

JHARKHAND URJA SANCHARAN NIGAM LIMITED

220KV D/C TRANSMISSION LINE FROM CHAIBASA-GUA T/L

A2Z INFRA ENGG. LIMITED
TOWER SCHEDULE

GANTRY TO DEAD END GUA

Sl. No.	Type of Tower		Tower Ext.	Angle of Deviation	Span Length (m)	Section Length (m)	Cumulative change (m)	Reduced Level (m)	Wind Span (m)	Weight Span Hot (m)			Weight Span Cold (m)			S. Adj Span			Level	Crossing Details	ZONE-45		
										Left	Right	Total	Left	Right	Total	Left	Right	Total			x	y	NEAR VILLAGE
1	GANTRY(S.S.)	GE	-2.34	XX° YY' ZZ"		30	0	235.11	15.00	0	-103	-103	0	-154	-154	0	30	30	232.78		380964	2499695	ULUJHARI
					30															FENCING			
2	DE	DD+0	0	17° 33' 02"RT		41	30	235.13	35.50	133	143	277	184	196	379	30	41	71	235.14		380960	2499675	ULUJHARI
					41															CT			
3	AP0	DD+0	0	57°00' 10"LT		25	71	231.79	33.00	-102	474	371	-155	670	515	41	25	66	231.79		380932	2499652	ULUJHARI
4	G1	G1	-7.34	00° 00' 00"		27	96	231.46	28.00	-449	4	-445	-645	-1	-646	25	27	52	224.12	SLAC SPAN 220kv D/C,JUSNL C&S- RAMCHNADRAPUR, T-1-2	380928	2499627	ULUJHARI
					27															SLAC SPAN	380923	2499600	ULUJHARI
5	G2	G2	-7.34	00° 00' 00"		32	123	231.61	29.50	23	-397	-374	28	-573	-545	27	32	59	224.27				
					32																		
6	AP1	DD+0	0	30°00' 09"RT		102	155	233.09	67.00	429	43	473	605	40	645	32	102	134	233.09		380919	2499571	ULUJHARI
					102																		
7	AP2	DD+0	0	38°06' 29"RT		44	257	233.61	73.00	59	314	373	62	438	500	102	44	146	233.61		380859	2499488	ULUJHARI
					44																		
8	AP2A	G3	-7.34	00° 00' 00"		30	301	232.41	37.00	-270	54	-216	-394	70	-324	44	30	74	225.07	SLAC SPAN 220kv S/C,PGCIL R-JODA, T-119C- 120	380815	2499479	ULUJHARI
					30																		
9	AP2B	G4	-7.34	00° 00' 00"		111	331	231.65	70.50	-24	-39	-63	-40	-80	-120	30	111	141	224.31	SLAC SPAN	380766	2499474	ULUJHARI
					111															CANAL,33KV			
10	AP2C	DD+6	6	07° 02' 37"RT		699	442	225.31	230.50	150	176	226	191	177	368	111	350	461	231.31		380677	2499454	ULUJHARI
					350																		
11	2C/1	DA+0	0			119	792	231.00	349.50	174	187	361	173	193	366	350	349	699	231.00		380393	2499389	AUCHU
					349																		
12	AP3	DD+0	0	16° 16' 36"RT		119	1141	228.00	234.00	162	161	323	156	204	360	349	119	468	228.00		379991	2499326	AUCHU
					119																		
13	AP4	G5	-7.34	00° 00' 00"		30	1260	227.31	74.50	-42	47	5	-85	60	-25	119	30	149	219.97	SLAC SPAN 400kv D/C (LILO, JSR-KRL PGCIL, T- 36/88-35/88)	379872	2499341	AUCHU
					30																		
14	AP5	G6	-7.34	00° 00' 00"		118	1290	226.68	74.00	-17	-121	-138	-30	-197	-227	30	118	148	219.34	SLAC SPAN	379843	2499344	AUCHU
					118															11KV			
15	AP6	DD+6	6	16° 29' 38"LT		200	1408	227.47	159.00	239	-66	173	315	-136	179	118	200	318	233.47	33KV,132kv S/C (CHAIBASA TO RAJKHARSAWAN T no.-47-48)	379726	2499360	AUCHU
					200																		
16	AP7	DD+25	25	17° 27' 22"LT		578	1608	230.53	282.50	66	243	509	336	268	604	200	365	565	255.53	TARROAD,MTR	379529	2499327	AUCHU
					365																		
17	7/1	DA+6	6			213	1973	234.97	289.00	122	159	281	100	181	281	365	213	578	240.97		379193	2499183	AUCHU
					213																		

Secondary/
(Surveyor)

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40	AP19	DC+0	0	15° 57' 02"LT		7931	246.45	285.50	148	163	311	156	166	322	261	310	571	246.45		374047	2496704	SANECHATU
41	19/1	DA+0	0		310	8241	244.78	322.00	147	137	284	144	124	268	310	334	644	244.78	NALI	373888	2496437	SANKOHTU
42	19/2	DA+3	3		334	8575	248.45	338.00	197	166	363	210	164	373	334	342	676	251.45		373717	2496150	BURUHATU
43	19/3	DA+3	3		342	8917	249.64	344.00	176	181	357	178	185	363	342	346	688	252.64	TARROAD,11KV	373542	2495856	BURUHATU
44	AP20	DD+0	0	38° 51' 23"RT	346	9263	250.75	354.00	165	149	314	161	135	297	346	362	708	250.75		373366	2495560	PANCHO
45	20/1	DA+6	6		362	9625	252.47	357.50	213	172	385	227	171	397	362	353	715	258.47		373026	2495434	PANCHO
46	AP21	DC+3	3	21° 35' 44"LT	353	9978	256.45	326.50	181	95	276	182	72	255	353	300	653	259.45		372695	2495313	PANCHO
47	21/1	DA+3	3		300	10278	267.32	280.00	205	112	317	228	104	332	300	260	560	270.32	CARTRACK	372470	2495114	PANCHO
48	21/2	DD+6	6	00° 00' 00"	260	10538	267.42	300.00	148	143	290	156	131	286	260	340	600	273.42	CARTRACK,11KV	372275	2494942	MORASAI
49	21/3	DD+3	3	00° 00' 00"	340	10878	276.64	345.00	197	222	420	209	242	451	340	350	690	279.64	(SH U/C),11KV,CARTRACK	372020	2494717	MORASAI
50	21/4	DA+6	6		350	11228	262.64	346.50	128	160	288	108	155	283	350	343	693	268.64	CARTRACK	371757	2494485	TURANGBASA
51	21/5	DA+3	3		343	11571	268.23	333.00	183	132	315	188	119	307	343	323	666	271.23	POND	371500	2494258	TURANGBASA
52	21/6	DA+3	3		323	11894	274.63	314.50	191	195	386	204	213	417	323	306	629	277.63		371259	2494044	BARAGUIRA
53	AP22	DC+0	0	25° 01' 16"LT	306	12200	269.09	319.00	111	192	303	93	204	297	306	332	638	269.09		371030	2493843	BARAGUIRA
54	22/1	DA+0	0		332	12532	263.25	332.00	140	172	312	128	175	303	332	332	664	263.25	METAL ROAD,11KV,POND	370897	2493538	BARAGUIRA
55	22/2	DA+3	3		332	12864	258.87	341.00	160	190	350	157	196	353	332	350	682	261.87	CARTRACK	370764	2493234	BARAGUIRA
56	AP23	DC+0	0	19° 02' 29"LT	350	13214	258.49	349.50	160	170	331	154	168	322	350	349	699	258.49		370623	2492912	CHHOTAGUIRA
57	AP24	DC+0	0	27° 41' 53"RT	349	13563	259.52	339.50	179	163	342	181	163	344	349	330	679	259.52	NALA	370595	2492566	CHHOTAGUIRA
58	24/1	DA+0	0		330	13893	259.88	335.50	167	138	305	167	124	291	330	341	671	259.88	TARROAD	370419	2492286	CHHOTAGUIRA
59	24/2	DA+3	3		341	14234	264.30	326.00	203	155	358	217	154	371	341	311	652	267.30		370237	2491997	CHHOTAGUIRA
60	24/3	DA+3	3		311	14545	264.47	318.00	156	168	325	157	171	328	311	325	636	267.47	11KV,TARROAD	370072	2491734	CHHOTAGUIRA
61	24/4	DA+0	0		325	14870	266.20	332.00	157	164	321	154	162	316	325	339	664	266.20		369899	2491459	CHHOTAGUIRA
62	24/5	DA+0	0		339	15209	267.42	333.00	175	135	310	177	123	300	339	327	666	267.42		369718	2491172	CHHOTAGUIRA
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USNL HQ. Ranchi-4

63	AP25	DD+0	0	31° 29' 20"LT		15536	273.63	332.50	192	139	331	204	127	331	327	338	665	273.63		369545	2490896	CHHOTAGUIRA
64	25/1	DA+6	6		338	15874	274.32	344.00	199	178	377	211	179	391	338	350	688	280.32	CARTRACK, 11KV	369539	2490558	SIMBIYA
65	25/2	DA+3	3		350	16224	276.62	340.00	172	184	356	171	192	363	350	330	680	279.62		369534	2490208	SIMBIYA
66	AP26	DB+0	0	08° 04' 14"RT	330	16554	275.46	333.50	146	195	341	138	206	344	330	337	667	275.46	CARTRACK	369529	2489883	SIMBIYA
67	26/1	DA+3	3		337	16891	266.62	336.00	142	178	320	131	182	313	337	335	672	269.62	POND, NALA	369473	2489550	SIMBIYA
68	AP27	DC+0	0	17° 16' 28"LT	335	17226	267.39	333.00	157	170	328	153	172	326	335	331	666	267.39		369417	2489217	HARO
69	27/1	DA+3	3		331	17557	263.32	335.50	161	167	328	159	166	325	331	340	671	266.32		369468	2488890	HARO
70	27/2	DA+6	6		340	17897	260.89	335.50	173	140	313	174	130	303	340	331	671	266.89	NALA	369522	2488554	HARIRA
71	AP27A	DB+3	3	02° 51' 37"LT	331	18228	269.40	330.50	191	197	388	201	211	412	331	330	661	272.40	2 11KV, TARROAD, POND	369574	2488227	HARIRA
72	27A/1	DA+0	0		330	18558	265.35	332.00	133	152	285	119	146	265	330	334	664	265.35		369638	2487903	HARIRA
73	27A/2	DA+3	3		334	18892	265.62	330.00	182	166	348	188	168	356	334	326	660	268.62	CAR TRACK	369703	2487575	MAUDA
74	27A/3	DA+0	0		326	19218	267.91	318.00	160	137	297	158	129	287	326	310	636	267.91	POND	369766	2487255	GARAHATU
75	27A/4	DA+0	0		310	19528	271.71	305.00	173	120	293	181	108	289	310	300	610	271.71		369827	2486951	GARAHATU
76	27A/5	DA+3	3		300	19828	274.65	322.50	180	172	352	192	171	363	300	345	645	277.65	2 CAR TRACK, 11KV	369885	2486657	BANAIKERA
77	27A/6	DA+0	0		345	20173	277.87	346.00	173	123	296	174	102	276	345	347	692	277.87	11KV	369952	2486319	BANAIKERA
78	27A/7	DA+6	6		347	20520	283.43	358.00	224	176	400	245	173	418	347	369	716	289.43		370020	2485978	BANAIKERA
79	AP28	DD+0	0	36° 55' 08"RT	369	20889	291.40	363.50	193	115	308	196	88	284	369	358	727	291.40		370092	2485617	KAINAW
80	28/1	DA+3	3		358	21247	303.69	348.00	243	149	392	270	140	410	358	338	696	306.69	CART TRACK	369936	2485294	KAINAW
81	28/2	DA+6	6		338	21585	305.26	330.00	189	143	332	198	136	334	338	322	660	311.26		369790	2484989	KAINAW
82	28/3	DA+6	6		322	21907	309.01	326.50	179	195	374	186	207	393	322	331	653	315.01	2 CART TRACK	369650	2484699	KAINAW
83	28/4	DA+3	3		331	22238	305.60	331.00	136	153	289	124	148	272	331	331	662	308.60	CART TRACK	369507	2484401	KAINAW
84	28/5	DA+6	6		331	22569	305.26	336.00	178	208	386	183	224	407	331	341	672	311.26	CART TRACK	369364	2484102	SANKUCHIYA
85	28/6	DB+3	3		341	22910	299.76	320.50	133	79	212	117	49	166	341	300	641	302.76		369216	2483795	SANKUCHIYA
					300																	

