



## **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 Sahnewal-Pilkhani Section (approximately 175 Route Km of Single Line) of Eastern Dedicated Freight Corridor**

### **SYSTEMS WORKS CONTRACT PACKAGE - 304**

**Issued on: 08.06.2017**

**ICB No.: HQ/SYS/EC/D-B/Sahnewal– Pilkhani**

**(Part-4 Reference Document)**

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

**MINISTRY OF RAILWAYS**

**COUNTRY: INDIA**

## Table of Contents

### **PART 1 – Bidding Procedures**

- Section I. Instructions to Bidders
- Section II. Bid Data Sheet
- Section III. Evaluation and Qualification Criteria (Following Prequalification)
- Section IV. Bidding Forms
- Section V. Eligible countries

### **PART 2 – Employer’s Requirements**

- Section VI. Employer’s Requirements
- Volume 1: General Specifications
- Volume 2: Particular Specifications – 2x25 kV, AC Traction Electrification and Associated Works
- Volume 3: Particular Specifications – Signalling Works
- Volume 4: Particular Specifications – Telecommunication Works
- Volume 5: Particular Specifications – E&M and Associated Works

### **PART 3 – Conditions of Contract and Contract Forms**

- Section VII. General Conditions (GC) As per FIDIC Yellow Book 1999-Edition
- Section VIII. Particular Conditions
  - *Appendix to Tender*
- Section IX. Contract Forms

### **PART 4 – Reference Documents**

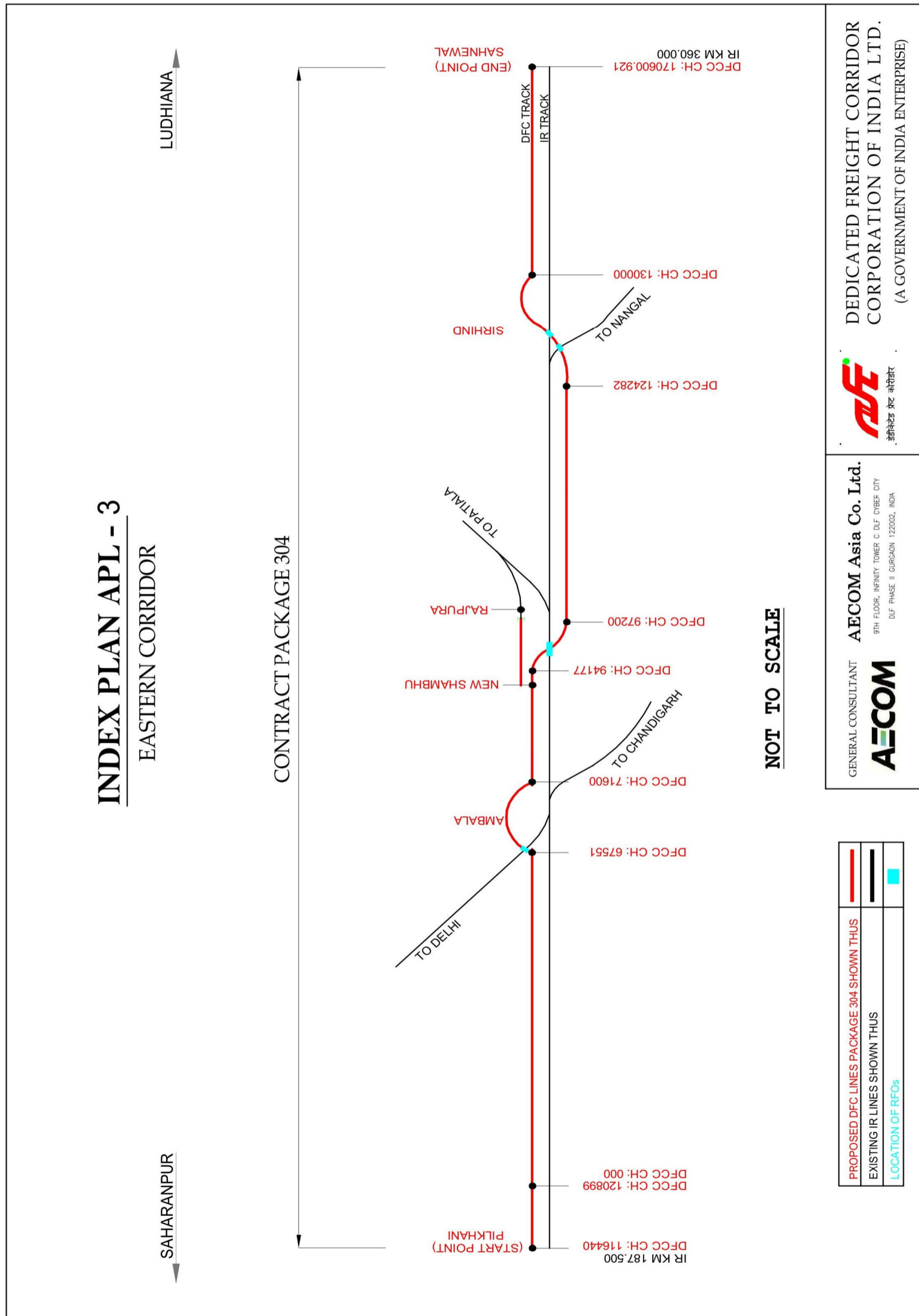
1. Alignment Plans, Yard Plans and Building Plans
2. Power Supply, Distribution, OHE and SCADA system Schemes & layouts and S&T Drawings
3. Environmental Assessment (EIA) Report including Environmental Management Plan(EMP) for Pilkhani-Sahnewal Section
4. Environmental Management Framework(EMF) for EDFC
5. DFCC– Social Impact Assessment:  
Resettlement Action Plan(RAP) for Sahnewal-Pilkhani Section
6. DFCC-SHE Manual
7. Specification for 12000hp locomotive and Tractive effort Curve.
8. Tentative Layout For Construction of Transmission Line Network over EDFC

