

MATERIAL BILL
BRITAIN STEEL LTD. CONTRACT 1420

NO	MARK	QTY	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WEIGHT
1								
2								
3								
4	ma	B	C	127x44x5.810	9385	B.C.I.E. (C5x6.7)	44W	9.9
5	mb	B	I		181	B.C.2E.	I	I
6	mc	B	I		968	B.C.I.E.	I	I
7	md	12B	BAR	19# (3/4")	470		A36	9.10
8								
9	pa	B	R	224x9.5(3/8)	250		44W	
10	pb	B	I	150xI	165		I	
11	pc	20	BAR	50.8x7.94	8150	(BAR 2x 3/4")	A36	9.11
12								
13	ha	B	BAR	50.8x7.94	1905	ROLL	A36	9.12
14	hb	32	I	I	1900	ABT. ROLL + BEND	I	I
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GENERAL NOTES:
1) FOR FINAL LOCATION OF THIS ITEM SEE DWG. E7a + E7b.

3R/300977

BRITAIN

MATERIAL G40.21 (44W) W/H

EXTERIOR LADDERS

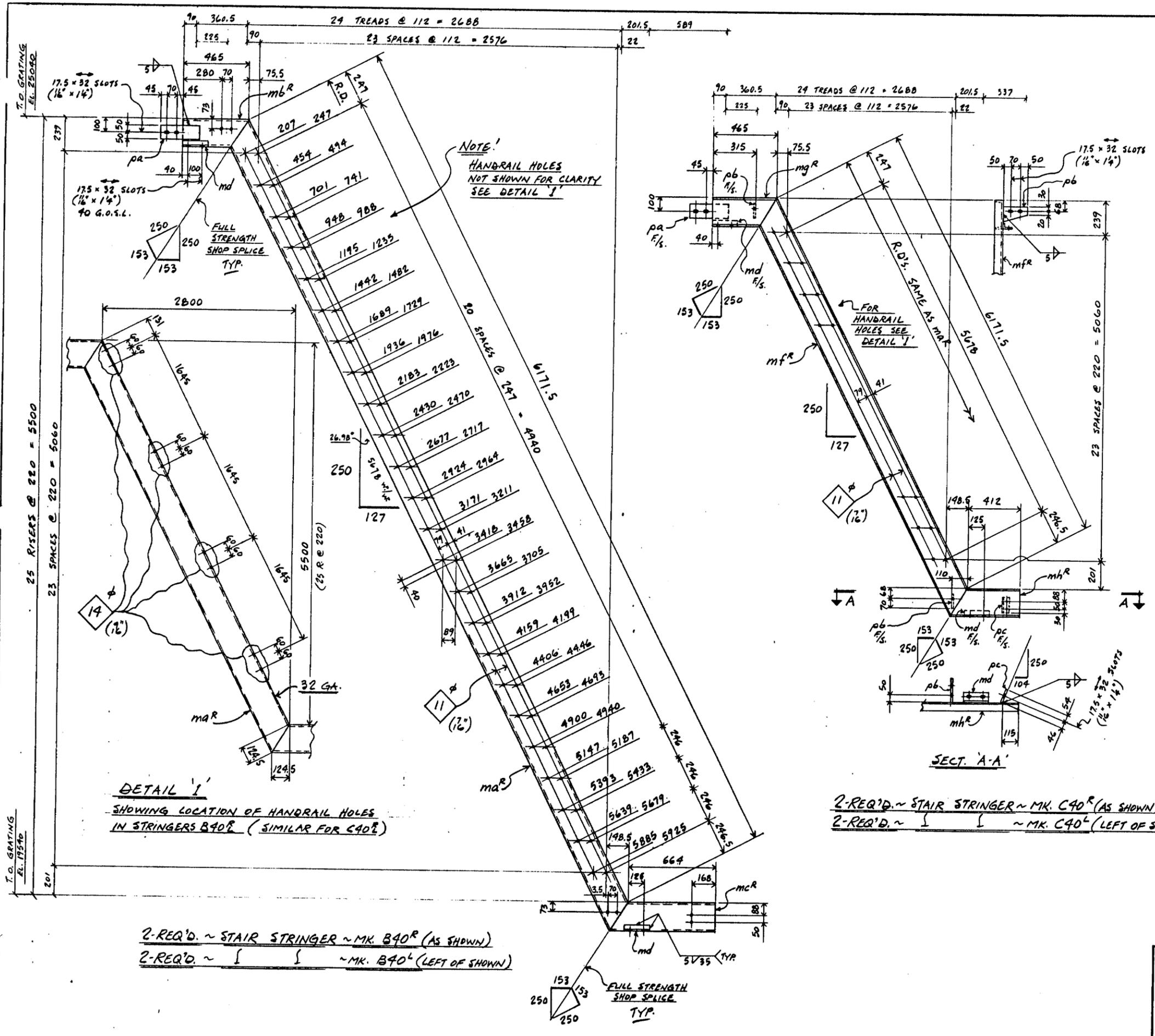
FOR 4.2M TELESCOPE DOME LA PALMA

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

DRAWING No. 1420-40a

p-abcdefghijklmnopstvw y m-abcdefghijklmnopstvw y s-abcdefghijklmnopstvw y

SHOP DEPARTMENT



MATERIAL BILL										BRITAIN STEEL LTD.		CONTRACT 1420	
LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT				
1													
2						2-REQ'D ~ MK B40R							
3						2-REQ'D ~ MK B40L							
4													
5	mfr	4	C	203x57x6@17	6296	B.C.2E. (CBx11.5)	94W	9.2					
6	mfr	4	I		965	B.C.1E.		9.4					
7	mfr	4	I		788	B.C.1E.		1.1					
8	md	8	L	635x38.1x6.95	180	(L2x1 1/2 x 4)							
9	pa	4	R	100x9.53(3/8)	280								
10													
11													
12													
13						2-REQ'D ~ MK C90R							
14						2-REQ'D ~ MK C90L							
15													
16	mfr	4	C	200x17	6296	B.C.2E.	94W	9.2					
17	mfr	4	I		965	B.C.1E.		9.4					
18	mfr	4	I		536	B.C.1E.		1.1					
19	md	8											
20	pa	4											
21	pb	8	R	100x6.35(1/4)	170								
22	pc	4	R	100x9.53(3/8)	110								
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41	mfr	4	C	200x17	6296	B.C.2E.	94W	9.2					
42	mfr	4	I		965	B.C.1E.		9.4					
43	mfr	4	I		536	B.C.1E.		1.1					
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3R1300978

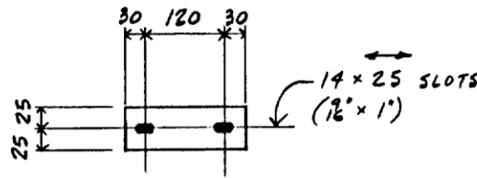
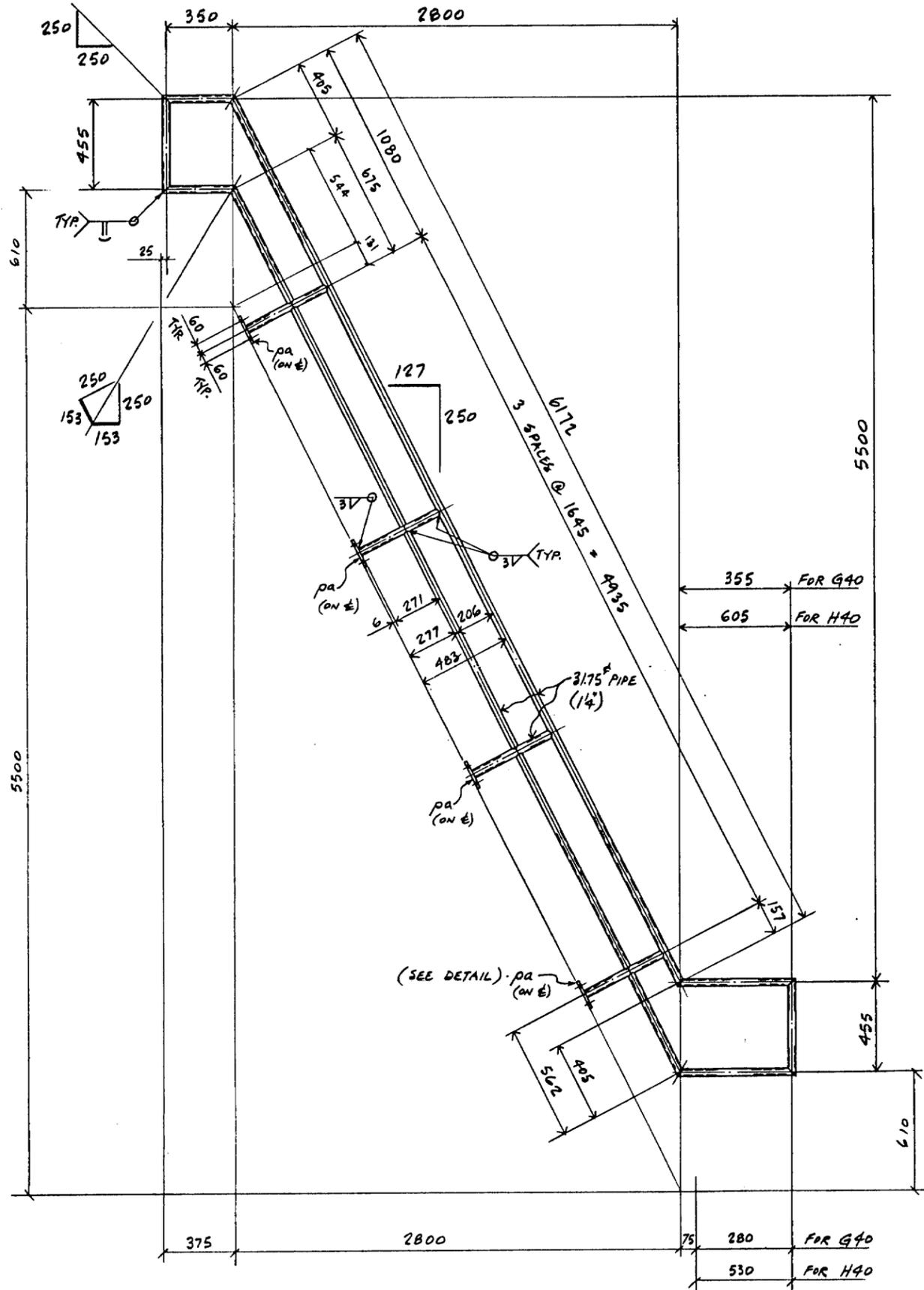
	MATERIAL	G40.21 (44W) W/N	DATE		REVISION	
	SURF. PREP. & PAINT	SEE MEMO	DETAILS			
	OPEN HOLES	17" (1 1/2") W/N.	FOR 4.2" TELESCOPE DOME LA PALMA			
	DRAWN	G.V.A.	DATE	MM/89	CHECKED	DATE
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			1420-406			

SHOP DEPARTMENT

p-abcdefghijklmnpstvw y

m-abcdefghijklmnpstvw y

s-abcdefghijklmnpstvw y



DETAIL OF R 'pa'
 (32 - DWG. 40d
 40 - I 40f)

MATERIAL BILL
 BRITAIN STEEL LTD.

CONTRACT 1420

MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT
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GENERAL NOTES:

- 1) FOR FINAL LOCATION OF ITEMS ON THIS DWG. SEE DWG. E7A.

3R1300980

4-REQ'D ~ HANDRAIL ~ MK. G40
 4-REQ'D ~ I ~ MK. H40

BRITAIN	MATERIAL	AS NOTED	DETAILS	EXTERIOR HANDRAIL
	SURF. PREP. & PAINT	SEE MEMO	FOR 9.2 M TELESCOPE DOME LA PALMA	
	OPEN HOLES	AS NOTED	DRAWING NO.	1420-40d
	DRAWN	G.V.A.	DATE	MAR/81
BRITAIN STEEL LTD. 401 BALTEA AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS / S / O / M / T / P / SH / DP / AS / PA / ER		

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m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

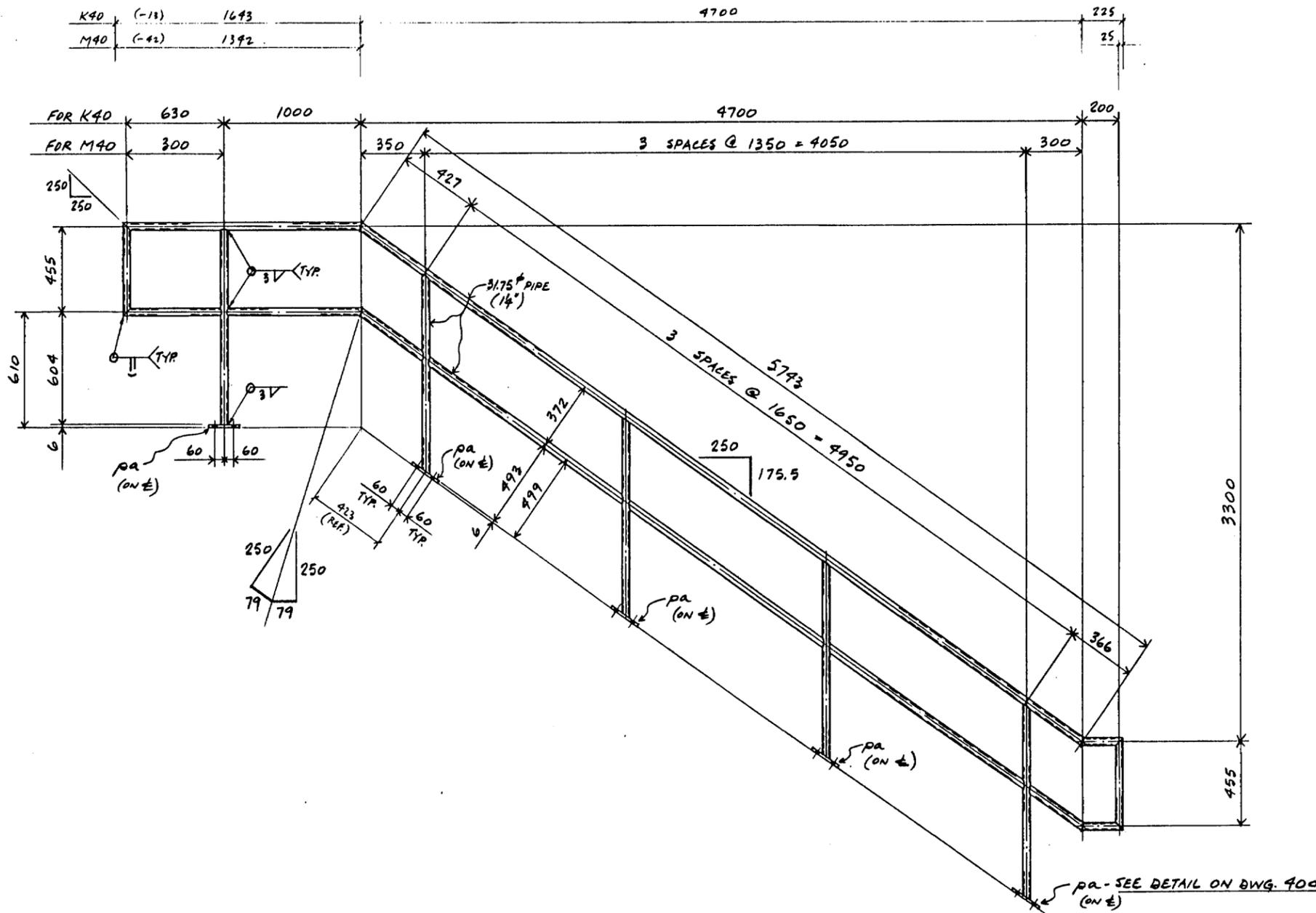
SHOP DEPARTMENT

INS / S / O / M / T / P / SH / DP / AS / PA / ER

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT
1									
2						4 REQ'D ~ MK. K40			
3									
4						4 PIPE 3/175" STD. 22000 LN. (14")	A52		
5						PA 20 @ 100x6.35(1/4")	A36		
6									
7									
8									
9						4 REQ'D ~ MK. M40			
10									
11						4 PIPE 3/175" STD. 21500 LN. (14")	A52		
12						PA 20			
13									
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4-REQ'D. ~ HANDBRAIL ~ MK. K40
 4-REQ'D. ~  ~ MK. M40

GENERAL NOTES:

1) FOR FINAL LOCATION OF ITEMS ON THIS DWG. SEE DWG. E7A

3R/300981

 BRITAIN	MATERIAL	AS NOTED	DETAILS	EXTERIOR HANDBRAIL
	SURF. PREP. & PAINT	SEE MEMO	FOR	4.2M TELESCOPE DOME LA PALMA
	OPEN HOLES	AS NOTED	DRAWING No.	1420-40f
	DRAWN	DATE	CHECKED	DATE
	G.V.A.	MAR/64		
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INS / F / S / O / M / T / P / SH / DP / AS / PA / ER		

