



डेडीकेटेड फ्रेट कोरीडोर

DESIGN AND CONSTRUCTION OF CIVIL, STRUCTURES AND TRACK WORKS FOR SINGLE LINE RAILWAY INVOLVING FORMATION IN EMBANKMENTS/CUTTINGS, BALLAST ON FORMATION, TRACK WORKS, BRIDGES, STRUCTURES, BUILDINGS, YARDS, INTEGRATION WITH IR EXISTING RAILWAY SYSTEM AND TESTING & COMMISSIONING ON DESIGN-BUILD LUMP SUM BASIS FOR SAHNEWAL - PILKHANI SECTION OF EASTERN DEDICATED FREIGHT CORRIDOR

Contract Package: 301

ICB No. HQ/EN/EC/D-B/SAHNEWAL - PILKHANI

PART - 4 - REFERENCE DOCUMENT

BRIDGE DRAWINGS - VOLUME - 5.2

SAHNEWAL TO PILKHANI
From Km. 360.200 to Km. 187.500

GAD BRIDGES



EMPLOYER
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LIMITED
(A GOVERNMENT OF INDIA ENTERPRISES)
MINISTRY OF RAILWAYS
NEW DELHI, INDIA

1 of 95

CONTENTS BRIDGE DRAWING (CONTRACT PACKAGE 301)

CONTENTS BRIDGE DRAWING (CONTRACT PACKAGE 301)

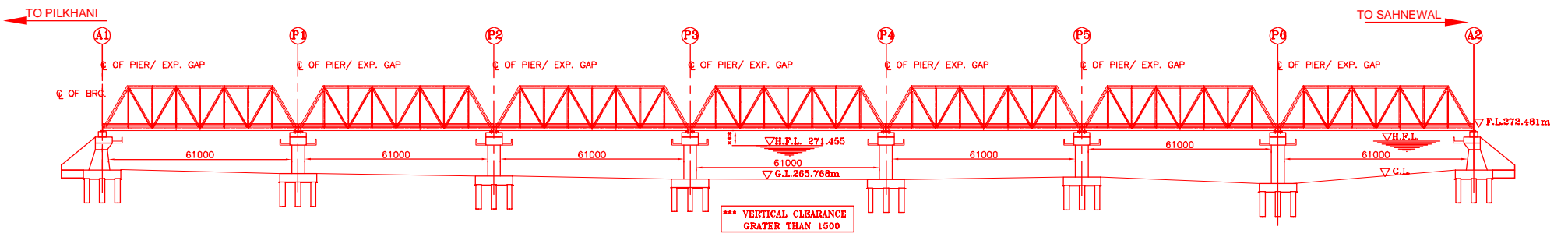
SL. NO.	DESCRIPTION	DRAWING NO.	REVISION NO.	REMARKS	SL. NO.	DESCRIPTION	DRAWING NO.	REVISION NO.	REMARKS
1	GAD FOR IMPORTANT BRIDGE NO. 13 (YAMUNA)	AECOM/301/IMP/13	RO		31	GAD FOR MAJOR BRIDGE NO. 91	AECOM/301/MJR/91	RO	
2	GAD FOR IMPORTANT BRIDGE NO. 55 (MARKANDA)	AECOM/301/IMP/55	RO		32	GAD FOR MAJOR BRIDGE NO. 92	AECOM/301/MJR/92	RO	
3	GAD FOR ROB BRIDGE NO. 25	AECOM/301/ROB/25	RO		33	GAD FOR MAJOR BRIDGE NO. 93	AECOM/301/MJR/93	RO	
4	GAD FOR ROB BRIDGE NO. 120	AECOM/301/ROB/120	RO		34	GAD FOR MAJOR BRIDGE NO. 94	AECOM/301/MJR/94	RO	
5	GAD FOR MAJOR BRIDGE NO. 9	AECOM/301/MJR/9	RO		35	GAD FOR MAJOR BRIDGE NO. 95	AECOM/301/MJR/95	RO	
6	GAD FOR MAJOR BRIDGE NO. 10	AECOM/301/MJR/10	RO		36	GAD FOR MAJOR BRIDGE NO. 96	AECOM/301/MJR/96	RO	
7	GAD FOR MAJOR BRIDGE NO. 20	AECOM/301/MJR/20	RO		37	GAD FOR MAJOR BRIDGE NO. 103	AECOM/301/MJR/103	RO	
8	GAD FOR MAJOR BRIDGE NO. 31	AECOM/301/MJR/31	RO		38	GAD FOR MAJOR BRIDGE NO. 114	AECOM/301/MJR/114	RO	
9	GAD FOR MAJOR BRIDGE NO. 32	AECOM/301/MJR/32	RO		39	GAD FOR MAJOR BRIDGE NO. 115	AECOM/301/MJR/115	RO	
10	GAD FOR MAJOR BRIDGE NO. 34	AECOM/301/MJR/34	RO		40	GAD FOR MAJOR BRIDGE NO. 123	AECOM/301/MJR/123	RO	
11	GAD FOR MAJOR BRIDGE NO. 35	AECOM/301/MJR/35	RO		41	GAD FOR MAJOR BRIDGE NO. 126	AECOM/301/MJR/126	RO	
12	GAD FOR MAJOR BRIDGE NO. 37	AECOM/301/MJR/37	RO		42	GAD FOR MAJOR BRIDGE NO. 134	AECOM/301/MJR/134	RO	
13	GAD FOR MAJOR BRIDGE NO. 38	AECOM/301/MJR/38	RO		43	GAD FOR MAJOR BRIDGE NO. 135	AECOM/301/MJR/135	RO	
14	GAD FOR MAJOR BRIDGE NO. 39	AECOM/301/MJR/39	RO		44	GAD FOR MAJOR BRIDGE NO. 136	AECOM/301/MJR/136	RO	
15	GAD FOR MAJOR BRIDGE NO. 40	AECOM/301/MJR/40	RO		45	GAD FOR MAJOR BRIDGE NO. 140	AECOM/301/MJR/140	RO	
16	GAD FOR MAJOR BRIDGE NO. 41	AECOM/301/MJR/41	RO		46	GAD FOR MAJOR BRIDGE NO. 145	AECOM/301/MJR/145	RO	
17	GAD FOR MAJOR BRIDGE NO. 48	AECOM/301/MJR/48	RO		47	GAD FOR MAJOR BRIDGE NO. 148	AECOM/301/MJR/148	RO	
18	GAD FOR MAJOR BRIDGE NO. 52	AECOM/301/MJR/52	RO		48	GAD FOR MAJOR BRIDGE NO. 163	AECOM/301/MJR/163	RO	
19	GAD FOR MAJOR BRIDGE NO. 53	AECOM/301/MJR/53	RO		49	GAD FOR MAJOR BRIDGE NO. 170	AECOM/301/MJR/170	RO	
20	GAD FOR MAJOR BRIDGE NO. 54	AECOM/301/MJR/54	RO		50	GAD FOR MAJOR BRIDGE NO. 199	AECOM/301/MJR/199	RO	
21	GAD FOR MAJOR BRIDGE NO. 58	AECOM/301/MJR/58	RO		51	GAD FOR RFO BRIDGE NO. 69	AECOM/301/RFO/69	RO	
22	GAD FOR MAJOR BRIDGE NO. 60	AECOM/301/MJR/60	RO		52	GAD FOR RFO BRIDGE NO. 108	AECOM/301/RFO/108	RO	
23	GAD FOR MAJOR BRIDGE NO. 61	AECOM/301/MJR/61	RO		53	GAD FOR RFO BRIDGE NO. 164	AECOM/301/RFO/164	RO	
24	GAD FOR MAJOR BRIDGE NO. 62	AECOM/301/MJR/62	RO		54	GAD FOR RFO BRIDGE NO. 165	AECOM/301/RFO/165	RO	
25	GAD FOR MAJOR BRIDGE NO. 64	AECOM/301/MJR/64	RO		55	GAD FOR MAJOR RUB BRIDGE NO. 68	AECOM/301/MJR-RUB/68	RO	
26	GAD FOR MAJOR BRIDGE NO. 65	AECOM/301/MJR/65	RO		56	GAD FOR MAJOR RUB BRIDGE NO. 77	AECOM/301/MJR-RUB/77	RO	
27	GAD FOR MAJOR BRIDGE NO. 74	AECOM/301/MJR/74	RO		57	GAD FOR MAJOR RUB BRIDGE NO. 162	AECOM/301/MJR-RUB/162	RO	
28	GAD FOR MAJOR BRIDGE NO. 75	AECOM/301/MJR/75	RO		58	TYPICAL GAD FOR MINOR BRIDGE (1X4X4m)	AECOM/301/MJ/TYPICAL/1	RO	
29	GAD FOR MAJOR BRIDGE NO. 79	AECOM/301/MJR/79	RO		59	TYPICAL GAD FOR MINOR RUB (1X5.5X4.5m)	AECOM/301/MNR-RUB/TYPICAL/2	RO	
30	GAD FOR MAJOR BRIDGE NO. 90	AECOM/301/MJR/90	RO		60	TYPICAL GAD FOR MINOR RUB (1X7.5X4.5m)	AECOM/301/MNR-RUB/TYPICAL/1	RO	

GENERAL CONSULTANT  AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA	TITLE CONTENTS BRIDGE DRAWING (301)	 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD. (A GOVERNMENT OF INDIA ENTERPRISE)
		PROJECT EASTERN CORRIDOR SAHNEWAL TO PILKHANI

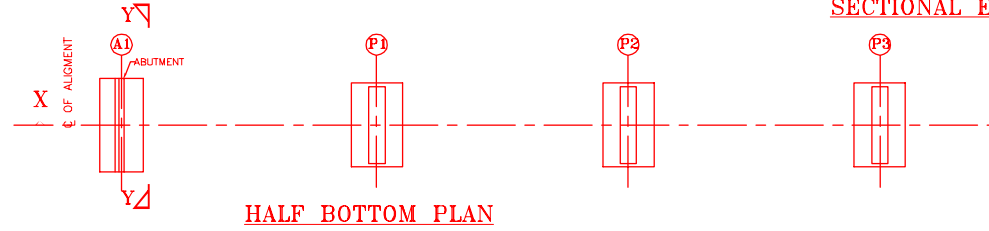
Contract Package: 301

SAHNEWAL TO PILKHANI
From Km 360.200 to 187.500

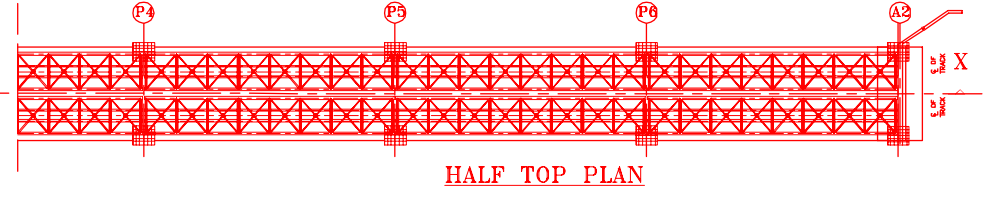
GAD OF IMPORTANT BRIDGES



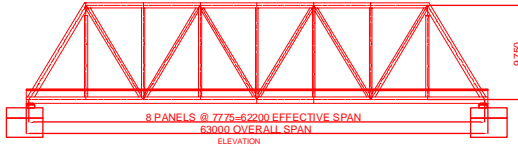
SECTIONAL ELEVATION X-X



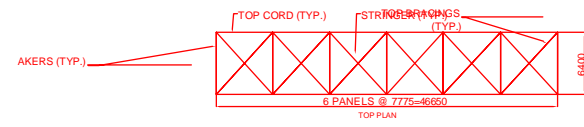
HALF BOTTOM PLAN



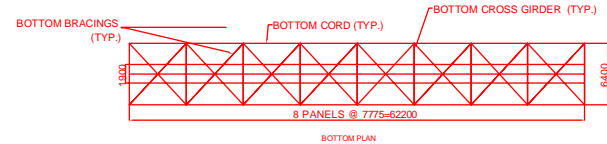
HALF TOP PLAN



8 PANELS @ 7775-62200 EFFECTIVE SPAN
63000 OVERALL SPAN
ELEVATION



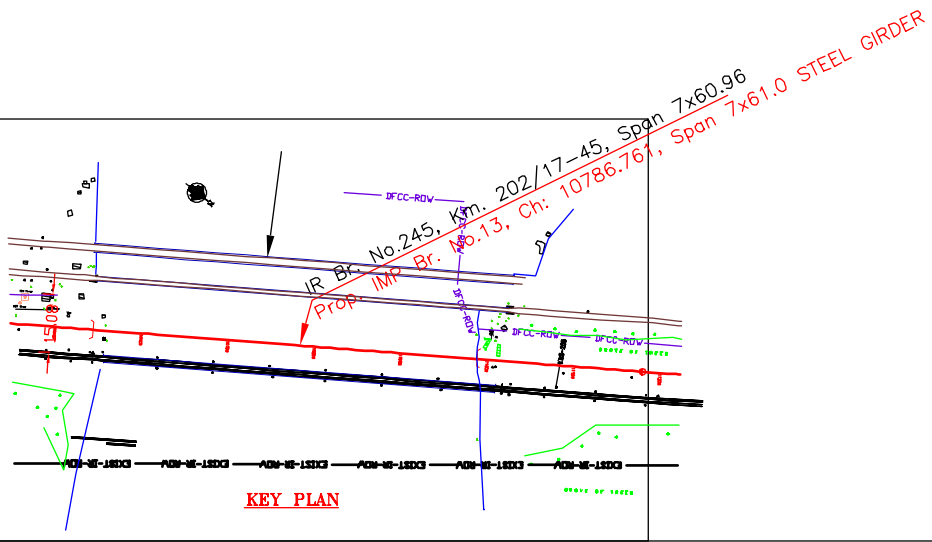
6 PANELS @ 7775-46650
TOP PLAN



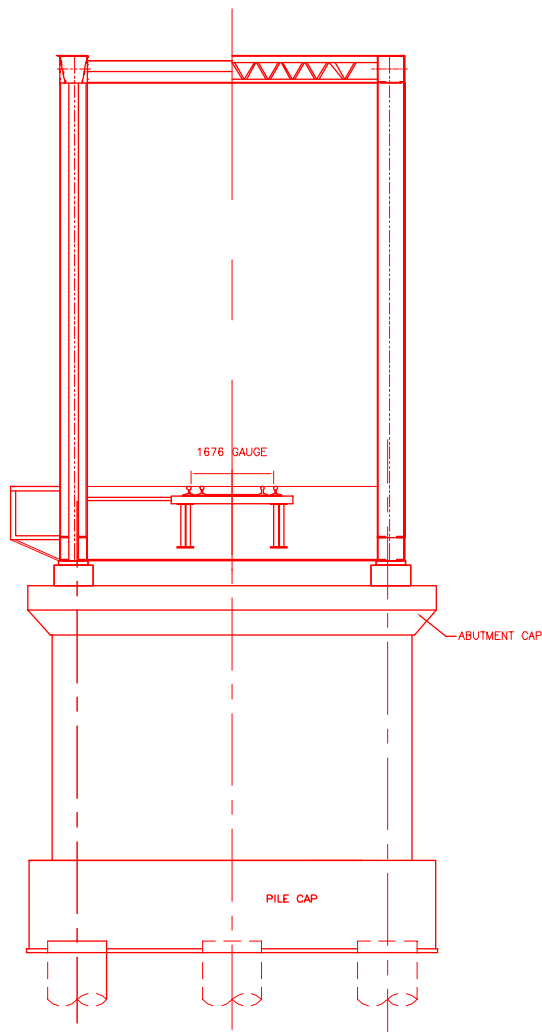
8 PANELS @ 7775-62200
BOTTOM PLAN

INDICATIVE DRAWING

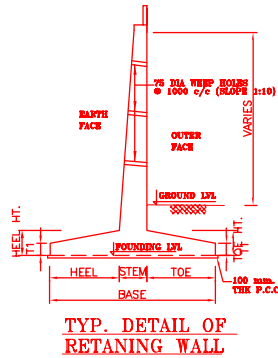
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.		
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA		
		EASTERN CORRIDOR		
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500		
STRUCTURE		CONTRACT PACKAGE - 301		
TITLE		PROPOSED IMPORTANT BR. NO. 13 SPAN (7x61.0 m) AT CH. 10786.761		
SCALE		GENERAL ARRANGEMENT DRAWING		
SCALE NTS	DATE MAY 2015	DRAWN BY	CHECKED BY	APPROVED BY
DRG. NO. AECOM/301/IMP/13 SHEET 1 OF 2				REV. R0



KEY PLAN



TYP. SECTION 'Y-Y'





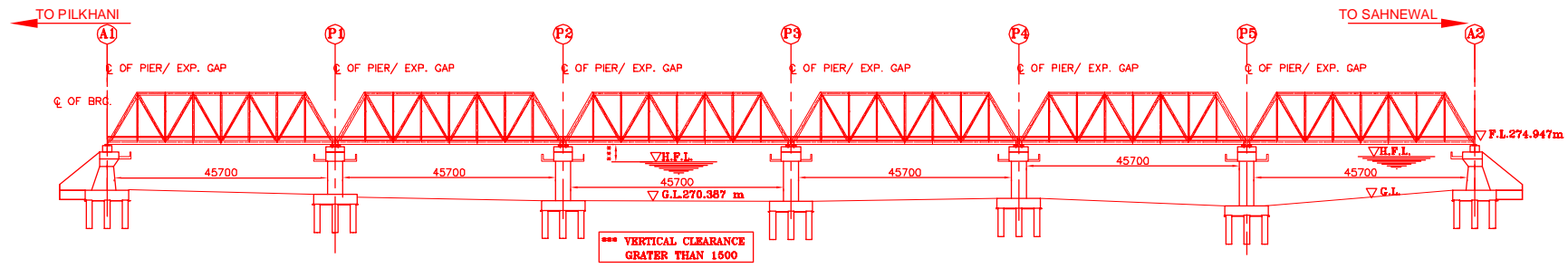
TYP. DETAIL OF RETAINING WALL

NOTES:-

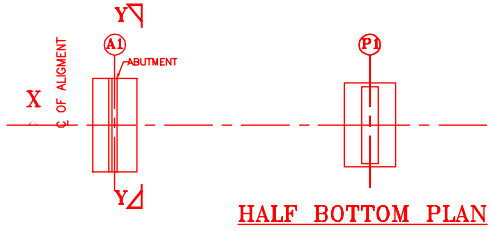
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. INSPECTION PLATFORMS AND TROLLEY REFUSE SHALL BE PROVIDED AS PER RAILWAY GUIDE LINES.
9. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
10. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
11. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDEFC.
12. WELP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
13. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS.
14. FLOOD PROTECTION WORKS AND GUIDE BUNDS SHALL BE GOT APPROVED BY ENGINEER.
15. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
16. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED OVER CONCRETE DECK.
17. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
18. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.
19. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL. UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL

INDICATIVE DRAWING

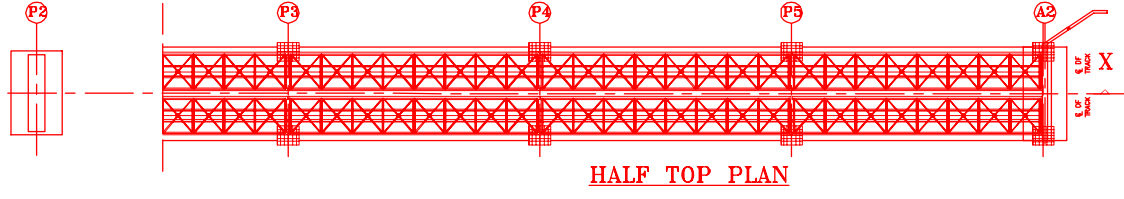
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		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED STEEL GIRDER BR. NO. 13 SPAN (7x61.0 m) AT CH. 10786.761				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/IMP/13 SHEET 2 OF 2	R0



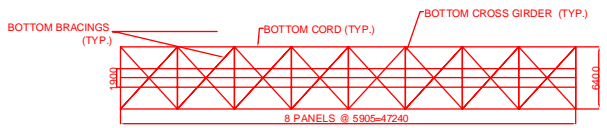
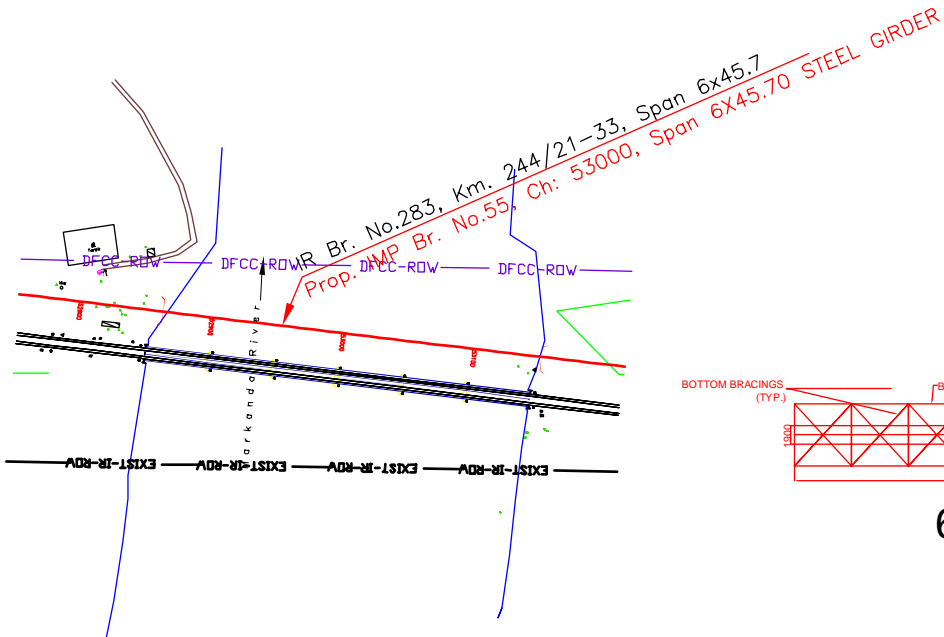
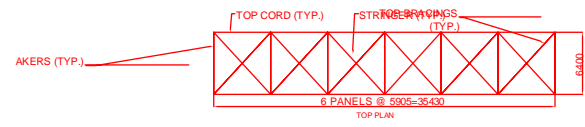
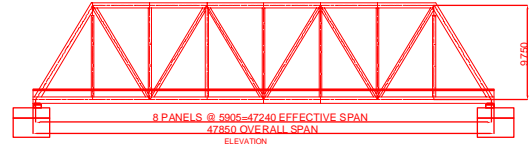
SECTIONAL ELEVATION X-X



HALF BOTTOM PLAN

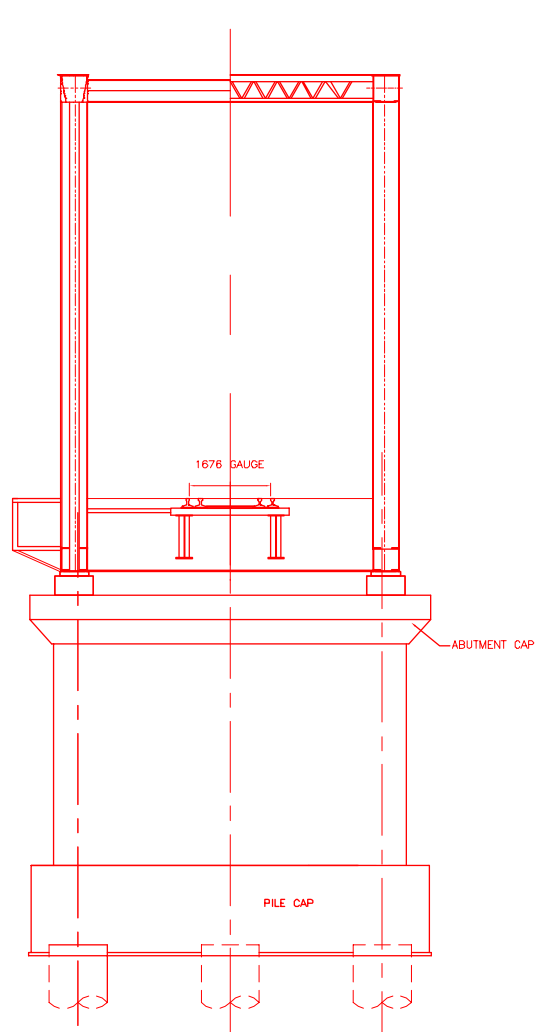


HALF TOP PLAN

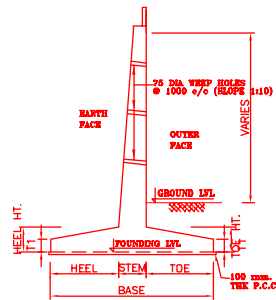


INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED IMPORTANT BR. NO. 55 SPAN (6X45.70 m) AT CH. 53000				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/IMP/55 SHEET 1 OF 2	R0



TYP. SECTION 'Y-Y'



TYP. DETAIL OF
RETAINING WALL

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
8. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
9. INSPECTION PLATFORMS AND TROLLEY REFUSE SHALL BE PROVIDED AS PER RAILWAY GUIDE LINES.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDPC.
13. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
14. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS.
15. FLOOD PROTECTION WORKS AND GUIDE BUNDS SHALL BE GOT APPROVED BY ENGINEER.
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED OVER CONCRETE DECK.
18. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.
20. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.

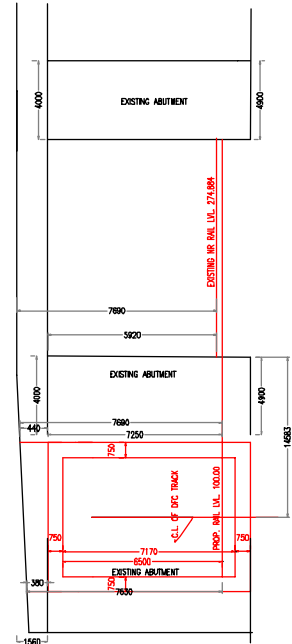
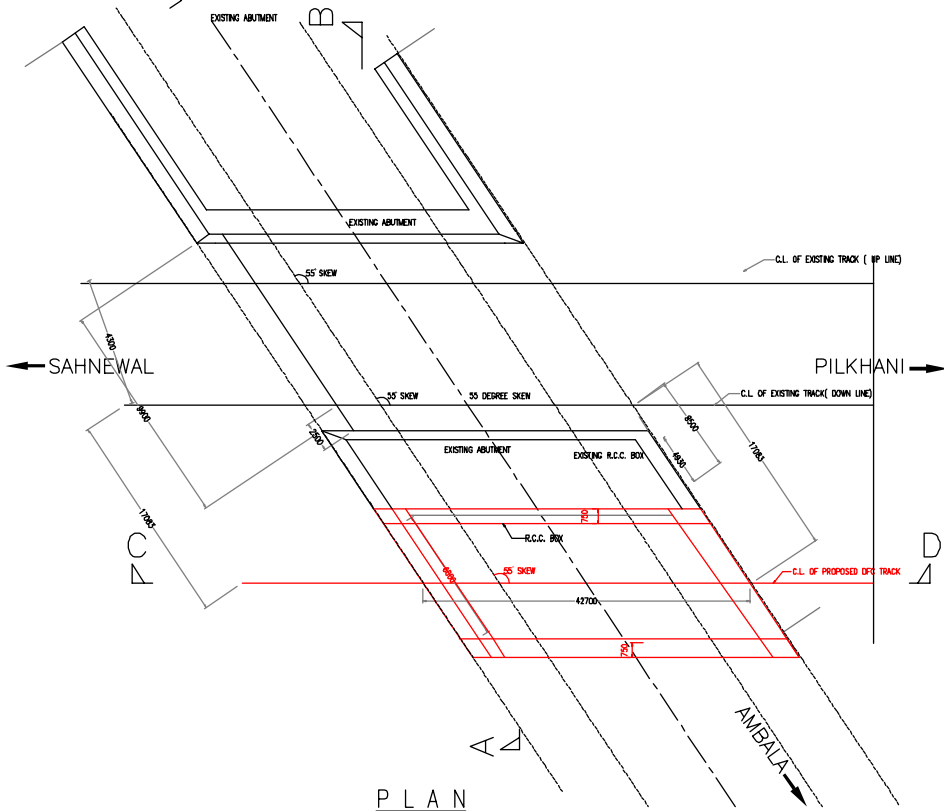
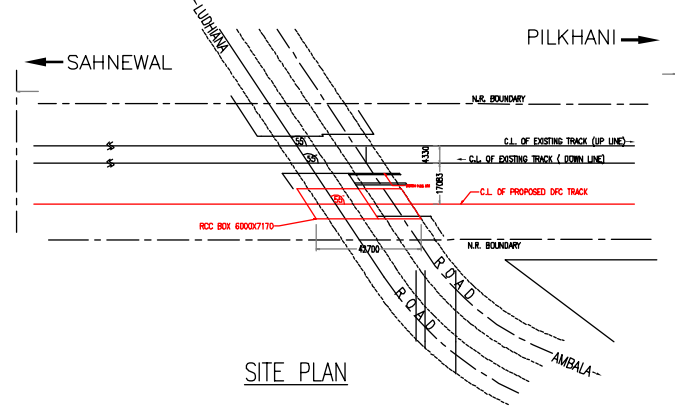
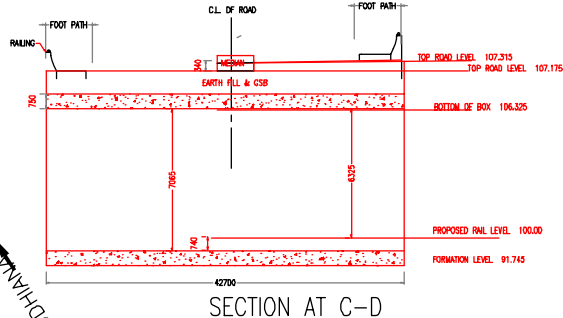
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
EASTERN CORRIDOR						
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED IMPORTANT BR. NO. 55 SPAN (6X45.70 m) AT CH. 53000				
TITLE						
GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/IMP/55 SHEET 2 OF 2	R0

Contract Package: 301


SAHNEWAL TO PILKHANI
From Km 360.200 to 187.500

GAD OF ROBS



- NOTES:-
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - 3) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
 - LOADING TO BE FOLLOWED IS D.F.C. LOADING (25 TON AXLE LOAD)
 - HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION. DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDERS. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS DIMENSIONS SHALL BE APPROVED BY TRCCL.
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm. C.C SHOULD BE PROVIDED IN EARTH BALAST RETAINER.
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTSIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER IF IT IS INEVITABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 700mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 - SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFC.
 - SANCTION OF CRS SHALL BE OBTAINED FOR PROPOSED WORK AS PER IRPW/M.
 - R.C.C. CRASH BARRIER WILL BE PROVIDED AS PER APPROVED DRAWING.
 - DESIGN SHALL BE AS PER LATEST RELEVANT CODE OF IRC AND OTHER CODE AS PER APPROVED BY M.O.S.T.
 - TEMP. SIGNALING ARRANGEMENT WILL BE DONE AS PER G.R. 15.09 (a) & S.R. 15.09 (2) OR G.R. 15.09 (2) & S.R. 15.09 (2) WHICH EVER IS ADOPTABLE IF REQUIRED.
 - LOADING BRIDGE SHALL BE DESIGNED FOR ONE LANE OR CLASS AA 70R LOADING OR DOUBLE LANES OF CLASS A WHICH EVER PROVIDES THE MAXIMUM STRESSES.
 - PROVISION OF CLAMPS IN THE SUPERSTRUCTURE FOR SUPPORTING ACTRACION WIRE TO BE MADE IN CONSULTATION WITH THE CONCERNED AUTHORITY.
 - TEMPORARY ARRANGEMENT DRAWING OR METHODOLOGY FOR LAUNCHING OF GIRDERS OVER RAILWAY TRACK AND CONSTRUCTION OF FOUNDATIONS/SUBSTRUCTURE ADJACENT TO RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE STARTING OF WORK.

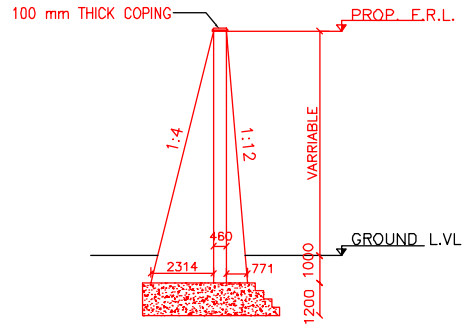
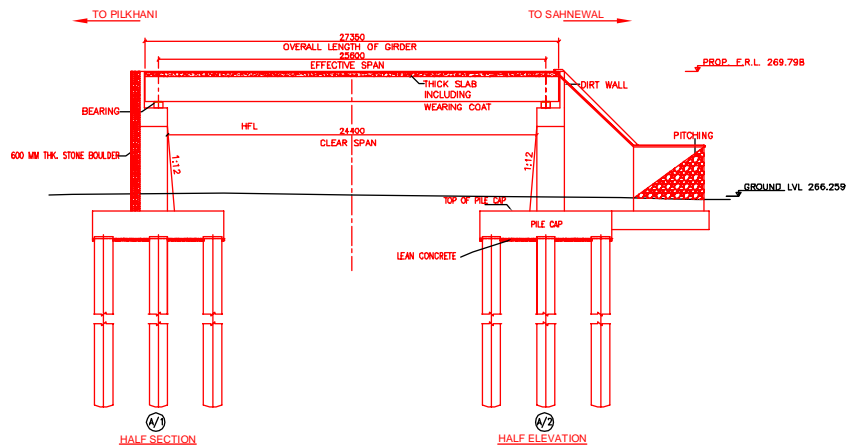
INDICATIVE DRAWING

 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.	
GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA
PROJECT	EASTERN CORRIDOR SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500
STRUCTURE	CONTRACT PACKAGE - 301 PROPOSED MODIFICATION OF ROB. NO. 120 SPAN (1X6X7.17m) AT CH. 100200
TITLE	GENERAL ARRANGEMENT DRAWING
SCALE	DRG. NO.
DATE	REV.
DRAWN BY	
CHECKED BY	
APPROVED BY	
NTS	MAY 2015
	AECOM/301/ROB/120
	R0

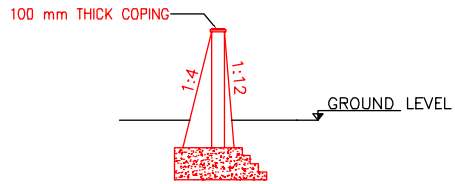
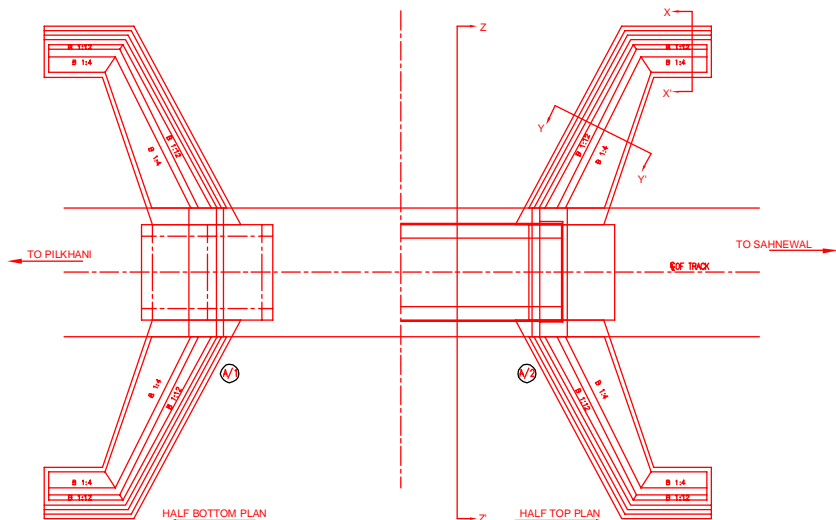
Contract Package: 301

SAHNEWAL TO PILKHANI
From Km 360.200 to 187.500

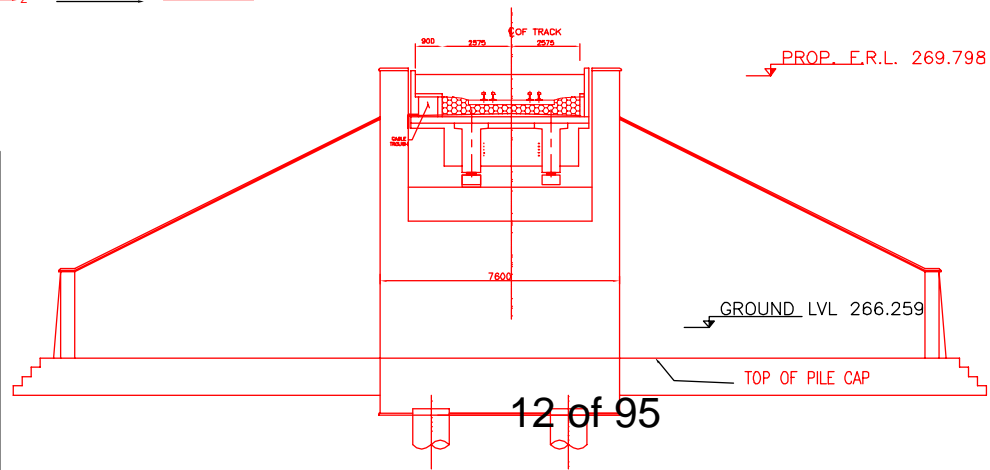
GAD OF MAJOR BRIDGES



SECTION OF WING WALL AT Y-Y'



SECTION OF RETAINING WALL X-X'

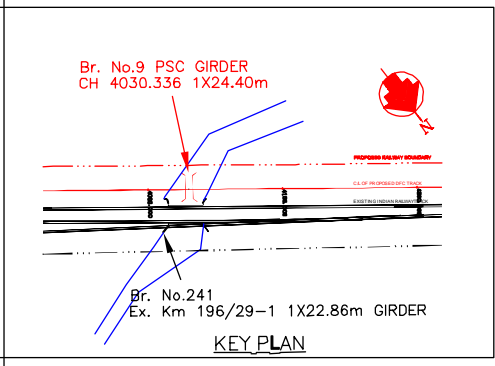


SECTION Z-Z

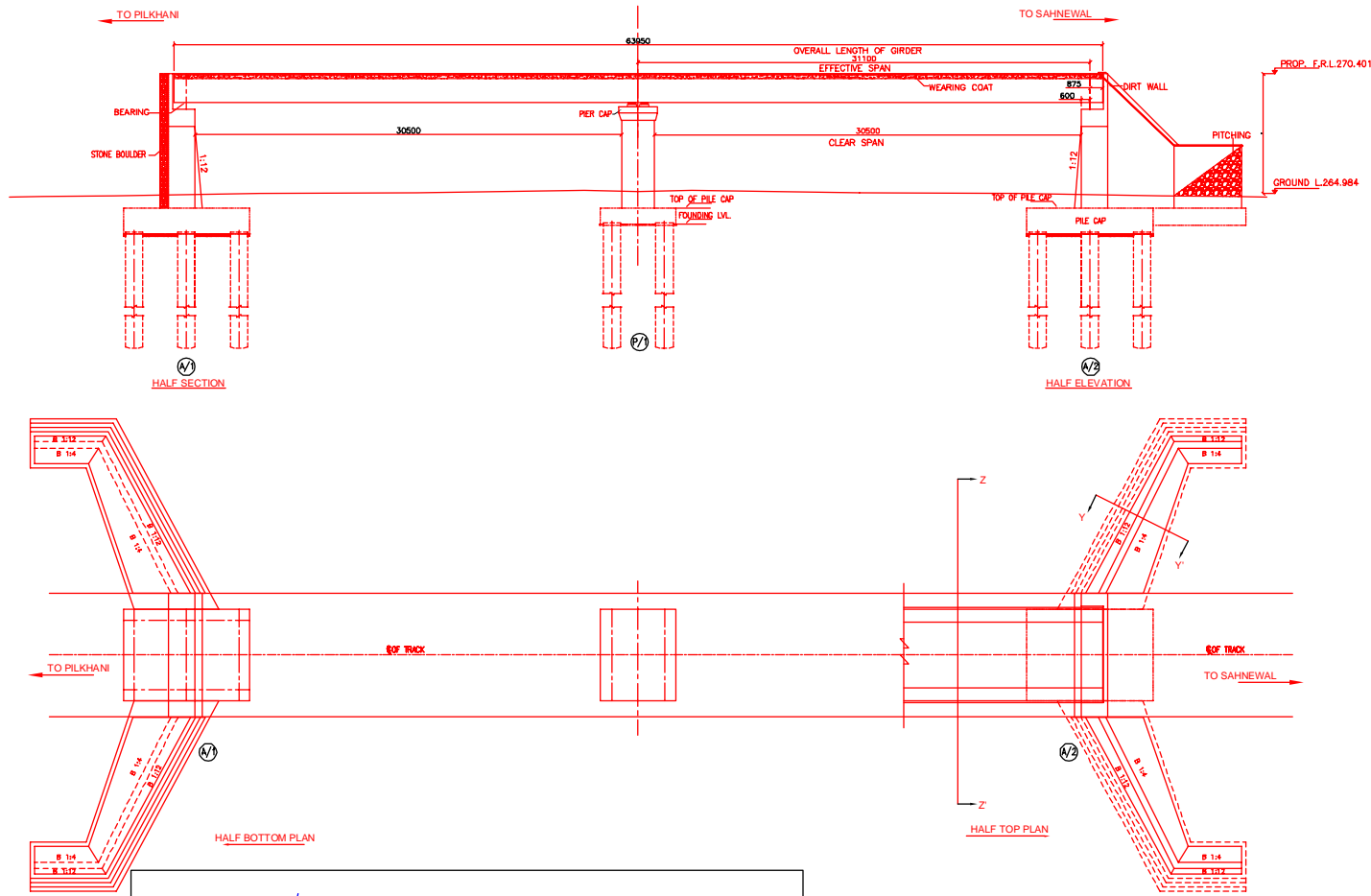
- NOTES:-**
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 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
 - HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
 - MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL
 - THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
 - IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
 - IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
 - WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
 - STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - CC WEARING COURSE OF MINIMUM M-35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
 - DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 9 SPAN (1X24.4m) AT CH. 4030.336				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/9	R0



KEY PLAN

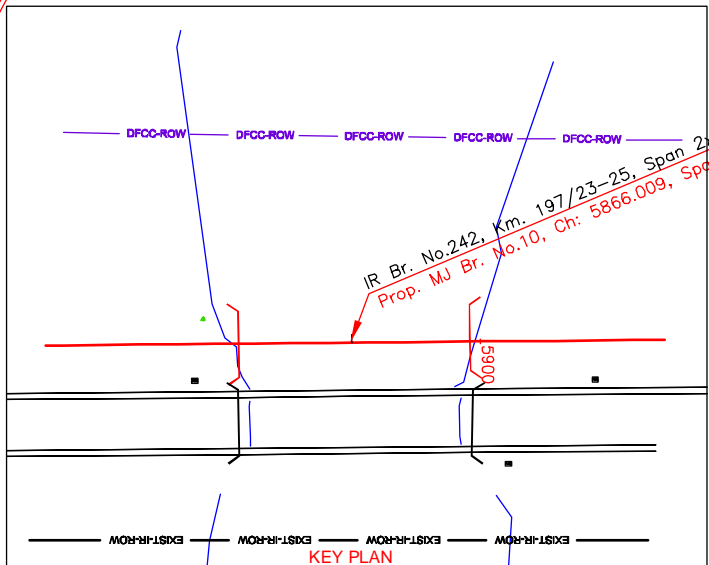


NOTES:-

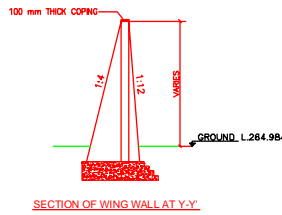
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2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
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 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
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16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
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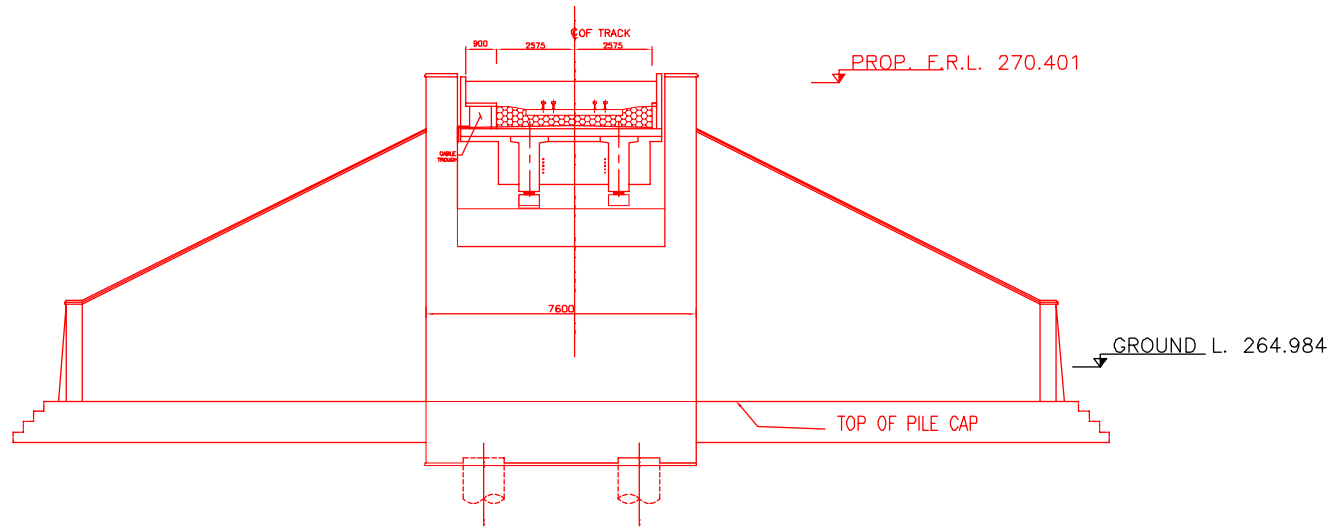
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
AECOM		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		PROPOSED MAJOR BR. NO. 10 SPAN (2X30.5m) AT CH. 5866.009				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/10	R0
						SHEET 1 OF 2

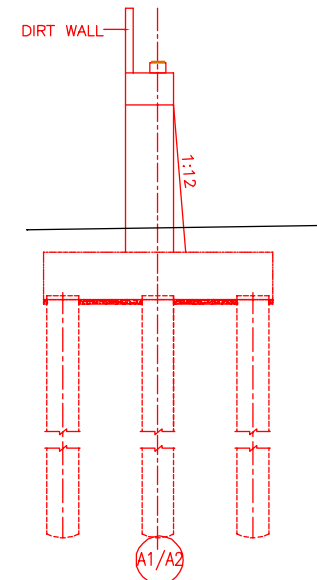


IR Br. No.242, Km. 197/23-25, Span 2x12.20+1x25.80
 Prop. MJ Br. No.10, Ch. 5866.009, Span 2X30.50 PSC GIRDER

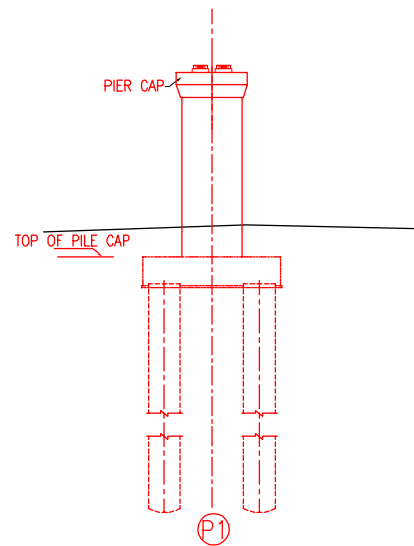




CROSS-SECTION OF ABUTMENT AT Z-Z





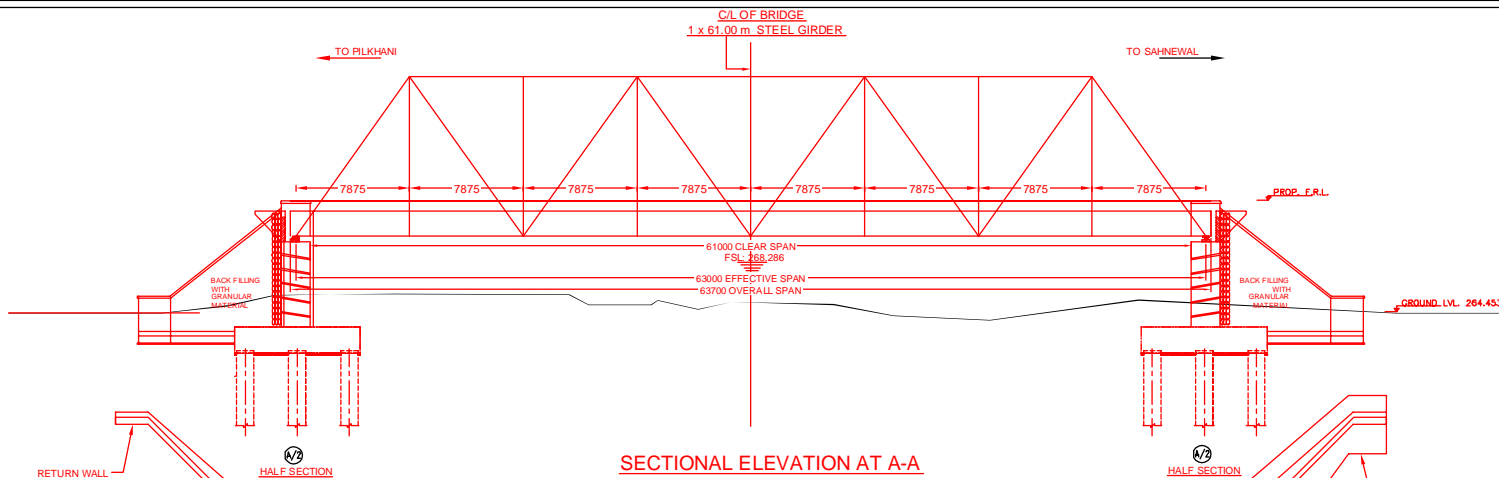
DETAIL OF ABUTMENT



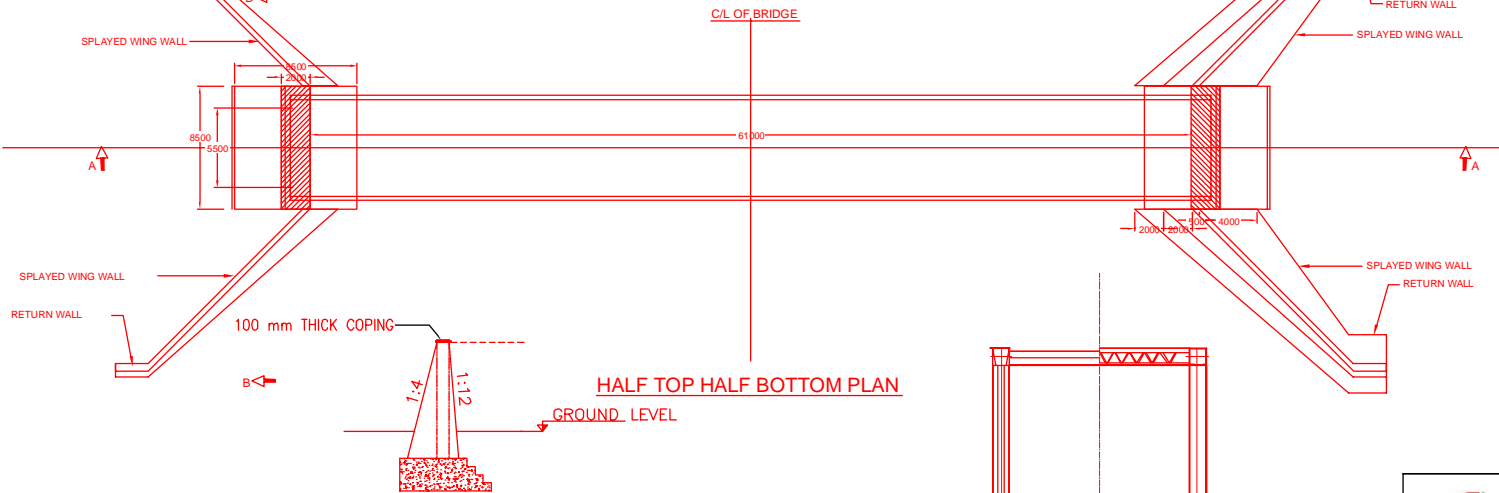
DETAIL OF PIER

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 10 SPAN (2X30.5m) AT CH. 5866.009				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/10	R0
					SHEET 2 OF 2	

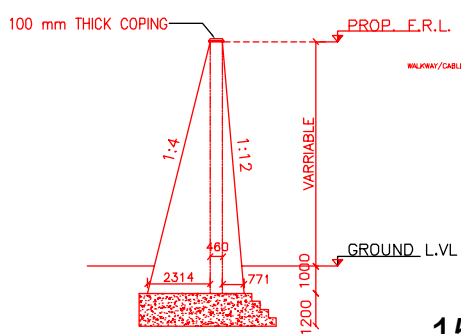


SECTIONAL ELEVATION AT A-A

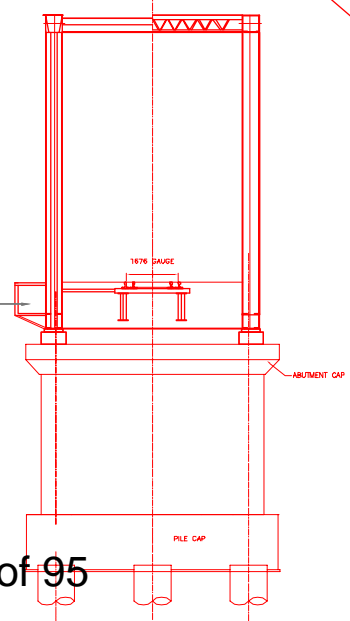


HALF TOP HALF BOTTOM PLAN

SECTION OF RETAINING WALL X-X'



SECTION OF WING WALL AT Y-Y'

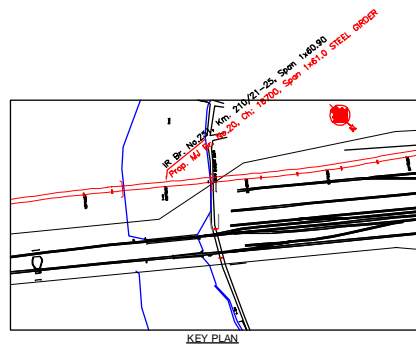


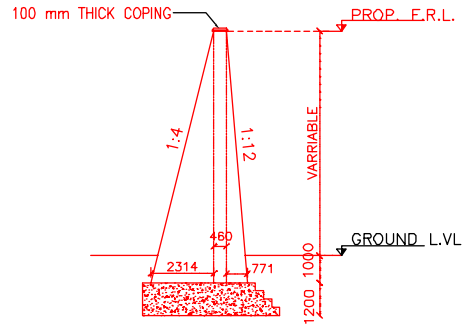
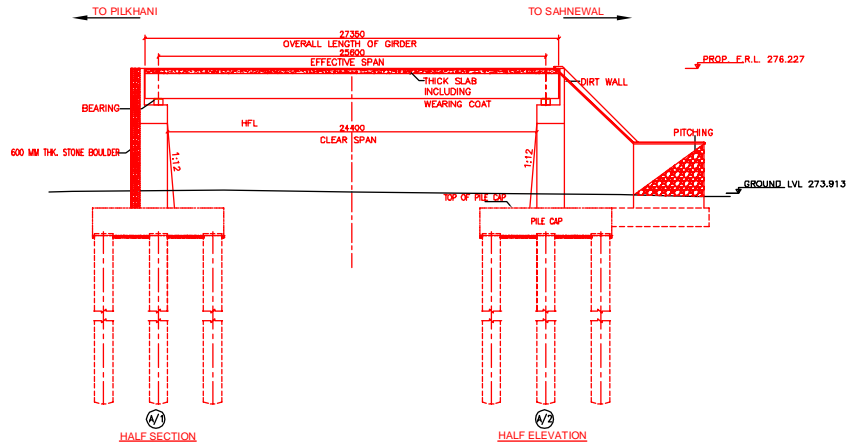
TYP. SRC.B-B

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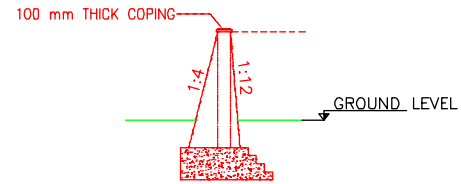
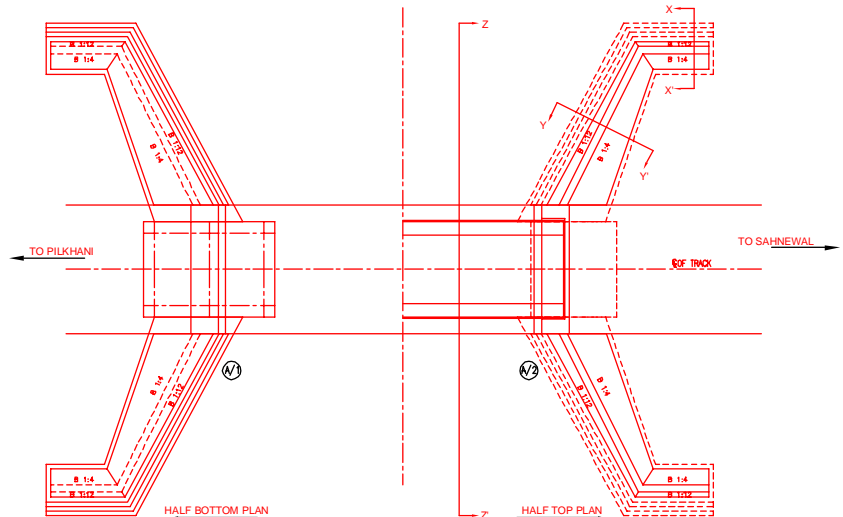
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 20 SPAN (1X61.0m) AT CH. 18700				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/20	R0

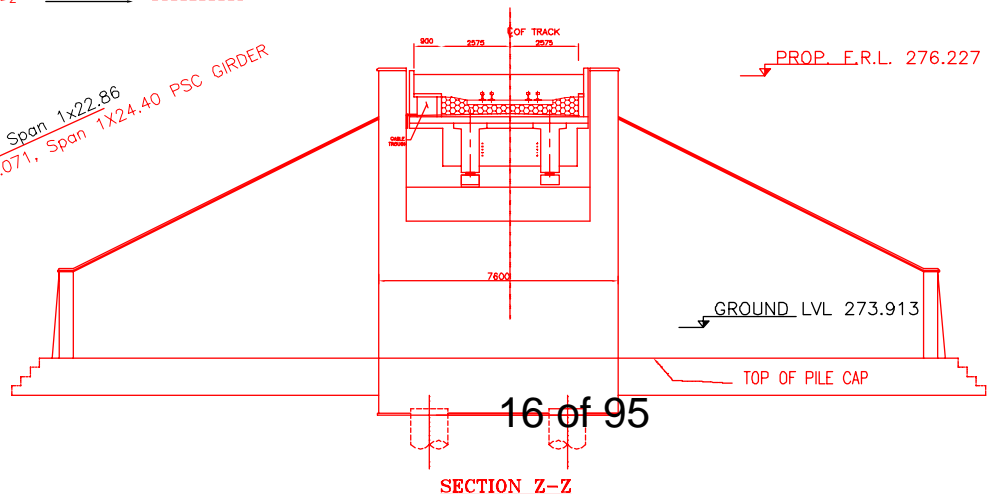




SECTION OF WING WALL AT Y-Y'



SECTION OF RETAINING WALL X-X'