# INDEX

<b>1.</b>	<b>ALIGNMENT PLANS, YARD PLANS AND BUILDING PLANS .....</b>	<b>4</b>
<b>1.1</b>	<b>INDEX PLAN.....</b>	<b>5</b>
<b>1.2</b>	<b>TENTATIVE ALIGNMENT PLANS.....</b>	<b>6</b>
<b>1.3</b>	<b>CONCORDANCE TABLE.....</b>	<b>12</b>
<b>1.4</b>	<b>INDICATIVE YARD PLANS AND OTHER DRAWINGS.....</b>	<b>18</b>
<b>2.</b>	<b>POWER SUPPLY, DISTRIBUTION, OHE SCADA SYSTEM SCHEMES &amp; LAYOUTS AND SIGNALLING &amp; TELECOMMUNICATION DRAWINGS .....</b>	<b>21</b>
<b>3.</b>	<b>Environmental Assessment (EIA) Report including Environmental Management Plan(EMP) for Pilkhani-Sahnewal Section.....</b>	<b>22</b>
<b>4.</b>	<b>Environmental Management Framework(EMF) for EDFC.....</b>	<b>23</b>
<b>5.</b>	<b>DFCC–SOCIAL IMPACT ASSESSMENT REPORT:.....</b>	<b>24</b>
	<b>RESETTLEMENT ACTION PLAN (RAP) FOR SAHNEWAL-PILKHANI SECTION.....</b>	<b>24</b>
<b>6.</b>	<b>DFCC SHE MANUAL.....</b>	<b>25</b>
<b>7.</b>	<b>SPECIFICATION FOR 12000HP LOCOMOTIVE AND TRACTIVE EFFORT CURVE.....</b>	<b>26</b>
<b>8.</b>	<b>TENTATIVE LAYOUT FOR CONSTRUCTION OF TRANSMISSION LINE NETWORK OVER EDFC .....</b>	<b>27</b>

# **1. ALIGNMENT PLANS, YARD PLANS AND BUILDING PLANS**

### 1.1 INDEX PLAN



## 1.2 TENTATIVE ALIGNMENT PLANS

### Sahnewal – Pilkhani (Drawings enclosed in separate booklet)

S.No.	DESCRIPTION	SHEET NUMBER
1.	PROJECT SHEET FROM CH: 116440 CH: 117640	1
2.	PROJECT SHEET FROM CH: 117640 CH: 118800	2
3.	PROJECT SHEET FROM CH: 118800 CH: 120000	3
4.	PROJECT SHEET FROM CH: 120000 CH: 120899.038	4
5.	PROJECT SHEET FROM CH: 120899.038 CH: 1200	5
6.	PROJECT SHEET FROM CH: 1200 CH: 2400	6
7.	PROJECT SHEET FROM CH: 2400 CH: 3600	7
8.	PROJECT SHEET FROM CH: 3600 CH: 4800	8
9.	PROJECT SHEET FROM CH: 4800 CH: 6000	9
10.	PROJECT SHEET FROM CH: 6000 CH: 7200	10
11.	PROJECT SHEET FROM CH: 7200 CH: 8400	11
12.	PROJECT SHEET FROM CH: 8400 CH: 9600	12
13.	PROJECT SHEET FROM CH: 9600 CH: 10800	13
14.	PROJECT SHEET FROM CH: 10800 CH: 12000	14
15.	PROJECT SHEET FROM CH: 12000 CH: 13200	15
16.	PROJECT SHEET FROM CH: 13200 CH: 14400	16
17.	PROJECT SHEET FROM CH: 14400 CH: 15600	17
18.	PROJECT SHEET FROM CH: 15600 CH: 16800	18
19.	PROJECT SHEET FROM CH: 16800 CH: 18000	19
20.	PROJECT SHEET FROM CH: 18000 CH: 19200	20
21.	PROJECT SHEET FROM CH: 19200 CH: 20400	21
22.	PROJECT SHEET FROM CH: 20400 CH: 21600	22
23.	PROJECT SHEET FROM CH: 21600 CH: 22800	23
24.	PROJECT SHEET FROM CH: 22800 CH: 24000	24
25.	PROJECT SHEET FROM CH: 24000 CH: 25200	25
26.	PROJECT SHEET FROM CH: 25200 CH: 26400	26
27.	PROJECT SHEET FROM CH: 26400 CH: 27600	27
28.	PROJECT SHEET FROM CH: 27600 CH: 28800	28

