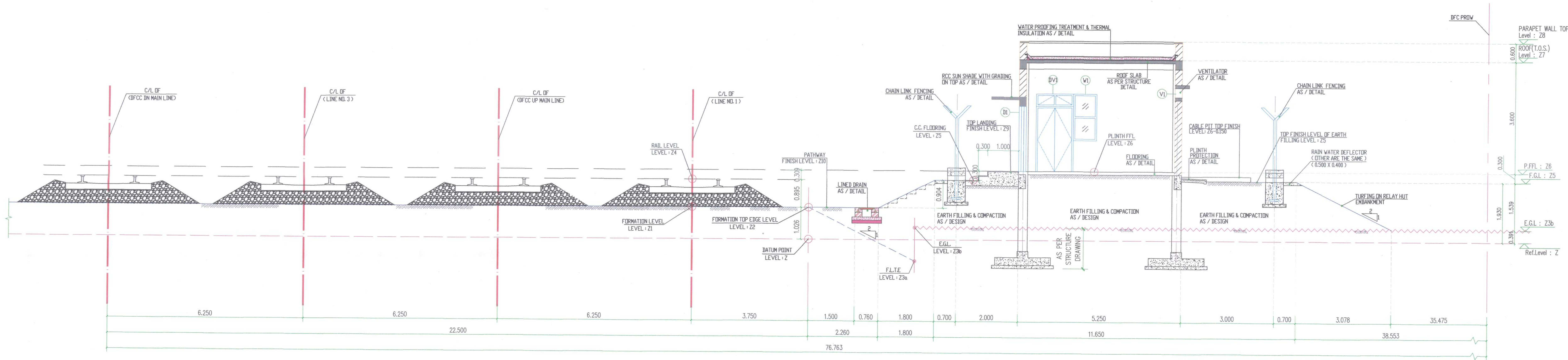


SITE PLAN 1:100

- NOTES :
- ALL DIMENSIONS ARE IN M UNLESS OTHERWISE SPECIFIED.
 - ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44 (AS PER ALIGNMENT AND CROSS SECTION DRAWING OF CP 201 & 202).
 - CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE.
 - REFERENCE DRAWING NO. SEE BELOW TABLE :
- REFERENCE TABLE A
- | S.NO. | Relay Hut No. | Building Chainage | Reference Chainage | Alignment Plan & Profile Drawing NO. | Detailed Cross Section Drawing NO. |
|-------|--------------------------|-------------------|--------------------|--------------------------------------|------------------------------------|
| 1 | New Kanpur Relay Hut - 1 | 459.500 | 459.500 | P2AL0852F | W2CS2747A |
5. RELAY HUT LOCATION DATUM POINT SEE BELOW TABLE :
- REFERENCE TABLE B
- | S.NO. | Relay Hut No. | Building Chainage | Reference Chainage | Datum Point Unit:m | Direction Angle | | |
|-------|--------------------------|-------------------|--------------------|--------------------|-----------------|---------|---------|
| | | | | X | Y | Z | |
| 1 | New Kanpur Relay Hut - 1 | 459.500 | 459.500 | 446209.966 | 2909321.007 | 119.795 | 71.511° |
- Note : The direction angle is positive(°) for clockwise rotation.
- LEVEL ABBREVIATIONS
F.T.E.L : FORMATION TOP EDGE LEVEL
F.G.L : FINISHED GROUND LEVEL
P.F.F.L : PLINTH FINISHED FLOOR LEVEL
R.L : RAIL LEVEL
E.G.L : EXISTING GROUND LEVEL
 - FOR SITE PLAN DESIGN PARAMETERS SEE "SITE SECTION 1-1" TABLE IN DRAWING NO. 1/AR/11102
 - CHAIN LINK FENCING SHOULD BE AS PER PARA 1.4.5. (5), PART 2, SECTION VI, VOL. 4, PARTICULAR SPECIFICATION BUILDING & STRUCTURE WORKS, ON PAGE NO. 0633 OF CA CP-203.
 - TURFING ON RELAY HUT EMBANKMENT TO BE DONE AS PER APPROVED MATHBOD STATEMENT.
 - THE PLINTH LEVEL OF SIGNALLING EQUIPMENT ROOMS, TELECOMMUNICATION EQUIPMENT ROOMS AND SIGNALLING & TELECOMMUNICATION POWER SUPPLY EQUIPMENT ROOMS SHALL BE AT LEAST 300MM ABOVE THE RAIL LEVEL. THE CEILING HEIGHT OF THESE ROOMS SHALL BE APPROXIMATELY 3 (THREE) M ABOVE FLOOR LEVEL.
 - ALL BUILDINGS SHALL BE PROVIDED WITH CONCEALED DUCTS/PIPES FOR WIRING OF SIGNAL AND TELECOM FACILITIES. IN ADDITION, DUCTS SHALL BE PROVIDED ON THE FLOOR FOR ENTRY/EXIT OF S&T CABLES AND ALSO FOR POWER SUPPLY. THESE ARRANGEMENTS SHALL BE MADE IN CONSULTATION WITH OTHER CONTRACTORS.
 - THE SITE OF THE WORK SHALL BE CLEARED OFF THE SHRUBS, RANK VEGETATION, GRASS, BUSHES AND OTHER MATERIALS UPTO ADEQUATE DEPTH AS REQUIRED AS PER SITE CONDITION AND RUBBISH REMOVED OUTSIDE THE PERIPHERY OF THE AREA BEING CLEARED. THE ENCLOSED AREA BETWEEN CHAIN LINK FENCING AND THE BUILDING SHALL THEN BE FILLED WITH THE EARTH UP TO RAIL LEVEL AS WELL AS COMPACTED BY A SUITABLE METHOD AS DECIDED BY ENGINEER.

