF ONE - 4447#

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50
ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE UNLESS NOTED RA OR ET

WORK THIS SHEET WITH SHEET 182 FOR TEMPLATES

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

HANGER L9-U9 (T1) & (T2)

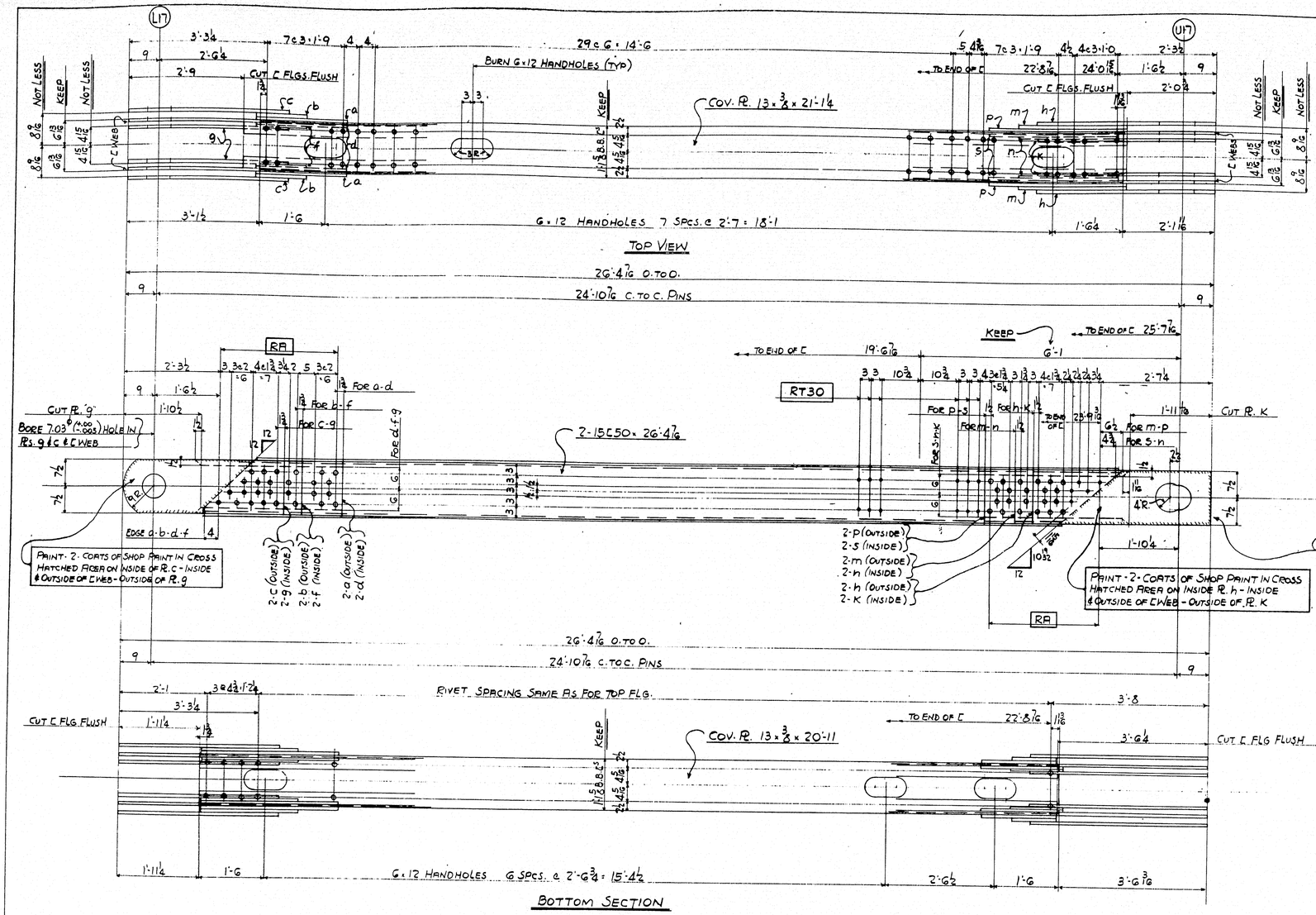
RIVETS 7/8 DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

HARRIS STRUCTURAL STEEL CO.
600 FOURTH AVE., N. Y.

