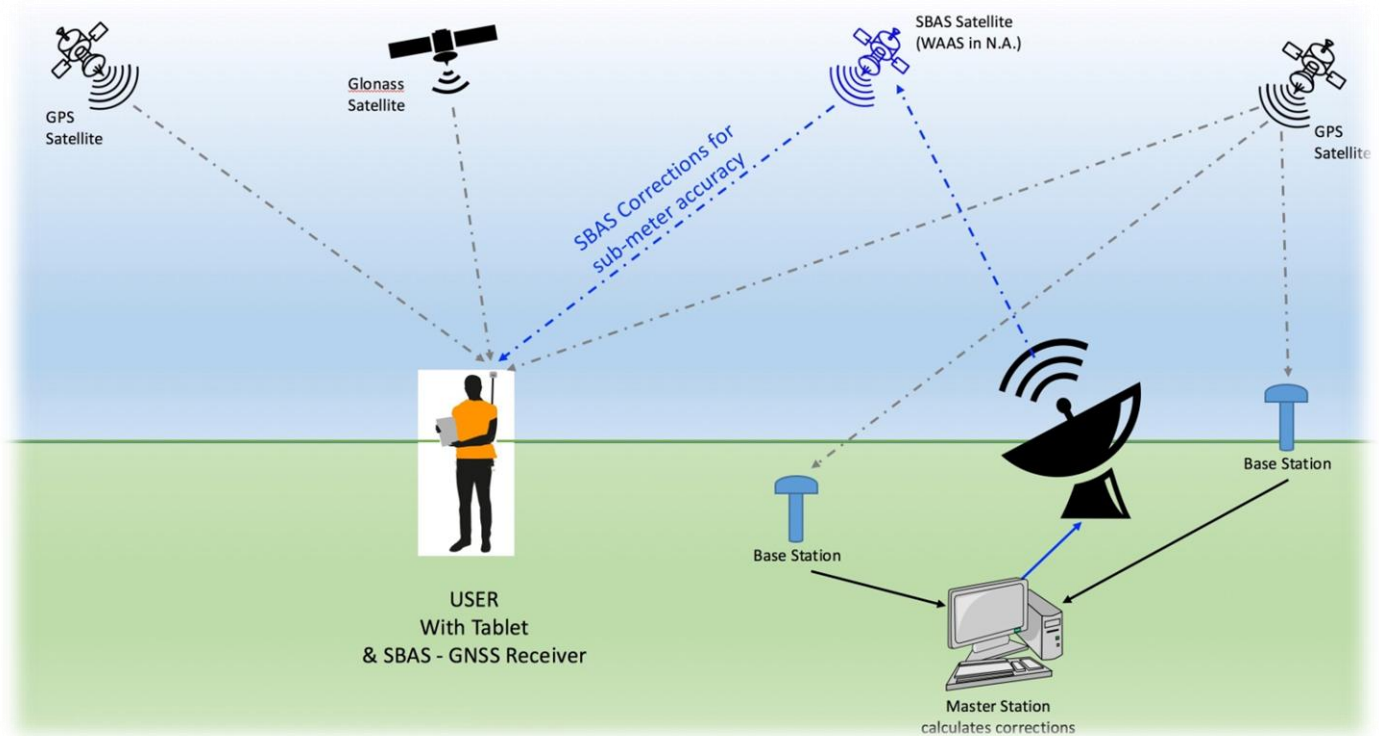


D.G.P.S. SURVEY REPORT
CHHATTISGARH ROAD DEVELOPMENT
CONNECTIVITY (ADB ROAD PROJECT)
PUBLIC WORKS DEPARTMENT
BAKARUMA-LAILUNGA ROAD SURVEY
PROJECT LENGTH – 22.34 KM
FOREST DIVISION DHARAMJAIGARH
DISTRICT RAIGARH
CHHATTISGARH



Name of the Applicant:

**Project Director (ADB Project),
C.G state Road Sector Project,
Public Works Department,
Raipur, C.G, India.**


Project Manager (A.D.B. Project)
Chhattisgarh Road Development Project
P.W.D. Bilaspur (C.G.)

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DATA ENCLOSED IN SOFT COPY

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1.ABOUT US

Computer Plus an **ISO 9001:2015 certified** organization working in the field of I.T. Consulting & Software Services. We are registered organization under **Directorate of Geology and Mining, Chhattisgarh**. We are serving since 1998 & head office in Raipur, (C.G.), with core competence in the areas of Integrated Business Solutions with Implementation and Support.

Our Team:

We're justifiably proud of the team we've assembled. Initially numbering just two programmers, **Computer Plus** has grown steadily and now has over 250 staff members. The **Computer Plus** team is made up of highly-qualified, talented and innovative IT and GIS professionals each with their own area of expertise. Their experience spans the full range of custom software development, from small entrepreneurial projects to complex systems for major corporations.

Our Mission:

Computer Plus's mission is to solve challenging technical problems in partnership with our clients.
How we achieve it:

- We understand the business needs of our clients, and how technology can be a tool to make modern businesses more profitable for both private and government sector.
- **Computer Plus** combines technical excellence with great customer service and value for money.
- We value creativity and collaboration; ideas are shared and everybody contributes on an individual basis toward the common goal.

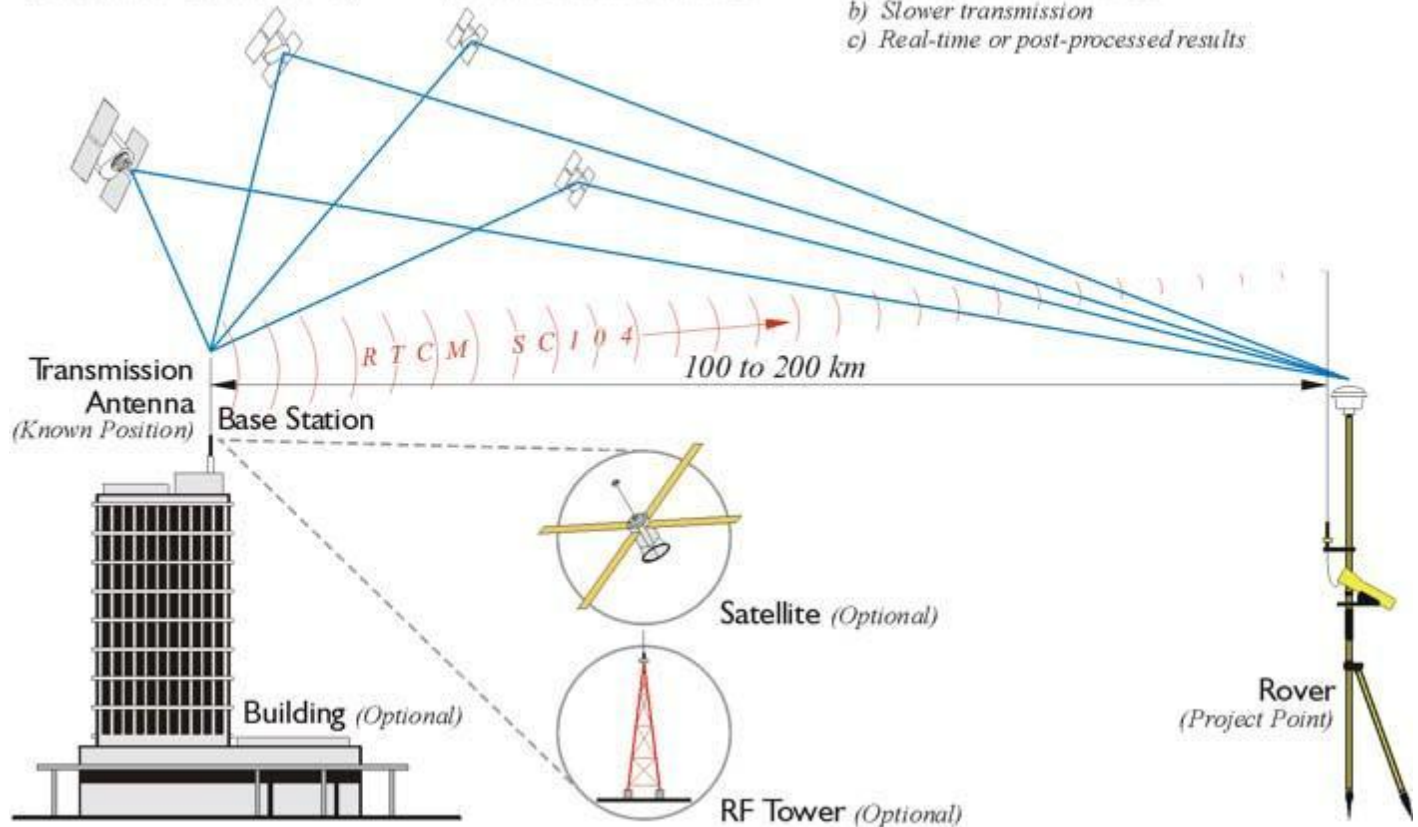
We create new teams for each project, ensuring the best possible combination of skills and experience to meet the client's needs and deliver high quality solutions.

2. INTRODUCTION TO DGPS

Differential GPS/DGPS

Positional Accuracy +/- 1 meter or so

- Same Satellite Constellation
(Base Station - Rover/or Rovers)
- Code Phase/Pseudorange
(Track 4 Satellites Minimum)
- Radio Link
 - a) Less information than RTK
 - b) Slower transmission
 - c) Real-time or post-processed results



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 operate in real-time. In such an operation pseudo range based versions can offer meter- or even sub meter results.