PRELIMINARY GAD

FOR CONTRACTOR			
PREPARED BY:	CHECKED BY:	APPROVED BY:	
SUDHANSH KHARE	SANJEEV KUMAR VERMA	DENG HUAFENG	
G	23-11-2019	AS PER PMC COMMENT	
F	13-11-2019	TYPE OF BUILDING HAVE BEEN CHANGED PRECAST TO FRAME STRUCTURE	
E	06-08-2019	AS PER PMC COMMENT	
D	19-06-2019	TECHNICAL SPECIFICATION CHANGE	
C	31-05-2019	AS PER PMC COMMENT	
B	18-04-2019	AS PER PMC COMMENT	
A	11-01-2019	FIRST SUBMISSION	
REV.	DATE	DESCRIPTION	REV.BY
CRSC Beijing National Railway Research&Design Institute of Signal&Communication Co.,Ltd.			
NAME OF THE CONTRACT:			
NEW MUGHALSARAI-NEW BHAIUPUR DESIGN AND BUILD SYSTEM WORK			
CONTRACT PACKAGE-203			
CLIENT NAME:			
Dedicated Freight Corridor Corporation of India Ltd.			
A Government of India (Ministry of Railway) Enterprise			
PROJECT NAME:			
Eastern Dedicated Freight Corridor Project-2			
NEW KANPUR RELAY HUT - 1			
SITE PLAN			
STATUS:	DWG No:	1/AR/11101	REV. G
REF.DWG:	ALIGNMENT PLAN & PROFILE KM. 459+00 TO KM. 460+100		SH.SIZE 841 X 594 MM
		DETAILED CROSS SECTION: KM. 459+00 TO KM. 459+70	



SITE SECTION 1-1 1:50

RELAY HUT - LEVELS

S.No.	Relay Hut No.	Building Chainage	Reference Chainage	Co-ordinates of ref. / Datum pt.		Ref. Level	Levels at 'Reference Chainage' as per approved cross-section				Derived Levels						Level Difference (Height/Depth)				Remark	
						Datum point (Refer to the drawing)	Formation Level at the Center of UP Main Track Line / Yard Line	Formation Level at Top Edge of the Embankment	Formation Level at the Toe of Embankment	Existing Ground Level at the Toe of Embankment	Rail Level	Finished Ground Level	Plinth FFL	Roof (T.O.S.)	Parapet Wall Top Level	Top Landing Finish Level	Pathway Finish Level	HT/DT. Of Formation Top Edge Level from Datum PT.	HT/DT. Of Rail Level from F.T.E.L.	HT/DT. Of F.G.L. from F.T.E.L.		HT/DT. Of Plinth FFL from Datum pt.
				X	Y	Z	Z1	Z2	Z3a	Z3b	Z4 (=Z1 + 0.771)	Z5 (=Z2 + 0.904)	Z6 (=Z5 + 0.300)	Z7 (=Z6 + 3.600)	Z8 (=Z6 + 4.200)	Z9 (=Z6 - 0.025)	Z10 (=Z2)	(=Z2 - Z)	(=Z4-Z2)	(=Z2-Z)		
1	NEW KANPUR RELAY HUT - 1	459.500	459.500	446209.966	2909321.007	119.795	120.945	120.821	119.107	120.186	121.716	121.725	122.025	125.625	126.225	122.000	120.821	1.026	0.895	0.904	2.230	

- NOTES :
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 - CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE.
 - REFERENCE DRAWING NO. SEE BELOW TABLE :

REFERENCE TABLE A					
S.NO.	Relay Hut No.	Building Chainage	Reference Chainage	Alignment Plan & Profile Drawing NO.	Detailed Cross Section Drawing NO.
1	New Kanpur Relay Hut - 1	459.500	459.500	P2AL0852F	W2CS2747A

5. RELAY HUT LOCATION DATUM POINT SEE BELOW TABLE :

REFERENCE TABLE B					
S.NO.	Relay Hut No.	Building Chainage	Reference Chainage	Datum Point UTM	Direction Angle
1	New Kanpur Relay Hut - 1	459.500	459.500	446209.966 2909321.007	119.795 71.511

