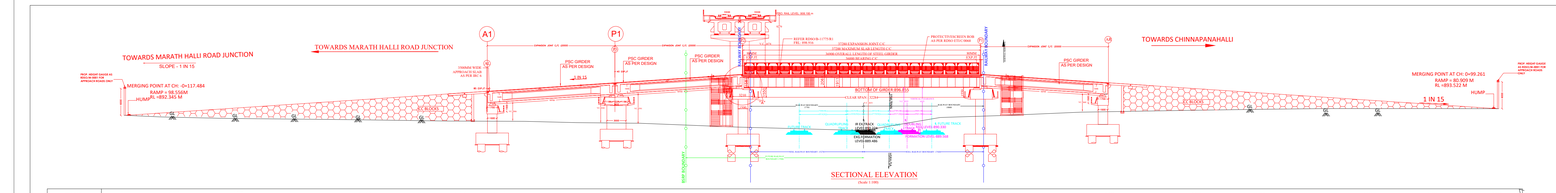
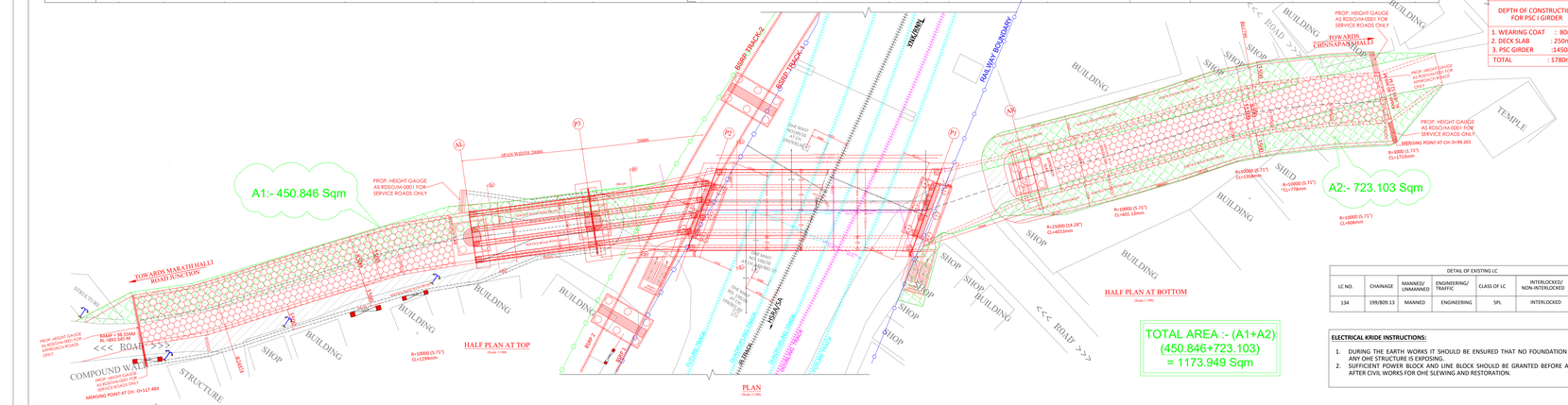
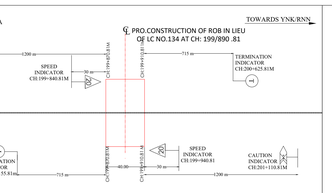


FILLING	0.000	-0.607	-1.507	-1.052	-4.255	-4.685							-4.533	-3.398	-2.585	-1.329	-0.674	0.000
PROPOSED ROAD LEVEL IN M	892.345	892.844	893.511	894.845	895.845	896.250	897.178	897.583	898.045 898.916		898.916	898.916	898.673	897.873	897.583	896.673	896.006	894.873	894.206	893.522
EXISTING ROAD LEVEL IN M	892.345	892.237	892.004	891.793	891.590	891.565	891.337	891.278	890.644 890.615		890.103	892.149	892.343	892.457	892.978	893.050	893.275	893.421	893.544	893.552
CHAINAGE IN M	117.484	110.000	100.000	80.000	62.000	58.828	49.000	38.828	20.000 18.828		00.000	12.000	18.352	22.000	34.000	38.352	52.000	62.000	79.000	89.000	99.261





KEY PLAN SHOWING THE PRO.TEMPORARY ENGINEERING INDICATORS
(NOT TO SCALE)

NOTE:
RETRO REFLECTIVE TYPE INDICATORS SHALL BE USED.