REVISIONS

DRAWN MADE BY JWV DATE 1/18/50
DRAW. CHECKED BY W.P. DATE 1-30-50
CONTRACT No. C318 SHEET No. 181

48-193



SHIPT NO	REQ'D NO	MARK	MADE UP OF NO	PC MK	SIZE	LENGTH	REMARKS	ORD	WEIGHT	LB CU FT
5	1	L17-U17 (T1)								
5	1	L17-U17 (T2)								
			4		15C50	26-4 7/16	CUT 26'-5 4	9-418-47	5274.	340
			2	COVS.	PL. 13 x 3/8	21'-1 4	CUT 21'-5	9-419-17	700.	108
			2	COVS.	PL. Do.	20'-11	Do.	Do	694.	108
			4	a	PL. 15 x 3/8	3'-2		9-442-8	566.	112
			4	b	Do.	2'-3			401.	112
			4	c	15 x 3/8	3'-9 4		&	673.	56
			4	d	12 x 3/8	3'-2		9-442-10	323.	51
			4	f	12 x 1/2	2'-3		Do-11	184.	41
			4	g	15 x 3/4	3'-9 4		Do-9	598.	48
			4	h	15 x 3/8	4'-1 3/4		9-442-8	740.	61
			4	K	15 x 3/4	4'-1 3/4		Do-9	636.	54
			4	m	15 x 3/8	2'-5 3/4		9-442-8	492.	98
			4	n	12 x 1/2	2'-4		Do-11	190.	34
			4	P	15 x 3/8	3'-2		9-442-8	566.	98
			4	S	12 x 3/8	3'-0 4		Do-10	308.	45
			612	RIVS.	3/8ϕ				220.	
								Gross Wt.	12495.	
								Wt. Ded.	1366.	
								Net Wt.	11129.	
								Paint	45	
								Tot. Wt.	11174.	

RT30

MAKE - ONE - HANGER - MARK - L17-U17 (T1)
" - ONE - " - " - L17-U17 (T2)
} WT. OF ONE = 5587 #

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

ALL RIVET HOLES & OPEN HOLES PUNCHED FULL SIZE UNLESS NOTED RA OR RT

WORK THIS SHEET WITH SHEET 181 FOR TEMPLATES.

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

HANGER L17-U17 (T1) & (T2)

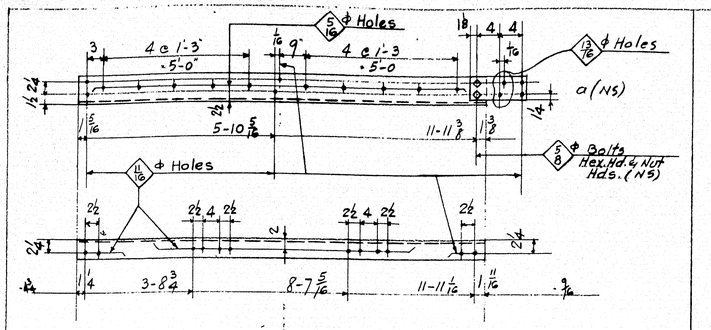
RIVETS 7/8 DIAM. OPEN HOLES 15/16 DIAM. UNLESS OTHERWISE NOTED

REVISIONS

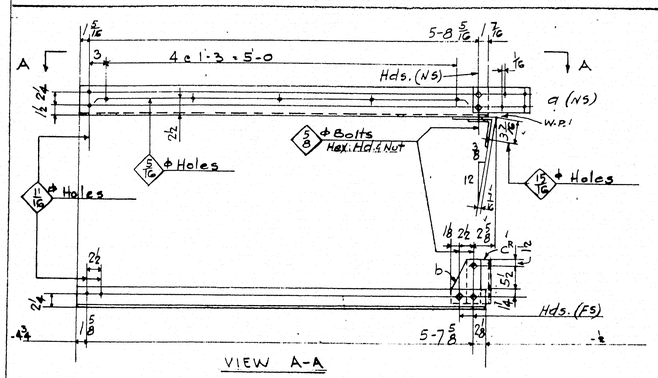
HARRIS STRUCTURAL STEEL CO.
419 FOURTH AVE., N. Y.

