PRE-FEASIBILITY REPORT

1.0 EXECUTIVE SUMMARY

S.No.	Information	Details
1.	Project name	Sand Stone Mining Project
2.	Mining Lease Area	274.73 Ha. or 678.87Acre
3.	Location of mine	Plot no. -1, 2, 3, 4, 5, 6, 7&8**.(Google Map is given as Annexure I).**
	Villages	Chilachond
	District :	Dholpur
	State :	Rajasthan
4.	Coordinates	Latitude - 2 6°34'52.38"N to 26°38'21.45"N.
		Longitude - 77°29'32.66"E to 77°31'13.95"E
5.	Minerals of mine	Sand stone
6.	Mineable Reserve	73071053 Tonnes
6.	Proposed Production	49980Tonnes / annum
7.	Method of mining	Open cast Semi-mechanized Mining Method.
8.	Drilling or Blasting	Yes on contractual basis.
9.	No of working days	300 days
10.	Water demand	Domestic Water : 1.0 KLD
		Dust Suppression: 3.0. KLD
		Plantation : 7.5 KLD
		Total Water Requirement: 11.5 KLD
11.	Man Power	30 Individuals.
12.	Nearest railway station	Bari Railway station, approximate 11 Km towards NE.
13.	Nearest state highway/national highway	NH11B, approx., 0.20 Km towards SE.
14.	Nearest air port	Agra Airport, approximate 73 Km towards NE .

2. INTRODUCTION OF THE PROJECT/ BACKGROUND INFORMATION

2.1 Identification of Project and Project Proponent

- Name of the Project: Sand Stone Mining Project

- Location of the Project : Plot no. 1,2,3,4,5,6,7&8 , Village – Chilachond, Tehsil – Bari, District – Dholpur , Sate – Rajasthan.**(Google Map is given as Annexure I)**
- Area – 274.73 ha or 678.87 acre
- Total Production: - 49980 tonnes/annum.

Name and address of the Project Proponent:

Harcharan Lal Jindal
S/o Nanak Chand Jindal
R/o Saramthura
Tehsil – Baseri, District – Dholpur
State – Rajasthan.

2.2 Brief description of nature of the project

The project is open cast Semi- mechanized mining of mineral in the form of Sandstone. Approx 49980 tonnes/annum. Sandstone will be excavated. Entire process of excavation will be through semi-mechanized open cast mining method.

The project has been proposed by Mr. Harcharan Lal Jindal. The project proponent had obtained mining lease on dated 31/8/12 through letter no. [redacted] from Office of Superintendin Engineer, Bharatpur Circle , Department of Mines & Geology, Bharatpur -Rajasthan, for the Sandstone mining in proposed area for 5 years over an area of 274.73 ha or 678.87Acres on Plot no – 1,2,3,4,5,6,7&8, Village – Chilachond, Tehsil – Bari, District –Dholpur,State - Rajasthan. The period of mine lease is 16.02.1988 to 15.02.2018. The mining plan is approved by Office of Superintendin Mining Engineer, Bharatpur Circle , Department of Mines & Geology, Bharatpur -Rajasthan through letter noSME/BP//M.Plan/2013/3115, for period of 22.08.2013 to 21.08.2018.

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

Sandstone is used widely in the construction industry. Dholpur sandstone is fine to medium grained , compact , resistant to acid , available in different shades and colors and can be easily dressed and chiseled . It take good polish at cut surface, The Dholpur sandstone is being used in Rajasthan as well as in neighboring states since centuries as building & dimensional stone. The famous historical building like Rashtrapati Bhawan, Red fort of Agra and Delhi, Vidhansabha Bhawan, Jaipur and Many other forts are built by the Dholpur Sandstone. It is being used in roofing, flooring, paneling, beams; pillars, doors and windows sills, cladding, wall fencing, making of statue, perforated windows, jalies and carved decorative articles.

2.4 Demands-Supply Gap

Creation of huge infrastructure as being envisaged by Government of India particularly in Construction and housing sector requires basic building raw materials. Thus the demand for Sandstone is ever growing with the growth of the infrastructure sector in our country.

