D.G.P.S. SURVEYREPORTFOR

132KV DCDS TRANSMISSION LINE
KONDATARAI TO NTPC JURDA

FORESTDIVISION:RAIGARH
DISTRICT : RAIGARH
CHHATTISGARH

NameoftheApplicant:

CHHATTISGARH STATE POWER TRANSMISSION
CO. LTD.
DANGANIYA RAIPUR,CHHATTISGARH.

PROJECT : CONSTRUCTION OF 132 KV DCDSLINE
TO PROVIDE 132 KV SUPPLY FROM KONDATARAI
TO JURDA

INDEX

1.ABOUTUS

From last 15 years we are giving our services for civil construction and building work at Korba and surroundings. We are involve in survey from last 10 years. We are doing topographical survey by using Total Station and DGPS(last 2 year). Now we are introduce us in Drone Survey also from 2018

Scope of work :

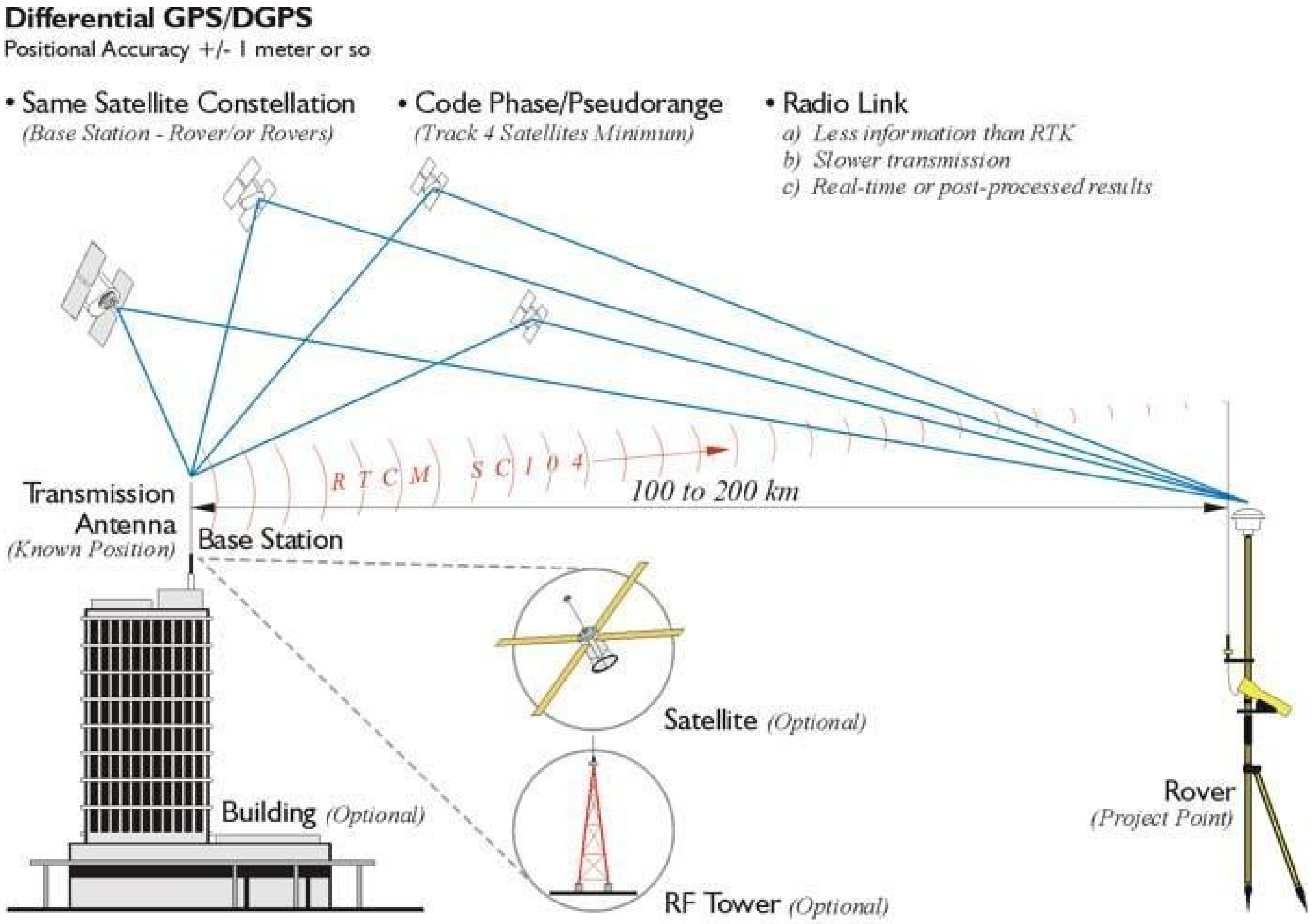
1. Detail survey of land, marking all important amenities.
2. Route Survey for road and ash pipe line, water pipe line etc. Providing L-Section C- section.
3. Route Survey for canal (WRD Department).
4. Finding out Catchment area for Annicut proposal.
5. Area grading, Cut-fill Quantity Calculation
6. Route Survey for Electric Tower Spotting
7. Layout of building columns according to drawing. for Power Plant, multistory building, colonies etc.
8. Drone Survey for mapping.

Our valuable clients are:

1. NTPC, CHHATTISGARH
2. ACB INDIA LIMITED
3. INDU PROJECT LIMITED, HYDERABAD
4. NAGAR NIGAM, CHATTISGARH
5. CSEB, CHATTISGARH
6. PRASAD AND COMPANY(PROJECT WORKS)LIMITED
7. DC INDUSTRIAL PLANTSERVICES PRIVATE LIMITED
8. HOUSING BOARD, CHATTISGARH
9. VANDNA GLOBAL
   (VANDANA VIDYUT POWER PLANT &VANDNA ENERGY POWER PLANT , KORBA)
10. WATER RESOURCE DEPARTMENT, CHHATTISGARH
11. ACPL,HYDERABAD (ATHNA POWER PLANT)
12. SV POWER PLANT
13. HARSHA ABKUS Pvt. ltd.(survey of land at Tilda& finding out Soil Resistivity of land)