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m-abcdefghijklmnpstvw y

s-abcdefghijklmnpstvw y

SHOP DEPARTMENT

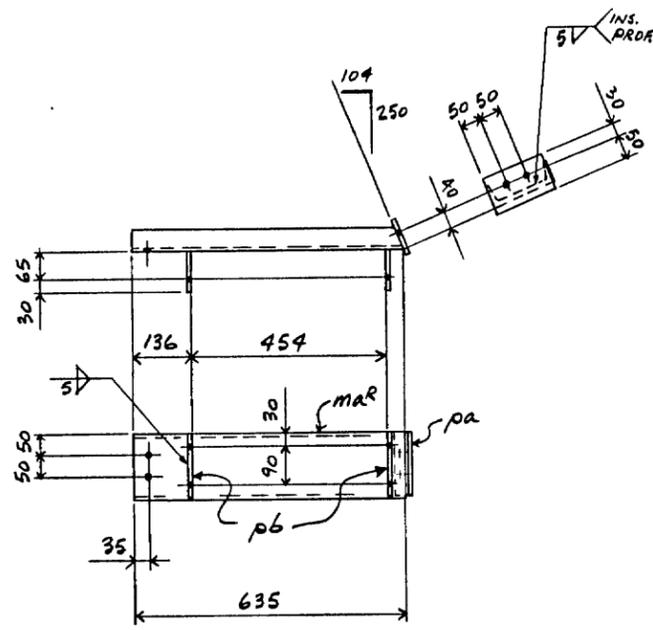
INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

No PRINTS

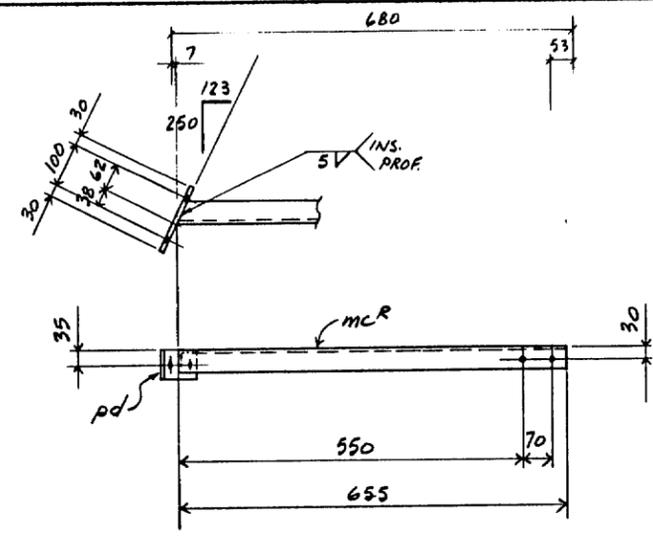
MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

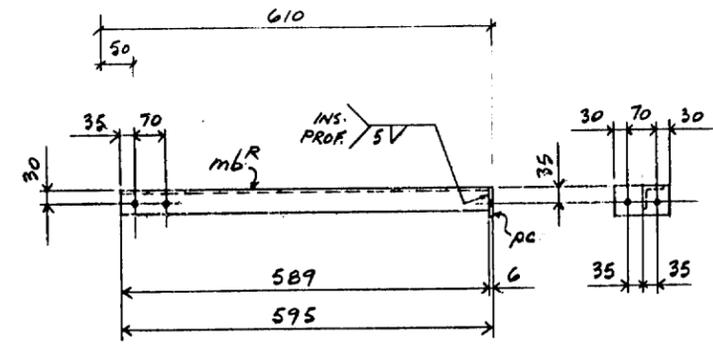
LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WGT.
1								
2		2	REQ'D. ~ MK.	T40R				
3		2	REQ'D. ~ MK.	T40L				
4								
5	MAF	4	C	152x98x5.812	635	B.C.I.E. C6x8.2	44W	9.6
6	PA	4	B	80x10(1/2)	150			
7	PB	8	B	95x10 L	150			
8								
9								
10								
11			B-REQ'D. ~ MK.	V40R				
12			B-REQ'D. ~ MK.	V40L				
13								
14	MBR	16	L	51x51x6	589	C.S.I.E. (L2'x2'x4')	44W	9.7
15	PC	16	B	65x6(1/2)	130			
16								
17								
18			2-REQ'D. ~ MK.	W40R				
19			2-REQ'D. ~ MK.	W40L				
20								
21								
22	MCR	4	L	51x51x6	655	B.C.I.E. (L2'x2'x4')	44W	9.7
23	PD	4	B	65x6(1/2)	160			
24								
25								
26								
27			B-REQ'D. ~ MK.	Y40				
28								
29	PF	8	B	150x10(1/2)	150		44W	
30	PG	8	B	110x10 L	150			
31								
32								
33								
34			B-REQ'D. ~ MK.	AA40				
35								
36	PH	8	B	150x10(1/2)	200		44W	
37	PK	8	B	130x10 L	200			
38								
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41			B-REQ'D. ~ MK.	AB40				
42			B	L 64x64x6	470	(L2'x2'x4')	44W	9.13
43								
44								
45								
46			B-REQ'D. ~ MK.	AC40				
47								
48			B	L 64x64x6	640	(L2'x2'x6')	44W	9.13
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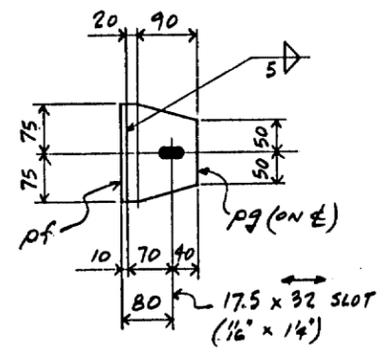
2-REQ'D. ~ STRUT ~ MK. T40R (AS SHOWN)
2-REQ'D. ~ I ~ MK. T40L (LEFT OF SHOWN)



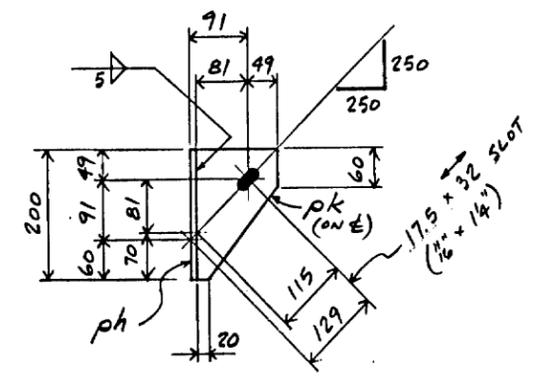
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2-REQ'D. ~ I ~ MK. W40L (LEFT OF SHOWN)



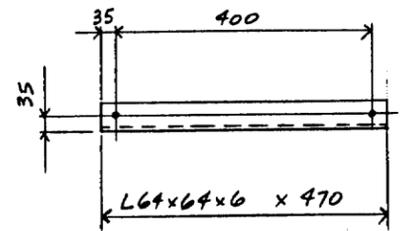
B-REQ'D. ~ STRUT ~ MK. V40R (AS SHOWN)
B-REQ'D. ~ I ~ MK. V40L (LEFT OF SHOWN)



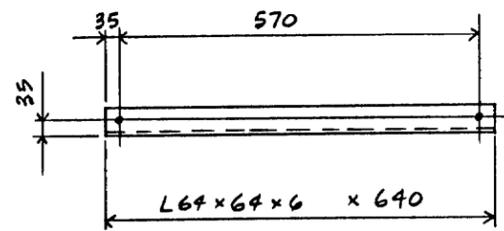
B-REQ'D. ~ BRACKET ~ MK. Y40



B-REQ'D. ~ BRACKET ~ MK. AA40



B-REQ'D. ~ BRACE ~ MK. AB40



B-REQ'D. ~ BRACE ~ MK. AC40

GENERAL NOTES:

- FOR FINAL LOCATION OF ITEMS ON THIS DWG. SEE DWG. ETA & ETB.

3R/300983

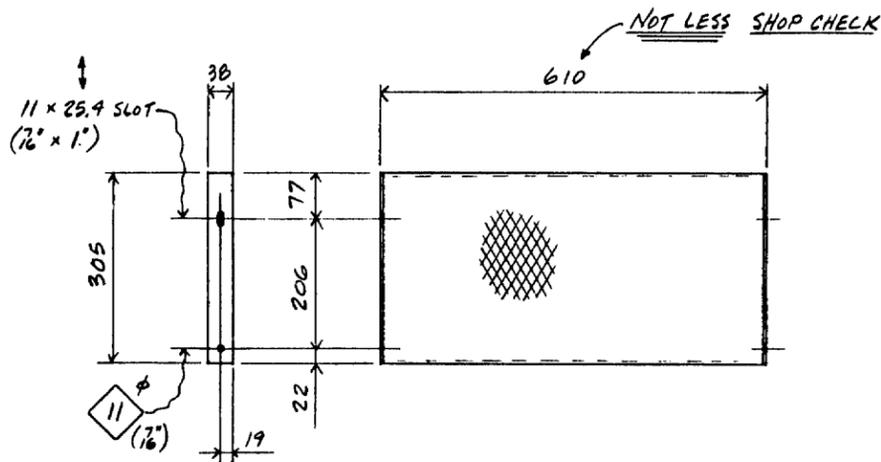
	MATERIAL	G40.21 (44W) w/h	DETAILS	EXTERIOR STAIR STRUTS & LADDER SUPPORTS
	SURF. PREP.	PAINT	SEE MEMO	FOR 4.2 M TELESCOPE DOME LA PALMA
	OPEN HOLES	17.5 (1/2) U/N.		
	DRAWN	DATE	CHECKED	DATE
G.V.A. MAC/04				DRAWING No. 1420-90h
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				

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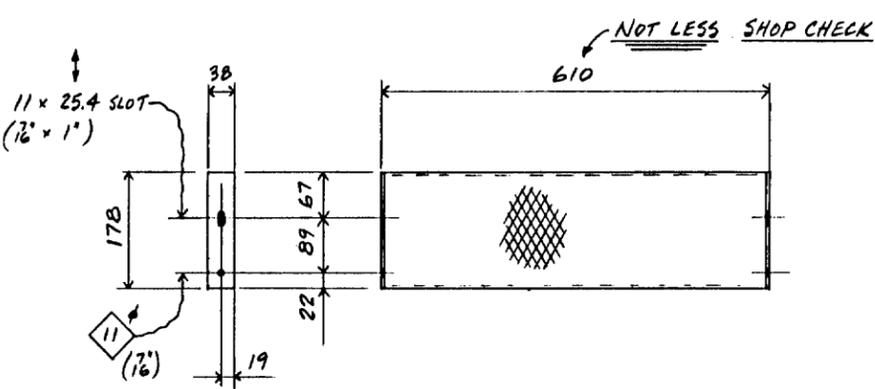
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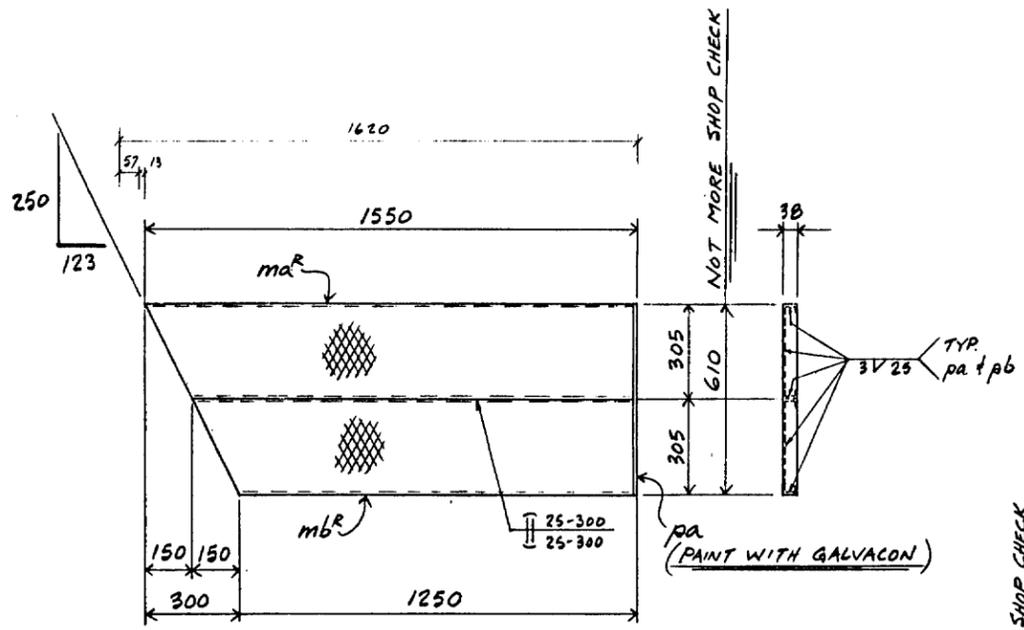
SHOP DEPARTMENT INS/ F/S/O/M/T/P/SH/DP/AS/PA/ER



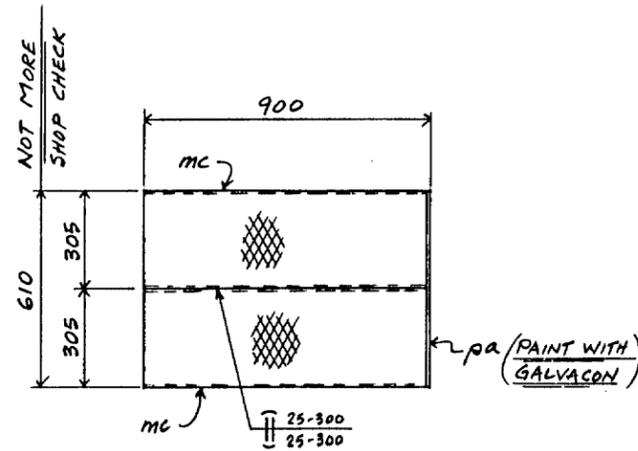
76 REQ'D ~ STAIR TREADS ~ MK. AD 40



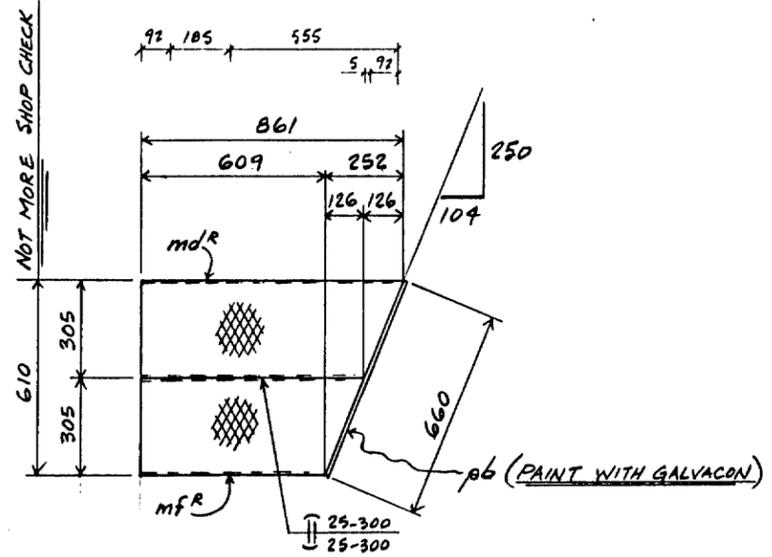
96 REQ'D ~ STAIR TREADS ~ MK. AF 40



2-REQ'D ~ LANDING GRATING ~ MK. AG 40^R (AS SHOWN)
 2-REQ'D ~ I I ~ MK. AG 40^L (LEFT OF SHOWN)



4-REQ'D ~ LANDING GRATING ~ MK. AH 40



2-REQ'D ~ LANDING GRATING ~ MK. AK 40^R (AS SHOWN)
 2-REQ'D ~ I I ~ MK. AK 40^L (LEFT OF SHOWN)

MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	ROLL LINE	WEIGHT
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GENERAL NOTES:

- FOR FINAL LOCATION OF ITEMS ON THIS DWG SEE DWG. E7a
- AFTER CUTTING AND WELDING TOUCH-UP GALVANIZING WITH GALVACON.