DEPTH OF CONSTRUCTION FOR PSC I GIRDER

1. WEARING COAT	: 80mm
2. RCC SLAB	: 250mm
3. PSC GIRDER	:1450mm
TOTAL	: 1780mm

PRO. BSRP TRACK STRUCTURE

ALIGNMENT	: 4° CURVE
GRADIENT	: LEVEL
SKEW ANGLE	: 30°
ANGLE OF CROSSING	: 60°
RAIL LEVEL	: 908.195

EXISTING IR TRACK STRUCTURE

ALIGNMENT	: STRAIGHT
GRADIENT	: 1 IN 428 R
SKEW ANGLE	: 25°31'39"
ANGLE OF CROSSING	: 64°28'21"
RAIL LEVEL	: 890.224m
RAIL 60 kg	: 172 mm
GR PAD	: 6 mm
PSC SLEEPER	: 210 mm
BALLAST CUSHION	: 350 mm

DEPTH OF CONSTRUCTION FOR COMPOSITE GIRDER

1. WEARING COAT	: 80mm
2. RCC SLAB	: 250mm
3. CAMBER	: 150 mm
4. COMPOSITE STEEL GIRDER	:1581mm
TOTAL =	2061 mm

REFERENCES:

1. GENERAL ARRANGMENTS. **(RDSO/B-11775/R1)**
2. DETAILS OF MAIN GIRDER. **(RDSO/B-11775/R1/T).**
3. DETAILS OF SPLICE JOINT, STUD SHEAR CONNECTOR AND CAMBER DIAGRAM. **(RDSO/B-11775/R2).**
4. DECK PLAN DETAILS FOR 7 GIRDER LEAVES & PEDESTAL ARRANGMENTS. **(RDSO/B-11775/R1/A).**
5. S.-SECTIONAL DETAILS FOR 6 AND 8 GIRDER LEAVES & PEDESTAL ARRANGMENTS. **(RDSO/B-11775/R1/4)**
6. DETAILS OF BEARINGS. **(RDSO/B-11775/R1/5)**
7. ASSEMBLY DRAWING. **(RDSO/B-11775/R1/6)**
8. PART & SHIPPING LIST. **(RDSO/B-11775/R1/7)**
9. DETAILS OF SEAR, REINFORCWMENT, DRAINAGE ARRANGMENTS AND SKEW ARRANGMENTS. **(RDSO/B-11776/R1 SERIES).**
10. (IISFG) BOLTS IN BRIDGES. **(RDSO/B-11760/R1)**
11. INSPECTION ARRANGMENTS. **(CRS-0044)**
12. ABUTMENT, PIER AND FOUNDATIONS DTAILS ARE AS PER DESIGN.
13. BED BLOCK, PIER CAP DETAILS ARE AS PER DESIGN.
14. PILE, PILE CAP FOUNDATION DETAILS ARE AS PER DESIGN.
15. PSC I GIRDER AS PER DESIGN.
16. PSC I GIRDER BEARINGS AS PER DESIGN.
17. CRASH BARRIER AS PER IRC:6.
18. CC BLOCKS AS PER DESIGN.
19. HEIGHT GEUAGE AS PER RDSO M-0001.
20. HEIGHT GAUGE FOUNDATION AS PER SWR/2023/TYPE PLAN-05 FOUNDATION OF HEIGHT GAUGE (RDSO)/M0001 ALT-1.
21. CONTINUOUS PROTECTIVE SCREEN AS PER RDSO. ETI/C/0068-M00-1.

ELECTRICAL KRIDE INSTRUCTIONS:

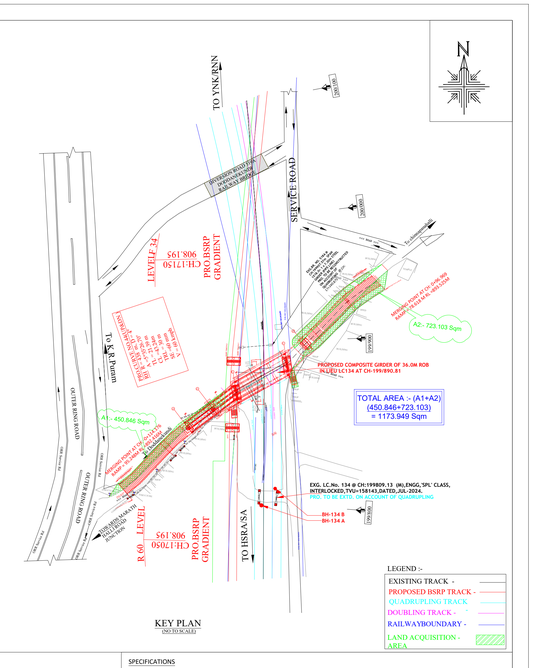
1. DURING THE EARTH WORKS IT SHOULD BE ENSURED THAT NO FOUNDATION OF ANY OHE STRUCTURE IS EXPOSING.
2. SUFFICIENT POWER BLOCK AND LINE BLOCK SHOULD BE GRANTED BEFORE AND AFTER CIVIL WORKS FOR OHE SLEWING AND RESTORATION.