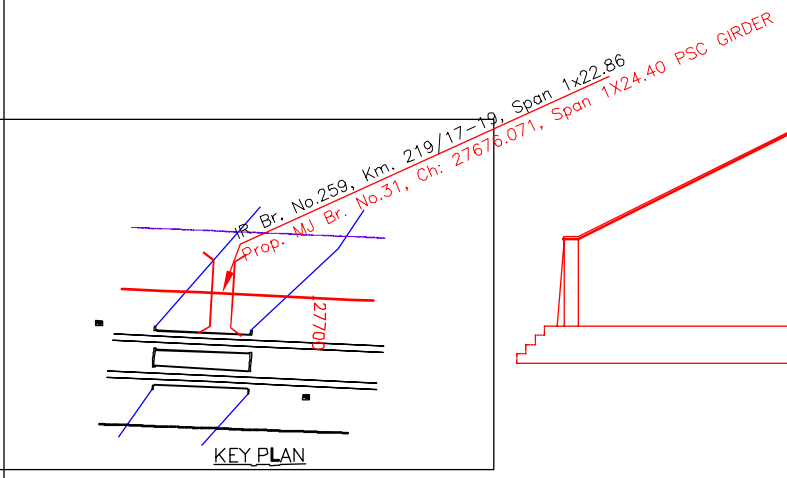
SECTION Z-Z

NOTES:-

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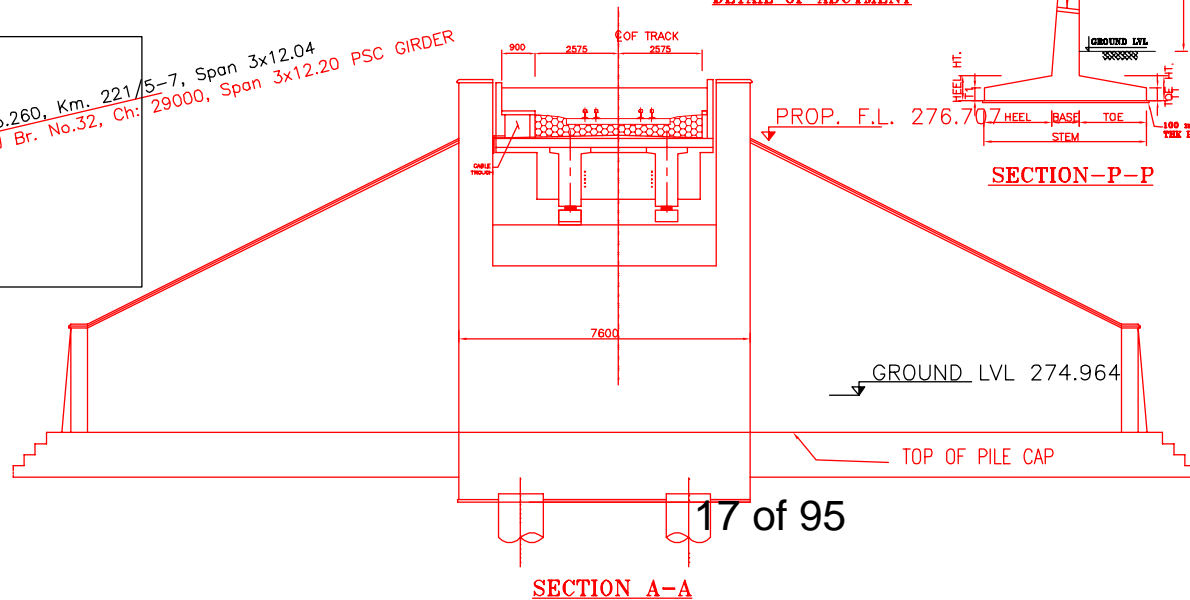
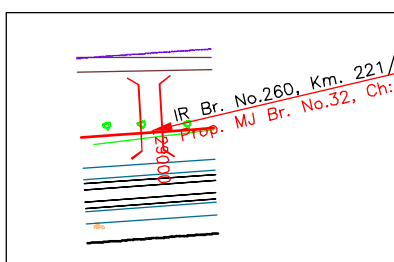
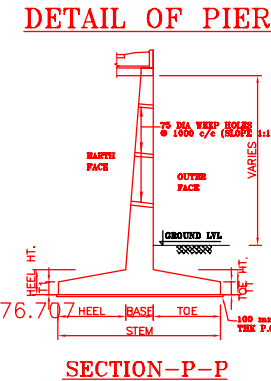
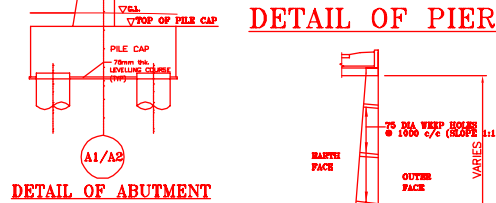
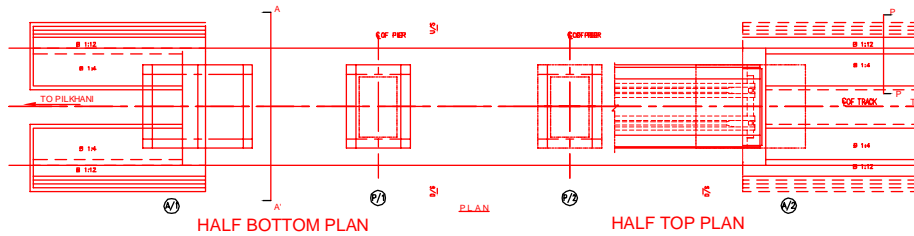
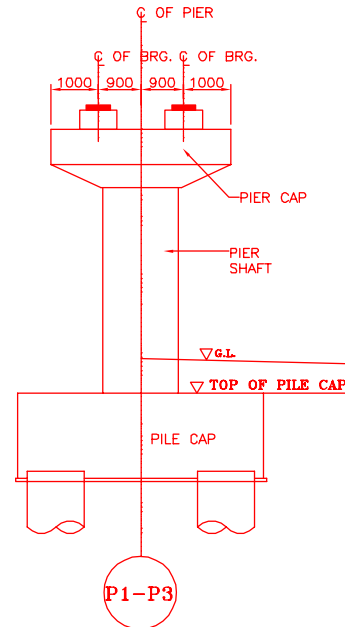
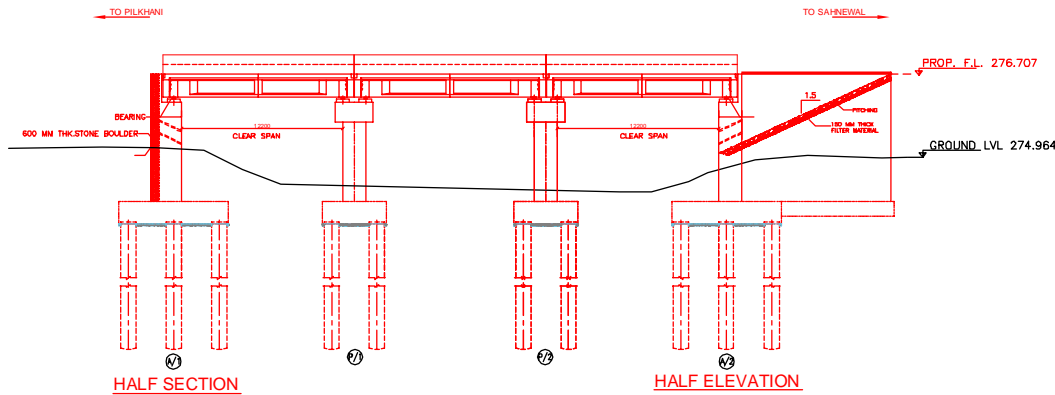
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
		GENERAL CONSULTANT AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 31 SPAN (1X24.4m) AT CH. 27676.071				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/31	R0



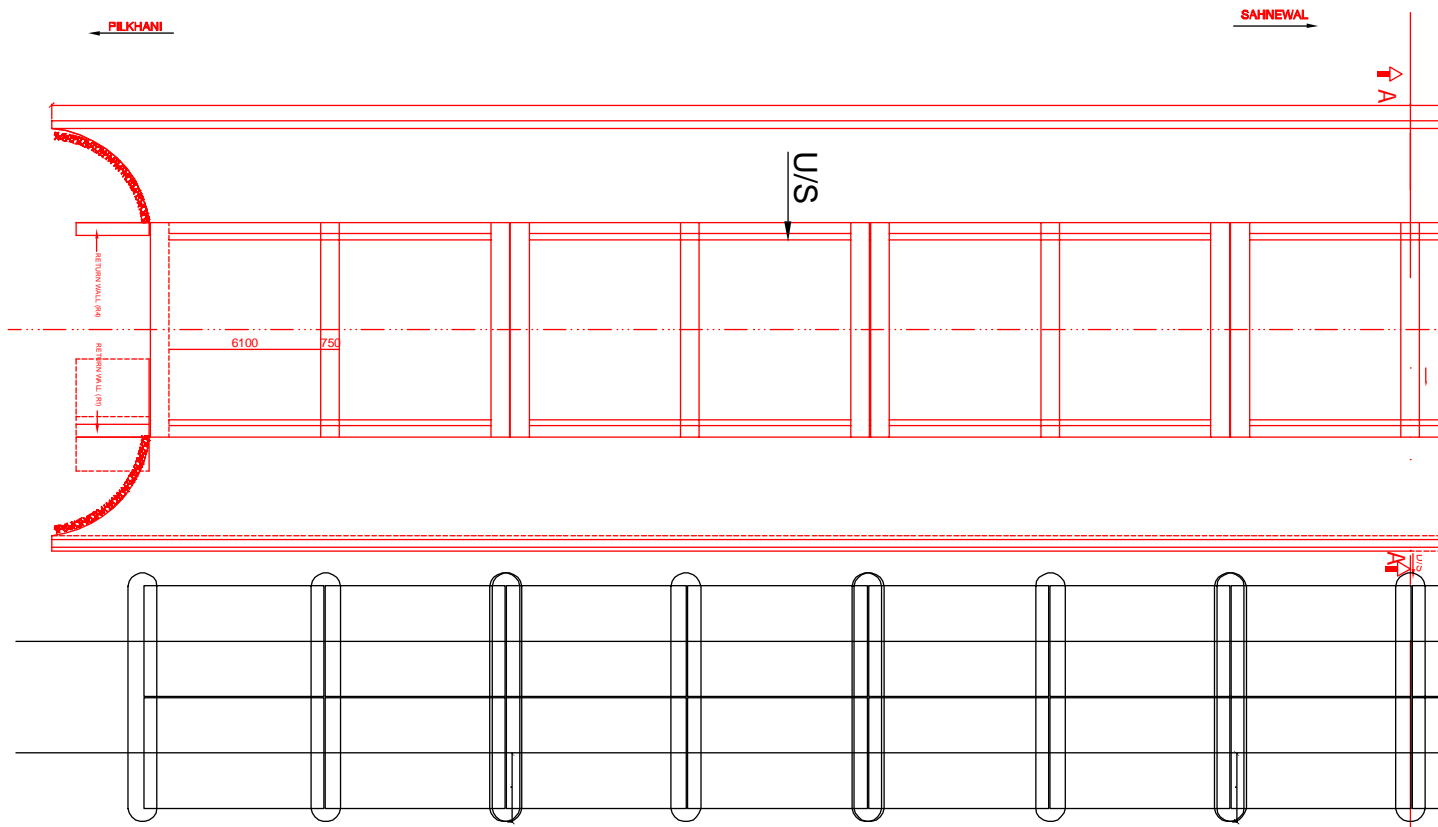
NOTES:-

- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
- THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS DRAWINGS SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
- WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
- DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

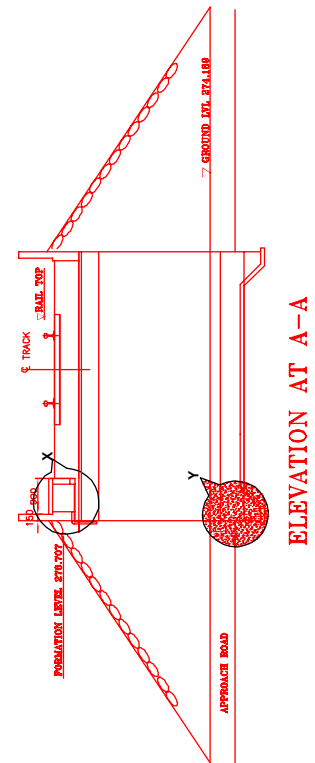


INDICATIVE DRAWING

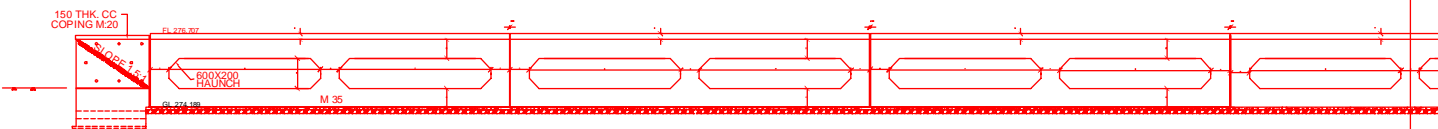
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GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
STRUCTURE	CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 32 SPAN (3X12.2m) AT CH. 29000					
TITLE	GENERAL ARRANGEMENT DRAWING					
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/32	R0



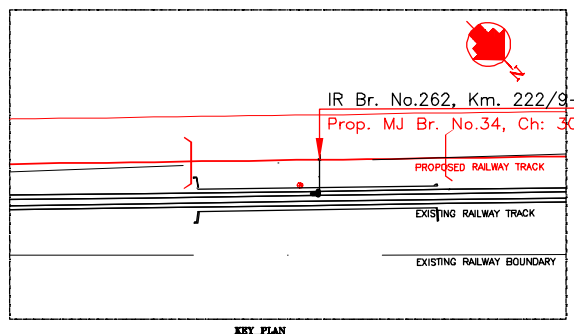
HALF TOP AND HALF BOTTOM PLAN



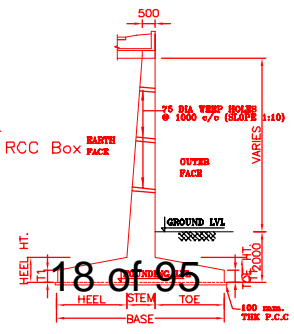
ELEVATION AT A-A



SIDE ELEVATION




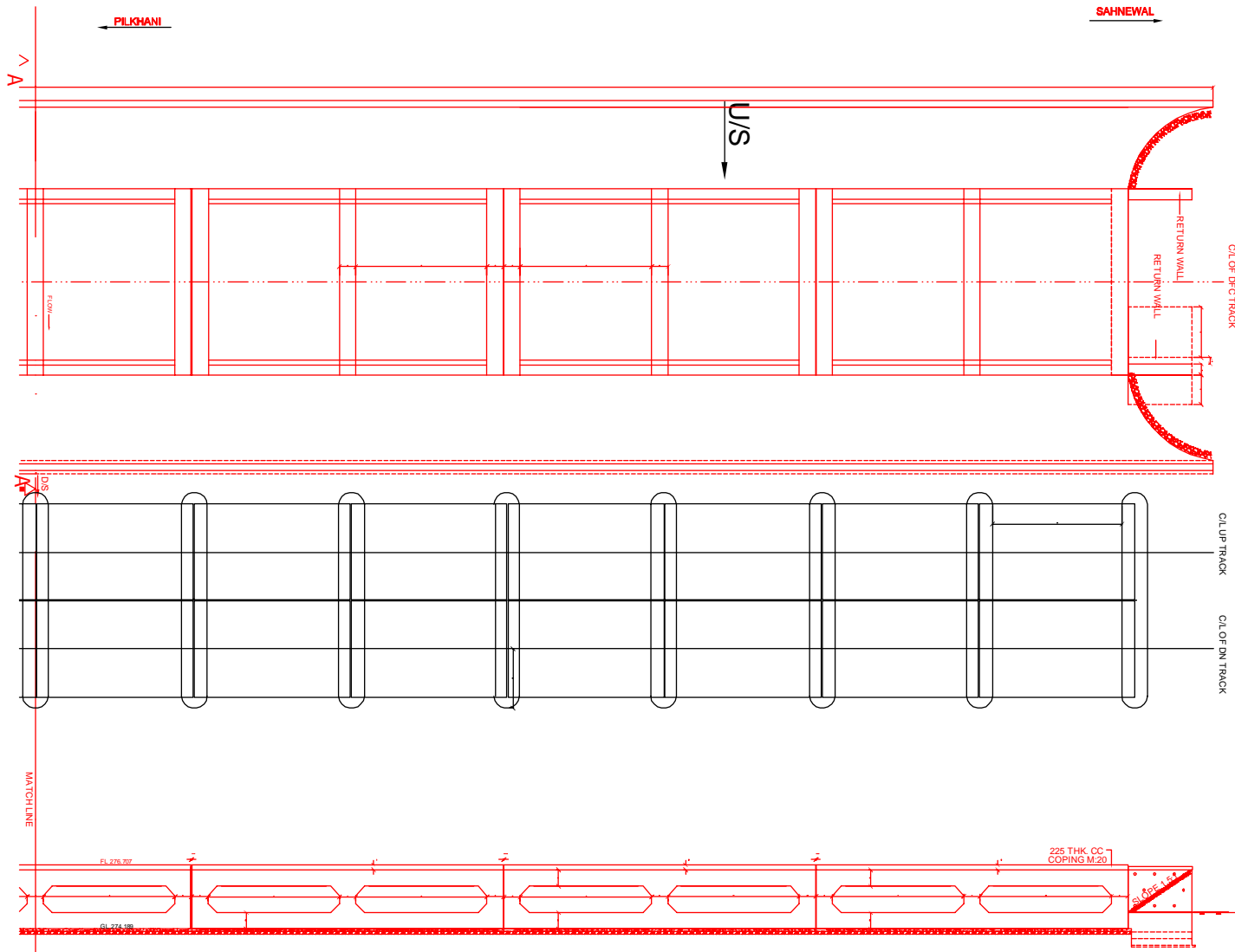
KEY PLAN



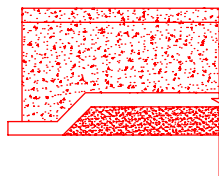
SECTION

INDICATIVE DRAWING

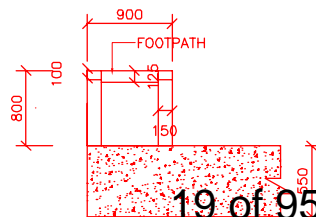
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA			
AECOM		EASTERN CORRIDOR			
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500			
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 34 SPAN (14X6.10m) AT CH. 30450.006			
TITLE		GENERAL ARRANGEMENT DRAWING			
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.
NTS	MAY 2015				AECOM/301/MJR/34 SHEET 1 OF 2
					REV.
					R0



SIDE ELEVATION



DETAIL OF 'Y'



19 of 95

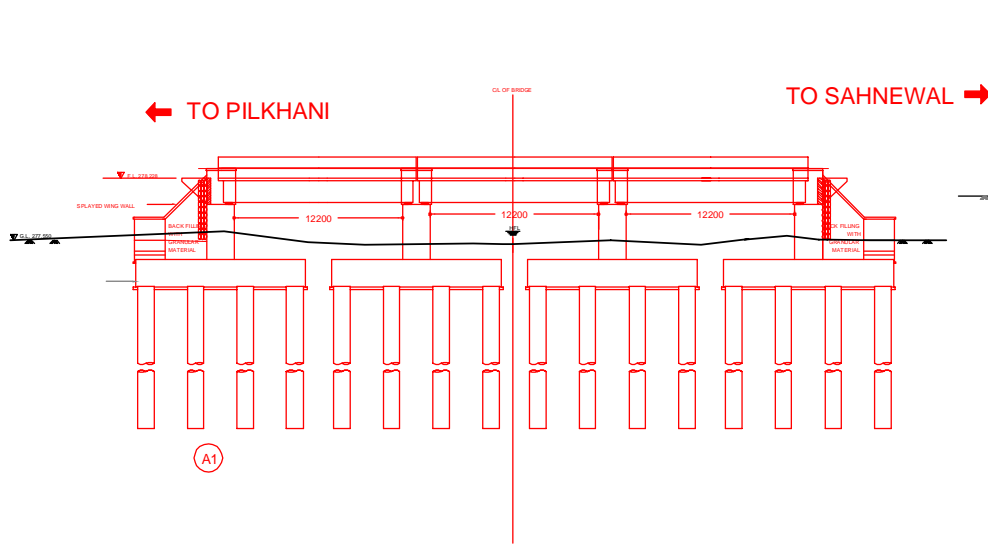
DETAIL OF 'X'

NOTES:-

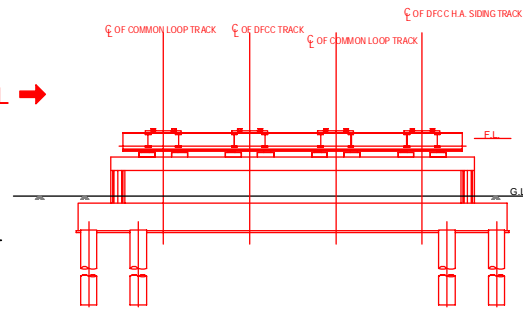
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
3. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT BIS CODES.
4. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
7. DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
8. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
9. TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
10. WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
11. WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
12. DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
13. TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
14. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
15. THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
16. THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 750mm.
17. PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
18. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS
19. SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
20. BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
21. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
22. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

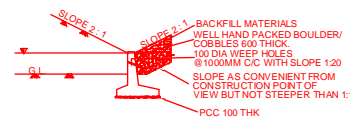
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
EASTERN CORRIDOR		PROJECT				
SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 34 SPAN (14X6.10m) AT CH. 30450.006				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/34	R0
						SHEET 2 OF 2



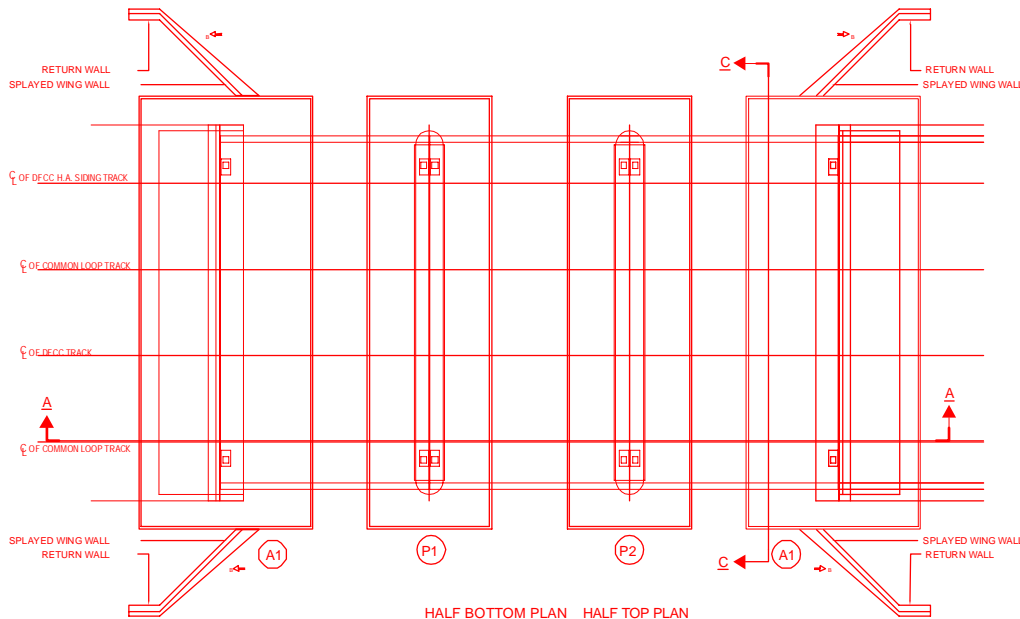
SECTIONAL ELEVATION A-A



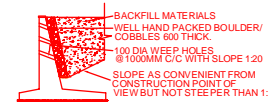
SECTION AT C-C



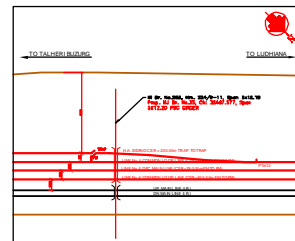
RETURN WALL SECTION AT D-D



HALF BOTTOM PLAN, HALF TOP PLAN



WING WALL NEAR ABUTMENT SECTION AT C-C




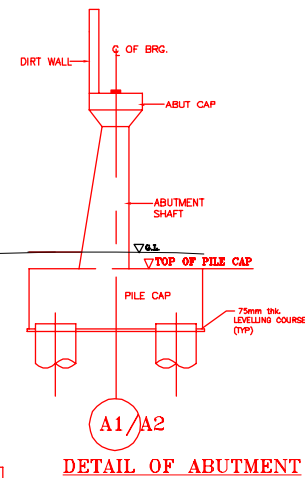
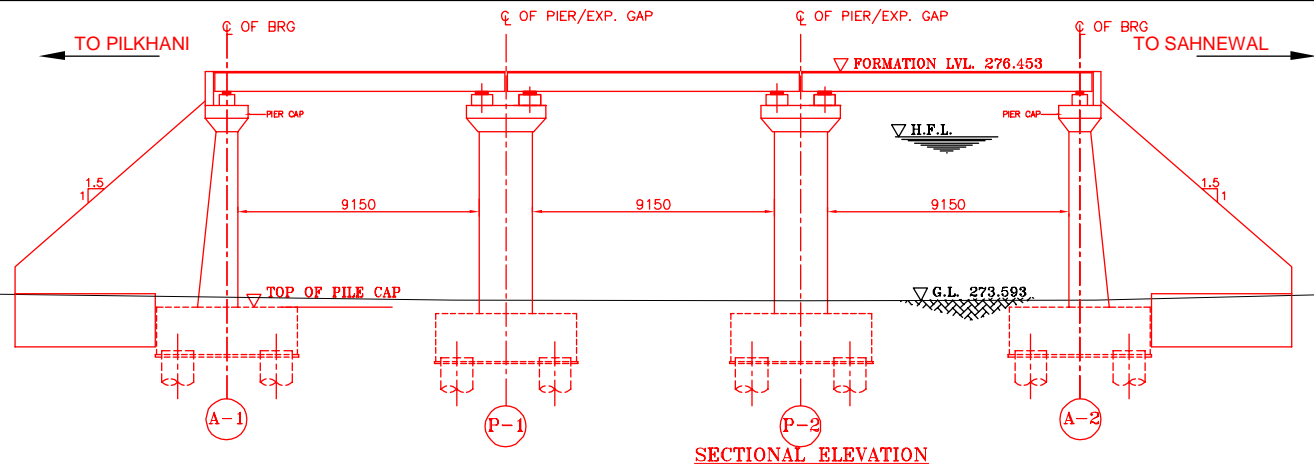
KEY / SITE PLAN

NOTES:-

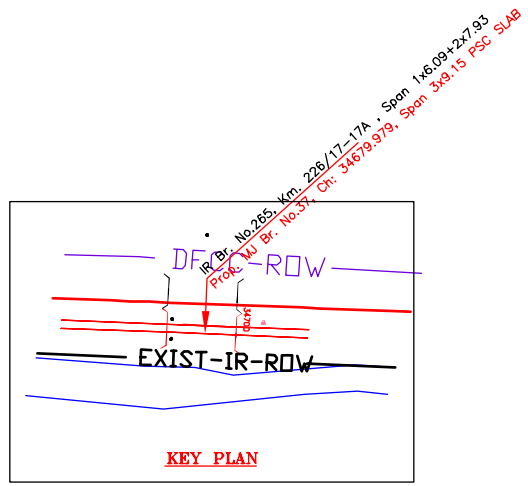
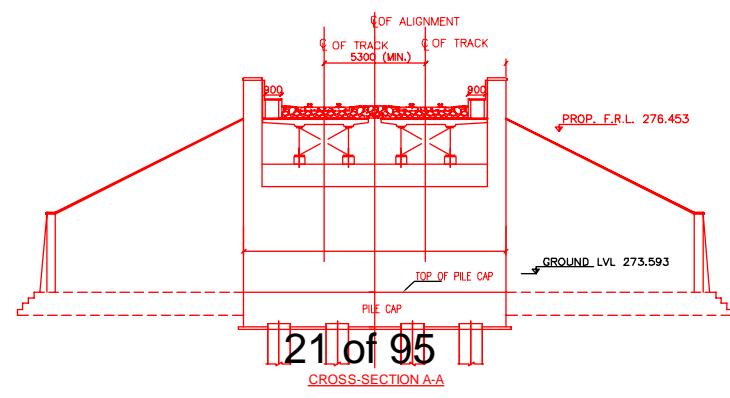
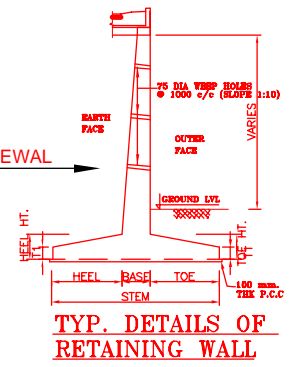
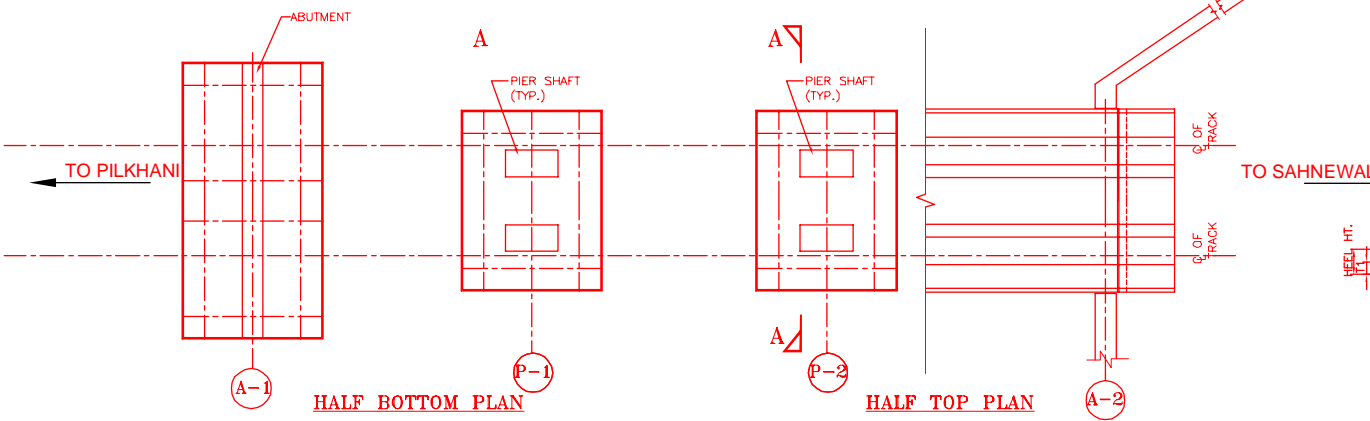
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
- THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
- WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
- DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING


 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
PROJECT	EASTERN CORRIDOR SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
STRUCTURE	CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 35 SPAN (3X12.2m) AT CH. 32467.577					
TITLE	GENERAL ARRANGEMENT DRAWING					
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/35	R0

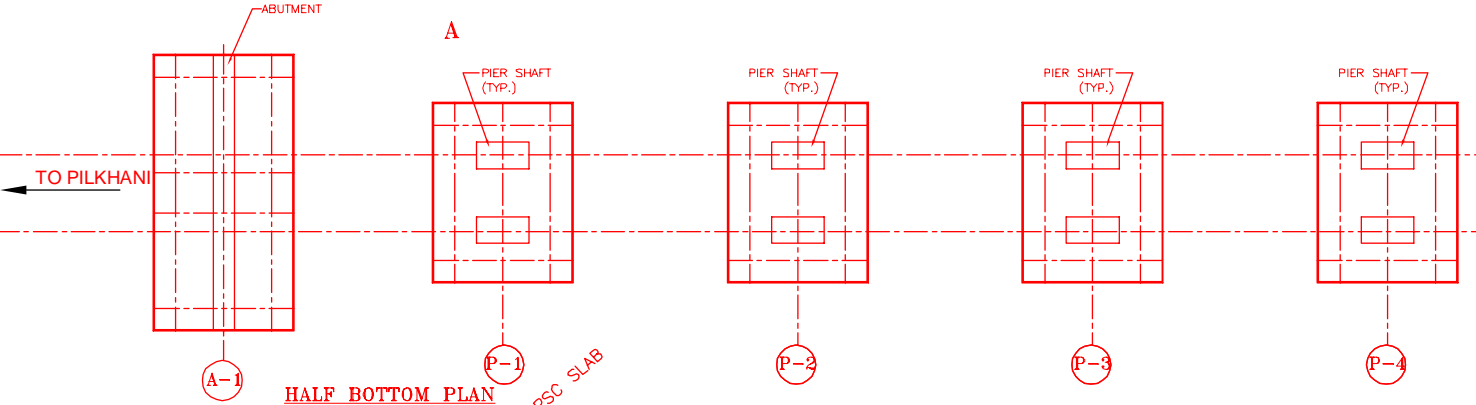
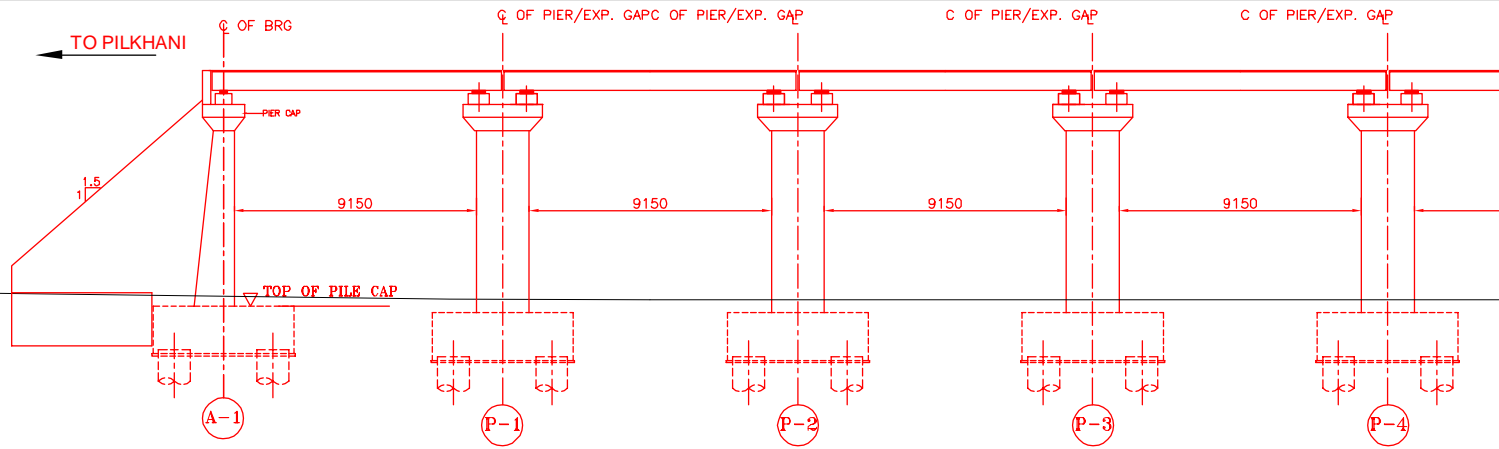


- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
 - LOADING TO BE AS PER MBG LOADING STANDARDS OF IR.
 - HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & REINFORCED BEFORE EXECUTION.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
 - MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
 - THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
 - IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
 - IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
 - WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm CC HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
 - STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - CC WEARING COURSE OF MINIMUM M-35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
 - DO NOT SCALE. FOLLOW WRITTEN MEASUREMENT ONLY.
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

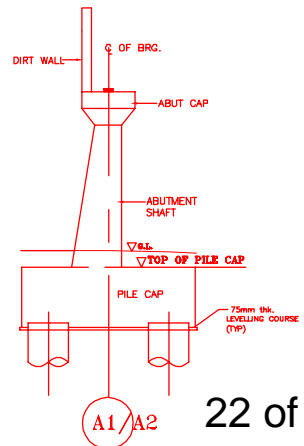


INDICATIVE DRAWING

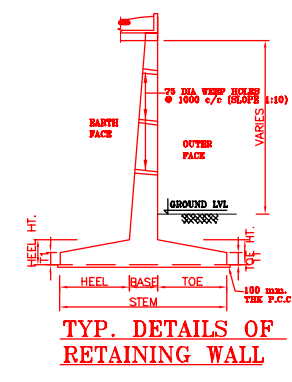
 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT	AECOM Asia Co. Ltd.					
	AECOM 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
PROJECT	EASTERN CORRIDOR SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
STRUCTURE	CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 37 SPAN (3X9.15m) AT CH. 34679.979					
TITLE	GENERAL ARRANGEMENT DRAWING					
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/37	R0



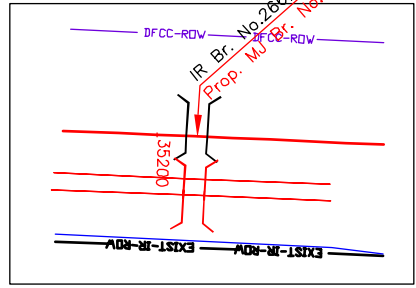
HALF BOTTOM PLAN



DETAIL OF ABUTMENT




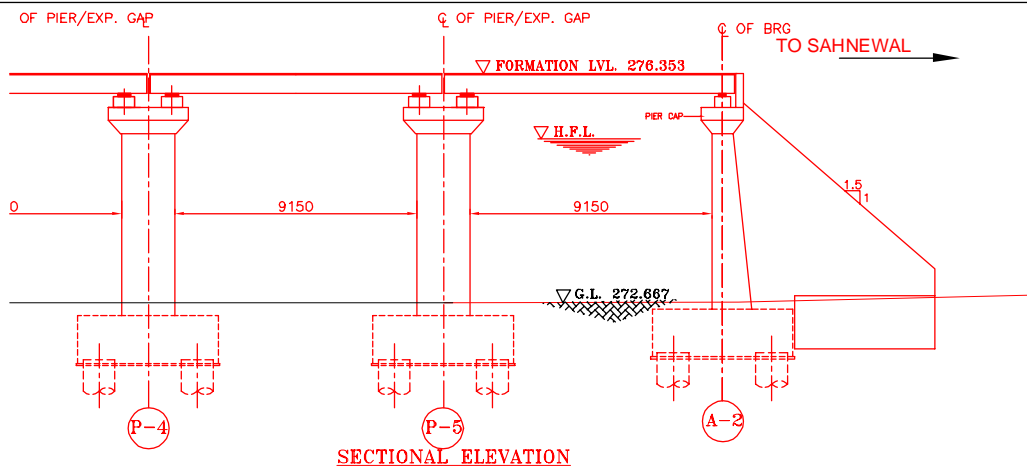
TYP. DETAILS OF RETAINING WALL



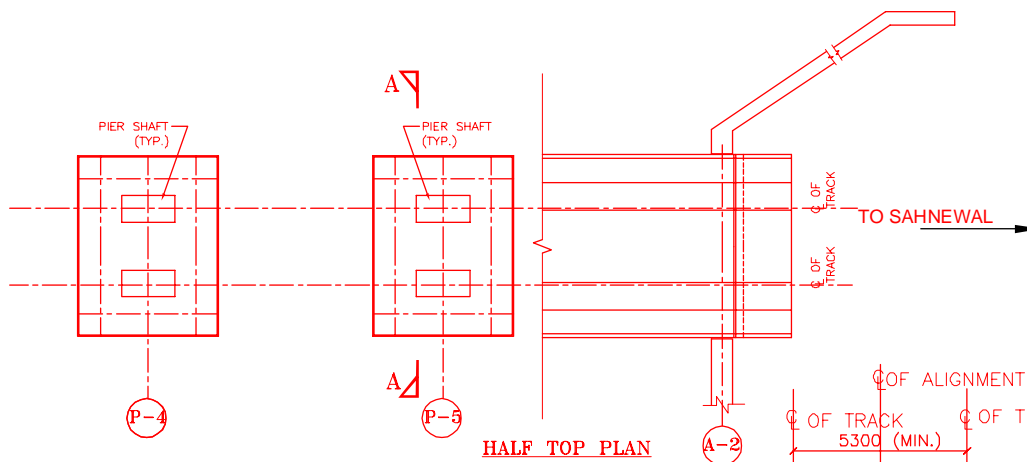
KEY PLAN

INDICATIVE DRAWING

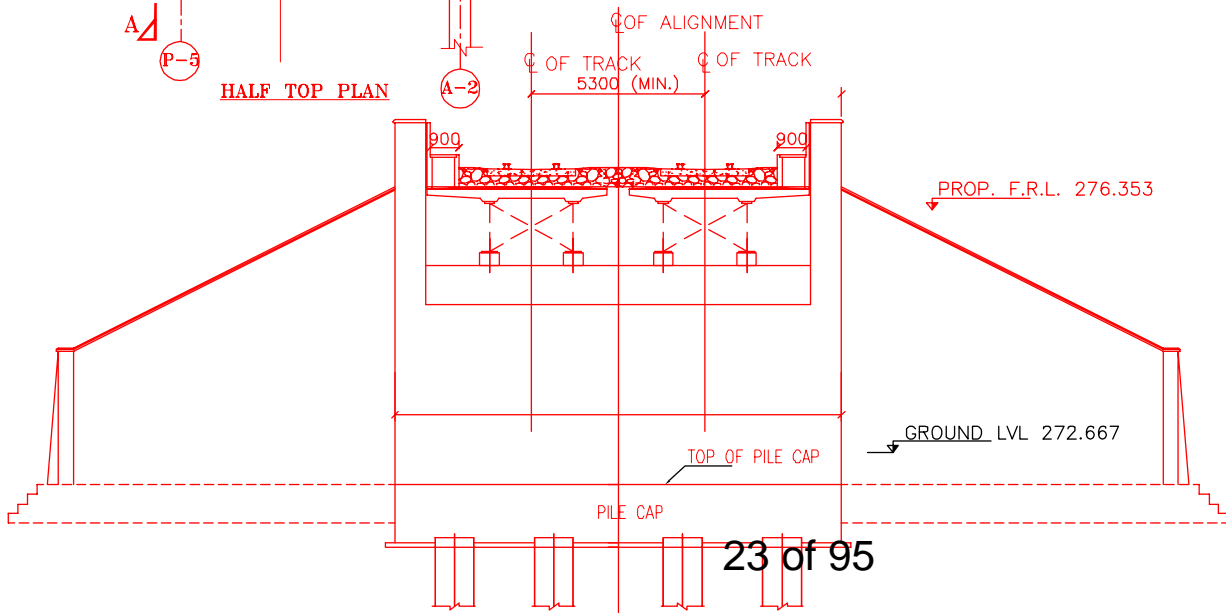
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GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA			
		EASTERN CORRIDOR			
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500			
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR. NO. 38 SPAN (6X9.15m) AT CH. 35209.673			
TITLE		GENERAL ARRANGEMENT DRAWING			
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.
NTS	MAY 2015				AECOM/301/MJR/38
					SHEET 1 OF 2
					REV.
					R0



SECTIONAL ELEVATION



HALF TOP PLAN



CROSS-SECTION A-A

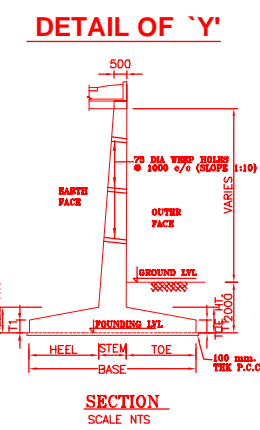
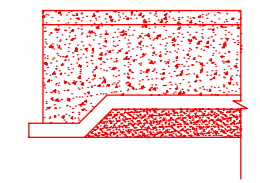
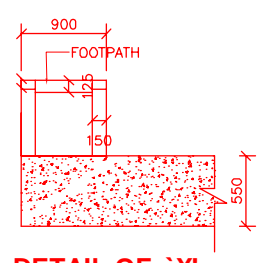
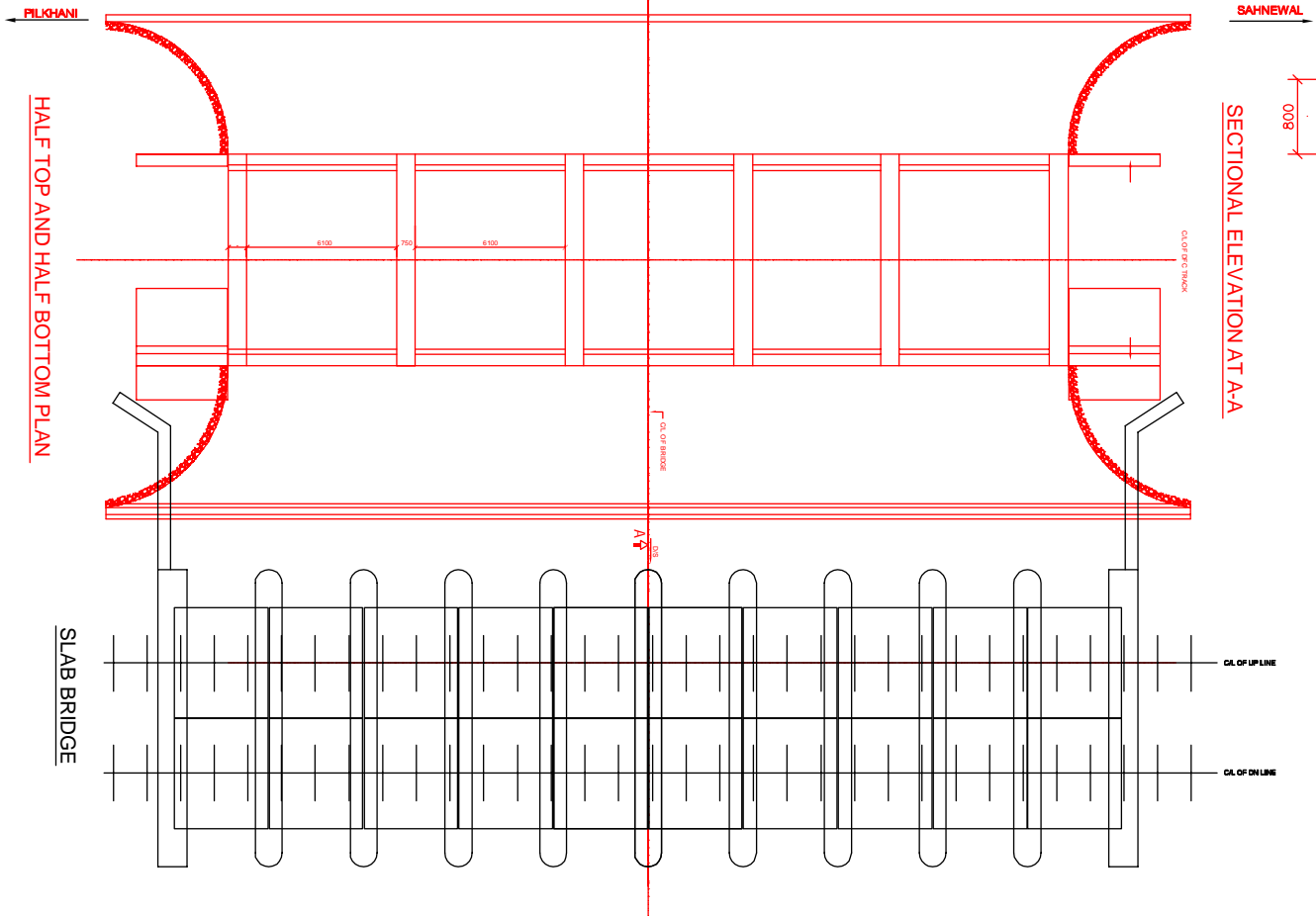
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NOTES:-

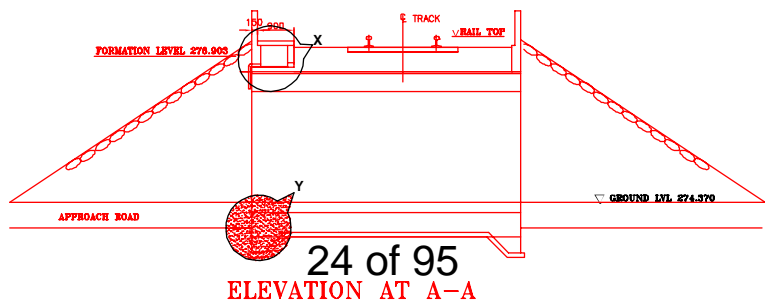
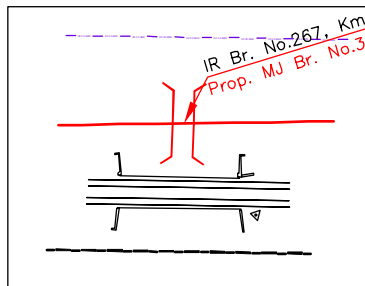
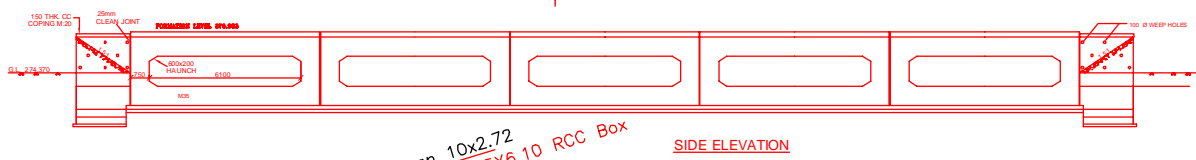
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
 - vi) LOADING TO BE AS PER MBG LOADING FOR IR STANDARDS.
3. HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT. BEFORE EXECUTION.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm CC HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT.
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS.
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M-35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		EASTERN CORRIDOR				
		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301				
		PROPOSED MAJOR BR. NO. 38 SPAN (6X9.15m) AT CH. 35209.673				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/38	R0
						SHEET 2 OF 2



- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:
 - IRS BRIDGE RULES
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (2.5 TON AXLE LOAD)
 - HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DRCCIL.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 - WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL ABUTMENT
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH BALAST RETAINER
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 - SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DRCC.



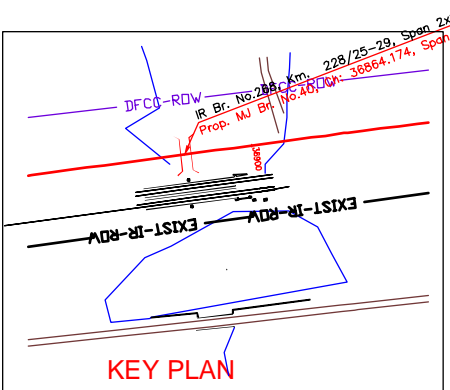
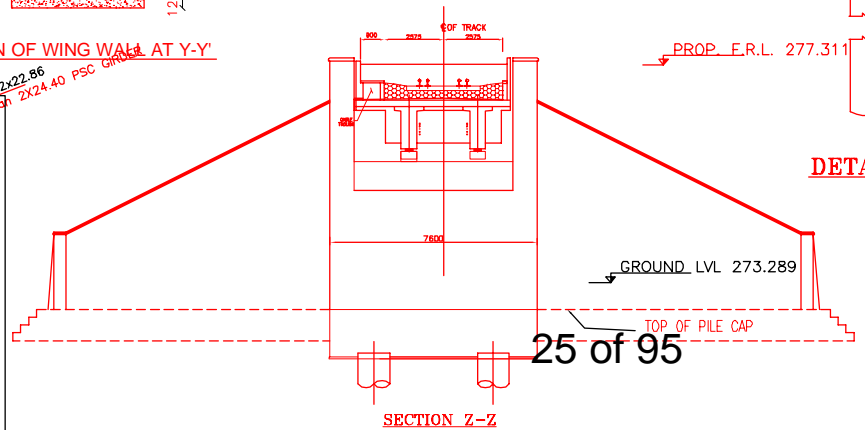
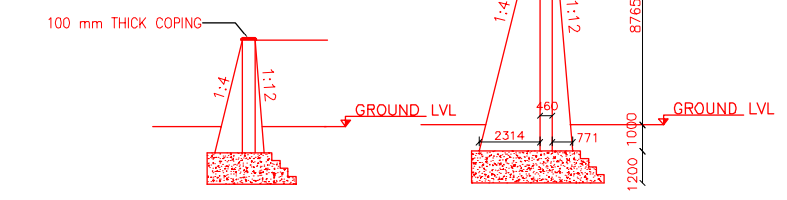
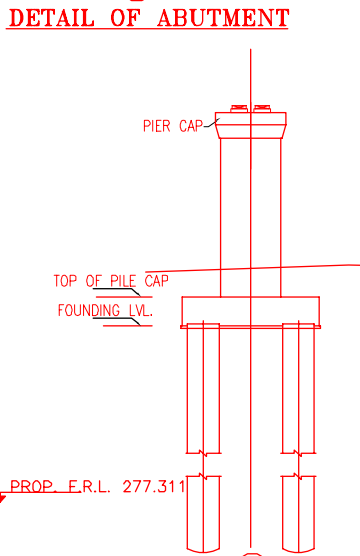
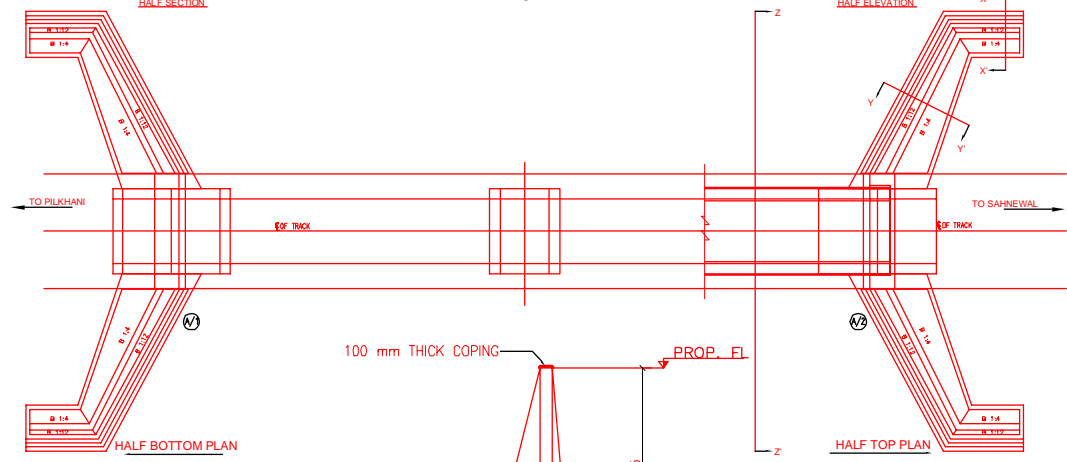
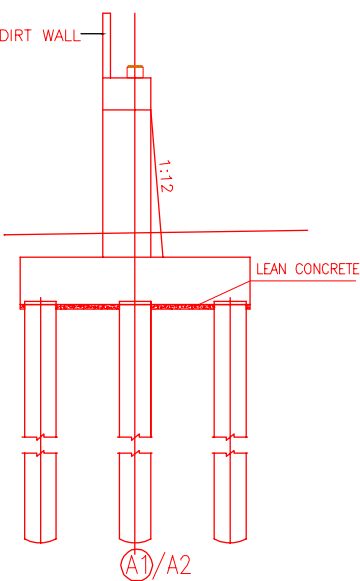
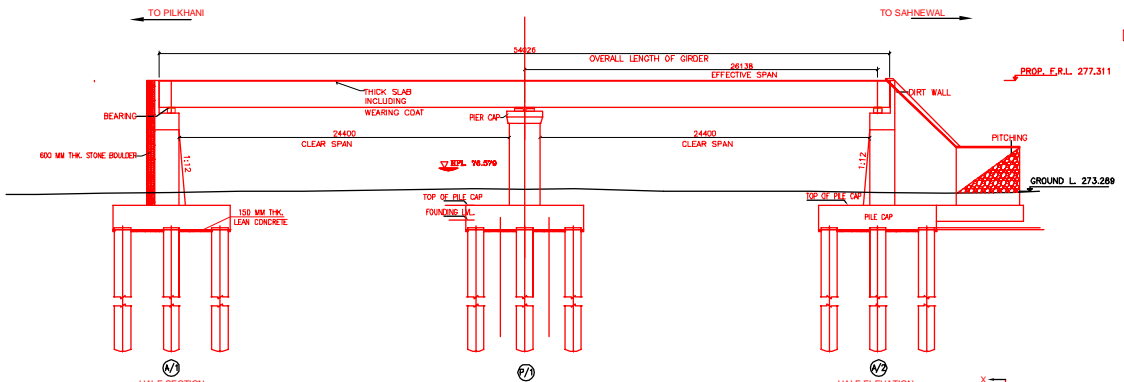
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ELEVATION AT A-A

INDICATIVE DRAWING


		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 39 SPAN (5X6.1m) AT CH. 35856.903				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/39	R0

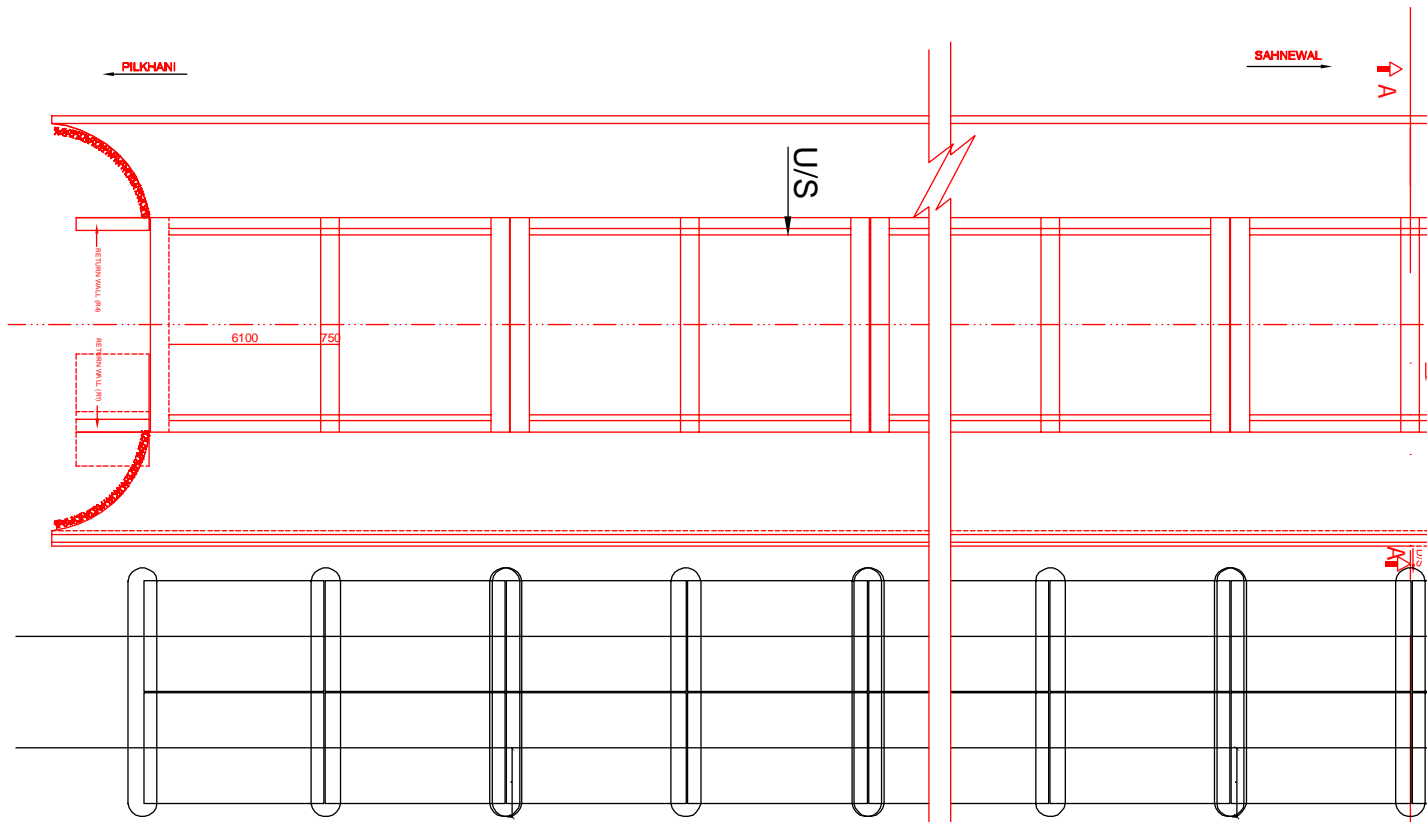
NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