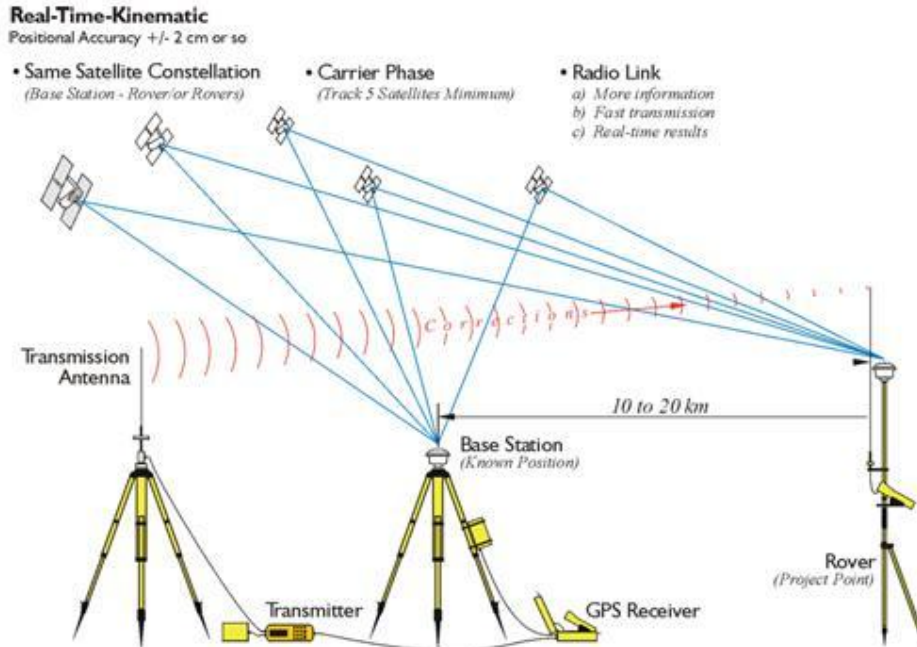
Usually, pseudo range corrections are broadcast from the base to the rover or rovers for each satellite in the visible constellation. Rovers with an appropriate input/output (I/O) port can receive the correction signal and calculate coordinates. The real-time signal comes to the receiver over a data 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, some one-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 receiver at a 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 receivers on 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 in real-time.

In this category of GPS surveying work there is sometimes a distinction made between code-based and carrier based solutions. In fact, most systems use a combination of code and carrier measurements so the distinction is more a matter of emphasis rather than an absolute difference. Well that's a bit 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.

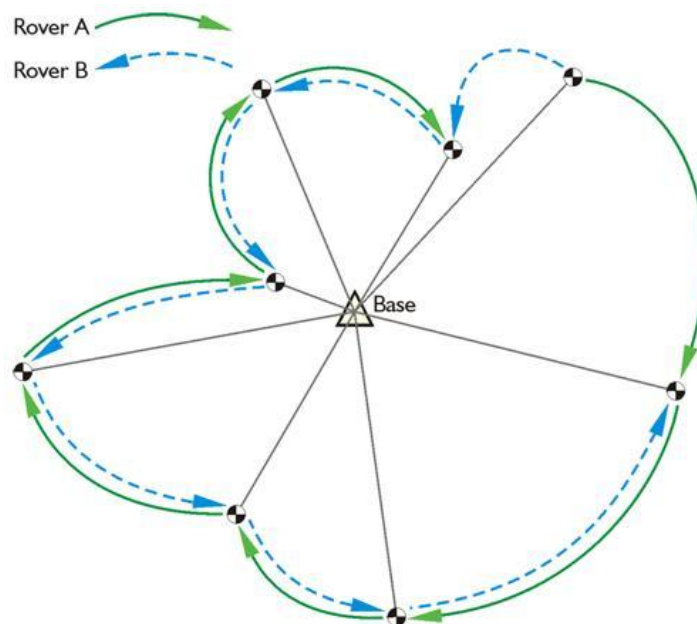
Errors in satellite clocks, imperfect orbits, the trip through the layers of the atmosphere, and many other sources contribute inaccuracies to GPS signals by the time they reach a receiver.

These errors are variable, so the best way to correct them is to monitor them as they happen. A good way to do this is to set up 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 corrections can be communicated from the base to the rover. It works well, but the errors are constantly changing so a base station has to monitor them all the time, at least all the time the rover 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 later in post processing.

Real-time positioning is built on the foundation of the idea that, with the important exceptions of multipath 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 baseline match. The shorter the baseline, the more the errors are correlated. The longer the baseline, 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.



RADIAL GPS

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 a short 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 these radial base lines, it would be tough to catch it because there's no real redundancy. The illustration shows a way 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 point twice with four to eight hours between the first occupation and the second occupation on the point. Another way is to move the base to another 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-occupation of the project points after one base station has been moved to a new control point, or a two base stations can be up and running from the very outset and throughout 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 antenna is blocked or tilted until the lock on the satellites is interrupted. It is then re-oriented on the unknown position a second time for the repeat solution. This does offer a second solution, but from virtually the same constellation.

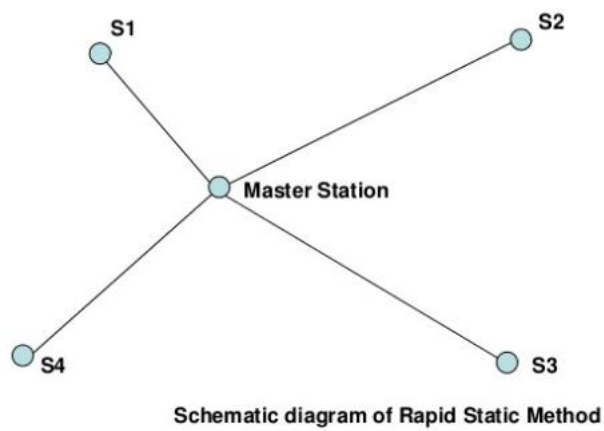
More efficiency can be achieved by adding additional roving receivers. However, as the number of receivers rises, the logistics become more complicated, and a survey plan becomes necessary. Also, project points that are simultaneously near one another but far from the control station should be directly connected with a baseline 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 a real-time survey.

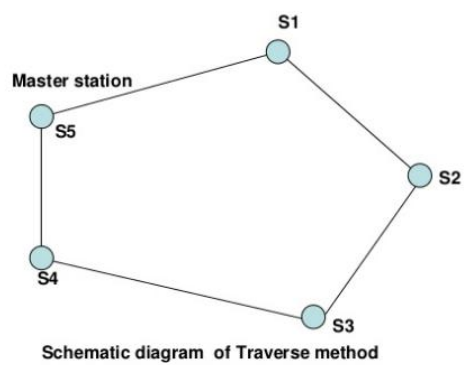
An advantage to continuously operating reference station network is that since those bases are operating simultaneously and all the time, it's possible to download the positions from more than one base and process your new position based on these continuously operating reference stations and have some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

2. STATIC METHOD

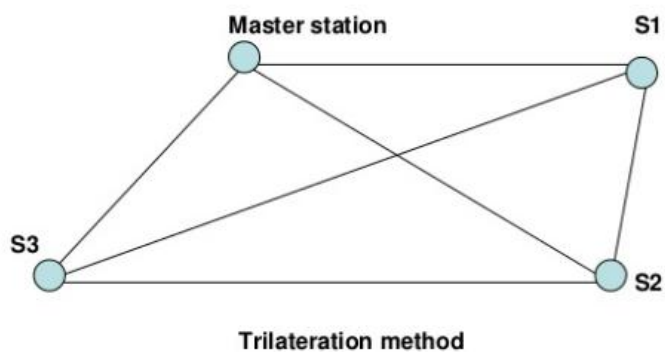
I. Rapid Static Method



II. Traverse Method



III. Trilateration Method



3. INTRODUCTION TO SURVEY SITE

The surveyed area is located on **Villages Lailunga, Hirapur & Salkhiya**, which comes under **Block Lailunga & Dharamjaigarh, District Raigarh, Chhattisgarh**. Dharamjaigarh Bus Stand longitude latitude is **83°12'35.27"E 22°27'41.75"N**. Survey site is located **30.0** Km from **Dharamjaigarh**. Survey site comes under **Forest Division Dharamjaigarh, Forest Range Lailunga & Bakaruma & Forest Circle Bilaspur**.

