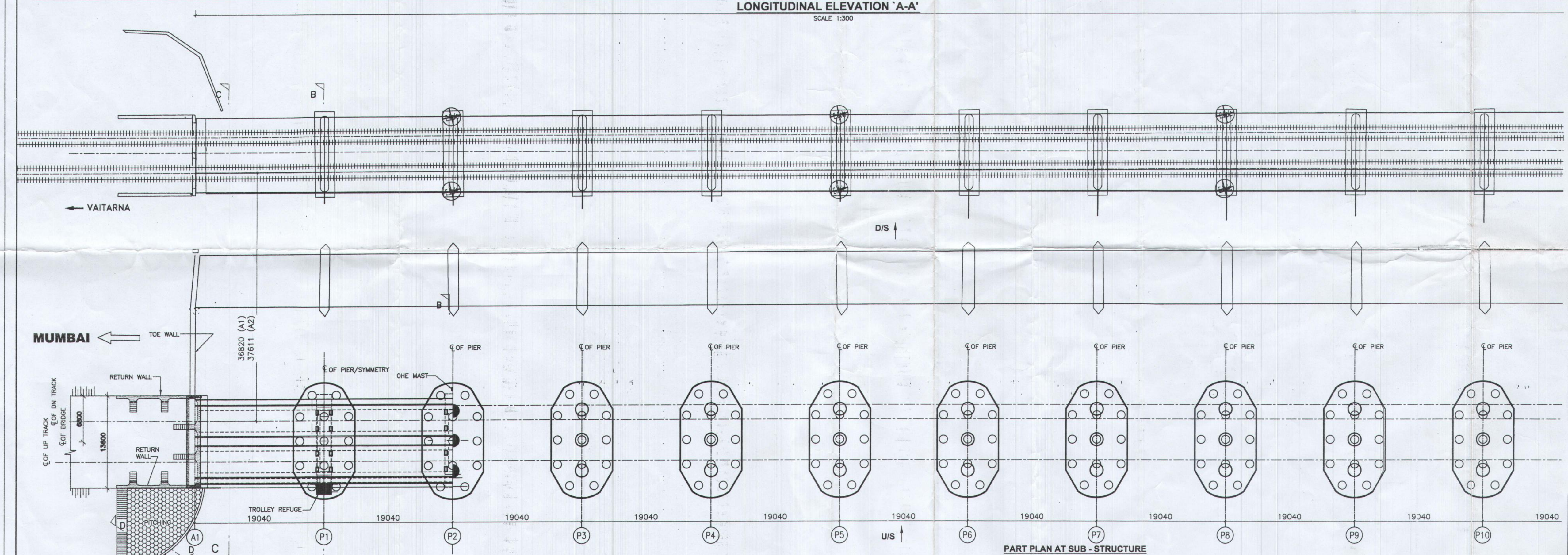
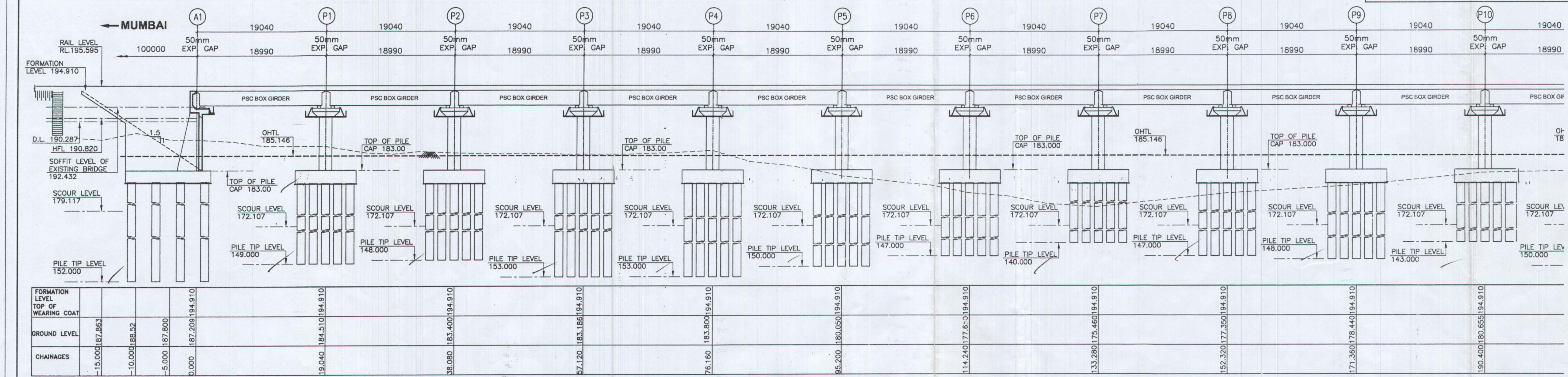