3R/300984

BRITAIN

MATERIAL AS NOTED
 SURF. PREP AS NOTED
 PAINT AS NOTED
 OPEN HOLES AS NOTED

DETAILS STAIR TREADS & LANDINGS FOR EXTERIOR STAIRS FOR 9.2 M TELESCOPE FOR LA PALMA

DRAWN G.V.A. DATE MAR/84 CHECKED DATE DRAWING No. 1420-40K

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

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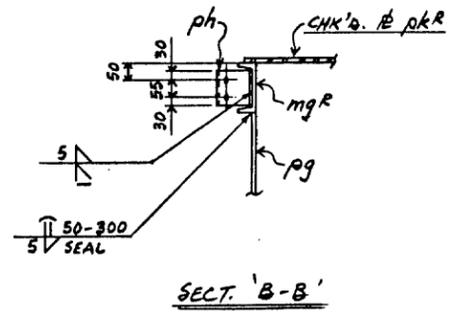
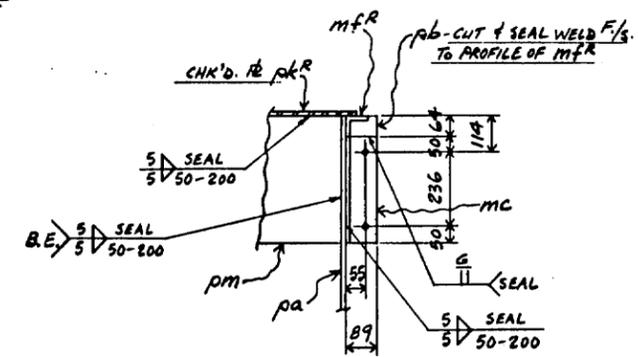
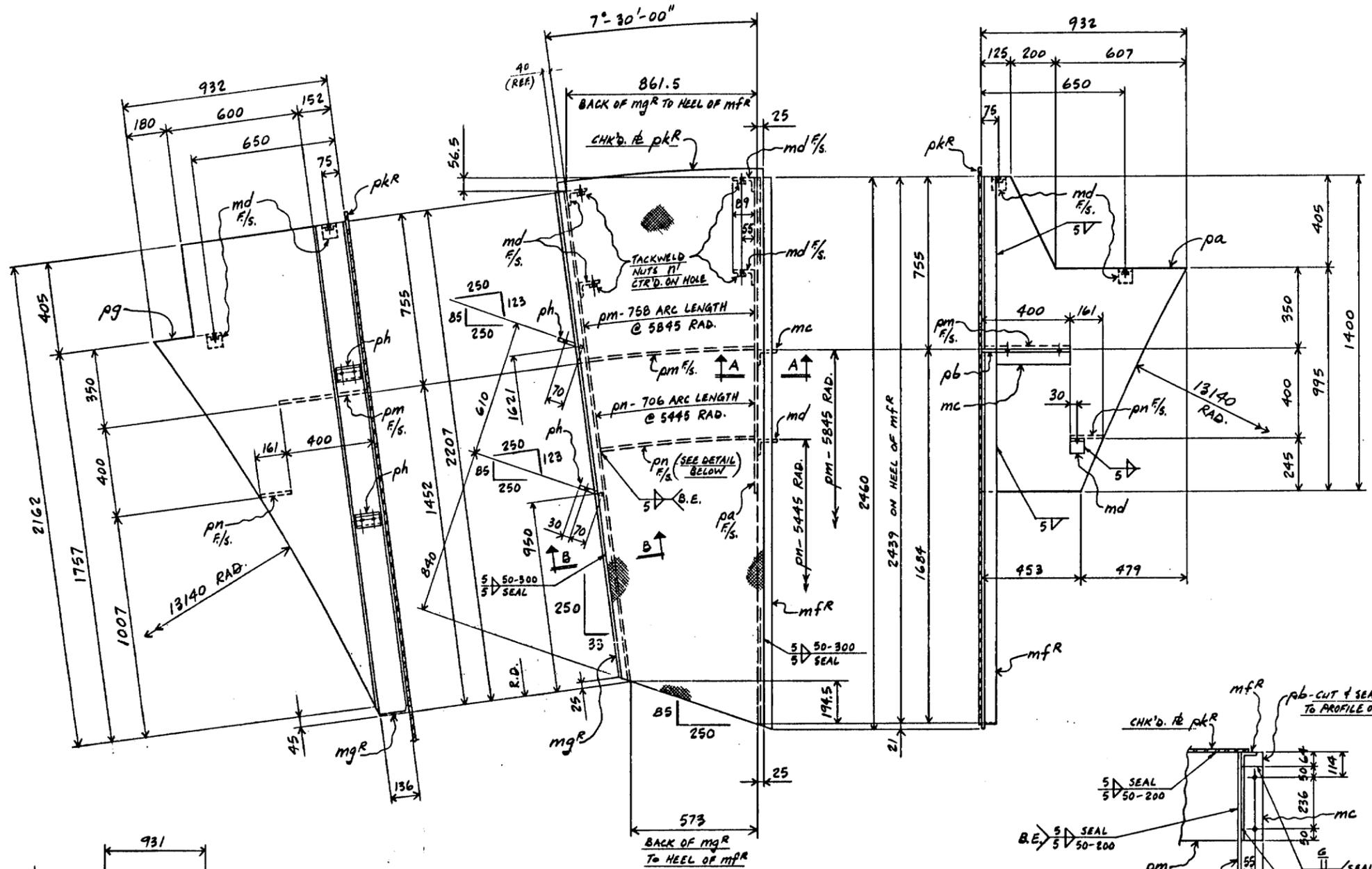
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SHOP DEPARTMENT INS/P/S/O/M/T/P/SH/DP/AS/PA/ER

MATERIAL BILL
BRITAIN STEEL LTD.

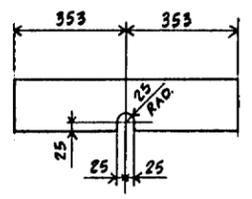
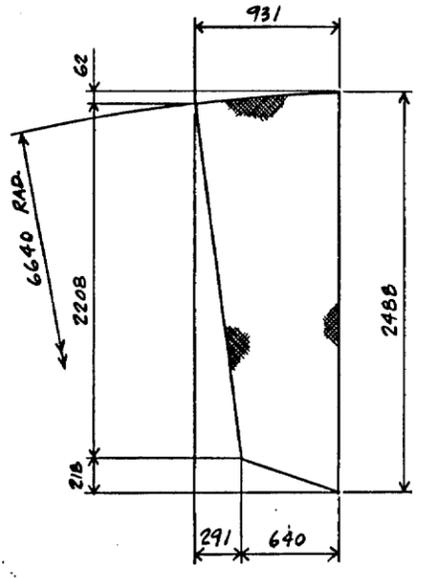
CONTRACT 1420

MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	MARK	W	WEIGHT
1									
2					2-REQ'D ~ MK. B41R				
3					2-REQ'D ~ MK. B41L				
4									
5	mfr	4	L 69x69x6	2460	B.C.I.E.		94W		
6			(2'x2'x4)						
7	mgr	4	C 152x51x8x16	2207	(C6x10.5) B.C.I.E.				
8	mc	4	L 89x69x6	336	(L3'x2'x6')				
9	md	20	L 89x69x6	60					
10	pa	4	P 932x6 (1/2")	1400					
11	ph	4	P 69x6	83					
12	pg	4	P 932x6	2162					
13	ph	8	P 100x8 (1/2")	115					
14	pk	4	CHK'D. B 931x5 (1/2")	2988			A36		
15	pm	4	P 900x5	758	ROLLED		94W		
16	pn	4	P 161x5	706					
17	ni	16	NUT 3/8" HVY HEX						
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2-REQ'D ~ PLATFORM SECTION ~ MK. B41R (AS SHOWN)
2-REQ'D ~ PLATFORM SECTION ~ MK. B41L (LEFT OF SHOWN)

GENERAL NOTES:
1) FOR FIELD ASSEMBLY SEE DWG. ETC



DETAIL OF CHK'D. B pkR

DETAIL SHOWING DRAIN HOLE IN pm

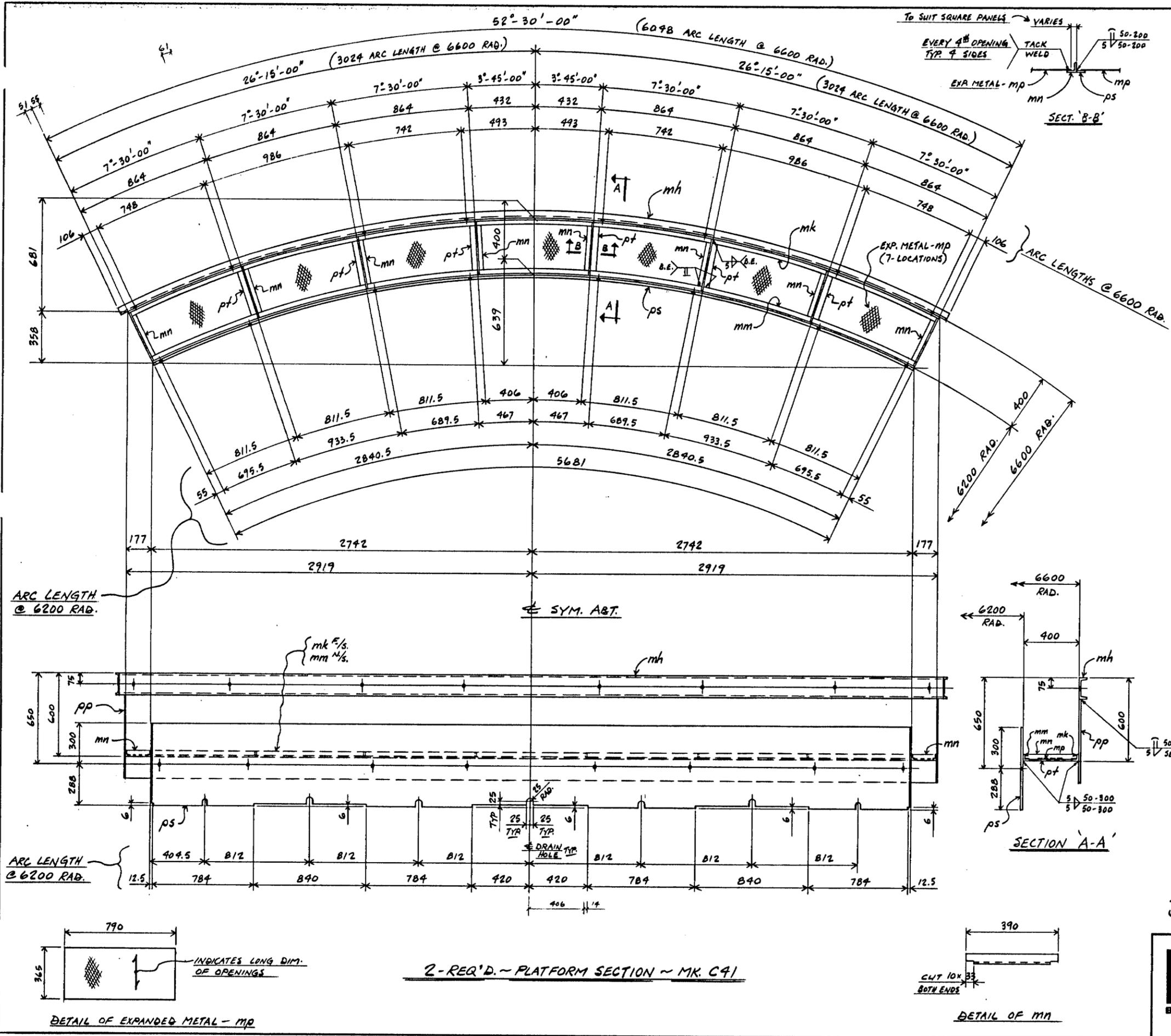
3R/300986

	MATERIAL	G40.21 (44W) w/n	NO. BY DATE	REVISION
	SURF. PREP. & PAINT	SEE MEMO	DETAILS EXTERIOR PLATFORM SECTION	
	OPEN HOLES	17" (1/2")	FOR 4.2M TELESCOPE DOME LA PALMA	
	DRAWN	G.V.A.	DATE	APR/84
BRITAIN STEEL LTD.		401 SALTER AVENUE, NEW WESTMINSTER, B.C.		DRAWING No. 1420-416
SHOP DEPARTMENT		MNS/P/S/O/M/T/P/SH/DP/AS/PA/ER		NO. PRINTS

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s-abcdefghijklmnpstvw



MARK		QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WGT.
1								
2								
3								
4	mh	2	C	152x51x8x16	6150	ROLLED (26x10.5)	44W	
5	mk	2	L	38x38x5	6098	(L1/2"x1/2"x3/8")		
6	mm	2			5681			
7	mn	16			390			
8	mp	14	EXP. METAL	365 x 790		PERDLAR #2-1/4-14 OR SIMILAR		
9								
10	pp	2	R	600 x 5 (1/2")	6098	ROLLED	44W	
11	ps	2	R	588 x 5	5681			
12	pt	12	R	38 x 5	324			
13								
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GENERAL NOTES:
 1) FOR FIELD ASSEMBLY SEE DWG. ETC

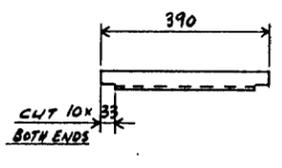
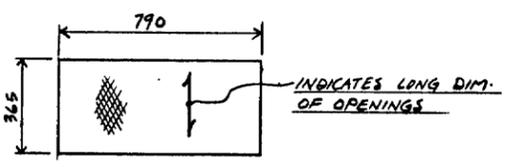
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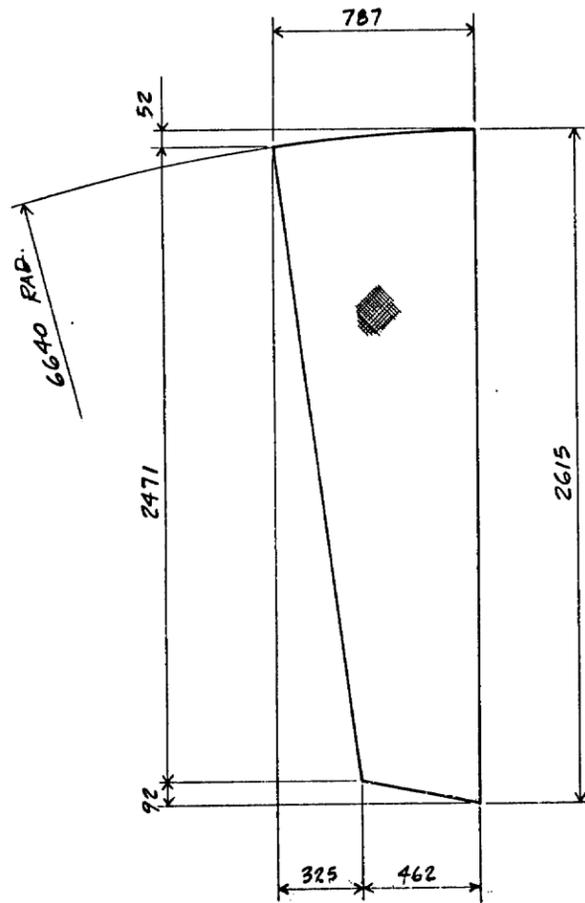
	MATERIAL Q4021 (44W) w/n		No. BY DATE REVISION	
	SURF. PREP. & PAINT SEE MEMO		DETAILS EXTERIOR PLATFORM SECTION	
	OPEN HOLES 1/2" (21P)		FOR 9.2" TELESCOPE DOME LA PALMA	
DRAWN G.V.A.	DATE APR/84	CHECKED	DATE	DRAWING No. 1420-91C
BRITAIN STEEL LTD. 401 SALTER AVENUE, NW WESTMINSTER, B.C.				

SHOP DEPARTMENT / INB / F / S / O / M / T / P / SH / DP / AS / PA / ER / No PRINTS

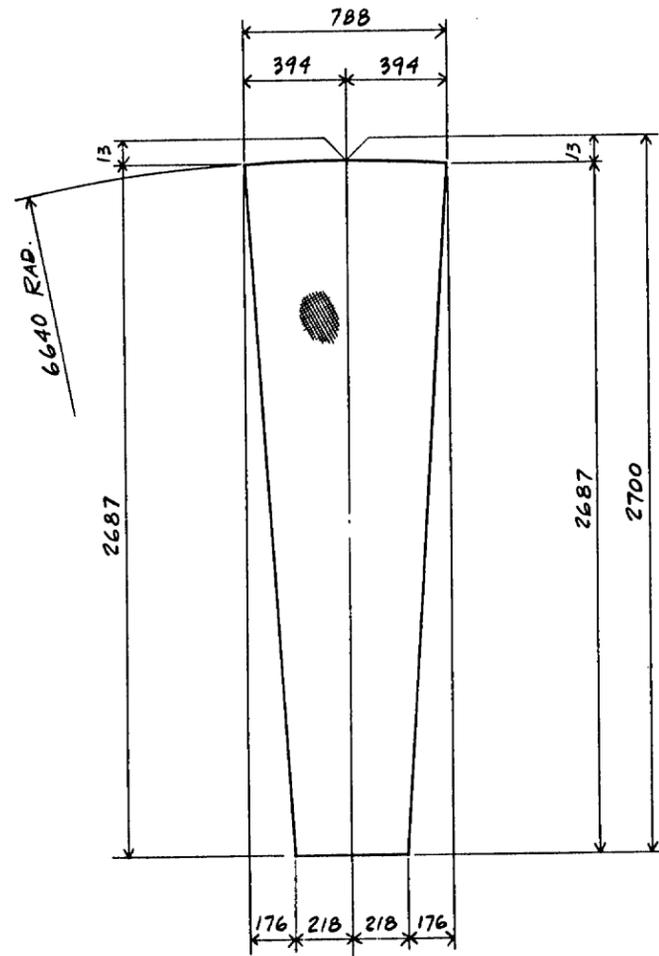
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2-REQ'D. ~ PLATFORM SECTION ~ MK. C41

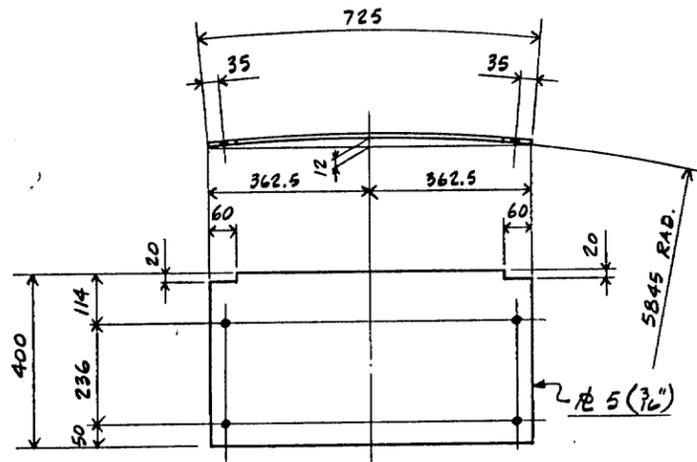




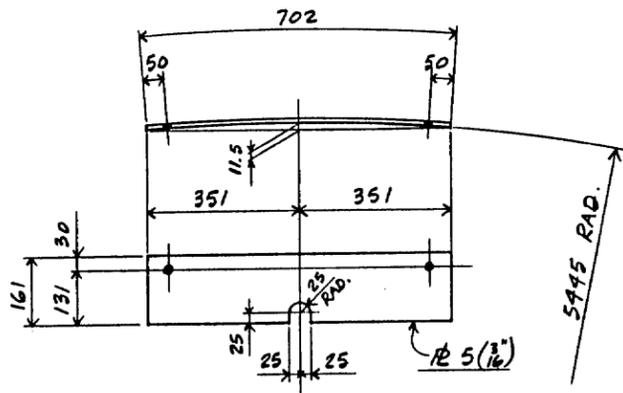
2-REQ'D. ~ CHK'D. R SECTION ~ MK. D41R (AS SHOWN)
 2-REQ'D. ~ CHK'D. R SECTION ~ MK. D41L (LEFT OF SHOWN)



2-REQ'D. ~ CHK'D. R SECTION ~ MK. F41



6-REQ'D. ~ BAFFLE R ~ MK. G41



6-REQ'D. ~ BAFFLE R ~ MK. H41

MATERIAL BILL
 BRITAIN STEEL LTD.