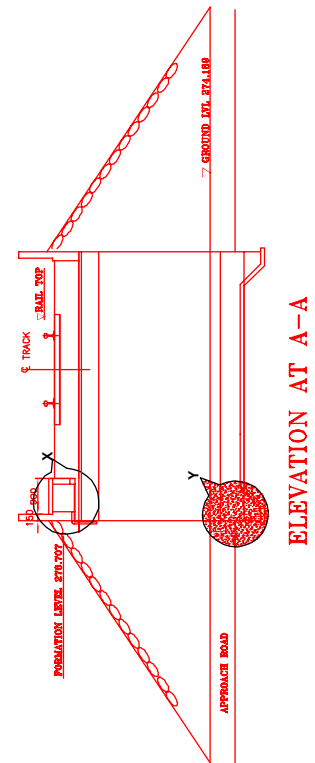


INDICATIVE DRAWING

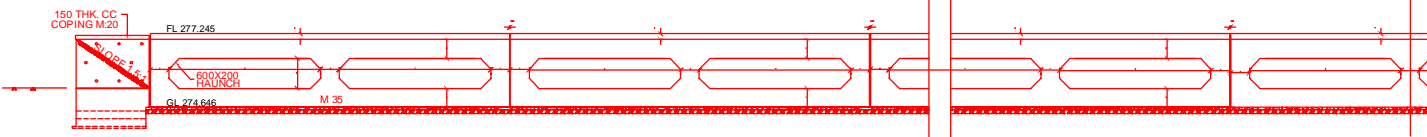
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GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		EASTERN CORRIDOR				
SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 40 SPAN (2X24.4m) AT CH. 36864.174				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/40	R0



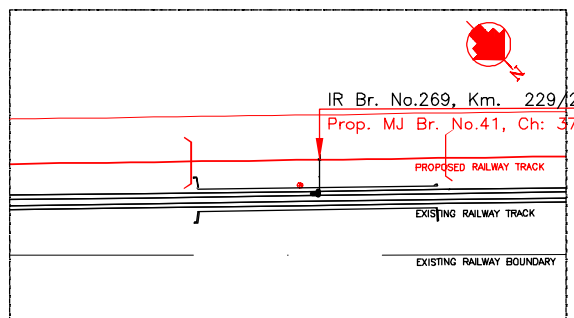
HALF TOP AND HALF BOTTOM PLAN



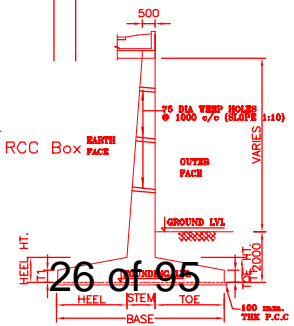
ELEVATION AT A-A



SIDE ELEVATION




KEY PLAN

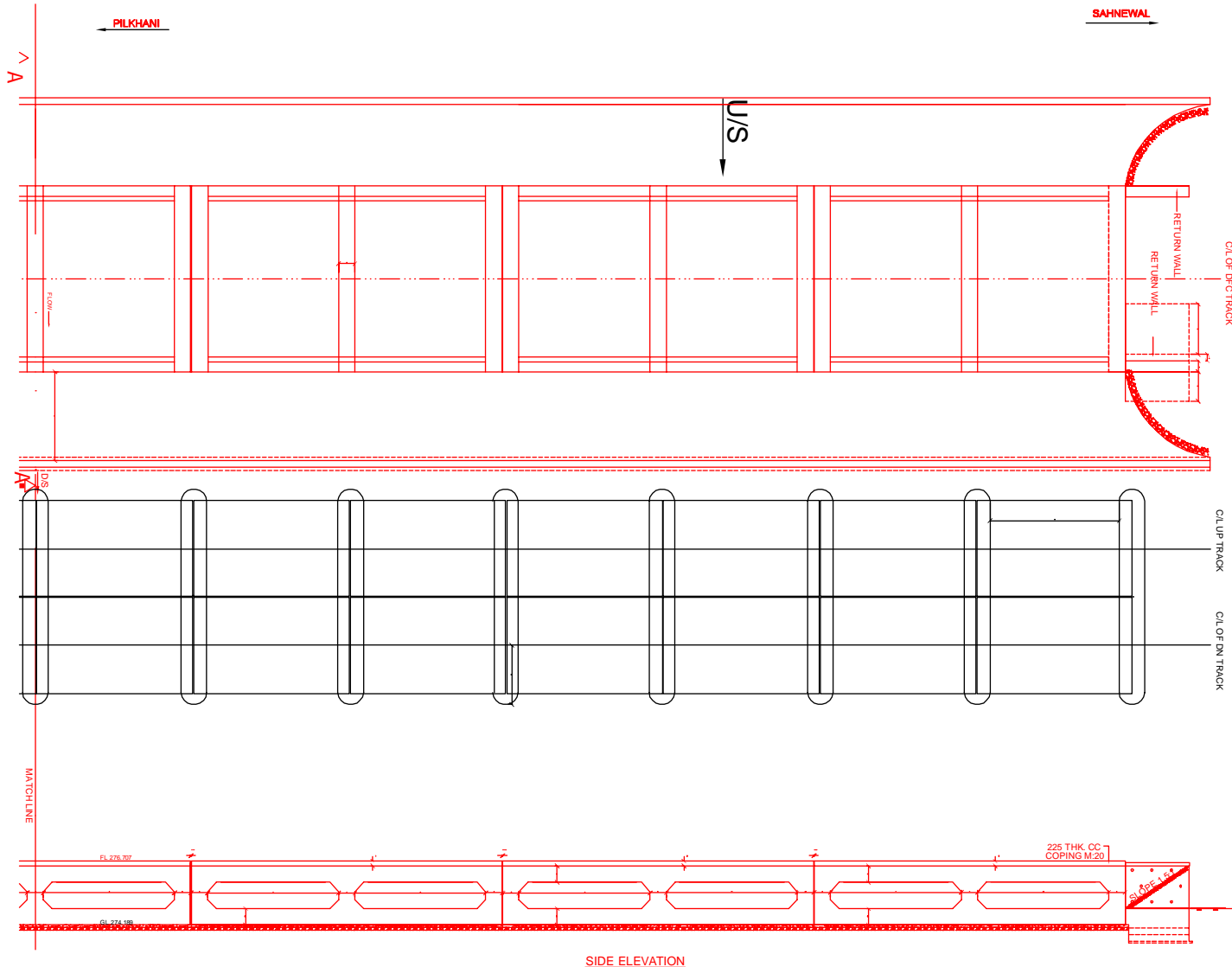


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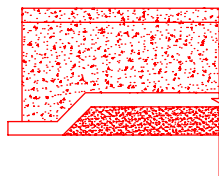
SECTION SCALE NTS

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.			
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA			
AECOM		EASTERN CORRIDOR			
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500			
STRUCTURE		PROPOSED MAJOR BR. NO. 41 SPAN (15X6.10m) AT CH. 37927.118			
TITLE		GENERAL ARRANGEMENT DRAWING			
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.
NTS	MAY 2015				AECOM/301/MJR/41 SHEET 1 OF 2
					REV.
					R0



SIDE ELEVATION



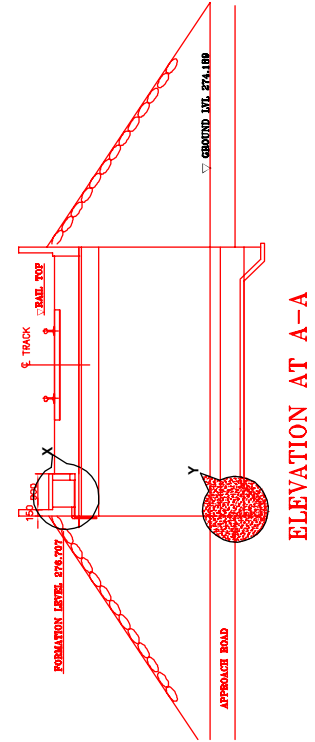
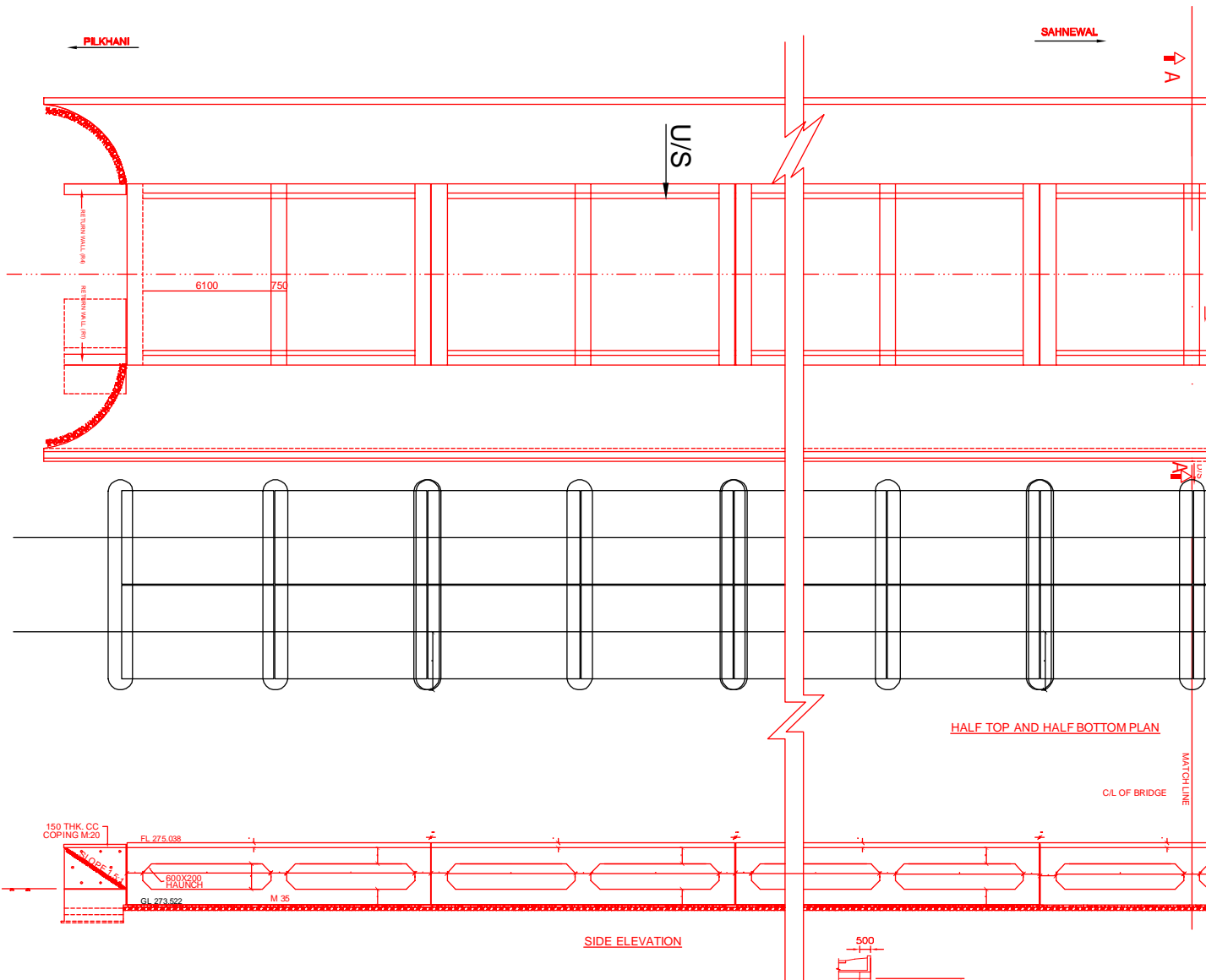
DETAIL OF 'Y'

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
3. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
7. DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
8. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
9. TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
10. WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
11. WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
12. DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
13. TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
14. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
15. THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
16. THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 750mm.
17. PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
18. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS
19. SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
20. BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
21. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
22. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

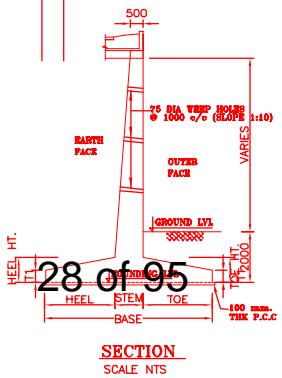
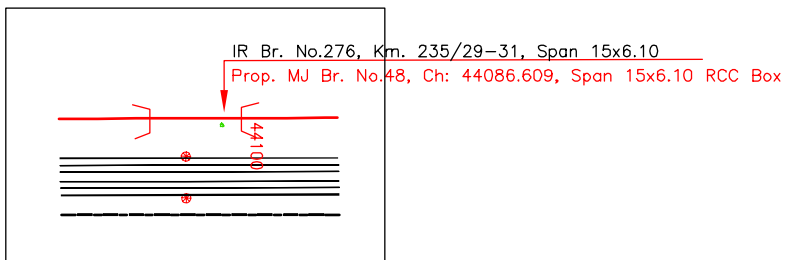
INDICATIVE DRAWING

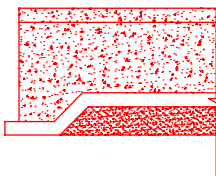
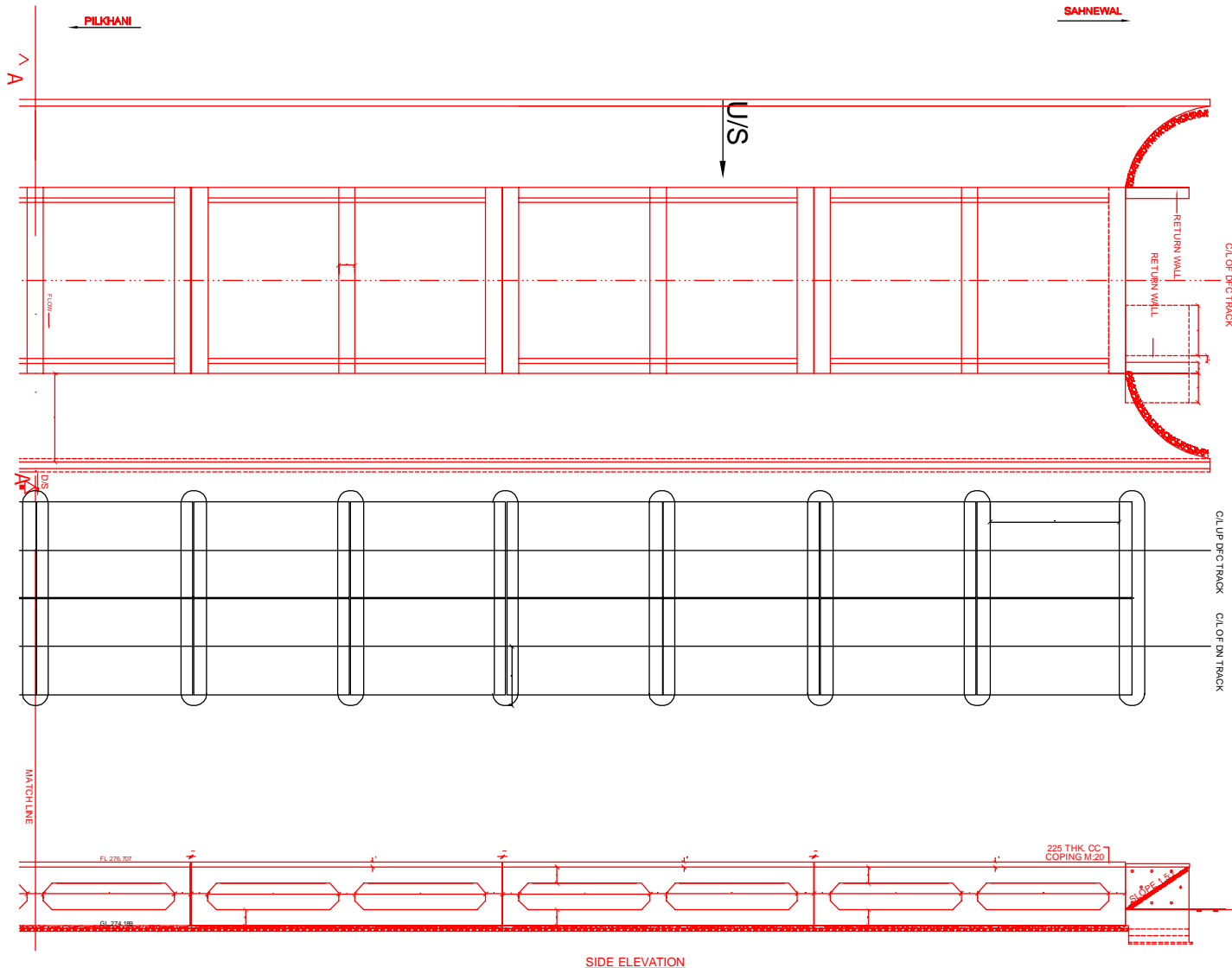
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 41 SPAN (15X6.10m) AT CH. 37927.118				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/41	R0
						SHEET 2 OF 2



INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.			
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA			
		EASTERN CORRIDOR			
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500			
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 48 SPAN (15X6.10m) AT CH. 44086.609			
TITLE		GENERAL ARRANGEMENT DRAWING			
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.
NTS	MAY 2015				AECOM/301/MJR/48 SHEET 1 OF 2
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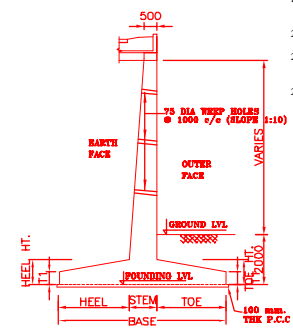
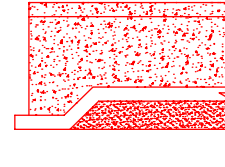
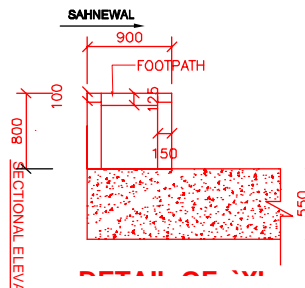
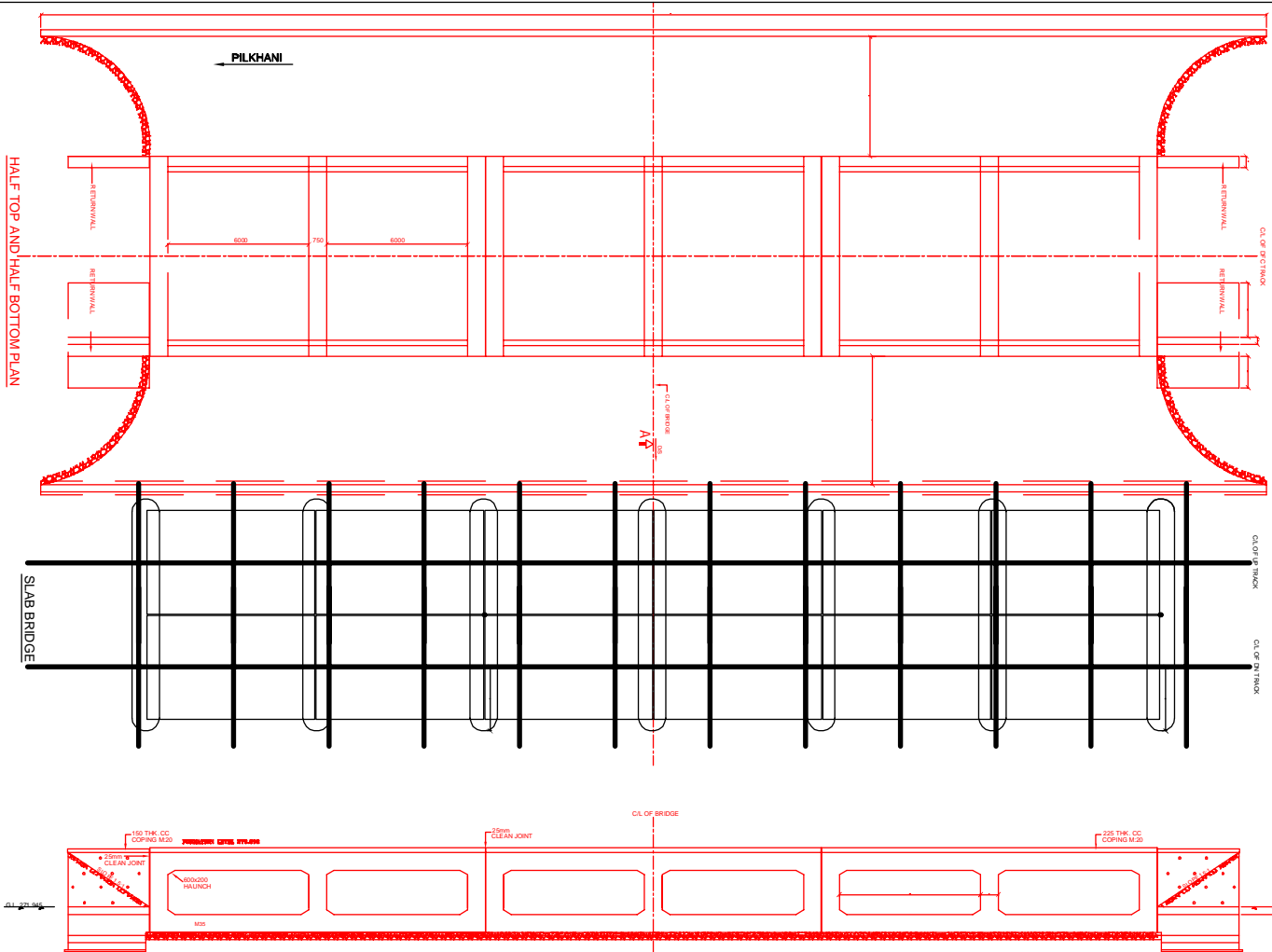
DETAIL OF 'Y'

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 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT BIS CODES.
4. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
7. DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
8. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
9. TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
10. WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
11. WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
12. DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
13. TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
14. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
15. THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
16. THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 750mm.
17. PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
18. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS
19. SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
20. BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
21. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
22. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

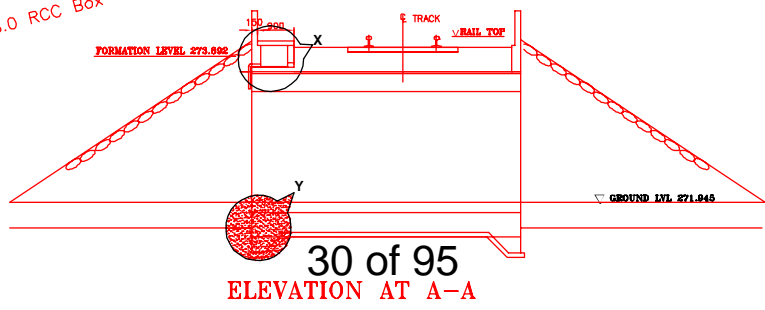
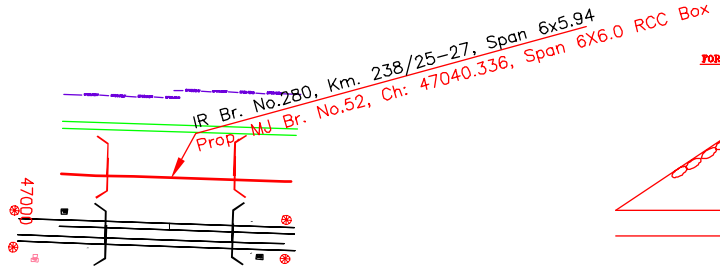
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GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
EASTERN CORRIDOR						
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 48 SPAN (15X6.10m) AT CH. 44086.609				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/48	R0
						SHEET 2 OF 2



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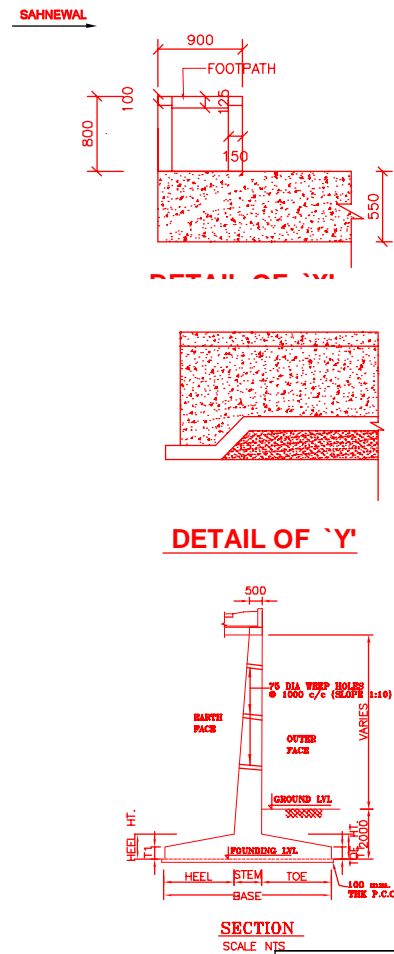
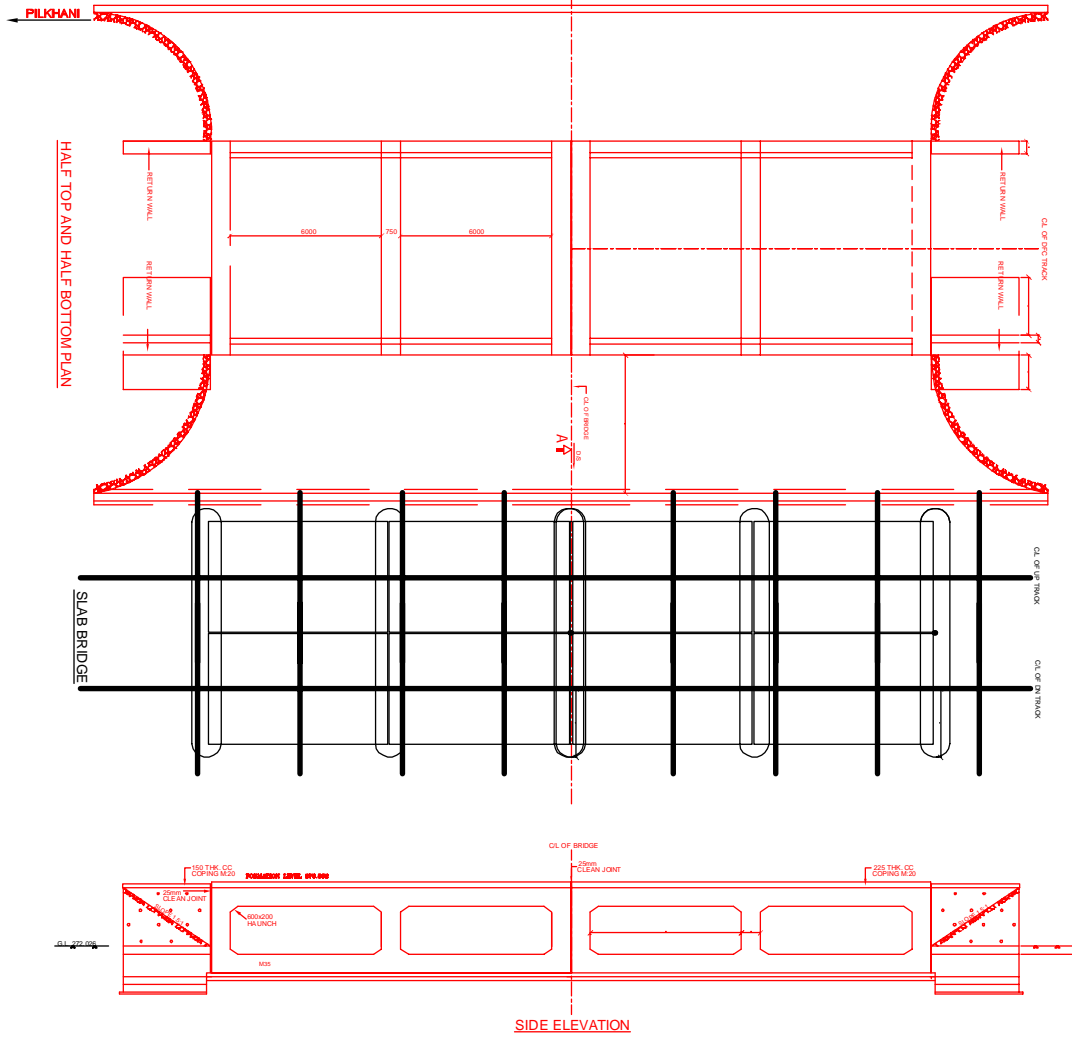
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.															
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA															
AECOM		EASTERN CORRIDOR															
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500															
CONTRACT PACKAGE - 301		STRUCTURE															
PROPOSED MAJOR BR. NO. 52 SPAN (6X6.0m) AT CH. 47040.336		TITLE															
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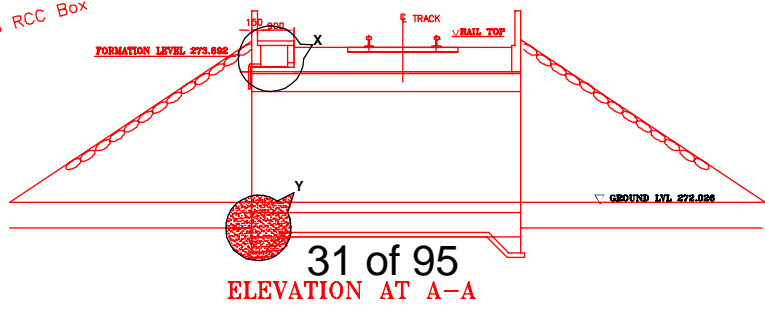
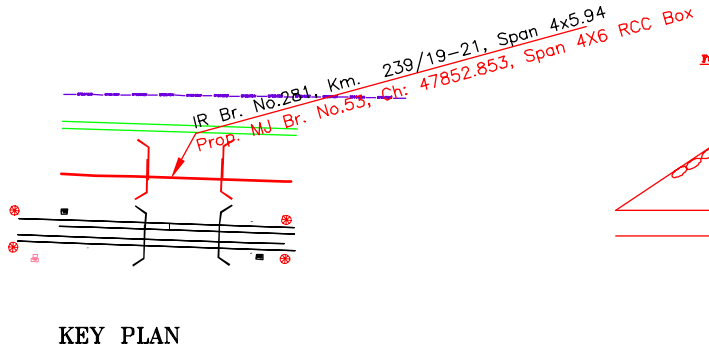


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ELEVATION AT A-A

KEY PLAN

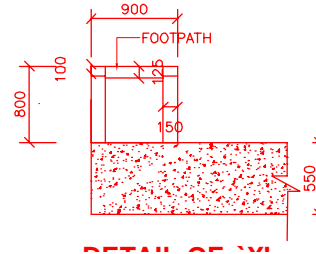
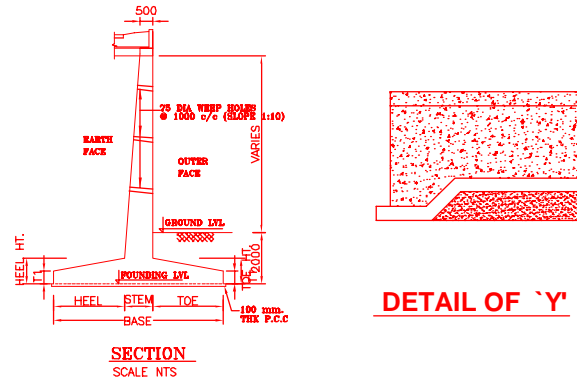
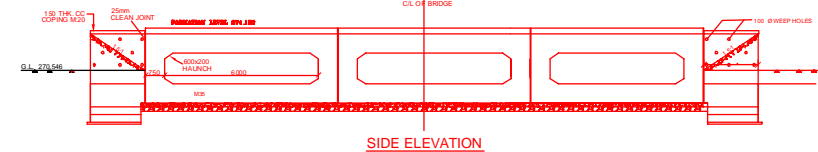
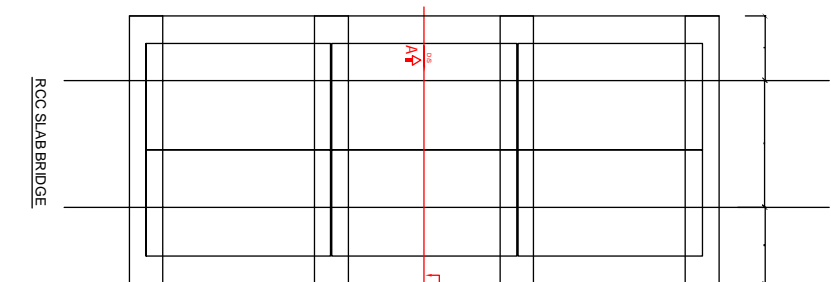
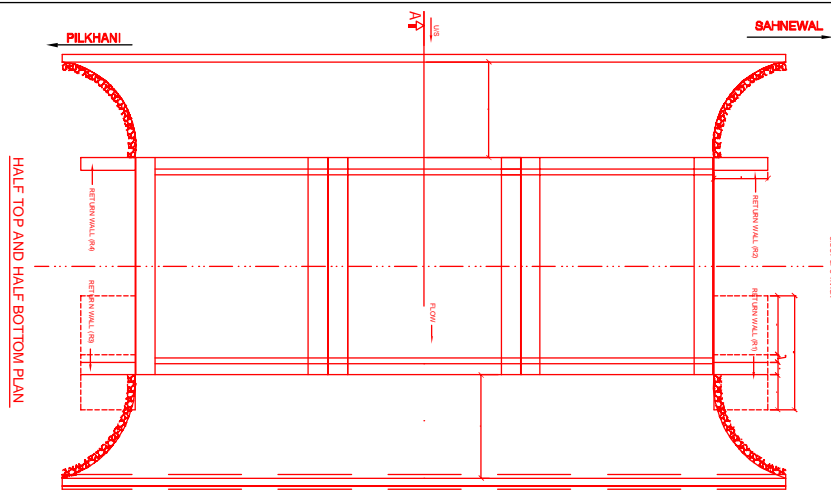


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 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
EASTERN CORRIDOR						
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 53 SPAN (4X6.0m) AT CH. 47852.853				
GENERAL ARRANGEMENT DRAWING						
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NTS	MAY 2015				AECOM/301/MJR/53	R0

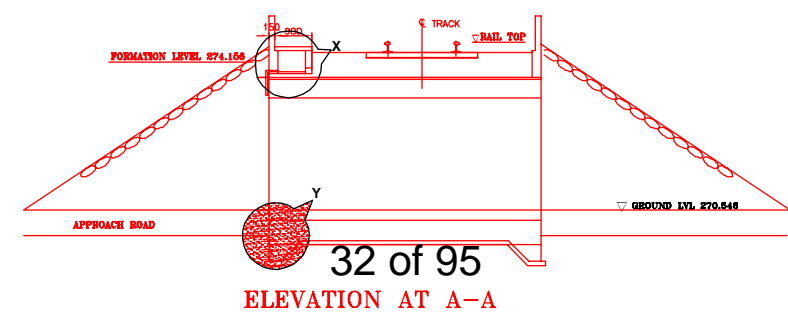
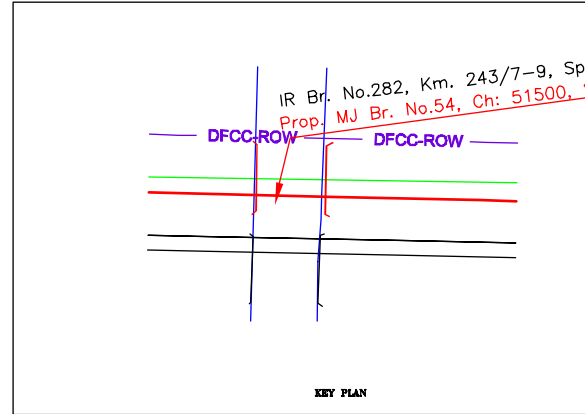


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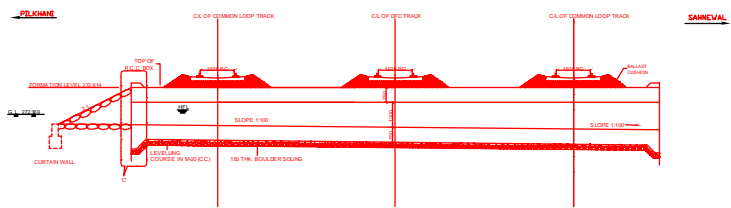
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INDICATIVE DRAWING

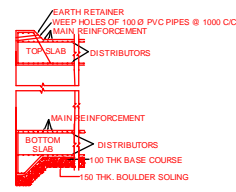
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		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		EASTERN CORRIDOR				
SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 54 SPAN (3X6.0m) AT CH.51500				
TITLE		GENERAL ARRANGEMENT DRAWING				
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NTS	MAY 2015				AECOM/301/MJR/54	R0



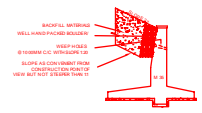
32 of 95
ELEVATION AT A-A



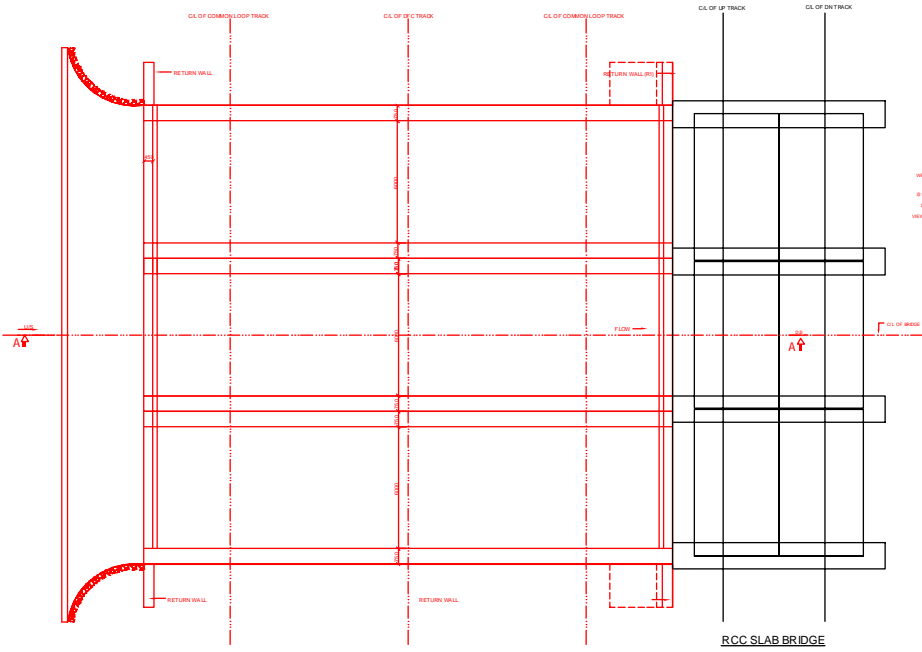
SECTIONAL ELEVATION AT A-A



TYPICAL DETAIL SCALP NOT TO SCALE

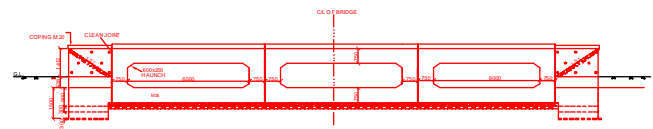


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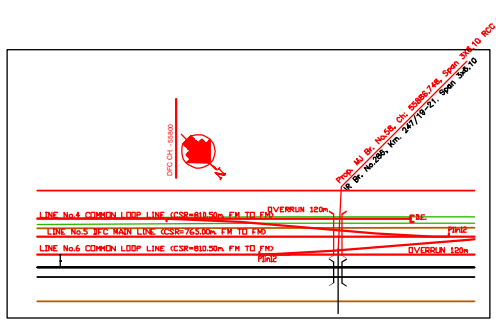


HALF TOP AND HALF BOTTOM PLAN

RCC SLAB BRIDGE



SIDE ELEVATION

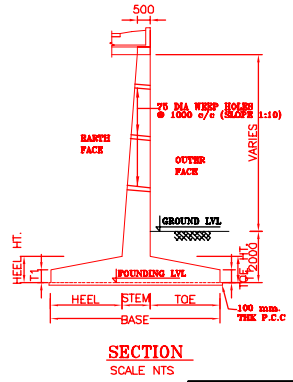
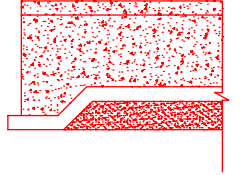
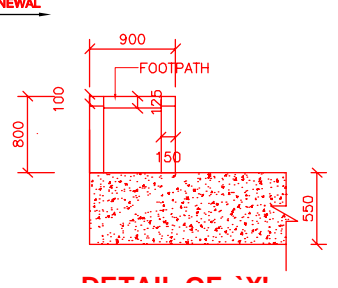
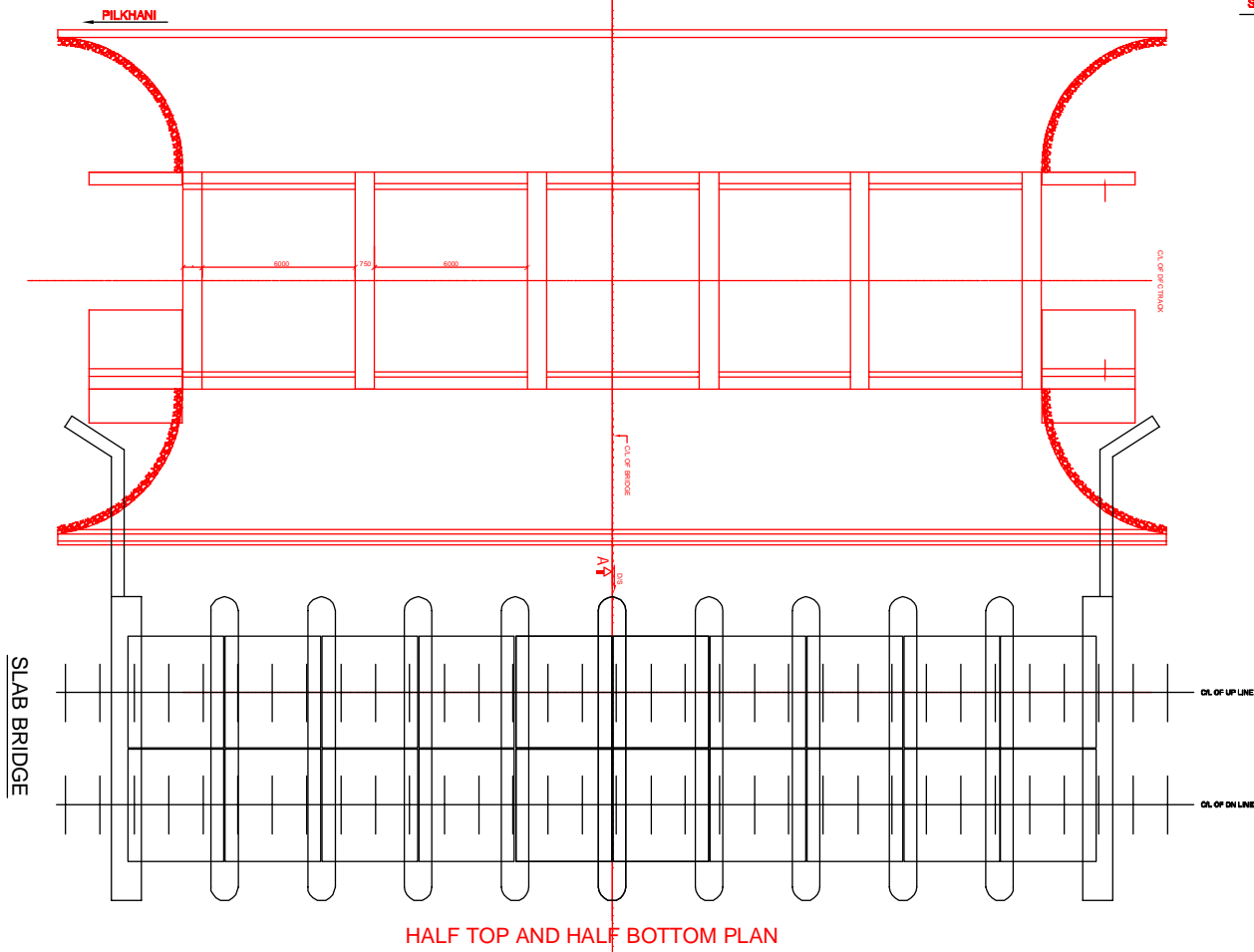


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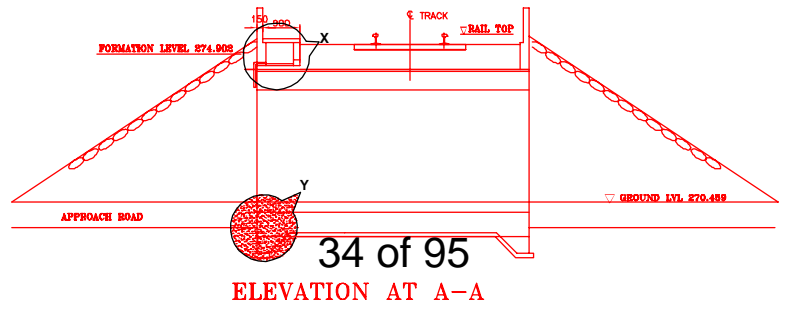
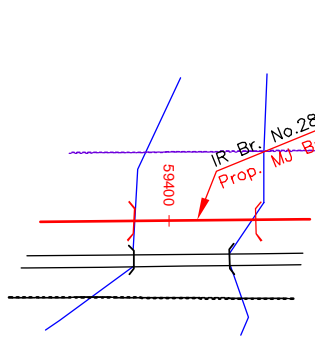
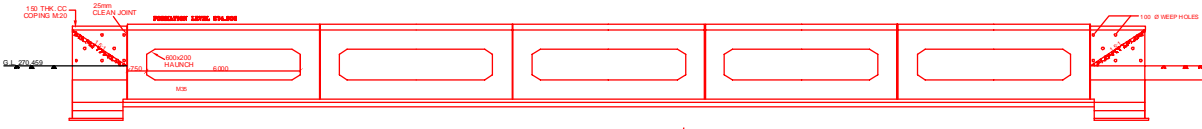
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- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD).
- HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fc-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
- THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EIPC.
- WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT.
- STONE FITTING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS.
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
- DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING

 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
EASTERN CORRIDOR						
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
CONTRACT PACKAGE - 301						
STRUCTURE	PROPOSED MAJOR BR. NO. 58 SPAN (3X6.10m) AT CH. 55888.748					
TITLE GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/58	R0

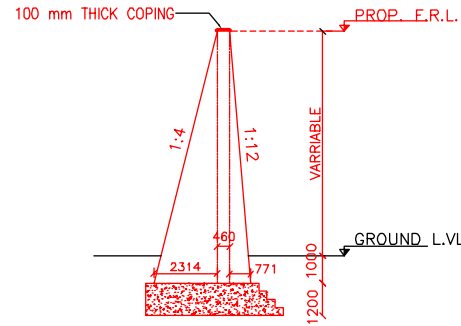
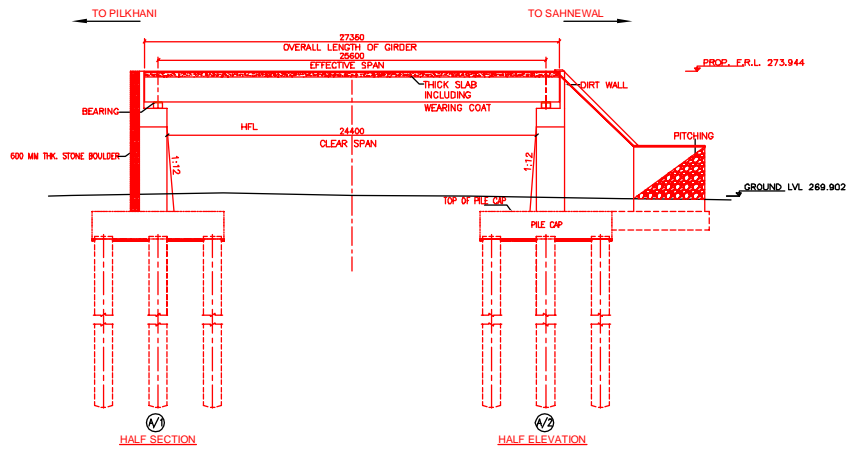


- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES
 - IRS CONCRETE BRIDGE CODE
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE
 - RELEVANT BIS CODES
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
 - HIGH YIELD STRENGTH DEFORMED (HYSD) THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS DIMENSIONS SHALL BE APPROVED BY DFCCIL.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 - WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL ABUTMENT
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) WIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER IF IT IS INEVITABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFC.

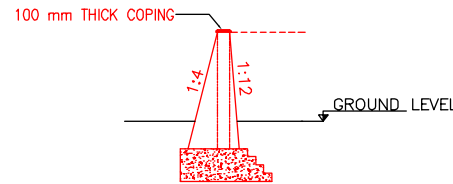
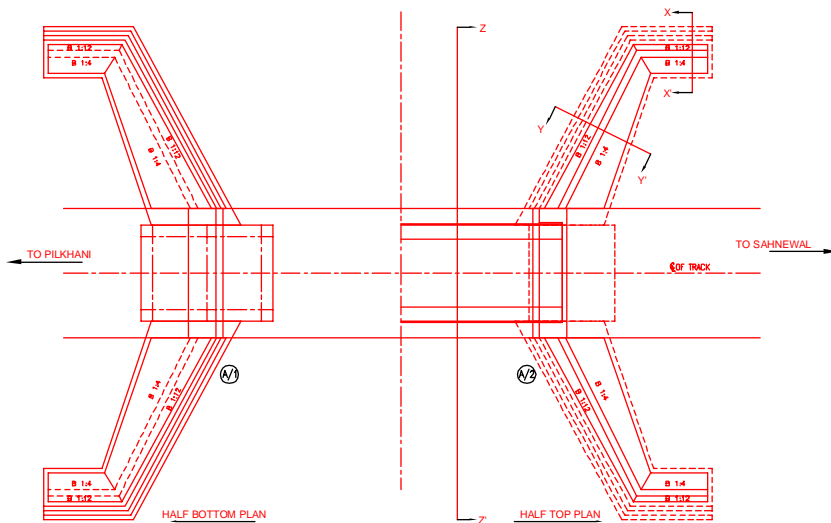


INDICATIVE DRAWING

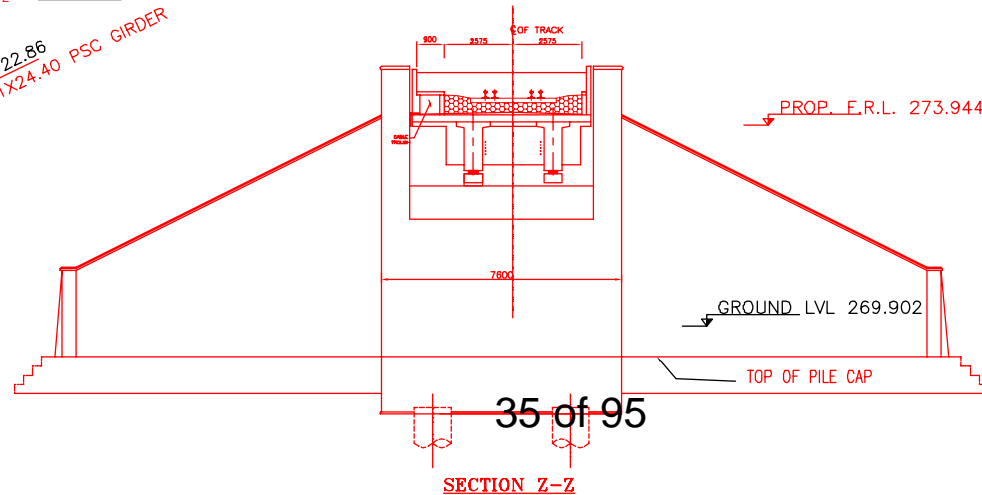
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GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
	EASTERN CORRIDOR					
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
	CONTRACT PACKAGE - 301					
STRUCTURE	PROPOSED MAJOR BR. NO. 60 SPAN (5X6.0m) AT CH. 59410					
TITLE	GENERAL ARRANGEMENT DRAWING					
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/60	R0



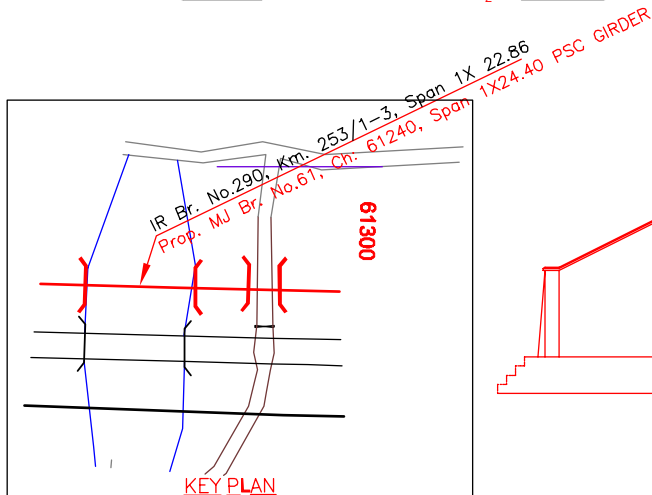
SECTION OF WING WALL AT Y-Y'



SECTION OF RETAINING WALL X-X'



SECTION Z-Z

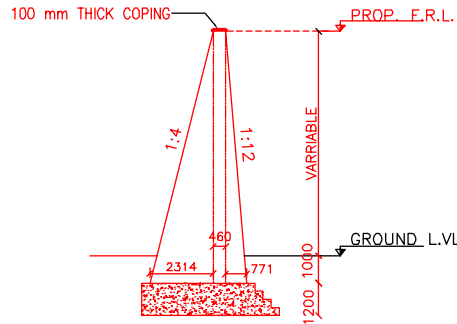
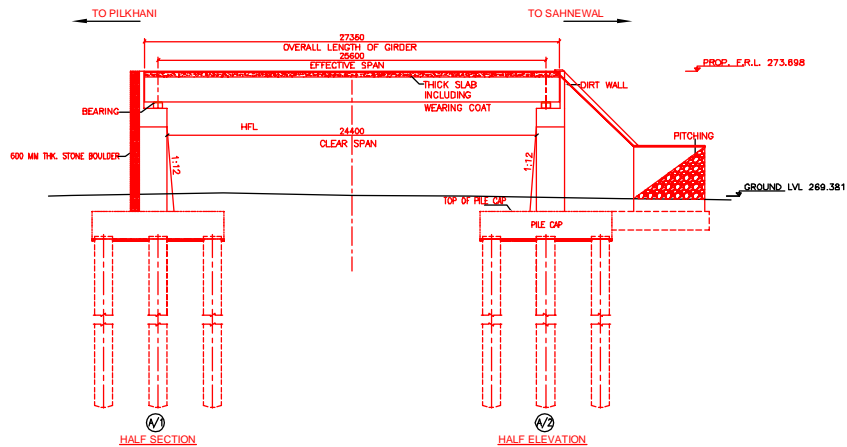


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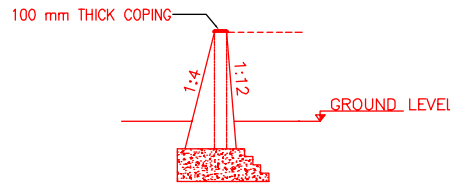
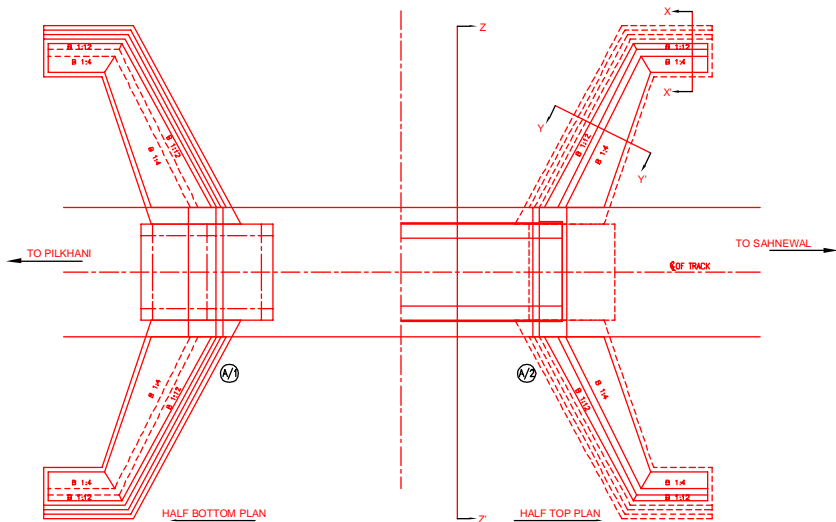
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL
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- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
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INDICATIVE DRAWING

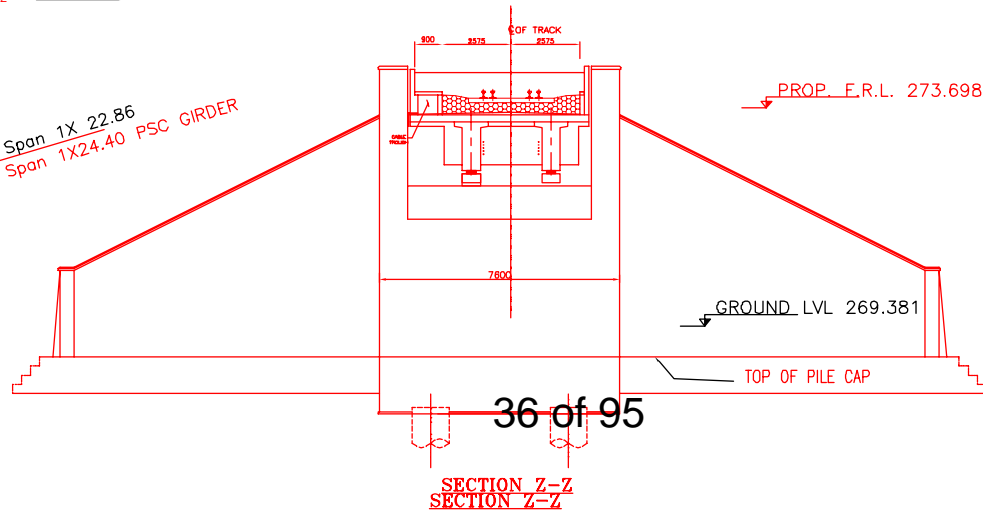
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 61 SPAN (1X24.4m) AT CH. 61240				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/61	R0



SECTION OF WING WALL AT Y-Y'



SECTION OF RETAINING WALL X-X'



