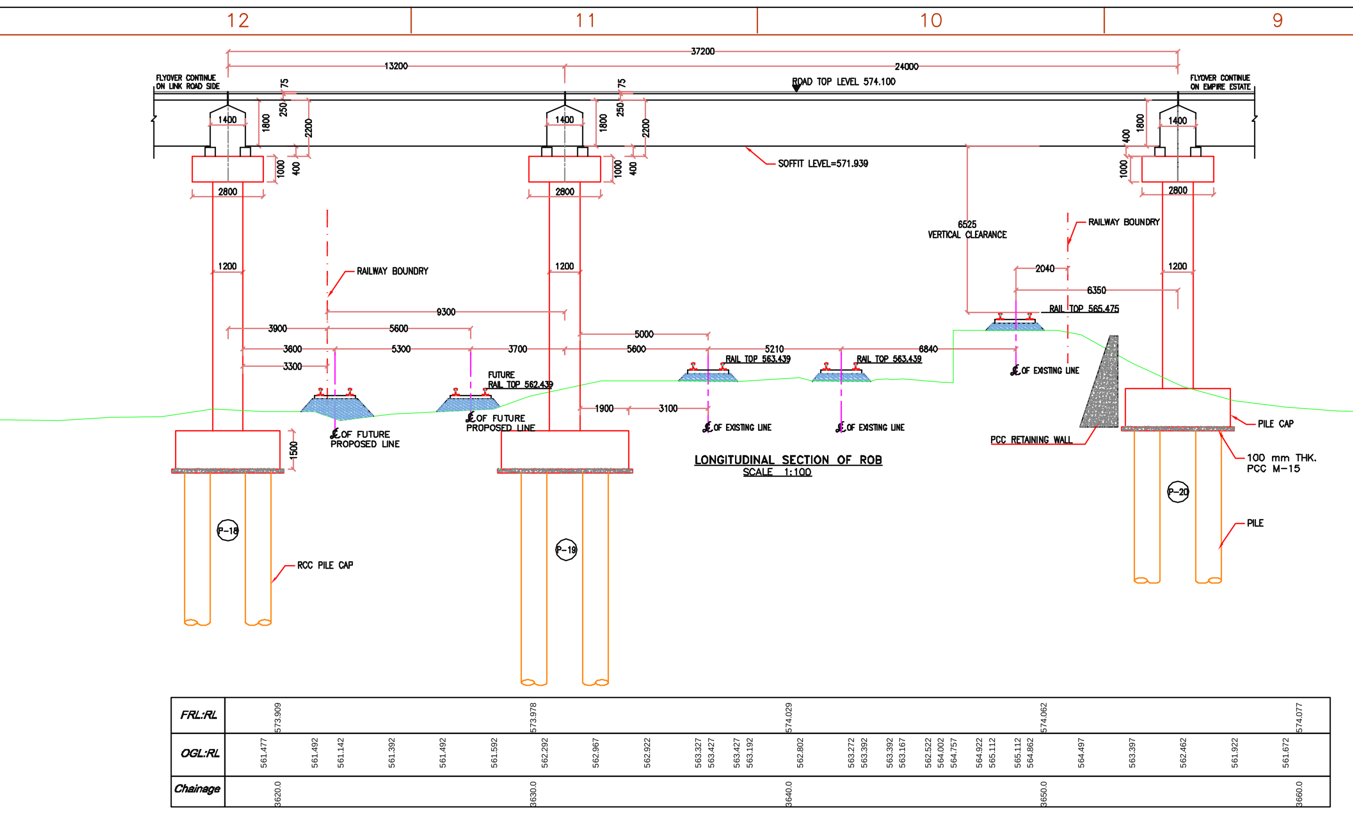

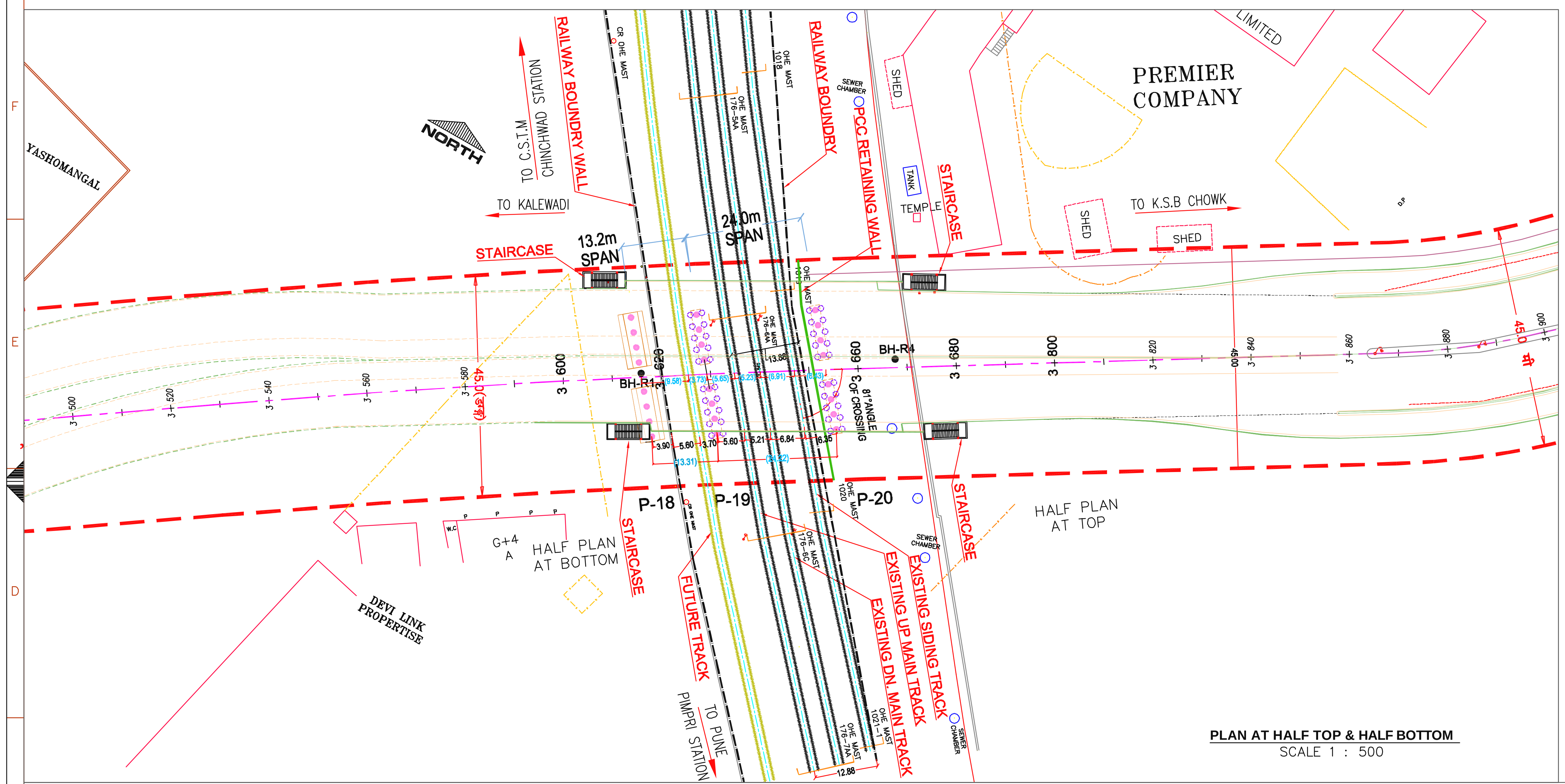

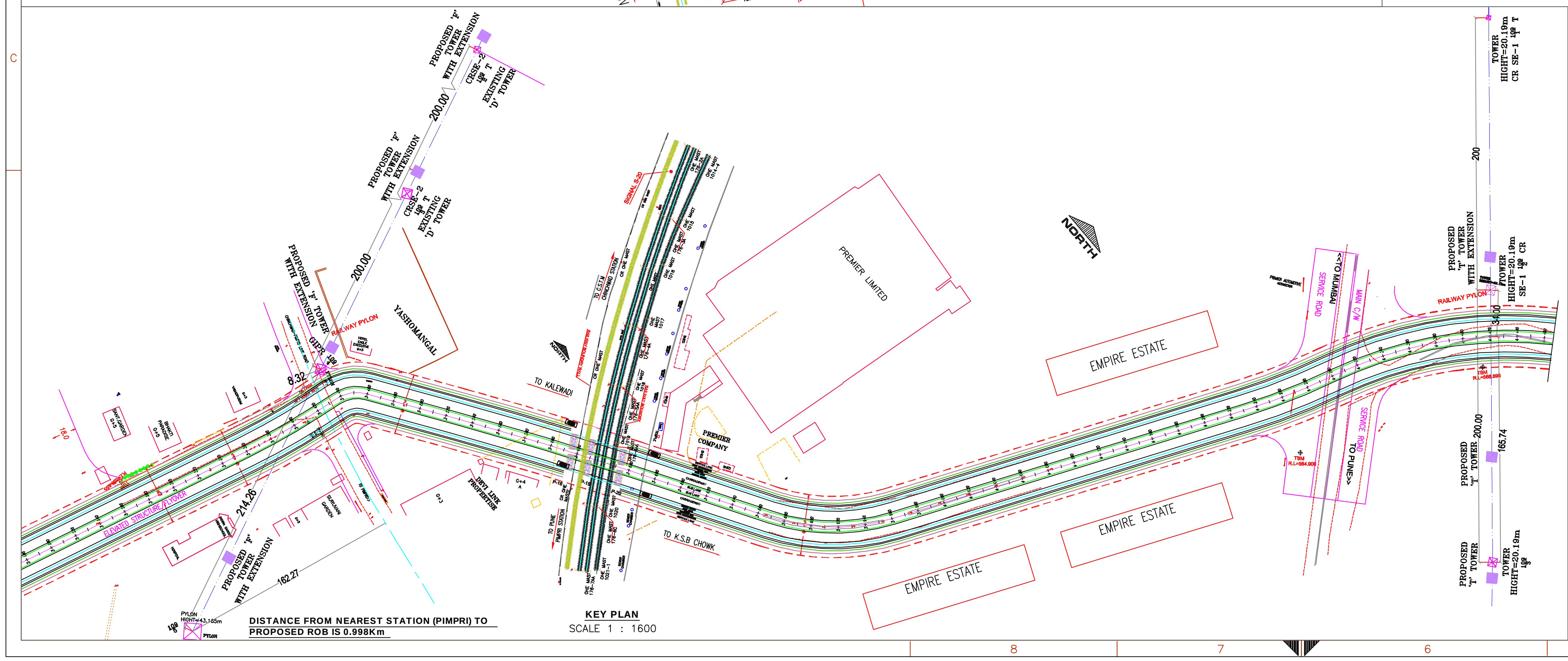

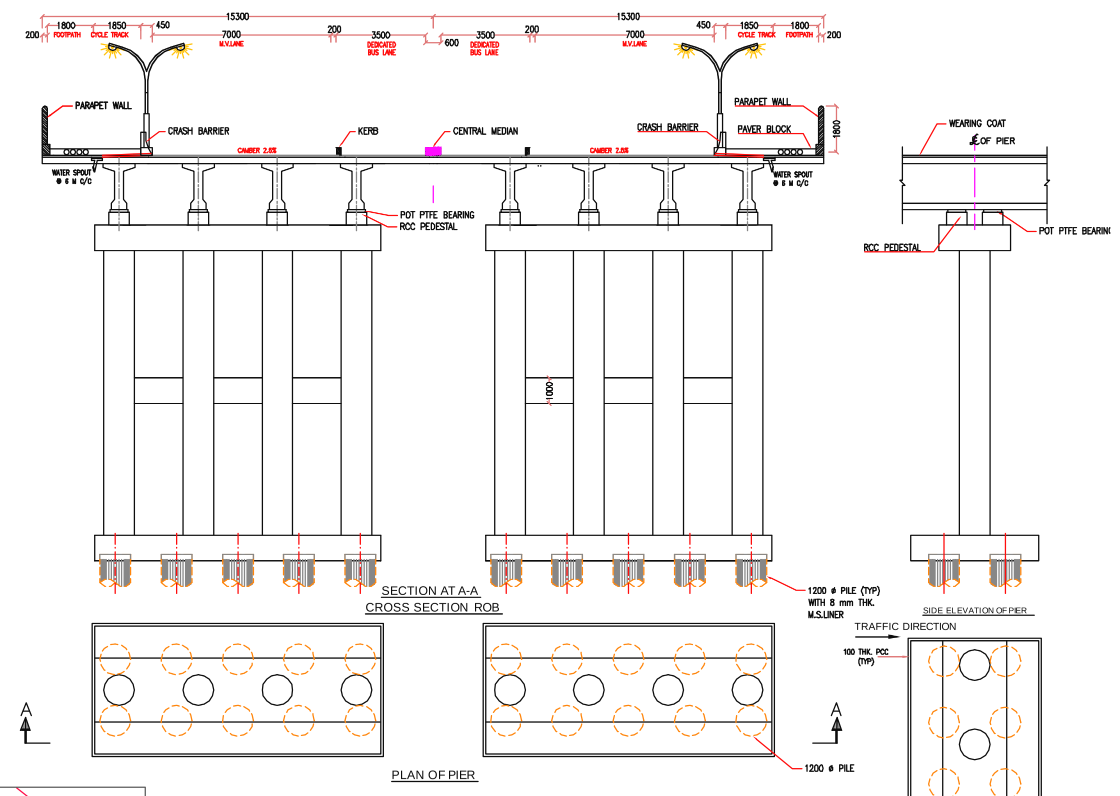

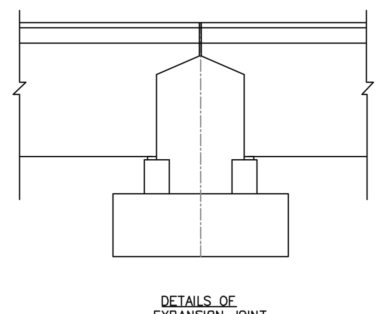