The requirement for the mineral is always high in the nearby cities and towns. Therefore there is always a good demand of the mineral in the domestic market. This stone (Sandstone) is present in abundant quantity in the mine lease area.

2.5 Imports vs. Indigenous Production

The demand in the domestic market is high for Sandstone. Mineral is available in abundant quantity in allotted area and can be excavated indigenously. Therefore import of sandstone is not required. It had become a major source of economy in the area /region.

2.6 Export Possibility

There are an enough possibility of mineral export of sandstone in various forms such as tiles and slabs. Sandstone caters to the indigenous demand and major consumers are located in nearby areas. Therefore, this project does not envisage export of the mined out mineral.

2.7 Domestic/ Export Markets

a) DOMESTIC MARKET

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

b) EXPORT MARKET

The proposed mining activity is for indigenous consumption only for real state, road making etc. So no export is envisaged.

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

The total direct manpower requirement for the proposed mining operation will be around 30 Significant Indirect employment is also expected due to the associated activities.

3 PROJECT DESCRIPTION

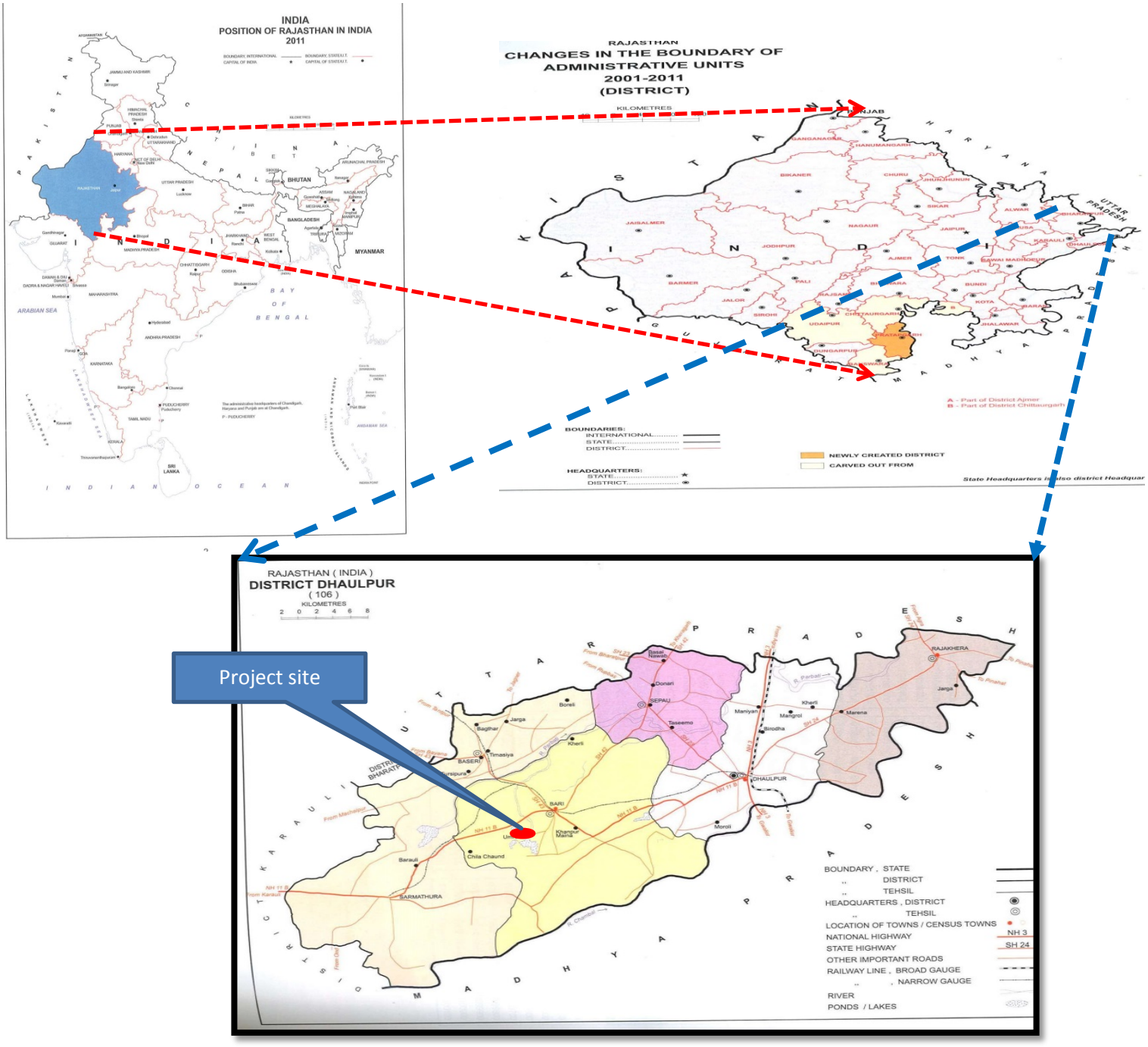
3.1 Type of Project Including Interlinked and Interdependent Projects, If Any.

