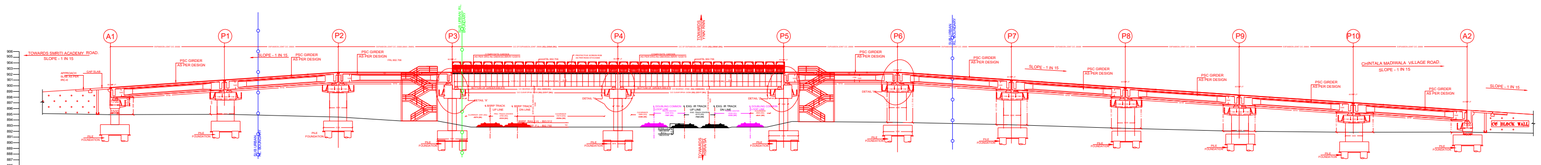
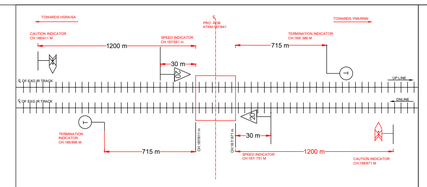


DESIGN PROFILE	899.726	901.260	902.240	902.240	902.240	902.240	902.240	902.240	902.240	901.260	899.726
EXISTING GROUND LEVEL	894.305	894.560	894.318	893.339	892.747	892.747	892.615	893.451	893.585	893.139	892.329
HEIGHT OF FILL	+4.800										
CHAINAGE	89,700	89,900	89,950	89,990	90,000	90,010	90,050	90,100	90,150	90,200	90,300



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

NOTE:
RETRO REFLECTIVE TYPE INDICATORS SHALL BE USED

PCE APPROVAL NOTE:
PCE APPROVAL FOR ADOPTION OF NON STANDARD DRAWING FOR THE SUPER STRUCTURE HAS BEEN OBTAINED VIDE E-OFFICE FILE No. SWR-ZHQ0ENGG(BR)/98/2023-O/o AXEN/Br/HQ/SWR.

NOTE:
1. ONCE THE QUADRUPLING WORK IS SANCTIONED, THE NOMINATED AGENCY BY SWR WILL MODIFY THE QUADRUPLING TRACK WITHIN THE PROPOSED SPAN AS SUFFICIENT HORIZONTAL SPACE IS AVAILABLE
2. THE REQUEST FOR CHANGE IN ALIGNMENT OF QUADRUPLING LINE-1 TRACK HAS BEEN MADE TO CONSTRUCTION ORG. BY KRIDE VIDE GM/CIVIL(C-4) /KRIDE LETTER NO.KRIDE/BSRP/C-4/ROB/017 DATED 10.12.2025.

TOTAL LAND REQUIRED

1AREA-1	-	867.285 Sq.mt
2AREA-2	-	998.690 Sq.mt
TOTAL AREA	-	1865.975 Sq.mt

AREA-1 867.285 Sqm

AREA-2 998.690 Sqm

4+900

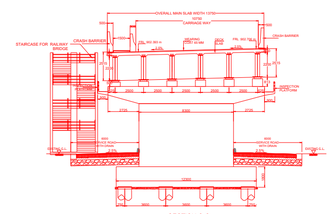
4+800

HALF PLAN AT TOP
SCALE - 1:100

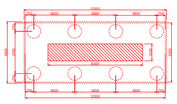
PLAN
SCALE 1:100

HALF PLAN AT BOTTOM

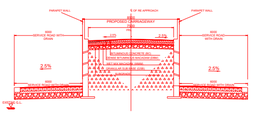
SPECIAL NOTE:
1. THE CARRIAGEWAY ON BOTH THE APPROACHES IS 7.5M BUT THE CARRIAGEWAY IN THE RAILWAY PORTION IS 10.5M CONVERGENCE AND DIVERGENCE IN THE WIDTH OF CARRIAGEWAY TO BE GRADUALLY MADE ON THE APPROACHES AS PER THE RATE PRESCRIBED BY RELEVANT IRC.
2. SUITABLE TRANSITION AS PER IRC TO BE PLANNED FOR THE CAMBER PROFILE FROM APPROACH TO THE OBLIGATORY PORTION AND VICE-VERSA.
3. ALL THE HORIZONTAL AND VERTICAL CURVES IN THE APPROACHES TO BE SUITABLY DESIGNED WITH TRANSITIONS AS PER THE RELEVANT IRC.