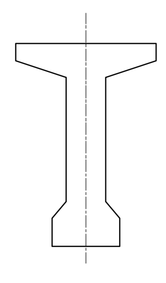

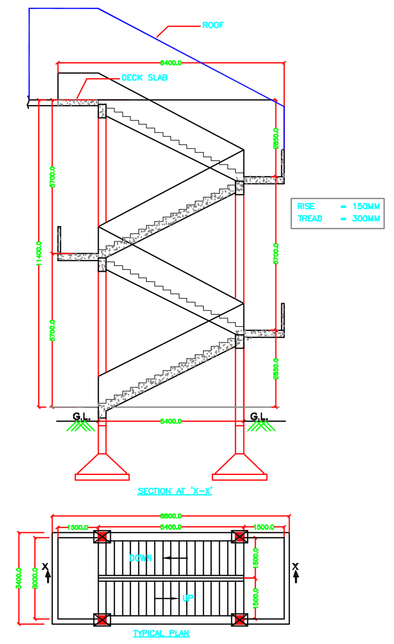

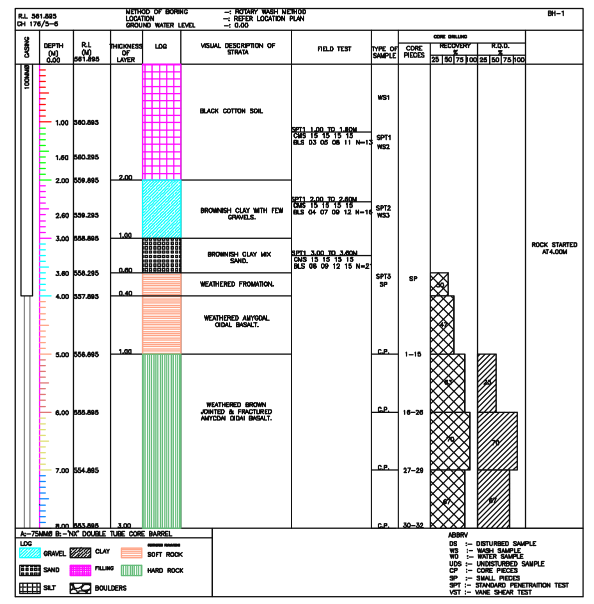

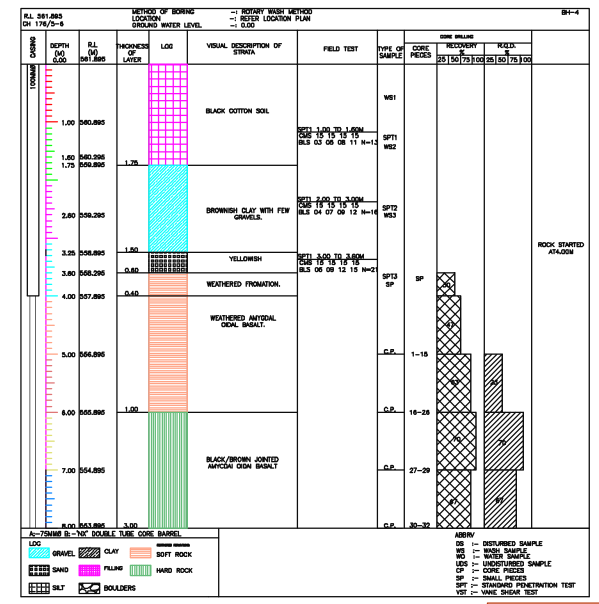

EXTRA BORE LOG DETAILS IN ROB PORTION

DESIGN NOTES :-

1) THE DESIGN IS BASED ON FOLLOWING CODES.:
IRC:6-2000
IRC:18-2000
IRC:78-2000
IRC:21-2000
2) CONCRETE GRADES SHALL BE AS FOLLOWS
PIER-M35
BED BLOCKS AND DIRT WALL-M35
PSC GIRDER AND DECK SLAB -M45 & ABOVE
LEVELLING COURSE-M20
3) TBM ON LIGHT OHE MASTE PEDESTAL AT LINK ROAD JUNCTION OPPOSITE TO HOTEL EAGLE EXECUTIVE AT KM. 3/000
NORTHING =742.5848, EASTING = 3834.4995, ELEVATION=561.605
TBM ON KM. 3/160 AT SANT. GARDEN
NORTHING =723.8493 EASTING = 3744.0713, ELEVATION=559.555

