

REF:-	EXISTING WORK SHOWN THUS	PROPOSED WORK SHOWN THUS

- CRS SANCTION REQUIRE.**
- NOTE:-**
- NORTH SIDE AND SOUTH SIDE LAND ACQUISITION WILL BE DONE BY DFCCL, NORTH SIDE CONSTRUCTION WILL BE DONE BY DFCCL & SOUTH SIDE CONSTRUCTION WILL BE DONE BY INDIAN RAILWAY.
  - ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE MENTIONED.
  - ALL DIMENSIONS SHOULD BE VERIFIED AND RECONCILED BEFORE EXECUTION.
  - BED SLOPE SHOULD BE KEPT A MINIMUM OF 1 IN 100.
  - CONSTRUCTION JOINTS SHALL BE PROVIDED AS PER APPENDIX A OF IRS CONCRETE BRIDGE CODE.
  - BALLAST CUSHION SHALL BE MINIMUM OF 60MM AND MAXIMUM OF 40MM.
  - CLEAR COVER FOR REINFORCING BARS SHOULD BE 50MM.
  - THE ENGINEER AT SITE SHOULD ENSURE THAT BEARING CAPACITY OF SOIL IS MORE THAN THE MAXIMUM FOUNDATION PRESSURE UNDER BOX SPECIFIED 16T/5Q.MTR.
  - DO NOT SCALE THE DRAWING. ONLY WRITTEN DIMENSIONS ARE TO BE FOLLOWED.
  - ALL R.C.C. SURFACE COMING IN CONTACT WITH SOIL SHOULD BE PAINTED WITH BITUMEN OR COALTAR OF APPROVED QUALITY @ 1.5KG/M2.
  - 60MM TRICK BOLLERS SHALL BE WELL HAND PACKED BOLLERS AND COBBLES BEHIND VERTICAL WALLS OF BOX AND RCC WALLS SHOULD BE PROVIDED.
  - BACK FILL MATERIAL SHOULD BE AS PER CLAUSE 75 OF THE BRIDGE SUB-STRUCTURE & FOUNDATION CODE.
  - VENTILATION SHOULD BE PROVIDED ABOVE EXISTING ROAD LEVEL.
  - THE DRAWING OF R.C.C. BOX IS BASED ON R.D.S.O. DRG. NO. B-1051111 OF SIZE 4MM X 4 MM.
  - NOT MORE THAN TWO BOX JOINTS SHOULD COME UNDER ONE SLEEPER LENGTH PREFERABLY.
  - LIFTING HOOKS SHOULD BE CUT AFTER THE PLACEMENT OF THE BASE SLAB UNITS & BOX UNITS.
  - A MINIMUM SAND LAYER OF 200MM TH. TO BE PROVIDED BELOW THE BASE SLAB.
  - 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.
  - AFTER ERECTION OF BOXES IN ALIGNMENT AND AFTER ALLOWING INITIAL SETTLEMENT OF BOXES BETWEEN THE BOX UNITS ARE TO BE SEALED WITH THE PRESSURE GROUTED WITH CEMENT EPOXY MORTAR.
  - SITE ENGINEER SHOULD CHECK THE FEASIBILITY AT SITE FOR HANDLING LIFTING AND PLACING OF PRECAST BOX UNITS BY CRANE OR ANY OTHER MEANS.
  - ALL R.C.C. WORKS TO BE DONE AS PER IRS CONCRETE BRIDGE CODE.
  - REINFORCEMENT BARS SHALL BE AS PER SPECIFICATION OF IRS: 1786-2008 WITH PROTECTIVE COATING OF APPROVED QUALITY.
  - REINFORCEMENT SHALL BE CLEAN AND FREE FROM OIL, MILL SCALE ETC.
  - COLD JOINT SHOULD BE AVOIDED DURING CONCRETE WORKING.
  - 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.
  - 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 M10
  - TOLERANCE SHALL BE FOLLOWED AS PER IRS CONCRETE BRIDGE CODE.
  - THE CONCRETE SHALL INvariably BE VIBRATED BY MECHANICAL MEANS.
  - FULL CURING TIME TO BE ALLOWED 14 DAYS MINIMUM.
  - EXISTING DETAILS OF SITE ARE SHOWN BY DFCCL.
  - FOR REINFORCEMENT DETAILS OF RCC WALL, RCC ROOF ETC. SEE SEPARATE APPROVED DRAWINGS.
  - HEIGHT GAUGE SHOULD BE PROVIDED AS PER RDSO DRG. NO. M-0001.
  - AFTER CONSTRUCTION OF LIMITED HEIGHT SUBWAY LEVEL CROSSING WILL BE CLOSED WITH THE APPROVAL OF THE COMPETENT AUTHORITY.
  - 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 DR 150/70, PROTECTED BY PROTECTIVE LAYER OF GEO TEXTILE WORKS OF UNIT WEIGHT 500 GRAM /M2 AND MINIMUM THICKNESS 3.5MM HAVING TENSILE STRENGTH 1000 N/M2.
  - SOIL COVERED UNDER THE BRIDGE SHALL BE CALCULATED TO BE AT LEAST 150MM PROVIDED WITH APPROVED DRAINAGE SYSTEM TO BE PROVIDED IN THE WATER COURSE ABOVE BRIDGE.
  - BEFORE START THE WORK APPROVAL OF THE COMPETENT AUTHORITY OF STATE GOVERNMENT TO EXISTING MEMORANDUM MUST BE OBTAINED. AFTER OBTAINING THE MEMORANDUM AFTER CONSULTING THE STATE ENGINEER.

