P.B NO.179 OF

ELEVATION OF THE BRIDGE FOR RAILWAY PORTION
(SKEW DIMENSIONS ARE SHOWN IN BRACKET)
SCALE 1:200

HALF TOP HALF BOTTOM PLAN

SECTION B-B

KEY PLAN FOR RAILWAY PORTION

KEY PLAN
NTS

PIER ELEVATION
(RP2,RP3,RP4,RP5)
(SCALE = 1 : 100)

PIER ELEVATION
(RP1 & RP6)
(SCALE = 1 : 100)

DETAILS OF BH-1
SCALE - NTS

DETAILS OF BH-2
SCALE - NTS

ABUTMENT ELEVATION (A2)
(SCALE = 1 : 100)

DETAILS OF SECTION B-B
SCALE 1:100

TYP SECTION VIEW 1-1
SCALE 1:100

LEGEND FOR STRUCTURES

STRUCTURE TYPE	CODE FOR SURVEY	SYMBOL
ELECTRIC POLE	EP	
SIGNAL POST	SP	
TOWER	TOW	
BOREWELL	BH	
WELL	WELL	
TREE	TR	
LEVEL CROSSING	LC	
OPC CABLE	OPC	
SAT CABLE	SAT	
RR CABLE	RR	

NOTES:
1. ALL DIMENSIONS ARE IN MILLIMETERS AND LEVELS IN METERS U.O.S.S WRITTEN OTHERWISE.
2. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWING ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. ALL DIMENSIONS SHOWN IN RED, ASSETS BEING DEMANTLED SHOWN IN GREEN AND FUTURE WORKS TRACKS SHOWN IN ORANGE.
4. ACTUAL LOCATION OF ROB SHALL BE DECIDED BY RLY. ENGINEER-IN -CHARGE IN CONSULTATION WITH ROAD AUTHORITIES AT THE TIME OF ITS CONSTRUCTION.
5. ACTUAL DEPTH OF FOUNDATION SHALL BE DECIDED BY ENGINEER-IN-CHARGE TO SUIT THE SOIL CONDITIONS AT THE SITE.
6. VERTICAL CLEARANCE FROM HIGHEST RAIL LEVEL TO BOTTOM OF GIRDER SHALL NOT BE LESS THAN 5.75M A.C. TRACTION AREA AND 5.55m IN CASE OF DFC/FREIGHT DOUBLE STACK CONTAINER ROUTE.
7. SHAPES AND SIZES OF GIRDERS, PIER PIER BEARING PEDESTALS, SHOWN IN THE DRAWING ARE TENTATIVE AND ARE SUBJECT TO CHANGES IN FINAL DESIGN AND DRAWING.
8. SHAPES AND DIMENSIONS OF ABUTMENTS, WING, PIER, PIER SHAFT AND FOOTINGS ARE TENTATIVE AND ARE SUBJECT TO CHANGES IN FINAL DESIGN AND DRAWING.
9. SLOPE PROTECTION SHALL BE PROVIDED BEHIND RETURN WALLS.
10. ALL RCC WORKS BELOW FINISHED GROUND LEVEL SHALL BE IN M-30 CONCRETE. ONLY CONTROLLED CEMENT CONCRETE MIX IS TO BE PROVIDED. GRADE OF CONCRETE FOR MASS CONCRETE AND PCC BOX WORK SHALL NOT BE LESSER THAN M-20 AND M-25 RESPECTIVELY.
11. THE DESIGN & SANCTIONING SCHEME OF SUPERSTRUCTURE HAS TO BE SUBMITTED WHICH WILL BE APPROVED BY CRB BEFORE COMMENCEMENT OF LAUNCHING.
12. EXCAVATION OF ROB WORK SHALL BE DONE ONLY IN PRESENCE OF AUTHORIZED RAILWAY REPRESENTATIVE TO ENSURE THE SAFETY OF RUNNING TRAINS. PROPER PRECAUTIONS SHALL BE TAKEN DURING EXCAVATION OF OPEN FOUNDATION NEAR THE EXISTING RAILWAY TRACK SO AS TO ENSURE THAT NO LOOSE SOIL FALLS NEAR THE TRACK. PROPER SHORING SHALL BE DONE TO PROTECT SLIPS/FAILURE OF SOIL.
13. ADDITIONAL LOAD TRANSFERRED FROM FUTURE TRACKS SHALL BE CONSIDERED WHILE DESIGNING OPEN FOUNDATION IN EITHER SIDE.
14. IN ORDER TO OFFER ADEQUATE RESISTANCE AGAINST CHOKAGING, THE REINFORCEMENT IN THE FOOTING SHALL BE PROVIDED AS PER CLAUSE 16.3.1.2 OF IRS CODE OF PRACTICE FOR PLAIN AND REINFORCED CONCRETE AS PER PARA 7.3 OF CONCRETE BRIDGE CODE CONSTRUCTION IS: 802.1.2 IN 26.06.2000.