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SL. NO.	DESCRIPTION	EXISTING	PROPOSED
1.	RAIL LEVEL	194.483	195.595
2.	FORMATION LEVEL	193.798	194.910
3.	SOFFIT LEVEL	192.432	192.620
4.	H.F.L.	190.820	190.820
5.	CLEARANCE	1.612	1.800
6.	FREE BOARD	2.978	4.090
7.	LINEAR WATER WAY	318.767	306.750
8.	NO. OF SPANS	18	18
9.	BED LEVEL	VARYING	VARYING
10.	LOADING STANDARDS	MBG	DFCC
11.	INVERT LEVEL OF DRAIN	-	193.900
12.	DANGER LEVEL	190.287	190.287
13.	REFERENCE BENCH MARK AS TAKEN @A1	-	194.333
14.	PILE CAP TOP A1	188.200	183.000
15.	PILE CAP TOP P1	183.239	183.000
16.	PILE CAP TOP P2	183.234	183.000
17.	PILE CAP TOP P3	183.231	183.000
18.	PILE CAP TOP P4	183.242	183.000
19.	PILE CAP TOP P5	183.250	183.000
20.	PILE CAP TOP P6	183.240	183.000
21.	PILE CAP TOP P7	183.210	183.000
22.	PILE CAP TOP P8	183.215	183.000
23.	PILE CAP TOP P9	183.218	183.000
24.	PILE CAP TOP P10	183.240	183.000
25.	PILE CAP TOP P11	183.215	183.000
26.	PILE CAP TOP P12	183.217	183.000
27.	PILE CAP TOP P13	183.215	183.000
28.	PILE CAP TOP P14	183.220	183.000
29.	PILE CAP TOP P15	183.230	183.000
30.	PILE CAP TOP P16	183.225	183.000
31.	PILE CAP TOP P17	183.228	183.000
32.	PILE CAP TOP A2	188.301	183.000

THE LEVEL ARE CORRECTED AS PER SURVEY PLAN RECEIVED FROM SITE.
DRG: DRG-SOMA-DFCC-401-2001
• BASE RAIL LEVEL ON EXISTING BRIDGE - UP TRACK - BEHIND A2-194.483m
• EXISTING RAIL LEVEL TO HFL - 3.663m
• PROPOSED RAIL LEVEL - 195.595m
• CLEARANCE ABOVE HFL - 1.800m
• DISCHARGE - 11887CUM/SEC
• EXISTING BRIDGE SOFFIT LVL- 192.432m
• EXISTING BRIDGE DANGER LVL- 190.287m
• TYPE OF RIVER- TIDAL

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:

- ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS ARE IN METER. ALL DIMENSIONS ARE TO BE READ AND NOT MEASURED.
- SHOWN DIMENSIONS ARE TENTATIVE AND MAY CHANGE AFTER FINAL STRUCTURAL DESIGN.
- 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.
- DELETED
- THE DRAWING AND DESIGN IS AS PER EMPLOYER'S REQUIREMENTS & SPECIFICATIONS AS CONTAINED IN THE CONTRACT AGREEMENT NO. HO / EN / WC / BRIDGES / DAB / 1 / SOMA AND THERE IS NO CHANGE.
- 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/DEMANTLING 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.

