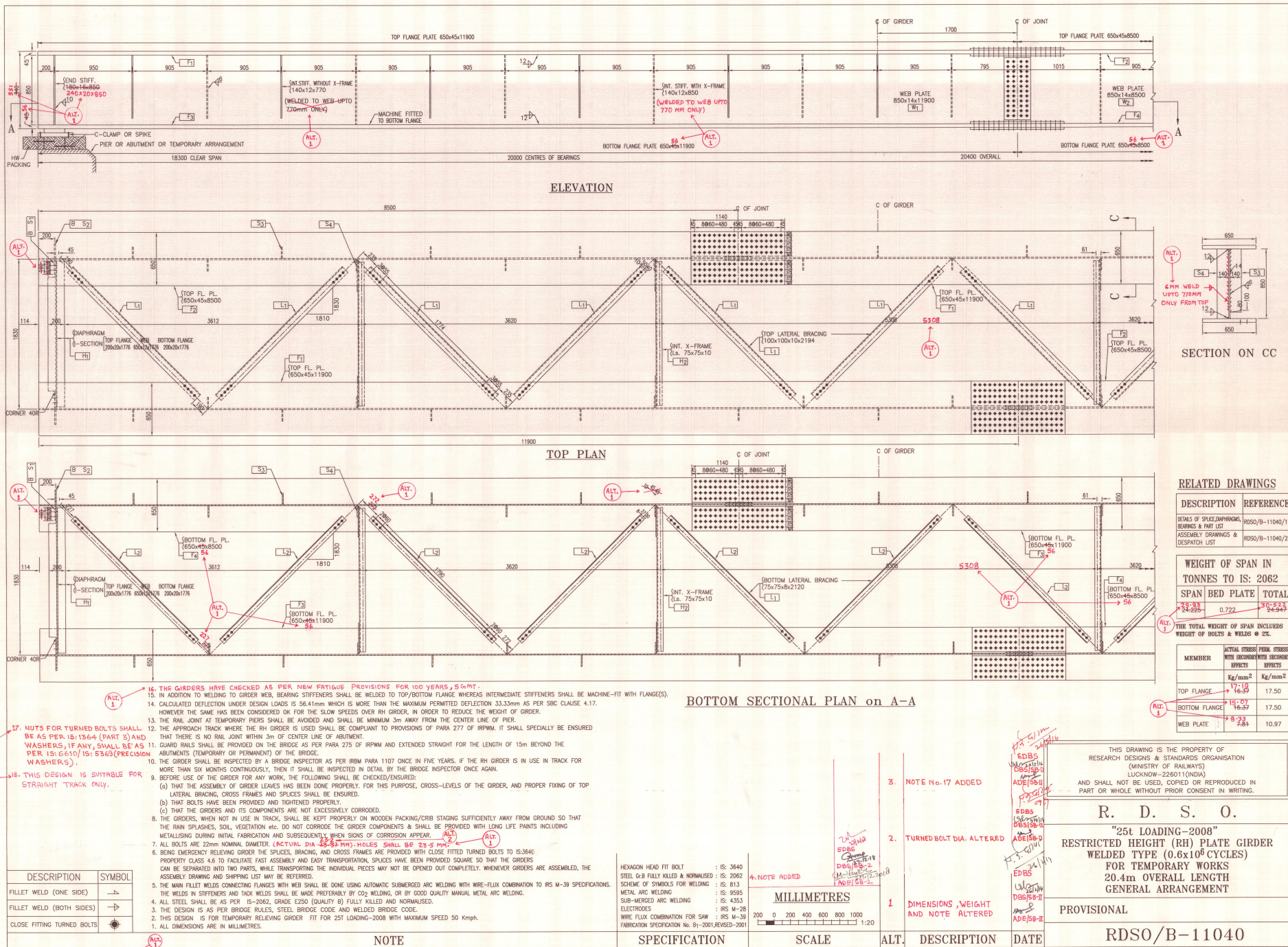


RELATED DRAWINGS

DESCRIPTION	REFERENCE
DETAILS OF SPICES, DIMENSIONS, BEHAVIOUR & PART LIST	RDSO/B-11040/1
ASSEMBLY DRAWINGS & DISPATCH LIST	RDSO/B-11040/2