We are also doing work for forest clearance also

2.INTRODUCTION TO DGPS



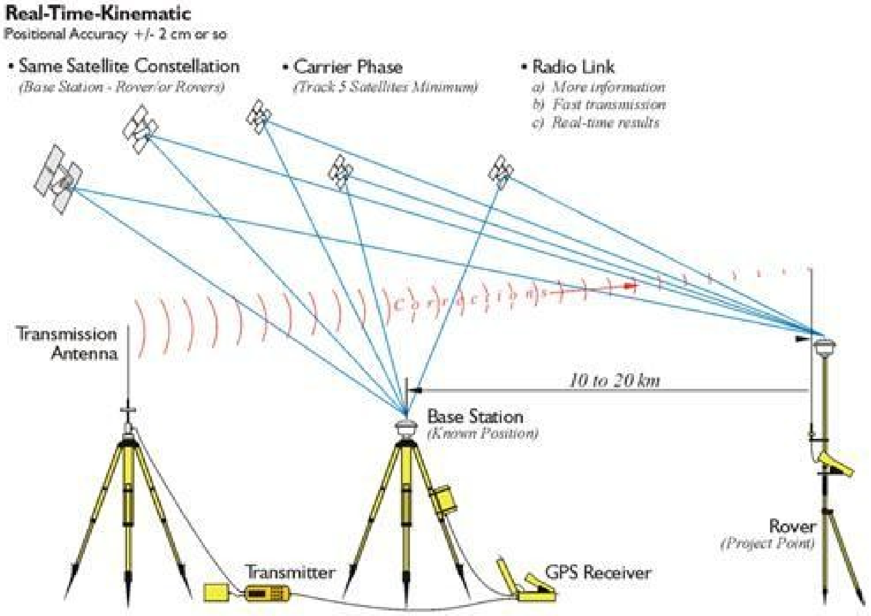
The term DGPS is sometimes used to refer to differential GPS that is based on pseudo ranges, aka code phase. Even though the accuracy of code phase applications was given a boost with the elimination of Selective Availability (SA) in May 2000 consistent accuracy better than the 2•5 meter range still requires reduction of the effect of correlated ephemeris and atmospheric errors by differential corrections. Though the corrections could be applied in post processing services that supply these corrections, most often operatein real-time. In such an operation pseudo range based versions can offer meter •or even sub meter results.

Usually, pseudo range corrections are broadcast from the base to the rover or rovers for each satellite in the visible constellation. Rovers with an appropriate input/output (I/O) port can receive the correction signal and calculate coordinates. The real-time signal comes to the receiver over a data link. It can originate at a project specific base station or it can come to the user through a service of which there are various categories. Some are open to all users and some are by subscription only. Coverage depends on the spacing of the beacons, aka transmitting base stations, their power, interference, and so forth. Some systems require two-way, someone-way, communication with the base stations. Radio systems, geostationary satellites, low•earth•orbiting.

SURVEY METHOD

1 RTK (Real Time Kinematic)
2 STATIC METHOD

1 Real-Time Kinematic



Most, not all, GPS surveying relies on the idea of differential positioning. The mode of a base or reference receive rata known location logging data at the same time as a receiver at an unknown location together provide the fundamental information for the determination of accurate coordinates. While this basic approach remains today, the majority of GPS surveying is not done in the static post processed mode. Post processing is most often applied to control work. Now, the most commonly used methods utilize receiver son reference stations that provide correction signals to the end user via a data link sometimes over the Internet ,radio signal , or cell phone and often inreal-time.

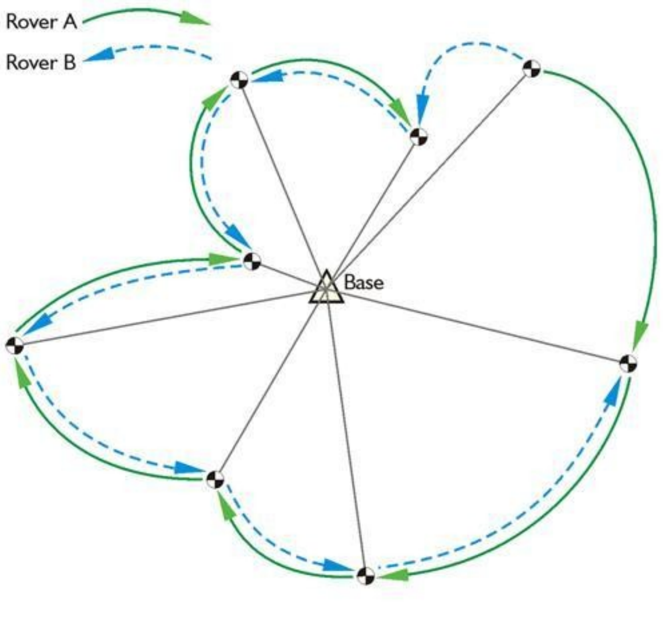
In this category of GPS surveying work there is sometime sad distinction made between code• based and carrier based solutions. In fact, most systems use a combination of code and carrier measure men tsetse distinction is more amateur of emphasis rather than an absolute difference. Well that's abet of discussion about static surveying, but as you know, a good deal of GPS these days is done not static .Much work is now done with DGPS or real-time kinematic, RTK.

Errors in satellite clocks, imperfect orbits, the troth rough the layers of the atmosphere, and many other sources contribute in accuracies to GPS signals by the time they reach a receiver.

These errors are variable, so the best to way to correct the mistook monitor them as they happen. Ago Ordway to do this is to setup a GPS receiver on a station whose position is known exactly, a base station .This base station receiver's computer can calculate its position from satellite data, compare that position with its actual known position, and find the difference .The resulting error correction scan be communicated from the base to the rover .It works well, but the errors are constantly changing so a base station has to monitor the mall the time ,at least all the time there over receiver or receivers are working. While this is happening the rovers move from place to place collecting the points whose positions you want to know relative to the base station ,which is the real objective after all .Then all you have to do is get those base station corrections and the rover's data together somehow. That combination can be done over a data link in real-time or applied dl at era post processing.

Real-time positioning is built on the foundation of the idea that, with the important exceptions of multi path and receiver noise, GPS error sources are correlated. In other words, the closer the rover is to the base the more the errors at the ends of the base line match. The shorter the base line ,the more the errors are correlated .The longer the base line ,the less the errors are correlated.

The base station is at a known point, whether it was on a building permanently or it's a tripod mounted base station. The fact that it is in a known position allows the base station to produce corrections .The constellation is telling the base station that it is in a slightly different place ,so corrections can be created to sent to the rover at the unknown point .The corrections are applied in real
time.



RADIALGPS

Such real-time surveying is essentially radial. There are advantages to the approach.The advantage is a large number of positions can be established in as hurt amount of time with little or no planning .The disadvantage is that there is little or no redundancy in positions derived ,each of the baselines originates from the same control station. Redundancy can be incorporated, but it requires repetition of the observations so each baseline is determined with more than one GPS constellation. One way to do It is to occupy the project points, the unknown positions, successively with more than one rover. It is best if these successive occupations are separated by at least 4 hours and not more than 8 hours so the satellite constellation can reach a significantly different configuration.

