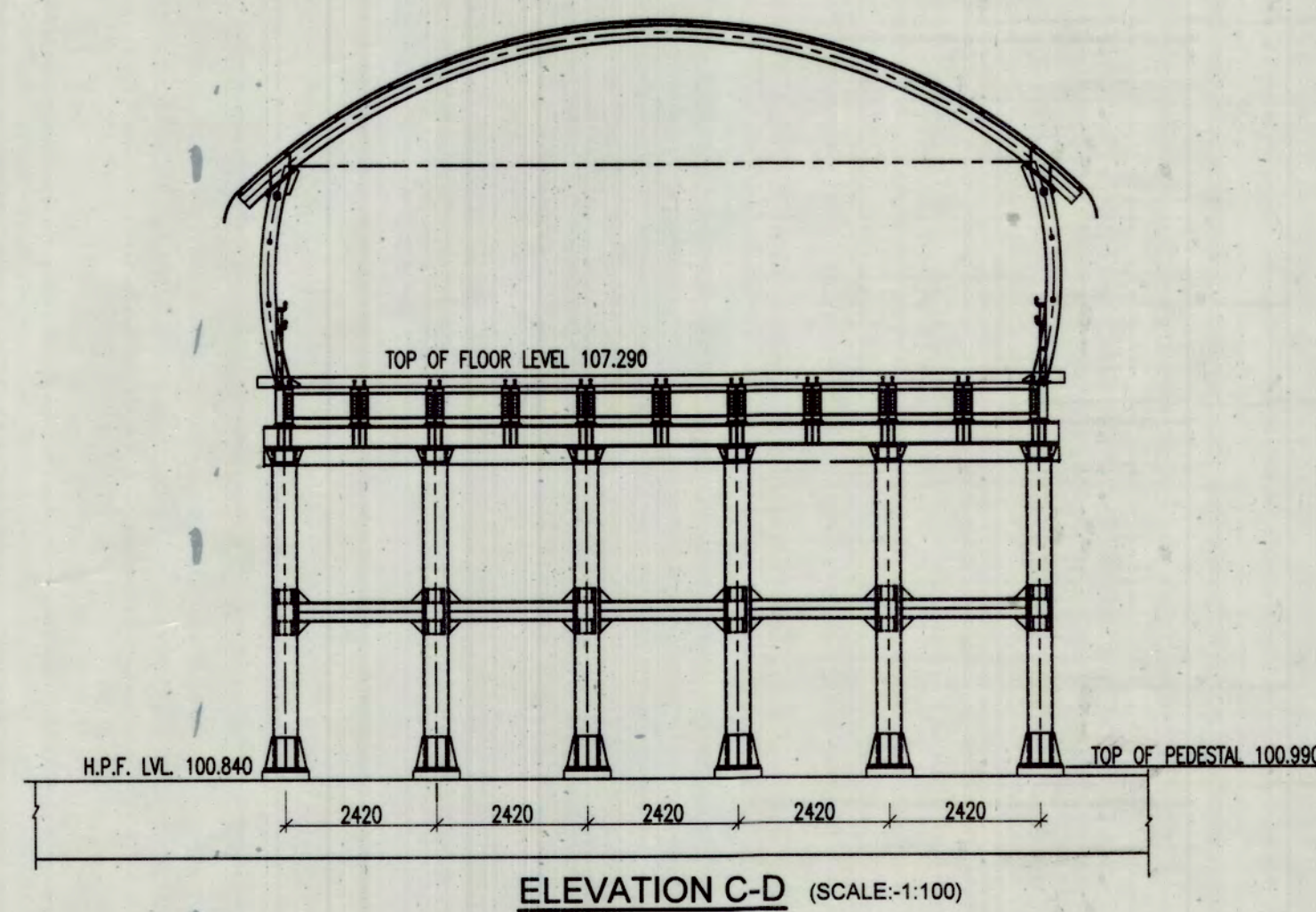
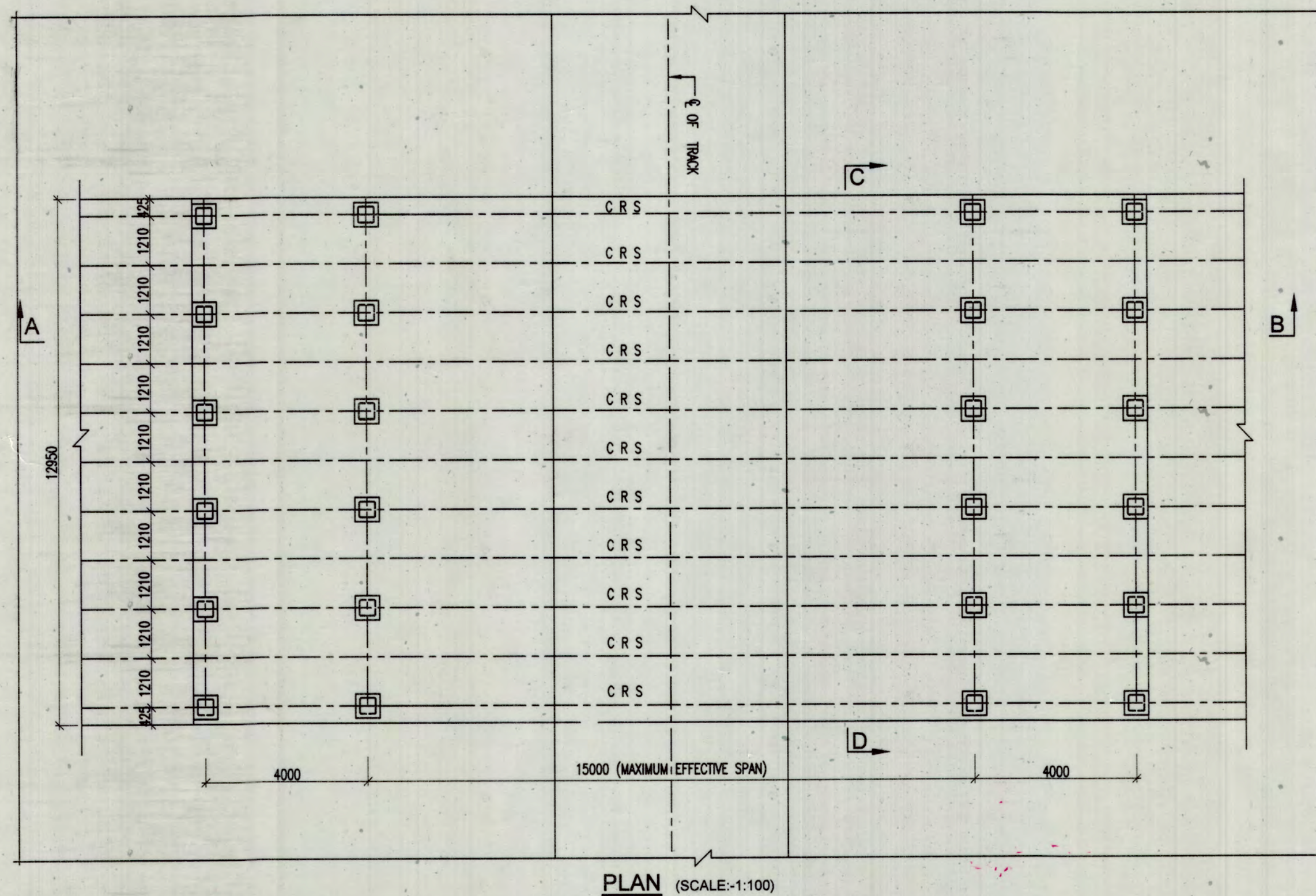
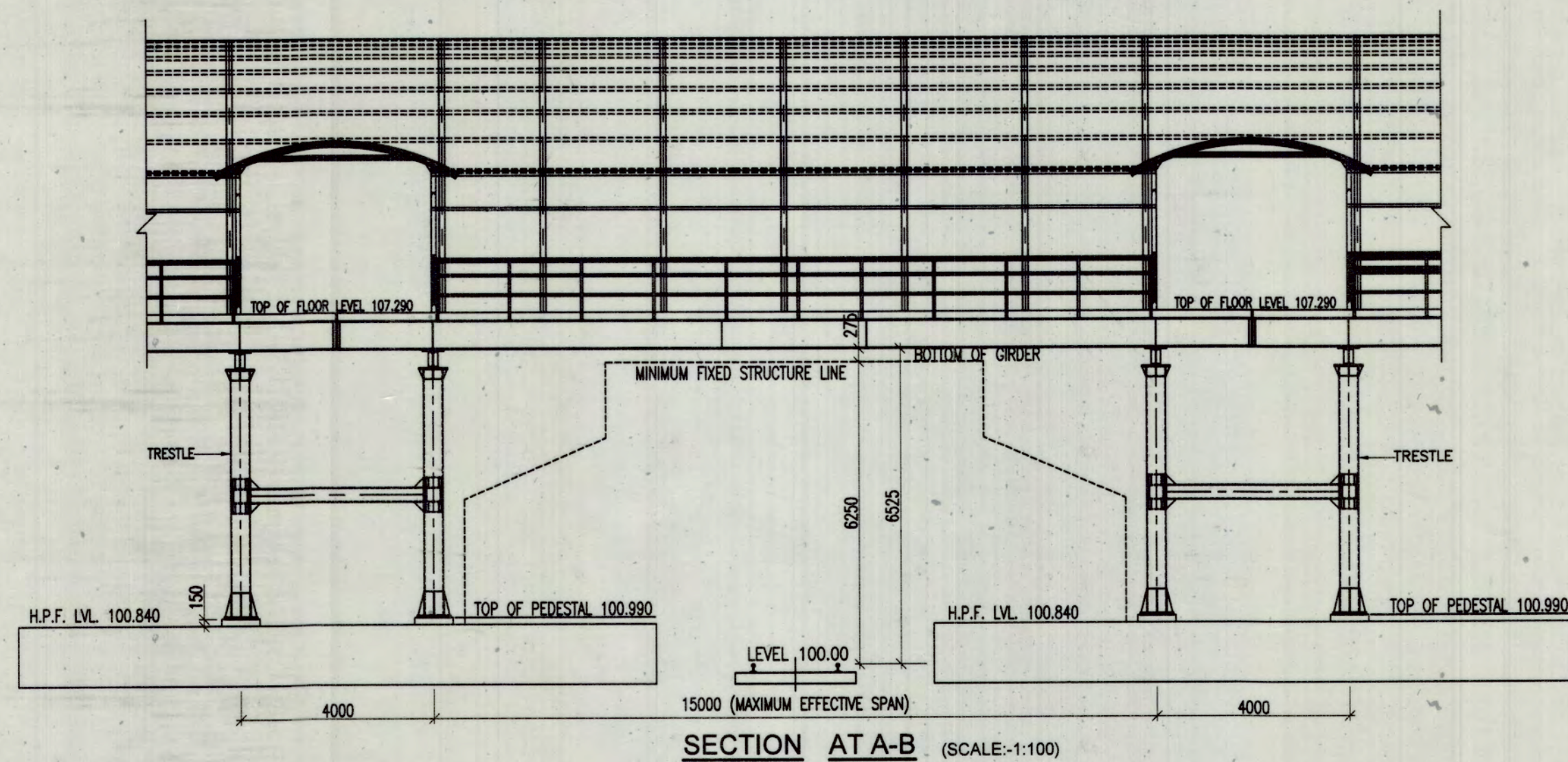




NOTES:-

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
2. NO DIMENSION SHOULD BE SCALED FROM THIS DRAWING.
3. ALL STEELS FOR GIRDERS SHALL BE E350, GRADE 'A' AS PER IS:2062-2011. RECTANGULAR OR SQUARE HOLLOW STRUCTURAL PIPES OF GRADE YST 310 OR HIGHER TO BE USED AS PER IS:4923-1997.
4. THIS GAD HAS BEEN PREPARED FOR SPAN OF 20M. HOWEVER, THIS DRAWING CAN BE USED FOR SPAN RANGE OF 10 m. TO 15 m. AS PER SITE CONDITION, AFTER FULFILLING THE REQUIREMENT GIVEN IN I.R.S.O.D. (B.G.) - 2004 (AS AMENDED FROM TIME TO TIME), ACCORDINGLY THE CHANGE IN GENERAL ARRANGEMENT DRAWING SHOULD BE APPROVED BY COMPETENT AUTHORITY AT ZONAL RAILWAYS LEVEL ITSELF.
5. LIVE LOAD ON FOB HAS BEEN TAKEN IN ACCORDANCE WITH CLAUSE 2.3.2.1 OF IRS BRIDGE RULE.
6. WIND LOAD ON FOB HAS BEEN TAKEN IN ACCORDANCE WITH CLAUSE 2.11 OF IRS BRIDGE RULE. MAXIMUM WIND PRESSURE IS TAKEN AS 75 Kg/m².
7. THIS DRAWING IS SUITABLE FOR USE UPTO SEISMIC ZONE-V. THE SEISMIC FORCE HAS BEEN CALCULATED IN ACCORDANCE WITH IRS SEISMIC CODE-2017 (REVISED 2020).
8. SNOW LOADING HAS NOT BEEN TAKEN IN THIS DESIGN.
9. NO IMPACT FACTOR IS TAKEN FOR DESIGN FOB AS PER CLAUSE 2.4.3 OF IRS BRIDGE RULE.
10. FOR DESIGN OF FOUNDATION THE LOAD MENTIONED IN THIS DRAWING SHOULD BE TAKEN.
11. FABRICATION OF COMPONENTS OF FOB TO BE DONE IN WORKSHOP AS FAR AS POSSIBLE.
12. FEASIBILITY OF THIS STRUCTURE SHALL BE CHECKED AT SITE IN EVERY RESPECT BY ENGINEER INCHARGE BEFORE FABRICATION/ERECTION. IF THERE IS ANY CONFUSION/AMBIGUITY IN DIFFERENT DIMENSIONS PROVIDED IN THESE DRAWINGS, A FULL SCALE LAYOUT SHOULD BE PREPARED FOR THE VERIFICATION OF THE SAME BEFORE START OF EXECUTION OF THE WORK.
13. BEFORE FABRICATION WORK IS TAKEN UP, GIRDER PIECES TO BE FABRICATED (ALONG WITH ITS EXACT DIMENSIONS) AND THEIR NUMBERS SHALL BE WORKED OUT. MOREOVER EXACT DIMENSIONS AND THEIR NUMBERS OF OTHER COMPONENTS SUCH AS BRACINGS, CROSS GIRDERS, MAIN COLUMN, STAIRCASE COLUMN, STAIRCASE GIRDERS ETC. ALSO TO BE WORKED OUT IN ORDER TO AVOID ANY PROBLEM AT LATER STAGE.
14. FABRICATION OF STEEL WORKS SHALL BE DONE AS ACCORDANCE WITH IRS B1-2000 SPECIFICATION.
15. ALL WELDS TO BE MADE BY USING APPROVED WELDING PROCEDURE AND BY QUALIFIED WELDERS AS PER PROVISIONS OF IRS WELDED BRIDGE CODE. WELDERS QUALIFIED FOR A PARTICULAR WELD POSITION, WELDING TECHNIQUE AND SIZE ONLY, SHALL MAKE THE WELD.
16. AUTOMATIC SUBMERGED ARC WELDING (SAW) SHOULD BE DONE IN FILLET WELDS OF CONNECTION OF FLANGE TO WEB OF MAIN GIRDER. OTHER WELDS SHOULD ALSO BE DONE BY SUBMERGE ARC WELDING TO THE MAXIMUM EXTENT POSSIBLE. FCW OR GMAW WELDING MAY BE DONE IN CASES WHERE SAW WELDING IS NOT POSSIBLE.
17. WELDING MAY BE DONE IN ACCORDANCE WITH PROVISIONS GIVEN FOR WELDING IN THE IRS WELDED BRIDGE CODE OR THE SPECIFICATION/CODES REFERRED IN THIS FOR THIS PURPOSE.
18. (a). IN CASE OF END PLATFORM, THERE WILL BE MAIN GIRDER OF F.O.B. FROM ONE SIDE ON TRESTLE ONLY. IN SUCH CASE EXTEND THE GIRDER SO THAT IT CAN GO UPTO OTHER COLUMN AT SAME COLUMN GROUP IF REQUIRED.
(b) IN CASE OF ISLAND PLATFORM, MAIN GIRDERS OF F.O.B. SHALL REST ON TRESTLE FROM BOTH SIDES.
19. COMPLETE STRUCTURE SHOULD BE MATELIZED AS PER IRS B1-2001 SPECIFICATION
20. TO PROMOTE SAFETY, HANDRAIL SHALL BE PAINTED DURABLE BRIGHT YELLOW SO THAT IT IS EASILY VISIBLE.
21. FOUNDATION HAS BEEN DESIGNED BY CONSIDERING GROSS SAFE BEARING CAPACITY OF 12.0T/m² AT THE BASE OF FOUNDATION

