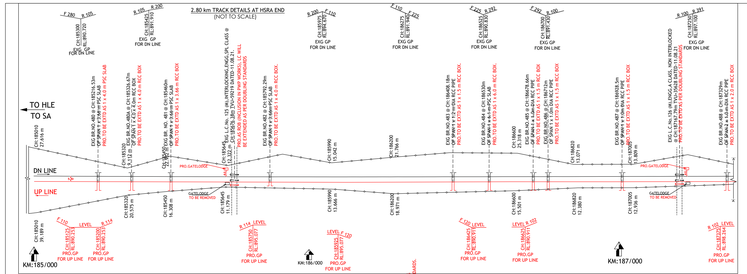
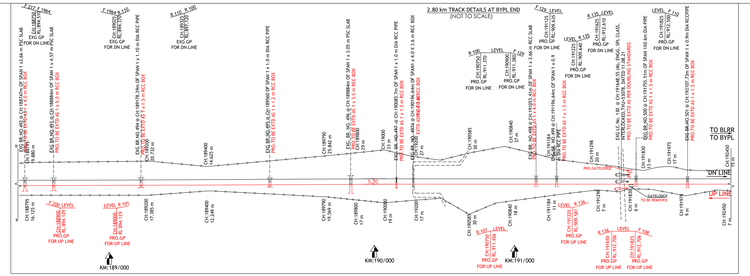
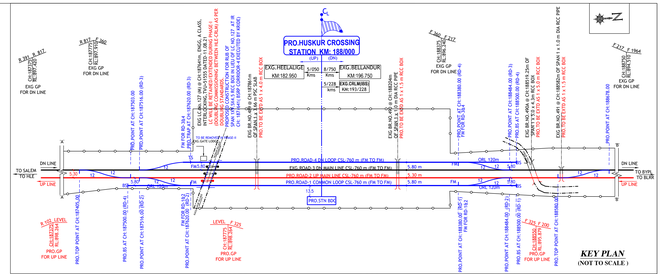
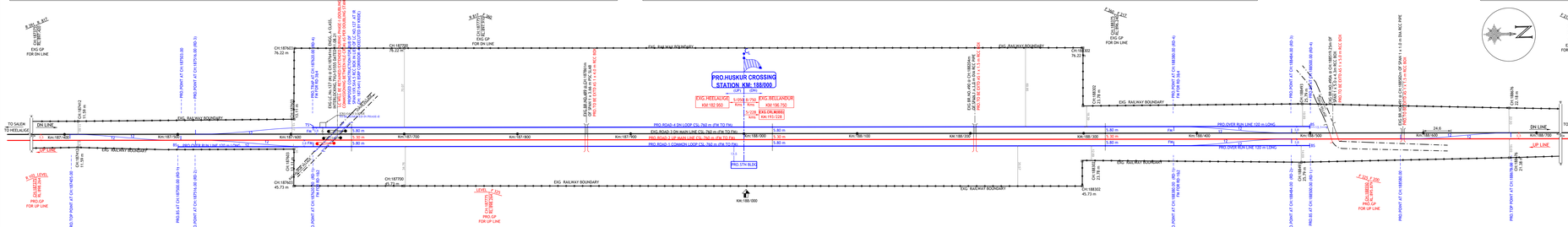






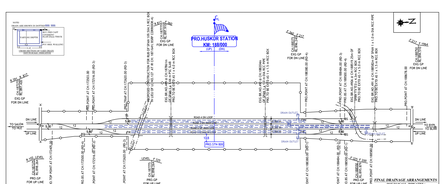


P.WAY DETAILS

EXISTING LINES	EXISTING RAILS	PROPOSED LINES	PROPOSED RAILS	SLEEPER DENSITY		BALLAST CUSHION	
				EXISTING	PROPOSED	EXISTING	PROPOSED
...	...	PRO.ROAD-1 I COMMON LOOP)	52 kg (90 UTS) CLASS II	...	52 kg PSC (1540 NOS)	...	250 mm
		PRO.ROAD-2 I (IN MAIN LINE)	60 kg (90 UTS) CLASS I	...	60 kg PSC (1660 NOS)	...	350 mm
EXG. ROAD-3 (MAIN LINE)	60 kg (90 UTS) CLASS I	PRO.ROAD-3 (UP MAIN LINE)	EXG.TO BE RETAINED	44 kg PSC (1460 NOS)	EXG.TO BE RETAINED	350 mm	EXG.TO BE RETAINED
...	...	PRO.ROAD-4 (COMMON LOOP)	52 kg (90 UTS) CLASS II	...	52 kg PSC (1540 NOS)	...	250 mm
TURNOUTS		TURNOUTS (1 IN 12 THICK WEB SWITCH)	PSC TURNOUT (60 kg CLASS I CRS)	...	60 kg PSC	...	350mm

