

# EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY CATEGORY – B1

(Public Hearing Upgraded after Terms of Reference (ToR) as per the provisions of  
EIA Notification 2006 & amendments thereof)

APPROVED TOR VIDE TOR IDENTIFICATION No. TO25B0108TN5982149N (FILE NO. 12211) DATED: 03.07.2025

PROPOSED QUARRY LEASE DETAILS	
SURVEY NOS	124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B
VILLAGE	PADALUR (EAST)
TALUK	ALATHUR
DISTRICT	PERAMBALUR
EXTENT	2.75.0 Ha
CLUSTER EXTENT	5.75.0 Ha
MINEABLE RESERVES (upto 52m BGL)	ROUGH STONE : 4,67,550m <sup>3</sup> GRAVEL : 43,164m <sup>3</sup>
PROPOSED PRODUCTION QUANTITY FOR FIRST FIVE YEARS (upto 47m BGL)	ROUGH STONE : 2,65,305m <sup>3</sup> GRAVEL : 43,164m <sup>3</sup>
PROPOSED PRODUCTION QUANTITY FOR SECOND FIVE YEARS (upto 52m BGL)	ROUGH STONE : 2,02,245m <sup>3</sup>
LAND	PATTA LAND

(Sector No. 1(a) (Sector no.1 as per NABET)

Category of the Project: B1 Cluster Mining, Total Cluster Area – 5.75.00 Ha

Baseline Monitoring Period – March 2025 – May 2025

## APPLICANT

**THIRU. D. BALAJI,**

S/o. S. DEVENDIRAN,

NO. 25, I A S NAGAR, THIRUVERUMBUR TALUK,

TIRUCHIRAPALLI DISTRICT - 620 013

ENVIRONMENTAL CONSULTANT	LABORATORY
<b>M/s. GLOBAL MINING SOLUTIONS</b> <i>(NABET Accredited &amp; ISO 9001 Certified Consultant)</i> Plot No. 6, S.F.No. 13/2, A2, VS City, RC Chettypatty, Kottamettupatty, Omalur, Salem, Tamil Nadu – 636 455. <b>NABET Accreditation No: NABET/EIA/23-26/SA 0241</b> <b>Valid up to: 04.01.2026</b> Contact: 97502 23535 & 94446 54520 Email: infoglobalmining@gmail.com, globalminingsolutionssalem@gmail.com	<b>M/s. SHRIENT ANALYTICAL &amp; RESEARCH LABS PRIVATE LIMITED</b> <i>(NABL Accredited Testing Laboratory)</i> <b>Valid up to: 29.09.2025</b> #416/15, Dhargas Road, Perungalathur, West Tambaram, Chennai, Tamil Nadu, India.

## **EXECUTIVE SUMMARY**

### **1.0 Introduction**

Environmental Impact Assessment (EIA) as a tool used to identify the environmental, social and economic impacts of a project prior to decision-making. It aims to predict environmental impacts at an early stage in project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the predictions and options to decision-makers.

This proposal is towards obtaining environmental clearance for Rough Stone and Gravel Quarry located at S. No. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A & 4B, Padalur (E) Village, Alathur Taluk, Perambalur District, Tamil Nadu, for production capacity of 4,67,550 m<sup>3</sup> of Rough Stone for the period of 10 years with ultimate depth up to 52 m BGL. The mining plan has prepared and same was approved by Assistant Director, Department of Geology and Mining, Perambalur vide Rc.No. 147/2024/G&M Dated 23.04.2025.

As per EIA notification, 2006 and its subsequent amendments the proposed "Rough Stone and Gravel Quarry of Thiru. D. Balaji" falls under Schedule 1(a) Mining of Minerals. It is further classified under Category B1 due to the overall extent of cluster area is 5.75.0 Ha which is >5 Ha. The ToR for the preparation of EIA/EMP was approved vide ToR Identification No. TO25B0108TN5982149N Dated: 03.07.2025. This report has been prepared in line with the approved TOR for production of maximum excavation 4,67,550 m<sup>3</sup> of Rough Stone and 43,164 m<sup>3</sup> of Gravel for 10 years.

