



BID DOCUMENT

FOR

Design, Supply, Construction, Installation, Testing and Commissioning of 2x25kV AC Electrification, Signalling & Telecommunication, E&M and Associated Works on Design-Build Lump Sum Basis for Dadri-Khurja Section (approximately 47 Route Km of Double Line) of Eastern Dedicated Freight Corridor

SYSTEMS WORKS CONTRACT PACKAGE 105

Issued on: 14.06.2017

ICB No.: HQ/SYS/EC/D-B/Dadri– Khurja

(Part-4 Reference Document)

**EMPLOYER: DEDICATED FREIGHT CORRIDOR CORPORATION OF INDIA LTD
(A GOVERNMENT OF INDIA ENTERPRISE)**

MINISTRY OF RAILWAYS

COUNTRY: INDIA

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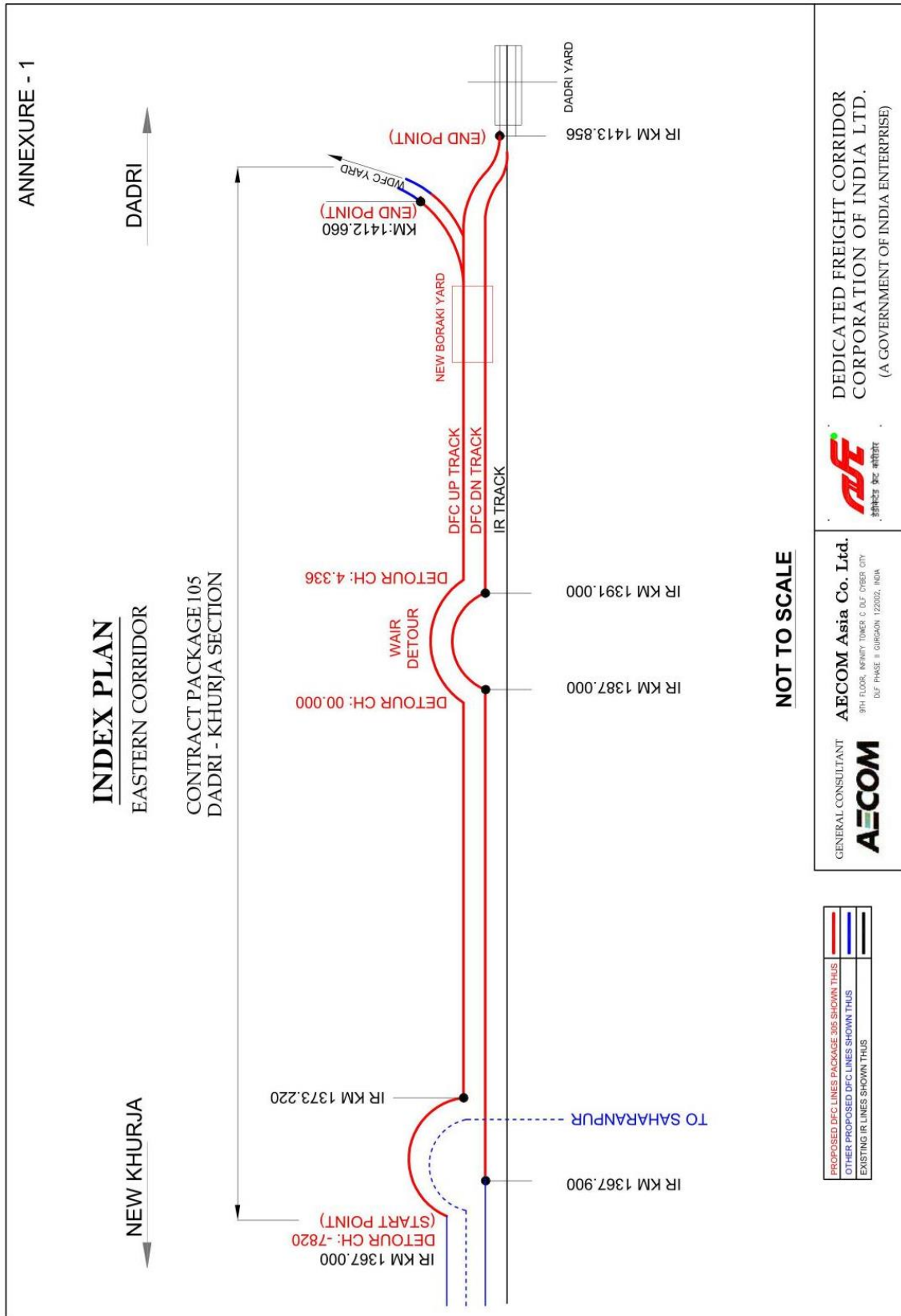
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1. ALIGNMENT PLANS, YARD PLANS AND BUILDING PLANS

1.1 INDEX PLAN



1.2 TENTATIVE ALIGNMENT PLANS

Dadri – Khurja (Drawings enclosed in separate booklet)

S.No.	DESCRIPTION	SHEET NUMBER
1	PROJECT SHEET FROM CH: -7820 TO CH: -6620	K1
2	PROJECT SHEET FROM CH: -6620 TO CH: -5420	K2
3	PROJECT SHEET FROM CH: -5420 TO CH: -4220	K3
4	PROJECT SHEET FROM CH: -4220 TO CH: -3020	K4
5	PROJECT SHEET FROM CH: -3020 TO CH: -1820	K5
6	PROJECT SHEET FROM CH: -1820 TO CH: -520	K6
7	PROJECT SHEET FROM CH: 1367900 TO CH: 1369000	1
8	PROJECT SHEET FROM CH: 1369000 TO CH: 1370200	2
9	PROJECT SHEET FROM CH: 1370200 TO CH: 1371400	3
10	PROJECT SHEET FROM CH: 1371400 TO CH: 1372600	4
11	PROJECT SHEET FROM CH: 1372600 TO CH: 1373800	5
12	PROJECT SHEET FROM CH: 1373800 TO CH: 1375000	6
13	PROJECT SHEET FROM CH: 1375000 TO CH: 1376200	7
14	PROJECT SHEET FROM CH: 1376200 TO CH: 1377400	8
15	PROJECT SHEET FROM CH: 1377400 TO CH: 1378600	9
16	PROJECT SHEET FROM CH: 1378600 TO CH: 1379800	10
17	PROJECT SHEET FROM CH: 1379800 TO CH: 1381000	11
18	PROJECT SHEET FROM CH: 1381000 TO CH: 1382200	12
19	PROJECT SHEET FROM CH: 1382200 TO CH: 1383400	13
20	PROJECT SHEET FROM CH: 1383400 TO CH: 1384600	14
21	PROJECT SHEET FROM CH: 1384600 TO CH: 1385800	15
22	PROJECT SHEET FROM CH: 1385800 TO CH: 1387000	16
23	PROJECT SHEET FROM CH: 0 TO CH: 1200	17
24	PROJECT SHEET FROM CH: 1200 TO CH: 2400	18
25	PROJECT SHEET FROM CH: 2400 TO CH: 3600	19
26	PROJECT SHEET FROM CH: 3600 TO CH: 4250	20
27	PROJECT SHEET FROM CH: 1391000 TO CH: 1392200	21
28	PROJECT SHEET FROM CH: 1392200 TO CH: 1393400	22
29	PROJECT SHEET FROM CH: 1393400 TO CH: 1394600	23

