



COMPARISON TABLE			
SL. NO.	DESCRIPTION	EXISTING	PROPOSED
1.	RAIL LEVEL	-	107.700
2.	FORMATION LEVEL	-	107.015
3.	SOFFIT LEVEL	-	105.118
4.	H.F.L.	-	102.940
5.	CLEARANCE	-	2.178
6.	FREE BOARD	-	4.075
7.	LINEAR WATER WAY	-	38.150
8.	NO. OF SPANS	-	3
9.	BED LEVEL	-	VARYING
10.	LOADING STANDARDS	-	DFCC
11.	INVERT LEVEL OF DRAIN	-	-
12.	DANGER LEVEL	-	102.940
13.	REFERENCE BENCH MARK AS TAKEN @A1	-	-
14.	PILE CAP TO LEVEL A1	-	96.850
15.	PILE CAP TO LEVEL F1	-	93.558
16.	PILE CAP TO LEVEL P2	-	95.955
17.	PILE CAP TO LEVEL A2	-	95.760

THE LEVELS ARE CORRECTED AS PER SURVEY PLAN RECEIVED FROM SITE REF. DRG: SOMA-DFCC-442-2001

- OBSERVED HIGH FLOOD LEVEL - 102.940M
- PROPOSED RAIL LEVEL - 107.700 m.
- CLEARANCE ABOVE H.F.L. - 2.178 m.
- DISCHARGE - 867 CUMEC.

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 STANDARDS: DFCC LOADING 2007
- I.R.S. BRIDGE MANUAL

442/574/04
CONTROLLED COPY
Signature
Date 17/11/2015
CRE
CPM

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. HO / 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 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-II.		
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 SEPARATE DRG.		
18.	FOR BORE HOLE DETAILS REFER: SOMA-DFCC-554.		
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.		

21.	FORMATION LEVEL/GROUND LEVEL/HFL/ DISCHARGE/ VERTICAL CLEARANCE/FREEDBOARD/C.L. DISTANCE OF BRIDGES IS CERTIFIED BY CPM/SURAT.		
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.		

AEN (D)-I, W. RLY, CCG.	SR. DEN (N), W. RLY, BCT.	DY. CE (D), W. RLY, CCG.	CBE, W. RLY, CCG.
DRAWN BY KAMAL	CHECKED BY HSG	VERIFIED BY NG	DATE OF ISSUE 20.11.2010
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD. WESTERN FREIGHT CORRIDOR : MAJOR BRIDGES BETWEEN VAITARNA AND UTRAN ON VASAI - BHARUCH SECTION BRIDGE NO. : BRIDGE NO. 229 OF SURAT UNIT (EXISTING BRIDGE NO.442) DRAWING TITLE : GENERAL ARRANGEMENT DRAWING OF BRIDGE OF 3X14.20 M PSC I GIRDER BRIDGE AT SURAT DIVERSION DRG.NO. SOMA-DFCC-442-C-1001 REV. 10 SCALE : AS SHOWN STATUS : APPROVAL			

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