The proposed project for excavation of sandstone is an independent project in which minerals excavated will be directly sold in the local markets. It does not involve interlinked and interdependent project.

3.2 Location

The mining lease area is located on Plot no. 1, 2, 3, 4, 5, 6, 7&8, Village – Chilachond, Tehsil – Bari, District – Dholpur, Sate – Rajasthan. (**Google Map is given as Annexure I).**

The vicinity map of the mine location is given below:



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 location is site specific as well as the lease has been allotted in the particular sandstone bearing area. Hence no alternative site is examined for mining. The land has been allocated by government for the mining only. As there is potential of sandstone in large amount, so the mining 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 274.73 ha or 678.87 Acres. The maximum rated capacity of the project wills 49980 TPA. Mining will be done by making benches of height & width 0f 6 meter. Details of Geological Reserve are as follows:-

Sr.no	Reserves	Quantity (Tonnes)
1	Proved Reserve	38462200
2	Probable Reserves	19231100
3	Possible Reserves	19231100
Total		76924400

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

Year	Total Excavation	Recoverable Mineral (in MT)	Total waste/OB(in MT)
1st	89040	44520	5300
2nd	89040	44520	5300
3rd	89040	44520	5300
4th	99960	49980	5950
5th	99960	49980	5950
Total	467040	233520	27800

3.5 Project description with process details

This is an open-cast semi-mechanized mining project, confined to excavation of sandstone from the proposed site. The operation will be open-cast semi-mechanized mining using Excavators/JCB. The mineral- sandstone will be collected in its existing form. Excavation will be carried out only up to a depth of 12m (During plan period) below ground level or above water level, whichever is less.

Excavation of Sandstone material will be done only during the day time and completely stopped during the monsoon season.

Following table gives the list of equipment to be used:

S. No.	Name of machinery	HP/Capacity	Make	No. of Machinery
1	Jack Hammer	32mm	Atlas Copco	4
2	Jib Cranes	30MT	Fortune	1
3	Compressor	$20m^3$	Local	1
4	Excavator	200pc	TATA	1
5	Wire Saw		Local	1

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 involves only 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	1.0
Plantation	7.50
Total	11.50

Thus total water requirement will be 11.50 KLD. This water will be supplied from the nearby tube well or by private tankers. Additional water will also be required for plantation purpose.

3.8.2 POWER

Proposed mining activity will be carried out by Open cast Semi- mechanized method by using Excavator / JCB for excavation, production and removal of waste with a combination of dumpers/Tippers.

Fuel will be consumed for different machinery involved like Wagon drill, Jack Hammer and Generators 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

Solid waste generated as overburden. No Municipal solid waste will be generated.

3.9.2 Liquid Effluent

No liquid effluent will be generated at the mine site due to the mineral excavation.

