

# **D.G.P.S. SURVEY REPORT**

AREA DEMARCATION AND BOUNDARY FIXATION OF FOREST  
LAND COVERED IN **CHOWKI-CHILHATI-KORCHATOLA-MH BORDER ROAD**  
**FOREST COMPARTMENT NO. – PF-716,PF-720,PF-731**  
FOREST DIVISION – RAJNANDGAON, RANGE – AMBAGARH CHOWKI  
DISTRICT – RAJNANDGAON (C.G.)



**APPLICANT**

**MANAGING DIRECTOR  
CHHATTISGARH ROAD DEVELOPMENT CORPORATION Ltd.  
RAIPUR.(C.G.)**

## CERTIFICATE

This is to certify that the work of D.G.P.S. Survey of the area proposed for Chowki-Chilhati-Korchatola-MH Border Road construction in Rajnandgaon over an area of 5.577 Hectare. , forest compartment no. PF-716,PF-720,PF-731 of Rajnandgaon forest division in District - Rajnandgaon. Ordered dy The Office of the Managing Director, CGRDC, Raipur (C.G.) .

**SURMINE CONSULTING PVT LTD.**  
D/4, 1st Floor, P. Va. a. hi i Nagar,  
Behind Vileta Complex.  
RAIPUR. (C.G.)

The D.G.P.S. Survey work done by -----


The work done is as followed:-

As per the work order the Co-ordinates of Boundary pillars & Surveyed area are corrected and we have successfully completed the work, which is correct in our knowledge.

Date :- 15/02/2017

Place :- Rajnandgaon (C.G.)

For, Surmine Consulting Pvt. Ltd.

  
Authorised Signatory

  
**S.C. ARYA**  
Project Manager  
CGRDC

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*S. Chandra*  
S. CHANDRA  
Project Manager  
CGRDC

## INTRODUCTION

Office of the Managing Director, CGRDC Raipur (C.G.) is the nodal agency for construction of Chowki-Chilhati-Korchatola-MH Border (Pkg-4) in Dist- Rajnandgaon over an area of 5.577 Hectare, in forest compartment no. PF-716, PF-720, PF-731 of Rajnandgaon forest division in, District- Rajnandgaon. D.G.P.S. survey work has been done by SURMINE CONSULTING PVT LTD to obtain forest clearance. The D.G.P.S. survey was done successfully and accurately from 11/02/2017 to 13/02/2017 in the presence of CGRDC and FOREST Dept. officials.

**SURMINE CONSULTING PVT LTD,**

D/4 Is Floor Panchsheel 2nd,  
Behind Viji's Complex  
RAIPUR, (C.G.)

  
**S.C. ARYA**  
Project Manager  
CGRDC

## LOCATION OF THE AREA

The surveyed area is situated in approximate 50 Km. NW direction from Rajnandgaon district (C.G.). It falls in Survey of India **Toposheet No. F44U9**. The surveyed area is bounded by SOI Co-ordinates **80°30' East, 21°00' North to 80°45' East, 21°00' North & 80°30' East, 20°45' North to 80°45' East, 20°45' North of Toposheet.**

The survey area comes under Govt. Forest land, compartment no.