DRAW. MADE BY JWV DATE 1/19/50
DRAW. CHECKED BY WP DATE 1-20-50
CONTRACT No. C378 SHEET No. 182

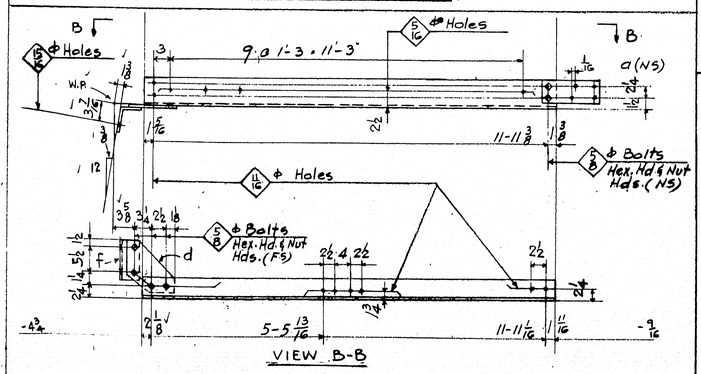
48-194



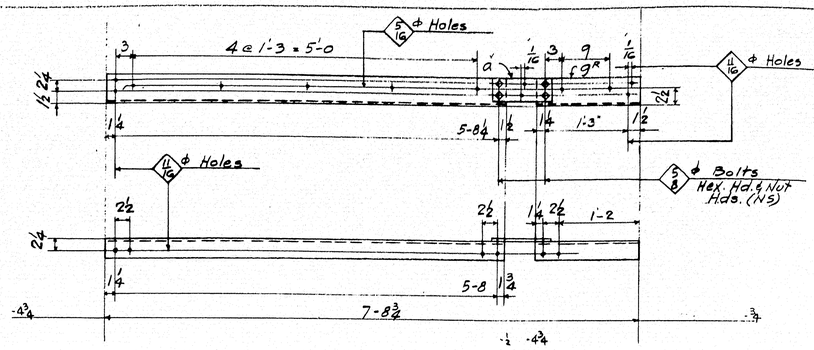
MAKE ONE RAIL - MARK R448 - AS SHOWN } ALIKE
" ONE " - " R548 - AS SHOWN }
" ONE " - " R449 - OPP. HAND } ALIKE
" ONE " - " R549 - OPP. HAND }
Wt of One = 130.



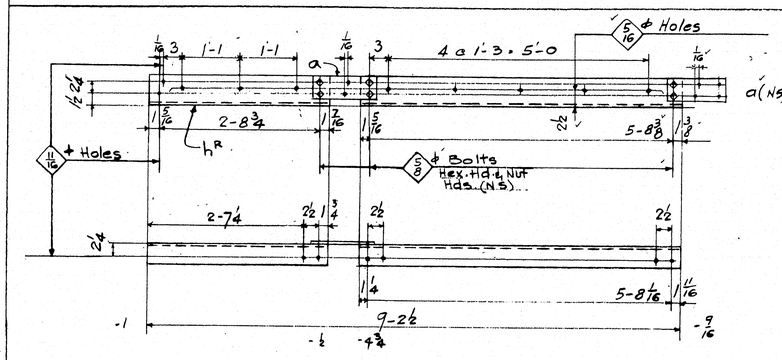
MAKE ONE RAIL - MARK R442 - AS SHOWN } ALIKE
" ONE " - " R542 - AS SHOWN }
" ONE " - " R443 - OPP. HAND } ALIKE
" ONE " - " R543 - OPP HAND }
Wt of One = 76.



MAKE ONE RAIL - MARK R474 - AS SHOWN } ALIKE
" ONE " - " R574 - AS SHOWN }
" ONE " - " R475 - OPP. HAND } ALIKE
" ONE " - " R575 - OPP HAND }
Wt of One = 142.



MAKE ONE RAIL - MARK R460 - AS SHOWN } ALIKE
" ONE " - " R560 - AS SHOWN }
" ONE " - " R461 - OPP. HAND } ALIKE
" ONE " - " R561 - OPP. HAND }
Wt of One = 81.



MAKE ONE RAIL - MARK R438 - AS SHOWN } ALIKE
" ONE " - " R538 - AS SHOWN }
" ONE " - " R439 - OPP. HAND } ALIKE
" ONE " - " R539 - OPP. HAND }
Wt of One = 100.

