



- NOTES:**
- ALL DIMENSIONS ARE IN MILLIMETRES AND LEVELS ARE IN METER, UNLESS OTHERWISE SPECIFIED.
  - DIMENSIONS ARE NOT TO BE SCALED. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
  - THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH GENERAL ARRANGEMENT DRAWINGS AND RAIL ALIGNMENT DRAWINGS.
  - SEISMIC ZONE: II
  - IF ANY AMBIGUITY IS FOUND IN DRAWINGS OR AT SITE, THE SAME SHALL BE BROUGHT TO DESIGNER'S/ENGINEER'S NOTICE BEFORE EXECUTION.
  - REINFORCEMENT STEEL SHALL BE HYSD BARS OF GRADE Fe 500 CONFORMING TO IS:1786-2008
  - GRADE OF CONCRETE SHALL BE AS FOLLOWS:  
PCC LEVELING COURSE : M20  
PILE : M35  
PILE CAP : M35  
PORTAL PIER : M50  
PIER HEAD : M60  
PORTAL BEAM : M60
  - CLEAR COVER TO ALL REINFORCEMENT SHALL BE:  
PILE : 75 mm  
PILE CAP : 75 mm  
PIER : 50 mm  
PORTAL BEAM : 40 mm
  - BORING AND CONCRETING OF PILE SHALL BE CARRIED OUT AS PER TECHNICAL SPECIFICATIONS AND METHOD STATEMENT.
  - PILE COORDINATES SHOULD BE CHECKED AND CONFIRMED AT SITE BEFORE CASTING OF PILES.
  - THE NOMINAL MAXIMUM SIZE OF AGGREGATE TO BE USED SHALL BE 20mm.
  - PILE TOP SHOULD PROJECT 75mm INTO PILECAP.
  - CONTRACTOR TO ENSURE THAT AT CUT-OFF LEVEL THE CONCRETE IS SOUND AND THE MATRIX HAS NO HONEYCOMBING OR OTHER DEFECTS.
  - THE METHOD OF BORING AND INSTALLATION FOR WORKING PILE SHALL BE SAME AS PER THE TEST PILE.
  - PERMISSIBLE TOLERANCES FOR SHALL BE:-  
a) SHIFT NOT TO EXCEED 75 MM. AT PILING PLATFORM LEVEL.  
b) TILT NOT TO EXCEED 1 IN 150.
  - IN CASE OF ANY DEVIATION IS OBSERVED DURING THE PILE BORING OPERATION, THE SAME SHOULD BE BROUGHT TO THE NOTICE OF DESIGNER AND ENGINEER FOR NECESSARY ACTION/ AMENDMENTS BEFORE EXECUTION.
  - TEMPORARY LINER SHALL BE FOLLOWED AT SITE, HOWEVER IF ANY DIFFICULTY ARISES IN EXECUTION, PERMANENT LINER SHALL PROVIDED BE AS PER ENGINEER'S RECOMMENDATION.
  - THE PILE CAPACITIES HAVE BEEN WORKED OUT AS PER BORE LOG DATA. DISCREPANCY IF ANY SHALL BE INFORMED TO THE ENGINEER.
  - ANY SHIFTING IN PILE AT SITE, SHALL BE BROUGHT TO THE NOTICE OF DDC.
  - ALL LEVELS & COORDINATES TO BE VERIFIED AT SITE BEFORE EXECUTION.
  - PILE TERMINATION LEVEL SHALL BE VERIFIED AT SITE BEFORE EXECUTION.
  - AS PER GC LETTER 2810 THE LENGTH OF PILE TO BE CONSIDERED.