- Note : The direction angle is positive(+) for clockwise rotation.
6. LEVEL ABBREVIATIONS
- F.T.E.L : FORMATION TOP EDGE LEVEL
F.G.L : FINISHED GROUND LEVEL
P.FFL : PLINTH FINISHED FLOOR LEVEL
R.L : RAIL LEVEL
E.G.L : EXISTING GROUND LEVEL
F.L.T.E : FORMATION LEVEL AT THE TOE OF EMBANKMENT
E.G.L.T.E : EXISTING GROUND LEVEL AT THE TOE OF EMBANKMENT
7. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NO. 1/AR/11101
8. CHAIN LINK FENCING SHOULD BE AS PER PARA 1.4.5. (5), PART 2, SECTION VI, VOL. 4, PARTICULAR SPECIFICATION BUILDING & STRUCTURE WORKS, ON PAGE NO. 0633 OF CA CP-203.
9. TURFING ON RELAY HUT EMBANKMENT TO BE DONE AS PER APPROVED MATHEOD STATEMENT.
10. THE PLINTH LEVEL OF SIGNALLING EQUIPMENT ROOMS, TELECOMMUNICATION EQUIPMENT ROOMS AND SIGNALLING & TELECOMMUNICATION POWER SUPPLY EQUIPMENT ROOMS SHALL BE AT LEAST 300MM ABOVE THE RAIL LEVEL. THE CEILING HEIGHT OF THESE ROOMS SHALL BE APPROXIMATELY 3 (THREE) M ABOVE FLOOR LEVEL.
11. ALL BUILDINGS SHALL BE PROVIDED WITH CONCEALED DUCTS/PIPES FOR WIRING OF SIGNAL AND TELECOM FACILITIES. IN ADDITION, DUCTS SHALL BE PROVIDED ON THE FLOOR FOR ENTRY/EXIT OF SAT CABLES AND ALSO FOR POWER SUPPLY. THESE ARRANGEMENTS SHALL BE MADE IN CONSULTATION WITH OTHER CONTRACTORS.
12. THE SITE OF THE WORK SHALL BE CLEARED OFF THE SHRUBS, RANK VEGETATION, GRASS, BUSHES AND OTHER MATERIALS UPTO ADEQUATE DEPTH AS REQUIRED AS PER SITE CONDITION AND RUBBISH REMOVED OUTSIDE THE PERIPHERY OF THE AREA BEING CLEARED. THE ENCLOSED AREA BETWEEN CHAIN LINK FENCING AND THE BUILDING SHALL THEN BE FILLED WITH THE EARTH UP TO RAIL LEVEL AS WELL AS COMPACTED BY A SUITABLE METHOD AS DECIDED BY ENGINEER.

PRELIMINARY GAD

FOR CONTRACTOR		CHECKED BY:	APPROVED BY:
PREPARED BY:	SUDHANSHU KHARE		
REV.	DATE	DESCRIPTION	REV. BY
G	23-11-2019	AS PER PMC COMMENT	
F	13-11-2019	TYPE OF BUILDING HAVE BEEN CHANGED PRECAST TO FRAME STRUCTURE	
E	06-08-2019	AS PER PMC COMMENT	
D	19-06-2019	TECHNICAL SPECIFICATION CHANGE	
C	31-05-2019	AS PER PMC COMMENT	
B	18-04-2019	AS PER PMC COMMENT	
A	11-01-2019	FIRST SUBMISSION	

CRSC Beijing National Railway Research & Design Institute of Signal & Communication Co., Ltd.