WEIGHT OF SPAN IN TONNES TO IS: 2062
SPAN BED PLATE TOTAL
23.83 24.225 0.722 30.233 24.947

THE TOTAL WEIGHT OF SPAN INCLUDES WEIGHT OF BOLTS & WELDS @ 2%.

MEMBER	ACTUAL STRESS WITH SECONDARY STRESS OFFSETS	FROM STRESS WITH SECONDARY STRESS OFFSETS
	Kg/mm ²	Kg/mm ²
TOP FLANGE	17.12	17.50
BOTTOM FLANGE	15.07	16.57
WEB PLATE	8.23	10.97

16. THE GIRDERS HAVE CHECKED AS PER NEW FATIGUE PROVISIONS FOR 100 YEARS, 5.6 MT.
15. IN ADDITION TO WELDING TO GIRDER WEB, BEARING STIFFENERS SHALL BE WELDED TO TOP/BOTTOM FLANGE WHEREAS INTERMEDIATE STIFFENERS SHALL BE MACHINE-FIT WITH FLANGE(S).
14. CALCULATED DEFLECTION UNDER DESIGN LOADS IS 56.41mm WHICH IS MORE THAN THE MAXIMUM PERMITTED DEFLECTION 33.33mm AS PER SBC CLAUSE 4.17. HOWEVER THE SAME HAS BEEN CONSIDERED OK FOR THE SLOW SPEEDS OVER RH GIRDER, IN ORDER TO REDUCE THE WEIGHT OF GIRDER.
13. THE RAIL JOINT AT TEMPORARY PIERS SHALL BE AVOIDED AND SHALL BE MINIMUM 3m AWAY FROM THE CENTER LINE OF PIER.
12. THE APPROACH TRACK WHERE THE RH GIRDER IS USED SHALL BE COMPLIANT TO PROVISIONS OF PARA 277 OF IRPM. IT SHALL SPECIALLY BE ENSURED THAT THERE IS NO RAIL JOINT WITHIN 3m OF CENTER LINE OF ABUTMENT.
11. GUARD RAILS SHALL BE PROVIDED ON THE BRIDGE AS PER PARA 275 OF IRPM AND EXTENDED STRAIGHT FOR THE LENGTH OF 15m BEYOND THE ABUTMENTS (TEMPORARY OR PERMANENT) OF THE BRIDGE.
10. THE GIRDER SHALL BE INSPECTED BY A BRIDGE INSPECTOR AS PER IRPM PARA 1107 ONCE IN FIVE YEARS, IF THE RH GIRDER IS IN USE IN TRACK FOR MORE THAN SIX MONTHS CONTINUOUSLY, THEN IT SHALL BE INSPECTED IN DETAIL BY THE BRIDGE INSPECTOR ONCE AGAIN.
9. BEFORE USE OF THE GIRDER FOR ANY WORK, THE FOLLOWING SHALL BE CHECKED/ENSURED:
- (a) THAT THE ASSEMBLY OF GIRDER LEAVES HAS BEEN DONE PROPERLY, FOR THIS PURPOSE, CROSS-LEVELS OF THE GIRDER, AND PROPER FIXING OF TOP LATERAL BRACING, CROSS FRAMES AND SPICES SHALL BE ENSURED.
- (b) THAT BOLTS HAVE BEEN PROVIDED AND TIGHTENED PROPERLY.
- (c) THAT THE GIRDERS AND ITS COMPONENTS ARE NOT EXCESSIVELY CORRODED.
8. THE GIRDERS, WHEN NOT IN USE IN TRACK, SHALL BE KEPT PROPERLY ON WOODEN PACKING/CORB STAGING SUFFICIENTLY AWAY FROM GROUND SO THAT THE RAIN SPLASHES, SOIL, VEGETATION, ETC. DO NOT CORRODE THE GIRDER COMPONENTS & SHALL BE PROVIDED WITH LONG LIFE PAINTS INCLUDING METALLISING DURING INITIAL FABRICATION AND SUBSEQUENTLY WHEN SIGNS OF CORROSION APPEAR.
7. ALL BOLTS ARE 22mm NOMINAL DIAMETER. (ACTUAL DIA 23.5mm). HOLES SHALL BE 23.5mm.
6. IN CASE OF EMERGENCY RELIEVING GIRDER THE SPICES, BRACING, AND CROSS FRAMES ARE PROVIDED WITH CLOSE FITTED TURNED BOLTS TO IS:3546 PROPERTY CLASS 4.6 TO FACILITATE FAST ASSEMBLY AND DISMANTLING. SPICES HAVE BEEN PROVIDED SQUARE SO THAT THE GIRDERS CAN BE SEPARATED INTO TWO PARTS, WHILE TRANSPORTING THE INDIVIDUAL PIECES MAY NOT BE OPENED OUT COMPLETELY. WHENEVER GIRDERS ARE ASSEMBLED, THE ASSEMBLY DRAWING AND SHIPPING LIST MAY BE REFERRED.
5. THE MAIN FILLET WELDS CONNECTING FLANGES WITH WEB SHALL BE DONE USING AUTOMATIC SUBMERGED ARC WELDING WITH WIRE-FLUX COMBINATION TO IS: M-39 SPECIFICATIONS. THE WELDS IN STIFFENERS AND TACK WELDS SHALL BE MADE PREFERABLY BY CO₂ WELDING, OR BY 6000 QUALITY MANUAL METAL ARC WELDING.
4. ALL STEEL SHALL BE AS PER IS-2062, GRADE E250 (QUALITY B) FULLY KILLED AND NORMALISED.
3. THE DESIGN IS AS PER BRIDGE RULES, STEEL BRIDGE CODE AND WELDED BRIDGE CODE.
2. THIS DESIGN IS FOR TEMPORARY RELIEVING GIRDER FIT FOR 25T LOADING-2008 WITH MAXIMUM SPEED 50 Kmph.
1. ALL DIMENSIONS ARE IN MILLIMETRES.