SECTION C-C
CROSS SECTION AT RAILWAY SPAN
SCALE 1:50
TOWARDS SMIRITI ACADAMY ROAD



FOOTING DETAILS
FOR PIER NO'S P3, P4 ,P5
SCALE 1:50



RE WALL WITH CC BLOCKS APPROACH CROSS SECTION
AS PER DESIGN
SCALE 1:50
TOWARDS SMIRITI ACADAMY ROAD

TENTATIVE IR TRACK TRAFFIC AND POWER BLOCK DETAILS FOR GIRDER ERECTION

SL. NO.	NO. OF DAY	TRACK ROAD/ LINE AFFECTED	ACTIVITY	POWER BLOCK WITH LINE BLOCK
1.	2 DAYS	EXT. IR TRACK. 1,2 DOUBLING COMMON LOOP. 1,2 QUADRUPLING LINE. 1	ERECTION OF GIRDER 1	3 hrs
2.	2 DAYS	EXT. IR TRACK. 1,2 DOUBLING COMMON LOOP. 1,2 QUADRUPLING LINE. 1	ERECTION OF GIRDER 2	3 hrs
3.	2 DAYS	EXT. IR TRACK. 1,2 DOUBLING COMMON LOOP. 1,2 QUADRUPLING LINE. 1	ERECTION OF GIRDER 3	3 hrs
4.	2 DAYS	EXT. IR TRACK. 1,2 DOUBLING COMMON LOOP. 1,2 QUADRUPLING LINE. 1	ERECTION OF GIRDER 4	3 hrs
5.	2 DAYS	EXT. IR TRACK. 1,2 DOUBLING COMMON LOOP. 1,2 QUADRUPLING LINE. 1	ERECTION OF GIRDER 5	3 hrs

BOREHOLE LOG DETAILS-127B REDUCED LEVEL : 894.223

DEPTH (M)		THICKNESS OF LAYER(M)	DESCRIPTION	PROFILE	N-VALUE	BEARING CAPACITY (t/m2)
FROM	TO					
0.0	1.5	1.5	BACK FILLING		-	-
1.5	3.0	5.0	BROWN COLORED SANDY SILT(ML)		-	-
3.0	3.5				29	28.40
3.5	4.5				34	33.29
4.5	6.0				-	-
6.0	6.5				42	41.13
6.5	7.5	3.0	WHITE & GREY COLORED SANDY SILT MIX (ML)		45	44.06
7.5	9.0					
9.0	9.5				>50	48.96
9.5	10.5	1.0	SOFT DISINTEGRATED ROCK		>50	48.96
10.5	12.0	7.5	GRANITIC GNEISS WITH COMPLETE WEATHERING (GRADE V)		-	55.00
12.0	13.5				-	55.00
13.5	15.0				-	55.00
15.0	16.5		GRANITIC GNEISS WITH MODERATE WEATHERING (GRADE III)		-	55.00
16.5	18.0				-	55.00
18.0	19.5	1.5			-	110.00

BOREHOLE LOG DETAILS-127A REDUCED LEVEL : 893.763

DEPTH (M)		THICKNESS OF LAYER(M)	DESCRIPTION	PROFILE	N-VALUE	BEARING CAPACITY (t/m2)
FROM	TO					
0.0	1.5	1.5	BACK FILLING		-	-
1.5	3.0	4.5	RED & BROWN COLOURED CLAYEY SILT(ML)		-	-
3.0	3.5				61	48.96
4.5	6.0		BROWN COLOUR ED SILT (ML)		-	-
6.0	7.5	1.5			-	48.96
7.5	9.0	3.0	SOFT DISINTEGRATED ROCK		>50	48.96
9.0	10.5				>50	48.96
10.5	12.0	7.5	GRANITIC GNEISS WITH COMPLETE WEATHERING (GRADE V)		>50	55.00
12.0	13.5				-	55.00
13.5	15.0				-	55.00
15.0	16.5		GRANITIC GNEISS WITH MODERATE WEATHERING (GRADE III)		-	55.00
16.5	18.0				-	55.00
18.0	19.5	1.5			-	100.00

DEPTH OF CONSTRUCTION FOR 38.545 M (SK)COMPOSITE GIRDER (AS PER DRG.No.GM(W)SC/BR/R-12/2014).

