

PRE-FEASIBILITY REPORT (PFR)

FOR

PROPOSED STONE QUARRY

BY

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AREA. 1.20 HA, GAT. NO. 299/B PART, VILLAGE:HARUR, TAL.: AJARA,
DIST.: KOLHAPUR

PREPARED BY



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1.0 EXECUTIVE SUMMARY AND INTRODUCTION OF THE PROJECT

M/s.Balaji Crush Sand Shri.Anada Shivaji Solapure & Shri.Appasaheb Yamaji Patil is a leading in minor minerals mining and production of raw materials in the form of stone and construction aggregates. They planned to carry out quarrying of basalt rock on land near village Harur, Tal.: Ajara, Dist.: Kolhapur. The said land is a private land. Stone in India is considered as a minor mineral and is controlled by State Government. Maharashtra State is mostly covered by basaltic rocks and is commonly known as Deccan trap.

1.1 Need of the Project

To meet the modern day requirements of people there is extraordinary growth of infrastructural developmental activities like roads, buildings, bridges etc. This has boosted high demand for building stone all over the country. Quarrying for building stone is an important economic activity through which stone as well as aggregates are made available for construction activities. Quarrying contributes considerably to state exchequer through royalty while providing valuable direct and indirect employment. This ultimately improves the socio-economic status of local people around quarry areas.

2.0 PROJECT DESCRIPTION

2.1 Location

The proposed stone quarrying shall be carried out on Gat. No. 299/B of Village Harur, Tal.: Ajara, Dist.: Kolhapur which is a private land.

Table No. 1 Salient Features of the Project Site

Sr.No.	Item	Details
1.	Project Site	Proposal for Quarrying of Minor Minerals, stone. Gat No 299/B Part, Harur Village, Ajara Taluka, Kolhapur District.
2.	Site Coordinates	BP1-16° 7'53.50"N TO 74°18'56.39"E BP2-16° 7'55.94"N TO 74°18'55.76"E BP3-16° 7'56.05"N TO 74°18'56.10"E BP4-16° 7'56.99"N TO 74°18'56.01"E BP5-16° 7'57.08"N TO 74°18'57.13"E BP6-16° 7'59.16"N TO 74°18'57.51"E BP7-16° 7'59.22"N TO 74°18'59.32"E BP8-16° 7'55.29"N TO 74°18'59.26"E
3.	Nearest National Highway	NH 4 at 25 Km towards SE side.
4.	Nearest State Highway	SH 134, 7 Km towards North side
5.	Nearest Railway Station	Belgaum at 36 Km towards SW side.

6.	Nearest River	Hiranyakeshi river 1 Km towards North.
7.	Nearest Village	Kanoli Village 0.5 Km towards NW side
8.	Archaeological monument	Not present in 10 km radius of the site
9.	Protected Area	Not present in 10 km radius of the site

2.2 Mining Area and Capacity

Stone mining shall be carried out on an area of 1.20 Ha. with stone production capacity of 1000 Brass per year. the project proponent intends to produce the following quantities of crushed stones by Manual method of quarry activity. The year wise production and development details for the five years plan period are summarized in the table below.

Table No. 2 Five Year Production Plan

Sr. No.	Year	Crushed Stone in Brass
1.	I	1000
2.	II	1000
3.	III	1000
4.	IV	1000
5.	V	1000

2.3 Investment

The investment for proposed stone mining project is 32 Lakhs.

2.4 Method of Mining

Open cast quarrying method shall be adopted for extraction of basalt. It is proposed to work with 6m bench. Drilling and blasting will be done to produce required size of crude rock. This rock will be fed to crusher. The crusher will be installed outside of the site. Following are the operations related to stone quarrying:

1. Removal of murrum soil, weathered basalt wherever available and stack at dumping site.
2. Mining of basalt.
3. Stacking, removal of mined rock to surface yard for proper sizing, sorting
4. Transportation of finished material to customers.

Equipments and machinery required for quarrying operations are as follows:

1. Compressor – 2 Nos.
2. Jack Hammer – 2 Nos.
3. Tipper – 4 Nos.

2.5 Manpower

For the proposed stone quarry project about 10 (2 skilled and 8 unskilled) workers shall be required. While selecting manpower preference will be given to persons from local area thereby creating better employment opportunities.

