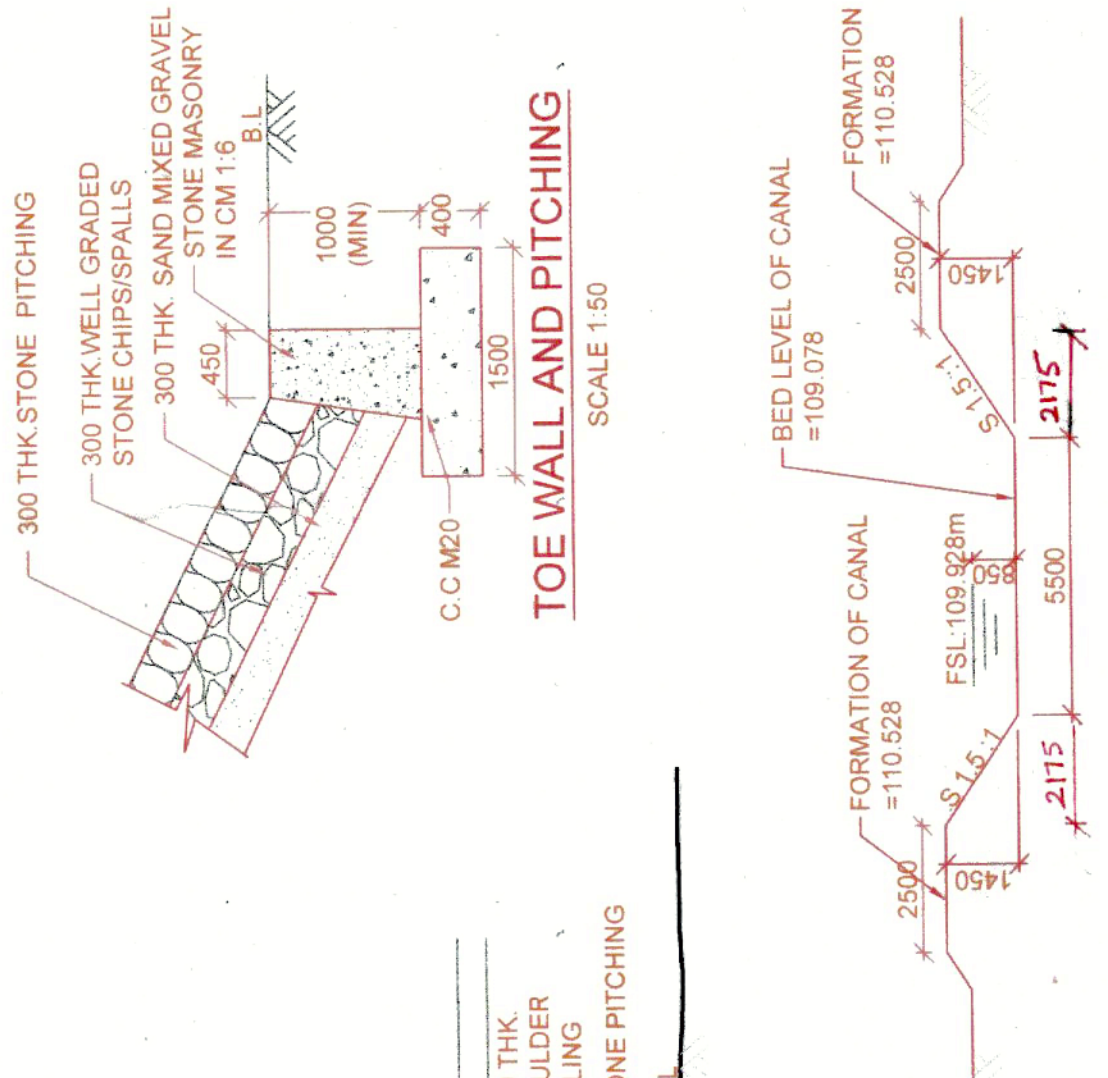