AREA DETAILS & LAND CLASSIFICATION OF RESERVE FOREST

S.No.	District Name	Division Name	Range Name	Compartment No.	Area (In Hectare)
1	Raigarh	Dharamjaigarh	Lailunga	187	3.327
2				193	0.351
3				209	0.165
TOTAL					3.843

AREA DETAILS & LAND CLASSIFICATION OF PRIVATE LAND

S.No.	District Name	Division Name	Range Name	Block Name	Area (In Hectare)
1	Raigarh	Dharamjaigarh	Lailunga & Bakaruma	Lailunga & Dharamjaigarh	27.403
TOTAL					27.403

LAND SUMMARY

S.No.	Division Name	Land Type	Width (In Meters)	Length (In Km)	Area (In Hectare)
1	Dharamjaigarh	Reserve Forest	14	2.56	3.843
2		Private Land		19.78	27.403
TOTAL				22.34	31.246

उप वनमण्डलाधिकारी
लैलुंगा उपवनमण्डल

उप वनमण्डलाधिकारी
लैलुंगा उपवनमण्डल

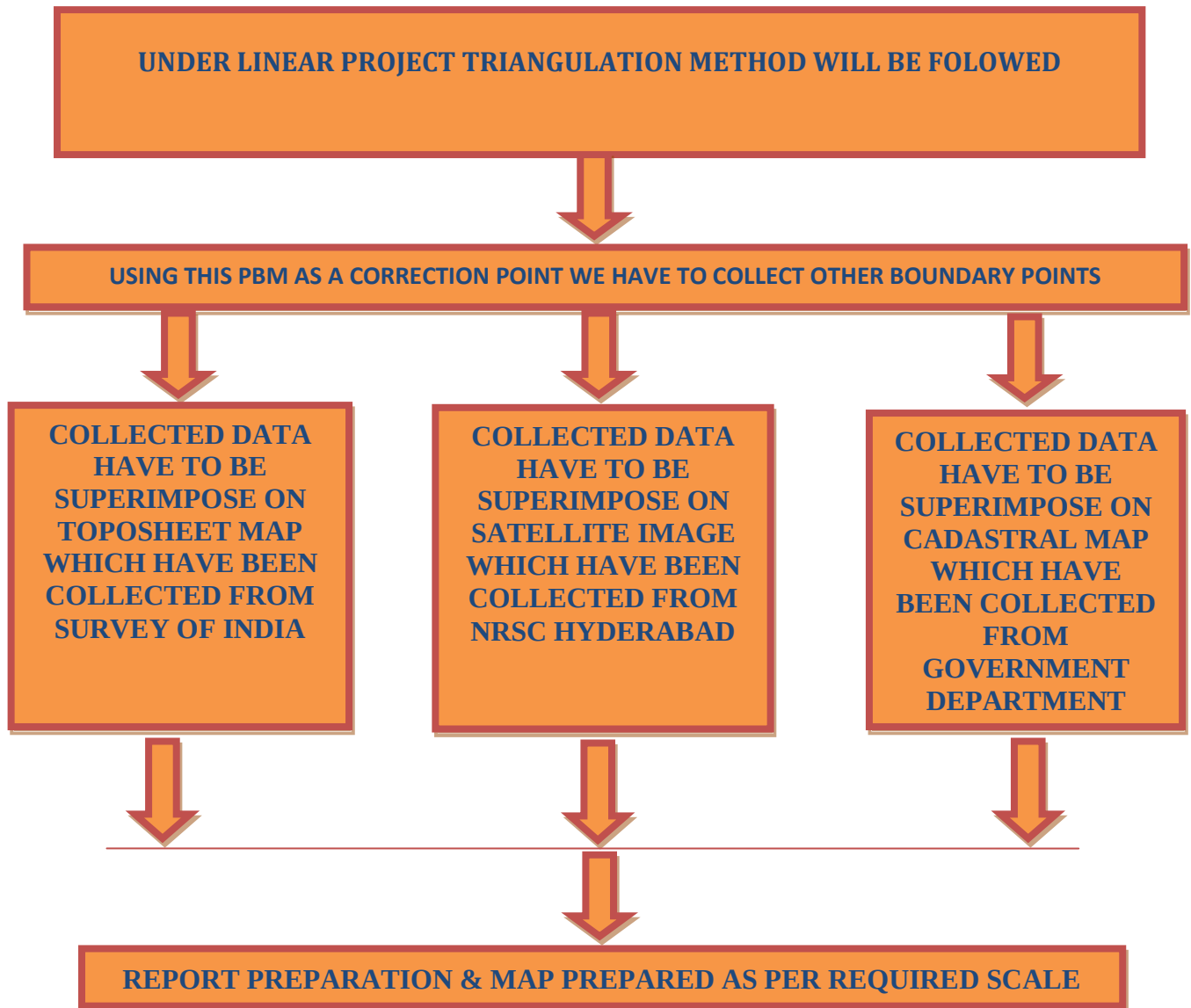
वन परिक्षेत्र अधिकारी
लैलुंगा



Project Manager (A.D.B. Project)
Chhattisgarh Road Development Project
P.W.D. Bilaspur (C.G.)

4. METHODOLOGY USED

SURVEY METHODOLOGY UNDER LINEAR PROJECT



4. CONTROL POINT

PRIMARY CONTROL POINT (FIXING OF BASE STATION POINT)

S.No.	P.C.P VILLAGE NAME	LONGITUDE	LATITUDE
Ground Control Point 1	Lailunga, Hirapur & Salkhiya	83°26' 4.618" E	22°30' 30.178" N
Ground Control Point 2		83°28' 55.230" E	22°26' 51.975" N
Ground Control Point 3		83°30' 50.977" E	22°24' 56.162" N

SURVEYED GROUND CONTROL POINTS (COMPARTMENT No. 187)