S.No.	DESCRIPTION	SHEET NUMBER
30	PROJECT SHEET FROM CH: 1394600 TO CH: 1395800	24
31	PROJECT SHEET FROM CH: 1395800 TO CH: 1397000	25
32	PROJECT SHEET FROM CH: 1397000 TO CH: 1398200	26
33	PROJECT SHEET FROM CH: 1398200 TO CH: 1399400	27
34	PROJECT SHEET FROM CH: 1399400 TO CH: 1400600	28
35	PROJECT SHEET FROM CH: 1400600 TO CH: 1401800	29
36	PROJECT SHEET FROM CH: 1401800 TO CH: 1403000	30
37	PROJECT SHEET FROM CH: 1403000 TO CH: 1404200	31
38	PROJECT SHEET FROM CH: 1404200 TO CH: 1405400	32
39	PROJECT SHEET FROM CH: 1405400 TO CH: 1406600	33
40	PROJECT SHEET FROM CH: 1406600 TO CH: 1407800	34
41	PROJECT SHEET FROM CH: 1407800 TO CH: 1407960	35
42	PROJECT SHEET FROM CH: 1407960 TO CH: 1409000	36
43	PROJECT SHEET FROM CH: 1409000 TO CH: 1410200	37
44	PROJECT SHEET FROM CH: 1410200 TO CH: 1411400	38
45	PROJECT SHEET FROM CH: 1411400 TO CH: 1412600	39
46	PROJECT SHEET FROM CH: 1412600 TO CH: 1413856	40
47	PROJECT SHEET FROM CH: 1411874 TO CH: 1412660	41

NOTE:

- 1) The Project Sheets mentioned above are indicative. The definitive Project Sheets shall be provided by the CST Contractor.

1.3 CONCORDANCE TABLE

Dadri - Khurja

Concordance Table					
Sheet No.	Chainage shown in Project Sheet		Corresponding Railway KM		Remarks
	From Ch.	To Ch.	From KM	To KM	
K1	-7820	-6620	Khurja Detour		Khurja Detour
K2	-6620	-5420	Khurja Detour		
K3	-5420	-4220	Khurja Detour		
K4	-4220	-3020	Khurja Detour		
K5	-3020	-1820	Khurja Detour		
K6	-1820	-520	Khurja Detour		
1	1367900	1369000	1367.900	1369.000	
2	1369000	1370200	1369.000	1370.200	
3	1370200	1371400	1370.200	1371.400	
4	1371400	1372600	1371.400	1372.600	
5	1372600	1373800	1372.600	1373.800	
6	1373800	1375000	1373.800	1375.000	
7	1375000	1376200	1375.000	1376.200	
8	1376200	1377400	1376.200	1377.400	
9	1377400	1378600	1377.400	1378.600	
10	1378600	1379800	1378.600	1379.800	
11	1379800	1381000	1379.800	1381.000	
12	1381000	1382200	1381.000	1382.200	
13	1382200	1383400	1382.200	1383.400	
14	1383400	1384600	1383.400	1384.600	
15	1384600	1385800	1384.600	1385.800	
16	1385800	1387000	1385.800	1387.000	
17	0	1200	Wair Detour		Wair Detour
18	1200	2400	Wair Detour		
19	2400	3600	Wair Detour		

20	3600	4250	Wair Detour		
21	1391000	1392200	1391.000	1392.200	
22	1392200	1393400	1392.200	1393.400	
23	1393400	1394600	1393.400	1394.600	
24	1394600	1395800	1394.600	1395.800	
25	1395800	1397000	1395.800	1397.000	
26	1397000	1398200	1397.000	1398.200	
27	1398200	1399400	1398.200	1399.400	
28	1399400	1400600	1399.400	1400.600	
29	1400600	1401800	1400.600	1401.800	
30	1401800	1403000	1401.800	1403.000	
31	1403000	1404200	1403.000	1404.200	
32	1404200	1405400	1404.200	1405.400	
33	1405400	1406600	1405.400	1406.600	
34	1406600	1407800	1406.600	1407.800	
35	1407800	1407960	1407.800	1407.960	
36	1407960	1409000	1407.960	1409.000	
37	1409000	1410200	1409.000	1410.200	
38	1410200	1411400	1410.200	1411.400	
39	1411400	1412600	1411.400	1412.600	
40	1412600	1413856	1412.600	1413.856	
41	1411874	1412660	WDFC Connecting Line		