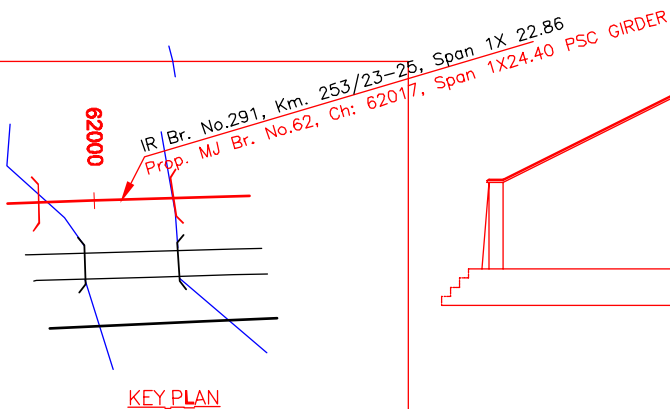
SECTION Z-Z
SECTION Z-Z

NOTES:-

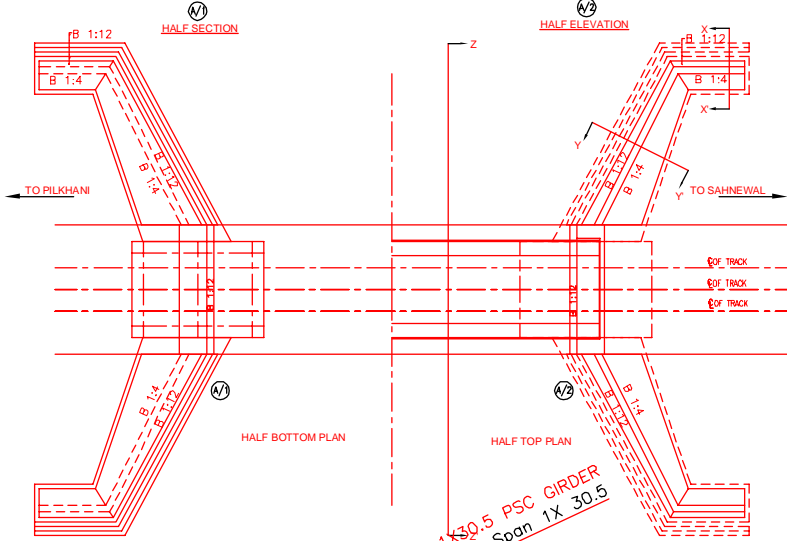
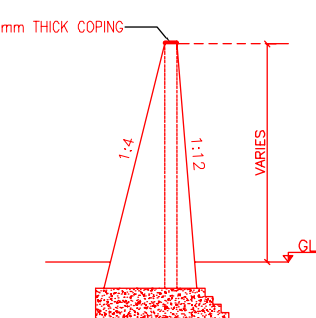
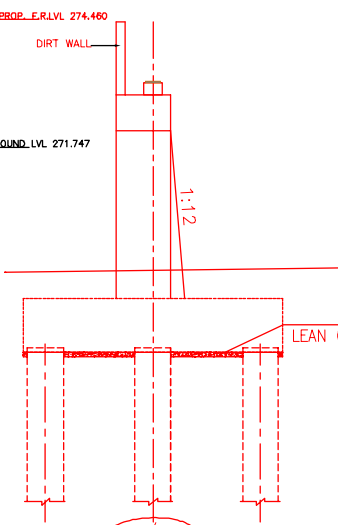
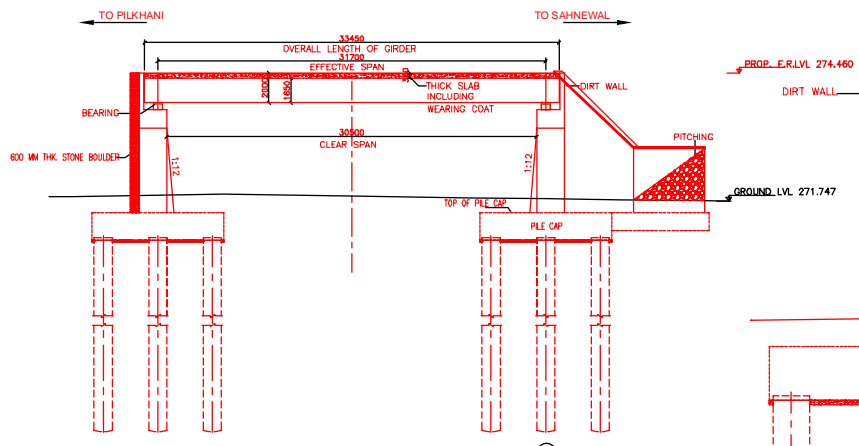
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
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- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
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INDICATIVE DRAWING

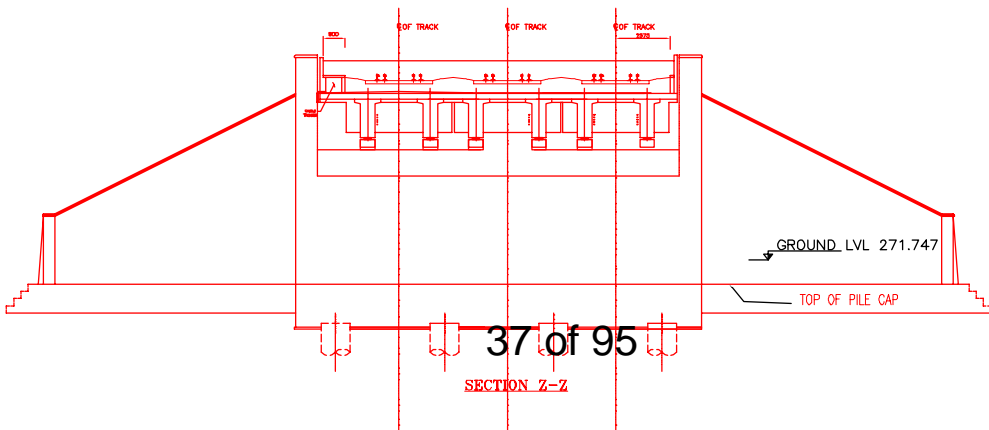
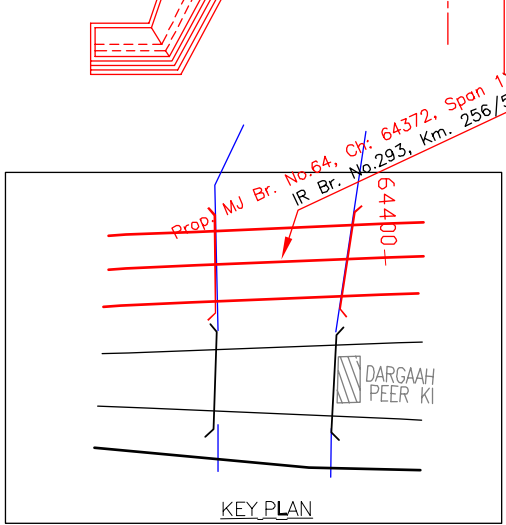
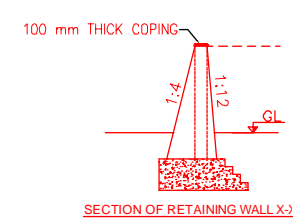
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 62 SPAN (1X24.4m) AT CH. 62017				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/62	R0



KEY PLAN



DETAIL OF ABUTMENT

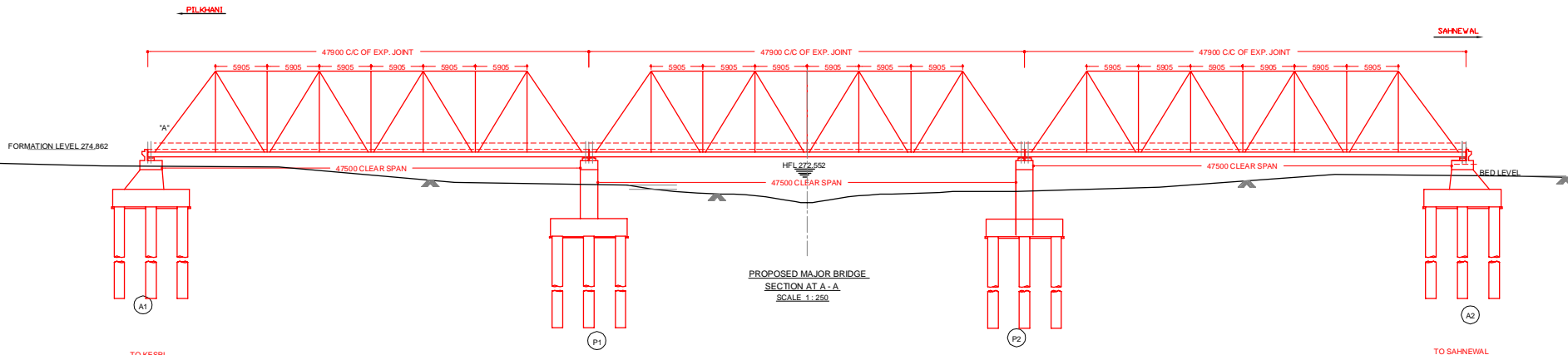


NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. 1200mm DIA PILES OF 20 M LENGTHS HAVE BEEN ASSUMED. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS.
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

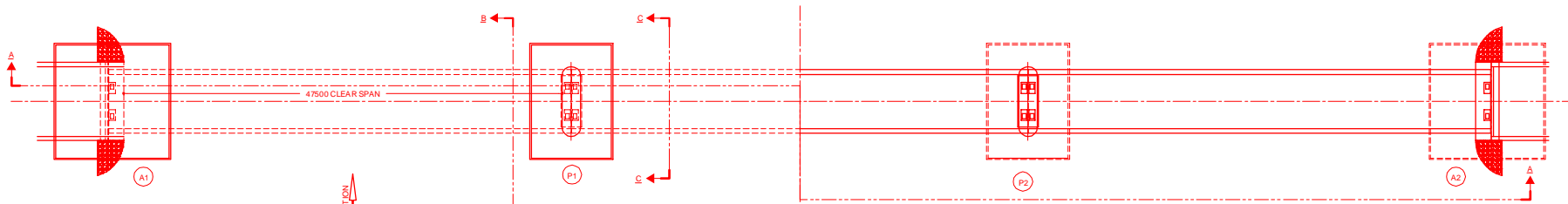
INDICATIVE DRAWING

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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 64 SPAN (1X30.5m) AT CH. 64372				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/64	R0

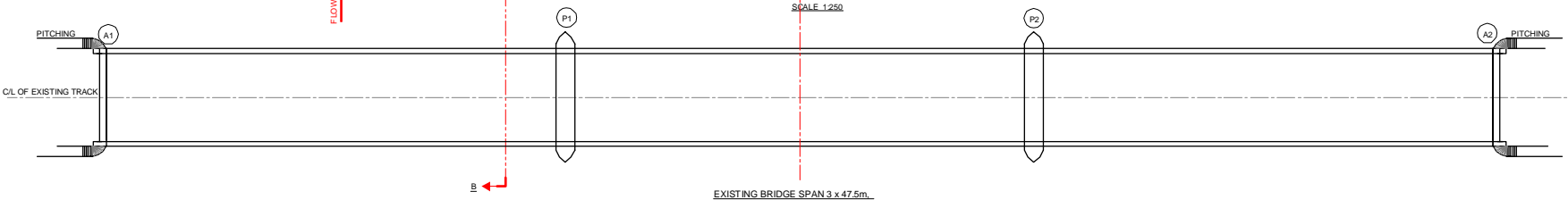


TO KESRI
(DUKHARI CH. 62650)


TO SAHNEWAL
(AMBALA CH. 71480)

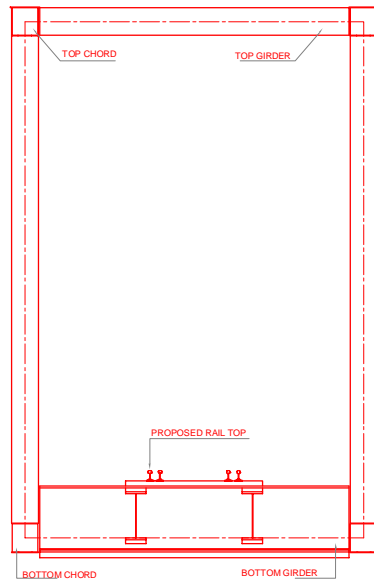


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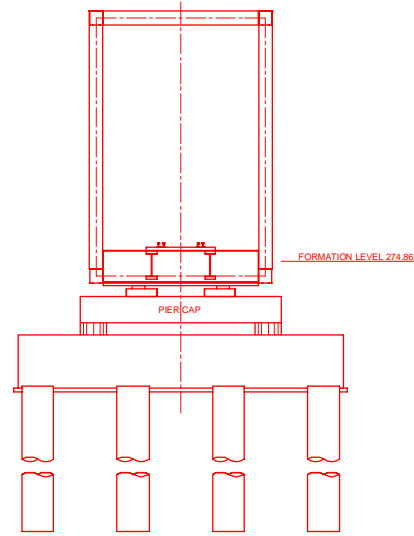


INDICATIVE DRAWING

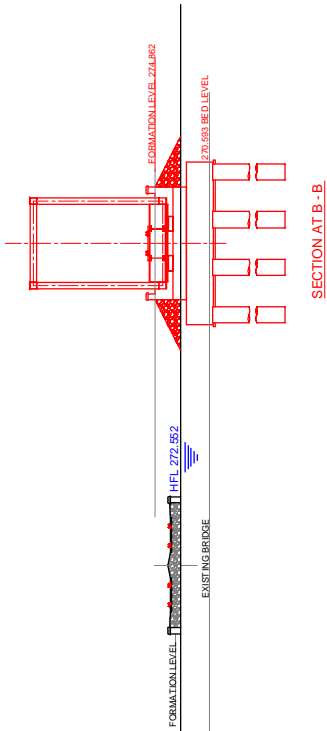
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT AECOM		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		PROPOSED MAJOR BR. NO. 65 SPAN (3x47.5m) AT CH. 65481				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/65 SHEET 1 OF 2	R0



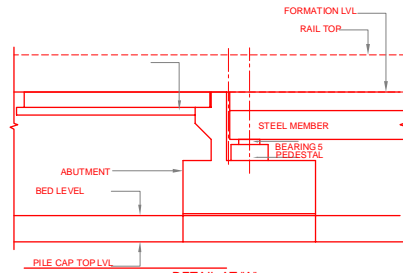
TYPICAL CROSS SECTION



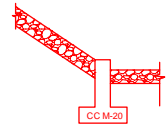
SECTION AT C - C



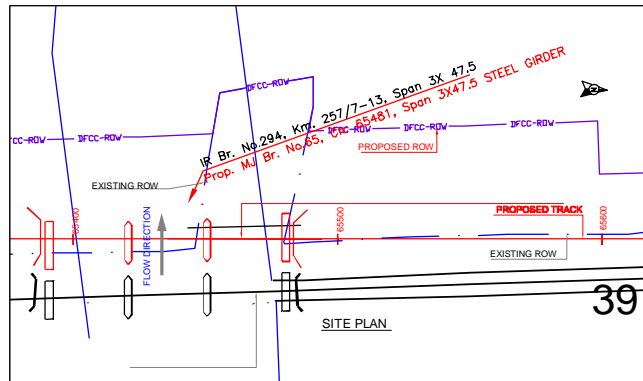
SECTION AT B - B



DETAIL AT 'A'



SECTION OF TOE WALL




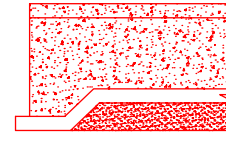
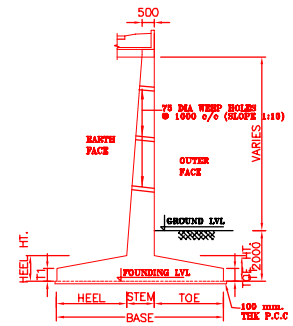
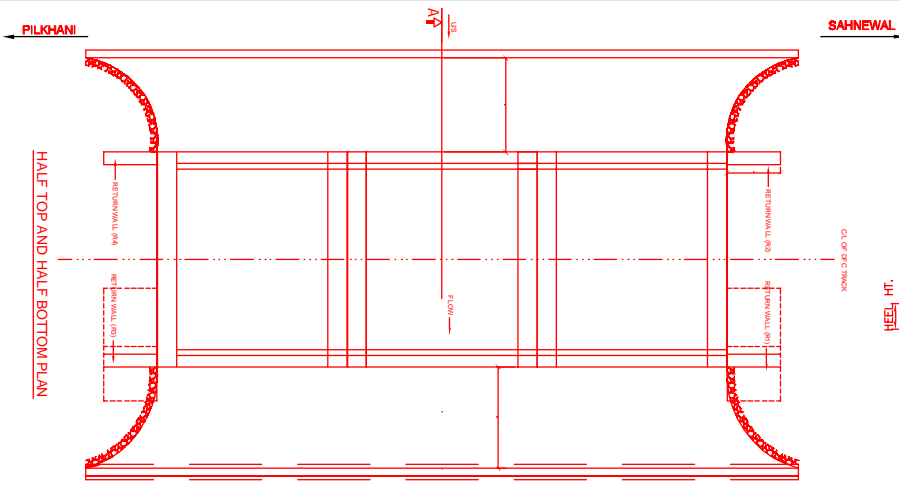
SITE PLAN

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
8. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
9. INSPECTION PLATFORMS AND TROLLEY REFUSE SHALL BE PROVIDED AS PER RAILWAY GUIDE LINES.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
13. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
14. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
15. FLOOD PROTECTION WORKS AND GUIDE BUNDS SHALL BE GOT APPROVED BY ENGINEER
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED OVER CONCRETE DECK
18. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYERS REQUIREMENT.
20. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 CC BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.

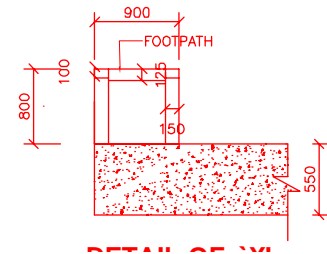
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 65 SPAN (3x47.5m) AT CH. 65481				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/65 SHEET 2 OF 2	RO

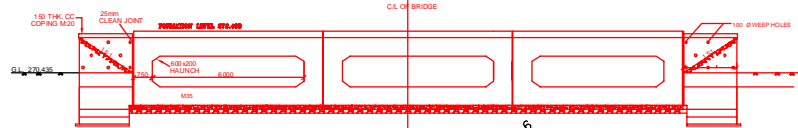
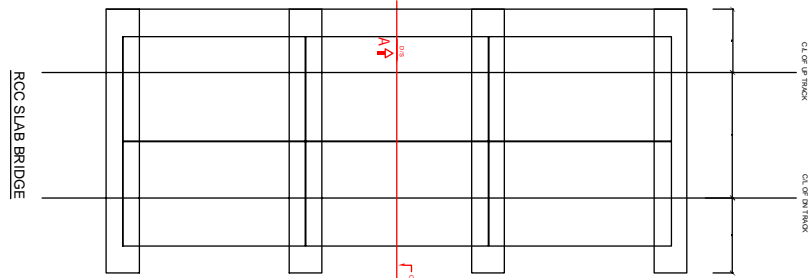


DETAIL OF 'Y'

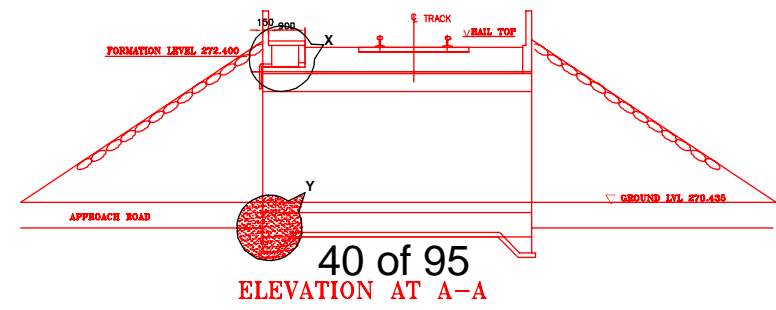
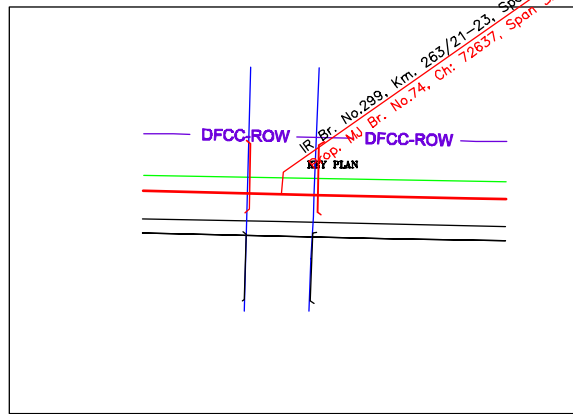
SECTION
SCALE: NTS



DETAIL OF 'X'



SIDE ELEVATION



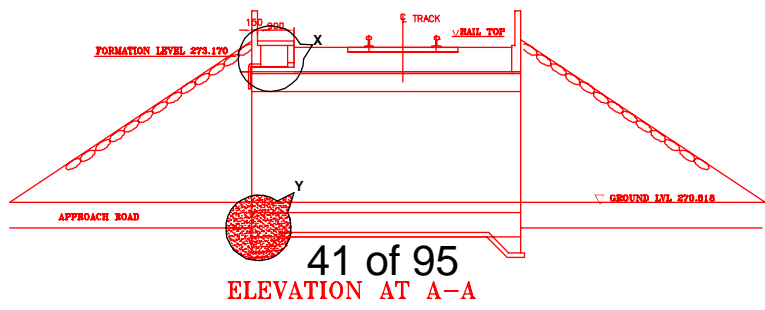
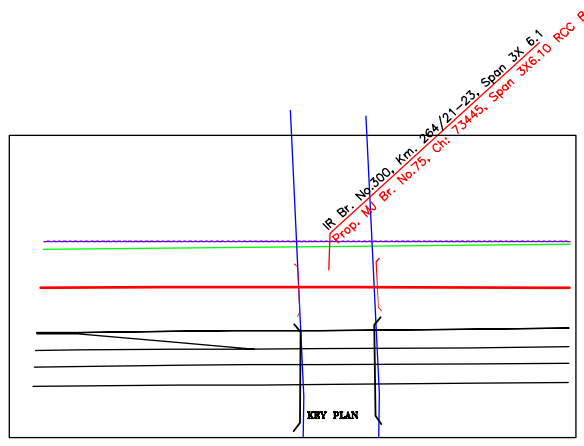
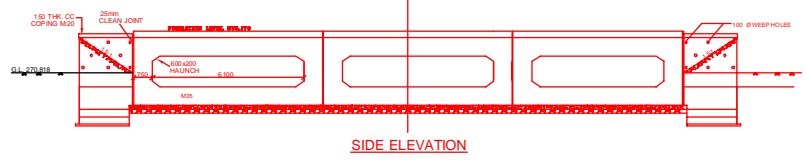
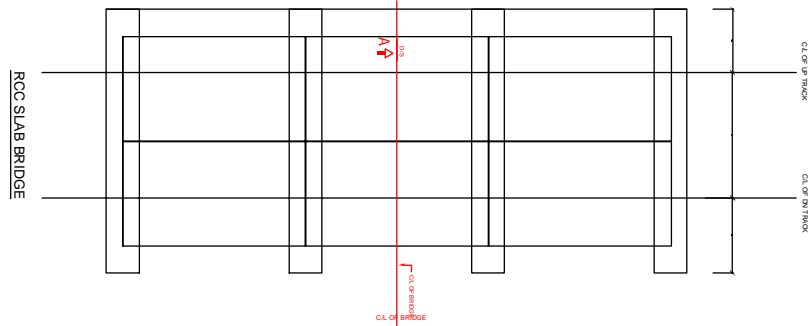
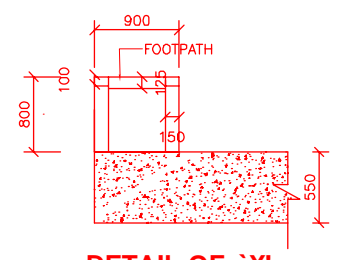
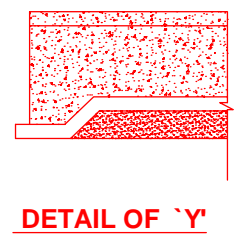
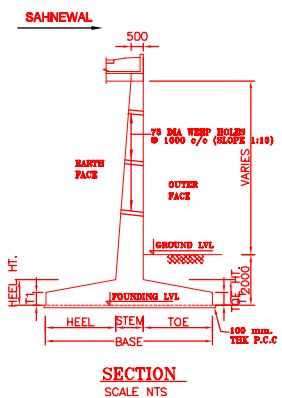
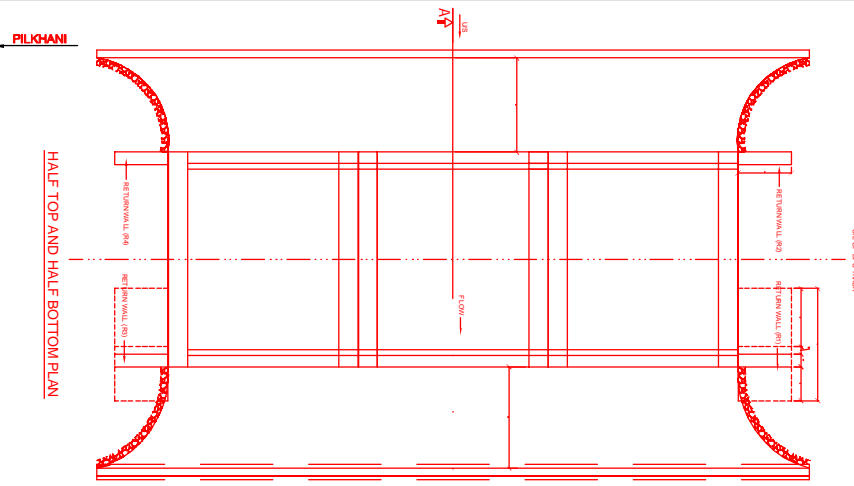
40 of 95
ELEVATION AT A-A

NOTES:-

- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED (HYSD) THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
- TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
- WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/BALAST RETAINER.
- DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
- TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
- THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
- PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
- SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
- SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

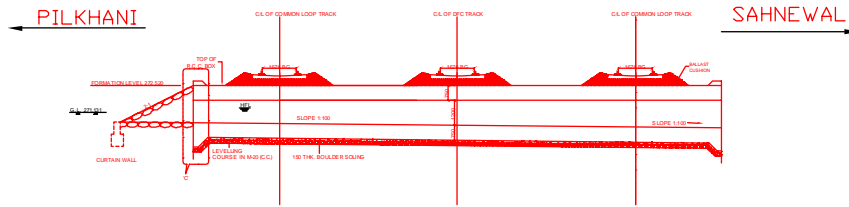
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 74 SPAN (3X6.0m) AT CH. 72637				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/74	R0



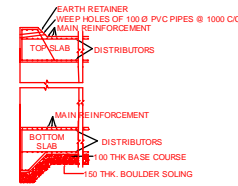
- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
 - HIGH YIELD STRENGTH DEFORMED (HYSD) THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCL.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 - WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/BALAST RETAINER.
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 - SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCCL.

INDICATIVE DRAWING

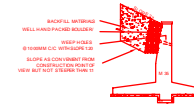
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 75 SPAN (3X6.10m) AT CH. 73445				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/75	R0



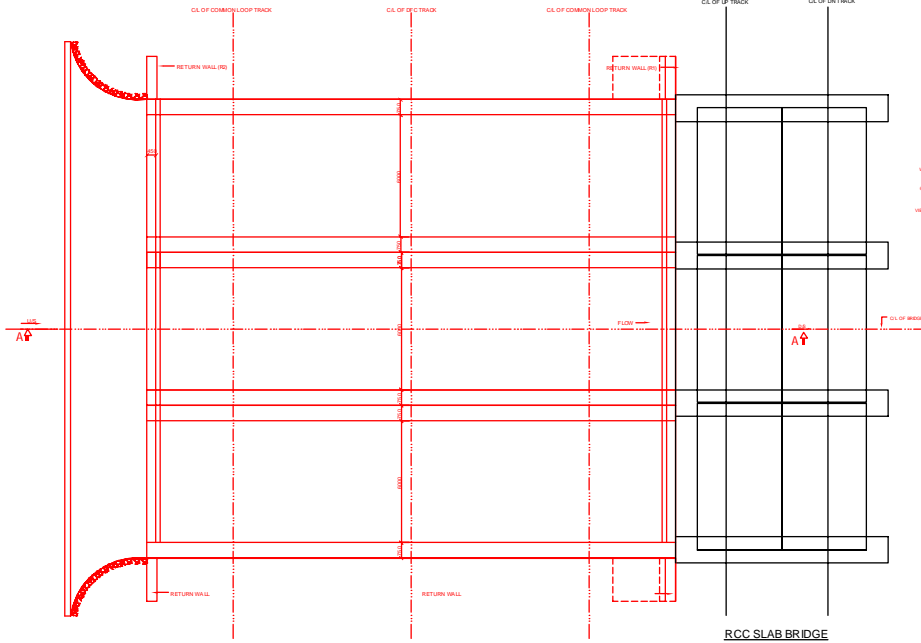
SECTIONAL ELEVATION AT A-A



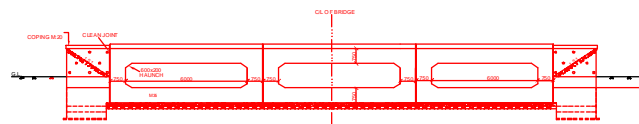
TYPICAL DETAIL SCALP: NOT TO SCALE



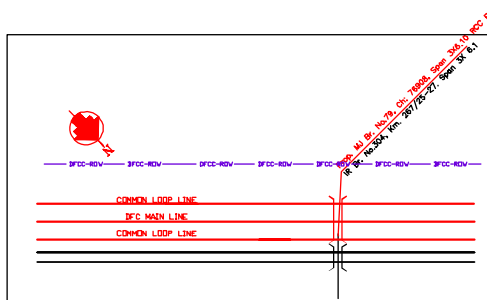
RETURN WALL



HALF TOP AND HALF BOTTOM PLAN



SIDE ELEVATION



NOTES:-

- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD).
- HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fc-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
- THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EIPC.
- WEEL HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT.
- STONE FITTING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS.
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
- DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING



DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

GENERAL CONSULTANT **AECOM Asia Co. Ltd.**
AECOM 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY
 DLF PHASE II GURGAON 122002, INDIA

PROJECT **EASTERN CORRIDOR**
 SAHNEWAL TO PILKHANI
 From Km 360.200 to Km 187.500

CONTRACT PACKAGE - 301

STRUCTURE **PROPOSED MAJOR BR. NO. 79**
SPAN (3x6.10m) AT CH. 76908

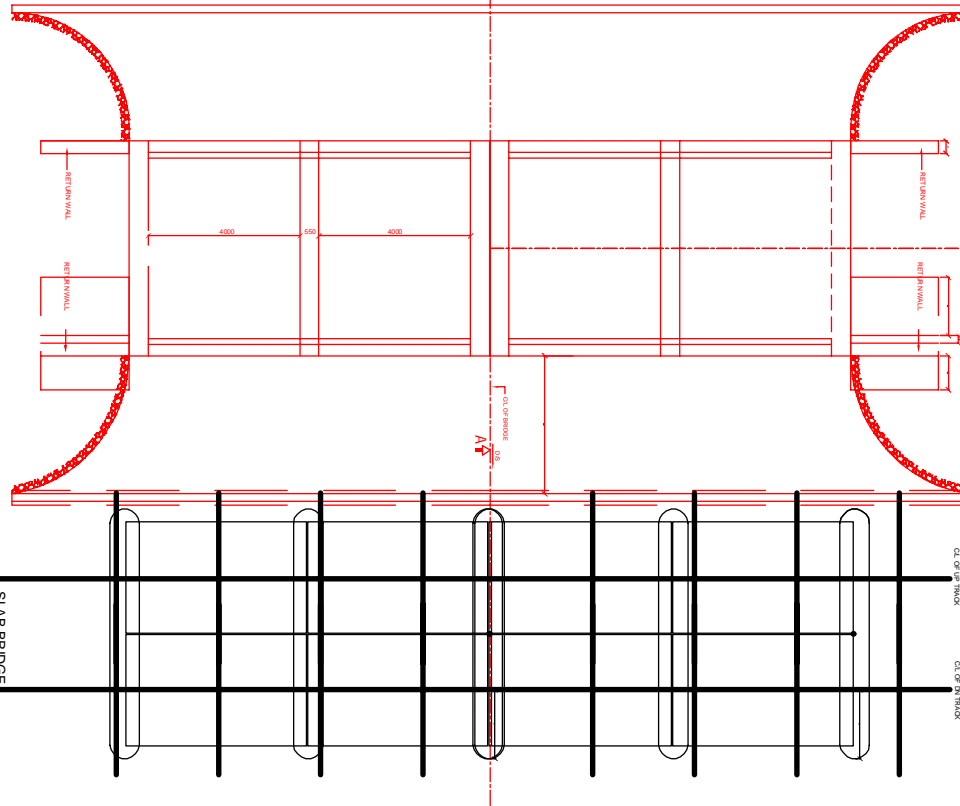
TITLE **GENERAL ARRANGEMENT DRAWING**

SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/79	R0

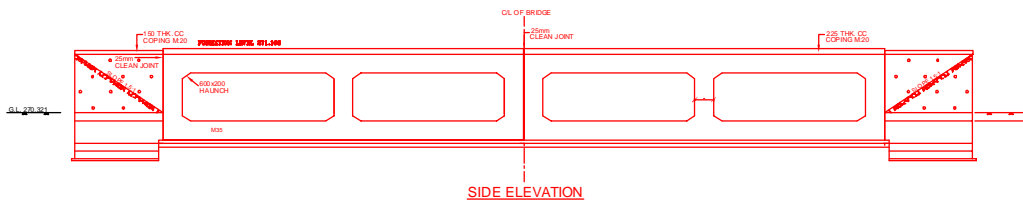
PILKHANI

SAHNEWAL

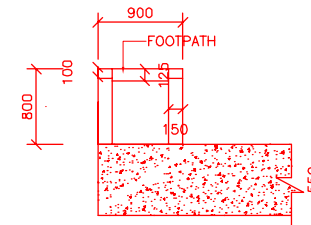
HALF TOP AND HALF BOTTOM PLAN



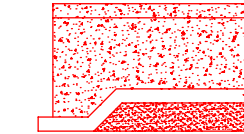
SECTIONAL ELEVATION AT A-A



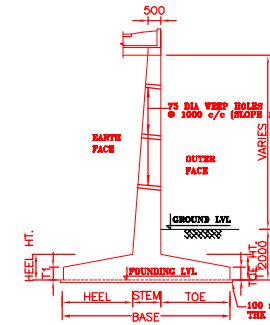
SIDE ELEVATION



DETAIL OF 'X'



DETAIL OF 'Y'



SECTION SCALE NTS

- NOTES:-
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 2. DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 3. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
i) IRS BRIDGE RULES.
ii) IRS CONCRETE BRIDGE CODE.
iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
iv) RELEVANT BIS CODES.
b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TM) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
7. DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 8. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS DIMENSIONS SHALL BE APPROVED BY DFCCL.
 9. TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 10. WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL ABUTMENT
 11. WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 12. DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.1 OF IRS CONCRETE BRIDGE CODE.
 13. TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 14. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS NECESSARY THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 15. THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 16. THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 17. PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 18. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 19. SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 20. BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
 21. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 22. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFC.

INDICATIVE DRAWING



DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

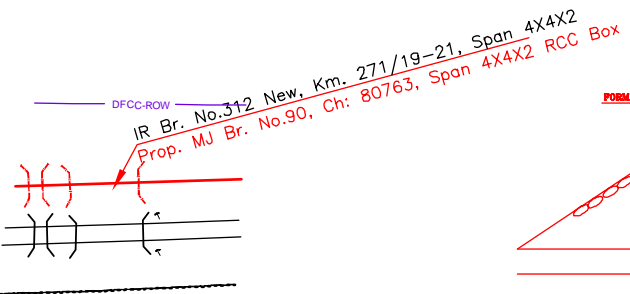
GENERAL CONSULTANT **AECOM Asia Co. Ltd.**
AECOM
 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY
 DLF PHASE II GURGAON 122002, INDIA

PROJECT **EASTERN CORRIDOR**
 SAHNEWAL TO PILKHANI
 From Km 360.200 to Km 187.500

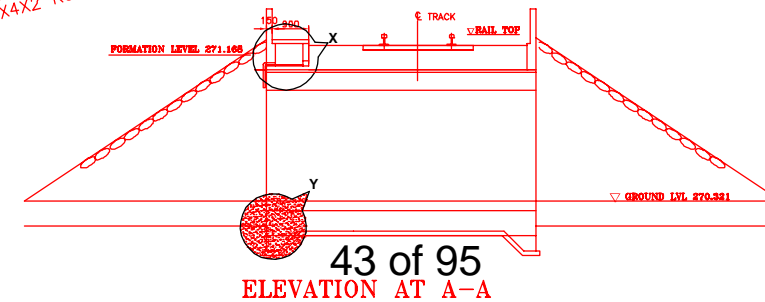
STRUCTURE **CONTRACT PACKAGE - 301**
PROPOSED MAJOR BR. NO. 90
SPAN (4X4X2m) AT CH. 80763

TITLE **GENERAL ARRANGEMENT DRAWING**

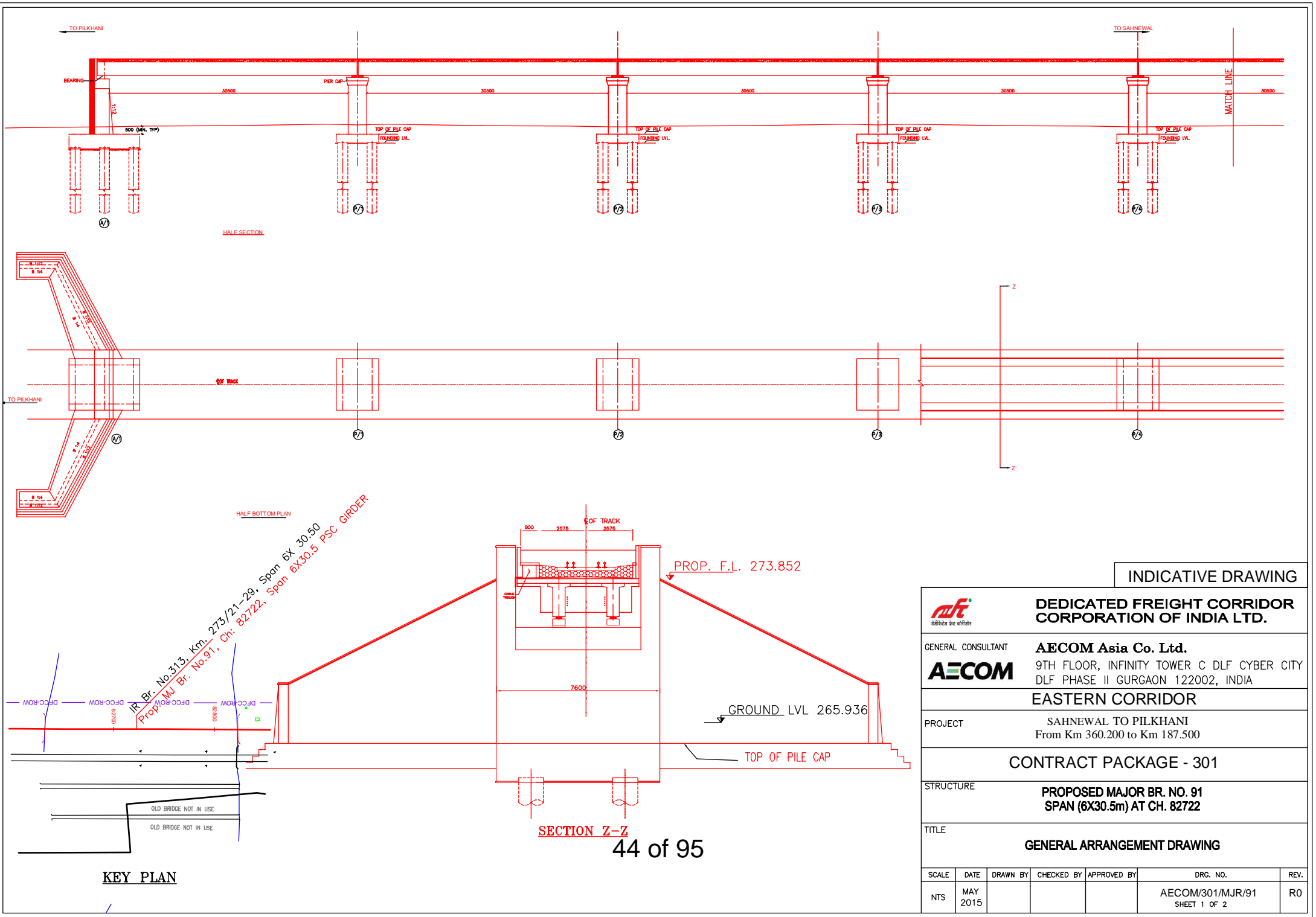
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/90	R0



KEY PLAN



43 of 95 ELEVATION AT A-A



HALF SECTION

HALF BOTTOM PLAN

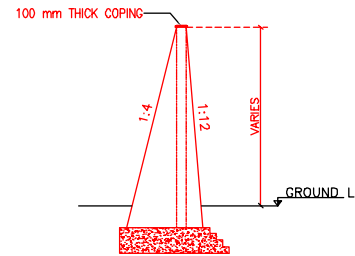
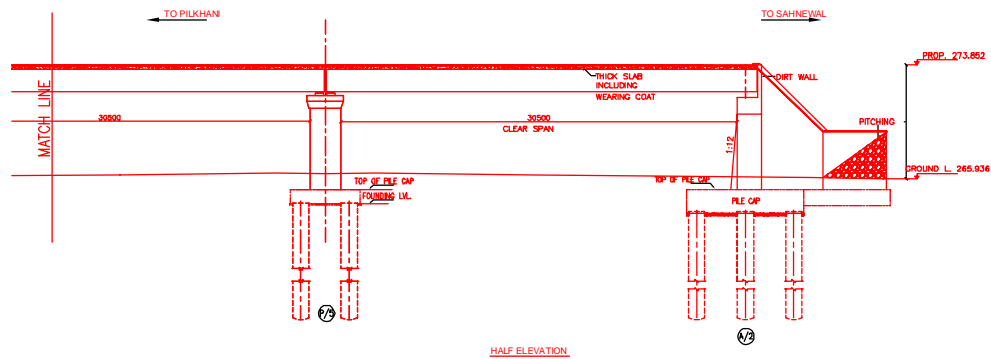
SECTION Z-Z

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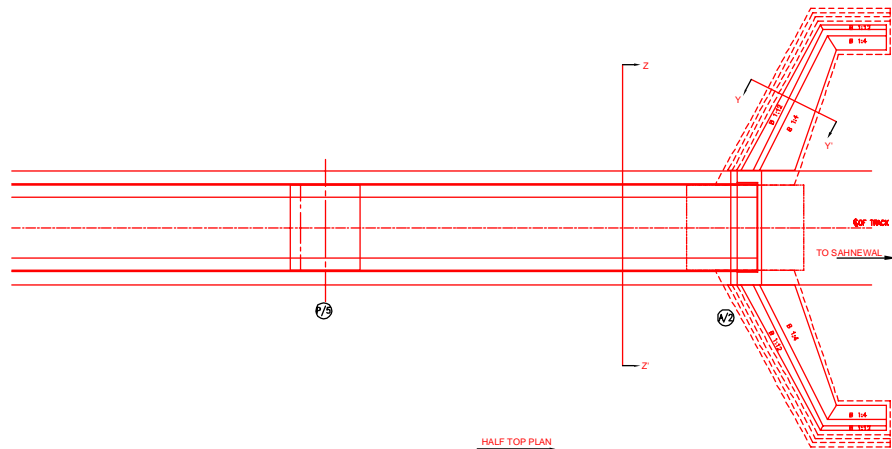
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 91 SPAN (6X30.5m) AT CH. 82722				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/91 SHEET 1 OF 2	R0

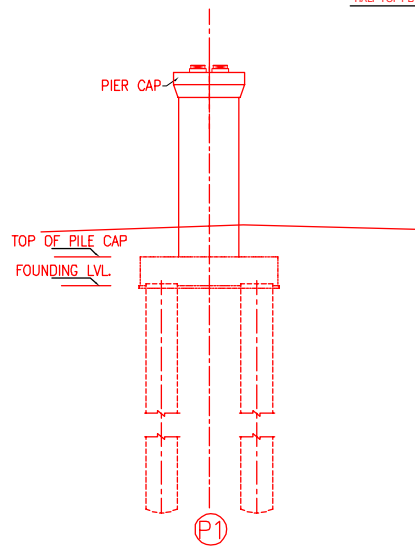
KEY PLAN



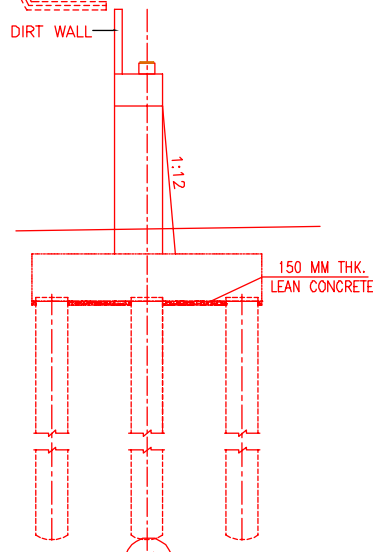
SECTION OF WING WALL AT Y-Y



HALF TOP PLAN



DETAIL OF PIER



DETAIL OF ABUTMENT

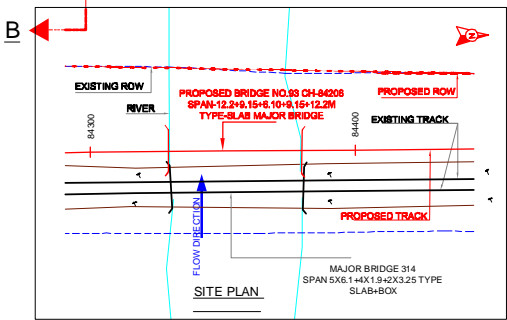
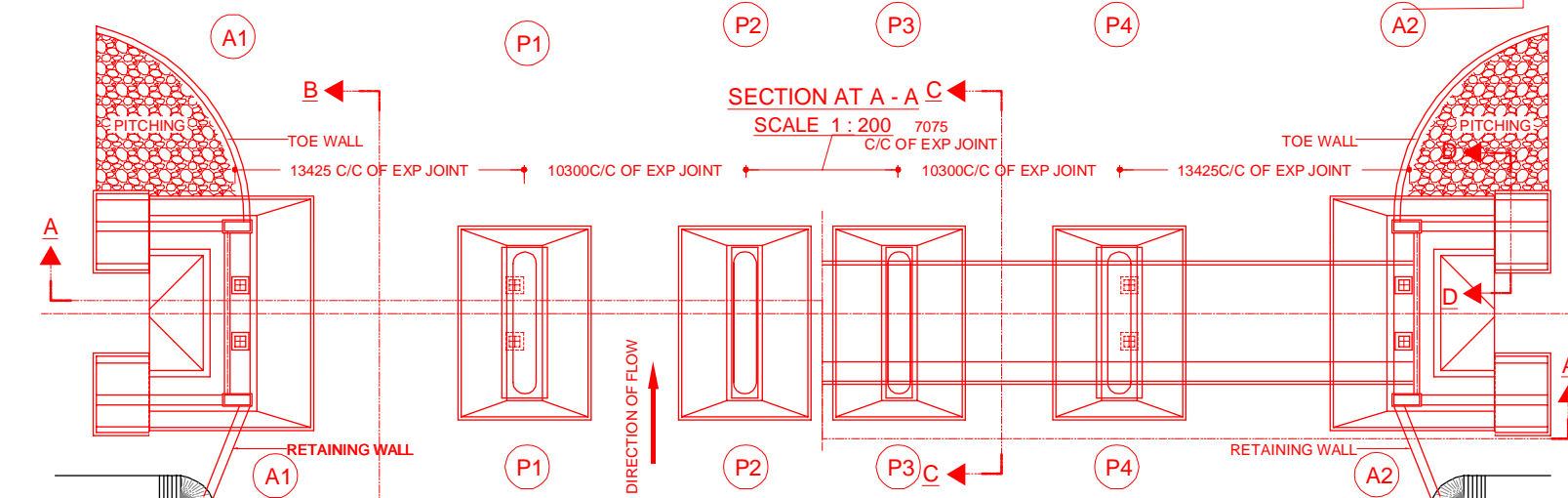
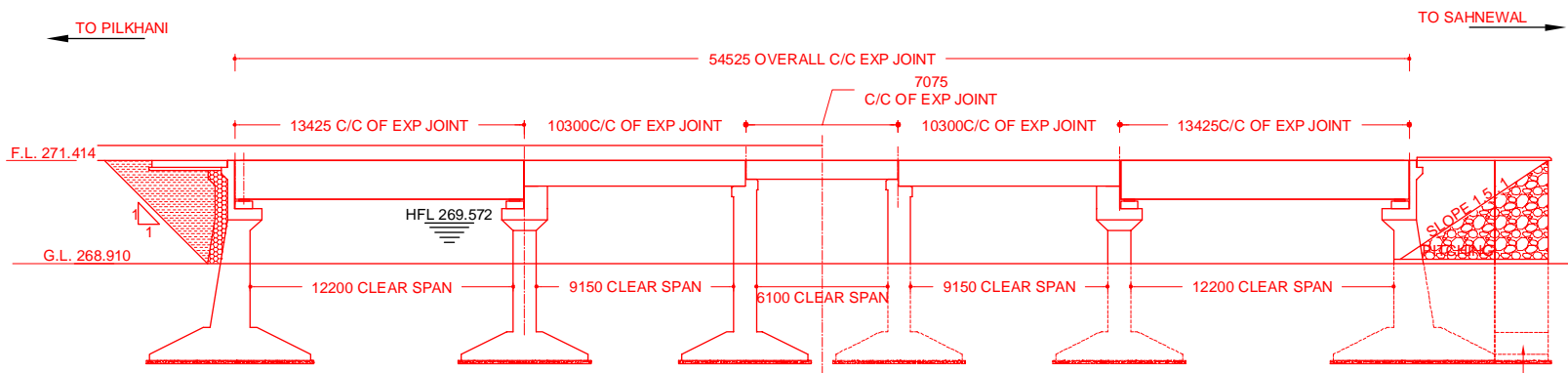
45 of 95

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING

 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
EASTERN CORRIDOR						
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 91 SPAN (6X30.5m) AT CH. 82722				
GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/91 SHEET 2 OF 2	RO

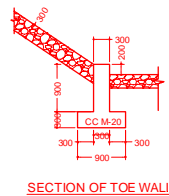
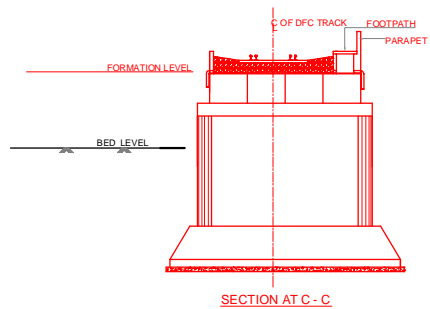
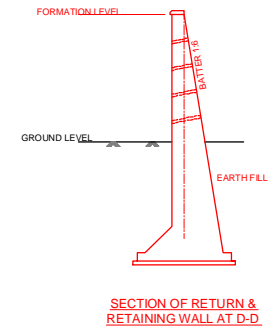
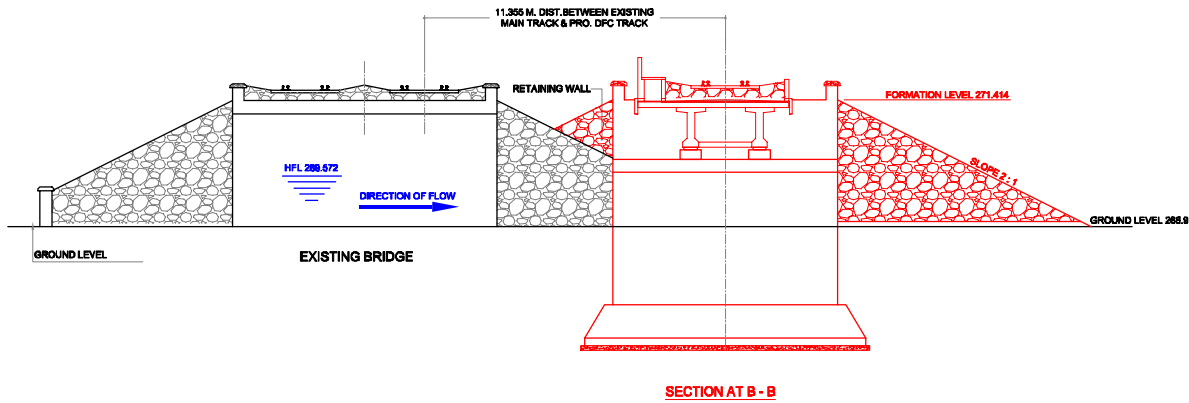


HALF BOTTOM PLAN _ HALF TOP PLAN

- NOTES:-
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS/SLIP) IN ORDER OF PREFERENCE:
 b) IRS CONCRETE BRIDGE CODE.
 c) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 d) RELEVANT IRC CODES OF PSC.
 e) RELEVANT BIS CODES.
 3. LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD).
 4. HIGH YIELD STRENGTH DEFORMED TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1983 SHALL BE USED AS REINFORCEMENT.
 5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 8. TRACK ON BRIDGE SHOULD BE WITH GUARDRAILS.
 9. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20mm DISTANCE AND OTHER LAYER BEING AT 100mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
 10. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
 11. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
 12. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
 13. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 14. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR FEDIC.
 15. WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 100mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL ABUTMENT.
 16. STONE PITCHING SHALL BE 300mm OVER 150mm FILTER MATERIAL IN PROTECTION WORKS.
 17. WORK SCHEME SHALL BE SUCH THAT ADJACENT R/ TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 18. CC WEARING COURSE OF MINIMUM M-35 GRADE AND MINIMUM THICKNESS OF 40mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
 19. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
 20. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

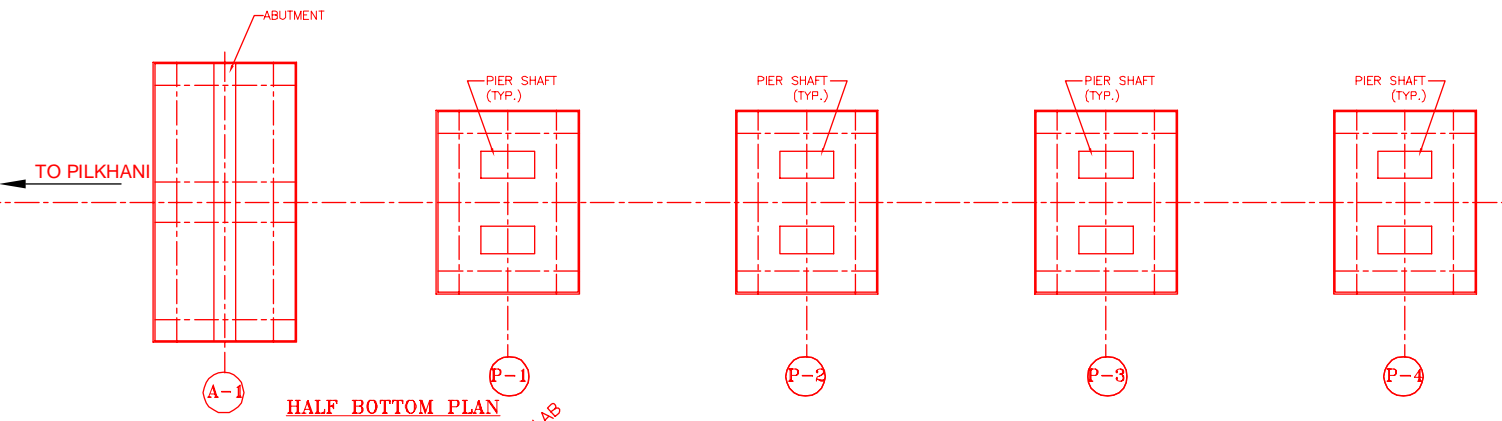
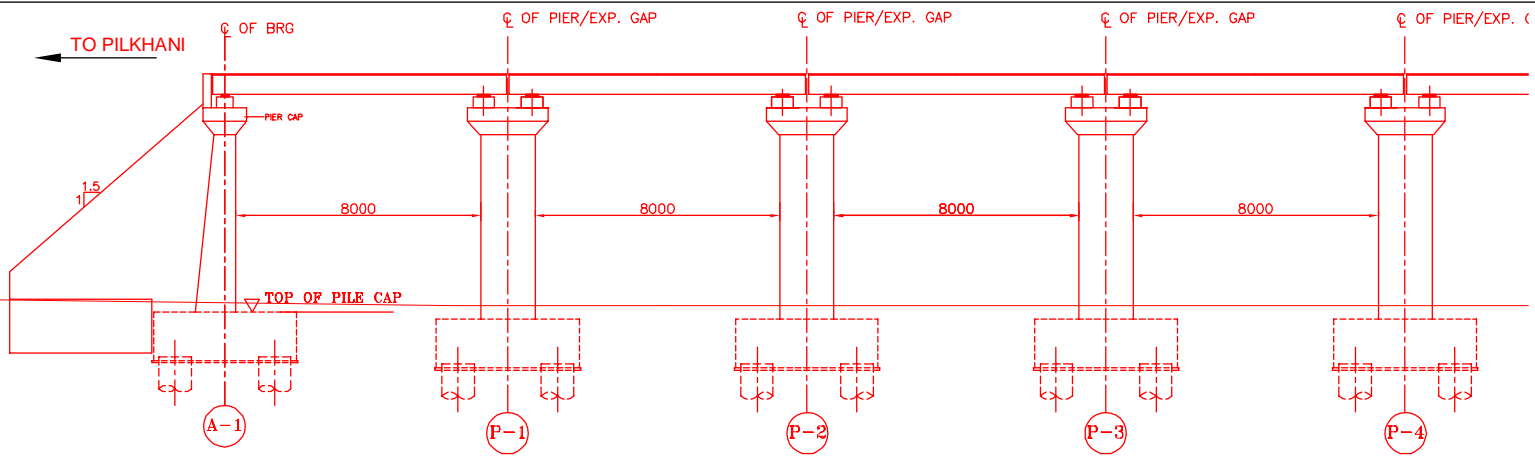
PROPOSED BRIDGE
EXISTING BRIDGE

INDICATIVE DRAWING					
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.					
GENERAL CONSULTANT		AECOM Asia Co. Ltd.			
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA			
		EASTERN CORRIDOR			
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500			
		CONTRACT PACKAGE - 301			
STRUCTURE		PROPOSED MAJOR BR. NO. 92 SPAN (1X12.2+1X9.15+1X8.10+1X9.15+1X12.2) AT CH. 84208			
TITLE		GENERAL ARRANGEMENT DRAWING			
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.
NTS	MAY 2015				AECOM/301/MJR/92 SHEET 1 OF 2
					REV.
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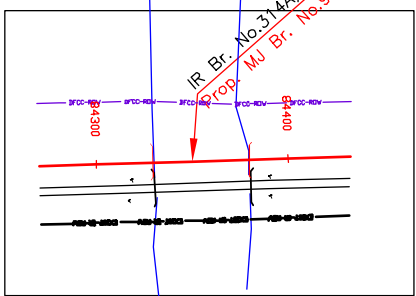
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		EASTERN CORRIDOR SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 92 SPAN (1X12.2+1X9.15+1X9.10+1X9.15+1X12.2) AT CH. 84208				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/92 SHEET 2 OF 2	R1

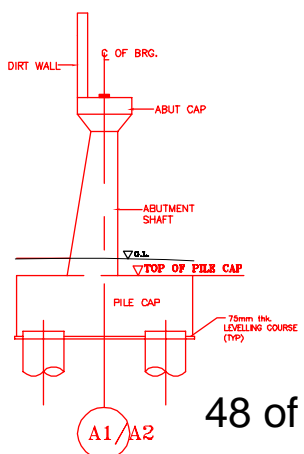


HALF BOTTOM PLAN

IR Br. No. 314A, Km. 275/1-7, Span 8(8x2)
 Prop. MJ Br. No. 93, Ch. 84355, Span 8x8 PSC SLAB