DETAIL OF EXISTING LC

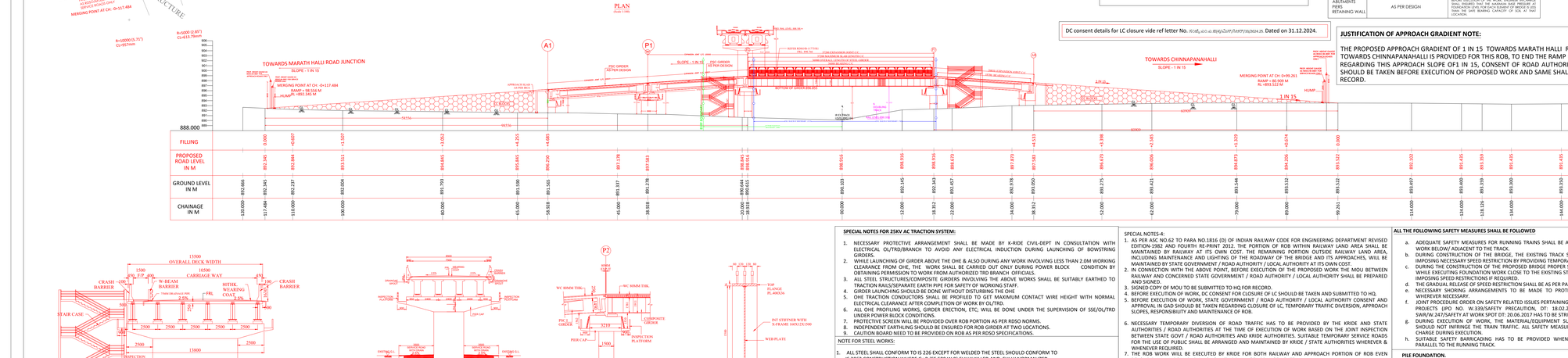
LC NO.	CHAINAGE	MANNED/ UNMANNED	ENGINEERING/ TRAFFIC	CLASS OF LC	INTERLOCKED/ NON-INTERLOCKED	TVU
134	199/809.13	MANNED	ENGINEERING	SPL	INTERLOCKED	158143 Jul-24

BASE PRESSURE AT FOUNDATION LEVEL

STRUCTURE	BASE PRESSURE AT FOUNDATION LEVEL	SBC AT FOUNDATION LEVEL
ABUTMENTS PIERS RETAINING WALL	AS PER DESIGN	BEFORE EXECUTION OF THE WORK, ENGINEER IN-CHARGE SHALL INSURED THAT SBC MINIMUM BASE PRESSURE AT FOUNDATION LEVEL FOR EACH ELEMENT OF BRIDGE IS LESS THAN THE SAFE BEARING CAPACITY OF SOIL AT THAT LOCATION.



KEY PLAN
(NOT TO SCALE)



DC consent details for LC closure vide ref letter No. ROB/LC NO.134 @ 199/809.13 dated 31.12.2024. Dated on 31.12.2024.

JUSTIFICATION OF APPROACH GRADIENT NOTE:

THE PROPOSED APPROACH GRADIENT OF 1 IN 15 TOWARDS MARATH HALLI ROAD JUNCTION AND 1 IN 15 TOWARDS CHINNAPANAHALLI IS PROVIDED FOR THIS ROB, TO END THE RAMP BEFORE ROAD JUNCTIONS. REGARDING THIS APPROACH SLOPE OF1 IN 15, CONSENT OF ROAD AUTHORITY / STATE GOVT OFFICIALS SHOULD BE TAKEN BEFORE EXECUTION OF PROPOSED WORK AND SAME SHALL BE SUBMITTED TO HQ FOR RECORD.

SPECIFICATIONS

1. ALL CIVIL WORKS HAVE TO BE CARRIED OUT AS PER THE FOLLOWING:
   1.1. INDIAN RAILWAY UNIFIED STANDARD SPECIFICATIONS FOR WORKS AND MATERIALS 2019
   1.2. IRS CONCRETE BRIDGE CODE 2014 AND RELEVANT IS SPECIFICATIONS.
   1.3. IRS BRIDGE SUBSTRUCTURE & FOUNDATION CODE 2013
   1.4. IRS BRIDGE RULES 2014
   1.5. IRS SCHEDULE OF DIMENSIONS CORRECTED UP TO LATEST CORRECTION SLIPS.
   THE FOLLOWING SPECIFICATIONS ARE FORMAT REFERENCE, KINDLY MODIFY THE NECESSARY AS PER THE WORK TO BE DONE AT SITE, AGREEMENT/ TENDER, DESIGN, REF DRAWINGS. ELIMINATE UNNECESSARY POINTS AND ADD IF ANY EXTRA)
2. MINIMUM GRADE OF CONCRETE FOR
   2.1. ALL RCC WORKS SHALL BE M35
   2.2. ALL MCC WORKS SHALL BE M25
3. COMPONENTS AND GRADE OF CONCRETE