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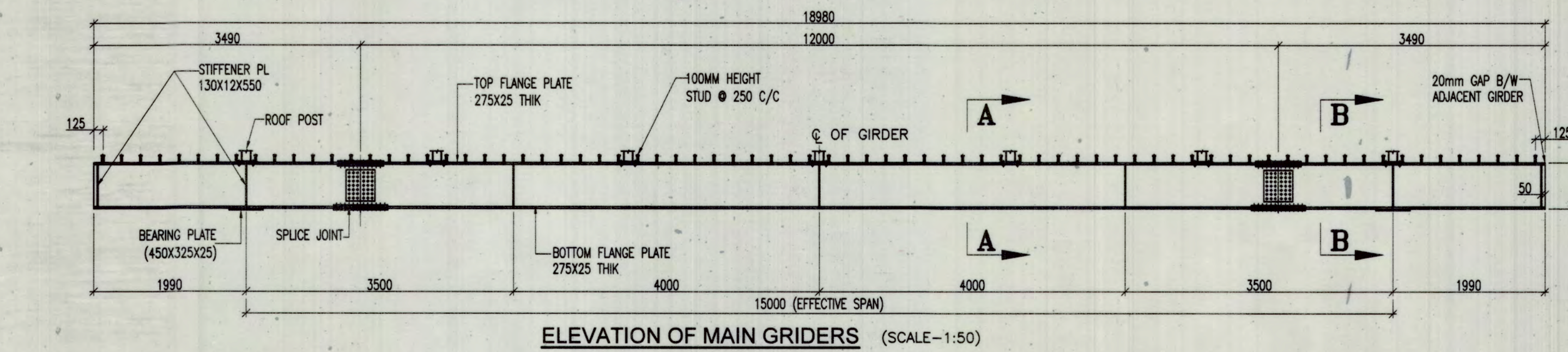
GOOD FOR CONSTRUCTION

RELATED DRAWINGS		
S.N.	DESCRIPTION	REFERENCE
1.	DETAILS OF GIRDER	SHEET NO. 2
2.	DETAILS OF SPLICE JOINT & WELDING SEQUENCE	SHEET NO. 3
3.	DETAILS OF CROSS GIRDER	SHEET NO. 4
4.	DETAILS OF MAIN COLUMN AND TRESTLE	SHEET NO. 5
5.	DETAILS OF TRESTLE FOUNDATION	SHEET NO. 6
6.	MISC. DETAILS	REFER RDSO/B-10438 (SH. 1 TO 6)

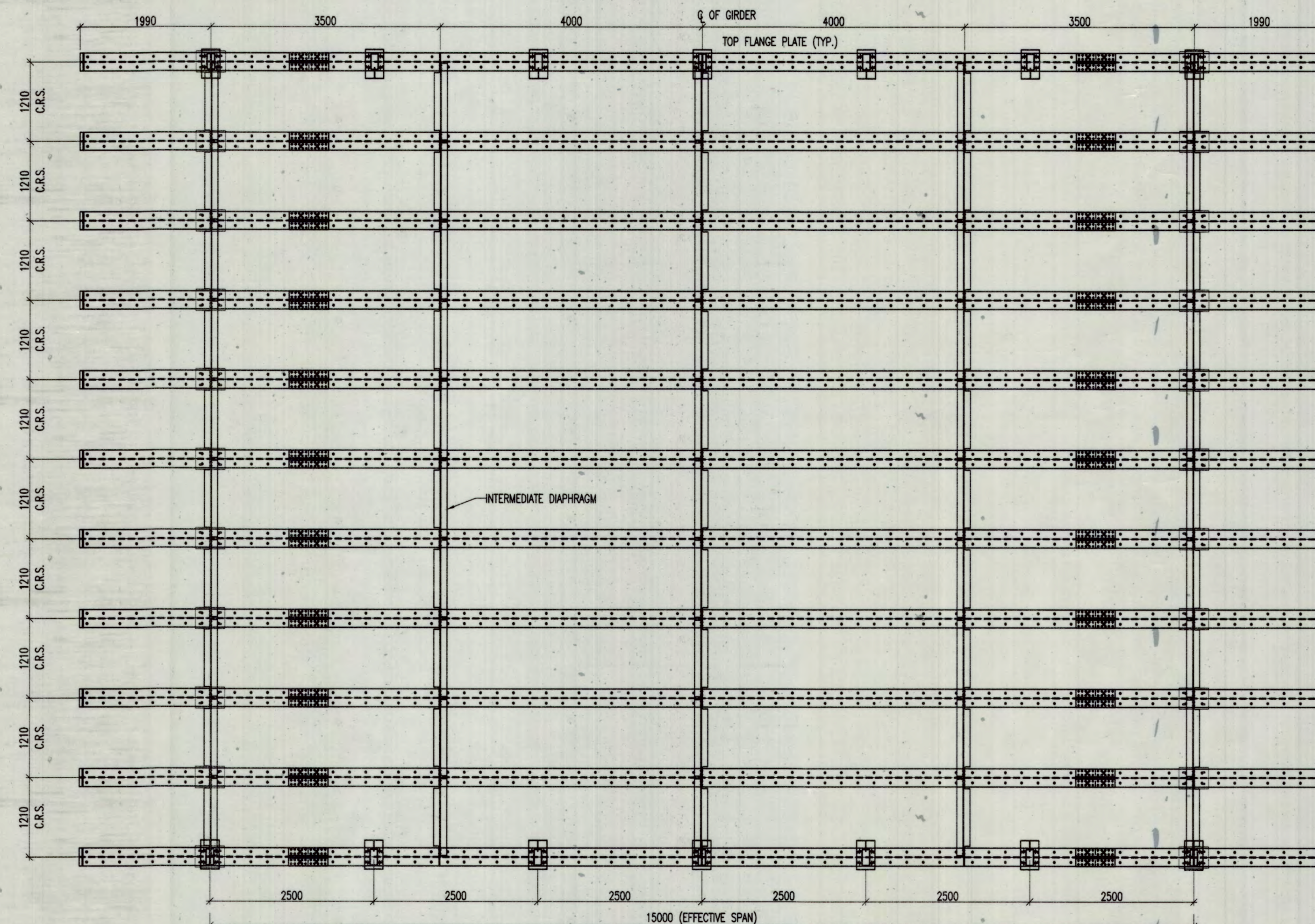
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	DY. CE/BD	(S.K. GARG)
DY.CE/GSU/LKO (N.S. CHAUHAN)	SSE/DESIGN	(PUSHKAL RAI)
	SSE/DWG.	(ASHWANI KUMAR)
GSU/LKO		HEAD QUARTER

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APPROVED BY:-	MARUT GUPTA
CHECKED BY:-	VANDANA SINGH
DESIGN BY:-	MANISH KUMAR
PROOF CHECK	DRAWN BY:- YASHPAL SINGH

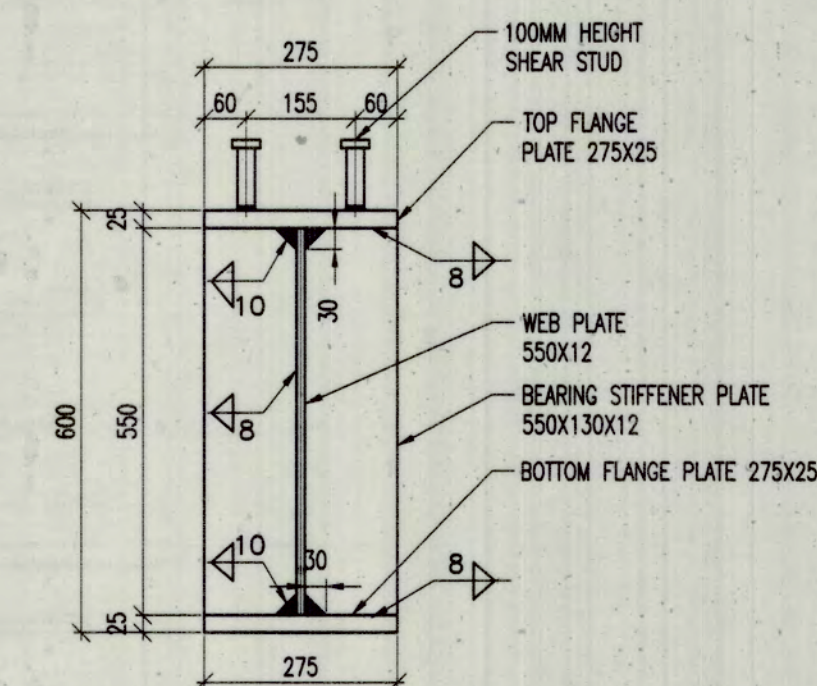
NORTHERN RAILWAY	
TYPICAL FOOT OVER BRIDGE 12.0M WIDE FOR SPAN 10-15M UNDER AMRIT BHARAT STATION SCHEME STRUCTURAL ARRANGEMENT	
NRHQ PLAN No. FB-GT/ABSS-01/10-15M/2023/R1	
SCALE:- AS SHOWN	SHEET NO. 01



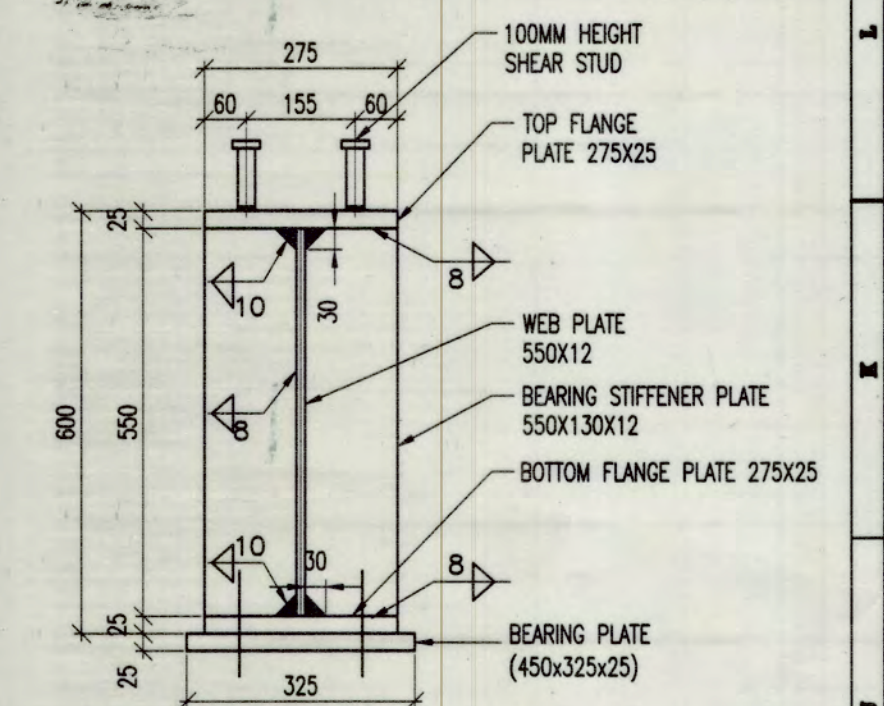
ELEVATION OF MAIN GRIDERS (SCALE-1:50)



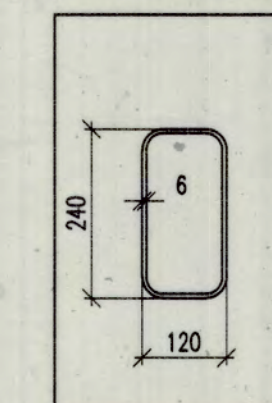
TOP PLAN OF MAIN GRIDERS (SCALE-1:50)



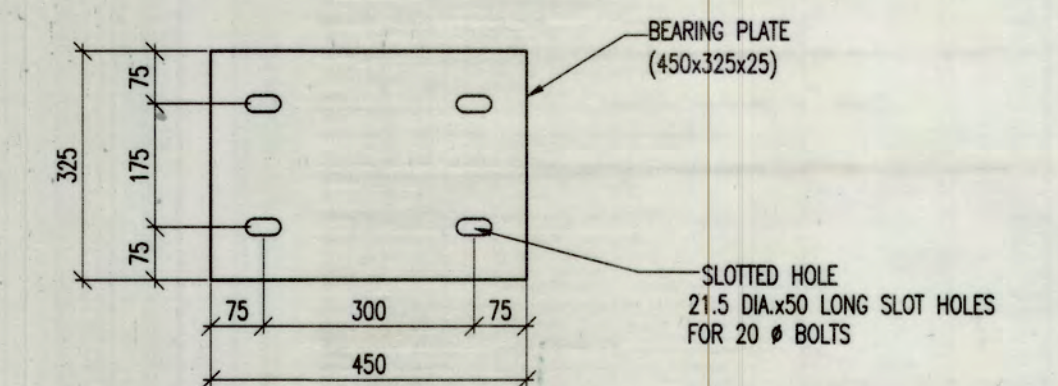
SECTION AT A-A
(SCALE-1:10)



SECTION AT B-B
(SCALE-1:10)



**RHS 240x120x6
MEMBER -21**



DETAILS OF BEARING PLATE
(SCALE-1:10)