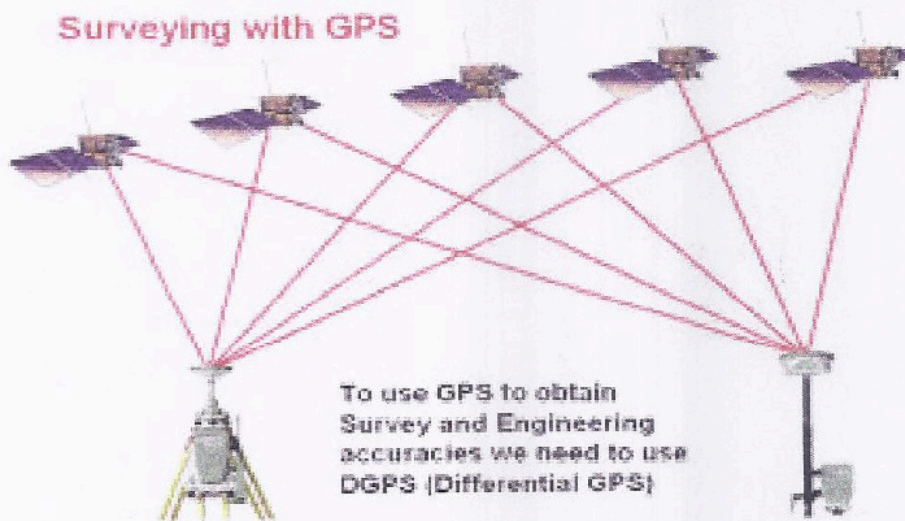
PF-716, PF-720, PF-731 of forest division Rajnandgaon, District- Rajnandgaon in Chhattisgarh. The total surveyed area **5.577 Hectare**. The surveyed area is on Chowki-Chilhati-Korchatola-MH Border road.

*S. G. ARYA*  
**S.G. ARYA**  
Project Manager  
GRDC

## FEATURES & METHODOLOGY OF DGPS SURVEY

**Differential Global Positioning System (DGPS)** is an enhancement to Global Positioning System that uses a network of fixed, ground-based reference station to broadcast the difference between the position indicated by the satellite system and the known fixed positions. These positions broadcast the difference between the measured satellite pseudo ranges and actual (internally computed) pseudo ranges and receiver station may correct their pseudo ranges by the same amount.

### Differential Positioning



*S. S. M. S. A.*  
S. S. M. S. A.  
Project Manager  
CGRDC

The survey work has done by ----- Starting DGPS Survey by making one permanent reference point (Base Station) by setting up, initialization of all the parameters of BASE Unit for minimum 2 Hrs reading.

That Initialization of the ROVER Unit in the same manner and each boundary pillars was established and fixer after 15 minutes of reading and that's how 81 boundary pillars and t has been fixed. After the successful completion of the survey ,all the RAW data collected from the field ,post process in the GNSS software , than Validation of the collected data by several methods & Geo referenced Vectorized forest maps, SOI Toposheets and Satellite Imageries.

#### WHAT IS DGPS AND WHY USE IT?

Differential Global Positioning System (DGPS) is an enhancement to Global Positioning System that provides improved location accuracy, from the 15-meter nominal GPS accuracy to about 10 cm in case of the best implementations.

DGPS refers to using a combination of receivers and satellites to reduce /eliminate common receiver based and satellite based errors reduce orbit errors reduce ionospheric and tropospheric errors reduce effects of SA eliminate satellite and receiver clock errors.

Improve accuracy significantly 100's of meters to meters to centimeters to Millimeters.

1. DGPS uses one or several (network) fixed ground based reference stations (in known locations).
2. The base station compares its own known location, to that computed from a GPS receiver.

  
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CGRDC

3. Any difference is then broadcast as a correction to the user.

Correction signals can be broadcast either from ground stations, or via additional satellites. These services are privately owned and usually require a user subscription.

**Examples:-**

- Satellite Based Augmentation System (SBAS),
- Wide Area Augmentation System (WAAS),
- Local Area Augmentation System (LAAS),
- European Geostationary Navigation Overlay Service (EGNOS),
- Omni STAR
- Coast guard beacon service.

*S.G. ARYA*  
S.G. ARYA  
Project Manager  
CGRDC

## LIST OF MAPS

S.No.	PARTICULARS	MAP NO.
1	GEO- REFERENCED SOI TOPOSHEET WITH FIXED BOUNDARY POINTS	1
2	GEO- REFERENCED MAP OF GOOGLE EARTH	2
3	SURVEYED AREA SUPER IMPOSED ON FOREST COMPARTMENT MAP	3

