

REMOVAL BY
GRUBBS, PARSON

NOTE:-
ALL STEEL REMOVED OR INSTALLED AFTER
COMPLETION OF TELESCOPE ERECTION TO BE
ACCOMPLISHED BY REMOVING OR INSTALLING
BULTS. NO BURNING OR WELDING ALLOWED
FOR PROCEURE + DETAILS SEE DRG SERIES* R1, R2 ETC.

NOTES

- 1.) FOR CROSS SECTIONS OF BRACE FRAME PORTAL + END SUPPORT
SEE DRG D3
- 2.) FOR DETAILS OF I.N.T. CRANE GIRDERS SEE CONT 1269
DRGS 29a, b, c + d.
- 3.) THIS DRG REPLACES ORIGINAL DRG 1384-R2, A SERIA
OF WHICH IS KEPT ON FILE

5	GA	6/1/82	UPDATED
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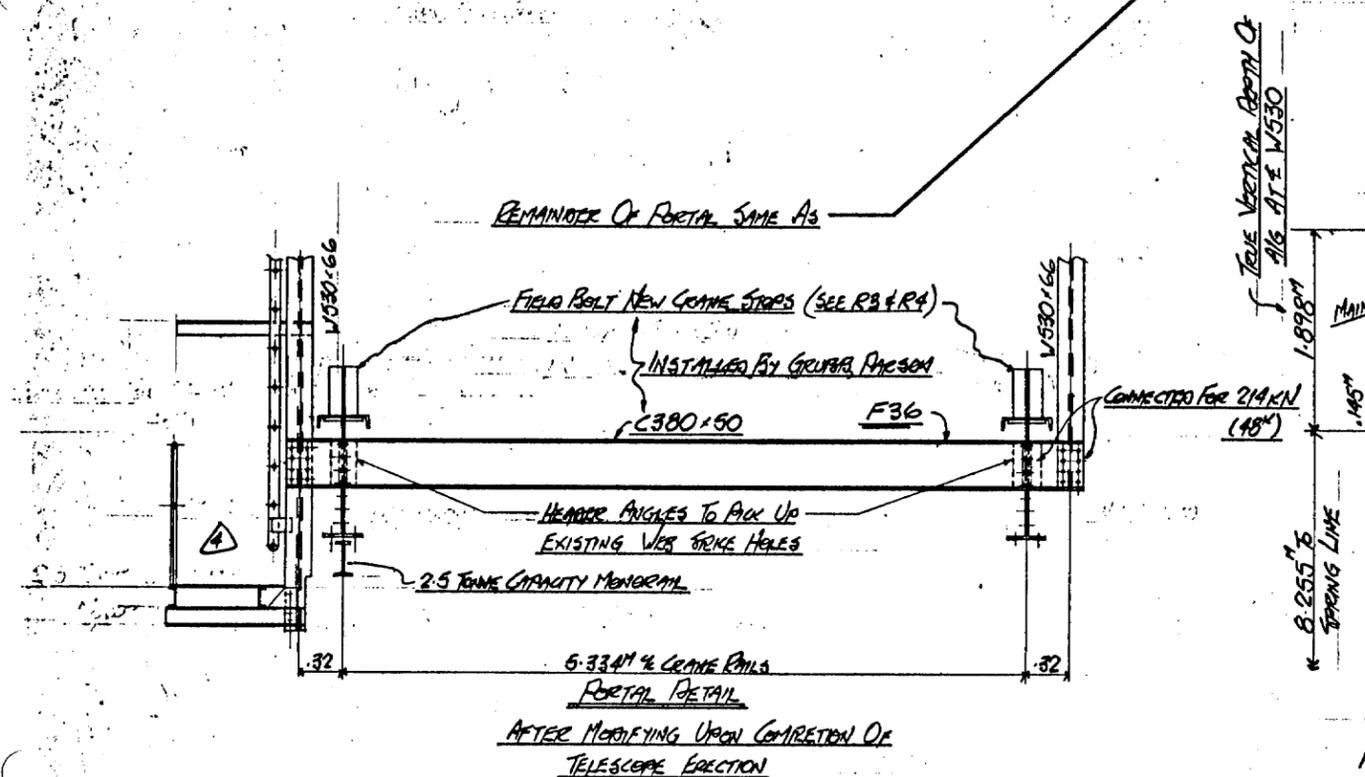
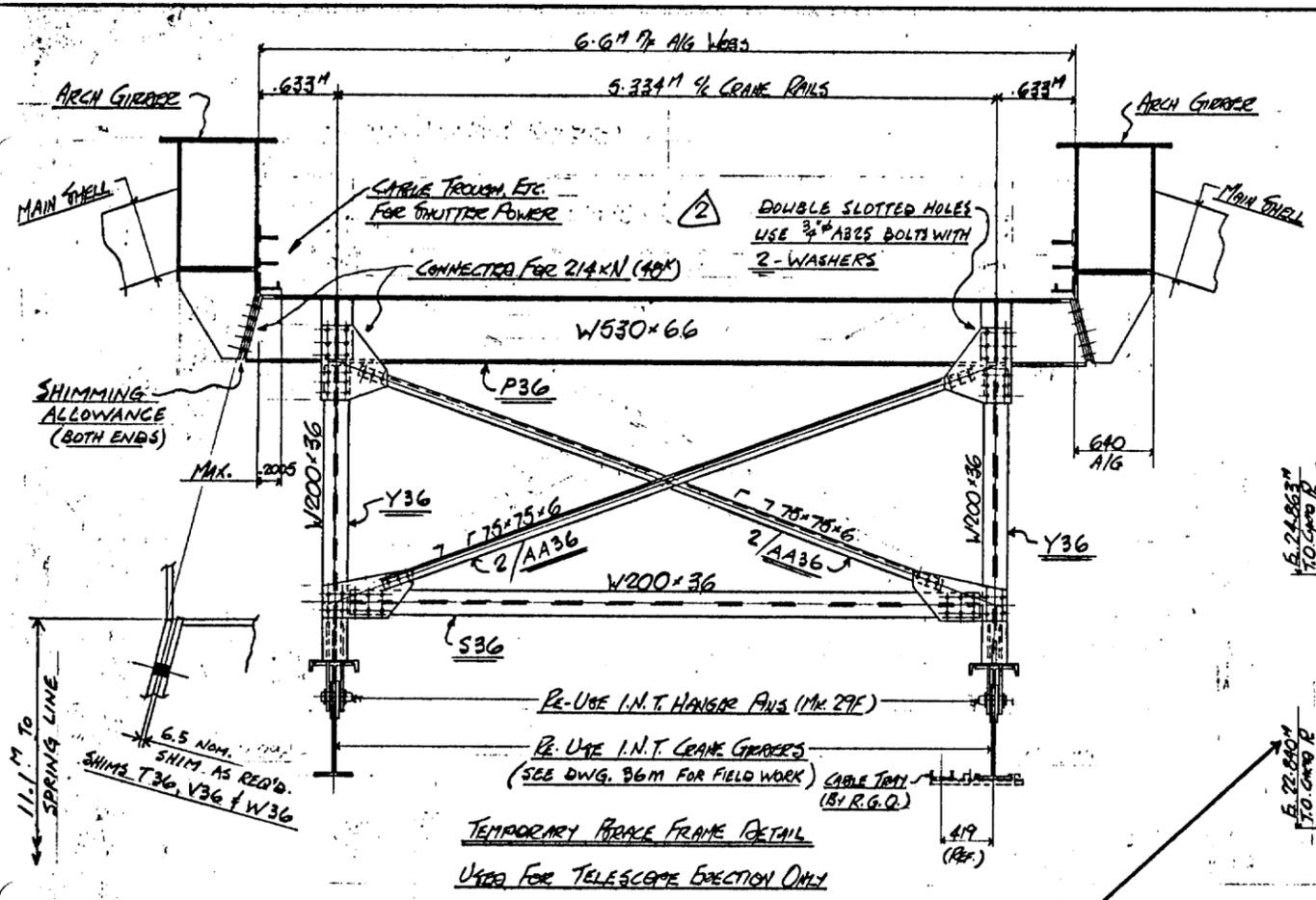
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	BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.								
SHOP DEPARTMENT			INS / P / S / O / M / T / P / SH / DP / AS / PA / ER			NO PRINTS			

