

Introduction

Development of human civilization is very well marked since the "Stone Age". The early men's first and most important discovery was the use of stone. Durability, strength, hardness and beauty of stone lead to its multiferous use. The stone age man's weapons, utensils and living places were all made out of the stones. The beauty and durability of stones have always fascinated the human society. Every society and country is proud of their ancient stone monuments as they preserved their culture, history and rich heritage. Many monuments, temples, mosques, churches made up by stones all over the world are of great attraction. Wonders of the world like Pyramids of Egypt, the great wall of China, the Tajmahal of Agra, the leaning tower of Pisa, etc. were all created using stones with artistic technology.

It shows, stone has been used throughout the historic time as a major construction material because of its great strength, extraordinary durability, architectural adaptability and aesthetic satisfaction. No other type of material posses all these qualities.

The construction stone industry comprises two major branches:-

1. Crushed and broken stone:- This category includes crushed stone and stone fragments of various sizes. The size range may be finely comminuted material to large blocks. It generally includes quarry blocks of irregular size and shape used for rough construction. It varies according to local availability.
2. Dimension stone:- Dimension stone is a term applied to natural rock material quarried for the purpose of obtaining blocks or slabs that meet specification of size and shape. It may be used with or without polish.

Dimension stone can also be defined as any rock that has been removed from its natural place of origin for ultimate use in construction or monuments where three dimensions of size together with shape and other elements of appearance, such as colour, grain texture and pattern and surface finish, are normal requirements. Durability and strength are other important criteria.

Rock which can be used as Dimension stone

Although a variety of igneous, metamorphic and sedimentary rocks are used as dimension stone, the principal rock types are granite and related rocks, dolerite, limestone, marble, sandstone, slate, etc. Commercially, dimension stone have been classified in seven major varieties.

1. Granite (include all rocks of granitoid texture and gneisses)
2. Limestone (includes dolomite)
3. Marble
4. Sandstone and quartzites
5. Slate/Shale
6. Green stone (Greenish stone composed largely of Chlorite, epidote or actinolite)
7. Basalt and other volcanic rocks

In commercial purposes, the term granite is applied to various decorative dimension stones with wide range of mineralogical composition. The rocks which are generally used are granite, dolerite, gabbro, anorthosite, rhyolite, syenite, leptynite, charnockites, etc. Depending upon the colour and shade the granites are usually referred as black and multicoloured. Black category includes dolerite, gabbro, quartz diorite, diorite, pyroxenite and peridotite rocks while multicoloured category includes mostly quartzofelspathic rocks, sometimes with two feldspars, varying in texture and structure from granulose to gneissose.

Criteria for the selection of Dimension stone

Selection of any dimension stone for any specific purpose mainly depends upon the understanding between the purchaser and producer i.e. buyers choice and consumers fancy. They can have their own specifications for dimension stones depending mainly on the following properties:-

1. Uniformity of grain size
2. Colour
3. Colour base
4. Structure
5. Hair cracks
6. White lines
7. Flowers
8. Moles
9. Size of blocks
10. Shape of blocks

The criteria given above are specially important, when the stone is used in cut and polished form for the purpose of decoration.

Strength and Durability are other important criteria which also effect selection of dimension stone to be used for any specific purpose.

For example granites have been classified on the basis of its strength and resistance:-

Grade	Compressive strength Kg/ sq cm (minimum)	Abrasion value % (maximum)
A	2200	32
B	1800	36
C	1400	40
D	1000	45

Accordingly grades have been recommended for various usage:-

- * Bridges, piers, river walls, dams and related structures A grade
- * Traffic controls, curbs, landscaping, parks C grade
- * Pavements B grade
- * Monumental buildings (cutting polishing properties are additional requirements) A grade
- * Commercial buildings C grade
- * Residential building D grade

What should be preferred

Here are some points which should be preferred while selecting any stone to be used as dimension stone, in the form of cut and polish stone:-

- * Fine grained stones with uniform grain size are usually preferred. Fine grained good black granite stone can be cut to the thickness of post-card and letter can be engraved on it.
- * In dark coloured stone uniformity of colour is generally preferred. In lighter shade variegated stones are also used.
- * Stone without flow structures are generally preferred.
- * Stone without hair cracks should be preferred.
- * White lines, which may be due to thin silica or calcite veinlets or due to alteration of existing minerals, can deteriorate the stone. Blocks without white lines should be preferred.
- * Block without flowers (patches of lighter minerals in dark coloured rocks) and moles (patches of dark colour in light coloured rocks) are preferred.
- * Dressed rectangular blocks are preferred.

What should be avoided

There are some properties which should be avoided while selecting dimension stone to be used as cut and polish stones, as they deteriorate the strength and beauty of the stone.

- * Uneven grain size is usually avoided.
- * Flow structures should be avoided as they are indicative of thin bands of different minerals of different hardness and they do not take good polish.
- * Stones with hair cracks are generally avoided as it decreases the value. These cracks may extend into the stone and while dressing the stone may chip out or the block may split.
- * Stone with white lines has should be avoided as they do not take good polish and chips may come off while dressing
- * Stone with flowers and moles are undesirable.
- * Any protrusion and depressions on the dressed faces of the blocks are generally avoided.
- * Concentration of platy and micaceous minerals are generally avoided as they are deleterious materials.
- * Close spaced joints, sheer fractures, veins of all dimensions, pinch and swell structure, vesicles and amygdles are strictly avoided.

Geological Distribution of Dimension Stone

In Chhattisgarh various type of dimension stones are widespread through out the geological column starting from the Archaean basement to the Deccan Traps. The Archaeans which are the oldest rocks of the earth crust, occur at the base of sedimentary rocks, present a treasure of dimension stones. Most of the granites and related rocks occurring in the state are of Archaean Age. Litho-units belonging to Peninsular gneisses, older granites and migmatites, Bengpal Group, Amgaon Group, Sonakhan Group etc. yield good quality dimension stone in various parts of the state. Dongargarh Granite of lowermost Proterozoic period also yields good quality dimensions stones at places. Basic intrusives of different ages in these rocks are also good as dimension stone.

Middle to Upper Proterozoic Sedimentary succession of Chhattisgarh Supergroup and Indravati Group are store house of limestone, sandstone and quartzite in Raipur, Bilaspur and Bastar divisions. Good quality flagstone is available in these formations at many places.

It is clear from the above description that almost all the Geological formations occurring within the state yield dimension stone of different magnitude.

Geographic distribution of Dimension stones in Chhattisgarh

Varieties of dimension stones are widely distributed in different parts of Chhattisgarh. Particularly in Bilaspur, Bastar, Raigarh, Rajnandgaon, Raipur, Surguja, Dantewada, Mahasamund and Kanker districts.

Bastar, Kanker, Dantewada, Mahasamund, Surguja, Raigarh, Rajnandgaon are particularly rich in granite and associated rocks while a large track along Mahanadi in Raipur and Janjgir-Champa districts are important for good quality flagstone (limestone). Although the state is not prosperous for good quality marbles, but few localities in Bastar & Dantewara districts can yield marble also. Sandstone/Quartzite suitable for cutting polishing are also reported from Bastar as well as Mahasamund district.

Districtwise, localitywise details of dimension stone occurring in the state are enumerated in following pages:-

Dimension Stones in Districts-Raipur, Mahasamund, Balodabazar, Gariyaband and Dhamtari

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
1.	Laxmipur village Tahsil- Mahasamund Distt.- Raipur Toposheet No. 64K/11 21° 17' - 21° 18' N 82° 32' - 82° 33' E	Domail hill with bouldary and Massive nature	Grey Granite	Medium to fine grained, Equigranular hard compact with uniformity of grains.	1,80,00000 cu.m.	1x1x1 m.
2.	Laxmipur village 21° 18' N 82° 32' E	Domail hill with bouldary and Massive nature	Grey and pinkish grey Granite Gneiss	Fine to coarse grained	2,40,00000 cu.m.	1x1x1 m.
3.	Rampur village 21° 18' - 21° 19' N 82° 32' - 82° 33' E	Mound shape with bouldary and massive nature	Grey Granite	Medium to fine grained equigranular hard and compact with uniformity of grains.	9,00000 cu.m.	1x1x1 m.
4.	Rampur village 21° 18' N 82° 31' - 82° 32' E	Mound shape with massive nature	Pinkish Grey Granite	Medium to Coarse grained, equigranular, hard, compact.	180000 cu.m.	1x1x1 m.
5.	Gopalpur village 21° 16' - 21° 17' N 82° 31' - 82° 32' E	Mound shape Bouldary	Black Granite	Medium to coarse grained, equigranular, hard, compact.	-	-
6.	Raja Sewaiya village 21° 16' N 82° 32' - 82° 33' E	Mound shape Massive	Pinkish Grey and Grey Granite	Medium to coarse grained, hard, compact.	-	-
7.	Chhuria-Dongar village 21° 16' N 82° 33' E	Mound Shape Massive	Pinkish Grey Granite	Medium to fine grained, hard, compact, equigranular	-	-
8.	Dongripali village 21° 15' - 21° 16' N 82° 33' - 82° 34' E	Linear ridge Bouldary and Massive	Pinkish Grey and Grey Granite	Medium to fine grained, equigranular with uniform grain size	-	-
9.	Kailshpur village 21° 16' - 21° 17' N 82° 33' - 82° 34' E	Domal hill Bouldary and Massive	Grey Granite	Medium to fine grained, hard, compact, equigranular with uniformity of grains	-	-
10.	Chhuria- Donger 21° 17' N 82° 32' - 82° 33' E	Domal hill Bouldary and Massive	Grey Granite	Medium to fine grained, hard, compact, equigranular	-	-