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### **1.1 Details of Project Proponent**

Name of the Proponent : Thiru. D. Balaji  
Status of the Proponent : Individual  
Address : S/o. S. Devendiran,  
No. 25, I A S Nagar, Thiruverumbur Taluk,  
Tiruchirapalli District-620 013.

### **1.2 Size and Location of the Project**

<b>S. No.</b>	<b>Feature</b>	<b>Description</b>
1	Co-ordinates of the project	Latitude: 11°05'47.07"N to 11°05'55.98"N Longitude: 78°51'25.59"E to 78°51'30.78"E
2	Type of land	Patta land
3	Extent of lease area	2.75.0 Ha and the cluster area within 500 m radius including the proposed mine is 5.75.0 Ha > 5 Ha
4	Type of lease	Fresh Quarry
5	Toposheet No.	58 I /16
6	Geological Resource	13,73,400m <sup>3</sup> of Rough Stone and 54, 936 m <sup>3</sup> of Gravel
7	Mineable Resource	4,67,550 m <sup>3</sup> of Rough Stone and 43,164 m <sup>3</sup> of Gravel
8	Proposed production quantity for five years	4,67,550 m <sup>3</sup> of Rough Stone and 43,164 m <sup>3</sup> of Gravel up to the depth of 52m for the period of 10 years
9	Peak Production / year	The Annual Peak production quantity of Rough Stone - 53510 m <sup>3</sup> (5th year) Total Gravel Quantity - 43,164 m <sup>3</sup>
10	Proposed depth of mining	52m BGL

### **1.3 Statutory Details:**

There is no litigation/court cases pending against this project.

#### **a) Precise Area Communication:**

The Project Proponent has obtained Precise area communication letter received from the Assistant Director, Department of Geology and Mining, Perambalur, vide Rc.No. 147/2024/G&M Dated 11.04.2025. **The letter copy enclosed as Annexure – 1.**

#### **b) Mining Plan Approval Letter:**

The project proponent has prepared a Mining Plan under rule 8, 41 & 42 of Tamil Nadu Minor Mineral Concession Rules, 1959 and the same has been approved by the Assistant Director, Department of Geology and Mining, Perambalur, vide Rc.No. 147/2024/G&M Dated 23.04.2025. **The approval letter along with approved plan is enclosed as Annexure – 2.**

#### **c) 500m radius quarry features:**

The project proponent has obtained an official letter from the Assistant Director (FAC), Department of Geology and Mining, Perambalur vide Letter Rc.No.147/2024/G&M, dated 14.05.2025. **The letter copy enclosed as Annexure - 3.**

#### **d) VAO certification regarding 300 meter features of the project area.**

There are no historical places, schools, cemeteries, temples, bird sanctuaries, and wildlife sanctuaries within 300 metres of the proposed project area. In this regard, the project proponent has received an official letter from the Village Administrative Officer, Padalur (East), dated 02.04.2025.

#### **e) Land document of the proposed lease area:**

It is a Patta land.

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**f) CER Letter:**

The project proponent has obtained an official letter from Government Aided High School, Padalur Village, dated 21.04.2025.

**g) QP Certificate:**

The mining plan for this project has been prepared by Thiru.C.Natarajan, a Geologist, has 10 years of experience with M.Sc Geology. He is working at Global Mining Solutions as a QP for preparing Mining Plans.

**h) NABET Certificate:**

The Project Proponent has engaged Global Mining Solutions to prepare a Pre-Feasibility report & Environmental Clearance application for this project. Global Mining Solution is A NABET & an ISO 9001 Certified Consultant.