S.NO	DESCRIPTION OF COMPONENT	GRADE OF CONCRETE
1.	ABUTMENT , PILE, PILE CAP, PIER	AS PER DESIGN
2.	CRASH BARRIER	M40
3.	DECK SLAB	M45
4.	PSC I GIRDER	AS PER DESIGN
5.	LEVELING COURSE	M20
6.	BED BLOCK & PIER CAP	M40

4. WEEP HOLES:-(75/100)MM DIA PVC/AC PIPES AS IRS SUBSTRUCTURE CODE 2013 CL: 7.6
5. BACKFILL: GEO-COMPOSITE DRAIN AS PER RAILWAY BOARD CIRCULAR.
   MATERIALS SHALL CONSIST OF GRANULAR MATERIALS OF GW, GP, SW GROUPS AS PER IS: 1498-1970. (ABUTMENTS, RETAINING WALLS. (OR) THE BOULDER FILLING SHALL CONSIST OF WELL HAND-PACKED BOULDERS AND COBBLERS TO THICKNESS NOT LESS THAN 600MM WITH SMALLER SIZE TOWARDS THE BACK. BEHIND THE BOULDER FILLING, BACKFILL MATERIALS SHALL CONSIST OF GRANULAR MATERIALS OF GW, GP, SW GROUPS AS PER IS: 1498-1970 (RCC BOX).
6. HIGH STRENGTH DEFORMED BARS(HYSD) SHALL CONFORM TO IS:1786-2008 [FE 500].
7. BAR BENDING SHALL BE CONFORM TO IS : 2502.
8. RE PANEL FOR ROB'S:- REINFORCED EARTH PANELS TO BE DESIGNED AS PER SETTLED BATS 8006.
9. APPROACH SLAB FOR ROB'S AS PER IC-6 - 2017

JUSTIFICATION FOR SELECTING THE SPAN
SPAN HAS BEEN PROPOSED CONSIDERING RAILWAY TRACKS, RAILWAY BOUNDARY & RAILWAY CIRCULAR.

JUSTIFICATION FOR TRACK CENTRE DISTANCE
PROPOSED FUTURE RAILWAY TRACK IS KEPT AS PER APPROVED L SECTION.

GENERAL NOTES

1. ALL DIMENSIONS SHOWN IN THIS GAD ARE IN MM AND REDUCED LEVELS (W.R.T MSL) ARE IN M UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
3. SEISMIC ZONE IS ZONE II
4. EXPOSURE CONDITION IS MODERATE
5. PROPOSED ROB IS SHOWN IN RED COLOUR IN THE KEY PLAN.
6. THIS DRAWING IS PREPARED BASED ON DATA COLLECTED FROM SITE BY FIELD EXECUTIVES.
7. THE ENTIRE WORK SHALL BE EXECUTED AS PER THE INSTRUCTIONS AND TO THE SATISFACTION OF THE ENGINEER IN CHARGE AT SITE.
8. RAIL LEVEL, FORMATION LEVEL ETC. SHOULD BE CROSS VERIFIED BY THE ENGINEER-IN-CHARGE BEFORE AND DURING EXECUTION OF WORK AT SITE AS PER LATEST APPROVED WORKING SECTION/PLANS, YARD PLANS AND OTHER CONNECTED DRAWINGS IF ANY.
9. THIS GAD IS SUBJECT TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE & TRACK CENTER DISTANCE AS THAT OF APPROVED WORKING SECTION/ L-SECTIONS.

SPECIAL NOTES :1

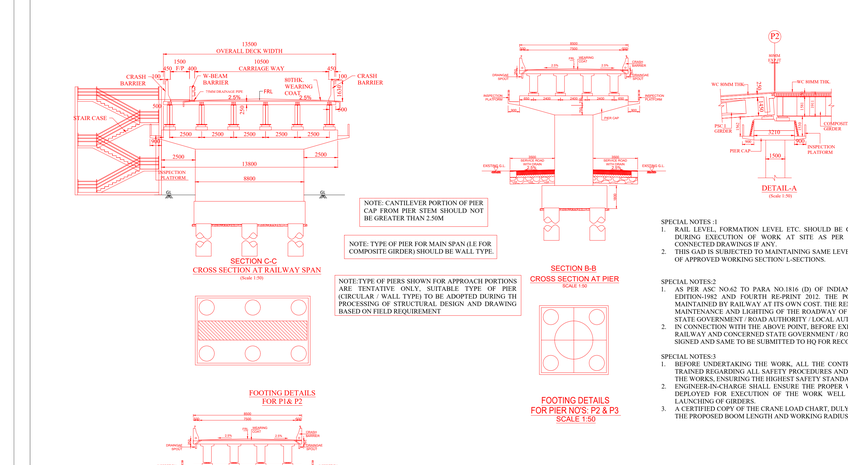
1. RAIL LEVEL, FORMATION LEVEL ETC. SHOULD BE CROSS VERIFIED BY THE ENGINEER-IN-CHARGE BEFORE AND DURING EXECUTION OF WORK AT SITE AS PER LATEST APPROVED WORKING SECTION/PLANS AND OTHER CONNECTED DRAWINGS IF ANY.
2. THIS GAD IS SUBJECTED TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE & TRACK CENTER DISTANCE AS THAT OF APPROVED WORKING SECTION/ L-SECTIONS.