GOOD FOR CONSTRUCTION



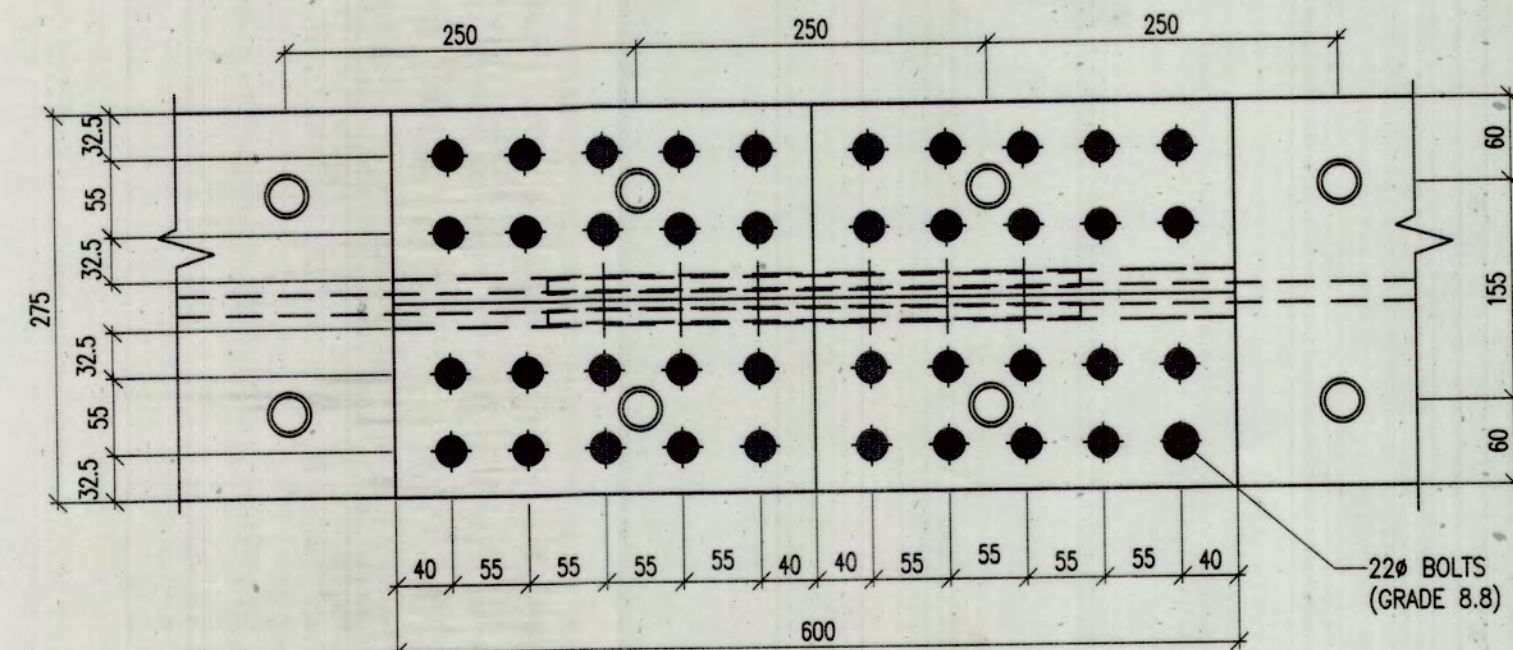
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Faculty, Civil Engg. Deptt.
N.I.T., KURUKSHETRA

- AT SPLICE LOCATION TOP AND BOTTOM COVER PLATES OF FLANGE SPLICES SHOULD ALSO BE BENT ACCORDING TO THE PROFILE AT SPLICE LOCATION.
- THE TOP AND BOTTOM FLANGE PLATES OF GIRDER SHOULD BE BENT ACCORDING TO THE PROFILE OF THE WEB PLATE IN PIECE 'G' SHOWN IN METHODOLOGY OF ASSEMBLY OF GIRDER PIECES.
- HSFG BOLTS, NUT AND WASHER SHOULD BE PROVIDED IN ACCORDANCE WITH THE PROVISION MENTIONED IN IRS B1 OR RELEVANT SPECIFICATION REFERRED IN IT.
- ALL HOLES ARE 21.5 MM DIA FOR 20 DIA HSFG BOLTS EXCEPT OTHERWISE MENTIONED IN DRAWING. PROPERTY CLASS OF HSFG BOLTS IS 8.8.
- SURFACE PREPARATION FOR PROVISION OF HSFG BOLTS SHALL BE DONE TO ENSURE MINIMUM SLIP FACTOR OF 0.4.
- END STIFFENER SHALL BE CONNECTED TO WEB AND FLANGES ALL AROUND WITH 8 MM FITTED WELD ALL AROUND.
- INTERMEDIATE STIFFENER SHALL BE WELDED BY 8 MM SIZE WELDS ONLY TO THE WEB OF THE GIRDER AND NOT TO THE FLANGES (THESE SHALL BE TIGHT FIT WITH FLANGES). THE BOTTOM 40 MM OF STIFFENER SHALL NOT BE WELDED TO THE WEB.
- PRE CAMBER IN FOB GIRDER IS TO BE PROVIDE AS MENTIONED IN RELEVANT DRAWING OF THIS SERIES.
- ALL EDGES SHALL BE MACHINE FINISHED IN SPLICES.
- MAIN GIRDER SHOULD BE CONNECTED WITH BEARING PLATE AT TOP OF CROSS GIRDER AS SHOWN WITH 20 B BOLTS. BEARING PLATE AT TOP OF CROSS GIRDER IS PROVIDED WITH SLOTTED HOLE FOR FACILITATION OF MOVEMENT OF GIRDER.
- BOLT HOLES SHALL BE MADE IN WEB OF GIRDER TO REST THE STAIRCASE GIRDER AS PER DETAIL GIVEN IN RELEVANT DRAWING OF THIS SERIES.
- BOLTS ARE SHOWN AS $\bullet$.
- EXACT SIZE OF STIFFENER, GUSSET PLATES, COVER PLATES OF SPLICES AND INCLINED MEMBERS TO BE DETERMINED IN TEMPLATE SHOP ON LAYOUT BEFORE START OF EXECUTION OF WORK.
- ALL STIFFENER PLATES & GUSSET PLATES ARE 10 MM THICK.
- ALL WELDS WILL BE IN FULL LENGTH ALL AROUND THE MEMBERS AT EACH POINT.
- WELDING IN THE MAIN GIRDER IS TO BE DONE BY AUTOMATIC SUBMERGED ARC WELDING (SAW) ONLY. FOR OTHER PLACES WHEREVER POSSIBLE SAW WELDING IS TO BE DONE. IF SAW WELDING NOT POSSIBLE THEN FCW OR GMAW WELDING AS PER PROVISIONS GIVEN IN IRS WELDED BRIDGE CODE AND RELEVANT SPECIFICATIONS REFERRED IN IT.
- ALL FILLET WELDS ARE OF 8 mm. SIZE UNLESS OTHERWISE SPECIFIED.
- FEASIBILITY OF THIS STRUCTURE SHALL BE CHECKED AT SITE IN EVERY RESPECT BY ENGINEER INCHARGE BEFORE FABRICATION/ERECTION. IF THERE IS ANY CONFUSION / AMBIGUITY IN DIFFERENT DIMENSIONS PROVIDED IN THESE DRAWINGS, A FULL SCALE LAYOUT SHOULD BE PREPARED FOR THE VERIFICATION OF THE SAME BEFORE START OF EXECUTION OF THE WORK.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.

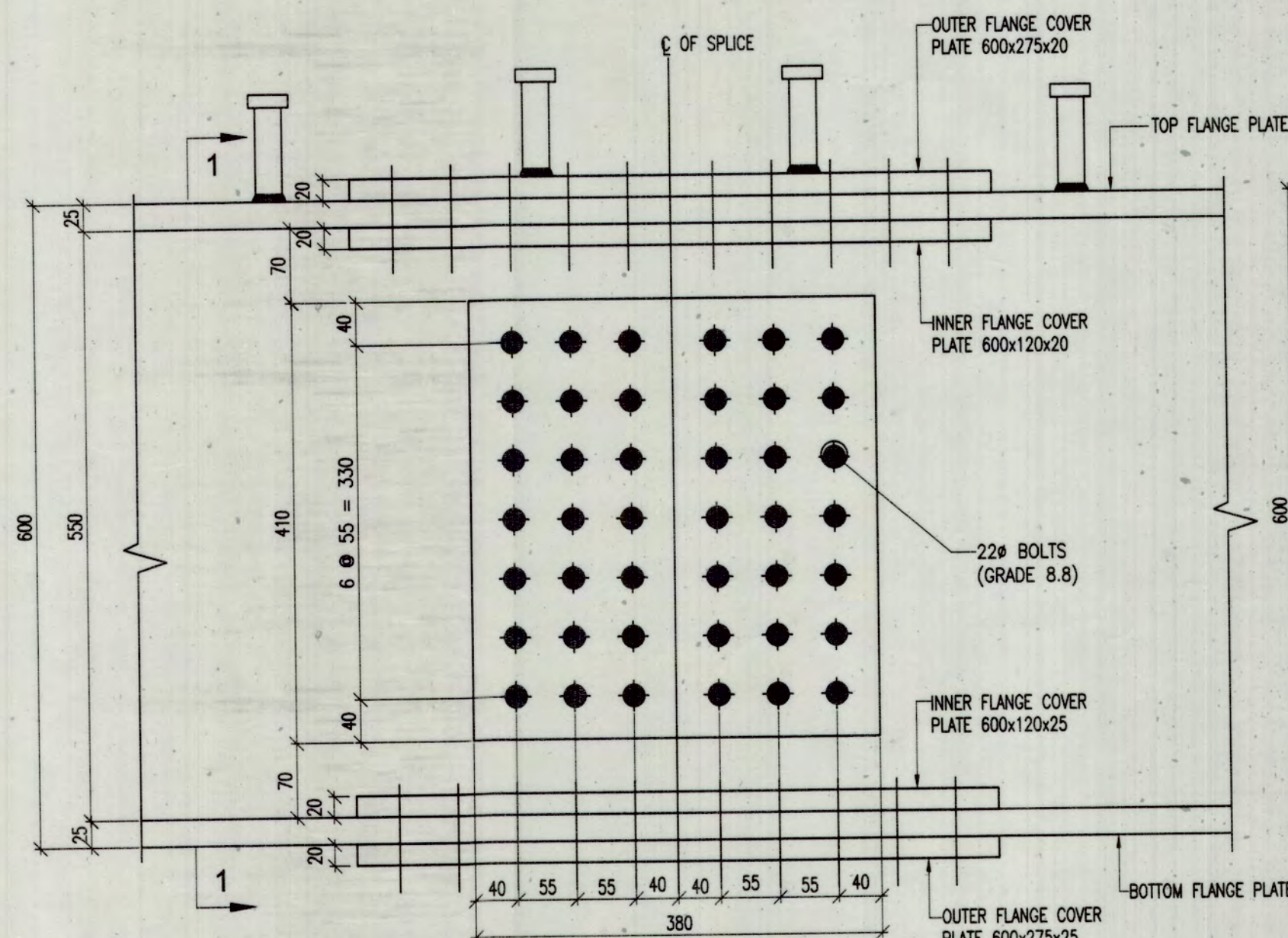
RELATED DRAWINGS		
S.N.	DESCRIPTION	REFERENCE
1.	STRUCTURAL ARRANGEMENT	SHEET NO. 1
2.	DETAILS OF SPLICE JOINT & WELDING SEQUENCE	SHEET NO. 3
3.	DETAILS OF CROSS GIRDER	SHEET NO. 4
4.	DETAILS OF MAIN COLUMN AND TRESTLE	SHEET NO. 5
5.	DETAILS OF TRESTLE FOUNDATION	SHEET NO. 6

CPM/GSU/LKO (V.S.YADAV)	CBE	(B.B.S. TOMAR)
	DY. CE/BD	(S.K. GARG)
DY.CE/GSU/LKO (N.S. CHAUHAN)	SSE/DESIGN	(PUSHKAL RAI)
	SSE/DWG.	(ASHWANI KUMAR)
GSU/LKO		HEAD QUARTER

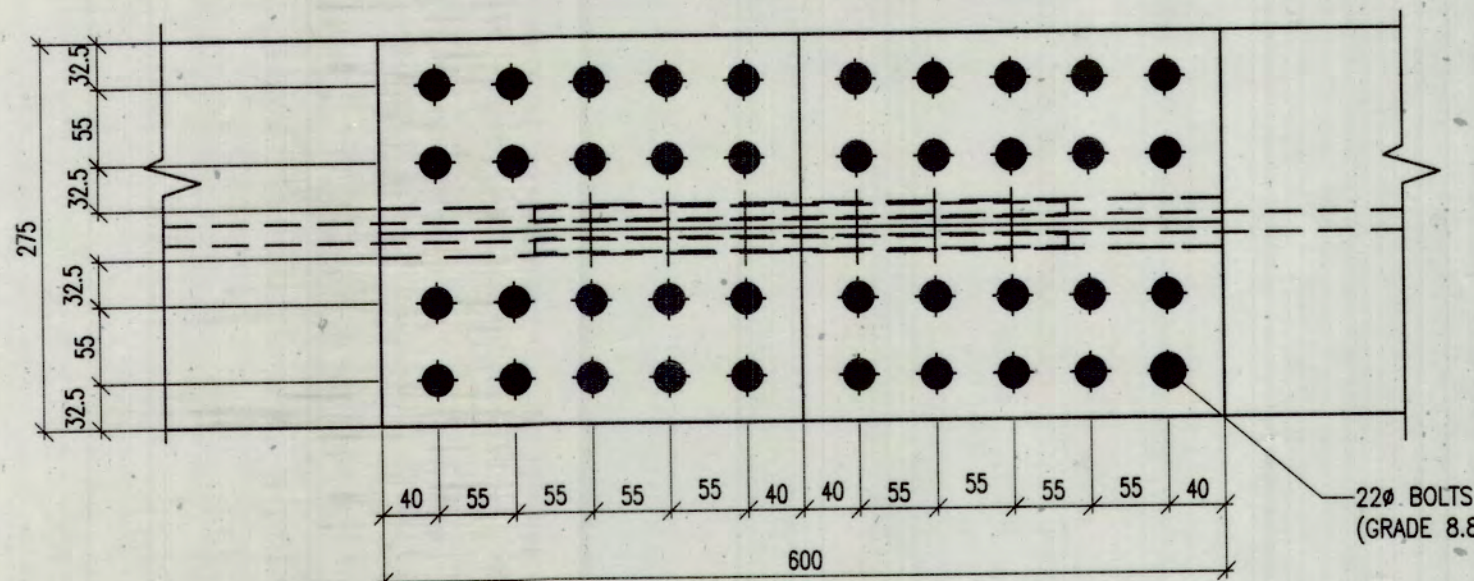
CONSULTANT A-8, Green Park, New Delhi-110016, INDIA. Tel: +91-11-40863020 Fax: +91-11-26850352 Website: http://www.icotnra.com	NORTHERN RAILWAY TYPICAL FOOT OVER BRIDGE 12.0M WIDE FOR SPAN 10-15M UNDER AMRIT BHARAT STATION SCHEME DETAILS OF GIRDER	
	APPROVED BY:-	MARUT GUPTA
	CHECKED BY:-	VANDANA SINGH
	DESIGN BY:-	MANISH KUMAR
PROOF CHECK	DRAWN BY:-	YASHPAL SINGH
	NRHQ PLAN No. FB-GT/ABSS-01/10-15M/2023/R1 SCALE:- AS SHOWN SHEET NO. 02	