INFRINGEMENT OF MAXIMUM & MINIMUM DIMENSIONS

SL NO.	LOCATION	KILOMETERAGE	NAME OF STRUCTURE WHICH INFRINGES	PRESCRIBED MAXIMUM AND MINIMUM DIMENSIONS		ACTUAL DIMENSIONS	AMOUNT OF INFRINGEMENT
				CHAPTER & ITEM	MAXIMUM & MINIMUM		
1	2	3	4	5	6	7	8
	DIVISION: BENGALURU SECTION: SALEM - BAIYAPPANAHALLI						
1.	USAUR CROSSING STATION (UP & DN LINES)	CH: 187775 TO CH: 188550 CH: 188550 TO CH: 188708	YARD GRADIENT	INDIAN RAILWAYS SCHEDULE OF DIMENSIONS, 1676 MM GAUGE (BG) REVISED 2004 (IAS MO-1) CHAPTER - II ITEM NO: 2 (b)(b)	MAXIMUM YARD GRADIENT : 1 IN 400	1 IN 325 (PROPOSED) 1 IN 200 (PROPOSED)	1 IN 325 & 1 IN 200 INSTEAD OF 1 IN 400



MODES OPERANDI: PHASE I

1. DURING PHASE I DOUBLING LINE WILL BE COMMISSIONED BETWEEN HEELALIGE - KARNELAPAM WITHOUT (NEW CROSSING STATION -HUSKUR).

MODUS OPERANDI: PHASE-II & FINAL
UNDER NON-BLOCK CONDITION :

1. CONSTRUCTION OF NEW STATION BUILDING FOR HUSKUR.
2. LINKING OF PRO.RD-4 IN ALONG WITH POINTS & CROSSINGS ON BOTH ENDS AT RD-1 TO CONNECT RD-2, AND LAYING OF OVER RUN LINES ON BOTH ENDS.
3. LINKING OF PRO.RD-4 IN ALONG WITH POINTS & CROSSINGS ON BOTH ENDS AT RD-4 TO CONNECT RD-3, AND LAYING OF OVER RUN LINE ON BYPL END & TRAP POINT ON SA END.

UNDER BLOCK CONDITION :

1. REGRADING WITH STONE BALLAST OF EXG TRACK IN STAGES TO THE PROPOSED FINAL LEVEL.
2. INSERTION OF POINTS & CROSSINGS KEPT ON STAGE FOR LOOP LINE CROSS OVER ON BOTH ENDS ON RD-2 & RD-3, TO CONNECT RD-1 & RD-4 ON BOTH ENDS.
3. INSERTION OF POINTS & CROSSINGS ON STAGE FOR EMERGENCY CROSS OVERS ON SA END & BYPL END, TO CONNECT WITH RD-2 TO RD-3.
4. COMMISSION THE YARD (NEW CROSSING STN- HUSKUR) WITH 4 LINES UNDER SPEED RESTRICTION OF 20 KM/PH AND RELAX THE SPEED IN STAGES.

SPECIAL NOTES:

1. CHAINAGE ZERO (0.00) IS RECKONED FROM THE CENTRE LINE OF SALEM JUNCTION.
2. SINCE THE SECTION IS MADE FIT FOR 25T LOADING, THE EXISTING BRIDGES ARE CHECKED FOR CARRYING OUT FOR 25T LOADING, FOR WHICH NECESSARY CALCULATIONS HAVE BEEN CARRIED OUT AND CERTIFIED.
3. AS FAR AS POSSIBLE, THE EXISTING LCs IN THE YARD HAS BEEN ELIMINATED BY CONSTRUCTION OF ROBR/RUB. HOWEVER, ELIMINATION OF LCs IS NOT INCLUDED IN BYPL-HSRA DETAILED ESTIMATE, AND AS PER DIRECTION OF RAILWAY BOARD VIDE LETTER NO.2013/W-1/0/0/0 PH.II THE COMMISSIONING OF ROBR/RUB SHALL NOT BE LINKED WITH DOUBLING PROJECT. HENCE, THE EXG.LC HAS BEEN RETAINED/EXTENDED AS PER THE IRPWM DOUBLING STANDARDS.
4. THE PROPOSED CONDONATION AND DETAILS OF TRACK STRUCTURE ARE MENTIONED IN A SEPARATE TABLE.
5. THE RULING GRADIENT OF THIS SECTION IS 1 IN 100. AND GRADE COMPENSATION HAS BEEN CONSIDERED FOR THE CURVES.
6. THIS YARD LIES IN 'D' ROUTE AS PER LATEST WTT.
7. THE EXISTING SECTIONAL SPEED OF YARD IS 100 KMPH AND THE YARD HAS BEEN PLANED FOR PROPOSED SECTIONAL SPEED OF 100 KMPH.
8. ALL WORKS PROPOSED IN THE MASTER PLAN ARE TO BE COMPLETED IN 2 PHASES, SHOWN AS PHASE I - RED AND PHASE 2 - BLUE AS PER LATEST PQE/SWR CIRCULAR. DI 12.09.2021

SAFTEY NOTES:

1. ADEQUATE SAFETY MEASURES FOR RUNNING TRAINS SHALL BE PROVIDED WHILE EXECUTING YARD RE-MODELING WORK / TAKING OF THE EARTHWORK NEAR TO THE TRACK.
2. NECESSARY SHORING ARRANGEMENT SHALL HAVE TO BE PROVIDED TO PROTECT THE EXISTING TRACKS IN CASE OF CUTTING CLOSE TO THE TRACKS.
3. DURING EXECUTION OF YARD WORK, THE MATERIALS / EQUIPMENTS / RELEASED MATERIAL / NEW MATERIAL ETC, SHALL BE STACKED IN SUCH A WAY THAT THEY WILL NOT INFRINGE THE RUNNING LINE DULY ENSURING ALL SAFETY MEASURES DURING RE-MODELING OF THIS YARD.
4. SUITABLE SAFETY BARRICADING HAS TO BE PROVIDED WHENEVER AND WHEREVER WORK IS BEING EXECUTED PARALLEL AND NEARER TO THE RUNNING TRACK.
5. WHILE CARRYING OUT PRE-NI WORKS NECESSARY PRECAUTIONS SHOULD BE TAKEN TO AVOID UNSAFE CONDITIONS, MODIFICATIONS, REMOVALS, ERECTIONS, INSERTIONS OF POINTS AND CROSSINGS, SEIs, TRAPS, GLUED JOINTS ETC., SHALL BE CARRIED OUT UNDER TRAFFIC BLOCKS ONLY UNDER THE SUPERVISION OF THE COMPETENT DEPARTMENT OFFICIALS.
6. WHILE WORKING IN CLOSED VICINITY WITH OHE, MINIMUM 2 METERS WORKING CLEARANCE TO BE MAINTAINED, IF REQUIRED PROPER POWER TO BE TAKEN DULY GIVING ADVANCE INTIMATION.
7. IN ELECTRIFIED SECTION TRACTION TERRITORY, EARTHING TO BE DONE AND CERTIFIED BY THE TRD OFFICIALS BEFORE POWER BLOCK IS CANCELED FOR WORKS RELATED TO YARD RE-MODELING WHICH HAS TO BE EXECUTED UNDER THE SUPERVISION OF EXPERIENCED AND COMPETENT TRD OFFICIALS.
8. ADHERENCE OF RSOD DIMENSIONS HAVE TO BE ENSURED BEFORE ALLOWING THE TRAFFIC AFTER CANCELLATION OF LINE BLOCK.
9. THE JOINT PROCEDURE ORDER ON SAFETY RELATED ISSUES PERTAINING TO WORK SITE IN CONSTRUCTION PROJECTS (LETTER NO.W.339/SAFETY PRECAUTIONS DI. 18.02.2011) VIDE CTE LETTER NO. SWR/W.247/SAFETY AT WORK SPOT. Dt. 20.06.2017 HAS TO BE STRICTLY FOLLOWED.
10. THE GRADUAL RELEASE OF SPEED RESTRICTIONS SHALL BE FOLLOWED AS PER PARA NO.6317 OF IRPWM-2020.

