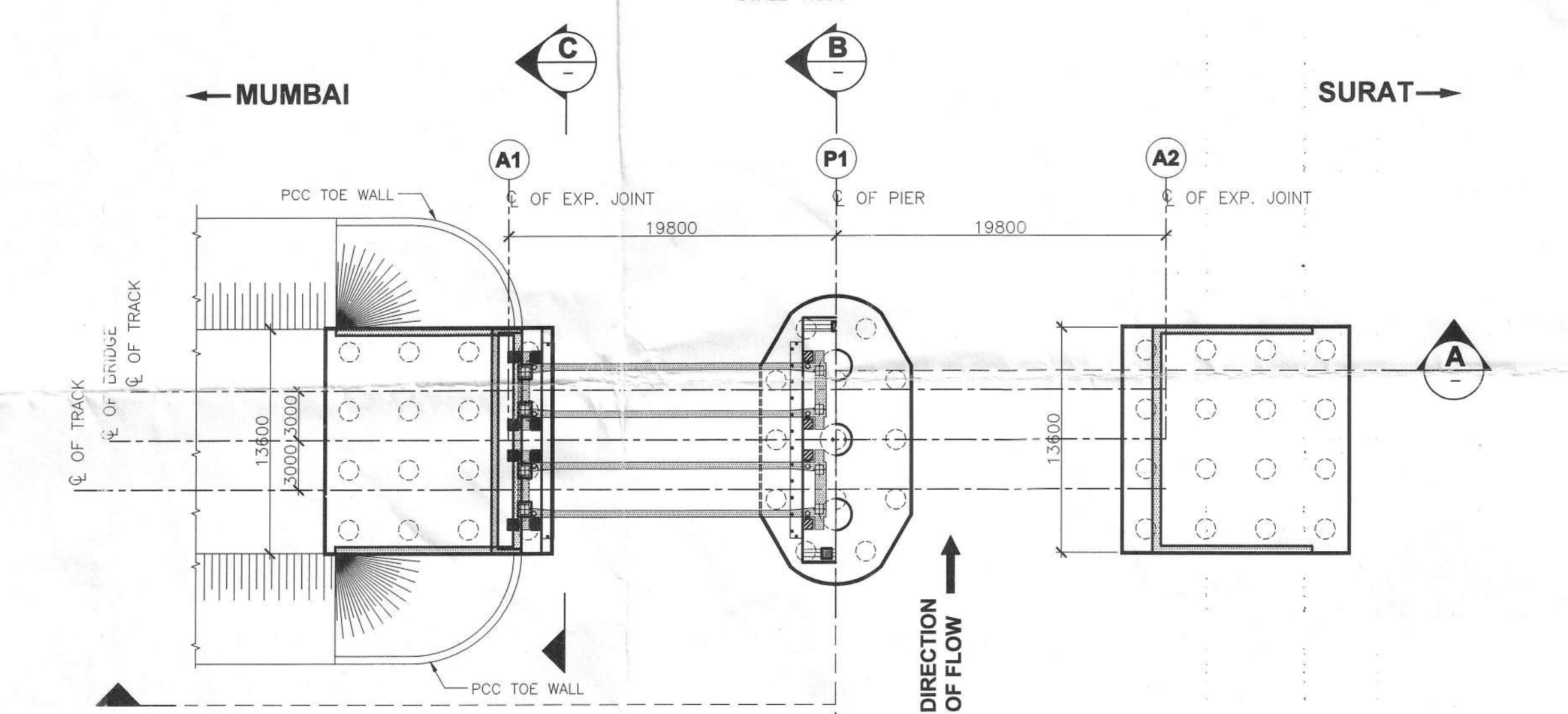