1.4 INDICATIVE YARD PLANS AND OTHER DRAWINGS

A) List of Indicative Yard Plan in the Block Section

S. No.	STATION NAME	DRAWINGS NUMBER
1	New Boraki	DFC/MTC/BORAKI-DADRI CONNECTIVITY

B) List of Indicative Building Drawings in the Block Section

S. No.	DRAWING NAME	DRAWING NUMBER
1	Integrated Maintenance Sub Depot (IMSD)	GC/DFCC/IMSD/401
2	Junction Station Ground Floor Plan	GC/DFCC/JS/101/REV.1
3	Junction Station First Floor & Roof Level Plan	GC/DFCC/JS/102/REV.1
4	Junction Station Front & Rear Elevation	GC/DFCC/JS/103/REV.1
5	DFCC Quarter Type - A	GC/DFCC/QRTS/701
6	DFCC Quarter Type - B	GC/DFCC/QRTS/702
9	Boundary Wall	DFCC/BOUNDARY WALL/TYP-001

2. POWER SUPPLY, DISTRIBUTION, OHE SCADA SYSTEM SCHEMES & LAYOUTS AND SIGNALLING & TELECOMMUNICATION DRAWINGS

A) List of Electrification and S&T Drawings

S. No.	DRAWING NAME	DRAWING NUMBER
1.	Schematic Diagram of 132/54 kV Traction Substation (TSS)	GC/DFCC/PS/TSS/SCH/TYP/101
2.	Schematic Diagram of 2x27 kV Sub-Sectioning and Paralleling Post(SSP)	GC/DFCC/PS/SSP/SCH/TYP/301
3.	General Supply Diagram	GC/DFCC/PS/GSD/401
4.	Electrical Single Line Diagram for Non-Traction Power Distribution System For Junction Station	GC/DFCC/E&M/STATION/801
5.	Block Diagram for Traction SCADA Control	GC/DFCC/TR/SCADA/701
6.	Block Diagram for Auxiliary SCADA Control	GC/DFCC/TR/SCADA/702
7.	Typical Arrangement of OHE Mast on Embankment	GC/DFCC/OHE/EMBKT/TYP/501
8.	BEC Arrangement of OHE Mast on Embankment	GC/DFCC/OHE/EMBKT/TYP/501-1
9.	Typical Arrangement of OHE on Portal at 4 Track Section	GC/DFCC/OHE/PORTAL/TYP/513
10.	Arrangement for OHE Guy Rod on Steel Bridges	GC/DFCC/OHE/GUY ROD ON BRIDGE / TYP-507
11.	Earthing & Bonding of OHE Structure along the Bridge Girders(RCC) & Piers	GC/DFCC/OHE/E&B/GIRDERS/TYP/603
12.	OHE, Earthing & Bonding Arrangement on RCC Bridge/Viaduct	GC/DFCC/OHE/E&B/BRIDGE/TYP/604
13.	Typical Arrangement of E&B for 2x25 kV AC Electrification System in Station Yard	GC/DFCC/OHE/E&B/STN/TYP/601
14.	Auxiliary Substation and Additional DG Room at Stations & Depot	GC/DFCC/ASS/506
15.	Typical General Arrangement Drawing Chain Link Fencing	GC/DFCC/CHAIN LINK FENCING/TYP-001
16.	Control Room at TSS	GC/DFCC/TSS/503
17.	SSP- Ground Floor Plan and Elevation	GC/DFCC/SSP/504
18.	Signal Equipment Room	DFCC/S&T/01/2016
19.	Telecom Equipment & Telecom Power Supply Equipment Room	DFCC/S&T/02/2016

3. DFCC-Environmental Assessment Report for Khurja - Dadri Section

4. Environmental Management Framework (EMF) for EDFC

5. DFCC– Resettlement Action Plan for Khurja- Dadri Section

6. DFCC SHE MANUAL

7. Specification for 12000hp locomotive and Tractive effort Curve.

8. IR's Transmission line Network and DFCCIL's Traction Sub Station (TSS) Connectivity