BOTTOM SECTIONAL PLAN on A-A

SPECIFICATION	
HEXAGON HEAD FIT BOLT	IS: 3640
STEEL G-B FULLY ROLLED & NORMALISED	IS: 2062
SCHEME OF SYMBOLS FOR WELDING	IS: 813
METAL ARC WELDING	IS: 5555
SUB-MERGED ARC WELDING	IS: 4353
ELECTRODES	IS: M-28
WIRE FLUX COMBINATION FOR SAW	IS: M-39
FABRICATION SPECIFICATION No. B-2001 (REVISED-2001)	



3. NOTE No.17 ADDED
2. TURNED BOLT DIA. ALTERED
1. DIMENSIONS, WEIGHT AND NOTE ALTERED

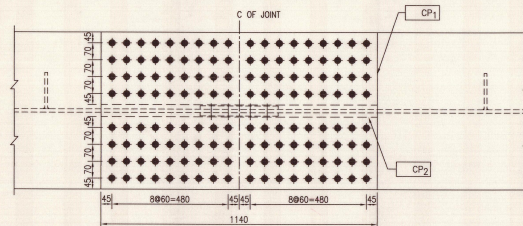
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R. D. S. O.

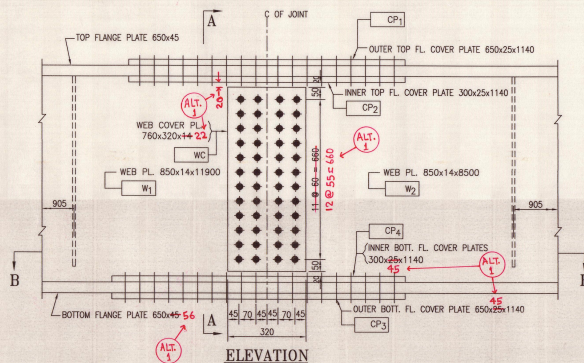
"25t LOADING-2008" RESTRICTED HEIGHT (RH) PLATE GIRDER WELDED TYPE (0.6x10⁶ CYCLES) FOR TEMPORARY WORKS 20.4m OVERALL LENGTH GENERAL ARRANGEMENT

PROVISIONAL

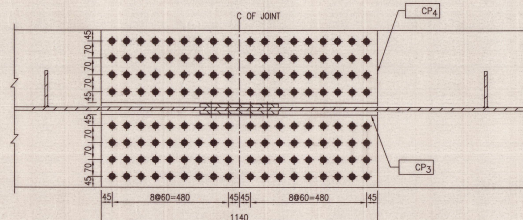
RDSO/B-11040



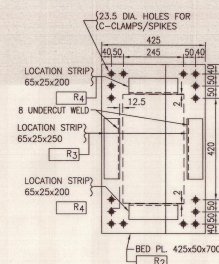
TOP PLAN



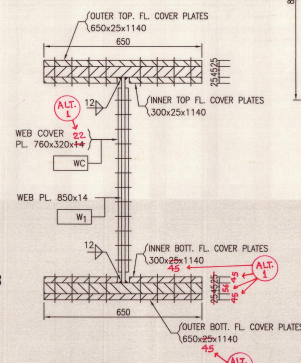
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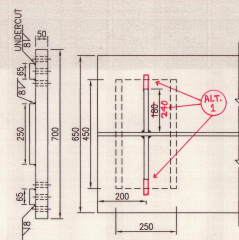
BOTTOM SECTIONAL PLAN ON B-B



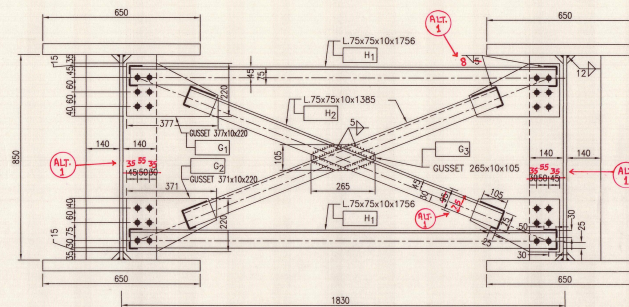
BED PLATE



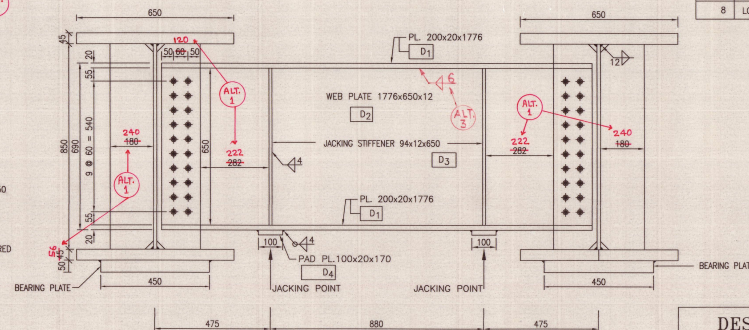
SECTION A-A



BEARING PLATE



INT. X-FRAME (4 Nos.)



END DIAPHRAGM (2 Nos.)