RTK and DGPS are radial. You have a known point in the middle, the base, and then the unknown points around it. This provides little geometric solidity .If there's an error in one of the sera dial base lines, it would be tough to catch it because there's no real redundancy .The illustration shows away around this difficulty. There are two receivers ,A and B, and it's possible by double occupation, one receiver going one way and the other going the other, by double occupying the unknown points to get some redundancy and some checks against the positions from a base. Another way to do it is to use one receiver. That receiver would occupy each points twice with forte eight hours between the first occupation and the second occupation on the point. Another way is to move the base to an other known point .Then if you have vectors from another base into these points, you have a check .This approach allows a solution to be available from two separate control stations. Obviously, this can be done with re•occupatio no the project points after one base station has been moved to a new control point ,o ratio base stations can be up and running from the very outset and through out of the work as would be the case using two CORS stations . It is best if there are both two occupations on each point and each of the two utilize different base stations.

A more convenient but less desirable approach is to do a second occupation almost immediately after the first .The roving receiver’s an tennais blocked or tilted until the lock on the satellites is interrupted .It is then reoriented on the unknown position a second time for the repeat solution. This does offerasecondsolution, butfromvirtuallythesameconstellation.

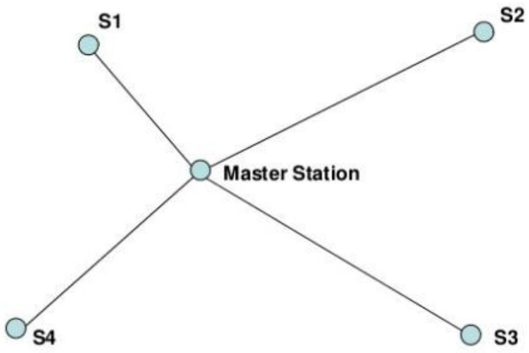
More efficiency can be achieved by adding additional roving receivers. However, as the number of receivers rises ,the logistics become more complicated, and a survey plan becomes necessary . Also, project points that are simultaneously near one another but far from the control station should be directly connected with a base line to maintain the integrity of the survey. Finally, if the base receiver loses lock and it goes unnoticed, it will completely defeat the radial survey for the time it is down.

These are a few possibilities to consider when you are doing areal-time survey.

An advantage to continuously operating reference station network is that since those bases are operating simultaneously and all the time, it's possible to down load the positions from more than one base and process your new position based on these continuously operating reference stations and have some redundancy.

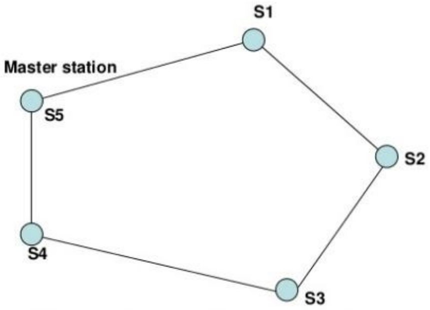
2.STATICMETHOD

I. Rapid Static Method



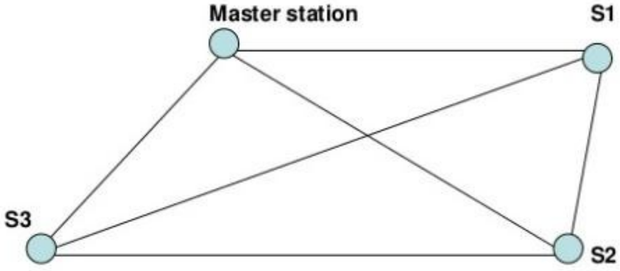
Schematic diagram of Rapid Static Method

II. Traverse Method



Schematic diagram of Traverse method

III.Trilateration Method



Trilateration method

3.INTRODUCTION TO SURVEY SITE

The surveyedareais located on **Villages Basanpali, Raitarai, Bulaki, kawarhiha, Linjir, Loharsingh, Jharmuda, Aurda, Mahuapali, Dumarmuda, Gudgahancmes under Tehsil Pusaur and Distt. Raigarh. Some more villages Jurda, Pandripani comes under Tehsil Raigarh and Distt.Raigarh, Chhattisgarh**.

Tower(Existing Location no.) 31,lattitudeis**83°16'39.72"E, longitude 21°49'29.22"N.**

	GPS CO ORDINATES					
SL. No.	**Location No.**	**Easting**	**Northing**	**Langitude**	**Latitude**	**Village Name**
1	Exist. Loc No.31	735439.19	2415173.63	21°49'29.22"N	83°16'39.726"E	PUTKAPURI
2	DE/AP 1	735474.15	2414978.14	21°49'22.85"N	83°16'40.842"E	PUTKAPURI
3	AP 2	736033.00	2414695.00	21°49'13.379"N	83°17'0.147"E	PUTKAPURI
4	AP 3	736192.47	2414686.53	21°49'13.027"N	83°17'5.693"E	PUTKAPURI
5	AP 4	736358.19	2414778.00	21°49'15.92"N	83°17'11.509"E	RAITARAI
6	AP 5	736508.41	2414800.03	21°49'16.564"N	83°17'16.748"E	RAITARAI
7	AP 6	736651.33	2414760.08	21°49'15.196"N	83°17'21.702"E	RAITARAI
8	AP 7	736735.95	2414596.07	21°49'9.825"N	83°17'24.562"E	RAITARAI
9	AP 8	736936.05	2414324.00	21°49'0.886"N	83°17'31.386"E	BULAKI
10	AP 9	737228.96	2414205.98	21°48'56.909"N	83°17'41.519"E	BULAKI
11	AP 10	737724.89	2414307.99	21°48'59.984"N	83°17'58.832"E	BULAKI
12	AP 11	737918.79	2414351.61	21°49'1.308"N	83°18'5.604"E	BULAKI
13	AP 12	738574.13	2414396.37	21°49'2.444"N	83°18'28.435"E	KAWHARIYA
14	AP 13	738762.56	2414294.24	21°48'59.033"N	83°18'34.96"E	KAWHARIYA
15	AP 14	738783.01	2414145.48	21°48'54.188"N	83°18'35.574"E	KAWHARIYA
16	AP 15	739281.97	2413730.86	21°48'40.471"N	83°18'52.723"E	KAWHARIYA
17	AP 16	739596.00	2413688.00	21°48'38.924"N	83°19'3.629"E	LINJHIR
18	AP 17	739780.15	2413602.58	21°48'36.058"N	83°19'9.993"E	LINJHIR
19	AP 18	740779.07	2414060.19	21°48'50.44"N	83°19'44.998"E	LINJHIR
20	AP 19	741255.79	2413909.98	21°48'45.324"N	83°20'1.51"E	LINJHIR