4 SITE ANALYSIS

4.1 Connectivity

Nearest Railway Station	Bari Railway station, approximate 11 Km towards NE.
Nearest Airport	Agra Airport, approximate 73 Km towards NE.
Road connectivity	NH11B, Approx. 0.20 Km towards SE**.(Rout Map is given as Annexure II)**

4.2 LANDFORM, LANDUSE AND LAND OWNERSHIP

The mine lease area is flat. There is no forest land or agriculture land in the mine lease area. The entire mining lease lies within the Govt. & Private Land. As a result of quarry operation the original ground profile will be altered

4.3 TOPOGRAPHY

Dholpur District is situated in the north – east corner of Rajasthan. Dolpur is the smallest district of the state and lies between latitude $22^0$22’ to $26^0$67’ and longitude $77^0$14’ to $78^0$16’ covering 3004 sq.km area. It is bounded in the north by Bharatpur (Raj) and Agra (U.P) districts, n South by Muraina (U.P) and Gwalior (M.P) District and in the West by Karauli District. The Lease area fall in Survey of India toposheet No. 54F/10 and is situated near longitude $77^0$31’16.3” and Latitude $26^0$36’15.3”, the area is rolling small hills. In the lease area the relief varies from 260m to 220 m with respect to the bench mark of 240mRL at Pillar A**. (10 Km Topographical Map is given as Annexure III)**

4.4 EXISTING LAND USE PATTERN AND SHORTEST DISTANCES FROM FORESTS, WATER BODIES, ECO-SENSITIVE AREAS, ETC.

Existing land use pattern

Sr. No.	Land use	Forest land (ha)	Crop Land (ha)	Waste land (ha)	Grazing Land (ha)
1	Pits & Quarries	-	-	19.1401	-
2	Dump	-	-	-	-
3	Infrastructure.	-	-	-	-
4	Stacks Yard	-	-	-	-
5	Road	-	-	13.1067	-
6	Township	-	-	-	-
7	Others	-	-	-	-
8	Non Utilized area	-	-	242.4832	-
	Total	-	-	**274.73**	-

List of Protected forest, Water bodies and Eco sensitive areas

Within 10 Km radius from Lease Boundary.

(Topographical Map is given as Annexure III)

Protected Forest	Distance From Lease Boundary
Parbati Nadi	Approx. 2 Km towards North West.
Parbati Reservoir	Approx. 4.5 Km towards West.
Parbati Main Canal	Approx. 8.5 km towards North.
Khurdiya PF	Approx. 9 Km towards West.
Bamni Nadi	Approx. 8 Km towards West.
Ramsagar Main Canal	Approx. 8.5 Km towards East.
Gurja PF	Approx. 8 Km towards SE.

4.5 EXISTING INFRASTRUCTURE

(a) Road- The lease area is located on NH11B about 0.20km away from lease towards SE.

(b) Rail- Bari Railway station, approximate 11 Km towards NE.

(c) Electricity- The village Chilachond has electricity connection while lease area is not connected with electricity.

(d) Water Supply- Water for drinking purpose will be provided through nearby tube well or by private.

(e) School Facilities- The village Bari, has a Govt. Sr. Sec School approximately 10.30 Km toward NE.

(f) Hospital- Government Hospital at Bari, approx. 10.30 Km toward NE.

(h) Manpower- Approx. 30 Local worker from nearby villages will be preferred

4.6 SOIL CLASSIFICATION

Major Soils(Common names like red sandy loam deep soil(etc.)	Area ('000 ha)	Percent (%) of total
Deep black clayey	-	1.66
Medium black clayey	-	1.68
Deep brown loamy	-	67.44
Medium brown loamy	-	23.14
Red gravelly loamy hill	-	6.09
Other (specify)		

Source:-http://agricoop.nic.in/Agriculture%20contingency%20Plan/Rajasthan/RAJ27-DHOLPUR-26.7.2012.pdf.

4.7 CLIMATIC DATA FROM SECONDARY SOURCES

The area is characterized by semi – arid type with an average annual rainfall about 300-460 mm. Which is mainly, received during July to September. The area falls in Semi-Arid zone agro climatic zone.

Minimum Temp- Varies from 5^0 to 20^0C

Maximum Temp – Varies from $25^0$to 47^0C.

4.8 SOCIAL INFRASTRUCTURE AVAILABLE

Nearest Railway Station	Bari Railway station, approximate 11 Km towards NE.
Nearest Airport	Agra Airport, approximate 73 Km towards NE.
Road connectivity	NH11B, approx 0.20km away from lease towards SE
Nearest Village	Chilachond , approx. 0.50 Km towards North West.