	REQ'D.		MADE UP OF								
			Nº	MK	SIZE	LGTH.	REMARKS	ORD.	WEIGHT	Cuts
AS SHOWN	1	R448	1		L-5x3½x⅜	12-0¾		9-418-87	125.	
AS SHOWN	1	R548	1						125.	
OPP. HAND	1	R449	1						125.	
OPP. HAND	1	R549	1		L-5x3½x⅜	12-0¾			125.	
			4	a	PL 4½x5/16	10½		9-419-43	17.	
			8	Bolt	⅝ϕ	1½	Hex. Hd. & Nut	32943	1.	
AS SHOWN	1	R442	1		L-5x3½x⅜	5-9¾		9-418-87	60.	
AS SHOWN	1	R542	1						60.	
OPP. HAND	1	R443	1						60.	
OPP. HAND	1	R543	1		L-5x3½x⅜	5-9¾			60.	
			4	a				9-419-43	17.	
			4	b	PL 4½x5/16	9½		Do	16.	2
			4	c	L-5x3½x5/16	9½	(Bent)	119-12	27.	
			16	Bolt	⅝ϕ	1½	Hex. Hd. & Nut	32943	3.	
			4	Bolt	⅝ϕ	1¾	Do.		1.	
AS SHOWN	1	R474	1		L-5x3½x⅜	12-0¾		9-418-87	125.	
AS SHOWN	1	R574	1						125.	
OPP. HAND	1	R475	1						125.	
OPP. HAND	1	R575	1		L-5x3½x⅜	12-0¾			125.	
			4	a				9-419-43	17.	
			4	d	PL 8x5/16	9½	Do	Do	27.	8
			4	f	L-5x3½x5/16	8½	(Bent)	119-12	24.	
			24	Bolt	⅝ϕ	1½	Hex. Hd. & Nut	32943	4.	
AS SHOWN	1	R460	1		L-5x3½x⅜	5-9¾		9-418-87	60.	
AS SHOWN	1	R560	1						60.	
OPP. HAND	1	R461	1						60.	
OPP. HAND	1	R561	1		L-5x3½x⅜	5-9¾			60.	
			4	g	L-5x3½x⅜	5-9¾			62.	
			4	a				9-419-43	17.	
			16	Bolt	⅝ϕ	1½	Hex. Hd. & Nut	32943	3.	
AS SHOWN	1	R438	1		L-5x3½x⅜	5-9¾		9-418-87	60.	
AS SHOWN	1	R538	1						60.	
OPP. HAND	1	R439	1						60.	
OPP. HAND	1	R539	1		L-5x3½x⅜	5-9¾			60.	
			4	h	L-5x3½x⅜	2-11½			123.	
			8	a				9-419-43	34.	
			24	Bolt	⅝ϕ	1½	Hex. Hd. & Nut	32943	4.	
							Gross Wt.		2117.	
							Wt. Ded.		10.	
							Net Wt.		2107.	
							Paint		9.	
							Tot. Wt.		2116.	

L
W.