WEARING COAT	: 65 mm
DECK SLAB	: 250 mm
STEEL I GIRDER	: 2200 mm
CAMBER	: 313 mm
TOTAL	: 2828 mm

DEPTH OF CONSTRUCTION FOR 20M SPAN PSC I GIRDER (AS PER DESIGN)

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

SPECIAL NOTES FOR 25KV AC TRACTION SYSTEM:

1. NECESSARY PROTECTIVE ARRANGEMENT SHALL BE MADE BY K-RIDE CIVIL-DEPT IN CONSULTATION WITH ELECTRICAL OL/TRDBRANCH TO AVOID ANY 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 OFFICIALS.
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.
5. FOR THE OHE MAST WITH IN 10m FROM THE BRIDGE ABUTMENT, THE REQUIRED MODIFICATION TO BE CARRIED OUT BY KRIDE.
6. GIRDER LAUNCHING SHOULD BE DONE WITHOUT DISTURBING THE OHE
7. OHE TRACTION CONDUCTORS SHALL BE PROFILED TO GET MAXIMUM CONTACT WIRE HEIGHT WITH NORMAL ELECTRICAL CLEARANCE AFTER COMPLETION OF WORK BY OL/TRD.
8. ALL OHE PROFILING WORKS, GIRDER ERECTION, ETC; WILL BE DONE UNDER THE SUPERVISION OF SSE-OL/TRD UNDER POWER BLOCK CONDITIONS.
9. PROTECTIVE SCREEN WILL BE PROVIDED OVER ROB PORTION AS PER ROBO NORMS.
10. INDEPENDENT EARTHLING SHOULD BE ENSURED FOR ROB GIRDER AT TWO LOCATIONS.
11. CAUTION BOARD NEED TO BE PROVIDED ON ROB AS PER RDSO SPECIFICATIONS.

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.

NOTE:

TEMPORARY DIVERSION OF PUBLIC TRAFFIC SHALL BE DONE THROUGH PROPOSED.

JUSTIFICATION FOR SELECTING THE SPAN

SPAN HAS BEEN PROPOSED CONSIDERING RAILWAY TRACKS, RAILWAY BOUNDARY & RAILWAY CIRCULAR.

JUSTIFICATION FOR TRACK CENTER DISTANCE

PROPOSED FUTURE RAILWAY TRACK AS PER CTE APPROVED WORKING SECTION DRG.NO.KRIDE/BSRP/ROB/CA/005-2021/R1 IS KEPT.

AUTHORITY OF WORK:

IS AS PER DFSR OF BSRP, THE RAILWAY BOARD SANCTION FOR BENGLURU SUB URBAN TRANSPORT PROJECT (148.17KM'S) VIDE LETTER NO.2019/J/ CELL/KRIDE/BSTP/EBR/07 DATED 21.010.2020.

JUSTIFICATION FOR VERTICAL CLEARENCE:

VERTICAL HEIGHT OF 6.525m IS PROPOSED AS PER IR SOD NORMS.

BSRP TRACK STRUCTURE

LOADING	: 25 T -2008 LOADING
ALIGNMET	: 1.4° CURVE
GRADIENT	: LEVEL
SKEW ANGLE	: 41°
CROSSING ANGLE	: 49°
RAIL LVL	: 893.512
FORMATION LVL	: 892.750
RAIL 60 KG	: 172 MM
GR PAD	: 10 MM
SLEEPER	: 230 MM
BALLAST	: 350 MM

EXISTING TRACK STRUCTURE

LOADING	: 25 T -2008 LOADING
ALIGNMET	: STRAIGHT
GRADIENT	: 1 IN F 550
RAIL LVL	: 893.353
FORMATION LVL	: 892.615
RAIL 60 KG	: 172MM
GR PAD	: 6 MM
SLEEPER	: 210MM
BALLAST	: 350MM

SPECIAL NOTES

a) DURING TENDERING PROCESS FOR FABRICATION OF STEEL GIRDER, GUIDELINES/PROCEDURE ISSUED BY RDSO LETTER NO.CBS/GIRAG, DATED 24.05.2019 SHALL BE STRICTLY FOLLOWED.
b) FOR SEQUENCE OF ANTI-CORROSIVE/PAINTING SCHEME TO THE STEEL GIRDERS OF RAILWAY BRIDGES,ROB & FOBS, THE INSTRUCTIONS CONVEYED VIDE CBE/SWR LETTER NO.SWR/W.7/BRIDGE/POLICY, DATED 23.08.2019 SHALL BE STRICTLY FOLLOWED (i.e METALIZING WITH ALUMINIUM AVERAGE THICKNESS 200 MICRONS FOLLOWED BY EPOXY PAINTING)
c) THE INSTRUCTIONS CONVEYED VIDE PCE CIRCULER NO: 01/2021 DT:09-03-15, REGARDING 'WORK DISCIPLINE AT SITE ' AND AS PER PCE CIRCULER NO:01/2021 DATED 22.06.2021 REGARDING ENSUREING QUALITY OF WORK AND MAINTAINING SITE RECORDS IN WORKS CONTRACTS TO BE STRICTLY FOLLOWED.
d) PILE INTEGRITY TEST SHALL BE CONDUCTED FOR ALL THE PILES FROM EXPERT AGENCIES AND PROPER RECORD OF RESULTS OF THE SAME TO BE FURNISHED TO CBE/SWR.
e) PROCUREMENT /FABRICATION OF STEEL GIRDER SHALL BE DONE THROUGH RDSO APPROVED VENDORS/FABRICATORS.