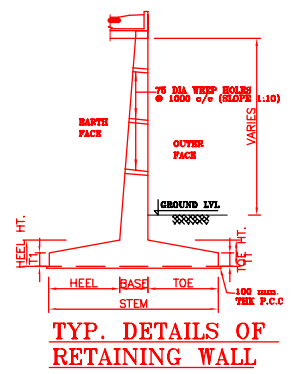


KEY PLAN





DETAIL OF ABUTMENT

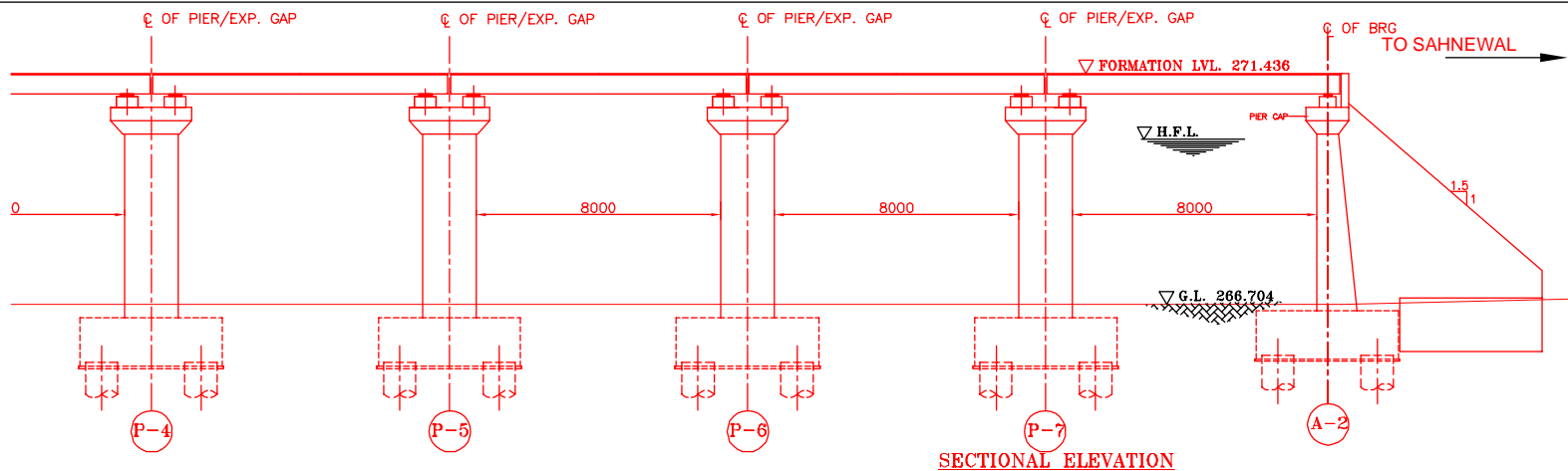
48 of 95



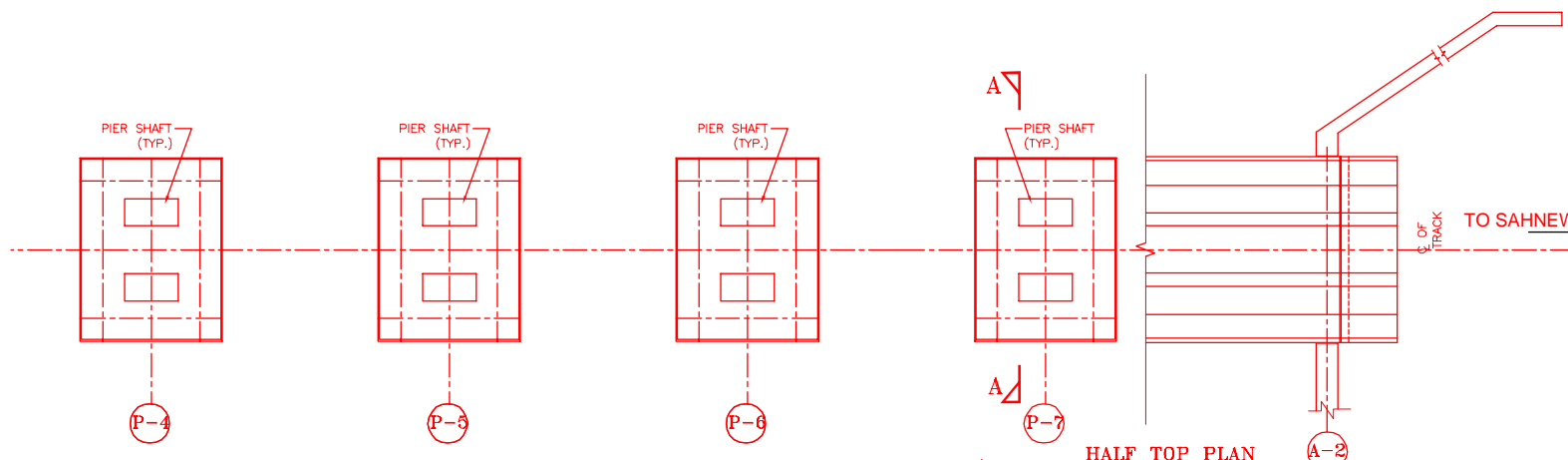
TYP. DETAILS OF RETAINING WALL

INDICATIVE DRAWING

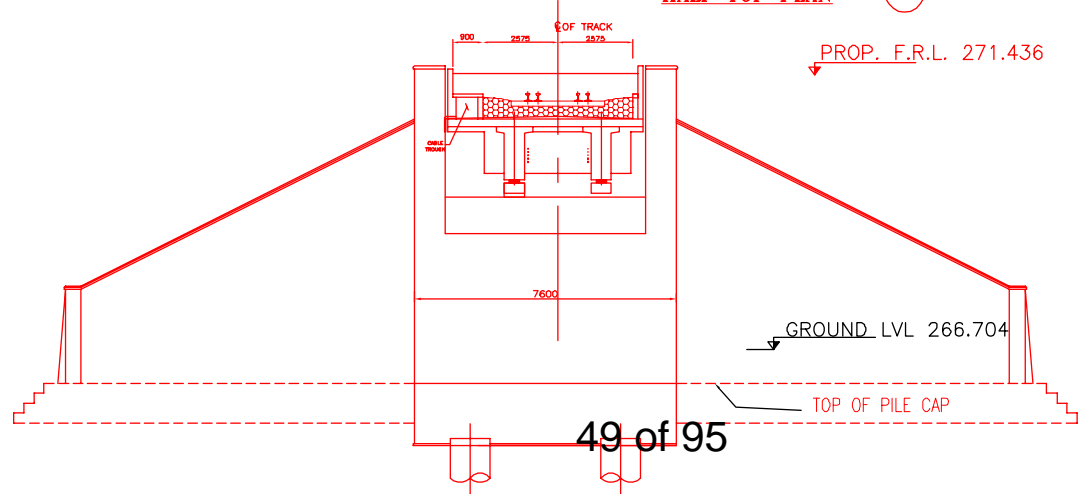
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		PROPOSED MAJOR BR. NO. 93 SPAN (8X8.0m) AT CH. 84355				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/93	R0
					SHEET 1 OF 2	



SECTIONAL ELEVATION



HALF TOP PLAN





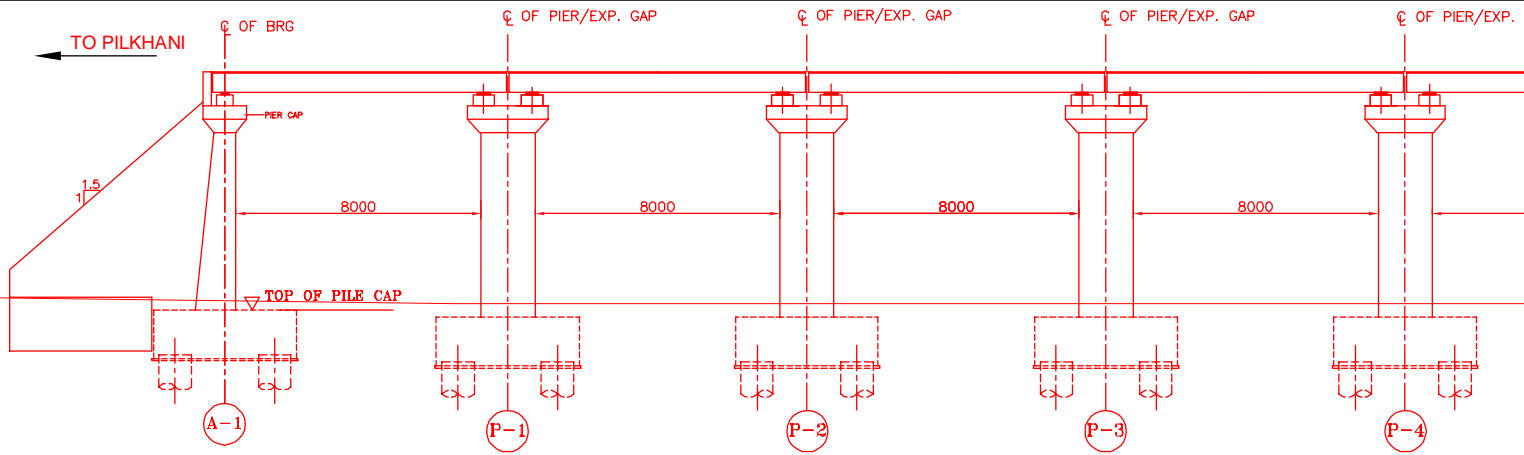
SECTION A-A

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
8. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
9. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL
10. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
11. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
12. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
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14. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
15. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
16. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
17. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
18. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
19. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
20. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

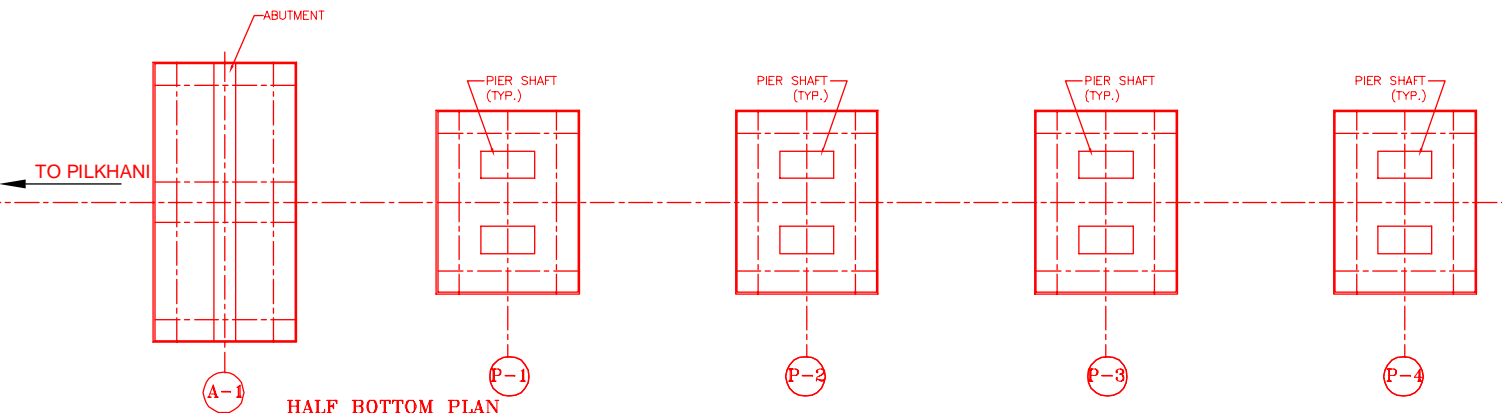
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 93 SPAN (8X8.0m) AT CH. 84355				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/93 SHEET 2 OF 2	R0



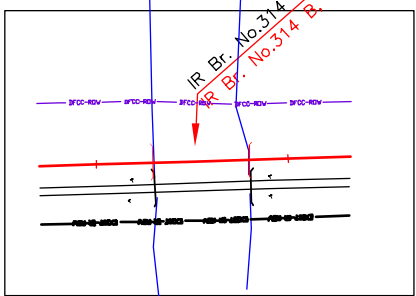
NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
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3. HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE F-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M-35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

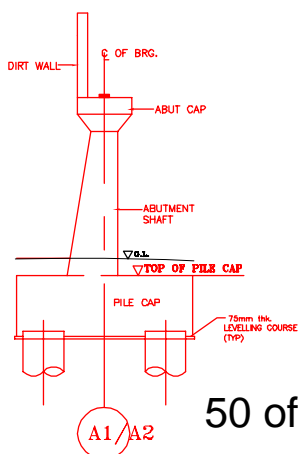


HALF BOTTOM PLAN

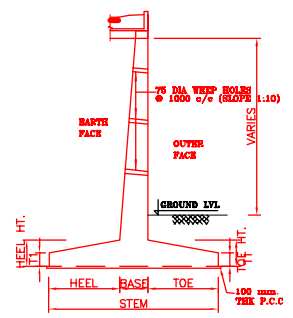
IR Br. No.314 B, Km. 275/13-15, Span 8(8x2)
 IR Br. No.314 B, Km. 275/13-15, Span 8x8



KEY PLAN



DETAIL OF ABUTMENT

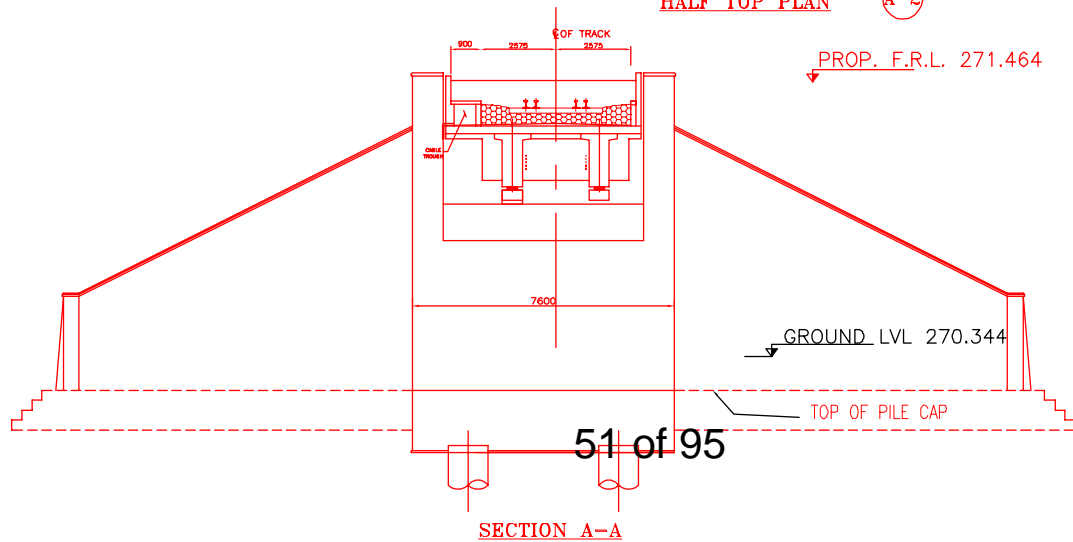
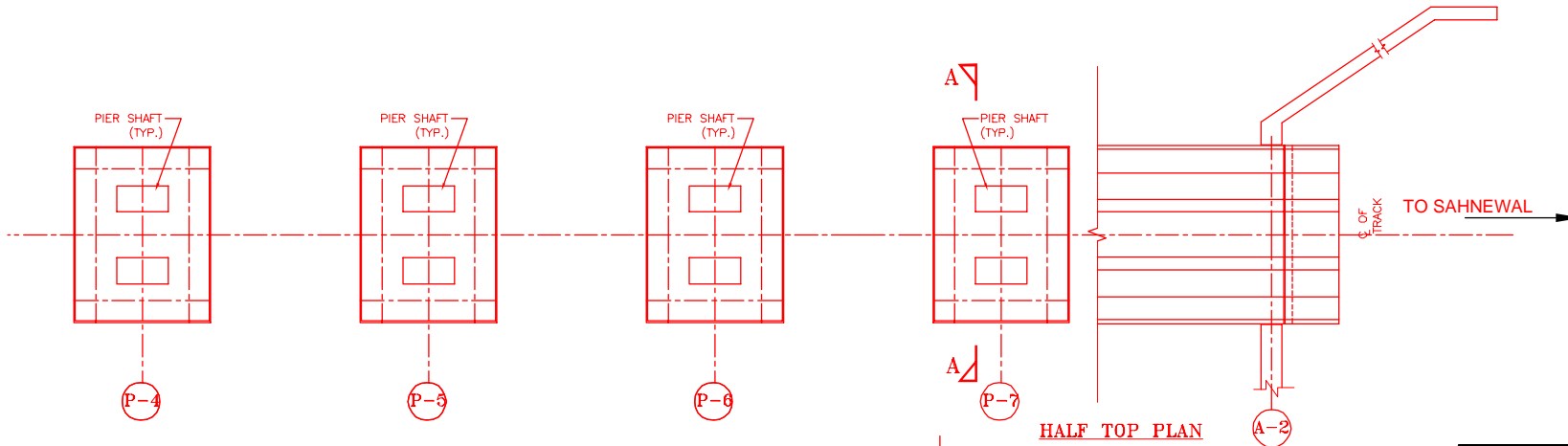
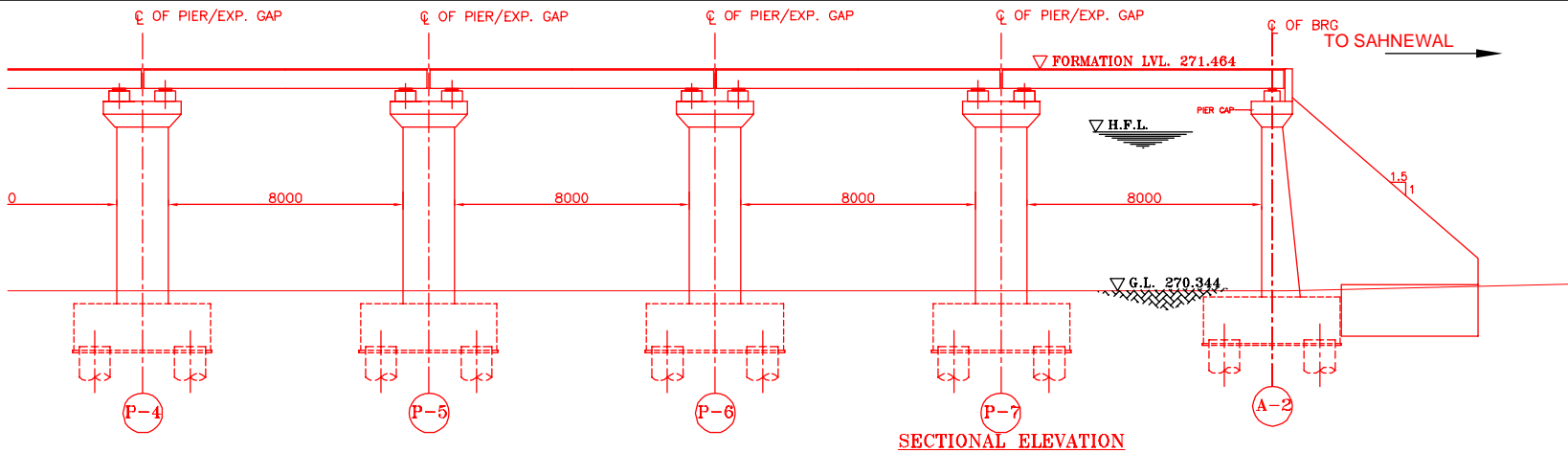


TYP. DETAILS OF RETAINING WALL



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INDICATIVE DRAWING

 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
EASTERN CORRIDOR						
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
CONTRACT PACKAGE - 301						
STRUCTURE	PROPOSED MAJOR BR. NO. 94 SPAN (8X8.0m) AT CH. 84550					
TITLE GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/94	R0
					SHEET 1 OF 2	



INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 94 SPAN (8X8.0m) AT CH. 84550				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/94	R0
					SHEET 2 OF 2	

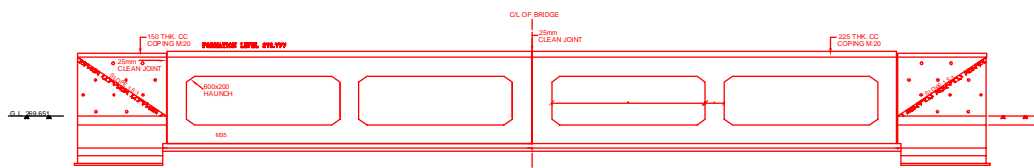
PILKHANI

SAHNEWAL

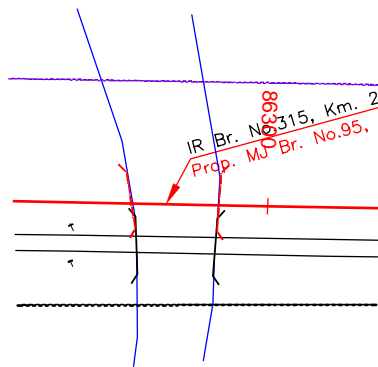
HALF TOP AND HALF BOTTOM PLAN

SECTIONAL ELEVATION AT A-A

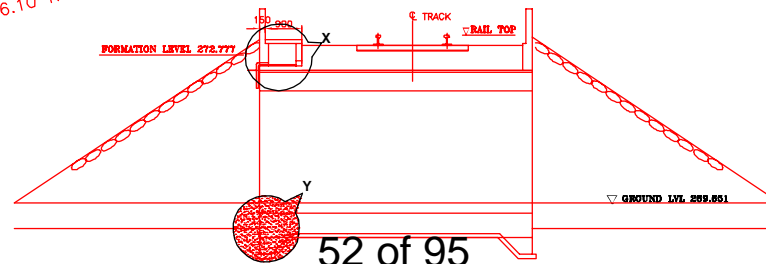
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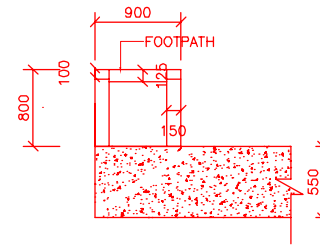
SIDE ELEVATION



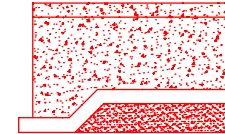
KEY PLAN



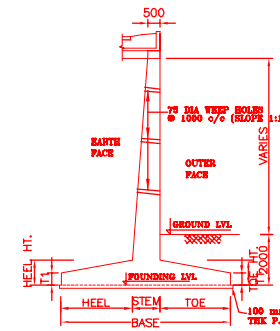
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ELEVATION AT A-A



DETAIL OF 'X'



DETAIL OF 'Y'



- NOTES:-
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS. DIMENSIONS SHALL BE APPROVED BY DPC/CL.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 - WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT.
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFC.

INDICATIVE DRAWING



DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

GENERAL CONSULTANT

AECOM Asia Co. Ltd.



9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA

PROJECT

EASTERN CORRIDOR

SAHNEWAL TO PILKHANI
From Km 360.200 to Km 187.500

STRUCTURE

CONTRACT PACKAGE - 301

PROPOSED MAJOR BR. NO. 95
SPAN (4X6.1m) AT CH. 86275

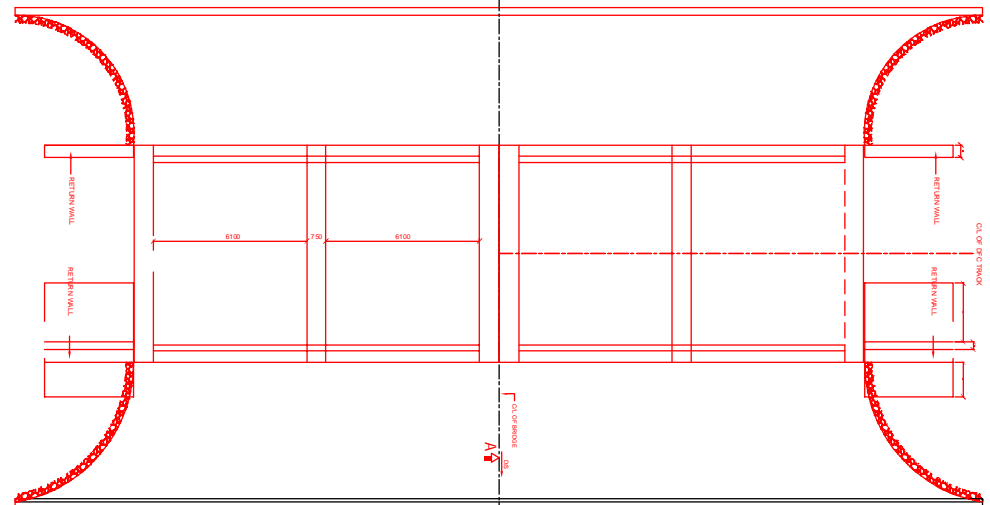
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GENERAL ARRANGEMENT DRAWING

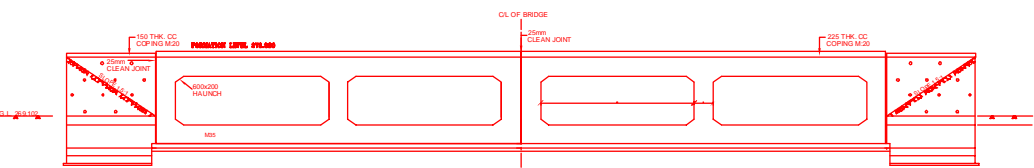
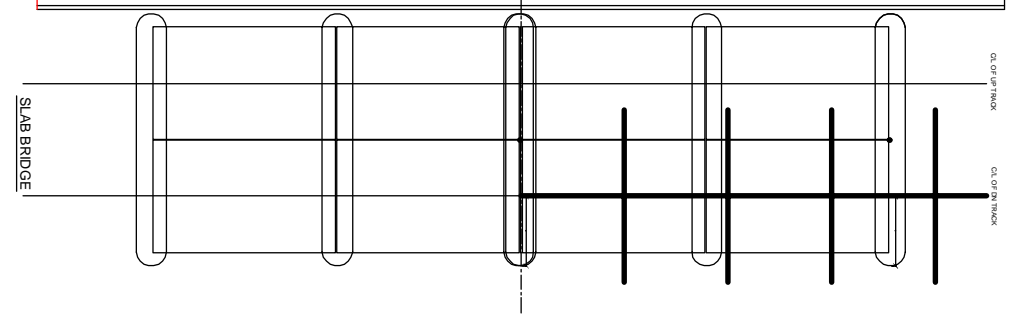
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/95	R0

PILKHANI SAHNEWAL

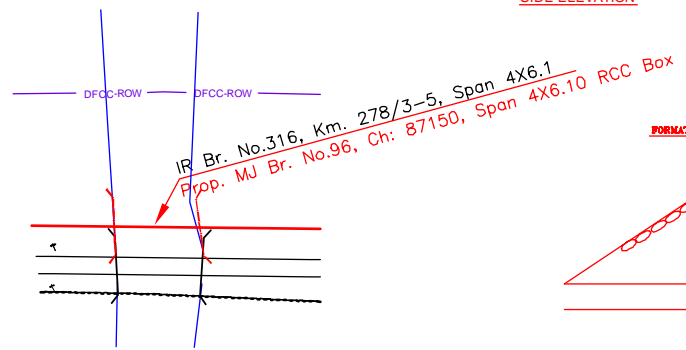
HALF TOP AND HALF BOTTOM PLAN



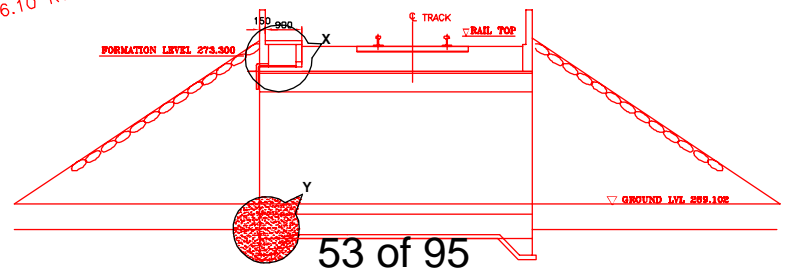
SECTIONAL ELEVATION AT A-A



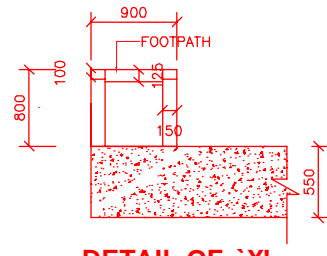
SIDE ELEVATION



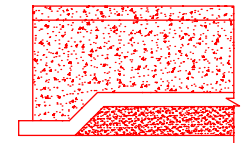
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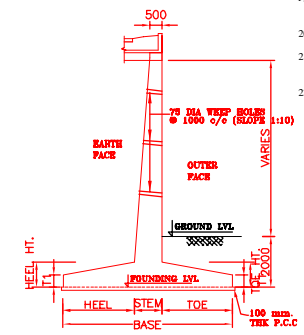
53 of 95
ELEVATION AT A-A



DETAIL OF 'X'



DETAIL OF 'Y'

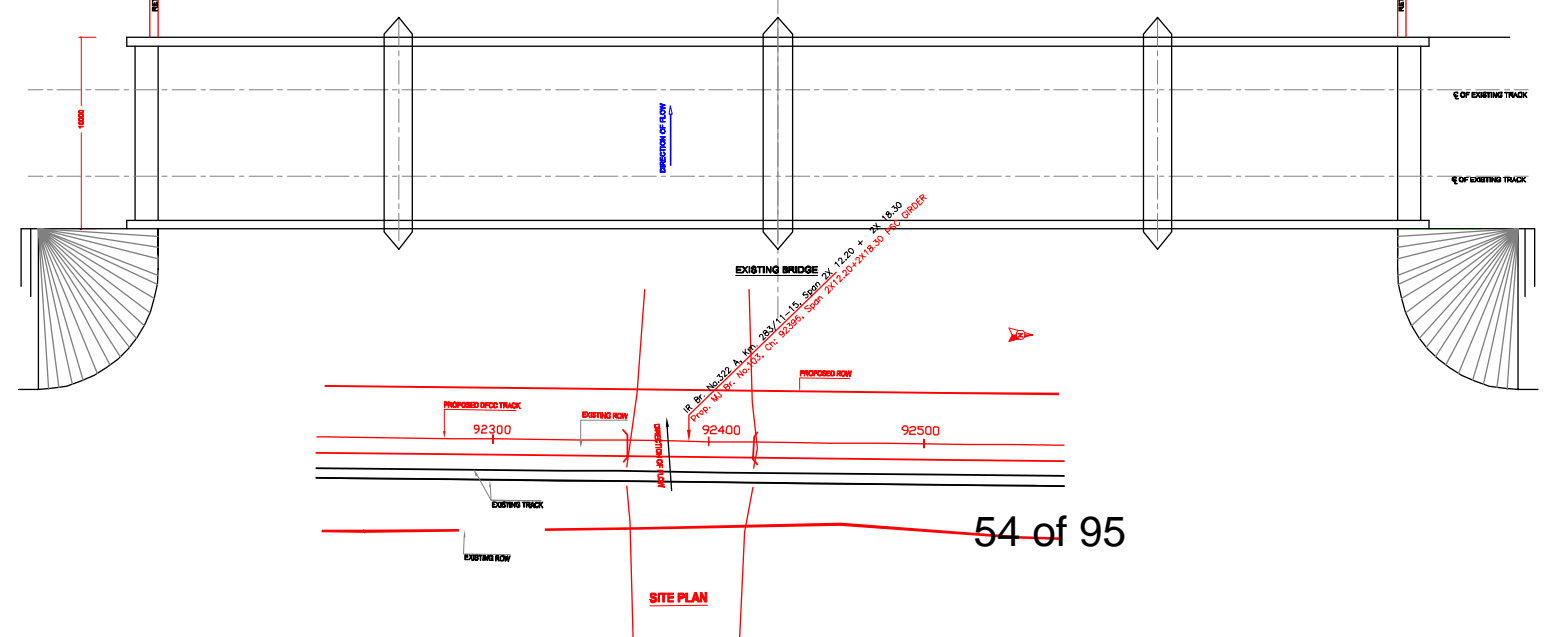
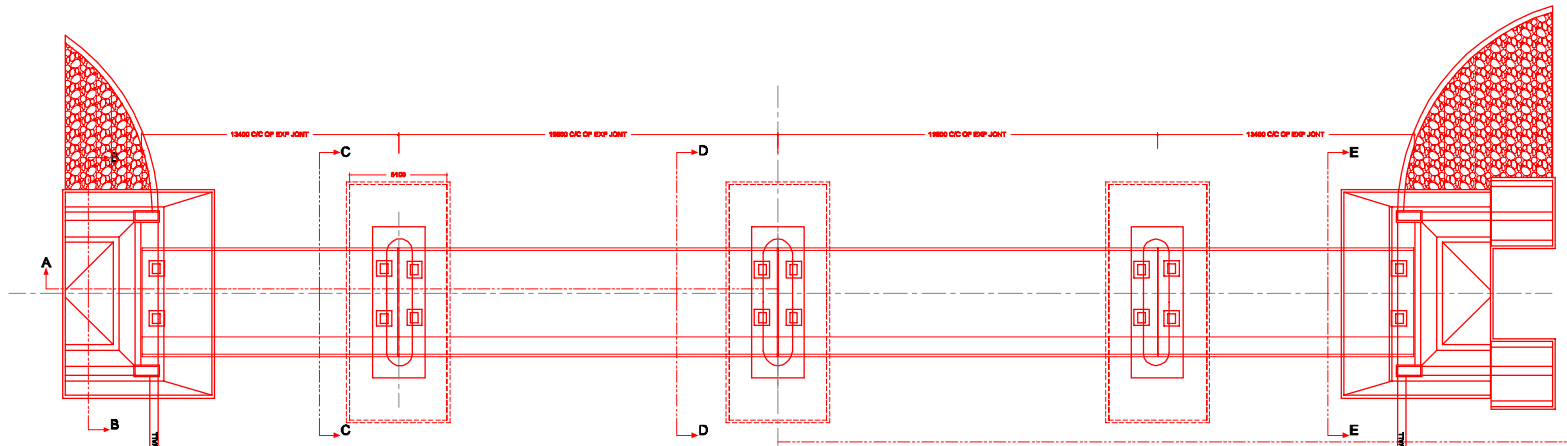
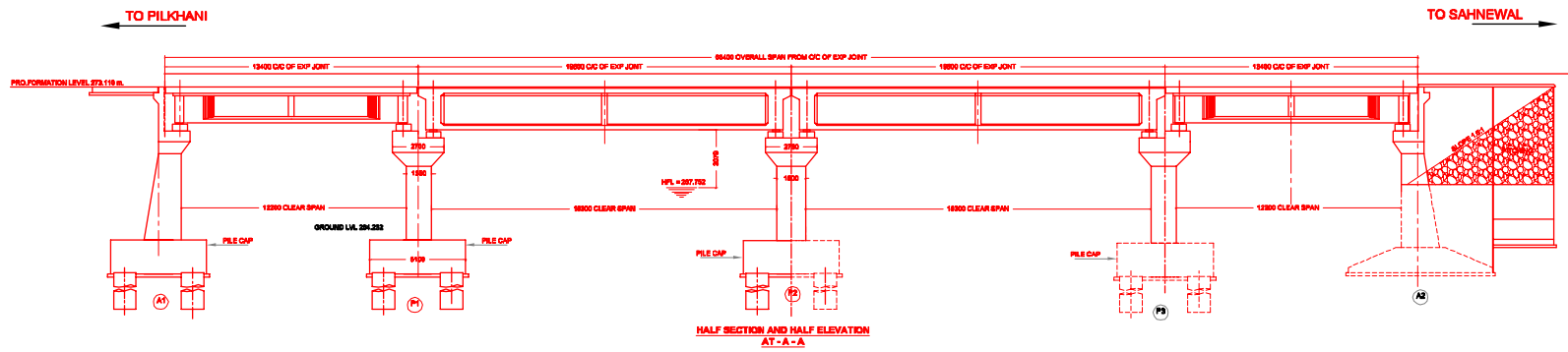


SECTION
SCALE NTS

- NOTES:-
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (325 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS. DIMENSIONS SHALL BE APPROVED BY DFCCL.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 - WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT.
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) WIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
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 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFC.

INDICATIVE DRAWING

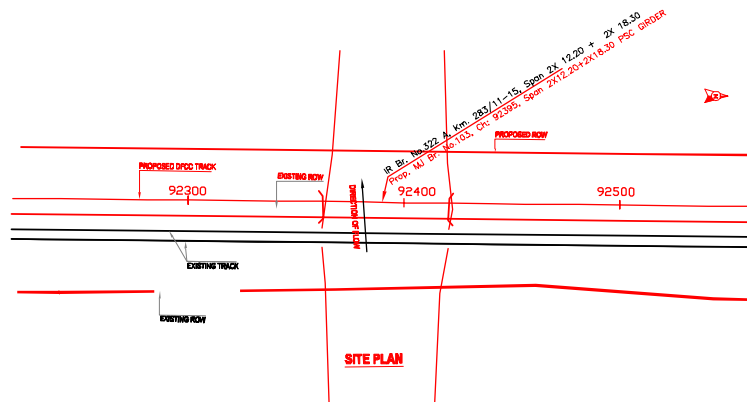
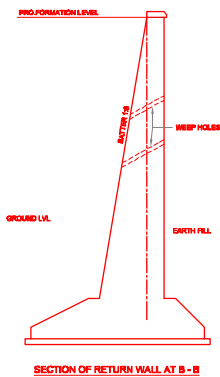
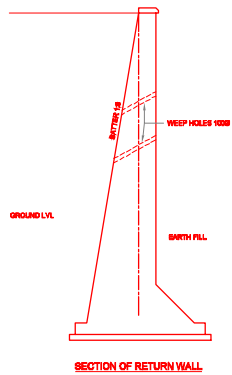
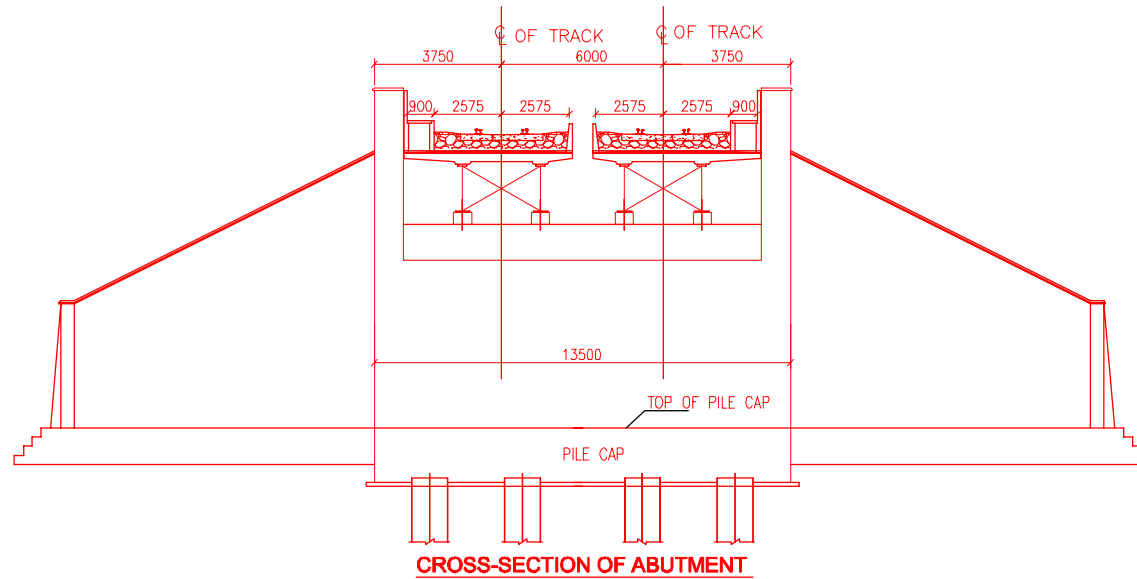
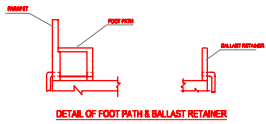
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.	
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA	
PROJECT		EASTERN CORRIDOR SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500	
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 96 SPAN (4X6.1m) AT CH. 87150	
TITLE		GENERAL ARRANGEMENT DRAWING	
SCALE	DATE	DRAWN BY	CHECKED BY
NTS	MAY 2015		
APPROVED BY		DRG. NO.	
		AECOM/301/MJR/96	
		REV.	
		R0	



- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
 - LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
 - HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
 - MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
 - THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
 - IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
 - IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR RDC.
 - WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPES STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
 - STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - CC WEARING COURSE OF MINIMUM M-35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
 - DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING

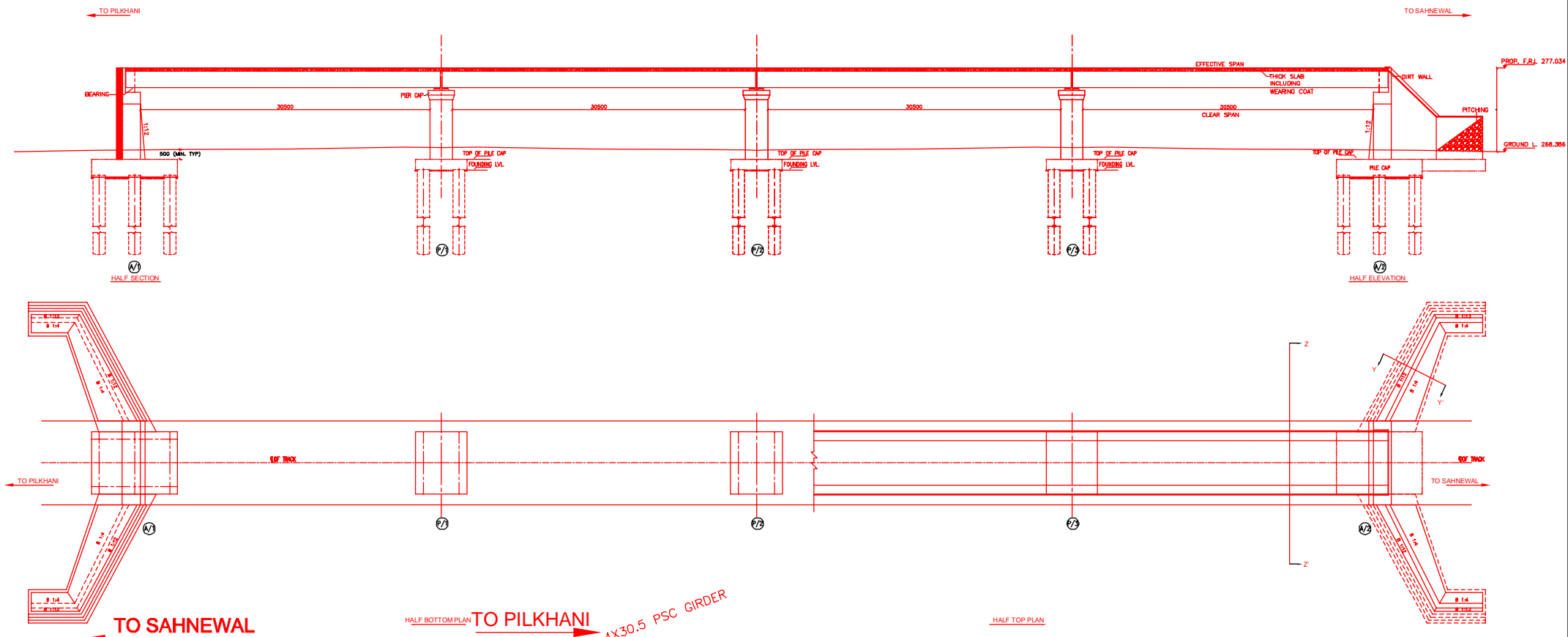
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GENERAL CONSULTANT		AECOM Asia Co. Ltd.	
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA	
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500	
STRUCTURE		PROPOSED MAJOR BR. NO. 103 SPAN (2X12.20+2X18.30 m) AT CH. 92395	
TITLE		GENERAL ARRANGEMENT DRAWING	
SCALE	DATE	DRAWN BY	CHECKED BY
NTS	MAY 2015		
APPROVED BY		DRG. NO.	
		AECOM/301/MJR/103	
REV.		SHEET 1 OF 2	
		R1	



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INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 103 SPAN (2X12.20+2X18.30 m) AT CH. 92395				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/103	R1
						SHEET 2 OF 2

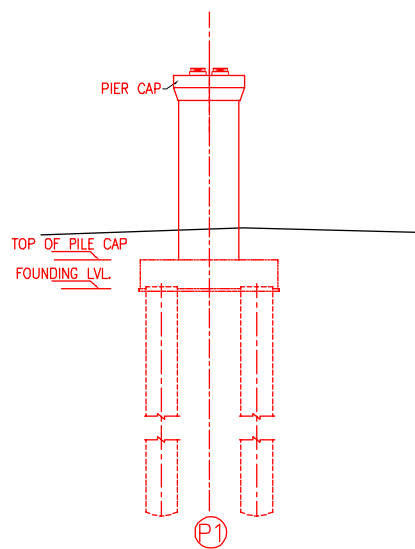
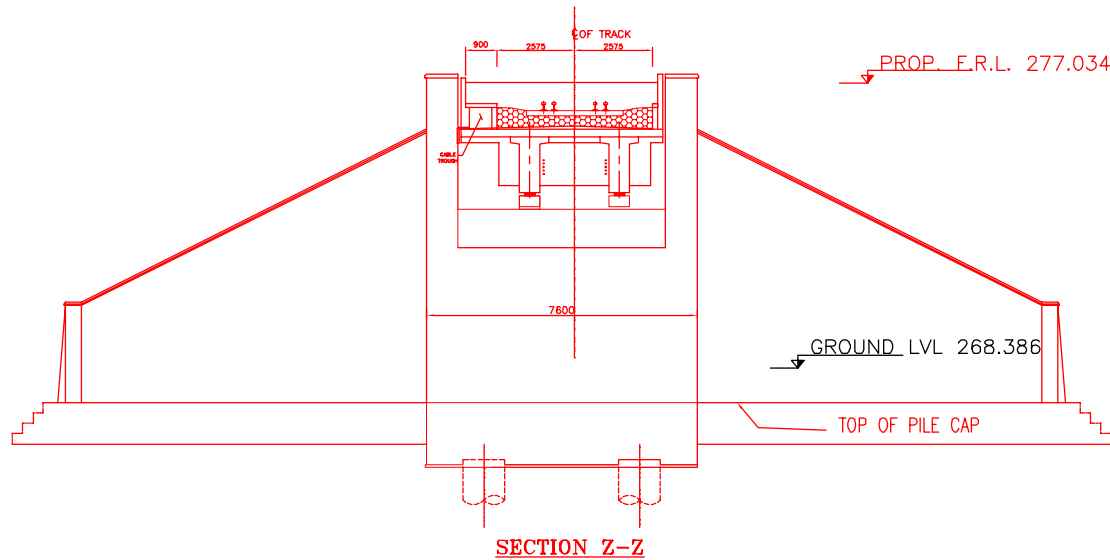


INDICATIVE DRAWING

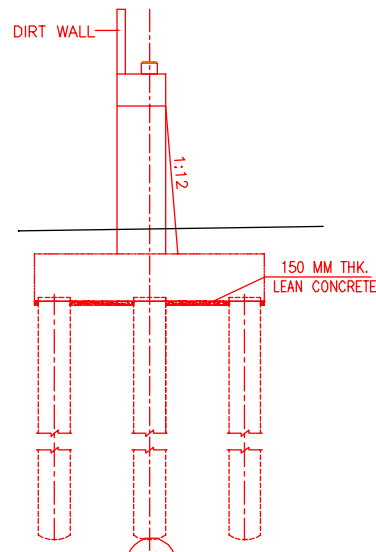
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 114 SPAN (4X30.5m) AT CH. 96688				
		GENERAL ARRANGEMENT DRAWING				
TITLE						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/114 SHEET 1 OF 2	R0

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.





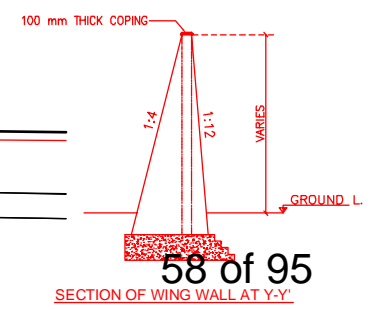
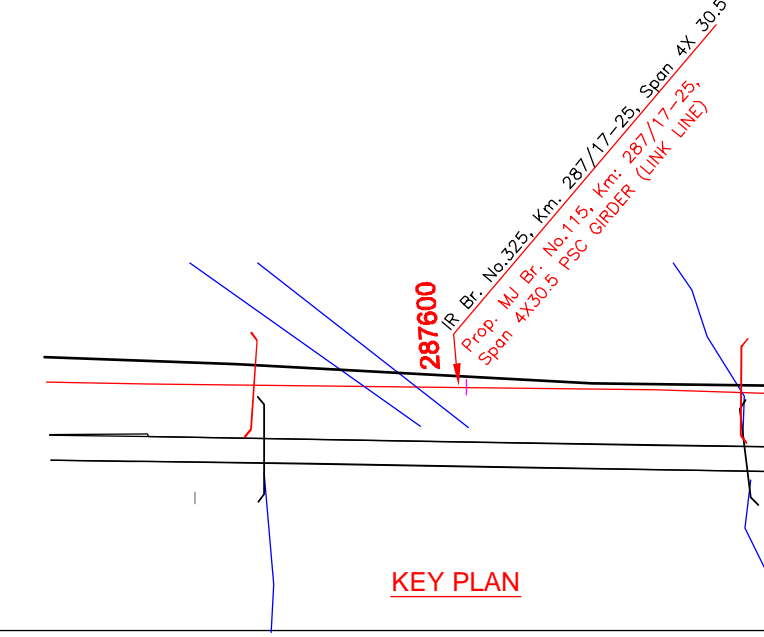
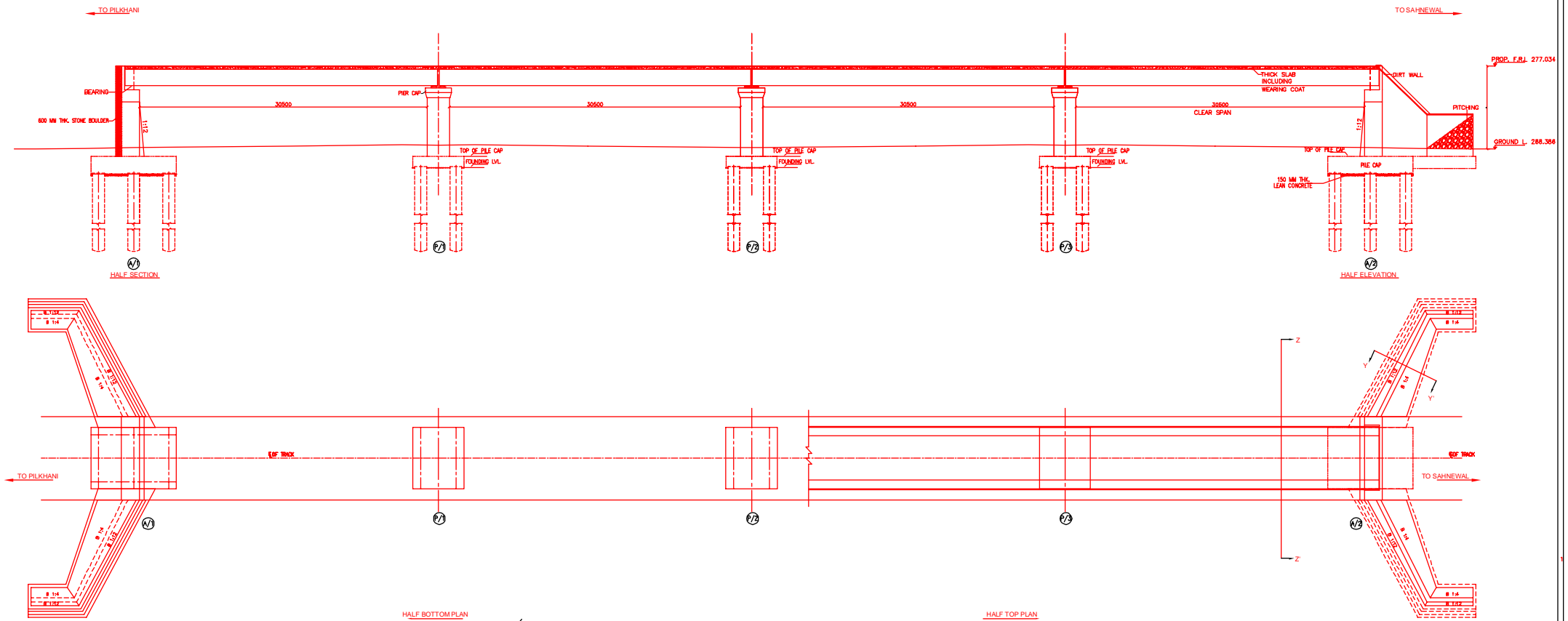
DETAIL OF PIER



DETAIL OF ABUTMENT

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 114 SPAN (4X30.5m) AT CH. 96688				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/114 SHEET 2 OF 2	RO



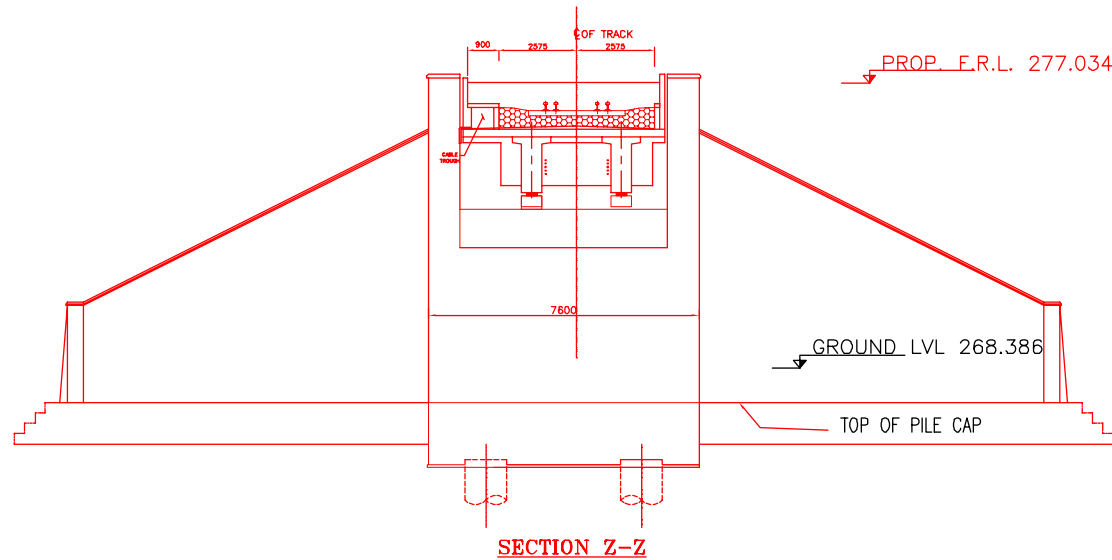
58 of 95

INDICATIVE DRAWING

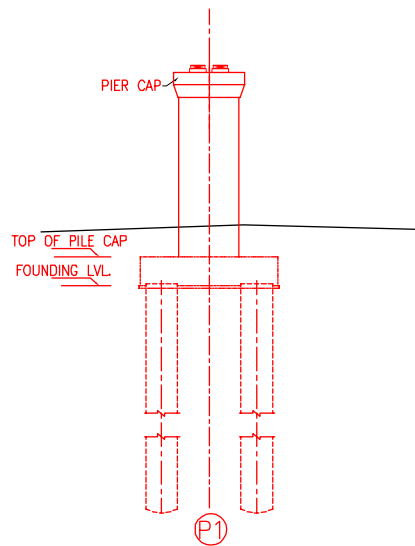
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED COMPOSITE I GIRDER BR. NO. 115 SPAN (4X30.5m) AT KM 287/17-25				
		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/115 SHEET 1 OF 2	R0

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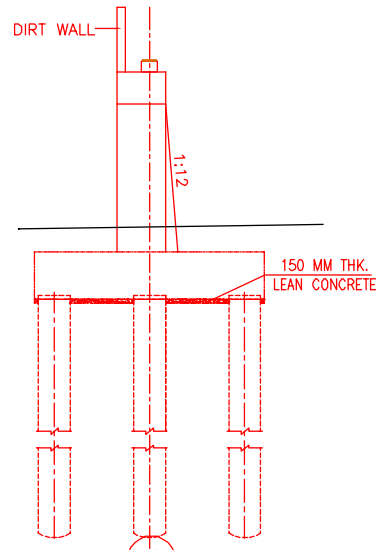
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD. THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.