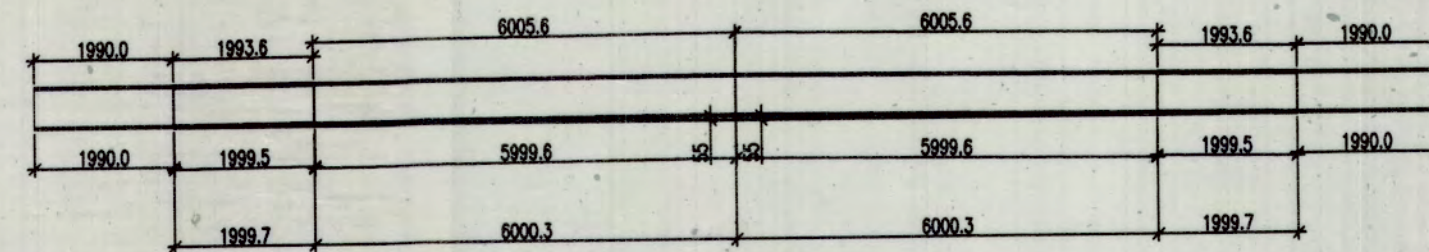
TOP PLAN
(SCALE:-1:5)



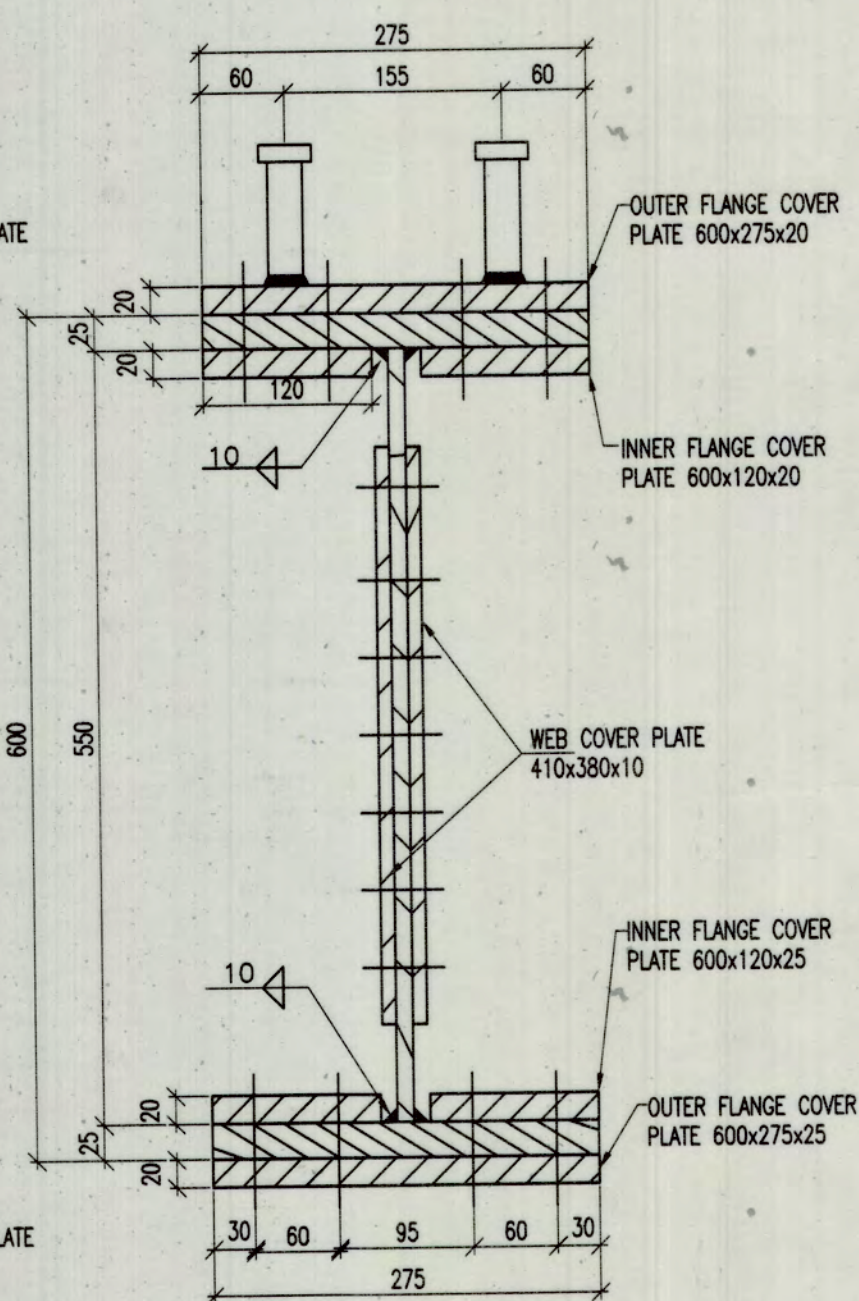
ELEVATION DETAIL OF SPLICE JOINT
(SCALE:-1:5)



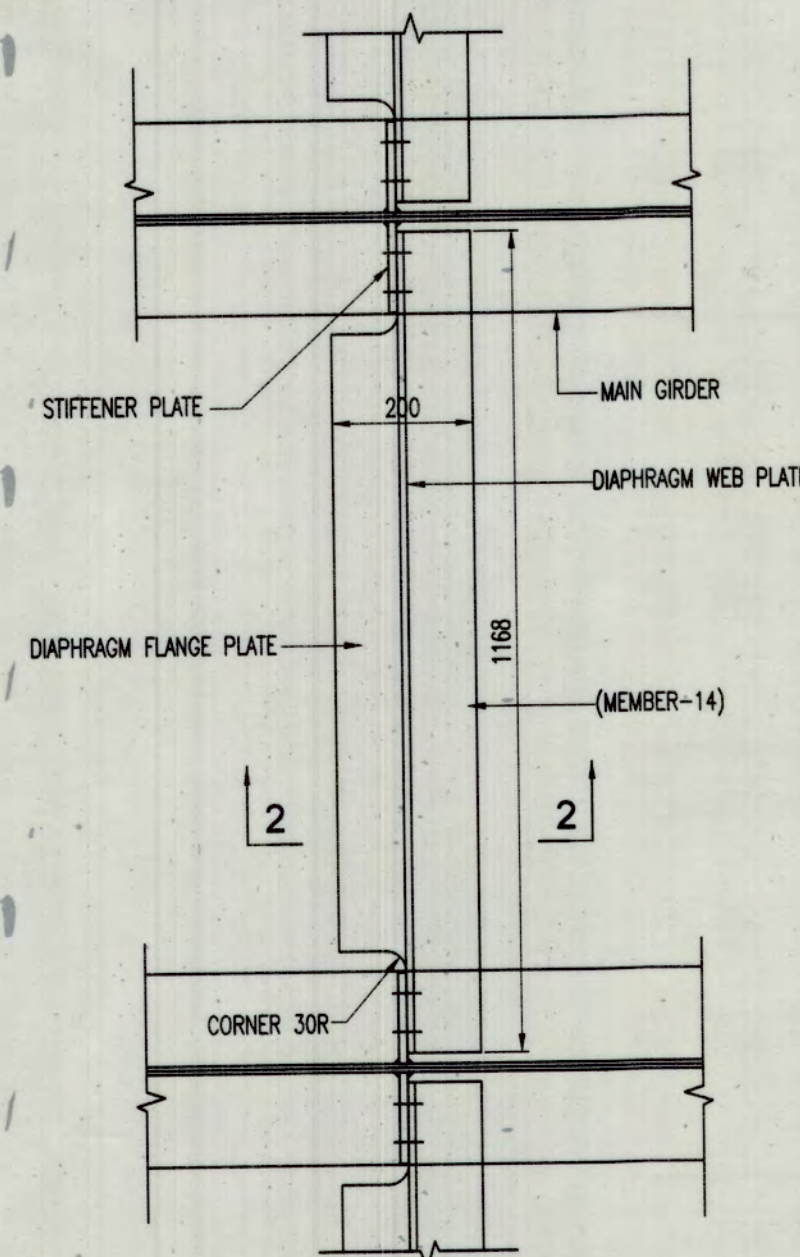
BOTTOM PLAN
(SCALE:-1:5)



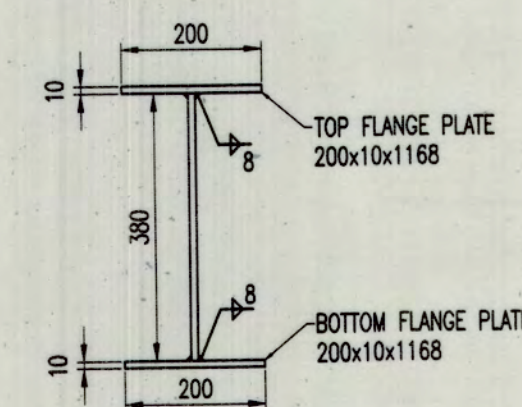
15.00M
CHAMBER DIAGRAM



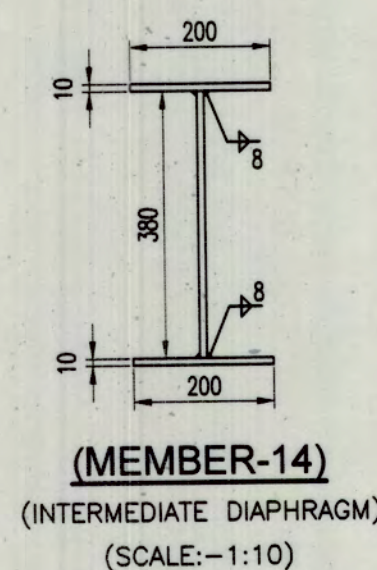
SECTION AT 1-1
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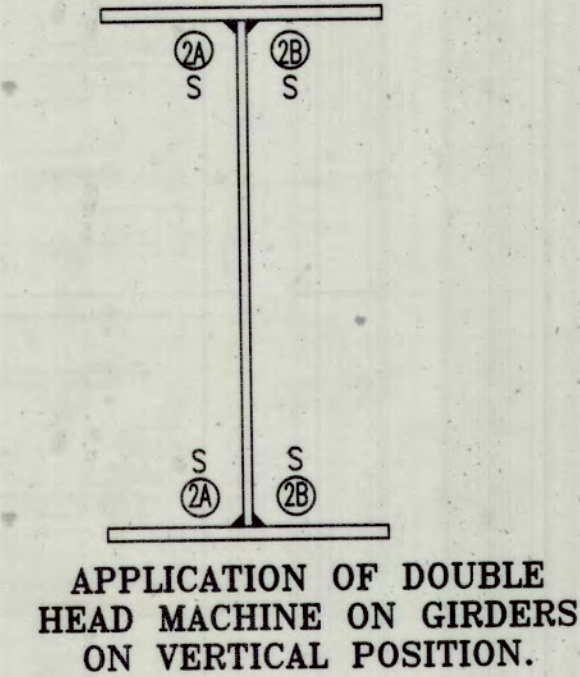
DETAIL AT INTERMEDIATE DIAPHRAGM
(SCALE:-1:10)



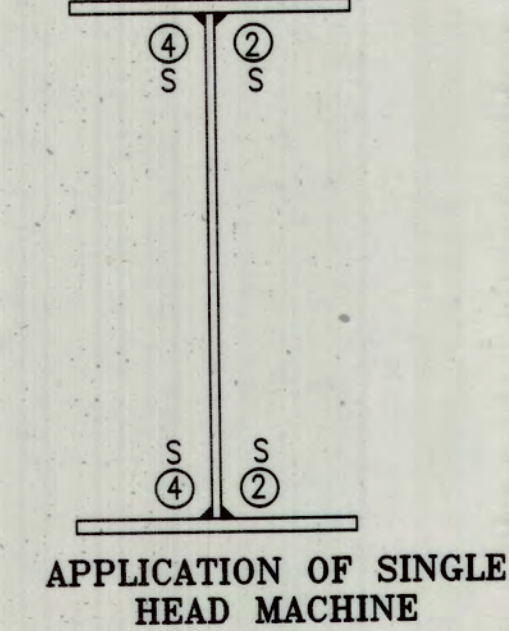
SECTION AT 2-2
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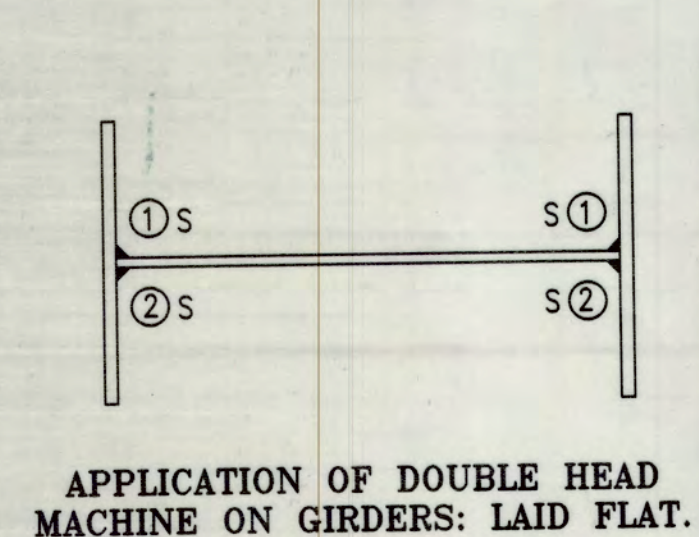
(MEMBER-14)
(INTERMEDIATE DIAPHRAGM)
(SCALE:-1:10)



APPLICATION OF DOUBLE HEAD MACHINE ON GIRDERS ON VERTICAL POSITION.

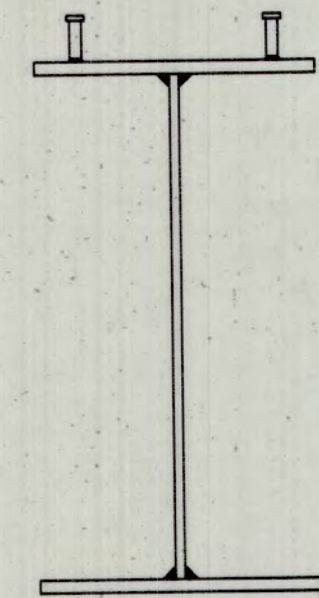


APPLICATION OF SINGLE HEAD MACHINE



APPLICATION OF DOUBLE HEAD MACHINE ON GIRDERS: LAID FLAT.