*S. Chitrya*  
S. CHITRYA  
Project Manager  
CGRDC

## SUMMERY

ROAD NAME—CHOWKI-CHILHATI-KORCHTOLA-UP TO MH BORDER

DISTRICT—RAJNANDGAON

FOREST DIVISION—RAJNANDGAON

RANGE—AMBAGRH CHOWKI

VILLAGE	COMP. No.	AREA
BHARSENA	PF-716	.968 He
KOLIYATOLA	PF-720	.231 He
CHILHATI	PF-731	.295 He
		.416 He
JHITIYA	REVENUE FOREST	3.667 He

AFFECTED ROAD AREA IN FOREST – 5.577 HECTARE (Incl.Existing Road)

EXISTING ROAD AREA – 12.216 HECTARE

EXISTING ROAD LENGTH – 22.212 Km

EXISTING ROAD LENGTH IN FOREST- 1.429 Km

EXISTING ROAD WIDTH – 5.50 Mtr with paved Shoulder (3.50 Mtr BT)

PROPOSED ROAD ROW – 14 Mtr.

  
S. S. ARYA  
Project Manager  
CGRDC

## DATA SHEET

CHOWKI - CHILHATI - KORCHATOLA ROAD						
SL No.	CODE	EASTING	NORTHING	ZONE	LONGITUDE	LATITUDE
1	P1	469085.613	2298463.798	44	80° 42' 10.6758" E	20° 47' 8.6694" N
2	P2	469041.536	2298474.603	44	80° 42' 9.1505" E	20° 47' 9.0182" N
3	P3	469037.989	2298460.911	44	80° 42' 9.0287" E	20° 47' 8.5727" N
4	P4	468942.036	2298492.647	44	80° 42' 5.7077" E	20° 47' 9.5992" N
5	P5	468938.994	2298478.982	44	80° 42' 5.6033" E	20° 47' 9.1545" N
6	P6	468879.971	2298494.354	44	80° 42' 3.5608" E	20° 47' 9.6510" N
7	P7	468881.504	2298480.438	44	80° 42' 3.6147" E	20° 47' 9.1984" N
8	P8	468752.413	2298476.15	44	80° 41' 59.1498" E	20° 47' 9.0512" N
9	P9	468754.86	2298462.366	44	80° 41' 59.2353" E	20° 47' 8.6029" N
10	P10	468667.372	2298458.185	44	80° 41' 56.2094" E	20° 47' 8.4616" N
11	P11	468672.609	2298445.201	44	80° 41' 56.3914" E	20° 47' 8.0396" N
12	P12	468577.926	2298425.813	44	80° 41' 53.1176" E	20° 47' 7.4032" N
13	P13	468585.43	2298413.994	44	80° 41' 53.3779" E	20° 47' 7.0192" N
14	P15	468409.45	2298332.996	44	80° 41' 47.2962" E	20° 47' 4.3737" N
15	P14	468382.924	2298335.479	44	80° 41' 46.3785" E	20° 47' 4.4528" N
16	P16	466004.576	2297908.066	44	80° 40' 24.1433" E	20° 46' 50.3986" N
17	P17	465996.506	2297896.626	44	80° 40' 23.8650" E	20° 46' 50.0260" N
18	P18	465915.603	2297952.568	44	80° 40' 21.0628" E	20° 46' 51.8404" N
19	P19	465906.912	2297941.592	44	80° 40' 20.7629" E	20° 46' 51.4828" N
20	P21	465859.007	2297957.974	44	80° 40' 19.1048" E	20° 46' 52.0125" N
21	P20	465838.053	2297975.201	44	80° 40' 18.3788" E	20° 46' 52.5715" N

For, Surmine

Pvt. Ltd.

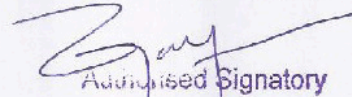
For Surmine Consulting Pvt. Ltd.

Authorizing Signatory

  
**S.C. ARYA**  
 Project Manager  
 GRDC

22	P22	460947.777	2298214.121	44	80° 37' 29.2134" E	20° 46' 59.9967" N
23	P23	460943.459	2298200.804	44	80° 37' 29.0651" E	20° 46' 59.5632" N
24	P24	460887.504	2298232.571	44	80° 37' 27.1271" E	20° 47' 0.5923" N
25	P25	460881.762	2298219.802	44	80° 37' 26.9295" E	20° 47' 0.1765" N
26	P26	460753.301	2298293.969	44	80° 37' 22.4802" E	20° 47' 2.5793" N
27	P27	460747.082	2298281.426	44	80° 37' 22.2661" E	20° 47' 2.1708" N
28	P28	460599.496	2298364.853	44	80° 37' 17.1546" E	20° 47' 4.8733" N
29	P29	460572.399	2298361.241	44	80° 37' 16.2176" E	20° 47' 4.7538" N
30	P30	460322.565	2298483.96	44	80° 37' 7.5661" E	20° 47' 8.7265" N
31	P31	460307.422	2298474.967	44	80° 37' 7.0430" E	20° 47' 8.4328" N

For, Surmine Consulting Pvt. Ltd.

  
Authorized Signatory

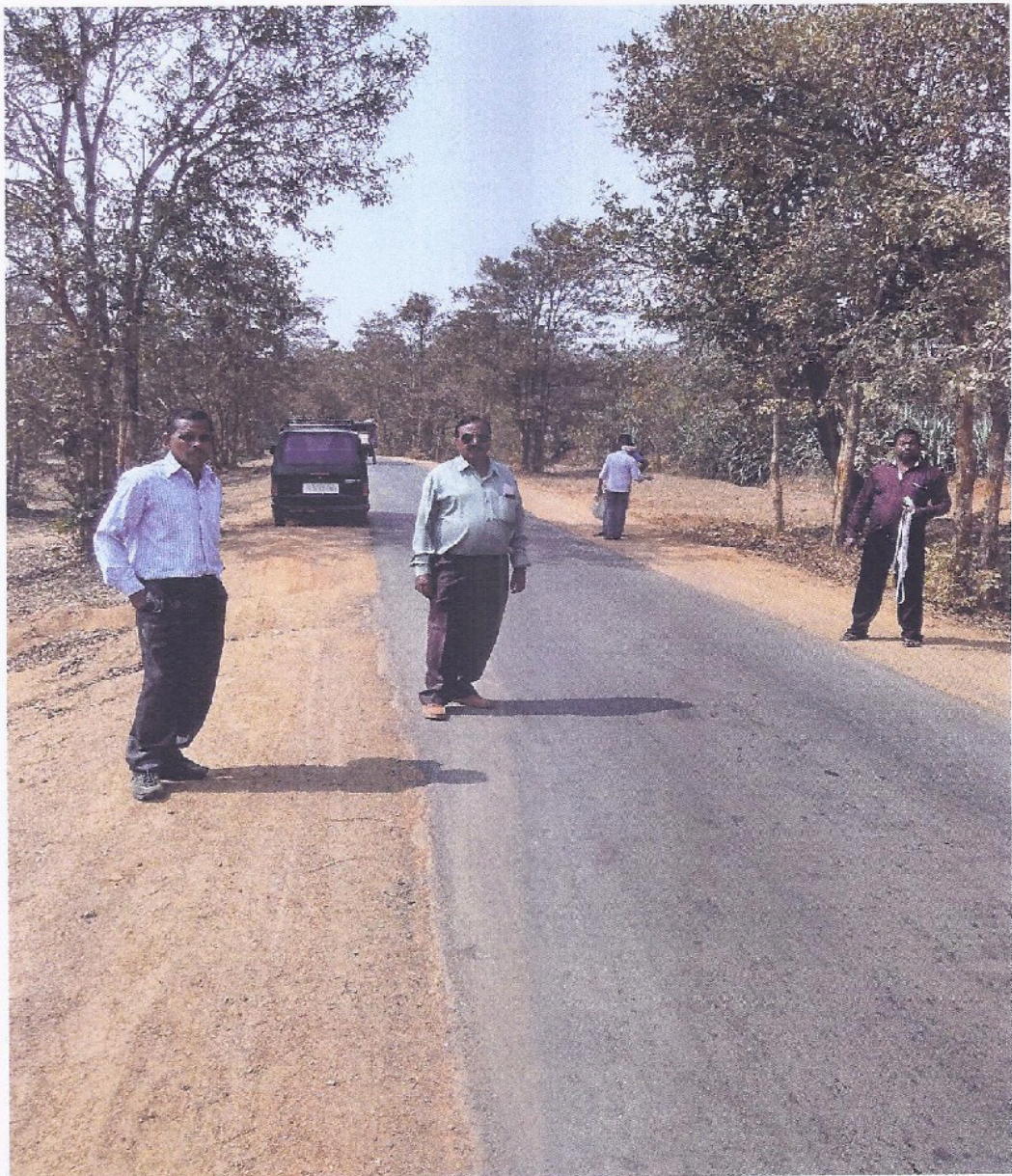
  
S.C. WRYA  
Project Manager  
CORDC

## VILLAGE LIST

1. Bharsena
2. Koliyatola
3. Chilhati
4. JHITIYA

*S.G. Arya*  
**S.G. ARYA**  
Project Manager  
CGRDC

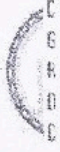
## PHOTO GRAPHS



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S.C. ARYA  
Project Manager  
CGRDC



*S. G. ARYA*  
**S.G. ARYA**  
Project Manager  
CGRDC



CIN : U45203CT2014SGC001560

**छत्तीसगढ़ रोड डेवलपमेंट कार्पोरेशन लिमिटेड रायपुर**

तृतीय तल, सिरपुर भवन परिसर, आकाशवाणी के पीछे, सिविल लाईन्स, रायपुर

वेबसाइट : www.cgrdc.in, ईमेलआईडी : info@cgrdc.in, info.cgrdc@gmail.com, Phone 0771-4043393, Fax 0771-4033242

क्रमांक 1063...../छ.ग.रो.डेव्ह.कार्पो.लि./2017

रायपुर,दिनांक : 26/04/2017

प्रति,

वन मण्डलाधिकारी  
राजनांदगांव  
जिला राजनांदगांव (छ.ग.)

विषय : वन संरक्षण अधिनियम के अंतर्गत प्रकरण तैयार करने हेतु आवश्यक सहयोग प्रदाय करने बाबत।

संदर्भ : इस कार्यालय का पत्र क्र. 65 दिनांक 11.01.2017

—00—

संदर्भित पत्र के तारतम्य में एम.एस.वी. इंटरनेशनल कंसल्टेंट द्वारा, विषयांकित बाबत निम्नांकित मार्गों का डीजीपी.एस. (Differential Global Positioning System) सर्वे कार्य, आपके निर्देशानुसार वन विभाग के कर्मचारियों की उपस्थिति में पूर्ण किया जा चुका है :-

1. त्रिवोला-छुरिया-कल्लूबंजारी महाराष्ट्र सीमा तक मार्ग
2. चौकी-चिल्हाटी-कोरवाटोला महाराष्ट्र सीमा तक मार्ग

संबंधित कंसल्टेंट के माध्यम से डीजीपी.एस. सर्वे रिपोर्ट भेजी जा रही है। कृपया डीजीपी.एस. रिपोर्ट सत्यापित कर अतिशीघ्र भेजने का कष्ट करें, ताकि विषयांकित बाबत आवश्यक पहल की जा सके।

उक्त मार्गों का उन्नयनीकरण/चौड़ीकरण कार्य रायग-सीमा के भीतर पूर्ण करना है। यह योजना छ.ग. शासन की महत्वपूर्ण योजना है। माननीय मुख्यमंत्री छ.ग. शासन द्वारा समय-समय पर समीक्षा की जाती है। कृपया इस कार्य को सर्वोच्च प्राथमिकता देने का कष्ट करें।

संलग्न :- उपरोक्तानुसार

  
26/4/17

महाप्रबंधक

छ.ग. रो. डेव्ह. कार्पो. लि.

रायपुर (छ.ग.)