**Salient Features of the Project**

S. No.	Particulars	Details
1.	Proponent Name	Thiru. D. Balaji
2.	Proposed project	Rough Stone & Gravel Quarry of Thiru. D. Balaji
3.	Extent	2.75.0 Ha and the cluster area within 500 m radius including the proposed mine is 5.75.0 Ha > 5 Ha
4.	Location	S. No. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A & 4B, Padalur (E) Village, Alathur Taluk, Perambalur District
5.	Co-ordinates of the project site	Latitude: 11°05'47.07"N to 11°05'55.98"N Longitude: 78°51'25.59"E to 78°51'30.78"E
6.	Topography	Plain Terrain
7.	Site Elevation above MSL	≈ 135 m from above MSL. Initial RL before commencement of Mining – 134m BGL and Final RL after completion of Mining Operation – 82m BGL
8.	Topo Sheet No.	58 I /16
9.	Minerals of Mine	Rough Stone & Gravel
10.	Proposed production in m3	4,67,550 m3 of Rough Stone and 43,164 m3 of Gravel up to the depth of 52m for the period of 10 years

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11.	Ultimate Depth of mining	52m (BGL)
12.	Method of Mining	Opencast Mining with a bench height of 5m and bench width of 5m is proposed
13.	Drilling/Blasting	Drilling and controlled Blasting is proposed
14.	No. of Working days	300 Days
15.	Water requirement & Source	5.5 kLD and will be sourced from local vendors
16.	Manpower	30 Nos.
17.	Project Cost	Rs. 143.7 lakhs
18.	Mining Plan Approval	Assistant Director, Department of Geology and Mining, Perambalur vide Rc.No.147/2024/G&M/ dated 23.04.2025
19.	Safety Zone	0.57.2 Ha will be maintained as safety zone and tree saplings will be planted in this area
20.	Ground water level	78 m BGL
21.	Distance of Stone Crusher	290m, SW
22.	Previous History & CCR	This is a Fresh Lease. Hence CCR is not applicable

**Environmental Settings of the Project**

S. No.	Particulars	Details
1.	Nearest Highway	NH 38 (Viluppuram – Trichy Road – 3.2 Km (W). The State Highway (SH-142) Perambalur – Thuraiyur Road - 14.5Km (NW).
2.	Interstate Boundary	Not Applicable
3.	Nearest Railway Station	Kallagam – 17.5km, SW
4.	Nearest Airport	Trichy International Airport – 39.81km, S
5.	Nearest Village	Therani – 550, NE
6.	Water bodies	Odai 760 m, SW, Odai 780m, W, Tank 640m, N, Tiruvalankurichi Eri 1.2km, NW, therani Tank, 1.52km, NE, Therani Big Lake, 2.22km, NE, Puthu Eri, 3.04km, SE, Odai Eri, 3.00 km, SE, Nakkambadi Tank, 4km, S, Vaeappan Eri, 3.91km, SW,

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		Perumalpalayam eri, 3.7km, NW, Nochikulam Eri, 4.34km, N, Karai Tank, 4.8km, NE, Karupudayan Eri, 7.36 km, SE, Sanamangalam Eri, 7.96km, SW, Maniyankurichi Tank, 7.39km, W, Chettikulam Tank, 8.29km, NW, Varugapadi Tank, 7.8km, N	
7.	Reserved Forest	Nedungur Reserve Forest Maniyankurichi RF Naranamangalam RF Maramareddipalayam Reserve Forest - Elur RF	3.68km, SW 5.58km, SW 5.65km, NW 7.61km, SW 8.10km (NW)
8.	Eco Sensitive Zone and Wildlife Sanctuary (Notified)	Nil within 10km Radius	
9.	Archaeological important places	Nil within 10 km radius	
10.	Defense Installations	Nil within 10 km radius	
11.	Nearest Port	Nil within 10 km radius	
12.	Seismic Zone	Nil within 10 km radius	

## 2.0 Project Description

The type of the project is opencast mechanized mining method to excavate Rough Stone within the proposed Mine Lease area with drilling, blasting, loading and transportation.

### 2.1 Location details

This is a Rough Stone and Gravel Quarry located in Padalur (East) Village, Alathur Taluk, Perambalur District, Tamil Nadu State. The area lies in the north latitude of **11°05'47.07"N to 11°05'55.98"N** and eastern longitude of **78°51'25.59"E to 78°51'30.78"E** and **toposheet number 58 I/16**. This proposed project area is classified as Patta land and the applicant has obtained consent copy from the Pattadars & does not fall within 10 km radius of any Eco – sensitive zone, Wild life Sanctuary, National Park, Tiger Reserve, Elephant Corridor and Biosphere Reserves.