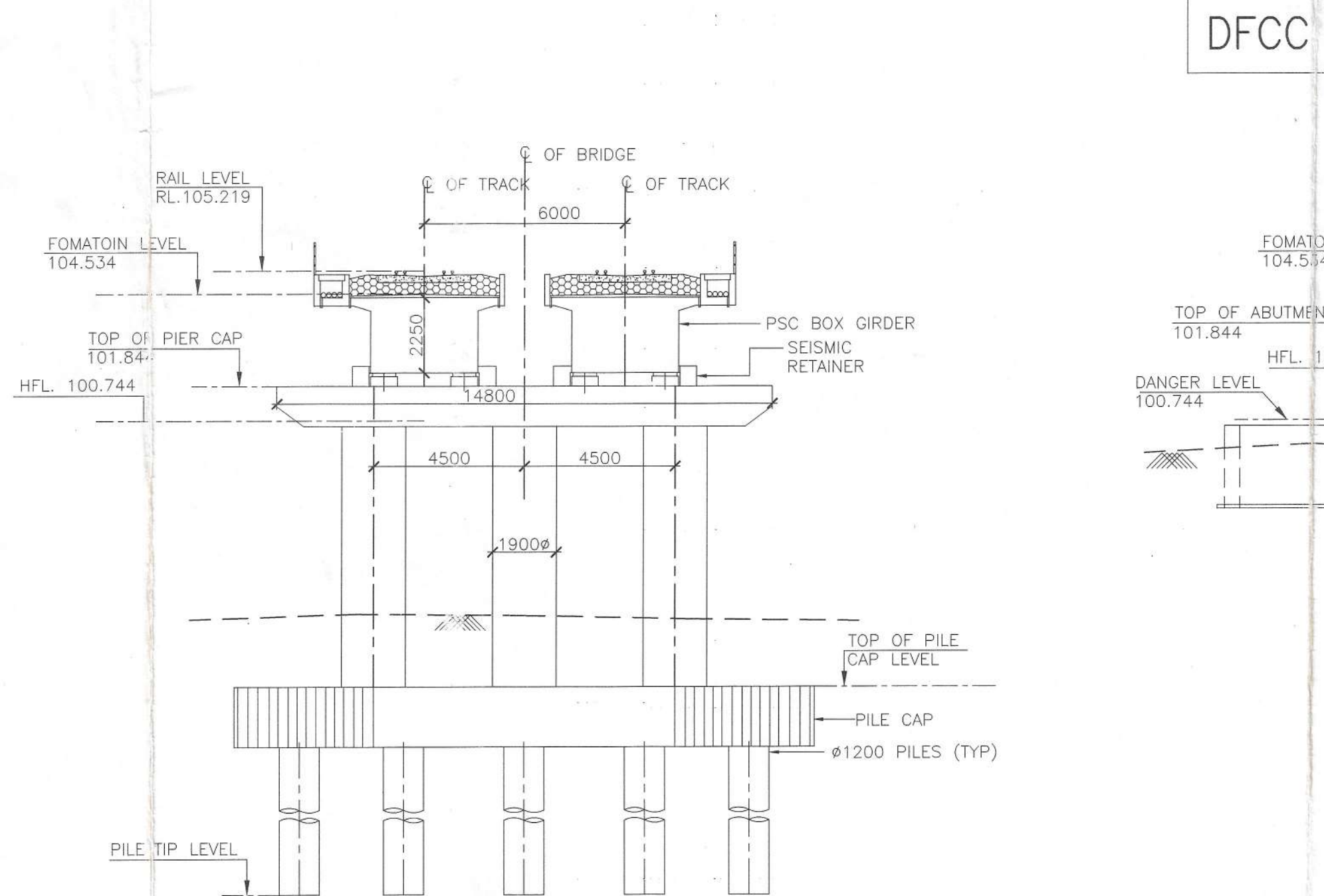


