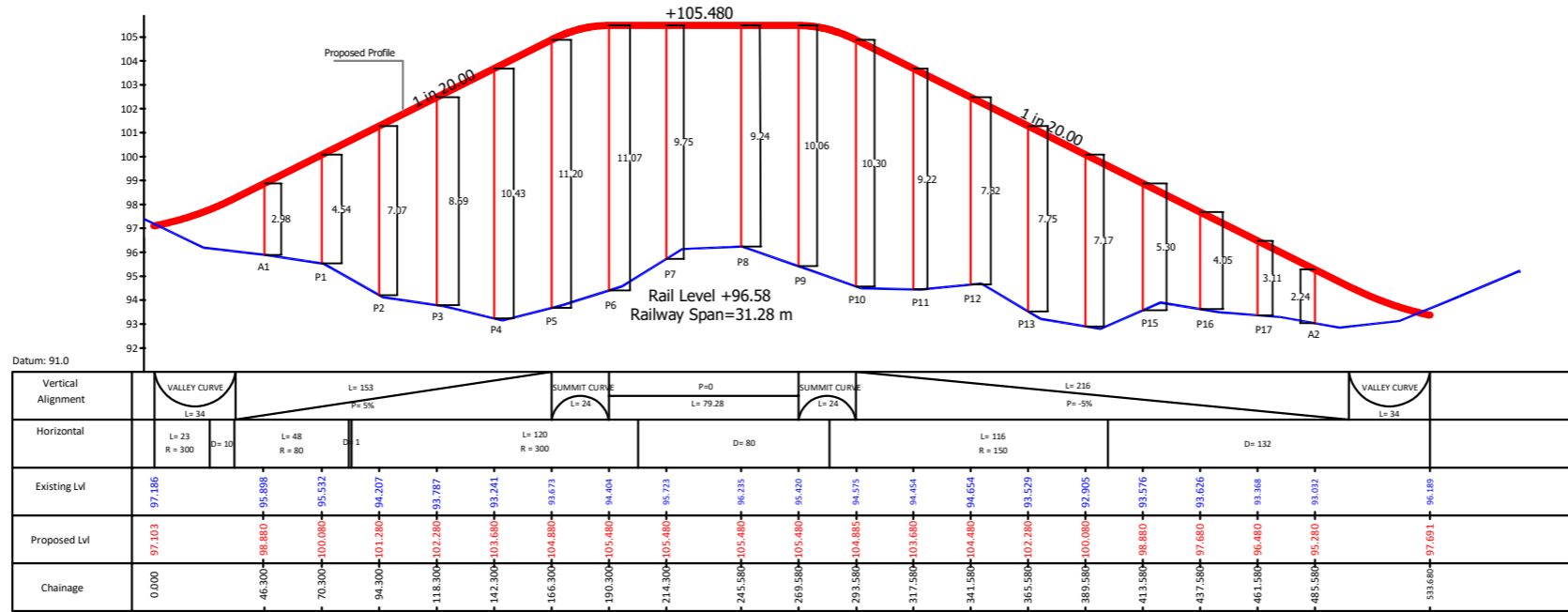


# MYNAGAPALLY

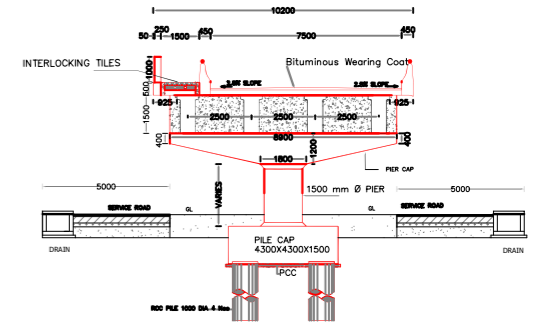
- NOTES:**
- All dimensions are in millimetres and Levels are in metres.
  - No dimension shall be scaled from the drawing.
  - Any discrepancy in the drawings to be brought to the notice of the Engineer.
  - All RCC works are to be done as per IRC code of practice read with Southern railway Specification for Materials & Works 1969.
  - Grade of concrete to be adopted as recommended below:-
    - M20 grade concrete for levelling course below pile cap.
    - M45 grade concrete for construction of Superstructure & Pier cap.
    - M35 grade concrete for the construction of Pile cap, Pier, Abutment and Wearing Coat.
    - M35 grade concrete for the construction of Piles.
    - M45 grade concrete for all RCC works in the superstructure of composite section.
  - Minimum cement content for-
    - M20 grade concrete - 310 kg/cum.
    - M35 grade concrete - 380 kg/cum.
    - M45 grade concrete - 380 kg/cum.
    - For Piles - 400 kg/cum.
  - Maximum water cement ratio for-
    - M20 grade concrete - 0.45
    - M35 grade concrete - 0.40
    - M45 grade concrete - 0.40
    - For Piles - 0.45
  - Use 53 / 43 grade Ordinary Portland cement conforming to IS 12269 : 1987 or IS 8112 : 1989.
  - Reinforcement steel shall be CRS bars of grade Fe 500 conforming to IS :1786 (Part1).
  - Bar bending shall conform to IS : 2502.
  - Development length (Ld) shall be 46 times diameter of bars.
  - Minimum Lap length (Ld) shall be 60 x d where 'd' is the diameter of smaller bar. The spacing of Transverse reinforcement shall not be more than 150mm at the locations where bars are lapped. Not more than 50% of bars shall be lapped at any section.