NAME OF THE CONTRACT: NEW MUGHALSARAI-NEW BHAUPUR DESIGN AND BUILD SYSTEM WORK CONTRACT PACKAGE-203

CLIENT NAME: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD. SCALE 1:50

PROJECT NAME: Eastern Dedicated Freight Corridor Project-2

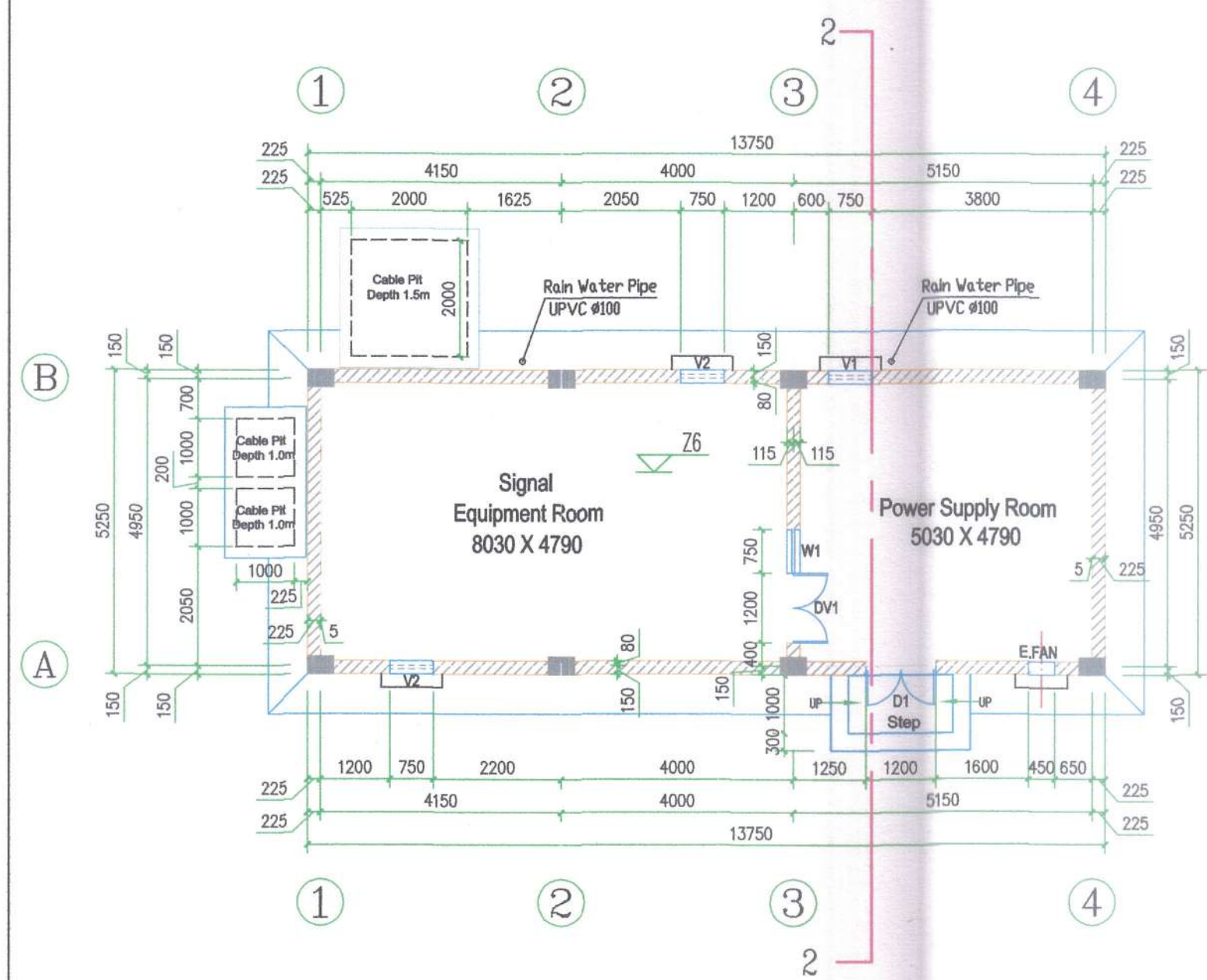
NEW KANPUR RELAY HUT - 1
SITE SECTION

STATUS: W DWG No: 1/AR/11102 REV. G

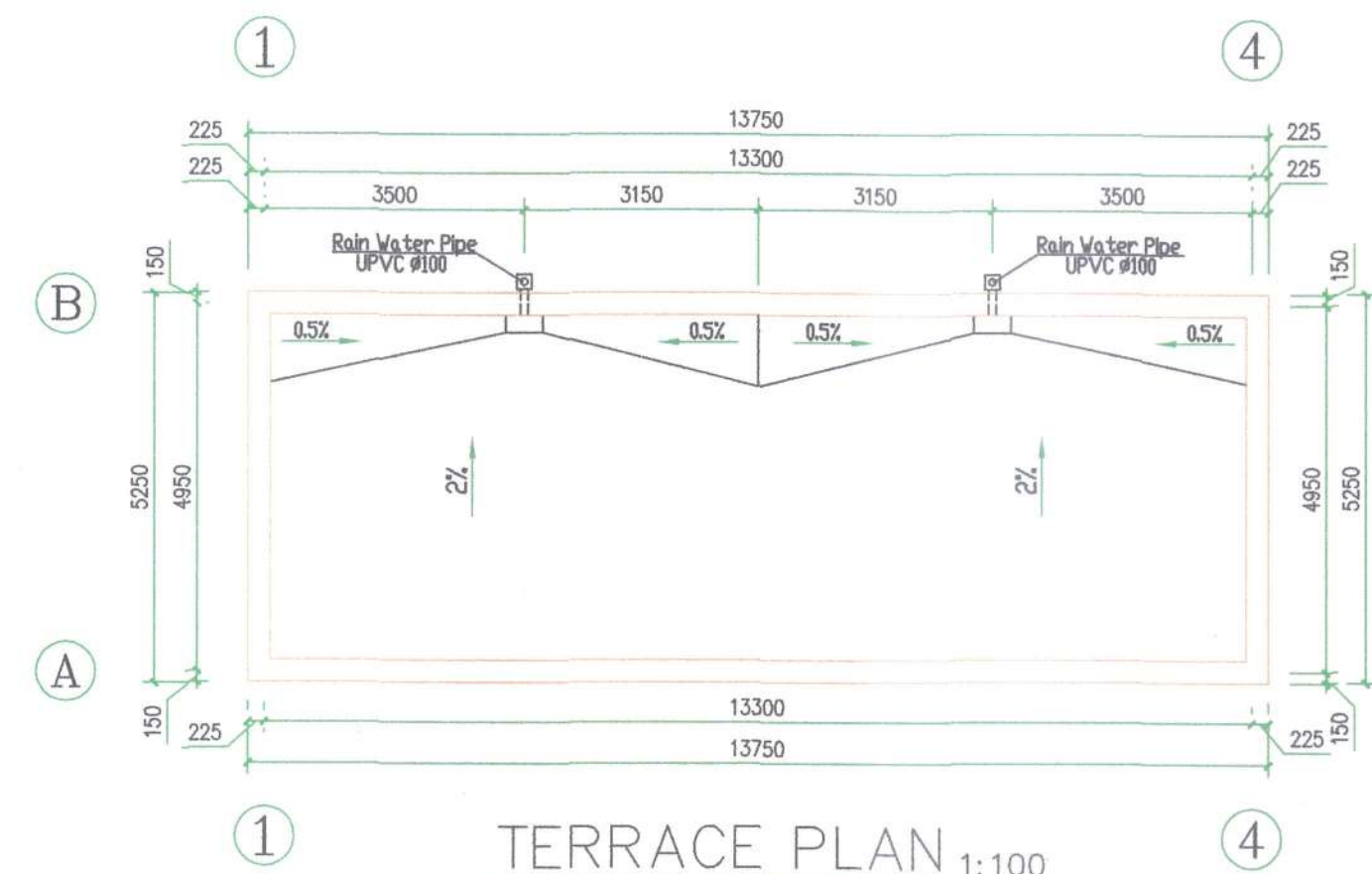
REF.DWG: ALIGNMENT PLAN & PROFILE KM. 459+000 TO KM. 460+100
DETAILED CROSS SECTION: KM. 459+000 TO KM. 459+770