SECTION Z-Z



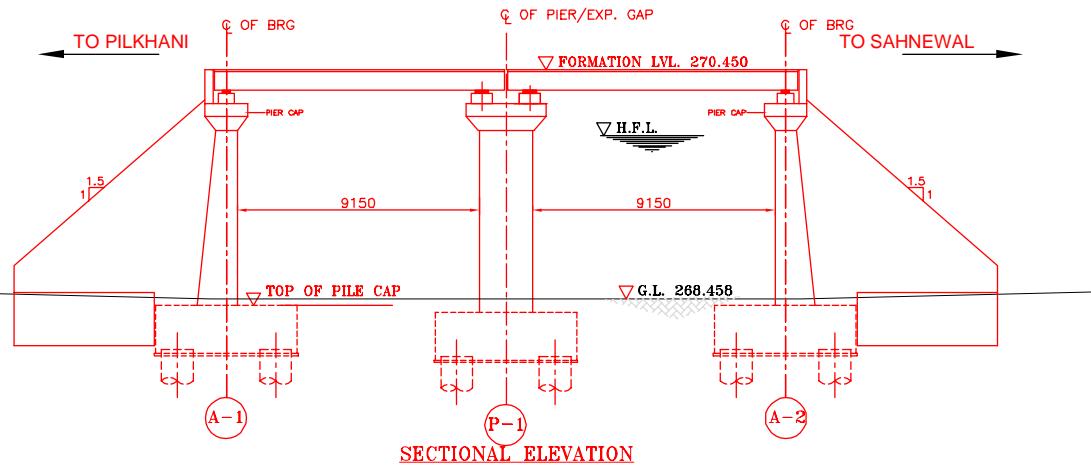
DETAIL OF PIER



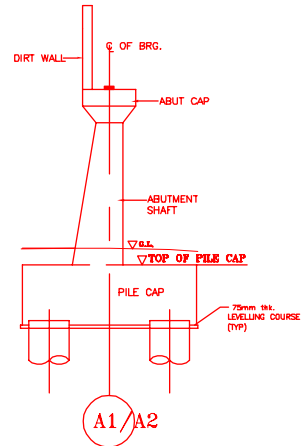
DETAIL OF ABUTMENT

INDICATIVE DRAWING

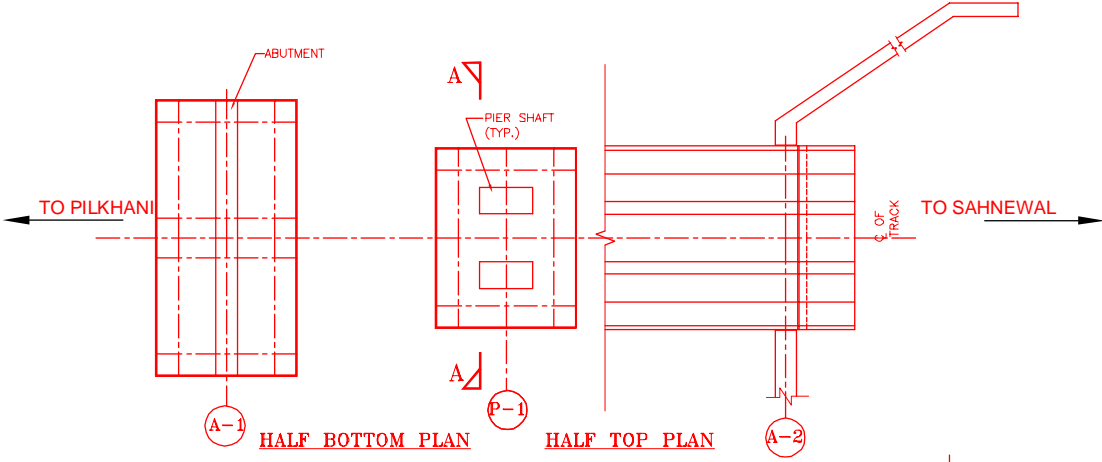
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GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED COMPOSITE I GIRDER BR. NO. 115 SPAN (4X30.5m) AT KM 287/17-25				
		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/115 SHEET 2 OF 2	RO



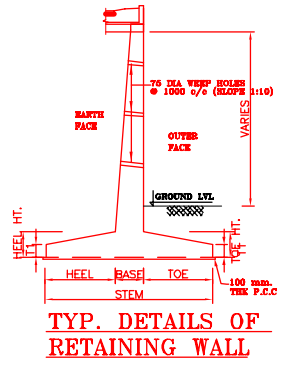
SECTIONAL ELEVATION



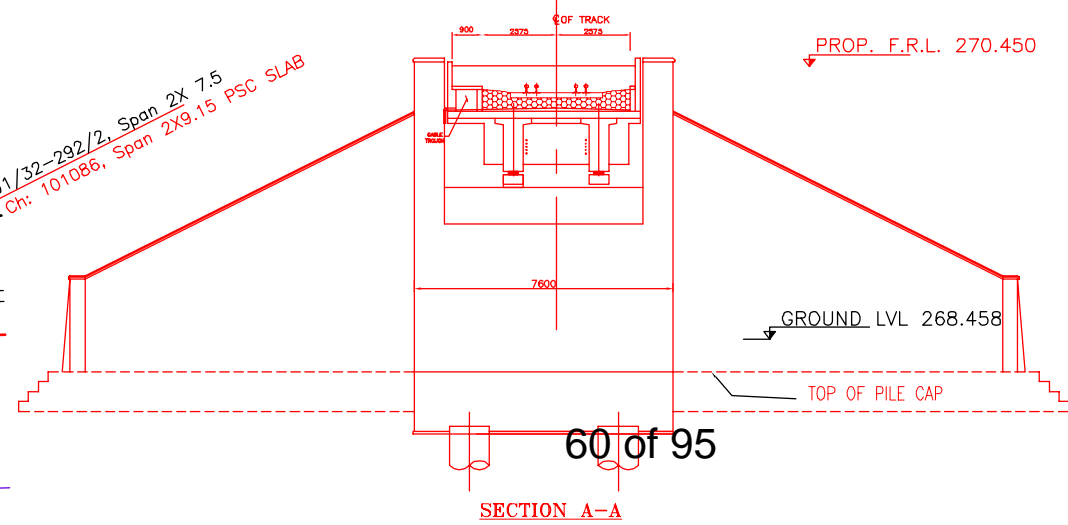
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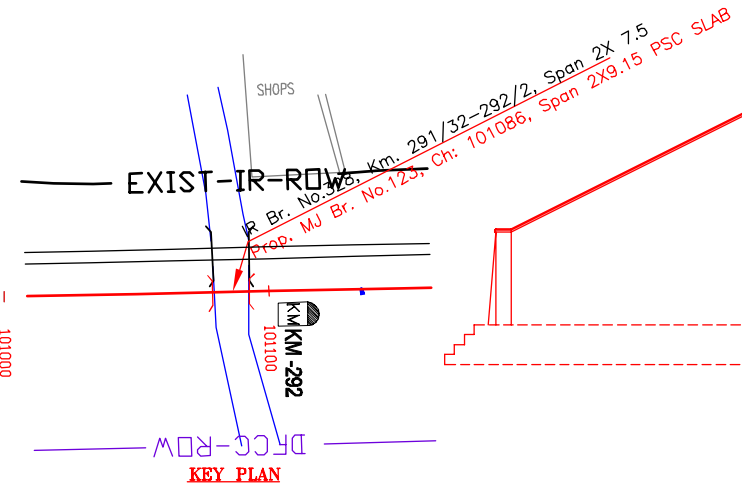
HALF BOTTOM PLAN HALF TOP PLAN



TYP. DETAILS OF RETAINING WALL



SECTION A-A



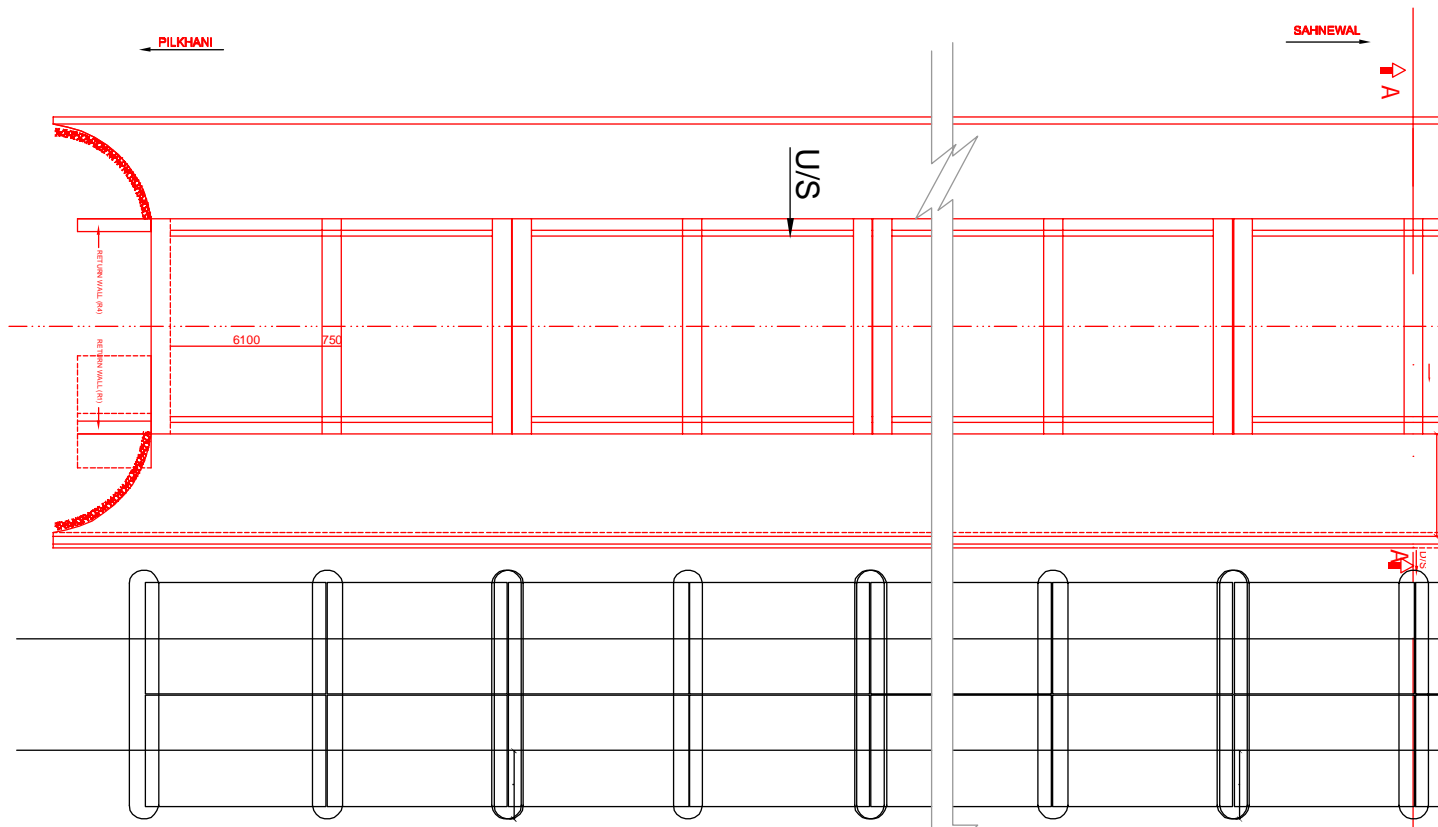
KEY PLAN

NOTES:-

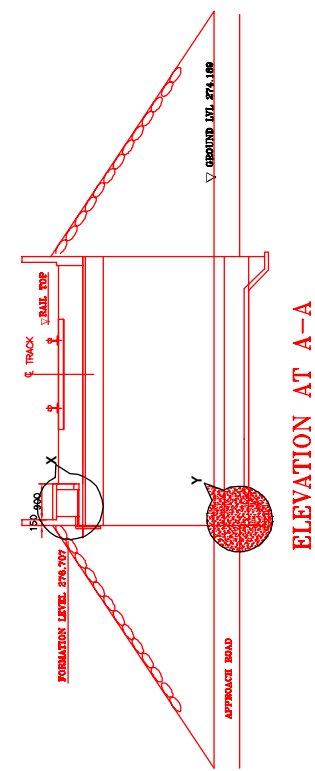
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
8. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
9. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
10. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
11. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
12. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
13. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
14. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
15. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
16. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
17. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
18. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
19. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
20. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYERS REQUIREMENT.

INDICATIVE DRAWING

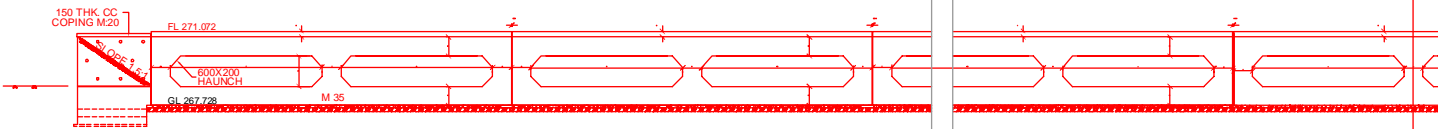
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
AECOM		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301		STRUCTURE				
STRUCTURE		PROPOSED MAJOR BR. NO. 123 SPAN (2X9.15m) AT CH. 101086				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/123	R0



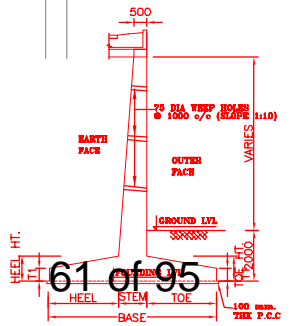
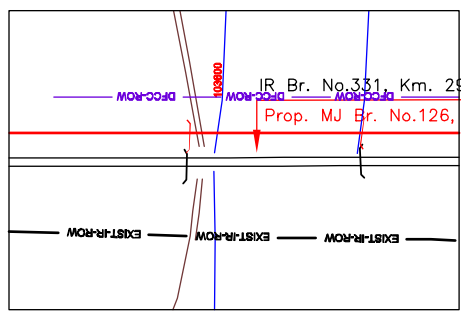
HALF TOP AND HALF BOTTOM PLAN



ELEVATION AT A-A



SIDE ELEVATION

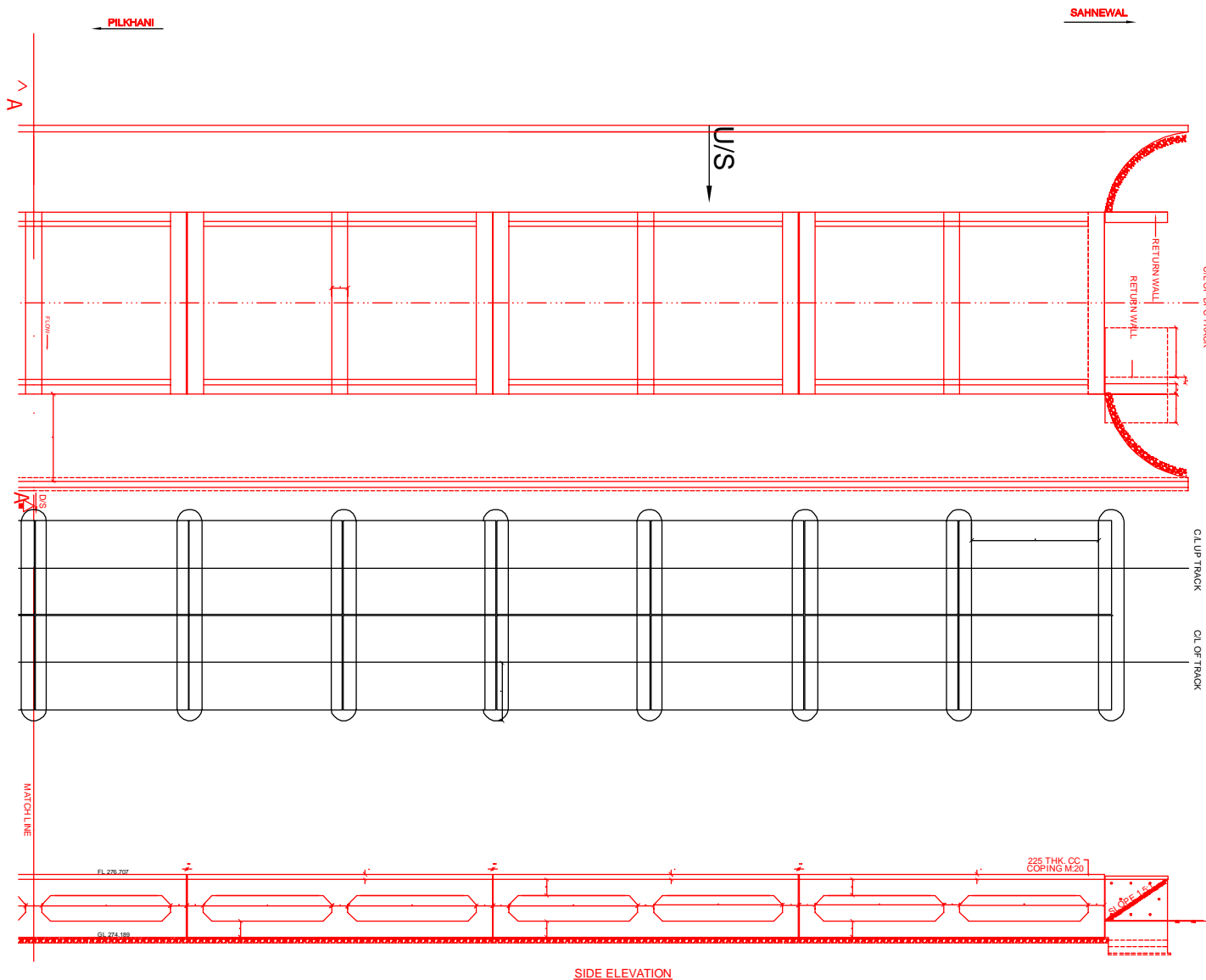


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SECTION
SCALE NTS

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
EASTERN CORRIDOR		PROJECT SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301		STRUCTURE PROPOSED MAJOR BR. NO. 126 SPAN (15X6.10m) AT CH. 103563				
TITLE GENERAL ARRANGEMENT DRAWING		DRG. NO. _____ REV. _____				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/126 SHEET 1 OF 2	R0



NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
3. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT BIS CODES.
4. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
5. HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
8. DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
9. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
10. TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
11. WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
12. WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
13. DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
14. TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
15. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
16. THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
17. THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
18. PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
19. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
20. SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
21. BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
22. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
23. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

GENERAL CONSULTANT **AECOM Asia Co. Ltd.**
 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY
 DLF PHASE II GURGAON 122002, INDIA

EASTERN CORRIDOR

PROJECT SAHNEWAL TO PILKHANI
 From Km 360.200 to Km 187.500

CONTRACT PACKAGE - 301

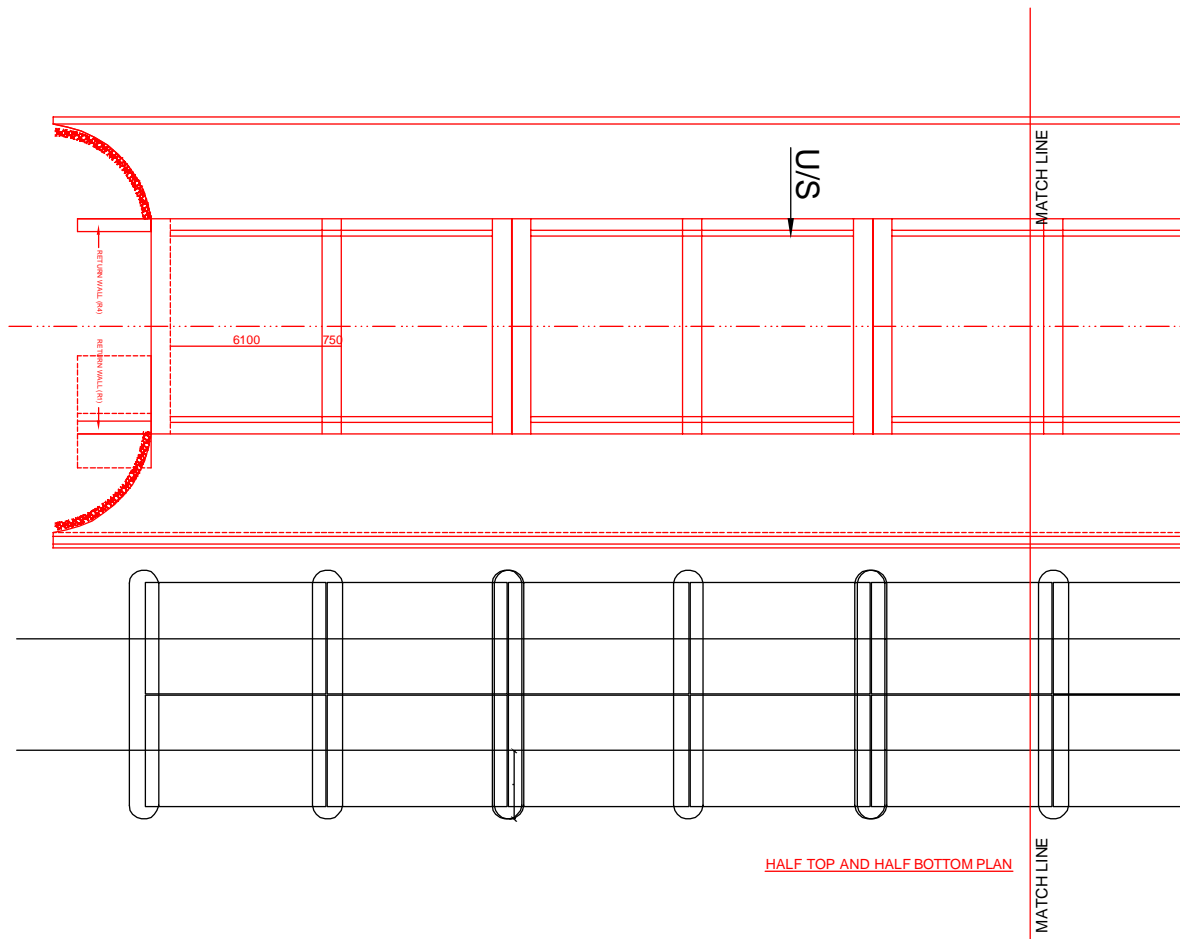
STRUCTURE **PROPOSED MAJOR BR. NO. 126**
SPAN (15X6.10m) AT CH. 103563

TITLE **GENERAL ARRANGEMENT DRAWING**

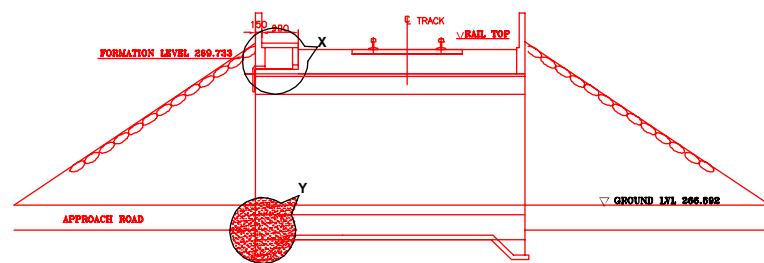
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/126 SHEET 2 OF 2	R0

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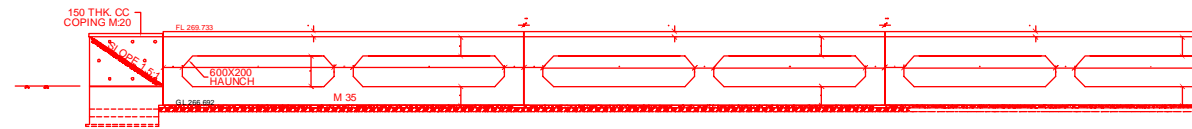
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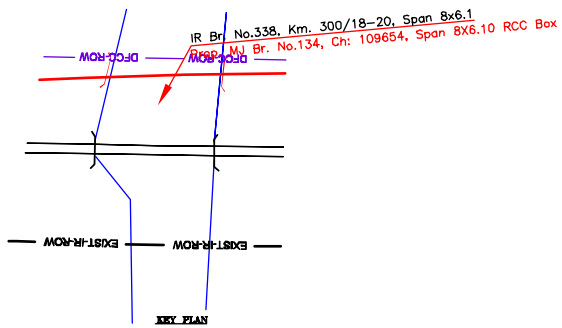
HALF TOP AND HALF BOTTOM PLAN



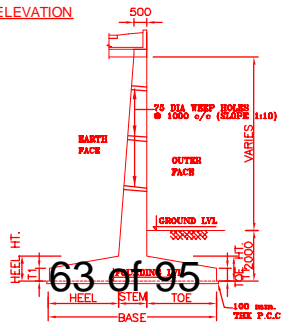
ELEVATION AT A-A



SIDE ELEVATION



KEY PLAN

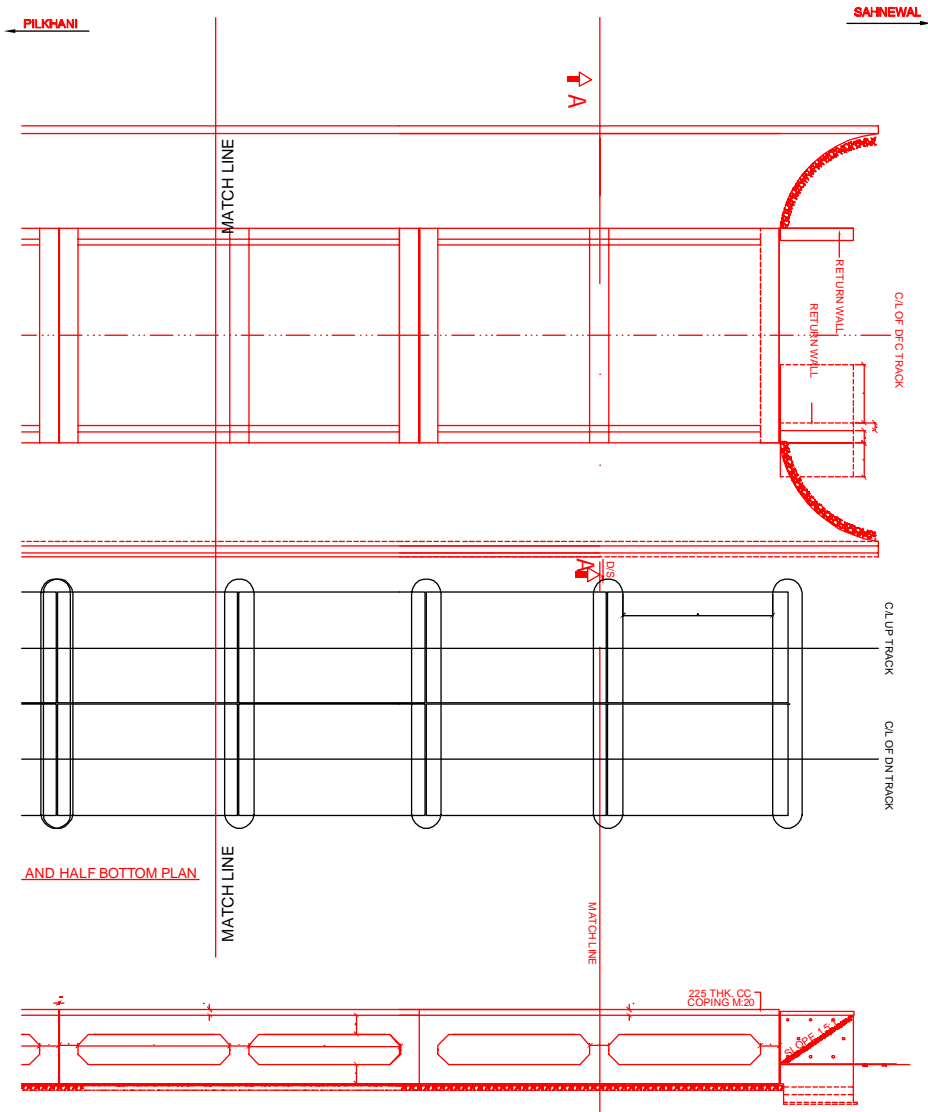


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SECTION
SCALE NTS

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED RCC BOX BR. NO. 134 SPAN (8X6.10m) AT CH. 109654				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/134 SHEET 1 OF 2	R0



AND HALF BOTTOM PLAN

SIDE ELEVATION

DETAIL OF 'Y'

DETAIL OF 'X'

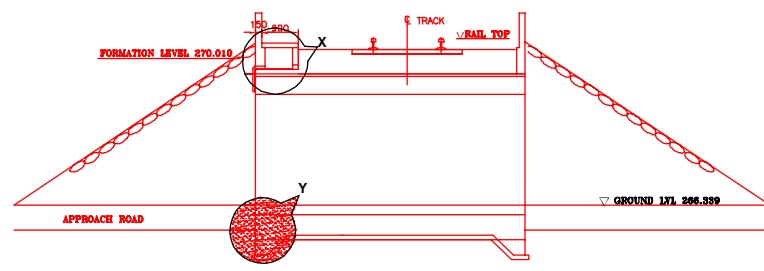
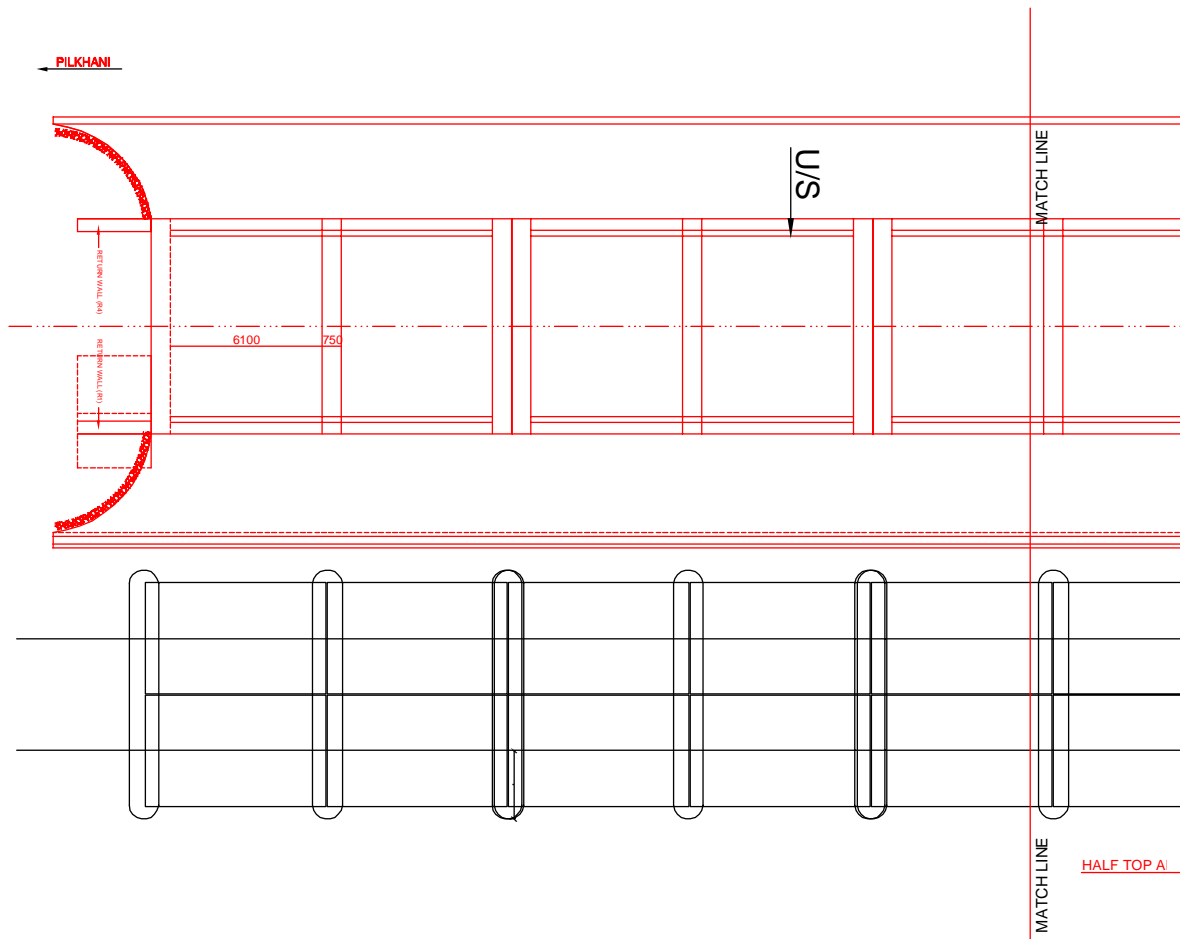
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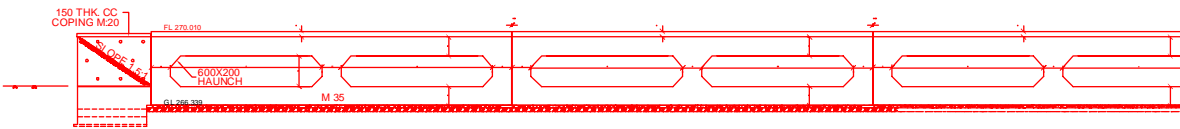
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
- TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
- WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/BALAST RETAINER.
- DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
- TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
- THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
- PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
- SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
- SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

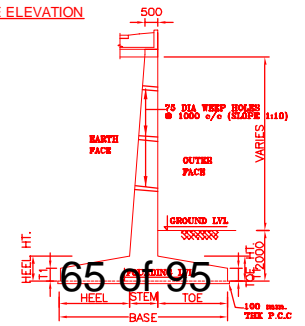
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED RCC BOX BR. NO. 134 SPAN (8X6.10m) AT CH. 109654				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/134 SHEET 2 OF 2	RO



ELEVATION AT A-A

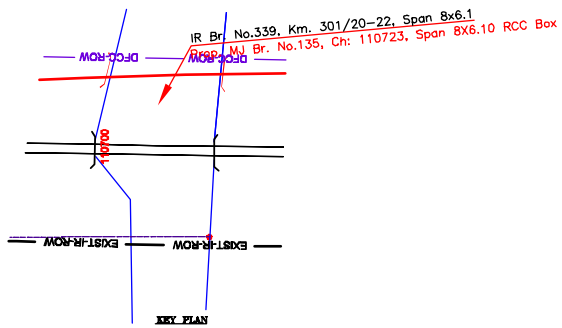


SIDE ELEVATION



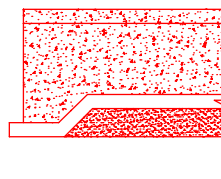
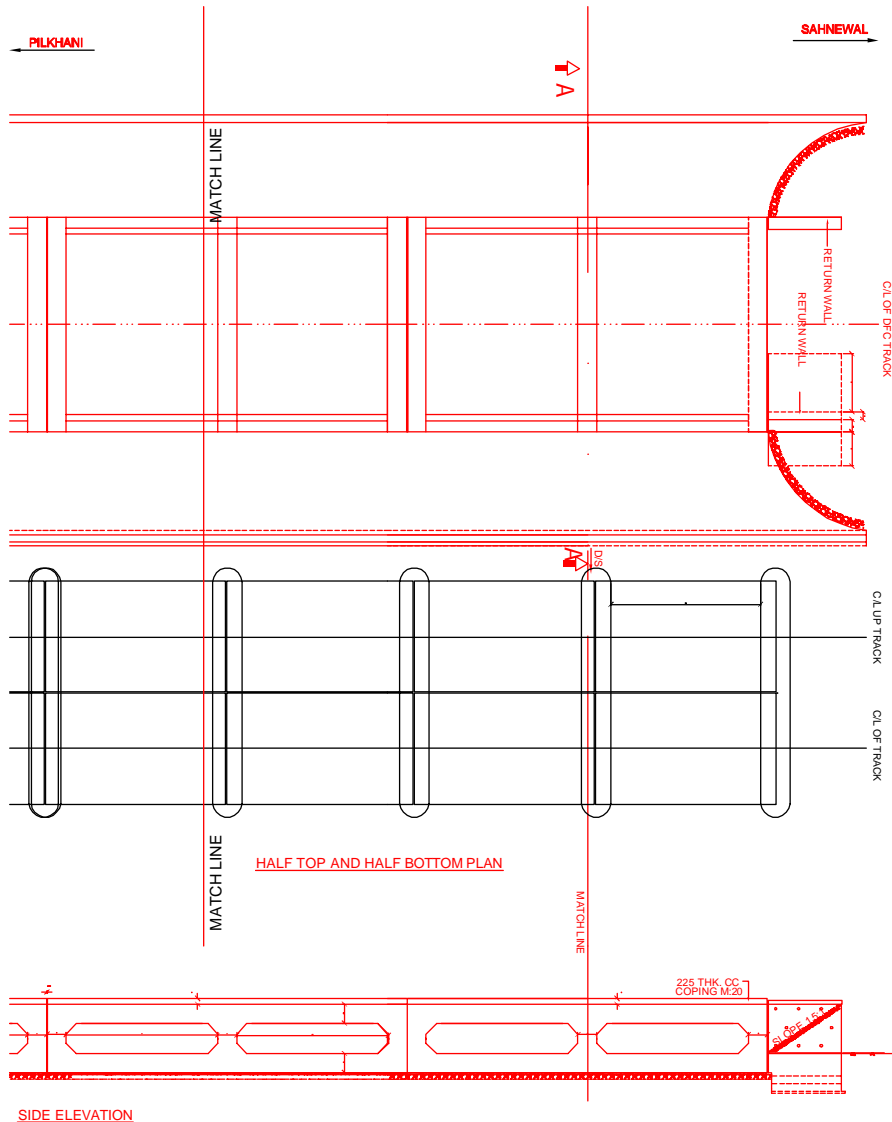
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SECTION SCALE NTS

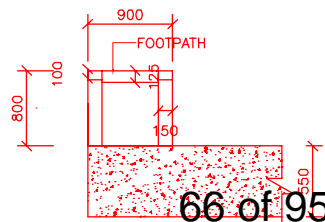


INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.			
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA			
AECOM		EASTERN CORRIDOR			
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500			
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 135 SPAN (8X6.10m) AT CH. 110723			
TITLE		GENERAL ARRANGEMENT DRAWING			
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.
NTS	MAY 2015				AECOM/301/MJR/135 SHEET 1 OF 2
					REV.
					R0



DETAIL OF 'Y'





DETAIL OF 'X'

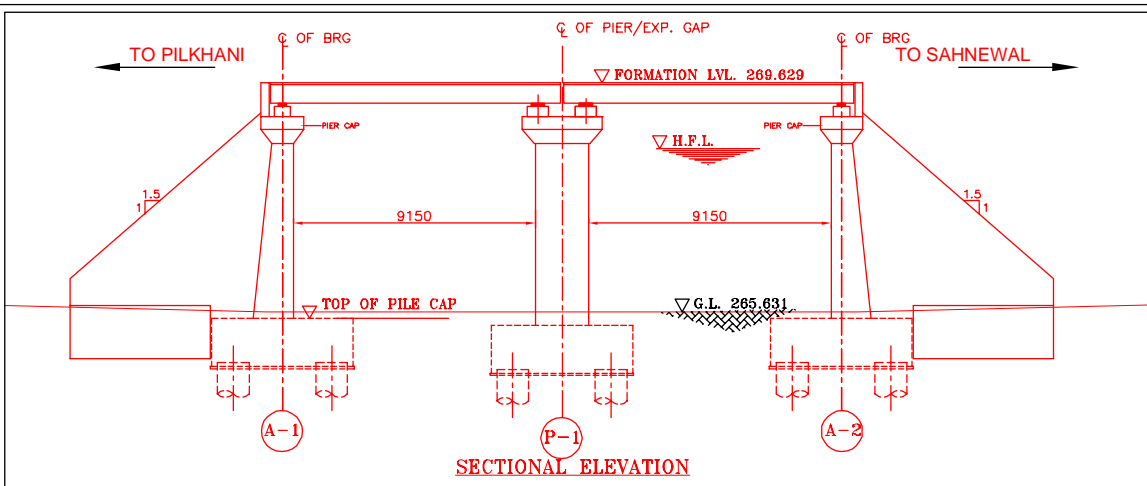
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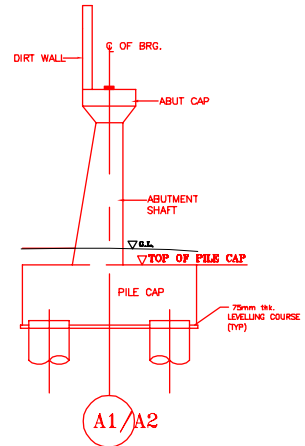
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
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- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
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 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
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- DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
- TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
- WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
- DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
- TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
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- PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
- SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
- SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
- IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

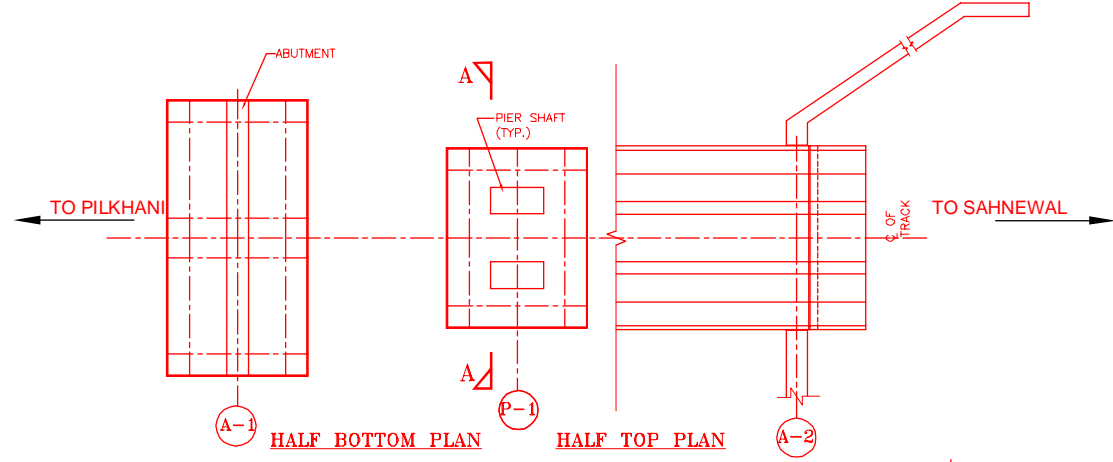
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 135 SPAN (8X6.10m) AT CH. 110723				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/135 SHEET 2 OF 2	RO



SECTIONAL ELEVATION

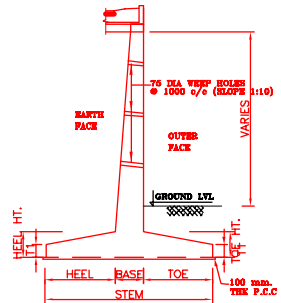


DETAIL OF ABUTMENT

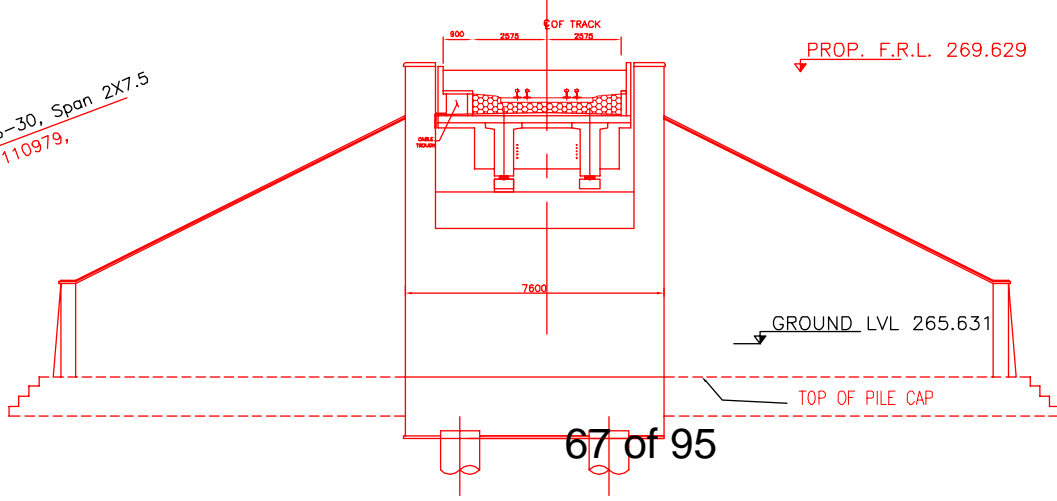


HALF BOTTOM PLAN

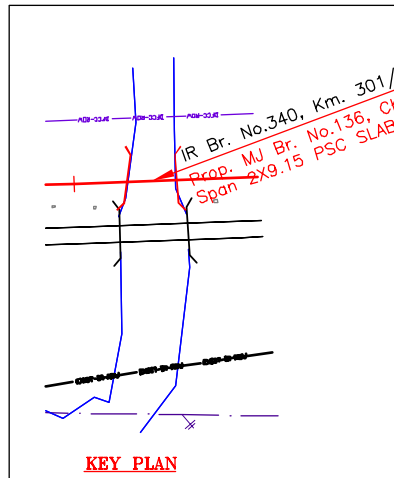
HALF TOP PLAN



TYP. DETAILS OF RETAINING WALL



SECTION A-A



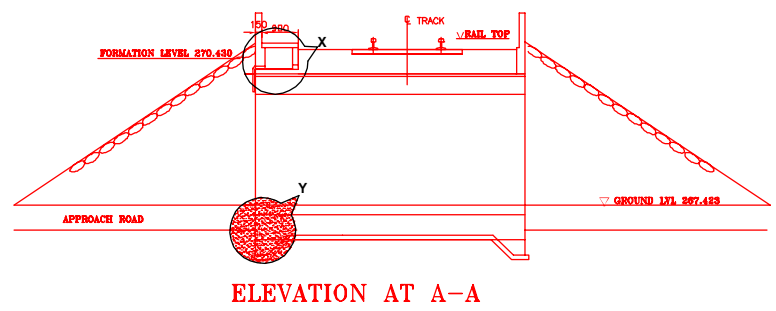
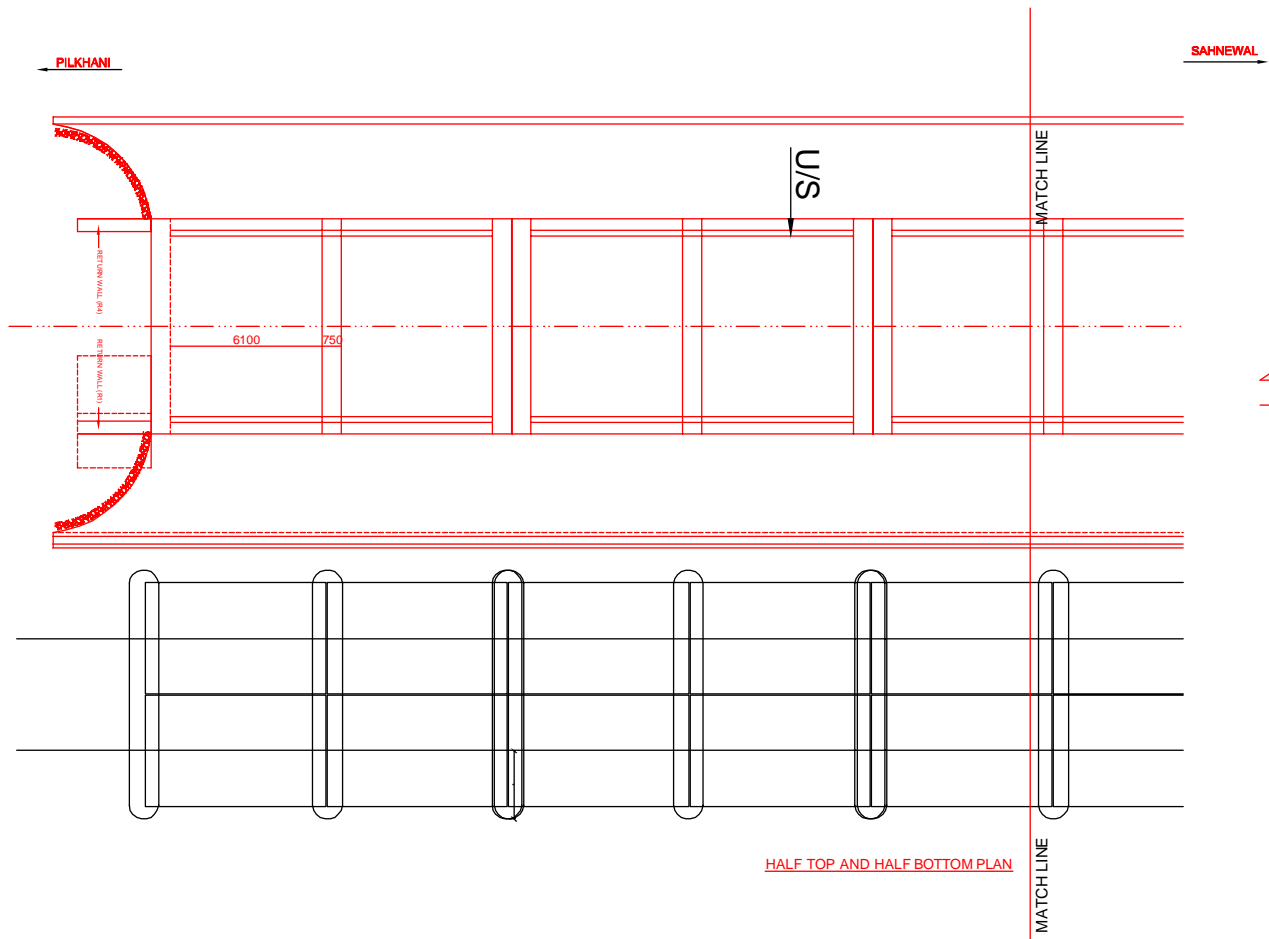
KEY PLAN

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
8. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
9. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
10. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
11. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
12. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
13. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
14. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
15. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
16. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
17. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
18. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
19. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
20. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYERS REQUIREMENT.

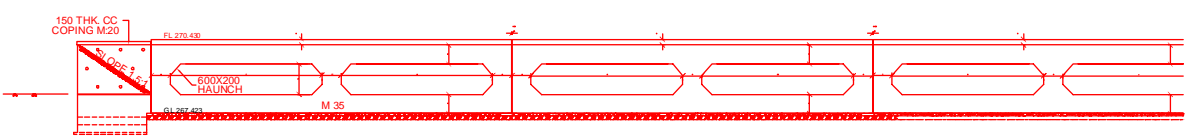
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
AECOM		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 136 SPAN (2X9.15m) AT CH. 110979				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/136	R0

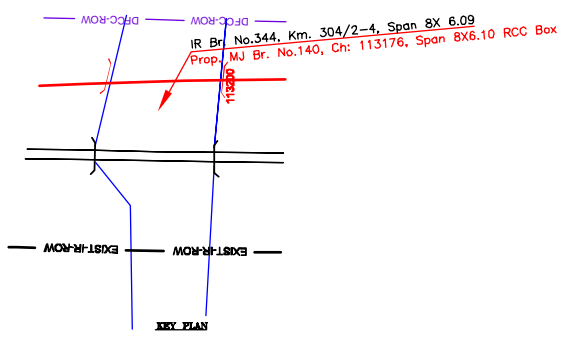


HALF TOP AND HALF BOTTOM PLAN

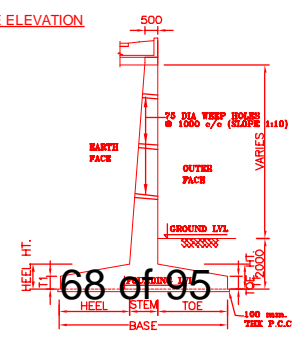
ELEVATION AT A-A



SIDE ELEVATION



KEY PLAN

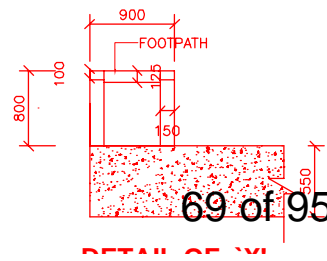
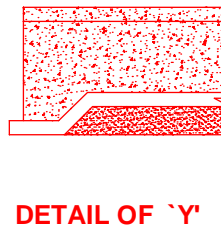
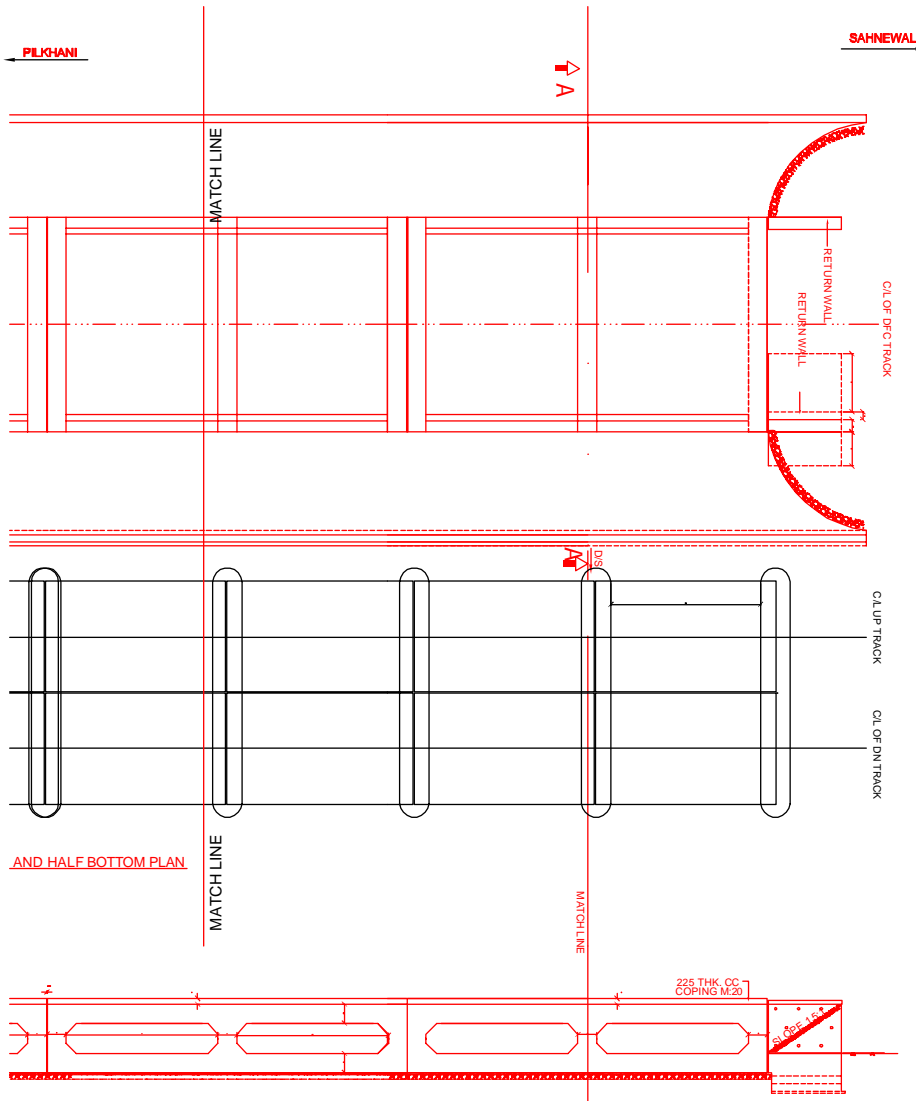


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SECTION SCALE NTS

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED RCC BOX BR. NO. 140 SPAN (8X6.10m) AT CH. 113176				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/140 SHEET 1 OF 2	R0

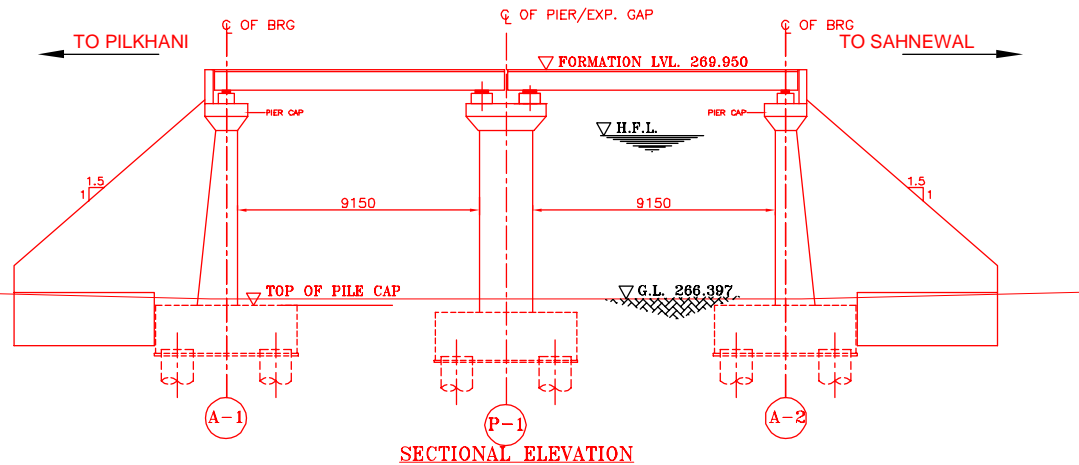


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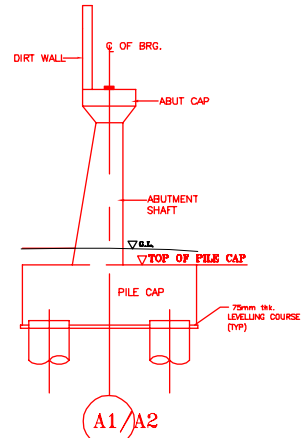
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
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 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
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22. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

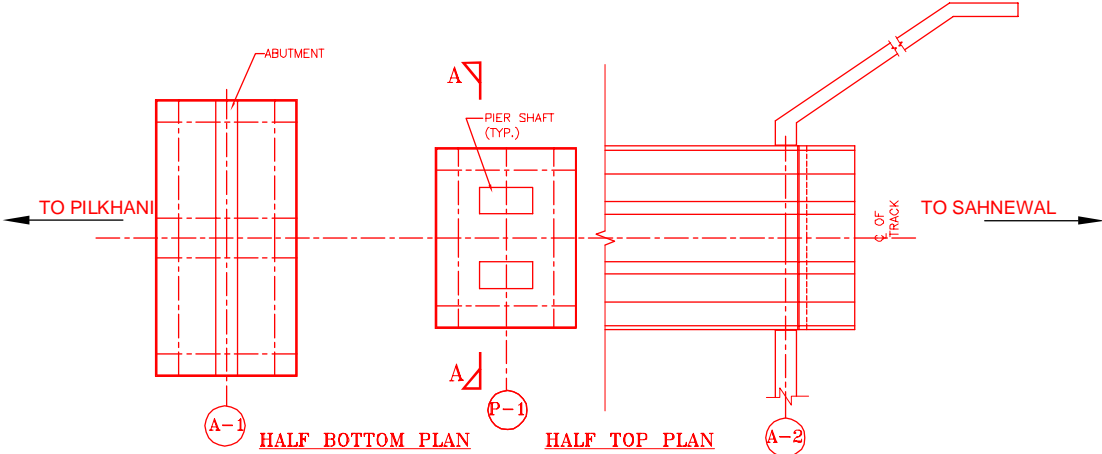
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 140 SPAN (8X8.10m) AT CH. 113176				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/140 SHEET 2 OF 2	RO



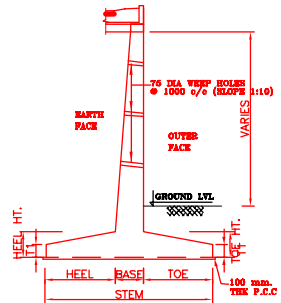
SECTIONAL ELEVATION



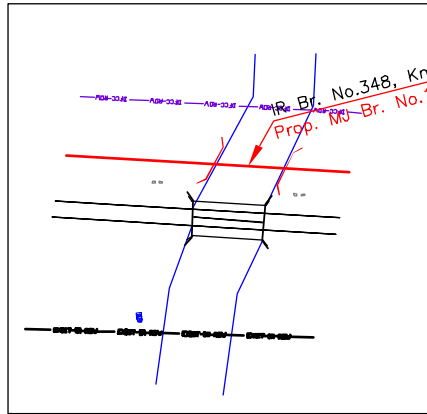
DETAIL OF ABUTMENT



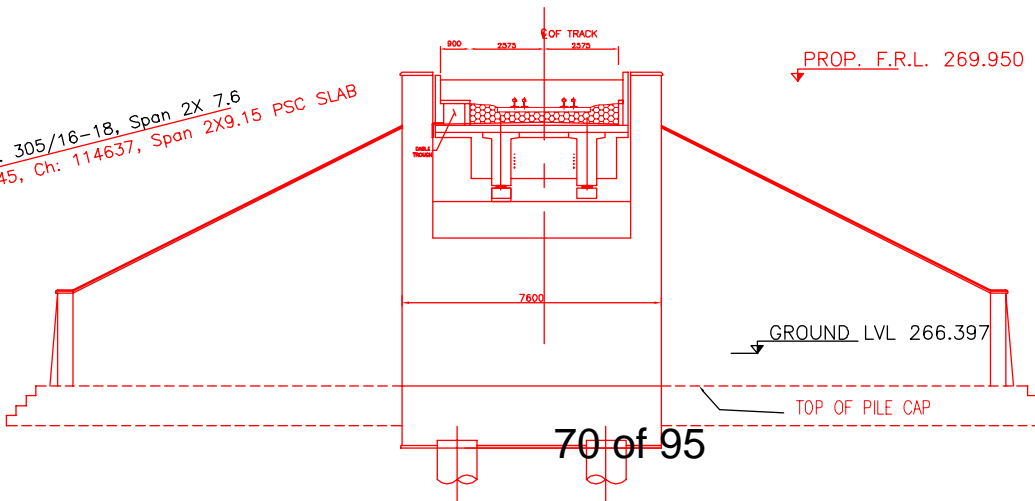
HALF BOTTOM PLAN HALF TOP PLAN



TYP. DETAILS OF RETAINING WALL



KEY PLAN



SECTION A-A

70 of 95

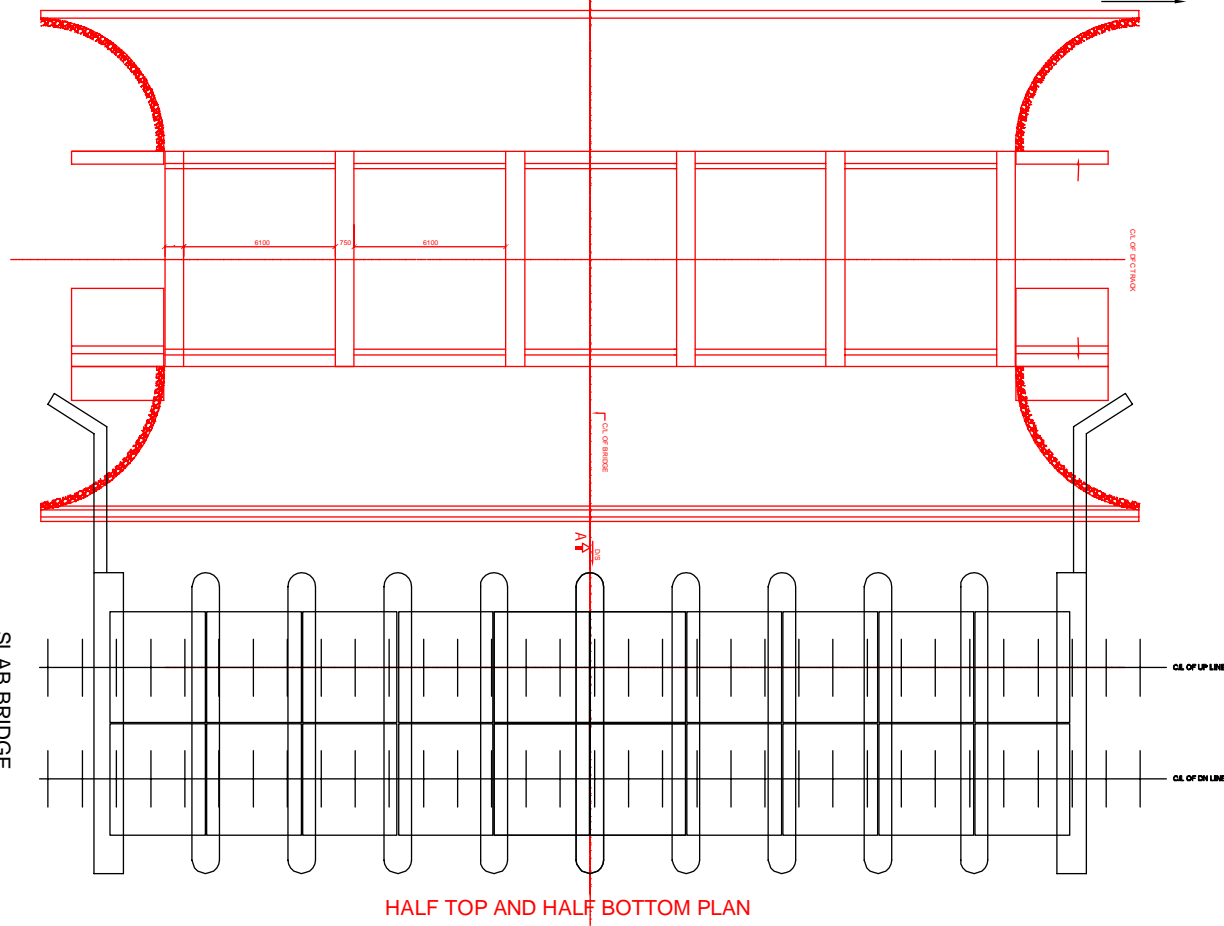
NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
8. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
9. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
10. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
11. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
12. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
13. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
14. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
15. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
16. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
17. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
18. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
19. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
20. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYERS REQUIREMENT.

