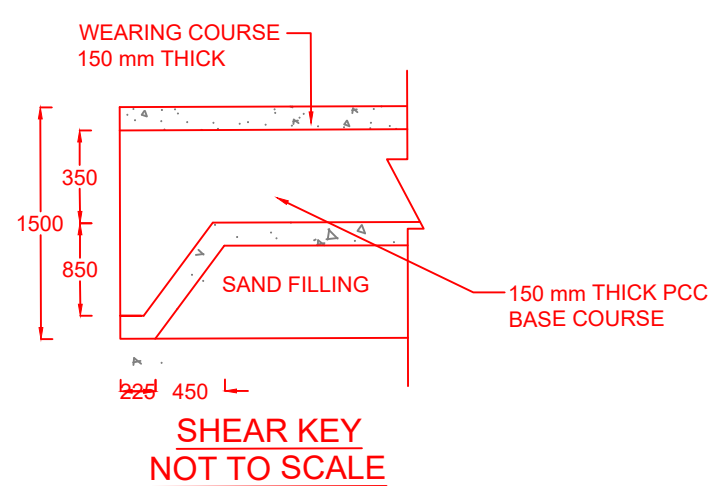


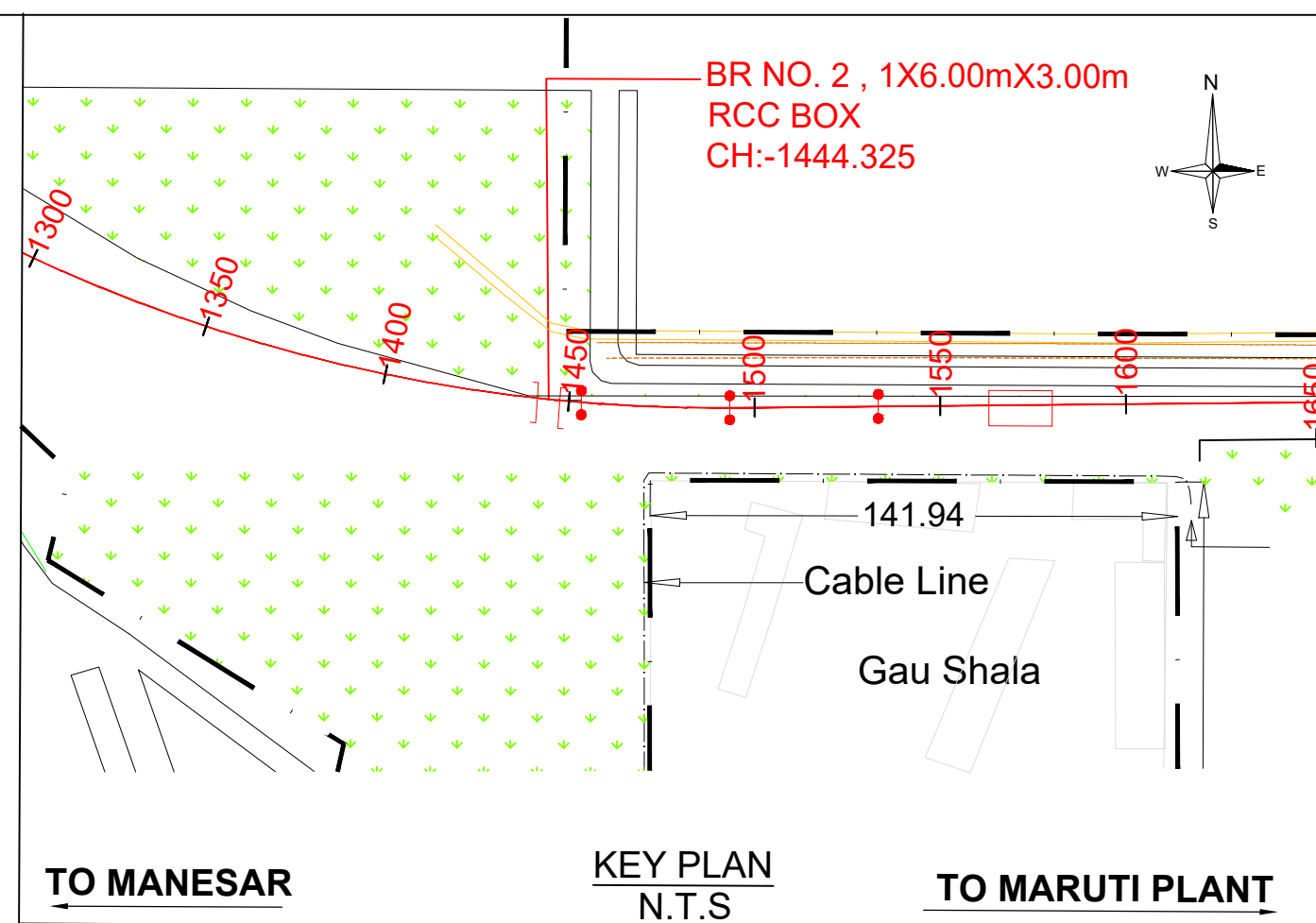
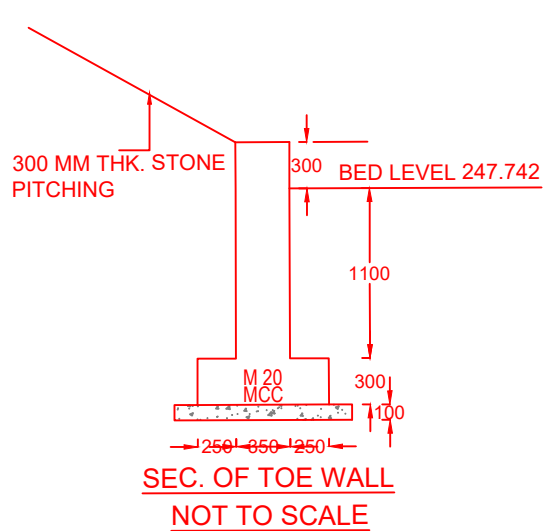
Diagram illustrating the cross-section of a bridge pier structure. The pier is shown with a central core of 600 mm WELL HAND PACKED BOULDERS, surrounded by BACKFILL MATERIALS (GW, GP, SW). The pier is topped with a 75/100 mm DIA. WEEP HOLES. The structure is supported by a foundation with a width of 1500 mm. The diagram includes the following dimensions and elevations:

- Top elevation: RL 251.192
- Bed Level: 247.742
- Foundation width: 1500 mm
- Foundation depth: 150 mm
- Foundation height: 500 mm
- Backfill height: 1500 mm
- WEEP HOLES: 75/100 mm DIA.
- WELL: 600 mm
- Backfill materials: GW, GP, SW
- Hand packed boulders: 600 mm
- Foundation: 1500 mm
- Foundation depth: 150 mm
- Foundation height: 500 mm
- Backfill height: 1500 mm
- WEEP HOLES: 75/100 mm DIA.
- WELL: 600 mm
- Backfill materials: GW, GP, SW
- Hand packed boulders: 600 mm

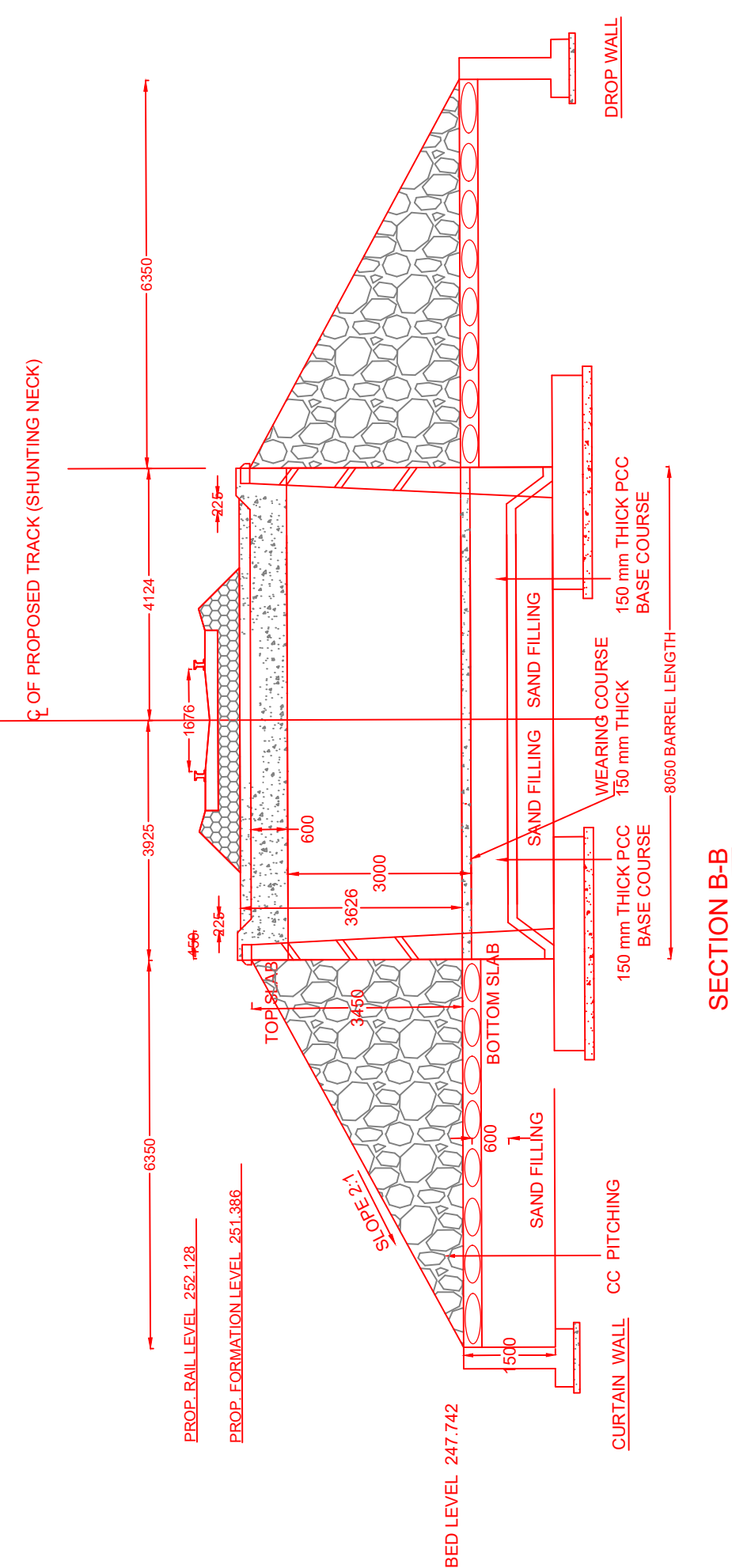
RCC RETURN
WALL AT SECTION CC



CURTAIN/DROP WALL DETAILS
NOT TO SCALE



KEY PLAN
N.T.S



SECTION B-B

6. PROTECTION WORK SUCH AS PITCHING ON SLOPE FOR APPROACHES SHALL BE PROVIDED AS PER SITE CONDITION & IT SHALL BE DECIDED BY EXECUTIVE ENGINEER.
9. FLOORING DESIGN & CURTAIN WALL SHALL BE PROVIDED DEPENDING UPON THE SITE CONDITION (ERODIBLE / NON- ERODIBLE SOILS) AND IT SHALL BE DECIDED BY D/C. IF FLOORING IS NECESSARY AS PER SITE CONDITION FOR ERODIBLE SOIL. THE RDSO DRG. NO. B/10154 SHALL BE REFERRED FOR ARRANGEMENT OF FLOORING / DROP WALL / CURTAIN WALL.
10. THE CURTAIN WALL SHALL BE IN MASS C/C. THE DETAILS SUCH AS DIMENSION AND DEPTH AS SHOWN IN THIS DRG.
11. FOR DETAILS OF RCC BOX BEHIND RDSO DRG. NO. B- 10155 & B- 10155/2 (FOR 3.0 X 3.0 M SPAN) FOR 2 M FALL.
12. BALLAST CUSHION ABOVE BOX SHALL BE 350mm.
13. DIMENSIONS OF RETURN WALL , DROP WALL CURTAIN WALL SHOWN IN THIS DRAWING ARE TENTATIVE .
14. FOR RCC DETAILS OF RETURN WALL REFER SEPARATE DRAWING.
15. FOR TIE WALL REFER APPROVED DRG. NO. CAO (C) CGC/24497/D-TIE WALL (TYPE PLAN).
16. DESIGN CRITERIA IS BASED ON FOLLOWING IRS CODES :
 - (i) IRS BRIDGE RULE
 - (ii) IRS CONCRETE BRIDGE CODE
 - (iii) IRS BRIDGE SUB-STRUCTURE & FOUNDATION CODE
 - (iv) SEISMIC ZONES IS IV AS PER IRS BRIDGE RULES APPENDIX - IV (REVISED) & EXPOSURE CONDITION IS MODERATE