15. OFFICE FOR THE RAILWAY ENGINEERS AT BRIDGE SITE OR AT NEAR BY LOCATION DECIDED THE RAILWAY SHALL BE PROVIDED BY SPONSORING ROAD AUTHORITY AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD BY RAILWAY.
16. DRAWING AND DESIGN OF ROB SHALL BE PROOF CHECKED BY EITHER OF INSTITUTE CONSULTANT AS APPROVED BY SBI/RAILWAY.
17. LONG DURABILITY ANTI-CORROSION PROTECTION SHOULD BE APPLIED TO THE STEEL SURFACES.
18. PROPER RAILINGS LADDER AND PLATFORMS FOR INSPECTION OF BEARING SHOULD BE PROVIDED IN EVERY PIER.
19. ALL TECHNICAL RECORD i.e. CUBE STRENGTH, PRESTRESSING DETAILS ETC. SHALL BE MAINTAINED BY MAIN WORKS ENGINEER.
20. BEFORE COMMENCEMENT OF RCC CONSTRUCTION DRAWING AND COMPLETE COST OF ROB IS TO BE SANCTIONED BY RLY ADMINISTRATION BY ROAD AUTHORITIES SHALL BE HANDED OVER TO RAILWAY ENGINEER IN CHARGE.
21. BEFORE OPENING OF ROB (WITH RAILWAY PORTION) FOR ROAD TRAFFIC, APPROVAL OF RLY. ADMINISTRATION IN CHARGE IS TO BE OBTAINED BY ROAD AUTHORITY.
22. GRADE OF CONCRETE
- 22.1. RCC ABUTMENT : M35
- 22.2. RCC PIER : M35
- 22.3. RCC ANTICRASH BARRIER : M40
- 22.4. RCC RETURN WALLS : M30
- 22.5. BEARING PEDESTALS : M40
23. STOPPER SHOULD BE PROVIDED AT ENDS ON THE TOP OF PIER/ABUTMENT CAP TO REDUCE POSSIBILITY OF TOPPING OF GIRDER DURING LAUNCHING OF GIRDER.
24. CRS SANCTION SHALL BE OBTAINED BEFORE COMMENCEMENT OF WORK.
25. ALL WORKS SHALL BE CARRIED OUT UNDER THE SUPERVISION OF ENGINEER IN CHARGE LOADING ALONG WITH PASSING LOAD ARE TO BE WORKED OUT FOR THE LOADING SHALL BE CONSIDERED AS PER IRCS.
26. AS PER RAILWAY BOARD LETTER NO.2007/CE/1/ST-775-776 DATED 12.10.2011 TRACK LEVEL SHOULD BE FROZEN.
27. ALL DESIGN OF STRUCTURAL MEMBERS i.e. PILE/PILE CAP/PIER, ABUTMENT/PIER CAP ETC SHOWN ARE TENTATIVE AND SHALL BE AS PER STRUCTURAL DESIGN AND DRAWING SUBMITTED BY CONSULTANT/PARTY AND APPROVED BY RAILWAY.
28. STRUCTURAL STEEL OF ROB STEEL/COMPOSITE GIRDERS CONFORMING TO IS:2062-2006 E 250 BO OTHERWISE SPECIFIED IN DESIGN.
29. ROB NUMBER SHALL BE INVITED AT SUITABLE LOCATION IN CONSULTATION WITH ROAD AUTHORITIES.
30. EXISTING ROB BE CLOSED AFTER COMPLETION OF ROB WORK.
31. THE QUALITY CONTROL AS PER RDSO/PROJECT (CIRCULATED BY RDSO VIDE LETTER NO.CB(PSI)-2/2012 DATED 16.05.2014) SHALL BE ENSURED BY INSPECTING ENGINEER.
32. ROB SHALL BE CONSTRUCTED AS PER RDSO APPROVED DRG. NO. ..... CLOSING OF LEVEL CROSSING NO. ..... AS/I RDSO OBTAINED VIDE LETTER NO. .....
34. FOR RUNNING STRUCTURE REFER FOLLOWING DRAWING:
- 34.1 PSC SPAN STEEL COMPOSITE GIRDER : RDSO/B-11558/
- 34.2 48 SPAN STEEL COMPOSITE GIRDER : RDSO/B-11559/
- 34.3 PSC SPAN/PRESTRESS PSC GIRDER REFER SPAN/STEEL DRAWING (TO BE DESIGNED BY DFCCIL)
35. S.B.C. AT 4.0 M DEPTH = 25 T/m²
36. FOUNDATION OF LAUNCHING TOWER
37. SLAB OF ABUTMENT IS γ_{sat} 2.75 kN/m³ (MATERIAL)
38. IN VIEW OF LOCATION OF ROB BETWEEN SVD AND MD-DFCCIL DATE 20/02/2015, ONE LHS SHALL BE PROVIDED BY THE SIDE OF ROB GAP OF THE SAME WILL FOLLOW SEPARATELY.