INDICATIVE DRAWING

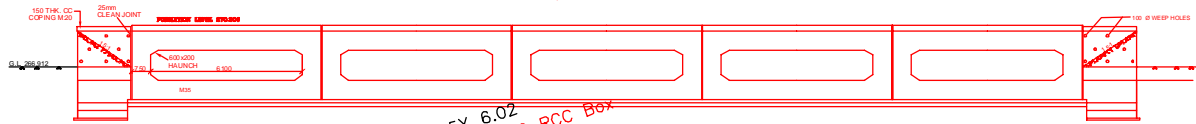
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
AECOM		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
CONTRACT PACKAGE - 301						
STRUCTURE		PROPOSED MAJOR BR. NO. 145 SPAN (2X9.15m) AT CH. 114637				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/145	R0

PILKHANI SAHNEWAL

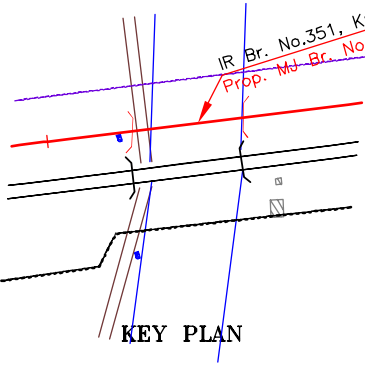


SLAB BRIDGE

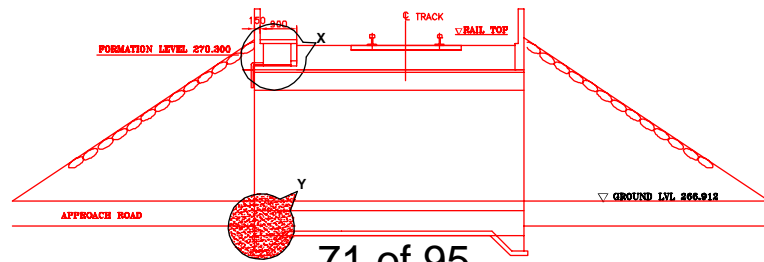
HALF TOP AND HALF BOTTOM PLAN



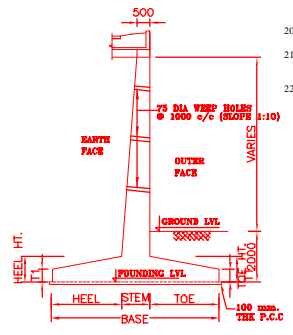
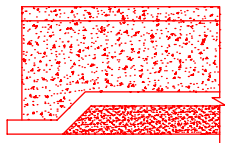
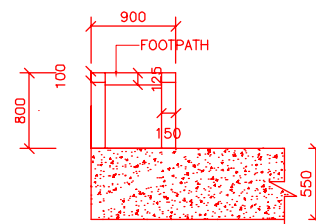
SIDE ELEVATION



IR Br. No. 351, Km. 306/12-14, Span 5X 6.02
 Prop. M.J. Br. No. 148, Ch. 115550, Span 5X6.10 RCC Box



71 of 95
 ELEVATION AT A-A

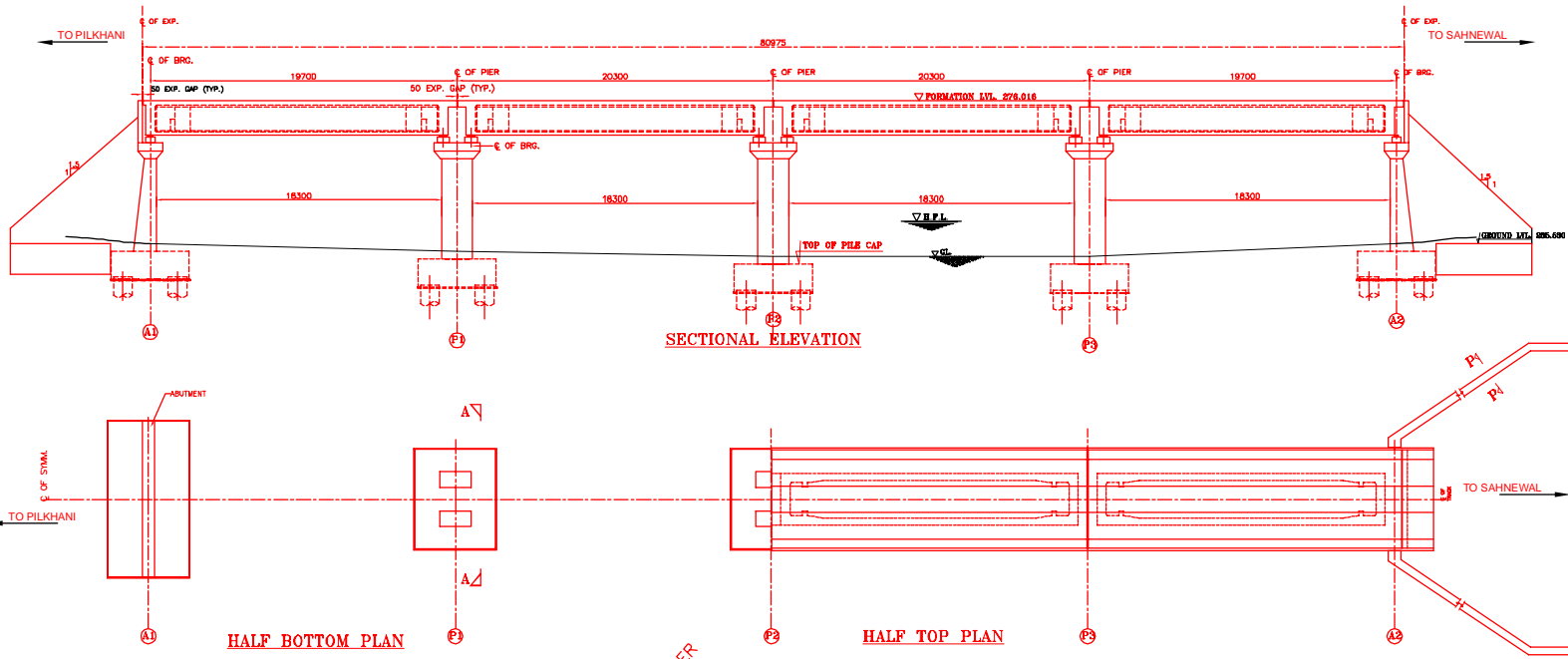


SECTION SCALE NTS

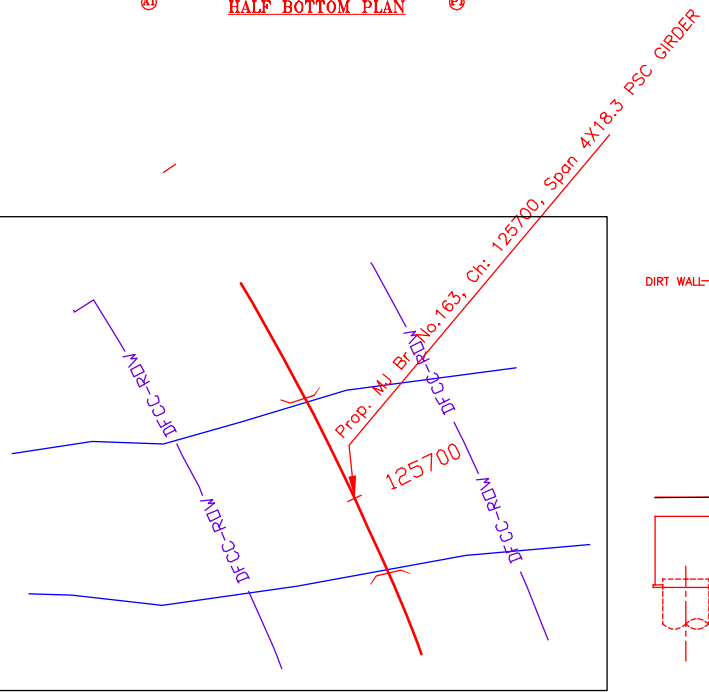
- NOTES:-
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT BIS CODES.
 - b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD) HIGH YIELD STRENGTH DEFORMED (HYSD) THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS DIMENSIONS SHALL BE APPROVED BY DFCCL.
 - TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
 - WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL ABUTMENT
 - WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/ BALAST RETAINER.
 - DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.1 OF IRS CONCRETE BRIDGE CODE.
 - TOP OF SLAB BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT TRACKS IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INEVITABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
 - THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
 - PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
 - SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:10.
 - IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFC.

INDICATIVE DRAWING

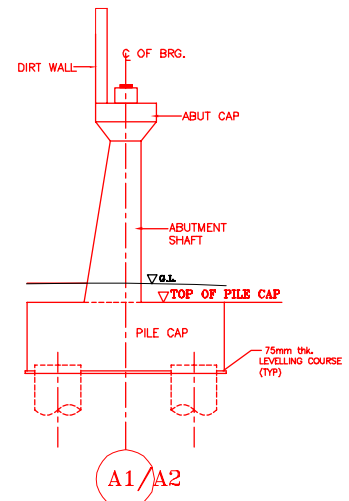
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
AECOM		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 148 SPAN (5X6.10m) AT CH. 115550				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/148	R0



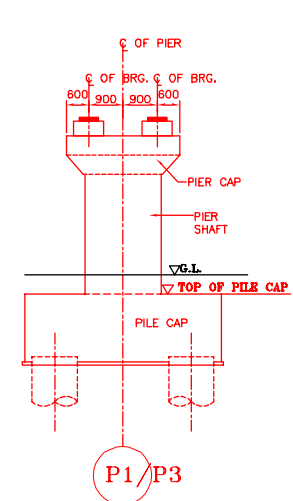
- NOTES:-**
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
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 - HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
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 - MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
 - THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
 - IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
 - IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
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 - STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
 - DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.



KEY PLAN



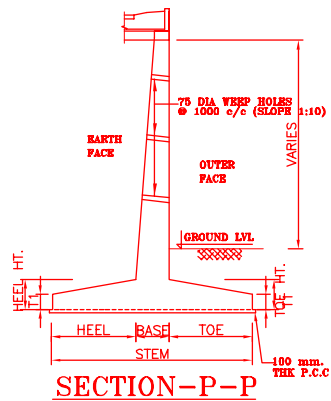
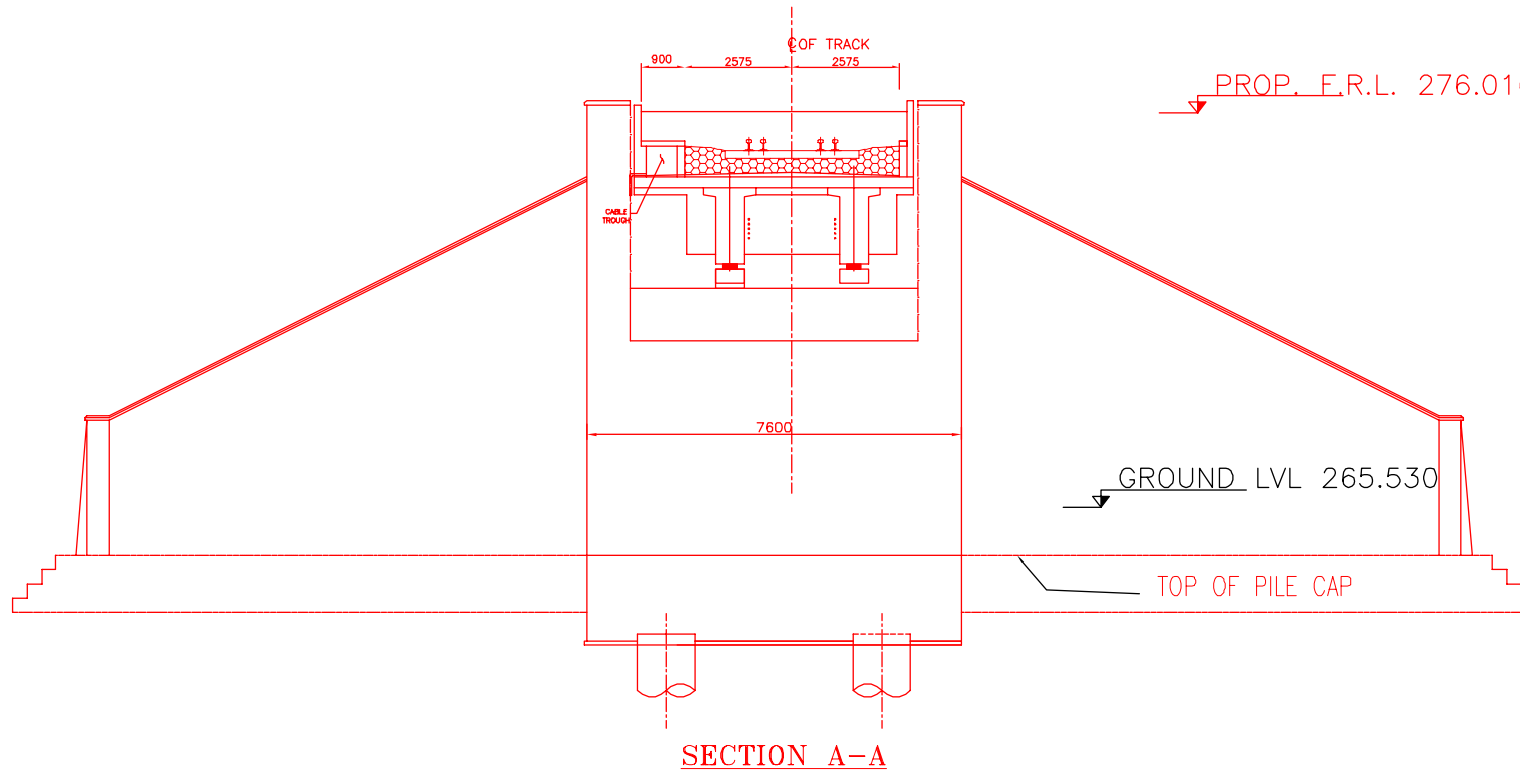
DETAIL OF ABUTMENT





DETAIL OF PIER

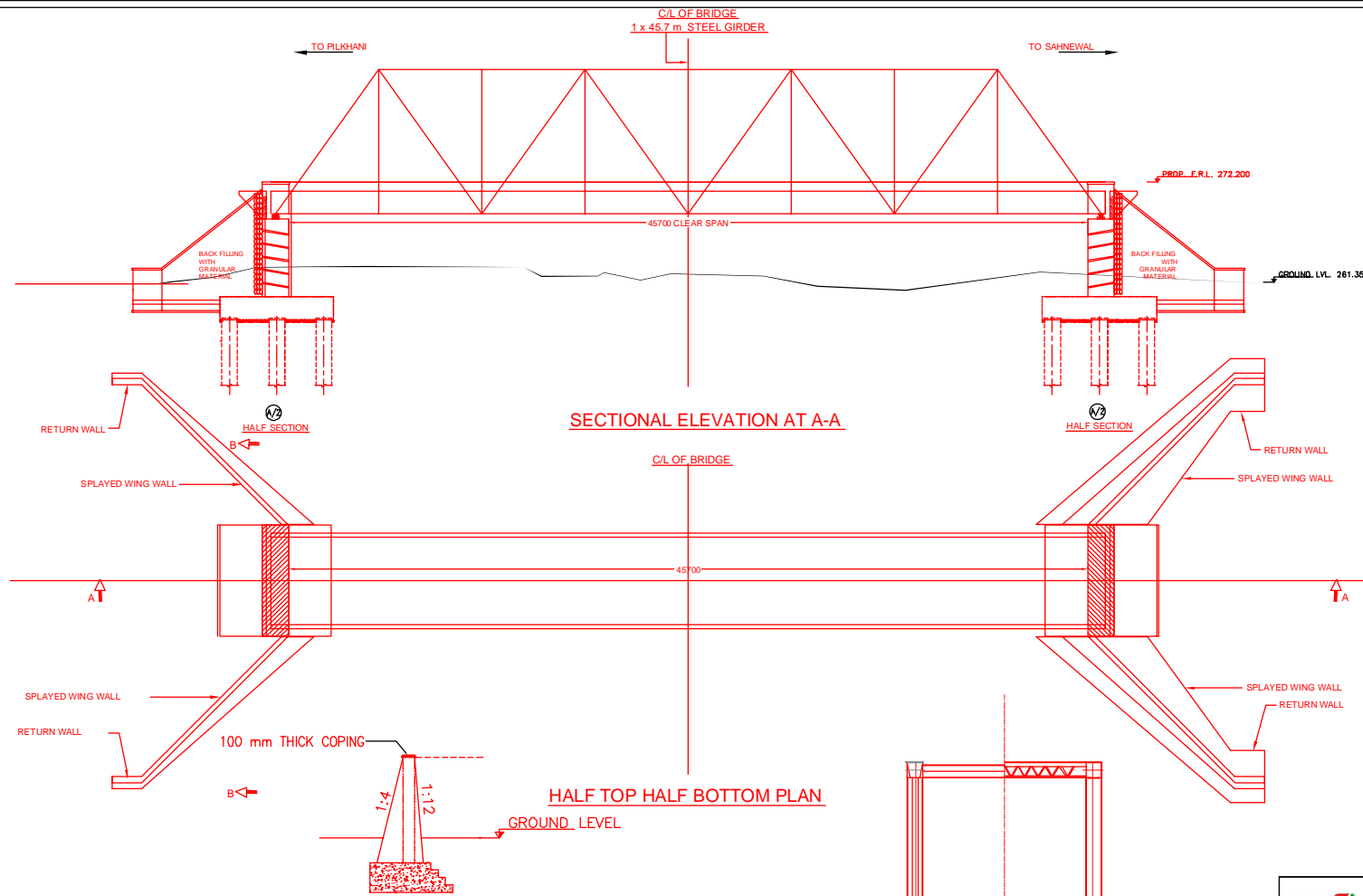
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		EASTERN CORRIDOR SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 163 SPAN (4X18.3m) AT CH. 125700				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/163 SHEET 1 OF 2	RO

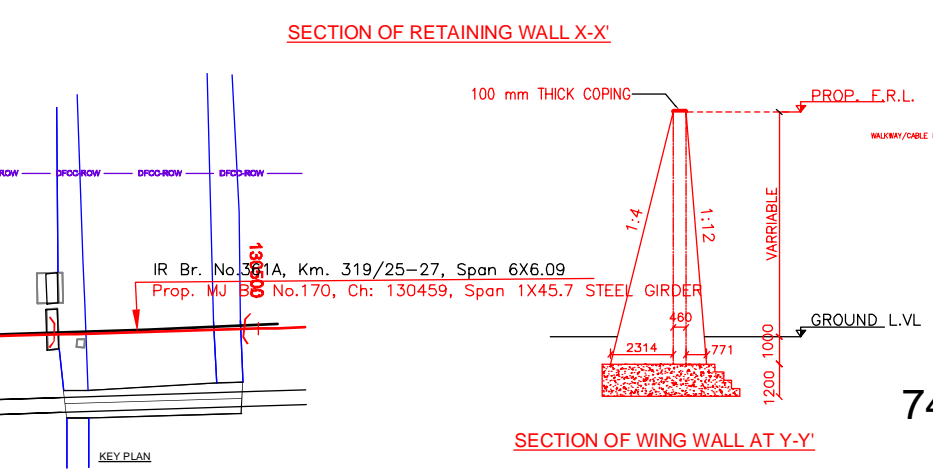


INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 163 SPAN (4X18.3m) AT CH. 125700				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/163 SHEET 2 OF 2	R0

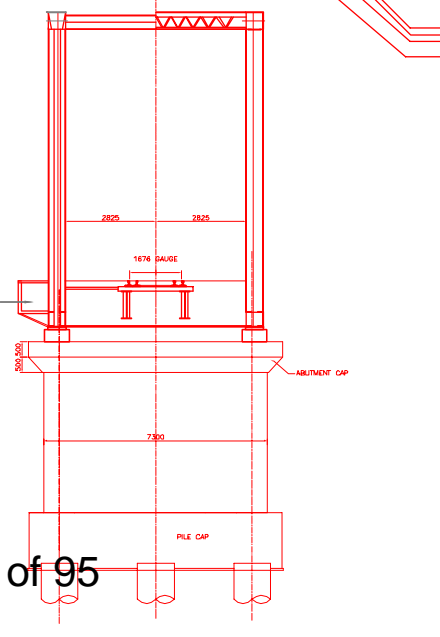


SECTIONAL ELEVATION AT A-A

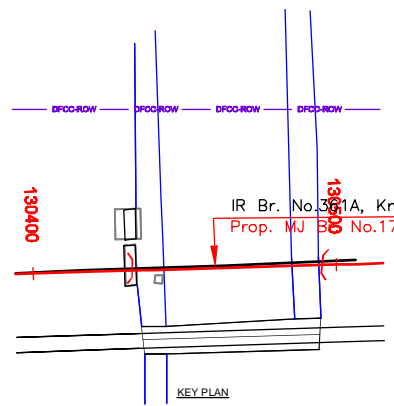


SECTION OF RETAINING WALL X-X'

SECTION OF WING WALL AT Y-Y'



TYP. SEC. B-B



KEY PLAN

NOTES:-

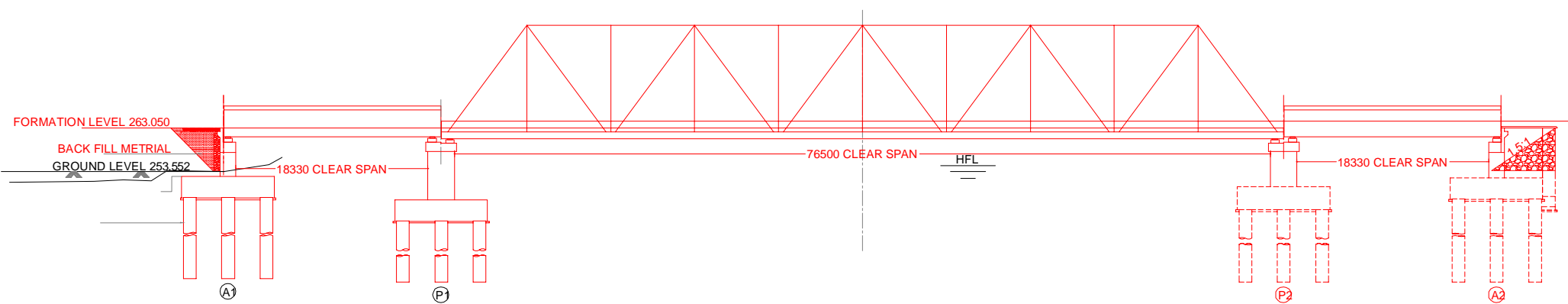
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
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 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 mm DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
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INDICATIVE DRAWING

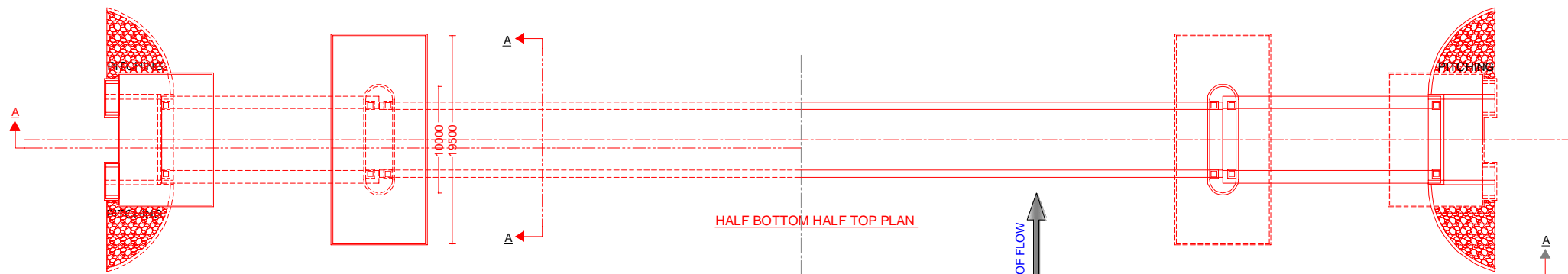
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED MAJOR BR. NO. 170 SPAN (1X45.7m) AT CH. 130459				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/170	R0

← TO PILKHANI

→ TO SAHNEWAL

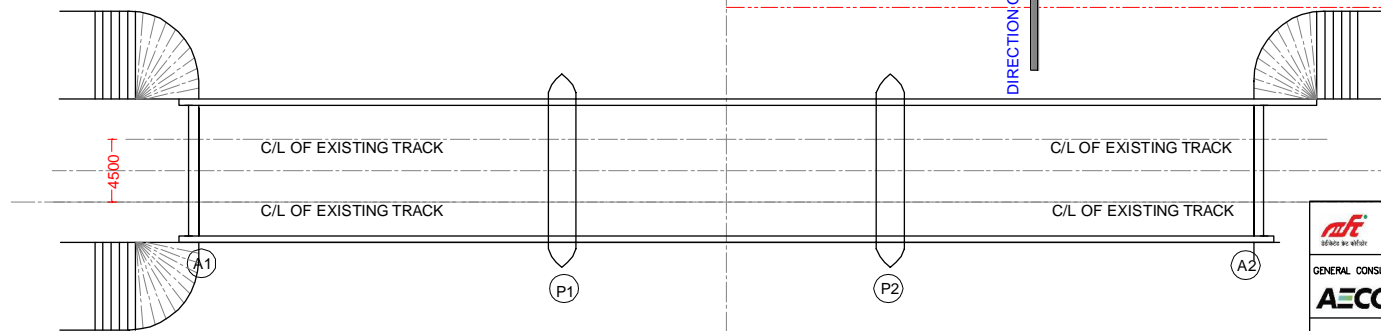


HALF SECTION HALF ELEVATION AT A - A



HALF BOTTOM HALF TOP PLAN

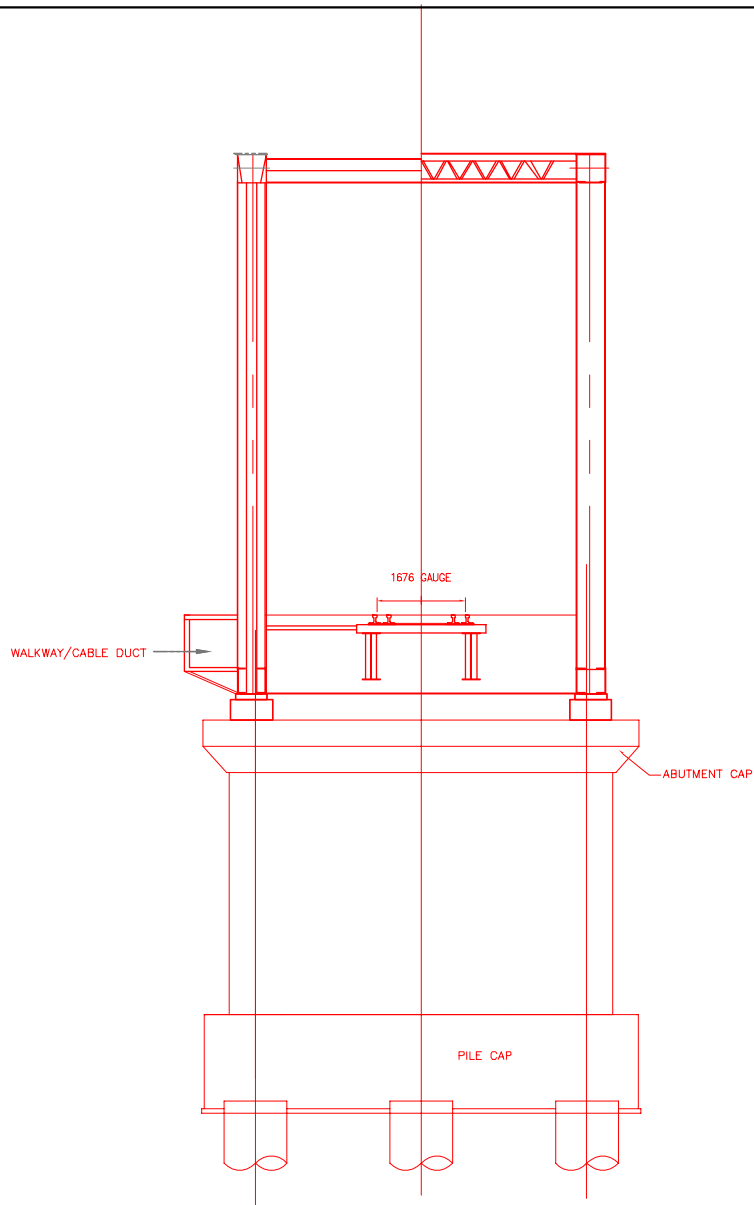
DIRECTION OF FLOW ↑



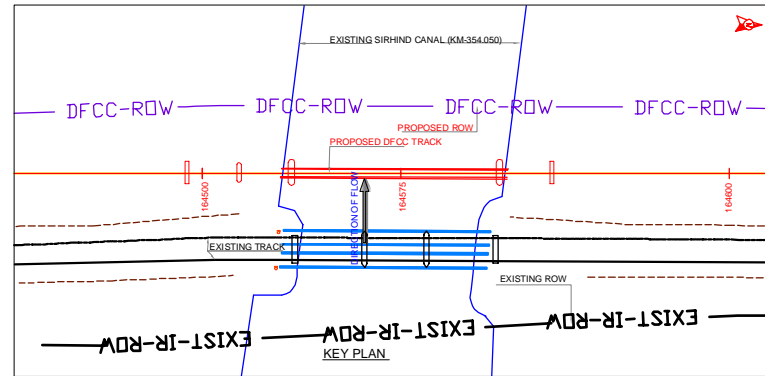
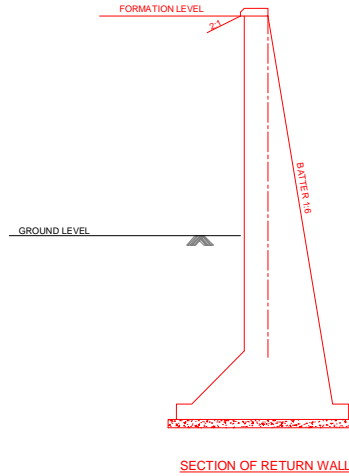
EXISTING BRIDGE SPAN 24.20+21.5+24.10m.

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
STRUCTURE	CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 199 SPAN (1X18.3+1X76.5+1X18.3 m) AT CH. 164575					
TITLE	GENERAL ARRANGEMENT DRAWING					
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR/199	R0
						SHEET 1 OF 2



TYPICAL CROSS SECTION A-A



NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
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 - v) RELEVANT BIS CODES.
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8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 CC BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL
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10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL/ROAD, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL/ROAD AUTHORITY BY THE CONTRACTOR WELL IN TIME.
13. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
14. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
15. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
16. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
17. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
18. DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
19. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

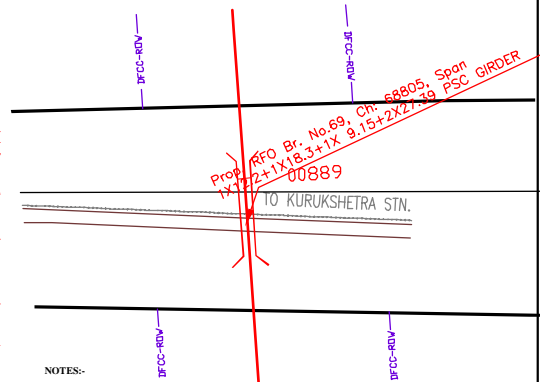
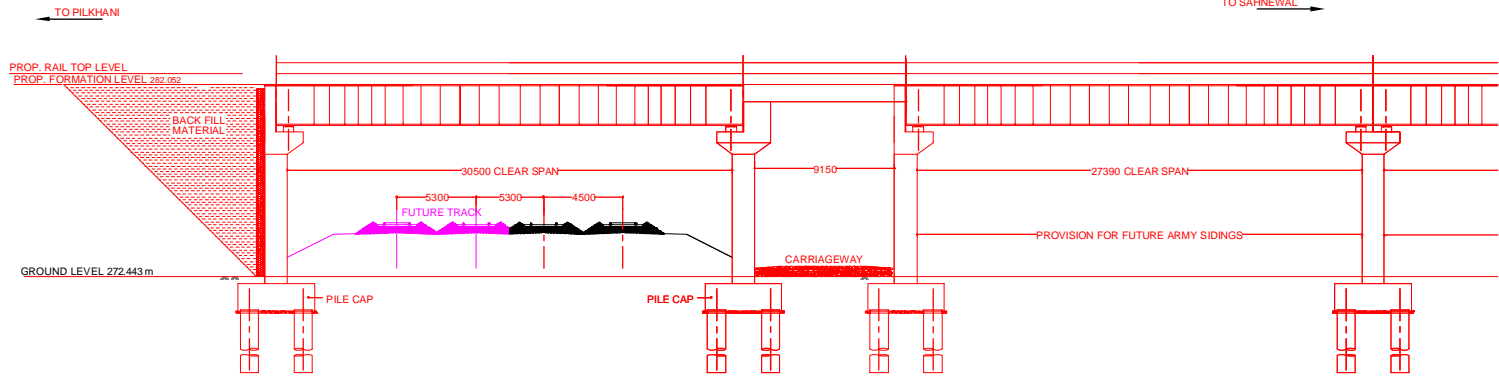
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.	
GENERAL CONSULTANT		AECOM Asia Co. Ltd.	
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA	
PROJECT		EASTERN CORRIDOR SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500	
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR BR. NO. 199 SPAN (1X18.3+1X76.5+1X18.3 m) AT CH. 164575	
TITLE		GENERAL ARRANGEMENT DRAWING	
SCALE	DATE	DRAWN BY	CHECKED BY
NTS	MAY 2015		
APPROVED BY	ORG. NO.	REV.	
	AECOM/301/MJR/199	R0	
SHEET 2 OF 2			

Contract Package: 301

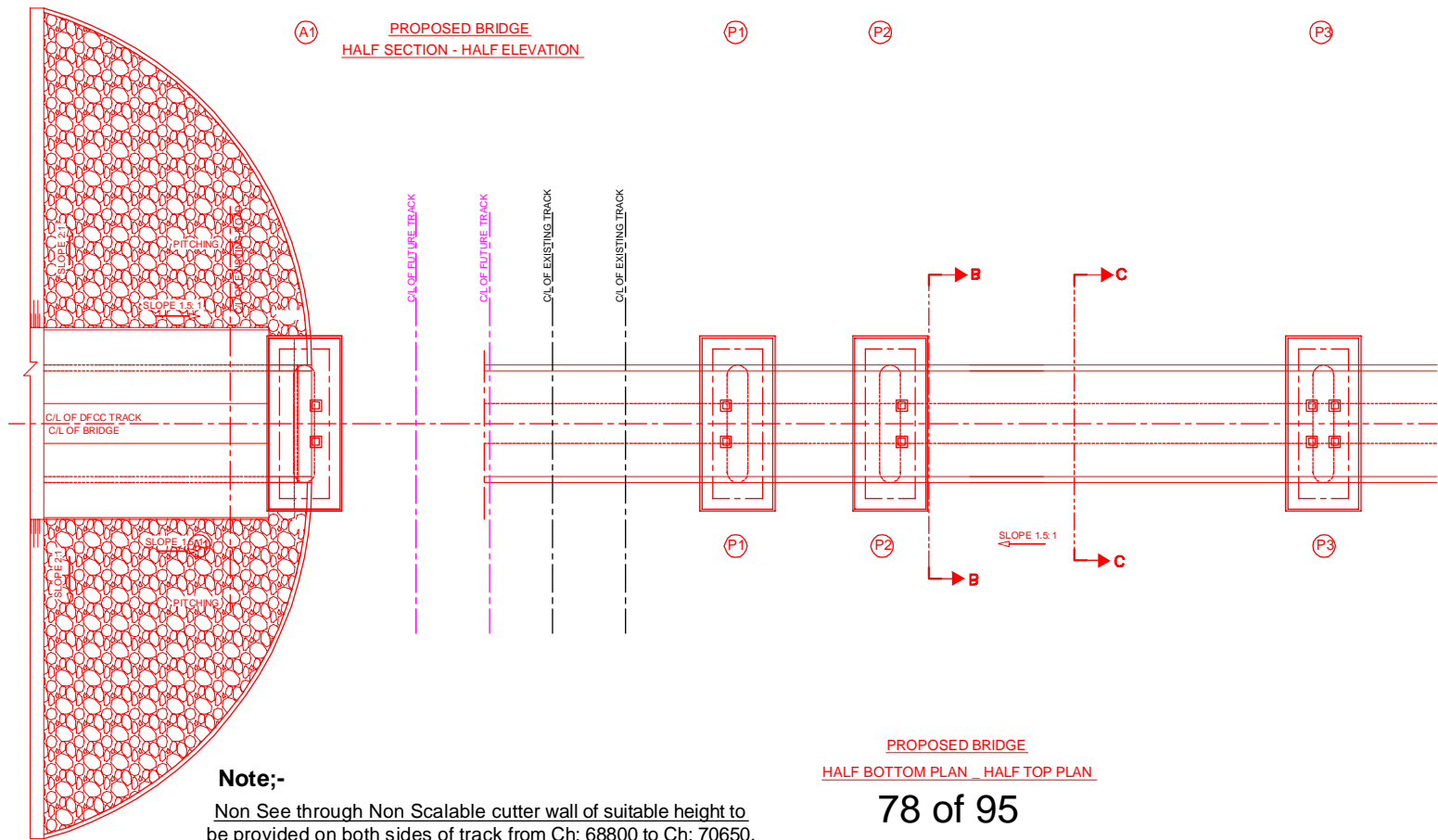
SAHNEWAL TO PILKHANI
From Km 360.200 to 187.500

GAD OF RFOs



**PROPOSED BRIDGE
HALF SECTION - HALF ELEVATION**


- NOTES:-**
1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
i) IRS BRIDGE RULES
ii) IRS CONCRETE BRIDGE CODE
iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE
iv) RELEVANT IRC CODES OF PSC
v) RELEVANT BIS CODES.
b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
 3. HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE FS-500 SATISFYING THE REQUIREMENTS OF IS 1786-1985 SHALL BE USED AS REINFORCEMENT.
 4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
 8. INSPECTION PLATFORMS SHALL BE PROVIDED AS PER RAILWAY GUIDE LINES.
 9. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
 10. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
 11. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
 12. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
 13. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 14. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED OVER CONCRETE DECK.
 15. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
 16. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.
 17. CRS SANCTION SHALL BE OBTAINED FOR PROPOSED WORK AS PER RPWM.
 18. TEMPORARY ARRANGEMENT DRAWING/ METHODOLOGY FOR LAUNCHING OF GIRDERS OVER RAILWAY TRACK AND CONSTRUCTION OF FOUNDATIONS/SUB STRUCTURES ADJACENT TO RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE STARTING OF WORK.
 19. THE CONTRACTOR SHALL ENSURE DURING EXECUTION OF WORK THAT SAFETY OF RUNNING RAIL TRAFFIC IS NOT EFFECTED.
 20. THE WORK SHALL BE EXECUTED UNDER INTERMITTENT TRAFFIC AND POWER BLOCK.

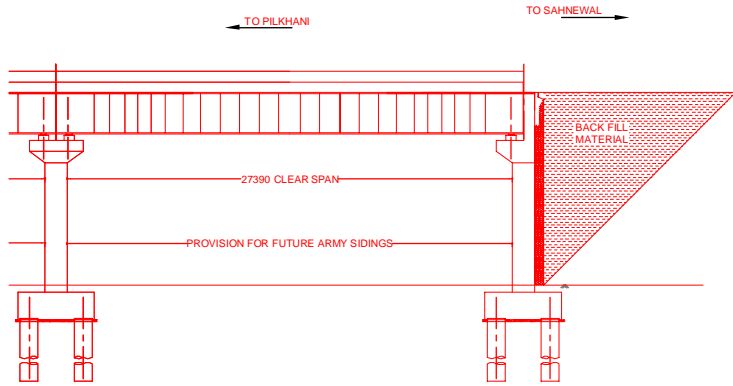


**PROPOSED BRIDGE
HALF BOTTOM PLAN - HALF TOP PLAN**

Note:-
Non See through Non Scalable cutter wall of suitable height to be provided on both sides of track from Ch: 68800 to Ch: 70650.

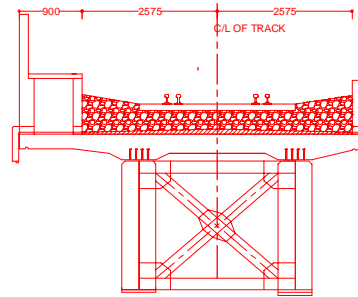
INDICATIVE DRAWING

 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT	AECOM Asia Co. Ltd.					
	9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
EASTERN CORRIDOR						
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
CONTRACT PACKAGE - 301						
STRUCTURE	PROPOSED RAIL FLYOVER NO. 69 SPAN (1X30.5 + 1X9.15 + 2X27.39) AT CH. 68805					
TITLE GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/69	R0
						SHEET 1 OF 2

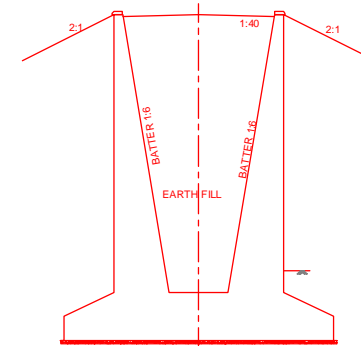


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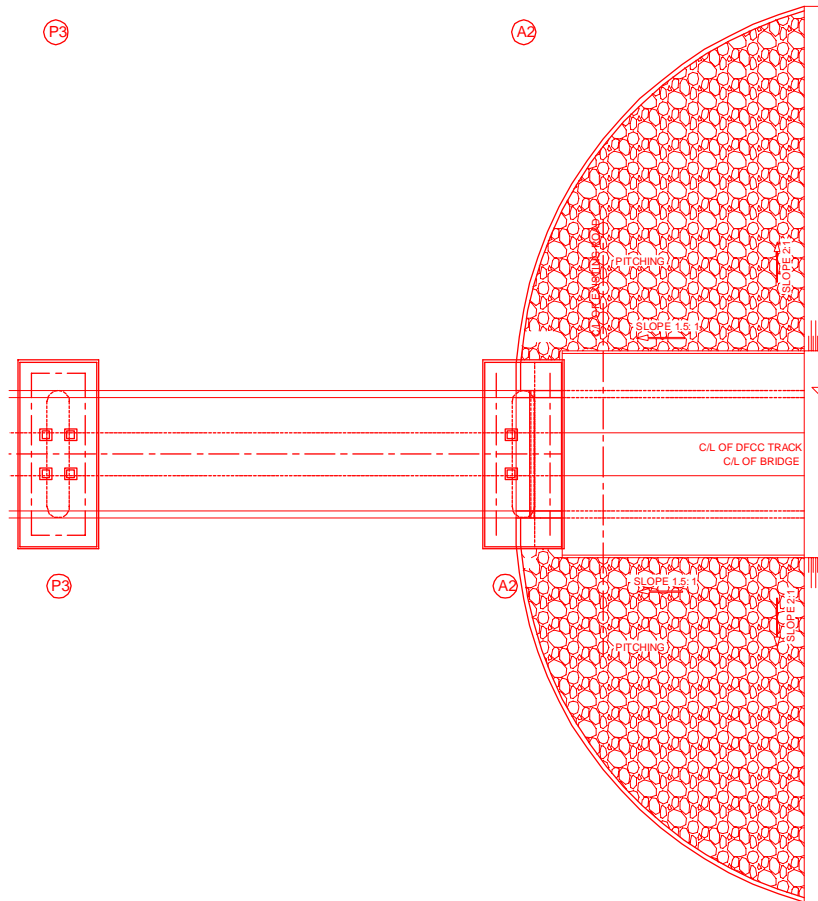
A2



TYPICAL CROSS SECTION FOR 30.5m SPAN

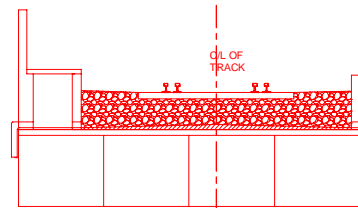


SECTION OF RETURN WALL AT C-C

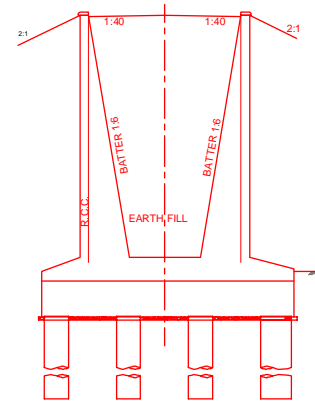


P3

A2



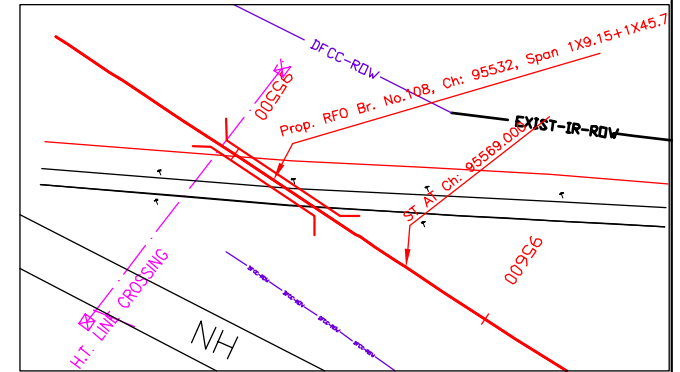
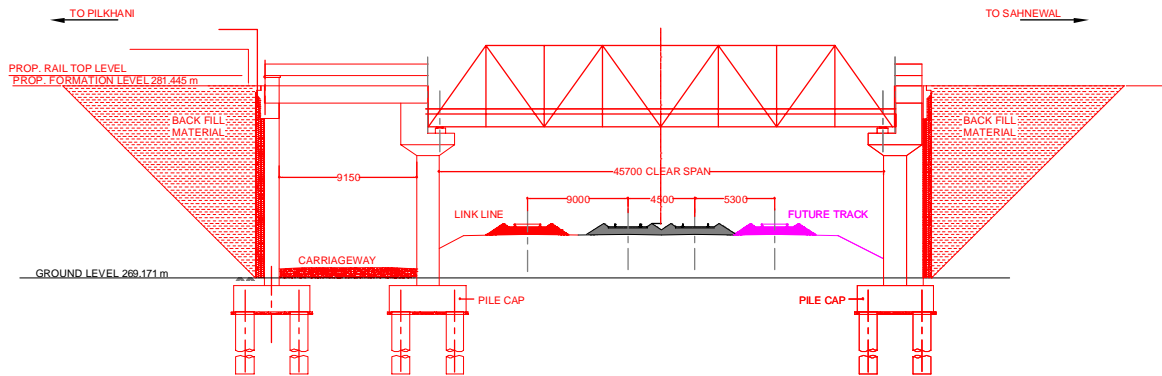
TYPICAL CROSS SECTION SLAB FOR 9.15m



SECTION AT B-B

INDICATIVE DRAWING

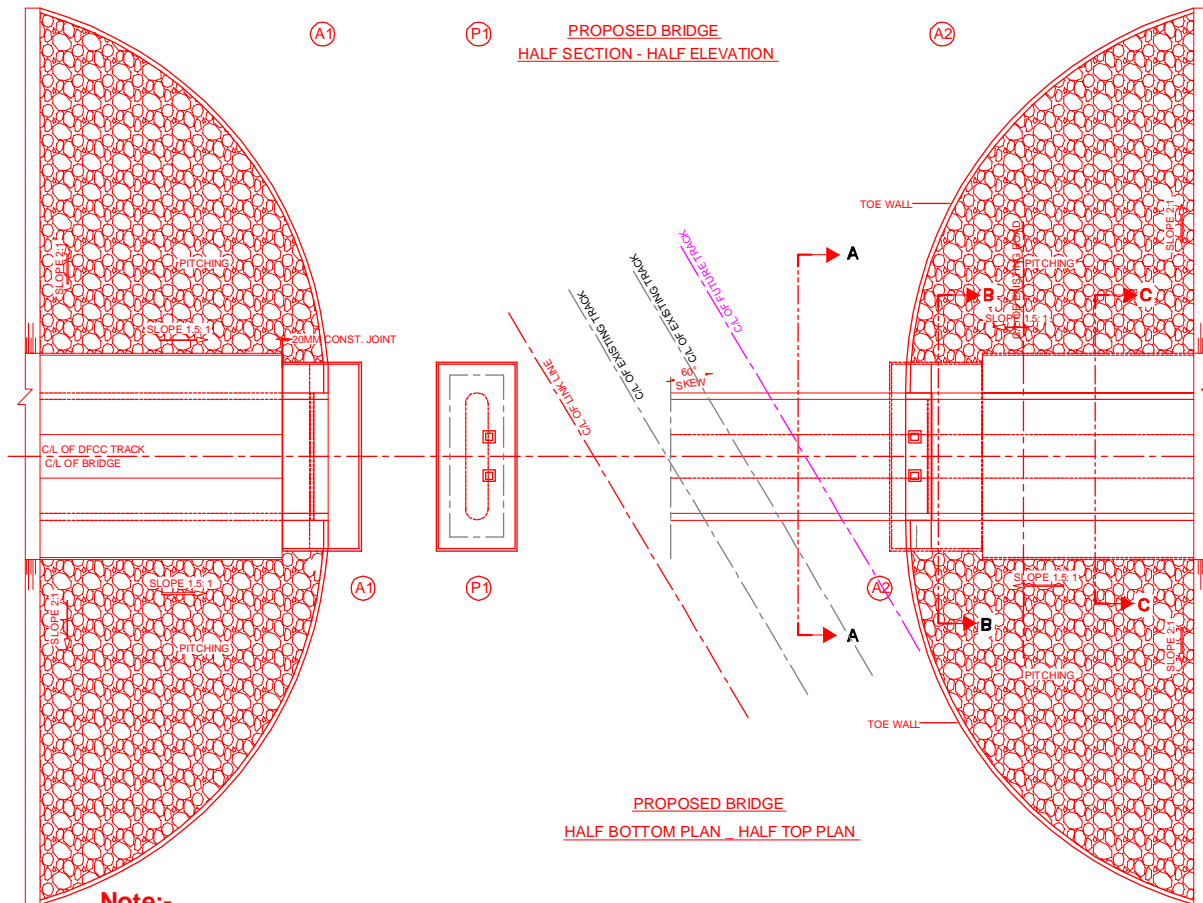
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GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
AECOM		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED RAIL FLYOVER NO. 69 SPAN (1X30.5 + 1X9.15 + 2X27.39) AT CH. 68805				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/69	R0
						SHEET 2 OF 2



NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
3. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
4. HIGH YIELD STRENGTH DEFORMED TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
5. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
8. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
9. INSPECTION PLATFORMS SHALL BE PROVIDED AS PER RAILWAY GUIDE LINES.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
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13. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT.
14. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACKS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
15. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED OVER CONCRETE DECK.
16. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
17. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.
18. CRS SANCTION SHALL BE OBTAINED FOR PROPOSED WORK AS PER IRPWM.
19. TEMPORARY ARRANGEMENT DRAWING METHODOLOGY FOR LAUNCHING OF GIRDERS OVER RAILWAY TRACK AND CONSTRUCTION OF FOUNDATIONS/SUB STRUCTURES ADJACENT TO RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE STARTING OF WORK.
20. THE CONTRACTOR SHALL ENSURE DURING EXECUTION OF WORK THAT SAFETY OF RUNNING RAIL TRAFFIC IS NOT EFFECTED.
21. THE WORK SHALL BE EXECUTED UNDER INTERMITTENT TRAFFIC AND POWER BLOCK.

**PROPOSED BRIDGE
HALF SECTION - HALF ELEVATION**





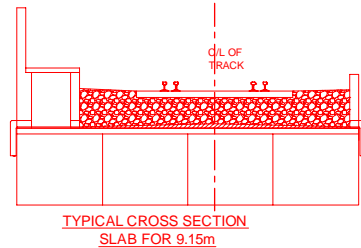
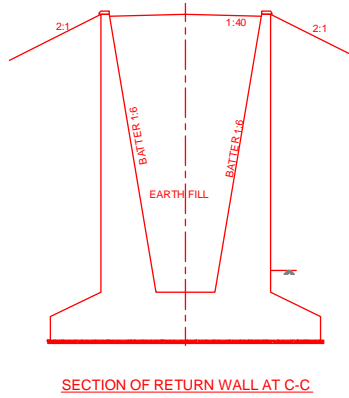
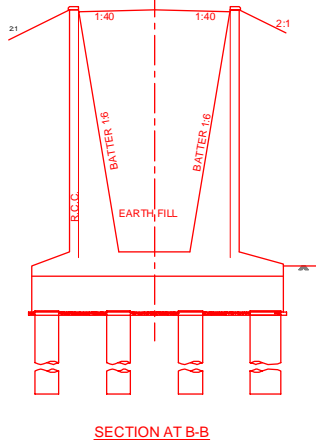
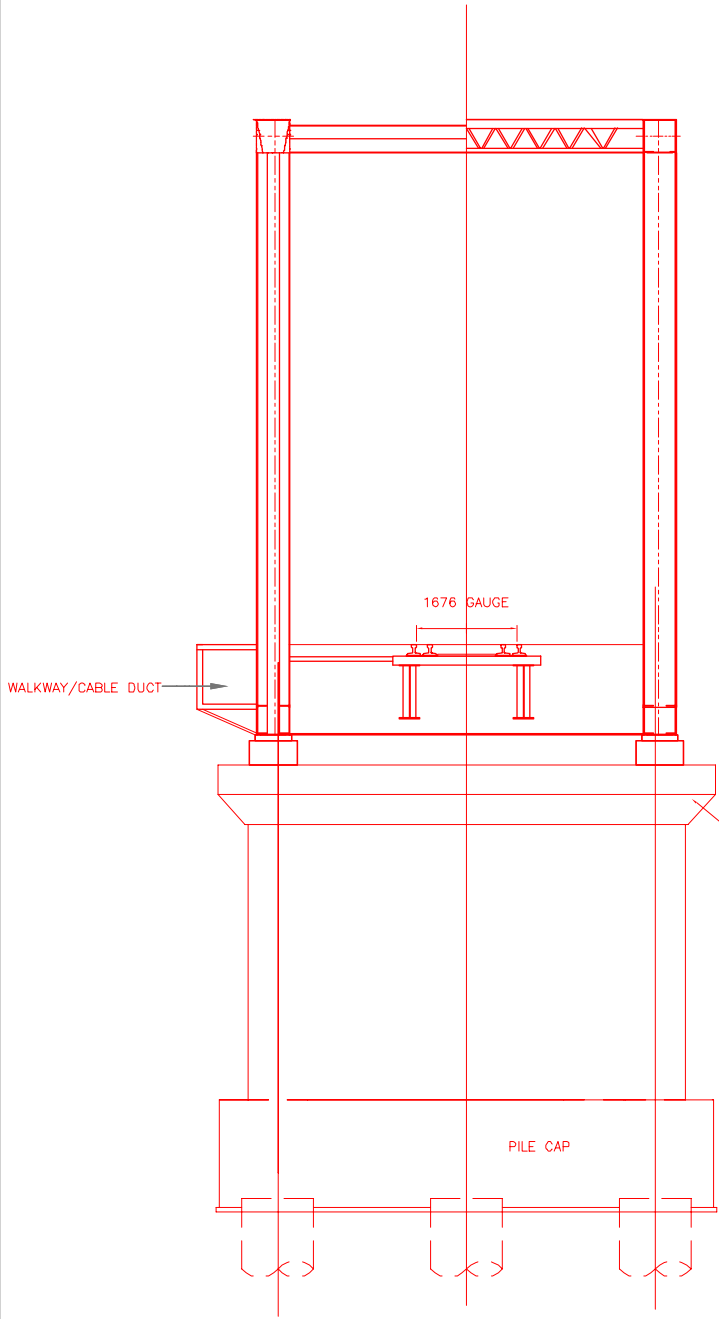
**PROPOSED BRIDGE
HALF BOTTOM PLAN - HALF TOP PLAN**

Note:-


There is a link line of DFCCIL on one side and future line on this side may not be needed. Also there is National Highway on other side and hence the opening for road on this side may not be required.