  - 12.7mm nominal dia. low relaxation strands as per IS 14268:1995 shall be used for pre stressing.
  - Structural details of Composite girder for the superstructure is as per the RDSO drawing RDSO/B-11758/R
  - All structural steel members shall be Corrosion Resistant Steel and tested for quality, conform to IS : 2062 (Latest).
  - Structural steel to be painted with one coat of primer(conforming with anti corrosive paint) after fabrication and another coat of primer and two coats of anti corrosive paint after erection.
  - Minimum clear cover to any reinforcement shall be 50mm for all the members except for Piles. For Piles Clear cover to any reinforcement shall be 75mm.
  - All members are designed for relevant IRC codes.
  - PVC Drainage spout and collection pit assembly shall be provided at suitable locations.
  - Initial pile load test shall be done for one pile as per IS : 2911 (Part-4) to assess pile capacity.
  - Routine pile load test shall be done for one pile as per IS : 2911 (Part-4) to ensure working pile capacity.
  - Borehole bottom shall be well flushed to remove all slush and other loose materials before laying the tremi concrete.
  - The Minimum slump for the pile concrete shall be 150 -170mm. If necessary add suitable plastisizers to get the required slump.
  - Strip seal Type Expansion Joint shall be used.
  - All the Bearings shall be of POT cum PTFE / NEOPRENE Bearings.

46.30 m(RETAINING WALL PORTION)      168.00 m(24\* 7 m spans)      31.28 m(RLY PORTION)      240.00 m(24\*10 spans)      48.10 m(RETAINING WALL PORTION)

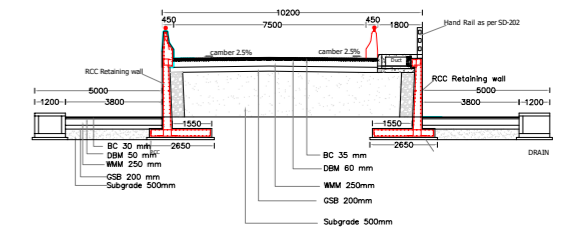


LONGITUDINAL SECTION  
VERTICAL 1:100

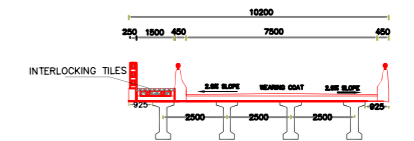
TOTAL LENGTH OF ROB: 533.68 m



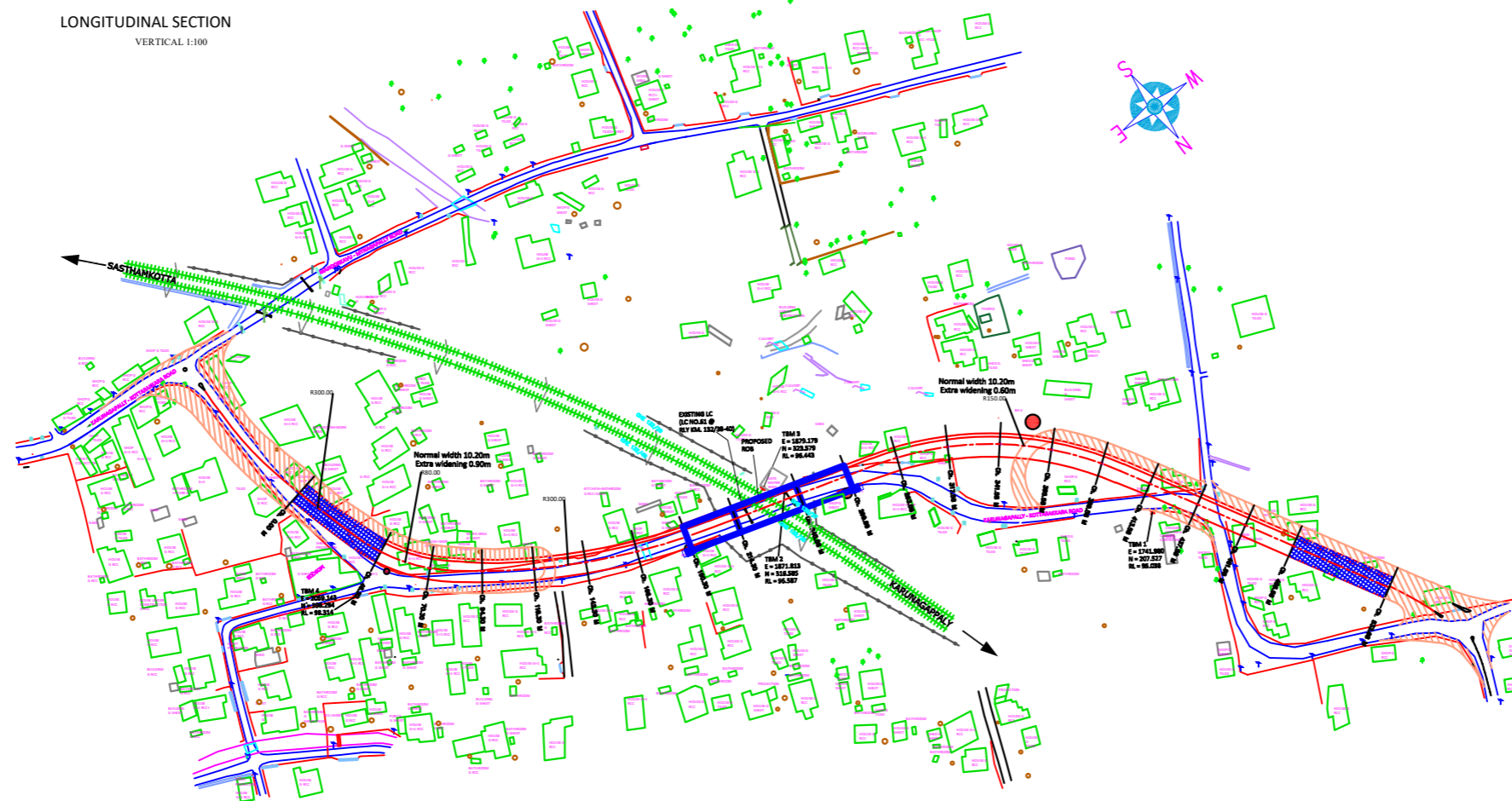
TYPICAL CROSS SECTION AT APPROACH (TRESTLE) PORTION (24.00 M SPAN)



