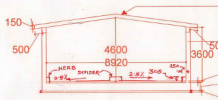
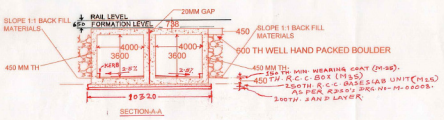


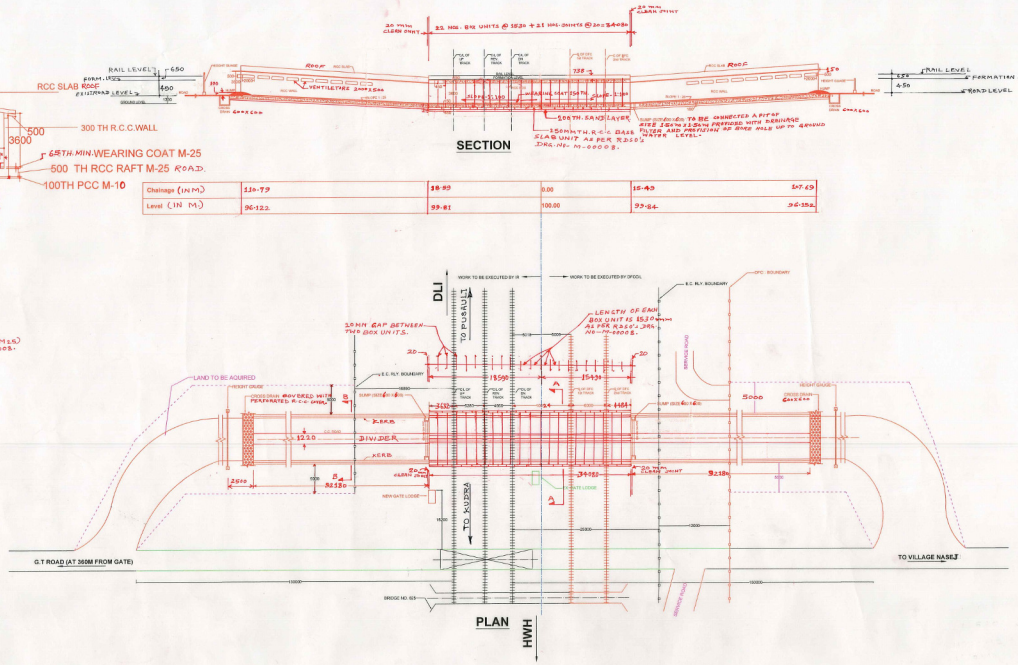
SECTION B-B



SECTION A-A

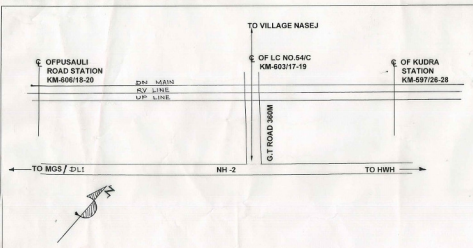
SECTION

Chainage (IN M)	110.79	18.93	0.00	15.43	57.69
Level (IN M)	96.122	99.81	100.00	99.84	96.352



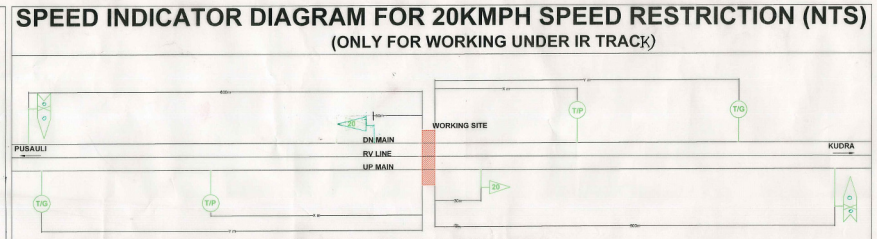
PLAN

KEY PLAN (NTS)



SPEED INDICATOR DIAGRAM FOR 20KMPH SPEED RESTRICTION (NTS)

(ONLY FOR WORKING UNDER IR TRACK)



NOTE :- X = TO BE LOCATED AT A DISTANCE EQUAL TO THE LENGTH OF LONGEST PASSENGER TRAIN OPERATING ON THE SECTION CONCERNED.
Y= TO BE LOCATED AT A DISTANCE EQUAL TO THE LENGTH OF LONGEST GOODS TRAIN OPERATING ON THE SECTION CONCERNED .

REF:-	
EXISTING WORK SHOWN THUS	———
PROPOSED WORK SHOWN THUS	———
CRS SANCTION REQUIRE.	