<b>S.No.</b>	<b>DESCRIPTION</b>	<b>SHEET NUMBER</b>
29.	PROJECT SHEET FROM CH: 28800 CH: 29400	29
30.	PROJECT SHEET FROM CH: 29400 CH: 30600	30
31.	PROJECT SHEET FROM CH: 30600 CH: 31800	31
32.	PROJECT SHEET FROM CH: 31800 CH: 33000	32
33.	PROJECT SHEET FROM CH: 33000 CH: 34200	33
34.	PROJECT SHEET FROM CH: 34200 CH: 35400	34
35.	PROJECT SHEET FROM CH: 35400 CH: 36600	35
36.	PROJECT SHEET FROM CH: 36600 CH: 37800	36
37.	PROJECT SHEET FROM CH: 37800 CH: 39000	37
38.	PROJECT SHEET FROM CH: 39000 CH: 40200	38
39.	PROJECT SHEET FROM CH: 40200 CH: 41400	39
40.	PROJECT SHEET FROM CH: 41400 CH: 42600	40
41.	PROJECT SHEET FROM CH: 42600 CH: 43800	41
42.	PROJECT SHEET FROM CH: 43800 CH: 45000	42
43.	PROJECT SHEET FROM CH: 45000 CH: 46200	43
44.	PROJECT SHEET FROM CH: 46200 CH: 47400	44
45.	PROJECT SHEET FROM CH: 47400 CH: 48600	45
46.	PROJECT SHEET FROM CH: 48600 CH: 49800	46
47.	PROJECT SHEET FROM CH: 49800 CH: 51000	47
48.	PROJECT SHEET FROM CH: 51000 CH: 52200	48
49.	PROJECT SHEET FROM CH: 52200 CH: 53400	49
50.	PROJECT SHEET FROM CH: 53400 CH: 54600	50
51.	PROJECT SHEET FROM CH: 54600 CH: 55800	51
52.	PROJECT SHEET FROM CH: 55800 CH: 56181.414	52
53.	PROJECT SHEET FROM CH: 56181.414 CH: 57400	53
54.	PROJECT SHEET FROM CH: 57400 CH: 58600	54
55.	PROJECT SHEET FROM CH: 58600 CH: 59800	55
56.	PROJECT SHEET FROM CH: 59800 CH: 61000	56
57.	PROJECT SHEET FROM CH: 61000 CH: 62200	57
58.	PROJECT SHEET FROM CH: 61000 CH: 62200	58
59.	PROJECT SHEET FROM CH: 63400 CH: 64600	59
60.	PROJECT SHEET FROM CH: 64600 CH: 65800	60