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JUSNL, H.Q. Ranchi-4

86	28/7	DA+3	3		357
87	AP29	DC+0	0	24° 58' 52"LT	360
88	29/1	DA+6	6		347
89	29/2	DA+3	3		325
90	29/3	DA+6	6		380
91	29/4	DB+3	9		176
92	AP30	DB+0	0	11° 40' 28"LT	357
93	AP31	DD+6	6	32° 28' 47"RT	395
94	31/1	DA+0	0		312
95	31/2	DB+0	0		321
96	AP32	DB+0	0	04° 03' 20"RT	349
97	32/1	DA+6	6		335
98	32/2	DA+0	0		335
99	AP33	DC+0	0	18° 24' 32"RT	291
100	33/1	DA+0	0		350
101	33/2	DB+6	6		312
102	33/3	DA+0	0		368
103	AP34	DD+6	6	39° 09' 33"LT	212
104	34/1	DA+6	6		360
105	AP35	DB+3	3	06° 29' 40"LT	363
106	35/1	DA+6	6		335
107	AP36	DC+0	0	19° 30' 48"RT	254
108	36/1	DA+6	6		253

1588	23210	313.93	328.50	221	198	419	251	206	457	300	357	657	316.93	2 CART TRACK, FOREST	369086	2483525	SANKUCHIYA
357	23567	312.41	358.50	159	185	344	151	187	338	357	360	717	312.41	11KV, FOREST	368931	2483202	NIMDIH
1028	23927	305.27	353.50	175	176	351	173	177	350	360	347	707	311.27		368927	2482842	NIMDIH
1019	24274	307.74	336.00	171	206	377	170	224	394	347	325	672	310.74		368923	2482495	NIMDIH
1321	24599	295.36	352.50	119	171	290	101	163	264	325	380	705	301.36	POND	368920	2482170	NIMDIH
572	24979	303.13	278.00	209	-22	187	217	-68	149	380	176	556	306.13	2-CART TRACK	368916	2481790	CHALGI
698	25155	318.95	266.50	198	240	438	244	266	510	176	357	533	318.95	11KV, TAR ROAD	368915	2481617	CHALGI
	25512	298.41	376.00	117	211	328	91	217	308	357	395	752	304.41	NALA, POND	368981	2481264	CHALGI
	25907	300.86	353.50	184	145	329	178	141	319	395	312	707	300.86		368835	2480897	CHALGI
	26219	303.07	316.50	167	65	232	171	25	196	312	321	633	303.07	CART TRACK	368720	2480607	CHALGI
	26540	323.38	335.00	256	199	455	296	210	506	321	349	670	323.38		368601	2480309	CHALGI
	26889	311.62	342.00	150	202	352	139	217	356	349	335	684	317.62	CART TRACK	368449	2479995	DOKATTA
	27224	309.83	335.00	133	141	274	118	130	248	335	335	670	309.83		368303	2479694	DOKATTA
	27559	315.72	313.00	194	143	337	205	142	347	335	291	626	315.72		368156	2479391	DOKATTA
	27850	316.14	320.50	148	139	287	149	124	273	291	350	641	316.14	FOREST START	367951	2479185	DOKATTA
	28200	318.45	331.00	211	67	278	236	29	255	350	312	662	324.45	FOREST	367703	2478937	DOKATTA
	28512	343.01	340.00	245	217	462	283	231	514	312	368	680	343.01	CART TRACK, FOREST	367483	2478716	DOKATTA
	28880	328.90	290.00	151	58	209	137	37	174	368	212	580	334.90	FOREST	367225	2478457	DOKATTA
	29092	335.71	286.00	154	124	278	175	100	275	212	360	572	341.71	FOREST	367200	2478246	DOKATTA
	29452	352.17	361.50	236	213	449	260	226	486	360	363	723	355.17	FOREST END, TAR ROAD	367160	2477890	DOKATTA
	29815	341.63	349.00	150	187	337	137	195	332	363	335	698	347.63		367159	2477527	DAWDONGWA
	30150	343.39	294.50	148	62	210	140	34	174	335	254	589	343.39	11KV	367159	2477190	DAWDONGWA
	30404	348.36	253.50	192	114	306	220	108	328	254	253	507	354.36	CART TRACK	367073	2476951	DAWDONGWA