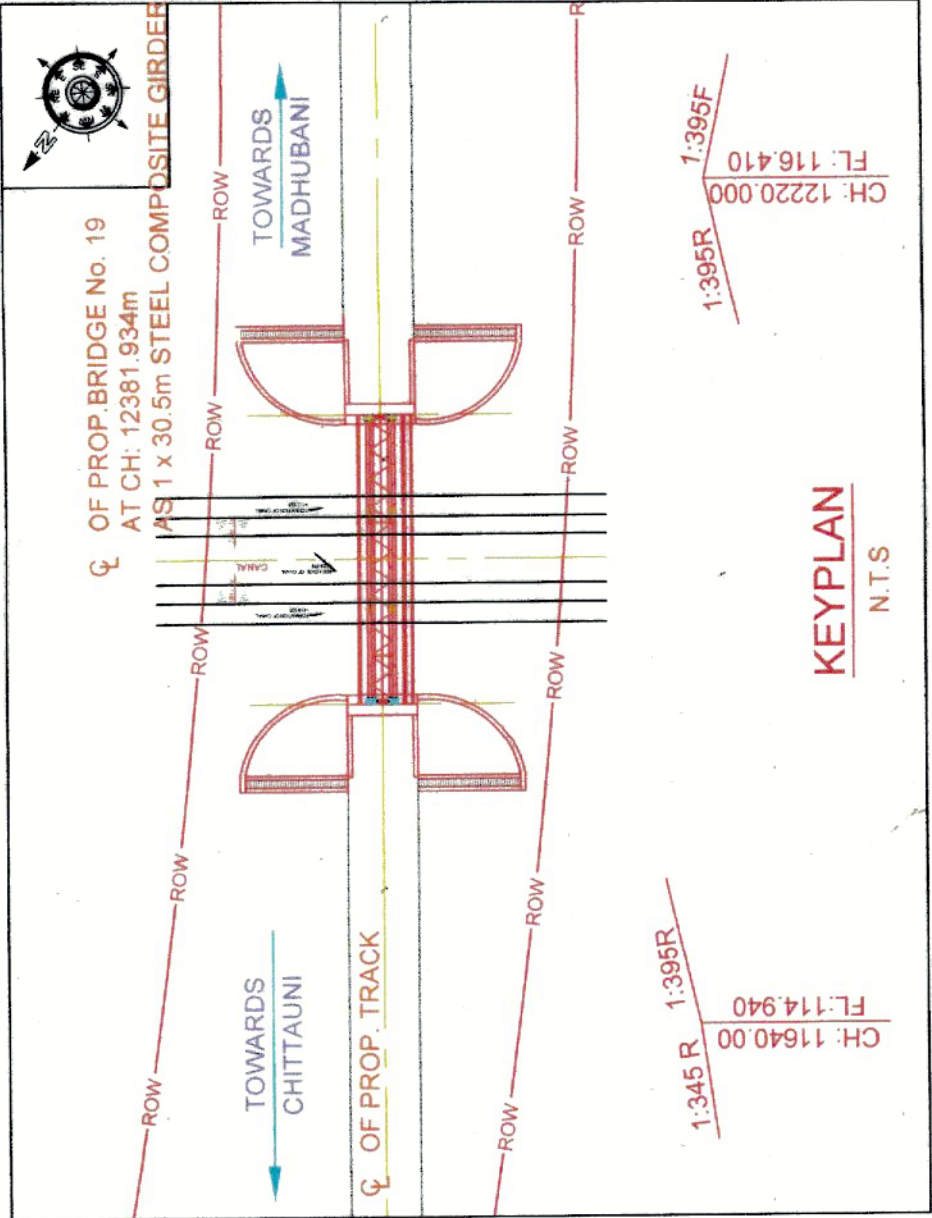