SPECIAL NOTES SNT KRIDE:-

1. JOINT INSPECTION MAY BE CARRIED OUT TO IDENTIFY CABLES BEFORE THE COMMENCEMENT OF EARTH WORK.
2. SHIFTING OF OFC, QUAD CABLES PASSING THROUGH THE PROPOSED ALIGNMENT SHALL BE CARRIED OUT, IF CABLES ARE EXPOSED, SECURE THE CABLES PROPERLY TO AVOID DAMAGES.

REFERNCE

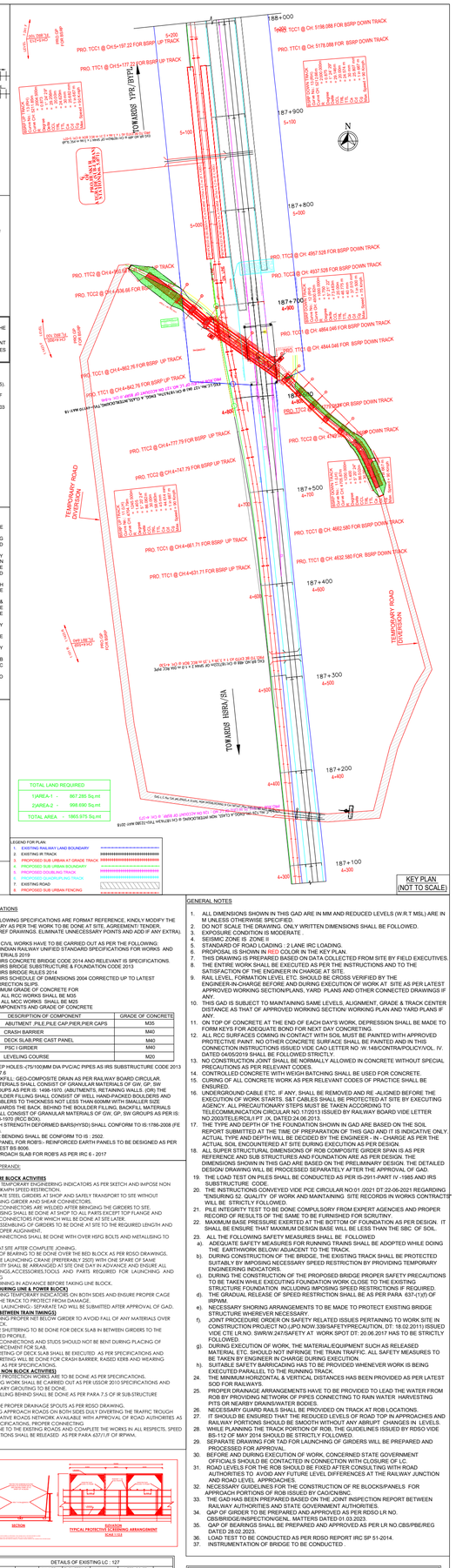
1. COMPOSITE GIRDER OF RAILWAY SPAN AS PER :DRG.No.GM(W)SC/BR/R-12/2014.
   1.1. LAYOUT AND DESIGN OF GIRDER IN DECK : NAM/STR/ROB/125+262/401 (Sh-01 OF 05).
   1.2. DETAILS OF INTERMEDIATE CROSS BRACING & END CROSS GIRDER : NAM/STR/ROB/125+262/401 (Sh-02 OF 05).
   1.3. TYPICAL DETAILS OF SPLICING OF MAIN GIRDERS :NAM/STR/ROB/125+262/401 (Sh-03 OF 05).
   1.4. TYPICAL REINF DETAILS OF DECK SLAB :NAM/STR/ROB/125+262/401 (Sh-04 OF 05).
   1.5. GENERAL NOTES :NAM/STR/ROB/125+262/401 (Sh-04 OF 05).
   1.6. BRG. LAYOUT & DESIGN LOADS FOR BRG. NAM/STR/ROB/125+262/501 & 502.
   1.7. MISCELLANEOUS DETAILS :NAM/STR/ROB/MISC/500.
2. ABUTMENT, PILE, PILECAP, PIER & PIERCAP AS PER DESIGN.
3. APPROACH SLAB AS PER DESIGN.
4. REINFORCED EARTH (CC BLOCKS) WALL AS PER DESIGN.
5. INSPECTION PLAT FORM AS PER CBS-0016.
6. PSC I GIRDER AS PER DESIGN.
7. HIGH CONTAINMENT CRASH BARRIER AS PER IRC 06.