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## 2.2 Geological resources

The Geological resource were calculated considering the depth of 52 m BGL. Availability of Resources is given below.

Available Geological Resources

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m <sup>3</sup>	Rough stone in m <sup>3</sup>	Bulk Density	Gravel formation in Ts	Geological Resources of Rough stone in Ts
XY-AB	I	218	126	2	54936	-	2	109872.00	-
	II	218	126	5	-	137340	2.75	-	377685.00
	III	218	126	5	-	137340	2.75	-	377685.00
	IV	218	126	5	-	137340	2.75	-	377685.00
	V	218	126	5	-	137340	2.75	-	377685.00
	VI	218	126	5	-	137340	2.75	-	377685.00
	VII	218	126	5	-	137340	2.75	-	377685.00
	VIII	218	126	5	-	137340	2.75	-	377685.00
	IX	218	126	5	-	137340	2.75	-	377685.00
	X	218	126	5	-	137340	2.75	-	377685.00
	XI	218	126	5	-	137340	2.75	-	377685.00
<b>Total</b>					<b>54936</b>	<b>1373400</b>	-	<b>109872.00</b>	<b>3776850.00</b>

Gravel Formation : 1,09,872Ts

The Geological Resources of Rough stone : 37,76,850Ts

## 2.3 Mineable resources

The mineable reserves are calculated by considering bench formation and leaving 7.5 m (Safety Barrier all around the applied area) and 10 m safety distance in applied lease areas.

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Gravel in m <sup>3</sup>	Rough stone in m <sup>3</sup>	Bulk Density	Gravel formation in Ts	Mineable Reserves of Rough stone in Ts
XY-AB	I	198	109	2	43164		2	86328.00	-
	II	192	103	5	-	98880	2.75	-	271920.00
	III	182	93	5	-	84630	2.75	-	232732.50



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IV	172	83	5	-	71380	2.75	-	196295.00
V	162	73	5	-	59130	2.75	-	162607.50
VI	152	63	5	-	47880	2.75	-	131670.00
VII	142	53	5	-	37630	2.75	-	103482.50
VIII	132	43	5	-	28380	2.75	-	78045.00
IX	122	33	5	-	20130	2.75	-	55357.50
X	112	23	5	-	12880	2.75	-	35420.00
XI	102	13	5	-	6630	2.75	-	18232.50
<b>Total</b>				<b>43164</b>	<b>467550</b>	<b>-</b>	<b>86328.00</b>	<b>1285762.50</b>

The mineable reserve is computed as 12,85,762.50Ts of Rough stone and 86,328Ts of Gravel formation upto a depth 52m (below ground level) only.

## 2.4 Yearwise production resources

The project proponent has proposed to carry out 7,29,588.75Ts of Rough stone and 86,328Ts of Gravel formation upto a depth of 47m (below ground level) for the period of first five years and remaining quantity of 5,56,173.75Ts of Rough Stone will be proposed for the period of second five years upto a depth of 52m (below ground level).

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Gravel in m³	Rough stone in m³	Bulk Density	Gravel in Ts	Mineable Reserves of Rough stone in Ts
I	XY-AB	I	129	109	2	28122	-	2	56244.00	-
		II	103	103	5	-	53045	2.75	-	145873.75
Total						28122	53045	-	56244.00	145873.75
II	XY-AB	I	69	109	2	15042	-	2	30084.00	-
		II	20	103	5	-	10300	2.75	-	28325.00
		III	92	93	5	-	42780	2.75	-	117645.00
Total						15042	53080	-	30084.00	145970.00
III	XY-AB	III	21	93	5	-	9765	2.75	-	26853.75
		IV	103	83	5	-	42745	2.75	-	117548.75
Total						-	52510	-	-	144402.50
IV	XY-AB	V	93	73	5	-	33945	2.75	-	93348.75
		VI	61	63	5	-	19215	2.75	-	52841.25
Total						-	53160		-	146190.00
V	XY-AB	VI	22	63	5	-	6930	2.75	-	19057.50
		VII	73	53	5	-	19345	2.75	-	53198.75