REFERENCE  
1. FOR 30.5 MTR. COMPOSITE WELDED GIRDER, AS PER RDSO DRAWING NO RDSO/ B-11754/R3  
2. RDSO B-11754/R3 FOR BEARING DETAILS  
3. SIDE PATHWAY AS PER DRAWING NO. CBS-0046  
4. INSPECTION PLATFORM AS PER DRAWING NO. CBS-0016  
NOTE:  
1. PROPOSED WORKS SHOWN RED  
2. ALL DIMENSIONS ARE IN mm & ALL LEVELS ARE IN METERS UNLESS OTHERWISE SPECIFIED  
3. MINIMUM GRADE OF CONCRETE TO BE FOLLOWED :  
(a) BED BLOCK - M35  
(b) ABUTMENT PIER - M30  
(c) PILE CAP - M35  
(d) PILE - M35  
(e) PEDESTAL - M35  
4. THE DESIGN IS BASED ON FOLLOWING CODE WITH LATEST CORRECTION SLIPS.  
(a) IS BRIDGE RULES  
(b) IS BRIDGE RULES  
(c) IS CONCRETE BRIDGE CODE  
(d) IS 456-2000  
(e) IS 2011-2010 PART-1 SECTION-2  
5. ALL THE CONCRETE SHALL BE DESIGNED MIXED CONTROLLED CONCRETE AS PER I.R.S CONCRETE BRIDGE AND IS 456-2000 THE CRUSHING STRENGTH OF CONCRETE SHALL BE AS PER CRITERIA SPECIFIED IN I.R.S CONCRETE BRIDGE CODE AND IS 456-2000.  
6. FOR SUPER STRUCTURE DRAWING RDSO B-11754/R3 AND ALL THE RELATED DRAWINGS.  
7. INSPECTION LADDERS AREA TO PROVIDED ON PIERS/ABUTMENTS AS PER SPECIFICATION FOR ACCESS TO BED BLOCKS FOR INSPECTION.  
8. REINFORCEMENT SHALL BE OF HIGH STRENGTH DEFORMED BARS CONFORMING TO IS 1786  
9. ONLY ONE TYPE OF CEMENT/STEEL WILL BE USED ON A PARTICULAR BRIDGE AND BRAND OF CEMENT AND STEEL SHOULD BE APPROVED BY D.Y. CE / ION OF THE PROJECT  
10. DIMENSIONS GIVEN IN THIS DRAWING MUST BE RECONCILED AT SITE BEFORE START OF THE WORK FOR FEASIBILITY  
11. CONTROLLED CONCRETE/DESIGN MIX CONCRETE WITH WEIGHT BATCHING OR AUTOMATIC WEIGHT BATCHING WITH PAN MIXTURE IF APPLICABLE SHALL BE USED  
12. THE BACKFILL BEHIND ABUTMENT, WING WALL AND RETURN WALL SHOULD BE AS PER CLAUSE 7.5 OF I.R.S BRIDGE SUB-STRUCTURE AND FOUNDATION CODE WITH UP TO DATE ALL CORRECTION SLIPS  
13. 600MM FILTER MEDIA SHALL BE PROVIDED WITH HAND PACKED BOULDERS ON THE EARTH FACE OF ABUTMENT/PIER/RETAINING WALL Voids BETWEEN BOULDERS SHALL BE FILL WITH SMALLER SIZED STONES TO PREVENT OUT FLOW OF BACK FILL MATERIALS  
14. WEAP HOLES SHALL BE 75/100 DIA PVC PIPES STAGGERED 1000MM CC HORIZONTALLY AND VERTICALLY ABOVE LVL OR F.S.L IN CASE OF CANAL BRIDGE IN BOTH WINGRETURN WALL AND EARTH RETAINMENT/ABUTMENT OF BRIDGE SHOULD BE AS PER CLAUSE 7.6 OF I.R.S BRIDGE SUB-STRUCTURE AND FOUNDATION CODE  
15. FOUNDATION CODE BEYOND THE BOULDERS PITCHING SHALL BE PROTECTED FROM RAIN CUTS BY PROVIDING TURFING  
16. ALL WORK SHALL BE CARRIED OUT AS PER THE INSTRUCTIONS & SUPERVISION OF ENGINEER-IN-CHARGE  
17. SHARP EDGES OF CONCRETE SHALL BE CHAMFERED  
18. BRIDGES COMES UNDER SEISMIC ZONE IV AREA  
19. EXPOSURE CONDITION OF BRIDGES IS MODERATE  
20. PITCHING WORK SHALL BE DONE IN ACCORDANCE WITH ANNEXURE-1 AS PER WICON/29/04/W-1/PART-III DATED 11-11-2009  
21. SEPARATE DRAWING WILL BE ISSUED FOR RETURN TOE WALL  
22. DIMENSION SHOWN IN SUBSTRUCTURE ARE TENTATIVE IN NATURE DETAILED DESIGN CALCULATION AND SOIL REPORT WILL BE SUBMITTED ALONG WITH STRUCTURAL DRAWINGS  
23. THE DEPTH OF PILES SHOWN IN DRAWING MAY VARY AT THE TIME OF DESIGNING OF THE SUB STRUCTURE OF BRIDGES  
24. THE EXECUTION OF BRIDGES WILL START AFTER APPROVAL OF DESIGN FROM RAILWAY'S DETAILING OF REINFORCEMENT CONCRETE SHALL BE AS PER I.R.S SEISMIC CODE -2020  
25. INITIAL PILE TEST REPORT MUST BE APPROVED BY CE/CON BEFORE EXECUTION OF WORKING PILE  
27. TRANSITION SYSTEM SHOULD BE PROVIDED AT BOTH END OF ABUTMENT AS PER RDSO DRG. GSK/GU/12/REV.0/2024  
28. MINIMUM 150 MM PROJECTION IN BEARING IS REQUIRED  
29. PILE ARRANGEMENT AS PER DESIGN  
30. LIQUEFACTION ANALYSIS TO BE SUBMITTED WITH DESIGN  
31. SUB-STRUCTURE PROPOSED IS FOR SINGLE LINE TRACK ONLY  
32. FIELD UNIT MUST PRE VALIDATE ALL DATA AND LEVELS BEFORE EXECUTION OF WORK COMMENCES  
33. LATEST RAILWAY BOARD GUIDELINES REGARDING RSI ANALYSIS MUST BE FOLLOWED  
34. ALL REINFORCEMENT DETAILS WILL BE ISSUED SEPARATELY  
35. CRS MINOR SECTION IS REQUIRED TO BE TAKEN BEFORE EXECUTION OF WORK  
36. DIMENSION OF TYPE RETURN WALL TO BE PROVIDED AS PER SITE CONDITION