FOR NOTES ON SPECIFICATIONS, MATERIAL, PAINTING, PUNCHING, DRILLING, REAMING, ETC. SEE SHEET X50

SHEET # 19 HOT RIVETED

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

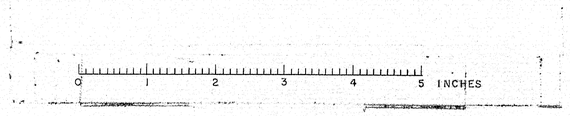
RAILINGS - SPANS 3, 4 & 5

BOLTS 5/8" DIAM. OPEN HOLES AS NOTED 3/4" DIAM. UNLESS OTHERWISE NOTED

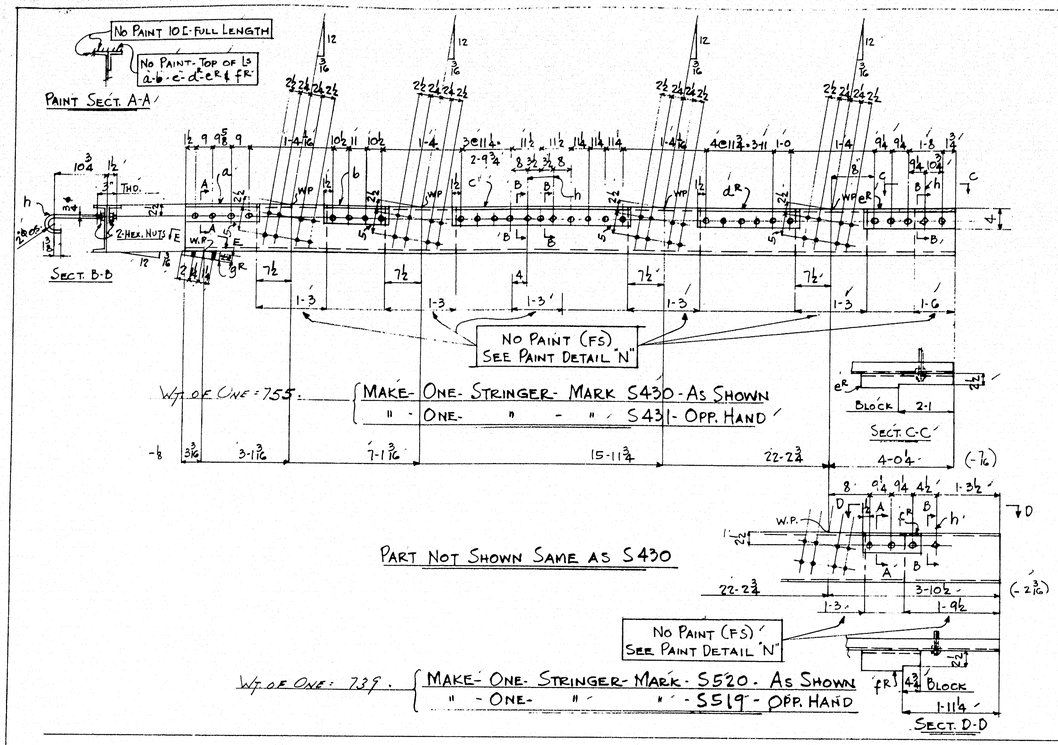
HARRIS STRUCTURAL STEEL CO.
619 FOURTH AVE., N. Y.

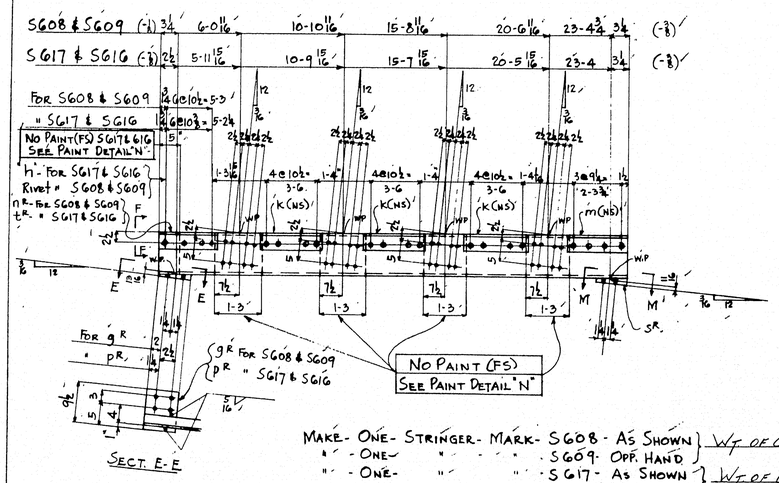
REVISIONS	

DRAW. MADE BY LK DATE 1-31-50
DRAW. CHECKED BY HLJ DATE 2-11-50
CONTRACT No. C378 SHEET No. 183



48-195





	Read No.	Mark	Made up of No	Pc Mk	Size	Length	Remarks	Ord	Weight	Cut
As Shown	1	S430	1		10E20	26-3		9-418-84	525 -	
Opp. Hand	1	S431	1			26-3			525 -	
As Shown	1	S520	1			26-1¼			522 -	
Opp. Hand	1	S519	1			26-1¼			522 -	
			4	gR	℄ Gx3½	9½	Ent Exit	9-423-9	54	3
			4	a	L 4x3½x⅜	2-6⅝		119-9	93 -	
			4	b		2-11			106 -	
			4	c		7-9½			284 -	
			4	dR		5-2			188 -	
			2	eR		3-5¾			63	5
			2	fR		1-9½			33	1
			12	h	¾ ϕ Rod	1-6¼	Bent 2-Hex. Nuts EA	118-29 118-28	31 -	
			106		⅝ ϕ Rivs				38 -	
			1		5/16 △ Weld	4-0			1 -	
As Shown	1	S608	1		10E20	23-8		9-418-84	473 -	
Opp. Hand	1	S609	1			23-8			473 -	
As Shown	1	S617	1			23-7¼			472 -	
Opp. Hand	1	S616	1			23-7¼			472 -	
			2	gR				9-423-9	27	2
			2	pR	℄ Gx3½	9½	Ent Exit	9-423-9	27	2
			4	sR	℄ Gx¾	9½	Do	-	48	3
			2	nR	L 4x3½x⅜	5-6¼		119-9	100	
			2	tR		5-5½			99 -	
			12	k		3-9			440 -	
			4	m		2-6¾			93 -	
			2	h			S617 & S616 2-Hex. Nut EA	118-29 118-28	5 -	
			102		⅝ ϕ Rivs				37 -	
			1		5/16 △ Weld	8-0			1 -	
								Gross Wt.	5722	
								Wt. Ded.	16	
								Net Wt.	5706	
								Paint	44	
								Total Wt.	5750	