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	VIII	63	43	5	-	13545	2.75	-	37248.75
	IX	53	33	5	-	8745	2.75	-	24048.75
	X	43	23	5	-	4945	2.75	-	13598.75
<b>Total</b>						<b>53510</b>		<b>-</b>	<b>147152.50</b>
<b>Grand Total</b>						<b>43164</b>	<b>265305</b>	<b>86328.00</b>	<b>729588.75</b>

### Year-wise Production (6<sup>th</sup> to 10<sup>th</sup> Year)

Year	Section	Bench	Length in(m)	Width in (m)	Depth in (m)	Rough stone in m³	Bulk Density	Mineable Reserves of Rough stone in Ts
VI	XY-AB	II	69	103	5	35535	2.75	97721.25
		III	10	93	5	4650	2.75	12787.50
Total						40185		110508.75
VII	XY-AB	III	59	93	5	27435	2.75	75446.25
		IV	31	83	5	12865	2.75	35378.75
Total						40300		110825.00
VIII	XY-AB	IV	38	83	5	15770	2.75	43367.50
		V	69	73	5	25185	2.75	69258.75
Total						40955		112626.25
IX	XY-AB	VI	69	63	5	21735	2.75	59771.25
		VII	69	53	5	18285	2.75	50283.75
Total						40020		110055.00
X	XY-AB	VIII	69	43	5	14835	2.75	40796.25
		IX	69	33	5	11385	2.75	31308.75
		X	69	23	5	7935	2.75	21821.25
		XI	102	13	5	6630	2.75	18232.50
Total						40785		112158.75
Grand Total						202245		556173.75

## 2.5 Land use of the project area

The entire project site is Patta land and the project proponent has obtained consent from other pattadars. The land use pattern of the mine lease area as of today and conceptual stage is given below.

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Sl. No.	Land Use	Present Area (Ha)	Area in use during the quarrying period (Ha)
1.	Quarrying Pit	Nil	2.15.8
2.	Infrastructure	Nil	0.01.0
3.	Roads	Nil	0.01.0
4.	Green Belt	Nil	0.57.2
5.	Unutilized	2.75.0	Nil
	Total =	<b>2.75.0</b>	<b>2.75.0</b>

Ultimate Pit dimension (M) end of Mining plan Period			
Pit No	Length (max) in(m)	Width (Avg) in (m)	Depth(max) in(m)
I	198	109	47
Ultimate pit dimension End of the lease period			
Pit No	Length (max) in(m)	Width (Avg) in (m)	Depth(max) in(m)
I	198	109	52

## 2.6 Method of mining

Opencast mechanized mining with a bench height of 5m and bench width of 5m and 80° Slope is proposed. The quarry operation involves shallow jack hammer drilling, slurry blasting, excavation, loading and transportation of Rough Stone to the needy customers. Occasionally hydraulic excavators are attached with rock breakers for fragmentation to avoid secondary blasting.

## **2.7 Greenbelt Development**

Green belt development plan is proposed for the 5 year period.

<b>Year</b>	<b>No. of trees proposed to be planted</b>	<b>Survival %</b>	<b>Name of the Species</b>	<b>No. of trees expected to be grown</b>
I	580	80%	Neem, Casuarina, Pongamia pinnata, etc.,	464
II		80%		
III		80%		
IV		80%		
V		80%		

## **3 Description of the Environment**

The baseline monitoring study was carried out during March 2025 – May 2025 to assess the existing environmental scenario in the area. For the purpose of EIA studies, project area was considered as the core zone and area outside the project area up to 10km radius from the periphery of the project site was considered as buffer zone. Baseline Environmental data has been collected for: -

- a) Land
- b) Water
- c) Air
- d) Noise
- e) Biological
- f) Socio-economic status

### **3.1 LAND ENVIRONMENT**

The existing land use pattern of the study area is tabulated below in table 11.2.

**Table - 11.2 Land use Pattern of the study area**

<b>Sl.No.</b>	<b>LAND USE / LAND COVER</b>	<b>Area in Sq.Km</b>	<b>Area in Percentage</b>
1	Built-up land	5.90	2.02
2	Crop land	24.15	8.29
3	Existing Crusher	0.22	0.08
4	Existing quarries	1.27	0.44
5	Fallow land	9.28	3.18
6	Hill and forest	22.87	7.85
7	Land with scrub	185.51	63.67
8	Land without scrub	22.57	7.75
9	Plantations	7.50	2.57
10	Water bodies	12.10	4.15
	<b>Total Area</b>	<b>291.37</b>	<b>100.00</b>

Source: Survey of India Toposheet and Landsat Satellite Imagery

### **3.2 SOIL CHARACTERISTICS**

Results of the soil samples show that the pH values were found to be 7.32 to 8.37 and Electrical Conductivity values were ranging between 182.8 – 298.30  $\mu\text{mhos/cm}$ . Soils are generally Silt Loam. Organic matter values were ranging between 0.67 – 1.21 %. Total Nitrogen values were ranging between 136 – 390 mg/kg. Phosphorus values were ranging between 1.21 – 1.69  $\mu\text{g/g}$ . Potassium values were ranging between 314 – 533 mg/kg. Sodium values were ranging between 566 - 1020 mg/kg. Total Sulphur values were observed to be BDL. The soil quality data for the 7 samples collected and analyzed are provided in Table no – 3.14.

### **3.3 AMBIENT AIR QUALITY**

The results of ambient air quality monitoring for the period **(March 2025 to May 2025)** are presented in Chapter 3. The ambient air quality data for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub>, CO studied at 5 locations as per prescribed guidelines/ methods. As per the monitoring data, the PM<sub>10</sub> values were in the range of 40.4 – 75.3  $\mu\text{g/m}^3$ . PM<sub>2.5</sub>

values were in the range of 19.0 – 36.1 µg/m<sup>3</sup>. SO<sub>2</sub> levels were ranging from 4.1 – 8.7 µg/m<sup>3</sup>. NO<sub>2</sub> levels were ranging from 5.2 – 10.8 µg/m<sup>3</sup>. While comparing with the NAAQ Norms laid by MoEF, all monitored values of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>2</sub> & CO were found to be well within the prescribed standards. The CO values in the all locations found to be below detectable limit (DL – 1144 µg/m<sup>3</sup>).

### **3.4 WATER ENVIRONMENT**

#### **Ground Water**

Suitability of ground water for drinking/irrigation/industrial purposes is determined keeping in view the effects of various chemical constituents present in water as required human use, plant use. Though many ions are very essential for the growth of plants and human body but when present in excess, have an adverse effect on health and growth.

As Per the data it has been observed that the pH value varies from 7.29 to 8.01, Chlorides Ranges From 72.6 - 512 mg/l, Sulphates value found to be between 53.4 - 358 mg/l, Fluoride Ranges low in lease area i.e. 0.13 – 0.61, Hardness varies from 171 - 451 mg/l, and Total dissolved solid 310 – 1286 mg/l. The ground water has been analyzed as per IS10500: 2012 and found to be suitable for drinking purpose. So the results of chemical and bacteriological analysis of water samples are classified under good class for drinking purpose with respect to total dissolved solids. Total hardness of the samples ranged from soft to moderately hard waters and can be fairly used for drinking. Regular ground water monitoring is suggested as the quality of ground water may fluctuate with groundwater consumption and seasonal variations.

### **3.5 NOISE ENVIRONMENT**

From the table 3.12, it is observed that the day Equivalent Noise (Leq-d) level were ranging from 44.6 to 51.6 dB(A) and Night Equivalent Noise (Leq-n) level were ranging from 37.0 to 42.8 (A). While comparing with the MoEF Norm of 55 dB(A) for

day time and 45 dB(A) for night time in Residential areas, the monitored ambient noise levels are within the limit values.