WELDING STAGE-I



STUDS (IF ANY) TO BE WELDED AFTER COMPLETE FABRICATION OF GIRDER AT WORKSHOP

WELDING STAGE-II

WELDING STAGE I : (WELDING OF WEB WITH FLANGE PLATES)

- SEQUENCE AND POSITION OF WELDING**
ALL THE WELDING IS TO BE DONE ENTIRELY IN DOWN HAND POSITION. S INDICATES SUBMERGED ARC WELDING. Nos. 1, 2, 3 ETC. NEXT TO ABOVE NOTATION INDICATE SEQUENCE BY WHICH THE WELDING IS TO BE PERFORMED. RUN-ON AND RUN-OFF PIECES SHALL BE PROVIDED.
- APPLICATION OF SINGLE HEAD MACHINE**
TO WELD GIRDERS WITH SINGLE HEAD MACHINE, FLANGES AND WEBS ARE TO BE SET IN FIXTURE AND TACKED.
- APPLICATION OF DOUBLE HEAD MACHINE ON GIRDERS LAID FLAT**
TWO WELDS ARE DEPOSITED ON ONE FACE OF WEB AT A TIME. THIS ARRANGEMENT DOES NOT REQUIRE REMOVAL OF THE ASSEMBLY FROM THE FIXTURE AFTER TACKING. THE FLANGE PLATES ARE SET AGAINST THE WEB IN THE FIXTURE AND TACKED MAIN WELDS, EACH JOINING FLANGE WITH THE WEB, ARE TO BE LAID WHILE ASSEMBLY IS STILL IN THE FIXTURE. AFTER COMPLETION OF FIRST FACE WELDING OF WEB, THE ASSEMBLY IS TO BE TURNED OVER AND WELDING OF THE SECOND FACE DONE.
- APPLICATION OF DOUBLE HEAD MACHINE ON GIRDERS IN VERTICAL POSITION**
IN THIS CASE TWO WELDS ARE LAID JOINING EACH FLANGE WITH THE WEB AT A TIME. THIS WILL REQUIRE TACKING OF THE FLANGES WITH THE WEB, WHICH ARE PREVIOUSLY SET IN FIXTURE SPECIALLY MADE FOR THE PURPOSE. THE ASSEMBLY IS TO BE REMOVED FROM THE FIXTURE AFTER TACKING IS COMPLETED AND POSITIONED IN A MANIPULATOR, THE TWO WELDING HEADS ARE OPERATED IN SUCH A WAY ONE HEAD WILL BE AWAY BY 600 MM, BOTH THE HEADS TRAVELING AT THE SAME SPEED. IT IS ADVISABLE TO LIMIT THE SINGLE RUN WELD TO 6 MM SIZE.
- AFTER EACH RUN OF WELDING, THE FABRICATED ARTICLE SHALL BE CHECKED FOR ANY DEFORMATION. IN CASE OF DEFORMATION BEYOND PERMISSIBLE LIMITS, THE SAME SHALL BE RECTIFIED BEFORE NEXT STAGE WELDING IS TAKEN UP.

WELDING STAGE II : (PROVIDING STUD SHEAR CONNECTORS)

- STUD WELDING SHALL BE DONE IN WORKSHOP.
- IF GIRDERS ARE TO BE HANDLED AFTER WELDING OF STUD SHEAR CONNECTORS, THE STUDS SHALL BE PROTECTED SUITABLY TO ENSURE THAT THERE IS NO DAMAGE TO THEM.

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APPROVED BY:- MARUT GUPTA
CHECKED BY:- VANDANA SINGH
DESIGN BY:- MANISH KUMAR
DRAWN BY:- YASHPAL SINGH

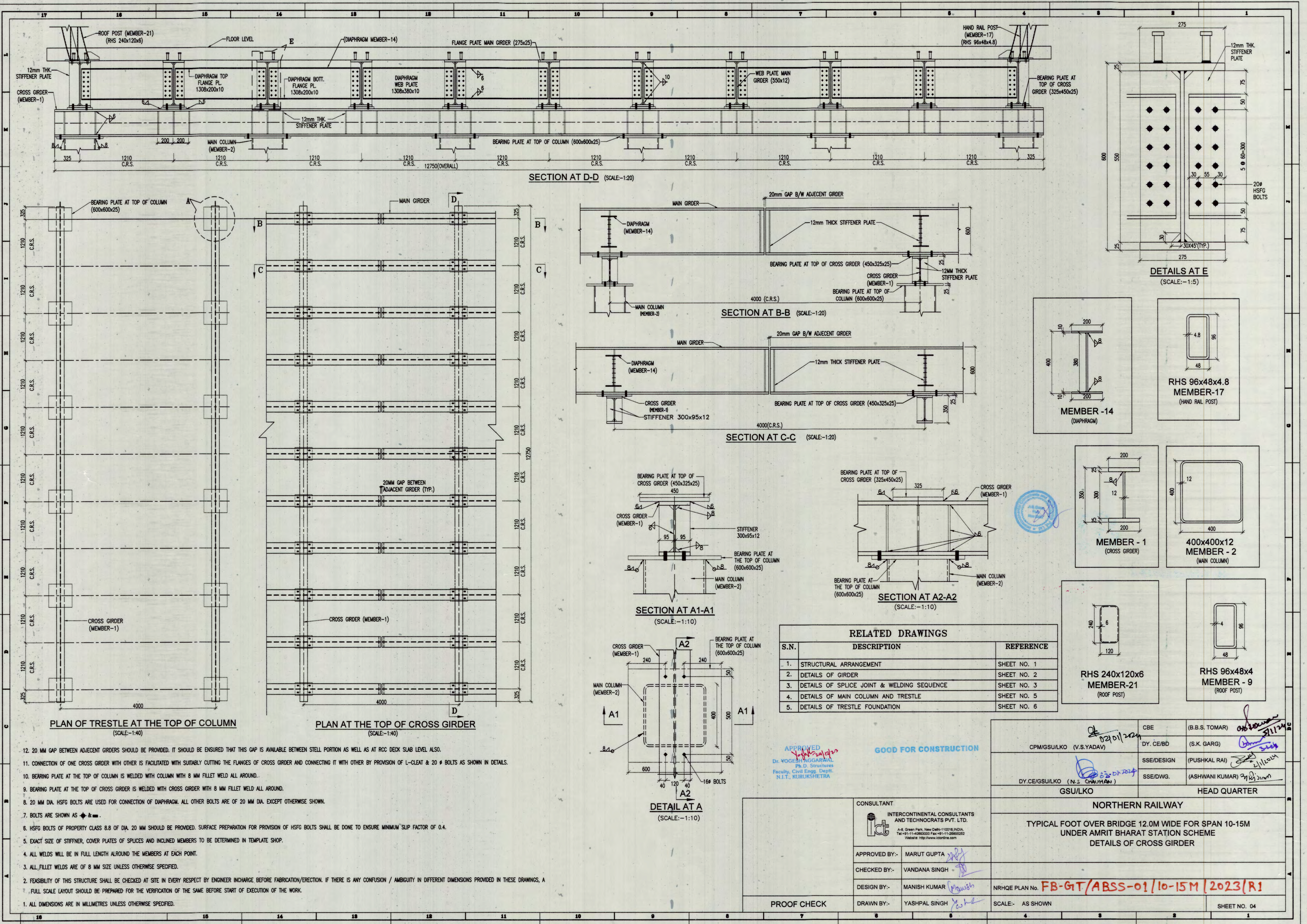
PROOF CHECK

CPM/GSU/LKO (V.S. YADAV)	CBE (B.B.S. TOMAR)
SSE/DESIGN (PUSHKAL RAI)	DY. CE/BD (S.K. GARG)
DY. CE/GSU/LKO (N.S. CHAUMHAN)	SSE/DWG. (ASHWANI KUMAR)
GSU/LKO HEAD QUARTER	

NORTHERN RAILWAY
TYPICAL FOOT OVER BRIDGE 12.0M WIDE FOR SPAN 10-15M
UNDER AMRIT BHARAT STATION SCHEME
DETAILS OF SPLICE JOINT
& WELDING SEQUENCE

NRHQ PLAN No. **FB-GT/ABSS-01/10-15M/2023/R1**
SCALE:- AS SHOWN
SHEET NO. 03

RELATED DRAWINGS		
S.N.	DESCRIPTION	REFERENCE
1.	STRUCTURAL ARRANGEMENT	SHEET NO. 1
2.	DETAILS OF GIRDER	SHEET NO. 2
3.	DETAILS OF CROSS GIRDER	SHEET NO. 4
4.	DETAILS OF MAIN COLUMN AND TRESTLE	SHEET NO. 5
5.	DETAILS OF TRESTLE FOUNDATION	SHEET NO. 6



- 20 MM GAP BETWEEN ADJACENT GIRDERS SHOULD BE PROVIDED. IT SHOULD BE ENSURED THAT THIS GAP IS AVAILABLE BETWEEN STEEL PORTION AS WELL AS AT RCC DECK SLAB LEVEL ALSO.
- CONNECTION OF ONE CROSS GIRDER WITH OTHER IS FACILITATED WITH SUITABLY CUTTING THE FLANGES OF CROSS GIRDER AND CONNECTING IT WITH OTHER BY PROVISION OF L-CLEAT & 20 # BOLTS AS SHOWN IN DETAILS.
- BEARING PLATE AT THE TOP OF COLUMN IS WELDED WITH COLUMN WITH 8 MM FILLET WELD ALL AROUND.
- BEARING PLATE AT THE TOP OF CROSS GIRDER IS WELDED WITH CROSS GIRDER WITH 8 MM FILLET WELD ALL AROUND.
- 20 MM DIA. HSGF BOLTS ARE USED FOR CONNECTION OF DIAPHRAGM. ALL OTHER BOLTS ARE OF 20 MM DIA. EXCEPT OTHERWISE SHOWN.
- BOLTS ARE SHOWN AS $\bullet$ & $\circ$.
- HSGF BOLTS OF PROPERTY CLASS 8.8 OF DIA. 20 MM SHOULD BE PROVIDED. SURFACE PREPARATION FOR PROVISION OF HSGF BOLTS SHALL BE DONE TO ENSURE MINIMUM SLIP FACTOR OF 0.4.
- EXACT SIZE OF STIFFENER, COVER PLATES OF SPLICES AND INCLINED MEMBERS TO BE DETERMINED IN TEMPLATE SHOP.
- ALL WELDS WILL BE IN FULL LENGTH AROUND THE MEMBERS AT EACH POINT.
- ALL FILLET WELDS ARE OF 8 MM SIZE UNLESS OTHERWISE SPECIFIED.
- FEASIBILITY OF THIS STRUCTURE SHALL BE CHECKED AT SITE IN EVERY RESPECT BY ENGINEER INCHARGE BEFORE FABRICATION/ERECTION. IF THERE IS ANY CONFUSION / AMBIGUITY IN DIFFERENT DIMENSIONS PROVIDED IN THESE DRAWINGS, A FULL SCALE LAYOUT SHOULD BE PREPARED FOR THE VERIFICATION OF THE SAME BEFORE START OF EXECUTION OF THE WORK.
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.

RELATED DRAWINGS		
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APPROVED
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APPROVED BY:- MARUT GUPTA
CHECKED BY:- VANDANA SINGH
DESIGN BY:- MANISH KUMAR
DRAWN BY:- YASHPAL SINGH

PROOF CHECK

CPM/GSULKO (V.S.YADAV)	CBE	(B.B.S. TOMAR)
DY.CE/GSULKO (N.S. CHAUHAN)	DY. CE/BD	(S.K. GARG)
	SSE/DESIGN	(PUSHKAL RAI)
	SSE/DWG.	(ASHWANI KUMAR)
GSULKO		HEAD QUARTER

