



TRACK DETAILS (PRO. BRIDGE)	
LOADING	: 25 T-AXLE LOAD
RAIL LEVEL	: 2008 STD
FORMATION LEVEL	: 16.106 m
FORMATION LEVEL	: 15.364 m

DEPTH OF CONSTRUCTION (PRO. BRIDGE)	
RAIL 60 kg	: 172 mm
GR PAD	: 10 mm
PSC SLEEPER	: 210 mm
BALLAST CUSHION	: 350 mm
EARTH CUSHION (F.L. TO TOP OF BOX)	: 5176 mm
TOTAL	= 5918 mm

LOADING STANDARD	
PRO. BRIDGE: 25TAXLE LOADING - 2008	

SPECIAL NOTES SPECIFIC :-

1. DIRECTION OF FLOW SHOWN IS TENTATIVE AND IT IS TO BE FINALLY JUDGED AT SITE.

SPECIAL NOTES :-

1. PITCHING: (where applicable)

HAND PACKED ROUGH STONE PITCHING 300mm. THICK (WITH CM 1:4) OVER 150mm. THICK GRAVEL BACKING CONSISTING OF WELL GRADED GRAVEL OF MAX.SIZE BEING 15mm. WITH PCC TOE WALL.

REFERENCE :-

1. DETAILS OF RCC BOX STANDARD DRAWING REFER RDSO DRG.NO.:RDSO/B-10155.

2. DETAILS OF RCC BOX REINFORCEMENT DRAWING REFER RDSO AS PER FILL HEIGHT.

DETAILS OF PROPOSED BRIDGES

BR.NO.	CHAINAGE	TYPE	SPAN
27	CH-16586.055	R.C.C. BOX	1X4.00X 2.00M
31	CH-17373.055		

- NOTES:-
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE STATED.
  - ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED AT SITE & RECONCILED BEFORE EXECUTION.
  - DESIGN CRITERIA
  - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE, LATEST REVISION
  - IRS CONCRETE BRIDGE CODE, LATEST REVISION
  - EXPOSURE CONDITION - MODERATE
  - STANDARD OF LOADING - BG-2008(25T LOADING)
  - SEISMIC ZONE - III
  - DESIGN CRACK WIDTH = 0.25MM
  - CONCRETE MIX
  - a) RCC BOX-----M35
  - b) RETURN WALL/ U-TROUGH.....M30
  - c) LEVELING COURSE .....M15
  - d) WEARING COURSE .....M15 (FOR DBC)
  - e) DROP WALL/CURTAIN WALL .....M 15.
  - MIX DESIGN SHALL BE APPROVED BY ENGINEER-IN-CHARGE.
  - ALL CONCRETE WORK SHALL BE MECHANICALLY MIXED AND VIBRATED.
  - ALL RCC AND PCC WORK SHALL BE DONE IN ACCORDANCE WITH SPECIFICATION LAID DOWN IN IRS CONCRETE BRIDGE CODE.
  - CLEAR COVER FOR REINFORCING BARS SHALL BE 50mm.
  - LAP LENGTH SHALL BE 50 x DIA OF BAR AND SHALL BE STAGGERED NOT MORE THEN HALF THE BARS SHALL BE LAPPED AT ONE SECTION.
  - WEEP HOLES OF 80mm DIA PIPES TO BE PROVIDED @1000mm c/c HORZ. AND 1000mm C/C VERTICALLY ABOVE LOWEST WATER LEVEL IN WING WALL / RETURN WALL.
  - WEEPS HOLES OF 80mm PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/BALLAST RETAINER.
  - BED SLOPE OF 1 IN 100 SHALL BE PROVIDED IN WEARING COURSE AS PER NATURAL SITE CONDITION.