OTHER NOTES :-

1) ALL DIMENSIONS ARE IN MILIMETERS AND LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2) NO DIMENSIONS SHALL BE SCALED FROM THIS DRG. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3) VERTICAL & HORIZONTAL CLEARANCE SHOWN FROM THE RAILWAY TRACK IS OBLIGATORY AND SHOULD NOT BE REDUCED.
4) THE DESIGN OF THE ROB SHALL CONFIRM TO THE LATEST IRC6-2000 STANDARD. DESIGN LOADING:-CARRIAGEWAY -7OR PERTWO LANES OR CLASS A ONE LANE OR THREE LANES OF CLASS A WHICHEVER PRODUCE MAXIMUM EFFECT.
5) ACTUAL LOCATION OF R.O.B. SHALL BE DECIDED BY ENGINEER IN CHARGE IN CONSULTATION WITH ROAD AUTHORITIES AT THE TIME OF ITS CONSTRUCTION.
6) DEPTH OF FOUNDATION MAY BE ALTERED BY ENGINEER IN CHARGE TO SUIT THE SOIL STRATA MET WITH AT SITE.
7) SHAPES & SIZE OF P.S.C. GIRDER, PTFE BEARING, BEARING PEDESTALS, R.C.C COLUMN CAP, COLUMNS, FOUNDATIONS SHOWN IN THIS DRG.ARE TENTATIVE AND ARE SUBJECTED TO CHANGE IN FINAL EXECUTION DRG. & DESIGN.
8) DRAWING AND DESIGN OF APPROACH ROAD SPANS AND APPROACHES SHALL BE DECIDED BY SPONSORING AUTHORITY AS PER CLAUSE 217-3 OF IRC CODE.
9) IN CASE BLASTING IS TO CARRIED OUT IN THE VICINITY OF RAILWAY LINE, NECESSARY PRECAUTIONS AND TRAFFIC BLOCK SHALL BE OBTAINED AS PER PARA 1006 OF (I.R.W) MANUAL.
10) WEARING COAT OF THICKNESS 102 M.M SHALL BE PROVIDED BY ROAD AUTHORITY AND SHALL CONSIST 50 mm DBM ,40mm BC & 12 mm MASTIC ASPHALT.
11) NO PLASTERING AND REPAIR WORK, OVER THE CONCRETE SHALL BE PERMITTED. ANY BAD WILL BE SUMMARILY REJECTED.
12) GUARD RAILS TO BE PROVIDED AS PER RLY'S STANDARD DRAWING.
13) ADDITIONAL LOAD TRANSFERRING FROM FUTURE TRACKS SHALL BE CONSIDERED WHILE DESIGNING OPEN FOUNDATION.
14) SITE OFFICE FOR RAILWAY ENGINEER WELL FURNISHED WITH PROPER EXECUTIVE TABLE, CHAIR,SOFA DULY EQUIPPED WITH TELEPHONIC COMMUNICATION AIR CONDITIONER ATTACHED TOILET ETC. COMPLETE AS DESIRED BY RAILWAY ENGINEER AT THE BRIDGE SITE OR AT THE NEAR BY LOCATION DECIDED BY THE RAILWAY SHALL BE PROVIDED BY ROAD SPONSORING AUTHORITY AND MAINTAINED DURING THE PERIOD OF CONSTRUCTION OF THE PROJECT.
15) STRIP SEAL TYPE EXPANSION JOINT SHALL BE PROVIDED.
16) VERTICAL CLEARANCE FROM THE HIGHEST RAIL LEVEL TO BOTTOM OF GIRDER SHALL NOT BE LESS THAN 6.525M.
17) CONTROLLED CEMENT CONCRETE SHALL BE AS PER RAILWAYS SPECIFICATION ISSUED AS ON DEC 2000.
18) A SEPERATE LAUNCHING SCHEME HAS TO BE SUBMITTED WHICH WILL BE APPROVED BY C.B.E BEFORE COMMENCEMENT OF LAUNCHING.