SPECIAL NOTES:2

1. AS PER ASC NO:62 TO PARA NO.1816 (D) OF INDIAN RAILWAY CODE FOR ENGINEERING DEPARTMENT REVISED EDITION-1982 AND FOURTH RE-PRINT 2012. THE PORTION OF ROB WITHIN RAILWAY LAND AREA SHALL BE MAINTAINED BY RAILWAY AT ITS OWN COST. THE REMAINING PORTION OUTSIDE RAILWAY LAND AREA, INCLUDING MAINTENANCE AND LIGHTING OF THE ROADWAY OF THE BRIDGE AND ITS APPROACHES, WILL BE MAINTAINED BY STATE GOVERNMENT / ROAD AUTHORITY /LOCAL AUTHORITY AT ITS OWN COST.
2. IN CONNECTION WITH THE ABOVE POINT, BEFORE EXECUTION OF THE PROPOSED WORK THE MOU BETWEEN K-RIDE, RAILWAY AND CONCERNED STATE GOVERNMENT / ROAD AUTHORITY / LOCAL AUTHORITY SHALL BE PREPARED AND SIGNED AND SAME TO BE SUBMITTED TO HQ FOR RECORD.

SPECIAL NOTES:3

1. BEFORE UNDERTAKING THE WORK, ALL THE CONTRACTOR'S SUPERVISORS AND STAFF SHALL BE ADEQUATELY TRAINED REGARDING ALL SAFETY PROCEDURES AND MEASURES TO BE FOLLOWED AT SITE DURING EXECUTION OF THE WORKS, ENSURING THE HIGHEST SAFETY STANDARDS.
2. ENGINEER-IN-CHARGE SHALL ENSURE THE PROPER WORKING OF THE CRANES AND ALL MACHINERY AND TOOLS DEPLOYED FOR EXECUTION OF THE WORK WELL IN ADVANCE BY DULY CONDUCTING A MOCK DRILL FOR LAUNCHING OF GIRDERS.
3. A CERTIFIED COPY OF THE CRANE LOAD CHART, DULY INDICATING THE NAME AND TYPE OF THE CRANE, AS WELL AS THE PROPOSED BOOM LENGTH AND WORKING RADIUS, SHALL BE SUBMITTED TO HQ WHILE SEEKING PCE SANCTION.



SPECIAL NOTES FOR 25KV AC TRACTION SYSTEM:

1. NECESSARY PROTECTIVE ARRANGEMENT SHALL BE MADE BY K-RIDE CIVIL-DEPT IN CONSULTATION WITH ELECTRICAL OL/TRACTION WORKS AND ELECTRICAL INDUCTION DURING LAUNCHING OF BOWSTRING GIRDERS.
2. WHILE LAUNCHING OF GIRDER ABOVE THE OHE & ALSO DURING ANY WORK INVOLVING LESS THAN 2.0M WORKING CLEARANCE FROM OHE, THE WORK SHALL BE CARRIED OUT ONLY DURING POWER BLOCK CONDITION BY OBTAINING PERMISSION TO WORK FROM AUTHORIZED TRD BRANCH OFFICER.
3. ALL STEEL STRUCTURES/COMPOSITE GIRDERS INVOLVING THE ABOVE WORKS SHALL BE SUITABLY EARTHED TO TRACTION RAILS/SEPARATE EARTH PIPE FOR SAFETY OF WORKING STAFF.
4. GIRDER LAUNCHING SHOULD BE DONE WITHOUT DISTURBING THE OHE
5. OHE TRACTION CONDUCTORS SHALL BE PROFILED TO GET MAXIMUM CONTACT WIRE HEIGHT WITH NORMAL ELECTRICAL CLEARANCE AFTER COMPLETION OF WORK IN ROB.
6. ALL OHE PROFILING WORKS, GIRDER ERECTION, ETC; WILL BE DONE UNDER THE SUPERVISION OF SSE/OL/TRD UNDER POWER BLOCK CONDITIONS.
7. PROTECTIVE SCREEN WILL BE PROVIDED OVER ROB PORTION AS PER RDSO NORMS.
8. INDEPENDENT EARTHING SHOULD BE ENSURED FOR ROB GIRDER AT TWO LOCATIONS.
9. CAUTION BOARD NEED TO BE PROVIDED ON ROB AS PER RDSO SPECIFICATIONS.