3.0 SITE ANALYSIS

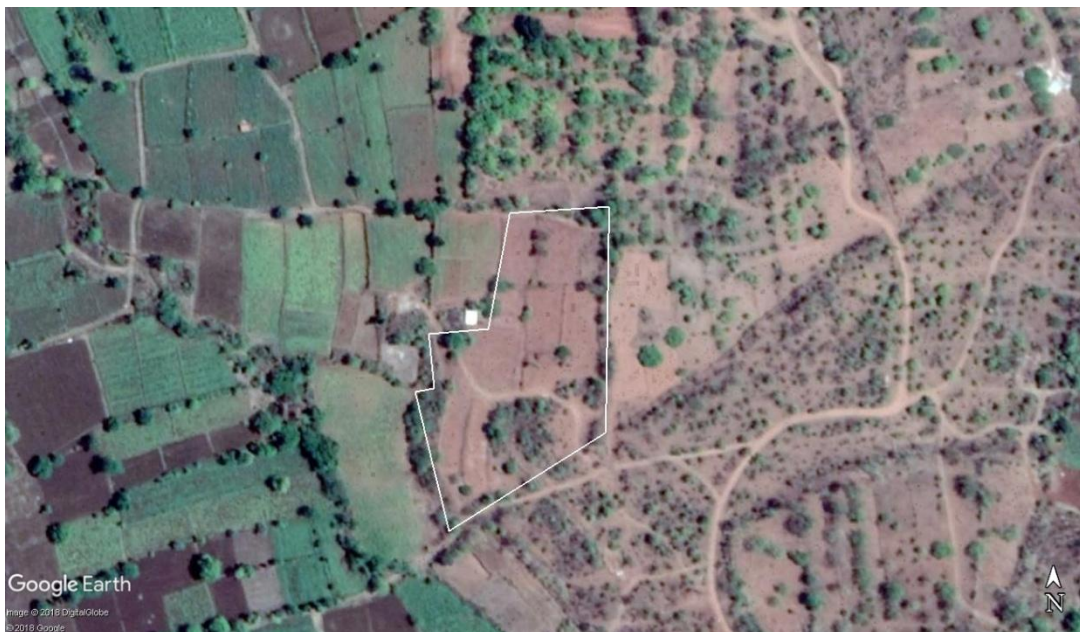
3.1 Connectivity

The proposed site is located in rural area. The nearest railway station is Belgaum which is located at a distance of 36 Km from project site. The nearest National highway is NH 4 at a distance of 25 Km and state highway, at a distance of 7 Km from project site.

3.2 Topography

The proposed quarry site is slightly undulating with average elevation of 659 M above Mean Sea Level (MSL) (Figure No. 1).

Figure No. 1 Google Earth Image of Proposed Quarry Site



3.3 Geology

The area is represented by thin soil cover of 5 to 10 cm. Below this is weathered basalt of 3 to 4 m thickness which is followed by basalt. This rock is grayish black and occurs in jointed and fractured form.

3.4 Soil

The soils in the study area are formed from Deccan trap where the hill tops are covered by lateritic soils while the valleys having mixed character varying from brownish to reddish.

3.5 Climate

The climate of the study area is generally temperate and modest throughout the year. The year can roughly be divided into three seasons, hot weather from March to May, rainy period from June to October and cold weather from November to February. The study area receives rainfall from the south-west as well as the north-east monsoons. The average rainfall in the study area ranges from 1700 to 1800 mm per year. Humidity in the area is maximum in monsoon and minimum in summer.

3.7 Socio-Economic:

The project will provide positive impact on the economic development of the region in terms of employment opportunities. Moreover the above unit will be operating in an authorized mining land declared by the Govt. of India. Therefore no population will be displaced.

3.8 Risk Assessment Plan

Risks likely to pose threat to man, environment or property associated with various activities are addressed in this report. Such activities include transport, storage; handling and usage of fuels. Surrounding population shall be made aware of safety precautions to be taken in case of any mishap in project site.

4.0 ENVIRONMENTAL MANAGEMENT PLAN

4.1 Dust

Dust can be a nuisance to the surrounding areas. When dust particles are released into the air, they fall back on the ground at a rate proportional to their size. Following dust pollution control measures shall be adopted:

1. Water sprinkling on haulage roads and unpaved areas for dust suppression.
2. Regular maintenance of earth moving equipments and vehicles.
3. Prohibit idling of vehicle.
4. Transportation to be done on controlled speed.
5. Periodical air quality monitoring.
6. Water sprinkling on temporary stockpiles.
7. A comprehensive 'Green Belt Development Programme' would be implemented wherein indigenous, fast growing and evergreen trees shall be planted along roads and fence in phase-wise manner.
8. Stone and finished product transportation in covered trucks and tractors.
9. Provision of dust masks to workers.

4.2 Water

Contaminants like sediments and oil spillages are common sources of water pollution in quarrying activities. For this, following control measures shall be adopted:

1. Garland drains shall be constructed to collect storm water and divert the same to nearby nallas.
2. Ground water recharging and rainwater harvesting systems shall be adopted in quarry area.
3. Settling tanks will be made on lower side of the quarry to collect drained water from pit. Here contaminants will be allowed to settle down and clean water will be allowed to join the mainstream.

4.3 Noise

All earth moving equipment operations have potential to produce noise during quarrying operations. Following are mitigation measures for noise pollution control:

1. Regular maintenance of machinery and vehicles shall be done.
2. Selection of low noise generating machinery.
3. Restricting quarrying operations only during day time.
4. As stated above Green Belt development along roads and fence.
5. Providing earmuffs to workers.

4.4 Solid Waste

The possible solid waste generated by the mining process will be some rejection which shall be used for leveling of the land. Apart from this, no solid or liquid waste will be generated from the mining process.

5.0 Conclusion

Based on the foregoing study as summarized above, it is observed that there will be marginal increase in the dust pollution, which shall be controlled by taking appropriate measures as mentioned in EMP. There will be minimal impact on the ambient environment & ecology due to the mining activities. The mining activity will lead to direct and indirect employment generation in the area as well as valuable exchequer to government. This ultimately will have a positive impact on the **Socio Economics** and boost development in the region. The applicant will ensure the implementation of the environmental protective measures within the mine area & surroundings and will comply with the terms & conditions that will be laid down by the Ministry of Environment & Forests as required under the Environmental Protection Act, 1986 and its amendments.