- OPERATION SCHEDULE:- (ONLY FOR WORKING UNDER IR TRACK)**
- CONSTRUCT THE PROPOSED PRE-CAST RCC BOX AND BASE SLAB UNITS AS PER DRAWING OVER A HARD CONCRETE BASE NEAR THE BRIDGE SITE.
  - IMPOSE 20 KMPH RUN THROUGH RESTRICTED SPEED AS PER TEMPORARY SIGNAL AND SPEED RESTRICTION DIAGRAM.
  - REQUIRED AMOUNT OF ADDITIONAL BALLAST FOR PROP. BR. AND THE APPROACHES SHALL BE KEPT READY ON CESS.
  - IN SUITABLE BLOCK DISCONNECT THE TRACK AND EXCAVATE THE EARTH TO THE EXTENT REQUIRED & FILL WITH SAND.
  - PLACE THE PRE-CAST RCC BOX UNDER PRE-CAST BASE SLAB UNITS BY ROAD CRANE METHOD.
  - GAP BETWEEN THE PROPOSED PRE-CAST UNITS SHALL BE SEALED AS PER NOTE NO. 15.
  - FILL UP THE BALLAST OVER PROPOSED PRE-CAST UNITS AND RESTORE THE TRACK AND ALLOW TRAFFIC AS PER TEMPORARY SIGNALS DIAGRAM.
  - UNDER SR CONSTRUCT THE PROPOSED BRIDGE AS PER SHOWN IN THE DRAWINGS.
  - AFTER GAIN SUFFICIENT STRENGTH OF ALL PROPOSED WORKS, RAISE THE SPEED GRADUALLY TO NORMAL SECTIONAL SPEED WITH CONSOLIDATION OF TRACK AS PER PARA 238 (b) OF IRPMV BY SECTIONAL AIDEN.

C.E. Drg No. ECR/MGS/2012. 13/8/23

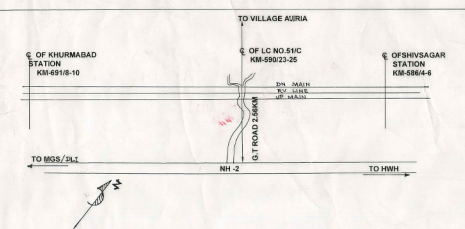
DRM/MGS PLAN NO.158-2012

LOADING STANDARD:- DFC (2-5 T AXLE LOADS)

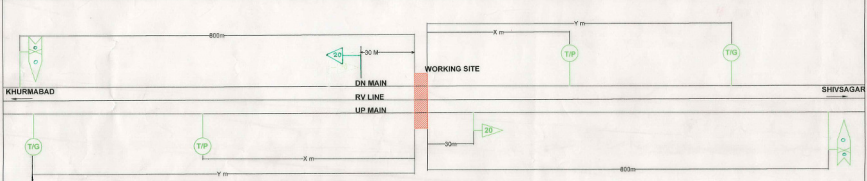
**GENERAL ARRANGEMENT DRAWING FOR PROPOSED ROAD UNDER BRIDGE AT LEVEL CROSSING NO 51/C KM 59/023-25 BETWEEN SHIVSAGAR - KHURMABAD STATION IN MUGHALSARAI-SONNAGAR SECTION GAD OF LIMITED HEIGHT SUBWAY (2X4.0M) PRE CAST RCC BOX IN LIEU OF LEVEL CROSSING.**

DFCCIL OFFICIALS				INDIAN RAILWAY OFFICIALS			
DRM	DRM	DRM	DRM	DRM	DRM	DRM	DRM
APR/MGS	DRM	DRM	DRM	DRM	DRM	DRM	DRM
DRM	DRM	DRM	DRM	DRM	DRM	DRM	DRM

**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.