19) CASTING OF PSC GIRDERS CAST IN SITU SHALL NOT BE PERMITTED OVER RUNNING LINE. THOSE WILL BE PRECAST OUTSIDE AND LAUNCHING.
20) EXECUTION OF ANY WORK WITHIN RLY BOUNDRY FOR CONSTRUCTION OF ROB SHALL BE DONE ONLY IN PRESENCE OF RAILWAY'S AUTHORISED REPRESENTATIVE TO ENSURE THE SAFETY OF RUNNING TRAINS. NO HEAVY MACHINERY WILL WORK ALONG THE TRACK WITHOUT PRESENCE OF ANY RAILWAY AUTHORITY.
21) ANTI-CRASH BARRIER TO BE PROVIDED AS PER APPROVED DRAWING OF M.O.R.T&H STANDARD AND SHALL BE CAST IN SITU.
22) POT P.T.F.E BEARING SHALL BE PROVIDED UNDER PSC GIRDES.
23) IN ORDER TO OFFER ADEQUATE RESISTANCE AGAINST CORROSION, ALL REINFORCEMENT BARS SHALL BE PROVIDED WITH EPOXY COATING AS ENVIRONMENT CONDITION AT LOCATION OF PROPOSED ROB IS MODERATE.
24) FOR GENERAL ARRANGEMENT OF ENTIRE BRIDGE. DRAWING NO.
25) ALL TECHNICAL RECORDS i.e. CUBE STRENGTH REGISTER,PRESTRESSING DETAILS ETC. SHOULD BE HANDED OVER TO RAILWAY ENGINEER WHENEVER REQUIRED.
26) COMPLETION DRAWING OF R.O.B DULY APPROVED BY ROAD AUTHORITY SHALL BE HANDED OVER TO RAILWAY ENGINEER IN CHARGE.
27) CONCRETE USED FOR CONSTRUCTION SHALL BE READY MIXED CONCRETE (RMC) OR CONCRETE MIXED FROM BATCHING PLANT.
28) PARAPET WALL FOR PROTECTION FRAMES SHALL BE PROVIDED FOR ELECRIFIED SECTION AND FIXED WITH PARAPET OF R.O.B OVER EACH LINE ON BOTH SIDES OF ROB.
29) BINDING WIRES USED FOR REINFORCEMENT AND COVER BLOCKS SHALL BE G.I. WIRE.
30) COLD ROLLED COLD ANNEALED (CRCA) MILD STEEL WITH G.I. COATING SHEATHING SHALL BE PROVIDED FOR PRESTRESSING CABLES.
31) WHILE CARRYING OUT EXCAVATION WORK FOR FOUNDATION, SHORING HAS TO BE DONE TO PROTECT SLIPPING OF SOIL. NECESSARY SPEED RESTRICTION WILL BE IMPOSED BY RAILWAY IF ANY EXCAVATION IS DONE BY THE SIDE OF RLY TRACK.
32) STRUCTURAL DRAWINGS/DESIGN SHALL BE PROOF CHECKED BY RAILWAY APPROVED DESIGNERS FOR FINAL APROVAL OF RLY ENGINEER AT CBE'S OFFICE.
33) BEFORE OPENING RAILWAY ROB FOR ROAD TRAFFIC, APPROVAL OF RLY ENGINEER INCHCARGE IS TO BE OBTAINED.
34) APPROVAL OF GAD SHALL BE OBTAINED IN TRACING PAPER FROM PUNE DIVISIONAL OFFICE & FURTHER FROM CBE'S OFFICER C.RLY HEAD QUARTERS.
35) WHILE INVITING TENDERS THE SPECIFICATIONS ENCLOSED SHALL FROM PART OF CONTRACT FOR CONSTRUCTION OF BRIDGE OVER RAILWAY SPAN.
36) FOR QUALITY AUDIT AN INDEPENDENT 3rd PARTY SHALL BE ENGAGED, WITH PRIOR APPROVALOF CBE RAILWAYS WHO SHALL SUBMIT PERIODIC REPORTS TO CBE FOR MONITORING.
37) EXISTING RAIL LEVEL 565.475 HAS ONLY BEEN CONSIDERED FOR ALL PURPOSE IN PREPARING GAD.