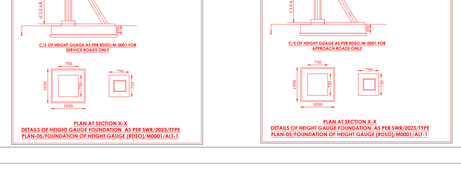
NOTE FOR STEEL WORKS:

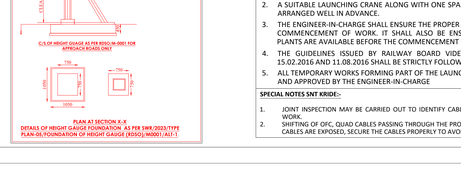
1. ALL STEEL SHALL CONFORM TO IS 226.EXCEPT FOR WELDED THE STEEL SHOULD CONFORM TO IS 2062 CONSTRUCTION WHERE Gr.B (FE 410 W B) FULLY KILLED AND FULLY NORMALIZED.
2. METALZING OF ALL STEEL SURFACES SHALL BE DONE BY SPRAYING ALUMINUM HAVING 99.5% PURITY WITH A COATING OF 150 MICRON BY MINIMUM OF TWO PASSES.
3. PAINTING OF METALIZED STEEL SECTIONS SHALL BE DONE AS BELOW.
   i. FIRST COAT - PRIMER TO IS: 5666.
   ii. SECOND COAT - ZINC CHROMIUM PAINT TO IS 104.
   iii. THIRD AND FOURTH COAT - ALUMINIUM PAINT TO IS 2339.
4. METALZING AND PAINTING SHALL BE DONE IN ACCORDANCE WITH INDIAN RAILWAYS BRIDGE MANUAL.
5. ALL WELDS TO BE MADE BY USING APPROVED WELDING TROCEDURES AND BY QUALIFIED WELDERS ONLY (S-9595)
6. SPLICING OF FLANGE PLATES SHALL BE DOUBLE "V" BUTT WELD.
7. SPLICING OF WEB PLATES SHALL BE DOUBLE "V" BUTT WELD.
8. ALL FIELD WELDS (DIAPHRAGMS) SHALL BE EITHER FILLET WELDING AS PER IS 816,OR BY RIVETING.
9. ALL BUTT WELDS ARE TO BE EXAMINED RADIOGRAPHICALLY AS PER IS:816,OR BY RIVETING.
10. ALL STEEL STRUCTURE INVOLVING THE ABOVE WORKS SHALL BE SUITABLY EARTHED TO TRACTION RAI/SEPARATE EARTH PIPE FOR SAFETY OF WORKING STAFF.

NOTE: ALL COMPOSITE GIRDERS INVOLVING THE ABOVE WORKS SHALL BE SUITABLY EARTHED TO TRACTION RAI/SEPARATE EARTH PIPE FOR SAFETY OF WORKING STAFF.

SPECIAL NOTES:

1. THIRD PARTY INSPECTION (TPI) OF THE WORKING CRANE, SPARE CRANE, AND ALL OTHER LIFTING EQUIPMENT & TOOLS SHALL BE CARRIED OUT PRIOR TO THE LAUNCHING OF GIRDERS TO ENSURE THEIR COOD WORKING CONDITION.
2. A SUITABLE LAUNCHING CRANE ALONG WITH ONE SPARE CRANE OF THE SAME CAPACITY, SHALL BE ARRANGED WELL IN ADVANCE.
3. THE ENGINEER-IN-CHARGE SHALL ENSURE THE PROPER FUNCTIONING OF CRANES WELL BEFORE THE COMMENCEMENT OF WORK. IT SHALL ALSO BE ENSURED THAT SUFFICIENT OILS, TOOLS, AND PLANTS ARE AVAILABLE BEFORE THE COMMENCEMENT OF THE LAUNCHING WORK.
4. THE GUIDELINES ISSUED BY RAILWAY BOARD VIDE LETTER NO. 2015/CE-IV/RUB/206, DATED 15.02.2016 AND 11.08.2016 SHALL BE STRICTLY FOLLOWED.
5. ALL TEMPORARY WORKS FORMING PART OF THE LAUNCHING SCHEME SHALL BE SUITABLY DESIGNED AND APPROVED BY THE ENGINEER-IN-CHARGE.
6. BEFORE UNDERTAKING THE WORK, ALL THE CONTRACTORS SUPERVISORS AND STAFF SHALL BE ADEQUATELY TRAINED REGARDING ALL SAFETY PROCEDURES AND MEASURES TO BE FOLLOWED AT SITE DURING EXECUTION OF THE WORKS, ENSURING THE HIGHEST SAFETY STANDARDS.
7. ENGINEER-IN-CHARGE SHALL ENSURE THE PROPER WORKING OF THE CRANES AND ALL MACHINERY AND TOOLS DEPLOYED FOR EXECUTION OF THE WORK WELL IN ADVANCE BY DULY CONDUCTING A MOCK DRILL FOR LAUNCHING OF RCC BOX, AND TEMPORARY GIRDER.
8. A CERTIFIED COPY OF THE CRANE LOAD CHART, DULY INDICATING THE NAME AND TYPE OF THE CRANE, AS WELL AS THE PROPOSED BOOM LENGTH AND WORKING RADIUS, SHALL BE SUBMITTED TO HQ WHILE SEEKING PCE SANCTION.