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132	AP46	DC+3	3	27°54'46"LT		340	37808	425.17	331.50	158	172	330	156	173	329	323	340	663	428.17		365349	2470290	BURU SIRINGSIYA
133	AP47	DD+0	0	30°41'51"RT		345	38148	427.73	342.50	168	99	267	167	67	234	340	345	665	427.73		365485	2469975	BURU SIRINGSIYA
134	47/1	DA+0	0			350	38493	444.67	347.50	246	161	407	278	156	444	345	350	695	444.67	FOREST START	365443	2469632	SAGARKATTA
135	47/2	DD+9	9			350	38843	438.83	350.00	189	112	301	194	85	279	350	350	700	447.83	CART TRACK,NALA,FOREST	365400	2469285	SAGARKATTA
136	AP48	DB+0	0	05°30'48"LT		290	39193	462.57	320.00	238	219	457	265	250	515	350	290	640	462.57	NALA,FOREST	365358	2468938	SAGARKATTA
137	48/1	DD+18	18			359	39483	430.38	324.50	71	274	345	40	313	353	290	359	649	448.38	FOREST END	365350	2468647	PUNGSIA
138	AP49	DB+3	3	02°20'55"RT		357	39842	422.95	358.00	85	166	251	46	161	207	359	357	716	425.95	TAR ROAD,NALA,11KV,POND	365342	2468288	PUNGSIA
139	49/1	DA+6	6			343	40199	422.87	350.00	191	184	375	196	189	385	357	343	700	428.87		365318	2467932	PUNGSIA
140	49/2	DA+3	3			264	40542	423.03	303.50	159	123	282	154	119	273	343	264	607	426.03	NALA	365294	2467590	KITAHATU
141	49/3	DA+3	3			359	40806	424.62	311.50	141	164	305	145	157	302	264	359	623	427.62	BUND	365276	2467326	KITAHATU
142	AP50	DC+0	0	25°05'58"RT		285	41165	431.33	322.00	195	97	292	202	78	280	359	285	644	431.33	CART TRACK	365252	2466969	KITAHATU
143	50/1	DA+6	6			348	41450	433.88	316.50	188	175	363	207	176	383	285	348	633	439.88		365114	2466719	KITAHATU
144	50/2	DA+3	3			333	41798	436.59	340.50	173	155	328	172	150	322	348	333	681	439.59	PIPE LINE,11KV,POND	364946	2466415	KITAHATU
145	50/3	DA+3	3			300	42131	439.16	316.50	178	129	307	183	119	302	333	300	633	442.16	CART TRACK	364785	2466123	KITAHATU
146	50/4	DA+3	3			361	42431	443.44	330.50	171	146	317	181	132	313	300	361	661	446.44		364640	2465860	KITAHATU
147	AP51	DB+3	3	14°18'27"RT		334	42792	451.66	347.50	215	198	413	229	211	440	361	334	695	454.66	11KV,CART TRACK	364467	2465546	SANMIRGILENDI
148	51/1	DA+0	0			330	43126	447.85	332.00	136	164	300	123	163	286	334	330	664	447.85	CART TRACK,11KV	364238	2465303	SANMIRGILENDI
149	51/2	DA+3	3			318	43456	445.16	324.00	166	177	343	167	184	351	330	318	648	448.16	TAR ROAD	364012	2465062	SANMIRGILENDI
150	51/3	DA+3	3			325	43774	441.41	321.50	141	172	313	134	175	309	318	325	643	444.41	11KV	363794	2464831	SANMIRGILENDI
151	51/4	DA+3	3			346	44099	439.45	335.50	153	195	348	150	205	355	325	346	671	442.45	BUND	363571	2464594	JAMDIH
152	AP51A	DB+0	0	01°44'27"RT		294	44445	437.34	320.00	151	174	325	141	186	327	346	294	640	437.34	TAR ROAD,11KV,LT	363336	2464344	JAMDIH
153	51A/1	DA+6	6			292	44739	426.04	293.00	120	163	283	108	170	278	294	292	586	432.04		363128	2464135	JAMDIH
154	AP52	DC+3	3	16°55'24"RT		340	45031	425.82	316.00	129	195	324	122	206	328	292	340	632	428.82	TAR ROAD,11KV	362923	2463928	JAMDIH

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155	52/1	DA+3	3			45371	420.18	340.00	145	165	310	134	162	296	340	340	680	423.18		362623	2463768	JAMDIH
					340														TAR ROAD, 11KV, WELL, NALA			
156	52/2	DA+6	6			45711	418.40	342.00	175	197	372	178	207	365	340	344	684	424.40		362323	2463608	JAMDIH
					344														CART TRACK, 11KV			
157	AP53	DC+0	0	18°06'48"LT		46055	418.70	352.00	147	171	318	137	167	304	344	360	704	418.70		362019	2463446	KOCHRA
					360																	
158	53/1	DA+3	3			46415	417.83	350.00	189	181	370	193	186	379	360	340	700	420.83		361770	2463186	KOCHRA
					340																	
159	53/2	DA+0	0			46755	418.31	345.00	159	186	345	154	190	344	340	350	690	418.31		361535	2462940	KOCHRA
					350														CART TRACK, PLAY GROUND			
160	53/3	DA+3	3			47105	412.84	344.00	164	187	351	160	195	355	350	338	688	415.84		361294	2462687	KOCHRA
					338																	
161	AP53A	DB+0	0	04°58'06"LT		47443	411.72	315.50	151	171	322	143	181	324	338	293	631	411.72		361060	2462442	KOCHRA
					293																	
162	AP53B	DB+0	0	08°11'18"RT		47736	406.97	321.50	122	160	282	112	153	265	293	350	643	406.97		360877	2462212	KOCHRA
					350														NALA			
163	53B/1	DA+6	6			48086	404.51	335.50	190	140	330	197	132	329	350	321	671	410.51		360621	2461974	MONGRA
					321														TARROAD			
164	AP54	DB+3	3	12°02'34"LT		48407	411.84	335.50	181	185	366	189	189	378	321	350	671	414.84		360387	2461757	MONGRA
					350														TARROAD			
165	54/1	DA+0	0			48757	412.52	335.00	165	151	316	161	147	308	350	320	670	412.52		360185	2461471	MONGRA
					320																	
166	54/2	DA+0	0			49077	414.42	332.00	169	159	328	173	153	326	320	344	664	414.42		360001	2461209	MONGRA
					344														11KV			
167	AP55	DD+0	0	31°05'27"RT		49421	417.40	347.00	185	136	321	191	120	311	344	350	694	417.40		359803	2460928	MONGRA
					350																	
168	55/1	DA+3	3			49771	423.41	340.00	214	186	400	230	194	424	350	330	680	426.41		359483	2460786	MONGRA
					330														CART TRACK			
169	55/2	DA+0	0			50101	421.90	337.50	144	135	279	136	119	255	330	345	675	421.90		359182	2460651	MAHOTISAI
					345														LT			
170	55/3	DA+3	3			50446	427.53	340.00	210	130	340	226	114	340	345	335	680	430.53		358867	2460511	MAHOTISAI
					335														TAR ROAD, CART TRACK			
171	AP56	DB+0	0	12°47'04"RT		50781	438.88	340.00	205	210	415	221	226	447	335	345	680	438.88		358561	2460375	MAHOTISAI
					345																	
172	56/1	DA+3	3			51126	427.29	345.00	135	180	315	119	183	302	345	345	690	430.29		358223	2460308	MAHOTISAI
					345																	
173	56/2	DA+0	0			51471	428.57	327.50	165	141	306	162	135	297	345	310	655	428.57		357884	2460242	MAHOTISAI
					310														NALA			
174	56/3	DA+0	0			51781	431.50	330.00	169	123	292	175	101	276	310	350	660	431.50		357580	2460182	HASADA
					350														BUND			
175	56/4	DA+3	3			52131	440.64	328.50	227	125	352	249	113	362	350	307	657	443.64		357236	2460114	HASADA
					307																	
176	AP57	DB+0	0	12°02'43"RT		52438	449.38	312.50	182	111	293	194	91	285	307	318	625	449.38		356936	2460055	SILDAURI
					318														BUND			
177	57/1	DA+3	3			52756	456.48	291.50	207	156	363	227	166	393	318	265	583	459.48		356618	2460060	SILDAURI
					265														CART TRACK			

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178	57/2	DB+0	0		289
179	AP58	DC+0	0	21°06'16"RT	330
180	58/1	DA+0	0		330
181	58/2	DA+3	3		345
182	58/3	DA+6	6		322
183	AP59	DB+0	0	05°32'09"LT	334
184	59/1	DA+6	6		346
185	59/2	DA+0	0		345
186	59/3	DA+3	3		344
187	AP60	DB+0	0	11°30'17"LT	325
188	60/1	DA+3	3		331
189	60/2	DA+6	6		329
190	60/3	DA+6	6		320
191	60/4	DA+3	3		315
192	60/5	DA+3	3		349
193	60/6	DA+6	6		336
194	60/7	DD+9	9		301
195	AP61	DC+0	0	25°10'53"LT	254
196	AP61A	DD+9	9	05°04'07"LT	412
197	AP61B	DB+6	6	01°55'48"RT	373
198	61B/1	DA+0	0		324
199	61B/2	DB+3	3		340
200	61B/3	DA+3	3		320

53021	455.29	277.00	109	27	136	99	-23	75	265	289	554	455.29		356353	2460064	SILDAURI
53310	477.91	309.50	262	138	400	312	127	439	269	330	619	477.91		356063	2460069	SILDAURI
53640	483.73	330.00	192	203	395	203	219	422	330	330	660	483.73	TAR ROAD, 11KV	355757	2460193	SILDAURI
53970	472.37	337.50	127	143	270	111	131	242	330	345	675	475.37		355451	2460317	SILDAURI
54315	476.13	333.50	202	122	324	214	106	320	345	322	667	482.13		355132	2460446	POKHARPI
54637	490.46	328.00	200	145	345	216	136	352	322	334	656	490.46		354834	2460567	POKHARPI
54971	489.28	340.00	189	173	362	198	173	371	334	346	680	495.28		354514	2460663	POKHARPI
55317	495.23	345.50	173	152	325	173	143	316	346	345	691	495.23		354183	2460762	POKHARPI
55662	497.01	344.50	193	210	403	202	226	428	345	344	689	500.01	TAR ROAD	353852	2460861	NOWAGAON
56006	491.33	334.50	134	201	335	118	217	335	344	325	669	491.33	NURSARY	353524	2460959	NOWAGAON
56331	480.07	328.00	124	183	307	108	191	299	325	331	656	483.07		353200	2460987	KARANGIYA
56662	473.13	330.00	148	124	272	140	107	247	331	329	660	479.13		352870	2461015	KARANGIYA
56991	481.98	324.50	205	126	331	222	112	334	329	320	649	487.98	CART TRACK	352543	2461043	KARANGIYA
57311	492.14	317.50	194	160	354	208	162	370	320	315	635	495.14		352224	2461071	JETEYA
57626	491.53	332.00	155	223	378	153	243	396	315	349	664	494.53	11KV	351910	2461098	JETEYA
57975	477.30	342.50	126	152	278	106	145	251	349	336	685	483.30	CART TRACK	351562	2461128	JETEYA
58311	477.86	318.50	184	104	288	191	85	276	336	301	637	486.86		351227	2461156	JETEYA
58612	496.12	277.50	197	246	443	216	296	512	301	254	555	496.12	TAR ROAD, FOREST START	350929	2461182	JETEYA
58866	467.11	333.00	8	278	286	-42	309	267	254	412	666	476.11	NALI, FOREST	350688	2461093	JETEYA
59278	450.32	392.50	134	159	292	103	147	250	412	373	785	456.32	FOREST END	350320	2460916	JETEYA
59651	463.26	348.50	214	250	464	226	288	514	373	324	697	463.26		349979	2460766	AIKUTI
59975	441.22	332.00	74	189	263	36	197	233	324	340	664	444.22	CART TRACK	349682	2460635	AIKUTI
60315	436.85	330.00	151	189	340	143	201	344	340	320	660	439.85	NALI, POND	349371	2460498	AIKUTI
													11KV			