S.No.	PILLAR ID	LONGITUDE	LATITUDE
1	C171/187S	83°31' 39.471" E	22°25' 8.513" N
2	C172	83°31' 40.376" E	22°25' 8.811" N
3	C173	83°31' 40.994" E	22°25' 8.910" N
4	C174	83°31' 41.812" E	22°25' 8.916" N
5	C175	83°31' 43.836" E	22°25' 8.739" N
6	C176	83°31' 46.332" E	22°25' 8.752" N
7	C177	83°31' 47.266" E	22°25' 8.720" N
8	C178	83°31' 48.567" E	22°25' 8.444" N
9	C179	83°31' 49.550" E	22°25' 8.146" N
10	C180	83°31' 50.423" E	22°25' 7.880" N
11	C181	83°31' 52.372" E	22°25' 7.966" N
12	C182	83°31' 54.295" E	22°25' 8.166" N
13	C183	83°31' 57.104" E	22°25' 8.425" N
14	C184	83°31' 58.244" E	22°25' 8.485" N
15	C185	83°31' 59.217" E	22°25' 8.416" N
16	C186	83°32' 0.555" E	22°25' 8.096" N
17	C187	83°32' 3.981" E	22°25' 6.750" N
18	C188	83°32' 6.019" E	22°25' 5.939" N
19	C189	83°32' 7.701" E	22°25' 5.315" N
20	C190	83°32' 8.864" E	22°25' 4.993" N
21	C191	83°32' 9.762" E	22°25' 4.879" N
22	C192	83°32' 11.008" E	22°25' 4.978" N
23	C193	83°32' 12.233" E	22°25' 5.416" N
24	C194	83°32' 12.687" E	22°25' 5.654" N
25	C195	83°32' 14.098" E	22°25' 6.565" N
26	C196	83°32' 14.940" E	22°25' 6.888" N
27	C197	83°32' 15.908" E	22°25' 6.995" N
28	C198	83°32' 20.460" E	22°25' 5.998" N
29	C199	83°32' 21.879" E	22°25' 5.888" N
30	C200	83°32' 23.295" E	22°25' 6.293" N
31	C201	83°32' 25.641" E	22°25' 7.639" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
32	C202	83°32' 26.855" E	22°25' 8.011" N
33	C203	83°32' 28.172" E	22°25' 7.946" N
34	C204	83°32' 32.762" E	22°25' 7.237" N
35	C205	83°32' 36.695" E	22°25' 6.779" N
36	C206	83°32' 39.228" E	22°25' 6.496" N
37	C207	83°32' 41.099" E	22°25' 6.027" N
38	C208	83°32' 44.013" E	22°25' 4.492" N
39	C209	83°32' 47.147" E	22°25' 3.660" N
40	C210	83°32' 52.873" E	22°25' 2.400" N
41	C211/209S	83°32' 55.456" E	22°25' 1.889" N
42	C212	83°32' 56.141" E	22°25' 1.680" N
43	C213	83°32' 57.084" E	22°25' 0.899" N
44	C214	83°32' 57.716" E	22°24' 59.798" N
45	C215	83°32' 57.935" E	22°24' 58.917" N
46	C216	83°32' 57.763" E	22°24' 57.981" N
47	C217	83°32' 57.741" E	22°24' 57.287" N
48	C218	83°32' 58.072" E	22°24' 56.674" N
49	C219/209&187E	83°32' 59.070" E	22°24' 55.808" N
50	L171/187S	83°31' 39.389" E	22°25' 8.728" N
51	L172	83°31' 40.295" E	22°25' 9.025" N
52	L173	83°31' 40.946" E	22°25' 9.133" N
53	L174	83°31' 41.816" E	22°25' 9.143" N
54	L175	83°31' 43.893" E	22°25' 9.009" N
55	L176	83°31' 46.331" E	22°25' 8.979" N
56	L177	83°31' 47.317" E	22°25' 8.931" N
57	L178	83°31' 48.643" E	22°25' 8.660" N
58	L179	83°31' 49.626" E	22°25' 8.363" N
59	L180	83°31' 50.528" E	22°25' 8.125" N
60	L181	83°31' 52.353" E	22°25' 8.193" N
61	L182	83°31' 54.269" E	22°25' 8.392" N
62	L183	83°31' 57.090" E	22°25' 8.652" N
63	L184	83°31' 58.263" E	22°25' 8.711" N
64	L185	83°31' 59.264" E	22°25' 8.639" N
65	L186	83°32' 0.643" E	22°25' 8.309" N
66	L187	83°32' 4.077" E	22°25' 6.959" N
67	L188	83°32' 6.113" E	22°25' 6.150" N
68	L189	83°32' 7.782" E	22°25' 5.530" N
69	L190	83°32' 8.916" E	22°25' 5.216" N
70	L191	83°32' 9.769" E	22°25' 5.107" N
71	L192	83°32' 10.952" E	22°25' 5.202" N
72	L193	83°32' 12.129" E	22°25' 5.622" N
73	L194	83°32' 12.557" E	22°25' 5.847" N
74	L195	83°32' 13.979" E	22°25' 6.763" N
75	L196	83°32' 14.882" E	22°25' 7.113" N
76	L197	83°32' 15.908" E	22°25' 7.222" N
77	L198	83°32' 20.498" E	22°25' 6.223" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
78	L199	83°32' 21.853" E	22°25' 6.118" N
79	L200	83°32' 23.193" E	22°25' 6.502" N
80	L201	83°32' 25.523" E	22°25' 7.838" N
81	L202	83°32' 26.838" E	22°25' 8.238" N
82	L203	83°32' 28.212" E	22°25' 8.170" N
83	L204	83°32' 32.797" E	22°25' 7.463" N
84	L205	83°32' 36.725" E	22°25' 7.005" N
85	L206	83°32' 39.291" E	22°25' 6.716" N
86	L207	83°32' 41.187" E	22°25' 6.239" N
87	L208	83°32' 44.109" E	22°25' 4.703" N
88	L209	83°32' 47.209" E	22°25' 3.880" N
89	L210	83°32' 52.927" E	22°25' 2.622" N
90	L211/209S	83°32' 55.532" E	22°25' 2.105" N
91	L212	83°32' 56.276" E	22°25' 1.869" N
92	L213	83°32' 57.274" E	22°25' 1.042" N
93	L214	83°32' 57.947" E	22°24' 59.873" N
94	L215	83°32' 58.178" E	22°24' 58.939" N
95	L216	83°32' 58.007" E	22°24' 57.959" N
96	L217	83°32' 57.987" E	22°24' 57.338" N
97	L218	83°32' 58.271" E	22°24' 56.813" N
98	L219/209&187E	83°32' 59.271" E	22°24' 55.987" N
99	R171/187S	83°31' 39.561" E	22°25' 8.302" N
100	R172	83°31' 40.438" E	22°25' 8.590" N
101	R173	83°31' 41.016" E	22°25' 8.691" N
102	R174	83°31' 41.801" E	22°25' 8.688" N
103	R175	83°31' 43.792" E	22°25' 8.519" N
104	R176	83°31' 46.328" E	22°25' 8.524" N
105	R177	83°31' 47.186" E	22°25' 8.498" N
106	R178	83°31' 48.502" E	22°25' 8.225" N
107	R179	83°31' 49.474" E	22°25' 7.930" N
108	R180	83°31' 50.423" E	22°25' 7.683" N
109	R181	83°31' 52.384" E	22°25' 7.739" N
110	R182	83°31' 54.320" E	22°25' 7.940" N
111	R183	83°31' 57.123" E	22°25' 8.198" N
112	R184	83°31' 58.247" E	22°25' 8.252" N
113	R185	83°31' 59.177" E	22°25' 8.191" N
114	R186	83°32' 0.477" E	22°25' 7.880" N
115	R187	83°32' 3.886" E	22°25' 6.541" N
116	R188	83°32' 5.929" E	22°25' 5.728" N
117	R189	83°32' 7.632" E	22°25' 5.097" N
118	R190	83°32' 8.817" E	22°25' 4.769" N
119	R191	83°32' 9.758" E	22°25' 4.651" N
120	R192	83°32' 11.062" E	22°25' 4.756" N
121	R193	83°32' 12.353" E	22°25' 5.217" N
122	R194	83°32' 12.827" E	22°25' 5.467" N
123	R195	83°32' 14.216" E	22°25' 6.364" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
124	R196	83°32' 15.039" E	22°25' 6.677" N
125	R197	83°32' 15.894" E	22°25' 6.764" N
126	R198	83°32' 20.413" E	22°25' 5.775" N
127	R199	83°32' 21.890" E	22°25' 5.661" N
128	R200	83°32' 23.396" E	22°25' 6.086" N
129	R201	83°32' 25.745" E	22°25' 7.432" N
130	R202	83°32' 26.888" E	22°25' 7.781" N
131	R203	83°32' 28.145" E	22°25' 7.720" N
132	R204	83°32' 32.731" E	22°25' 7.012" N
133	R205	83°32' 36.665" E	22°25' 6.553" N
134	R206	83°32' 39.181" E	22°25' 6.272" N
135	R207	83°32' 41.005" E	22°25' 5.815" N
136	R208	83°32' 43.946" E	22°25' 4.273" N
137	R209	83°32' 47.091" E	22°25' 3.438" N
138	R210	83°32' 52.822" E	22°25' 2.177" N
139	R211	83°32' 55.392" E	22°25' 1.669" N
140	R212	83°32' 56.016" E	22°25' 1.478" N
141	R213	83°32' 56.889" E	22°25' 0.756" N
142	R214	83°32' 57.485" E	22°24' 59.718" N
143	R215	83°32' 57.685" E	22°24' 58.911" N
144	R216	83°32' 57.518" E	22°24' 57.988" N
145	R217	83°32' 57.499" E	22°24' 57.255" N
146	R218	83°32' 57.868" E	22°24' 56.549" N
147	R219/209&187E	83°32' 58.880" E	22°24' 55.663" N

SURVEYED GROUND CONTROL POINTS (COMPARTMENT No. 193)

S.No.	PILLAR ID	LONGITUDE	LATITUDE
1	C123/193S	83°30' 22.393" E	22°25' 13.777" N
2	C124/193E	83°30' 23.090" E	22°25' 11.719" N
3	L123/193S	83°30' 22.624" E	22°25' 13.852" N
4	L124/193E	83°30' 23.324" E	22°25' 11.785" N
5	R123/193S	83°30' 22.177" E	22°25' 13.669" N
6	R124/193E	83°30' 22.845" E	22°25' 11.664" N

SURVEYED GROUND CONTROL POINTS (COMPARTMENT No. 209)

S.No.	PILLAR ID	LONGITUDE	LATITUDE
1	C211/209S	83°32' 55.456" E	22°25' 1.889" N
2	C212	83°32' 56.141" E	22°25' 1.680" N
3	C213	83°32' 57.084" E	22°25' 0.899" N
4	C214	83°32' 57.716" E	22°24' 59.798" N
5	C215	83°32' 57.935" E	22°24' 58.917" N
6	C216	83°32' 57.763" E	22°24' 57.981" N
7	C217	83°32' 57.741" E	22°24' 57.287" N
8	C218	83°32' 58.072" E	22°24' 56.674" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
9	C219/209&187E	83°32' 59.070" E	22°24' 55.808" N
10	L211/209S	83°32' 55.532" E	22°25' 2.105" N
11	L212	83°32' 56.276" E	22°25' 1.869" N
12	L213	83°32' 57.274" E	22°25' 1.042" N
13	L214	83°32' 57.947" E	22°24' 59.873" N
14	L215	83°32' 58.178" E	22°24' 58.939" N
15	L216	83°32' 58.007" E	22°24' 57.959" N
16	L217	83°32' 57.987" E	22°24' 57.338" N
17	L218	83°32' 58.271" E	22°24' 56.813" N
18	L219/209&187E	83°32' 59.271" E	22°24' 55.987" N

SURVEYED GROUND CONTROL POINTS (PRIVATE LAND)