5 PLANNING BRIEF

5.1 Planning Concept

Mining will be done as per the guidelines of Rajasthan Minor Mineral Concession Rules (amended thereof) This is an open-cast Semi- Mechanized mining project. Excavation of minerals will be carried out only up to a depth of 12 meter during the plan period and 7.5 meter of safety zone will be left all around the lease area.

5.2 Population projection

The project will employ most of the workers from nearby villages except for supervisory staff. Thus there will no increase in population due to the project. However, few people from other area may migrate in this area for employment directly and indirectly for business opportunities.

Population projection as per last three decades population growth rate and addition in the existing population by the proposed project will be included in final EIA.

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 barriers Zone), at the Dump, along the haul road. Existing Land use pattern of the mine lease area is as follows:-

Land Use pattern during next five years

Activity	Area Occupied (Ha.) During next five years
Pits & Quarries	80.2252
Dump	23.435
Infrastructure.	0.75
Stacks Yard	-
Road	7.07
Township	-
Others	-
Non Utilized area	163.2498
Total	**274.73**

Land Use pattern at the end of lease period

Activity	Area Occupied (Ha.) During next five years
Pits (Water Reserves)	134.4146
Dump (Backfill)	113.452
Infrastructure.	-
Stacks Yard	-
Plantation	11.11
Township	-
Non Utilized area	15.7534
Total	**274.73**

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 Mining will be done by Open cast Semi- mechanized method with the adaptation of drilling and blasting. There would be requirement of Hydraulic excavator, compressor, jackhammer, tippers etc.

(c) Administrative Requirement- For this a rest shelter and a site office are 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 most will be from nearby villages depending upon the suitability of persons required for the job.
- Arrangements for safe and healthy working conditions & temporary rest shelters.
- Provision of Drinking water.
- Provision of PPE.
- 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 industrial area is proposed.

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

Plantation will be done in the 33% area of the total lease area which will be 90.6609 Ha .Planation of approx. 500 numbers of tress will do in every year. It is proposed to plant local trees along, safety zone, haul road and in Gram Panchyat of villages in consultation with the local authority/ Govt. body.

The study area falls within Flood prone Eastern plains subzone of central plateau and hills agro climatic zone having and average rainfall of 500mm and semi-arid climate. The region is having recent alluvial soil and other districts included in the subzone are Alwar, Bharatpur & Sawai Madhopur. List of trees suggested for Green belt development at Sandstone mine at Dholpur, Rajasthan.

S. No.	Common Name	Hindi Name	Binomial Name	Family	Sensitive / Tolerant	Height (meters)	Regeneration by	Flowering season	Crown shape	Crown surface area ($M^{2)}$
1	Australian Wattle	Australian babul	*Acacia auriculiformis* A.cunn	Mimoseae	T	16m	By Seeds.	June-Jan	Oblong	8548
2	Indian Gum-Arabic-tree	Babul	*Acacia nilotica* (Linn) Wild.	Mimoseae	T	8m	By Seeds.	Aug-JAN.	Spreading	8294
3	Custard apple	Seeta phal	*Anona squamosa* Linn.	Anonaceae	T	10m	By Seeds	March - July extended up to Sept.	Round	2178
4	Bullock's Heart	Luvuni, nona	*Anona reticulata* Linn.	Anonaceae	T	10m	By Seeds	June.	Round	2017
5	Indian Lilac	Nim	*Azadirachta indica* A. juss.	Meliaceae	T	20m	By Seeds	Jan - March, Aug. - Sept.	Spreading	300445