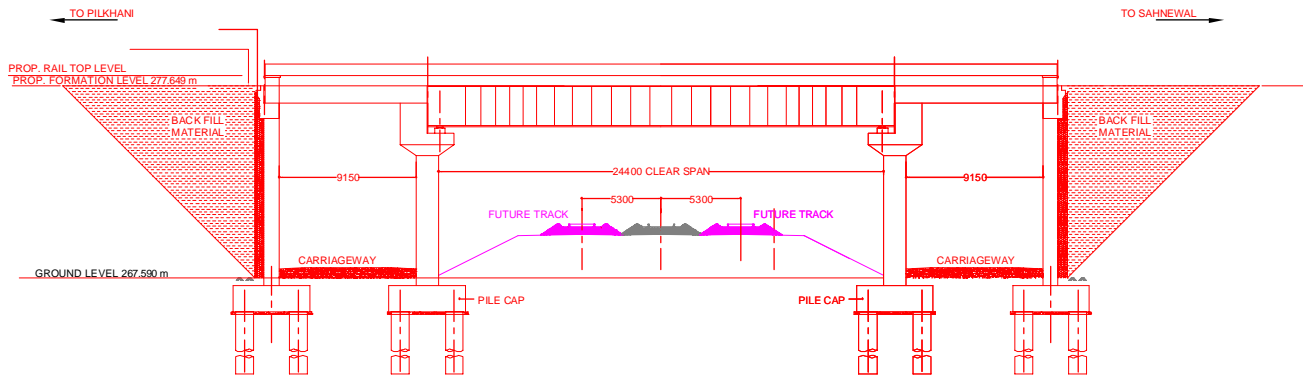
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED RAIL FLYOVER NO. 108 SPAN (1X9.15. + 1X45.7) AT CH. 95532				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/108 SHEET 1 OF 2	R0

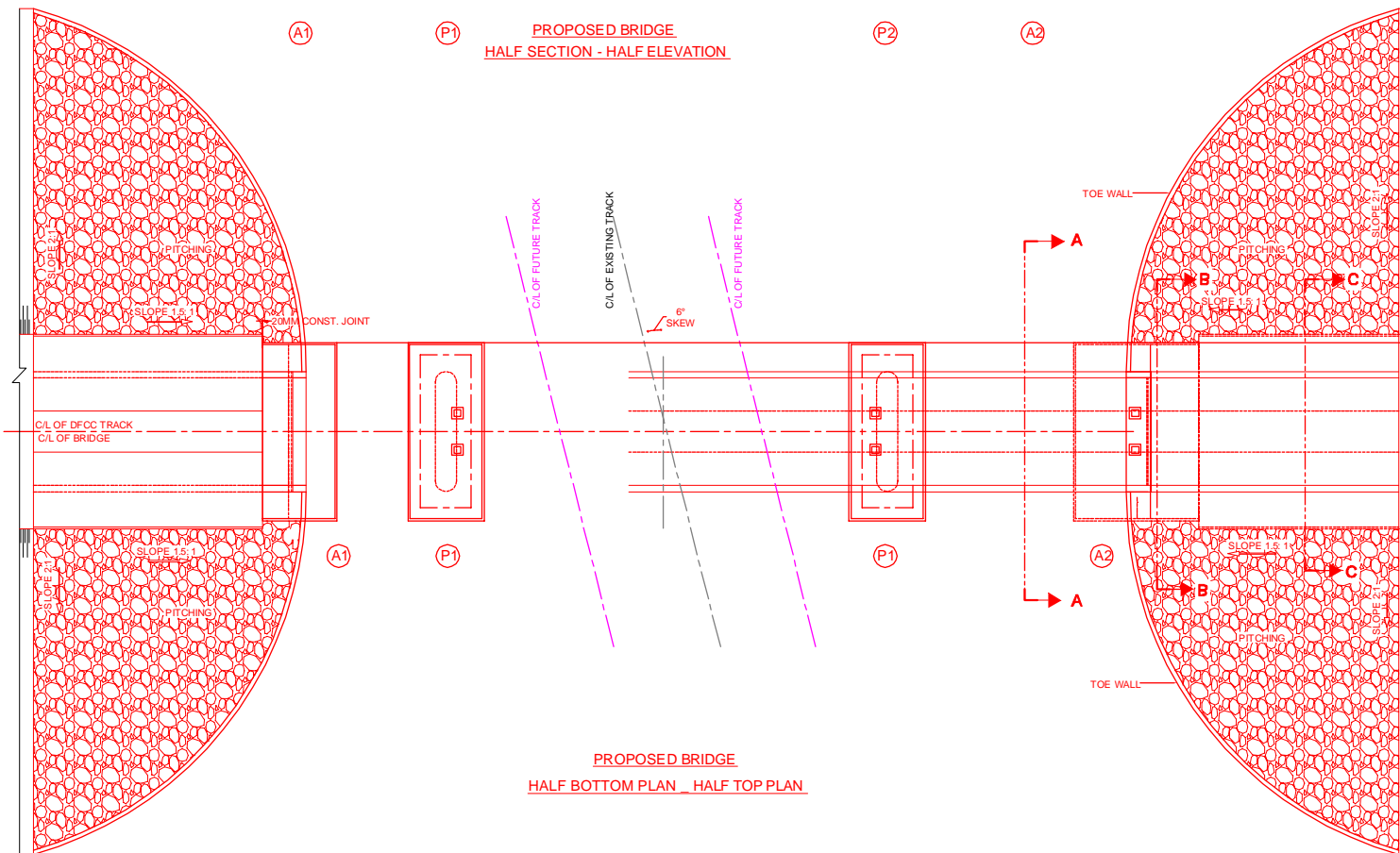


INDICATIVE DRAWING

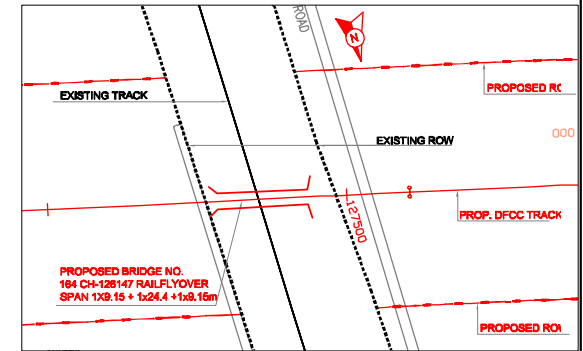
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GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED RAIL FLYOVER NO. 108 SPAN (1X9.15. + 1X45.7) AT CH. 95532				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/108	R0
						SHEET 2 OF 2



PROPOSED BRIDGE
HALF SECTION - HALF ELEVATION



PROPOSED BRIDGE
HALF BOTTOM PLAN - HALF TOP PLAN



NOTES:-

- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
i) IRS BRIDGE RULES.
ii) IRS CONCRETE BRIDGE CODE.
iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
iv) RELEVANT IRC CODES OF PSC.
v) RELEVANT BIS CODES.
b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- INSPECTION PLATFORMS SHALL BE PROVIDED AS PER RAILWAY GUIDE LINES.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDPC.
- WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED OVER CONCRETE DECK.
- DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYERS REQUIREMENT.
- CRS SANCTION SHALL BE OBTAINED FOR PROPOSED WORK AS PER IPBWM.
- TEMPORARY ARRANGEMENT DRAWING METHODOLOGY FOR LAUNCHING OF GIRDERS OVER RAILWAY TRACK AND CONSTRUCTION OF FOUNDATIONS/SUB STRUCTURES ADJACENT TO RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE STARTING OF WORK.
- THE CONTRACTOR SHALL ENSURE DURING EXECUTION OF WORK THAT SAFETY OF RUNNING RAIL TRAFFIC IS NOT EFFECTED.
- THE WORK SHALL BE EXECUTED UNDER INTERMITTENT TRAFFIC AND POWER BLOCK.

INDICATIVE DRAWING



DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

GENERAL CONSULTANT

AECOM Asia Co. Ltd.



9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA

EASTERN CORRIDOR

PROJECT

SAHNEWAL TO PILKHANI
From Km 360.200 to Km 187.500

CONTRACT PACKAGE - 301

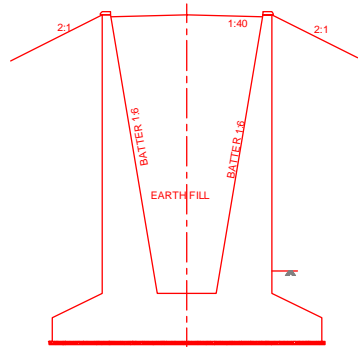
STRUCTURE

**PROPOSED RAIL FLYOVER NO. 164
SPAN (1x9.15 + 1x24.4 + 1x9.15) AT CH. 126147**

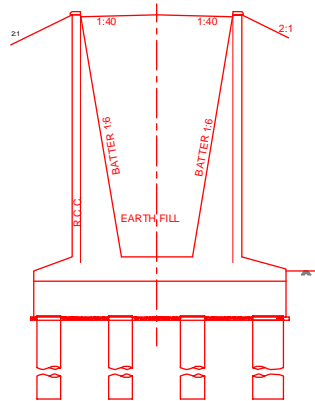
TITLE

GENERAL ARRANGEMENT DRAWING

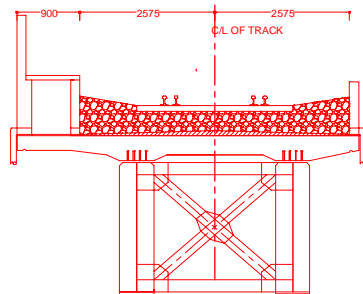
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/164 SHEET 1 OF 2	R0



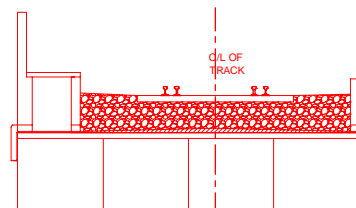
SECTION OF RETURN WALL AT C-C



SECTION AT B-B



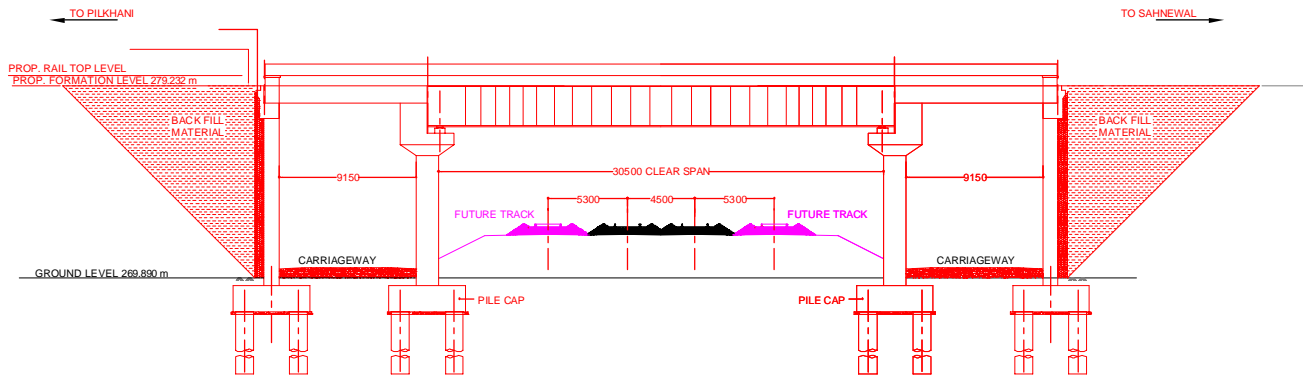
TYPICAL CROSS SECTION
FOR 30.5m SPAN



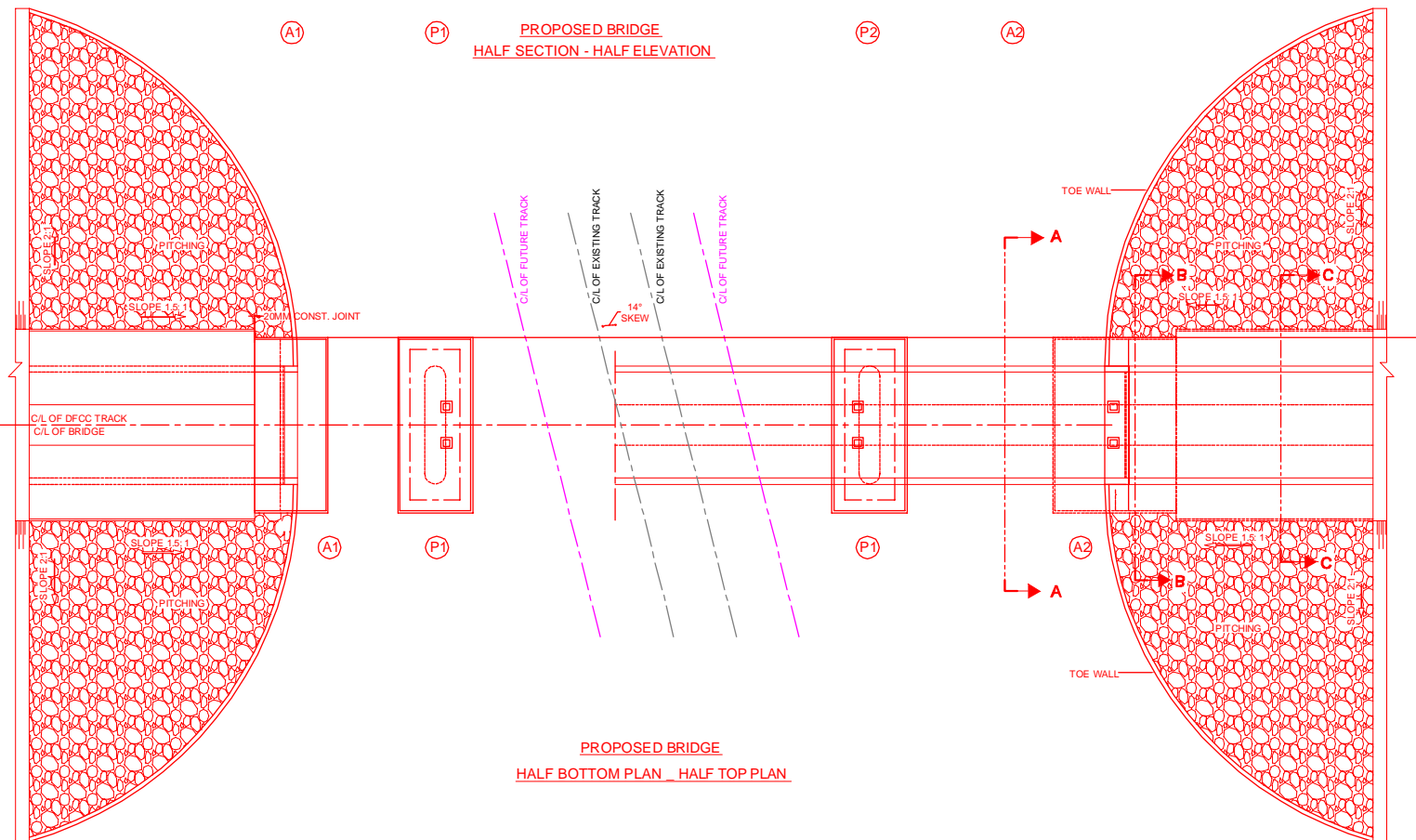
TYPICAL CROSS SECTION
SLAB FOR 9.15m

INDICATIVE DRAWING

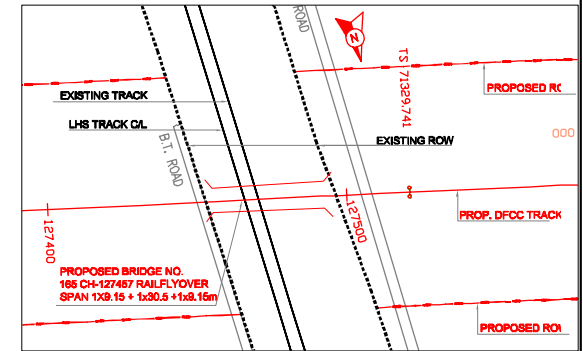
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GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED RAIL FLYOVER NO. 164 SPAN (1X9.15 + 1X24.4 + 1X9.15) AT CH. 126147				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/164	R0
						SHEET 2 OF 2



PROPOSED BRIDGE
HALF SECTION - HALF ELEVATION




PROPOSED BRIDGE
HALF BOTTOM PLAN - HALF TOP PLAN

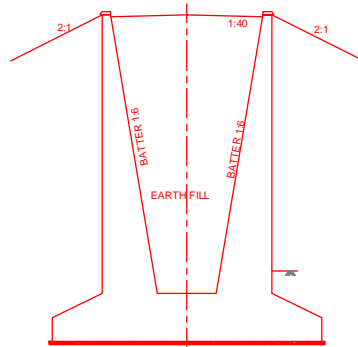


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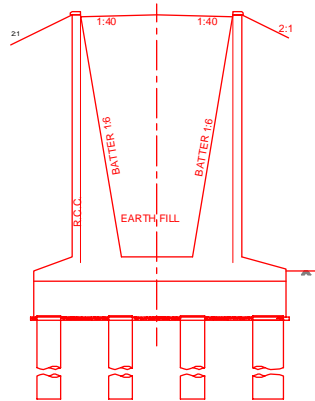
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
i) IRS BRIDGE RULES.
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iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
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v) RELEVANT BIS CODES.
b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF IS 1786-1983 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD-RAILS.
- INSPECTION PLATFORMS SHALL BE PROVIDED AS PER RAILWAY GUIDE LINES.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR DFCC.
- WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL ABUTMENT
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACKS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- C/WEARING COURSE OF MINIMUM M + 25 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED OVER CONCRETE DECK. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYERS REQUIREMENT.
- CRS SANCTION SHALL BE OBTAINED FOR PROPOSED WORK AS PER IRPW.
- TEMPORARY ARRANGEMENT DRAWING/ METHODOLOGY FOR LAUNCHING OF GIRDERS OVER RAILWAY TRACK AND CONSTRUCTION OF FOUNDATIONS/SUB STRUCTURES ADJACENT TO RAILWAY TRACK SHOULD BE GOT APPROVED FROM RAILWAY AUTHORITY BEFORE STARTING OF WORK.
- THE CONTRACTOR SHALL ENSURE DURING EXECUTION OF WORK THAT SAFETY OF RUNNING RAIL TRAFFIC IS NOT EFFECTED.
- THE WORK SHALL BE EXECUTED UNDER INTERMITTENT TRAFFIC AND POWER BLOCK.

INDICATIVE DRAWING

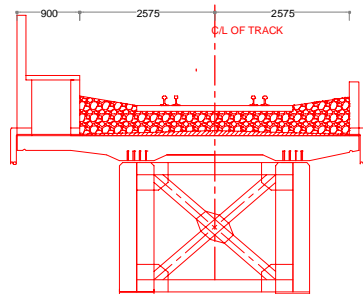
 GENERAL CONSULTANT		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		PROPOSED RAIL FLYOVER NO. 165 SPAN (1X9.15 + 1X30.5 + 1X9.15) AT CH. 127457				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/165	R0



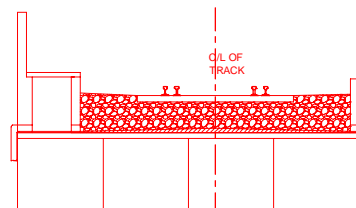
SECTION OF RETURN WALL AT C-C



SECTION AT B-B



TYPICAL CROSS SECTION
FOR 30.5m SPAN



TYPICAL CROSS SECTION
SLAB FOR 9.15m

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT 		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		PROPOSED RAIL FLYOVER NO. 165 SPAN (1X9.15 + 1X30.5 + 1X9.15) AT CH. 127457				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/RFO/165	R0
						SHEET 2 OF 2

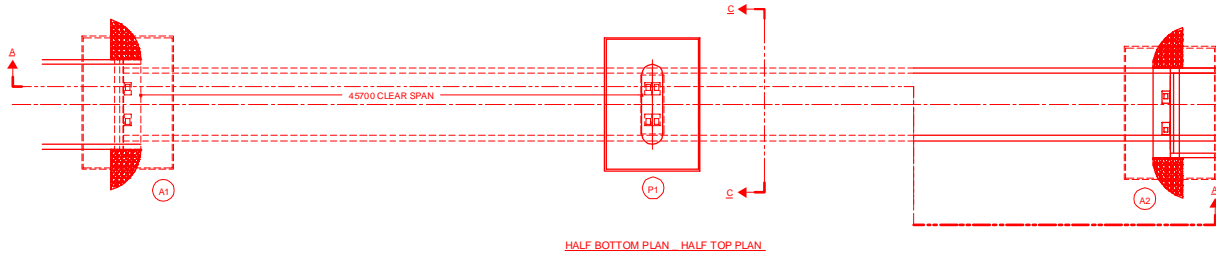
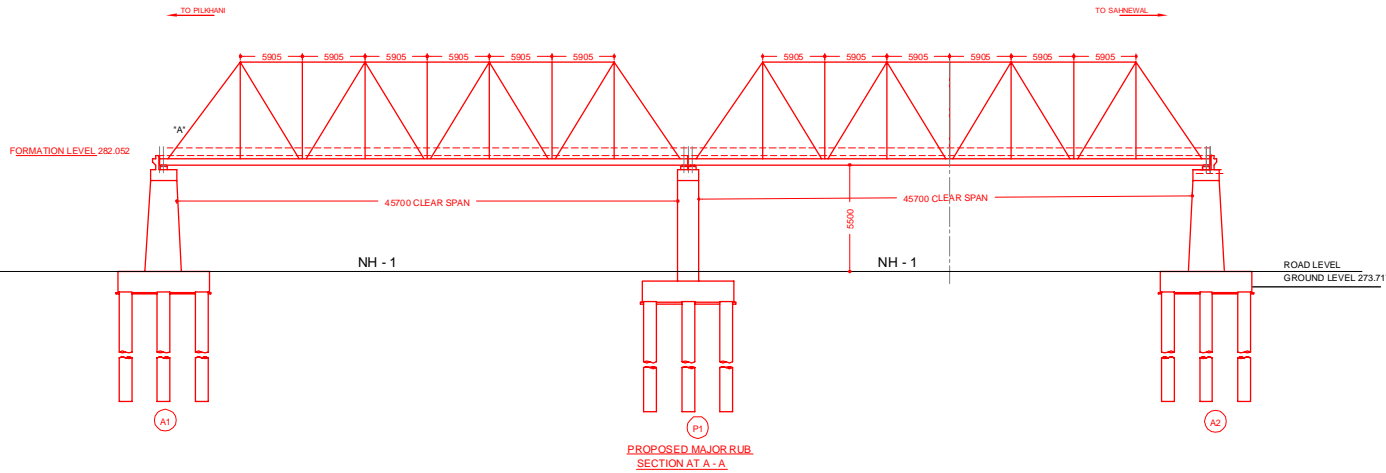
Contract Package: 301

SAHNEWAL TO PILKHANI
From Km 360.200 to 187.500

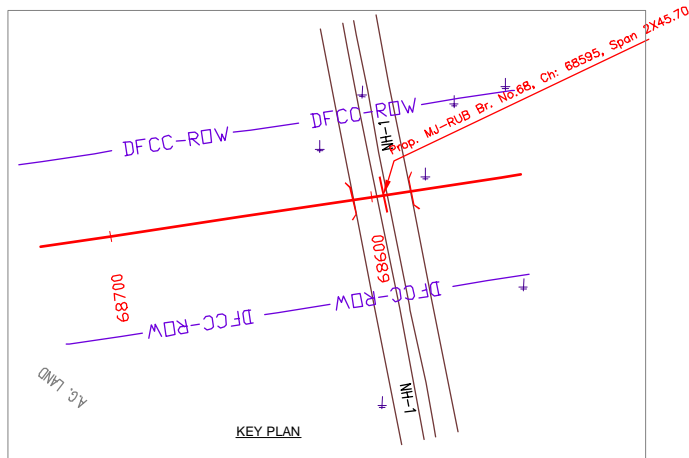
GAD OF MAJOR RUBS

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT IRC CODES OF PSC.
 - v) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
3. HIGH YIELD STRENGTH DEFORMED/ TMT BAR OF GRADE Fe-500 SATIFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
4. ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
5. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
6. SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
7. TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
8. MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20mm DISTANCE AND OTHER LAYER BEING AT 100MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
9. THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. 1200mm DIA PILES OF 20 M LENGTHS HAVE BEEN ASSUMED. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
10. IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
11. IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
12. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
13. WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
14. STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
15. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
16. CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
17. DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
18. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.



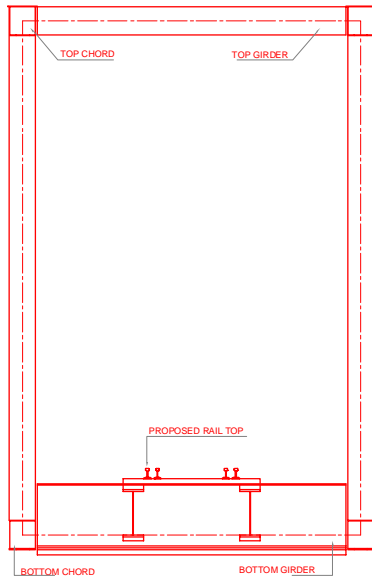
HALF BOTTOM PLAN - HALF TOP PLAN



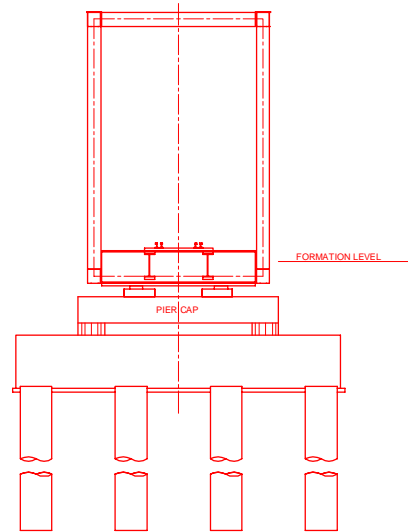
KEY PLAN

INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT AECOM		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
PROJECT SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500		EASTERN CORRIDOR				
CONTRACT PACKAGE - 301		PROPOSED MAJOR RUB BR. NO. 68 SPAN (2x45.7m) AT CH. 68595				
TITLE GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR-RUB/68	R0
						SHEET 1 OF 2



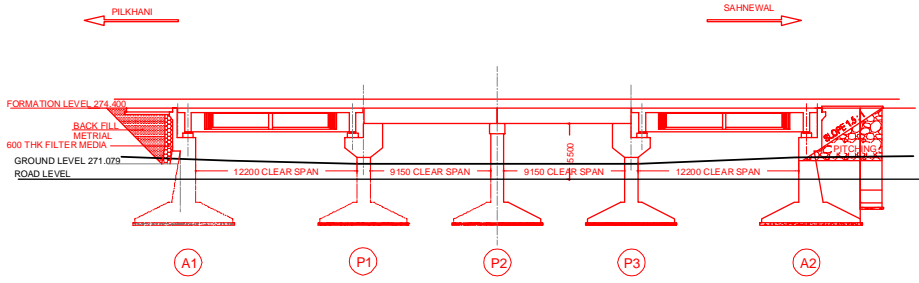
TYPICAL CROSS SECTION



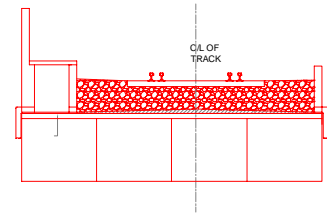
SECTION AT C - C

INDICATIVE DRAWING

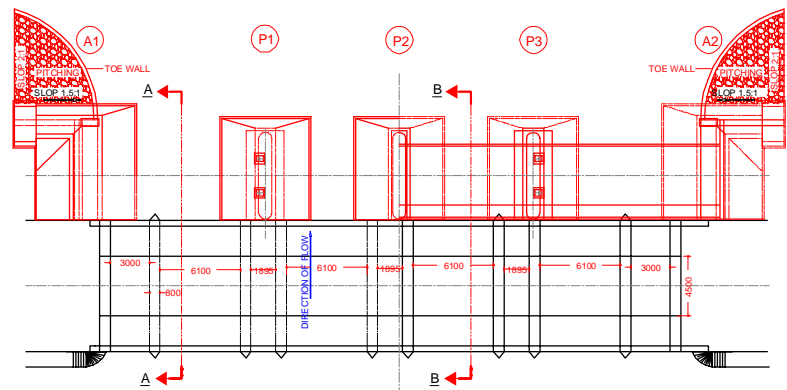
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C, DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
AECOM		EASTERN CORRIDOR				
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
CONTRACT PACKAGE - 301						
STRUCTURE	PROPOSED MAJOR RUB BR. NO. 68 SPAN (2x45.7m) AT CH. 68595					
TITLE GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR-RUB/68	R0
						SHEET 2 OF 2



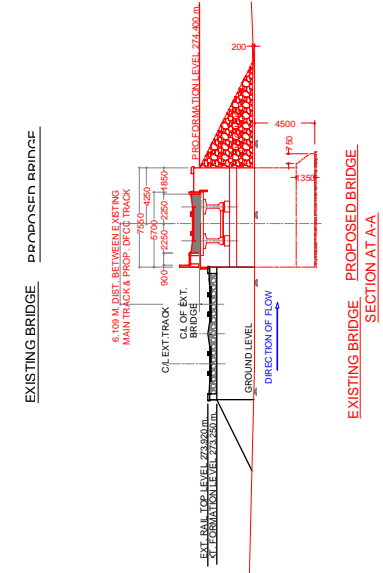
PROPOSED BRIDGE
HALF ELEVATION HALF SECTION



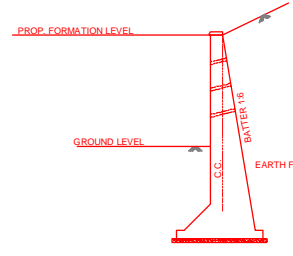
TYPICAL CROSS SECTION
SLAB FOR 9.150m



PROPOSED BRIDGE
HALF BOTTOM PLAN HALF TOP PLAN



EXISTING BRIDGE PROPOSED BRIDGE
SECTION AT A-A

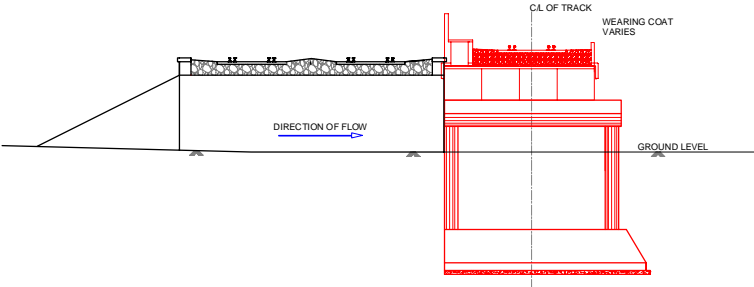


SECTION OF RETURN WALL

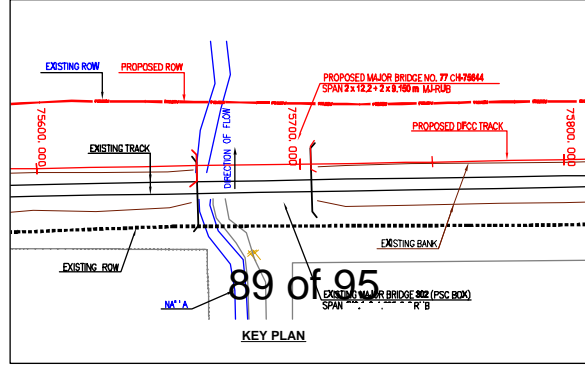
- NOTES:-
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
 - a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
 - LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
 - HIGH YIELD STRENGTH DEFORMED/TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
 - ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
 - BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
 - SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
 - TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
 - MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
 - THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. 1200mm DIA PILES OF 20 M LENGTHS HAVE BEEN ASSUMED. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
 - IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
 - IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
 - THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
 - WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
 - STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
 - WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
 - CC WEARING COURSE OF MINIMUM M-35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
 - DO NOT SCALE. FOLLOW WRITTEN DIMENSION ONLY.
 - THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

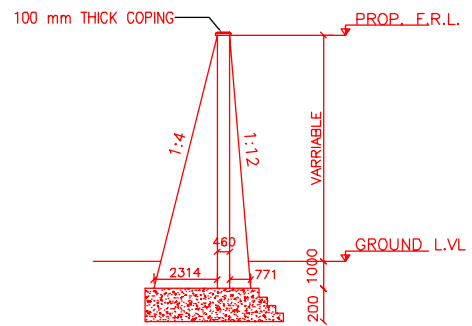
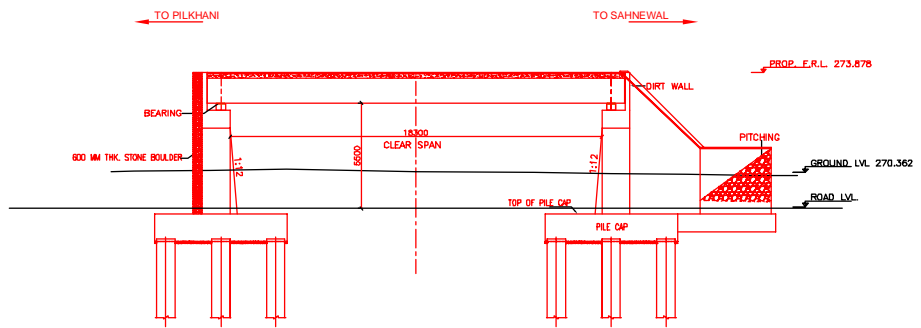
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
AECOM		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 PROPOSED MAJOR RUB BR. NO. 77 SPAN (2X12.2 + 2X9.15m) AT CH. 75644				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR-RUB/77	R0

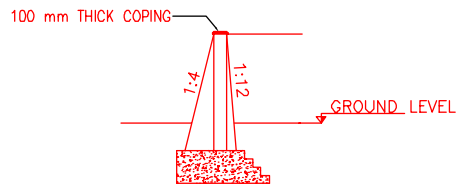
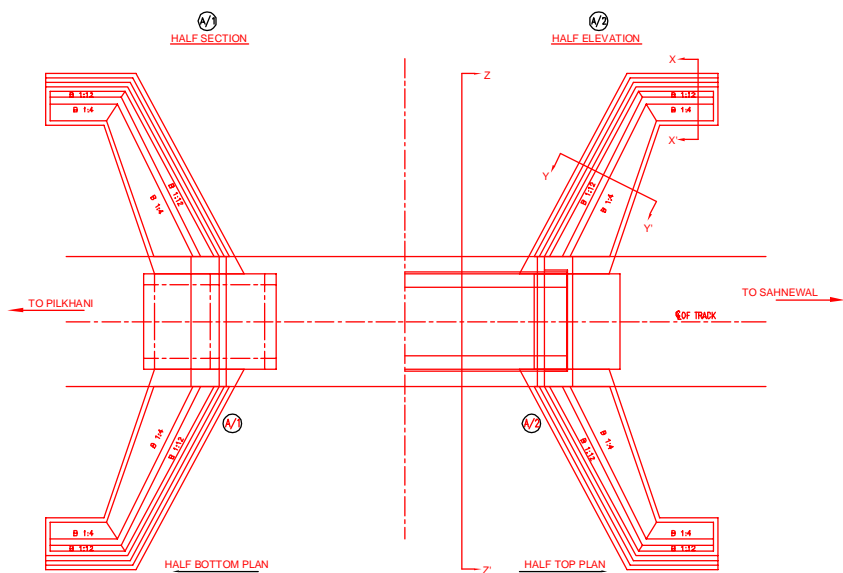


CROSS SECTION AT B-B
SLAB FOR 9.150m





SECTION OF WING WALL AT Y-Y'



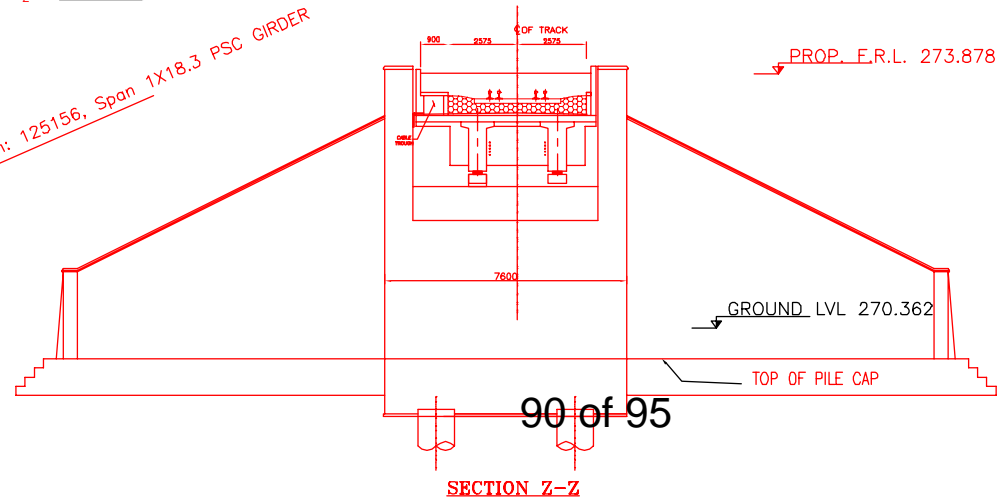
SECTION OF RETAINING WALL X-X'

NOTES:-

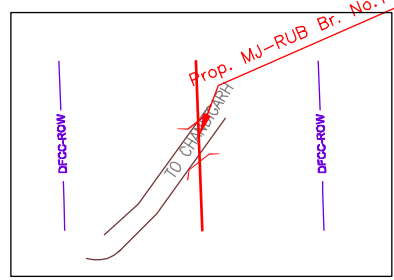
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
 - IRS BRIDGE RULES.
 - IRS CONCRETE BRIDGE CODE.
 - IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - RELEVANT IRC CODES OF PSC.
 - RELEVANT BIS CODES.
- LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED TMT BAR OF GRADE Fe-500 SATISFYING THE REQUIREMENTS OF I.S. 1786-1985 SHALL BE USED AS REINFORCEMENT.
- ALL DIMENSIONS AND LEVELS SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- SAFE BEARING CAPACITY OF SOIL SHALL BE DETERMINED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
- TRACK ON BRIDGE SHOULD BE WITH GUARD RAILS.
- MESH REINFORCEMENT SHALL BE PROVIDED AT THE TOP OF RCC PEDESTAL UNDER THE BEARING IN TWO LAYERS OF 8 mm TOR @ 75 C/C BOTHWAYS ONE LAYER BEING AT 20 mm DISTANCE AND OTHER LAYER BEING AT 100 MM DISTANCE FROM THE TOP OF RCC PEDESTAL.
- THE PILE FOUNDATION SHOWN IN GAD IS TENTATIVE. 1200mm DIA PILES OF 20 M LENGTHS HAVE BEEN ASSUMED. THE CONTRACTOR HAS TO DESIGN SUITABLE FOUNDATION/SUBSTRUCTURE AS PER THE SOIL STRATA AND CAN CHANGE THE PROPOSED FOUNDATION.
- IN CASE PILE FOUNDATION IS USED THE RELEVANT BIS CODE FOR PILE FOUNDATION AND TESTING WILL BE FOLLOWED.
- IN CASE WELL FOUNDATION IS USED THE RELEVANT IRS CODE & IRC CODE FOR WELL FOUNDATION SHALL BE FOLLOWED IN THAT ORDER OF PRECEDENCE.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSIONS FOR EDFC.
- WEEP HOLES SHALL BE OF 75 mm DIA. PVC PIPE STAGGERED @ 1000 mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- STONE PITCHING SHALL BE 300 mm OVER 150 mm FILTER MATERIAL IN PROTECTION WORKS
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANY WAY. HOWEVER, IF IT IS INESCAPABLE, THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
- CC WEARING COURSE OF MINIMUM M - 35 GRADE AND MINIMUM THICKNESS OF 40 mm WITH A CROSS SLOPE OF 1 IN 40 SHALL BE PROVIDED ON DECK.
- DO NOT SCALE, FOLLOW WRITTEN DIMENSION ONLY.
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS AND EMPLOYER'S REQUIREMENT.

INDICATIVE DRAWING

 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT	AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
EASTERN CORRIDOR						
PROJECT	SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500					
CONTRACT PACKAGE - 301						
STRUCTURE	PROPOSED MAJOR RUB BR. NO. 162 SPAN (1X18.3m) AT CH. 125156					
TITLE GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MJR-RUB/162	R0



SECTION Z-Z



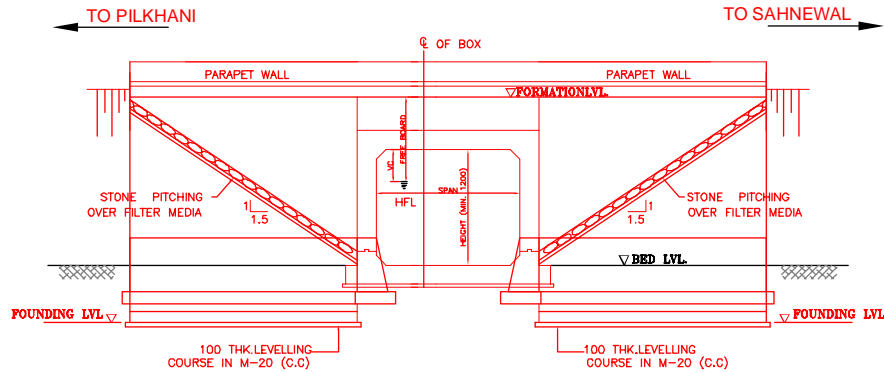
KEY PLAN

Prop. MJ-RUB Br. No.162, Ch. 125156, Span 1X18.3 PSC GIRDER

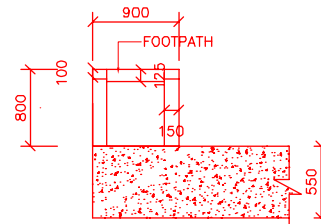
Contract Package: 301

SAHNEWAL TO PILKHANI
From Km 360.200 to 187.500

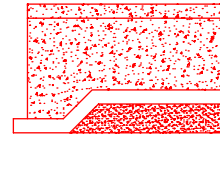
GAD OF MINOR BRIDGES



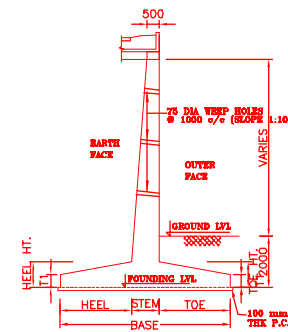
ELEVATION



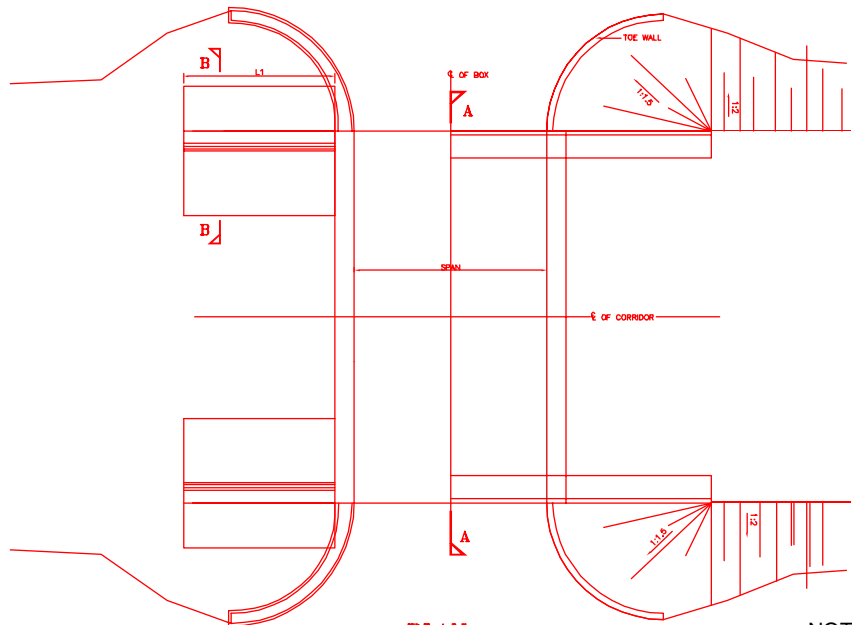
DETAIL OF 'X'



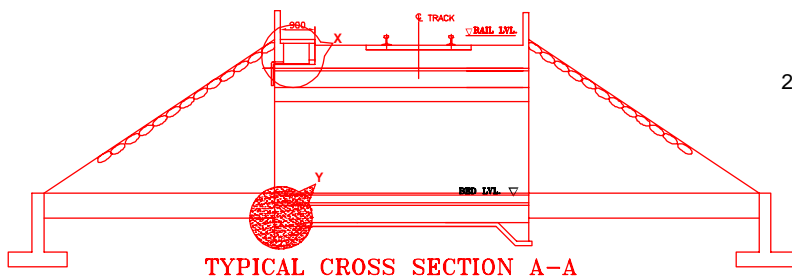
DETAIL OF 'Y'



SECTION
SCALE NTS



PLAN



TYPICAL CROSS SECTION A-A



NOTE:-

1. THIS DRAWING DEPICTS GA OF MINOR BRIDGE OF SPAN 1x4x4 AND IS MEANT ONLY FOR THE GUIDANCE OF THE BIDDER. ALL THE MINOR BRIDGES SHALL BE DESIGNED BY THE CONTRACTOR AS PER THE GUIDELINES PROVIDED IN BID DOCUMENT AND SHALL BE GOT APPROVED FROM THE ENGINEER.
2. BRIDGES IN STATION YARDS SHALL BE DESIGNED TO CATER TO THE NUMBER OF TRACKS SHOWN IN RESPECTIVE STATION YARD.

NOTES:-

1. ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
2. DO NOT SCALE. FOLLOW THE WRITTEN DIMENSIONS ONLY.
3. a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:
 - i) IRS BRIDGE RULES.
 - ii) IRS CONCRETE BRIDGE CODE.
 - iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
 - iv) RELEVANT BIS CODES.
4. b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
5. HIGH YIELD STRENGTH DEFORMED (HYSD) / THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
6. BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
7. ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
8. DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
9. THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
10. TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
11. WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
12. WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/BALAST RETAINER.
13. DRAINAGE OF DECK SHALL BE PROVIDED AS PER CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
14. TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
15. WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
16. THE EXISTING TRACK SHALL BE PROTECTED BEFORE EXECUTION OF WORK. DESIGN OF SUCH PROTECTION WORK SHALL BE DONE BY THE CONTRACTOR AND SHALL BE APPROVED BY THE SITE ENGINEER.
17. THE DIFFERENCE BETWEEN PROPOSED RAIL LEVEL (RL) & PROPOSED FORMATION LEVEL (FL) HAS BEEN ASSUMED AS 730mm.
18. PROPER OUTLETS ON D/S SIDE FOR DRAINAGE OF DISCHARGE IS TO BE ENSURED.
19. SUITABLE DRAIN HAS TO BE PROVIDED BETWEEN THE IR AND DFC FORMATIONS AND THE WING WALLS SHOULD HAVE PROVISION FOR DISCHARGE OF FLOW FROM THESE DRAINS.
20. SAFE BEARING CAPACITY OF SOIL SHALL BE CONFIRMED BY SUITABLE METHOD BEFORE CONSTRUCTION WORK. IT SHALL BE GREATER THAN MAXIMUM FOUNDATION PRESSURE.
21. BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:100.
22. IN CASE THE PROPOSED BRIDGE IS CROSSING A CANAL, THE GAD AND OTHER DRAWINGS AS REQUIRED SHALL BE GOT APPROVED FROM THE CONCERNED CANAL AUTHORITY BY THE CONTRACTOR WELL IN TIME.
23. THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

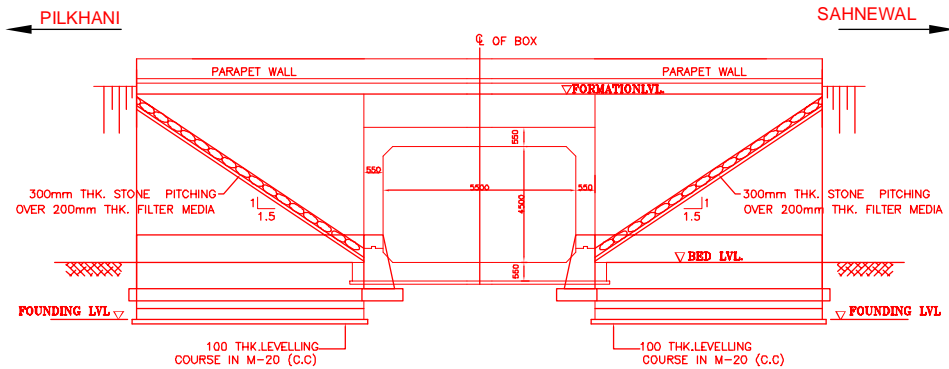
INDICATIVE DRAWING

		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd. 9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
STRUCTURE		CONTRACT PACKAGE - 301 TYPICAL DRAWING OF MINOR BRIDGE				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS	MAY 2015				AECOM/301/MI/TYPICAL/1	RO

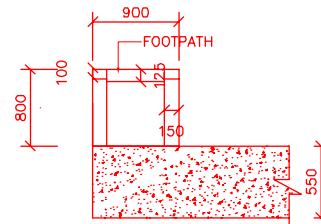
Contract Package: 301

SAHNEWAL TO PILKHANI
From Km 360.200 to 187.500

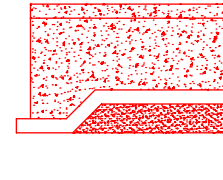
GAD OF MINOR RUB



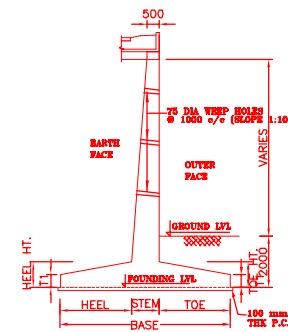
ELEVATION



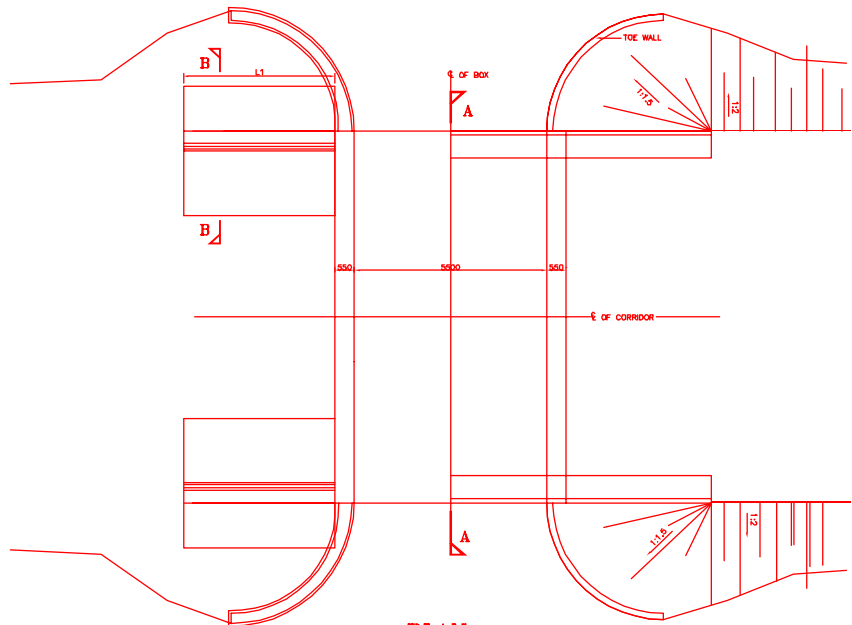
DETAIL OF 'X'



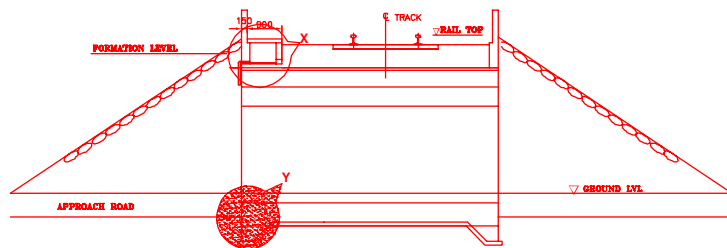
DETAIL OF 'Y'



SECTION
SCALE NTS



PLAN



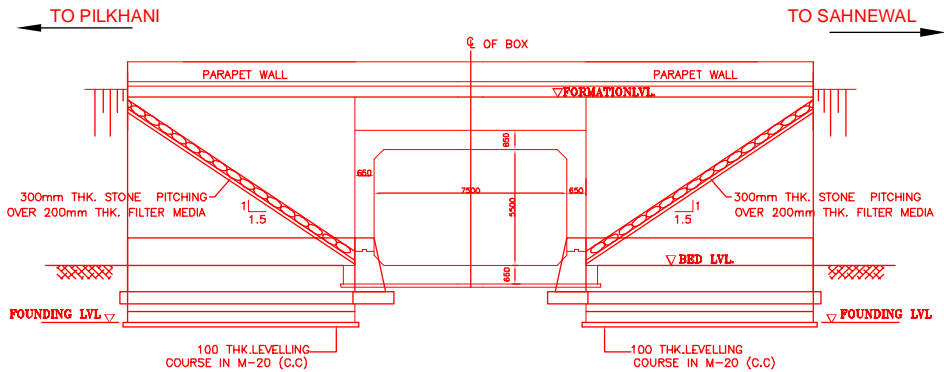
ELEVATION AT A-A

NOTES:-

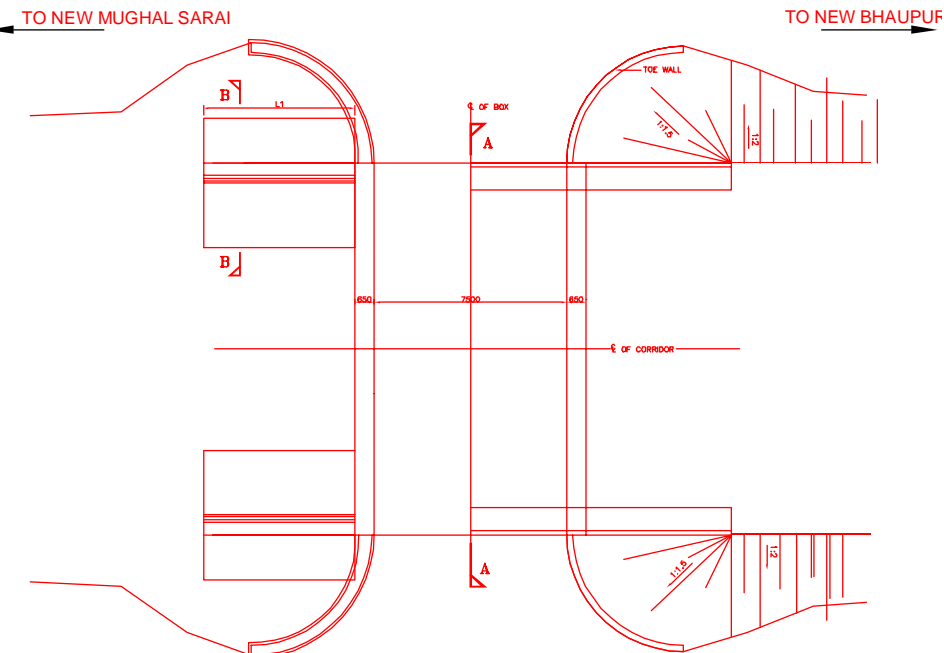
- ALL DIMENSIONS ARE IN mm AND ALL LEVELS IN METERS UNLESS OTHERWISE SPECIFIED.
- DO NOT SCALE, FOLLOW THE WRITTEN DIMENSIONS ONLY.
- a) CODES TO BE FOLLOWED (WITH LATEST CORRECTIONS SLIP) IN ORDER OF PREFERENCE:-
i) IRS BRIDGE RULES.
ii) IRS CONCRETE BRIDGE CODE.
iii) IRS BRIDGE SUBSTRUCTURE AND FOUNDATION CODE.
iv) RELEVANT BIS CODES.
- b) LOADING TO BE FOLLOWED IS D.F.C. LOADING (32.5 TON AXLE LOAD)
- HIGH YIELD STRENGTH DEFORMED (HYSD) THERMO MECHANICAL TREATED (TMT) BARS OF GRADE Fe - 500 SATISFYING THE REQUIREMENT OF IS: 1786-1985 SHALL BE USED AS REINFORCEMENT.
- BACK FILL SHOULD BE AS PER CLAUSE 7.5 OF IRS BRIDGE SUB-STRUCTURE AND FOUNDATION CODE.
- ALL DIMENSION AND LEVEL SHOULD BE VERIFIED & RECONCILED BEFORE EXECUTION.
- DEPTH AND SIZE OF FOUNDATION, LENGTH OF RETURN WALL AND LEVELS SHALL BE DECIDED BASED ON SITE CONDITION (TYPE OF STRATA AND GROUND LEVEL).
- THIS GAD IS TENTATIVE AND IS MEANT ONLY FOR GUIDANCE OF THE BIDDER. ALL THE ENGINEERING DETAILS ARE TO BE DESIGNED BY THE CONTRACTOR AS PER SITE CONDITIONS/DIMENSIONS SHALL BE APPROVED BY DFCCIL.
- TOP SURFACE AND SIDE OF BOX SHALL BE GIVEN TWO COATS OF COAL TAR OR BITUMEN CONFORMING TO IS: 3070-1965 BEFORE FILLING OF EARTH.
- WEEP HOLES SHALL BE OF 75mm DIA. PVC PIPE STAGGERED @ 1000mm C/C HORIZONTALLY AND VERTICALLY THROUGH RETURN WALL/ABUTMENT
- WEEP HOLES OF 75mm DIA. PVC PIPES @ 1000mm C/C SHOULD BE PROVIDED IN EARTH/BALAST RETAINER.
- DRAINAGE OF DECK SHALL BE PROVIDED 1 IN 40 (CROSS SLOPE) VIDE CLAUSE 15.2.2.1 OF IRS CONCRETE BRIDGE CODE.
- TOP OF SLAB/BOX SHALL HAVE A WEARING COURSE OF 1 IN 40 TOWARDS OUTER SIDE FOR PROPER DRAINAGE.
- WORK SCHEME SHALL BE SUCH THAT ADJACENT IR TRACK IS NOT AFFECTED IN ANYWAY. HOWEVER, IF IT IS INESCAPABLE THE ENGINEER WILL DECIDE THE IMPOSITION OF TEMPORARY SPEED RESTRICTION.
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- BED SLOPE SHALL BE ADJUSTED AS PER THE SITE CONDITIONS IT SHOULD BE KEPT MINIMUM AS 1:10.
- THE GAD SHOULD SATISFY THE LATEST APPROVED SCHEDULE OF DIMENSION FOR DFCC.

INDICATIVE DRAWING

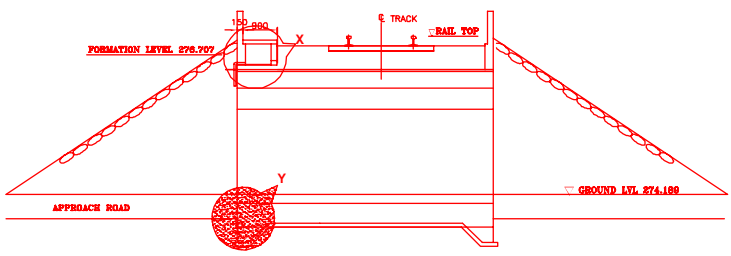
		DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.				
GENERAL CONSULTANT		AECOM Asia Co. Ltd.				
		9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA				
		EASTERN CORRIDOR				
PROJECT		SAHNEWAL TO PILKHANI From Km 360.200 to Km 187.500				
		CONTRACT PACKAGE - 301				
STRUCTURE		TYPICAL DRAWING OF RUB SPAN 1 X 5.5 X 4.5M				
TITLE		GENERAL ARRANGEMENT DRAWING				
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS					AECOM/301/MNR-RUB/TYPICAL/2	



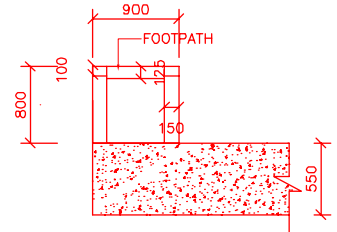
ELEVATION



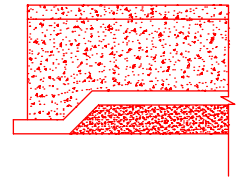
PLAN



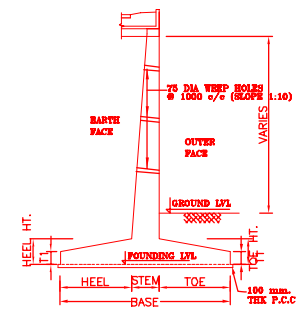
ELEVATION AT A-A



DETAIL OF 'X'



DETAIL OF 'Y'




SECTION
SCALE NTS

NOTES:-

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INDICATIVE DRAWING

 DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.						
GENERAL CONSULTANT	AECOM Asia Co. Ltd.					
	9TH FLOOR, INFINITY TOWER C DLF CYBER CITY DLF PHASE II GURGAON 122002, INDIA					
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TITLE						
GENERAL ARRANGEMENT DRAWING						
SCALE	DATE	DRAWN BY	CHECKED BY	APPROVED BY	DRG. NO.	REV.
NTS					AECOM/301/MNR-RUB/TYPICAL/1	