DIMENSION ALTERED (NOT TO SCALE)

PART LIST

No. REQD.	DESCRIPTION	PART OR TEMP.No.	SIZE	L	B	D
2	WEB PLATES	W ₁	11900	850	14	
2	WEB PLATES	W ₂	8500	850	14	
2	TOP FLANGE PLATES	F ₁	11900	650	45	
2	TOP FLANGE PLATES	F ₂	8500	650	45	
2	BOTTOM FLANGE PLATES	F ₃	11900	650	45	
2	BOTTOM FLANGE PLATES	F ₄	8500	650	45	
2	OUTER FLANGE SPICE COVER PLATES (TOP)	CP ₁	1140	650	25	
4	INNER FLANGE SPICE COVER PLATES (TOP)	CP ₂	1140	300	25	
2	OUTER FLANGE SPICE COVER PLATES (BOTTOM)	CP ₃	1140	650	25	
4	INNER FLANGE SPICE COVER PLATES (BOTTOM)	CP ₄	1140	300	25	
4	WEB SPICE COVER PLATE	WC	760	320	45	
4	END BEARING STIFFENER INSIDE	S ₁	850	146	16	
4	END BEARING STIFFENER OUTSIDE	S ₂	850	146	16	
32	INT. STIFFENERS (WITHOUT X-FRAME)	S ₃	770	140	12	
8	INT. STIFFENERS WITH X-FRAME	S ₄	850	140	12	
11	TOP LATERAL BRACINGS 100x100x10	L ₁	2194	100	100	
11	BOTTOM LATERAL BRACINGS 75x75x8	L ₂	2120	75	75	
4	END DIAPHRAGM FLANGE PLATE (TOP & BOTTOM)	D ₁	1776	200	20	
2	END DIAPHRAGM WEB PLATE	D ₂	1776	650	12	
8	END DIAPHRAGM STIFFENER FOR JACKING	D ₃	650	94	12	
4	PAD PLATE	D ₄	170	100	20	
8	INT. X-FRAME HORIZONTAL (TOP & BOTTOM)	H ₁	1756	75	75	
8	INT. X-FRAME DIAGONALS 75x75x10	H ₂	1385	75	75	
8	INT. X-FRAME GUSSETS (TOP)	G ₁	377	220	10	
8	INT. X-FRAME GUSSETS (BOTTOM)	G ₂	371	220	10	
4	INT. X-FRAME CENTRAL GUSSETS	G ₃	265	105	10	
4	BEARING PLATES	R ₁	450	250	50	
4	BED PLATES	R ₂	700	425	50	
8	LOCATION STRIPS	R ₃	250	65	25	
8	LOCATION STRIPS	R ₄	200	65	25	

RELATED DRAWINGS

DESCRIPTION	REFERENCE
GENERAL ARRANGEMENT	RDSO/B-11040
ASSEMBLY DRAWING & DESPATCH LIST	RDSO/B-11040/2

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R. D. S. O.

"25t LOADING-2008"

RESTRICTED HEIGHT (RH) PLATE GIRDER

WELDED TYPE (0.6x10⁶ CYCLES)

FOR TEMPORARY WORKS

20.4m OVERALL LENGTH

DETAILS OF SPICE JOINT, DIAPHRAGMS, BEARINGS & PART LIST

RDSO/B-11040/1

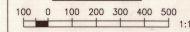
DESCRIPTION	SYMBOL
FILLET WELD (ONE SIDE)	—
FILLET WELD (BOTH SIDES)	—
CLOSED FITTING TURNED BOLTS	—
ANCHOR BOLTS	—

- BEFORE LOWERING THE GIRDER IN POSITION, THE BED PLATE SHALL BE CLEANED PROPERLY AND GRAPHITE GREASE GRADE 3 AS PER IS-508.
- THE BED PLATE MUST BE KEPT IN POSITION BY PROVIDING SUFFICIENT NUMBER OF C-CLAMPS OR WOODEN SPIKES CONNECTING THE BED PLATE TO THE WOODEN BLOCKS ON PIER/ABUTMENT.
- THE BED PLATE (50mm THICK) MUST BE PROVIDED BELOW THE BEARING TO DISTRIBUTE THE LOAD TO MINIMUM THREE WOODEN BLOCKS. THE WOODEN BLOCKS DIRECTLY UNDER BED PLATE SHALL BE OF GOOD QUALITY HARD-WOOD WHICH SHALL NOT GET CRACKED/CRUSHED UNDER LOADS.
- Holes are 23.5 DIA. FOR 22 DIA. BOLTS (ACTUAL DIA 23.2-23.4mm)
- ALL DIMENSIONS ARE IN MILLIMETRES.