S.No.	PILLAR ID	LONGITUDE	LATITUDE
1	C01	83°25' 21.995" E	22°31' 9.052" N
2	C02	83°25' 22.975" E	22°31' 6.706" N
3	C03	83°25' 26.575" E	22°30' 58.650" N
4	C04	83°25' 29.475" E	22°30' 52.159" N
5	C05	83°25' 31.897" E	22°30' 46.761" N
6	C06	83°25' 32.156" E	22°30' 46.190" N
7	C07	83°25' 32.461" E	22°30' 45.544" N
8	C08	83°25' 32.845" E	22°30' 44.906" N
9	C09	83°25' 33.452" E	22°30' 44.234" N
10	C10	83°25' 35.093" E	22°30' 42.718" N
11	C11	83°25' 35.761" E	22°30' 42.212" N
12	C12	83°25' 36.383" E	22°30' 41.884" N
13	C13	83°25' 38.069" E	22°30' 41.262" N
14	C14	83°25' 40.735" E	22°30' 40.688" N
15	C15	83°25' 47.303" E	22°30' 39.465" N
16	C16	83°25' 54.831" E	22°30' 37.854" N
17	C17	83°25' 55.536" E	22°30' 37.663" N
18	C18	83°25' 56.569" E	22°30' 37.193" N
19	C19	83°26' 4.503" E	22°30' 31.606" N
20	C20	83°26' 7.873" E	22°30' 29.392" N
21	C21	83°26' 9.033" E	22°30' 28.899" N
22	C22	83°26' 10.060" E	22°30' 28.523" N
23	C23	83°26' 11.510" E	22°30' 28.228" N
24	C24	83°26' 13.630" E	22°30' 28.116" N
25	C25	83°26' 15.972" E	22°30' 28.499" N
26	C26	83°26' 20.983" E	22°30' 30.984" N
27	C27	83°26' 22.580" E	22°30' 31.586" N
28	C28	83°26' 25.197" E	22°30' 31.483" N
29	C29	83°26' 27.252" E	22°30' 31.255" N
30	C30	83°26' 28.696" E	22°30' 31.355" N
31	C31	83°26' 30.733" E	22°30' 32.028" N
32	C32	83°26' 35.079" E	22°30' 33.824" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
33	C33	83°26' 36.209" E	22°30' 33.990" N
34	C34	83°26' 37.733" E	22°30' 33.440" N
35	C35	83°26' 39.430" E	22°30' 32.242" N
36	C36	83°26' 43.917" E	22°30' 28.709" N
37	C37	83°26' 49.677" E	22°30' 24.288" N
38	C38	83°26' 50.817" E	22°30' 23.256" N
39	C39	83°26' 51.518" E	22°30' 22.381" N
40	C40	83°26' 52.243" E	22°30' 21.153" N
41	C41	83°26' 57.004" E	22°30' 12.671" N
42	C42	83°26' 58.077" E	22°30' 10.735" N
43	C43	83°26' 58.940" E	22°30' 9.604" N
44	C44	83°27' 0.706" E	22°30' 7.750" N
45	C45	83°27' 5.423" E	22°30' 2.901" N
46	C46	83°27' 6.164" E	22°30' 1.852" N
47	C47	83°27' 6.705" E	22°29' 59.894" N
48	C48	83°27' 7.833" E	22°29' 51.861" N
49	C49	83°27' 8.655" E	22°29' 46.143" N
50	C50	83°27' 9.008" E	22°29' 44.629" N
51	C51	83°27' 9.843" E	22°29' 43.412" N
52	C52	83°27' 10.883" E	22°29' 42.907" N
53	C53	83°27' 13.259" E	22°29' 42.241" N
54	C54	83°27' 17.736" E	22°29' 41.064" N
55	C55	83°27' 18.519" E	22°29' 40.668" N
56	C56	83°27' 19.882" E	22°29' 39.302" N
57	C57	83°27' 20.812" E	22°29' 38.235" N
58	C58	83°27' 20.961" E	22°29' 37.395" N
59	C59	83°27' 20.890" E	22°29' 35.949" N
60	C60	83°27' 21.238" E	22°29' 34.725" N
61	C61	83°27' 24.025" E	22°29' 30.688" N
62	C62	83°27' 24.687" E	22°29' 29.189" N
63	C63	83°27' 24.877" E	22°29' 28.164" N
64	C64	83°27' 25.384" E	22°29' 22.778" N
65	C65	83°27' 25.171" E	22°29' 21.350" N
66	C66	83°27' 24.703" E	22°29' 20.155" N
67	C67	83°27' 24.726" E	22°29' 18.563" N
68	C68	83°27' 25.141" E	22°29' 17.058" N
69	C69	83°27' 29.505" E	22°29' 10.507" N
70	C70	83°27' 29.970" E	22°29' 9.245" N
71	C71	83°27' 30.194" E	22°29' 7.660" N
72	C72	83°27' 30.614" E	22°28' 59.238" N
73	C73	83°27' 30.915" E	22°28' 57.592" N
74	C74	83°27' 31.666" E	22°28' 56.040" N
75	C75	83°27' 41.763" E	22°28' 40.769" N
76	C76	83°27' 50.417" E	22°28' 27.417" N
77	C77	83°27' 57.754" E	22°28' 13.316" N
78	C78	83°28' 1.566" E	22°28' 5.909" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
79	C79	83°28' 9.787" E	22°27' 49.471" N
80	C80	83°28' 15.229" E	22°27' 40.207" N
81	C81	83°28' 22.321" E	22°27' 29.966" N
82	C82	83°28' 23.157" E	22°27' 28.985" N
83	C83	83°28' 32.995" E	22°27' 19.083" N
84	C84	83°28' 40.420" E	22°27' 10.088" N
85	C85	83°28' 53.176" E	22°26' 53.638" N
86	C86	83°28' 57.174" E	22°26' 49.179" N
87	C87	83°28' 59.837" E	22°26' 46.260" N
88	C88	83°29' 3.517" E	22°26' 42.433" N
89	C89	83°29' 5.519" E	22°26' 40.341" N
90	C90	83°29' 13.278" E	22°26' 31.379" N
91	C91	83°29' 14.184" E	22°26' 30.543" N
92	C92	83°29' 15.638" E	22°26' 29.612" N
93	C93	83°29' 17.161" E	22°26' 29.020" N
94	C94	83°29' 18.789" E	22°26' 28.712" N
95	C95	83°29' 19.703" E	22°26' 28.397" N
96	C96	83°29' 20.392" E	22°26' 27.694" N
97	C97	83°29' 20.484" E	22°26' 26.440" N
98	C98	83°29' 20.019" E	22°26' 23.303" N
99	C99	83°29' 18.003" E	22°26' 10.284" N
100	C100	83°29' 17.797" E	22°26' 8.897" N
101	C101	83°29' 17.581" E	22°26' 7.427" N
102	C102	83°29' 17.486" E	22°26' 6.491" N
103	C103	83°29' 17.501" E	22°26' 6.063" N
104	C104	83°29' 17.628" E	22°26' 5.460" N
105	C105	83°29' 18.182" E	22°26' 4.048" N
106	C106	83°29' 21.009" E	22°25' 57.679" N
107	C107	83°29' 22.817" E	22°25' 54.072" N
108	C108	83°29' 23.966" E	22°25' 52.325" N
109	C109	83°29' 27.991" E	22°25' 46.974" N
110	C110	83°29' 28.813" E	22°25' 45.982" N
111	C111	83°29' 29.491" E	22°25' 45.267" N
112	C112	83°29' 30.480" E	22°25' 44.413" N
113	C113	83°29' 32.674" E	22°25' 42.947" N
114	C114	83°29' 35.428" E	22°25' 41.106" N
115	C115	83°29' 45.225" E	22°25' 35.698" N
116	C116	83°29' 54.028" E	22°25' 30.992" N
117	C117	83°30' 2.150" E	22°25' 26.415" N
118	C118	83°30' 8.658" E	22°25' 22.707" N
119	C119	83°30' 10.691" E	22°25' 21.843" N
120	C120	83°30' 13.547" E	22°25' 21.026" N
121	C121	83°30' 17.966" E	22°25' 19.512" N
122	C122	83°30' 22.156" E	22°25' 14.189" N
123	C125	83°30' 23.922" E	22°25' 9.110" N
124	C126	83°30' 24.333" E	22°25' 8.116" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
125	C127	83°30' 24.713" E	22°25' 7.579" N
126	C128	83°30' 25.216" E	22°25' 7.134" N
127	C129	83°30' 26.872" E	22°25' 5.918" N
128	C130	83°30' 28.180" E	22°25' 4.873" N
129	C131	83°30' 30.254" E	22°25' 3.378" N
130	C132	83°30' 31.274" E	22°25' 2.661" N
131	C133	83°30' 32.296" E	22°25' 2.096" N
132	C134	83°30' 35.013" E	22°25' 1.820" N
133	C135	83°30' 38.491" E	22°25' 1.605" N
134	C136	83°30' 39.292" E	22°25' 1.563" N
135	C137	83°30' 42.442" E	22°25' 1.430" N
136	C138	83°30' 43.653" E	22°25' 1.260" N
137	C139	83°30' 44.962" E	22°25' 0.872" N
138	C140	83°30' 49.093" E	22°24' 59.167" N
139	C141	83°30' 50.942" E	22°24' 58.457" N
140	C142	83°30' 53.444" E	22°24' 57.505" N
141	C143	83°30' 54.904" E	22°24' 56.966" N
142	C144	83°30' 55.932" E	22°24' 56.734" N
143	C145	83°30' 57.057" E	22°24' 56.848" N
144	C146	83°30' 57.375" E	22°24' 56.975" N
145	C147	83°30' 57.797" E	22°24' 57.222" N
146	C148	83°30' 58.357" E	22°24' 57.729" N
147	C149	83°30' 59.285" E	22°24' 58.794" N
148	C150	83°31' 2.315" E	22°25' 2.559" N
149	C151	83°31' 4.172" E	22°25' 4.998" N
150	C152	83°31' 5.058" E	22°25' 5.869" N
151	C153	83°31' 6.355" E	22°25' 6.342" N
152	C154	83°31' 7.430" E	22°25' 6.259" N
153	C155	83°31' 10.609" E	22°25' 5.558" N
154	C156	83°31' 13.072" E	22°25' 4.955" N
155	C157	83°31' 15.200" E	22°25' 4.457" N
156	C158	83°31' 17.186" E	22°25' 4.081" N
157	C159	83°31' 19.115" E	22°25' 3.716" N
158	C160	83°31' 20.160" E	22°25' 3.409" N
159	C161	83°31' 23.498" E	22°25' 2.084" N
160	C162	83°31' 24.291" E	22°25' 1.745" N
161	C163	83°31' 24.965" E	22°25' 1.558" N
162	C164	83°31' 25.960" E	22°25' 1.577" N
163	C165	83°31' 26.968" E	22°25' 1.843" N
164	C166	83°31' 27.859" E	22°25' 2.229" N
165	C167	83°31' 29.005" E	22°25' 2.924" N
166	C168	83°31' 33.596" E	22°25' 6.059" N
167	C169	83°31' 35.720" E	22°25' 7.028" N
168	C170	83°31' 36.895" E	22°25' 7.449" N
169	C220	83°33' 1.894" E	22°24' 52.835" N
170	C221	83°33' 3.977" E	22°24' 50.757" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
171	C222	83°33' 4.624" E	22°24' 49.955" N
172	C223	83°33' 6.036" E	22°24' 47.081" N
173	C224	83°33' 6.508" E	22°24' 46.258" N
174	C225	83°33' 6.918" E	22°24' 45.844" N
175	C226	83°33' 7.036" E	22°24' 45.714" N
176	C227	83°33' 11.328" E	22°24' 42.318" N
177	C228	83°33' 17.772" E	22°24' 37.793" N
178	C229	83°33' 18.232" E	22°24' 37.441" N
179	C230	83°33' 18.479" E	22°24' 37.000" N
180	C231	83°33' 18.366" E	22°24' 36.170" N