For Notes on Specifications, Material, Painting, Punching, Drilling, Reaming, Etc. See Sheet X50

For Sections — M-M & Detail N, See Sh. # 131

ARROWSIC BRIDGE OVER SASANOA RIVER
ARROWSIC - WOOLWICH
FED. AID PROJ. No. S-154 (2)
CONTRACT No. 2

Shs. F, G Not Applic.

Sidewalk Stringers

Rivets ⅞ Diam. Open Holes 15/16 Diam. Unless Otherwise Noted

HARRIS STRUCTURAL STEEL CO.
610 Fourth Ave., N. Y.

Revisions		

Draw. Made By HLJ Date 2/13/50
Draw. Checked By WP Date 2-13-50
Contract No. C378 Sheet No. 185

48-196

SM 10-48 D2E DV.

HARRIS STRUCTURAL STEEL COMPANY, INC., 419 FOURTH AVE., NEW YORK 16, N. Y.

STRUCTURE ARROWSIC BRIDGE OVER SASANOA RIVER, ARROWSIC - WOOLWICH, MAINE

W. J

	GRIP	Req'd	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
7/8ϕ FIELD RIVETS	3/4"			198	7/8ϕ Riv.	2 1/4			
	7/8"			634	Do	2 3/8			
				832					300
7/8ϕ FIELD BOLTS - (2 Hex. Nuts)	1 5/8"			32	7/8ϕ Bolt	3 1/2	Hex. Hd.		8
				64	Hex. Nuts	for 7/8ϕ Bolts			12
3/4ϕ FIELD BOLTS	7/8"			67	3/4ϕ Bolt	2	Hex. Hd.	123-8	10
	1 1/16"			97	Do	2 3/4	Do	32943	15
	2 1/16"			67	Do	3	Do	123-10	10
				231	Hex. Nuts	for 3/4ϕ Bolts		32943	28
5/8ϕ FIELD BOLTS	1 1/16"			295	5/8ϕ Bolt	1 1/2	Hex. Hd.	32943	27
	1 3/16"			67	Do	2 1/4	Do		6
				362	Hex. Nuts	for 5/8ϕ Bolts			33
									449

SOUTH APPROACH
SHIPMENT #3

NAME	DATE
LK	

RIVETS DIAM. OPEN HOLES DIAM. REVISED

UNLESS OTHERWISE NOTED

CONTRACT NO. C378

SHEET NO. 187

48-198

SM 10-48 D2E DV

HARRIS STRUCTURAL STEEL COMPANY, INC., 419 FOURTH AVE., NEW YORK 16, N. Y.

STRUCTURE ARROWSIC BRIDGE OVER SASANOA RIVER, ARROWSIC - WOOLWICH, MAINE

W. J

	GRIP	Req'd	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
7/8ϕ FIELD RIVETS	3/4"			277	7/8ϕ Riv.	2 1/4			
	7/8"			792	Do	2 3/8			
				1069					385
7/8ϕ FIELD BOLTS (2 Hex. Nuts)	1 5/8"			32	7/8ϕ Bolt	3 1/2	Hex. Hd.		8
				64	Hex. Nuts	for 7/8ϕ Bolts			12
3/4ϕ FIELD BOLTS	7/8"			77	3/4ϕ Bolt	2	Hex. Hd.	123-8	12
	1 1/16"			110	Do	2 3/4	Do	32943	17
	2 1/16"			77	Do	3	Do	123-10	12
				264	Hex. Nuts	for 3/4ϕ Bolts		32943	32
5/8ϕ FIELD BOLTS	1 1/16"			374	5/8ϕ Bolt	1 1/2	Hex. Hd.	32943	34
	1 3/16"			67	Do	2 1/4	Do		6
				441	Hex. Nuts	for 5/8ϕ Bolts			40
									558

NORTH APPROACH
SHIPMENT #2

NAME	DATE
LK	

RIVETS DIAM. OPEN HOLES DIAM. REVISED

UNLESS OTHERWISE NOTED

CONTRACT NO. C378

SHEET NO. 186

48-197

0 1 2 3 4 5 INCHES

SM 10-48 D22 DV.