TYPICAL CROSS SECTION AT APPROACH ROAD (RETAINING WALL PORTION)

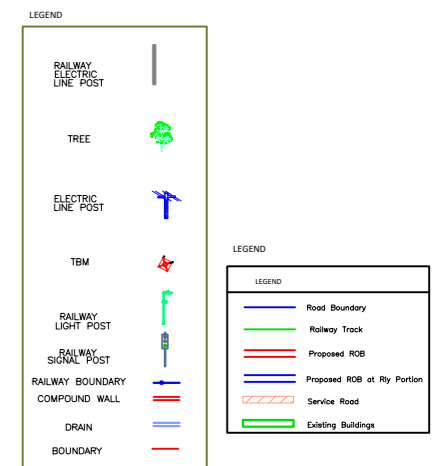


TYPICAL CROSS SECTION AT MIDSPAN (24.00 M SPAN)



ALIGNMENT PLAN  
HORIZONTAL 1:1000

Sl No	Chainage	Coordinates	
		Easting	Northing
1	46.3	E=2037.39	N=-405.69
2	70.3	E=2023.75	N=-386.03
3	94.3	E=2005.39	N=-370.63
4	118.3	E=1985.54	N=-357.16
5	142.3	E=1964.68	N=-345.32
6	166.3	E=1942.94	N=-335.18
7	190.3	E=1920.45	N=-326.81
8	214.3	E=1897.42	N=-320.04
9	245.58	E=1867.32	N=-311.53
10	269.58	E=1844.23	N=-305.00
11	293.58	E=1821.26	N=-298.07
12	317.58	E=1799.47	N=-288.07
13	341.58	E=1779.56	N=-274.73
14	365.58	E=1762.01	N=-258.38
15	389.58	E=1747.30	N=-239.44
16	413.58	E=1735.15	N=-218.74
17	437.58	E=1723.25	N=-197.90
18	461.58	E=1711.35	N=-177.05
19	485.58	E=1699.48	N=-156.20
20	TBM 1	E=1741.980	N=207.527
21	TBM 2	E=1871.813	N=316.585
22	TBM 3	E=1879.179	N=323.579
23	TBM 4	E=2059.143	N=396.294



REVISION	DATE	BY	CHECKED	APPROVED	SCALE	PROJECT	TITLE	SHEET NO.	SHEET TOTAL

ALIGNMENT AND LONGITUDINAL PROFILE FOR PROPOSED ROB AT MYNAGAPALLY IN MYNAGAPALLY AND SASTHANUR TALUK

**RBDCK Ltd.**  
INSTITUTE FOR SOCIAL ADVANCEMENT  
T.C. 376/2/5, Kattappanadu, Kottayam District, Kerala  
PROJECT: ALIGNMENT, LONGITUDINAL PROFILE AND CROSS SECTION FOR AT MYNAGAPALLY IN MYNAGAPALLY DISTRICT  
TITLE: GENERAL ARRANGEMENT DRAWING  
SHEET NO. 02