<b>S.No.</b>	<b>DESCRIPTION</b>	<b>SHEET NUMBER</b>
61.	PROJECT SHEET FROM CH: 65800 CH: 67000	61
62.	PROJECT SHEET FROM CH: 67000 CH: 68200	62
63.	PROJECT SHEET FROM CH: 68200 CH: 69400	63
64.	PROJECT SHEET FROM CH: 69400 CH: 70600	64
65.	PROJECT SHEET FROM CH: 70600 CH: 71800	65
66.	PROJECT SHEET FROM CH: 71800 CH: 73000	66
67.	PROJECT SHEET FROM CH: 73000 CH: 74200	67
68.	PROJECT SHEET FROM CH: 74200 CH: 75400	68
69.	PROJECT SHEET FROM CH: 75400 CH: 76600	69
70.	PROJECT SHEET FROM CH: 76600 CH: 77800	70
71.	PROJECT SHEET FROM CH: 77800 CH: 79000	71
72.	PROJECT SHEET FROM CH: 79000 CH: 80200	72
73.	PROJECT SHEET FROM CH: 80200 CH: 81400	73
74.	PROJECT SHEET FROM CH: 81400 CH: 82600	74
75.	PROJECT SHEET FROM CH: 82600 CH: 83800	75
76.	PROJECT SHEET FROM CH: 83800 CH: 85000	76
77.	PROJECT SHEET FROM CH: 85000 CH: 86200	77
78.	PROJECT SHEET FROM CH: 86200 CH: 87400	78
79.	PROJECT SHEET FROM CH: 87400 CH: 88600	79
80.	PROJECT SHEET FROM CH: 88600 CH: 89800	80
81.	PROJECT SHEET FROM CH: 89800 CH: 91000	81
82.	PROJECT SHEET FROM CH: 91000 CH: 92200	82
83.	PROJECT SHEET FROM CH: 92200 CH: 93400	83
84.	PROJECT SHEET FROM CH: 93400 CH: 94600	84
85.	PROJECT SHEET FROM CH: 94600 CH: 95800	85
86.	PROJECT SHEET FROM CH: 95800 CH: 97000	86
87.	PROJECT SHEET FROM CH: 97000 CH: 98200	87
88.	PROJECT SHEET FROM CH: 98200 CH: 99400	88
89.	PROJECT SHEET FROM CH: 99400 CH: 100600	89
90.	PROJECT SHEET FROM CH: 100600 CH: 101000	90
91.	PROJECT SHEET FROM CH: 101000 CH: 102200	91
92.	PROJECT SHEET FROM CH: 102200 CH: 103400	92



<b>S.No.</b>	<b>DESCRIPTION</b>	<b>SHEET NUMBER</b>
93.	PROJECT SHEET FROM CH: 103400 CH: 104600	93
94.	PROJECT SHEET FROM CH: 104600 CH: 105800	94
95.	PROJECT SHEET FROM CH: 105800 CH: 107000	95
96.	PROJECT SHEET FROM CH: 107000 CH: 108200	96
97.	PROJECT SHEET FROM CH: 108200 CH: 109400	97
98.	PROJECT SHEET FROM CH: 109400 CH: 110600	98
99.	PROJECT SHEET FROM CH: 110600 CH: 111800	99
100.	PROJECT SHEET FROM CH: 111800 CH: 113000	100
101.	PROJECT SHEET FROM CH: 113000 CH: 114200	101
102.	PROJECT SHEET FROM CH: 114200 CH: 115400	102
103.	PROJECT SHEET FROM CH: 115400 CH: 116600	103
104.	PROJECT SHEET FROM CH: 116600 CH: 117800	104
105.	PROJECT SHEET FROM CH: 117800 CH: 119000	105
106.	PROJECT SHEET FROM CH: 119000 CH: 120200	106
107.	PROJECT SHEET FROM CH: 120200 CH: 121400	107
108.	PROJECT SHEET FROM CH: 121400 CH: 122600	108
109.	PROJECT SHEET FROM CH: 122600 CH: 123800	109
110.	PROJECT SHEET FROM CH: 123800 CH: 125000	110
111.	PROJECT SHEET FROM CH: 125000 CH: 126200	111
112.	PROJECT SHEET FROM CH: 126200 CH: 127400	112
113.	PROJECT SHEET FROM CH: 127400 CH: 128600	113
114.	PROJECT SHEET FROM CH: 128600 CH: 129800	114
115.	PROJECT SHEET FROM CH: 129800 CH: 130000	115
116.	PROJECT SHEET FROM CH: 130000 CH: 131200	116
117.	PROJECT SHEET FROM CH: 131200 CH: 132400	117
118.	PROJECT SHEET FROM CH: 132400 CH: 133600	118
119.	PROJECT SHEET FROM CH: 133600 CH: 134800	119
120.	PROJECT SHEET FROM CH: 134800 CH: 136000	120
121.	PROJECT SHEET FROM CH: 136000 CH: 137200	121
122.	PROJECT SHEET FROM CH: 137200 CH: 138400	122
123.	PROJECT SHEET FROM CH: 138400 CH: 139600	123
124.	PROJECT SHEET FROM CH: 139600 CH: 140800	124