PMC: SYSTRA - MOTT MACDONALD
TEAM LEADER:
ARCHITECT:

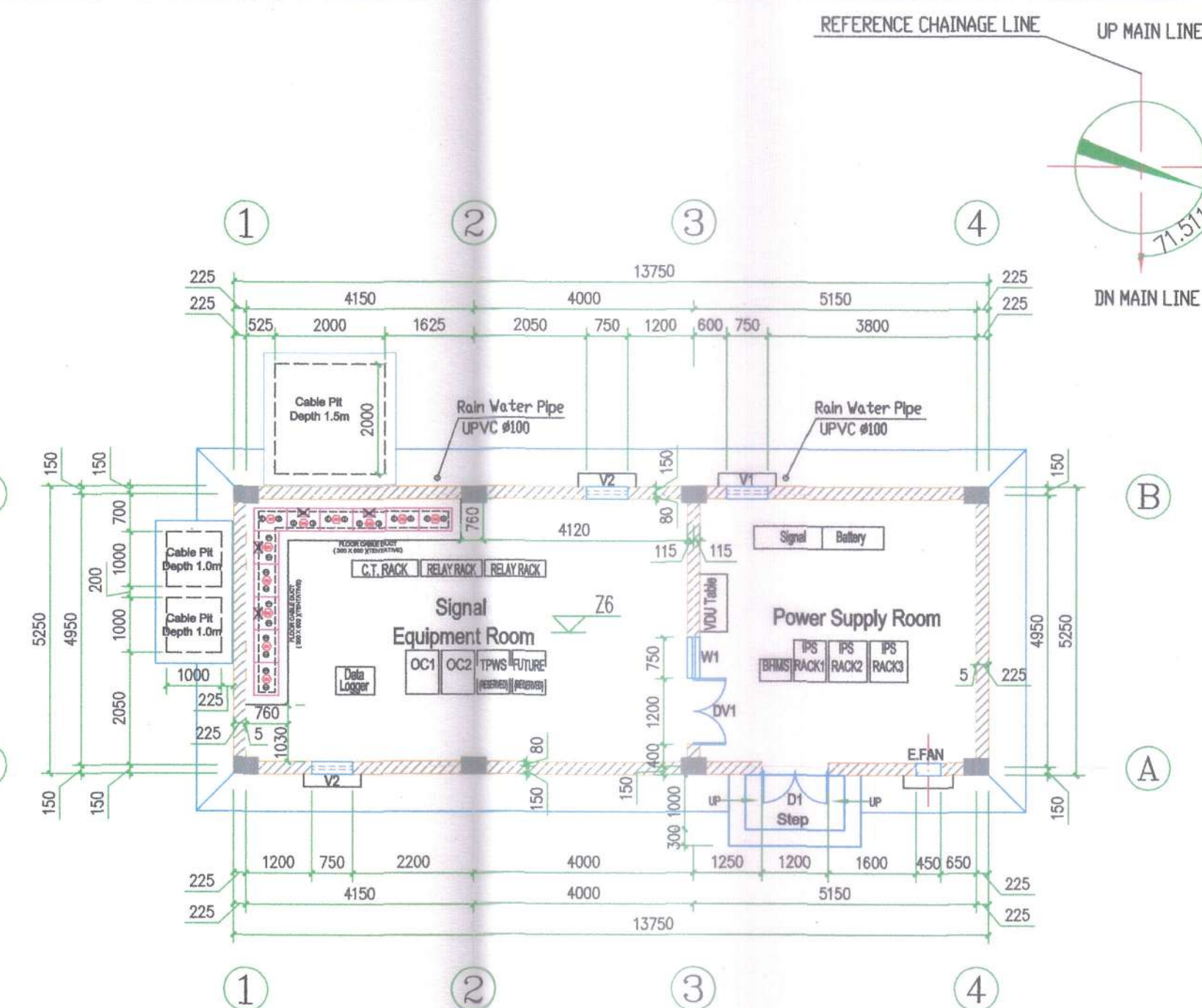
EMPLOYER: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.