17. THE PROPOSED MATERIAL SHALL BE CONFORMING TO CLAUSE 7.5 OF IRS SUB- STRUCTURE AND FOUNDATION CODE.
18. WEEP HOLES SHALL BE OF 75/100 MM DIA PVC/PIP PIPES STAGGERED @ 1000 MM C/C HORIZONTALLY AND VERTICALLY ABOVE LOW WATER LEVEL IN WING/RETURN WALL.
19. REINFORCEMENT SHALL BE FE 500 (TMT) CONFORMING TO IS 1786 - 2008.
20. FOR CONCRETE SPECIFICATION REFER IRS CONCRETE BRIDGE CODE.
21. GRADE OF CONCRETE :

(i) RCC BOX	=	M35
(ii) RETURN WALL	=	M35
(iii) WEARING COURSE	=	M20
23. LAP LENGTH SHALL BE 50 X DIA OF BAR LAPPING OF BAR SHALL BE STAGGERED AND NOT MORE THAN 50% AT A JOINT.
24. MINIMUM FOUNDATION PRESSURE UNDER RCC BOX IS 18.0 t/m² AS PER RDSO DRG. NO RDSO / B-10155/2.

HYDRAULIC DATA		
SR.No	DESCRIPTION	LEVEL (IN M)
		PROPOSED
1	RAIL LEVEL	252.128 m
2	FORMATION LEVEL	251.386 m
3	EARTH CUSHION (mm)	0.044 m
4	BOTTOM OF TOP SLAB	250.742 m
5	BED LEVEL	247.742 m
6	GRADE	LEVEL
7	LOADING STANDARD	25 T LOADING
8	BRIDGE ALIGNMENT	CURVE (4°)

STANDARD OF LOADING: 25 T LOADING

DRAWING SUBMITTED BY:
ELITE CONSULTANT

C:\Users\NLR\My Desktop\stamp.jpg

1446 / 4, 35 CIVIL LINES
BEHIND ROADWAYS, ROORKEE

CARRY OUT DETAILS ENGINEERING SURVEY INCLUDING LEVELLING, ALIGNMENT DESIGN, GAD OF BRIDGES, BUILDING ETC, SURVEY OF ELECTRICAL AND UNDERGROUND UTILITIES, PREPARATION OF YARD PLAN (ESP) BILL OF QUANTITIES AND OTHER ANCILLARY WORKS IN CONNECTION WITH DEVELOPMENT OF RAILWAY YARD IN MARUTI PLANT AT MANESAR INCLUDING PROPOSED SIDING FROM MANESAR STATION OF HORC.

TITLE:- **BRIDGE NO. 02 (BALANCE CULVERT)**

PROP.SPAN - 1x 6.0 m X 3.0 m RCC BOX (BALANCING CULVERT)

CH: 1444.325 KM: BETWEEN STATIONS : MANESAR - MARUTI PLANT

SIGNATURE BLOCK

HRIDC

GM/HRIDC

DGM/Civil/HRIDC

Exec./Civil/HRIDC

DWG Section/HRIDC/GGN

CONSULTANT

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NO : ANNEXURE-5

PG NO. : 131