<b>S.No.</b>	<b>DESCRIPTION</b>	<b>SHEET NUMBER</b>
125.	PROJECT SHEET FROM CH: 140800 CH: 142000	125
126.	PROJECT SHEET FROM CH: 142000 CH: 143200	126
127.	PROJECT SHEET FROM CH: 143200 CH: 144400	127
128.	PROJECT SHEET FROM CH: 144400 CH: 145600	128
129.	PROJECT SHEET FROM CH: 145600 CH: 146800	129
130.	PROJECT SHEET FROM CH: 146800 CH: 148000	130
131.	PROJECT SHEET FROM CH: 148000 CH: 149200	131
132.	PROJECT SHEET FROM CH: 149200 CH: 150400	132
133.	PROJECT SHEET FROM CH: 150400 CH: 151600	133
134.	PROJECT SHEET FROM CH: 151600 CH: 152800	134
135.	PROJECT SHEET FROM CH: 152800 CH: 154000	135
136.	PROJECT SHEET FROM CH: 154000 CH: 155200	136
137.	PROJECT SHEET FROM CH: 155200 CH: 156400	137
138.	PROJECT SHEET FROM CH: 156400 CH: 157600	138
139.	PROJECT SHEET FROM CH: 157600 CH: 158800	139
140.	PROJECT SHEET FROM CH: 158800 CH: 160000	140
141.	PROJECT SHEET FROM CH: 160000 CH: 161200	141
142.	PROJECT SHEET FROM CH: 161200 CH: 162400	142
143.	PROJECT SHEET FROM CH: 162400 CH: 163600	143
144.	PROJECT SHEET FROM CH: 163600 CH: 164800	144
145.	PROJECT SHEET FROM CH: 164800 CH: 166000	145
146.	PROJECT SHEET FROM CH: 166000 CH: 167200	146
147.	PROJECT SHEET FROM CH: 167200 CH: 168400	147
148.	PROJECT SHEET FROM CH: 168400 CH: 169600	148
149.	PROJECT SHEET FROM CH: 169600 CH: 170600.921	149
150.	PROJECT SHEET FROM CH: 11317.550 TO CH 12692.950	KNZ-1
151.	PROJECT SHEET FROM CH: 91200 CH: 92400	SMU-1
152.	PROJECT SHEET FROM CH: 92400 CH: 93600	SMU-2
153.	PROJECT SHEET FROM CH: 93600 KM: 285.800	SMU-3
154.	PROJECT SHEET FROM KM: 285.800 KM: 287.000	SMU-4
155.	PROJECT SHEET FROM KM: 287.000 CH: 97200	SMU-5
156.	PROJECT SHEET FROM CH: 97200 CH: 98070	SMU-6

<b>S.No.</b>	<b>DESCRIPTION</b>	<b>SHEET NUMBER</b>
157.	PROJECT SHEET FROM CH: 121351.520 CH: 122500	SIR-1
158.	PROJECT SHEET FROM CH: 122500 CH: 123082.530	SIR-2
159.	PROJECT SHEET FROM CH: 131173 CH: 132400	GVG-1
160.	PROJECT SHEET FROM CH: 132400 CH: 133600	GVG-2
161.	PROJECT SHEET FROM CH: 133600 CH: 134753.870	GVG-3
162.	PROJECT SHEET FROM CH: 144200 CH: 145225.910	KNN-1

**NOTE:**

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

### 1.3 CONCORDANCE TABLE

#### Sahnewal – Pilkhani (CP- 304)

<b>Concordance Table</b>					
<b>Sheet No.</b>	<b>Chainage shown in Project Sheet</b>		<b>Corresponding Railway KM</b>		<b>Remarks</b>
	<b>From Ch.</b>	<b>To Ch.</b>	<b>From KM</b>	<b>To KM</b>	
1.	116440	117640	187.500	188.700	
2.	117640	118800	188.700	189.900	
3.	118800	120000	189.900	191.100	
4.	120000	120899.038	191.100	192.000	
5.	120899.038/0.000	1200	192.000	193.200	
6.	1200	2400	193.200	194.400	
7.	2400	3600	194.400	195.600	
8.	3600	4800	195.600	196.800	
9.	4800	6000	196.800	198.000	
10.	6000	7200	198.000	199.200	
11.	7200	8400	199.200	200.400	
12.	8400	9600	200.400	201.600	
13.	9600	10800	201.600	202.800	
14.	10800	12000	202.800	204.000	
15.	12000	13200	204.000	205.200	
16.	13200	14400	205.200	206.400	
17.	14400	15600	206.400	207.600	
18.	15600	16800	207.600	208.800	
19.	16800	18000	208.800	210.000	
20.	18000	19200	210.000	211.200	
21.	19200	20400	211.200	212.400	
22.	20400	21600	212.400	213.600	
23.	21600	22800	213.600	214.800	
24.	22800	24000	214.800	216.000	
25.	24000	25200	216.000	217.200	
26.	25200	26400	217.200	218.400	
27.	26400	27600	218.400	219.600	