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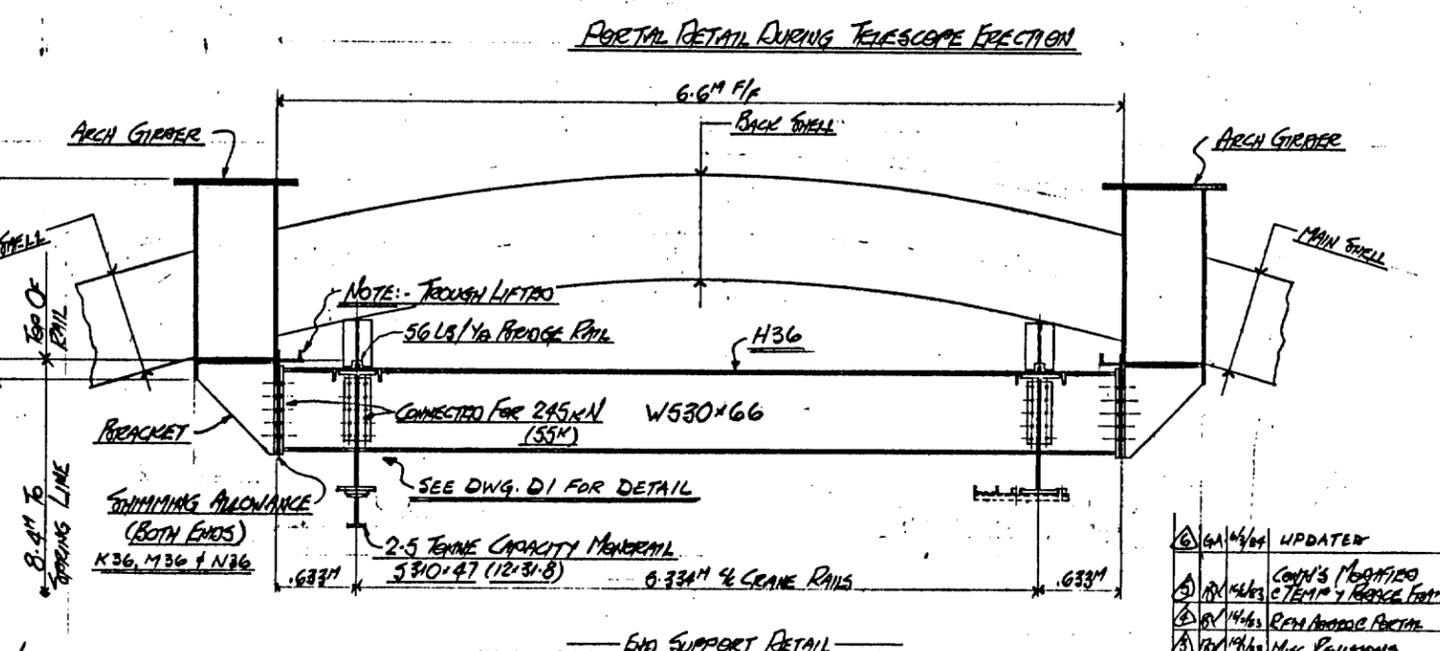
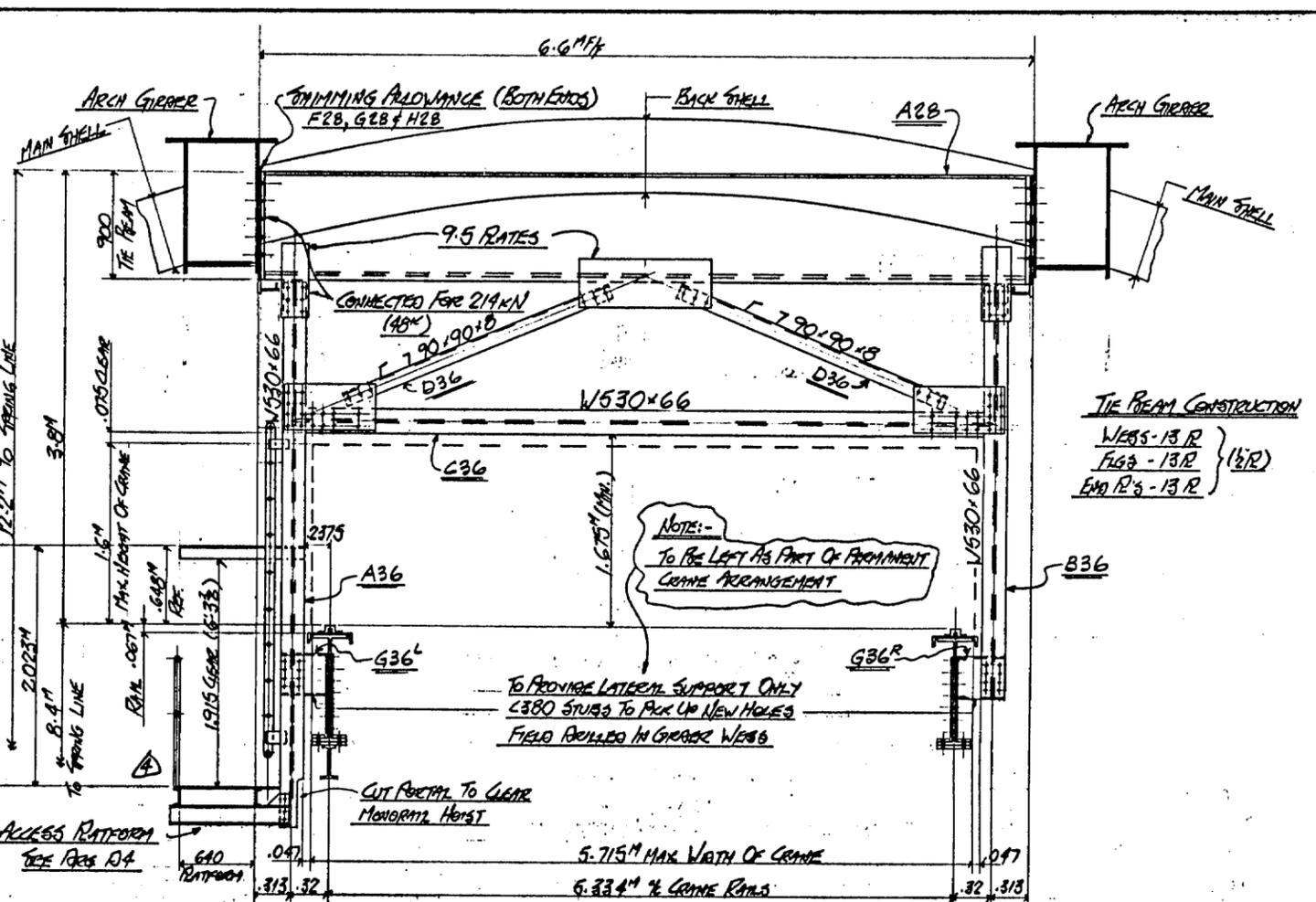
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SCALE ON ORIGINAL 1:50
SCALE ON REDUCED COPY 1:100



NOTE:-
ALL DETAILS ON THIS PAGE SHOWN LOOKING
TOWARDS BACK SHELL OF BOME.



NOTES
1) FOR LOCATIONS OF THESE DETAILS SEE PAGE D1/D2
2) THIS PAGE REPLACES ORIGINAL PAGES 1384-P3, A TEMPORARY
OF WHICH IS KEPT ON FILE
3) REFER TO DWG'S R1, R2 ETC. FOR MODIFICATION
OF CRANE BEAMS AFTER TELESCOPE ERECTION.
SCALE ON ORIGINAL 1:25
SCALE ON REDUCED COPY 1:50

END SUPPORT DETAIL

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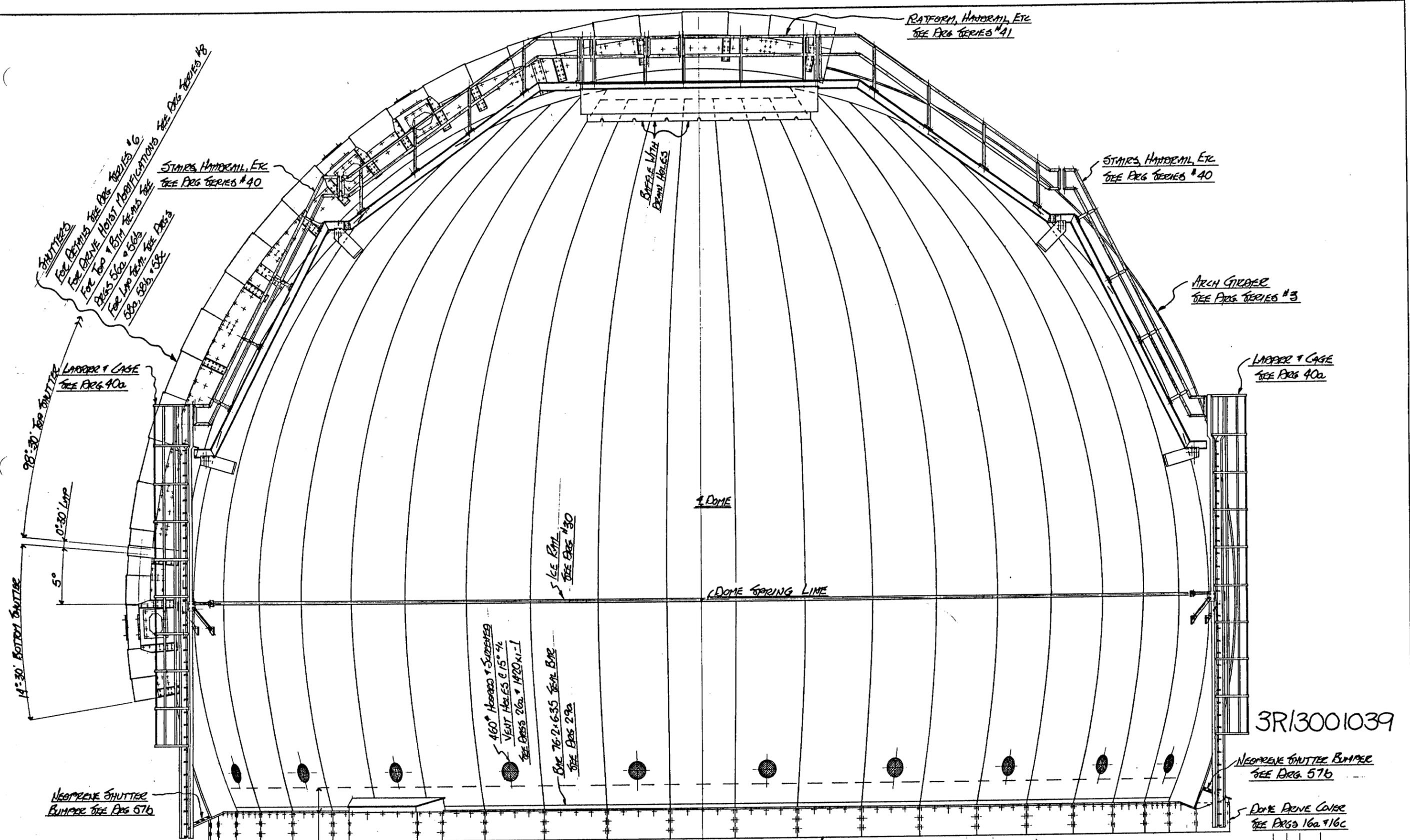
NO.	BY	DATE	REVISION
6A	4/64		UPDATED
5	RK	1/63	CON'S MODIFIED C TEMP & CRANE PORTAL
4	RK	1/63	REN ANCHOR PLATE
3	RK	1/63	MISC. REVISIONS
2	RK	1/63	W330 REM LAPPED C TEMP BRACE FRAME
1	RK	1/63	MISC. REVISIONS