HARRIS STRUCTURAL STEEL COMPANY, INC., 419 FOURTH AVE., NEW YORK 16, N. Y.

STRUCTURE ARROWSIC BRIDGE OVER SASANOA RIVER, ARROWSIC-WOOLWICH, MAINE

W. J

7/8" FIELD RIVETS

GRIP	REQ'D	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
5/8			45	7/8" Rivs	2 1/8			
3/4 & 13/16			1120		2 1/4			
7/8 & 15/16			915		2 3/8			
1 & 1 1/16			1480		2 1/2			
1 1/8 & 1 3/16			935		2 5/8			
1 1/4 & 1 5/16			480		2 3/4			
1 3/8 & 1 7/16			545		2 7/8			
1 1/2 & 1 9/16			795		3 1/8			
1 5/8 & 1 11/16			595		3 1/4			
1 3/4 & 1 13/16			130		3 1/2			
1 1/8			195		3 5/8			
2			210		3 3/4			
2 1/8 & 2 3/16			35		3 7/8			
2 1/4			15		4			
2 3/8			70		4 1/8			
2 5/8			30		4 3/8			
2 3/4			35		4 1/2			
2 7/8			5		4 5/8			
3			25		4 3/4			
3 1/2			40		5 1/4			
3 7/8			25		5 7/8			
5 1/4			20	7/8" Rivs	7 1/4			
			7140					2788

7/8" FIELD BOLTS (2-HEX. NUTS)

GRIP								
1 5/8		15	7/8" Bolts	3 1/2	Hex. Hd			4
1 7/8		15	Do	3 3/4	Do			4
		60	Hex. Nuts - 7/8 Tap					11

3/4" FIELD BOLTS

GRIP								
1 1/16		230	3/4" Bolts	2 3/4	Hex. Hd	32943		35
2 1/16		155	Do	3	Do	123-10		23
		385	Hex. Nuts - 3/4 Tap			32943		46

5/8" FIELD BOLTS

GRIP								
5/8 & 11/16		885	5/8" Bolts	1 1/2	Hex. Hd	32943		30
1 1/2 & 1 9/16		75	Do	2 1/4	Do	"		7
		960	Hex. Nuts - 5/8 Tap			"		86

SHIPMENT # 5

NAME	DATE
NLJ	2/7/56

RIVETS DIAM. OPEN HOLES DIAM. — UNLESS OTHERWISE NOTED

REVISED

CONTRACT NO. C 378

SHEET NO. 189

48-200

3084

SM 10-48 D22 DV.

HARRIS STRUCTURAL STEEL COMPANY, INC., 419 FOURTH AVE., NEW YORK 16, N. Y.

STRUCTURE ARROWSIC BRIDGE OVER SASANOA RIVER, ARROWSIC-WOOLWICH, MAINE

7/8" FIELD RIVETS

GRIP	REQ'D	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
5/8			45	7/8" Rivs.	2 1/8			
3/4 & 13/16			1070		2 1/4			
7/8 & 15/16			915		2 3/8			
1 & 1 1/16			1480		2 1/2			
1 1/8 & 1 3/16			960		2 5/8			
1 1/4 & 1 5/16			425		2 3/4			
1 3/8 & 1 7/16			545		2 7/8			
1 1/2 & 1 9/16			785		3 1/8			
1 5/8 & 1 11/16			610		3 1/4			
1 3/4 & 1 13/16			130		3 1/2			
1 1/8			195		3 5/8			
2			210		3 3/4			
2 1/8 & 2 3/16			25		3 7/8			
2 1/4			25		4			
2 3/8			70		4 1/8			
2 5/8			30		4 3/8			
2 3/4			35		4 1/2			
2 7/8			5		4 5/8			
3			25		4 3/4			
3 1/2			40		5 1/4			
3 7/8			25		5 7/8			
5 1/4			20	7/8" Rivs	7 1/4			
			7670					2761

7/8" FIELD BOLTS (2-HEX. NUTS)