CONTRACT 1420

LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W/WT	WEIGHT
1									
2		2	REQ'D. ~ MK. D41R						
3		2	REQ'D. ~ MK. D41L						
4		4	CHK'D. R 787 x 5 (3/16)		2615		A36		
5									
6									
7									
8									
9		2	REQ'D. ~ MK. F41						
10		2	CHK'D. R 788 x 5 (3/16)		2700		A36		
11									
12									
13									
14									
15		6	REQ'D. ~ MK. G41						
16		6	R 400 x 5 (3/16)		725	ROLLED		44W	
17									
18									
19									
20									
21		6	REQ'D. ~ MK. H41						
22		6	R 161 x 5 (3/16)		702	ROLLED		44W	
23									
24									
25									
26									
27									
28		4	REQ'D. ~ MK. T41						
29		4	BAR 25.4 x 6.35		870	(PLAIN MAT'L.)	A36		
30									
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GENERAL NOTES:

1) FOR FIELD ASSEMBLY SEE DWG. ETC.

3R/300988



MATERIAL	G40.21 (44W) W/n	NO.	BY	DATE	REVISION
SURF. PREP. & PAINT	SEE MEMO	DETAILS EXTERIOR PLATFORM CHK'D. R & BAFFLE R'S.			
OPEN HOLES	13/16" (21#)	FOR 4.2M TELESCOPE DOME LA PALMA			
DRAWN	DATE	CHECKED	DATE	DRAWING NO. 1420-410	
G.V.A.	APR/84				

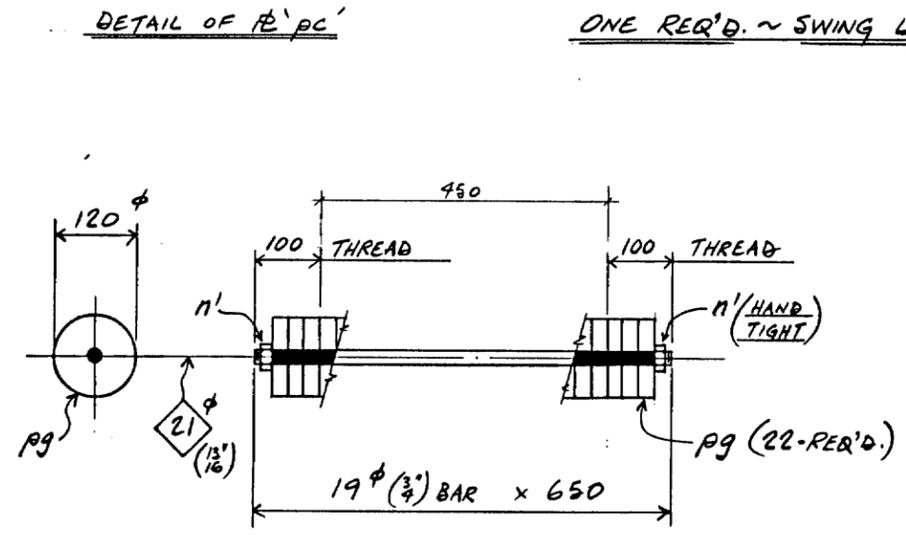
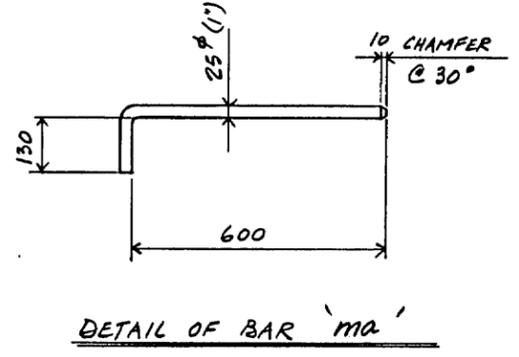
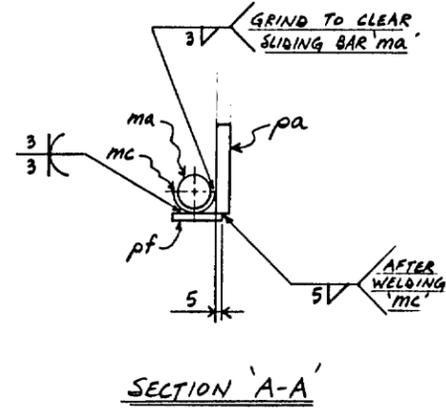
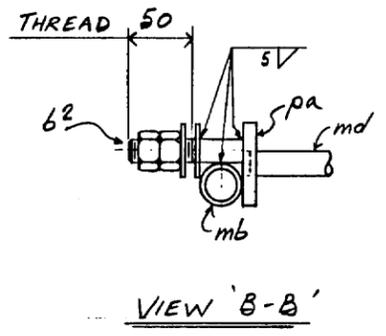
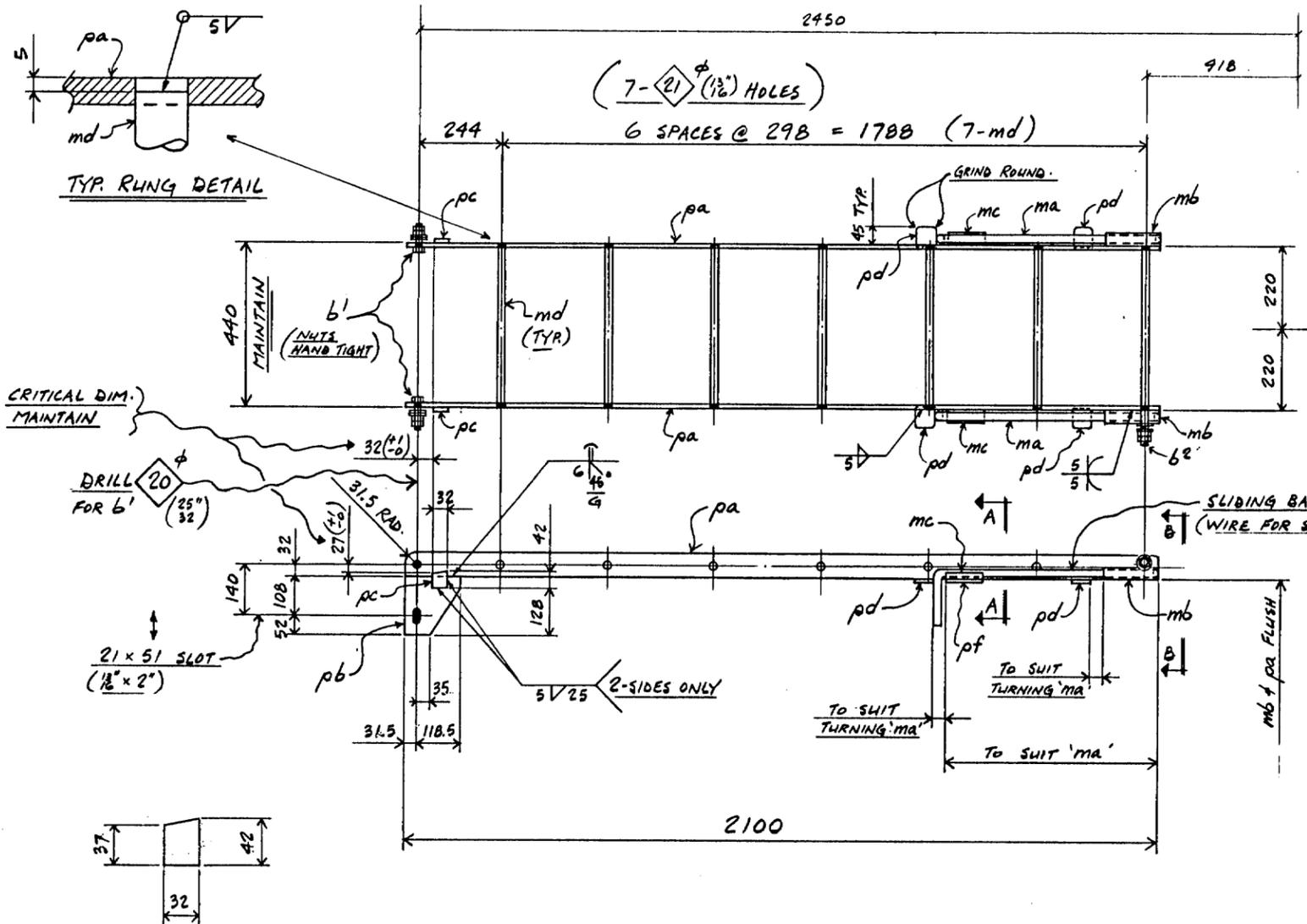
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

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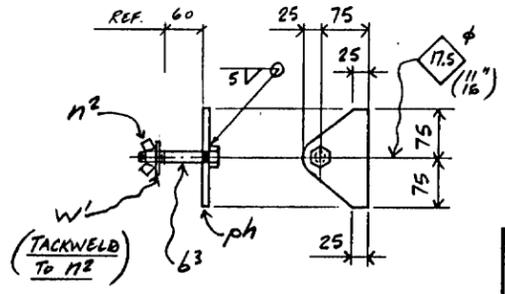
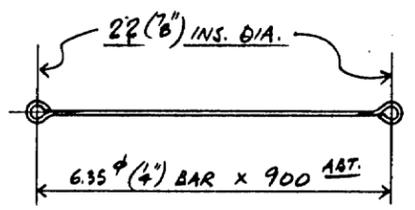
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SHOP DEPARTMENT INS / F / S / O / M / T / P / SH / DP / AS / PA / ER NO PRINTS



SHOP NOTE!
GRIND ALL SHARP CORNERS
AND ROUGH EDGES SMOOTH



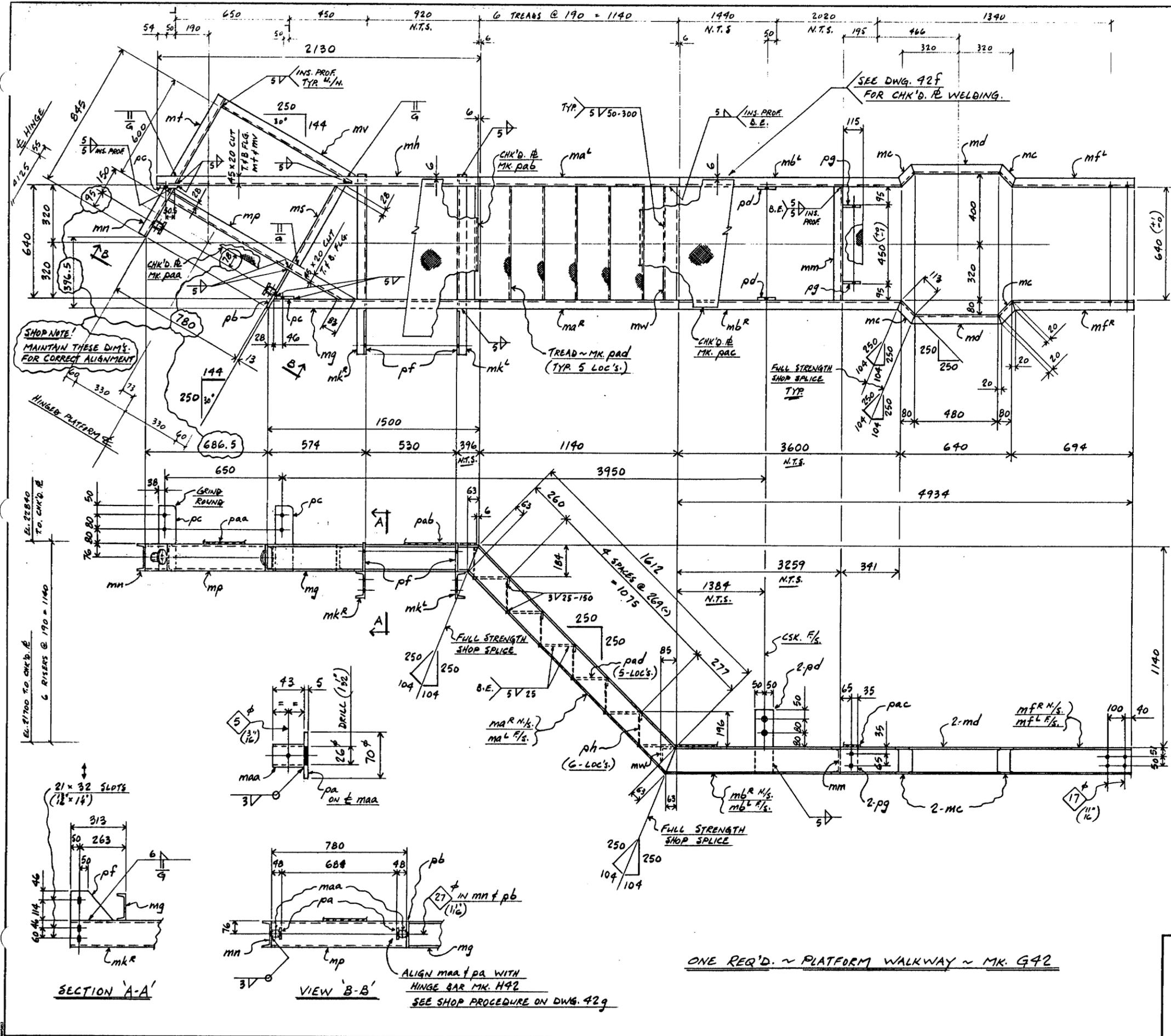
MATERIAL BILL						CONTRACT 1420	
BRITAIN STEEL LTD.							
MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MAT. TYPE	WEIGHT
1					ONE REQ'D ~ MK. A42		
2							
3							
4	2	BAR	6.35 x 10 (3/8)	2100		A36	
5	2	PIPE	2.5 x 10 (1/2)	160		A36	
6	2	PIPE	32 x 16 (3/4)	42			
7	4	PIPE	50 x 6 (1/2)	50			
8	2	PIPE	40 x 6	100			
9							
10	2	BAR	25 (1)	750	BEND	A36	
11	2	PIPE	2.5 (1) STD	150		A36	
12	2	PIPE	25 (1)	100	(1 CUTS 2)	A36	
13	7	BAR	19 (3/4)	730			
14	2	BOLT	3/4 A307	2 3/4	2 NUTS + 2 WASH.		
15	1	STUD	3/4 A307	3 3/4	1 NUT + 2 WASH.		
16							
17							
18					ONE REQ'D ~ MK. B42		
19							
20							
21	1	BAR	19 (3/4)	650	THRD. 2 E.	A36	
22	22	PIPE	120 x 25 (1)				
23							
24							
25					ONE REQ'D ~ MK. BA42		
26							
27	1	BAR	6.35 (1/2)	1200	BEND	A36	
28							
29					ONE REQ'D ~ MK. BB42		
30							
31							
32	1	PIPE	100 x 10 (3/8)	150			
33	2	BOLT	3/4 A307	4			
34	1	NUT	3/4 WING TYPE				
35	1	WASHER	3/4 STD.				
36							
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GENERAL NOTES:
1) FOR FIELD ASSEMBLY SEE DWG. D4

3R/300990

	MATERIAL	G40.21 (44W) OR A36	SEE MEMO	DETAILS	INTERIOR SWING LADDER
	SURF. PREP. & PAINT		AS NOTED	FOR	4.2M TELESCOPE DOME LA PALMA
	OPEN HOLES			DRAWING No.	1420-42a
DRAWN	DATE	CHECKED	DATE		
G.V.A.	APR. 84				
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.					
SHOP DEPARTMENT		INS / F / S / O / M / T / P / SH / DP / AS / PA / ER		No. PRINTS	

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MATERIAL BILL										CONTRACT 1420	
BRITAIN STEEL LTD.											
LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	UNIT	WEIGHT		
1											
2											
3											
4	ma ^R	2	C	152x48x5@12	1675	B.C. 2E. (C6x8.2) 44W		9	18		
5	mb ^L	2			3663						
6	mc	4			133						
7	md	2			520						
8	me ^R	2			694	B.C. 1E.					
9	mg	1			1500	B.C. 2E.					
10	mh	1			2130	B.C. 1E.					
11	mi ^R	2			1010						
12	mm	1			690	C.S. 2E.					
13	mn	1			322	B.C. 1E.					
14	mp	1			1204						
15	mq	1			565						
16	mt	1			550						
17	mv	1			870						
18	mw	1	L	76x76x6	690	C.S. 2E. (L3x3x2)					
19											
20	maa	2	PIPE	25 (1") STD.	43	C.S. 2E.				AS348B	
21											
22											
23	pa	2	PL	70x5 (3/8) THK.						44W	
24	pb	1	PL	152x13 (1/2)	245						
25	pc	2	PL	100x13	360						
26	pd	2	PL	100x13	360						
27	pe	2	PL	160x10 (3/8)	200						
28	pf	2	PL	100x10	135						
29	pg	6	PL	165x3 (1/2)	690					A26	
30											
31											
32	paa	1	CHK'D. PL	1180x6.35 (1/2)	1186					A26	
33	pab	1		900x	1010	BEND				SEE DWG	
34	pac	1		724x	3590					42f	
35	pad	5		240x	640	BEND					
36											
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GENERAL NOTES:

- 1) FOR DETAILS OF CHK'D. PL SEE DWG. 42f
- 2) FOR DETAIL OF HINGE BAR SEE DWG. 42g
- 3) FOR FIELD ASSEMBLY SEE DWG. D4

3R/300993

	MATERIAL	G40.21 (44W) w/n	NO. BY DATE	REVISION					
	SURF. PREP. & PAINT	SEE MEMO	DETAILS INTERIOR PLATFORM WALKWAY						
	OPEN HOLES	1/8" w/n (E/F)	FOR 4.2" TELESCOPE DRIVE LA PALMA						
	DRAWN	G.V.A.	DATE	APR/84	CHECKED	DATE	DRAWING NO.	1420-42d	REV
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.									
SHOP DEPARTMENT									

ONE REQ'D. ~ PLATFORM WALKWAY ~ MK. G42

ALIGN maa & pa WITH HINGE BAR MK. H42 SEE SHOP PROCEDURE ON DWG. 42g

SECTION 'A-A'

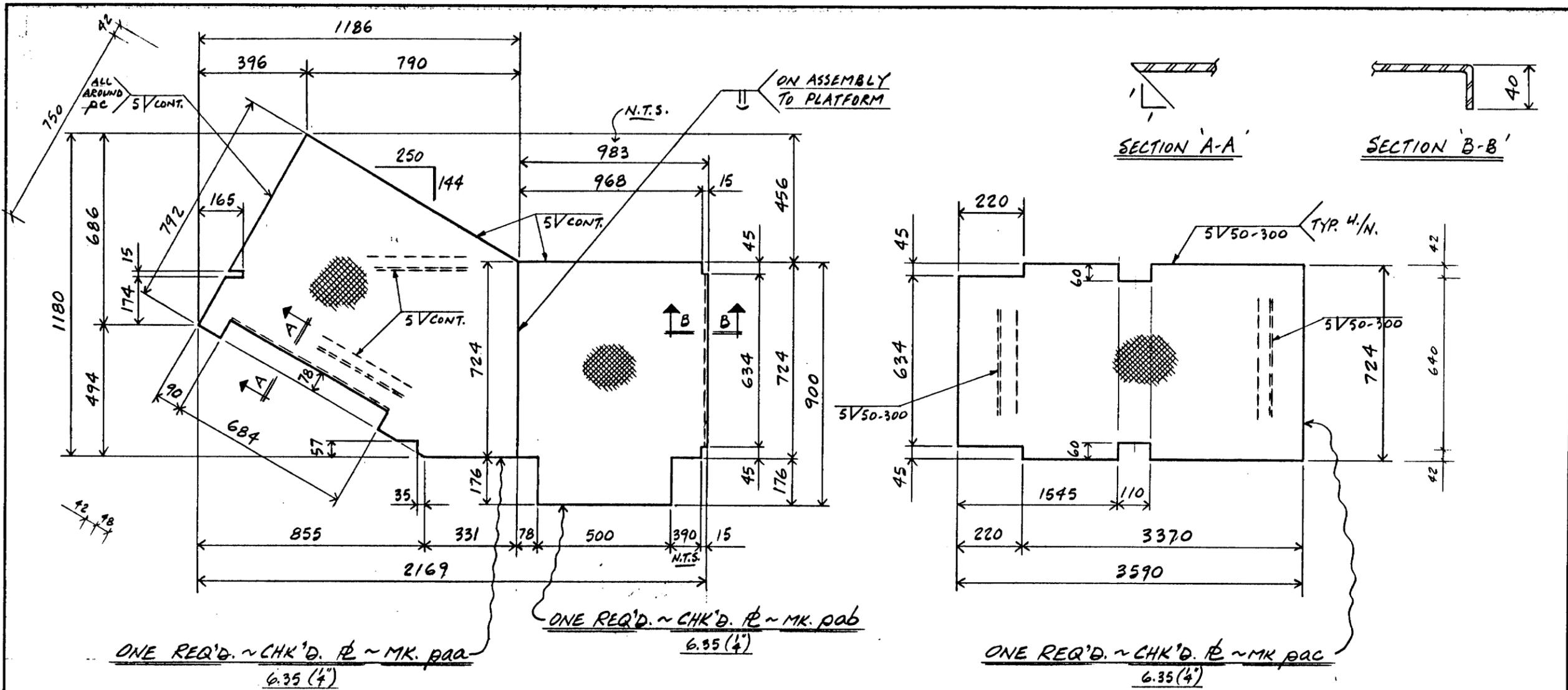
VIEW 'B-B'

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m-abcdefghijklmnpstvw y

s-abcdefghijklmnpstvw y

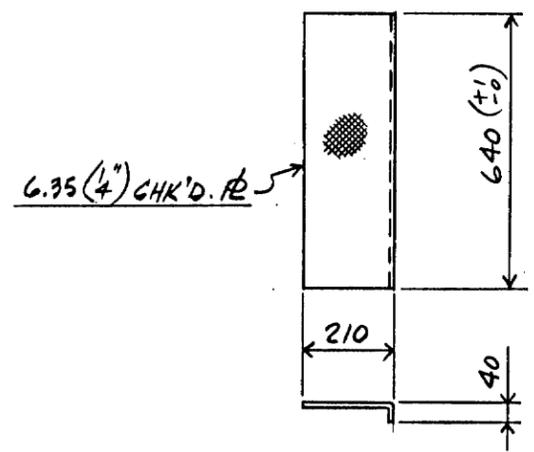
NO PRINTS



ONE REQ'D. ~ CHK'D. P ~ MK. PAA
6.35 (4'')

ONE REQ'D. ~ CHK'D. P ~ MK. PAB
6.35 (4'')

ONE REQ'D. ~ CHK'D. P ~ MK. PAC
6.35 (4'')



5-REQ'D. ~ TREADS ~ MK. PAD

REVISED TO 4.76 (3'')
AUG. 10/84

GENERAL NOTES:

- 1) FOR SHOP ASSEMBLY TO PLATFORM SEE DWG. 42d.
- 2) ITEMS ON THIS DWG ARE BILLED ON DWG. 42d.

3R1300994

	MATERIAL		A36		No.		BY		DATE		REVISION		
	SURF. PREP.		PAINT ON / FINAL ASSEMBLY		DETAILS OF		CHK'D. P		SUB-ASSEMBLY ITEMS				
	OPEN HOLES				FOR		4.2M TELESCOPE DOME		LA PALMA				
	DRAWN		DATE		CHECKED		DATE		DRAWING No.		1420-42f		
		G.V.A. APR/84											
BRITAIN STEEL LTD.													
401 SALTER AVENUE, NEW WESTMINSTER, B.C.													
SHOP DEPARTMENT										INS / F / S / O / M / T / P / SH / DP / AS / PA / ER		No. PRINTS	

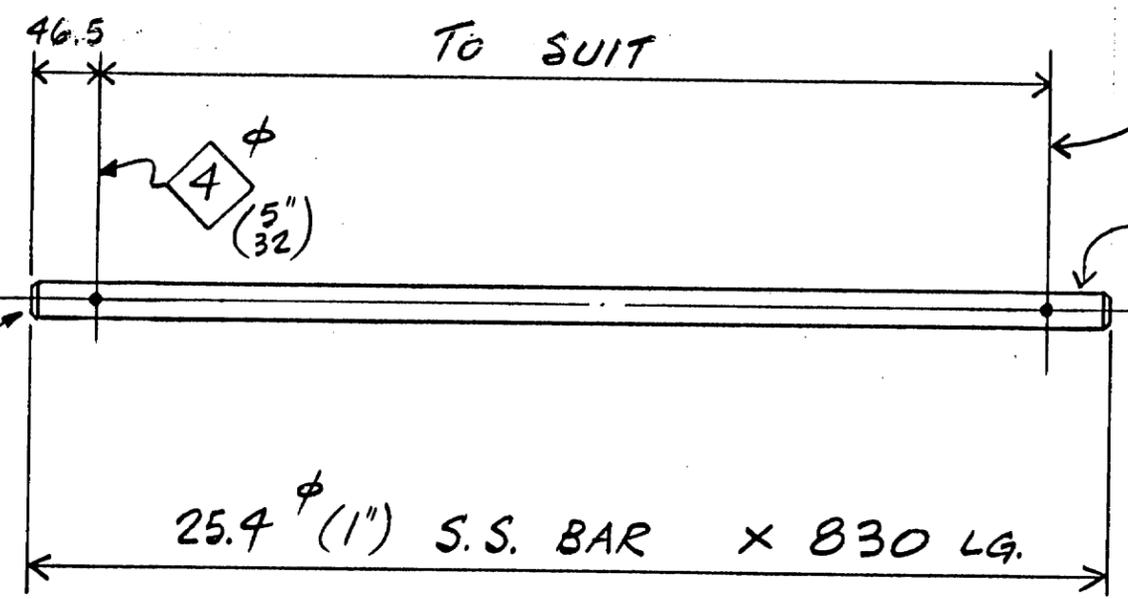
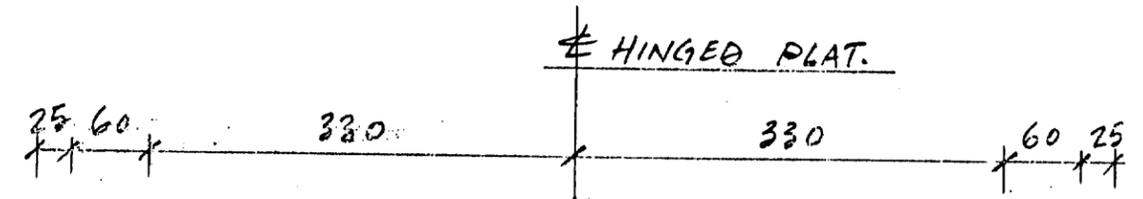
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m - abcdfghkmnpstvw

LINE	No. REQD.		MARK	DESCRIPTION	MAT'L	LENGTH		R.B.	LINE	REMARKS	SPLICING _____ ALLOWED		WEIGHT
	SHIP	FAB.				---	---				CUTTING	INSTRUCTIONS	
1													
2	ONE		H42	25.4 ϕ (1") BAR	S.S.		830						
3													
4	2		K42	3/8 ϕ (1/8") COTTER PIN	S.S.		51			(2") BAG & SHIP WITH BAR H42			
5													
6	2		M42	1" ϕ FLAT WASHER	S.S.								
7													
8													
9													
10													

3R1300995

No. BY DATE
 REVISION
 CONTRACT 1420
 DWG. No. REV. 429
SEE MEMO



CHAMFER
3 @ 45°
BOTH ENDS

ONE REQ'D. ~ HINGE BAR ~ MK. H42

DRILL $\diamond 4 \phi$
(5/32) TO SUIT ON ALIGNMENT
OF maa & pa (SEE DWG. 42d)
AND SHOP PROCEDURE

SHOP PROCEDURE

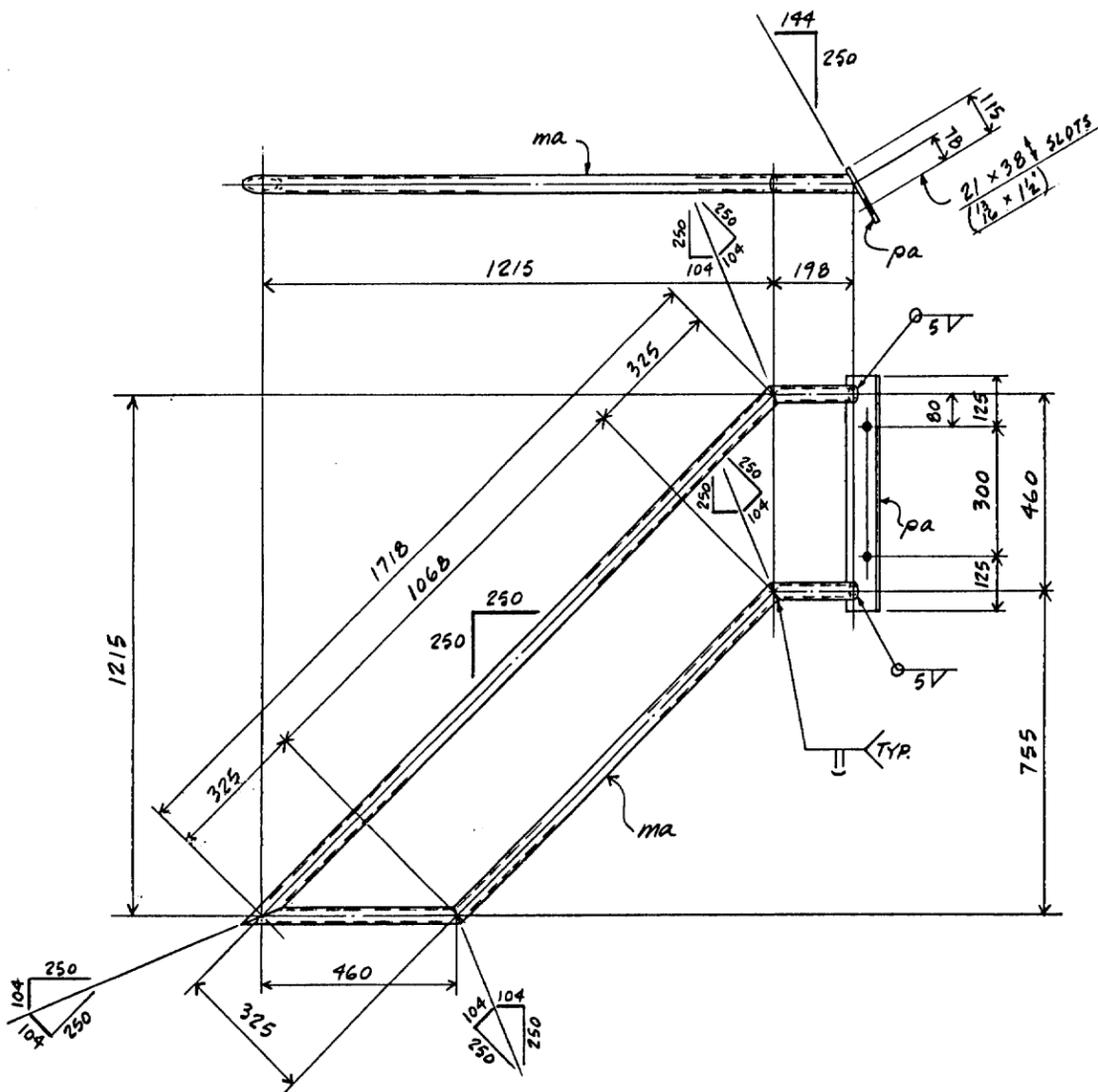
- 1.) REFERRING TO VIEW 'B-B' ON DWG. 42d
INSTALL \otimes END OF HINGE BAR H42 AND
ALIGN PARALLEL TO CHANNEL MP THEN
WELD maa TO ϕ pb.
- 2.) INSTALL COTTER PIN MK. K42 @ 1/4 END.
- 3.) DRILL $\diamond 4 \phi$ HOLE @ R/H END USING EXISTING
HOLE IN maa AS A GUIDE.

GENERAL NOTES:

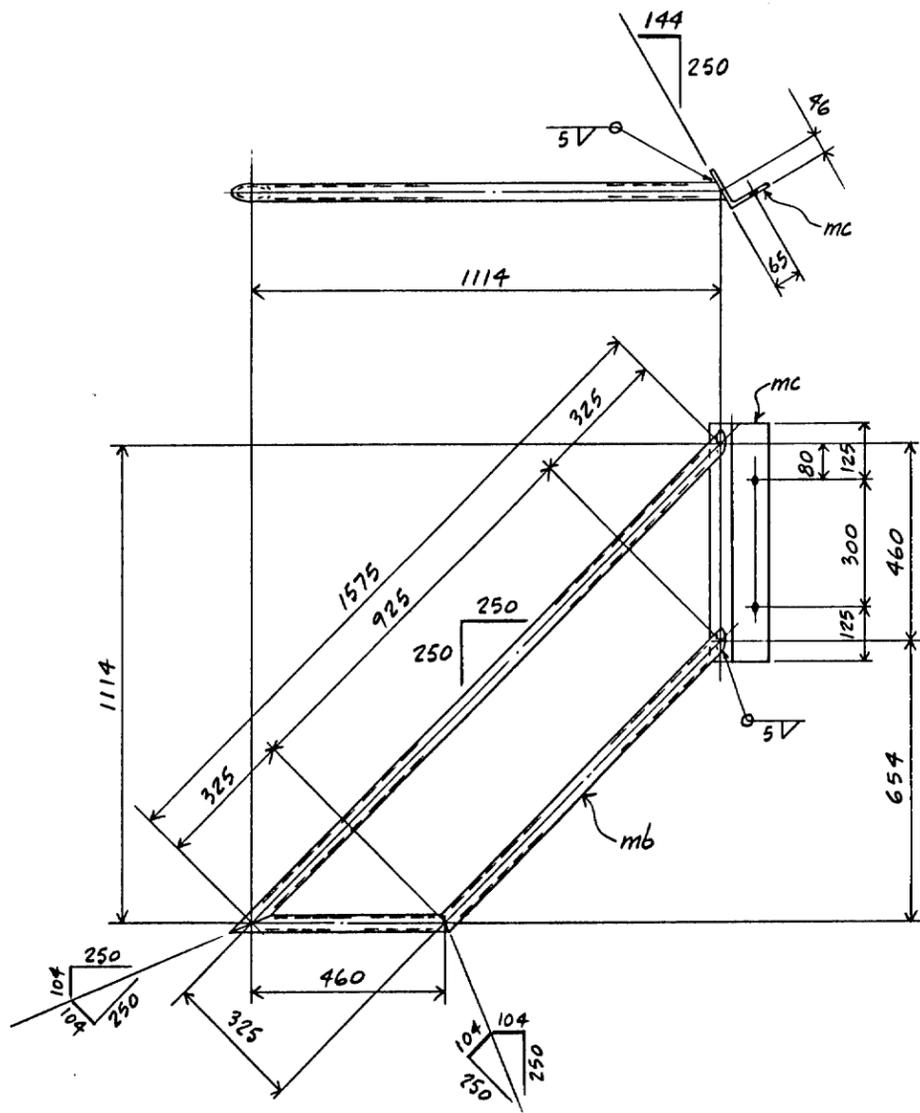
- 1.) FOR FIELD ASSEMBLY SEE DWG D4

HOLES	1
PAINT & PREP	
DATE	10
CH'KD	9
DATE	8
MADE	7
G.A.	6
APR/84	5
BRITAIN STEEL LTD. B.C.	4
NEW WESTMINSTER	3
	2
	1
No. DIV.	