21	AP 20	741389.19	2413867.13	21°48'43.866"N	83°20'6.013"E	LINJHIR
22	AP 21	741417.16	2413837.38	21°48'42.886"N	83°20'7.088"E	LINJHIR
23	AP 22	741510.05	2413742.01	21°48'39.74"N	83°20'10.27"E	LINJHIR
24	AP 23	741627.15	2413444.86	21°48'30.026"N	83°20'14.189"E	LINJHIR
25	AP 24	742050.06	2413094.70	21°48'18.438"N	83°20'28.721"E	LOHARSING
26	AP 25	742194.90	2412954.30	21°48'13.804"N	83°20'33.687"E	LOHARSING
27	AP 26	742318.22	2412895.07	21°48'11.818"N	83°20'37.948"E	LOHARSING
28	AP 27	743269.24	2412762.92	21°48'7.053"N	83°21'11.972"E	SURRI
29	AP 28	745086.94	2412852.07	21°48'9.045"N	83°22'14.274"E	JHARMUDA
30	AP 29	746967.51	2413357.29	21°48'24.512"N	83°23'19.987"E	AURDA
31	AP 30	749061.00	2415197.00	21°49'23.245"N	83°24'33.839"E	KESHLA
32	AP 31	749188.96	2415293.27	21°49'26.308"N	83°24'38.345"E	KESHLA
33	AP 32	749585.15	2415317.01	21°49'26.878"N	83°24'52.147"E	KESHLA
34	AP 33	749726.14	2415365.47	21°49'28.381"N	83°24'57.08"E	KESHLA
35	AP 34	749992.98	2415381.34	21°49'28.76"N	83°25'6.375"E	MIDMUDA
36	AP 35	750125.34	2415452.24	21°49'30.997"N	83°25'11.021"E	MIDMUDA
37	AP 36	750438.58	2416030.49	21°49'49.627"N	83°25'22.239"E	DUMARMUDA
38	AP 37	750627.41	2416097.91	21°49'51.722"N	83°25'28.848"E	DUMARMUDA
39	AP 38	750928.05	2417338.61	21°50'31.885"N	83°25'39.993"E	DARRAMUDA
40	AP 39	751201.13	2417509.79	21°50'37.308"N	83°25'49.592"E	DARRAMUDA
41	AP 40	751391.93	2418477.98	21°51'8.67"N	83°25'56.77"E	DARRAMUDA
42	AP 41	751802.89	2418767.74	21°51'19.77"N	83°26'13.81"E	FOREST
43	AP 42	751974.42	2419151.13	21°51'30.31"N	83°26'17.47"E	FOREST
44	AP 43	752370.05	2419339.38	21°51'36.28"N	83°26'31.19"E	FOREST
45	AP 44	752515.17	2419419.68	21°51'38.39"N	83°26'35.85"E	FOREST
46	AP 45	752655.71	2419613.09	21°51'44.94"N	83°26'41.40"E	FOREST
47	AP 46	752907.96	2419797.75	21°51'50.72"N	83°26'50.34"E	JURDA
48	AP 47	752919.04	2419938.09	21°51'55.33"N	83°26'50.73"E	JURDA
49	AP 48	752270.71	2420557.96	21°52'15.78"N	83°26'28.48"E	JURDA
50	AP 49	752307.12	2420891.28	21°52'26.61"N	83°26'29.95"E	JURDA
51	AP 50	752433.07	2420999.02	21°52'30.06"N	83°26'34.40"E	JURDA
52	AP 51	752595.00	2420973.00	21°52'29.13"N	83°26'40.02"E	JURDA
53	AP 52	752728.70	2420781.67	21°52'22.85"N	83°26'44.58"E	JURDA
54	AP 53	752774.51	2420777.76	21°52'22.70"N	83°26'46.15"E	JURDA
55	Gantry	752816.68	2420791.70	21°52'23.13"N	83°26'47.62"E	JURDA

Revenue Forest Land Proposed Area Statement (in Ha)

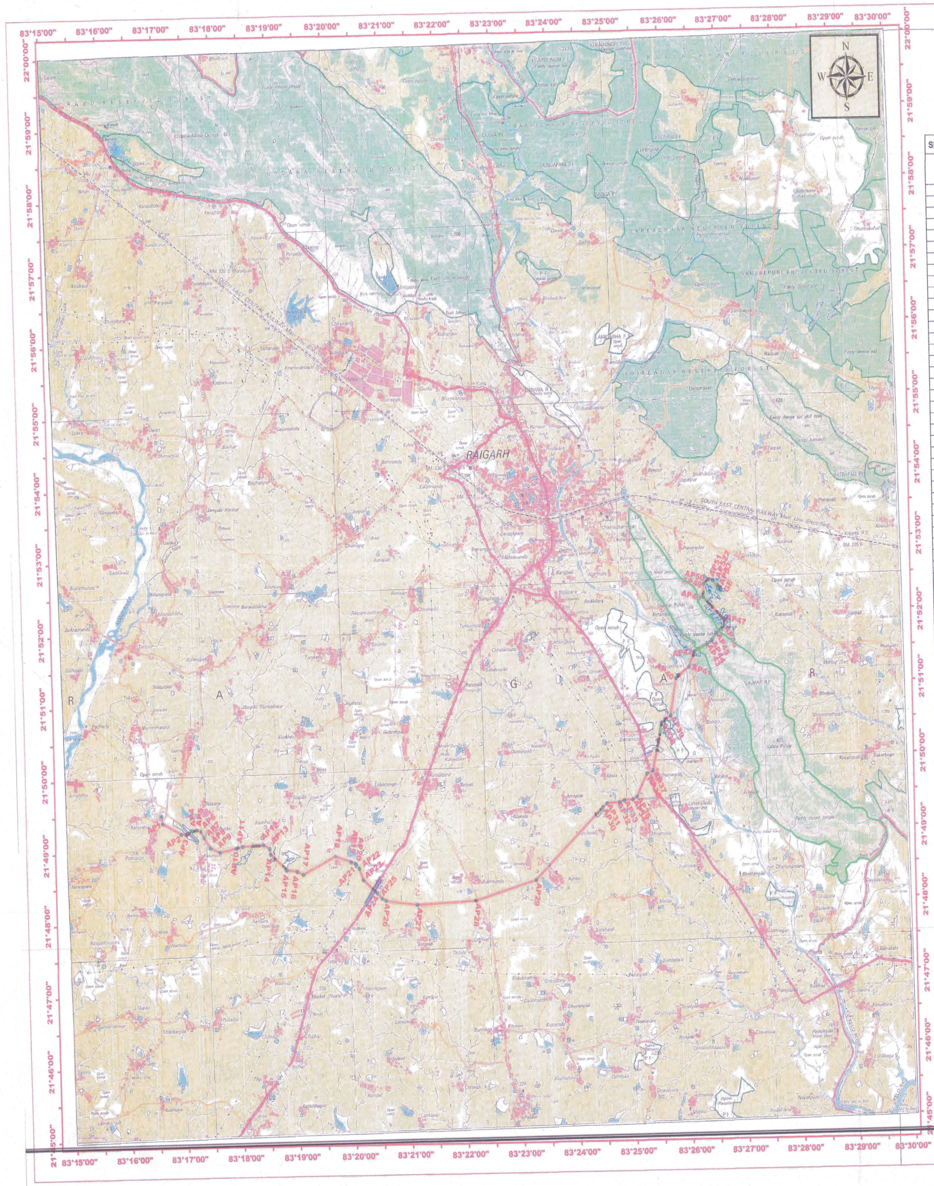
Sl	Tower ID	Patch No	District	Tehsil	Village Name	Khasra Nos	Proposed Forest Area (In Ha)
1	AP3-AP5	1	Raigarh	Pusaur	Basanpali	1	0.282
2		2			Raitarai	39	0.335
3	AP10-AP11	3			Bulaki	389	0.065
4	AP11-AP12	4			Kawarhiha	151	0.513
5	AP14-AP15	5				460	0.032
6		6			Linjir	187	0.119
7	AP23-AP24	7			Loharsingh	1011	0.022
8		8				1081	0.022
9	AP28-AP29	9			Jharmuda	568	0.059
10	AP29-AP30	10			Aurda	444	0.07
11		11			Mauhapali	18	0.254
12	AP37-AP38	12			Dumarmuda	157/1	0.335
13		13			Darramuda	290/2	0.029
14		14				290/1	0.014
15		15				285/1	0.010
16		16				286/1	0.058
17		17				375/10	0.656
18		18				373/1	0.087
19	AP38-AP39	19				378H	0.174
20	AP40-AP41	20			Gudgahan	109	0.151
21	AP41-AP42	21			Nawapali	34	0.108
22	AP41-AP43	22				32/1	0.508
23	AP45-AP48	23		Raigarh	Jurda	31/1	0.626
24		24				31/2	0.232
25		25				31/29	0.086
26	AP47-AP49	26				20	1.193
27	AP49-AP50	27			Pandripani	181	0.206
28	AP50-AP53	28			Jurda	17/1	1.152
Total Revenue Forest Land Proposed Area (in Ha)							7.399