DETAILS CRANE ARRANGEMENT
FOR 4.0m TELESCOPE DOME
LA PALMA

DRAWING No. 1420-D3

BRITAIN

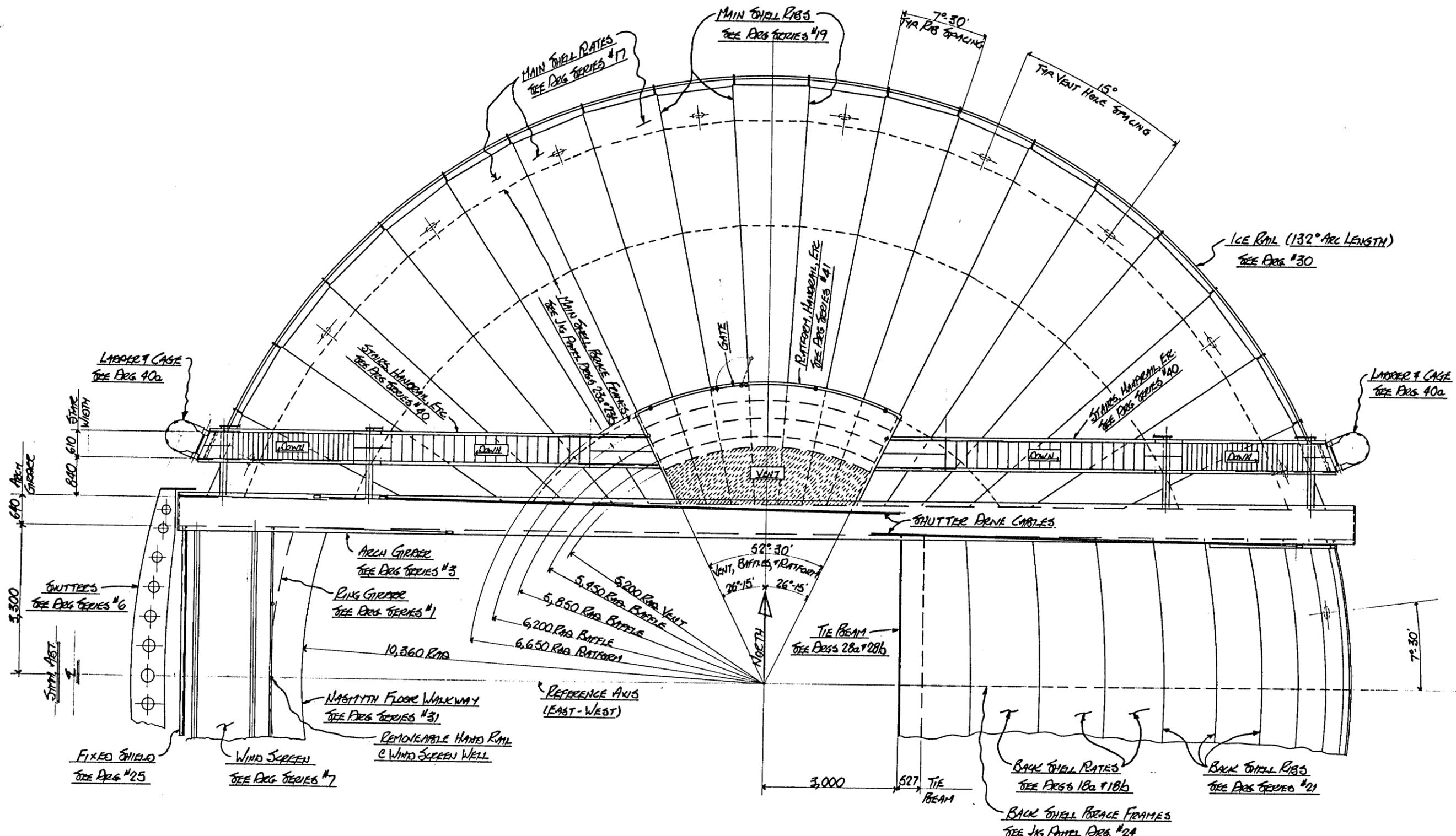
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MAIN ELEVATION
 READ THIS DRG IN CONJUNCTION WITH DRGS M2, M3, M4, & M5

	No. BY DATE REVISION	
	DETAILS MAIN ELEVATION	
	FOR 4.2" TELESCOPE DOME LA FOLM	
	DRAWN PRZ	DATE 1/11/85
DRAWING No. 1420-M1		REV. M/F
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		
SHOP DEPARTMENT	INS / E / S / O / M / T / P / BH / DP / AS / PA / ER	NO. PRINTS



— PART PLAN LOOKING DOWN ON TOP OF DOME —
 READ THIS DRG IN CONJUNCTION WITH DRG'S M1, M3, M4, & M5

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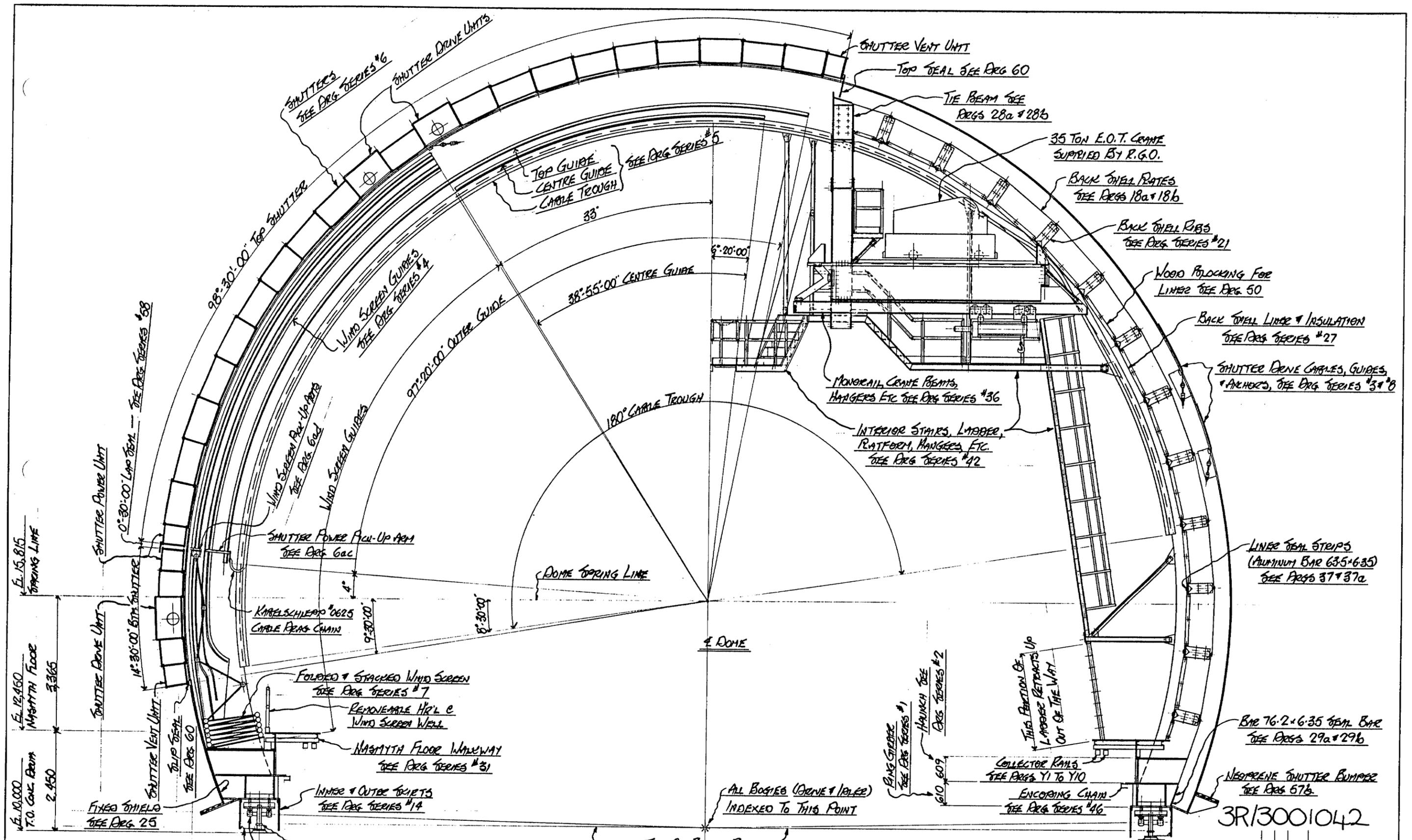
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SHOP DEPARTMENT										INS / F / S / O / M / T / P / SH / DP / AS / PA / ER		NO PRINTS	

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M/F



EL. 15.815
SPRING LINE

EL. 12.450
NASTYTH FLOOR

EL. 10.000
T.O. G.C. BEAM

VIEW ON NORTH ARCH GIRDER INNER WEB
 FOR ARCH GIRDER DETAILS SEE DRG SERIES #3
 MONORAIL & INTERIOR STAIRS ETC. NORTH #16 ONLY
 READ THIS DRG IN CONJUNCTION WITH DRGS #11, #12, #13 & #15