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
11	Chhuria - Dongar 21° 16' - 21° 17' N 82° 32' - 82° 33' E	Domal hill Bouldary and Massive	Pinkish Grey Granite	Medium to fine grained, hard, compact, equigranular	-	-
12.	Patandadar village 21° 19' N 82° 35' E	Mound Shape Bouldary	Greyish Black Granite	Medium to fine grained, hard, compact, equigranular with uniform grain size	-	-
13.	Memra village 21° 17' - 21° 18' N 82° 35' - 82° 36' E	Mound shape Massive	Grey, Greyish white, whitish grey Granite	Medium to fine grained, hard, compact, equigranular with uniform grain size	-	-
14.	Tilanjapur village 21° 18' N 82° 43' - 82° 44' E	Mound shape Bouldary and Massive	Grey and Greyish Black	Medium to fine grained, hard, compact, equigranular with uniform grain size	-	-
15	Thabhakhar village 21° 17' - 21° 18' N 82° 43' - 82° 44' E	Linear patch	Greenish Grey Granite	Medium to coarse grained	-	-
16.	Gopalpur Para No. 9 21° 17' N 82° 34' E	Dolerite Dyke	Black Dolerite	Medium to fine grained	-	-
17	Lahrakot village 21° 37' - 21° 38' N 82° 17' - 82° 18' E	Dolerite Dyke	Black Dolerite	Medium to fine grained	-	-
18	Ghatkachhar village Tahsil- Saraipali Distt- Raipur Toposheet No. 64 O/3 21° 18' - 21° 19' N 83° 13' - 83° 14' E	Dolerite Dyke	Black Dolerite	Medium to fine grained	-	-
19	Bandalimal village Tahsil- Saraipali Distt. Raipur Toposheet No. 64 O/7 21° 22' - 21° 22' N 83° 14' E	Dolerite Dyke	Black Dolerite	medium to fine grained	-	-
20	Koriya village Tahsil- Mahasamund Distt. Raipur Toposheet No. 64 K/12 21° 14' - 21° 15' N 82° 34' - 82° 35' E	Domal hill Bouldary and Massive	Greyish, Greyish pink Granite	Medium to fine grained, hard, compact, equigranular	1,60,00000 cu.m.	1x1x1 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
21	Murakhar village 21° 14' - 21° 15' N 82° 33' - 82° 34' E	Domal hill Bouldary and Massive	Greyish, Greyish pink, pink Granite	Medium to fine grained, hard, compact, equigranular	3,20,00000 cu.m.	2x2x2 m.
22	Boraridadar village 21° 1' N 82° 32' - 82° 33' E	Mound shape Massive	Pinkish Grey and Grey ish Granite	Medium to fine grained, hard, compact, equigranular	9,37,500 cu.m.	2x2x2 m.
23	SE of Mungaser village 21° 2' - 21° 3' N 82° 32' - 82° 33' E	Sheet rock Massive	Pinkish granite gneiss	Medium grained, Inequigranular	25000cu.m.	0.5x0.5x0.5 m.
24	East of Muragaon village along south of Tendukona- Bundeli road 21° 6' - 21° 7' N 82° 31' - 82° 32' E	Mound shape Massive	Greysh and Pinkish granite	Mediium grained, Inequigranular Porphyritic.	15000 cu.m.	-
25	West of Muragaon village across the Bundeli- Tendukona road 21° 6' - 21° 8' N 82° 30' - 82° 31' E	Mound shape Bouldary	Porphyritic grey granite	Medium grained, hard, compact, Inequigranular	200000 cu.m.	1x1x2 m.
26	WWS of gahnaghata village 21° 6' - 21° 7' N 82° 30' - 82° 31' E	Sheet rock Massive	Greyish granite	Medium to fine grained, hard, compact, equigranular	10,000 cu.m.	1x1x1 m.
27	North of Chikli village 21° 14' - 21° 15' N 82° 37' - 82° 38' E	Dolerite	Greyish Black Dolerite	Medium to fine grained, hard, compact, equigranular	40,000 cu.m.	0.5x0.5x0.5 m.
28	NE of Jhungabari village 21° 13' - 21° 15' N 82° 35' - 82° 36' E	Dolerite	Greyish Black Dolerite	Medium to fine grained, hard, compact, equigranular	20,000 cu.m.	0.5x0.5x0.5 mts
29	West of Bhirwadipa Near Pilwapali- Jhungabari road 21° 14' - 21° 15' N 82° 35' - 82° 36' E	Dolerite	Greyish Black Dolerite	Medium to fine grained, hard, compact, equigranular	72000 cu.m.	0.5x0.5x0.5 m.
30	South of Mohda village across Bundeli Janghora road 21° 8' - 21° 9' N 82° 32' - 82° 33' E	Dolerite	Greyish Black Dolerite	Medium to fine grained	15000 cu.m.	0.5x0.5x0.5 m.
31	SSE of Amodih village along Amodih-Girha road 21° 11' - 21° 12' N 82° 37' E	Dolerite	Greyish Black Dolerite	Medium to fine grained	3750 cu.m.	0.5x0.5x0.5 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
32	NNW of Jhungabari village along the west of the Jhungabari-Pilwapali road 21° 13' - 21° 14' N 82° 35' - 82° 36' E	Sheet rock Massive	Greyish and Grey Granite	Medium grained Inequigranular Granite Gneiss	72000 cu. mts	0.5x0.5x0.5 m.
33	NNE of Barhaipali 21° 8' N 82° 30' - 82° 31' E	Mound shape, Bouldary and Massive	Pinkish and Grey Granite	Medium to coarse, porphyritic, Inequigranular	22,500 cu.m.	2x2x2 m.
34	NNE of Barhaipali village 21° 8' - 21° 9' N 82° 30' - 82° 31' E	Mound shape, Bouldary Massive	Whitish and Grey granite	Medium to coarse, porphyritic, Inequigranular	1,87,500 cu.m.	0.5x0.5x0.5 m.
35	South of Domarpalii village 21° 12' - 21° 13' N 82° 37' - 82° 38' E	Mound shape Bouldary	Grey and pinkish Grey Granite	Medium grained, hard, compact, equigranular	8000 cu.m.	1x1x1 m.
36	NNE of Tongapahar 21° 13' - 21° 14' N 82° 37' - 82° 38' E	Sheet rock Massive	Pinkish and Grey Granite	Medium to coarse porphyritic, hard, compact, equigranular	1,25,000 cu. mts	1x1x1 m.
37	Bhurkoni 21° 6' 40" N 82° 33' E	Domal shape Bouldary and Massive	Greyish Pink Granite	Medium grained, hard, compact, equigranular	3,60,0000 cu.m.	2x2x2 m.
38	Mandalpat village 21° 6' 20" N 82° 33' E	Domal shape Bouldary and Massive	Pure Grey, Greyish pink, Pinkish Grey Granite	Medium to fine grained, compact, hard, equigranular	1,20,00000 cu.m.	2x1x1 m.
39	Sohagpur village 21° 4' - 21° 5' N 82° 33' - 82° 34' E	Mound shape Massive	Grey Granite	Medium to fine grained, compact, hard, equigranular	3750 cu.m.	1x1x1 m.
40	SE of Ganjar village adjacent to Muchaka Nadi 21° 2' - 21° 3' N 82° 31' - 82° 32' E	Mound shape, Bouldary and Massive	Pinkish Granite	Medium to fine grained	225000 cu.m.	1x1x1 m.
41	Tupkabora village 21° 3' - 21° 4' N 82° 30' - 82° 31' E	Sheet rock Massive	Grey Granite	Medium to coarse grained	30000 cu.m.	3x1x1 m.
42	Chhuhia village 21° 4' - 21° 5' N 82° 31' E	Sheet rock Massive	Pinkish Grey Granite	Medium to coarse grained	4800 cu.m.	2x2x2 m.
43	Chaukbera village 21° 6' N 82° 32' - 82° 33' E	Mound shape Bouldary	Pinkish Grey Granite	Medium to fine grained, hard, compact, equigranular	12000 cu.m.	2x2x2 m.
44	Charbhata village 21° 2' N 82° 34' - 82° 35' E	Mound shape Bouldary	Grey and Pink Granite	Medium to fine grained, hard, compact, equigranular	150 cu.m.	1x1x1 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
45	Birajpali-Jhankarpali 21° 7' N 82° 34' - 82° 35' E	Sheet rock Massive	Greyish Pink Granite	Medium Grained Granites	7500 cu.m.	1x1x1 m.
46	Tikrapara village adjacent to Muchka Nadi 21° 9' - 21° 10' N 82° 36' - 82° 37' E	Mound shape, Bouldary and Massive	Pink Granite	Medium to fine grained, hard, compact, equigranular	100,000 cu.m.	2x2x2 m.
47	Liherer village 21° 7' N 82° 38' E	Sheet rock Massive	Pink and Pinkish Grey Granite	Medium to fine grained	-	2x2x2 m.
48	Boirlami village 21° 7' N 82° 38' E	Sheet rock massive	Pink Granite	Medium to fine Grained	8000 cu.m.	1x1x1 m.
49	Dongripali village in the dry portion of the pond 21° 2' - 21° 3' N 82° 36' - 82° 37' E	Linear Bouldary, Granodiorite	Greenish Black Granodiorite	Coarse grained, hard, compact	20000 cu.m.	1x1x1 m.
50	South of Baluchua Toposheet No. 64 K/8 21° 1' N 82° 00' E	Sheet rock, Boulders and massive	Grey granite	Medium grained, hard, compact, equigranular	1000 cu.m.	2x2x2 m.
51	NW of Nawadih about 200 m. in the north from the milestone 90 on Baghbahera- Khariyar road 21° 1' N 82° 27' - 82° 28'	Mound shape, Bouldary and Massive	Grey Granite	Medium grained, equigranular, hard, compact.	200000 cu.m.	2x2x2 and 3x3x3 m.
52	SW of Basuladabri 21° 1' N 82° 28' - 82° 29' E	Sheet rock, Massive	Greyish Pink Granite	Medium to fine grained, equigranular, hard, compact	25 cu.m.	1x1x1 m.
53	South of Basuladabri 21° 1' - 21° 2' 82° 28' - 82° 29' E	Sheet rock, Massive	Grey Granite Gneiss	Medium grained, Hard, Compact	200 cu.m.	2x2x2 m.
54	NNE of Basuladabri 21° 1' - 21° 2' N 82° 28' - 82° 29' E	Sheet rock, Massive	Grey Granite Gneiss	Medium grained, hard, compact, equigranular	150 cu.m.	1x1x1 m.
55	Samhar about 300- 400 m. north of Samhar 21° 5' N 82° 28' E	Sheet rock, Massive	Grey Granite	Medium grained, hard, compact, equigranular	25 cu.m.	1x1x1 m.
56	SE of Muragaon 21° 3' - 21° 4' N 82° 29' E	Sheet rock, Bouldary and Massive	Grey Granite Gneiss	Medium to Fine grained, hard, compact, equigranular	2500 cu.m.	1x1x1 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
57	North of Muragaon 21° 4' N 82° 29' E	Bouldary	Greyish Black	Medium to fine grained	25 cu.m.	0.5x0.5x0.5 m.
58	NW of Muragaon near Nala	Sheet rock, Bouldary and Massive	Pinkish Grey Granite	Coarse grained, equigranular, hard and Compact	1200 cu.m.	1x1x1 and 2x2x2 m.
59	Middle of village Ghoghara 21° 9' - 21° 10' N 82° 26' - 82° 27' E	Domal hill, Bouldary and Massive	Pinkish Grey Granite	Medium to fine grained, hard, compact, equigranular	50000 cu.m.	1x1x1 and 2x2x2 m.
60	South of Ghoghare 21° 8' - 21° 9' N 82° 26' - 82° 27' E	Sheet rock, Bouldary and Massive	Pinkish Grey Granite	Medium to fine grained equigranular hard, compact	2400 cu.m.	1x1x1 and 2x2x2 m.
61	Hanumandih 21° 9' - 21° 10' N 82° 26' - 82° 77' E	Sheet rock, bouldary and Massive	Greyish Pink Granite	Medium to fine grained, hard, compact, equigranular	750 cu.m.	1x1x1 m.
62	Belar village 1/2 km. in the west of Belar after Nala 21° 11' N 82° 28' - 82° 29' E	Sheet rock, Bouldary and Massive	Grey Granite	Coarse grained, equigranular, hard, compact	5000 cu.m.	1x1x1 m.
63	North of Phulwari-Kalan 21° 1' N 82° 25' - 82° 26' E	Mound shape, Bouldary and Massive	Pinkish Grey Granite	Porphyritic coarse grained, hard, compact	128000 cu.m.	1x1x1 and 2x2x2 m.
64	NE of Phulwari-Kalan 21° 1' N 82° 26' E	Mound shape, Bouldary and Massive	Pinkish Grey Granite	Porphyritic, coarse grained, hard, compact	200 cu.m.	1x1x1 m.
65	North of Kalmijhar adjacent to Kalmijhar reservoir 21° 7' - 21° 8' N 82° 26' - 82° 27' E	Sheet rock, Bouldary and Massive	Pinkish Grey Granite	Coarse grained, equigranular, hard, compact	20000 cu.m.	1x1x1 m.
66	SE of Kumharimuda 21° 7' - 21° 8' N 82° 29' - 82° 30' E	Sheet rock, Bouldary and Massive	Pinkish grey granite	Coarse grained, equigranular, hard, compact, Porphyrite	30000 cu.m.	1x1x1 and 2x2x2 m.
67	West of Kumharimuda 21° 7' - 21° 8' N 82° 29' - 82° 30' E	Sheet rock, Bouldary and Massive	Pinkish Grey Granite	Coarse grained, equigranular, hard, compact, porphyritic	800 cu.m.	1x1x1 and 2x2x2 m.
68	NW of Kumharimuda 21° 7' - 21° 8' N 82° 28' - 82° 29' E	Sheet rock, massive	Grey Granite	Medium to coarse grained	1125 cu.m.	1x1x1 and 2x2x2 m.
69	Kasibahra (Nawadih NNE of Kasibahra) 21° 1' - 21° 2' N 82° 27' - 82° 28' E	Sheet rock, Bouldary and Massive	Pinkish Grey Granite	Medium to fine grained, equigranular, hard, compact	30000 cu.m.	1x1x1 and 2x2x2 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
70	NE of Kasibehra 21° 1' - 21° 2' N 82° 27' - 82° 28' E	Mound shape, Bouldary and Massive	Pinkish Grey Granite	Medium to fine grained equigranular hard, compact	25000 cu.m.	1x1x1 m.
71	NE of Ghonch 21° 10' - 21° 11' N 82° 28' - 82° 29' E	Sheet rock, Bouldary and Massive	Grey Granite Gneisses	Medium to fine grained equigranular hard, compact	40000 cu.m.	1x1x1 m.
72	NW of Ghonch 21° 10' - 21° 11' N 82° 28' - 82° 29' E	Sheet rock, Bouldary and Massive	Grey Granite Gneisses	Medium to fine grained equigranular, hard, compact	1250 cu.m.	1x1x1 m.
73	About 1/2 km to 1 km from Salhebhata on Kalmijhar road 21° 7' N 82° 27' - 82° 28' E	Sheet rock Bouldary and Massive	Greyish Pink Granite	Porphyritic, coarse grained, hard, compact	1125 cu.m.	1x1x1 m.
74	West of Kalyanpur 21° 2' - 21° 3' N 82° 25' E	Sheet rock, Bouldary and Massive	Greyish pink Granite	Porphyritic, coarse grained, hard compact	80000 cu.m.	1x1x1 and 2x2x2 m.
75	Karmapatpar 21° 3' - 21° 4' N 82° 26' - 82° 27' E	Domal hill, Bouldary and Massive	Grey granite	Medium to fine grained, equigranular, hard, compact	400000 cu.m.	1x1x1 and 2x2x2 m.
76	NW of Karmapatpar near Baghbahara-Tendukona road 21° 2' - 21° 3' N 82° 26' - 82° 27' E	Mound shape, Bouldary and Massive	Grey Granite	Porphyritic coarse grained, hard, compact	400000 cu.m.	2x2x2, 3x3x3 & 3x2x3 m.
77	Nw of Karmapatpar near the Temple 21° 3' - 21° 4' N 82° 26' - 82° 27' E	Mound shape, Bouldary and Massive	Grey Granite	Porphyritic coarse grained hard, compact	150000 cu.m.	2x2x2 m.
78	East of Kotanpali 21° 3' - 21° 4' N 82° 27' - 82° 28' E	Sheet rock, Bouldary and Massive	Grey Granites	Medium to fine grained, equigranular, hard, compact	1500 cu.m.	2x2x2 m.
79	SW of Birajpali (Jalkopat- Dongar) 21° 2' - 21° 4' N 82° 27' - 82° 28' E	Domal hill, Bouldary and Massive	Grey Granites	Medium to fine grained, equigranular, hard, compact	48000000 cu.m.	1x1x1, 2x2x2 & 3x2x3 m.
80	SW of Kamkeni village and west of Kamkeni reservoir 21° 3' - 21° 5' N 82° 25' - 82° 26' E	Domal hill, Bouldary and Massive	Pinkish Grey Granite	Coarse, equigranular, hard, compact, porphyritic	40500000 cu.m.	1x1x1 and 2x2x2 m.
81	NE of Biajhar 21° 2' N 82° 26' E	Mound shape Bouldary and Massive	Grey Granite Gneisses	Medium to fine grained equigranular, hard, compact	2500 cu.m.	1x1x1 and 2x2x2 m.
82	NNE of Biajhar 21° 2' - 21° 3' N 82° 26' E	Mound shape, Bouldary and Massive	Greyish Pink Granite	Medium to fine grained, equigranular, hard, compact	200 cu.m.	1x1x1 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
83	North of Biajhar 21° 2' - 21° 3' N 82° 25' - 82° 26' E	Mound shape, Bouldary and Massive	Greyish Pink Granite	Medium to fine grained, equigranular, hard, compact	110000 cu.m.	2x2x2 & 3x3x3 m.
84	South of Tilaidadar 21° 4' - 21° 5' N 82° 27' E	Sheet roack, Bouldary and Massive	Pinkish Grey Granite	Coarse grained, hard, compact, equigranular	20000 cu.m.	2x2x2 & 3x2x3 m.
85	In the south of Tilaidadar before nala 21° 4' - 21° 5' N 82° 27' E	Mound shape, Bouldary and Massive	Greyish Pink Granite	Coarse grained, hard, compact, equigrained	3200 cu.m.	1x1x1 m.
86	SSE of Tilaidadar 21° 5' - 21° 6' N 82° 26' - 82° 27' E	Mound shape, Bouldary and Massive	Greyish Pink Granite	Coarse grained, hard, compact, equigranular	6400 cu.m.	1x1x1 m.
87	NE of Tilaidadar 21° 5' - 21° 6' N 82° 26' - 82° 27' E	Mound shape, Bouldary and Massive	Pinkish Grey, Greyish Pink Granite	Coarse grained, hard, compact, equigranular	440 cu.m.	1x1x1 m.
88	North of Tilaidadar 21° 5' - 21° 6' N 82° 26' - 82° 27' E adjacent to Machkanala	Mound shape, Bouldary and Massive	Grey Granite	Coarse grained, hard, compact, equigranular	400 cu.m.	1x1x1 m.
89	NNE of Tilaidadar 21° 5' - 21° 6' N 82° 26' - 82° 27' E	Mound shape, Bouldary and Massive	Grey Granite	Coarse grained, hard, compact, equigranular	7500 cu.m.	1x1x1 and 2x2x2 m.
90	SW of Tilaidadar 21° 5' - 21° 6' N 82° 26' - 82° 27' E	mound shape, Bouldary and Massive	Grey Granite	Coarse grained, hard, compact, equigranular	2000 cu.m.	2x2x2 & 3x2x3 m.
91	NW of Tilaidadar 21° 5' - 21° 6' N 82° 26' - 82° 27' E	Sheet rock Bouldary and Massive	Pinkish Grey Granite	Coarse, grained, hard, compact, equigranular, porphyritic	1250 cu.m.	1x1x1 and 2x2x2 m.
92	Durug Pali near the Pond 21° 11' - 21° 12' N 82° 27' - 82° 28' E	Sheet rock, Bouldary and Massive	Grey Granite	Medium grained, hard, compact, equigranular	5000 cu.m.	1x1x1 m.
93	Durugpali 21° 11' - 21° 12' N 82° 27' - 82° 28' E	Sheet rock, Bouldary and Massive	Grey Granite	Medium grained, hard, compact, equigranular	7500 cu.m.	1x1x1 and 2x2x2 m.
94	East of Kashibahara and West of Saraktora 21° 12' - 21° 13' N 82° 26' - 82° 27' E	Sheet rock, Bouldary and Massive	Grey Granite	Coarse grained, hard, compact, equigranular	150000 cu.m.	1x1x1, 2x2x2 & 3x2x3 m.
95	NW of Bartunga 21° 13' - 21° 14' N 82° 29' - 82° 30' E	Sheet rock, Bouldary and Massive	Grey Granite	Medium grained, hard, compact, equigranular	7500 cu.m.	1x1x1 and 2x2x2 cu.m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
96	NNE of Jampali 21° 14' N 82° 27' - 82° 28' E	Mound shape Massive	Grey Granite Gneisses	Medium to fine grained, hard, equigranular, compact.	20000 cu.m.	1x1x1 and 2x2x2 m.
97	SW of Singhupali to the north of NH-6 21° 14' N 82° 27' - 82° 28' E	Mound shape, Massive	Grey Granite Gneisses	Medium to fine grained, equigranular, hard, compact	50000 cu.m.	1x1x1 and 2x2x2 m.
98	Dhanora 21° 11' - 21° 12' N 82° 28' - 82° 29' E	Sheet rock, Bouldary and Massive	Grey Granite	Medium grained, hard, compact, equigranular	40000 cu.m.	1x1x1 and 2x2x2 m.
99	SE of Dumarpali 21° 14' N 82° 26' - 82° 27' E	Sheet rock Massive	Grey Granite	Porphyritic, coarse grained, hard, compact	300 cu.m.	1x1x1 and 2x2x2 m.
100	North of Dumarpali 21° 14' - 21° 15' N 82° 26' - 82° 27' E	Sheet rock, Bouldary and Massive	Greyish Pink	Porphyritic, coarse grained, hard, compact	5000 cu.m.	1x1x1 and 2x2x2 m.
101	Rampur 21° 15' N 82° 25' - 82° 26' E	Sheet rock, Bouldary and Massive	Pinkish Grey	Porphyritic, coarse grained, hard, compact	200 cu.m.	1x1x1 m.
102	Rampur 21° 15' N 82° 25' E	Sheet rock, Bouldary and Massive	Pinkish Grey	Porphyritic, coarse grained, hard, compact	300 cu.m.	1x1x1 m.
103	Kauhakuta 21° 4' - 21° 5' N 82° 29' - 82° 30' E	Dolerite	Greenish Black Dolerite	Medium to fine grained, equigranular, hard, compact	3000 cu.m.	1x1x1 m.
104	Muragaon 21° 4' N 82° 29' E	Dolerite	Black Dolerite	Medium to fine grained, equigranular, hard, compact	300 cu.m.	1x1x1 & 0.5x0.5x0.5 m.
105	Bhadraasi 21° 2' - 21° 3' N 82° 27' E	Dolerite	Light Green Granite	Medium to fine grained, equigranular, hard, compact	25 cu.m.	1x1x1 m.
106	Ghonch 21° 10' - 21° 11' N 82° 28' E	Granodolerite	Greenish Black	Coarse grained	300 cu.m.	1x1x1 m.
107	Dhanora 21° 11' - 21° 12' N 82° 29' E	Dolerite	Jet Black	Medium to fine grained, equigranular, hard, compact	100 cu.m.	1x1x1 and 2x2x2 m.
108	Phutguna 21° 12' - 21° 13' N 82° 28' - 82° 29' E	Dolerite	Jet Black	Medium to fine grained, equigranular, hard, compact	80 cu.m.	1x1x1 and 2x2x2 m.
109	Saraktora (I) 21° 13' - 21° 14' N 82° 27' - 82° 28' E	Dolerite	Greenish Black	Coarse grained	2160 cu.m.	1x1x1 and 2x2x2 m.
110	Saraktora (II) 21° 13' N 82° 28' - 82° 29' E	Dolerite	Jet Black	Fine grained, equigranular, hard, compact	300 cu.m.	1x1x1 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
111	Saraktora (III) 21° 13' - 21° 14' N 82° 28' - 82° 29' E	Granodiorite	Greenish Black	Coarse grained	40 cu.m.	1x1x1 m.
112	Jampali 21° 13' - 21° 14' N 82° 28' E	Granodiorite	Greenish Black	Coarse grained	25 cu.m.	1x1x1 m.
113	Dumarpali 21° 14' - 21° 15' N 82° 26' - 82° 27' E	Dolerite	Jet Black	Fine grained, equigranular, hard, compact	125 cu.m.	1x1x1 m.
114	Kasahibahra 21° 12' - 21° 13' N 82° 26' - 82° 27' E	Granodiorite	Greenish	Coarse grained	75 cu.m.	1x1x1 m.
115	Sonasilli 21° 12' N 82° 27' E	Granodiorite	Greenish Black	Coarse grained	1000 cu.m.	1x1x1 and 2x2x2 m.
116	Pandepali 21° 12' - 21° 13' N 82° 27' - 82° 28' E	Granodiorite	Jet Black	Fine grained, equigranular, hard, compact	200 cu.m.	1x1x1 m.
117	Girna village (in North) Toposheet No. 64 K/12 21° 11' - 21° 12' N 82° 37' - 82° 38' E	Dolerite	Greyish Black	Medium to fine grained, equigranular, hard, compact	10000 cu.m.	1x1x1 cu.m.
118	Singupali, 37 km N of railway station Bagbahara in NH6 (T.N. 64K/8) 21° 14' 30" 82° 28'	Rock outcrops	Grey/pink porphyritic granite	Domal, sheet rock, no close spaced jointing, perfect polishing	40000 cu.m.	0.5 cu.m. or even more
119	Singupali, Deep No. of NH6 37 kms from railway station Bagbahera 64K/8, 21° 19' 82° 28' 10"	Rock outcrops	Grey/pink Porphyritic granite	Domal, sheet rock, no close spaced jointing, perfect polishing	400000 cu.m.	0.5 cu.m. or even more
120	Jampali, S. of NH6, 36 kms. from Bagbahera railway station 21° 14' : 82° 28'	Rock outcrops	Pink/Grey porphyritic granite	Compact domal, sheet rock no. close spaced jointing, perfect polishing	100000 cu.m.	0.5 cu.m. or even more
121	Dongripali, 4 kms from Pithora on NH6 21° 16' : 82° 33'	Rock outcrops	Pink granite	Fine to medium compact, close spaced jointing in limited area	1125000 cu. m.	0.5 cu.m. or even more
122	Dongripali 4 kms from Pithora on NH6 21° 16' 30" 82° 33'	Rock outcrops	Pink/Grey granite	Fine to medium grained compact, granite, big slabs can be made by perfect polishing	15000000 cu.m.	0.5 cu.m. or even more

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
123	Rampur, 7 kms from Pithora in the N. 21° 18' 20" 82° 31' 20"	Rock outcrops	Pink/Grey granite	Medium grained granite, No close spaced jointing perfect polishing	37500000 cu.m.	0.5 cu.m. or even more
124	Laxmipur (A), 40 kms Railway station Bagbahera 21° 17' 40" 30" Along 5 kms from Pithora in the north distt. Raipur	Rock one outcrop exposures	Grey/Pink Granite	Grey/Pink compact medium grained to coarse grained granite. Perfect polishing, no closed spaced jointing	50000 cu.m.	1.0 cu.m. or even more
125	Bhurkoni (A), close to village	Rock outcrop	Pink granite	Pink medium to fine grained compact granite, hard perfect polishing, big block can be mined out.	15000000 cu.m.	1.0 cu.m. or even more
126	Bhurkoni (B), close to village Mandalpat	Rock outcrop	Pink granite	Pink medium to fine grained compact granite, hard perfect polishing, big block can be mined out.	37500000 cu.m.	0.5 cu.m. or even more
127	Teka deposit village Teka in NH6 about 107 kms. from Raipur	Rock outcrops	Black Dolerite	Dark black, compact medium grained dolerite are present on the surface no close spaced joints perfect polishing occasional white spots	60000 cu.m.	1.0 cu.m. or even more
128	Ramadabri 21° 10' 10" 82° 20'	Rock outcrops (Mound hill)	Porphyritic pink grey	Porphyritic pink grey granite sheet rock good polishing.	2500000 cu.m.	0.5 cu.m. or even more
129	Lakhanpur, 21° 12' 00" 82° 24' 50"	Rock outcrop hill	Pink granite	Pink fine to medium grained granite compact no closed space jointing may take good polish.	5000000 cu.m.	0.5 cu.m. or even more
130	khallari (A) 21° 9' 30" 82° 18' 10"	Rock outcrops domed hill	Grey porphyritic	Grey coarse grained porphyritic granite compact, domal shaped, sheet rock	150000000 cu.m.	0.5 cu.m. or even more

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
131	Dhelwa Dongar 21° 11' 00" 82° 24' 30" About 4 kms south west from NH6	Rock outcrops big hills	pink granite	Pink fine to medium grained granite, no close spaced jointing sheet rock, may take good polish	225000000 cu.m.	0.5 cu.m. or even more
132	Middle of village Ghoghra 21° 10' 82° 27'	Boulder/ Massive	Pinkish Grey granite	Medium to fine grained	70000 cu.m.	2x2x2 1x1x1 m.
133	South of Ghoghra 21° 9' 82° 29'	Boulder/ Massive	Pinkish Grey granite	Medium to fine grained	2400 cu.m.	2x2x2 1x1x1 m.
134	NNE of Kashibahara (Newadih) 21° 1' 82° 28'	Boulders/ Massive	Pinkish grey granite	Medium to fine grained	30000 cu.m.	2x2x2 1x1x1 m.
135	NE of Ghonah 21° 10' 82° 28'	Boulders/ Massive	Grey granite	Medium to fine grained	40000 cu.m.	1x1x1m.
136	Karmapatpar 21° 3' 82° 26'	Boulders/ Massive	Grey granite	Medium to fine grained	400000 cu.m.	2x2x2 1x1x1 m.
137	NW of Karmapatpar 21° 2' 82° 25'	Boulders/ Massive	Grey granite	Coarse grained equigranular	400000 cu.m.	3x3x3 2x2x2 1x1x1 m.
138	NE of Karmapatpar near the Temple 21° 3' 82° 26'	Boulders/ Massive	greyish pink granite	Coarse grained porphyritic	150000 cu.m.	2x2x2 m.
139	SW of Birajpali Donger (Jalkopat) 21° 2' 82° 27'	Boulders/ Massive	Grey granite	Medium to fine grained	48000000 cu.m.	3x3x3 2x2x2 1x1x1 m.
140	North of Bijhar 21° 2' 82° 26'	Boulders/ Massive	Grey granite	Medium to fine grained	110000 cu.m.	2x2x2 1x1x1 m.
141	East of Kashibahra 21° 12' 82° 26'	Boulders/ Massive	Grey granite	Coarse grained	150000 cu.m.	1x1x1 2x2x2 3x3x3 m.
142	N-W of Bartunga 21° 13' 82° 29'	Boulders/ Massive	Grey	Medium grained	750 cu.m.	1x1x1 m.
143.	Bauhakura (21° - 82° 28')	Bouldary	Greenish black dolerite	Fine grained	3000 cu.m.	1 x 1 x 1 m.
144.	Ghonch (21° 10' - 82° 28')	Dyke bouldary	Greenish black dolerite	Coarse grained	300 cu.m.	1 x 1 x 1 m.
145	Dhanora (21°11' - 82° 29')	Dyke bouldary	Jet black dolerite	Fine grained	200 cu.m.	1 x 1 x 1 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
146	Saraktora (I) (21°13' - 82°27')	Dyke bouldary	Greenish black dolerite	Fine grained	2160 cu.m.	1 x 1 x 1 2 x 2 x 2 m.
147	Saraktora (II) (21°13' - 82°38')	Dyke bouldary	Jet black dolerite	Fine grained	300 cu.m.	1 x 1 x 1 m.
148	Saraktora (III) (21°13' - 82° 29')	Dyke bouldary	Greenish black dolerite	Coarse grained	40 cu.m.	1 x 1 x 1 m.
149	Dumarpali (N 21°14' - 21°15') (E 82°26' - 82°27')	Dyke bouldary	Jet black dolerite	Fine grained	125 cu.m.	1 x 1 x 1 m.
150	Sonasilli (21°12' - 82°27')	Dyke bouldary	Greenish black dolerite	Coarse grained	1000 cu.m.	2 x 2 x 2 m.
151	Pandepali (N 21°12' - 21°13') (E 82°27' - 82°28')	Dyke bouldary	Jet black dolerite	Fine grained	200 cu.m.	1 x 1 x 1 m.
152	Gopalpur (21°17'30" - 82°34'40") T.S. No. 64 K/11	Boulders on the surface, sheet rock after mining	Dark black dolerite	Fine grained, dolerite compact. No close spaced joints may take good polish	6,00,000 cu.m.	0.5 cu m or even big
153	Koriya (21°14'50" - 82°34'30") T.S. No. 64 K/12	Rock outcrops (Hill)	White, pink grey granite	Medium to fine grained. No close spaced jointing. May take good polish, colour variation also present	10,00,000 cu.m.	0.5 cu m or even big
154	Kotanpali (Jalkopat dongar) (21°3' - 82° 27'20") T.S. No. 64 K/8	Big hill	Blue pink grey granite	Fine grained, compact may take good polish. Jointing is prominent	10,50,00,000 cu.m.	0.5 cu m or even big
155	Sorammar T.S. No. 64 L/5	Domal	Grey, pink granite	Coarse, as well as fine grained, compact. No close spaced jointing may take good polish.	10,00,00,000 cu.m.	0.5 cu m or even big
156	Komakhan	Huge hill sheet rock	Grey, pink granite	Porphyritic medium grained. No close spaced jointing.	10,00,00,000 cu.m.	0.5 cu m or even big
157	Botha	-	pink granite	Medium to fine grained, compact, close spaced jointing	10,00,00,000 cu.m.	0.5 cu m or even big
158	Bogari dadar (21°1' N - 82°32' : 82°33')	Mound shape massive	Pinkish grey and greyish granite	Medium to fine grained, equigranular hard, compact	9,375,000 cu.m.	2 x 2 x 2 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
159	West of Muragaon (21°6' - 21°8' : 82°31' - 82°32')	Mound shape bouldary	Grey granite	Medium grained, Porphyritic, hard, compact	20,00,000 cu.m.	1 x 1 x 2 m.
160	North of Chikli village (21°14' - 21°15' : 82°37' - 82°38')	-	Greyish black granite	Medium to fine grained equigranular, hard and compact, Doleritic	40,000 cu.m.	0.5 x 0.5 x 0.5 m.
161	SE of Ganjar (21°2' - 21°3' : 82°31' - 82°32')	Mound shape bouldary and massive	Pinkish grey granite	Medium to fine grained	2,25,000 cu.m.	1 x 1 x 1 m.
162	Tikrapara (21°9' - 21°10' : 82°36' - 82°37')	Mound shape, bouldary and Massive	Pink granite granite	Medium to fine grained, equigranular hard and compact	10,00,000 cu.m.	2 x 2 x 2 m.
163	NW of Nawadih (21° 1' - 82°27')	Mound shape, bouldary and Massive	Grey granite	Medium grained, equigranular, hard and compact	2,00,000 cu.m.	2 x 2 x 2 3 x 3 x 3 m.
164	Girha village (in north) (21°11'-21°12' N : 82°37' - 82°38')	-	Greyish black granite	Medium to fine grained equigranular hard, compact	10,000 cu.m.	1 x 1 x 1 m.
165	Laxmipur (B) (21°18' - 82°32') T.S. No. 64 K/11	Rock outcrops	Grey granite	Medium grained compact. No close spaced jointing	2,50,00,000 cu.m.	0.5 cu m or even big
166	Laxmipur (C) (21°17'30" - 82°32')	Rock outcrops	Grey granite	Compact. No close spaced jointing	1.50,00,000 cu.m.	0.5 cu m or even big
167	Laxmipur (D) (21°16'30" - 82°30'20")	Rock outcrops	Grey granite	Medium grained, compact different pattern may occur after polishing. No close spaced jointing	1,00,000 cu.m.	0.5 cu m or even big
168	Murakhar (21°14'20" - 82°33'40") T.S. No. 64 K/12	Rock outcrops (Hills)	White, grey and pink granite	Medium grained. No close spaced joints, may take beautiful polish	2,25,00,000 cu.m.	0.5 cu m or even big
169	Khairkhuta (21°18'40" - 82°34'40") T.S. No. 64 K/11	Boulders on surface sheet rock may be at depth	Dark black dolerite	Medium to fine grained dolerite, compact, Flowers and moles rarely present. No close spaced joints	60,000 cu.m.	0.5 cu m or even big
170	Ghoghara 21° 9' - 21° 10' 82° 26' - 82° 27'	Domal hill Bouldary and Massive	Pinkish grey granite	Medium to fine grained equigranular, hard and compact	50000 cu.m.	1x1x1 2x2x2 m.

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
171	North of Kalmijhar 21° 7' - 21° 8' 82° 26' - 82° 27'	Sheet rock, Bouldary and Massive	Pinkish Grey granite	Coarse grained, equigranular hard, compact	20000 cu.m.	1x1x1 m.
172	SE of Kumharimuda 21° 7' - 21° 8' 82° 29' - 82° 30'	Sheet rock, Bouldary and Massive	Pinkish grey granite	Coarse grained, equigranular hard, compact, porphyritic	30000 cu.m.	1x1x1 2x2x2 m.
173	Kasibahra 21° 1' - 21° 2' 82° 27' - 82° 28'	Sheet rock, Bouldary and Massive	Pinkish Grey granite	Medium to fine grained, equigranular, hard, compact	25000 cu.m.	1x1x1 2x2x2 m.
174	West of Kalyanpur 21° 2' - 21° 3' N 82° 25' E	Sheet rock, Bouldary and Massive	Greyish Pink granite	Porphyritic coarse grained, hard, compact	80000 cu.m.	1x1x1 2x2x2 m.
175	Dhanora 21° 11' - 21° 12' N 82° 28' - 82° 29' E	Sheet rock, Bouldary and Massive	Grey Granite granite	Medium grained, equigranular, hard, compact	40000 cu.m.	1x1x1 2x2x2 m.
176	Singupali (A) 21° 14' 30" 82° 28' 00" Toposheet No. 64K/8,	Domal sheet rock, rock out crop,	Grey, pink granite	Porphyritic, no close spaced jointing, may take good polish	400000 cu.m.	0.5 cu.m. or even big
177	Singupali (B) 21° 14' 15" 82° 28' 10" Toposheet No. 64K/8,	Domal sheet rock, rock outcrop	Grey, Pink granite	Porphyritic, no close spaced jointing, may take good polish	400000 cu. m	0.5 cu.m. or even big
178	Jampali 21° 14' 82° 28' 00" Toposheet No. 64K/8,	Domal sheet rock, rock outcrop	Grey, Pink granite	Porphyritic, no close spaced jointing, may take good polish	10000 cu.m.	0.5 cu.m. or even big
179	Dongripali (A) 21° 16' 82° 33' Toposheet No. 64K/11,	Sheet rock, rock outcrop	Pink granite granite	Medium grained, compact, no close spaced jointing with some jointed area.	11250000 cu.m.	0.5 cu.m. or even big
180	Dongripali (B) 21° 16' 30" 82° 33' 00" Toposheet No. 64K/11,	Sheet rocks, rock outcrops	Pink granite	Medium to fine grained, compact, no close spaced jointing, with some close spaced jointing	15000000 cu.m.	0.5 cu.m. or even big slabs
181	Rampur (A) 21° 18' 20" 82° 31' 20" Toposheet No. 64K/11,	Rock out crop, sheet rock	Light grey, grey, pink granite	Medium grained, compact. No close spaced jointing, may take good polish	37500000 cu.m.	0.5 cu.m. or even big
182	Rampur (B) 21° 17' 30" 82° 30' 20" Toposheet No. 64K/11,	Rock outcrop	Grey, light grey granite	Medium grained, compact, colour variation, no close spaced jointing	50000 cu.m.	0.5 cu.m. or even big

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
183	Laxmipur (A) 21° 17' 40" 82° 31' 30" Toposheet No. 64K/11,	Rock out crop	Grey, Pink granite	Medium grained compact, no close spaced jointing, may take good polish	50000 cu.m.	0.5 cu.m. or even big
184	Murakhar 21° 14' 20" 82° 33' 40" Toposheet No. 64K/12,	Rock outcrops (hills)	White, grey, pink	Medium grained, no close spaced jointing, may take beautiful polish	22500000 cu.m.	0.5 cu.m. or even big blocks
185	Tekka 21° 15' 40" 82° 34' 40" Toposheet No. 64K/11	Dolerite, Boulders on surface, Sheet rock, rock outcrops	Dark black dolerite	Medium to fine grained, compact, flowers and moles rarely present. No close spaced joints.	60000 cu.m.	0.5 cu.m. or even big
186	Khairkhuta 21° 18' 40" 82° 34' 40" Toposheet No. 64K/11,	Dolerite, Boulders on surface, Sheet rock, rock outcrops	Dark black dolerite	Medium to fine grained, compact, flowers and moles rarely present. No close spaced joints.	60000 cu.m.	0.5 cu.m. or even big
187	Gopalpur 21° 17' 30" 82° 34' 40" Toposheet No. 64K/11,	Dolerite, Boulders on surface, sheet rock, Rock outcrops	Dark black dolerite	Fine grained, compact, flowers and moles present occasionally. No close spaced joints. May take good polish	600000 cu.m.	0.5 cu.m. or even big
188	Bhurkoni (A) 21° 6' 40" 82° 33' 10" Toposheet No. 64K/12,	Rock outcrop	Pink granite	Pink to fine grained, compact with little colour variation, no close spaced jointing, may take good polish	15000000 cu.m.	0.5 cu.m. or even big
189	Bhurkoni (B) 21° 6' 20" 82° 33' 10" Toposheet No. 64K/12	Rock outcrop	Pink granite	Medium to fine grained compact, with little colour variation, no close spaced jointing, may take good polish	37500000 cu.m.	0.5 cu.m. or even big
190	Lakhanpur 21° 12' 00" 82° 24' 50" Toposheet No. 64K/8	Rock outcrop (hill), Boulder, sheet rock	Pink granite	Fine to medium grained, compact, No close spaced jointing, may take good polish	25000000 cu.m.	0.5 cu.m. or even big

Sr. No.	Location	Geological Feature	Colour & Rock Type	Quality	Approximate Reserves in cu.m.	Size of Blocks available
191	Dhelwa (Mungaser) 21° 11' 82° 24' 30" Toposheet No. 64K/8	Rock outcrop (hill), Boulder, sheet rock	Pink granite	Fine to medium grained, compact, No close spaced jointing, may take good polish.	225000000 cu.m.	0.5 cu.m. or even big
192	Ramadabri (Bawankera) 21° 10' 10" 82° 20' 00" Toposheet No. 64K/18	Rock outcrop (hill & mound), sheet rock big boulders on the hill slope	Pink, grey granite	porphyritic, coarse to medium grained, compact,. May take good polish	5000000 cu.m.	0.5 cu.m. or even big
193	Khallari (A) 21° 5' 30" 82° 18' 00" Toposheet No. 64K/8	Domal shape, sheet rock with big phenocrysts of felspar	Grey granite	Porphyritic, coarse grained, compact	150000000 cu.m.	0.5 cu.m. or even big
194	Khallari (B) 21° 5' 30" 82° 18' 20" Toposheet No. 64K/8	Domal shape, sheet rock with big phenocrysts of felspar	Grey granite	Porphyritic, coarse grained, compact	100000 cu.m.	0.5 cu.m. or even big
195	Khallari (C) 21° 6' 82° 18' Toposheet No. 64K/8	Domal shape, sheet rock with big phenocrysts of felspar	Grey granite	Porphyritic, coarse grained, compact	100000 cu.m.	0.5 cu.m. or even big

Flag Stone

Sr. No.	Locality	Name of Rock	Description of deposit	Dimensions length x width x thickness	Approximate Reserves (cu m)	Overburden (m)	Remark
1.	Tikari, tehsil Simga	Limestone (dolomitic)	Fine grained, hard, compact and massive, colour-pale yellow, pink, brown	-	-	-	Seems to be suitable for cutting polishing
2.	3 km W of Bilaigarh	Limestone	-	-	-	-	Suitable for dimension stone
3.	Sondikala, Bhelmundi, Alikund, etc.	-- ,, --	-	-	-	-	-- ,, --
4.	Bhelsudi, Rajim, Gudari, etc. (along Mahanadi)	-- ,, --	Flaggy, grey	along Mahanadi	Vast reseves	-	Takes good polish

Dimension Stone in District Bastar, Kanker, Kondagaon, Narayanpur and Dantewara

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
1.	East of Korgaon 20°03'15" : 81°43'00" 64 H/12	Dolerite	Greenish black, hard, compact, fine grained	4.2 lakh cu m	less than 1 cu m	Non forest	Takes good polish
2.	Bendeli area 20°18'37" : 81°36'30" 64 H/11	Dolerite	Black coloured, fine grained, hard compact with closely spaced joints	5 lakh cu m	1 cu m	Non forest	Takes polish but moles are present
3.	SE of Balenga 19°59'00" : 81°47'45" 65 E/13	Dolerite	Occurs in Bouldary form in jet black colour. Fine grained. Closely spaced joints	6 lakh cu m	0.5 cu m	Non forest	Takes good polish
4.	SW of Sarona 20°17'35" : 81°38'45" 64 E/11	Dolerite	Jet black, fine grained uniform grain size compact with closely spaced joints	3.5 lakh cu m	less than 1 cu m	Non forest	Takes good polish
5.	1 km NW of Makri 19°46'45" : 81°45'30" 64 E 13	Granite	Pink, medium to coarse grained, hard, compact. Flowers present	7 lakh cu m	more than 1 cu m	Non forest	Big slabs can be obtained, suitable for monuments
6.	North of Badhgaon 19°45'15" : 81°52'15"	Granite	Pink, medium to coarse grained, hard, compact	-	-	Protecte d forest area	Suitable for big slabs
7.	East of Dhondhra 19°53'15" : 81°45'30" 65 E/13	Granite	Pink, medium to coarse grained, hard, upper layer is weathered	1 lakh cu m	upto 1 cu m	Protecte d forest area	Suitable for tiling
8.	Borgaon 20°04'30" : 81°35'15"	Granite	Grey coloured fine grained, hard and compact	2.8 lakh cu m	upto 1 cu m	Non forest	Takes good polish, suitable for decorative items
9.	SW of Bayalpur 20°03'45" : 81°36'30" 64 H/12	Granite	Grey coloured, medium to fine grained with closely spaced joints	7 lakh cu m	1 cu m	Non forest	Suitable for dimension
10.	Mode 20°30'30" : 81°34'30" T.S. No. 64 H/7	Aplite	Creanish white in colour, fine grained, greenish bands are present	1.12 lakh cu m	less than 1 cu m	Non forest	Takes good polish

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
11.	Batrali 20°03'30" : 81°34'30"	Granite	Porphyritic granite, pinkish grey in colour, vertical & horizontal wide spaced joints are common	14 lakh cu m	more than 1 cu m	Forest	Big slabs can be obtained
12.	Near village Sarha (Surhi) 20° 29' 00" : 81° 39' 00"	Dolerite	Fine to medium grained, hard, greenish black	10,000	1 cu m	-	Takes excellent polish
13.	Near Amgaon village 20° 24' 00" : 81° 42' 00"	Granite	Coarse grained mesocratic granite, hard, compact, hair cracks are often present	25,000	-	-	Can be used for exterior decoration takes good polish
14.	Near village Thekobod	Dolerite	Fine to medium grained hard, massive, greenish black coloured	-	-	-	Small exposure
15.	On Makdi Bagodar road, 3 km from Makdi 20° 19' 00" : 81° 26' 00"	Dolerite	Melanocratic, fine grained, hard, compact, uniform black colour	1,50,000	1 - 2 cu m	-	Takes splendid polish suitable for dimension stone
16.	Dumarpani village 20° 28' 00" : 81° 26' 00"	Dolerite	Fine to medium grained, hard, compact, melanocratic in colour	-	-	-	Takes excellent polish
17.	Near Lakhanpuri village 20° 23' 00" : 81° 26' 00"	Granite	Light pink, medium to coarse grained, few hair cracks present	1,25,000	-	-	Takes good polish
18.	South of village Gariya para	Amphibolite	Fine to medium grained, hard, massive, dark coloured deposit	-	-	-	Takes excellent polish
19.	Near village Kokpur and Kanker proper 20° 16' 00" : 81° 26' 00"	Grey Granite	Light grey colour, medium grained, equigranular	-	1 - 3.5 cu m	-	Takes good polish