BRITAIN



ONE REQ'D. ~ HANDRAIL ~ MK. P42



ONE REQ'D. ~ HANDRAIL ~ MK. S42

MATERIAL BILL							BRITAIN STEEL LTD.			CONTRACT 1420		
LINE NO.	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	W	L	W	W	WEIGHT
1												
2						ONE REQ'D. ~ MK. P42						
3												
4	ma	1	PIPE	32 ϕ (14) STD.	4000	LIN.	A53					
5	pa	1	R	160 x 6 (4")	550		A53					
6												
7												
8						ONE REQ'D. ~ MK. S42						
9												
10												
11	mb	1	PIPE	32 ϕ (14) STD.	3500	LIN.	A53					
12	mc	1	L	102 x 102 x 6	550	(L4" x 4" x 4")	A53					
13												
14												
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GENERAL NOTES:
 1) FOR FIELD ASSEMBLY SEE DWG. 04.

3R1300997

	MATERIAL	G4021 (44W) w/n	REVISION	
	SURF. PREP. & PAINT	SEE MEMO	DETAILS	INTERIOR PLATFORM HANDRAIL
	OPEN HOLES	1/8" w/n (21 ϕ)	FOR	4.2" TELESCOPE DOME LA PALMA
	DRAWN	G.V.A.	DATE	APR/84
	CHECKED		DATE	
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.			DRAWING NO.	1420-42K
SHOP DEPARTMENT			INS/F/S/O/M/T/P/SH/DP/AS/PA/ER	NO. PRINTS

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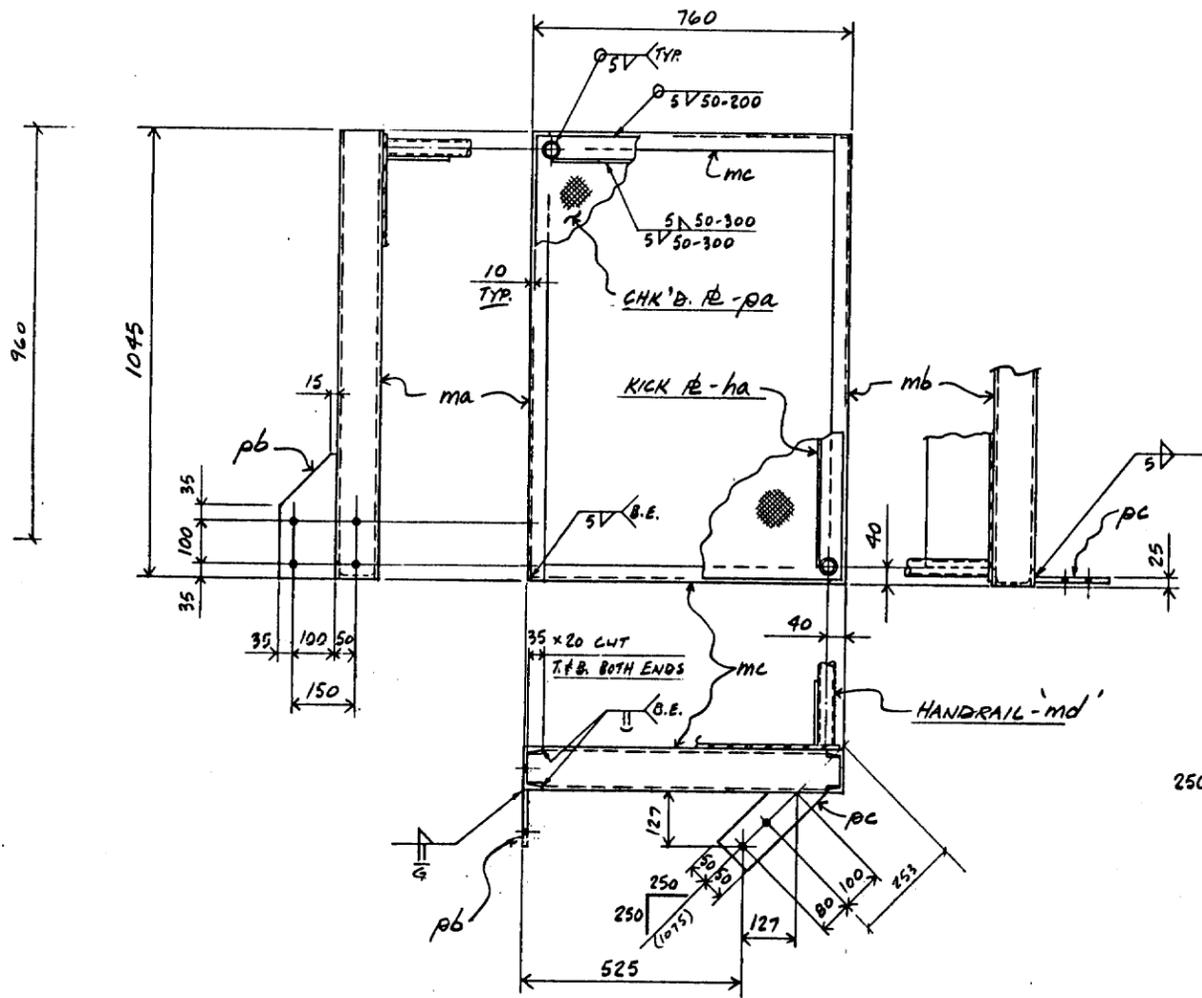
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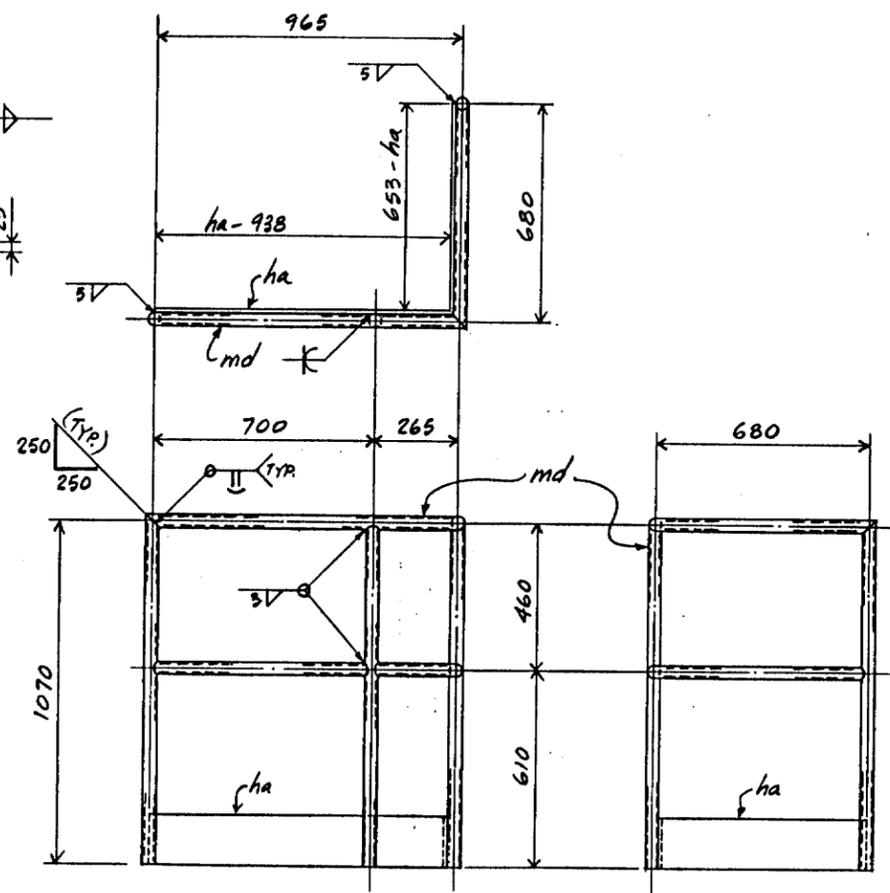
MATERIAL BILL
BRITAIN STEEL LTD.

CONTRACT 1420

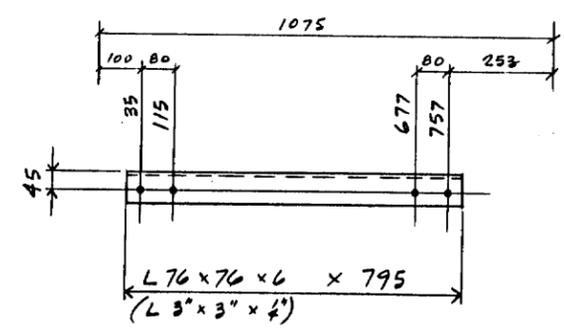
LINE	MARK	QTY.	SHAPE	SIZE	LENGTH	REMARKS	MATL. TYPE	WELL	LINE	WEIGHT
1										
2						ONE REQ'D. ~ MK. AA42				
3										
4	ma	1	C	102x40x50 B	1095	G.S. 2E. (6'4" x 5'4")	44W			
5	mb	1	I	I	1095					
6	mc	2	I	I	750					
7										
8	md	1	PIPE	32" (1 1/4") STD.	7000	LINEAL	A53 GRB			
9										
10	pa	1	CHK'D. R.	790x6 (4)	1025		A36			
11	pb	1	R	135x10 (3)	290		44W			
12	pc	1	R	100x10	265		I			
13										
14	ha	1	BAR	152x6	1590	BEND (BAR 6"x4")	A36			
15										
16										
17										
18						ONE REQ'D. ~ MK. AB42				
19										
20		1	L	76x76x6	795	(L 3"x3"x4")	44W			
21										
22										
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ONE REQ'D. ~ PLATFORM ~ MK. AA42



DETAIL OF HANDRAIL 'md' & KICK PL 'ha'



ONE REQ'D. ~ BRACE ~ MK. AB42

SHOP NOTE!
GRIND ALL SHARP CORNERS AND
ROUGH EDGES SMOOTH

GENERAL NOTES:
1) FOR FIELD ASSEMBLY SEE DWG. D4

3R/300999

	MATERIAL	G4021 (44W) w/r	NO.	BY	DATE	REVISION
	SURF. PREP.	PAINT	DETAILS E.O.T. CRANE ACCESS PLATFORM			
	OPEN HOLES	1 1/2" w/r (21#)	FOR 4.2 M TELESCOPE DOME LA PALMA			
	DRAWN	G.V.A.	DATE	APR/84	CHECKED	DATE
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.						

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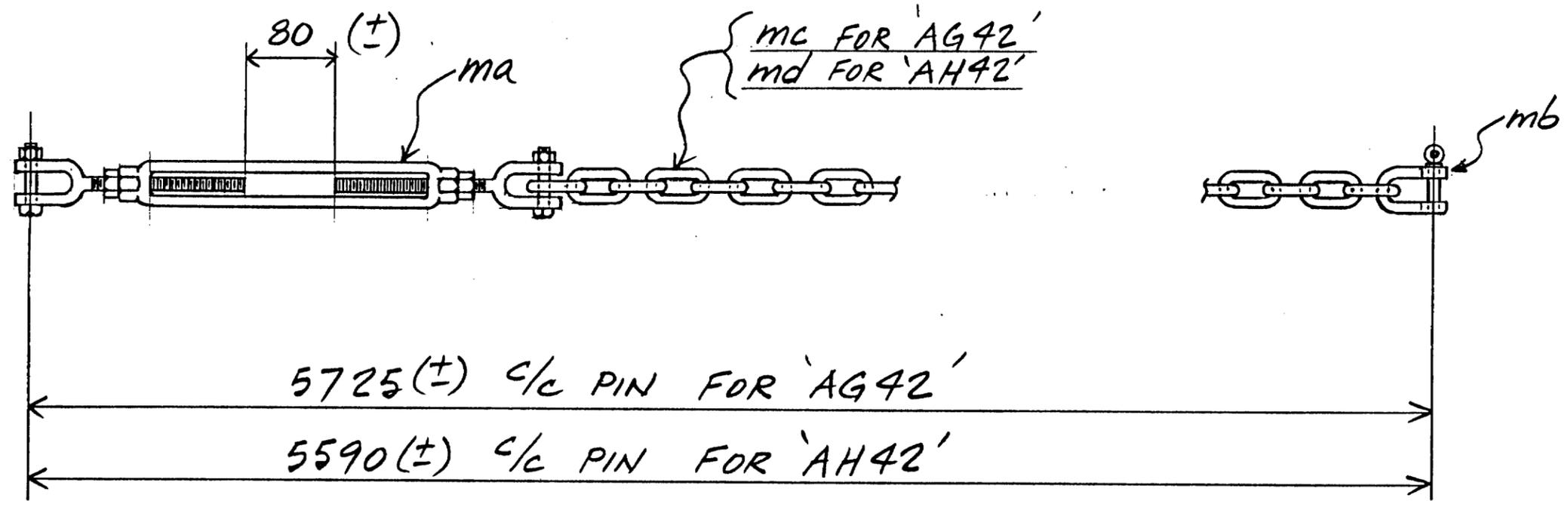
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SHOP DEPARTMENT
INS / F / S / O / M / T / P / SH / DP / AS / PA / ER
NO PRINTS

LINE	No. REQ'D.		MARK	DESCRIPTION	MAT'L	LENGTH		R.B.	LINE	REMARKS	SPLICING _____ ALLOWED		WEIGHT
	SHIP	FAB.									CUTTING	INSTRUCTIONS	
				ONE REQ'D. ~ MK. AG 42									
2		1	ma	3" x 6" JAW & JAW TURNBUCKLE	GALV.					c/w 2 LOCK NUTS (GALV.)			
3		1	mb	1/4" SCREW PIN CHAIN SHACKLE						(1/2 TON CAP.)			
4		1	mc	6(1/4") PROOF COIL CHAIN			5360	ABT.					
5													
6													
7				ONE-REQ'D. ~ MK AH 42									
8		1	ma										
9		1	mb										
10		1	md	6(1/4") PROOF COIL CHAIN	GALV.		5225	ABT.					