181	C232	83°33' 17.555" E	22°24' 33.033" N
182	C233	83°33' 17.179" E	22°24' 31.075" N
183	C234	83°33' 17.200" E	22°24' 30.230" N
184	C235	83°33' 17.402" E	22°24' 29.563" N
185	C236	83°33' 17.669" E	22°24' 29.159" N
186	C237	83°33' 18.437" E	22°24' 28.460" N
187	C238	83°33' 24.443" E	22°24' 23.581" N
188	C239	83°33' 25.416" E	22°24' 22.787" N
189	C240	83°33' 28.996" E	22°24' 19.595" N
190	C241	83°33' 33.064" E	22°24' 14.512" N
191	C242	83°33' 38.074" E	22°24' 7.740" N
192	L01	83°25' 22.240" E	22°31' 9.086" N
193	L02	83°25' 23.202" E	22°31' 6.791" N
194	L03	83°25' 26.804" E	22°30' 58.732" N
195	L04	83°25' 29.701" E	22°30' 52.247" N
196	L05	83°25' 32.126" E	22°30' 46.845" N
197	L06	83°25' 32.381" E	22°30' 46.279" N
198	L07	83°25' 32.680" E	22°30' 45.646" N
199	L08	83°25' 33.048" E	22°30' 45.036" N
200	L09	83°25' 33.632" E	22°30' 44.388" N
201	L10	83°25' 35.257" E	22°30' 42.887" N
202	L11	83°25' 35.900" E	22°30' 42.400" N
203	L12	83°25' 36.489" E	22°30' 42.090" N
204	L13	83°25' 38.142" E	22°30' 41.480" N
205	L14	83°25' 40.787" E	22°30' 40.910" N
206	L15	83°25' 47.351" E	22°30' 39.688" N
207	L16	83°25' 54.899" E	22°30' 38.072" N
208	L17	83°25' 55.624" E	22°30' 37.876" N
209	L18	83°25' 56.717" E	22°30' 37.374" N
210	L19	83°26' 4.647" E	22°30' 31.790" N
211	L20	83°26' 7.996" E	22°30' 29.590" N
212	L21	83°26' 9.133" E	22°30' 29.108" N
213	L22	83°26' 10.131" E	22°30' 28.741" N
214	L23	83°26' 11.543" E	22°30' 28.454" N
215	L24	83°26' 13.615" E	22°30' 28.344" N
216	L25	83°26' 15.891" E	22°30' 28.717" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
217	L26	83°26' 20.891" E	22°30' 31.195" N
218	L27	83°26' 22.556" E	22°30' 31.813" N
219	L28	83°26' 25.208" E	22°30' 31.711" N
220	L29	83°26' 27.258" E	22°30' 31.483" N
221	L30	83°26' 28.645" E	22°30' 31.580" N
222	L31	83°26' 30.642" E	22°30' 32.240" N
223	L32	83°26' 34.999" E	22°30' 34.039" N
224	L33	83°26' 36.243" E	22°30' 34.210" N
225	L34	83°26' 37.859" E	22°30' 33.635" N
226	L35	83°26' 39.588" E	22°30' 32.416" N
227	L36	83°26' 44.074" E	22°30' 28.883" N
228	L37	83°26' 49.838" E	22°30' 24.460" N
229	L38	83°26' 51.013" E	22°30' 23.392" N
230	L39	83°26' 51.732" E	22°30' 22.491" N
231	L40	83°26' 52.459" E	22°30' 21.260" N
232	L41	83°26' 57.221" E	22°30' 12.776" N
233	L42	83°26' 58.287" E	22°30' 10.853" N
234	L43	83°26' 59.132" E	22°30' 9.746" N
235	L44	83°27' 0.889" E	22°30' 7.902" N
236	L45	83°27' 5.613" E	22°30' 3.044" N
237	L46	83°27' 6.388" E	22°30' 1.943" N
238	L47	83°27' 6.946" E	22°29' 59.930" N
239	L48	83°27' 8.076" E	22°29' 51.891" N
240	L49	83°27' 8.896" E	22°29' 46.182" N
241	L50	83°27' 9.238" E	22°29' 44.717" N
242	L51	83°27' 10.014" E	22°29' 43.585" N
243	L52	83°27' 10.976" E	22°29' 43.119" N
244	L53	83°27' 13.328" E	22°29' 42.459" N
245	L54	83°27' 17.823" E	22°29' 41.277" N
246	L55	83°27' 18.643" E	22°29' 40.834" N
247	L56	83°27' 20.072" E	22°29' 39.445" N
248	L57	83°27' 21.043" E	22°29' 38.310" N
249	L58	83°27' 21.205" E	22°29' 37.391" N
250	L59	83°27' 21.136" E	22°29' 35.973" N
251	L60	83°27' 21.465" E	22°29' 34.818" N
252	L61	83°27' 24.239" E	22°29' 30.798" N
253	L62	83°27' 24.918" E	22°29' 29.264" N
254	L63	83°27' 25.121" E	22°29' 28.184" N
255	L64	83°27' 25.629" E	22°29' 22.774" N
256	L65	83°27' 25.412" E	22°29' 21.307" N
257	L66	83°27' 24.948" E	22°29' 20.116" N
258	L67	83°27' 24.971" E	22°29' 18.594" N
259	L68	83°27' 25.369" E	22°29' 17.148" N
260	L69	83°27' 29.719" E	22°29' 10.617" N
261	L70	83°27' 30.212" E	22°29' 9.280" N
262	L71	83°27' 30.439" E	22°29' 7.671" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
263	L72	83°27' 30.858" E	22°28' 59.262" N
264	L73	83°27' 31.151" E	22°28' 57.659" N
265	L74	83°27' 31.882" E	22°28' 56.146" N
266	L75	83°27' 41.972" E	22°28' 40.887" N
267	L76	83°27' 50.631" E	22°28' 27.527" N
268	L77	83°27' 57.974" E	22°28' 13.414" N
269	L78	83°28' 1.787" E	22°28' 6.006" N
270	L79	83°28' 10.006" E	22°27' 49.573" N
271	L80	83°28' 15.440" E	22°27' 40.323" N
272	L81	83°28' 22.521" E	22°27' 30.098" N
273	L82	83°28' 23.343" E	22°27' 29.132" N
274	L83	83°28' 33.185" E	22°27' 19.226" N
275	L84	83°28' 40.619" E	22°27' 10.221" N
276	L85	83°28' 53.369" E	22°26' 53.778" N
277	L86	83°28' 57.361" E	22°26' 49.325" N
278	L87	83°29' 0.021" E	22°26' 46.409" N
279	L88	83°29' 3.699" E	22°26' 42.584" N
280	L89	83°29' 5.709" E	22°26' 40.484" N
281	L90	83°29' 13.460" E	22°26' 31.531" N
282	L91	83°29' 14.341" E	22°26' 30.719" N
283	L92	83°29' 15.756" E	22°26' 29.813" N
284	L93	83°29' 17.233" E	22°26' 29.239" N
285	L94	83°29' 18.874" E	22°26' 28.925" N
286	L95	83°29' 19.855" E	22°26' 28.574" N
287	L96	83°29' 20.617" E	22°26' 27.783" N
288	L97	83°29' 20.728" E	22°26' 26.437" N
289	L98	83°29' 20.261" E	22°26' 23.272" N
290	L99	83°29' 18.246" E	22°26' 10.252" N
291	L100	83°29' 18.039" E	22°26' 8.866" N
292	L101	83°29' 17.824" E	22°26' 7.401" N
293	L102	83°29' 17.731" E	22°26' 6.484" N
294	L103	83°29' 17.745" E	22°26' 6.089" N
295	L104	83°29' 17.864" E	22°26' 5.521" N
296	L105	83°29' 18.410" E	22°26' 4.130" N
297	L106	83°29' 21.234" E	22°25' 57.771" N
298	L107	83°29' 23.033" E	22°25' 54.180" N
299	L108	83°29' 24.171" E	22°25' 52.449" N
300	L109	83°29' 28.188" E	22°25' 47.108" N
301	L110	83°29' 29.002" E	22°25' 46.127" N
302	L111	83°29' 29.667" E	22°25' 45.426" N
303	L112	83°29' 30.635" E	22°25' 44.589" N
304	L113	83°29' 32.817" E	22°25' 43.132" N
305	L114	83°29' 35.562" E	22°25' 41.297" N
306	L115	83°29' 45.349" E	22°25' 35.894" N
307	L116	83°29' 54.154" E	22°25' 31.187" N
308	L117	83°30' 2.277" E	22°25' 26.609" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
309	L118	83°30' 8.773" E	22°25' 22.908" N
310	L119	83°30' 10.779" E	22°25' 22.056" N
311	L120	83°30' 13.632" E	22°25' 21.240" N
312	L121	83°30' 18.114" E	22°25' 19.694" N
313	L122	83°30' 22.371" E	22°25' 14.298" N
314	L125	83°30' 24.153" E	22°25' 9.183" N
315	L126	83°30' 24.551" E	22°25' 8.221" N
316	L127	83°30' 24.523" E	22°25' 7.436" N
317	L128	83°30' 25.376" E	22°25' 7.306" N
318	L129	83°30' 27.032" E	22°25' 6.091" N
319	L130	83°30' 28.335" E	22°25' 5.049" N
320	L131	83°30' 30.403" E	22°25' 3.558" N
321	L132	83°30' 31.425" E	22°25' 2.850" N
322	L133	83°30' 32.391" E	22°25' 2.321" N
323	L134	83°30' 35.042" E	22°25' 2.059" N
324	L135	83°30' 38.534" E	22°25' 1.842" N
325	L136	83°30' 39.304" E	22°25' 1.790" N
326	L137	83°30' 42.478" E	22°25' 1.655" N
327	L138	83°30' 43.700" E	22°25' 1.483" N
328	L139	83°30' 45.049" E	22°25' 1.085" N
329	L140	83°30' 49.189" E	22°24' 59.376" N
330	L141	83°30' 51.035" E	22°24' 58.668" N
331	L142	83°30' 53.535" E	22°24' 57.716" N
332	L143	83°30' 54.979" E	22°24' 57.183" N
333	L144	83°30' 55.948" E	22°24' 56.964" N
334	L145	83°30' 56.994" E	22°24' 57.071" N
335	L146	83°30' 57.247" E	22°24' 57.162" N
336	L147	83°30' 57.645" E	22°24' 57.402" N
337	L148	83°30' 58.176" E	22°24' 57.883" N
338	L149	83°30' 59.091" E	22°24' 58.934" N
339	L150	83°31' 2.118" E	22°25' 2.693" N
340	L151	83°31' 3.987" E	22°25' 5.147" N
341	L152	83°31' 4.907" E	22°25' 6.048" N
342	L153	83°31' 6.338" E	22°25' 6.569" N
343	L154	83°31' 7.476" E	22°25' 6.482" N
344	L155	83°31' 10.672" E	22°25' 5.778" N
345	L156	83°31' 13.133" E	22°25' 5.175" N
346	L157	83°31' 15.254" E	22°25' 4.679" N
347	L158	83°31' 17.235" E	22°25' 4.304" N
348	L159	83°31' 19.164" E	22°25' 3.939" N
349	L160	83°31' 20.248" E	22°25' 3.621" N
350	L161	83°31' 23.601" E	22°25' 2.291" N
351	L162	83°31' 24.378" E	22°25' 1.959" N
352	L163	83°31' 24.998" E	22°25' 1.786" N
353	L164	83°31' 25.923" E	22°25' 1.804" N
354	L165	83°31' 26.883" E	22°25' 2.057" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
355	L166	83°31' 27.740" E	22°25' 2.429" N
356	L167	83°31' 28.866" E	22°25' 3.111" N
357	L168	83°31' 33.478" E	22°25' 6.258" N
358	L169	83°31' 35.632" E	22°25' 7.240" N
359	L170	83°31' 36.778" E	22°25' 7.628" N
