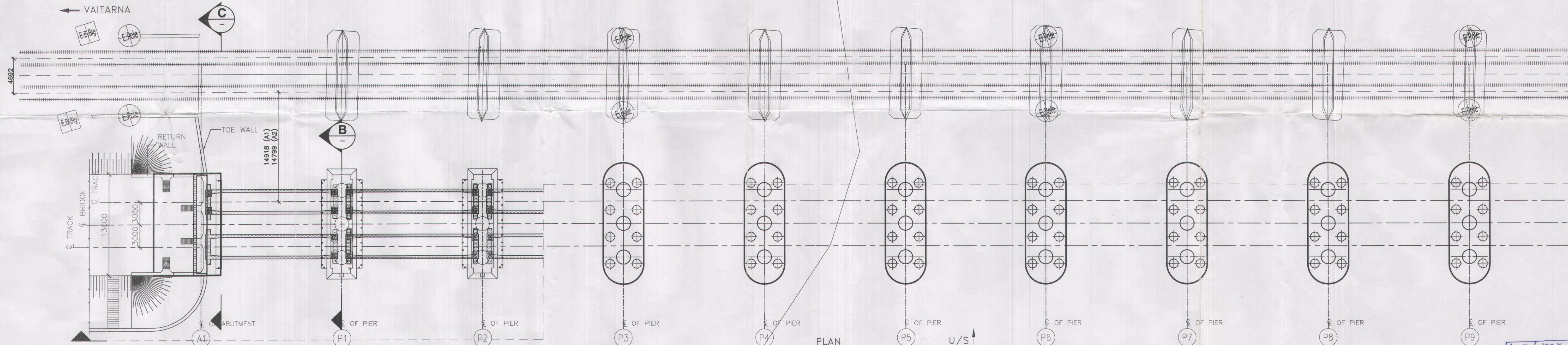


LONGITUDINAL ELEVATION 'A-A'
(SCALE 1:250)



PLAN
(SCALE 1:300)

PART PLAN AT SUB - STRUCTURE

HALF PLAN AT SUPER-STRUCTURE

THE LEVEL ARE CORRECTED AS PER SURVEY PLAN RECEIVED FROM SITE. DRG: SOMA-DFCC-417-2001

- BASE RAIL LEVEL ON EXISTING BRIDGE - Dn TRACK - BEHIND A1-191.257m
- EXISTING RAIL LEVEL TO HFL - 2.754m
- PROPOSED RAIL LEVEL - 193.278m
- CLEARANCE ABOVE HFL - 1.800m
- DISCHARGE - 5085 CUMECs
- EXISTING BRIDGE SOFFIT LVL - 188.996m
- EXISTING BRIDGE DANGER LVL - 187.332m

DESIGN CRITERIA :

I.R.S. BRIDGE RULES
I.R.S. CONCRETE BRIDGE CODE
I.R.S. BRIDGE SUB-STRUCTURE AND FOUNDATION CODE
I.R.S. SCHEDULE OF DIMENSIONS FOR DEDICATED FREIGHT CORRIDOR.
MANUAL ON THE DESIGN AND CONSTRUCTION OF WELL AND PILE FOUNDATIONS.
LOADING STANDARD : DFCC LOADING 2007
I.R.S. BRIDGE MANUAL

TYPICAL NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
2. SHOWN DIMENSIONS ARE TENTATIVE AND MAY CHANGE AFTER FINAL STRUCTURAL DESIGN.
3. THIS DRAWING IS BASED ON TOPOGRAPHIC, HYDROGRAPHIC SURVEY (AS APPROVED BY CPM/SURAT) AND GEOTECHNICAL INVESTIGATION CARRIED OUT AT SITE BY M/s. SOMA ENTERPRISE.
4. DELETED.
5. THE DRAWING AND DESIGN IS AS PER EMPLOYER'S REQUIREMENTS & SPECIFICATIONS AS CONTAINED IN THE CONTRACT AGREEMENT NO. H2 / EN / WC / BRIDGES / D&B /1 /SOMA AND THERE IS NO CHANGE.
6. SAFETY AND PROTECTION OF THE PROPOSED WORK AND SAFETY AND PROTECTION FOR THE RUNNING TRAINS ON THE EXISTING LINES IS TO BE ENSURED BY THE CONTRACTOR.