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(Surveyor) Bsharw

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201	61B/4	DA+0	0		
					314
202	AP62	DC+0	0	20°39'50"LT	
					318
203	62/1	DA+3	3		
					300
204	62/2	DA+0	0		
					265
205	62/3	DA+0	0		
					344
206	62/4	DA+0	0		
					330
207	AP63	DB+0	0	02°46'07"RT	
					320
208	63/1	DA+6	6		
					316
209	63/2	DA+3	3		
					300
210	63/3	DA+6	6		
					345
211	63/4	DA+6	6		
					314
212	63/5	DA+6	6		
					346
213	63/6	DA+0	0		
					300
214	63/7	DA+0	0		
					262
215	AP63A	DB+0	0	03°44'19"LT	
					351
216	AP63B	DB+0	0	04°57'32"RT	
					296
217	63B/1	DA+0	0		
					300
218	63B/2	DA+0	0		
					329
219	AP64	DC+0	0	29° 00' 01"LT	
					333
220	64/1	DA+6	6		
					304
221	64/2	DA+0	0		
					335
222	64/3	DB+3	3		
					326
223	64/4	DA+0	0		

1557

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351

925

2645

60635	433.78	317.00	131	151	282	119	149	268	320	314	634	433.78		349078	2460370	AIKUTI
60949	434.99	316.00	163	143	306	165	136	301	314	318	632	434.99		348788	2460242	AIKUTI
61267	435.36	309.00	175	147	322	182	145	327	318	300	618	438.36	11KV,TAR ROAD	348561	2460020	BAHADA
61567	439.00	282.50	153	154	307	155	164	319	300	265	565	439.00	11KV,CART TRACK	348346	2459810	BAHADA
61832	435.14	304.50	111	191	302	101	199	300	265	344	609	435.14		348157	2459624	BAHADA
62176	430.78	337.00	153	157	310	145	154	299	344	330	674	430.78	11KV	347911	2459384	BAHADA
62506	432.46	325.00	173	168	341	176	171	347	330	320	650	432.46	TAR ROAD	347678	2459156	BAHADA
62826	424.74	318.00	152	123	275	149	108	257	320	316	636	430.74	CART TRACK	347439	2458943	RABRASAI
63142	435.16	308.00	193	180	373	208	193	401	316	300	616	438.16	CART TRACK,POND	347203	2458733	RABRASAI
63442	426.21	322.50	120	223	343	107	245	352	300	345	645	432.21	CART TRACK,POND	346979	2458533	RABRASAI
63787	414.56	329.50	122	188	310	100	201	301	345	314	659	420.56		346722	2458304	GUTUSAI
64101	408.07	330.00	126	194	320	113	204	317	314	346	660	414.07		346487	2458095	GUTUSAI
64447	409.14	323.00	152	176	328	142	187	329	346	300	646	409.14	POND	346229	2457865	GUTUSAI
64747	403.91	281.00	124	134	258	113	136	249	300	262	562	403.91	NALA	346005	2457665	GUTUSAI
65009	403.33	306.50	128	162	290	126	157	283	262	351	613	403.33		345809	2457491	GUTUSAI
65360	406.42	323.50	189	151	340	194	152	346	351	296	647	406.42	NALA,TAR ROAD,11KV	345562	2457241	DUDHBILA
65656	405.82	298.00	145	142	287	144	138	282	296	300	596	405.82		345337	2457049	DUDHBILA
65956	407.47	314.50	158	127	285	162	111	273	300	329	629	407.47		345108	2456854	DUDHBILA
66285	415.72	164.50	202	121	323	218	102	321	329	333	662	415.72		344857	2456640	DUDHBILA
66618	419.69	318.50	212	125	337	231	114	344	333	304	637	425.69	POND	344532	2456566	DUDHBILA
66922	431.14	319.50	179	185	364	190	193	383	304	335	639	431.14	TAR ROAD,LT LINE, CARTRACK	344235	2456498	DUDHBILA
67257	424.17	330.50	150	81	231	142	46	188	335	326	661	427.17	BUND	343909	2456424	DUDHBILA
67583	444.91	329.00	245	196	441	280	208	488	326	332	658	444.91		343591	2456352	DUDHBILA

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					332
224	64/5	DA+3	3		
					336
225	64/6	DA+0	0		
					324
226	64/7	DA+6	6		
					355
227	AP65	DD+6	6	26° 01' 55" RT	
					330
228	65/1	DA+6	6		
					330
229	65/2	DA+6	6		
					340
230	65/3	DB+0	0		
					328
231	AP66	DD+0	0	33° 16' 18" LT	
					280
232	66/1	DA+0	0		
					235
233	66/2	DA+0	0		
					239
234	66/3	DA+0	0		
					315
235	AP67	DD+0	0	33° 16' 33" LT	
					187
236	AP68	DC+0	0	26° 34' 53" RT	
					312
237	68/1	DB+3	3		
					339
238	AP69	DC+0	0	28° 41' 34" LT	
					312
239	AP70	DC+0	0	28° 25' 12" RT	
					298
240	AP71	DC+0	0	19° 21' 57" LT	
					329
241	71/1	DA+0	0		
					360
242	AP72	DB+3	3	14° 20' 51" LT	
					241
243	AP73	DC+0	0	16° 09' 27" RT	
					351
244	AP74	DD+6	6	19° 04' 32" RT	
					328
245	74/1	DA+6	6		
					342
246	74/2	DA+6	6		