AUTHORITY OF WORK  
PINK BOOK - 2024-25  
PAGE NO.-4-2-1  
ITEM NO. - 14



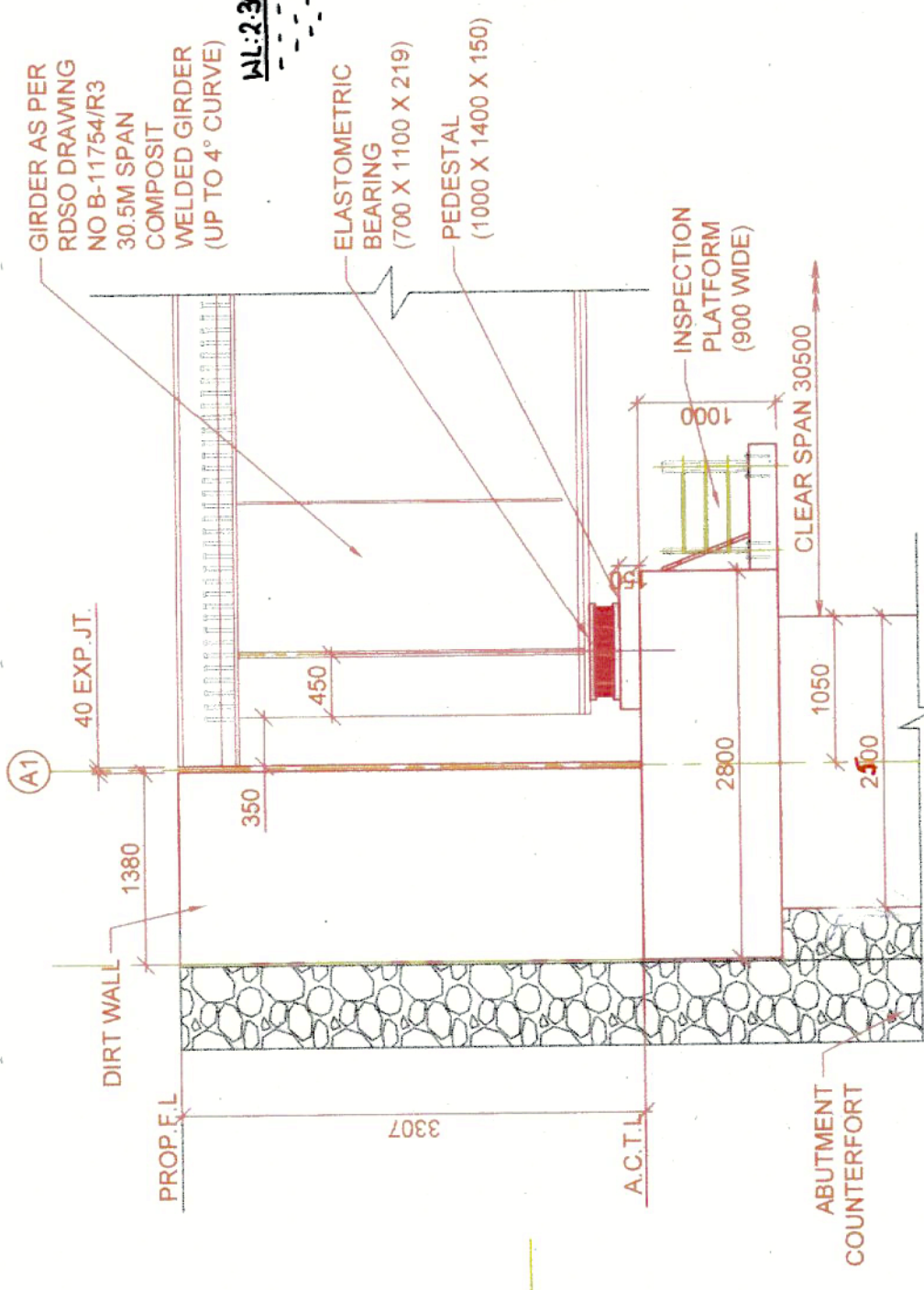
ELEVATION  
SCALE 1:200

CHAINAGE (m)	A1	A2
PROPOSED RAIL LEVEL (m)	116.761	123.984
PROPOSED FORMATION LEVEL (m)	115.999	115.999