Reserve Forest Land Proposed Area Statement (in Ha)

Sl	Tower ID	Patch No	District	Tehsil	Land type	Comp No	Proposed Forest Area (In Ha)
1	AP42-AP46	29	Raigarh	Raigarh	Reserve Forest	1010	2.190
Total Reserve Forest Land Proposed Area (in Ha)							2.19

Total Forest Land Proposed Area Statement (in Ha)

Total Revenue Forest Land Proposed Area (in Ha)	7.399
Total Reserve Forest Land Proposed Area (in Ha)	2.19
Total Forest Land Proposed Area (in Ha)	9.589



DGPS CORDINATE OF TOWER CENTRE LINE

SL.No.	Pillar ID	Easting (m)	Northing (m)	Latitude "N"	Longitude "E"
1	Exist. Loc No.31	735439.19	2415173.63	83°16'39.726"E	21°49'29.22"N
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21	AP 20	741389.19	2413867.13	83°20'6.13"E	21°48'43.866"N
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42	AP 41	751802.89	2418767.74	83°26'11.231"E	21°51'17.876"N
43	AP 42	751974.42	2419151.13	83°26'17.413"E	21°51'30.246"N
44	AP 43	752370.05	2419339.38	83°26'31.289"E	21°51'36.16"N
45	AP 44	752515.17	2419419.68	83°26'36.385"E	21°51'38.694"N
46	AP 45	752655.71	2419613.09	83°26'41.385"E	21°51'44.906"N
47	AP 46	752907.96	2419797.75	83°26'50.268"E	21°51'50.777"N
48	AP 47	752919.04	2419938.09	83°26'50.732"E	21°51'55.331"N
49	AP 48	752270.71	2420557.96	83°26'28.505"E	21°52'15.809"N
50	AP 49	752307.12	2420891.28	83°26'29.956"E	21°52'26.622"N
51	AP 50	752433.07	2420999.02	83°26'34.401"E	21°52'30.058"N
52	AP 51	752595.00	2420973.00	83°26'40.024"E	21°52'29.128"N
53	AP 52	752728.70	2420781.67	83°26'44.573"E	21°52'22.842"N
54	AP 53	752774.51	2420777.76	83°26'46.165"E	21°52'22.691"N
55	Gantry	752816.68	2420791.70	83°26'47.641"E	21°52'23.122"N