10. KEEP HOLE TO BE PROVIDED IN WING WALL/RETURNS AS PER IRS SUB-STRUCTURE CODE AND IRS CONCRETE BRIDGE CODE.

11. EARTH FILLING TOP 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 5 M 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 BENCHMARKING 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 Ø VALUE OF 35°.

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

17. FOR TRANSITION SYSTEM ON APPROACH OF BRIDGES REFER DRG. NO. SOMA-DFCC-CD-C-1418.

18. FOR BORE HOLE DETAILS REFER DOCUMENT NO. SOMA/DFCC/545.

19. DELETED

20. PILE CAPACITY TO BE ASCERTAINED BY CONDUCTING INTIAL LOAD TEST AND ROUTINE LOAD TEST AS PER EMPLOYER'S REQUIREMENT AND REPORTS SUBMITTED TO DESIGN CELL FOR APPROVAL BEFORE TAKING UP CONSTRUCTION.

21. FORMATION LEVEL/GROUND LEVEL/HFL/ DISCHARGE/ VERTICAL CLEARANCE/FREEBOARD/C.L. DISTANCE OF BRIDGES AS CERTIFIED BY CPM/SURAT OR PMC.

22. CONSTRUCTION METHODOLOGY STATEMENT IN TERMS OF CLAUSE 4.2 (d) (iv) OF EMPLOYERS REQUIREMENT SHOULD BE PREPARED AND SUBMITTED FOR APPROVAL BEFORE EXECUTION OF WORKS.

23. WORK WILL BE EXECUTED AS PER EMPLOYERS REQUIREMENT AND SPECIFICATION CONTAINED IN THE CONTRACT AGREEMENT.

24. MINIMUM GRADE OF CONCRETE :
a. SUBSTRUCTURE - M40
b. FOUNDATION - M40
c. SUPER STRUCTURE - M50
d. WEARING COURSE - M35

25. THE OUTER SURFACE OF LINERS FOR TOP PORTION OF 10 M SHALL BE PAINTED WITH COAT TAR EPOXY PAINT WITH TOTAL DFT OF 140 MICRONS AS PER S.NO. 12 OF CLAUSE 8.3.1 OF EMPLOYER'S REQUIREMENTS FUNCTIONAL AND OUTLINE DESIGN.

26. NO. OF PILES SHOWN IN THIS GAD ARE TENTATIVE FOR DETAIL REFER RELEVANT STRUCTURAL DRAWING.

DRAWN BY
KAMAL

CHECKED BY
HSG

VERIFIED BY
NG

DATE OF ISSUE
15.09.2010

CLIENT:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

PROJECT :
WESTERN FREIGHT CORRIDOR : MAJOR BRIDGES BETWEEN VAITARNA AND UTRAN ON VASAI - BHARUCH SECTION

BRIDGE NO. :
BRIDGE NO. 156 OF SURAT UNIT (EXIST. BRIDGE NO-401)

DRAWING TITLE :
GENERAL ARRANGEMENT DRAWING OF 18x19.04m PSC BOX GIRDER BRIDGE AT km 238/29 ON NORTH POORNA RIVER (SHEET 1 OF 3)

CONTRACTOR REVISION NO.

REV.	PARTICULARS	DATE
R7	SPAN LENGTH MODIFIED	27.02.12
R6	COMPARISON TABLE MODIFIED	10.01.12
R5	MODIFIED AS PER SOMA e-mail DATED 17/09/2011	17.09.11
R4	BLOCK REMOVED	23.08.11
R3	MODIFIED AS PER DISCUSSION HELD IN DFCC OFFICE ON 21st & 22nd JULY-2011	26.07.11
R2	MODIFIED AS PER THE CONCORDANCE TABLE	29.06.11
R1	MODIFIED AS PER "DBR-7" DTD. 16.02.2011	02.03.11

CONTRACTOR :
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PROOF CONSULTANTS :
STUP Consultants Pvt. Ltd.

OFFICE OF ORIGIN

PM/Dy-CPM

CPM

TCPL

PMC

SEL

DFCC

15.09.2010

7

AS SHOWN

APPROVAL

USER: KAMAL P/SCALE: 1:1 (A1) UPDATE: 27/02/2012

Mar 07, 2012 - 10:30am