NOTE:-

1) NORTH SIDE AND SOUTH SIDE LAND ACQUISITION WILL BE DONE BY DFCCIL. NORTH SIDE CONSTRUCTION WILL BE DONE BY DFCCIL & SOUTH SIDE CONSTRUCTION WILL BE DONE BY INDIAN RAILWAY.
2) ALL DIMENSIONS ARE IN MM UNLESS OTHER WISE MENTIONED.
3) ALL DIMENSIONS SHOULD BE VERIFIED AND RECONCILED BEFORE EXECUTION.
4) BED SLOPE SHOULD BE KEPT A MINIMUM OF 1 IN 100.
5) CONSTRUCTION JOINTS SHALL BE PROVIDED AS PER APPENDIX-A OF IRS CONCRETE BRIDGE CODE.
6) BALLAST CUSHION SHALL BE MINIMUM OF 350MM AND MAXIMUM OF 400MM.
7) CLEAR COVER FOR REINFORCING BARS SHOULD BE 50MM.
8) THE ENGINEER AT SITE SHOULD ENSURED THAT BEARING CAPACITY OF SOIL IS MORE THAN THE MAXIMUM FOUNDATION. PRESSURE UNDER BOX SPECIFIED 15T/SQ.MTR.
9) DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
10) ALL R.C.C SURFACE COMING IN CONTACT WITH SOIL SHOULD BE PAINTED WITH BITUMEN OR COALTAR OF APPROVED QUALITY @ 1.464KG/M2.
11) 600MM THICK BOULDER FILLING SHOULD BE WELL HAND PACKED BOULDERS AND COBBLES BEHIND VERTICAL WALLS OF BOX,AND RCC WALLS SHOULD BE PROVIDED.
12) BACK FILL MATERIAL SHOULD BE AS PER CLAUSE 7.5 OF THE IRS BRIDGE SUB-STRUCTURE & FOUNDATION CODE.
13) VENTILATORS SHOUL BE PROVIDED ABOVE EXISTING ROAD LEVEL.
14) THE DRAWING OF R.C.C BOX IS BASED ON R.D.S.O DKG. NO-M-1000 AND FOR REINFORCEMENT DETAILS REFER R.D.S.O DRG. NO. B-10151/1 OF SIZE 4.0MX4.0 M.
15) NOT MORE THAN TWO BOX JOINTS SHOULD COME UNDER ONE SLEEPER LENGTH PREFERABLY.
16) LIFTING HOOKS SHOULD BE CUT AFTER THE PLACEMENT OF THE BASE SLAB UNITS & BOX UNITS.
17) A MINIMUM SAND LAYER OF 200MM TH. TO BE SPREAD BELOW THE BASE SLAB.
18) THE JOINT FOR R.C.C. SEGMENTAL BOXES & JOINT OF R.C.C. BASE SLAB UNITS SHOULD BE STAGGERED WITH THE LENGTH OF SEGMENTAL BOXES.
19) AFTER ERECTION OF BOXES IN ALIGNMENT AND AFTER ALLOWING INITIAL SETTLEMENT OF BOXES THE GAP BETWEEN THE BOX UNITS ARE TO BE SEALED WITH THE PRESSURE GROUTED WITH CEMENT EPOXY MORTAR.
20) SITE ENGINEER SHOULD CHECK THE FEASIBILITY AT SITE FOR HANDLING LIFTING AND PLACING OF PRECAST BOX UNITS BY CRANE OR ANY OTHER MEANS
21) ALL R.C.C. WORKS TO BE DONE AS PER IRS CONCRETE BRIDGE CODE.
22) REINFORCEMENT BARS SHALL BE HSD/TMT OF Fe-500 GRADE CONFORMING TO IS: 1786-2008 WITH PROTECTIVE COATING OF APPROVED QUALITY.
23) REINFORCEMENT SHALL BE CLEAN AND FREE FROM OIL, MILL SCALE ETC.
24) COLD JOINT SHOULD BE AVOIDED DURING CONCRETING WORK.
25) LAPPING OF BARS SHOULD BE MINIMIZED AND STAGGERED WHERE NECESSARY MINIMUM LENGTH OF LAP SHALL BE 25 TIMES OF THE SMALLER BAR SIZE PLUS 150MM IN TENSION AND 20 TIMES OF THE SMALLER BAR SIZE PLUS 150MM IN COMPRESSION.
26) THE GRADE OF CONCRETE TO BE USED ARE AS FOLLOWS:-
    (i) FOR R.C.C BOX M-35 (ii) FOR C.C WEARING COURSE M25 (iii) FOR R.C.C BASE SLAB M25 (iv) LEVELING COURSE M-10
27) TOLERANCE SHALL BE FOLLOWED AS PER IRS CONCERT BRIDGE CODE.
28) THE CONCRETE SHALL INVARIABLY BE VIBRATED BY MECHANICAL MEANS.
29) FULL CURING TIME TO BE ALLOWED 14 DAYS MINIMUM.
30) EXISTING DETAILS OF SITE ARE SHOWN BY DFCCIL.
31) FOR REINFORCEMENT DETAILS OF RCC WALL, RCC ROOF ETC. SEE SEPARATE APPROVED DRAWINGS.
32) HEIGHT GAUGE SHOULD BE PROVIDED AS PER RDSO DRG.NO. M-0001.
33) AFTER CONSTRUCTION OF LIMITED HEIGHT SUBWAY, LEVEL CROSSING WILL BE CLOSED WITH THE APPROVAL OF THE COMPETENT AUTHORITY.
34) IN ORDER TO STOP WATER IN FILTRATION AT JUNCTION AND ALL ALONG, PRECAST BOX SHOULD BE WRAPPED WITH THE PVC WATER PROOFING MEMBRANE (PVC) HAVING MINIMUM THICKNESS OF 2MM OF STANDARD DIN 53370, PROTECTED BY PROTECTIVE LAYER OF GEO TEXTILE WORKS OF UNIT WEIGHT 500 GRAM /M2 AND MINIMUM THICKNESS 3.9MM HAVING TENSILE STRENGTH 1000 N/5CM.
35) SOAK PIT TO BE PROVIDED IN PIT OF SIZE 6.0M X 1.8M PROVIDED WITH DRAINAGE FILTER AND A DEEP BORING TO DRAIN THE WATER TO GROUND WATER AQUIFER.
36) BEFORE START THE WORK APPROVAL OF THE COMPETENT AUTHORITY OF STATE GOVT. i.e DISTRICT MAGISTRATE MUST BE OBTAINED REGARDING CLOSER LEVEL CROSSING AFTER FUNCTIONING OF PROPOSED RUB/LHS.