GENERAL NOTES:

1. STANDARD OF RAIL LOADING 25T AXLE LOAD-2008.
2. PROPOSALS (SCOPE OF WORK) ARE SHOWN IN CONTINUOUS RED.
3. EXISTING ARRANGEMENTS TO BE RETAINED ARE SHOWN IN CONTINUOUS BLACK.
4. EXISTING ARRANGEMENTS TO BE REMOVED ARE SHOWN IN BLACK DASH.
5. LAND BOUNDARY DISTANCES TO BE SHOWN AS CHAIN DISTTED IN BLACK.
6. NORTH DIRECTION INDICATED IN THE PLAN IS OF THE MAGNETIC NORTH.
7. ALL DIMENSIONS AND LEVELS (WITH RESPECT TO MSL) ARE IN METERS, UNLESS OTHERWISE SPECIFIED.
8. LAND BOUNDARY DISTANCES SHOWN IN THE PLAN ARE THE PERPENDICULAR OFFSETS FROM THE EXG. MAIN LINE CENTRE AND THE LOCATION OF STATION BUILDING ARE ONLY INDICATIVE. FOR ACCURATE MEASUREMENTS, RESPECTIVE LAND PLANS ARE TO BE VERIFIED.
9. SINCE THE EXG. DETAILS MENTIONED IN THE LATEST COMPLITION YARD PLAN ARE NOT MATCHING WITH THE DETAILS AVAILABLE AT SITE, THIS ESP HAS BEEN PREPARED BASED ON THE DETAILS PHYSICALLY COLLECTED FROM SITE BY FIELD OFFICIALS.
10. THE FEASIBILITY OF EXECUTION AS PER THIS PLAN SHALL BE CHECKED AT SITE BY ENGINEER-IN-CHARGE BEFORE TAKING UP THE WORK.
11. THE CHAINAGES AND EXISTING LEVELS GIVEN IN THE YARD PLAN ARE ACTUALLY MEASURED AND VERIFIED AT SITE.
12. ALL LOOP LINES PROPOSED ARE TO BE MADE FIT FOR 30 kmph.
13. THE MINIMUM HORIZONTAL AND VERTICAL DISTANCE AND OTHER DIMENSIONS SHALL BE PROVIDED AS PER IRSOD AND LATEST CORRECTION SLIPS TO IRSOD UNLESS OTHERWISE SPECIFIED.
14. THIS YARD PLAN IS PROCESSED FOR APPROVAL SUBJECTED TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE AND TRACK CENTRE DISTANCES SHOWN IN THIS PLAN AND AS THAT OF APPROVED WORKING SECTION / PLANS.
15. NECESSARY DRAINAGE ARRANGEMENTS TO SUIT SITE CONDITION WILL BE PROVIDED AS PER THE STANDARDS BY THE ENGINEER-IN-CHARGE.
16. THE ENGINEER-IN-CHARGE AT SITE SHOULD ENSURE TRACK CENTERS AS SHOWN ON CURVES DULY TAKING CARE OF SHIFT AND ALL OTHER ALLOWANCES.
17. FOR CHANGE OF GRADIENTS IN THE YARDS, PROPER VERTICAL CURVE SHALL BE DESIGNED AND ACCORDINGLY PROVIDED.
18. THE EXISTING TRACK COMPONENTS SUCH AS SEJS, TRAPS, GLUED JOINTS, NON-STANDARD RAILS, SLEEPERS ETC. SHALL BE REPLACED WITH PROPOSED TRACK STANDARDS MENTIONED IN THIS PLAN.
19. ALL STANDARD AND CONVENTIONAL APPROVED DRAWINGS SHALL BE ADOPTED FOR VARIOUS PASSENGER AMENITIES, TRACK WORKS, BRIDGE WORKS, BUILDING WORKS, S&T WORKS, ELECTRICAL WORKS ETC., UNLESS OTHERWISE SPECIFIED.
20. REGRADING PLAN BEING ADOPTED, IF ANY, SHALL BE REFERRED IN THE ESP UNDER PROCESS.
21. THE UNDERGROUND CABLE ETC., IF ANY, SHALL BE REMOVED AND RE ALIGNED BEFORE THE STARTING OF THE WORK, S&T CABLES SHALL BE PROPERLY PROTECTED AND ALL PRECAUTIONARY MEASURES MUST BE TAKEN ACCORDING TO TELECOMMUNICATIONS CIRCULAR NO.17/2013 ISSUED BY RAILWAY BOARD VIDE LETTER NO.2003/TELECRL/SPT. IX DATED24.06.2013.
22. BEFORE AND DURING EXECUTION OF WORK, CONCERNED OPEN LINE OFFICIALS SHOULD BE CONSULTED IN CONNECTION WITH WORKS AFFECTING THE EXISTING FACILITIES.
23. WHEREVER NEW PLATFORM SHELTER BEING PROVIDED OVER THE EXISTING OHE MAST, THE WATER PROOFING OF CUT AREA IN THE PLATFORM SHELTER TO BE DONE BY CONCERNED CIVIL DEPT.
24. WHENEVER PLATFORM EXTENSION OR NEW PLATFORM BEING CONSTRUCTED THE PLATFORM EARTH WORK TO BE DONE BEFORE TAKING UP THE TRACK WORK TO FACILITATE THE ERECTION OF MAST FOR MODIFICATION IN THE EXISTING OHE.