NOTE

SPECIFICATION

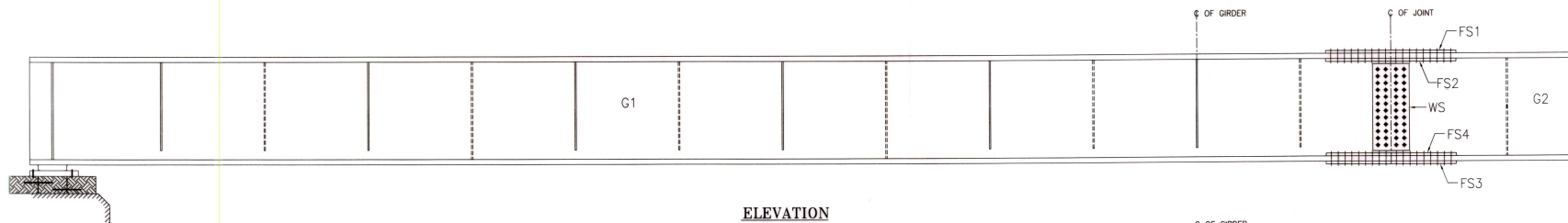
MILLIMETRES



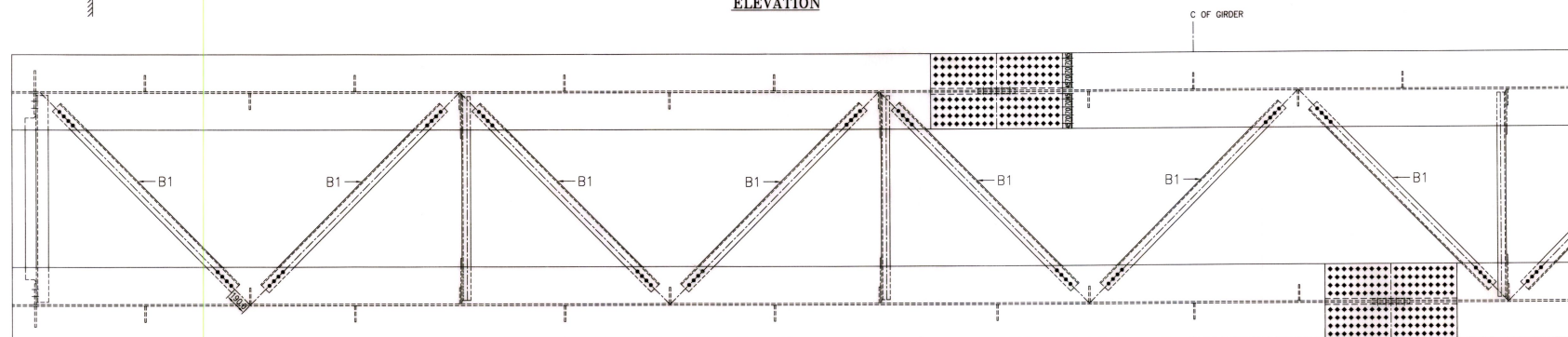
SCALE

ALT. DESCRIPTION

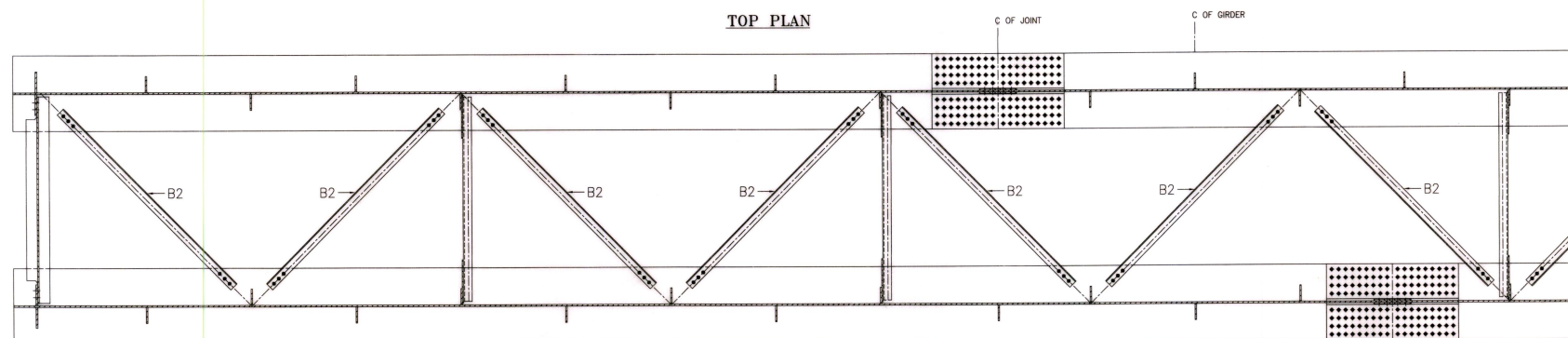
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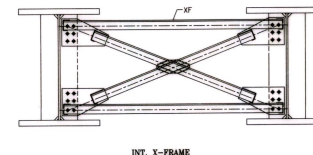
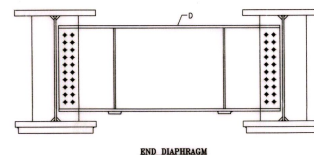
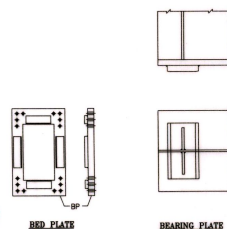
TOP PLAN



BOTTOM SECTIONAL PLAN

DESPATCH LIST

ERECTION MARK	DESCRIPTION	SIZE			NO. REQD.
		L	B	D	
G1	GIRDER COMPLETE	11900	2480	950	2
G2	GIRDER COMPLETE	8500	2480	950	2
D	END DIAPHRAGM	1776	200	690	2
XF	INT. CROSS FRAME	1786	75	780	4
B1	TOP LATERAL BRACING	2194	100	100	11
B2	BOTTOM LATERAL BRACING	2120	75	75	11
FS1	TOP FLANGE SPLICE PL. - OUTSIDE	1140	650	25	2
FS2	TOP FLANGE SPLICE PL. - INSIDE	1140	300	25	4
FS3	BOTTOM FLANGE SPLICE - OUTER	1140	650	25	2
FS4	BOTTOM FLANGE SPLICE - INNER	1140	300	25	4
WS	WEB SPLICE COVER PLATES	760	320	40	4
BP	BED PLATES	700	425	50	4



RELATED DRAWINGS

DESCRIPTION	REFERENCE
GENERAL ARRANGEMENT	RDSO/B-11040
DETAILS OF SPLICE/DIAPHRAGMS, BEARINGS & PART LIST	RDSO/B-11040/1

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"25t LOADING-2008"
RESTRICTED HEIGHT (RH) PLATE GIRDER
WELDED TYPE (0.6x10⁶ CYCLES)
FOR TEMPORARY WORKS
20.4m OVERALL LENGTH
ASSEMBLY DRAWING & DESPATCH LIST

PROVISIONAL

RDSO/B-11040/2

NOTE

SPECIFICATION

(NOT TO SCALE)

SCALE

1 DIMENSION ALTERED

ALT. DESCRIPTION

DATE