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
20.	Near Khairkhodra village, 7 km from Antagarh 20° 7' 00" : 81° 11' 00"	Dolerite	Fine to medium grained, hard, compact and melanocratic in colour	-	-	-	Takes excellent polish
21.	South of Warchgoni village	Granite	Light grey coloured, medium grained, equigranular & compact. Slightly weathered	-	-	-	Can be used only for exteriors
22.	Near Matwara Makdi village 20° 19' 00" : 81° 26' 00"	Zebra Granite	Medium to coarse grained light and dark bands are present	-	1 - 3.5 cu m	-	Takes good polish, excellent colour banding
23.	1 km NW of village Kokodi by the Kondagaon Kokodi Road side 19° 20' : 81° 31'	Dolerite	Medium to fine grained, hard and compact	10,000	0.25 - 0.5 m	Seem to be forest land	
24.	Noticed in the village Kokodi itself 19° 20' : 81° 31'	Dolerite	Medium to fine grained, hard and compact	1,00,000	0.25 - 0.5 m	Partly revenue, private and forest land	
25.	Start from village Sambalpur and extent towards NW direction 19° 31' : 81° 39'	Dolerite	Medium to fine grained, hard and compact in the form of boulder	1,00,000	0.25 - 0.5 m	Partly in revenue, private and forest land	
26.	Parallel to above	Dolerite	Medium to fine grained, hard and compact	10,000	0.25 - 0.5 m	Partly in revenue, private and forest land	

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
27.	Parallel to above	Dolerite	Medium to fine grained, hard and compact	20,000	0.25 - 0.5 m	Partly in revenue, private and forest land	
28.	4 km SW of village Bamhni 19° 30' : 81° 38'	Dolerite	Medium to fine grained, hard and compact	5,000	0.25 - 0.5 m	Seem to be forest land	-
29.	2 km SW of village Kevti 19° 36' : 81° 36'	Dolerite	Medium to fine grained, hard and compact, black in colour	10,000	0.25 - 0.5 m	Seem to be forest land	-
30.	2 km SW of village Dadhiya by the road side (Parsipadar Dadhiya road) 19° 38' : 81° 36'	Dolerite	Medium to fine grained, hard and compact, black in colour	5000	0.25 - 0.5 m	Seem to be in forest land	-
31.	2 km South of village Pharsipadar (By the road side Pharsipadar Narayanpur road)	Dolerite	Medium to fine grained, hard and compact, black in colour	5000	0.25 - 0.5 m	-	-
32.	3 km SE of village Pharsipadar (By the road side 1 km ahead.	Pink granite	Medium to coarse grained pink in colour less hard	5000	0.25 - 0.5 m	Seem to be in forest land	-
33.	1 km from the Kondagaon-Narayanpur road bifurcation for village Pala	Dolerite	Fine to medium grained black in colour with two sets of joints	1,00,000	0.25 - 0.5 m	Seem to be in forest land	-
34.	Extending from Dhawari Berapara of village Chilputi to Satgaon through Patelpara and onward	Dolerite	Medium to coarse grained hard and compact black in colour occur in the form of boulder and in sheet two sets of joint are seen	3,00,000	0.25 - 0.5 m	Partly seem to in all type of land	Seem to be important dyke in the area near Patelpara of village Satgaon its width is noted 5 ot 6 m. Major part is noted in the forest and Chhote bare jungle.

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
35.	2 km N of village Jaipuri 19° 40' : 81° 41'	Dolerite	Fine to medium grained black in colour in boulder form, with two sets of joints	1,40,000	0.25 - 0.5 m	Seem to be in forest land	-
36.	2.5 km SE of village Barda (By the road side of Jaitpuri to Pujaripara road)	Dolerite	Medium to fine grained and black in colour in boulder form with two sets of joints	10,000	0.25 - 0.5 m	Partly in forest and partly in private land	
37.	Between the Barda and Pujaripara village (area covered 0.5 km)	Dolerite	Medium to fine grained black colour of good quality big boulder with two sets of joints	20,000 20,000 5000 5000	1 cubic metre and above	Major part in revenue land and private land. Partly in forest	
38.	100 m. from above dyke towards S.E. direction	Dolerite	Medium to fine grained black colour of good quality big boulder with two sets of joints	5000	0.25 - 0.5 m	Seem to be private land	-
39.	1 km N of Pujaripara (By the road side Pujaripara to Kerawahi road) 19° 43' : 81° 29'	Dolerite	Medium to fine grained black in colour in boulder form	5000	0.25 - 0.5 m	seem to be revenue land	-
40.	2 km SE of village Bangoli by the road side 19° 40' : 81° 38'	Dolerite	Fine to medium grained black in colour. Two sets of joint observed	80,000	0.25 - 0.5 m	Seem to be in forest land	-
41.	1.5 km SE of village Kobonge	Dolerite	Fine to medium grained black in colour. Uniform distribution of grain. There is no hair cracks, patches etc.	1,40,000	0.50 - 1 cu m	Seem to be in forest land	-
42.	1.5 km SW of village Kobonga	Dolerite	Fine to medium grained black in colour, uniform distribution of grains. There is no hair cracks, patches, etc.	1,40,000	0.50 - 1 cu m	Seem to be in revenue land	

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
43.	2 km due East and NE of village Kobonga	Dolerite	Fine to medium grained black in colour	1,00,000	0.25 - 0.5 m	partly in private and partly in revenue land	
44.	1.5 due South of village Sorma near small water tank	Dolerite	Fine to medium grained, black in colour, big exposure are noticed	30,000	1 cubic metre and above	Seem to be in revenue land	-
45.	Located in Mainpara of village Sorma	Dolerite	Fine to medium grained black in colour with two sets of joints	25,000	0.50 - 1 cu m	private land	-
46.	By the road side of Sorma Alibera road 0.5 km SW of village Alibera	Dolerite	Fine to medium grained black in colour with two sets of joints	50,000	0.50 - 1 cu m	Seem to be in forest land	-
47.	Parallel to above dyke.	Dolerite	Fine to medium grained black in colour with two sets of joints	75,000	0.50 - 1 cu m	Seem to be in forest land	-
48.	By the road side of Kondagaon Raipur road, 2 to 3 km from village Lanjoda near 19° 42' : 81° 40'	Dolerite	Fine to medium grained black in colour with two sets of joints	10,000 5000 10,000 5000	0.25 & above	Seem to be in revenue land	-
49.	1 km South of village Laujora near Nala crossing by the Kondagaon-Raipur road	Dolerite	Fine to medium grained black in colour	20,000	0.25 & above	Seem to be in revenue land	-
50.	0.5 km East of Higher Secondary school of village Laujora	Dolerite	Fine to medium grained hair cracks and white particles are seen. Black in colour	1,50,000	1 cu m and above	Seem to be in revenue land	The dyke has mined out some cube of more than 1 cu m are scattered in the area
51.	Located in SE of main village Laujora by the road side	Dolerite	Fine to medium grained black in colour	10,000 2500	0.25 and above	Partly in revenue and private land	

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
52.	Located in SW of Sulphi Padar para of village Lawjora	Dolerite	Fine to medium grained black in colour, hair cracks highly jointed	1,20,000	0.25 - 0.50 m	Seem to be in revenue land	The dyke has been mined out (due to hair cracks and joints, block of 0.25 to 0.50 cu m is extractable)
53.	Located 1 km SW of above dyke.	Dolerite	Fine to medium grained	40,000	0.25 - 0.50 m	Seem to be in revenue land	-
54.	Located 0.5 km SW of above dyke	Dolerite	Fine to medium grained colour greyish black	60,000	0.25 - 0.50 m	Partly in revenue land and Chhote bara Jhar	
55.	By the road side of (Toyabera to Charkai) and approximately 0.5 km W of village Toyabera	Dolerite	Fine to medium grained greenish black in colour hard and compact as boulders forms	5000	0.25 - 1 cu m	Seem to be in revenue land	Due to presence of greenish and white particles of quartz feldspar decreasing grade of rock for the purpose of cutting and polishing.
56.	At interval of 100 m from the dyke No. M ₃ towards astern direction	Dolerite	---- ,, ----	750	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---
57.	It is also parallel set of dyke village Toyabera situated at the interval of 100 m towards Eastern direction	Dolerite	---- ,, ----	7500	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---
58.	It is passing through village Charkai and approximately 0.5 km NW and 1 km SE of village Charkai 19° 45' : 81° 44'	Dolerite	Fine to medium grained occur as boulders, making small hill range around the area with presence of greenish and white particles (Quartz and plagioclase) Black in colour	2,25,000	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
59.	1.5 km NW of village Charkai	Dolerite	Fine to medium grained occur as boulders, making small hill range around the area with presence of greenish and white particles (Quartz and plagioclase) Black in colour	1250	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---
60.	It is parallel to above dyke	Dolerite	---- ,, ----	1250	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---
61.	2.0 km NW of village Charkai by the road side of (Charkai to Chandagaon)	Dolerite	---- ,, ----	750	0.25 - 1 cu m	Seem to be in private land	Due to presence of greenish and white particles of (quartz feldspar) decreasing grade of rock for the purpose of cutting and polishing further testing is required.
62.	It is the parallel to above dyke at interval of 50 m	Dolerite	Fine to medium grained occur as boulders, making small hill range around the area with presence of greenish and white particles (Quartz and plagioclase) Black in colour	2500	0.25 - 1 cu m	Seem to be in revenue land	Due to presence of greenish and white particles of (quartz feldspar) decreasing grade of rock for the purpose of cutting and polishing further testing is required.
63.	It is parallel to above dyke	Dolerite	---- ,, ----	1250	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---
64.	It is parallel to above dyke	Dolerite	---- ,, ----	750	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---
65.	200 m NW of village Chandagaon (Adjacent to village Chandagaon) 19° 46' : 81° 41'	Dolerite	---- ,, ----	1875	0.25 - 1 cu m	Seem to be in revenue land	--- ,, ---

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
66.	It is parallel to above dyke	Dolerite	Fine to medium grained occur as boulders, making small hill range around the area with presence of greenish and white particles (Quartz and plagioclase) Black in colour	1875	0.25 - 1 cu m	Seem to be in revenue land	Due to presence of greenish and whitish particles in rock as well as situation adjacent to village are unfavourable factors for cutting and polishing
67.	1 km SW of village Hirri 19° 45' : 81° 36'	Dolerite	Fine to medium grained two sets of joints are noticed, black in colour	2000	0.25 - 0.5 m	Seem to be in revenue land and Chhote bare jhar	
68.	2 km SE of village Bhumka 19° 46' : 81° 33'	Dolerite	---- ,, ----	1,20,000	more than 1 cu m	Seem to be in forest land	Locally this hill is called as Bhudhbhata
69.	Adjacent to village Kewatpara Bhumka	Dolerite	---- ,, ----	2500	0.25 - 0.5 m	Partly in private and revenue land	
70.	1.5 km NW of village Gharsora	Dolerite	Fine to medium grained two sets of joints are noticed, black in colour and quartz percentage negligible	7500	0.50 - 1 cu m	Partly in private and Chhote bara jhar	
71.	By the road side of 1 km from Shankarpur to Borgaon 19° 50' : 81° 36'	Dolerite	Fine to medium grained and occur in form of boulders, black in colour	3750	0.25 - 0.5 m	Seem to be in Chhote bara jhar	
72.	1 km SE of village Borgaon	Dolerite	Fine to medium grained two sets of joints are noticed, black in colour	11,250	0.50 cu m	Partly in revenue and Chhote bara jhar	
73.	Extending from village middle Borgaon to Belbhata to trending NW-SE	Dolerite	Fine to medium grained two sets of joints are noticed, black in colour in form of boulder and sheets	9,00,000	more than 1 cu m	completely in forest land	It is one of the biggest dyke of the area

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
74.	0.5 km South of village Patora (Nawapara) 19° 51' : 81° 36'	Dolerite	Fine to medium grained two sets of joints are noticed, black in colour in the form of boulder and sheets	15,000	1 cu m	Solely in forest land	-
75.	Adjacent to above dyke at the interval of 500 m	Dolerite	-- ,, --	5000	0.25 - 0.50 m	Solely in forest land	-
76.	1 km NW of village Patora	Dolerite	-- ,, --	25,000	1 cu m	-- ,, --	-
77.	Parallel to above dyke	Dolerite	-- ,, --	20,000	1 cu m	-- ,, --	-
78.	0.5 km SW of village Belbhata para (Pharasgaon to Bare Donger road)	Dolerite	Fine to medium grained two sets of joints are noticed, black in colour.	90,000	0.25 - 0.50 m	-- ,, --	-
79.	3 km South of Pharasgaon by the either side of the road 19° 15' : 81° 38'	Dolerite	Fine grained, massive hard rounded boulder are seen (may be exfoliation or spheroidal weathering) black in colour	3,00,000	more than 1 cu m	-- ,, -	-
80.	2.5 km south of Pharasgaon by the either side of the road	Dolerite	Fine to medium grained two sets of joints are present, black in colour	3,00,000	0.50 cu m	-- ,, --	In teak wood forest
81.	1 km N of village Palna 19° 43' : 81° 27'	Dolerite	-- ,, --	75,000	1 cu m	Solely in private land	Mining of the rock is going on (Area around 200 m in length)
82.	Adjacent to village Palna	Dolerite	Fine to medium grained three sets of joints, black in colour	10,000	0.50 cu m	Partly in revenue and Chhote bare jhar	
83.	0.5 km NW of village Korrabargaon	Dolerite	-- ,, --	7500	0.50 cu m	Seem to be in Chhote bare jhar	-

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
84.	200 m SW of village Palna	Dolerite	Fine to medium grained, jet black in colour good quality, occurs in the form of boulders and sheets one set of vertical joints are noticed.	3000	0.50 - 1 cu m	Seem to be in revenue land	Partly in revenue and as well as private land local resident.
85.	It is the parallel to above dyke 15 m West	Dolerite	-- ,, --	225	0.50 - 1 cu m	-- ,, --	
86.	It is the parallel set adjacent to village Palna of interval of 30 m	Dolerite	Fine to medium grained black to greenish black in colour, occurs as boulders and sheets. Laths of plagioclase are seen. Three sets of joints (two vertical and one horizontal)	1000	0.50 - 1 cu m	Seem to be in Chhote bare jhar	
87.	0.5 km NW of village Pandey Algaon 19° 47' : 81° 39'	Dolerite	Fine to medium grained black in colour with white particles, occur in the form of boulders and sheets as well	10,000	1 cu m	Seem to be in revenue land	-
88.	200 m SW of village Atgaon (Gudripara)	Dolerite	Fine to medium grained black to greenish black in colour containing white particles.	10,000	1 cu m	Seem to be in revenue land	-
89.	300 m SW above dyke.	Dolerite	-do-	70,000	1 cu m	Seem to be in forest land	Its good quality and good reserve suitable for cutting and polishing
90.	Adjacent to village Bhandarundi Mainpara 19° 50' : 81° 34'	Dolerite	Fine to medium grained, black in colour in the form of boulders and sheets as well. One set of horizontal joints	3500	more than 1 cu m	Seem to be in revenue land	Extent of deposit is very limited but occurrence in the form of sheet rock is good indication extract big block.
91.	From Bhiragaon to Taragaon (Amlipara) 19° 47' : 19° 49' 81° 42' : 81° 45'	Pink Granite	Fine to medium grained, pink in colour	1,12,50,000	more than 1 cu m	-	Partly in all types of land

S.No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
92.	From adjacent to village Randhawa to 1 km SW of village Randhawa 19° 47': 81° 43'	Pink Granite (Garnetiferous)	-- ,, --	75,00,000	more than 1 cu m	-	Partly in revenue types of land, and Chhote bare jhar (scattered outcrops)
93.	Due south and SW 1 to 1.5 km from village Pupal 19° 50' : 81° 43'	Charnockite (Acid to intermediate type)	Fine to medium grained with some coarse grained content of quartz & feldspar (Hypersthene) uniform grain size varies from grey to smoky grey in colour, hard and compact.	75,00,000	more than 1 cu m	-	Partly in revenue and Chhote bare jhar. Grain size varies place to place also content of big (Phenocryst) in the rock.

Flagstone

Sr. No.	Locality	Name of Rock	Description of deposit	Dimensions length x width x thickness	Approximate Reserves (cu m)	Overburden (m)	Remark
1.	Matkot area, 28 km from Jagdalpur	Sandstone and Shale	Flaggy fine grained, compact, pink horizontally bedded, feasible separated by micaceous layers with 3 sets of joints	Number of small mounds	Huge quantity	2 - 3'	Mostly revenue land, partly forest
2.	Nainmur Matkot area 29 kms from Jagdalpur	-- ,, --	-- ,, --	-	-	2'	Mostly revenue land
3.	Bhejripader 39 kms from Jagdalpur	-- ,, --	-- ,, --	-- ,, --	-	1 - 2'	Revenue land and revenue forest land
4.	Mariguda (Chitrakot) area	Shale and Sandstone	Dark grey, fine grained, flaggy, hard and compact, micaceous layers are also available	0.98 sq km	-	-	Partly under revenue forest partly private
5.	Garhiya area	-- ,, --	-- ,, --	0.597 sq km	-	-	Revenue area
6.	Mendri (Chitrakot) area	Quartzite	Fine grained, hard, compact, horizontally bedded, prominently jointed	0.50 sq km	-	-	Suitable for cutting polishing
7.	Parapur	Quartzite	-- ,, --	0.50 sq km	-	-	Revenue land
8.	Rajpur area (65 E/16) E of NH-43 35 km from Jagdalpur	Limestone	Flaggy, hard, compact, greenish grey to grey in colour, with shale parting breaks easily along parting	-	10,00,000 cu m	-	Suitable for cutting / polishing
9.	Balenga	-- ,, --	-- ,, --	-	8,00,000 cu m	-	-
10.	Chapka	-- ,, --	-- ,, --	-	5,00,00 cu m	-	Area under protected forest

Sr. No.	Locality	Name of Rock	Description of deposit	Dimensions length x width x thickness	Approximate Reserves (cu m)	Overburden (m)	Remark
11.	Sivni Alnar	-- ,, --	-- ,, --	-	25,00,000 cu m	-	Low grade limestone
12.	Madhota Tikampal area	-- ,, --	-- ,, --	-	30,00,000 cu m	-	Upper parts are flaggy
13.	Ichhapur-Retawand area	-- ,, --	-- ,, --	-	20,00,000 cu m	-	Suitable for dimension stone
14.	Raikot	Limestone/ Marble	-	-	-	-	-

District Dantewara, Sukma and Bijapur

Sr. No.	Locality	Name of Rock	Description of deposit	Dimensions length x width x thickness	Approximate Reserves (cu m)	Overburden (m)	Remark
1.	Gongla and Pushpalli villages about 4 km SE of Sukma 18°22': 18°26' 81°40':81°44' T.S. No. 65F/11	Limestone/ Marble				-	
	Block A	-- ,, --	Yellowish white to white, horizontally bedded, hard, compact, slightly metamorphosed, 2 sets of fractures	600 m 80-150 m 10 m	1,50,000 cu m		Looks like marble suitable for dimension stone
	Block B	-- ,, --	-- ,, --	200 m 60 m 7 m	84,000 cu m	-	Suitable for dimension stone
	Block C	-- ,, --	Greyish to greyish, white, hard, compact, massive, horizontally, bedded, devoid of fractures	60 m 40 m 5 m	12,000 cu m	-	-- ,, --
	Block D	-- ,, --	-- ,, --	40 m 30 m 5 m	6000 cu m	upto 10 m	High grade limestone takes good polish
	Block E	-- ,, --	-- ,, --	100 m 60 m 5 m	30,000 cu m	-- ,, --	-
	Block F	-- ,, --	-- ,, --	50 m 30 m 5 m	7500 cu m	-	Suitable for D.S.
	Block G	-- ,, --	White crystalline limestone/marble, horizontally bedded, wide spaced fractures	500 m 80 m 10 m	4,00,000 cu m	-	-- ,, --
	Block H	-- ,, --	-- ,, --	200 m 80 m 10 m	1,60,000 cu m	-	-- ,, --
	Block I	-- ,, --	-- ,, --	200 m 70 m 8 m	1,12,000 cu m	-	-- ,, --

Dimension Stone District Durg, Bemetara and Balod

S. No.	Location	Name of the Rock	Description	Length x width x depth	Reserve in cubic metre	Block size	Remarks
1.	Belodi village 81°18'25" : 21°34'55" T.S. No. 64 H/16	Granite	Grey coloured, medium grained, equigranular, lack of flaky platy minerals, free from veins, free from veins, hair cracks, flower and moles	500 m 100 m	-	-	Seems to be suitable for cutting/polishing
2.	Villages Malgaon, Amabakra, Orogaon, etc.	Granite	Grey, greyish and pinkish coloured, medium grained, equigranular, uniform in grain size and colour	-	-	-	All the characters make the area suitable for cutting/polishing

Dimension Stone Raigarh district

S. No.	Location	Name of the Rock	Description	Reserve in cubic metre	Block size	Type of Land	Remarks
1.	Amadarha-Sirenga area, teh. Dharmjaygarh	Granite and Granite gneiss	-	-	-	-	-
2.	Bagbahar Ludeg area, teh. Dharmjaygarh	Granite	-	-	-	-	-
3.	Rajpur-Lelunga-Kotba teh. Gharghora	Granite	Grey to pink in colour, two directional major joints	vast	-	-	Takes good polish, blocks can be obtained due to joining
4.	Parts of Jashpur tehsil	Granite	Pink coloured, very well jointed	huge	-	-	Take good polish, can be used for dimension stone
5.	Kotarlaia-Jamgaon track, teh. Raigarh	Granite	Grey to pink coloured	-	-	-	Can take good polish
6.	Dongripali Gaurdih area, SE of Sarangarh	Granite	Grey to pinkish white in colour, medium grained, evenly distributed joints make it suitable for easier quarrying	-	-	-	Can take good polish
7.	Khamar 22°24' : 83°33'20" T.S. No. 64 N/11	Granite	Pink to greyish medium to coarse grained	1.58 million cu m	-	-	Can be used as dimension stone.
8.	Jharan 22°24'30" : 83°33'15" T.S. No. 64 N/11	Migmatite	Grey to blackish grey, medium to coarse grained. Two sets of joints	3.15 million cu m	-	-	Can be used as dimension stone.