RESPONSIBILITY NOTES

1. THE MAINTENANCE OF ROB SHALL BE AS PER PARA 1816(D) OF ENGINEERING CODE READ ALONG WITH RECENT CORRECTION SLIPS.
2. AN MOU SHALL BE SIGNED BETWEEN RAILWAY AND STATE GOVT./ROAD OWNING AUTHORITY ,DULY MENTIONING THE RESPONSIBILITIES OF EXECUTION AND MAINTENANCE OF ROB.
3. NECESSARY TEMPORARY DIVERSION OF ROAD TRAFFIC HAS TO BE PROVIDED BY THE KRIDE /STATE AUTHORITIES AT THE TIME OF EXECUTION OF WORK BASED ON THE JOINT INSPECTION BETWEEN STATE AND KRIDE AUTHORITIES. SUITABLE TEMPORARY SERVICE ROADS FOR USE OF PUBLIC SHALL BE ARRANGED AND MAINTAINED BY KRIDE / STATE AUTHORITIES WHEREVER & WHENEVER REQUIRED.
4. THE ROB WORK WILL BE EXECUTED BY KRIDE FOR BOTH RAILWAY AND APPROACH PORTION OF ROB EVEN BEYOND RAILWAY BOUNDARY ALONG WITH DRAINAGE ARRANGEMENTS.
5. EXISTING TELEGRAPH POSTS, ELECTRIC POSTS, SIGNAL CABLES, WATER & DRAINAGE, WATER MAINS AND ALL OTHER UTILITIES COMING IN THE WAY SHALL BE SHIFTED SUITABLY BY THE RESPECTIVE DEPARTMENTS OF KRIDE / STATE AUTHORITIES.
6. ADEQUATE SIGHT BREACHES ON EITHER SIDE OF THE PROPOSED ROB SHOULD BE SUITABLY ALIGNED AND REGARDED BY KRIDE AUTHORITY.
7. MAINTENANCE OF DRAINAGE WILL BE DONE BY ROAD AUTHORITIES AFTER THE COMPLETION OF WORK.
8. MAINTENANCE OF ROAD SURFACE AFTER COMPLETION OF ROB IS TO BE DONE BY ROAD AUTHORITIES BOTH INSIDE AND OUTSIDE THE RAILWAY LIMITS.
9. THE RESPONSIBILITY OF THE MAINTENANCE OF LIGHTING ARRANGEMENTS OF ROB IN RAILWAY PORTION AND BEYOND RAILWAY PORTION WILL BE WITH LOCAL CIVIC BODY
10. AFTER CONSTRUCTION AND COMMISSIONING OF ROB IT WILL BE HANDED OVER TO LOCAL CIVIL AUTHORITY FOR MAINTENANCE WITH ALL RESPECT.

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 500 W B) FULLY KILLED AND FULLY NORMALIZED.
2. METALIZING OF ALL STEEL SURFACES SHALL BE DONE BY SPRAYING ALUMINIUM HAVING 99.5% PURITY WITH A COATING OF 150 MICRON BY MINIMUM OF TWO PASSES.
3. PAINTING OF ALL EXPOSED 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. METALIZING 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. (IS-9595)
6. SPLICING OF FLANGE PLATES SHALL BE DOUBLE "V" BUTT WELD.
7. SPLICING OF WEB PLATES SHALL BE SINGLE "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 RAIS/SEPARATE EARTH PIPE FOR SAFETY OF WORKINF STAFF.
11. ALL HSFG BOLTS SHALL CONFIRM TO DRAWING NO.RDSO/B-11760/R1.
12. FOR ALL CONCRETE WORKS , RMC SHALL BVE USED.



KEY PLAN
(NOT TO SCALE)

LEGEND FOR PLAN

1. EXISTING RAILWAY LAND BOUNDARY
2. EXISTING IR TRACK
3. PROPOSED SUB URBAN IR GRADE TRACK
4. PROPOSED SUB URBAN BOUNDARY
5. PROPOSED DOUBLING TRACK
6. PROPOSED QUADRUPLING TRACK
7. EXISTING ROAD
8. PROPOSED SUB URBAN FENCING

SPECIFICATIONS

(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)

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 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 2004 CORRECTED UP TO LATEST CORRECTION SLIPS.
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,PIER CAPS	M35
2.	CRASH BARRIER	M40
3.	DECK SLAB,PRE CAST PANEL	M40
4.	PSC I GIRDER	M40
5.	LEVELING COURSE	M20