SIGNATURE COLUMN	
K RIDE	
JGM/ELE/PROJECTS	Aman Katyal Digitally signed by Aman Katyal Date: 2022.02.02 12:58:45 +05'30'
AGM/CIVIL/PROJECTS	Nabin Chandra Patra Digitally signed by Nabin Chandra Patra Date:2021.10.07 12:34:32 +05'30'
GM/SNT/PROJECTS	SOWMYATI NAGESHWARAKAD Digitally signed by SOWMYATI NAGESHWARAKAD Date:2022.02.03 04:39:24 +05'30'
GM/CIVIL/PROJECTS	Praveen Kumar Digitally signed by Praveen Kumar Date:2021.10.07 12:37:10 +05'30'

DIVISION -SBC		
Sr.DEN/Co-ord/SBC	PERVESH KUMAR	Digitally signed by PERVESH KUMAR Date: 2022.02.28 19:01:21 +05'30'
DEN/South/SBC	HISAM UDDIN	Digitally signed by HISAM UDDIN Date: 2022.02.28 19:48:15 +05'30'
Sr.DOM/SBC	Akhil M Shastary	Digitally signed by Akhil M Shastary Date: 2022.02.28 19:07:37 +05'30'
Sr.DEE/TRD/SBC	PUJA KUMARI	Digitally signed by PUJA KUMARI Date: 2022.02.25 17:00:08 +05'30'
Sr.DCM/SBC	Dr.A.N.Krishna Reddy	Digitally signed by Dr.A.N.Krishna Reddy Date: 2022.02.28 19:46:28 +05'30'
Sr.DSTE/SBC	SATISH KUMAR CHILAMKURTI	Digitally signed by SATISH KUMAR CHILAMKURTI Date: 2022.02.28 19:04:46 +05'30'
ADRM/T/SBC	LAKSHMAN SINGH	Digitally signed by LAKSHMAN SINGH Date: 2022.02.28 19:43:11 +05'30'
DRM/SBC	SHYAM SINGH	Digitally signed by SHYAM SINGH Date: 2022.03.02 12:51:49 +05'30'

HEAD QUARTERS- SWR	
CTPM/SWR	
CPDE/SWR	

SOUTH WESTERN RAILWAY

K RIDE

RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

BENGALURU DIVISION

SALEM - BAIYAPPANAHALLI SECTION

DOUBLING OF BG TRACK BETWEEN BAIYAPPANAHALLI 'A' PANEL AND HOSUR STATIONS PROPOSED YARD ARRANGEMENTS AT

HUSKUR

MASTER PLAN

SCALE - 1 : 1000

DRG.NO:KRIDE/DL/BH/032 - 2021