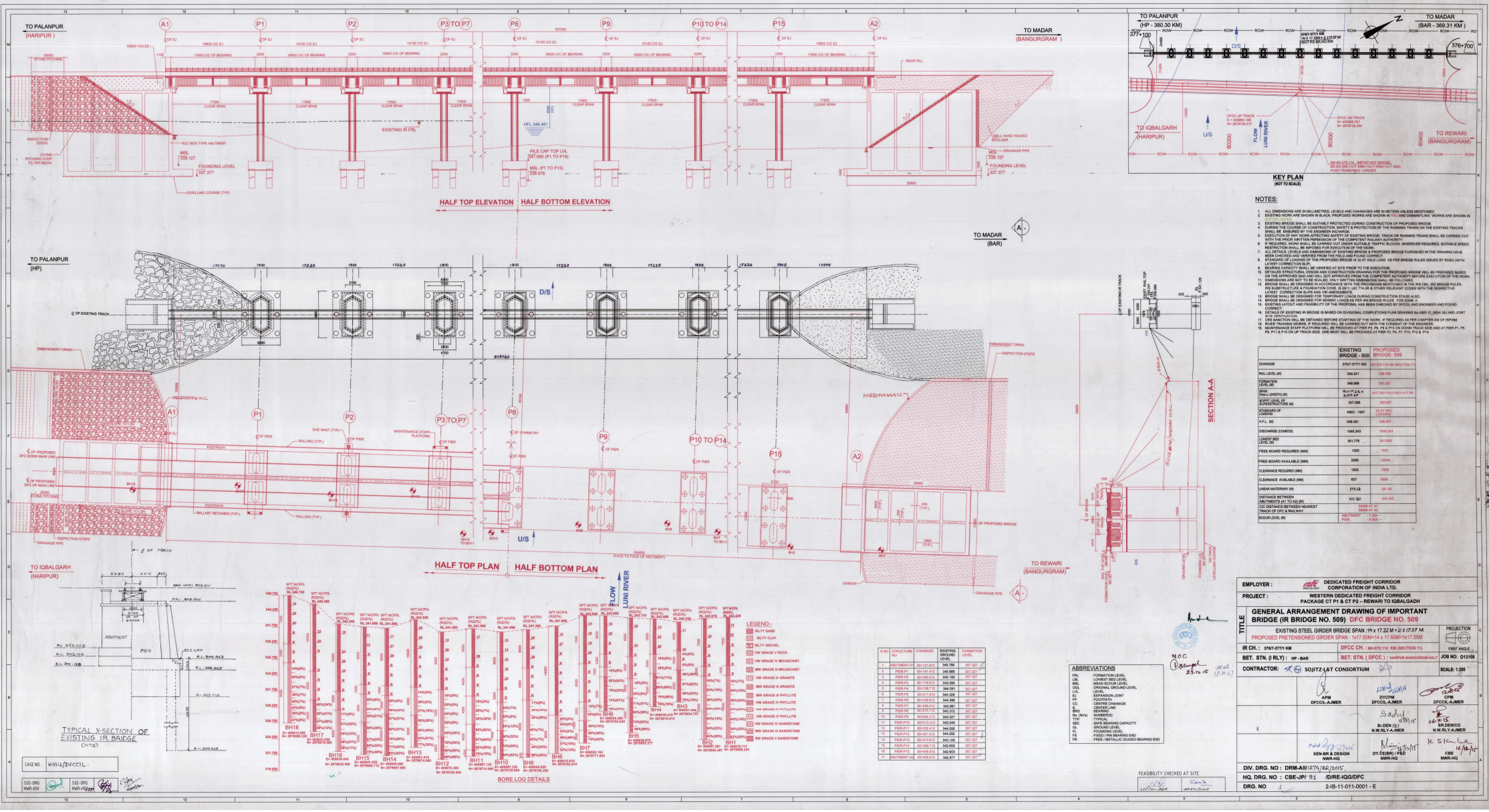

TO PALANPUR (HP - 380.30 KM)

TO MADAR (BAR - 369.31 KM)

TO IQBALGARH (HARIPUR)

TO REWARI (BANGURGRAM)

LUNI RIVER

FLOW

U/S

D/S

KEY PLAN
(NOT TO SCALE)

NOTES:

1. ALL DIMENSIONS ARE IN MILLIMETRES, LEVELS AND CHAINAGES ARE IN METERS UNLESS MENTIONED.
2. EXISTING WORK ARE SHOWN IN BLACK, PROPOSED WORKS ARE SHOWN IN RED AND DISMANTLING WORKS ARE SHOWN IN DOTTED.
3. EXISTING BRIDGE SHALL BE SUITABLY PROTECTED DURING CONSTRUCTION OF PROPOSED BRIDGE.
4. DURING THE COURSE OF CONSTRUCTION, SAFETY & PROTECTION OF THE RUNNING TRAINS ON THE EXISTING TRACKS SHALL BE ENSURED BY THE ENGINEER INCHARGE.
5. EXECUTION OF ANY WORK AFFECTING SAFETY OF EXISTING BRIDGE, TRACK OR RUNNING TRAINS SHALL BE CARRIED OUT WITH THE PRIOR WRITTEN PERMISSION OF THE COMPETENT RAILWAY AUTHORITY.
6. IF REQUIRED, WORK SHALL BE CARRIED OUT UNDER SUITABLE TRAFFIC BLOCKS, WHEREVER REQUIRED, SUITABLE SPEED RESTRICTION SHALL BE IMPOSED FOR EXECUTION OF THE WORK.
7. THE EXISTING AND PROPOSED DIMENSIONS OF EXISTING BRIDGE & PROPOSED BRIDGE FURNISHED IN THE DRAWING HAVE BEEN CHECKED AND VERIFIED FROM THE FIELD AND FOUND CORRECT.
8. STANDARD OF LOADING OF THE PROPOSED BRIDGE IS 25.07 ANGLE LOAD AS PER BRIDGE RULES ISSUED BY RDSO (WITH LATEST CORRECTION SLIP).
9. BEARING CAPACITY SHALL BE VERIFIED AT SITE PRIOR TO THE EXECUTION.
10. DETAILED STRUCTURAL DESIGN AND CONSTRUCTION DRAWING FOR THE PROPOSED BRIDGE WILL BE PREPARED BASED ON THE APPROVED GAD AND WILL GOT APPROVED FROM THE COMPETENT AUTHORITY BEFORE EXECUTION OF THE WORK.
11. DIMENSIONS GIVEN IN THE DRAWING ONLY WRITTEN DIMENSIONS SHALL BE FOLLOWED.
12. BRIDGE SHALL BE DESIGNED AND ACCORDANCE WITH THE PROVISIONS MENTIONED IN THE IRS CBC, IRS BRIDGE RULES, IRS SUBSTRUCTURES & FOUNDATION CODES, IS: 1893, IS: 7316-2B & OTHER RELEVANT CODES WITH THE RESPECTIVE LATEST CORRECTION SLIPS AND OR AMENDMENTS.
13. BRIDGE SHALL BE DESIGNED FOR TEMPORARY LOADS DURING CONSTRUCTION STAGE ALSO.
14. BRIDGE SHALL BE DESIGNED FOR SEISMIC LOADS AS PER IRS BRIDGE RULES FOR ZONE -II.
15. EXISTING LAYOUT AND FEASIBILITY OF THE PROPOSAL HAS BEEN CHECKED BY DFCCIL AND ENGINEER AND FOUND CORRECT.
16. DETAILS OF EXISTING IR BRIDGE IS BASED ON DIVISIONAL COMPLETIONS PLAN DRAWING No ABW/ IC_MSH- NIL/ AND JOINT SURVEY DATED
17. CRS SANCTION WILL BE OBTAINED BEFORE STARTING OF THE WORK, IF REQUIRED AS PER CHAPTER-XIX OF IRPWM.
18. RIVER TRAINING WORKS, IF REQUIRED WILL BE CARRIED OUT WITH THE CONSENT OF THE ENGINEER.
19. MAINTENANCE STAFF PLATFORM WILL BE PROVIDED AT PIER P3, P6, P9 & P13 ON DOWN TRACK SIDE AND AT PIER P1, P5, P8, P11 & P15 ON UP TRACK SIDE. ONE MAST WILL BE PROVIDED AT PIER P2, P4, P7, P10, P12 & P14.