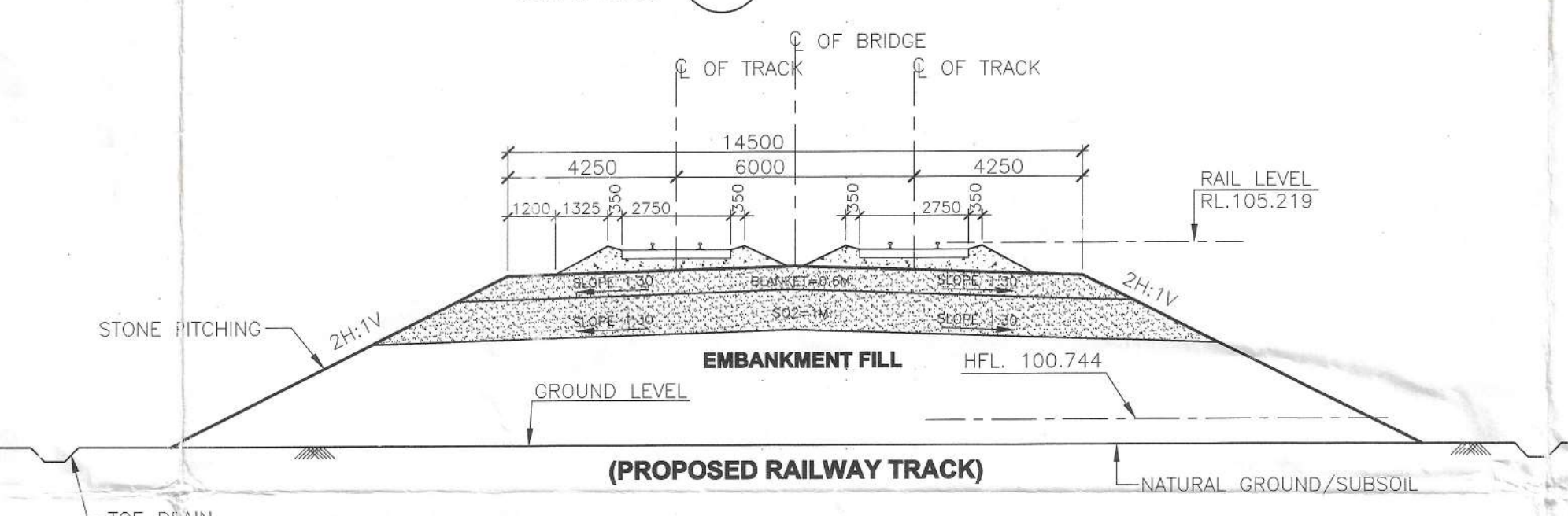
LONGITUDINAL ELEVATION 'A-A'
SCALE 1:300