<b>Concordance Table</b>					
<b>Sheet No.</b>	<b>Chainage shown in Project Sheet</b>		<b>Corresponding Railway KM</b>		<b>Remarks</b>
	<b>From Ch.</b>	<b>To Ch.</b>	<b>From KM</b>	<b>To KM</b>	
28.	27600	28800	219.600	220.800	
29.	28800	29400	220.800	221.400	
30.	29400	30600	221.400	222.600	
31.	30600	31800	222.600	223.800	
32.	31800	33000	223.800	224.900	
33.	33000	34200	224.900	226.100	
34.	34200	35400	226.100	227.250	
35.	35400	36600	227.250	228.450	
36.	36600	37800	228.450	229.650	
37.	37800	39000	229.650	230.850	
38.	39000	40200	230.850	232.050	
39.	40200	41400	232.050	233.250	
40.	41400	42600	233.250	234.450	
41.	42600	43800	234.450	235.650	
42.	43800	45000	235.650	236.850	
43.	45000	46200	236.850	238.050	
44.	46200	47400	238.050	239.250	
45.	47400	48600	239.250	240.450	
46.	48600	49800	240.450	241.650	
47.	49800	51000	241.650	242.850	
48.	51000	52200	242.850	244.050	
49.	52200	53400	244.050	245.250	
50.	53400	54600	245.250	246.450	
51.	54600	55800	246.450	247.650	
52.	55800	56181.414	247.650	248.000	
53.	56181.414	57400	248.000	249.200	
54.	57400	58600	249.200	250.400	
55.	58600	59800	250.400	251.600	
56.	59800	61000	251.600	252.800	
57.	61000	62200	252.800	254.000	
58.	62200	63400	254.000	255.200	

<b>Concordance Table</b>					
<b>Sheet No.</b>	<b>Chainage shown in Project Sheet</b>		<b>Corresponding Railway KM</b>		<b>Remarks</b>
	<b>From Ch.</b>	<b>To Ch.</b>	<b>From KM</b>	<b>To KM</b>	
59.	63400	64600	255.200	256.400	
60.	64600	65800	256.400	257.650	
61.	65800	67000	257.650	258.850	
62.	67000	68200	258.850	260.050	
63.	68200	69400	Detour		
64.	69400	70600	Detour		
65.	70600	71800	Detour		
66.	71800	73000	262.800	264.000	
67.	73000	74200	264.000	265.200	
68.	74200	75400	265.200	266.400	
69.	75400	76600	266.400	267.600	
70.	76600	77800	267.600	268.800	
71.	77800	79000	268.800	269.950	
72.	79000	80200	269.950	271.150	
73.	80200	81400	271.150	272.350	
74.	81400	82600	272.350	273.550	
75.	82600	83800	273.550	274.750	
76.	83800	85000	274.750	275.950	
77.	85000	86200	275.950	277.150	
78.	86200	87400	277.150	278.350	
79.	87400	88600	278.350	279.550	
80.	88600	89800	279.550	280.750	
81.	89800	91000	280.750	281.950	
82.	91000	92200	281.950	283.150	
83.	92200	93400	283.150	284.400	
84.	93400	94600	284.400	285.600	
85.	94600	95800	285.600	286.800	
86.	95800	97000	286.800	288.000	
87.	97000	98200	288.000	289.150	
88.	98200	99400	289.150	290.400	
89.	99400	100600	290.400	291.500	

<b>Concordance Table</b>					
<b>Sheet No.</b>	<b>Chainage shown in Project Sheet</b>		<b>Corresponding Railway KM</b>		<b>Remarks</b>
	<b>From Ch.</b>	<b>To Ch.</b>	<b>From KM</b>	<b>To KM</b>	
90.	100600	101000	291.500	291.900	
91.	101000	102200	291.900	293.150	
92.	102200	103400	293.150	294.300	
93.	103400	104600	294.300	295.500	
94.	104600	105800	295.500	296.700	
95.	105800	107000	296.700	297.900	
96.	107000	108200	297.900	299.100	
97.	108200	109400	299.100	300.300	
98.	109400	110600	300.300	301.500	
99.	110600	111800	301.500	302.700	
100.	111800	113000	302.700	303.900	
101.	113000	114200	303.900	305.100	
102.	114200	115400	305.100	306.300	
103.	115400	116600	306.300	307.500	
104.	116600	117800	307.500	308.700	
105.	117800	119000	308.700	309.900	
106.	119000	120200	309.900	311.100	
107.	120200	121400	311.100	312.300	
108.	121400	122600	312.300	313.500	
109.	122600	123800	313.500	314.700	
110.	123800	125000	Detour		
111.	125000	126200	Detour		
112.	126200	127400	Detour		
113.	127400	128600	Detour		
114.	128600	129800	Detour		
115.	129800	130000	319.200	319.400	
116.	130000	131200	319.400	320.650	
117.	131200	132400	320.650	321.800	
118.	132400	133600	321.800	323.050	
119.	133600	134800	323.050	324.250	
120.	134800	136000	324.250	325.450	