DGPS SURVYED FOREST PATCH PILLAR POINT

SL. No.	Patch No.	Pillar ID	Easting (m)	Northing (m)	Latitude "N"	Longitude "E"
1	PATCH NO.1	P1	736193.29	2414672.4	21°49'12.56"N	83°17'5.70"E
2		P2	736195.21	2414687.71	21°49'13.04"N	83°17'5.78"E
3		P3	736175.44	2414700.45	21°49'13.48"N	83°17'5.09"E
4		P4	736305.36	2414733.49	21°49'14.49"N	83°17'9.63"E
5		P5	736294.67	2414742.99	21°49'14.78"N	83°17'9.26"E
6		P6	736282.61	2414751.73	21°49'15.08"N	83°17'8.84"E
7	PATCH NO.2	P7	736297.55	2414760.03	21°49'15.37"N	83°17'9.37"E
8		P8	736309.33	2414742.9	21°49'14.78"N	83°17'9.78"E
9		P9	736314.81	2414738.74	21°49'14.64"N	83°17'9.95"E
10		P10	736437.08	2414776	21°49'15.82"N	83°17'14.25"E
11		P11	736435.3	2414785.97	21°49'16.11"N	83°17'14.19"E
12		P12	736393.23	2414790.7	21°49'16.30"N	83°17'12.73"E
13		P13	736381.36	2414781.5	21°49'16.01"N	83°17'12.30"E
14		P14	736366.3	2414779.3	21°49'15.95"N	83°17'11.78"E
15		P15	736349.78	2414789.06	21°49'16.28"N	83°17'11.19"E
16	PATCH NO.3	P16	737757.7	2414328.77	21°49'0.62"N	83°17'59.96"E
17		P17	737765.92	2414316.79	21°49'0.23"N	83°18'0.23"E
18		P18	737771.51	2414304.22	21°48'59.83"N	83°18'0.44"E
19		P19	737789.57	2414308.33	21°48'59.96"N	83°18'1.06"E
20		P20	737793.6	2414323.09	21°49'0.44"N	83°18'1.21"E
21		P21	737795.65	2414337.4	21°49'0.90"N	83°18'1.29"E
22	PATCH NO.4	P22	738227.31	2414385.91	21°49'2.25"N	83°18'16.35"E
23		P23	738212.6	2414357.86	21°49'1.34"N	83°18'15.81"E
24		P24	738275.83	2414362.12	21°49'1.47"N	83°18'18.01"E
25		P25	738294.21	2414374.22	21°49'1.86"N	83°18'18.67"E
26		P26	738314.33	2414364.86	21°49'1.52"N	83°18'19.37"E
27		P27	738323.67	2414365.34	21°49'1.55"N	83°18'19.68"E
28		P28	738337.3	2414378.09	21°49'1.96"N	83°18'20.17"E
29		P29	738360.1	2414367.8	21°49'1.60"N	83°18'20.97"E
30		P30	738369.53	2414378.03	21°49'1.95"N	83°18'21.29"E
31		P31	738381.16	2414374.33	21°49'1.81"N	83°18'21.70"E
32		P32	738389.06	2414383.28	21°49'2.10"N	83°18'21.99"E
33		P33	738421.48	2414371.93	21°49'1.70"N	83°18'23.09"E
34		P34	738465.16	2414375.87	21°49'1.80"N	83°18'24.63"E
35		P35	738439.56	2414386.68	21°49'2.17"N	83°18'23.73"E
36		P36	738437.9	2414396.25	21°49'2.50"N	83°18'23.66"E
37		P37	738425.29	2414399.25	21°49'2.60"N	83°18'23.25"E
38	PATCH NO.5	P38	738903.96	2414062.13	21°48'51.42"N	83°18'39.71"E
39		P39	738901.56	2414029.03	21°48'50.35"N	83°18'39.62"E
40		P40	738927.28	2414007.68	21°48'49.62"N	83°18'40.51"E
41		P41	738935.94	2414035.59	21°48'50.53"N	83°18'40.81"E
42	PATCH NO.6	P42	739162.19	2413847.77	21°48'44.31"N	83°18'48.61"E
43		P43	739162.51	2413837.003	21°48'43.98"N	83°18'48.60"E
44		P44	739179.23	2413822.4	21°48'43.48"N	83°18'49.19"E
45		P45	739216.76	2413802.47	21°48'42.82"N	83°18'50.46"E
46		P46	739239.73	2413783.41	21°48'42.19"N	83°18'51.25"E
47		P47	739232.89	2413771.54	21°48'41.80"N	83°18'51.01"E
48		P48	739229.61	2413756.72	21°48'41.32"N	83°18'50.89"E
49		P49	739284.46	2413716.61	21°48'39.99"N	83°18'52.79"E
50		P50	739285.3	2413730.12	21°48'40.44"N	83°18'52.83"E
51		P51	739287.77	2413743.53	21°48'40.86"N	83°18'52.90"E
52	PATCH NO.7	P52	741956	2413155	21°48'20.45"N	83°20'25.48"E
53		P53	741972	2413176	21°48'21.12"N	83°20'26.05"E
54		P54	741985.31	2413165.25	21°48'20.76"N	83°20'26.49"E
55		P55	741969	2413144	21°48'20.08"N	83°20'25.93"E
56	PATCH NO.8	P56	741984.15	2413131.41	21°48'19.65"N	83°20'26.44"E
57		P57	742000.6	2413152.59	21°48'20.33"N	83°20'27.01"E
58		P58	742007.61	2413146.91	21°48'20.13"N	83°20'27.25"E
59		P59	741991	2413126	21°48'19.49"N	83°20'26.68"E
60	PATCH NO.9	P60	745098.37	2412840.97	21°48'8.65"N	83°22'14.65"E
61		P61	745086.17	2412841.6	21°48'8.69"N	83°22'14.24"E
62		P62	745088.16	2412866.18	21°48'9.50"N	83°22'14.32"E
63		P63	745094.84	2412867.98	21°48'9.53"N	83°22'14.53"E
64		P64	745093.56	2412851.46	21°48'9.01"N	83°22'14.48"E
65		P65	745103.49	2412847.5	21°48'8.87"N	83°22'14.83"E
66		P66	745117.63	2412846.14	21°48'8.83"N	83°22'15.32"E
67	PATCH NO.10	P67	747375.87	2413698.36	21°48'35.39"N	83°23'34.35"E
68		P68	747350.75	2413694.27	21°48'35.27"N	83°23'33.48"E
69		P69	747331.71	2413695.5	21°48'35.31"N	83°23'32.82"E
70		P70	747348.35	2413710.13	21°48'35.79"N	83°23'33.42"E
71		P71	747386.51	2413718.05	21°48'36.03"N	83°23'34.75"E
72		P72	747386.33	2413743.5	21°48'36.85"N	83°23'34.76"E
73		P73	747399.55	2413755.13	21°48'37.23"N	83°23'35.22"E
74		P74	747407.24	2413725.94	21°48'36.25"N	83°23'35.48"E
75	PATCH NO.11	P75	748850.69	2414994.5	21°49'16.76"N	83°24'26.39"E
76		P76	748851.08	2415002.8	21°49'17.02"N	83°24'26.43"E
77		P77	748833.15	2415005.91	21°49'17.12"N	83°24'25.80"E
78		P78	748827.73	2415010.29	21°49'17.29"N	83°24'25.59"E
79		P79	748838.71	2415019.946	21°49'17.58"N	83°24'25.98"E
80		P80	748846.52	2415014.76	21°49'17.41"N	83°24'26.26"E
81		P81	748855.69	2415026.33	21°49'17.79"N	83°24'26.58"E
82		P82	748864.16	2415042.174	21°49'18.31"N	83°24'26.90"E
83		P83	748872.43	2415049.57	21°49'18.53"N	83°24'27.18"E
84		P84	748891.59	2415040.71	21°49'18.23"N	83°24'27.84"E
85		P85	748903.72	2415041.66	21°49'18.26"N	83°24'28.26"E
86		P86	748906.59	2415044.261	21°49'18.35"N	83°24'28.36"E
87		P87	748915.05	2415069.06	21°49'19.16"N	83°24'28.69"E
88		P88	748984.769	2415127.47	21°49'21.01"N	83°24'31.12"E
89		P89	748985.032	2415144.43	21°49'21.56"N	83°24'31.17"E
90		P90	749006.069	2415131.08	21°49'21.13"N	83°24'31.89"E
91	PATCH NO.12	P91	750768.84	2416626.08	21°50'8.81"N	83°25'34.03"E
92		P92	750759.89	2416631.53	21°50'8.98"N	83°25'33.72"E
93		P93	750737.57	2416611.56	21°50'8.34"N	83°25'32.94"E
94		P94	750769.21	2416742.1	21°50'12.58"N	83°25'34.13"E
95		P95	750795.76	2416737.08	21°50'12.41"N	83°25'35.03"E
96	PATCH NO.13	P96	750812.44	2416806.04	21°50'14.64"N	83°25'35.66"E
97		P97	750793.33	2416811.04	21°50'14.81"N	83°25'35.00"E
98		P98	750794.13	2416824.01	21°50'15.23"N	83°25'35.04"E
99	PATCH NO.14	P99	750807.05	2416831.93	21°50'15.45"N	83°25'35.50"E
100		P100	750818.72	2416831.93	21°50'15.45"N	83°25'35.88"E
101		P101	750815.48	2416818.6	21°50'15.03"N	83°25'35.77"E
102	PATCH NO.15	P102	750804.18	2416860.26	21°50'16.40"N	83°25'35.41"E
103		P103	750797.95	2416860.91	21°50'16.40"N	83°25'35.17"E
104		P104	750808.86	2416887.94	21°50'17.27"N	83°25'35.57"E