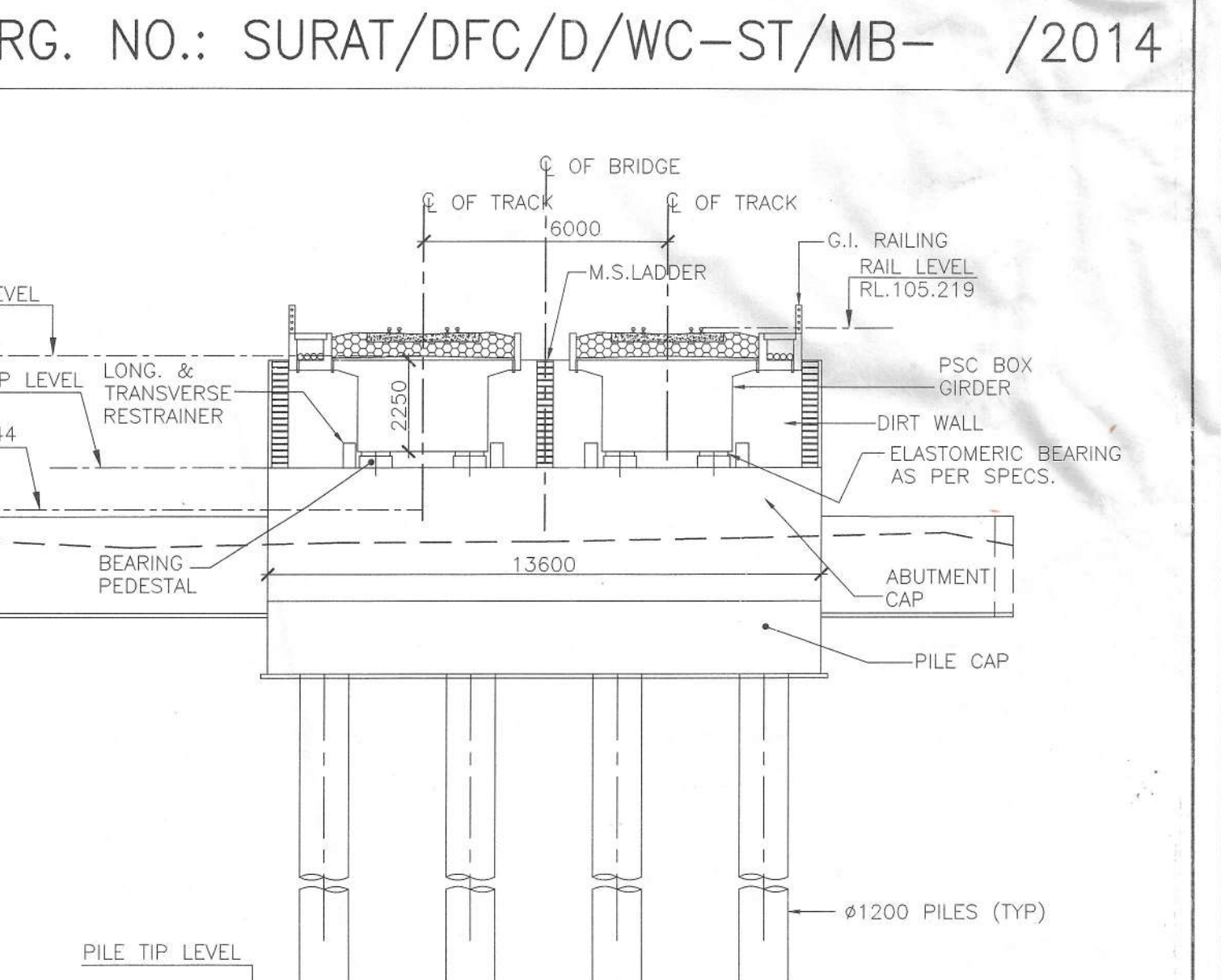
HALF PLAN AT SUPER-STRUCTURE
PLAN
SCALE 1:300
HALF PLAN AT SUB-STRUCTURE



SECTION B
SCALE 1:150



TYPICAL X-SECTION OF APPROACH EMBANKMENT
SCALE 1:150



SECTION C
SCALE 1:150

440/673/04
CONTROLLED COPY
Signature
Date 17/11/15
CRE

COMPARISON TABLE			
SL. NO.	DESCRIPTION	EXISTING	PROPOSED
1.	RAIL LEVEL	-	105.219
2.	FORMATION LEVEL	-	104.534
3.	SOFFIT LEVEL	-	102.244
4.	H.F.L.	-	100.744
5.	CLEARANCE	-	1.500
6.	FREE BOARD	-	3.790
7.	LINEAR WATER WAY	-	36.100
8.	NO. OF SPANS	-	2
9.	BED LEVEL	-	VARYING
10.	LOADING STANDARDS	-	DFCC
11.	INVERT LEVEL OF DRAIN	-	-
12.	DANGER LEVEL	-	100.744
13.	REFERENCE BENCH MARK AS TAKEN @A1	-	-
REFERENCE BENCH MARK CP.22 (TBM)		-	101.471

THE LEVEL ARE CORRECTED AS PER SURVEY PLAN RECEIVED FROM SITE.
DRG: DRG:SOMA-DFCC-440-2001

- PROPOSED RAIL LEVEL - 105.219m
- CLEARANCE ABOVE HFL - 1.500m
- DISCHARGE - 985 CUMECs
- EXISTING BRIDGE SOFFIT LVL - DIVERSION
- EXISTING BRIDGE DANGER LVL - DIVERSION

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. HQ / EN / WC / BRIDGES / DAB / I / 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.

- 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 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.
- ANY DISCREPANCIES MUST BE BROUGHT TO THE NOTICE OF THE DRAWING APPROVING AUTHORITY BEFORE EXECUTION OF WORK AT SITE.
- 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 SHALL REQUIRE PRIOR APPROVAL OF DESIGN APPROVING AUTHORITY.
- WEEP HOLE TO BE PROVIDED IN WING WALL/RETURNS AS PER I.R.S SUB-STRUCTURE CODE AND I.R.S CONCRETE BRIDGE CODE (MINIMUM 120W PVC PIPES @1.5m SPACING BOTH WAYS) REF. CL. NO. 3.6 OF SPECIFICATIONS VOL-III.
- EARTH FILLING BETWEEN THE EXISTING RAILWAY FORMATION AND PROPOSED DFCC FORMATION AS MARKED 'X' IN THE DRAWING TO BE KEPT ABOVE HFL.