BED LEVEL (m)	110.654	109.078
PILE CAP TOP LEVEL (m)	110.154	109.735
PILE CAP BOTTOM LEVEL (m)	108.354	107.935

ELEVATION OF CANAL  
SCALE 1:150

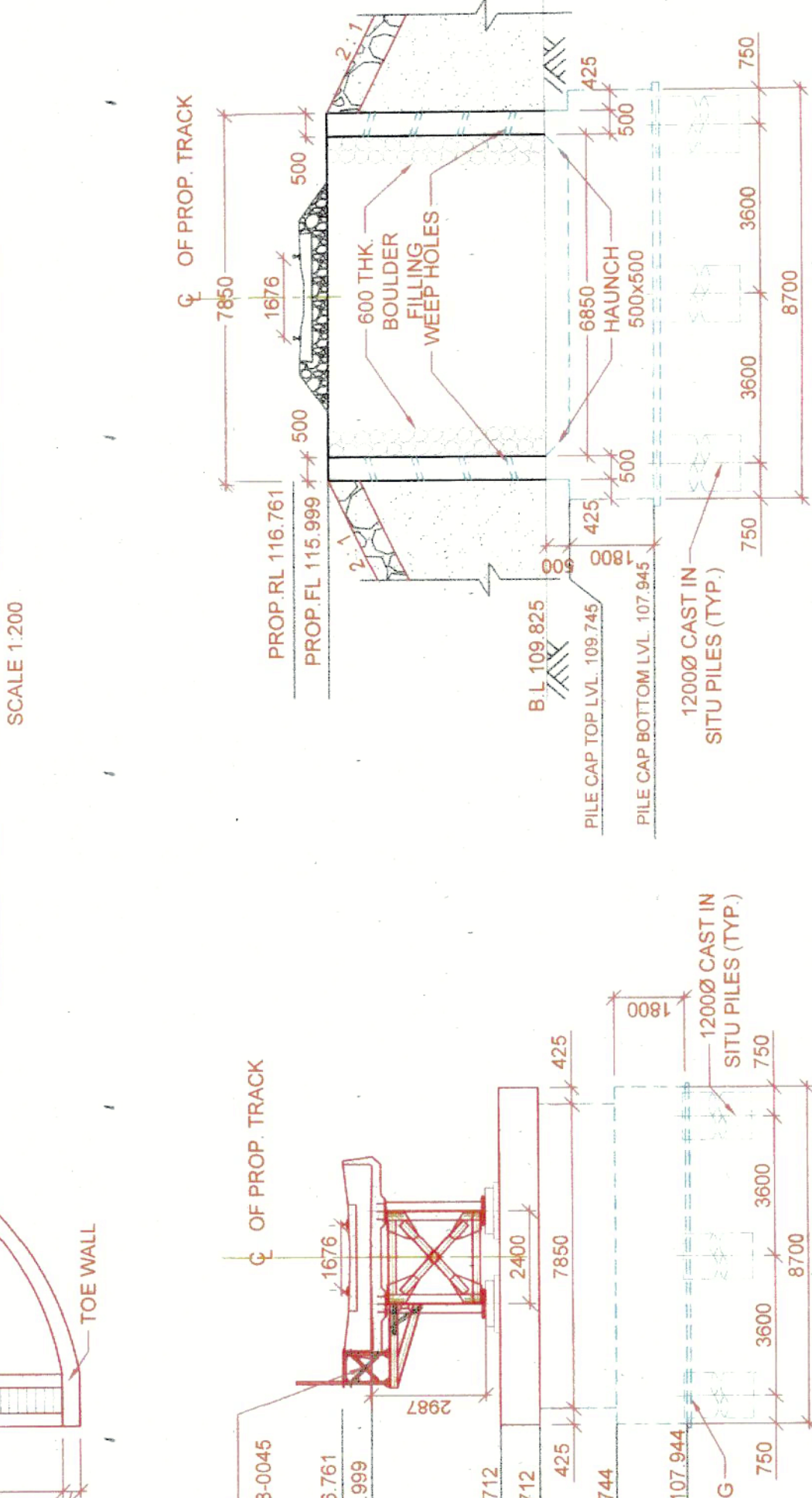
SECTION: CHITTAUNI TO MADHUBANI  
Bore Hole Terminated at: -40.45M.