38) IN CASE OF OPEN FOUNDATION ANCHOR RODS 32mm DIA HYSD (TREATED WITH ANTI CORROSIVE TREATMENT) AT A SPACING OF 1m/c/c, DULY STAGGERED, SHALL BE PROVIDED FOR ALL FOUNDATIONS. THESE ANCHOR RODS SHALL BE ANCHORED INTO FOUNDING STRATA UPTO A DEPTH OF 1.25 M AND EPOXY GROUTED.
39) IT IS TO CERTIFY THAT CONSTRUCTION OF SUBWAY OR LIGHT FOOT OVER BRIDGE IS NOT NECESSARY. IT IS FURTHER TO CERTIFY THAT THERE IS NO EXISTING LEVEL CROSSING.
40) EXPOSURE CONDITIONS:-MODERATE.
41) IF REQUIRED O.H.E MODIFICATION FOR WHICH SEPARATE DRWING WILL BE SUBMITTED.
42) ONE ROAD INSPECTION VEHICLE (CAR/JEEP) FOR THE INSPECTION PURPOSEFOR RAILWAY ENGINEER SHALL BE PROVIDED BY ROAD SPONSORING AUTHORITY FOR THE ENTIRE PERIOD OF CONSTRUCTION OF R.O.B. THE COST OF PROVIDING SUCH VEHICLE, ITS MAINTANANCE AND FUEL ETC. COMPLETE SHALL BE BORN BY ROAD SPONSORING AUTHORITY (BIDDER).
43) SEPARATE SKETCH AND ESTIMETE WILL BE SUBMITTED FOR SHIFTING OF TELECOM CABLE.
44) IN ORDER TO OFFER ADEQUATE RESISTANCE AGAINST CORROSION. THE REINFORCEMENT BARS SHALL BE PROVIDED WITH SUITABLE PROTECTIVE COATING DEPENDING UPON THE ENVIRONMENTAL CONDITIONS AS PER PARA 7.1.5 OF CONCRETE BRIDGE CODE CORRECTION SLIP NO1 DATED 26-04-2000.
45) GIRDER SHOULD BE DESIGNED KEEPING IN MIND STABILITY DURING LAUNCHING.
46) AS FAR AS POSSIBLE IN DESIGN OF PSC GIRDER BOTTOM FLANGE SHOULD BE NARROW/LESSER IN WIDTH THAN TOP FLANGE.
47) DIAPHRAM SHOULD BE PROVIDED IN SUPERSTRUCTURE TO CONNECT THE GIRDER AS PER CBC CL 16.9.7.2. TILL DIAPHRAMS ARE CASTED STEEL BRACKETS AT END OF GIRDER SHOULD BE PROVIDED AND WILL NOT BE REMOVED TILL END DIAPHRAMS ARE CASTED. DRAWING FOR STEEL BRACKETS SHALL BE SUBMITED SEPARATELY.
48) JACK SHOULD BE TESTED BEFORE USING AT THE TIME OF LAUNCHING OF THE GIRDER/REPLACEMENT OF BEARINGS.
49) STOPPERS SHOULD BE PROVIDED AT THE TOP OF PIER TO PREVENT POSSOBILITY OF TOPPLING OF GIRDER WHILE LAUNCHING OF GIRDER.
50) MINIMUM GRIP LENGTH IN ROCK SHOULD BE KEPT 1.5m AS PER BRIDGE MANUAL (PARA 403).
51) IF THE LAUNCHING IS DONE BY CRANE, THE CAPACITY/BOOM LENGTH OF THE CRANGE WILL BE APPROVED BY THE RAILWAY ENGINEER AND ADDITIONAL STAND BY CRANE WILL HAVE TO BE PROVIDED IN CASE OF FAILURE OF WORKING CRANE.
52) IN THE DESIGN OF PIER/ABUTMENT CAP MINIMUM OF 300 mm CLEAR SPACE SHOULD BE PROVIDED ALL AROUND THE PEDESTALS FOR LAUNCHING OF GIRDERS.
53) SKEW ANGLE IS 81° DEGREES.
54) SHIFTING OF TOWER WILL BE 10 TO 20 METRES FROM EXISTING LOCATIONS.
55) SIZE OF TIE BEAM 1.0 Metre X 1.0 Metre.
56) DIMENSIONS IN SKEW ARE SHOWN INTO BRACKET ( ).