- EARTH WORK ON APPROACHES ON THE BRIDGES SHALL BE AS PER DFCC'S SPECIFICATION REF. CL. NO. 2.1 TO 2.20 VOL-III CERTIFIED BY CPM/SURAT.
- 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.
- PROPER BENCHING ON EXISTING FORMATION TO BE DONE BEFORE EXECUTION OF EARTHWORK FOR DFCC'S FORMATION.
- BHIND 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°.
- MINIMUM GRADE OF CONCRETE : a. SUBSTRUCTURE - M40 b. FOUNDATION - M40 c. SUPER STRUCTURE - M50 d. WEARING COURSE - M35
- STONE PITCHING ON SLOPES OF BANK ON APPROACHES OF BRIDGE SHALL BE PROVIDED UPTO 300mm ABOVE HFL DEPENDING UPON THE SITE CONDITION.
- FOR TRANSITION SYSTEM ON APPROACH OF BRIDGES REFER DRG. NO. SOMA-DFCC-CD-C-1418.
- FOR BORE HOLE DETAILS REFER: SOMA-DFCC-553.
- DELETED.
- 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.

- FORMATION LEVEL/GROUND LEVEL/HFL/ DISCHARGE/ VERTICAL CLEARANCE/FREEBOARD/C.L. DISTANCE OF BRIDGES TO BE CERTIFIED BY CPM/SURAT.
- CONSTRUCTION METHODOLOGY STATEMENT IN TERMS OF CLAUSE 4.2 (d) (vi) OF EMPLOYERS REQUIREMENT SHOULD BE PREPARED AND SUBMITTED FOR APPROVAL BEFORE EXECUTION OF WORKS.
- WORK WILL BE EXECUTED AS PER EMPLOYERS REQUIREMENT AND SPECIFICATION CONTAINED IN THE CONTRACT AGREEMENT.
- MINIMUM GRADE OF CONCRETE : a. SUBSTRUCTURE - M40 b. FOUNDATION - M40 c. SUPER STRUCTURE - M50 d. WEARING COURSE - M35
- 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.
- NO. OF PILES SHOWN IN THIS GAD ARE TENTATIVE FOR DETAIL REFER RELEVANT STRUCTURAL DRAWING.

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.220 OF SURAT UNIT (EXIST BRIDGE NO-440)
DATE OF ISSUE 20.11.2010	DRAWING TITLE : GENERAL ARRANGEMENT DRAWING OF 2x19.80m PSC BOX GIRDER BRIDGE AT km ON DIVERSION
DRG. NO. SOMA-DFCC-440-C-1001	REV. 7 SCALE : AS SHOWN STATUS : APPROVAL

REV.	PARTICULARS	CHKD.	VER.	DATE
R7	SCOUR LEVEL REVISED AS PER THE REVISED HYDRAULIC CALCULATIONS DTD. 01.10.14	BKB	SKH	NG 15.10.14
R6	VIDE CONTRACTOR'S LTR. NO. 5436 DTD. 01.10.14	BKB	SKH	NG 22.07.14
R5	REVISAS AS PER THE APPROVED SPAN ARRANGEMENT & HYDRAULIC REPORT.	CJJ	HSG	NG 30.11.11
R4	COMPARISON TABLE MODIFIED	CJJ	HSG	NG 23.08.11
R3	BLOCK REMOVED	KAMAL	HSG	NG 26.07.11
R2	MODIFIED AS PER DISCUSSION HELD IN DFCC OFFICE ON 21st & 22nd JULY-2011	Vijay	HSG	NG 15.07.11
R1	MODIFIED AS PER M/S STUP LETTER NO. 13/E/6554/PB/MKM/1175 DTD 14.07.2011	CJJ	HSG	NG 08.07.11
R1	MODIFIED AS PER THE CONCORDANCE TABLE	DRN.	CHD.	VER.

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STUP Consultants Pvt. Ltd.

OFFICE OF ORIGIN

PM/Dy. CPM CPM TCPL PMC SEL