S. No.	Common Name	Hindi Name	Binomial Name	Family	Sensitive / Tolerant	Height (meters)	Regeneration by	Flowering season	Crown shape	Crown surface area ($M^{2)}$
6	Pongam-Oil Tree, Karanj	Karanja	*Derris indica* (Lam.) Bennett.	Fabaceae	T	10m	By Seeds	April - June	Round	6278
7	Mysore gum	Safeda	*Eucalyptus hybrid*	Myrtaceae	T	20m	By seeds	Feb. - April, Oct.- Dec.	Conical	50047
8	Banyan Tree	Bargad	*Ficus benghalensis* Linn	Moraceae	T	20m	By cutting, Seeds	April - June	Spreading	236494
9		Pakur	*Ficus benjamina* Linn	Moraceae	T	12m	By Seeds, Cutting	Sept - Nov	Spreading	87326
10	Indian Rubber Tree		*Ficus elastica* Roxb	Moraceae	T	12m	By Cutting		Spreading/Round	6028
11	Peepal Tree	Pipal	*Ficus religiosa* Linn	Moraceae	T	20m	Through Seeds, Cutting.	Jan.- May.	Round/Oblong	144869
12	Sausage tree		*Kigelia africana* Lamk	Bingnoniaceae	T	10m	By Seeds	Mar.- June	Round/Oblong	58432
13	Queen crape Myrte	Jarool	*Lagerstroemia speciosa* (Linn)	Lythraceae	T	10m	By Seeds	April - June.	Oblong	72569
14	The mango tree	Am	*Managifera indica* Linn	Anacardiaceae	S	15m	By seeds, transplanting,	South India -Jan - Mar	Round / Oblong	69005
15	Bakuli	Bakul	*Mimusops elengi* Linn	Sapotaceae	T	10m	By Seeds.	Jan.- Mar.	Oblong / Round	13385

S. No.	Common Name	Hindi Name	Binomial Name	Family	Sensitive / Tolerant	Height (meters)	Regeneration by	Flowering season	Crown shape	Crown surface area ($M^{2)}$
16	Manila tamarind, Madras thorn	Vilayati imili	*Pithecellobium ducle* (Roxb.) Benth	Mimosaceae	T	8m	By Seeds, Cutting	Jan. - Feb.	Oblong	2565
17	Mesquite	Vilayati kikkar	*Prosopis chilensis* (Molina) Stuntz	Mimosaceae	T	10m	By seeds, root sucker	Dec. - April.	Spreading	7951
18	State tree of Rajasthan	Khejri	*Prosopis cineraria* Linn.	Mimosaceae	T	12m	By seeds ,root sucker	Dec. - April.	Spreading	13431
19	Guava tree	Amrud	*Psidium guayava* Linn.	Myrtaceae	T	5m	By cutting, seeds, Budding, Grafting		Oblong	9243
20	Rain Tree		*Samanea saman* Jacq	Mimosaceae	T	20m	By Seeds, Cutting	Mar. - june.	Spreading /Round	99306
21		Ashok	*Saraca asoka* Roxb.De Wilde	Caesalpiniaceae	T	5m	By Seeds	Dec. - May	Spreading	2295
22	Swamp- pea, Agathi	Ogosti (Oriya)	*Sesbania grandiflora* Pers	Fabaceae	T	10m	By Seeds	Sept. - Dec.	Oblong	4695
23	Black plum	Jaman	*Syzygium cumini* Linn	Myrtaceae	T	20m	By Seeds, cutting, Grafting. Budding	Mar. - May.	Oblong/ Spreading	112143
24	The Tamarind Tree	Imli	*Tamarindus indica* Linn	Caesalpiniaceae	T	20m	By seeds	April - Oct.	Spreading	276840

S. No.	Common Name	Hindi Name	Binomial Name	Family	Sensitive / Tolerant	Height (meters)	Regeneration by	Flowering season	Crown shape	Crown surface area ($M^{2)}$
25	Indian Jujube	Ber	*Zizyphus mauritiana* Var. Fruticosa	Rhamnaceae	T	10m	By seeds	April -Oct.	Round	2638

Source: Guidelines for developing greenbelt, CPCB, 2007

Note: The trees proposed are evergreen, fast growing and having good canopy cover. The trees having height greater than 10 meter will be planted along the boundary mine lease, and less than 10 meter will be planted along haul road. Shrubs will be planted in between trees along the boundary of mine lease and haul road.

List of Shrubs suggested for Green belt development at Sandstone mine at Dholpur, Rajasthan.