  - ALL R.C.C. SURFACES COMING IN CONTACT WITH SOIL SHOULD BE PAINTED WITH TWO COATS OF BITUMEN OR COATER (SEALING COAT) OF APPROVED QUALITY.
  - PROVIDE A SLOPE OF 1 IN 40 TOWARDS OUTSIDE FROM CONCRETE LINE ON TOP OF BOX FOR PROPER DRAINAGE
  - BOX STRUCTURE SHOULD BE PROVIDED ON NON-ERODIBLE STRATA OR ELSE SUITABLE MEASURES SHOULD BE TAKEN TO AVOID EROSION BELOW THE BOX.
  - BARREL LENGTH OF BOX & LENGTH OF WING WALL AND RETURN WALL TO BE ADJUSTED AT SITE IF REQUIRED, AS PER SITE CONDITION.
  - DRAWING IS TO BE CHECKED THOROUGHLY AND DISCREPANCIES IF ANY, MAY BE BROUGHT TO THE NOTICE OF THE DESIGNER BEFORE STARTING EXECUTION.
  - SUITABILITY OF THE STRUCTURE PROPOSED, ITS OVERALL LAYOUT AND BARREL LENGTH MAY BE RECHECKED AT SITE VIS-A-VIS LAYOUT DRAWING OF ALIGNMENT AS IN DPR AND W.R.T. ACTUAL SITE CONDITION ALSO, BEFORE STARTING EXECUTION.
  - SOFT PATCHES BELOW FOUNDATION MAY BE REMOVED AND TO BE REPLACED WITH GRANULAR FILL-FULLY COMPACTED, LAID OVER COMPACTED HARD SOIL. EXTENT OF PITCHING AND TOE WALL MAY BE FINALIZED AS PER SITE CONDITION.
  - GF - PROJECT OFFICE NEEDS TO MAKE AVAILABLE GT REPORT/CONFIRMATORY LOAD TEST REPORT AT BRIDGE LOCATION TO GET EXTENT OF GROUND IMPROVEMENT DEPTH (GF) TO ENSURE REQUIRED BEARING CAPACITY AT SITE.
  - ALL THE GUIDELINES REGARDS TO ENVIRONMENT PROTECTION SHALL BE FOLLOWED.
  - PROPER SAFETY AND HEALTH MEASURES SHOULD BE ENSURED FOR WORKERS AND EMPLOYEES DURING EXECUTION AS PER CODAL PROVISION.
  - DROP WALL/ CURTAIN WALL DETAILS SHOWN ARE TENTATIVE. THE SAME TO BE RE-CONFIRMED WITH GT REPORT, TO COMPLY WITH SCOUR REQUIREMENT.
  - SHAPES AND DIMENSIONS SHOWN ARE TENTATIVE AND ARE SUBJECT TO CHANGES IN FINAL DESIGN AND DRAWING.
  - STAINLESS STEEL BARS HAVING GRADE SS 500/550 AS PER DESIGNER APPROVAL SHOULD BE USED CONFORMING IS 16651 - 2017 WITH LATEST AMENDMENT.

SIGNATURE BLOCK

CE-C-I-CCG	
DYCE-C-CCG	
AXEN-C-CCG	
SSE-C-W-BVI	

PINK BOOK ITEM NO: 31 OF PB 2024-25NR

DRG. NO.: DY.CE/CCCG/ 1067 /D-VADHAVAN PORT

CONSTRUCTING RAILWAY: WESTERN RAILWAY

DIVISION: MUMBAI SECTION: VR - ST SECTION

PROJECT: NEW DOUBLE LINE BETWEEN VADHAVAN PORT AND NEW PALGHAR STATION (22.23 KM)

TYPICAL GAD FOR R.C.C. BOX 1X4.00X2.00M (MINOR BRIDGE) IN BETWEEN NEW PALGHAR STATION AND VAROR STATION.

GENERAL ARRANGEMENT DRAWING

RAIL LOADING STANDARD : 25 T AXLE LOADING (2008)

CONSULTANT: SATRA Services and Solutions Private Limited

SHEET NO: SHEET 1 SHEET PAGE: AD (2200 X 841)

SCALE: AS SHOWN (UNLESS OTHERWISE SPECIFIED)

DATE: