

Report on Differential Global Positioning System (DGPS) Survey

for

Bhaskarpara Coal Mine

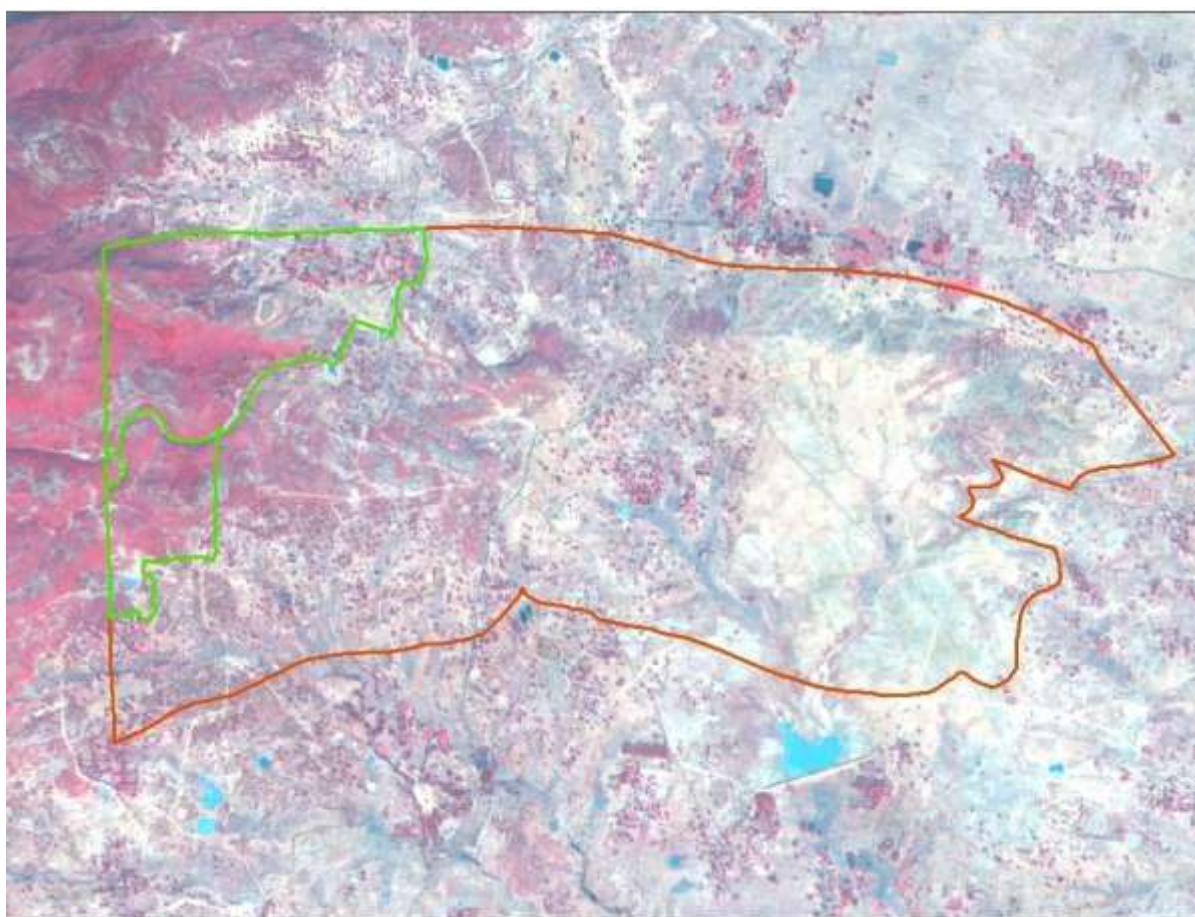
Protected Forest Area 113.246 Ha. & Orange Area 35.546 Ha. Total 148.795 Ha

(Out of Total ML Area 932 Ha.)

Villages- Bhaskarpara, Badsara, Khadapara, Kurridih, Kewara,

Danouli-Khurd and Kusmusi,

Teshil-Bhaiyathan, District-Surajpur (Chhattisgarh)



Prepared for:



Prakash Industries Limited
Sivan, Najafgarh- Bijwasan road,
Bijwasan, New Delhi-110061

Prepared By:

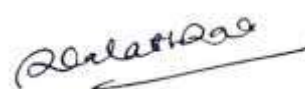


GeoSolutions(P)Ltd.
HIG-21, Hudco Colony, Bhilai,
District -Durg Chhattisgarh- 490009
email: geosolution@rediffmail.com

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I	State Govt. Authorization for DGPS survey to M/s Geo Solutions (P)Ltd. Bhilai	--
II	Copy of Authorisation for Signature in the Report and Maps	--

PLATES

S. No.	Plate Nos.	Particulars	Scale
1	Plate-1	Location Map	Not to scale
2	Plate-2	Mining Lease Boundary marked on Toposheet	(1:50,000)
3	Plate-3	DGPS Survey Boundary Superimposed on Forest Map	(1:15,000)
4	Plate-4	DGPS Survey Boundary Superimposed on Satellite Imageries (LISS-IV & Cartosat-1) with digitized Compartment boundary	(1:5,000)
5	Plate-5	DGPS Survey Boundary Superimposed on Satellite Image covering 5 km area	(1:50,000)

1.0 Introduction:

1.1 Introduction

The DGPS survey of Protected Forest and Undemarcated Forest Land of Bhaskarpara Coal Mine, Villages- Bhaskarpara, Badsara, Khadapara, Kurridih, Kewara, Danouli-Khurd and Kusmusi, Tahsil-Bhaiyathan, District-Surajpur has been conducted.

The DGPS Survey of the Mine, as per IBM/State Govt. Norms has been carried out by M/s Geo Solutions (P) Ltd. Bhilai. The State Govt. has Authorized Geo Solutions (P)Ltd for DGPS survey vide letter No.F-14/2013/12 Dated 12 May 2015, renewed vide letter no. F 7-14/2013/12, Raipur Dated 4 Sept. 2018 and further renewal is under process, copy enclosed as **Annexure No.I**.

This report has been submitted in the anticipation of getting a predated renewal so as to not disrupt any work in progress.

1.2 Scope of Work

1. Survey and geo-referencing of protected forest & undemarcated Forest land boundary of the Bhaskarpara Coal Mine by using DGPS.
 - a) Establishment of Base station with 72hrs observation.
 - b) Field identification of mining lease boundary & marking.
 - c) Establishment of base stations with minimum 2 hrs observation.
 - d) DGPS observation of mining lease area boundary coordinates.
 - e) Geo-referencing of the Forest Map in the project area.
 - f) Procurement & Integration of satellite Images (Cartosat-I/Resourcesat-LISSIV).
2. Processing of DGPS observation for final coordinates through differential correction.
3. Identification of the Protected Forest Boundary points and compartment boundary through DGPS stacking out marking.
4. Generation of geo-referencing shape files of mining lease boundary.
5. GIS Data base creation and analysis.
6. Printing and delivery of hard copy maps and report and submission.



2. 0 Location of the Mining Lease area:

Location and Accessibility of the area:

Name of the Area	Bhaskarpara Coal Mine		
Protected Forest Area (Ha.)	113.246	148.795	Annexure-A
Orange Area (Ha.)	35.549		
Revenue Forest Area (Ha.)	366.785		
Non-forest Area (Ha.)	416.477		
Total Mining Lease area (Ha.)	932.000 Ha		
Village	Bhaskarpara, Badsara, Khadapara, Kurridih, Kewara, Danouli-Khurd and Kusmusi		
Taluka	Bhaiyathan		
District	Surajpur		
State	Chhattisgarh		
Accessibility	The area can be approached by own conveyance from District head quarter Surajpur which is at a distance of About 25 km.		
Rail and Air Link	The Katora Raiway Station on Bijuri-Karonji Railway line Of SEC Railway is the nearest Railway Stations at a distance of about 12km.		
Toposheet No.	64 I/15		

PrakashIndustriesLtd

ShalabhSaha
(Authorized Signatory)
GeoSolutions(P)Ltd,Bhilai

M/s PRAKASH INDUSTRIES LIMITED
Bhaskarpara Coal Mines - ML Area – 932.00 Ha
Forest Land – 515.581 Ha.
Non Forest Land – 416.419 Ha.

(A) Details of Forest Land:-

Area in Hectare

S. No.	Compartment No./ Village Name	All Right Area	Mining Right Area	Total (Ha.)
1	PF 1619-P	0.818	1.012	1.830
2	PF 1620-P	68.490	42.926	111.416
3	Orange Area (Badsara)	1.855	33.694	35.549
4	Badsara	14.127	0.723	14.850
5	Khadapara	50.035	67.665	117.700
6	Baskarpara	114.049	51.711	165.760
7	Kurridih	9.283	1.843	11.126
8	Kewara	40.065	2.135	42.200
9	Danouli Khurd	15.003	0.097	15.100
10	Kusmusi	0.050	0.000	0.050
Total		313.775	201.806	515.581

Summary

S No	Particulars	All Right Area	Mining Right Area	Total (Ha.)
1	Protected Forest Area	69.308	43.938	113.246
2	Orange Area (Badsara)	1.855	33.694	35.549
3	Revenue Forest Area	242.612	124.174	366.786
Total		313.775	201.806	515.581

For Prakash Industries Ltd.


 (A. K. Chaturvedi)
 Director (Corp. Affairs)

3.0 Deliverable:

The deliverables envisaged for the assignment are described below

- I. Location Map **PLATE NO. 1**
- II. Area marked on Toposheet 64 I/15 and 64 I/11 in scale 1:50,000 **PLATE NO. 2**
- III. DGPS Survey Boundary superimposed on the Forest Map in scale 1:15,000 **PLATE NO.3**
- IV. Merged imagery of LISS IV & Cartosat 1 and digitized compartment boundary of Forest Map in scale 1:5,000 **PLATE NO. 4**
- V. Merged imagery of LISS IV & Cartosat 1 covering an area of 5 km from lease boundary in scale 1:50,000 **PLATE NO. 5**
- VI. Report and all necessary/relevant data printing & delivery in hard copy & softcopy.

4.0 Steps for the DGPS survey:

4.1 Base Station Setting:

Co-ordinate of the permanent ground control point has been taken from the known point from the static mode of uninterrupted observation for a minimum duration of 72 hours and 3 nos. base stations have been established from this permanent ground control point for a minimum two hours observation.

4.2 Demarcation of boundary of ground:

Checked and assessed the present situation of the boundary points and cadastral boundary. Precise geo-coordinates of cadastral area have been taken for fixing the pillar, which were extracted from the UTM projected map. The points are precisely staked out on the ground in statics mode.

4.3 Digitization of compartment boundary:

Compartment boundaries are digitized within the Block boundary.

4.4 Geo referencing of Forest Map and mining lease boundary:

The forest map and the mining lease boundary are in the form of shape file has been prepared by using geo coordinates of the boundary points (WGS-84) and superimposed on the merged satellite imagery.

4.5 GIS related work:

The survey of mining lease boundary in the form of shape file by the DGPS, geo-referenced cadastral map and geo-referenced mining lease boundary are super imposed on the merged satellite imagery (LISS IV and CARTOSAT-I) using QGIS software by which calculation and statics of mining area is generated.

5.0 Input Data:

1. The forest map of the area (1:15,000) provided by the Lessee.
2. Digital data Cartosat I and LISS IV has acquired from National Remote Sensing Centre, Hyderabad.

DGPS equipment specifications:

South S86 GPS Receiver provides the following features:

- Dual frequency (L1 and L2) GPS signal tracking
- Static accuracy: 3mm + 1mm (hor.) 5mm + 2ppm (ver.)
- RTK accuracy: 1cm + 1ppm (hor.) 2cm + 1ppm (ver.)
- Up to 10 Hz position updates
- USB standard removable disk storage interface
- Samsung ARM9 200HMZ Processor
- 64M bytes data storage
- Two 4600mAh Li batteries
- Internal 2 watt UHF radio module
- GSM/GPRS/CDMA datalink module

5.1 Work carried out: - The survey started on 21Oct2021 and was completed on 28 Oct 2021. Total 87nos. of protected forest boundary points and compartment boundary have been marked as well as one permanent point and 3 Base points observed and taken, also prepared shape file of all.

5.2 Establishment of Base Station/Primary control point:

The boundary points of the mining area have been surveyed through DGPS (WGS/84), for this, a primary ground control point has been fixed with 72 hours observation (in a Rest house of the company at village Kusmusi) and 3 nos. of base points have been marked (2 hours observation).

DGPS SURVEY REPORT OF BHASKARPARA COAL MINE

The details of the Base stations are as under:

Station	Latitudes	Longitudes	Location	Observation Time
Permanent Boundary Point (PBM)	23° 20' 54.836" N	82° 48' 15.467" E	Rest shelter in village Kusmusi	72 hours observation
Base-1	23° 21' 10.580" N	82° 40' 40.831" E	Village Katkona P.O. main Gate	2 hours observation
Base-2	23° 22' 42.681" N	82° 46' 34.879" E	Village Khadpara road junction	2 hours observation
Base-3	23° 18' 26.362" N	82° 40' 9.845" E	Village Bardiya over bridge on Railway track	2 hours observation

5.3 Establishment of Boundary point:

Thereafter, on the basis of these points, the boundary points of the mining lease area have been surveyed for fifteen minutes observation, total 87 boundary points (63 nos. of protected forest boundary and 24 nos. of compartment boundary) have been marked.

6.0 Results:

The DGPS co-ordinates of the boundary points (as per WGS/84) are as under:

S.NO.	BP_NO.	EASTING	NORTHING	LATITUDE	LONGITUDE
1	CB 1	680567.2886	2586494.5347	23° 22' 41.593" N	82° 46' 0.184" E
2	CB 2	680451.2944	2586487.5752	23° 22' 41.413" N	82° 45' 56.096" E
3	CB 3	680352.8539	2586486.5429	23° 22' 41.419" N	82° 45' 52.630" E
4	CB 4	680254.1221	2586486.9344	23° 22' 41.471" N	82° 45' 49.154" E
5	CB 5	680155.4825	2586484.0925	23° 22' 41.417" N	82° 45' 45.679" E
6	CB 6	680056.2774	2586478.2948	23° 22' 41.268" N	82° 45' 42.184" E
7	CB 7	679957.4228	2586474.2361	23° 22' 41.176" N	82° 45' 38.701" E
8	CB 8	679860.8763	2586467.1400	23° 22' 40.983" N	82° 45' 35.299" E
9	CB 9	679760.4582	2586471.9509	23° 22' 41.179" N	82° 45' 31.765" E
10	CB 10	679661.1589	2586475.7064	23° 22' 41.341" N	82° 45' 28.270" E
11	CB 11	679563.1270	2586478.5092	23° 22' 41.471" N	82° 45' 24.820" E
12	CB 12	679466.4408	2586475.5538	23° 22' 41.413" N	82° 45' 21.414" E
13	CB 13	679367.8660	2586463.4690	23° 22' 41.059" N	82° 45' 17.938" E
14	CB 14	679270.5446	2586447.4174	23° 22' 40.576" N	82° 45' 14.504" E
15	CB 15	679170.5313	2586429.8494	23° 22' 40.044" N	82° 45' 10.975" E
16	CB 16	679008.8205	2586403.3400	23° 22' 39.246" N	82° 45' 5.270" E
17	CB 17	679011.9090	2586314.8779	23° 22' 36.370" N	82° 45' 5.341" E
18	CB 18	679012.9267	2586214.4292	23° 22' 33.104" N	82° 45' 5.334" E

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19	CB 19	679013.9307	2586116.3441	23° 22' 29.916" N	82° 45' 5.328" E
20	CB 20	679014.9484	2586016.2956	23° 22' 26.664" N	82° 45' 5.321" E
21	CB 21	679015.9629	2585916.7737	23° 22' 23.428" N	82° 45' 5.314" E
22	CB 22	679016.9835	2585816.5499	23° 22' 20.170" N	82° 45' 5.307" E
23	CB 23	679017.9871	2585717.9953	23° 22' 16.967" N	82° 45' 5.300" E
24	CB 24	679018.9878	2585619.7239	23° 22' 13.772" N	82° 45' 5.293" E
25	CB 25	679019.6768	2585519.7023	23° 22' 10.521" N	82° 45' 5.275" E
26	CB 26	679021.5116	2585421.1769	23° 22' 7.317" N	82° 45' 5.298" E
27	CB 27	679024.0940	2585320.2817	23° 22' 4.037" N	82° 45' 5.345" E
28	CB 28	679026.5678	2585222.9835	23° 22' 0.873" N	82° 45' 5.391" E
29	CB 29	679029.1156	2585122.7683	23° 21' 57.615" N	82° 45' 5.438" E
30	CB 30	679031.7007	2585024.6951	23° 21' 54.426" N	82° 45' 5.487" E
31	CB 31	679034.1790	2584923.6077	23° 21' 51.140" N	82° 45' 5.531" E
32	CB 32	679036.5558	2584830.1221	23° 21' 48.100" N	82° 45' 5.575" E
33	CB 33	679039.1151	2584729.1577	23° 21' 44.817" N	82° 45' 5.622" E
34	CB 34	679042.1036	2584600.1627	23° 21' 40.623" N	82° 45' 5.672" E
35	CB 35	679132.6386	2584605.4569	23° 21' 40.760" N	82° 45' 8.862" E
36	CB 36	679149.0798	2584637.1630	23° 21' 41.784" N	82° 45' 9.454" E
37	CB 37	679179.7259	2584637.8606	23° 21' 41.794" N	82° 45' 10.533" E
38	CB 38	679195.0602	2584592.7557	23° 21' 40.322" N	82° 45' 11.054" E
39	CB 39	679241.0514	2584592.2883	23° 21' 40.289" N	82° 45' 12.673" E
40	CB 40	679264.3473	2584664.8528	23° 21' 42.638" N	82° 45' 13.524" E
41	CB 41	679261.8257	2584785.6994	23° 21' 46.567" N	82° 45' 13.487" E
42	CB 42	679206.4381	2584809.8697	23° 21' 47.375" N	82° 45' 11.547" E
43	CB 43	679209.5205	2584880.3950	23° 21' 49.666" N	82° 45' 11.686" E
44	CB 44	679330.8534	2584880.7721	23° 21' 49.630" N	82° 45' 15.958" E
45	CB 45	679404.4802	2584886.0330	23° 21' 49.772" N	82° 45' 18.552" E
46	CB 46	679480.5097	2584897.3524	23° 21' 50.110" N	82° 45' 21.234" E
47	CB 47	679543.4596	2584875.9238	23° 21' 49.389" N	82° 45' 23.441" E
48	CB 48	679566.7030	2584922.8683	23° 21' 50.905" N	82° 45' 24.279" E
49	CB 49	679569.2694	2585024.4470	23° 21' 54.206" N	82° 45' 24.413" E
50	CB 50	679554.8323	2585192.5607	23° 21' 59.676" N	82° 45' 23.977" E
51	CB 51	679561.5297	2585346.7127	23° 22' 4.684" N	82° 45' 24.279" E
52	CB 52	679571.2099	2585524.0470	23° 22' 10.444" N	82° 45' 24.695" E
53	CB 53	679713.1883	2585630.9114	23° 22' 13.861" N	82° 45' 29.740" E
54	CB 54	679818.3491	2585805.8783	23° 22' 19.507" N	82° 45' 33.518" E
55	CB 55	680009.2012	2585870.8919	23° 22' 21.544" N	82° 45' 40.265" E
56	CB 56	680140.7567	2585838.5785	23° 22' 20.442" N	82° 45' 44.883" E
57	CB 57	680197.8593	2585957.3497	23° 22' 24.280" N	82° 45' 46.945" E
58	CB 58	680239.0292	2586044.3073	23° 22' 27.090" N	82° 45' 48.432" E
59	CB 59	680420.4046	2585967.5801	23° 22' 24.524" N	82° 45' 54.785" E
60	CB 60	680437.6775	2586112.5475	23° 22' 29.229" N	82° 45' 55.455" E
61	CB 61	680464.4246	2586224.9186	23° 22' 32.871" N	82° 45' 56.446" E
62	CB 62	680551.6806	2586234.7762	23° 22' 33.156" N	82° 45' 59.522" E
63	CB 63	680584.4757	2586363.5937	23° 22' 37.330" N	82° 46' 0.732" E

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64	A1	679050.0215	2585250.5343	23°22' 1.760" N	82°45' 6.228" E
65	A2	679083.9451	2585272.2232	23°22' 2.451" N	82°45' 7.432" E
66	A3	679115.6442	2585322.8305	23°22' 4.084" N	82°45' 8.570" E
67	A4	679109.5268	2585356.7541	23°22' 5.189" N	82°45' 8.369" E
68	A5	679087.8380	2585380.1114	23°22' 5.957" N	82°45' 7.615" E
69	A6	679068.6300	2585407.0100	23° 22' 6.838" N	82° 45' 6.950" E
70	A7	679097.3000	2585441.5200	23° 22' 7.949" N	82° 45' 7.975" E
71	A8	679094.6800	2585501.2100	23° 22' 9.890" N	82° 45' 7.908" E
72	A9	679117.3600	2585553.5500	23° 22' 11.582" N	82° 45' 8.729" E
73	A10	679180.5800	2585596.1600	23° 22' 12.942" N	82° 45' 10.973" E
74	A11	679249.1600	2585599.9100	23° 22' 13.037" N	82° 45' 13.389" E
75	A12	679299.8200	2585554.1300	23° 22' 11.529" N	82° 45' 15.153" E
76	A13	679319.3600	2585501.8900	23° 22' 9.823" N	82° 45' 15.819" E
77	A14	679346.7900	2585479.0100	23° 22' 9.069" N	82° 45' 16.775" E
78	A15	679379.0900	2585464.9100	23° 22' 8.598" N	82° 45' 17.906" E
79	A16	679433.4600	2585462.8500	23° 22' 8.509" N	82° 45' 19.819" E
80	A17	679463.0600	2585459.5600	23° 22' 8.391" N	82° 45' 20.860" E
81	A18	679514.4600	2585472.0600	23° 22' 8.777" N	82° 45' 22.675" E
82	A19	679568.7300	2585499.6800	23° 22' 9.653" N	82° 45' 24.598" E
83	B1	679025.5191	2585263.7549	23° 22' 2.199" N	82° 45' 5.371" E
84	B2	679024.7022	2585295.9368	23° 22' 3.245" N	82° 45' 5.356" E
85	B3	679024.0940	2585320.2817	23° 22' 4.037" N	82° 45' 5.345" E
86	B4	679023.3466	2585349.7710	23° 22' 4.996" N	82° 45' 5.332" E
87	B5	679022.2224	2585397.8615	23° 22' 6.559" N	82° 45' 5.313" E

The co-ordinates of Base stations are as under:

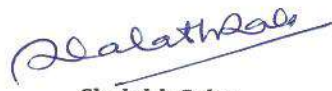
Station	Easting	Northing	Latitudes	Longitudes	Observation Time
PBM	684449.8980	2583258.0130	23° 20' 54.836" N	82° 48' 15.467" E	72 hours observation
Base-1	671531.4870	2583586.7340	23° 21' 10.580" N	82° 40' 40.831" E	2 hours observation
Base-2	681552.1120	2586540.0800	23° 22' 42.681" N	82° 46' 34.879" E	2 hours observation
Base-3	670709.7470	2578525.1630	23° 18' 26.362" N	82° 40' 9.845" E	2 hours observation


Prakash Industries Ltd


S.D.O. (Forest)
Obangi Sub Division C.G.


वन परिक्षेत्राधिकारी
बुलढ


Divisional Forest Officer
Surajpur Division
Surajpur (C.G.)


Shalabh Saha
(Authorized Signatory)
Geo Solutions (P) Ltd, Bhilai



ANNEXURES



छत्तीसगढ़ शासन
खनिज साधन विभाग
मंत्रालय
महानदी भवन, अटल नगर, रायपुर-492002
// अधिसूचना //

रायपुर, दिनांक सितम्बर, 2018

क्रमांक एफ 7-14/2013/12 :: इस विभाग की समसंख्यक अधिसूचना दिनांक 11.05.2015 द्वारा कुल 02 संस्थानों को 03 वर्ष की अवधि के लिये सशर्त अधिमान्यता प्रदान की गई है, जिसकी अवधि दिनांक 10.05.2018 को समाप्त हो गई है।

2/ राज्य शासन, एतद्वारा निम्नलिखित 02 संस्थानों की अधिमान्यता का नवीनीकरण, तालिका में उल्लेखित क्रमांक-01 द्वारा आवेदन प्रस्तुत करने में हुए विलम्ब की अवधि में छूट प्रदान करते हुए उनकी अधिमान्यता अवधि दिनांक 10.05.2018 से आगामी 03 वर्ष के लिये प्रदान की जाती है :-

क्र.	एजेंसी का नाम एवं पता
1	मेसर्स सौरभ सर्वेयिंग सर्विसेस, श्री रमेश मेश्राम, हाऊस नंबर 396/4, अंगुली मॉल के पास, बौद्ध विहार, नजूल लेआउट कॉलोनी, बेजानबाग, जरीपटका, नागपुर(महाराष्ट्र)-440014
2	मेसर्स जियो सॉल्यूशन(प्रा0) लिमिटेड, HIG-21, हुडको कालोनी, आमदीनगर भिलाई, जिला दुर्ग(छत्तीसगढ़)

3/ उपर्युक्त तालिका में उल्लेखित कंपनियों/एजेंसियों को राज्य में खनिज कोयला को छोड़कर शेष खनिजों की खनिज रियायत संबंधित डीजीपीएस सर्वे कार्य हेतु भारतीय खान ब्यूरो के परिपत्र क्रमांक 2/2010, दिनांक 06.04.2010 एवं पत्र दिनांक 21.09.2011 तथा भारत सरकार के राजपत्र दिनांक 08.10.2014 एवं खनिज(परमाणु और हाईड्रोकार्बन उर्जा खनिजों से भिन्न) रियायत नियम, 2016 के नियम, 12 के परिप्रेक्ष्य में निम्नलिखित शर्तों के अधीन प्रदान किया जाता है :-

1. Each corner of the lease area shall have a boundary pillar(corner pillar).
2. There shall be erected intermediate boundary pillars between the corner pillars in such a way that each pillar is visible from the adjacent pillar located on either side of it;
3. The distance between two adjacent pillars shall not be more than fifty meters;
4. The pillar shall be of square pyramid frustum shaped above the surface and cuboids shaped below the surface;
5. Each pillars shall be of reinforced cement concrete;
6. The corner pillar shall have a base of 0.3m X 0.3m and height of 1.30m of which 0.70m shall be above ground level and 0.60m below the ground;
7. The intermediate pillars shall have a base of 0.25m x 0.25m and height of 1.0m of which 0.70m shall be above ground level and 0.30 m below the ground;
8. All pillars shall be painted in yellow color and the top ten centimeters in red color by enamel paint and shall be grouted with cement concrete.
9. On all corner pillars, distance and being to the forward and backward pillars and latitude and longitude shall be marked;
10. Each pillar shall have serial number in a clockwise direction and the number shall be engraved on the pillars;

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(Signature)

(Signature)

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11. The number of pillars shall be the numbers of the individual pillar upon the total number of pillars in the lease;
 12. The tip of all the corner boundary pillars shall be a square of 15 centimeter on which a permanent circle of 10 centimeter diameter shall be drawn by paint or engraved and the actual boundary point shall be intersection of two diameters drawn at 90 degrees.
 13. The lease boundary survey shall be accurate within such limits of error as the Control General, Indian Bureau of Mines may specify in this behalf;
 14. The location and number of the pillars shall also be shown in the surface and other plans maintained by the lessee: and
 15. In case of forest area within the lease, the size and construction and color of the boundary pillars shall be as per the norms specified by the Forest Department in this behalf.
 16. The Survey Agency shall be responsible for the accuracy of the data collected during Survey.
 17. Coordinates of boundary pillars shall be established in the World Geodetic System 1984 (WGS-84) Datum.
 18. डीजीपीएस सर्वे कार्य हेतु पारिश्रमिक का निर्धारण अधिमान्यता प्राप्त संस्थान एवं खनिज रियायतधारी के मध्य आपसी समन्वय से किया जायेगा। किसी भी प्रकार का आपसी विवाद होने पर राज्य शासन उत्तरदायी नहीं होगा।
 19. डीजीपीएस सर्वे कार्य के गुणवत्ता में कमी पाये जाने पर या किसी भी प्रकार की कार्य संबंधी शिकायत पाये जाने पर जांच उपरांत राज्य शासन को यह अधिकार होगा कि उक्त अधिकृत एंजेसी की मान्यता किसी भी समय समाप्त की जा सकती है।
 20. डीजीपीएस सर्वे के संबंध में भारतीय खान ब्यूरो/राज्य शासन द्वारा समय-समय पर जारी निर्देशों का पालन अधिमान्यता प्राप्त संस्थान को करना होगा।
 21. राज्य शासन द्वारा जारी यह अधिमान्यता 03 वर्ष के लिए होगी। समयावधि समाप्ति से 03 माह पूर्व अधिकृत एंजेसी नवीनीकरण हेतु आवेदन कर सकेगा।
- 4/ यह अधिमान्यता दिनांक 10.05.2018 से 03 वर्ष के लिए ही मान्य होगी।

छत्तीसगढ़ के राज्यपाल के नाम से
तथा आदेशानुसार,

रामा १.

(इफफत आरा)

उप सचिव

छत्तीसगढ़ शासन

खनिज साधन विभाग

पृ0क्रमांक एफ 7-14/2013/12

रायपुर, दिनांक सितम्बर, 2018

प्रतिलिपि:-

1. सचिव, भारत सरकार, खान मंत्रालय, शास्त्री भवन, नई दिल्ली,
2. कंट्रोलर जनरल, भारतीय खान ब्यूरो, सेक्रेण्ड फ्लोर, ए-ब्लॉक, इन्दिरा भवन, सिविल लाईन्स, नागपुर(महाराष्ट्र)
3. उप खान नियंत्रक, क्षेत्रीय कार्यालय भारतीय खान ब्यूरो, दूसरी मंजिल, जी.एस.आई. फील्ड प्रशिक्षण केन्द्र, महालेखाकार आफिस काम्पलेक्स, पोस्ट विधानसभा, रायपुर
4. संचालक, भौमिकी तथा खनिकर्म, छत्तीसगढ़, द्वितीय तल, इन्द्रावती भवन, अटल नगर, रायपुर

04 SEP 2018

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5. समस्त कलेक्टर, जिला _____ छत्तीसगढ़

6. समस्त संबंधित _____

की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु अग्रेषित

7. संचालक, शासकीय क्षेत्रीय मुद्रणालय, खैरागढ़ रोड़, राजनांदगांव, जिला राजनांदगांव(छत्तीसगढ़) की ओर साधारण राजपत्र में प्रकाशनार्थ।

8. श्री श्रीकांत राव, सहायक भौमिकी विद्, संचालनालय भौमिकी तथा खनिकर्म, द्वितीय फ्लौर, इन्द्रावती भवन, अटल नगर, रायपुर। कृपया उक्त आदेश/अधिसूचना को संचालनालय की वेबसाईट में अपलोड करने का कष्ट करें।

9. गार्ड फाईल रजिस्टर


उप प्रमुख

छत्तीसगढ़ शासन
खनिज साधन विभाग

4



छत्तीसगढ़ शासन
खनिज साधन विभाग
मंत्रालय
महानदी भवन, नया रायपुर-492002
// अधिसूचना //

रायपुर, दिनांक मई, 2015

क्रमांक एफ 7-14/2013/12:: राज्य शासन एतद् द्वारा चीफ कन्ट्रोलर ऑफ माइन्स, भारतीय खान ब्यूरो नागपुर के परिपत्र क्रमांक 2/2010, दिनांक 06.4.2010 के पैरा-2 के बिन्दु-2 के तारतम्य में समस्त खनिजों के खनिज रियायतों के सीमा स्तम्भ का Differential Global Positioning System (डीजीपीएस) का उपयोग करते हुए सर्वेक्षण करने के लिए तालिका में दर्शित संस्थानों को अधिमान्यता प्रदान करता है:-

क्र.	एजेंसी का नाम एवं पता
1	मेसर्स सौरभ सर्वेयिंग सर्विसेस, श्री रमेश मेश्राम, हाऊस नंबर 396/4, अंगुली मॉल के पास, बौद्ध विहार, नजूर लेआउट कॉलोनी, बेजानबाग, जरीपटका, नागपुर(महाराष्ट्र)-440014
2	मेसर्स जियो सॉल्यूशन(प्रा0) लिमिटेड, HIG-21, हुडको कालोनी, आमदीनगर भिलाई, जिला दुर्ग(छत्तीसगढ़)

2/ अधिमान्यता प्राप्त संस्थानों के लिए शर्तें:-

- 2.1. The Survey Agency Shall Be responsible for the accuracy of the data collected and Survey.
- 2.2. Coordinates of boundry pillars shall be established in the World Geodetic System 1984 (WGS-84) Datum.
- 2.3. Each boundry pillar shall be surved using DGPS, at least 2 Hours observation for its ground position.
- 2.4. The maximum distance between any two successive pillars should not be more than 100 meter.
- 2.5. All corner pillar should be of pyramid shaped whith base of 1 meter and height of 2 meter and should be placed 1 mater above the ground and 1 meter below the ground.
- 2.6. Distance and bearing to the forward and backward pillars and latitudes and longitudes should be market on all the corner pillars.
- 2.7. डीजीपीएस सर्वे कार्य हेतु पारिश्रमिक का निर्धारण अधिमान्य प्राप्त संस्थान एवं खनिज रियायतधारी के मध्य आपसी समन्वय से किया जाएगा। किसी भी प्रकार का आपसी विवाद होने पर राज्य शासन उत्तरदायी नहीं होगा।
- 2.8. डीजीपीएस सर्वे कार्य के गुणवत्ता में कमी पाये जाने पर या किसी भी प्रकार की कार्य संबंधी शिकायत पाये जाने पर जांच उपरांत राज्य शासन को यह अधिकार होगा कि उक्त अधिकृत एजेंसी की मान्यता किसी भी समय समाप्त की जा सकती है।
- 2.9. डीजीपीएस सर्वे के संबंध में भारतीय खान ब्यूरो/राज्य शासन द्वारा समय-समय पर जारी निर्देशों का पालन अधिमान्यता प्राप्त संस्थान को करना होगा।

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- 2.10 राज्य शासन द्वारा जारी यह अधिमान्यता 03 वर्ष के लिए होगी। समयावधि समाप्ति से 03 माह पूर्व अधिकृत एंजेसी नवीनीकरण हेतु आवेदन कर सकेगा।
- 2.11 भारत सरकार एवं राज्य शासन द्वारा डीजीपीएस सर्वे के संबंध में समय-समय पर जारी निर्देशों का पालन किया जाना होगा।
- 3/ यह अधिमान्यता अधिसूचना जारी होने की तिथि से 03 वर्ष के लिए ही मान्य होगी।

छत्तीसगढ़ के राज्यपाल के नाम से
तथा आदेशानुसार,

उद्देश्य :-

(सुबोध कुमार सिंह)

सचिव

छत्तीसगढ़ शासन

खनिज साधन विभाग

पृ. क्रमांक एफ 7-14 / 2013 / 12

रायपुर, दिनांक

मई, 2015

प्रतिलिपि:-

1. सचिव, भारत सरकार, खान मंत्रालय, शास्त्री भवन, नई दिल्ली, 11 MAY 2015
2. कंट्रोलर जनरल, भारतीय खान ब्यूरो, सेकण्ड फ्लोर, ए-ब्लॉक, इन्दिरा भवन, सिविल लाईन, नागपुर (महाराष्ट्र)
3. चीफ कंट्रोलर ऑफ माईन्स, भारतीय खान ब्यूरो, सेकण्ड फ्लोर, ए-ब्लॉक, इन्दिरा भवन, सिविल लाईन, नागपुर (महाराष्ट्र)
4. क्षेत्रीय खान नियंत्रक, भारतीय खान ब्यूरो, छटवां तल, बी एवं सी -ब्लॉक, इन्दिरा भवन, सिविल लाईन, नागपुर (महाराष्ट्र)
5. संचालक, भौमिकी तथा खनिकर्म, छत्तीसगढ़ ब्लॉक-4, द्वितीय तल, इन्द्रावती भवन, नया रायपुर,
6. समस्त कलेक्टर, जिला ----- छत्तीसगढ़
7. मेसर्स सौरभ सर्वेयिंग सर्विसेस, श्री रमेश मेश्राम, हाऊस नंबर 396/4, अंगुली मॉल के पास, बौद्ध विहार, नजूर लेआउट कॉलोनी, बेजानबाग, जरीपटका, नागपुर(महाराष्ट्र)-440014 की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु
8. मेसर्स जियो सॉल्युशन(प्रा0) लिमिटेड, HIG-21, हुडको कालोनी, आमदीनगर भिलाई, जिला दुर्ग(छत्तीसगढ़) की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु
9. संचालक, शासकीय मुद्रणालय, गोन्दवारा, भनपुरी, रायपुर(छत्तीसगढ़) की ओर राजपत्र में प्रकाशनार्थ।
10. श्री श्रीकांत राव, सहायक भौमिकी विद, संचालनालय भौमिकी तथा खनिकर्म, द्वितीय फ्लोर, इन्द्रावती भवन, नया रायपुर। कृपया उक्त आदेश/अधिसूचना को संचालनालय की वेबसाइट में अपलोड करने का कष्ट करें।
11. गार्ड फाईल रजिस्टर

सचिव

छत्तीसगढ़ शासन
खनिज साधन विभाग



Geo Solutions Pvt Ltd.

T: 0788-2242913

services@geosolutions.co.in
mining@geosolutions.co.in
environment@geosolutions.co.in

HIG-21, Hudco Colony, Amdi Nagar
Bhilai 490009, Durg, Chhattisgarh

Geo/DGM/Nava Raipur/2021-22/2

Date: 10.04.2021

To,
The Director,
Directorate of Geology and Mining (DGM),
2nd Floor, 4th Block,
Indravati Bhavan,
Naya Raipur, Atal Nagar (Chhattisgarh)
PIN - 492101

Subject: For renewal of Empanelment regarding DGPS survey as per 2/2010 circular.

Dear Sir,

This is in respect of above subject that, M/s Geo Solutions (P) Ltd. Bhilai is empanelled by DGM Raipur vide Order no. F 7-14/2013/12 Date – 11.05.2015, further renewed for three years (from 10.05.2018 onwards) vide notification Dated 04.09.2018 for compliance of DGPS survey as per 2/2010 circular of IBM.

Kindly request you for renewal of our Empanelment.

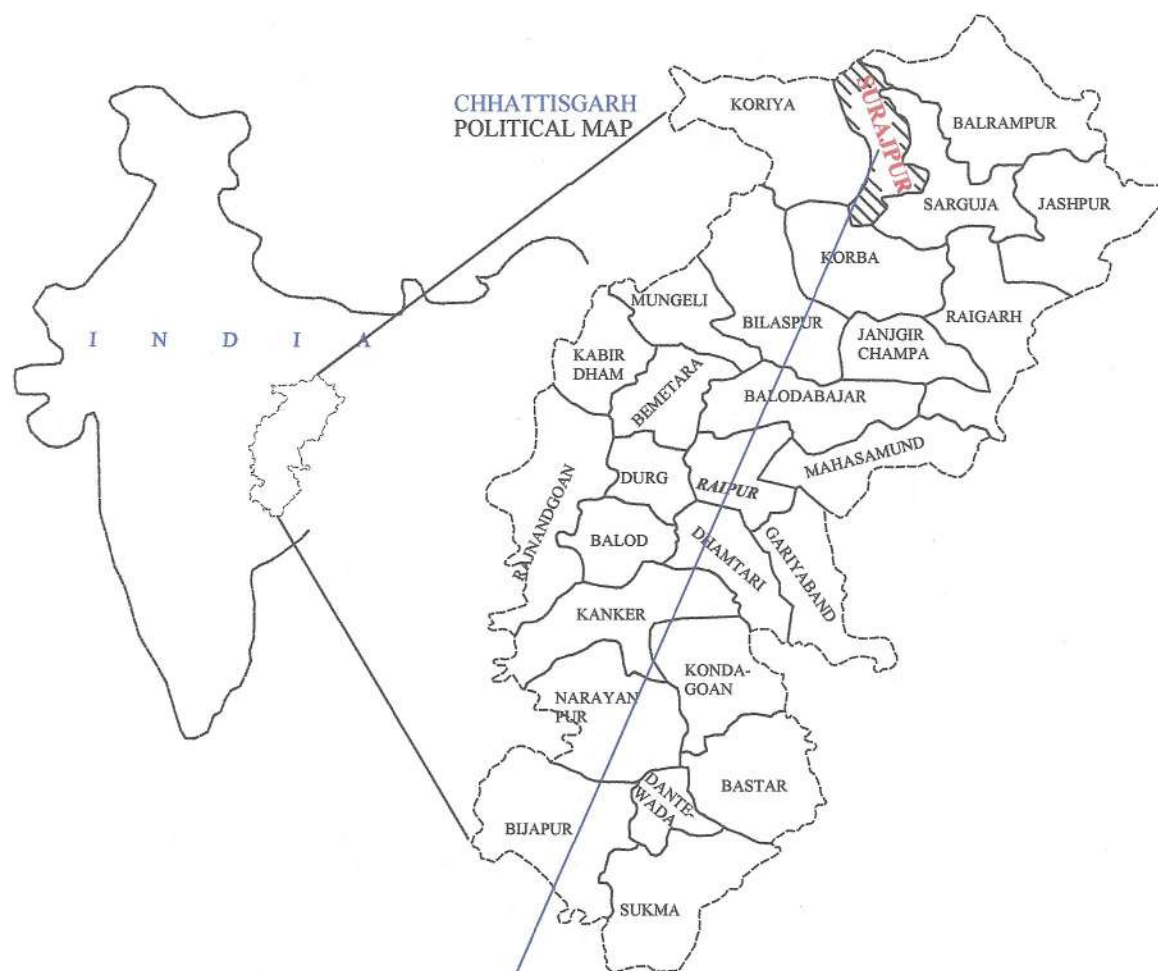
Thanking you,

Yours faithfully,

Shalabh Saha
Director
Geo Solutions (P) Ltd.

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PLATES



INDEX	
	VILLAGE
	CITY / TOWN
	ROAD
	NATIONAL HIGHWAY
	RAILWAY LINE
	RAILWAY STATION
	STATE HIGHWAY
	BHASKARPARA COAL MINE
	DISTRICT H.Q.

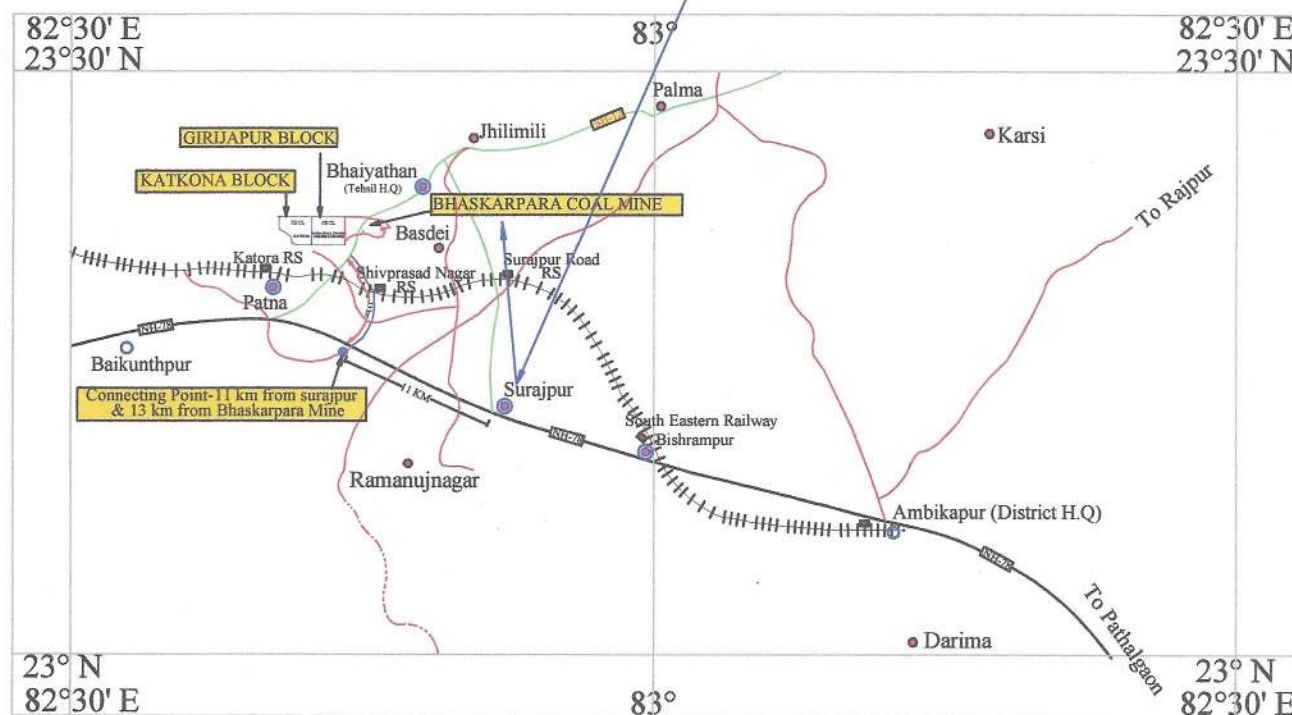


PLATE NO. - I A

BHASKARPARA COAL MINE

JHILIMILI COALFIELD

AREA - 932.00 Ha.

VILLAGES - BADSARA, TEHSIL- BHAIYATHAN

DISTRICT-SURAJPUR

NOT TO SCALE

LOCATION MAP

PREPARED FOR -



PRAKASH INDUSTRIES LIMITED

Srivan, Najafgarh-Bijwasan Road,
Bijwasan, New Delhi -110061

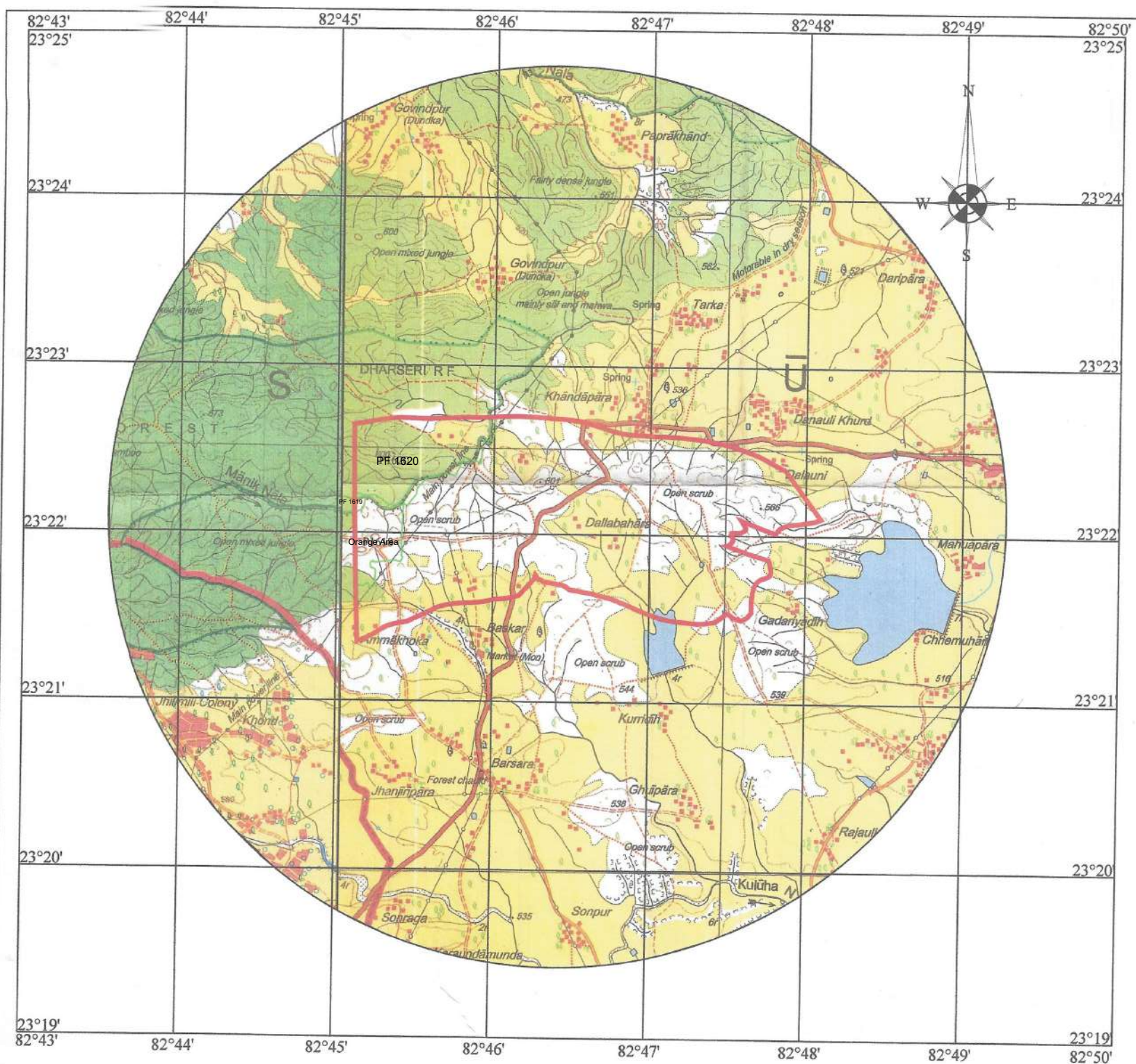
PREPARED BY -

Shalabh Saha

Shalabh Saha
(Qualified Person)

Geo Solutions (P) Ltd.

HIG-21, HUDCO COLONY, AMDI NAGAR, BHILAI,
DISTRICT - DURG (C.G.)



INDEX

CONVENTIONAL SYMBOLS

Express highway: with toll; with bridge; with distance stone	
Roads, metalled; according to importance	
Roads, double cartlageway; according to importance	
Unmetalled road. Cart-track. Pack-track with pass. Foot-path	
Streams: with track in bed; undefined. Canal	
Dams: masonry or rock-filled; earthwork. Weir	
River: dry with water channel; with island & rocks. Tidal river	
Submerged rocks. Shoal. Swamp. Reeds	
Wells: lined; unlined. Tube-well. Spring. Tanks: perennial; dry	
Embankments: road or rail; tank. Broken ground	
Railways, broad gauge: double; single with station; under constm.	
Railways, other gauges: double; single with distance stone; do.	
Mineral line or tramway. Klin. Cutting with tunnel	
Contours with sub-features. Rocky slopes. Cliffs	
Sand features: (1) flat, (2) sand-hills (permanent), (3) dunes (shifting)	
Towns or Villages: inhabited; deserted. Fort	
Huts: permanent; temporary. Tower. Antiquities	
Temple. Chhatra. Church. Mosque. Idgah. Tomb. Graves	
Lighthouse. Lightship. Buoys: lighted; unlighted. Anchorage	
Mine. Vine on trellis. Grass. Scrub	
Palms: palmyra; other. Plantain. Conifer. Bamboo. Other trees	
Areas: cultivated; wooded. Surveyed tree	
Boundary, International	
state; demarcated; undemarcated	
district; subdivision; tahsil or taluk; forest	
Boundary pillars: surveyed; unlocated	
Heights, triangulated: station; point; approximate	
Bench-mark: geodetic; tertiary; canal	
Post office. Telegraph office. Overhead tank	
Rest house or inspection bungalow. Circuit house. Police station	
Camping ground. Forest: reserved; protected	
Specied names: administrative; locally or tribal	
Hospital. Dispensary. Veterinary. Hospital / Dispensary	
Aerodrome. Helipad. Tourist site	
Power line: with pylons surveyed; with poles unsurveyed	

INDEX

	MINE LEASE BOUNDARY
	PROTECTED FOREST
	GRID LINE INTERVAL 1 MNT.
	5KM RADIUS BOUNDARY

Note :-

- Location of Bhaskarpara Coal Mine -
Latitude - 23° 20' 50" N To 23° 22' 30" N
Longitude - 82° 45' 00" E To 82° 48' 50" E

SCALE 1: 50,000

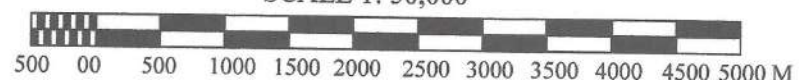


PLATE NO. - II

BHASKARPARA COAL MINE	
JHILIMILI COALFIELD	
AREA - 932.00 Ha.	
VILLAGES - BADSARA, TEHSIL- BHAIYATHAN	
DISTRICT-SURAJPUR	
SCALE :- 1:50,000	
MINING LEASE BOUNDARY MARKED ON TOPOSHEET	
PREPARED FOR -	PREPARED BY -
 PRAKASH INDUSTRIES LIMITED Srivan, Najafgarh-Bijwasan Road, Bijwasan, New Delhi -110061	 Shalabh Saha (Qualified Person) Geo Solutions (P) Ltd. HIG-21, HUDCO COLONY, AMDI NAGAR, BHILAI, DISTRICT - DURG (C.G.)