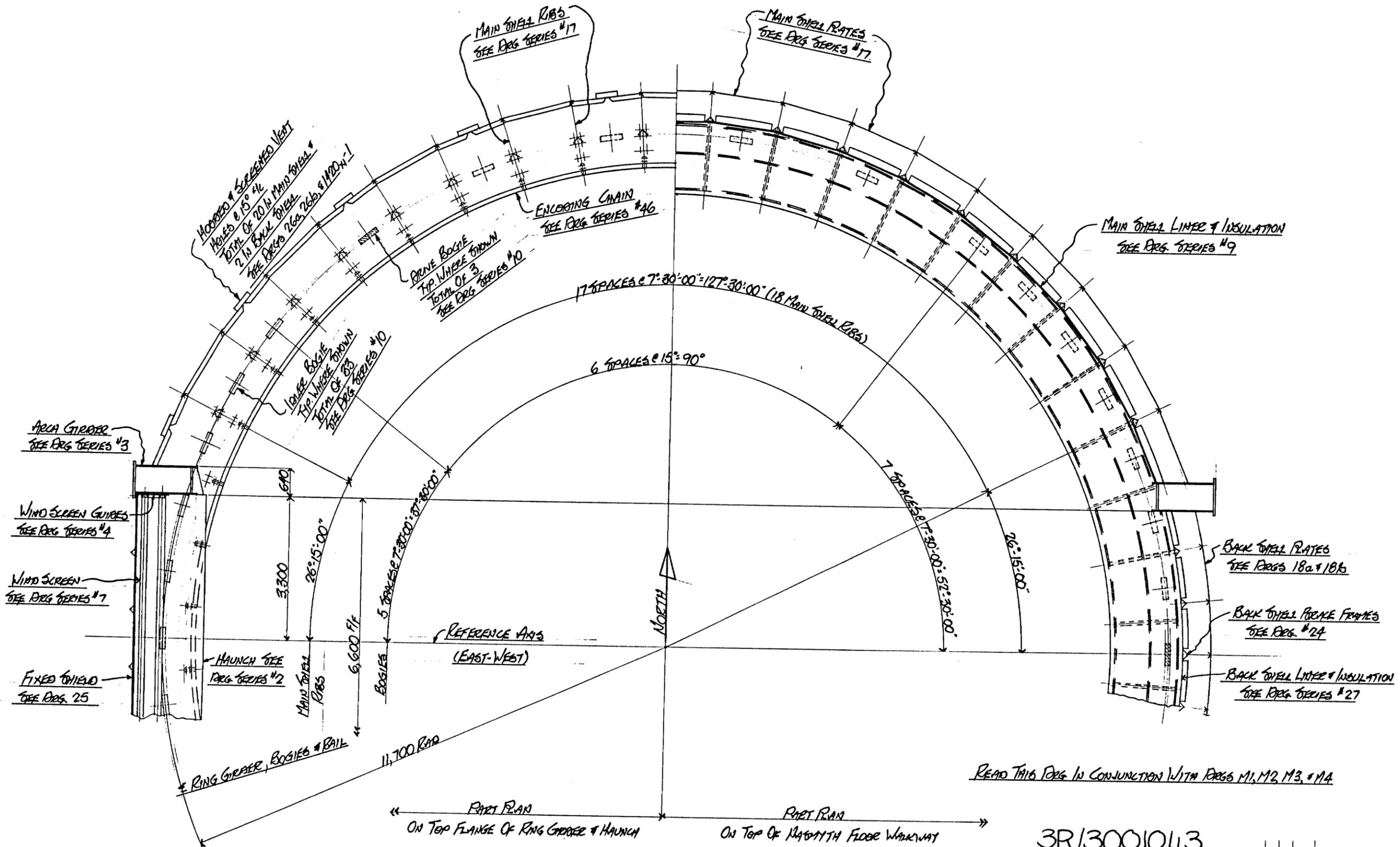
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BRITAIN	NO. BY DATE REVISION	
	DETAILS VIEW ON #16 INNER WEB	
	FOR 4.7M TELESCOPE DOME LA PALMA	
DRAWN FOR	DATE Mar/71	CHECKED DATE
DRAWING NO. 1420-M4		REV. 1
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.		
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READ THIS DRG IN CONJUNCTION WITH DRGS M1, M2, M3, & M4

← PART PLAN ON TOP FLANGE OF RING GIRDER & HAUNCH →
 ← PART PLAN ON TOP OF NORTH FLOOR WALKWAY →

— PART PLAN —
 FOR RING GIRDER DETAILS SEE DRG SERIES #1
 FOR NORTH FLOOR WALKWAY DETAILS SEE DRG SERIES #31

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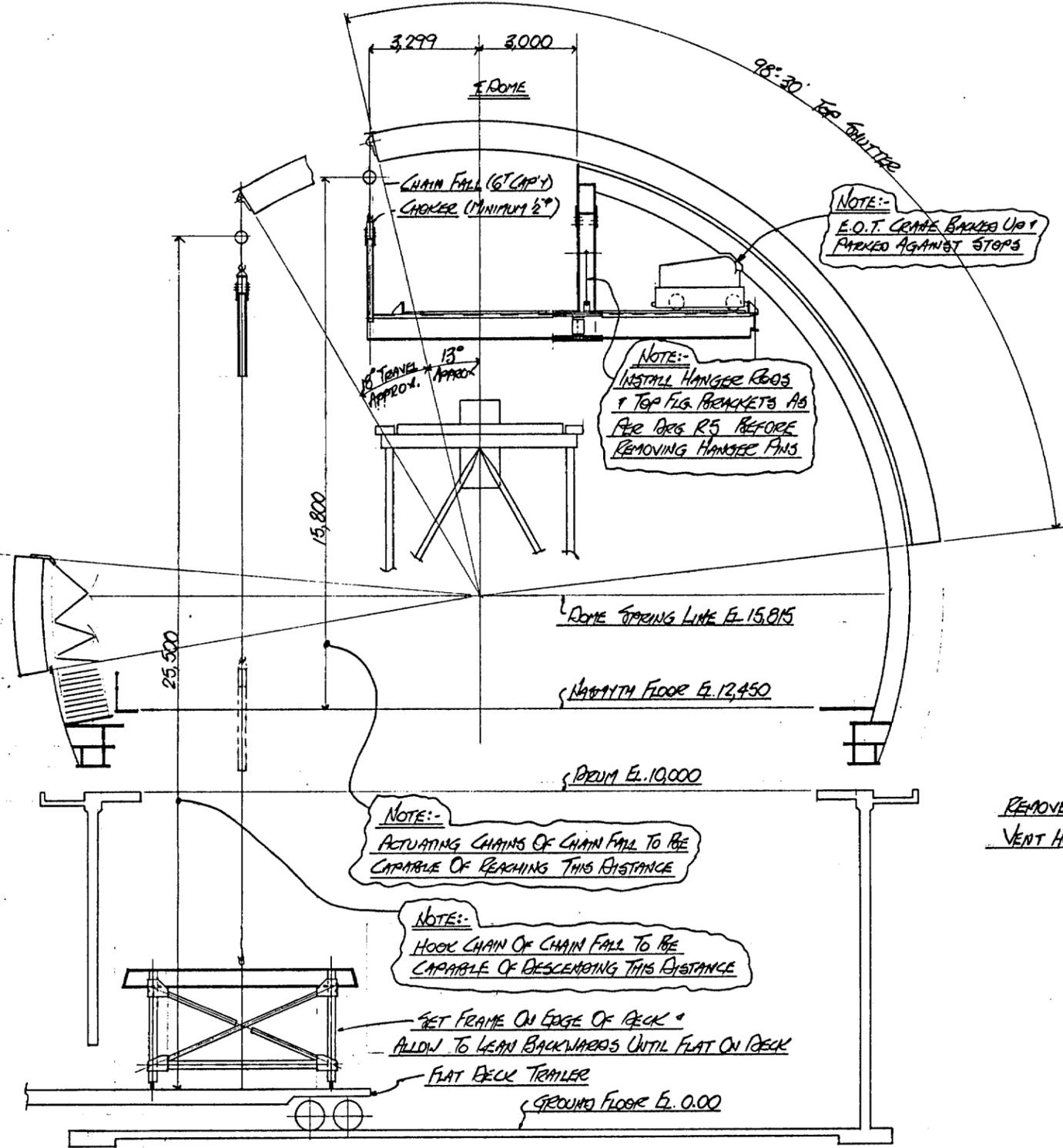
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SHOP DEPARTMENT



NOTE:-
E.O.T. CRANE BANKED UP & PARKED AGAINST STOPS

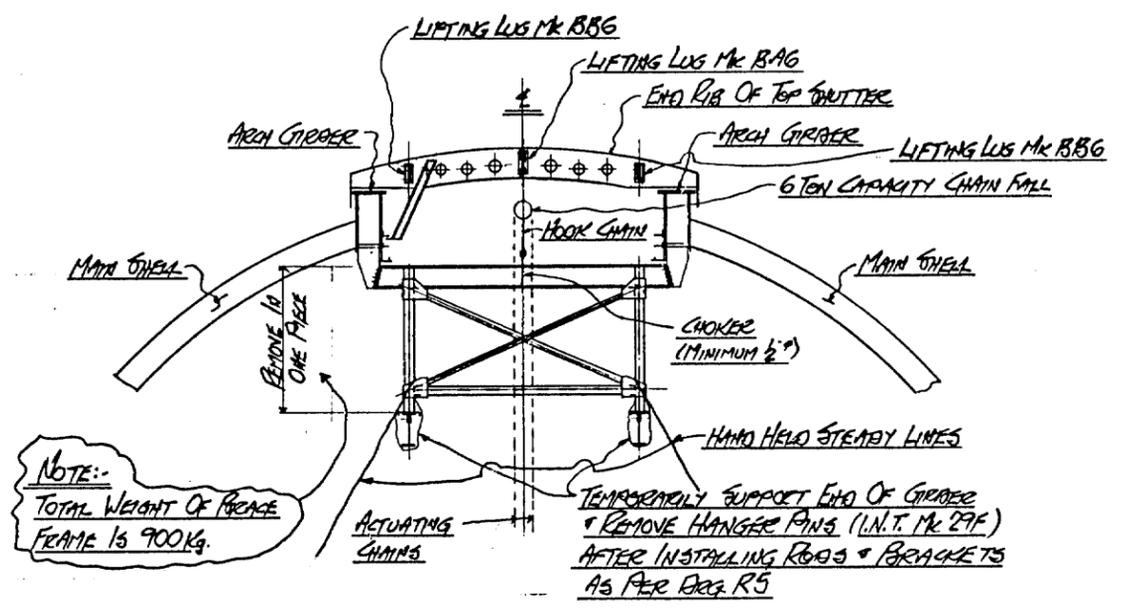
NOTE:-
INSTALL HANGER ROOS & TOP FLG. BRACKETS AS PER DRG R5 BEFORE REMOVING HANGER PINS

NOTE:-
ACTUATING CHAINS OF CHAIN FALL TO BE CAPABLE OF REACHING THIS DISTANCE

NOTE:-
HOOK CHAIN OF CHAIN FALL TO BE CAPABLE OF DESCENDING THIS DISTANCE

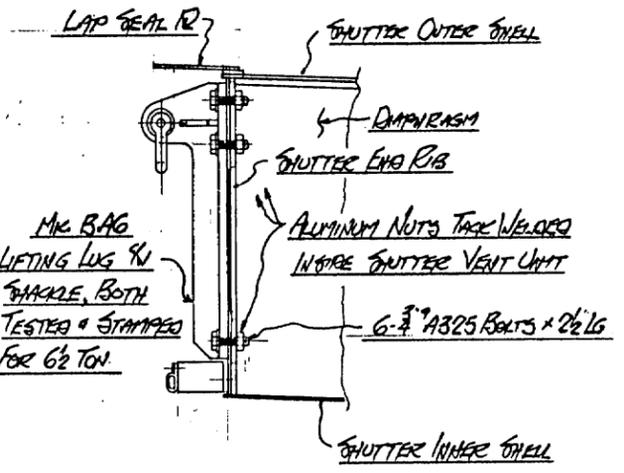
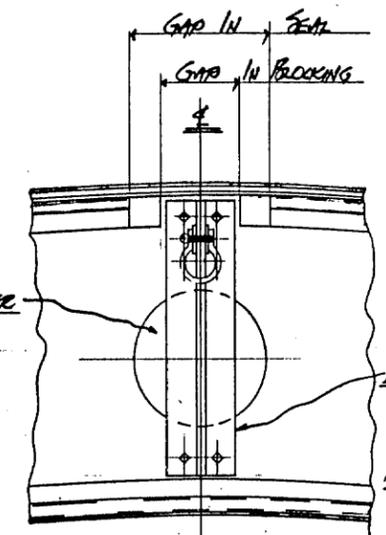
SET FRAME ON EDGE OF DECK & ALLOW TO LEAN BACKWARDS UNTIL FLAT ON DECK
FLAT DECK TRAILER

BRACE FRAME REMOVAL
LOOKING TOWARDS NORTH ARCH GIRDER



NOTE:-
TOTAL WEIGHT OF BRACE FRAME IS 900kg.