- REFERENCE DRAWINGS :**
- 022077-BSRP-CR2-C-VD-0-30-1602.....REINFORCEMENT DETAILS OF PILE, PILE CAP & PIER FOR PORTAL PIER DPP211
  - 022077-BSRP-CR2-C-VD-0-30-1621.....DIMENSION DETAILS OF PORTAL BEAM FOR PORTAL PIER DPP211
  - 022077-BSRP-CR2-C-VD-0-30-1647.....PRESTRESSING DETAILS OF PORTAL BEAM AT PORTAL PIER DPP211 (SHEET 1 OF 2)
  - 022077-BSRP-CR2-C-VD-0-30-1724.....REINFORCEMENT DETAILS OF PRECAST POST TENSIONED PORTAL BEAM FOR PORTAL PIER DPP211 (SHEET 1 OF 2)
  - 022077-BSRP-CR2-C-VD-0-30-1725.....REINFORCEMENT DETAILS OF PRECAST POST TENSIONED PORTAL BEAM FOR PORTAL PIER DPP211 (SHEET 2 OF 2)

TABLE OF LEVELS

PIER NO.	PROPOSED BSRP RAIL LEVEL CR1(m)	PROPOSED BSRP RAIL LEVEL CR2(m)	LEDGE BEAM TOP LEVEL (m)	ORIGINAL GROUND LEVEL LHS (M)	ORIGINAL GROUND LEVEL RHS (M)	PILE CAP TOP LEVEL FOR LHS PIER (m)	PILE CAP TOP LEVEL FOR RHS PIER (m)	PILE CUT-OFF LEVEL (m)	PILE CAP BOTTOM LEVEL (m)	PILE TERMINATION LEVEL (m)	DESIGN LOAD VERTICAL (TONNES)	CAPACITY LOAD VERTICAL (TONNES)	DESIGN LOAD LATERAL (TONNES)	CAPACITY LOAD LATERAL (TONNES)
DPP211	929.232	929.266	925.873	906.033	906.123	905.533	905.533	903.808	903.733	870.733	571	600	15.00	114.67

DPP211L-PIER & PILE CO-ORDINATES			DPP211R-PIER & PILE CO-ORDINATES		
CENTRE LOCATIONS	X	Y	CENTRE LOCATIONS	X	Y
PIER	776268.565	1441731.868	PIER	776285.553	1441739.594
PILE 1	776267.671	1441729.484	PILE 1	776284.659	1441737.210
PILE 2	776266.181	1441732.761	PILE 2	776283.169	1441740.487
PILE 3	776269.458	1441734.251	PILE 3	776286.446	1441741.977
PILE 4	776270.948	1441730.974	PILE 4	776287.936	1441738.700

**NOTES:**

**LEGEND:**

**REFERENCE DRAWINGS:**

1. 022077-BSRP-CR2-C-VD-GEN-20-2061 TO 2072.....GENERAL ARRANGEMENT DRAWING FOR VADUT PORTION UP LINE & DOWN LINE FROM CH.16.500KM TO CH.18.000KM FOR CR2

2. 022077-BSRP-CR2-C-VD-0-30-1738.....TYPICAL DETAILS OF DRAINAGE SCHEME AT PORTAL PIER LOCATION

3. 022077-BSRP-CR2-C-VD-0-30-1739.....TYPICAL DETAILS OF EARTHING SCHEME AT PORTAL PIER LOCATION

**REFERENCE DOCUMENTS:**

1. DDC-BSRP-CR2-EV-DGN-GEN-30-1701

**KEY PLAN**

**STATION BOX KEY PLAN**

**EMPLOYER:**

**RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED**

**GENERAL CONSULTANTS:**

**AECOM EGIS AECOM-EGIS-WSP**

**PROJECT:**

**BENGALURU SUBURBAN RAILWAY PROJECT (BSRP)**

**K-RIDE CORRIDOR - 2**

**DRAWING TITLE:**

**DIMENSION DETAILS OF FOUNDATION AND SUBSTRUCTURE FOR PORTAL PIER DPP211**

**DRAWING NO.:**

**022077-BSRP-CR2-C-VD-0-30-1601**

**REVISION**

**0**

**DWG STATUS**

**C**

**SCALE:**

**AS SHOWN**

**DATE:**

**14.12.2023**

**SHEET SIZE - A1**

10/12/2023 2:28 PM  
022077-BSRP-CR2-C-VD-0-30-1601\_01.dwg