

PRE-FEASIBILITY REPORT

1.0 EXECUTIVE SUMMARY

S.No.	Information	Details															
1.	Project name	Sandstone mining															
2.	Mining Lease Area	1.00 Hectares or 2.47 Acre.															
3.	Location of mine :	Khasra no.- 1185, 1186, M.L No. 286/04															
	Village :	Sirrond															
	Tehsil :	Roopwas															
	District :	Bharatpur															
	State :	Rajasthan															
4.	Coordinates	<table border="1"> <thead> <tr> <th>Pillar No</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>26°55'36.69"N</td> <td>77°28'17.65"E</td> </tr> <tr> <td>2</td> <td>26°55'33.45"N</td> <td>77°28'17.58"E</td> </tr> <tr> <td>3</td> <td>26°55'33.38"N</td> <td>77°28'21.2"E</td> </tr> <tr> <td>4</td> <td>26°55'36.63"N</td> <td>77°28'21.27"E</td> </tr> </tbody> </table>	Pillar No	Latitude	Longitude	1	26°55'36.69"N	77°28'17.65"E	2	26°55'33.45"N	77°28'17.58"E	3	26°55'33.38"N	77°28'21.2"E	4	26°55'36.63"N	77°28'21.27"E
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5.	Land Use	Government waste Land															
6.	Minerals of mine	Sandstone Mining															
7..	Mineable Reserve	982800 tonnes															
9.	Proposed Production	108000 tonnes per annum															
10.	Method of mining	Open cast Semi Mechanized															
11.	Drilling or Blasting	Blasting is proposed for mining by authorized contractor on contractual basis.															
12.	No of working days	300 days															
13.	Water demand	Domestic Water : 1.56 KLD															
		Dust Suppression : 3.0 KLD															
		Green Belt Development : 0.3 KLD															
		Total Water Requirement: 4.86 KLD															
14.	Man Power	52															
15.	Nearest railway station	Bansi Paharpur Railway Station, approx. 1.5 km towards NE															

16.	Nearest state highway /national highway	SH-45 at approx. 7 Km NW.
17.	Nearest airport	Jaipur International Airport, approx. 168 Km towards West.

2. INTRODUCTION OF THE PROJECT/ BACKGROUND INFORMATION

2.1 Identification of Project and Project Proponent

- Name of the Project: Sandstone Mining
- Location of the Project: Khasra no.- 1185, 1186, M.L No. 286/04, Village- Sirrond, Tehsil- Roopwas, District- Bharatpur State- Rajasthan.
- Area: 1.00 ha.
- Production: 108000 tonnes per annum.

Name and address of the Project Proponent:

Shri Praveen Kumar Gupta

S/o:- Shri Heera Lal Gupta

R/o:- Village- Rudawal, Tehsil- Roopwas,

District- Bharatpur, Rajasthan

2.2 Brief description of nature of the project

The project is opencast Semi Mechanized method with adaptation of blasting for sandstone mining. The drilling is being done by hand held Jack Hammer of 32 mm size of shot hole.

The project has been proposed by Shri Praveen Kumar Gupta. The project proponent had obtained lease in the area for 20 years over an area of 1.00 Ha. at Khasra no.- 1185, 1186, M.L No. 286/04, Village-Sirrond, Tehsil- Roopwas, District- Bharatpur State- Rajasthan.

Land documents attached with *Annexure-I*

2.3 Need for the Project and Its Importance to the Country or Region

Due to the globalization and new ventures, the requirement for sandstone has been on an increase over the last few years. Sandstone are used in various forms in many industries to manufacture various products. Sandstone is used as building construction material majorly. The mined out sandstone will be sold to the Factories in Bharatpur & other parts of the state. Also the proposed project will be

beneficial in revenue generation. It will generate new employment opportunity causing beneficial socio-economic impact. This project will also lead to good utilization of an existing resource.

2.4 Demands-Supply Gap

Rajasthan is a mineral rich state and blessed with 79 varieties of minerals, of which 58 are being commercially exploited.

Mining is not only a major source of employment in rural and tribal areas of the State, but also a major source of revenue and plays an important role in the development of the State.

The quality of sandstone throughout the quarry lease area is heterogeneous or having remarkable variation in grade. The rate of production proposed on the basis of current demand of market. The demand for sandstone in India is increasing day by day due to increase in economic development of the country. This sandstone is present in abundant quantity in the mine lease area. Rajasthan is one of the major sandstone producing state in the country.

2.5 Imports vs. Indigenous Production

Demand of Sandstone as building construction material in the domestic market is high. In the allotted area, Sandstone is available in abundant quantity and can be excavated indigenously. It had become a source of economy in the area/region.

2.6 Export Possibility

There is an enough possibility of export of sandstone in various forms such as tiles, slabs from Rajasthan. The Sandstone caters to the indigenous demand and major consumers are located in nearby areas. Therefore, no export is envisaged for the mined out mineral.

2.7 Domestic/ Export Markets

- **Domestic Market**

There is always ever increasing demand sandstone in the domestic market.

- **Export Market**

The proposed mining activity is for indigenous consumption only for industrial and manufacturing activities. So no export is envisaged.

2.8 Employment Generation (Direct and indirect) due to the project

The proposed mining operation will generate new employment opportunity causing beneficial socio-economic impact. The total manpower requirement for the proposed mining operation will be approximately 20. Experienced personnel will be hired as Mine Supervisor, a Mine's Mate will be hired, and a watchman to check and regulate the entries/exits in the mine lease area. Local laborers will be hired for mining operation.

3. PROJECT DESCRIPTION

3.1 Type of Project Including Interlinked and Interdependent Projects, If Any.

The proposed mining activity will be done for excavation of sandstone only and the mined out mineral will be transportation by trucks to the Factories in Bharatpur & other parts of the state. This is an independent mining project and there are no interlinked projects involved.

3.2 Location

The mining lease area is located at Khasra no.- 1185, 1186, M.L No. 286/04, Village- Sirrond, Tehsil-Roopwas, District- Bharatpur State- Rajasthan.

The mining lease area falls in Survey of India GT Sheet no. 54 F/5.

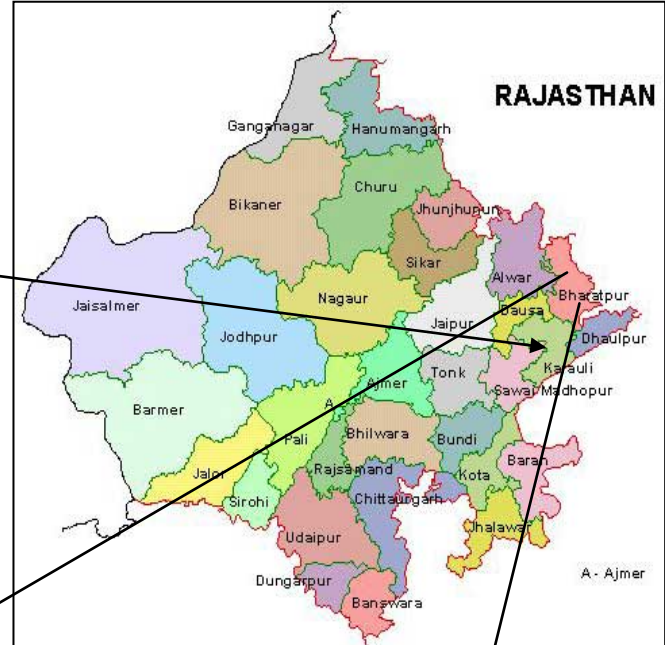
Site Coordinates:-

Pillar No	Latitude	Longitude
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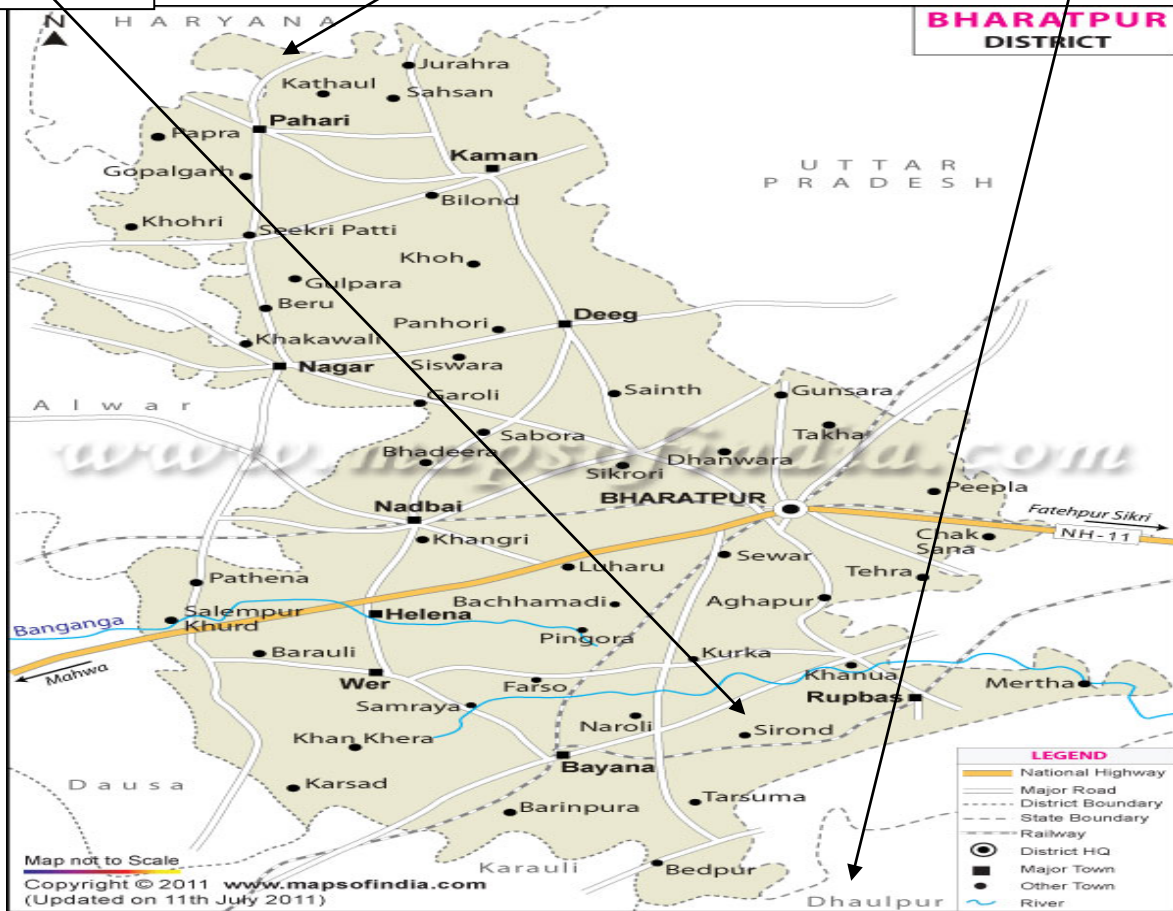
500 meters Google map and 10Km radius Google map are given as **Annexure II & Annexure IV.**

The vicinity map of the mine location is given below Figure 1:

Pre-Feasibility Report of Proposed Sandstone Mining project at Village- Sirrond, Tehsil- Roopwas, District- Bharatpur, State- Rajasthan.



Project Site



3.3 Details of alternate sites considered and the basis of selecting the proposed site, particularly the environment considerations gone into should be highlighted.

Mineral is site-specific and the lease has been allotted in the particular area. Hence no alternative site is examined for mining.

The land is government revenue land. It is hilly terrain, rocky non-forest land of Rajasthan Government. The quarry lease area is covered with mainly Sandstone mineral. As there is potential of sandstone in large amount in that area, the proposed mining activity will help to use a resource for beneficial purposes.

3.4 Size or magnitude of operation

The proposed mine has lease over an area of 1.00 Ha. The maximum rated capacity of the project will be 108000 tonnes per annum. Mining will be done by making benches of height of 3-6 m.

Details of Reserve are as follows:-

Nature of reserve	Recovery minerals 80% (tonnes)	Waste 15% (tonnes)	Sub-grade 5%
Proved Reserve(111)	658800	123525	41175
Probable Reserve(121)	324000	60750	20250
Possible Reserve (333)	108000	20250	6750
Total	1090800	204525	68175

Source: Approved Mine Plan

Total minable reserve = proved + probable

$$658800+324000= 982800 \text{ MT}$$

Net production from the mine lease area will be as follows:-

Year	Total Saleable sandstone MT in Tonnes	Total waste/overburden/ soil in MT
1 st	38634	10314
2 nd	44677	10581
3 rd	50168	11545
4 th	62139	13990
5 th	108000	20248.5
Total	303618	66678.5

Source: Approved Mine Plan

3.5 Project description with process details

Mining of sandstone will be done by opencast Semi Mechanized method with the adaptation of drilling & blasting as the mineral is found in the form of rock. The proposed bench height is of 6 m & width of the bench shall be kept more than the height. A slope of bench shall be kept 45°.

The parameter of blasting are:-

Length of Short Holes : 1.6 m

Parameter of short holes: 32mm

Spacing : 1 m

Burden : 0.8 m

Stemming : 25%

Blasting Parameters

Type of Explosive – Special Gellatin, ordinary plain, Detonator, Safety fuse

Production capacity is proposed to be about 108000 tonnes per annum. Lease has been granted for 20 years. Entire process will be done opencast Semi Mechanized method with adaptation of drilling & blasting.

Extent of mechanization

Machine	No.
Compressor	1
Jack Hammer	1
Excavator	1
Dumper	4
Fork lift m/c	1
Cobbles formation m/c	1
Edge cutting m/c	1

The handling of ROM is Semi Mechanized. The Rom mineral is first sorted out Semi Mechanized to remove the impurities associated with it. The sorted mineral is then carried to the temporary stack yard & then further loaded for its onward transportation by trucks to the Factories in Bharatpur & other parts of the state.

3.6 Raw Material Required Along With Estimated Quantity, Likely Source, Marketing Area of Final Product/s, Mode of Transport of Raw Material and Finished Product

No raw material will be required in the proposed project. The operation only involves the excavation of sandstone in its existing form and transported to the end users/ market.

3.7 Resource Optimization/ Recycling and Reuse

In nature, mineral is in finite quantity and once the mineral is depleted cannot be replenished easily. Mining will be done systematically and scientifically in order to achieve optimum utilization of the mineral.

3.8 Availability of Water, Its Source, Energy/ Power Requirement and Source

3.8.1 Water Requirement

Activity	Water requirement (KLD)
Dust suppression	3.0
Domestic	1.56
Green Belt Development	0.3
Total	4.86

Thus total water requirement will be 4.86 KLD. This water will be supplied from the nearby sources through tankers, after due permission.

3.8.2 Power

Proposed mining activity will be carried out by Opencast Semi Mechanized method with the adaptation of drilling & blasting. The sandstone will be excavated and after sorting it will be loaded into tractors/dumpers by the workers themselves. Fuel will be consumed for different machinery involved like Compressor, Jack Hammer, Dumper and Diesel Pump etc. The mining operation will be carried out during daytime only. If electricity will be required in future then it will be taken by proper permission from concerned department.

3.9 Quantity of Wastes to be Generated (Liquid And Solid) and Scheme for their Management/ Disposal

3.9.1 Solid Waste Generation & its Disposal

No municipal Solid Waste will be generated at the site by the local workers, hired for the project. However, 66678 tonnes of mineral reject will be generated in next five year, which will be back filled and used for plantation after spreading top soil over it and the local people would use either for making & maintaining road or as filler for the foundation of the house.

3.9.2 Liquid Effluent Generation & its Disposal

No liquid effluents will be generated at the site by the local workers, hired for the project.

4. SITE ANALYSIS

4.1 Connectivity

Nearest Railway Station	Bansi Paharpur Railway Station, approx. `1.5 km towards NE
Nearest Airport	Jaipur International Airport, approx. 168 Km towards West.
Road connectivity	SH-45 Approx. 7 Km towards NW.
Nearest Village	Sirrond, approx. 1.5 Km towards WNW.

4.2 Landform, Landuse and Land Ownership

Topographically the lease area is hilly terrain non-forest land and surrounding topography is hillock.

As a result of quarry operation the original ground profile will be altered.

The ownership of the lease land lies with Rajasthan Government as it is a Government Waste Land

Geology of the Area:

The area covers parts of Alwar and Bharatpur districts of Rajasthan and Gurgaon district of Haryana. Topographically, the area is characterized by NNE-SSW trending hill ranges in the west, flat-top domal hill in the east, rugged hilly terrain with narrow intervening valley in the south east, and flat topography in the central part. The average relief of the area is 100 m above msl. The maximum elevation, 372 m above msl, is located in the northwest. The area is drained in the southern parts by Ruparel or Barah River flowing towards East. In other parts the drainage is controlled by ephemeral nalas(carrying run-off water of the monsoon) which invariably lose their tracts in the plains. The drainage pattern is mainly 'trellis' or 'fault trellis' although dendritic pattern are also present.

The litho logical units exposed in the area belong to the Alwar and Ajabgarh Groups of the Delhi Super group of plalaeo to meso Proterozoic age and quaternary geomorphic surfaces.

Three phases of deformation suffered by the Delhi super group of rocks could be recognized in the area. The first phase is represented by tight, isoclinal to near- upright folds having 30° to 60° NNE plunge. The second phase has resulted in open anticlines and synclines plunging 30° to 45° towards WNW of ESE. The third phase is represented by broad open warps roughly along E-W Axis. The interference of first and second phase has produced domal structure in the east.

4.3 Topography

Considering the topography of the district some parts as tehsil Bharatpur and Nadbai are plain in as terrain tehsil Nagars and Bayana are consi derably diversifies by hills. In general the soil is alluvial which is fairly wooded and cultivated, the area surrounded by diversified and

detached hill is locally called by name Dang. Forests exists in considerable size in all the Sub divisions of the district.

Source: http://dcmsme.gov.in/dips/DIPR_Bharatpur.pdf

4.4 Existing Land Use Pattern and Shortest Distances from Forests, Water Bodies, Eco-Sensitive Areas, Etc.

The Mine lease area is rocky hilly terrain non-forest land. List of Water Bodies /Eco-sensitive areas within 15 km radius of the project site are as follow:-

Water Bodies	Nil
Eco-sensitive areas	Band Baretta Wildlife Sanctuary, approx. 11 km towards WSW.

4.5 Existing Infrastructure

- (a) **Road-** SH-45, approx. 7 Km towards NorthWest.
- (b) **Rail-** Bansi Paharpur Railway Station, approx. 1.5 km towards NE
- (c) **Electricity-** Village Sirrond has Electricity facility.
- (d) **Water Supply-** Water for drinking purpose will be provided through water tankers and other available sources in the nearby villages.
- (e) **School Facilities-** Govt. middle School, Sirrond, approx. 1.5 Km towards WNW.
- (f) **Hospital-** Govt. Hospita, Rudawal, Rudawal, approx. 6.5 Km toward NW.
- (h) **Manpower-** Local worker from nearby villages will be preferred.

4.6 Soil Classification

Bharatpur district is characterized by wide spectrum of landscapes including hillocks, pediments, undulating fluvial plains, aeolian, ravines, palaeo-channels etc. Structural hills (mainly in northern and northeastern parts) trending NNE-SSW are generally composed of Delhi quartzite.

Soils in the district may be classified as:

- Medium Brown Loamy
- Deep brown loamy
- Deep dark brown Sandy

- Deep gravelly loam hilly soil

Source:<http://agricoop.nic.in/Agriculture%20contingency%20Plan/Rajasthan/RAJ29-BHARATPUR-26.7.2012.pdf>

4.7 Climatic Data from Secondary Sources

The Climate of the area is dry with extreme temperature variation i.e. in summer as high as 44⁰c, whereas in winter it lowers to 6⁰C or even less. Most of the rain falls during the period of July to September. Maximum and minimum rain fall varies (500mm-200mm).

Source: *Approved Mine plan*

4.8 Social Infrastructure Available

Nearest Railway Station	Bansi Paharpur Railway Station, approx. 1.5 km towards NE
Nearest Airport	Jaipur International Airport, approx. 168 Km towards West.
Road connectivity	SH-45 Approx. 7 Km towards NW.
Nearest Village	Sirrond, approx. 1.5 Km towards WNW.

5. PLANNING BRIEF

5.1 Planning Concept

During mining operation all the precaution will be observed to prevent haphazard excavation of pit as per the DGMS and IBM rule & regulation.

This project operation will be done by open cast Semi Mechanized method with the adaptation of drilling and blasting. The operation like drilling of short holes, breaking will be done by using machinery.

5.2 Population projection

The Total Population of village Sirrond is 3647 individuals and 650 numbers of households. As the locals will be involved in this mining project so no inflow of population is anticipated due to this project.

Census data of Project Village: Sirrond, Subdistrict: Rupbas, District: Bharatpur, Rajasthan

Items	Details
Town/Village	075298
Name of Village	Sirrond
Number of Household	610
Total Population	3694
Total Male	1977
Total Female	1717
Children	672
Schedule Caste	615
Literate	2399
Illiterate	1295
Total Worker	1753
Total Non-Worker	1941

Source: Census of India 2011,

5.3 Land use planning (Break up along with green belt, etc.)

Green belt development will be done on the periphery of lease area (7.5m safety barrier zone).

Land use pattern of the mine lease area is as follows:-

Existing Land use pattern

	Class	Forest land (Ha)	Crop land (Ha)	Govt. land (Ha)	Pvt. Land (Ha)	Total (Ha)
1	Area under excavation	--	--	0.9404	--	0.9404
2	Storage of top soil	--	--	--	--	--
3	O/B Dump	--	--	--	--	--
4	Mineral Storage	--	--	--	--	--

5	Sub grade mineral storage	--	--	--	--	--
6	Infrastructure	--	--	--	--	--
7	Road/cart track	--	--	0.0596	--	0.0596
8	Railway	--	--	--	--	--
9	Green belt	--	--	--	--	--
10	Tailing Pond	--	--	--	--	--
11	ETP	--	--	--	--	--
12	Mineral separation plant	--	--	--	--	--
13	Town ship	--	--	--	--	--
14	Electric line	--	--	--	---	--
15	others	--	--	--	--	
16	Virgin area	--	--	--	--	--
	Total			1.00	--	1.00

Source: Approved Mine Plan

Land use pattern at the end of five year period

	Class	Forest land (Hectare)	Crop land (Hectare)	Waste land (Govt.)	Pvt. land	Total
1	Pits & quarries	--	--	0.7369	--	0.7369
2	top soil dump	--	--	--	--	--
3	Dumps	--	--	--	--	--
4	Mineral Stack yard	--	--	0.0030	--	0.0030
5	Sub grade Stack yard	--	--	--	--	--
6	Infrastructure (work shop, administrative building)	--	--	0.0042	--	0.0042

7	Roads	--	--	0.0097	--	0.0097
8	Railway	--	--	--	--	--
9	Green belt	--	--	--	--	--
10	Tailing Pond	--	--	--	--	--
11	ETP	--	--	--	--	--
12	Mineral separation plant	--	--	--	--	--
13	Town ship	--	--	--	--	--
14	Not utilized	--	--	0.2462	---	0.2462
	Total			1.00	--	1.00

Source; Approved mine Plan

5.4 Assessment of Infrastructure Demand (Physical & Social)

(a) Statutory Requirement: These facilities will include first aid facility, rest shelter, drinking water facility etc. in the quarry lease area.

(b) Maintenance Requirement: As the method of quarry is opencast Semi Mechanized in nature, purposed machinery will be properly maintained.

(c) Administrative Requirement- For this a rest shelter and a site office is required for quarry staff.

5.5 Amenities/Facilities

The following facilities/amenities will be extended by the mine management:

- Direct and indirect Employment, most of which will be from nearby villages.
- Arrangements for safe and healthy working conditions & temporary rest shelters.
- Provision for safe Drinking water.
- Provision for Personal protective equipment (PPE).
- Provision of Nose-cap, eyeglasses, helmet, safety boots and safety belt for laborers.
- First-Aid facilities and Health check-up camps for the workers.
- Conducting medical camps for workers and nearby villagers at regular interval.

6. PROPOSED INFRASTRUCTURE

6.1 Industrial Area (Processing Area)

No processing area is required separately.

6.2 Residential Area (Non Processing Area)

As the local people will be given employment, no residential area/ housing are proposed.

6.3 Green Belt

It is proposed to plant approx. 100 local trees and bushes along the haul road, lease boundary and on the safety barrier around mined quarry as per directions and consultation with the local authority/ Govt. body.

Year wise plantation Details:

Year	No. of Sapling
1 st	20
2 nd	20
3 rd	20
4 th	20
5 th	20

List of Trees proposed for Masonry Stone mining project at Village- Sirrond, Tehsil- Roopwas, District- Bharatpur, State- Rajasthan.

S. N	Hindi Name	Binomial Name	Sensitive Tolerant /	Height Meters	Flowering Season	Crown Shape	Crown Surface Area M ²	Leaf Area CM ²
1	Babul	Indian Gum-Arabic-tree	<i>Acacia nilotica</i> (Linn) Willd.	Mimoseae	T	8	Aug-JAN.	Spreading
2	Amrud	Guava tree	<i>Psidium guayava</i> Linn.	Myrtaceae	T	5		Oblong
3	Bakul	Bakuli	<i>Mimusops elengi</i> Linn	Sapotaceae	T	10	Jan.- Mar.	Oblong / Round
4	Am	The mango tree	<i>Managifera indica</i> Linn	Anacardiaceae	S	15	South India - Jan -Mar	Round / Oblong
5	Jarool	Queen crape Myrte	<i>Lagerstroemia speciosa</i> (Linn)	Lythraceae	T	10	April - June.	Oblong
6	Jaman	Black plum	<i>Syzygium cumini</i> Linn	Myrtaceae	T	20	Mar. - May.	Oblong/ Spreading
7	Bargad	Banyan Tree	<i>Ficus benghalensis</i> Linn	Moraceae	T	20	April - June	Spreading

S. N	Hindi Name	Binomial Name	Sensitive Tolerant /	Height Meters	Flowering Season	Crown Shape	Crown Surface Area M ²	Leaf Area CM ²
8	Imli	The Tamarind Tree	<i>Tamarindus indica</i> Linn	Caesalpinaceae	T	20	April - Oct.	Spreading
9	Neem	Indian Lilac	<i>Azadirachta indica</i> A. juss.	Meliaceae	T	20	Jan - March, Aug.-Sept.	Spreading
10	Mehendi	Henna	<i>Lawsonia inermis</i> Linn	Lythraceae	T	5	April -July	Round
11	Khair	The catch tree	<i>Acacia catechu</i> , Willd	Mimosaceae	T	3	May-August	Oblong
12	Tagar		<i>Tabernaemontana divaricata</i> Linn	Apocynaceae	T	3	Throught the Year	Round
13	Agani jhar	Scarlet bush	<i>Hamelia patens</i> Jacq	Rubiaceae	T	3	Oct.- Jan	Round
14	Kagji phul	Bougainvillea	<i>Bougainvillea spectabilis</i> Willd	Nyctaginvillea	T	8	Throught the year	Oblong/Round
15	Erandi	The castor	<i>Ricinus communis</i> Linn	Euphorbiaceae	T	6	Sept - Oct	Oblong

Source: Guidelines for developing greenbelts, Programme Objective Series, PROBES/75/1999-2007, CPCB

6.4 Social infrastructure

The proposed sandstone mining is at a very small scale which requires 52 individual, which will be hired from nearby Villages, hence no social infrastructure is proposed. However, temporary rest shelter and site office is proposed.