Flag Stone

District Raigarh							
Sr. No.	Locality	Name of Rock	Description of deposit	Dimensions length x width x thickness	Approximate Reserves (cu m)	Overburden (m)	Remark
1.	Sahajpali 21°30'30" : 83°19'00"	Limestone	Flaggy Charmuria limestone grey, white sometimes pink in colour	1000x 100	6,00,000	0 to 1.5 m	
2.	Kanthipali 21°31' : 83°20'	-- ,, --	-- ,, --	2000x 100	12,00,000	3.0 m	
3.	Tousir 21°30'40" : 83°15'20"	-- ,, --	-- ,, --				Low grade limestone
4.	Sanda 21°34'10" : 83°17'	-- ,, --	-- ,, --	200x200	1,60,000	0.5 m	
5.	Khalkhatar-Dendaidih 21°37'30" : 83°16'	-- ,, --	-- ,, --	100x100 1500x50	20,000 1,50,000	1 m 2 m	
6.	Katangarli 21°38'30" : 83°17'	-- ,, --	-- ,, --	2000x50	10,00,000	Nil to 1 m	
7.	Chandarpur, Timarlaga, Gureli, Laladhurwa, Dhaurabhata, Jognipali, Malda	-- ,, --	-- ,, --	10,000 x 500	1,00,00,000	Nil to 1 m	Few pockets yield good grade limestone cement and BF grade
8.	Ghoraghati 21°31' : 85°00"	-- ,, --	-- ,, --	500 x 50	1,50,000	3 m	Low grade
9.	Kotmarra-Keldi 21°34' : 83°00" Kalkohi 21°35'30" : 83°01'	-- ,, --	-- ,, --	2000x50	6,00,000	0 - 3 m	-- ,, --
10.	Piparda 21°25' : 83°08'	-- ,, --	-- ,, --	100 x 20	12,000	0 - 1.2 m	Low grade dolerite

District Bilaspur, Mungeli and Janjgir-Champa

Sr. No.	Locality	Name of Rock	Description of deposit	Dimensions length x width x thickness	Approximate Reserves (cu m)	Overburden (m)	Remark
1.	Kosamdih village (64 K/5) 2 km E of Masturi	Limestone	Greyish black, argillaceous, flaggy, horizontally bedded, jointed. Bedding planes are prominent	2 km 1.5 km	4.5 crore cu m (block size - 24" x 30")		Suitable for dimension stone takes good polish. Number of quarries are working.
2.	Bilha and Paunsari	Flaggy Dolomite	Fine grained brownish pink horizontally bedded, hair cracks absent	4 km 1.5 km	20 crore cu m (block size - 36" x 24") Thickness of slabs 1" to 4"	Thin soil cover	Takes good polish
3.	Tikari (Bilaspur)	Calcareous Dolomite	Fine grained, grey flaggy	-	-	-	Takes excellent polish
4.	Kharod-Sheori narayan area (Janjgir) 64 K/9, 10 along Mahanadi	Limestone	Grey coloured flaggy fine grained, 2 sets of vertical joints (similar to Rajim stone)	0.36 km area	72 lakh cu m block size - 1m x 1m) Thickness of slabs 2" to 6"	Thin soil cover	Suitable for cutting polishing, takes good polish, No. of quarries are working.
5.	Sarkhon-Awaraikalan (Janjgir) 64 J/12	Limestone	Grey, flaggy, hard and compact with prominent bedding feasibility	-	-	-	May take good polish

आकारीय पत्थरों हेतु उत्खनन पट्टे प्राप्त करने हेतु प्रक्रियाएँ

गौण खनिज नियम 1996 के नियम 9 के अंतर्गत अनुसूची "एक" में विनिर्दिष्ट खनिजों आकारीय पत्थर – ग्रेनाईट, डोलेराइट, मार्बल और अन्य आग्नेय तथा परिवर्तित चट्टाने जिनका उपयोग काट कर और तराश कर विशिष्ट आकार के ब्लाक्स, स्लेब्स, टाइल्स बनाने के लिये किया जाता है । फ्लेग स्टोन, प्राकृतिक परतदार पत्थर जिसका उपयोग फर्श, छत आदि के लिये किया जाता है, के लिये आवेदन प्रारूप एक में तीन प्रतियों में किया जावेगा । आवेदन पत्र पर 5 रुपये मूल्य का न्यायालय शुल्क स्टाम्प चिपकाया जायेगा तथा उसमें निम्नलिखित विवरणों के साथ साथ उसमें किये गये कथन के समर्थन में दस्तावेज प्रस्तुत किये जायेंगे ।

आवेदन कर्ता द्वारा अनुसूची "एक" में विनिर्दिष्ट खनिजों के लिये नियमों के अधीन देय रुपये 5000 (पांच हजार रुपये मात्र) की राशि आवेदन शुल्क के रूप में चालान के माध्यम से जिलाध्यक्ष कार्यालय के अधीक्षक के समक्ष आवेदन पत्र जमा करना होगा ।

नियम 9 के अधीन उत्खनिपट्टे प्रदान करने की निहित शक्तियों के तहत अनुसूची "एक" में विनिर्दिष्ट खनिजों के संबंध में उत्खननपट्टों के प्रदान करने तथा उसका नवीनीकरण नीचे दी गई सारणी के कॉलम (1) में वर्णित प्राधिकारी द्वारा कॉलम नं (2) में विनिर्दिष्ट खनिजों के लिये कॉलम नं (3) तत्स्थानी प्रविष्टि में विनिर्दिष्ट सीमा तक किया जाएगा ।

सारणी

क्रमांक	प्राधिकारी	खनिज	शक्तियों की सीमा
1	2	3	4
1.	राज्य सरकार (एक)	अनुसूची "एक" के अनुक्रमांक 1 से 3 तक में विनिर्दिष्ट खनिज ।	(एक) संपूर्ण शक्तियों
2.	सचालक (एक)	अनुसूची "एक" के अनुक्रमांक 4 में विनिर्दिष्ट खनिज ।	(एक) जहाँ आवेदित क्षेत्र 4 हेक्टर से अधिक हो ।
3.	कलेक्टर/अपर कलेक्टर (वरिष्ठ आय.ए.एस स्केल)(एक)	अनुसूची "एक" के अनुक्रमांक 4 में विनिर्दिष्ट खनिज । (2) अनुसूची "एक" के अनुक्रमांक 5 में विनिर्दिष्ट खनिज (एक)	(एक) जहाँ आवेदित क्षेत्र 4 हेक्टर से कम हो ।

पट्टे पर दिये गये क्षेत्र का सर्वेक्षण:-

- यदि आवेदन कर्ता द्वारा अनुसूची "एक" के खनिज आकारीय पत्थर –मार्बल, ग्रेनाईट आदि हेतु उत्खनन पट्टा आवेदन पत्र प्रस्तुत किया जाता है तो मार्बल पॉलिसी अनुसार विधिवत दरों में पूर्वक्षण शुल्क जमा कर भू वैज्ञानिकों द्वारा आवेदित क्षेत्र का सर्वेक्षण रिपोर्ट प्रस्तुत करना होगा ।

2. उत्खनन पट्टा हेतु आवेदित क्षेत्र का स्थल निरीक्षण तहसीलदार पटवारी एवं खनि निरीक्षक आदि के निरीक्षण रिपोर्ट उपरांत नियमानुसार उत्खननपट्टा की स्वीकृती की कार्यवाही प्रस्तावित की जा सकेगी ।
3. जो वन भूमि क्षेत्र हो उसके बारे में पट्टा या परमिट वन संरक्षण अधिनियम 1980 की धारा 2 में लगाये गये प्रतिबंध या वर्जन रोक के अनुसार केन्द्र सरकार की पूर्व मंजूरी/अनुमोदन के बिना उत्खनन पट्टा नहीं दिया जायेगा ।
4. पर्यावरण संरक्षण के अंतर्गत उत्खनन पट्टा का धारक उत्खनन संक्रियाएँ करते समय पर्यावरण का संरक्षण और प्रदूषण का नियंत्रण करने के लिये यथा संभव पूर्वावधानियाँ गौण खनिज नियम 1996 की धारा 44 (एक) के अंतर्गत दर्शित रीति से बर्तेगा ।
5. धारक द्वारा उत्खनन किये गये क्षेत्र या कलेक्टर द्वारा चयनित किसी अन्य क्षेत्र में उत्खनन या खनन संक्रियाओं के कारण नष्ट हुये वृक्षों की संख्या के दुगने वृक्ष लगाने के अतिरिक्त भूमि के पुनर्नवीकरण तथा समतलीकरण के संबध में समस्त उपाय करेगा ।
6. धारक द्वारा पट्टा विलेखा के निष्पादन की तारीख से एक वर्ष के भीतर खनन संक्रिया प्रारंभ करेगा तथा उसके पश्चात ऐसे संक्रियाओं का उपयुक्त निपुणता और कुशलता से संचालन करेगा ।
7. जहां धारक उसके नियंत्रण के बाहर के कारणों से एक वर्ष से अधिक की कालावधि के लिये खनन संक्रियाएँ प्रारंभ करने में असमर्थ रहता है या खनन प्रक्रिया प्रारंभ करने के पश्चात उसे चालू रखने में असमर्थ रहता है तो वह ऐसी कालावधि की समाप्ति के कम से कम 90 दिन पूर्व मंजूरी प्राधिकारी को ऐसे कारण स्पष्ट करते हुये आवेदन प्रस्तुत करेगा ।
8. धारक,राज्य या केन्द्रीय सरकार द्वारा न्यूनतम मजदूरी अधिनियम 1948 (1948 का 11) के अधीन समय-समय पर यथाविहित न्यूनतम मजदूरी से कम मजदूरी का भुगतान नहीं करेगा ।
9. किसी पट्टा लिखत में अंतर्विष्ट किसी बात के होते हुये भी पट्टेदार निकाले गये या खपाये गये किसी भी खनिज के संबंध मे अनुसूची तीन तथा चार में समय समय पर विनिर्दिष्ट दरों से भाटक /स्वामित्व का भुगतान करेगा ।
10. मार्बल,ग्रेनाईट का कोई भी ब्लाक चाहे वह प्रसंस्कारित (Processed) अथवा कच्चे स्वरूप में हो या अन्य कोई खनिज खनि अधिकारी द्वारा जारी किये गये विधि मान्य अभिवहन पास के बिना पट्टा क्षेत्रों में से किसी भी क्षेत्र में नहीं भेजा जायेगा, उत्खनित खनिजों में से उस मात्रा के लिये जिसका परिवहन अभिप्रेत है , स्वामित्व जमा करने के पश्चात प्रारूप आठ में आवेदन पर अभिवहन पास जारी किया जायेगा । इस नियम के उल्लंघन का परिणाम ऐसे किसी कार्यवाही पर जो पट्टेदार के विरुद्ध हो सके प्रतिकूल प्रभाव डाले बिना कलेक्टर द्वारा प्रतिभूति निक्षेप के समपहरण (जब्ती –राजसातकरण) में हो सकेगा तथा अभिवहन पास प्रारूप –नौ में होगा ।

11. उत्खनन पट्टे की कालावधि मार्बल नीति अनुसार व्यक्तिगत प्रकरण एवं सहकारी सोसायटियों के मामले में दस से बीस वर्ष की होगी ।
12. काटने तथा तराशने की इकाई की स्थापना:- नियम 30 के उपनियम (5)में अंतर्विष्ट किसी बात के होते हुये भी, काटने तथा तराशने की इकाई स्थापित करने के लिये प्रदाय किये गये मार्बल,ग्रेनाईट के उत्खनन पट्टे के संबंध में यदि राज्य में ईकाई पट्टा / पट्टे निष्पादन किये जाने से एक वर्ष की कालावधि के भीतर स्थापित न की जाये, तथा नियम 30 के निहित शर्तों के तहत पालन न करने पर उक्त पट्टा /पट्टे पर्यवसित कर दिये समझे जायेंगे ।
13. स्वामित्व का निर्धारण तथा विनिश्चय:-
 1. किसी पट्टे का निर्धारण वर्ष में या यथा अपेक्षित किसी निर्धारिती से शोध्य स्वामित्व का निर्धारण तथा अवधारणा पट्टेदार द्वारा पट्टा विलेख के निबंधनों तथा शर्तों के अधीन यथा अपेक्षित उस वर्ष के संबंध में तथा राज्य शासन द्वारा समय समय पर पुनरीक्षित रायल्टी के संबंध में अपेक्षित विवरणियाँ प्रस्तुत कर दी जाने के पश्चात् या उत्पादन प्रेषण या खपाये जाने के बारे में धारक द्वारा विवरण प्रस्तुत कर दिये जाने के पश्चात निर्धारण प्राधिकारी द्वारा किया जायेगा :

परन्तु यह कि निर्धारण प्राधिकारी, निर्धारण वर्ष के दौरान किसी विशिष्ट कालावधि के लिये उस कालावधि के संबंध में विवरणियाँ प्राप्त होने के पश्चात अनन्तिम निर्धारण कर सकेगा ।
 2. उप नियम (1) में वर्णित स्वामित्व के निर्धारण के प्रयोजन के लिये निर्धारिती प्रारूप-दस में आगामी मास की 10 तारीख तक मासिक विवरणी तथा प्रारूप 12 में वार्षिक विवरणी निर्धारण वर्ष के अवसान होने से एक माह के भीतर प्रस्तुत करेगा तथा राज्य शासन द्वारा समय समय पर संशोधित नियमों के तहत अनुबंध शर्तों के आधार पर पट्टेदार द्वारा पालन किया जायेगा ।