BRACE FRAME REMOVAL
LOOKING TOWARDS BACK SHELL



GENERAL NOTES
1) FOR REMOVAL PROCEDURE SEE DRGS R9a & R9b
2) WORK THIS DRG WITH DRGS R2 TO R8 INCL.

LIFTING LUG DETAIL

SCALE ON ORIGINAL 1:75
SCALE ON REDUCED COPY 1:150

3R/3001044

NO.	BY	DATE	UPDATED	REVISION

DETAILS
TEMPORARY BRACE FRAME REMOVAL
FOR 4.2M TELESCOPE DOME LA PALMA

DRAWN	DATE	CHECKED	DATE	DRAWING NO.	REV.
BK				1420-R1	

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

SHOP DEPARTMENT

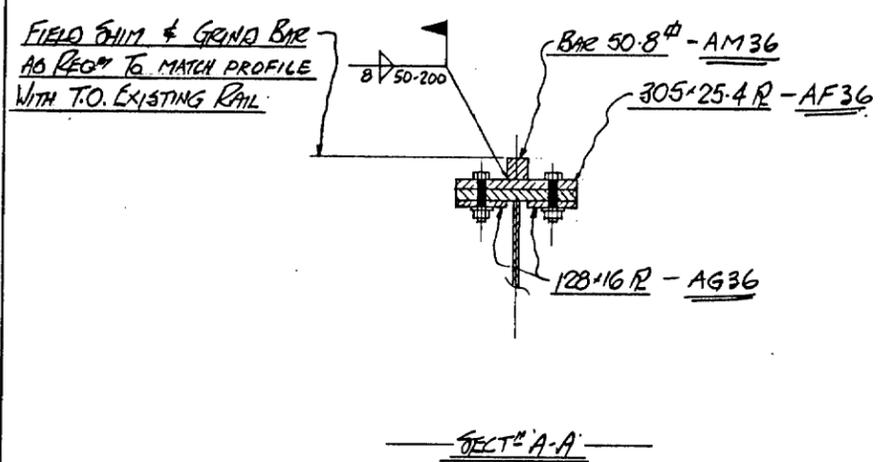
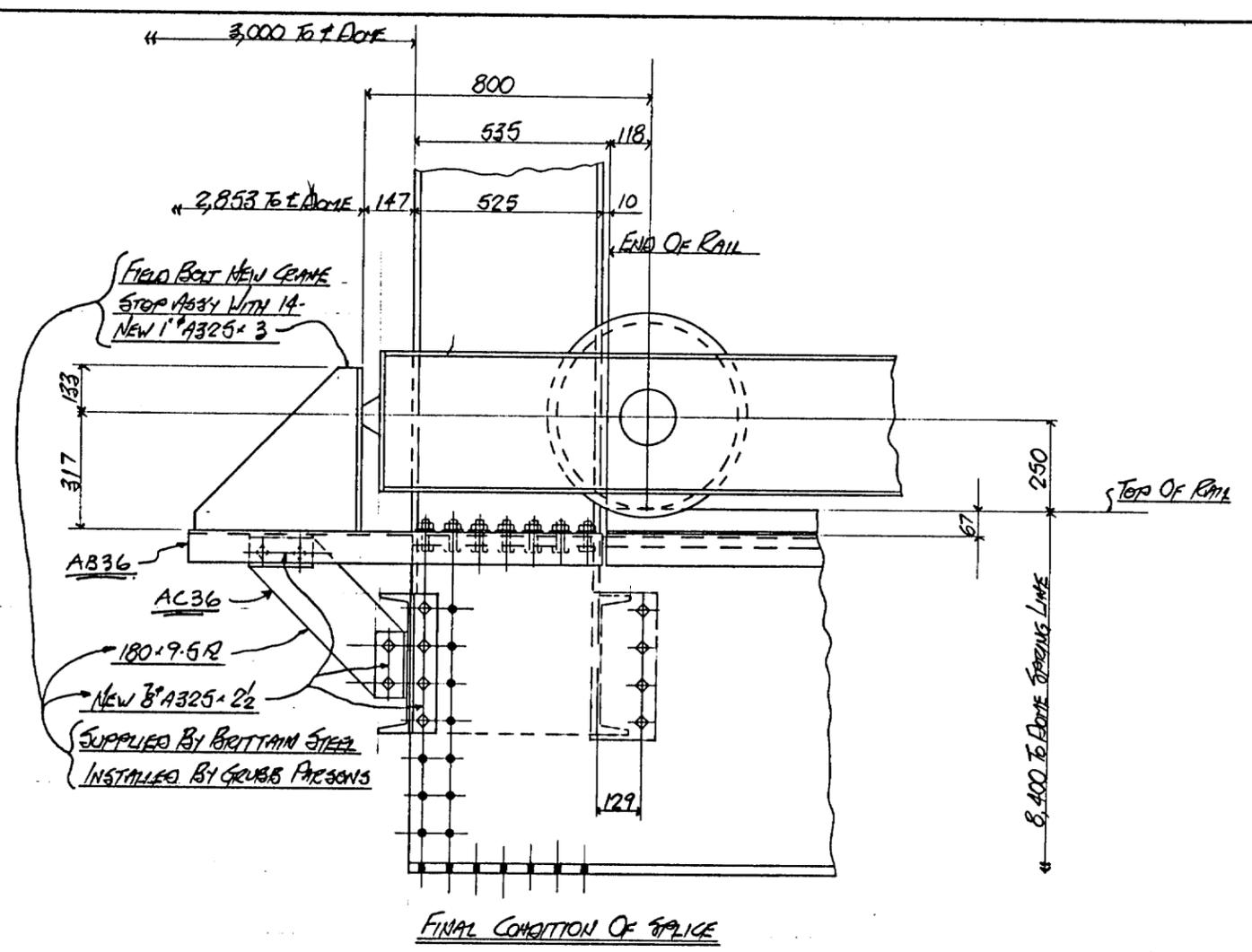
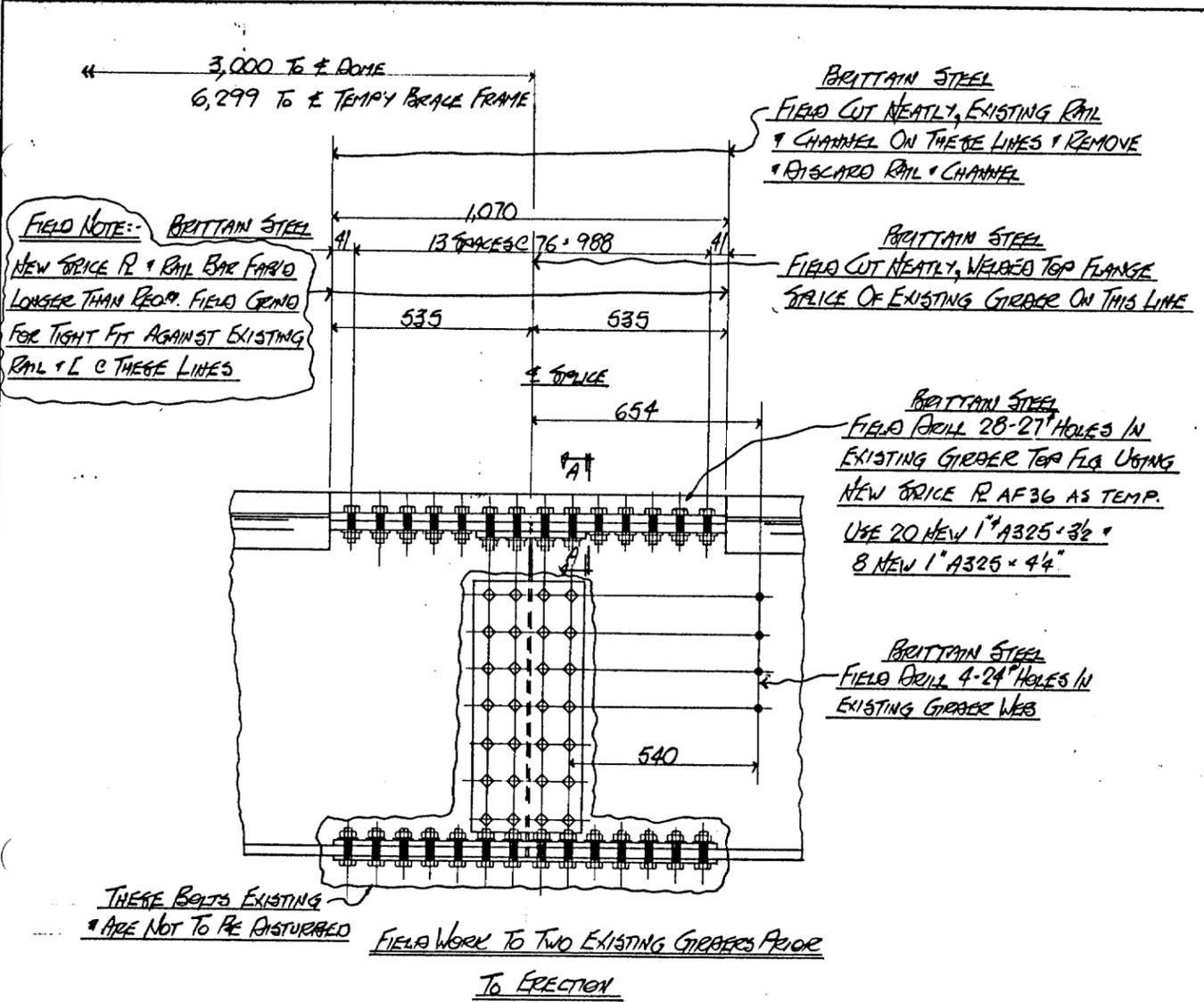
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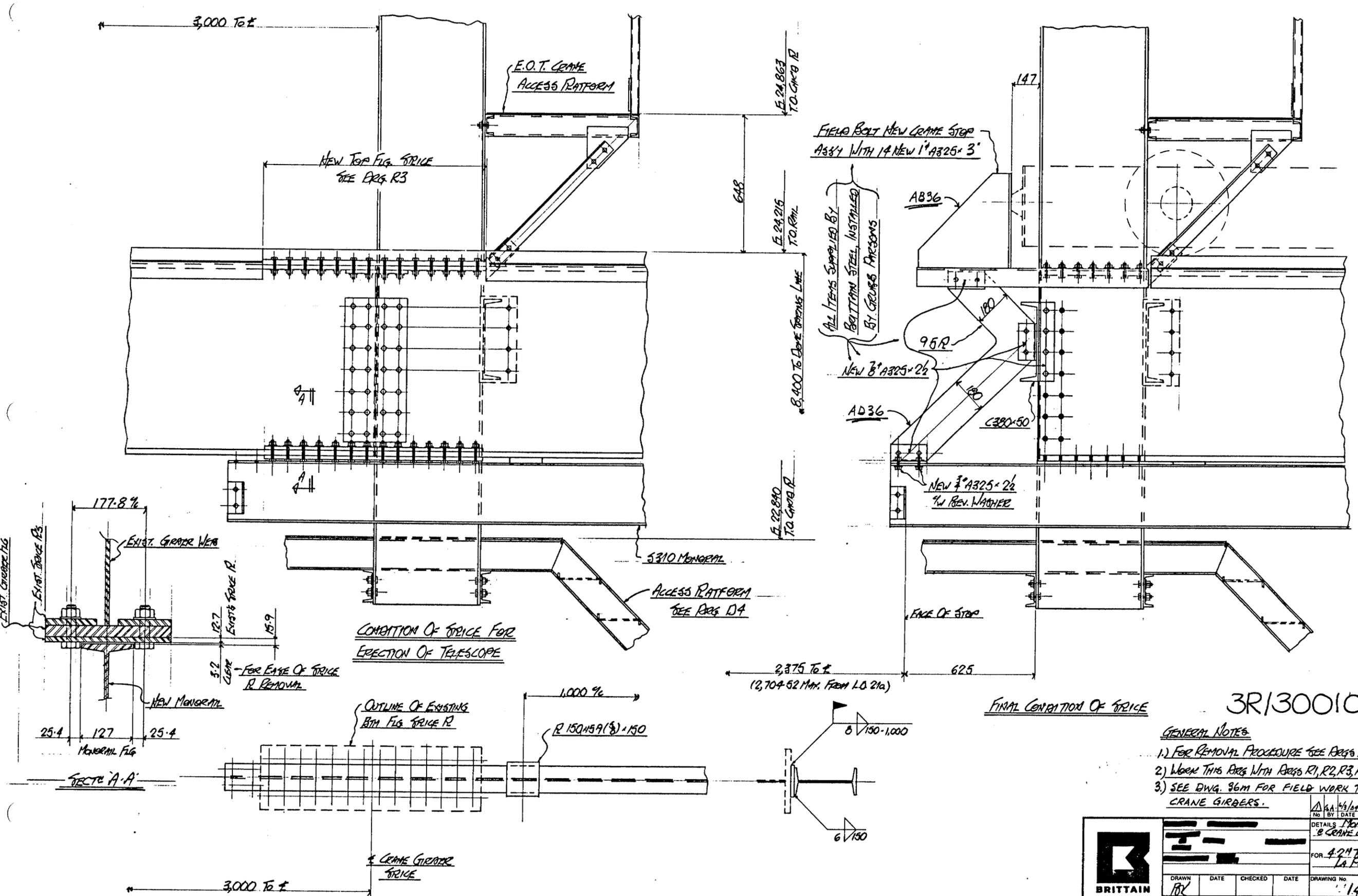
- GENERAL NOTES
- 1) FOR REMOVAL PROCEDURE SEE PAGES R9a & R9b
 - 2) WORK THIS REQ WITH PAGES R1, R2, R3, R5, R6, R7, & R8
 - 3) SEE DWG. 36M FOR FIELD WORK TO EXISTING CRANE GIRDERS.