7. EXCAVATION/DISMANTLING OF ANY PORTION OF THE EXISTING BRIDGE OR IN ITS VICINITY OR ANY ELEMENT OF EXISTING PERMANENT WAY OR ANY WORK AFFECTING SAFETY OF THE EXISTING BRIDGE /PERMANENT WAY OR SAFETY OF THE RUNNING TRAINS WILL REQUIRE APPROVAL OF THE CONCERNED ZONAL RAILWAY AND COMPLIANCE OF THE SAFETY REQUIREMENT AS DIRECTED BY THE CONCERNED ZONAL RAILWAY.

8. ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE DRAWING APPROVING AUTHORITY BEFORE EXECUTION OF WORK AT SITE.

9. FOUNDATION DEPTH AS SHOWN IN THE GAD IS TENTATIVE & MAY BE ALTERED AS PER DESIGN, REQUIREMENT, FINAL DEPTH SHALL BE INDICATED IN THE STRUCTURAL DRAWING, ANY ALTERATION / MODIFICATION REQUIRED DURING CONSTRUCTION STAGE, WILL REQUIRE PRIOR APPROVAL OF DESIGN APPROVING AUTHORITY.

10. WEEP HOLE TO BE PROVIDED IN WING WALL/RETURNS AS PER IRS SUB-STRUCTURE CODE AND IRS CONCRETE BRIDGE CODE (MINIMUM 1200 PVC PIPES @1.5m SPACING BOTH WAYS) REF. CL. NO. 3.6 OF SPECIFICATIONS VOL-III.

11. EARTH FILLING BETWEEN THE EXISTING RAILWAY FORMATION AND PROPOSED DFCC FORMATION AS MARKED 'X' IN THE DRAWING TO BE KEPT ABOVE HFL.

12. EARTH WORK ON APPROACHES ON THE BRIDGES SHALL BE AS PER DFCC'S SPECIFICATION REF. CL. NO. 2.1 TO 2.20 VOL-III.

13. FOR BANK HEIGHT MORE THAN 5m ADEQUACY OF BANK IS TO BE CHECKED BY DOING APPROPRIATE SLOPE STUDY ANALYSIS AND PROVIDE SUITABLE STRENGTHENING OR OTHER ARRANGEMENT TO MAKE BASE STRUCTURALLY SAFE.

14. PROPER BENCHING ON EXISTING FORMATION TO BE DONE BEFORE EXECUTION OF EARTHWORK FOR DFCC'S FORMATION.

15. BEHIND ABUTMENTS, WING WALLS AND RETURN WALLS BACK FILL MATERIAL SHALL BE PROVIDED AS PER DFCC'S SPECIFICATION REF. CL. NO. 3.5.7 AND 3.5.8 OF SPECIFICATIONS VOL -III & WITH MINIMUM @ VALUE OF 35°

16. STONE PITCHING ON SLOPES OF BANK ON APPROACHES OF BRIDGES SHALL BE PROVIDED UPTO 300mm ABOVE HFL DEPENDING UPON THE SITE CONDITION.

17. FOR TRANSITION SYSTEM ON APPROACH OF BRIDGES REFER SEPARATE DRG.

18. FOR BORE HOLE DETAILS REFER: SOMA/DFCC/549.

19. DELETED.

20. BEARING CAPACITY TO BE ASCERTAINED BY CONDUCTING INITIAL LOAD TEST AND WORKING LOAD TEST AT EACH SUB STRUCTURE LOCATION AND REPORTS SUBMITTED TO DESIGN CELL FOR APPROVAL BEFORE TAKING UP CONSTRUCTION.