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 STONE PIECES NOT LESS THAN 600MM WITH SMALLER SIZE ..... TOWARDS THE BEHIND THE BOULDER FILLING, BACKFILL MATERIALS SHALL CONSIST OF GRANULAR MATERIALS OF GW, GP, SW GROUPS AS PER IS: 1498-1970 (IRCC ROK).
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 LATEST BS 8006.
9. APPROACH SLAB FOR ROB'S AS PER IRC 6 : 2017

MODUS OPERANDI:

STAGE I PRE BLOCK ACTIVITIES

1. INSTALL TEMPORARY ENGINEERING INDICATORS AS PER SKETCH AND IMPOSE NON STOP 30KM/H SPEED RESTRICTION.
2. FABRICATE STEEL GIRDERS AT SHOP AND SAFELY TRANSPORT TO SITE WITHOUT DAMAGING GIRDER AND SHEAR CONNECTORS.
3. SHEAR CONNECTORS ARE WELDED AFTER BRINGING THE GIRDERS TO SITE.
4. METALIZING SHALL BE DONE AT SHOP TO ALL PARTS EXCEPT TOP FLANGE AND SHEAR CONNECTORS FOR WHICH WILL BE DONE AT SITE LATER.
5. FINAL ASSEMBLING OF GIRDERS TO BE DONE AT SITE TO THE REQUIRED LENGTH AND IN A PROPER ALIGNAEMT.
6. ALL CONNECTIONS SHALL BE DONE WITH OVER HSFG BOLTS AND METALISING TO BE DONE AT SITE AFTER COMPLETE JOINING.
7. FIXING OF BEARING TO BE DONE OVER THE BED BLOCK AS PER RDSO DRAWINGS.
8. SUITABLE LAUNCHING CRANE (PREFERABLY 250T) WITH ONE SPARE OF SAME CAPACITY SHALL BE ARRANGED AT SITE ONE DAY IN ADVANCE AND ENSURE ALL FITTINGS,ACCESSORIES,TOOLS AND PARTS REQUIRED FOR LAUNCHING AND JOINING ..... AND JOINING IN ADVANCE BEFORE TAKING LINE BLOCK.

STAGE II (DURING LINE & POWER BLOCK)

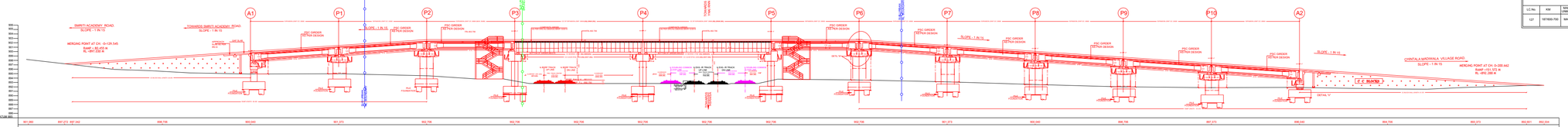
9. PROVIDING TEMPORARY INDICATORS ON BOTH SIDES AND ENSURE PROPER CAGE OVER THE TRACK TO PROTECT FROM DAMAGE.
10. GIRDER LAUNCHING:- SEPARATE TAD WILL BE SUBMITTED AFTER APPROVAL OF GAD.

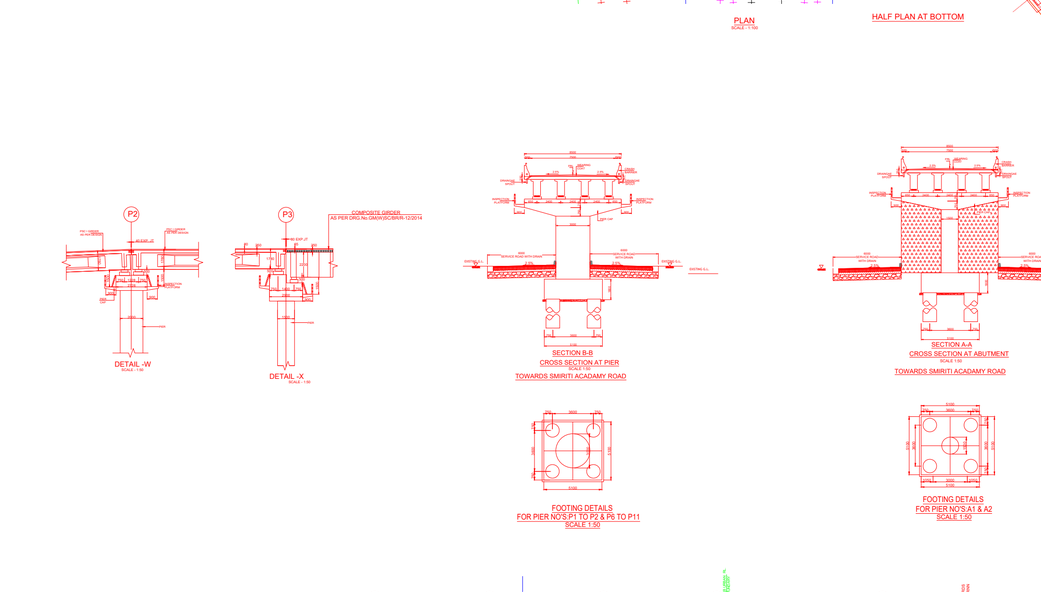
STAGE III (BETWEEN TRAIN TIMINGS)