105		P105	750813.84	2416885.702	21°50'17.21"N	83°25'35.74"E
106		P106	750816.59	2416886.38	21°50'17.24"N	83°25'35.84"E
107		P107	750820.1	2416895.25	21°50'17.53"N	83°25'35.99"E
108	PATCH NO.16	P108	750835.24	2416900.13	21°50'17.68"N	83°25'36.51"E
109		P109	750839.78	2416918.89	21°50'18.27"N	83°25'36.66"E
110		P110	750813.44	2416924.81	21°50'18.47"N	83°25'35.76"E
111		P111	750806.32	2416895.25	21°50'17.53"N	83°25'35.50"E
112	PATCH NO.17	P112	750863.74	2417017.45	21°50'21.47"N	83°25'37.55"E
113		P113	750853.008	2417020.88	21°50'21.57"N	83°25'37.21"E
114		P114	750848.34	2417028.66	21°50'21.83"N	83°25'37.04"E
115		P115	750839.05	2417030.539	21°50'21.90"N	83°25'36.72"E
116		P116	750895	2417261.45	21°50'29.38"N	83°25'38.80"E
117		P117	750908.95	2417261.68	21°50'29.38"N	83°25'39.25"E
118		P118	750923.4	2417263.99	21°50'29.43"N	83°25'39.78"E
119	PATCH NO.18	P119	750898.28	2417274.98	21°50'29.80"N	83°25'38.91"E
120		P120	750917.83	2417283.42	21°50'30.09"N	83°25'39.58"E
121		P121	750932.07	2417299.77	21°50'30.60"N	83°25'40.11"E
122		P122	750933.46	2417321.53	21°50'31.31"N	83°25'40.16"E
123		P123	750909.39	2417320.46	21°50'31.29"N	83°25'39.32"E
124	PATCH NO.19	P124	751008.03	2417372.93	21°50'32.93"N	83°25'42.79"E
125		P125	751018.34	2417385.64	21°50'33.35"N	83°25'43.15"E
126		P126	751015.82	2417401.903	21°50'33.87"N	83°25'43.05"E
127		P127	751020.07	2417412.37	21°50'34.23"N	83°25'43.23"E
128		P128	751070.6	2417444.09	21°50'35.24"N	83°25'44.99"E
129		P129	751078.32	2417417.065	21°50'34.36"N	83°25'45.26"E
130	PATCH NO.20	P130	751463.96	2418510.98	21°51'9.68"N	83°25'59.26"E
131		P131	751444.57	2418520.29	21°51'10.01"N	83°25'58.60"E
132		P132	751442.75	2418529.02	21°51'10.31"N	83°25'58.54"E
133		P133	751493.2	2418564.94	21°51'11.42"N	83°26'0.33"E
134		P134	751505.35	2418540.44	21°51'10.63"N	83°26'0.74"E
135	PATCH NO.21	P135	751938.32	2419038.393	21°51'26.59"N	83°26'16.08"E
136		P136	751936.7	2419049.73	21°51'26.95"N	83°26'16.02"E
137		P137	751917.84	2419058.71	21°51'27.25"N	83°26'15.36"E
138		P138	751939.21	2419106.38	21°51'28.80"N	83°26'16.16"E
139		P139	751949.23	2419111.57	21°51'28.96"N	83°26'16.51"E
140		P140	751955.31	2419094.95	21°51'28.40"N	83°26'16.71"E
141		P141	751949.97	2419084.43	21°51'28.08"N	83°26'16.49"E
142		P142	751948.877	2419072.5	21°51'27.69"N	83°26'16.45"E
143		P143	751950.81	2419066.257	21°51'27.49"N	83°26'16.52"E
144	PATCH NO.22	P144	751973.2	2419137.16	21°51'29.79"N	83°26'17.36"E
145		P145	751965.35	2419140.55	21°51'29.89"N	83°26'17.08"E
146		P146	751959.47	2419151.59	21°51'30.25"N	83°26'16.88"E
147		P147	752111	2419230.94	21°51'32.74"N	83°26'22.21"E
148		P148	752121.546	2419223.97	21°51'32.51"N	83°26'22.56"E
149		P149	752122.093	2419206.32	21°51'31.96"N	83°26'22.58"E
150		P150	751963.67	2419094.95	21°51'28.40"N	83°26'16.98"E
151	PATCH NO.23	P151	752748.69	2419664.19	21°51'46.52"N	83°26'44.63"E
152		P152	752742.12	2419692.91	21°51'47.43"N	83°26'44.43"E
153		P153	752824.71	2419753.96	21°51'49.37"N	83°26'47.32"E
154		P154	752832.73	2419743.1	21°51'49.04"N	83°26'47.59"E
155		P155	752839.92	2419738.9	21°51'48.87"N	83°26'47.83"E
156		P156	752837.72	2419730	21°51'48.61"N	83°26'47.76"E
157		P157	752856.01	2419743.52	21°51'49.03"N	83°26'48.43"E
158		P158	752853.49	2419758.45	21°51'49.52"N	83°26'48.33"E
159		P166	752835.81	2420034.345	21°51'58.49"N	83°26'47.86"E
160		P167	752829.97	2420021.13	21°51'58.07"N	83°26'47.64"E
161		P168	752820.02	2420011.96	21°51'57.75"N	83°26'47.32"E
162		P169	752775.67	2420091.67	21°52'0.38"N	83°26'45.80"E
163		P170	752767.8	2420061.82	21°51'59.41"N	83°26'45.51"E
164		P171	752722.91	2420142.07	21°52'2.06"N	83°26'43.99"E
165		P172	752711.81	2420115.334	21°52'1.19"N	83°26'43.59"E
166		P173	752695.23	2420168.5	21°52'2.92"N	83°26'43.06"E
167		P174	752658.69	2420166.07	21°52'2.87"N	83°26'41.77"E
168		P159	752871.36	2419754.87	21°51'49.38"N	83°26'48.96"E
169	PATCH NO.24	P160	752930.74	2419922.79	21°51'54.80"N	83°26'51.10"E
170		P161	752900.78	2419886.93	21°51'53.65"N	83°26'50.04"E
171		P162	752884.69	2419987.89	21°51'56.94"N	83°26'49.54"E
172		P163	752862.46	2419971.432	21°51'56.43"N	83°26'48.76"E
173	PATCH NO.25	P164	752843.8	2419989.25	21°51'57.03"N	83°26'48.11"E
174		P165	752860.44	2420010.69	21°51'57.70"N	83°26'48.72"E
175	PATCH NO.26	P175	752554.67	2420265.43	21°52'6.15"N	83°26'38.20"E
176		P176	752579.89	2420268.15	21°52'6.23"N	83°26'39.08"E
177		P177	752582.87	2420275.828	21°52'6.46"N	83°26'39.19"E
178		P178	752533.93	2420322.57	21°52'8.01"N	83°26'37.51"E
179		P179	752522.76	2420322.576	21°52'8.01"N	83°26'37.12"E
180		P180	752512.8	2420326.84	21°52'8.15"N	83°26'36.78"E
181		P181	752503.04	2420314.74	21°52'7.76"N	83°26'36.46"E
182		P182	752449.49	2420365.9	21°52'9.45"N	83°26'34.60"E
183		P183	752471.7	2420363.31	21°52'9.37"N	83°26'35.37"E
184		P184	752486.73	2420367.66	21°52'9.49"N	83°26'35.89"E
185		P185	752438.28	2420413.94	21°52'11.01"N	83°26'34.25"E
186		P186	752415.95	2420408.5	21°52'10.86"N	83°26'33.45"E
187		P187	752403.36	2420428.63	21°52'11.52"N	83°26'33.04"E
188		P188	752416.1	2420435.13	21°52'11.74"N	83°26'33.49"E
189		P189	752264.2	2420627.46	21°52'18.06"N	83°26'28.31"E
190		P190	752295.99	2420668.46	21°52'19.37"N	83°26'29.41"E
191	PATCH NO.27	P191	752359.89	2420954.136	21°52'28.64"N	83°26'31.80"E
192		P192	752384.48	2420939.73	21°52'28.13"N	83°26'32.66"E
193		P193	752417.67	2420968.64	21°52'29.06"N	83°26'33.82"E
194		P194	752420.842	2420979.03	21°52'29.42"N	83°26'33.94"E
195		P195	752450.39	2421009.9	21°52'30.38"N	83°26'35.00"E
196	PATCH NO.28	P196	752723.84	2420812.4	21°52'23.83"N	83°26'44.39"E
197		P197	752719.81	2420805.29	21°52'23.61"N	83°26'44.25"E
198		P198	752734.81	2420796.82	21°52'23.31"N	83°26'44.77"E
199		P199	752739.079	2420794.419	21°52'23.24"N	83°26'44.94"E
200		P200	752787.1	2420767.91	21°52'22.34"N	83°26'46.59"E
201	PATCH NO.29	P201	752665.942	2419603.025	21°51'44.58"N	83°26'41.70"E
202		P202	752646.58	2419622.3	21°51'45.20"N	83°26'41.05"E
203		P203	752524.053	2419409.55	21°51'38.34"N	83°26'36.69"E
204		P204	752505.746	2419430.252	21°51'39.04"N	83°26'36.04"E
205		P205	752364.038	2419351	21°51'36.54"N	83°26'31.09"E
206		P206	752376.428	2419326.99	21°51'35.72"N	83°26'31.49"E