<b>Concordance Table</b>					
<b>Sheet No.</b>	<b>Chainage shown in Project Sheet</b>		<b>Corresponding Railway KM</b>		<b>Remarks</b>
	<b>From Ch.</b>	<b>To Ch.</b>	<b>From KM</b>	<b>To KM</b>	
121.	136000	137200	325.450	326.650	
122.	137200	138400	326.650	327.850	
123.	138400	139600	327.850	329.050	
124.	139600	140800	329.050	330.250	
125.	140800	142000	330.250	331.450	
126.	142000	143200	331.450	332.650	
127.	143200	144400	332.650	333.850	
128.	144400	145600	333.850	335.050	
129.	145600	146800	335.050	336.250	
130.	146800	148000	336.250	337.450	
131.	148000	149200	337.450	338.650	
132.	149200	150400	338.650	339.850	
133.	150400	151600	339.850	341.050	
134.	151600	152800	341.050	342.250	
135.	152800	154000	342.250	343.450	
136.	154000	155200	343.450	344.650	
137.	155200	156400	344.650	345.850	
138.	156400	157600	345.850	347.050	
139.	157600	158800	347.050	348.250	
140.	158800	160000	348.250	349.450	
141.	160000	161200	349.450	350.650	
142.	161200	162400	350.650	351.850	
143.	162400	163600	351.850	353.050	
144.	163600	164800	353.050	354.250	
145.	164800	166000	354.250	355.450	
146.	166000	167200	355.450	356.650	
147.	167200	168400	356.650	357.850	
148.	168400	169600	357.850	359.050	
149.	169600	170600.921	359.050	360.200	
<b>THERMAL LINE KALANAUR</b>					
KNZ-1	11317.55	12692.95	203.100	204.475	



<b>Concordance Table</b>					
<b>Sheet No.</b>	<b>Chainage shown in Project Sheet</b>		<b>Corresponding Railway KM</b>		<b>Remarks</b>
	<b>From Ch.</b>	<b>To Ch.</b>	<b>From KM</b>	<b>To KM</b>	
<b>LINK LINE - SHAMBU RAJPURA</b>					
SMU-1	91200	92400	281.950	283.150	
SMU-2	92400	93600	283.150	284.400	
SMU-3	93600	285.800	284.400	285.800	
SMU-4	285.800	287	285.800	287.000	
SMU-5	287.000	97200	287.000	288.200	
SMU-6	97200	98070	288.200	289.000	
<b>IR UP MAIN LINE - SIRHIND</b>					
SIR-1	121351.52	122500	312.300	313.500	
SIR-2	122500	123082.53	313.500	314.700	
<b>IR MAIN LINES - MANDI GOBINDGARH</b>					
GVG-1	131173	132400	320.650	321.800	
GVG-2	132400	133600	321.800	323.050	
GVG-3	133600	134753.87	323.050	324.250	
<b>IR DN MAIN LINE - KHANNA</b>					
KNN-1	144200	145225.91	333.700	334.700	

## 1.4 INDICATIVE YARD PLANS AND OTHER DRAWINGS

### A) List of Indicative Yard Plans in the Block Section

S. No.	STATION NAME	DRAWING NUMBER
1.	New Pilkhani	NRHQE Plan No. UMB/09/07-2015
2.	New Kalanaur	NRHQE Plan No. UMB/14/11-2015
3.	New Jagadhari Workshop	NRHQE Plan No. UMB/01/01-2015
4.	New Darazpur	DFC/LDH/2012/CS/06
5.	New Barara	DFC/LDH/2012/CS/07
6.	New Kesri	DFC/LDH/2012/CS/08
7.	New Dukheri	NRHQE Plan No. UMB/04/03-2015
8.	New Ambala City	DFC/LDH/2011/CS/10
9.	New Shambhu	DFC/LDH/2013/CS/11
10.	New Sarai Banjara (Sheet-1)	N.R.H.Q.E. PLAN NO. UMB/11/11-2012 SHEET NO. 1
11.	New Sarai Banjara (Sheet-2)	N.R.H.Q.E. PLAN NO. UMB/11/11-2012 SHEET NO. 2
12.	New Sirhind	NRHQE Plan No. UMB/10/07-2015
13.	New Mandi Gobindgarh	NRHQE Plan No. UMB/11/07-2015
14.	New Khanna	NRHQE Plan No. UMB/10/11-2014
15.	New Chawapail	NRHQE Plan No. UMB/07/06-2015
16.	Pilkhani	NRHQE Plan No. UMB/08/07- 2015
17.	Kalanaur	NRHQE Plan No. UMB/14/11-2015
18.	Jagadhari	NRHQE Plan No. UMB/12/12-2014
19.	Ambala Cantt.	DFC/LDH/2013/16
20.	Rajpura	DFCC Plan No. DFC/LDH/2012/19
21.	Sadhugarh	DFC/LDH/2012/21
22.	Sirhind	NRHQE Plan No. UMB/10/07-2015
23.	Mandi Gobindgarh	NRHQE Plan No. UMB/11/07-2015
24.	Khanna	NRHQE Plan No. UMB/09/11-2014
25.	Doraha	NRHQE Plan No. UMB/11/12-2014
26.	Sahnewal	NRHQE Plan No. FZR/03/10-2015