11. PROVIDING PROPER NET BELOW GIRDER TO AVOID FALL OF ANY MATERIALS OVER THE TRACK.
12. PROPER SHUTTERING TO BE DONE FOR DECK SLAB IN BETWEEN GIRDERS TO THE REQUIRED PROFILE.
13. SHEAR CONNECTIONS AND STUDS SHOULD NOT BE BENT DURING PLACING OF REINFORCEMENT FOR SLAB.
14. CONCRETING OF DECK SLAB SHALL BE EXECUTED AS PER SPECIFICATIONS. CONCRETING WILL BE DONE FOR CRASH BARRIER, RAISED KERB AND WEARING COATS AS PER SPECIFICATIONS.

STAGE IV (NON BLOCK ACTIVITIES)

15. PROPER PROTECTION WORKS ARE TO BE DONE AS PER SPECIFICATIONS.
16. PITCHING WORK SHALL BE CARRIED OUT AS PER USSOR 2010 SPECIFICATIONS AND NECESSARY GROUTING TO BE DONE.
17. BACK FILLING BEHIND SHALL BE DONE AS PER PARA 7.5 OF IS:SP-TRUCTURE 2010.
18. PROVIDE PROPER DRAINAGE SPOUTS AS PER RDSO DRAWING.
19. MAKING APPROACH ROADS ON BOTH SIDES DULY DIVERTING THE TRAFFIC THROUGH ALTERNATIVE ROADS NETWORK AVAILABLE WITH APPROVAL OF ROAD AUTHORITIES AS PER SPECIFICATIONS, PROPER CONNECTING ..... TO BE DONE TO THE EXISTING ROADS AND COMPLETE THE WORKS IN ALL RESPECTS. SPEED RESTRICTIONS SHALL BE RELEASED AS PER PARA 637-(1)F OF IRPWM.