NORTHERN RAILWAY

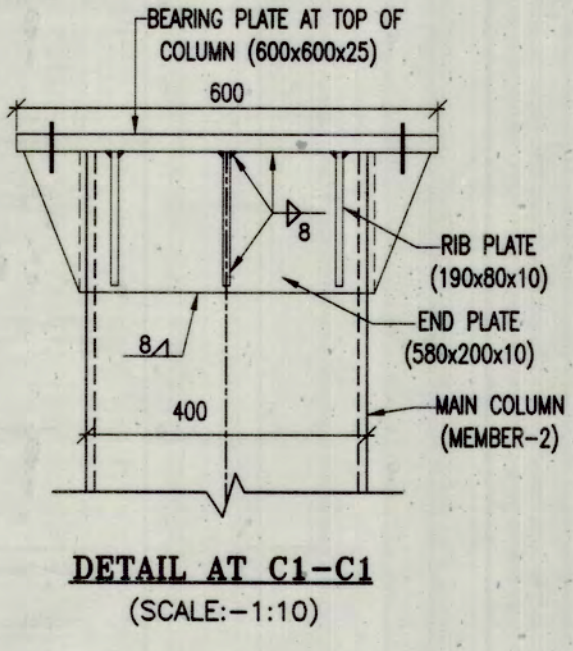
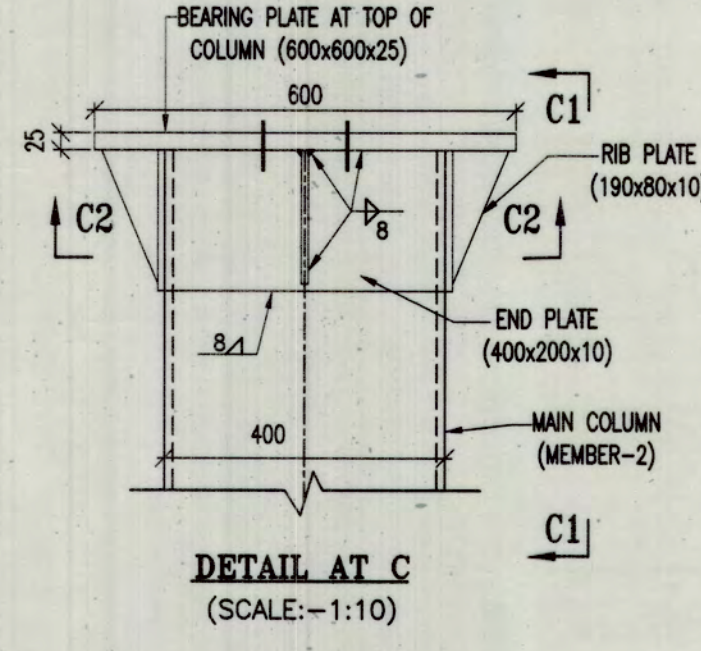
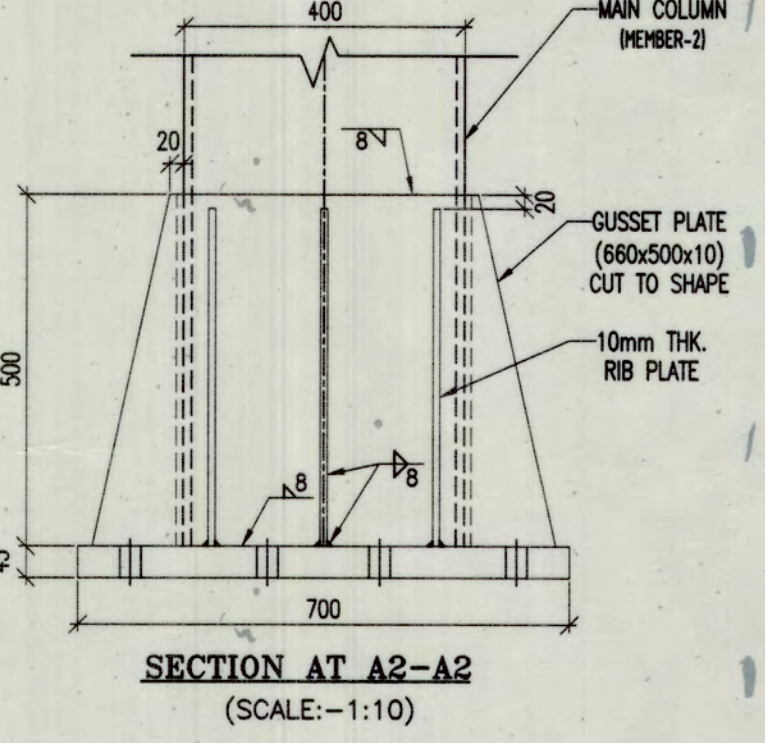
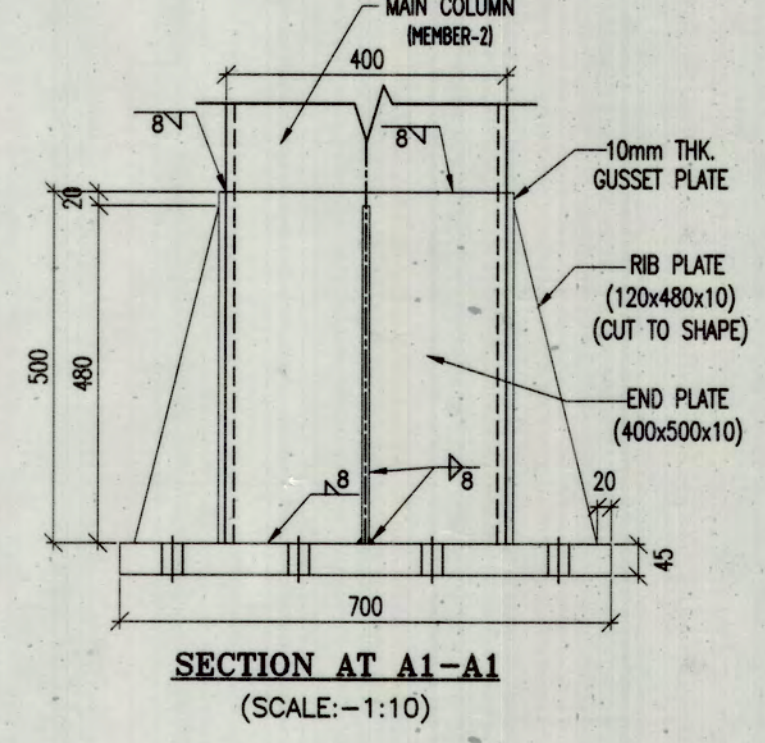
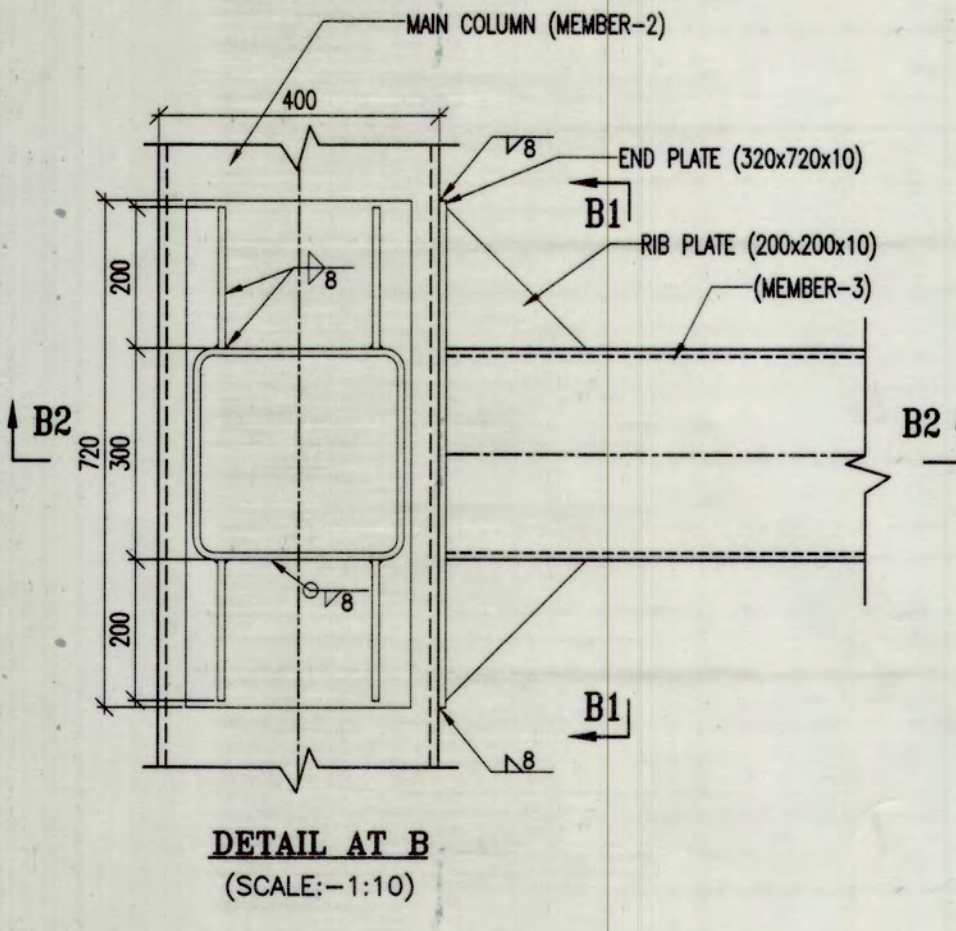
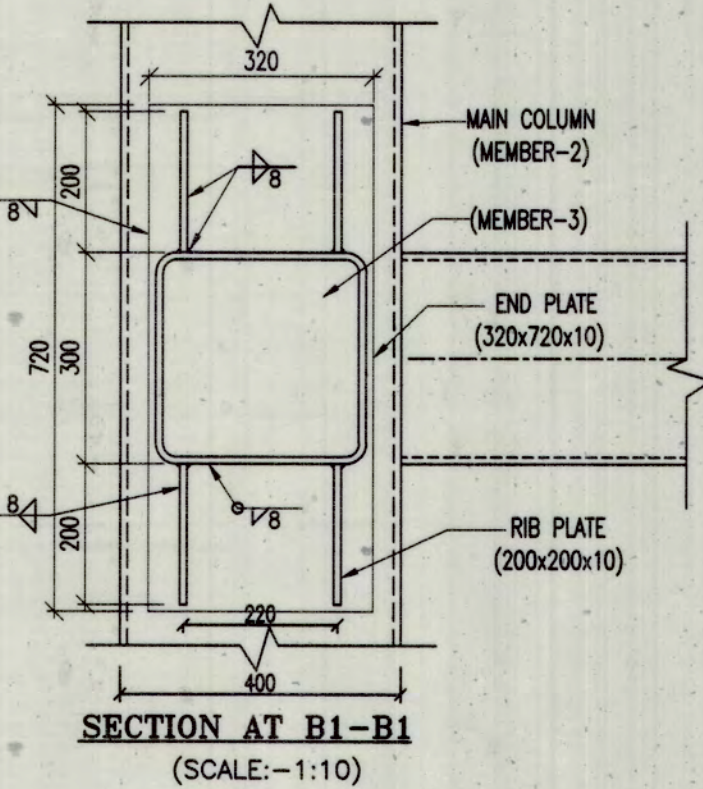
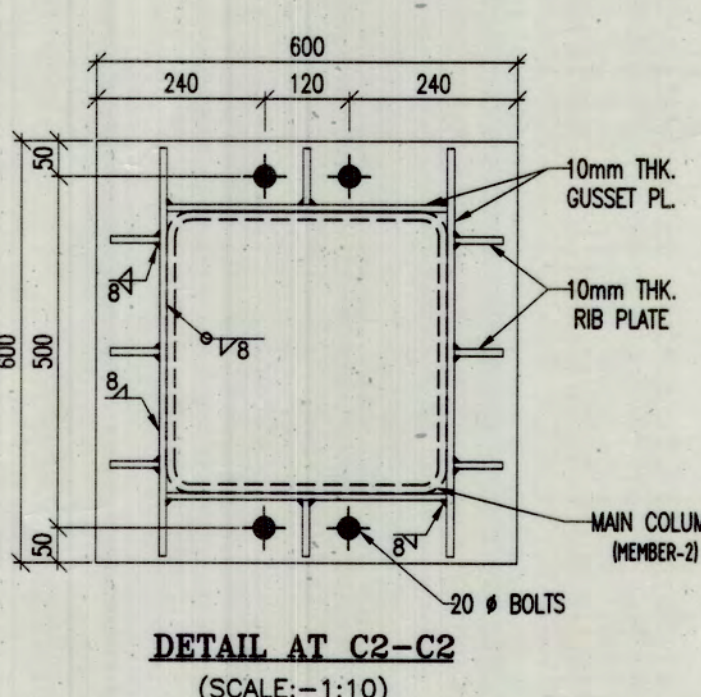
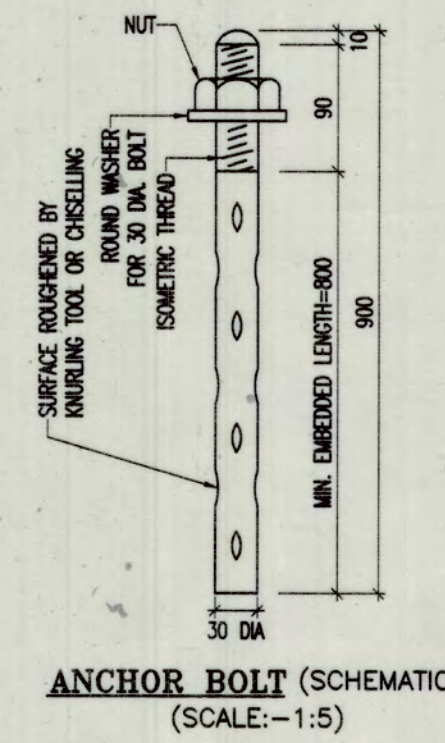
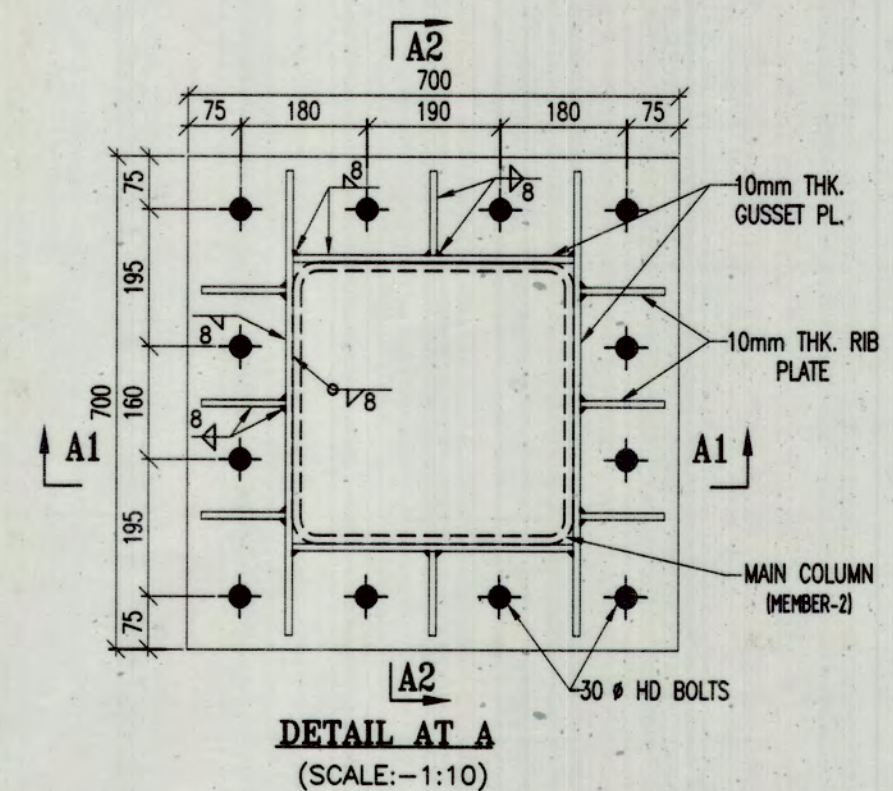
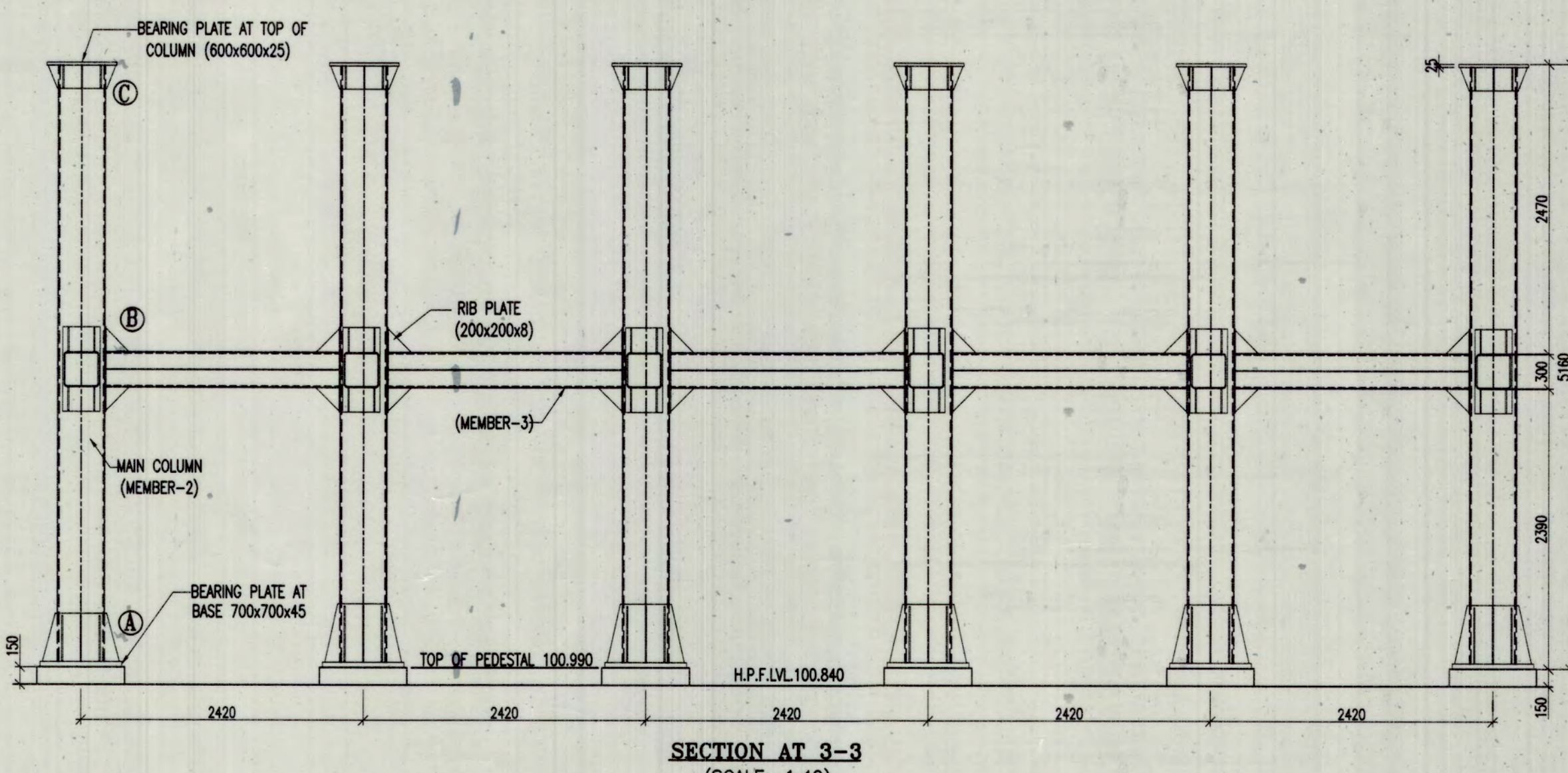
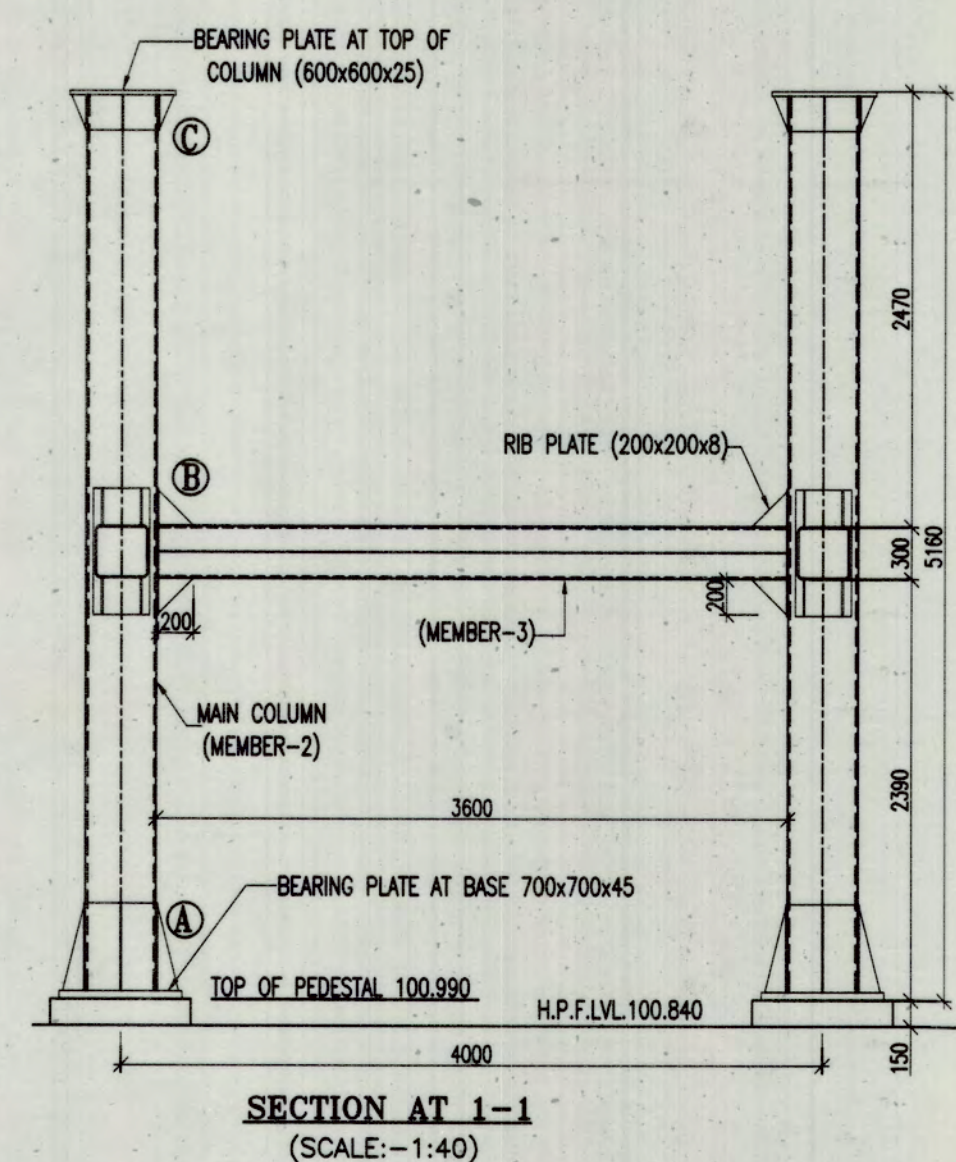
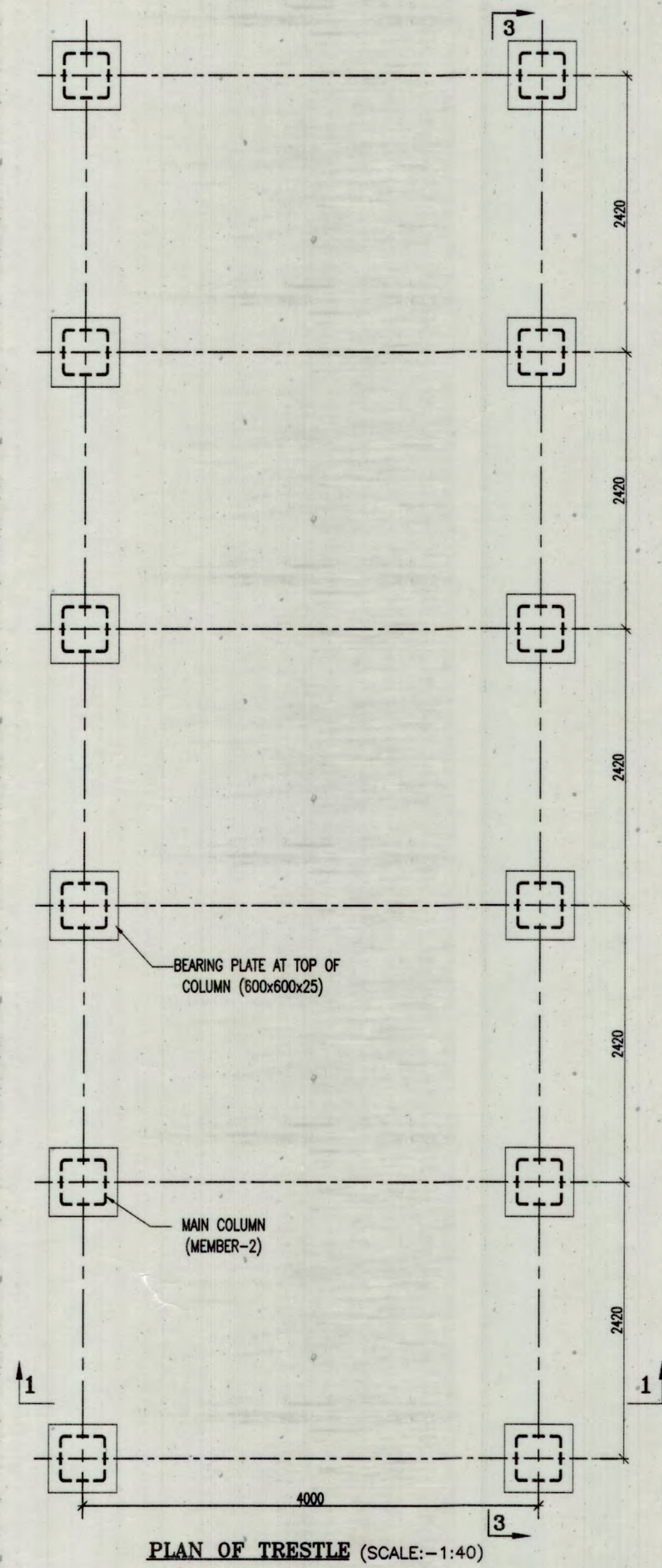
TYPICAL FOOT OVER BRIDGE 12.0M WIDE FOR SPAN 10-15M
UNDER AMRIT BHARAT STATION SCHEME
DETAILS OF CROSS GIRDER