**B) List of Indicative Building Drawings in the Block Section**

<b>S. No.</b>	<b>DRAWING NAME</b>	<b>DRAWING NUMBER</b>
1.	Integrated Sub Depot (IMD)	GC/DFCC/IMD/301
2.	Integrated Maintenance Sub Depot (IMSD)	GC/DFCC/IMSD/401
3.	Junction Station Ground Floor Plan	GC/DFCC/JS/101/REV.1
4.	Junction Station First Floor & Roof Level Plan	GC/DFCC/JS/102/REV.1
5.	Junction Station Front & Rear Elevation Plan	GC/DFCC/JS/103/REV.1
6.	Crossing Station Ground Floor Plan	GC/DFCC/CS/201/REV.1
7.	Crossing Station First Floor & Roof Level Plan	GC/DFCC/CS/202/REV.1
8.	Crossing Station Front & Rear Elevation Plan	GC/DFCC/CS/203/REV.1
9.	DFCC Quarter Type - A	GC/DFCC/QTRS/701
10.	DFCC Quarter Type - B	GC/DFCC/QTRS/702
11.	DFCC Quarter Type - C	GC/DFCC/QRTS/703
12.	Boundary Wall	DFCC/BOUNDARY WALL/TYP-001
13.	Typical GAD for LC Gate Lodge	GC/DFCC/GL/505/R1

**C) List of Electrification and S&T Drawings**

<b>S. No.</b>	<b>DRAWING NAME</b>	<b>DRAWING NUMBER</b>
1.	PS- Schematic Jagadhari TSS	GC/DFCC/PS/TSS/SCH/TYP/101 – Jagadhari
2.	PS- Schematic New Sirhind TSS	GC/DFCC/PS/TSS/SCH/TYP/101 – New Sirhind
3.	PS-Schematic SP	GC/DFCC/PS/SP/SCH/TYP/201
4.	PS- Schematic SSP	GC/DFCC/PS/SSP/SCH/TYP/301
5.	OHE-General Supply Diagram	GC/DFCC/PS/GSD/401
6.	E&M Schematic	GC/DFCC/E&M/STATION/801
7.	SCADA Traction SCADA	GC/DFCC/TR/SCADA/701
8.	SCADA-AUX	GC/DFCC/TR/SCADA/702
9.	OHE-BEC in Embankment	GC/DFCC/OHE/EMBKT/TYP/501
10.	OHE-Arrangement OHE on Portal at Multi Track Section	GC/DFCC/OHE/OHE/PORTAL/TYP/513
11.	OHE-Arrangement at Bridge Steel	GC/DFCC/OHE/GUY ROD ON BRIDGE / TYP-507
12.	OHE-Arrangement at Bridges-Earthing & Bonding	GC/DFCC/OHE/E&B/GIRDERS/TYP/603
13.	OHE-Arrangement at Bridges-RCC Earthing & Bonding	GC/DFCC/OHE/E&B/BRIDGE/TYP/604
14.	Control Room Bldng - Jagadhari TSS	GC/DFCC/TSS/503-A
15.	Control Room Bldng – New Sirhind TSS	GC/DFCC/TSS/503-B
16.	Building Plan of SP and SSP	GC/DFCC/SP-SSP/504
17.	Building -Tower Wagon Shed	GC/DFCC/TWS/501
18.	PS-Chain Link Fencing	GC/DFCC/CHAIN LINK FENCING/TYP-001
19.	Signal & Telecom Equipment Rooms	DFC/S&T/01/2017
20.	Telecom Equipment & Telecom Power Supply Equipment Room	DFC/S&T/02/2017

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

### **3. Environmental Assessment (EIA) Report including Environmental Management Plan(EMP) for Pilkhani-Sahnewal Section**

## **4. Environmental Management Framework(EMF) for EDFC**

## **5. DFCC–SOCIAL IMPACT ASSESSMENT REPORT:**

### **RESETTLEMENT ACTION PLAN (RAP) FOR SAHNEWAL-PILKHANI SECTION**



## **6. DFCC SHE MANUAL**

## **7. SPECIFICATION FOR 12000HP LOCOMOTIVE AND TRACTIVE EFFORT CURVE**

## **8. TENTATIVE LAYOUT FOR CONSTRUCTION OF TRANSMISSION LINE NETWORK OVER EDFC**