DEPTH (m)	SPT N-VALUE	CLASSIFICATION	DEPTH (m)	SPT N-VALUE	CLASSIFICATION
0.00	1.5	SM	0.00	1.5	SM
1.50	1.95	SM	1.50	1.95	SM
3.00	3.45	SM	3.00	3.45	SM
4.50	4.95	SM	4.50	4.95	SM
6.00	6.45	SM	6.00	6.45	SM
7.50	7.95	SM	7.50	7.95	SM
9.00	9.45	SM	9.00	9.45	SM
10.50	10.95	SM	10.50	10.95	SM
12.00	12.45	SM	12.00	12.45	SM
13.50	13.95	SM	13.50	13.95	SM
15.00	15.45	SM	15.00	15.45	SM
16.50	16.95	SM	16.50	16.95	SM
18.00	18.45	SM	18.00	18.45	SM
19.50	19.95	SM	19.50	19.95	SM
21.00	21.45	SM	21.00	21.45	SM
22.50	22.95	SM	22.50	22.95	SM
24.00	24.45	SM	24.00	24.45	SM
25.50	25.95	SM	25.50	25.95	SM
27.00	27.45	SM	27.00	27.45	SM
28.50	28.95	SM	28.50	28.95	SM
30.00	30.45	SM	30.00	30.45	SM
31.50	31.95	SM	31.50	31.95	SM
33.00	33.45	SM	33.00	33.45	SM
34.50	34.95	SM	34.50	34.95	SM
36.00	36.45	SM	36.00	36.45	SM
37.50	37.95	SM	37.50	37.95	SM
39.00	39.45	SM	39.00	39.45	SM
40.00	40.45	SM	40.00	40.45	SM