SECTION B-B
CROSS SECTION AT PIER
SCALE 1:50
TOWARDS SMIRITI ACADAMY ROAD

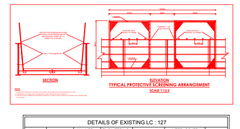
SECTION A-A
CROSS SECTION AT ABUTMENT
SCALE 1:50
TOWARDS SMIRITI ACADAMY ROAD

FOOTING DETAILS
FOR PIER NO'S P1 TO P2 & P6 TO P11
SCALE 1:50

FOOTING DETAILS
FOR PIER NO'S A1 & A2
SCALE 1:50

DETAIL -Y
SCALE - 1:50

DETAIL -Z
SCALE - 1:50



TYPICAL PROTECTIVE SCREENING ARRANGEMENT
SCALE 1:25

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. EXPOSURE CONDITION IS MODERATE
4. SEISMIC ZONE IS ZONE II
5. STANDARD OF ROAD LOADING : 2 LANE IRC LOADING.
6. PROPOSAL IS SHOWN IN RED COLOR IN THE KEY PLAN.
7. THIS DRAWING IS PREPARED BASED ON DATA COLLECTED FROM SITE BY FIELD EXECUTIVES.
8. THE ENTIRE WORK SHALL BE EXECUTED AS PER THE INSTRUCTIONS AND TO THE SATISFACTION OF THE ENGINEER IN CHARGE AT SITE.
9. 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.
10. THIS GAD IS SUBJECT TO MAINTAINING SAME LEVELS, ALIGNMENT, GRADE & TRACK CENTER DISTANCE AS THAT OF APPROVED WORKING SECTION/ WORKING PLAN AND YARD PLANS IF ANY.
11. ON TOP OF CONCRETE AT THE END OF EACH DAYS WORK, DEPRESSION SHALL BE MADE TO FORM KEYS FOR ADEQUATE BOND FOR NEXT DAY CONCRETING.
12. ALL RCC SURFACES COMING IN CONTACT WITH SOIL MUST BE PAINTED WITH APPROVED PROTECTIVE PAINT. NO OTHER CONCRETE SURFACE SHALL BE PAINTED AND IN THIS CONNECTION INSTRUCTIONS ISSUED VIDE CAO LETTER NO: W.148/CONTRA/POLICY/VOL. IV. DATED 04/05/2019 SHALL BE FOLLOWED STRICTLY.
13. NO CONSTRUCTION JOINT SHALL BE NORMALLY ALLOWED IN CONCRETE WITHOUT SPECIAL PRECAUTIONS AS PER RELEVANT CODES.
14. CONTROLLED CONCRETE WITH WEIGH BATCHING SHALL BE USED FOR CONCRETE.
15. CURING OF ALL CONCRETE WORK AS PER RELEVANT CODES OF PRACTICE SHALL BE ENSURED.
16. UNDERGROUND CABLE ETC. IF ANY, SHALL BE REMOVED AND RE -ALIGNED BEFORE THE EXECUTION OF WORK STARTS, S&T CABLES SHALL BE PROTECTED AT SITE BY EXECUTING AGENCY. ALL PRECAUTIONARY STEPS MUST BE TAKEN ACCORDING TO TELECOMMUNICATION CIRCULAR NO.17/2013 ISSUED BY RAILWAY BOARD VIDE LETTER NO.2003/TELE/R/CIL/PT.IX, DATED:24.06.2013.
17. THE TYPE AND DEPTH OF THE FOUNDATION SHOWN IN GAD ARE BASED ON THE SOIL REPORT SUBMITTED AT THE TIME OF PREPARATION OF THIS GAD AND IT IS INDICATIVE ONLY. ACTUAL TYPE AND DEPTH WILL BE DECIDED BY THE ENGINEER - IN - CHARGE AS PER THE ACTUAL SOIL ENCOUNTERED AT SITE DURING EXECUTION AS PER DESIGN.
18. ALL SUPER STRUCTURAL DIMENSIONS OF ROB COMPOSITE GIRDER SPAN IS AS PER REFERENCE AND SUB STRUCTURES AND FOUNDATION ARE AS PER DESIGN. THE DIMENSIONS SHOWN IN THIS GAD ARE BASED ON THE PRELIMINARY DESIGN. THE DETAILED DESIGN DRAWING WILL BE PROCESSED SEPARATELY AFTER THE APPROVAL OF GAD.
19. THE LOAD TEST ON PILES SHALL BE CONDUCTED AS PER IS-2911-PART IV / -1985 AND IRS SUBSTRUCTURE CODE.
20. THE INSTRUCTIONS CONVEYED VIDE PCE CIRCULAR NO:01 /2021 DT:22-06-2021 REGARDING "ENSURING S2 QUALITY OF WORK AND MAINTAINING SITE RECORDS IN WORKS CONTRACTS" WILL BE STRICTLY FOLLOWED.
21. PILE INTEGRITY TEST TO BE DONE COMPULSORY FROM EXPERT AGENCIES AND PROPER RECORD OF RESULTS OF THE SAME TO BE FURNISHED FOR SCRUTINY.
22. MAXIMUM BASE PRESSURE EXERTED AT THE BOTTOM OF FOUNDATION AS PER DESIGN. IT SHALL BE ENSURE THAT MAXIMUM DESIGN BASE WILL BE LESS THAN THE SBC OF SOIL.
23. ALL THE FOLLOWING SAFETY MEASURES SHALL BE FOLLOWED
   a). ADEQUATE SAFETY MEASURES FOR RUNNING TRAINS SHALL BE ADOPTED WHILE DOING THE EARTHWORK BELOW/ ADJACENT TO THE TRACK.
   b). DURING CONSTRUCTION OF THE BRIDGE, THE EXISTING TRACK SHALL BE PROTECTED SUITABLY BY IMPOSING NECESSARY SPEED RESTRICTION 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 PROJECT NO.JPO/NOW 330/SAFETY/PROCEDURE, DT: 18.02.2011) ISSUED VIDE CTE LR.NO. SWR/W.247/SAFETY AT WORK SPOT DT: 20.06.2017 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.
24. THE MINIMUM HORIZONTAL & VERTICAL DISTANCES HAS BEEN PROVIDED AS PER LATEST SOD FOR RAILWAYS.
25. PROPER DRAINAGE ARRANGEMENTS HAVE TO BE PROVIDED TO LEAD THE WATER FROM ROB BY PROVIDING NETWORK OF PIPES CONNECTING TO RAIN WATER HARVESTING PITS OR NEARBY DRAINS/WATER BODIES.
26.