NOTE:
1. FOR APPROACHES PARTIAN AS PER STATE GAUT
- (a) RFI-1(ENE)111/11, DATED 25.03.2015 IT AS UNDE
- (b) WRAPCENT FOR APPROACH PARTIAN & LINE
- (c) MAX HEIGHT OF RE WALL FOR APPROACH P
- (d) TO BE TO MEET SAFE CRITERIA(IE. AND
- (e) MORE THAN 8m, VIADUCT SPAN HAS BEEN P
2. ON WEST SIDE APPROACHES NALLAH PARALL APPROACHES PARTIAN, THEREFORE VIADUCT BEEN PROPOSED UPTO 6m HEIGHT OF RE W

LENGTH OF APPROACH = 297.84m
= 12nos (1 NO. OF SPAN OF 23m)
+ 247.84m LENGTH OF RE WALL

LENGTH OF APPROACH = 297.84m
= 12nos (1 NO. OF SPAN OF 23m)
+ 247.84m LENGTH OF RE WALL

(P. M. CHAUDHARY)
SE/R&B/VARA

(N.I.CHAUDHARY)
EE/R&B/VARA

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
A PSU UNDER MINISTRY OF RAILWAY (MUMBAI UNIT)
WESTERN RAILWAY
MUMBAI - DIVISION | VR - ST - SECTION
BETWEEN - SANAV - BHILAD

PROPOSED CONSTRUCTION OF ROB IN LIEU OF LC AT KM 149/22-24 (DFCC CH.184922) 1×24+2×23 "COMPOSITE GIRDER RAILWAY SPAN"

DESIGNED BY: CHANCHAL JAIN
CHECKED BY: AZEEM OBCT (LEURA BH PRASAD)
SANCTIONED BY: SR.DEN/DFC (NANDEESH SHUKLA)
PLAN VERIFIED BY ME AT SITE:
SR.DEN/DFC (NANDEESH SHUKLA)
SR.DEN/DFC (CHANDRA PRAKASH)
SR.DEN/DFC (CHANDRA PRAKASH)
SR.DEN/DFC (CHANDRA PRAKASH