OPERATION SCHEDULE:- (ONLY FOR WORKING UNDER IR TRACK)

1) CONSTRUCT THE PROPOSED PRE-CAST RCC BOX AND BASE SLAB UNITS AS PER DRAWING OVER A HARD CONCRETE BASE NEAR THE BRIDGE SITE.
2) IMPOSE 20 KMPH RUN THROUGH RESTRICTED SPEED AS PER TEMPORARY SIGNAL AND SPEED RESTRICTION DIAGRAM.
3) REQUIRED AMOUNT OF ADDITIONAL BALLAST FOR PROP. BR. AND THE APPROACHES SHALL BE KEPT READY ON CESS.
4) IN SUITABLE BLOCK DISCONNECT THE TRACK AND EXCAVATE THE EARTH TO THE EXTENT REQUIRED AND FILL 20mm TH. SAND.
5) PLACE THE PRE-CAST RCC BOX UNITS OVER PRE-CAST BASE SLAB UNITS BY ROAD CRANE OPERATION.
6) GAP BETWEEN THE PROPOSED PRE-CAST UNITS SHALL BE SEALED AS PER NOTE NO: 19 .
7) FILL UP THE BALLAST OVER PROPOSED PRE-CAST UNITS AND RESTORE THE TRACK . AND ALLOW TRAFFIC AS PER TEMPORARY SIGNALS DIAGRAME.
8) UNDER SR CONSTRUCT THE PROPOSED BRIDGE AS PER THIS DRAWING.
9) AFTER GAIN SUFFICIENT STRENGTH OF ALL PROPOSED WORKS, RAISE THE SPEED GRADUALLY TO NORMAL SECTIONAL SPEED WITH CONSOLIDATION OF TRACK AS PER PARA 238 (g) OF IRPWM BY SECTIONAL AEN/DEN.

G.E. Drg No- ECR/MGS/2012-13/B/90
LOADING STANDARD - DFC (32.5t AXLE LOAD).

DRM/MGS PLAN NO.151-2012

GENERAL ARRANGEMENT DRAWING FOR PROPOSED ROAD UNDER BRIDGE AT LEVEL CROSSING NO 54/C KM 603/17-19 BETWEEN KUDRA- PUSAULI STATION IN MUGHALSARAI-SONNAGAR SECTION

GAD OF LIMITED HEIGHT SUBWAY (2X4.0M) PRE CAST RCC BOX IN LIEU OF LEVEL CROSSING.

	DFCCIL OFFICIALS			INDIAN RAILWAY OFFICIALS						
SSE/DRM/HTP	SSE/DRM/HTP	SSE/DRM/HQRRE								
GM(ENGG) CASE FILE NO-W-3/142/12	BR PLAN/DFC	APM/ENG	CPM	GGM/CO/EC	SR DEN/1	SR DEN/CO	SR DOM	DRM/MGS	XEN/BR/D	DY CE/BR/HQ	CBE/ECR