SPECIAL NOTES:4-

1. AS PER ASC NO.62 TO PARA NO.1816 (D) OF INDIAN RAILWAY CODE FOR ENGINEERING DEPARTMENT REVISED EDITION-1982 AND FOURTH RE-PRINT 2012. THE PORTION OF ROB WITHIN RAILWAY LAND AREA SHALL BE MAINTAINED BY RAILWAY AT ITS OWN COST. THE REMAINING PORTION OUTSIDE RAILWAY LAND AREA, INCLUDING MAINTENANCE AND LIGHTING OF THE ROADWAY OF THE BRIDGE AND ITS APPROACHES, WILL BE MAINTAINED BY STATE GOVERNMENT / ROAD AUTHORITY / LOCAL AUTHORITY AT ITS OWN COST.
2. IN CONNECTION WITH THE ABOVE POINT, BEFORE EXECUTION OF THE PROPOSED WORK THE MOU BETWEEN K-RIDE, RAILWAY AND CONCERNED STATE GOVERNMENT / ROAD AUTHORITY / LOCAL AUTHORITY SHALL BE PREPARED AND SIGNED AND SAME TO BE SUBMITTED TO HQ FOR RECORD.

SPECIAL NOTES:5

1. DETAILED SOIL INVESTIGATION SHOULD BE DONE BEFORE PROCESSING OF STRUCTURAL DRAWINGS.
2. BEFORE EXECUTION OF THE PROPOSED WORK, ENGINEER IN-CHARGE SHALL ENSURED THAT, THE MAXIMUM BASE PRESSURE EXERTED AT FOUNDATION LEVEL FOR EACH ELEMENT OF BRIDGE IS LESS THAN THE SAFE BEARING CAPACITY OF SOIL AT THAT LOCATION.
3. BEFORE EXECUTION OF THE PROPOSED WORK, ENGINEER IN-CHARGE SHOULD ENSURE THAT, MAXIMUM LOAD COMING ON THE PILE SHOULD NOT BE MORE THAN PILE CARRYING CAPACITY OF PILE.

SPECIAL NOTES:-7:

1. THIS GAD IS SUBJECTED TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE & TRACK CENTER DISTANCE AS THAT OF APPROVED WORKING SECTION/ L-SECTIONS.
2. RAIL LEVEL, FORMATION LEVEL ETC. SHOULD BE CROSS VERIFIED BY THEENGINEER-IN-CHARGE BEFORE AND DURING EXECUTION OF WORK AT SITE AS PER LATEST APPROVED WORKING SECTION/PLANS AND OTHER CONNECTED DRAWINGS IF ANY.
3. THE MINIMUM HORIZONTAL & VERTICAL DISTANCES HAS BEEN PROVIDED AS PER THE LATEST SOD FOR RAILWAYS.

SPECIAL NOTES :8

1. LOAD TEST TO BE CONDUCTED AS PER IRC PARA 18 OF CBC & IRC SP 61.
2. APPROVAL OF CONCERNED ROAD AUTHORITIES / STATE GOVT OFFICIALS SHALL BE TAKEN BEFORE COMMENCEMENT OF EXECUTION OF WORK.
3. QAP OF GIRDER TO BE PREPARED AND APPROVED AS PER RDSO LR NO. CBS/PBE/Impl/ Genl Matters Dated 01.03.2023.
4. QAP OF BEARINGS SHALL BE PREPARED AND APPROVED AS PER LR NO.CBS/PBE/Reg DATED 28.02.2023.
5. LOAD TEST TO BE CONDUCTED AS PER RDSO REPORT IRC SP 51 -2014.
6. INSTRUMENTATION OF BRIDGE TO BE CONDUCTED AS PER RDSO REPORT BS-106 (R2)

