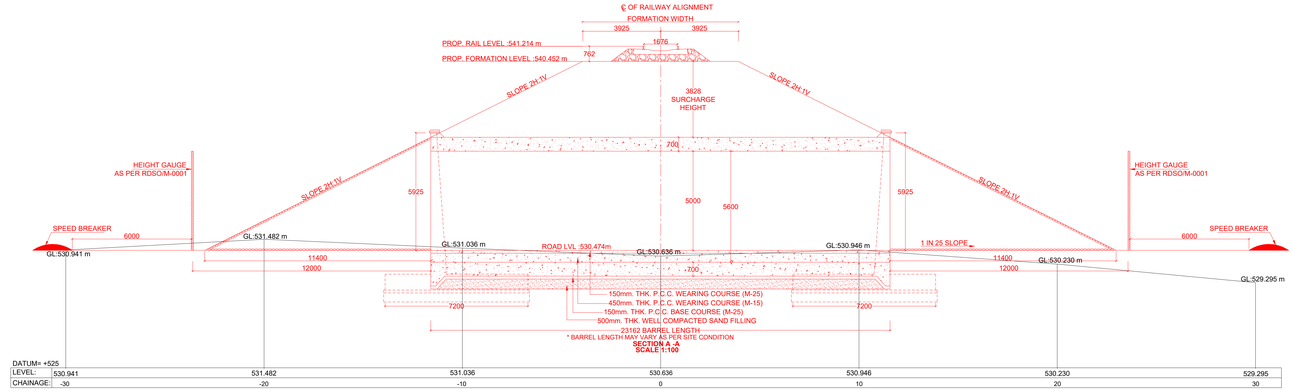
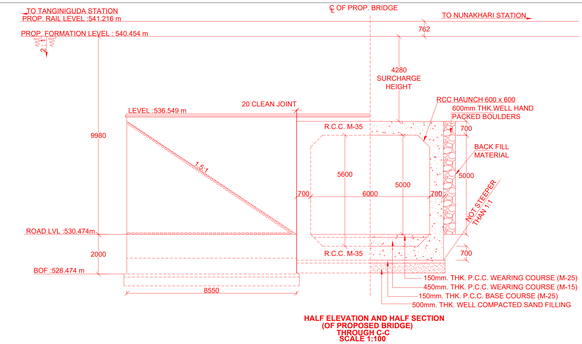
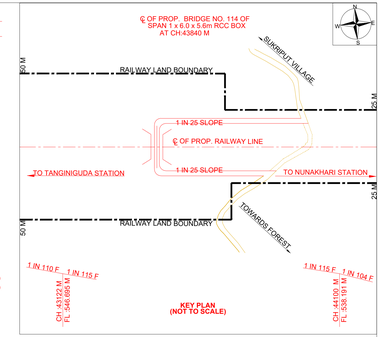


SECTION A -A
SCALE:1:100

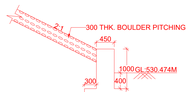
DATUM= +525							
LEVEL:	530.941	531.482	531.036	530.636	530.946	530.230	529.295
CHAINAGE:	-30	-20	-10	0	10	20	30



HALF ELEVATION AND HALF SECTION (OF PROPOSED BRIDGE) THROUGH C-C
SCALE 1:100



KEY PLAN
(NOT TO SCALE)