3R/3001046

BRITAIN	NO. BY DATE	DATE	UPDATED	REVISION
	CRANE GIRDER SPICE			
FOR 4.2M TELESCOPE DOME LA PALMA				
DRAWN FR.	DATE	CHECKED	DATE	DRAWING NO. 1420-R3
BRITAIN STEEL LTD. 401 SALTER AVENUE, NEW WESTMINSTER, B.C.				
SHOP DEPARTMENT				

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GENERAL NOTES

- 1) FOR REMOVAL PROCEDURE SEE DRGS R9a & R9b
- 2) WORK THIS DRG WITH DRGS R1, R2, R3, R5, R6, R7, & R8
- 3) SEE DRG. 96M FOR FIELD WORK TO EXISTING CRANE GIRDERS.

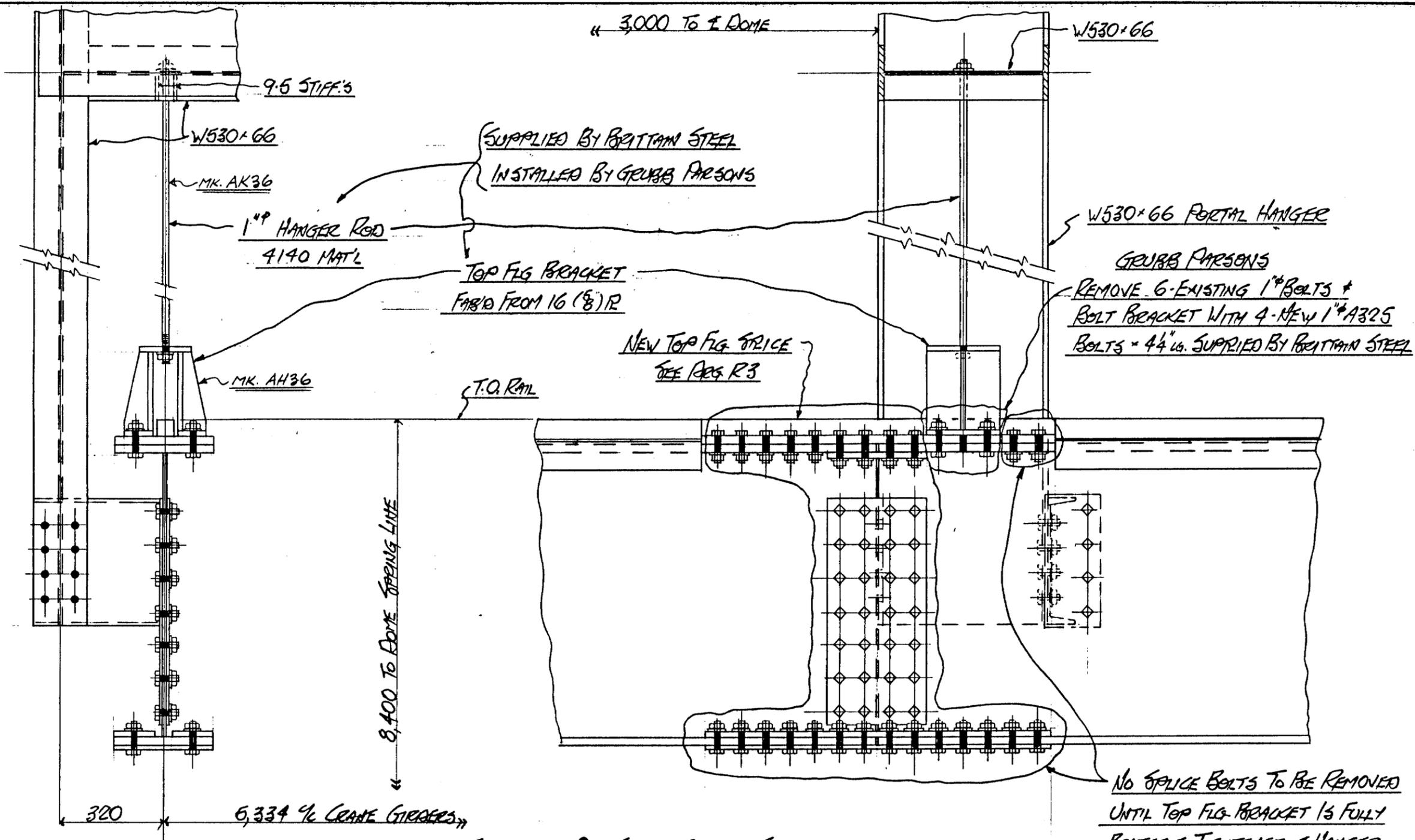
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SHOP DEPARTMENT										

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SUPPLIED BY BRITAIN STEEL
INSTALLED BY GRUBB PARSONS

W530x66 PORTAL HANGER
GRUBB PARSONS
REMOVE 6-EXISTING 1\"/>

TOP FLG BRACKET
FAB'D FROM 16 (8)R

NEW TOP FLG BRACE
SEE DRG R3

T.O. RAIL

NO SPlice BOLTS TO BE REMOVED
UNTIL TOP FLG BRACKET IS FULLY
BOLTED & TIGHTENED & HANGER
RODS ARE INSTALLED & GIRDER
IS CONNECTED TO LIFTING LUG ON
SHUTTER AS PER DRG R2