IMPORTANT NOTES:

27. THE WING WALL OF DFCC BRIDGE ON W.R. BRIDGE SIDE SHOULD BUTT AGAINST W.R. WING WALL WITH FOUNDATION OF DFCC WING WALL TOUCHING THE FOUNDATION OF THE W.R. WING WALL AND THE PORTION OF DFCC WING WALL ABOVE THE FOUNDATION OF W.R. WING WALL TO BE HANG AS A CANTILEVER OF SMALL HEIGHT. SUITABLE PROTECTION SHOULD BE PROVIDED IN BETWEEN BOTH THE WING WALLS. THE R.C.C. FLOORING SHOULD NOT BE PROVIDED AS THE FOUNDATION OF R.C.C. FLOORING WILL REQUIRE EXPOSING OF W.R. BRIDGE ABUTMENT FOUNDATION WITHOUT ANY ADVANTAGE IN PROTECTION.
28. IN CASE OF STRUCTURAL CHANGES IN WING WALL OR ANY OTHER CHANGE REQUIRING SPEED RESTRICTION ON EXISTING W.R. BRIDGES ORS SANCTION WILL BE TAKEN.
29. THE EXISTING WORK IS SHOWN IN LIGHT BLACK AND THE PROPOSED WORK IS SHOWN IN DARK BLACK.
30. THE PILE CAP LEVEL (TOP) OF DFCC BRIDGE SHOULD BE AT LEAST 50cm BELOW THE BED LEVEL OF CHANNELS WHICH ARE DRY IN WORKING SEASON (NOT APPLICABLE)

REV.	CONTRACTOR REVISION NO.	PARTICULARS	DRN.	CHD.	VER.	DATE
R10	REVISED AS PER PROOF CONSULTANTS'S LETTER NO. 13/E/6554/PB/NCI/2029 DATED 06.03.2013	AKK	SKH	NG	05.04.13	
R9	REVISED AS PER DFCC'S LETTER NO. ST/EN/SOMA/DD/VOL.V/66 DATED 22.01.2013	GJJ	SKH	NG	31.01.13	
R8	REVISED AS PER DFCC'S LETTER NO. ST/EN/SOMA/GEN/VOL.XI/34 DATED 22.11.2012	GJJ	HSG	NG	30.11.12	
R7	COMPARISON TABLE ADDED	GJJ	HSG	NG	10.01.12	
R6	BLOCK REMOVED	GJJ	HSG	NG	23.08.11	
R5	MODIFIED AS PER DISCUSSION HELD IN DFCC OFFICE ON 21st & 22nd JULY-2011	KAMAL	HSG	NG	28.07.11	
R4	MODIFIED AS PER M/S STUP LETTER NO. 13/E/6554/PB/MKM/1152 DATED 07.07.2011	CJJ	HSG	NG	08.07.11	
R3	MODIFIED AS PER 'DER-7' DTD. 16.02.2011	KAMAL	HSG	NG	04.03.11	

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PROOF CONSULTANTS : STUP Consultants Pvt. Ltd.

OFFICE OF ORIGIN

FM/Dy CPM CPM TCPL PMC SEL

DRAWN BY KAMAL		CLIENT: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.	
CHECKED BY HSG		PROJECT : WESTERN FREIGHT CORRIDOR : MAJOR BRIDGES BETWEEN VAITARNA AND UTRAN ON VASAI - BHARUCH SECTION	
VERIFIED BY NG		BRIDGE NO. : BRIDGE NO. 183 OF SURAT UNIT (EXT BRIDGE NO-417)	
DATE OF ISSUE 17.11.2009		DRAWING TITLE : GENERAL ARRANGEMENT DRAWING OF 13x19.05m PSC BOX GIRDER BRIDGE AT km 249/11-19 ON MINDHOLA RIVER (SHEET 1 OF 3)	
REV. 10		SCALE : AS SHOWN	
STATUS : APPROVAL		SOMA-DFCC-417-C-1001	