SECTION OF PROP. TOE WALL
SCALE 1:50

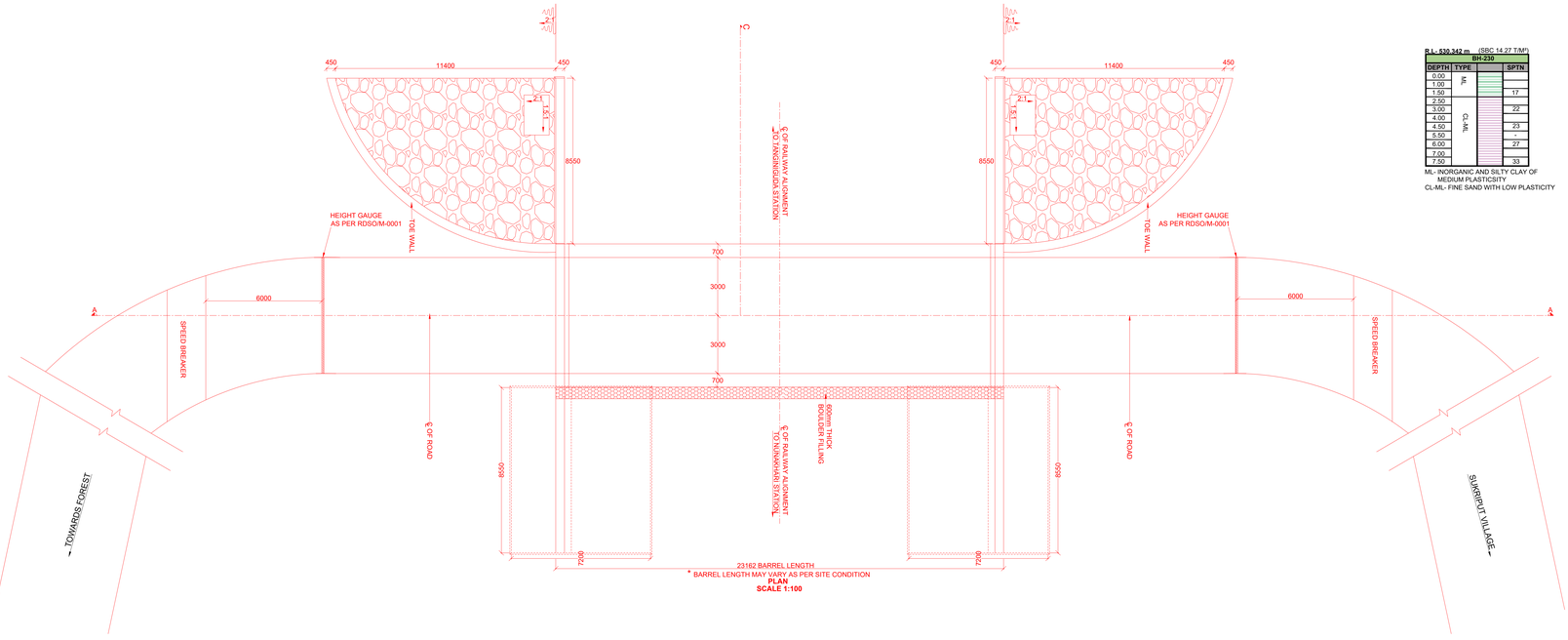
BRIDGE-DETAILS	
1) ALIGNMENT	STRAIGHT
2) GRADE	1 IN 115 F
3) PROP. RAIL LEVEL	541.214 m
4) PROP. FORMATION LEVEL	540.452 m
5) ROAD LEVEL	530.924 m

R.L- 530.342 m (ISBC 14.27 TM/P)

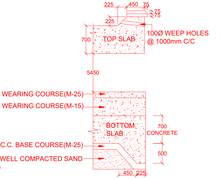
BH-230

DEPTH	TYPE	SPTN
0.00	ML	
1.00		
1.50		17
2.50		
3.00		22
4.00	CL-ML	
4.50		23
5.50		-
6.00		27
7.00		
7.50		33

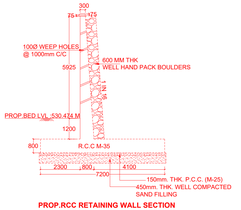
ML- INORGANIC AND SILTY CLAY OF MEDIUM PLASTICSITY
CL-ML- FINE SAND WITH LOW PLASTICITY