S.No.	Common Name	Hindi Name	Binomial Name	Family	Sensitive/ Tolerant	Height (meters)	Regeneration by	Flowering season	Crown shape	Crown surface area (M^2)
1	The cutch tree	Khair	*Acacia catechu*, Willd	Mimoseae	T	3m	By Seeds.	May-August	Oblong	108
2	Bougainvillea		*Bougainvillea spectabilis* Wild	Nyctaginvillea	T	8m	By cuttings	Through the year	Oblong/Round	939
3	Scarlet bush		*Hamelia patens* Jacq	Rubiaceae	T	3m	By Seeds, cuttings	Oct.- Jan	Round	824
4	Henna	Mehendi	*Lawsonia inermis* Linn	Lythraceae	T	5m	By Seeds, Cutting	April -July	Round	72
5	Pink oleander	Kaner	*Nerium indicum* Mill	Apocynaceae	T	5m	By Seeds, Cutting	Throughout the year	Oblong / Round	5748
6	The castor	Erandi	*Ricinus*	Euphorbia	T	6m	By seeds	Sept - Oct	Oblong	943

S.No.	Common Name	Hindi Name	Binomial Name	Family	Sensitive/ Tolerant	Height (meters)	Regeneration by	Flowering season	Crown shape	Crown surface area (M^2)
			communis Linn	ceae						
7	Yellow oleanner	PilaKaner	*Thevetia peruviana* (Pers.) Merrill.	Apocynaceae	T	6m	By seeds, cutting		Round/Oblong	21775
8	Jasud	Jasum	*Hibiscucrosa-sinensis* Linn	Malvaceae	T	3m	By Cutting	Throughout the year	Round /Oblong	61
9		Rangan	*Ixora coccinea* L	Rubiaceae	T	6m	By Cutting	Throughout the year	Oblong	183
10	Common Sesban	Jainti	*Sesbania sesban* (Linn)Merrill	Fabaceae	T	6m	By Seeds	Aug. - Dec.	Oblong	4564

Source: Guidelines for developing greenbelt, CPCB, 2007

6.4 Social infrastructure

- Road facility (existing roads will be maintained regularly)
- Employment opportunity (30 Workers)
- Medical camps
- Social awareness camps,
- Donations to schools
- Secondary employment opportunities
- Formation of self-help groups for the women in nearby villages

6.5 Connectivity

Lease area is well connected by the Metal road National High way of NH – 11B Approx. 0.20 km towards NW. National Highway is connected to Dholpur district towards NE and Sarmathura town towards South West**. (Rout Map as Annexure II)**

6.6 Drinking Water Management

Water required for drinking purpose will be obtained through nearby tube Well or tankers/or by private tankers.

6.7 Sewerage System

No sewerage system is proposed. However for sanitation purpose soak pits are proposed to be made in area.

6.8 Industrial Waste Management

Not applicable

6.9 Solid Waste management

Overburden or the Waste which will be generating during the mining will be stacked by proper benching method at the Dump site. This will be utilized for the back filling at the end of the lease period.

6.10 Power Requirement & Supply/Source.

All the activities will be carried out using diesel based machines. The material will be excavated and loaded directly into Dumpers/Tippers by the JCB/ Excavators. The operation will be done only from sun rise to sun set. So there is no power requirement for the mining activity.

7 REHABILITATION AND RESETTLEMENT (R&R) PLAN

The mine area is a barren land 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 certificates are obtained from the respective departments.

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

Sr. No.	Description	Cost in Lakhs Rs.
1	Equipment's & Machineries and site development	60.0
2	Manpower	40.0
2	Haul road Maintenance & Site amenities	25.0
3	Environnemental Protection	30.0
4	Miscellaneous	15.0
TOTAL		**170 Lakhs**

The total cost of project would be around Rs**. 170 Lakhs**

9.0 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATIONS)

The Project will bring economic benefits to the state by the way of Royalty for mineral.

Achieving a huge infrastructure as being envisaged by Government of India particularly in road and housing sector requires basic building materials. Sandstone is one of primary building material required for the purpose. The mining activities as proposed are the backbone of all construction and infrastructure projects as the raw material for construction is available only from such mining. Sandstone excavated is in high demand at the local market for real estate industry.

This project operation will provide livelihood to the poorest section of the society/economically backward population and tribal in the area. It provides employment to the people residing in vicinity directly or indirectly. The mine management will also help nearby villages by providing aid to school, conducting medical and social awareness camps, helping in formation of self-help groups, etc. Thus the project will bring about socio-economic improvement of the area and will prove beneficial to the area.

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