360	L220	83°33' 2.075" E	22°24' 52.988" N
361	L221	83°33' 4.167" E	22°24' 50.900" N
362	L222	83°33' 4.838" E	22°24' 50.065" N
363	L223	83°33' 6.256" E	22°24' 47.182" N
364	L224	83°33' 6.709" E	22°24' 46.391" N
365	L225	83°33' 7.106" E	22°24' 45.990" N
366	L226	83°33' 7.210" E	22°24' 45.875" N
367	L227	83°33' 11.482" E	22°24' 42.495" N
368	L228	83°33' 17.927" E	22°24' 37.968" N
369	L229	83°33' 18.432" E	22°24' 37.572" N
370	L230	83°33' 18.720" E	22°24' 37.040" N
371	L231	83°33' 18.606" E	22°24' 36.127" N
372	L232	83°33' 17.795" E	22°24' 32.986" N
373	L233	83°33' 17.424" E	22°24' 31.057" N
374	L234	83°33' 17.444" E	22°24' 30.264" N
375	L235	83°33' 17.628" E	22°24' 29.655" N
376	L236	83°33' 17.861" E	22°24' 29.301" N
377	L237	83°33' 18.603" E	22°24' 28.627" N
378	L238	83°33' 24.604" E	22°24' 23.752" N
379	L239	83°33' 25.585" E	22°24' 22.951" N
380	L240	83°33' 29.186" E	22°24' 19.739" N
381	L241	83°33' 33.266" E	22°24' 14.641" N
382	L242	83°33' 38.272" E	22°24' 7.882" N
383	R01	83°25' 21.767" E	22°31' 8.983" N
384	R02	83°25' 22.746" E	22°31' 6.624" N
385	R03	83°25' 26.349" E	22°30' 58.563" N
386	R04	83°25' 29.249" E	22°30' 52.072" N
387	R05	83°25' 31.672" E	22°30' 46.673" N
388	R06	83°25' 31.931" E	22°30' 46.100" N
389	R07	83°25' 32.247" E	22°30' 45.434" N
390	R08	83°25' 32.656" E	22°30' 44.761" N
391	R09	83°25' 33.279" E	22°30' 44.072" N
392	R10	83°25' 34.933" E	22°30' 42.546" N
393	R11	83°25' 35.635" E	22°30' 42.016" N
394	R12	83°25' 36.263" E	22°30' 41.686" N
395	R13	83°25' 38.014" E	22°30' 41.041" N
396	R14	83°25' 40.680" E	22°30' 40.466" N
397	R15	83°25' 47.252" E	22°30' 39.242" N
398	R16	83°25' 54.774" E	22°30' 37.632" N
399	R17	83°25' 55.448" E	22°30' 37.450" N
400	R18	83°25' 56.440" E	22°30' 36.998" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
401	R19	83°26' 4.355" E	22°30' 31.425" N
402	R20	83°26' 7.771" E	22°30' 29.185" N
403	R21	83°26' 8.943" E	22°30' 28.687" N
404	R22	83°26' 9.971" E	22°30' 28.311" N
405	R23	83°26' 11.463" E	22°30' 28.005" N
406	R24	83°26' 13.626" E	22°30' 27.888" N
407	R25	83°26' 16.052" E	22°30' 28.284" N
408	R26	83°26' 21.087" E	22°30' 30.778" N
409	R27	83°26' 22.623" E	22°30' 31.357" N
410	R28	83°26' 25.178" E	22°30' 31.257" N
411	R29	83°26' 27.248" E	22°30' 31.027" N
412	R30	83°26' 28.735" E	22°30' 31.130" N
413	R31	83°26' 30.815" E	22°30' 31.814" N
414	R32	83°26' 35.149" E	22°30' 33.604" N
415	R33	83°26' 36.182" E	22°30' 33.756" N
416	R34	83°26' 37.612" E	22°30' 33.240" N
417	R35	83°26' 39.277" E	22°30' 32.065" N
418	R36	83°26' 43.760" E	22°30' 28.535" N
419	R37	83°26' 49.514" E	22°30' 24.119" N
420	R38	83°26' 50.632" E	22°30' 23.106" N
421	R39	83°26' 51.312" E	22°30' 22.258" N
422	R40	83°26' 52.027" E	22°30' 21.046" N
423	R41	83°26' 56.786" E	22°30' 12.567" N
424	R42	83°26' 57.863" E	22°30' 10.624" N
425	R43	83°26' 58.750" E	22°30' 9.461" N
426	R44	83°27' 0.524" E	22°30' 7.598" N
427	R45	83°27' 5.229" E	22°30' 2.762" N
428	R46	83°27' 5.937" E	22°30' 1.758" N
429	R47	83°27' 6.464" E	22°29' 59.851" N
430	R48	83°27' 7.591" E	22°29' 51.831" N
431	R49	83°27' 8.413" E	22°29' 46.107" N
432	R50	83°27' 8.788" E	22°29' 44.530" N
433	R51	83°27' 9.694" E	22°29' 43.231" N
434	R52	83°27' 10.796" E	22°29' 42.695" N
435	R53	83°27' 13.191" E	22°29' 42.022" N
436	R54	83°27' 17.643" E	22°29' 40.852" N
437	R55	83°27' 18.420" E	22°29' 40.488" N
438	R56	83°27' 19.697" E	22°29' 39.153" N
439	R57	83°27' 20.581" E	22°29' 38.139" N
440	R58	83°27' 20.715" E	22°29' 37.381" N
441	R59	83°27' 20.646" E	22°29' 35.925" N
442	R60	83°27' 21.014" E	22°29' 34.634" N
443	R61	83°27' 23.807" E	22°29' 30.582" N
444	R62	83°27' 24.450" E	22°29' 29.126" N
445	R63	83°27' 24.634" E	22°29' 28.135" N
446	R64	83°27' 25.138" E	22°29' 22.783" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
447	R65	83°27' 24.932" E	22°29' 21.405" N
448	R66	83°27' 24.460" E	22°29' 20.179" N
449	R67	83°27' 24.485" E	22°29' 18.528" N
450	R68	83°27' 24.915" E	22°29' 16.969" N
451	R69	83°27' 29.282" E	22°29' 10.409" N
452	R70	83°27' 29.731" E	22°29' 9.192" N
453	R71	83°27' 29.950" E	22°29' 7.640" N
454	R72	83°27' 30.370" E	22°28' 59.227" N
455	R73	83°27' 30.684" E	22°28' 57.518" N
456	R74	83°27' 31.452" E	22°28' 55.929" N
457	R75	83°27' 41.554" E	22°28' 40.650" N
458	R76	83°27' 50.202" E	22°28' 27.308" N
459	R77	83°27' 57.533" E	22°28' 13.217" N
460	R78	83°28' 1.344" E	22°28' 5.812" N
461	R79	83°28' 9.572" E	22°27' 49.362" N
462	R80	83°28' 15.024" E	22°27' 40.084" N
463	R81	83°28' 22.129" E	22°27' 29.825" N
464	R82	83°28' 22.977" E	22°27' 28.830" N
465	R83	83°28' 32.807" E	22°27' 18.936" N
466	R84	83°28' 40.224" E	22°27' 9.952" N
467	R85	83°28' 52.977" E	22°26' 53.505" N
468	R86	83°28' 56.986" E	22°26' 49.032" N
469	R87	83°28' 59.650" E	22°26' 46.113" N
470	R88	83°29' 3.334" E	22°26' 42.281" N
471	R89	83°29' 5.332" E	22°26' 40.194" N
472	R90	83°29' 13.088" E	22°26' 31.236" N
473	R91	83°29' 14.023" E	22°26' 30.371" N
474	R92	83°29' 15.512" E	22°26' 29.417" N
475	R93	83°29' 17.073" E	22°26' 28.808" N
476	R94	83°29' 18.721" E	22°26' 28.493" N
477	R95	83°29' 19.562" E	22°26' 28.203" N
478	R96	83°29' 20.153" E	22°26' 27.599" N
479	R97	83°29' 20.238" E	22°26' 26.448" N
480	R98	83°29' 19.777" E	22°26' 23.335" N
481	R99	83°29' 17.761" E	22°26' 10.316" N
482	R100	83°29' 17.554" E	22°26' 8.928" N
483	R101	83°29' 17.337" E	22°26' 7.449" N
484	R102	83°29' 17.242" E	22°26' 6.494" N
485	R103	83°29' 17.259" E	22°26' 6.027" N
486	R104	83°29' 17.397" E	22°26' 5.383" N
487	R105	83°29' 17.952" E	22°26' 3.970" N
488	R106	83°29' 20.788" E	22°25' 57.583" N
489	R107	83°29' 22.603" E	22°25' 53.962" N
490	R108	83°29' 23.766" E	22°25' 52.194" N
491	R109	83°29' 27.797" E	22°25' 46.835" N
492	R110	83°29' 28.623" E	22°25' 45.839" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
493	R111	83°29' 29.325" E	22°25' 45.100" N
494	R112	83°29' 30.314" E	22°25' 44.245" N
495	R113	83°29' 32.531" E	22°25' 42.763" N
496	R114	83°29' 35.302" E	22°25' 40.911" N
497	R115	83°29' 45.102" E	22°25' 35.501" N
498	R116	83°29' 53.903" E	22°25' 30.796" N
499	R117	83°30' 2.023" E	22°25' 26.220" N
500	R118	83°30' 8.517" E	22°25' 22.520" N
501	R119	83°30' 10.619" E	22°25' 21.626" N
502	R120	83°30' 13.470" E	22°25' 20.807" N
503	R121	83°30' 17.851" E	22°25' 19.314" N
504	R122	83°30' 21.948" E	22°25' 14.068" N
505	R125	83°30' 23.690" E	22°25' 9.035" N
506	R126	83°30' 24.119" E	22°25' 8.006" N
507	R127	83°30' 24.902" E	22°25' 7.726" N
508	R128	83°30' 25.055" E	22°25' 6.962" N
509	R129	83°30' 26.717" E	22°25' 5.743" N
510	R130	83°30' 28.031" E	22°25' 4.693" N
511	R131	83°30' 30.105" E	22°25' 3.197" N
512	R132	83°30' 31.119" E	22°25' 2.485" N
513	R133	83°30' 32.222" E	22°25' 1.870" N
514	R134	83°30' 35.055" E	22°25' 1.589" N
515	R135	83°30' 38.511" E	22°25' 1.363" N
516	R136	83°30' 39.279" E	22°25' 1.336" N
517	R137	83°30' 42.418" E	22°25' 1.204" N
518	R138	83°30' 43.597" E	22°25' 1.037" N
519	R139	83°30' 44.875" E	22°25' 0.659" N
520	R140	83°30' 48.993" E	22°24' 58.959" N
521	R141	83°30' 50.849" E	22°24' 58.247" N
522	R142	83°30' 53.352" E	22°24' 57.294" N
523	R143	83°30' 54.846" E	22°24' 56.745" N
524	R144	83°30' 55.916" E	22°24' 56.507" N
525	R145	83°30' 57.119" E	22°24' 56.628" N
526	R146	83°30' 57.516" E	22°24' 56.766" N
527	R147	83°30' 57.951" E	22°24' 57.045" N
528	R148	83°30' 58.542" E	22°24' 57.580" N
529	R149	83°30' 59.480" E	22°24' 58.658" N
530	R150	83°31' 2.511" E	22°25' 2.423" N
531	R151	83°31' 4.362" E	22°25' 4.853" N
532	R152	83°31' 5.198" E	22°25' 5.676" N
533	R153	83°31' 6.391" E	22°25' 6.111" N
534	R154	83°31' 7.391" E	22°25' 6.033" N
535	R155	83°31' 10.550" E	22°25' 5.337" N
536	R156	83°31' 13.011" E	22°25' 4.735" N
537	R157	83°31' 15.151" E	22°25' 4.234" N
538	R158	83°31' 17.137" E	22°25' 3.858" N