PLAN
SCALE 1:100



DETAILS 'X &'Y'
SHEAR KEY & BALLAST RETAINER
SCALE 1:50



PROP.RCC RETAINING WALL SECTION
SCALE 1:50

NOTES-1 (GENERAL): -

1.ALL DIMENSIONS ARE IN MILLIMETER & ALL LEVELS ARE IN METER UNLESS OTHERWISE SPECIFIED.
2.THE DRAWING IS NOT BE SCALED AND ONLY WHITTEN DIMENSIONS SHOULD BE FOLLOWED.
3. PROPER LEGEND IS SHOWN AS PER STANDARD GUIDELINES.
4.LOADING STANDARD: 25 T. AXLE LOAD.
5.DESIGN CRITERIA.
a. IRS BRIDGE RULES (THIRD PRINTING -2014 WITH CORRECTION SLIP UP TO-49.
b. IRS CONCRETE BRIDGE CODE (IRE-PRINT SEPT-2014) WITH ALL CORRECTION SLIP UPTO-8.
c. IRS BRIDGE SUBSTRUCTURE & FOUNDATION CODE, (2nd REVISION-2013) WITH CORRECTION SLIP UPTO -09.
6. THE DESIGN AND CONSTRUCTION SHALL CONFIRM TO THE CRITERIA LAID DOWN IN THE LATEST EDITIONS OF THE FOLLOWING CODES AND STANDARD SPECIFICATIONS
i) IRC STANDARD SPECIFICATIONS AND CODES OF PRACTICES FOR ROAD BRIDGES SUCH AS; IRC - 5-1998, IRC - 6 - 2014, IRC - 78 - 2014, IRC - 112 -2011 WITH LATEST EDITION.
ii) SPECIFICATION FOR ROAD AND BRIDGES WORKS BY MINISTRY OF SURFACE TRANSPORTATION.
iii) R.D.S.O DESIGN AND DRAWINGS OF MINISTRY OF RAILWAY.
7.RDSO DRAWING NO: FOR RCC BOX RDSO DRG NO-RDSO/B-10152/5R & DRG NO-RDSO/B-10152.
8.EXPOSURE CONDITION: SEVERE.
9.SEISMIC ZONE IS ZONE-II
10. CONCRETE GRADE:-
i) R.C.C BOX M-35 (DESIGN MIX) & LEVELLING COARSE M-25 (DESIGN MIX)
ii)M.C.C. M-20(DESIGN MIX) & P.C.C. M-25(DESIGN MIX).
11. HSD/TMT BARS CONFORMING TO IS-1786-2008 SHALL BE USED AS REINFORCEMENT. GRADE OF REINFORCEMENT IS Fe-500 / Fe-5000.
12. SUITABILITY OF THE FOUNDATION PRESSURE SHALL BE CHECKED AS PER SITE CONDITION.
13. BACK FILL MATERIAL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUBSTRUCTURE & FOUNDATION CODE.
14. ALL RCC SURFACES COMING IN CONTACT WITH SOIL SHOULD BE PAINTED WITH BITUMEN OR COAL-TAR OF APPROVED QUALITY @1.464 KG/SQM.
15. WEEP HOLES SHALL BE OF 75/100 MM DIA PVC/AC PIPES STAGGERED @ 1000 MM C/C BOTH VERTICALLY AND HORIZONTALLY STAGGERED. VERTICALLY ABOVE LOW WATERVEL IN BOTH RETURN WALL AND EARTH RETAINER OF BOX.
16. TOLERANCE SHALL BE FOLLOWED AS PER IRS CONCRETE BRIDGE CODE.
17. NO CONSTRUCTION JOINT SHALL BE NORMALLY ALLOWED IN CONCRETE WORKS WITHOUT SPECIAL PRECAUTIONS AS PER RELEVANT BRIDGE CODE.
18. PROPER SAFETY MEASURES SHALL BE ADOPTED DURING EXECUTION OF WORK TO SAFE GUARD THE EXISTING BRIDGE AND BANK.
IPO D69-27-06-12 BETWEEN PCE, CSTE, CEE REGARDING SAFETY OF S&T & ELECTRIC CABLES SHOULD BE FOLLOWED.
19. 20MM CLEAN JOINT SHALL BE PROVIDED BETWEEN BOX AND RETURN WALL AND SHALL BE FILLED WITH SUITABLE FILLING MATERIAL LIKE BITUMEN.
20. LAPPING OF BAR SHOULD BE MINIMIZED AND ALL STAGGERED WHEREVER NECESSARY. MINIMUM LENGTH OF LAP SHALL BE AS GIVEN IN IRS CONCRETE BRIDGE CODE
21. CONCRETE SHOULD BE PROPERLY VIBRATED AT REGULAR INTERVAL WHILE PLACING THE CONCRETE
22. FOR CONCRETING WORK, CURING PERIOD SHALL BE 14 DAYS (MIN.)
23. PERMEABILITY TEST SHOULD BE CONDUCTED AS PER CL 5.4.2 OF CONCRETE BRIDGE CODE.
24. PAINTING OF RCC / PSC STRUCTURES TO BE DONE AS PER CL 5.4.7 OF CONCRETE BRIDGE CODE.
25.SAFE BEARING CAPACITY 14.27 t/m^2.
26. SBC OF THE FOUNDATION SOIL SHALL BE DETERMINED. IF SBC IS LESS THAN INDUCED FOUNDATION PRESSURE, THEN SOIL IMPROVEMENT IS TO BE DONE AND CONFIRMED BY PLATE LOAD TEST BEFORE EXECUTION OF WORK.
27. THIS DRAWING IS BASED ON APPROVED DETAILED PLAN AND SECTION:- CE/CON/I/VSKP/JEYPORE-MALKANGIRI/2 OF 18.

LEGEND:
PROP.WORK SHOWN THUS: ———

DRG.NO.CE/CON/I/VSKP/JEYPORE-MALKANGIRI/NEWBG/114/2024
STANDARD OF LOADING : RAILWAY LOADING (25T-2008)

EAST COAST RAILWAY
(CONSTRUCTION)

DIVISION:	WALTAIR	
BR.NO-114	PROP.BRIDGE	1 X6.0 Y 5.6 M RCC BOX (RUB)
	LOCATION	CH:43840.00 M

PROPOSED BRIDGE NO-114(CH:CH-43840M) BETWEEN TANGINIGUDA -NUNAKHARI
IN WALTAIR DIVISION OF EAST COAST RAILWAY

CONSULTANTS:
M/s SATRA SERVICES AND SOLUTIONS PVT. LTD.
Corporate Office : 401, Capital Park, Image Garden Lane, Hi-Tech City, Madhapur, Hyderabad, Telangana - 500 081, India.

SHEET NO		SHEET SIZE	1270 X 600
SCALE	AS SHOWN	REVISION	R 0
		ISSUE DATE	

A.GOURI SANKAR RAO CE/C-II/VSKP E.Co.Railway	DY.CE/CON/I/KRPU E.Co.Railway	SANYASI NAIDU SSE/DRG/CON/VSKP E.Co.Railway

SAINANJAN PANDA PROJECT INCHARGE	PANKAJ PANDA CHECKED BY	KARTIKESWAR MOHANTY DRAWN BY

☐ TENDER ☐ PRELIMINARY ☐ INFORMATION ✓ APPROVAL ☐ CONSTRUCTION

Signature Not Verified
Digitally signed by KHOVHASH CHOUDHARY
Date: 2024.12.03 15:48:03
Reason: Verified-CRIS
Location: New Delhi