67915	435.36	334.00	136	200	336	124	214	338	332	336	668	438.36		343267	2456278	CHOTABALI JORI
68251	431.13	330.00	136	142	278	122	133	255	336	324	660	431.13	NALA	342939	2456203	CHOTABALI JORI
68575	429.49	339.50	182	145	327	191	131	322	324	355	679	435.49		342624	2456132	CHOTABALI JORI
68930	437.13	342.50	210	148	358	224	141	365	355	330	685	443.13		342281	2456054	CHOTABALI JORI
69260	440.83	330.00	182	179	361	189	184	373	330	330	660	446.83		341959	2456129	CHOTABALI JORI
69590	437.86	335.00	151	261	412	146	300	446	330	340	670	443.86		341638	2456205	CHOTABALI JORI
69930	423.21	334.00	79	141	220	40	132	172	340	328	668	423.21		341307	2456282	CHOTABALI JORI
70258	428.16	304.00	187	163	350	196	173	369	328	280	608	428.16		340988	2456358	CHOTABALI JORI
70538	423.80	257.50	117	124	241	107	127	234	280	235	515	423.80		340724	2456262	CHOTABALI JORI
70773	422.73	237.00	111	122	233	108	123	231	235	239	474	422.73	CART TRACK	340503	2456182	CHOTABALI JORI
71012	422.34	277.00	117	146	263	116	141	257	239	315	554	422.34	NALA	340279	2456101	CHOTABALI JORI
71327	424.75	251.00	169	96	265	174	97	271	315	187	502	424.75	NALA, CART TRACK	339983	2455994	KANTORIYA
71514	424.41	249.50	91	119	210	90	104	194	187	312	499	424.41	NALA, CART TRACK	339872	2455841	KANTORIYA
71826	429.05	325.50	193	98	291	208	67	275	312	339	651	432.05	NALA, CART TRACK	339592	2455701	KANTORIYA
72165	448.26	325.50	241	145	386	272	141	413	339	312	651	448.26		339290	2455550	KANTORIYA
72477	450.50	305.00	167	62	229	171	26	197	312	298	610	450.50	CART TRACK, 11KV, NALA	339116	2455294	KANTORIYA
72775	467.67	313.50	236	195	431	272	208	480	298	329	627	467.67	CART TRACK, 11KV	338847	2455155	KANTORIYA
73104	461.00	344.50	134	146	280	121	132	253	329	360	689	461.00		338620	2454916	SILPUNJI
73464	466.02	300.50	214	49	263	228	18	246	360	241	601	469.02	BUND, NALA	338369	2454650	SILPUNJI
73705	480.51	296.00	192	126	318	223	105	328	241	351	592	480.51	11KV	338255	2454447	DIRIBURU
74056	486.13	339.50	225	184	409	246	193	439	351	328	679	492.13	11KV	338004	2454200	DIRIBURU
74384	481.72	335.00	144	219	363	135	239	374	328	342	670	487.72	TAR ROAD	337707	2454059	DIRIBURU
74726	470.92	348.50	123	206	329	103	219	322	342	355	697	476.92		337398	2453912	DIRIBURU

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Chief Engineer (Trans)
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247	AP75	DC+3	3	19° 35' 41" RT	355
248	75/1	DA+0	0		338
249	75/2	DA+0	0		337
250	AP76	DC+0	0	27° 35' 44" LT	331
251	AP77	DD+0	0	46° 25' 33" LT	346
252	AP78	DD+0	0	38° 28' 12" RT	323
253	AP79	DD+9	9	20° 17' 27" RT	265
254	AP80	DD+0	0	37° 30' 40" RT	242
255	AP81	DD+0	0	48° 08' 54" LT	167
256	AP82	DC+0	0	27° 32' 29" LT	209
257	AP83	DB+6	6	06° 20' 50" LT	336
258	AP84	DD+3	3	40° 34' 10" RT	330
259	84/1	DA+6	6		291
260	AP85	DD+3	3	42° 02' 55" RT	318
261	AP86	DC+0	0	24° 57' 39" RT	274
262	86/1	DA+6	6		260
263	AP87	DD+0	0	33° 06' 16" RT	356
264	87/1	DA+0	0		322
265	87/2	DA+0	0		347
266	87/3	DB+0	0		299
267	87/4	DA+0	0		299
268	AP88	DD+0	0	05° 31' 19" LT	318
285					285

1006	75081	467.12	346.50	149	175	324	136	178	314	355	338	693	470.12		337080	2453761	DIRIBURU
	75419	468.68	337.50	163	144	307	160	134	294	338	337	675	468.68	11KV	336743	2453726	DIRIBURU
	75756	474.12	334.00	193	125	318	203	108	311	337	331	668	474.12		336408	2453692	NOWAGAON
	76087	483.02	338.50	206	90	296	223	54	277	331	346	677	483.02	2 - CART TRACK, LT LINE	336077	2453659	NOWAGAON
346	76433	502.17	334.50	256	143	399	292	135	427	346	323	669	502.17	NALA	335790	2453469	NOWAGAON
323	76756	506.18	294.00	180	254	434	188	305	493	323	265	588	506.18	FOREST START	335733	2453150	NOWAGAON
265	77021	475.82	253.50	11	220	231	-60	262	222	265	242	507	484.82	FOREST	335535	2452978	PATAHATU
242	77263	468.90	204.50	22	81	103	-20	79	59	242	167	409	468.90	FOREST	335306	2452888	PATAHATU
167	77430	469.23	188.00	86	72	158	88	58	146	167	209	376	469.23	RAILWAY LINE (POLL NO. 390 36-390 46) GUA TO BARAJAMDA	335147	2452937	BOKNA
209	77639	473.74	272.50	137	231	368	151	258	409	209	336	545	473.74	NALA	334969	2452826	BOKNA
336	77975	453.69	333.00	105	201	306	78	216	294	336	330	666	459.69	NALA	334796	2452539	BOKNA
330	78305	448.79	310.50	129	176	305	114	189	303	330	291	621	451.79	POND	334659	2452239	BOKNA
609	78596	439.92	304.50	115	211	326	102	233	335	291	318	609	445.92	2 - CART TRACK, NALA, 11KV	334394	2452117	BOKNA
	78914	431.97	296.00	107	173	280	85	188	273	318	274	592	434.97	2 - 33KV	334104	2451984	BOKNA
274	79188	428.42	267.00	101	115	216	86	109	195	274	260	534	428.42	11KV, LT LINE, CART TRACK	333839	2452066	BOKNA
616	79448	424.99	308.00	145	208	353	151	221	372	260	356	616	430.99	33KV, NALA	333646	2452240	BOKNA
	79804	423.88	339.00	148	142	290	135	134	289	356	322	678	423.88	CART TRACK, 33KV, NALA, 11KV	333386	2452478	BOKNA
1585	80126	427.91	334.50	180	148	328	188	137	325	322	347	669	427.91	NALA, FOREST START	333302	2452789	BOKNA
	80473	433.76	323.00	199	237	436	210	273	483	347	299	646	433.76	CART TRACK, FOREST	333212	2453124	BOKNA
	80772	416.45	299.00	62	110	172	26	93	119	299	299	598	416.45	NALA, FOREST	333135	2453413	BOKNA
	81071	424.28	308.50	189	197	386	206	213	419	299	318	617	424.28	FOREST	333058	2453701	BOKNA
	81389	416.29	301.50	121	77	198	105	50	155	318	285	603	416.29	FOREST	332976	2454008	BOKNA
														2-33KV, KARO RIVER, FOREST			