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PIMPRI, PUNE 411 018

EXECUTIVE ENGINEER | CITY ENGINEER

CONSULTANT:-
C.V.KAND CONSULTANTS PVT.LTD.

DIVISIONAL OFFICERS APPROVAL

DEN (N)/PA	DEN(HQ)/ROB/PA	Sr. DEN/(CO)/PA	Sr. DSTE/PA	SR. DEE(TR)/PA	SR. DOM/PA	DRM (PA)

APPROVAL OF OTHER HODS | DRG. CHECKED BY | HEAD QUARTERS APPROVAL

JEI (ROB) HQ
SE.DRAWING (ROB).

C.E.E	C.S.T.E.	C.O.M.	SE. (DESIGN) HQ.	SEN. (DESIGN) HQ.	DY .CE (BR-II)HQ	DY .CE (BR-I)	CHIEF BRIDGE ENGINEER

DEPOSIT TERM

REVISIONS	DATE	PARTICULARS
R1	16/12/2009	ROB SPAN ARRANGEMENT REVISED

DRAWING TITLE:- GENERAL ARRAGEMENT FOR RAILWAY SPAN, ELEVATION AND SECTION

PROJECT:- PROPOSED CONSTRUCTION OF EMPIRE ESTATE ROB @ K.M-176/5-6 BETWEEN PIMPRI AND CHINCHWAD STATIONS ON PUNE - LONAVALA SECTION (COMPONENT NO:-3)

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CVK/CP1-DRG. NO.-CVK/CP1/PCMC/JNNURM/KALEWADI/RLYS/ROB-GAD001 | SCALE-AS SHOWN | DATE : 01/10/2010