GROUND FLOOR PLAN 1:100
AREA: 72.19m²



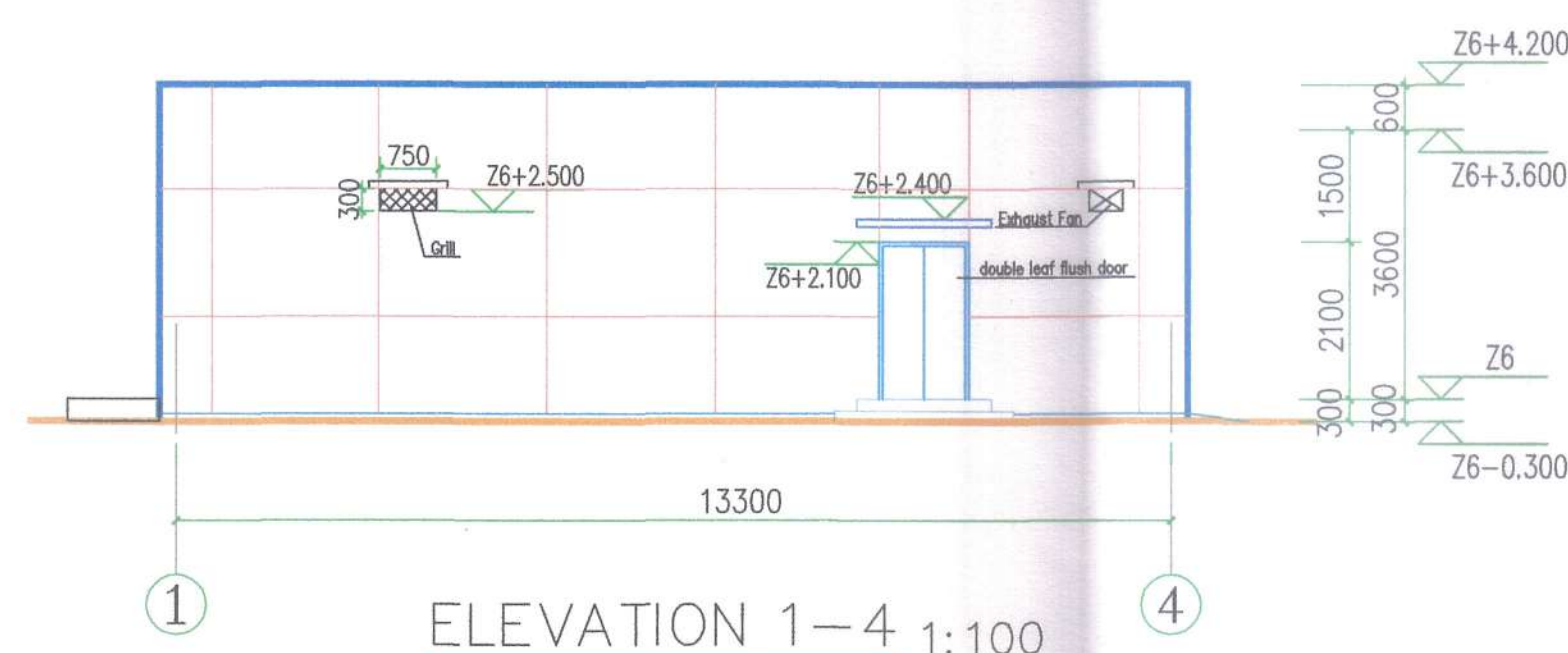
TERRACE PLAN 1:100



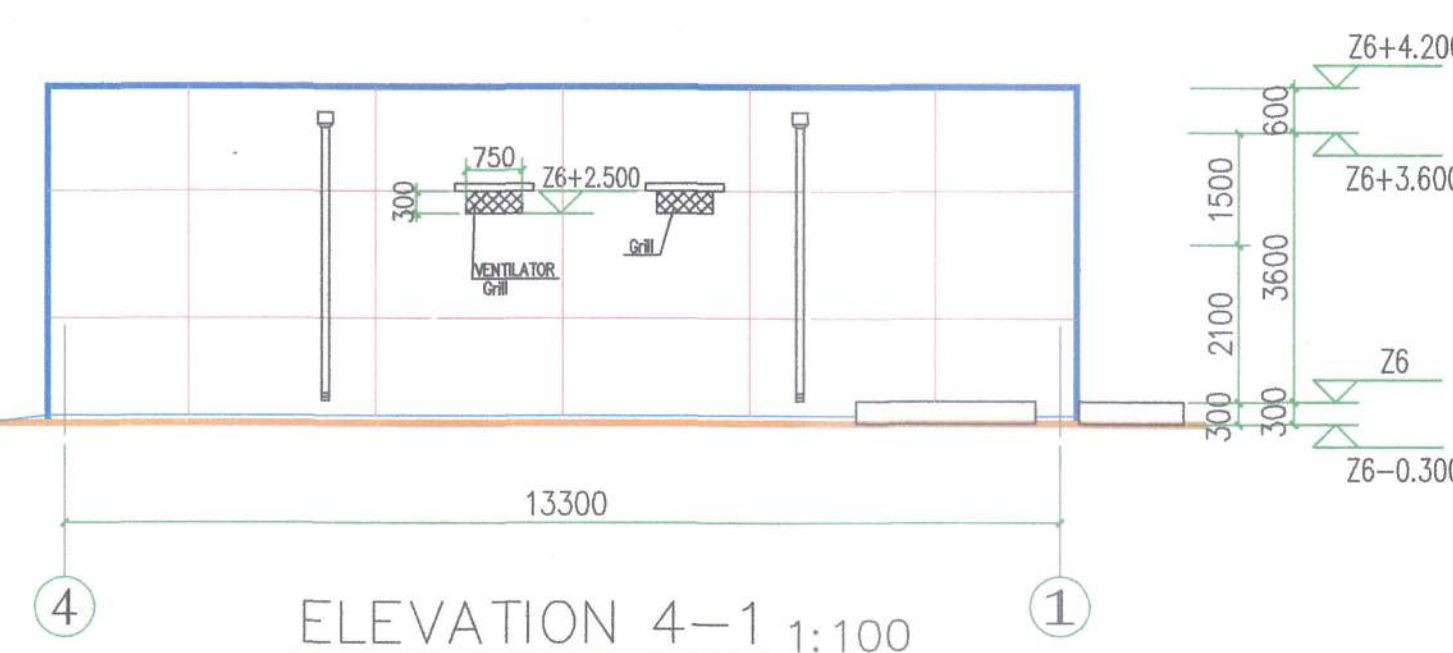
FLOOR CABLE DUCT PLAN 1:100

FURNISHING SCHEDULE

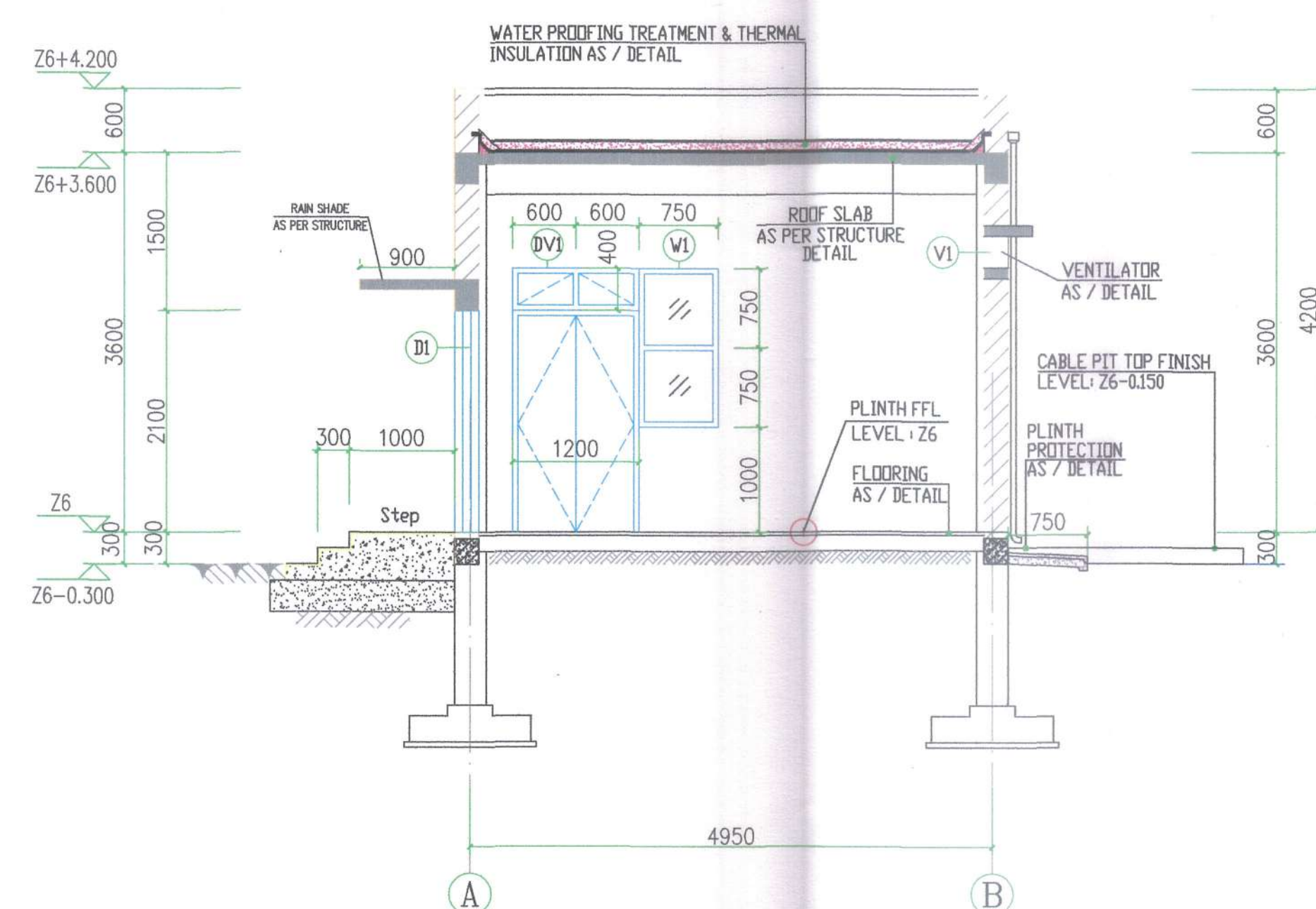
S.N.	DESCRIPTION	FINISHING	
		FLOORS	SKIRTING / DADO
1	signalling equipment rooms	ceramic tile flooring	same with 100 mm high
2	power supply room	acid proof tiles for flooring	same with 2 m high
3	doors	door frame - steel section painted with enamel paint shutter door - water proof flush door steel section painted with enamel paint	
4	ventilators	ventilators shall be made with steel section with the grill painted with enamel paint	
5	internal finish	cement plaster on all walls finished with oil bound distemper	
6	external finish	cement plaster on all walls finished with snowcem paint	