DETAIL  
SCALE 1:50

HALF PLAN AT TOP  
SCALE 1:200



SECTION A-A  
SCALE 1:150

SECTION B-B  
SCALE 1:125

PLAN OF ABUTMENT CAP  
SCALE 1:50

PLAN OF ABUTMENT CAP  
SCALE 1:50

BOREHOLE NO. 02  
AT CH-11276

DEPTH (m)	SPT N-VALUE	CLASSIFICATION	DEPTH (m)	SPT N-VALUE	CLASSIFICATION
0.00	1.5	SM	0.00	1.5	SM
1.50	1.95	SM	1.50	1.95	SM
3.00	3.45	SM	3.00	3.45	SM
4.50	4.95	SM	4.50	4.95	SM
6.00	6.45	SM	6.00	6.45	SM
7.50	7.95	SM	7.50	7.95	SM
9.00	9.45	SM	9.00	9.45	SM
10.50	10.95	SM	10.50	10.95	SM
12.00	12.45	SM	12.00	12.45	SM
13.50	13.95	SM	13.50	13.95	SM
15.00	15.45	SM	15.00	15.45	SM
16.50	16.95	SM	16.50	16.95	SM
18.00	18.45	SM	18.00	18.45	SM
19.50	19.95	SM	19.50	19.95	SM
21.00	21.45	SM	21.00	21.45	SM
22.50	22.95	SM	22.50	22.95	SM
24.00	24.45	SM	24.00	24.45	SM
25.50	25.95	SM	25.50	25.95	SM
27.00	27.45	SM	27.00	27.45	SM
28.50	28.95	SM	28.50	28.95	SM
30.00	30.45	SM	30.00	30.45	SM
31.50	31.95	SM	31.50	31.95	SM
33.00	33.45	SM	33.00	33.45	SM
34.50	34.95	SM	34.50	34.95	SM
36.00	36.45	SM	36.00	36.45	SM
37.50	37.95	SM	37.50	37.95	SM
39.00	39.45	SM	39.00	39.45	SM
40.00	40.45	SM	40.00	40.45	SM

BOREHOLE NO. 01  
AT CH-11276

DEPTH (m)	SPT N-VALUE	CLASSIFICATION	DEPTH (m)	SPT N-VALUE	CLASSIFICATION
0.00	1.5	SM	0.00	1.5	SM
1.50	1.95	SM	1.50	1.95	SM
3.00	3.45	SM	3.00	3.45	SM
4.50	4.95	SM	4.50	4.95	SM
6.00	6.45	SM	6.00	6.45	SM
7.50	7.95	SM	7.50	7.95	SM
9.00	9.45	SM	9.00	9.45	SM
10.50	10.95	SM	10.50	10.95	SM
12.00	12.45	SM	12.00	12.45	SM
13.50	13.95	SM	13.50	13.95	SM
15.00	15.45	SM	15.00	15.45	SM
16.50	16.95	SM	16.50	16.95	SM
18.00	18.45	SM	18.00	18.45	SM
19.50	19.95	SM	19.50	19.95	SM
21.00	21.45	SM	21.00	21.45	SM
22.50	22.95	SM	22.50	22.95	SM
24.00	24.45	SM	24.00	24.45	SM
25.50	25.95	SM	25.50	25.95	SM
27.00	27.45	SM	27.00	27.45	SM
28.50	28.95	SM	28.50	28.95	SM
30.00	30.45	SM	30.00	30.45	SM
31.50	31.95	SM	31.50	31.95	SM
33.00	33.45	SM	33.00	33.45	SM
34.50	34.95	SM	34.50	34.95	SM
36.00	36.45	SM	36.00	36.45	SM
37.50	37.95	SM	37.50	37.95	SM
39.00	39.45	SM	39.00	39.45	SM
40.00	40.45	SM	40.00	40.45	SM

CONSTRUCTION DEPTH

PROF. LINE	DEPTH (mm)
1) RAIL	172 mm
2) RUBBER PAD	10 mm
3) PSC SLEEPER	230 mm
4) BALLAST	350 mm
TOTAL	762 mm

LEGEND

TYPE	THICKNESS
R/L	RAIL LEVEL
F/L	FORMATION LEVEL
VC	VERTICAL CLEARANCE
FB	FREE BOARD
HFL	HIGH FLOOD LEVEL
B.L	BED LEVEL
TOPC	TOP OF PILE CAP
BOPC	BOTTOM OF PILE CAP
PROP	PROPOSED
THK	THICKNESS
EXP. JT.	EXPANSION JOINT
C.C	CEMENT CONCRETE
TYP	TYPICAL

COLOR CODE LEGEND

COLOR	CODE
RED	PROPOSED
BLACK	EXISTING
CONTINUOUS	VISIBLE
DOTTED	INVISIBLE

FOR EPC  
TENDER ONLY

LOADING STANDARD  
25T AXLE LOAD-2008

CE / CON / I/GKP

DY. CE / CON / P&D

XEN / CON / C / DESIGN

XEN / CON / C / PR

CONST. & H.Q. OFFICER'S SIGNATURE

CLIENT

PROJECT

TITLE

BETWEEN STATION

TYPE OF MAP

FILE NO.

CONSULTANT

CE/CON / Plan No. BICTE/TOI/24/17/2025

SCALE

SHEET