S.No.	PILLAR ID	LONGITUDE	LATITUDE
539	R159	83°31' 19.053" E	22°25' 3.495" N
540	R160	83°31' 20.075" E	22°25' 3.196" N
541	R161	83°31' 23.399" E	22°25' 1.876" N
542	R162	83°31' 24.204" E	22°25' 1.533" N
543	R163	83°31' 24.932" E	22°25' 1.333" N
544	R164	83°31' 25.998" E	22°25' 1.352" N
545	R165	83°31' 27.048" E	22°25' 1.628" N
546	R166	83°31' 27.978" E	22°25' 2.030" N
547	R167	83°31' 29.139" E	22°25' 2.733" N
548	R168	83°31' 33.724" E	22°25' 5.864" N
549	R169	83°31' 35.818" E	22°25' 6.820" N
550	R170	83°31' 36.983" E	22°25' 7.237" N
551	R220	83°33' 1.715" E	22°24' 52.680" N
552	R221	83°33' 3.789" E	22°24' 50.611" N
553	R222	83°33' 4.413" E	22°24' 49.838" N
554	R223	83°33' 5.821" E	22°24' 46.974" N
555	R224	83°33' 6.318" E	22°24' 46.115" N
556	R225	83°33' 6.734" E	22°24' 45.694" N
557	R226	83°33' 6.876" E	22°24' 45.541" N
558	R227	83°33' 11.181" E	22°24' 42.136" N
559	R228	83°33' 17.620" E	22°24' 37.614" N
560	R229	83°33' 18.038" E	22°24' 37.295" N
561	R230	83°33' 18.227" E	22°24' 36.958" N
562	R231	83°33' 18.125" E	22°24' 36.211" N
563	R232	83°33' 17.315" E	22°24' 33.075" N
564	R233	83°33' 16.934" E	22°24' 31.079" N
565	R234	83°33' 16.958" E	22°24' 30.194" N
566	R235	83°33' 17.178" E	22°24' 29.472" N
567	R236	83°33' 17.478" E	22°24' 29.015" N
568	R237	83°33' 18.276" E	22°24' 28.288" N
569	R238	83°33' 24.282" E	22°24' 23.410" N
570	R239	83°33' 25.251" E	22°24' 22.619" N
571	R240	83°33' 28.812" E	22°24' 19.444" N
572	R241	83°33' 32.865" E	22°24' 14.380" N
573	R242	83°33' 37.875" E	22°24' 7.605" N

उप वनमण्डलधिकारी
बिस्मिलपुर वन मंडल

उप वनमण्डलधिकारी
लेखगा उपवनमण्डल

वन पारक्षेत्र अधिकारी
लेखगा



Project Manager (A.D.B. Project)
Chhattisgarh Road Development Project
P.W.D. Bilaspur (C.G.)

6. SURVEY DATE

Survey Date	Survey Time	Village Name
17-12-2018 TO 20-12-2018	10.00 AM To 05.00 PM	Lailunga, Hirapur & Salkhiya

Weather was nice with clear sun light. Survey pillar marking has been done before itself so it was easy to get the location point. Survey has been done by the survey team members Mr. Goldy and Mr. Kishor sahu. The team was lead by **Mr. Kishor Sahu**.

Base Station Photographs



Survey Photographs with Staff



Survey Pillar Photographs







Thank You!

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