	EXISTING BRIDGE - 509	PROPOSED BRIDGE- 509
CHAINAGE	3767-377/1 KM	80+270.112 KM (SECTION 11)
RAIL LEVEL (M)	349.241	358.559
FORMATION LEVEL (M)	348.668	357.327
SPAN (Nos.x LENGTH) (M)	16 X 17.33 + 2 X 17.07	1x17.55+14x17.60+1x17.55
SOFFIT LEVEL OF SUPERSTRUCTURE (M)	347.068	355.037
STANDARD OF LOADING	MBG - 1987	25.07 DFC (CURVED)
H.F.L. (M)	346.481	346.481
DISCHARGE (CUMECS)	1545.243	1545.243
LOWEST BED LEVEL (M)	341.778	341.000
FREE BOARD REQUIRED (MM)	1000	1000
FREE BOARD AVAILABLE (MM)	2085	13946
CLEARANCE REQUIRED (MM)	1500	1500
CLEARANCE AVAILABLE (MM)	627	6830
LINEAR WATERWAY (M)	275.28	281.90
DISTANCE BETWEEN ABUTMENTS (A1 TO A2) (M)	303.120	304.000
C/C DISTANCE BETWEEN NEAREST TRACK OF DFC & RAILWAY	30469 AT A1 30809 AT A2	
SCOUR LEVEL (M)	ABUTMENT - 7.334 PIER - 9.805	

S.NO.	STRUCTURE NO	CHAINAGE	EXISTING GROUND LEVEL	FORMATION LEVEL
1	ABUTMENT-A1	80+121.612	345.766	357.327
2	PIER-P1	80+141.453	345.668	357.327
3	PIER-P2	80+160.912	342.190	357.327
4	PIER-P3	80+179.612	343.085	357.327
5	PIER-P4	80+198.712	344.091	357.327
6	PIER-P5	80+217.812	344.328	357.327
7	PIER-P6	80+236.912	344.386	357.327
8	PIER-P7	80+256.012	343.081	357.327
9	PIER-P8	80+275.112	343.312	357.327
10	PIER-P9	80+294.212	343.027	357.327
11	PIER-P10	80+313.312	343.240	357.327
12	PIER-P11	80+332.412	344.556	357.327
13	PIER-P12	80+351.512	344.282	357.327
14	PIER-P13	80+370.612	343.109	357.327
15	PIER-P14	80+389.712	342.609	357.327
16	PIER-P15	80+408.812	342.833	357.327
17	ABUTMENT-A2	80+428.812	343.877	357.327

ABBREVIATIONS

FRL	FORMATION LEVEL
LBL	LOWEST BED LEVEL
MSL	MEAN SCOUR LEVEL
OGL	ORIGINAL GROUND LEVEL
LVL	LEVEL
EJ	EXPANSION JOINT
FP	FOOTPATH
CC	CENTRE CHAINAGE
E	CENTER LINE
BRG	BEARING
No. (Nos)	NUMBER(S)
SEC	SECTION
SBC	SAFE BEARING CAPACITY
GL	GROUND LEVEL
FL	FOUNDING LEVEL
FX	FIXED / PIN BEARING END
FR	FREE / METALLIC GUIDED BEARING END

FEASIBILITY CHECKED AT SITE

SITE ON 06.08.15

Kamla ARUN KUMAR

MOC Dtempt 29.12.15 (P.M.C)

EMPLOYER :	DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.
PROJECT :	WESTERN DEDICATED FREIGHT CORRIDOR PACKAGE CT P1 & CT P2 – REWARI TO IQBALGADH
TITLE	GENERAL ARRANGEMENT DRAWING OF IMPORTANT BRIDGE (IR BRIDGE NO. 509) DFC BRIDGE NO. 509
	EXISTING STEEL GIRDER BRIDGE SPAN : 19 x 17.22 M +2 X (7.07 M, PROPOSED PRETENSIONED GIRDER SPAN : 1x17.55M+14 x 17.60M+1x17.55M
PROJECTION	FIRST ANGLE
IR CH. : 3767-377/1 KM	DFCC CH. : 80+275.112 KM (SECTION 11)
BET. STN. (I RLY.) : HP - BAR	BET. STN. (DFCC) : HARIPUR-BANGURGRAM HALT
JOB NO: 013108	
CONTRACTOR: SOJITZ L&T CONSORTIUM	SCALE: 1:200

APM	DY.CPM	CPM
DFCCIL-AJMER	DFCCIL-AJMER	DFCCIL-AJMER
Sr.DEN (E)		Sr.DEN.CO
N.W.RLY-AJMER		N.W.RLY-AJMER
XEN-BR & DESIGN	DY.CE(BR) / P&D	CBE
NWR-HQ	NWR-HQ	NWR-HQ

DIV. DRG. NO : DRM-AII/1274/BR/2015.

HQ. DRG. NO : CBE-JP/ 91 /DIR-IQG/DFC

DRG. NO : 2-IB-11-011-0001 - E

TYPICAL X-SECTION OF EXISTING IR BRIDGE (NTS)

CASE NO. : W/651/4/DFCCIL.

SSE-DRG NWR-DIV

SSE-DRG NWR-HQ