ELEVATION 1-4 1:100



ELEVATION 4-1 1:100



SECTION 2-2 1:50

DOOR, WINDOW & VENTILATOR SCHEDULE						
TYPE	NO.	WIDTH (MM)	HEIGHT (MM)	SILL (M)	LINTEL (M)	REMARK
DOOR	DV1	1200	2500	Z6	Z6 + 2.500	DOUBLE LEAF STEEL FLUSH DOOR, FIXED GLASS VENTILATOR
	D1	1200	2100	Z6	Z6 + 2.100	DOUBLE LEAF STEEL FLUSH DOOR
WINDOW	W1	750	1500	Z6 + 1.000	Z6 + 2.500	FIXED GLASS
VENTILATOR	V1	750	300	Z6 + 2.500	Z6 + 2.800	GRILL
	V2	750	300	Z6 + 2.500	Z6 + 2.800	GRILL
EXHAUST FAN	E.FAN	450	300	Z6 + 2.500	Z6 + 2.800	FAN

PMC:
SYSTRA - MOTT MACDONALD
MACDONALD JV

SYSTRA **MOTT MACDONALD**

TEAM LEADER: *[Signature]*

ARCHITECT: *[Signature]*

EMPLOYER:
DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD.

[Logo]

- NOTES :
- ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED.
 - ALL COORDINATES ARE BASED ON WGS 84 PROJECTION IN UTM ZONE 44 (AS PER ALIGNMENT AND CROSS SECTION DRAWING OF CP 201 & 202).
 - CHAINAGE AND LEVELS AS SHOWN IN THE DRAWING IS BASED ON THE DFC DOWN LINE.
 - REFERENCE DRAWING NO. SEE BELOW TABLE :

REFERENCE TABLE A

S.NO.	Relay Hut No.	Building Chainage	Reference Chainage	Alignment Plan & Profile Drawing NO.	Detailed Cross Section Drawing NO.
1	New Kanpur Relay Hut - 1	459.500	459.500	P2AL0852F	W2CS2747A

5. RELAY HUT LOCATION DATUM POINT SEE BELOW TABLE :

REFERENCE TABLE B

S.NO.	Relay Hut No.	Building Chainage	Reference Chainage	Datum Point Unit:m			Direction Angle
				X	Y	Z	
1	New Kanpur Relay Hut - 1	459.500	459.500	446209.966	2909321.007	119.795	71.511°

Note : The direction angle is positive(°) for clockwise rotation.

- FOR THE RELAY HUT LOCATION SEE DRAWING NO. 1/AR/11101
- BRICKWORK TO BE DONE AS FOLLOWS:
 - IN SUPERSTRUCTURE ABOVE PLINTH TO BE DONE AS PER APPROVED METHOD STATEMENT.
 - IN PLINTH AND FOUNDATION TO BE DONE AS PER APPROVED METHOD STATEMENT.
- CEMENT PLASTER TO BE DONE IN C.M. 1:3 INTERNAL SIDE 12MM THICK AND EXTERNAL SIDE 15MM THICK.
- REFER TO SEPARATE APPROVED DRAWING / METHOD STATEMENT FOR THE FOLLOWING WORKS:
 - BRICKWORKS.
 - FLOORING, SKIRTING AND DADO.
 - FLOOR CABLE DUCT FOR SIGNAL CABLES.
 - CABLE PIT WORKS.
 - PLASTERING AND PAINTING.
 - DOOR, WINDOW, VENTILATOR AND GRILL.
 - PLINTH PROTECTION.
 - STRUCTURAL AND OTHER ASSOCIATED RC WORKS.
 - SLOPE PROTECTION AND TURFING.
 - CHAIN LINK FENCING AND GATE.
 - ELECTRICAL CONDUITS AND OTHER ASSOCIATED ELECTRICAL WORKS.
 - EXCAVATION IN FOUNDATION, BACKFILLING AND COMPACTION.
 - WATERPROOFING & THERMAL INSULATION ON ROOF TO BE DONE.

PRELIMINARY GAD

FOR CONTRACTOR				
PREPARED BY:	CHECKED BY:	APPROVED BY:		
SUDHANSH KHARE	SANJEEV KUMAR VERMA	DENG HUAFENG		
G	23-11-2019	AS PER PMC COMMENT		
F	13-11-2019	TYPE OF BUILDING HAVE BEEN CHANGED PRECAST TO FRAME STRUCTURE		
E	06-08-2019	AS PER PMC COMMENT		
D	19-06-2019	TECHNICAL SPECIFICATION CHANGE		
C	31-05-2019	AS PER PMC COMMENT		
B	18-04-2019	AS PER PMC COMMENT		
A	11-01-2019	FIRST SUBMISSION		
REV.	DATE	DESCRIPTION	REV.BY	CHK.BY

CRSC Beijing National Railway Research & Design Institute of Signal & Communication Co., Ltd.			
NAME OF THE CONTRACT: NEW MUGHALSARAI-NEW BHAUPUR DESIGN AND BUILD SYSTEM WORK CONTRACT PACKAGE-203		SCALE 1:100	
CLIENT NAME: Dedicated Freight Corridor Corporation of India Ltd. A Government of India (Ministry of Railway) Enterprise		PROJECT NAME: Eastern Dedicated Freight Corridor Project-2	
STATUS: W		DWG No.: 1/AR/11103	
REF.DWG.: ALIGNMENT PLAN & PROFILE KM. 459+000 TO KM. 460+100 DETAILED CROSS SECTION: KM. 459+460 TO KM. 459+770		SHEET 01 TOT.SHEET 01 REV. G	