BOREHOLE LOG DETAILS-134A REDUCED LEVEL:890.063

DESCRIPTION	LEGEND	DEPTH (m)	'N'-VALUE	SBC (t/Sq.m)
BACK FILLING		1.500		
BROWN COLORED SILTY SAND (SM)		3.500	37	36.23
GREY & WHITE COLOURED SILTY SAND (SM)		4.500	43	42.11
		6.000		
		6.500	55	48.96
GREY & GREEN COLOURED SILTY SAND (SM)		7.500	60	48.96
		9.000	71	48.96
SOFT DISINTEGRATED ROCK		10.500	>50	48.96
		12.000	>50	48.96
		13.500	>50	48.96
GRANITE GNEISS WITH COMPLETE WEATHERING (GRADE V)		15.000		55.00
		16.500		55.00
		18.000		55.00
		19.500		55.00
GRANITE GNEISS WITH MODERATE WEATHERING (GRADE III)		21.000		130.00

BOREHOLE LOG DETAILS-134B REDUCED LEVEL:890.843

DESCRIPTION	LEGEND	DEPTH (m)	'N'-VALUE	SBC (t/Sq.m)
BACK FILLING		1.500		
BROWN & GREY COLOURED CLAYEY SILT (SC)		3.500	43	42.11
		4.500	50	48.96
		6.000		
		6.500	57	48.96
		7.500	62	48.96
SOFT DISINTEGRATED ROCK		9.000	>50	48.96
		10.500	>50	48.96
		12.000		55.00
		13.500		55.00
GRANITE GNEISS WITH COMPLETE WEATHERING (GRADE V)		15.000		55.00
		16.500		55.00
		18.000		55.00
GRANITE GNEISS WITH MODERATE WEATHERING (GRADE III)		19.500		190.00

ALL THE FOLLOWING SAFETY MEASURES SHALL BE FOLLOWED

a. ADEQUATE SAFETY MEASURES FOR RUNNING TRAINS SHALL BE ADOPTED WHILE DOING THE EARTH WORK BELOW/ ADJACENT TO THE TRACK.
b. DURING CONSTRUCTION OF THE BRIDGE, THE EXISTING TRACK SHALL BE PROTECTED SUITABLY BY IMPOSING NECESSARY SPEED RESTRICTIONS BY PROVIDING TEMPORARY ENGINEERING INDICATORS.
c. DURING THE CONSTRUCTION OF THE PROPOSED BRIDGE PROPER SAFETY PRECAUTIONS TO BE TAKEN WHILE EXECUTING FOUNDATION WORK CLOSE TO THE EXISTING STRUCTURE FOUNDATION INCLUDING IMPOSING SPEED RESTRICTIONS IF REQUIRED.
d. THE GRADUAL RELEASE OF SPEED RESTRICTION SHALL BE AS PER PARA 637-(1)(f) OF IRPWM.
e. NECESSARY SHORING ARRANGEMENTS TO BE MADE TO PROTECT EXISTING BRIDGE STRUCTURE WHEREVER NECESSARY.
f. JOINT PROCEDURE ORDER ON SAFETY RELATED ISSUES PERTAINING TO WORK SITE IN CONSTRUCTION PROJECTS (JPO NO. W.339/SAFETY PRECAUTION, DT: 18.02.2011) ISSUED VIDE CTE LR.NO. SW/W.241/SAFETY WORK DT: 06.02.2017 HAS TO BE STRICTLY FOLLOWED.
g. DURING EXECUTION OF WORK, THE MATERIAL/EQUIPMENT SUCH AS RELEASED MATERIAL ETC. SHOULD NOT INFRINGE THE TRAIN TRAFFIC. ALL SAFETY MEASURES TO BE TAKEN BY ENGINEER IN CHARGE DURING EXECUTION.
h. SUITABLE SAFETY BARRICADING HAS TO BE PROVIDED WHENEVER WORK IS BEING EXECUTED PARALLEL TO THE RUNNING TRACK.

PILE FOUNDATION.

1. MINIMUM LENGTH OF SOCKET OF PILES TO BE PROVIDED AS PER CL:6.5.1 OF IS 14593-1998.
2. THE DETAILS OF PILES AND PILE CAPS SHOWN IN THE GAD ARE TENTATIVE, ACTUAL DETAILS WILL BE BASED ON SEPARATE APPROVED STRUCTURAL DRAWINGS/DESIGNS.
3. ENGINEER IN-CHARGE SHOULD ENSURE MAXIMUM LOAD ON THE PILE SHALL NOT BE MORE THAN PILE CARRYING CAPACITY OF SPECIFIC DEPTH / SOCKETING DEPTH INTO ROCK DULY CARRYING PILE LOAD TEST AS PER IS-2911 (PART 4)- 1985.
4. PILE INTEGRITY TEST SHOULD BE CARRIED OUT FOR ALL THE PILES AS PER THE RELEVANT CODES/SPECIFICATIONS.
5. ENGINEER IN CHARGE SHALL ENSURE MAXIMUM CALCULATED FOUNDATION PRESSURE AT FOUNDATION LEVEL SHALL NOT EXCEED SAFE BEARING CAPACITY OF SOIL AT THAT LOCATION.
6. RDSO GUIDELINES WITH REGARD TO TEST