Revenue Forest Land Proposed Area Statement (in Ha)

Sl	Tower ID	Patch No	District	Tehsil	Village Name	Khasra Nos	Proposed Forest Area (In Ha)
1	AP3-AP5	1	Raigarh	Pusaur	Basanpali	1	0.282
2		2			Raitarai	39	0.335
3	AP10-AP11	3			Bulaki	389	0.065
4	AP11-AP12	4			Kawarhiha	151	0.513
5	AP14-AP15	5				460	0.032
6		6			Linjir	187	0.119
7	AP23-AP24	7			Loharsingh	1011	0.022
8		8				1081	0.022
9	AP28-AP29	9			Jharmuda	568	0.059
10	AP29-AP30	10			Aurda	444	0.07
11		11			Mauhapali	18	0.254
12	AP37-AP38	12			Dumarmuda	157/1	0.335
13		13			Darramuda	290/2	0.029
14		14				290/1	0.014
15		15				285/1	0.010
16		16				286/1	0.058
17		17				375/10	0.656
18		18				373/1	0.087
19	AP38-AP39	19				378H	0.174
20	AP40-AP41	20			Gudgahan	109	0.151
21	AP41-AP42	21			Nawapali	32/1	0.508
22	AP41-AP43	22				34	0.108
23	AP45-AP48	23		Raigarh	Jurda	31/1	0.626
24		24				31/2	0.232
25		25				31/29	0.086
26	AP47-AP49	26				20	1.193
27	AP49-AP50	27			Pandripani	181	0.206
28	AP50-AP53	28			Jurda	17/1	1.152
Total Revenue Forest Land Proposed Area (in Ha)							7.399

Reserve Forest Land Proposed Area Statement (in Ha)

Sl	Tower ID	Patch No	District	Tehsil	Land type	Comp No	Proposed Forest Area (In Ha)
1	AP42-AP46	29	Raigarh	Raigarh	Reserve Forest	1010	2.190
Total Reserve Forest Land Proposed Area (in Ha)							2.19

Total Forest Land Proposed Area Statement (in Ha)

Total Revenue Forest Land Proposed Area (in Ha)	7.399
Total Reserve Forest Land Proposed Area (in Ha)	2.19
Total Forest Land Proposed Area (in Ha)	9.589

0 1,125 2,250 4,500 6,750 9,000 Meters

Scale-1:50,000

Submitted by:-

CHHATTISGARH STATE POWER TRANSMISSION CO. LTD.
EXECUTIVE ENGINEER EHT (CONST) DN. CSPTCL, BILASPUR

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CSPTCL

Executive Engineer
EHT (C) Dn. CSPTCL
Bilaspur

LEGEND

- ● [illegible]
- ● Forest Patch DGPS Points
- — Tower Centre Line Raigarh
- ☐ Transmission Line Corridor
- 🟩 Forest Area
- 🟥 Non Forest Area
- ☐ Revenue Forest Khasra Boundary
- ☐ Reserve Forest Compartment Boundary

वनमंडलाधिकारी
रायगढ़ वनमण्डल