Surrender /
(Surrender) Isharuo

NP

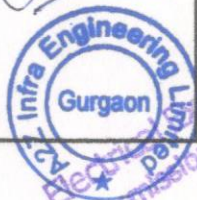
fool

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Subject to the condition that you are
absolved from responsibility for
correctness of the Materials Supplied
as per specification.

269	AP89	DD+0	0	09° 18' 40" RT		81674	428.65	299.00	208	122	330	235	108	343	285	313	598	428.65		332875	2454272	GUA
					313														STATE HIGHWAY-4, FOREST			
270	AP90	DD+3	3	42° 56' 33" RT		81987	432.76	340.00	191	166	357	205	159	364	313	367	680	435.76		332812	2454580	GUA
					367														CART TRACK, FENSING, FOREST			
271	AP91	DC+3	3	22° 17' 35" LT		82354	436.91	328.00	201	172	373	208	184	392	367	289	656	439.91		332996	2454899	GUA
					289														11KV, FOREST			
272	AP92	DD+9	9	04° 19' 45" LT		82643	425.57	285.50	117	144	261	105	145	250	289	282	571	434.57		333047	2455181	GUA
					282														FOREST			
273	AP93	DD+9	9	19° 28' 17" LT		82925	425.06	238.50	138	23	161	137	-8	129	282	195	477	434.06		333063	2455462	GUA
					195														11KV, FOREST			
274	AP94	DD+9	9	09° 19' 04" LT		83120	434.68	210.00	172	-27	145	203	-87	116	195	225	420	443.68		333010	2455651	GUA
					225														FOREST			
275	AP95	DB+0	0	07° 23' 29" RT		83345	464.62	247.00	252	186	438	312	209	521	225	269	494	464.62		332919	2455857	GUA
					269														BUND, FOREST			
276	AP95A	DB+6	6	06° 11' 00" RT		83614	449.32	225.00	83	150	233	60	175	235	269	181	450	455.32		332840	2456110	GUA
					181														TAR ROAD, LT LINE, WATER PIPE, FOREST			
277	AP96	DB+0	0	00° 28' 17" RT		83795	448.17	200.50	31	183	214	6	215	221	181	220	401	448.17		332804	2456291	GUA
					220														DRAIN, LT LINE, NALA, TAR ROAD, FOREST			
278	AP97	DC+0	0	27° 27' 54" RT		84015	437.42	185.00	37	242	279	5	313	318	220	150	370	437.42		332766	2456506	GUA
					150														TAR ROAD, 11KV, 2-33KV, PLAY GROUND, FOREST			
279	DE	DD+0	0	XX° YY' ZZ"		84165	420.76	75.00	-92	0	-92	-163	0	-163	150	0	150	420.76		332807	2456651	GUA

A2Z INFRA ENGG.LTD			JHARKHAND URJA SANCHARAN NIGAM LIMITED		
SURVEYED BY	CHECKED BY	SUBMITTED BY	CHECKED BY	RECOMMENDED BY	APPROVED BY
<i>Surendra</i>	<i>P. S. Sharma</i>	<i>P. S. Sharma</i>	<i>Adarsh</i>	<i>P. S. Sharma</i>	<i>P. S. Sharma</i>

Surendra
(Surveyor)



Adarsh
Executive Engineer
Transmission Division, Chaibasa
Electrical Superintending Engineer
Transmission Circle, Chaibasa

P. S. Sharma
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not absolved from responsibility for
correctness of the Materials Supplied
as per specification.

P. S. Sharma
Chief Engineer (Trans)
JUSNL, HQ. Ranchi-4

ABSTRACT

220KV D/C CHAIBASA-GUA TRANSMISSION.LINE

TYPE OF TOWER	NORMAL	3 MTR	6 MTR	9 MTR	18 MTR	25 MTR	TOTAL
A	51	50	39				140
B	26	11	4				41
C	25	6	1				32
D	29	5	9	10	3	1	57

TOTAL QUANTITY OF TOWER	270
TOTAL GANTRY	8

ROUTE LENGTH = 84.165 KM

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SURVEYED BY	CHECKED BY	SUBMITTED BY	CHECKED BY	RECOMMENDED BY	APPROVED BY
<i>Serendoo</i>	<i>Bsharwo</i>	<i>NP</i> 	<i>EEELTS</i> <i>Chaibasa</i>	<i>ESSE</i> <i>Chaibasa</i>	<i>APPROVED</i> Subject to the condition that you are not absolved from responsibility for Correctness of the Materials Supplied as per specification. <i>AP</i>

Electrical Executive Engineer
Transmission Division, Chaibasa
Electrical Superintending Engineer
Transmission Circle, Chaibasa

Chief Engineer (Trans)
JUSNL HQ. Ranchi-4