GRIP								
1 1/8		15	7/8" Bolts	3 1/2	Hex. Hd			4
2 1/8		15	Do	4 2	"			4
3 3/8		15	Do	5 1/4	"			4
		90	Hex. Nuts - 7/8 Tap					16

3/4" FIELD BOLTS

GRIP								
1 1/16		230	3/4" Bolts	2 3/4	Hex. Hd	32943		35
2 1/16		155	Do	3	Do	123-10		23
		385	Hex. Nuts - 3/4 Tap			32943		46

5/8" FIELD BOLTS

GRIP								
5/8 & 11/16		885	5/8" Bolts	1 1/2	Hex. Hd	32943		30
1 1/2 & 1 9/16		75	Do	2 1/4	Do	"		7
		960	Hex. Nuts - 5/8 Tap			"		86

SHIPMENT #4

NAME	DATE
NLJ	2/7/56

RIVETS DIAM. OPEN HOLES DIAM. — UNLESS OTHERWISE NOTED

REVISED

CONTRACT NO. C 378

SHEET NO. 188

48-199

3066

0 1 2 3 4 5 INCHES

SM 10-49 D22 DV.

HARRIS STRUCTURAL STEEL COMPANY, INC., 419 FOURTH AVE., NEW YORK 16, N. Y.

STRUCTURE ARROWSIC ROAD OVERPASS & ARROWSIC BRIDGE OVER SASANOA RIVER, WOOLWICH, MAINE

WIRE MESH & FITTINGS
- FOR RAILINGS

ITEM #116 - WIRE MESH FENCE
TOTAL SQUARE FEET - 4704

REQ'D	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
			30" PAGE HI-WAY GUARD OR APPROVED EQUAL - 2" MESH - #6 GAUGE GALV. WIRE				
		1		1950'-0 (39-50' RLLS)			
						33403	
		1	#12 GALV. WIRE	3200'-0			
		50	STD. GALV. STRETCHER BARS FOR 30" MESH				

NAME JWL DATE 3/10/50

RIVETS DIAM. OPEN HOLES DIAM. UNLESS OTHERWISE NOTED

REVISED

CONTRACT NO. C378

SHEET NO. 191

48-202

SM 10-49 D22 DV.

HARRIS STRUCTURAL STEEL COMPANY, INC., 419 FOURTH AVE., NEW YORK 16, N. Y.

STRUCTURE ARROWSIC BRIDGE OVER SASANOA RIVER, ARROWSIC - WOOLWICH, MAINE

W. N.

7/8φ FIELD RIVETS

GRIP	REQ'D	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
5/8			65	7/8φ RIVS	2 1/8			
3/8 & 13/16			1245		2 1/4			
7/8 & 1 1/16			375		2 3/8			
1 & 1 1/16			1045		2 1/2			
1 1/8 & 1 3/16			175		2 5/8			
1 1/4 & 1 1/16			530		2 3/4			
1 3/8 & 1 1/16		RI	490		2 7/8			
1 1/2 & 1 1/16			580		3 1/8			
1 5/8 & 1 11/16			570		3 1/4			
1 3/4 & 1 13/16			505		3 1/2			
2			120		3 3/4			
2 1/8 & 2 3/16			105		3 7/8			
2 1/4			80		4			
2 3/8			80		4 5/8			
3 1/2			115		5 1/4			
4 5/16			80	7/8φ RIVS	6 1/4			
			6110					2218

3/4φ FIELD BOLTS

GRIP	REQ'D	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
1 1/16			185	3/4φ BOLTS	2 1/4	HEX. HD	32943	28
2 1/16			125	Do	3	Do	123-10	19
			310	HEX. NUTS - 3/4 TAP			32943	37

5/8φ FIELD BOLTS

GRIP	REQ'D	MARK	NO.	SIZE	LENGTH	REMARKS	ORD.	WEIGHT
5/8 & 11/16			810	5/8φ BOLTS	1 1/2	HEX. HD	32943	73
1 1/2 & 1 9/16			110	Do	2 1/4	Do		10
			920	HEX. NUTS - 5/8 TAP				83

SHIPMENT #6

						2448

NAME JWL DATE 2/17/50

RIVETS DIAM. OPEN HOLES DIAM. UNLESS OTHERWISE NOTED

REVISED RI - AS NOTED 3/15/50

CONTRACT NO. C378

SHEET NO. 190

48-201

0 1 2 3 4 5 INCHES