CONDITION OF CRANE GIRDER SPICE
BEFORE REMOVING HANGER PINS AT
TEMPORARY BRACE FRAME

GENERAL NOTES

- 1) FOR REMOVAL PROCEDURE SEE DRGS R9a & R9b
- 2) WORK THIS DRG WITH DRGS R1, R2, R3, R4, R6, R7, & R8

3R/3001048

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No.	BY	DATE	REVISION

	DETAILS OF CRANE GIRDER SPICE	
	FOR 4.2M TELESCOPE DOME LA PALMA	
DRAWN BK	DATE	CHECKED
DRAWING No. 1420-R5	REV. Δ	

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

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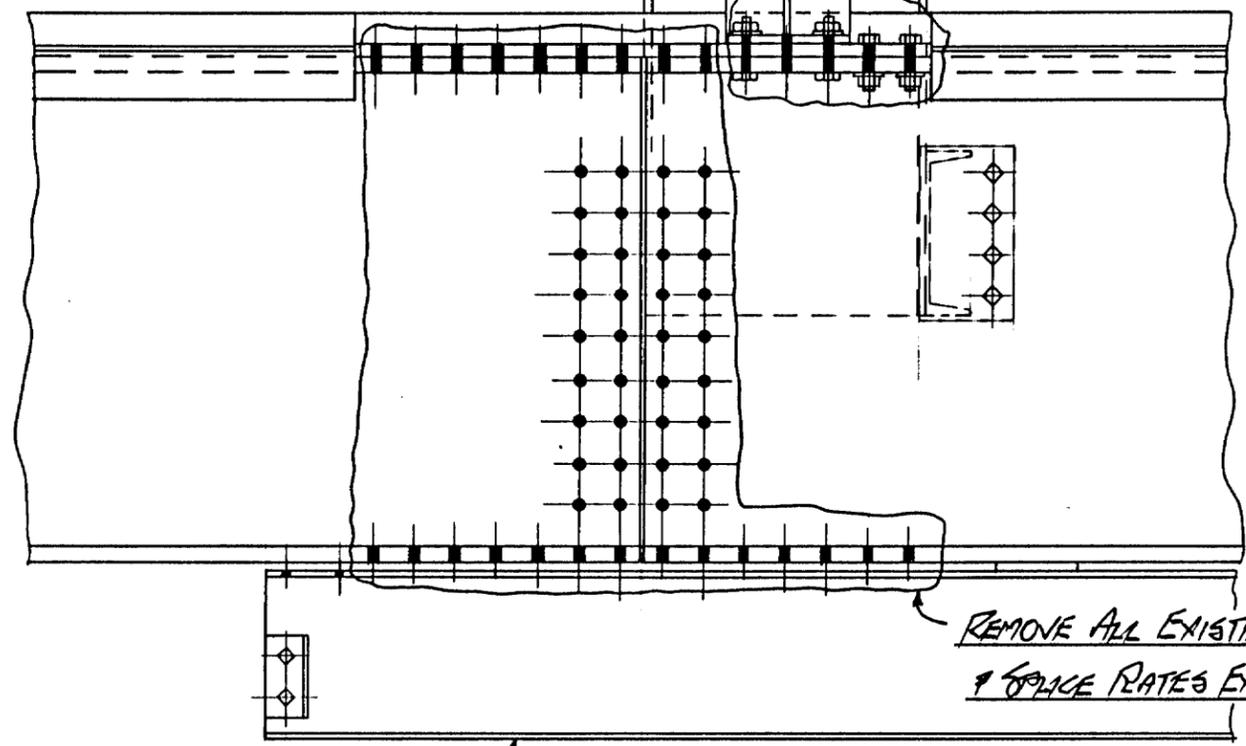
3,000 TO 4 DOME

NOTE:- GRUBB PARSONS
BEFORE REMOVING ANY SPICE PLATES
OR BOLTS, CRANE GIRDER MUST BE
ATTACHED TO LIFTING LUG ON TOP
SHUTTER AS PER FIG. R2

1" HANGER ROD + TOP FLG BRACKET
 SEE FIG. R5

W530x66 PORTAL HANGER

DO NOT DISTURB TOP FLG
 SPICE RATE ASSY + THESE 8 BOLTS



GRUBB PARSONS

REMOVE ALL EXISTING BOLTS
 + SPICE PLATES EXC. AS NOTED

5310 MONORAIL (ONE SIDE ONLY)

CONDITION OF SPICE JUST PRIOR TO
MOVING WITH SHUTTER

GENERAL NOTES

- 1.) FOR REMOVAL PROCEDURE SEE FIGS R9a + R9b
- 2.) WORK THIS FIG WITH FIGS R1, R2, R3, R4, R5, R7, + R8

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GA 7/3/84	UPDATED
No.	REVISION

	DETAILS OF CRANE GIRDER REMOVAL			
	FOR 4.2M TELESCOPE DOME LA PALMA			
DRAWN BR	DATE	CHECKED	DATE	DRAWING No. 1420-R6
BRITAIN STEEL LTD.				REV. WF

401 SALTER AVENUE, NEW WESTMINSTER, B.C.

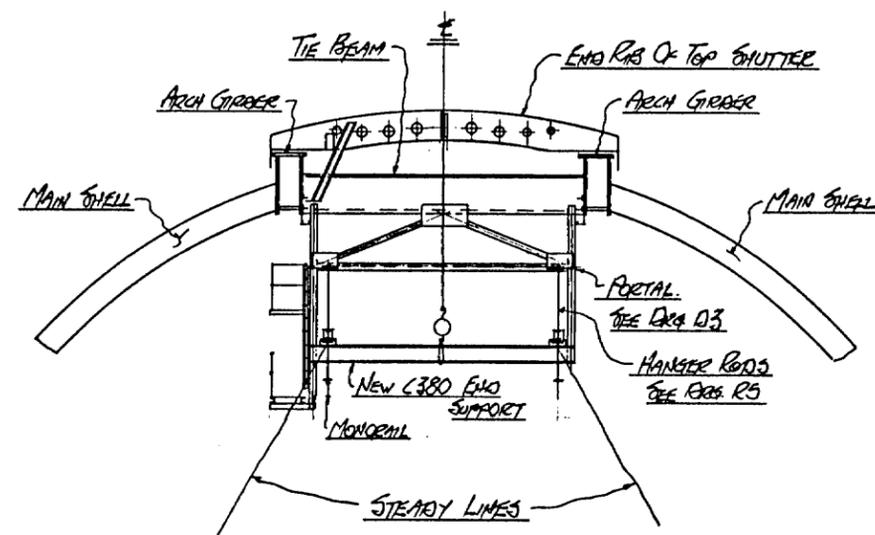
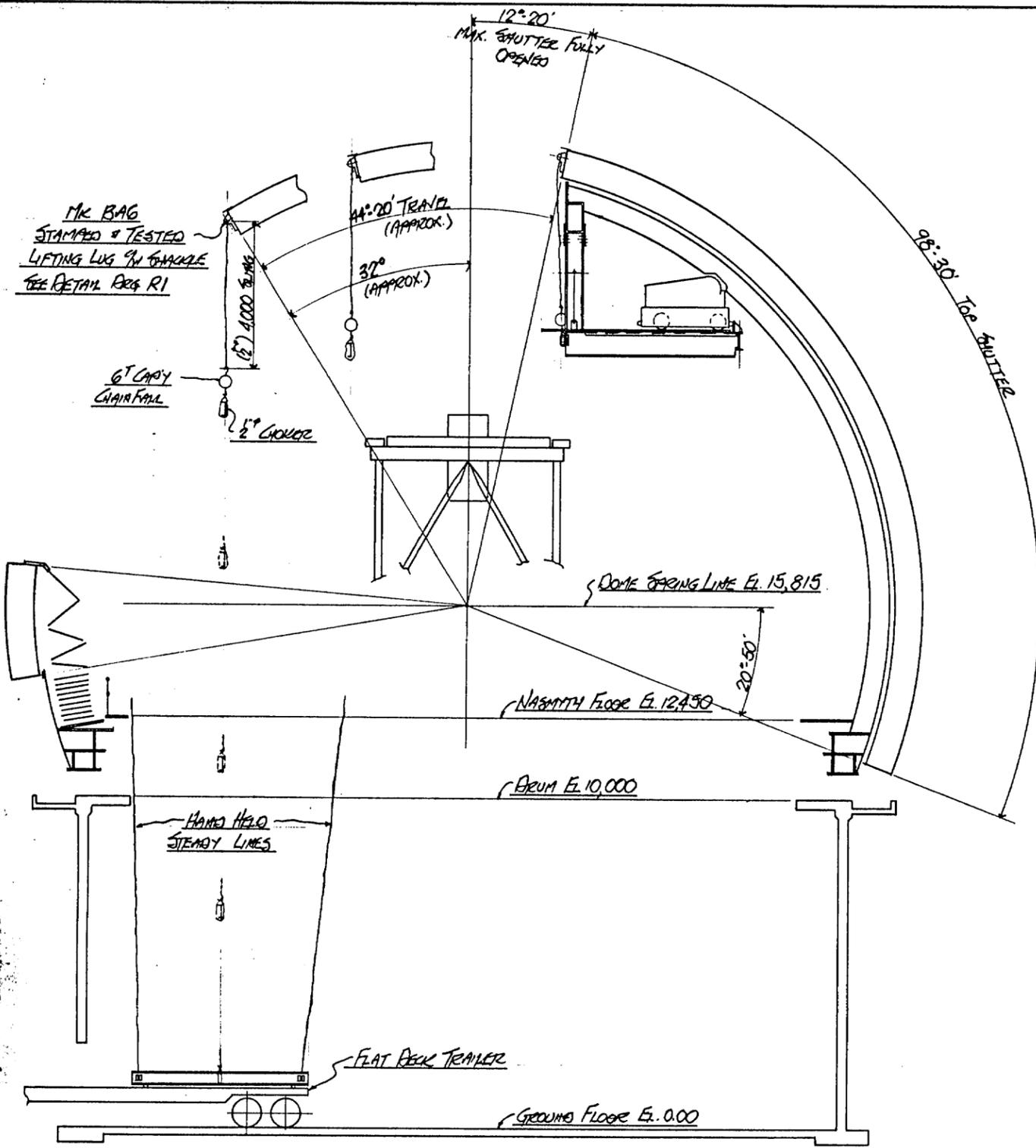
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SHOP DEPARTMENT