पृ. क्र. 1064...../छ.ग.रो.डेव्ह.कार्पो.लि./2017

रायपुर,दिनांक : 26/04/2017

प्रतिलिपि :-

1. मुख्य वन संरक्षक, दुर्ग वन वृत्त दुर्ग को सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
2. कलेक्टर राजनांदगांव जिला-राजनांदगांव को सूचनार्थ एवं आवश्यक कार्यवाही हेतु।
3. एम.एस.वी. इंटरनेशनल कंसल्टेंट को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित। वन मण्डलाधिकारी, राजनांदगांव से डीजीपी.एस. रिपोर्ट सत्यापित कराकर तत्काल इस कार्यालय को प्रस्तुत करें।

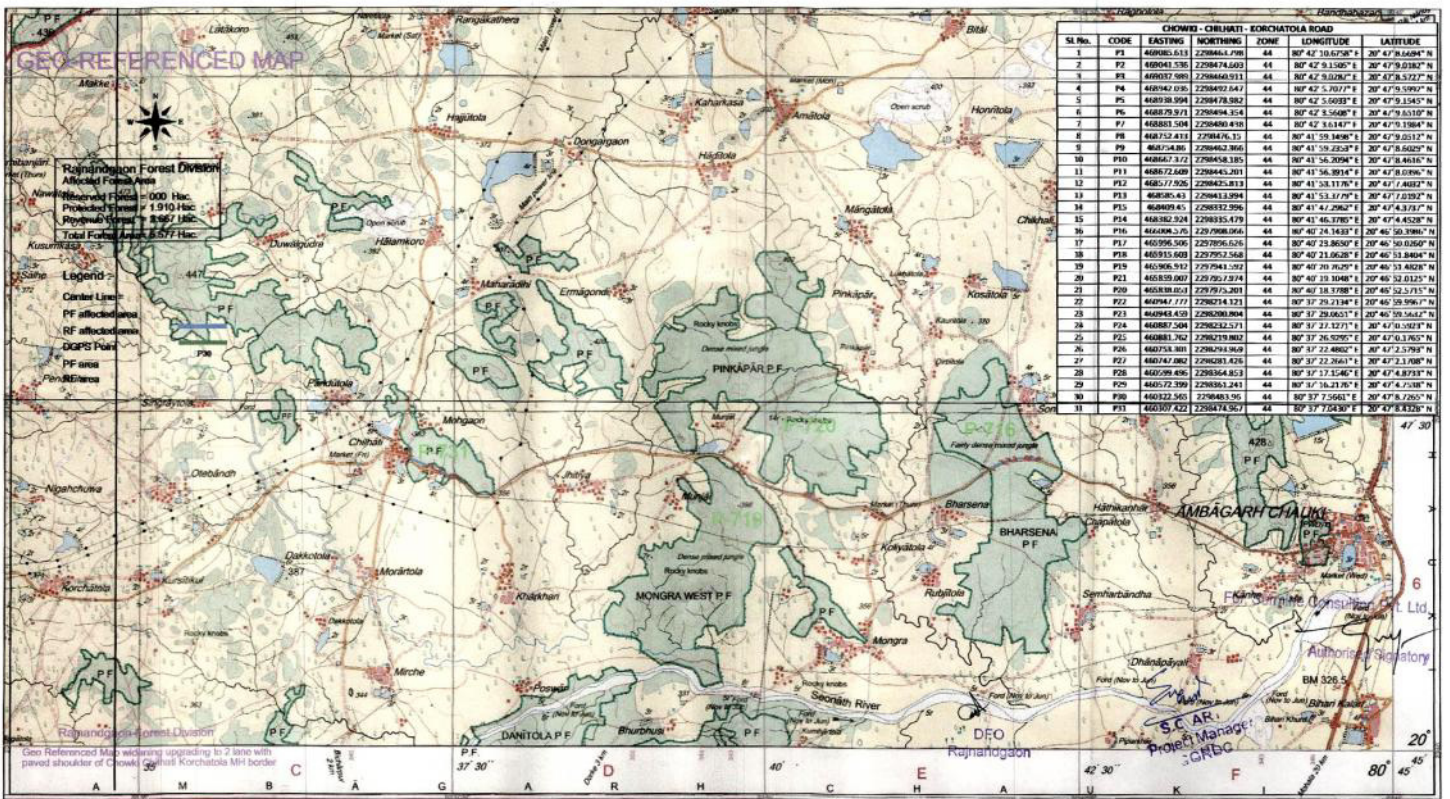
  
26/4/17

महाप्रबंधक

छ.ग. रो. डेव्ह. कार्पो. लि.