6.5 Connectivity

The mine site is well connected via an unmetalled road of approx. 500 m towards North which further connects metalled road (road towards Sirrond & Mahalpur).

The haul road map is attached as **Annexure-III**.

6.6 Drinking Water Management

The main source of drinking water shall be water tankers and tube wells in the nearby areas.

6.7 Sewerage System

No sewerage system is proposed. However for sanitation purpose soaking pits will be made available.

6.8 Industrial Waste Management

Not applicable.

6.9 Solid Waste management

Negligible amount of municipal Solid Waste will be generated at the site by the local workers, hired for the project. The waste will be managed by the workers themselves. However 66678 tonnes of waste will be generated which will be mixed with mineral to make intermediate grade mineral which saleable in market and the local people would use either for making & maintaining road or as filler for the foundation of the house.

6.10 Power Requirement & Supply/Source.

The mining operation will be carried out during daytime only. As the mining process is proposed to be done by Open cast Semi Mechanized method with the adaptation of drilling & blasting, the power requirements to operate the machineries will be full filled by fuel (diesel).

7. REHABILITATION AND RESETTLEMENT (R&R) PLAN

The mine area is a hilly terrain which is vacant, therefore, rehabilitation and resettlement plan is not required.

8. PROJECT SCHEDULE & COST ESTIMATES

8.1 Likely date of start of construction and likely date of completion.

The project will commence once Environmental Clearance and other necessary clearances are obtained from the respective departments.

8.2 Estimated project cost along with analysis in terms of economic viability of the project

The project proponent will incur a total cost (Capital & Recurring cost) of Rs.35.0 Lakhs. This will include cost of labor, cost of transportation, fuel charges etc.

8.2.1 PROJECT DEVELOPMENT COST BREAK-UP

Sr. No.	Description	Cost in Rs.
1	Cost of infrastructure, Laborers,	15,00,000
2	HAUL Road Maintenance	3,00,000
3	Environnemental Protection cost	4,00,000
4	Machinery cost	10,00,000
5	Miscellaneous	3,00,000
TOTAL		35,00,000

8.2.2 ENVIRONMENTAL MANAGEMENT PLAN COST BREAK-UP

SI. No.	Measures	Capital Cost (In Rs.)	Recurring Cost (in Rs.)
1	Pollution Control (Dust Suppression)	50,000	90,000
2	Monitoring cost:- i) Air Monitoring ii) Water Monitoring iii) Noise Monitoring	-- --	60,000 30,000 20,000
3	Plantation (sapling cost+ water requirement for green belt)	50,000	1,00,000
Total		1,00,000	3,00,000

- Number of Tree- 100 (Approx.)

8.2.3 CORPORATE SOCIAL RESPONSIBILITY (CSR)

SI. No.	Activity	Capital Cost (in Rs.)
1	Construction of toilet in nearby school	50,000
2	Distribution of educational kits to the students of nearby village	20,000
TOTAL		70,000

9. ANALYSIS OF PROPOSAL (FINAL RECOMMENDATIONS)

The Project will bring economical benefits to the state as revenue will be generated for mineral.

The region is basically poor and backward area. The main economic activity is agricultural and animal husbandry. Severe unemployment problem exists in this area, literacy rate is low and standard of living is poor. The proposed mining operation will generate new employment opportunity causing beneficial impact. Transportation facilities and awareness in the region will be improved considerably. Socio-economic status of the region will definitely improve due to this mining operation.