NRHQ PLAN No. FB-GT/ABSS-01/10-15M/2023/R1

SCALE:- AS SHOWN

SHEET NO. 04

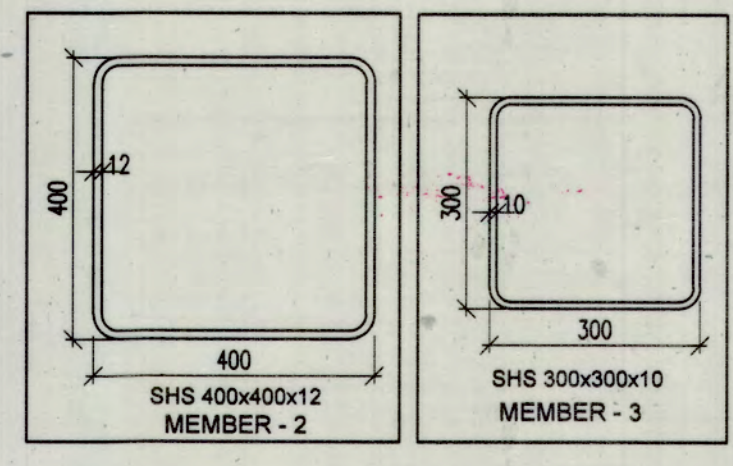
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GOOD FOR CONSTRUCTION

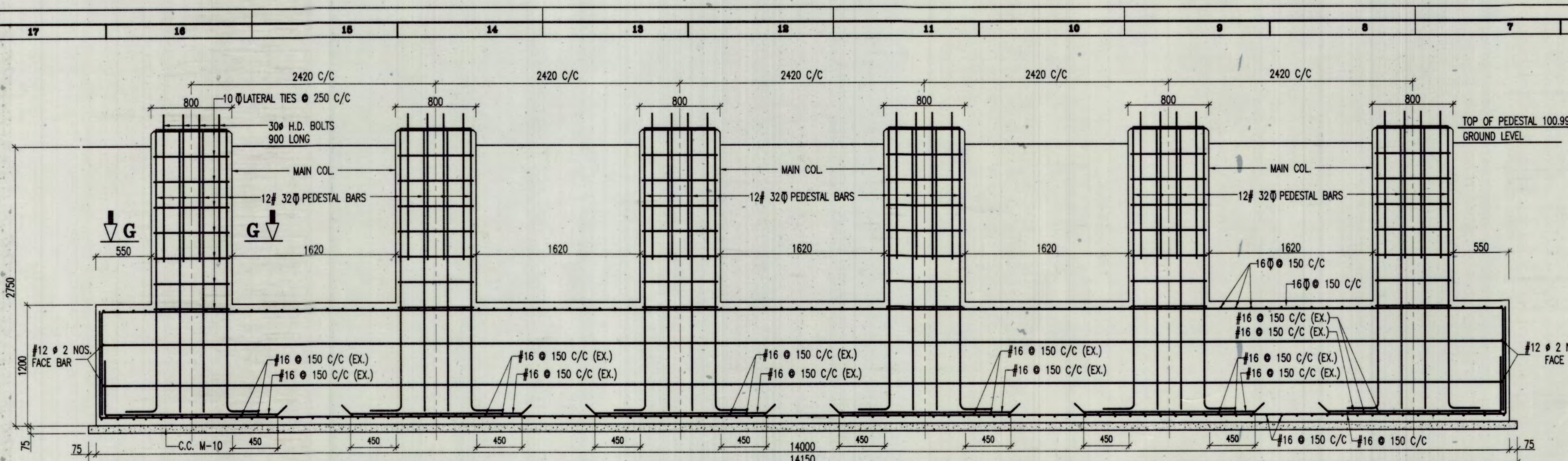
APPROVED
Dr. YOGESH AGGARWAL
Ph.D. Structural
Faculty, Civil Engg. Deptt.
N.I.T. KURUKSHETRA

RELATED DRAWINGS		
S.N.	DESCRIPTION	REFERENCE
1.	STRUCTURAL ARRANGEMENT	SHEET NO. 1
2.	DETAILS OF GIRDER	SHEET NO. 2
3.	DETAILS OF SPICE JOINT & WELDING SEQUENCE	SHEET NO. 3
4.	DETAILS OF CROSS GIRDER	SHEET NO. 4
5.	DETAILS OF TREESTLE FOUNDATION	SHEET NO. 6