3R/3001001

NO. BY	DATE	REVISION	CONTRACT	DWG. NO.	REV.
			1420	425	



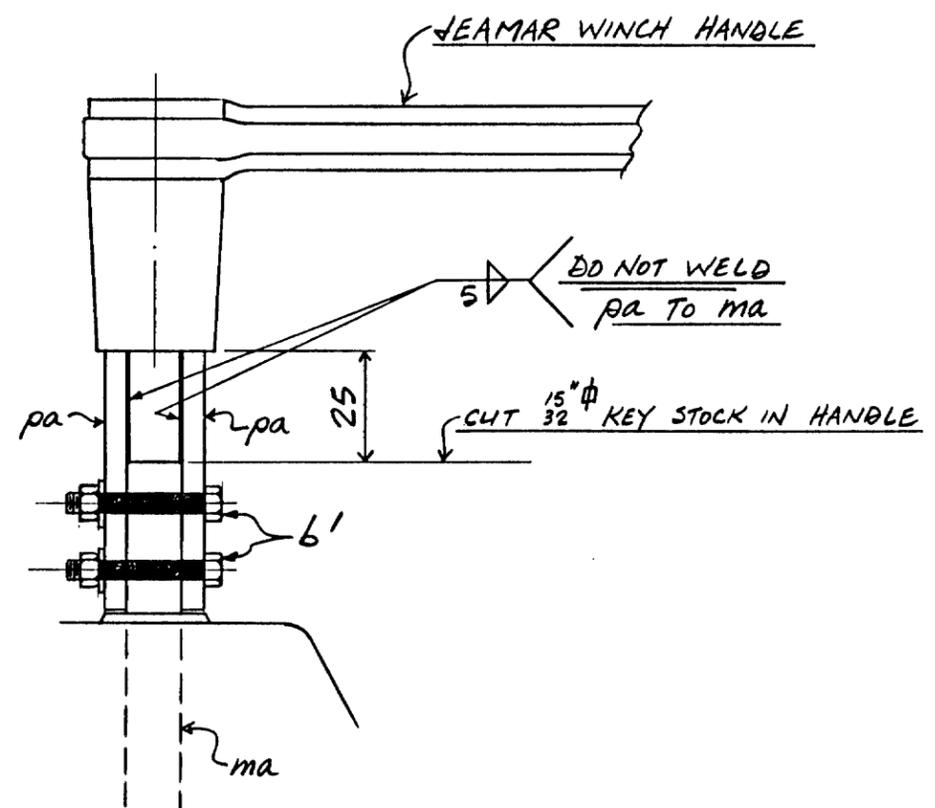
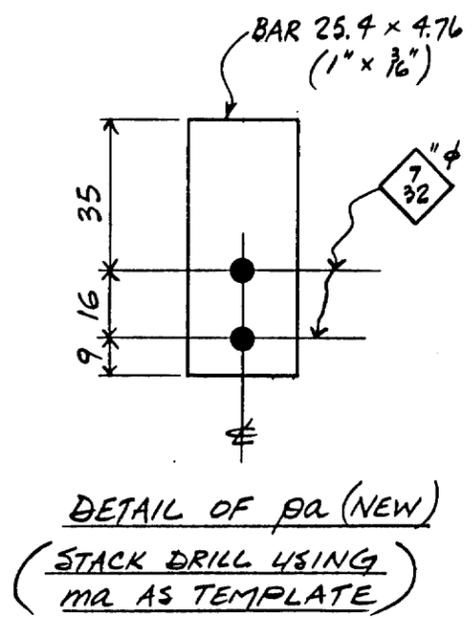
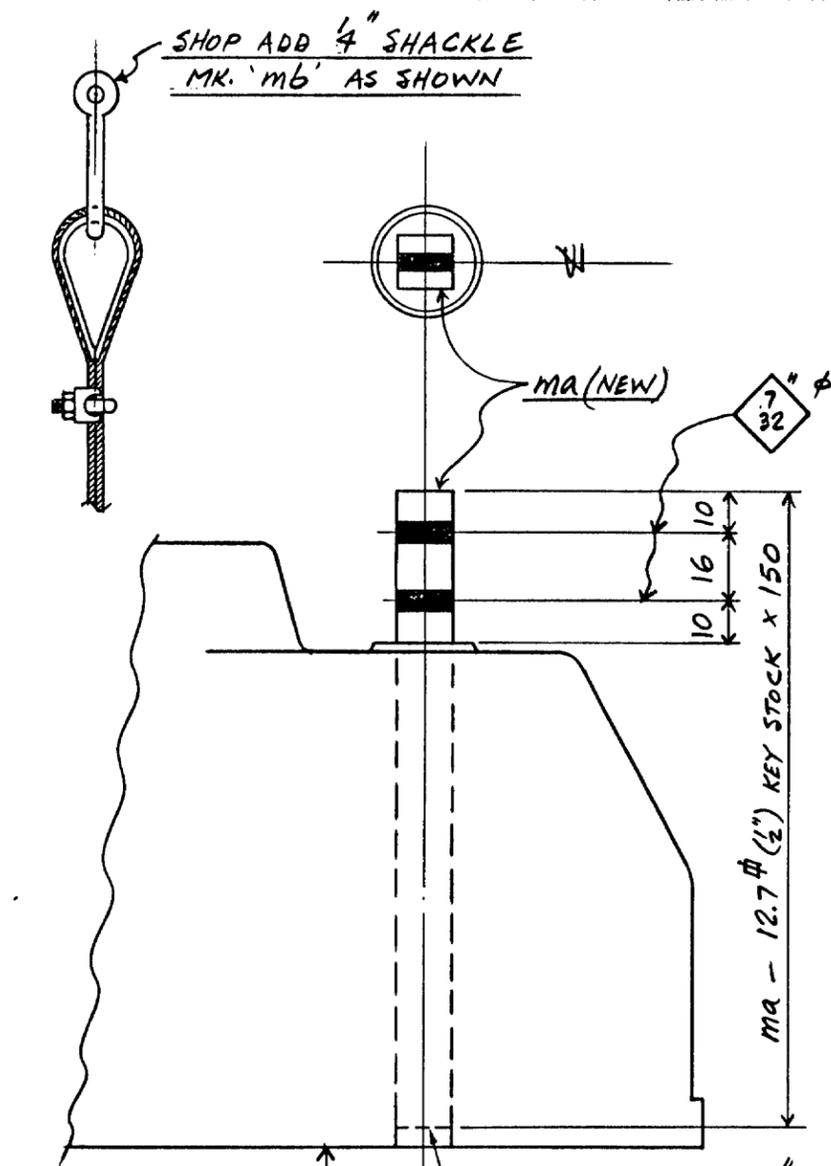
ONE REQ'D. ~ SUPPORT CHAIN ~ MK. AG42
ONE REQ'D. ~ [] ~ MK. AH42

GENERAL NOTES:
 1.) FOR FIELD ASSEMBLY
 SEE DWG. 129.

HOLES	PAINT & PREP
10	
9	
8	
7	
6	MADE DATE GMA MAY/84
5	
4	
3	
2	
1	
NO. DIV.	

BRITAIN STEEL LTD. B.C.
 NEW WESTMINSTER





- SHOP PROCEDURE**
- 1) ASSEMBLE RE'S PA TO NEW KEY STOCK MK. 'MA' WITH 2 BOLTS MK. 6' AS SHOWN.
 - 2) LOCATE REWORKED WINCH HANDLE ON E OF RE'S PA AND WELD AS SHOWN.
 - 3) SHIP TO DOME SITE WITH HANDLE BOLTED IN PLACE.

DETAILS OF SHOP REWORK TO JEAMAR WINCH & HANDLE FOR INT. HINGED PLATFORM

SHOP INSTALL KEY STOCK - MK. 'MA' TO JEAMAR WINCH AS SHOWN

GENERAL NOTES:
1) FOR FIELD LOCATION OF JEAMAR WINCH SEE DWG. D4.

3R/3001002

LINE	SHIP	FAB	MARK	DESCRIPTION	MAT'L	LENGTH	R.B.	LINE	REMARKS	CUTTING INSTRUCTIONS	WEIGHT	DIVISIONS
	No. REQD.									SP LICING	ALLOWED	
7			mb	1/4" SCREW PIN CHAIN SHACKLE					(1/2 TON CAP.)			
6												
5			2	6' 3/16" BOLT C/W HEX NUT & LOCK WASHER								
4												
3			2	pa BAR 25.4 x 4.76		60			(BAR 1" x 3/16")			
2												
1			ONE	ma 12.7" (1/2") KEY STOCK		150						

BRITAIN

MATERIAL G40.21 (44W) 1/2"

SURF. PREP. & PAINT TO MATCH WINCH

OPEN HOLES

DRAWN G.V.A. DATE MAY/84 CHECKED DATE

DRAWING No. 1420-421

BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.

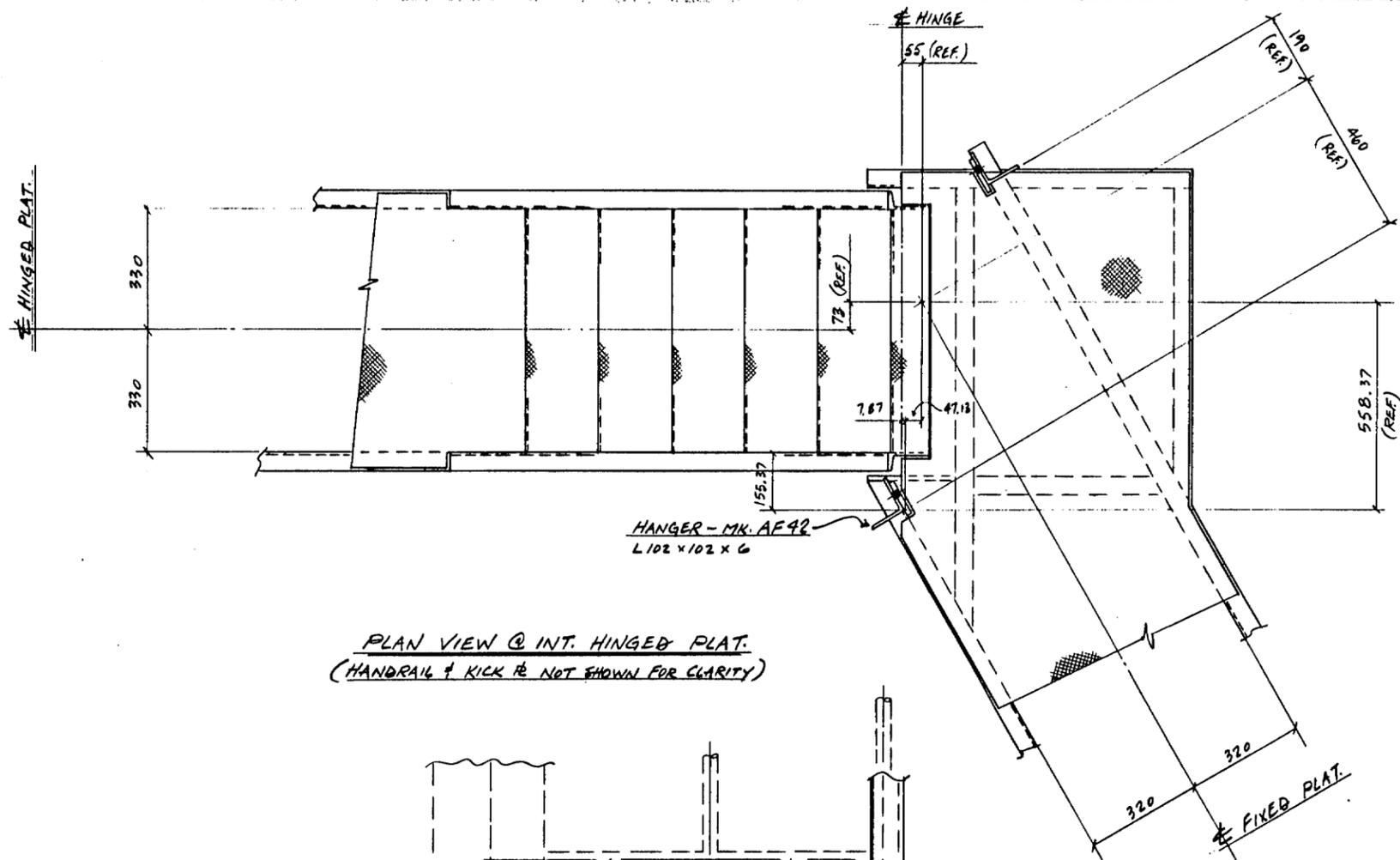
INS / F / S / O / M / T / P / SH / DP / AS / PA / ER

No. PRINTS

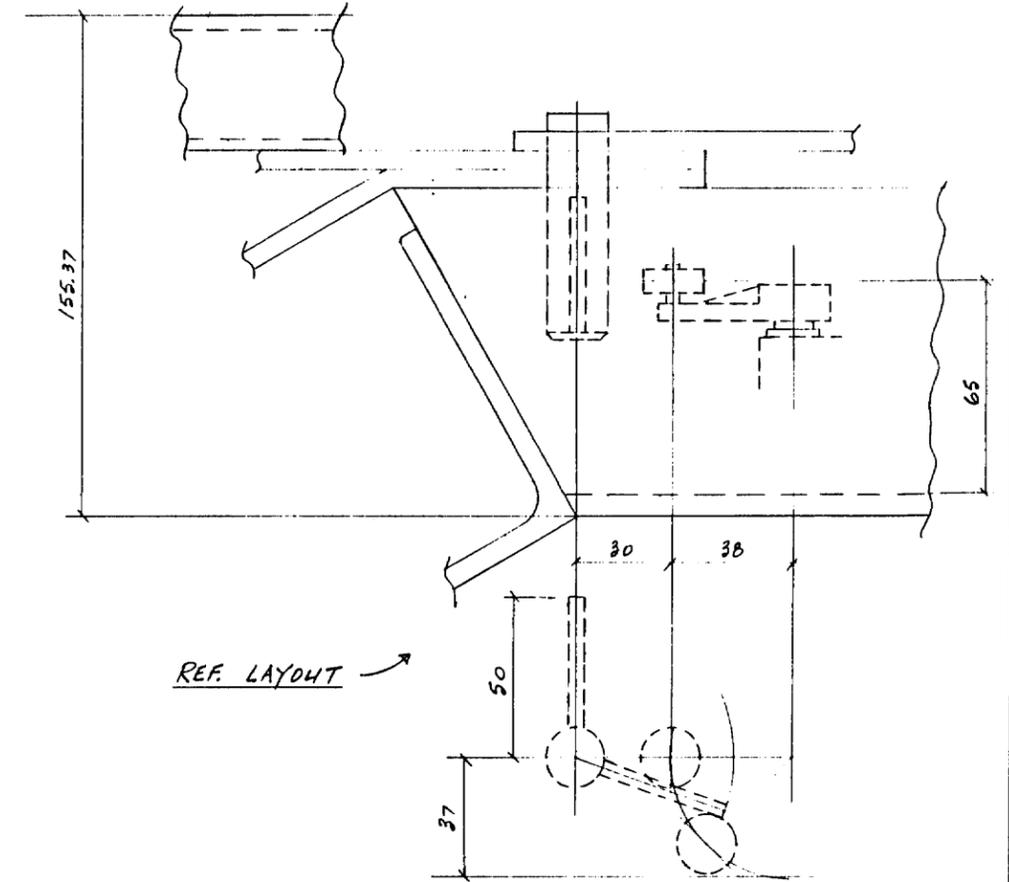
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m - a b c d f g h k m n p s t v w y

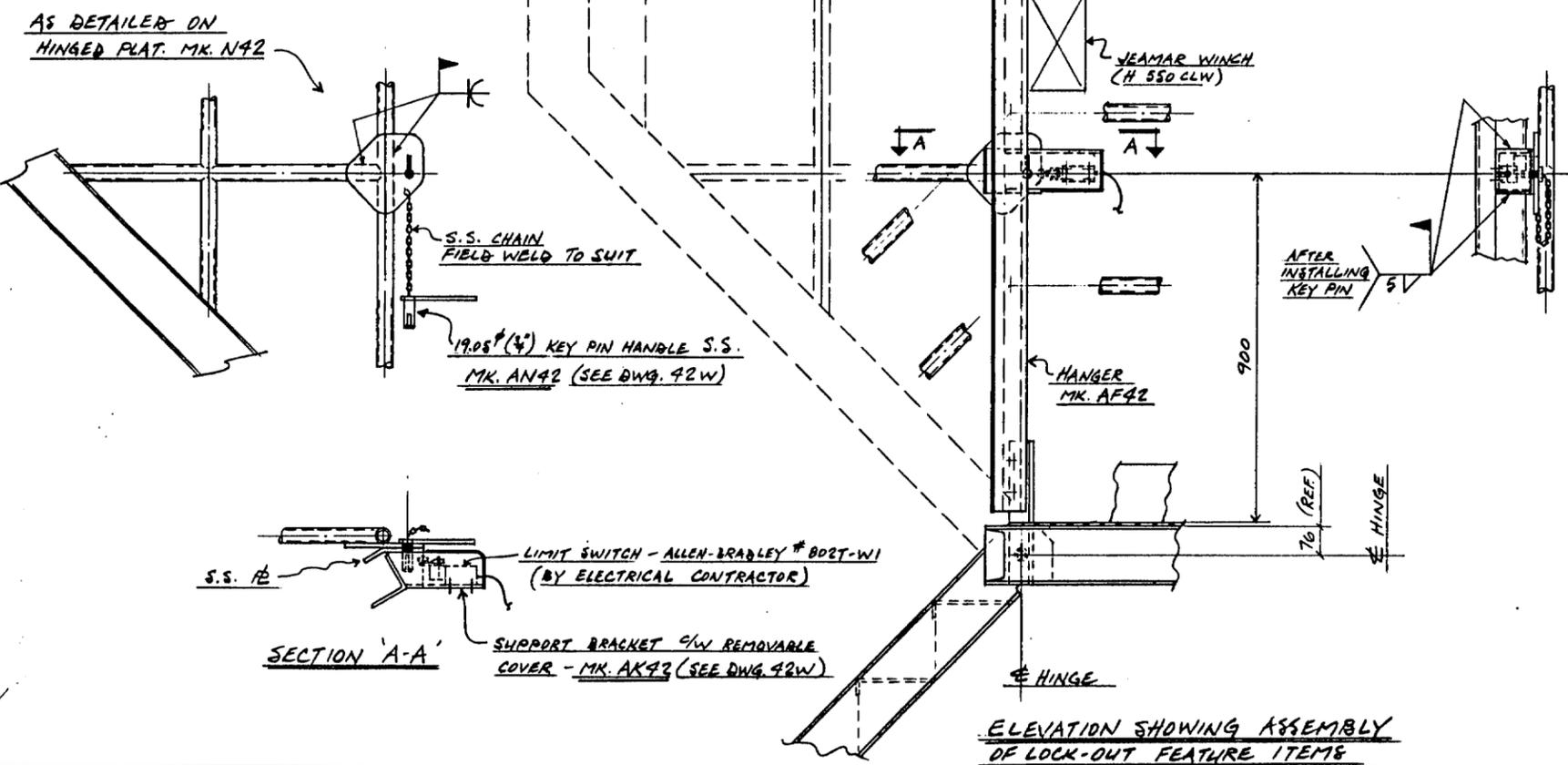
SHOP DEPARTMENT



PLAN VIEW @ INT. HINGED PLAT.
(HANDRAIL & KICK PLATE NOT SHOWN FOR CLARITY)



REF. LAYOUT



ELEVATION SHOWING ASSEMBLY
OF LOCK-OUT FEATURE ITEMS

GENERAL NOTES:

- 1.) FOR ADDITIONAL INFORMATION SEE DWG. D9
- 2.) FOR LOCK-OUT FEATURE ITEMS SEE DWG. 92W

3R/3001003

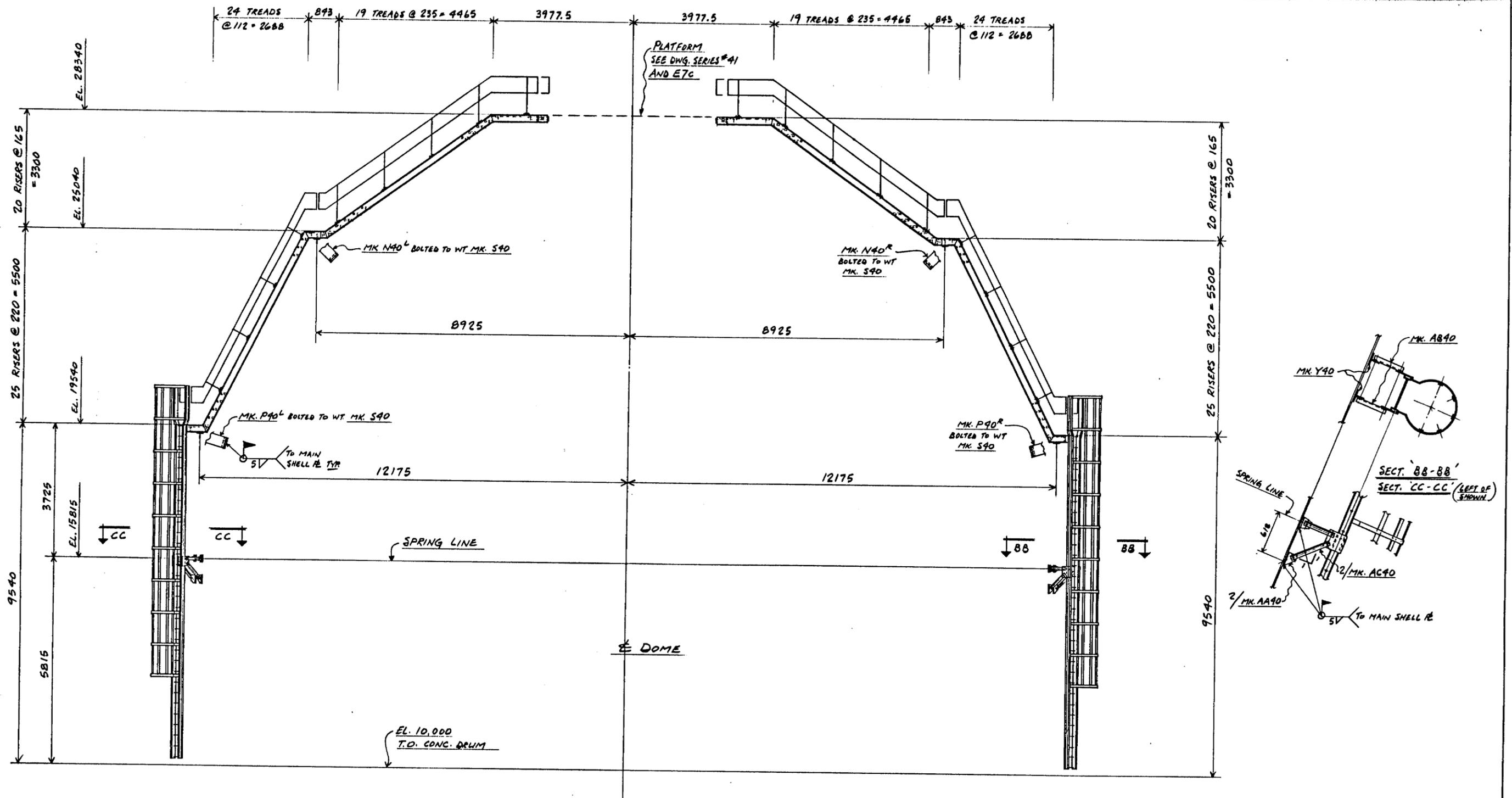
	MATERIAL		No. BY DATE REVISION	
	SURF. PREP. & PAINT		DETAILS ELECTRONIC LOCK-OUT FEATURE	
OPEN HOLES		FOR 4.2m TELESCOPE DOME LA PALMA		
DRAWN	DATE	CHECKED	DATE	DRAWING No.
G.V.A.	MAY/89			1420-92V
BRITAIN STEEL LTD. 401 BALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT		INB / S / O / M / T / P / SH / DP / AS / PA / ER		NO PRINTS

p-abcdefghijklmnpstvw y

m-abcdefghijklmnpstvw y

s-abcdefghijklmnpstvw y

SCALE = 1:75



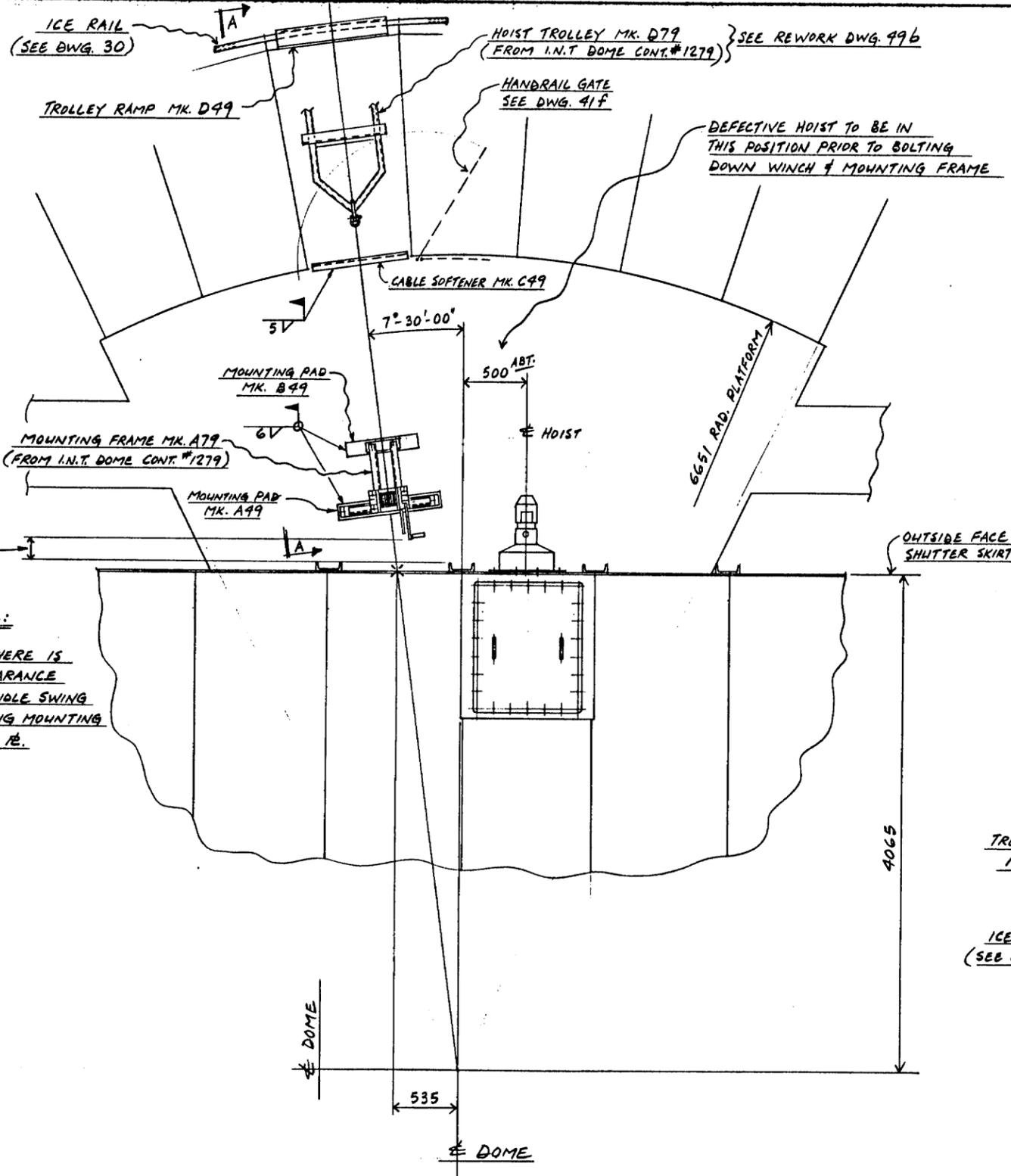
VIEW 'AA-AA'
(FROM DWG. E7a)

GENERAL NOTES:
1) FOR DETAILS OF ITEMS ON THIS DWG. SEE DWGS. 40a, 40b, 40c, 40d, 40f, 40g, 40h & 40k.

3R/3001074

	MATERIAL		No. BY DATE REVISION	
	SURF. PREP. & PAINT		DETAILS EXTERIOR STAIRS FINAL LOCATIONS	
	OPEN HOLES		FOR 4.2M TELESCOPE DOME LA PALMA	
	DRAWN DATE CHECKED DATE	G.V.A. MAR/09	DRAWING No.	1420-E76
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, S.C.				
SHOP DEPARTMENT		INS / E / S / O / M / T / P / SH / DP / AS / PA / ER		No. PRINTS

p-abcdefghijklmnpstvw y m-abcdefghijklmnpstvw y s-abcdefghijklmnpstvw y



FIELD NOTES:

- 1) BEEBE WINCH c/w WIRE ROPE & SHACKLE & TROLLEY MK. D79 ARE TO BE KEPT INSIDE WHEN NOT IN USE. 1/2" S.S. BOLTS CAN BE LEFT IN MOUNTING FRAME MK. A79.
- 2) MOUNTING FRAMES MK. A79 MUST BE UNBOLTED AND SET ASIDE ON PLATFORM WHEN NOT IN USE SO AS NOT TO INTERFERE WITH SHUTTER OPERATION. THESE FRAMES ARE EXPECTED TO BE LEFT OUTSIDE ON PLATFORM.
- 3) 3/4" S.S. BOLTS ARE TO BE INSTALLED IN THREADED HOLES IN MOUNTING PADS MK. A99 & B99 WHEN THERE NOT HOLDING DOWN FRAME MK. A79 THIS IS TO PREVENT HOLES FROM FILLING WITH ICE OR SNOW.

109'-0" OF 5/16" WIRE ROPE c/w SPLICED EYE AND THIMBLE AT ONE END.

KONE HOIST TYPE 2185B MODIFIED FOR SHUTTER DRIVE AS PER DWG. SERIES #B

HOIST TROLLEY MK. D79 c/w SHACKLE (FROM I.N.T. DOME CONT. #1279) MODIFIED TO SUIT KONE HOIST 2185B SEE REWORK DWG. 496

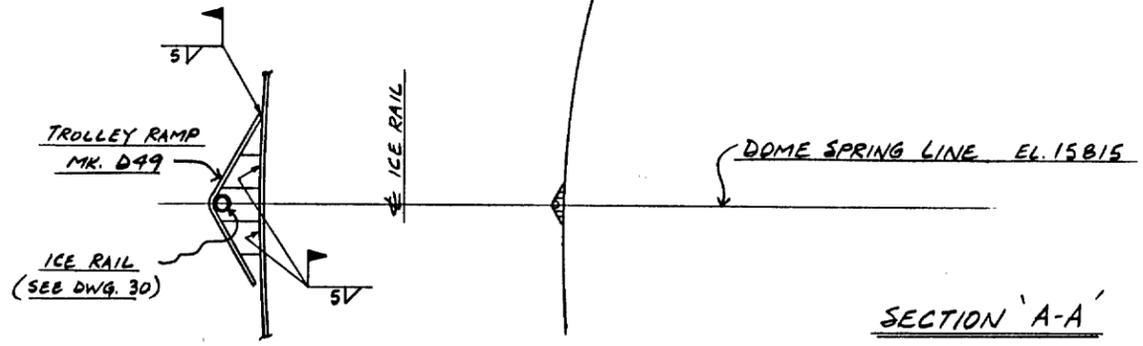
BEEBE (ONE TON) HANDI WINCH MODEL B-6B c/w HAND BRAKE BOLT TO ADAPTER BRACKET MK. G99 WITH 7/8" S.S. BOLTS x 1 1/2" LG. c/w S.S. NUT & WASHER

ADAPTER BRACKET MK. G99 BOLT TO FRAME MK. A79 WITH 7/8" S.S. BOLTS x 1 1/2" LG. c/w S.S. NUT & WASHER

T.O. PLAT. EL. 28340 SEE DWG. SERIES #41

FRAME MK. A79 (FROM I.N.T. DOME CONT. #1279) - BOLT TO PADS WITH 3/4" S.S. BOLTS x 1 1/4" LG. c/w S.S. WASHER

FIELD NOTE:
MAKE SURE THERE IS ADEQUATE CLEARANCE FOR WINCH HANDLE SWING & RE WELDING MOUNTING PADS TO CHK'D. 12.



GENERAL NOTES:

- 1) FOR ITEMS ON THIS DWG. SEE DWG. 49A. & 496
- 2) FOR REWORK TO HOIST TROLLEY MK. D79 SEE DWG. 496

PART PLAN LOOKING DOWN SHOWING LOCATION OF HOIST REMOVAL WINCH FOR SHUTTER DRIVES SIMILAR BOTH SIDES OF DOME

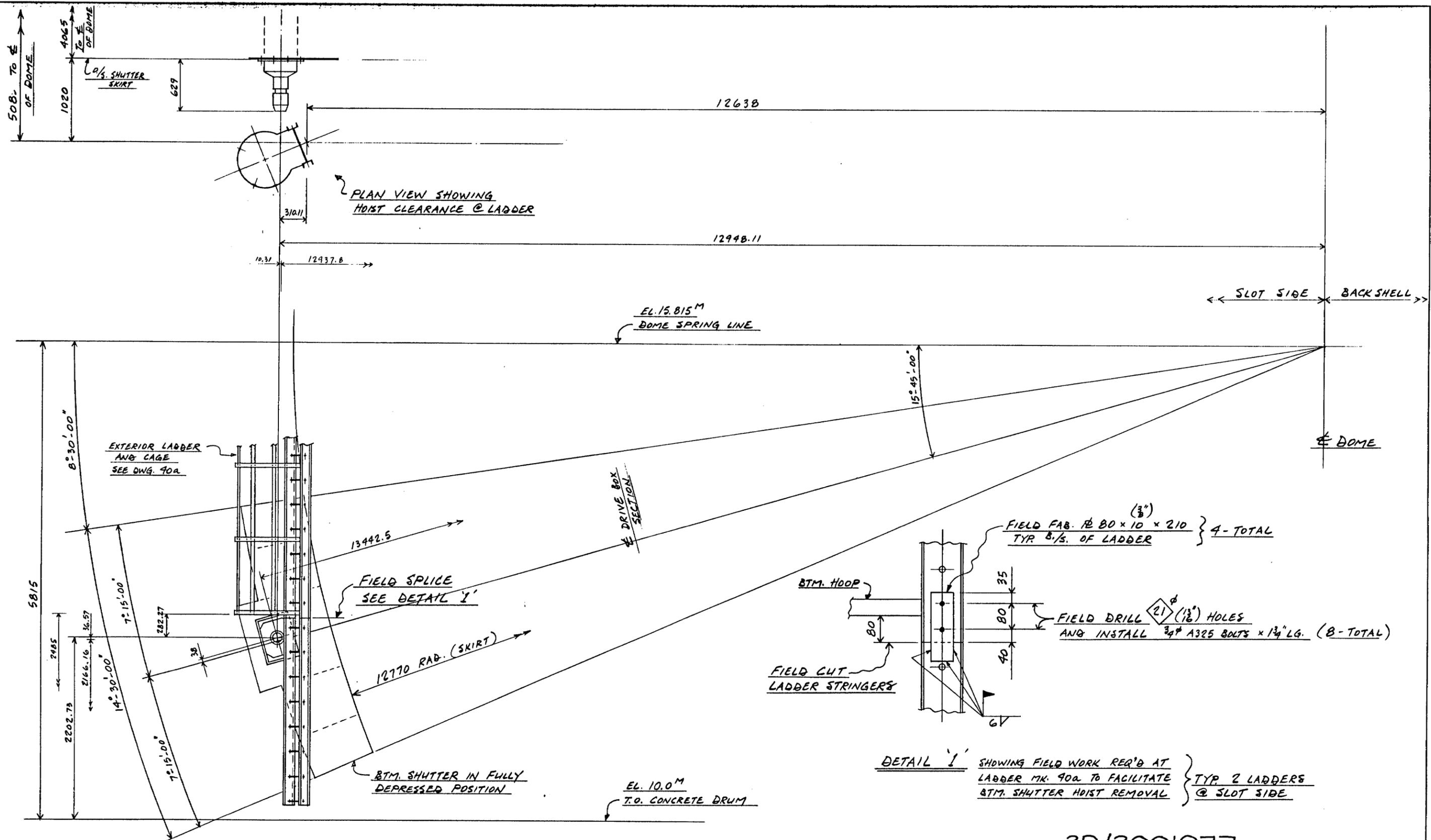
3R/3001076

BRITAIN	MATERIAL			No.	BY	DATE	REVISION
	SURF. PREP & PAINT			DETAILS SHUTTER HOIST REMOVAL			
	OPEN HOLES			FOR 4.2 M TELESCOPE DOME LA PALMA			
	DRAWN	DATE	CHECKED	DATE	DRAWING No.	REV.	
	G.V.A.	MAY/89			1420-E8a		MT
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.							
SHOP DEPARTMENT				INS / F / B / O / M / T / P / SH / DP / AS / PA / ER			
				No. PRINTS			

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m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw



ELEVATION SHOWING HOIST REMOVAL CLEARANCE @ LADDER AND FIELD SPLICE DETAIL

3R/3001077

	MATERIAL	[REDACTED]		NO.	BY	DATE	REVISION
	SURF. PREP. & PAINT	[REDACTED]		DETAILS FIELD WORK EXT. LADDER TO FACILITATE HOIST REMOVAL.			
	OPEN HOLES	[REDACTED]		FOR 4.2 ^M TELESCOPE DOME LA PALMA			
	DRAWN	DATE	CHECKED	DATE	DRAWING No. 1420-EB6		
G.V.A.		MAY/84					
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.							
SHOP DEPARTMENT				INS/P/S/O/M/T/P/SH/DP/AS/PA/ER			
				NO PRINTS			

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m-abcdefghijklmnpstvw

s-abcdefghijklmnpstvw

AVT