रायपुर (छ.ग.)

प्राप्त किया  
DGPS सर्वे  
रख + रख  
4/17  
A  
11/5/2017



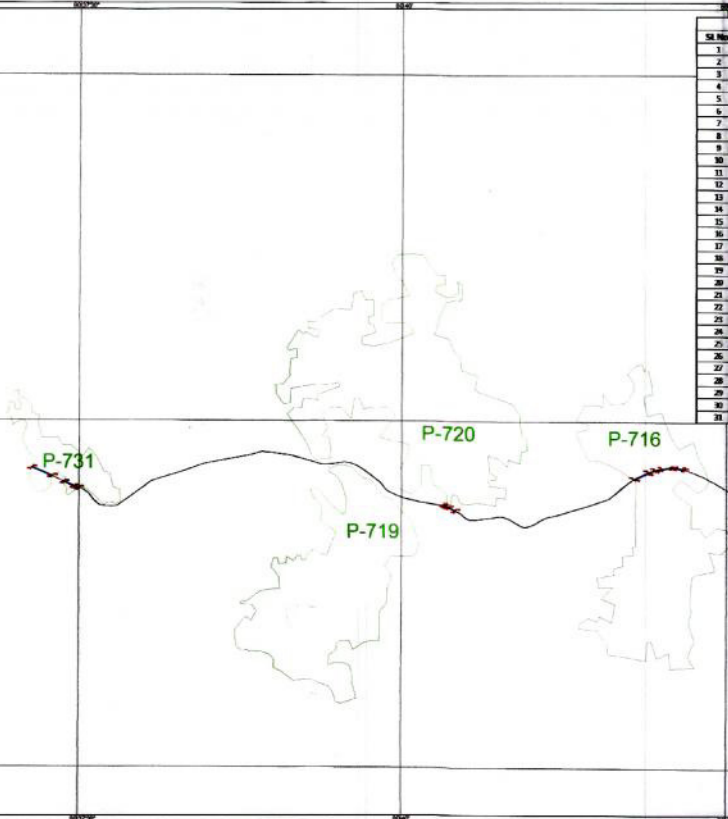
# GEO-REFERENCED MAP



Rajnandgaon Forest Division  
 Affected Forest Area  
 Reserved Forest = 000 Hac.  
 Protected Forest = 1.910 Hac.  
 Revenue Forest = 3.667 Hac.  
 Total Forest Area = 5.577 Hac.

**Legend :-**

- Center Line =
- PF affected area =
- RF affected area =
- DGPS Point =
- PF area =
- RF area =



Sl. No.	CODE	EASTING	NORTHING	ZONE	LONGITUDE	LATITUDE
1	P1	469041.536	2298474.503	44	80° 42' 10.6750" E	20° 47' 8.6464" N
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28	P28	466599.896	2298364.853	44	80° 37' 17.3546" E	20° 46' 4.8738" N
29	P29	466572.389	2298361.841	44	80° 37' 16.2170" E	20° 46' 4.2588" N
30	P30	466522.585	2298483.95	44	80° 37' 7.5661" E	20° 46' 8.2265" N
31	P31	466507.822	2298474.967	44	80° 37' 7.0430" E	20° 46' 8.4328" N

For, Surmine Consulting Pvt. Ltd.  
  
 Authorized Signatory  
  
 S.C. ARYA  
 Project Manager  
 CGRDC  
 DFO  
 Rajnandgaon

Rajnandgaon Forest Division  
 Geo Referenced Map widening upgrading to 2 lane with paved shoulder of Chowki Chihali Korchatola MH border