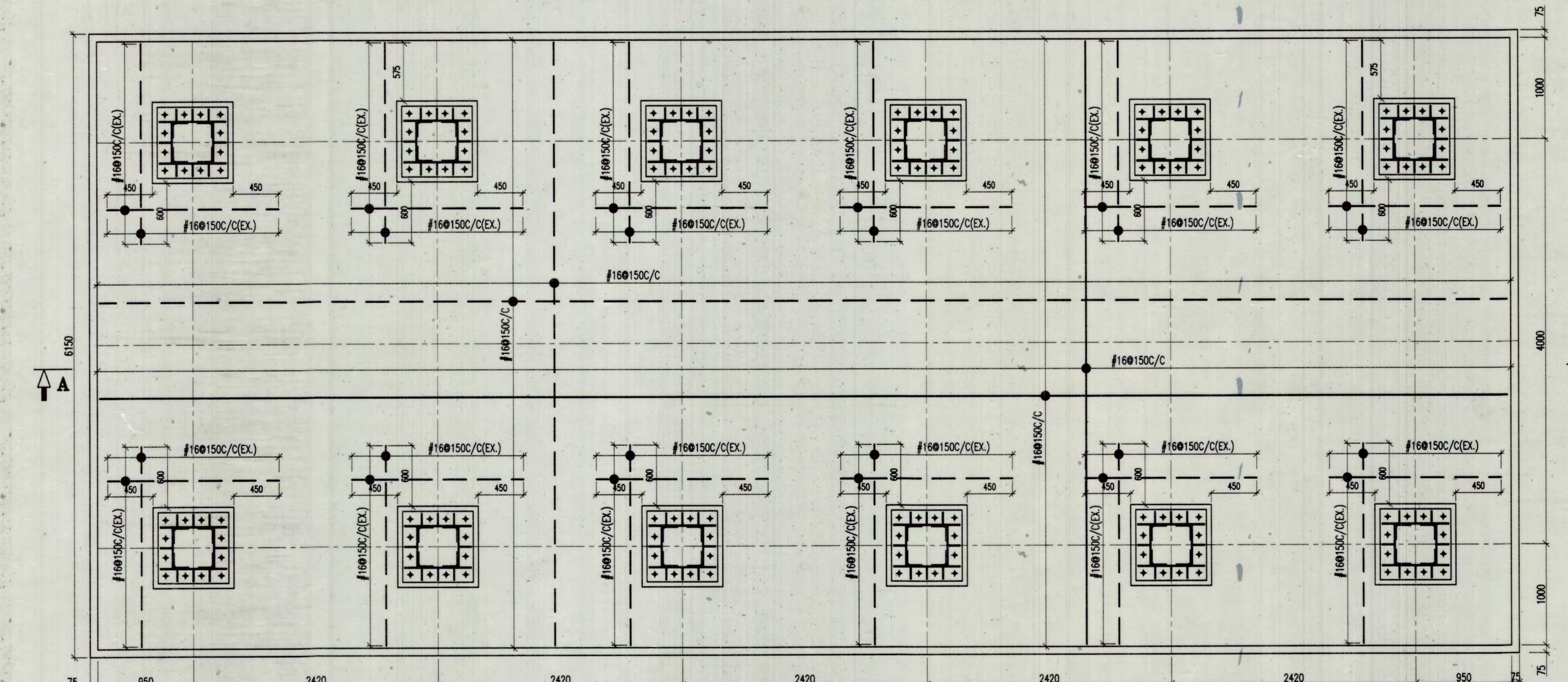


9. SUITABLE NOTCH/CUT IN THE RIB PLATE SHOULD BE PROVIDED SO THAT IT DOES NOT INFRINGE WITH THE WELD OF MAIN COLUMN WITH BASE PLATE/BEARING PLATE.
8. ALL ANCHOR BOLTS ARE OF 30 # EXCEPT OTHERWISE SHOWN AS PER IS:1367 PROPERTY CLASS 6.6.
7. ANCHOR BOLTS ARE SHOWN AS
6. EXACT SIZE OF RIB PLATES & GUSSET TO BE DETERMINED IN TEMPLATE SHOP.
5. ALL WELDS WILL BE IN FULL LENGTH AROUND THE MEMBERS AT EACH JOINT.
4. ALL MEMBERS MEETING AT A JOINT ARE FILLET WELDED EXCEPT OTHERWISE STATED.
3. ALL WELDS ARE 8 MM FILLET WELDS EXCEPT OTHERWISE SPECIFIED.
2. FEASIBILITY OF THIS STRUCTURE SHALL BE CHECKED AT SITE IN EVERY RESPECT BY ENGINEER INCHARGE BEFORE FABRICATION/ERECTION. IF THERE IS ANY CONFUSION / AMBIGUITY IN DIFFERENT DIMENSIONS PROVIDED IN THESE DRAWINGS, A FULL SCALE LAYOUT SHOULD BE PREPARED FOR THE VERIFICATION OF THE SAME BEFORE START OF EXECUTION OF THE WORK.
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.

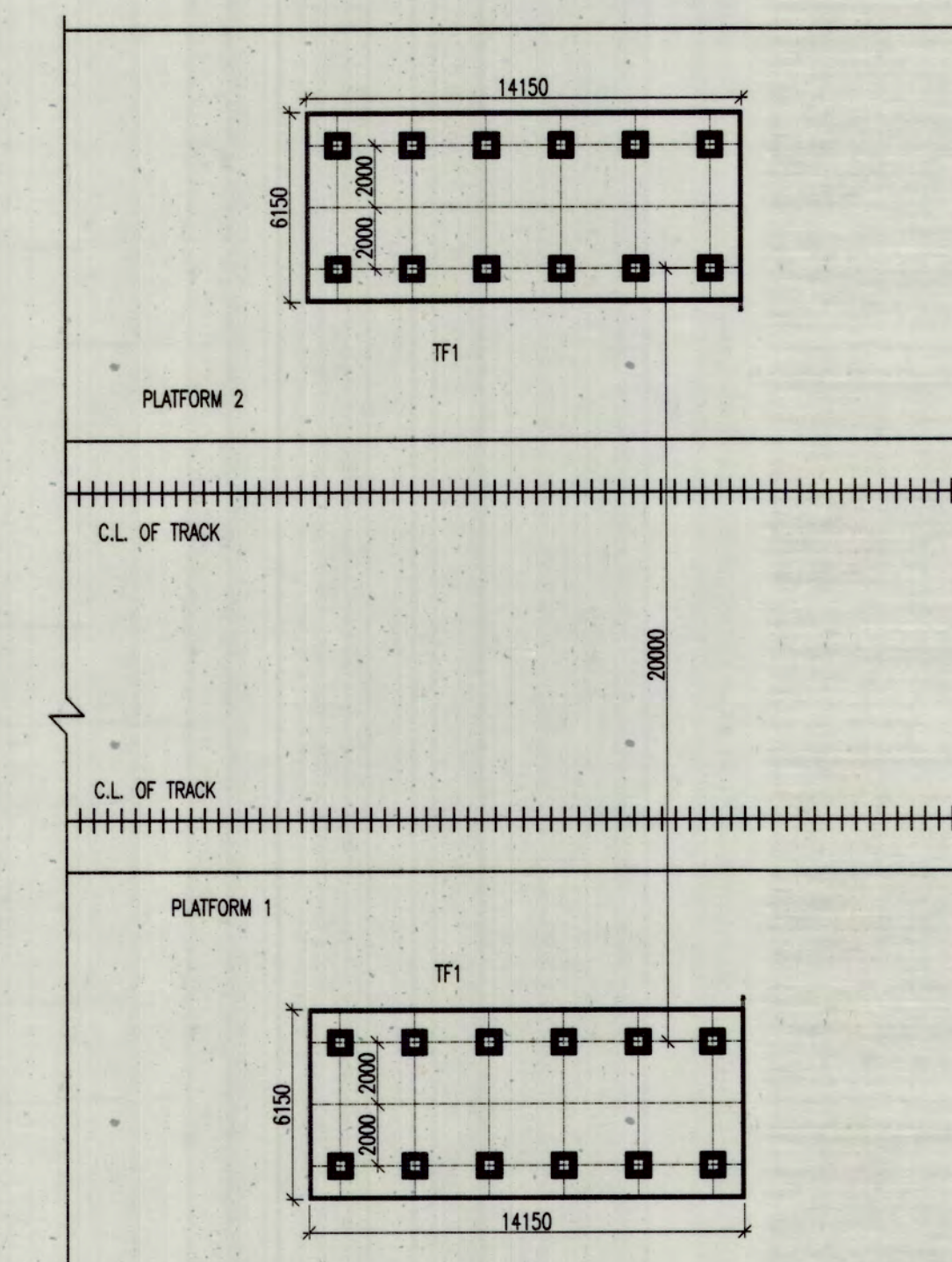
PROOF CHECK	CONSULTANT INTERCONTINENTAL CONSULTANTS AND TECHNOCRATS PVT. LTD. A-8, Green Park, New Delhi-110016, INDIA. Tel: +91-11-42883000 Fax: +91-11-26862622 Website: http://www.icdtonline.com	NORTHERN RAILWAY	
	APPROVED BY:- MARUT GUPTA	TYPICAL FOOT OVER BRIDGE 12.0M WIDE FOR SPAN 10-15M UNDER AMRIT BHARAT STATION SCHEME DETAILS OF MAIN COLUMN AND TREESTLE	
	CHECKED BY:- VANDANA SINGH	NRHQ PLAN No. FB-GT/ABSS-01/10-15M/2023/1A1	
	DESIGN BY:- MANISH KUMAR	SCALE:- AS SHOWN	
DRAWN BY:- YASHPAL SINGH		SHEET NO. 05	



SECTION A-A
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

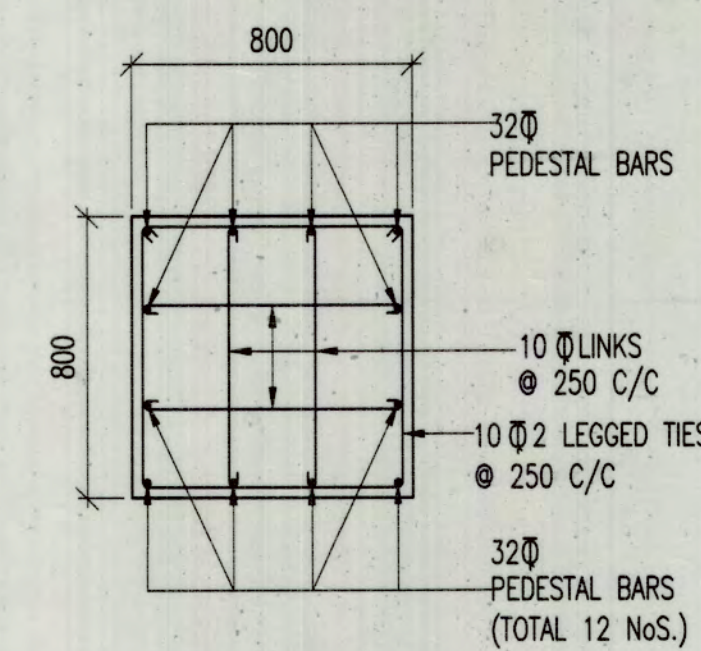


FOUNDATION PLAN
(SLAB REINFORCEMENT NOT SHOWN FOR CLARITY)

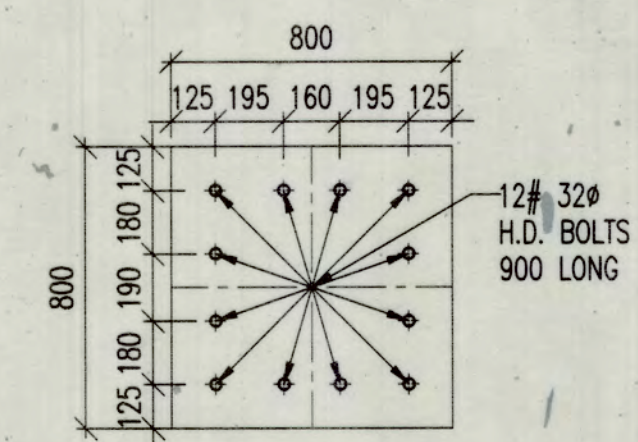


KEY PLAN

- ALL DIMENSIONS ARE IN MILLIMETER UNLESS OTHERWISE SPECIFIED.
- DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
- ALL R.C.C WORK IS TO BE DONE IN ACCORDANCE WITH LATEST NORTHERN RAILWAY SPECIFICATION & IRS CONC. BRIDGE CODE CORRECTION UP TO DATE.
- PARTICULAR CARE MUST BE TAKEN TO ENSURE THAT:
 - NO SAG OCCURS IN REINFORCEMENT DURING EXECUTION OF WORK.
 - MINIMUM CLEAR COVER TO REINFORCEMENT TO BE MAINTAINED IN FOUNDATION & PEDESTAL.
 - PEDESTAL = 50 mm
 - RAFT FOUNDATION TOP 50 mm & BOTTOM 75 mm
 - LAP LENGTH WHERE BARS OBTAINED ARE OF SHORTER LENGTH MUST NOT BE LESS 42 TIMES DIA OF BAR.
- ALL CEMENT CONCRETE TO BE MECHANICALLY MIXED & VIBRATED.
- ALL BINDERS/STIRRUPS/LINKS SHALL BE EFFECTIVELY TIED WITH MAIN REINFORCEMENT BARS.
- VIBRATED CONTROLLED CONCRETE OF MINIMUM COMPRESSIVE STRENGTH OF 250 KG/CM² (M-25) TO BE USED FOR ALL FOUNDATIONS.
- FOUNDATION HAS BEEN DESIGNED BY CONSIDERING GROSS SAFE BEARING CAPACITY OF 12.0T/M² AT THE BASE OF FOUNDATION.
- HSD/TMT BARS CONFORMING TO IS 1786-2000 SHALL BE USED. (GRADE OF TMT BAR Fe 500)
- ENGINEER INCHARGE SHOULD ENSURE THE LOCATIONS/DIA/LENGTH OF HOLDING DOWN BOLTS DURING CONCRETING OF FOUNDATION. HOLDING DOWN BOLTS SHOULD BE PLACED PROPERLY AT DESIRED LOCATIONS AND MATCH WITH THE BASE PLATE OF COLUMNS.
- DEPTH OF FOUNDATION BELOW GROUND LEVEL SHOWN IN DRAWING FOR DIFFERENT FOUNDATIONS IS THE MINIMUM GRIP LENGTH OF FOOTING IN THE GROUND. IF ANY LOCATION THE GROUND IS FOUND LOWER THAN THE GROUND LEVEL SHOWN IN THE DRAWING, THEN BOTTOM OF FOUNDATION SHOULD BE ACCORDINGLY LOWERED TO HAVE MINIMUM GRIP LENGTH.



SEC. G-G
(PEDESTAL MAIN TRESTLE)



(PEDESTAL MAIN TRESTLE)
SHOWING
LOCATION OF H.D. BOLTS

LEGEND

—	TOP REINFORCEMENT
- - -	BOTTOM REINFORCEMENT

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A-8, Green Park, New Delhi-110016, INDIA. Tel: +91-11-4983000 Fax: +91-11-2668252 Website: http://www.icotline.com	
APPROVED BY:-	MARUT GUPTA
CHECKED BY:-	VANDANA SINGH
DESIGN BY:-	MANISH KUMAR
DRAWN BY:-	YASHPAL SINGH
PROOF CHECK	

RELATED DRAWINGS		
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4.	DETAILS OF CROSS GIRDER	SHEET NO. 4
5.	DETAILS OF MAIN COLUMN AND TRESTLE	SHEET NO. 5

CPM/GSULKO (V.S.YADAV)	CBE	(B.B.S. TOMAR)
DY. CE/BD	(S.K. GARG)	
DY. CE/GSULKO (N.S. CHAUDHARI)	SSE/DESIGN	(PUSHKAL RAI)
GSU/LKO	SSE/DWG.	(ASHWANI KUMAR)
HEAD QUARTER		

NORTHERN RAILWAY		
TYPICAL FOOT OVER BRIDGE 12.0M WIDE FOR SPAN 10-15M UNDER AMRIT BHARAT STATION SCHEME DETAILS OF TRESTLE FOUNDATION		
NRHQ PLAN No. FB-GT/ABSS-01/10-15M/2023/R1	SCALE:- AS SHOWN	SHEET NO. 06



GOOD FOR CONSTRUCTION