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No. PRINTS



NEW END SUPPORT INSTALLATION
LOOKING TOWARDS BACK SHELL

GENERAL NOTES

- 1) FOR REMOVAL PROCEDURE SEE PAGES R79 & R91
- 2) WORK THIS PAGE WITH PAGES R1, R2, R3, R4, R5, R6, & R8

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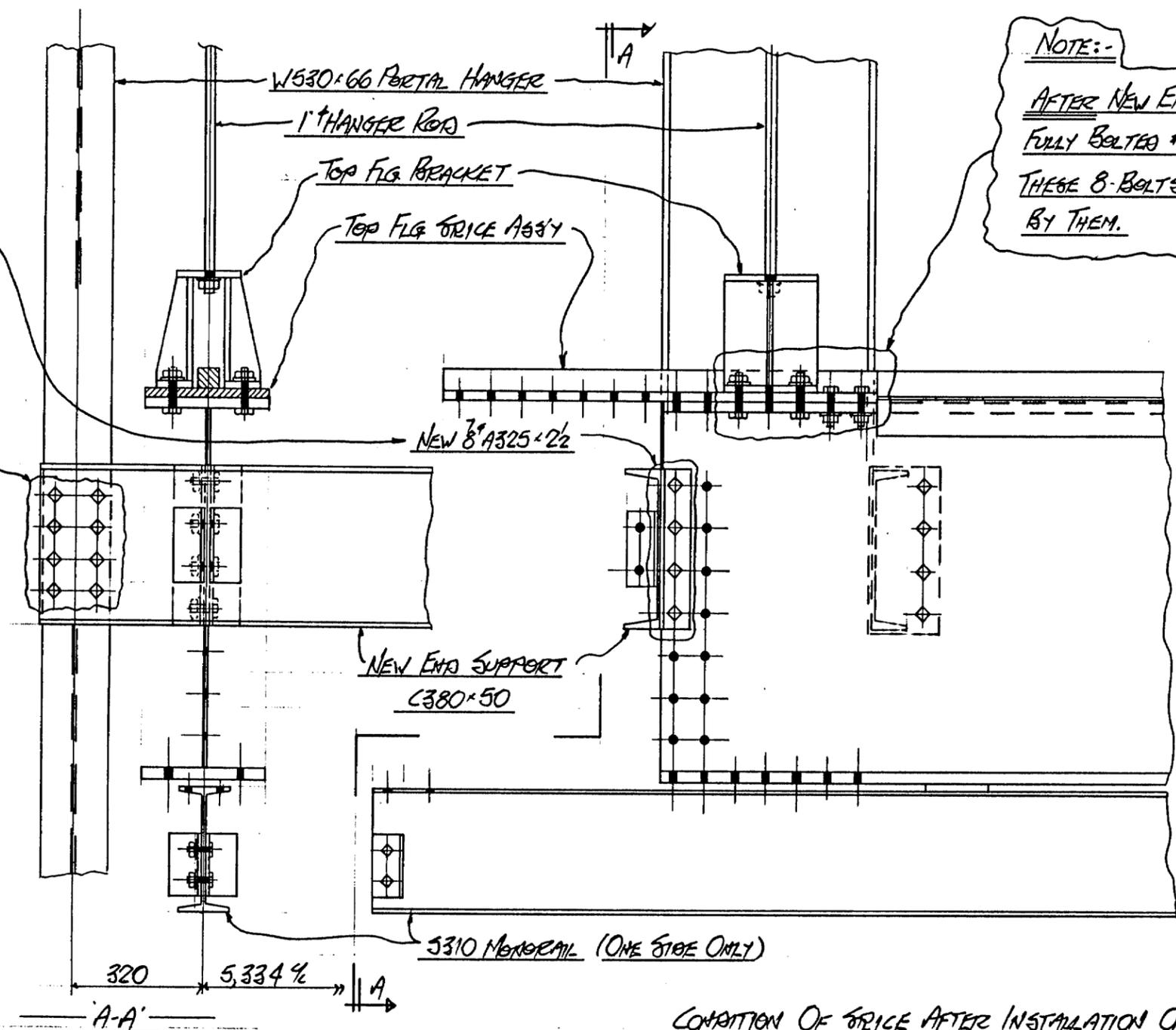
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SUPPLIED BY BRITAIN STEEL
INSTALLED BY GRUBBS PARSONS

NEW 8" A325 x 24



NOTE:- GRUBBS PARSONS
AFTER NEW END SUPPORTS HAVE BEEN FULLY BOLTED & TIGHTENED IN PLACE, REMOVE THESE 8-BOLTS & ALL ITEMS CONNECTED BY THEM.

GENERAL NOTES

- 1.) FOR REMOVAL PROCEDURE SEE DRGS R9a & R9b
- 2.) WORK THIS DRG WITH DRGS R1 TO R7 INCL.

CONDITION OF BRICE AFTER INSTALLATION OF NEW END SUPPORT & PRIOR TO REMOVAL OF HANGER RODS, & TOP FLG BRICE ASSY

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GA 7/3/88 UPDATED	
No.	REVISION
DETAILS OF NEW END SUPPORT DETAIL	
FOR 4.7m TELESCOPE DOME LA POMA	
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SHOP DEPARTMENT

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No. PRINTS

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FIELD REMOVAL PROCEDURE FOR TEMPORARY CRANE GIRDERS

- 1.) BACK E.O.T. CRANE AGAINST STOPS C BACK SHELL & PARK.
 - 2.) INSTALL HANGER RODS & TOP FLG BRACKETS C PORTAL AS SHOWN ON DRG R5.
 - 3.) REMOVE WOOD BLOCKING & SEALS ON SHUTTER & BOLT LIFTING LUGS IN RACE AS SHOWN ON DRG R1. (ONE MK BAG & 2 MK BBBG)
 - 4.) ACTIVATE & MOVE SHUTTER TO BRING LIFTING LUG IN VERTICAL ALIGNMENT WITH TEMPORARY BRACE FRAME AS SHOWN DRG R1.
 - 5.) CONNECT CHAIN FALL A CHOKER AS SHOWN DRG R1 & SNUG UP WITH CHAIN FALL.
 - 6.) TEMPORARILY SUPPORT PINNED ENDS OF CRANE GIRDERS (ONE AT A TIME) WITH A SLING & COMEALONG & REMOVE HANGER PINS (I.N.T. MK 29F)
 - 7.) SLOWLY RELEASE TEMPORARY SUPPORTS THEREBY ALLOWING CRANE GIRDERS TO CANTILEVER FROM PORTAL.
 - 8.) REMOVE BOLTS & SHIMS HOLDING TEMPORARY BRACE FRAME TO TROOPING BRACKETS ON ARCH GIRDERS AFTER CONNECTING STEADY
 - 9.) TEMPORARY BRACE FRAME IS NOW FREE TO BE MOVED BY SHUTTER & LOWERED BY CHAIN FALL. LINES
- NOTE:- AT THIS TIME, IT IS NOT KNOWN HOW MUCH (IF ANY) OF THE NASMYTH FLOOR PLATFORM STEELWORK WILL BE IN RACE. WE ARE PROCEEDING ON THE ASSUMPTION THAT NONE OF THIS STEEL WORK IS RACED & THEREFORE ALL TEMPORARY STEEL WORK MUST BE LOWERED TO THE GROUND FLOOR VIA THE SHUTTER & CHAIN FALL. IF HOWEVER THIS ASSUMPTION PROVES TO BE FALSE, THEN TEMPORARY STEEL WORK MAY BE LANDED C NASMYTH FLOOR & LOWERED TO THE GROUND FLOOR VIA THE E.O.T. CRANE OR THE MONORAIL AFTER ALL MODIFICATIONS ARE COMPLETE AS PER FINAL CONDITION OF STRICE SHOWN ON DRGS R3 & R4. THIS WILL CONSIDERABLY SHORTEN THE DISTANCE OF TRAVEL FOR THE CHAIN HOOR OF THE CHAIN FALL AS CALLED FOR ON DRG R1.
- 10.) AFTER LOWERING & DISCONNECTING BRACE FRAME, TRANSFER CHAIN FALL TO EITHER LIFTING LUG MK BBBG
 - 11.) RECONNECT CHAIN FALL WITH SLING AS CALLED FOR ON DRG R2 & CONNECT TO CRANE GIRDER WITH CHOKER AS SHOWN.
 - 12.) REMOVE ALL STRICE R'S & BOLTS AS SHOWN ON DRG R6, AFTER CONNECTING STEADY LINES.
 - 13.) CRANE GIRDER IS NOW FREE TO BE MOVED BY SHUTTER & LOWERED BY CHAIN FALL.
 - 14.) AFTER LOWERING & DISCONNECTING CRANE GIRDER, REPEAT STEPS 10) TO 13) FOR OTHER CRANE GIRDER.
 - 15.) AFTER LOWERING & DISCONNECTING SECOND CRANE GIRDER, PROCEED WITH ERECTION OF NEW END SUPPORT.

CONTINUED ON DRG R9b

No.	DIV.	1	2	3	4	5	6	7	8	9	10	DATE	CH'KD	DATE	MADE	BRITAIN STEEL LTD. NEW WESTMINSTER B.C.	3R/3001052	No BY	DATE	REVISION	CONTRACT	DWG. No.	REV.



CONTINUED FROM DRG R9a

ERECTION OF NEW END SUPPORT

- 16.) TRANSFER SLING & CHAINFALL BACK TO CENTRE LIFTING LUG MR. BAG
- 17.) HOOK ONTO NEW END SUPPORT & USING CHAINFALL & SHUTTER, LIFT & MOVE INTO PLACE AFTER CONNECTING STEADY LINES AS SHOWN ON DRG R7.
- 18.) INSTALL & FULLY TIGHTEN ALL BOLTS AS CALLED FOR ON DRG R8.
- 19.) REMOVE BOLTS, HANGER RODS, TOP FLG BRACKETS, & TOP FLG BRICE ASSYS AS CALLED FOR ON DRG R8.
- 20.) BOLT NEW CRANE STOP ASSYS IN PLACE AS SHOWN ON DRGS R3 & R4.
- 21.) BOLT NEW 9.5/2 KNEE BRACE ASSYS IN PLACE AS SHOWN ON DRGS R3 & R4.
- 22.) REPLACE WOOD BLOCKING & SEALS REMOVED FROM SHUTTER

MODIFICATION IS NOW COMPLETE

3R/3001053

No. DIV.	1	2	3	4	5	6	7	8	9	10	DATE	CH'KD	DATE	MADE BY RZ	CONTRACT 1420	DWG. No. R96	REV. A
													OPERATED				