### **3.6 BIOLOGICAL ENVIRONMENT**

There is no schedule I species of animals observed within study area as per Wildlife Protection Act 1972 as well as no species is in vulnerable, endangered or threatened category as per IUCN. There is no endangered red list species found in the study area. Hence this small operation over short period of time will not have any significant impact on the surrounding flora and fauna.

### **3.7 SOCIO-ECONOMIC ENVIRONMENT**

An attempt has been made to assess the impact of the proposed mining project at Padalur (East) Village on Socioeconomic aspect of the study area. The various attributes that have been taken into account are population composition, employment generation, occupational shift, household income and consumption pattern. Implementation of the Proposed Mine Project will generate both direct and indirect employment. Besides, Mining operation will be legally valid and it will bring income to the state exchequer.

## **4. ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

The main scope of the EIA study is to quantify the cumulative impact in the study area due to cluster quarries and formulate the effective mitigation measures for each individual leases. A detailed account of the emission sources, emissions control equipment, background Air quality levels, Meteorological measurements, Dispersion model and all other aspects of pollution like effluent discharge, Dust generation etc., have been discussed in Chapter 4 of this report.

The project proponent will adopt all the necessary mitigation measures and management plan mentioned in this report and also comply the conditions stipulated in Environmental clearance and CTO of this project.

**EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY OF THIRU. D. BALAJI AT S.F.NO. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B OVER AN EXTENT OF 2.75.0 HECTARES AT PADALUR (EAST) VILLAGE, ALATHUR TALUK, PERAMBALUR DISTRICT, TAMIL NADU STATE**

**Anticipated Impacts & Mitigation Measures**

<b>Impact</b>	<b>Mitigation Measures</b>
<b>Land Environment</b>	
<ul style="list-style-type: none"> <li>❖ Destruction of natural landscapes</li> <li>❖ Changes in soil characteristics</li> <li>❖ Soil erosion and slope instability</li> <li>❖ Problems to agricultural land and human habitations due to dust, and noise caused by movement of heavy vehicles.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Rough stone does not produce any toxic effluents in the form of solids, liquids, or gases.</li> <li>❖ At the end of life of mine, the excavated mine pit / void of 2.15.8 Ha. will act as artificial reservoir for collecting rain water and helps to meet out the demand or crises during drought season.</li> <li>❖ After mine closure the greenbelt (0.57.2 Ha.) will be developed along the safety barrier and top benches and 0.02 ha are approach road and Infrastructure.</li> <li>❖ The periphery of the mining lease area will be converted to a greenbelt to prevent Noise and sound propagation to the nearby lands.</li> <li>❖ Entire mined out area will be properly fenced to prevent inadvertent entry of human and animals.</li> <li>❖ Construction of garland drains all around the quarry pit and construction of settling traps at strategic location in lower elevations to prevent soil erosion due to surface runoff during rainfall and also to collect the storm water for various uses within the proposed area.</li> </ul>
<b>Water Environment</b>	



**EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY OF THIRU. D. BALAJI AT S.F.NO. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B OVER AN EXTENT OF 2.75.0 HECTARES AT PADALUR (EAST) VILLAGE, ALATHUR TALUK, PERAMBALUR DISTRICT, TAMIL NADU STATE**

<ul style="list-style-type: none"> <li>❖ Impact due to Usage of Water in mines</li> <li>❖ Generation of waste water from vehicle washing</li> <li>❖ Domestic sewage</li> <li>❖ Washouts from surface exposure or working areas</li> <li>❖ Impact on Surface Water Resources</li> <li>❖ Impact on Ground water</li> <li>❖ Impact on Water Quality</li> </ul>	<ul style="list-style-type: none"> <li>❖ Nanthai River is situated at a distance of 2.3 km in north east direction and two odais passing at 760m (SW) and 780m m in W direction. No other water bodies close to the project site; there is no proposal for discharging of wastewater outside the project area.</li> <li>❖ There is no proposal for a rough stone processing or workshop within the project area, so no effluent is anticipated in the mine.</li> <li>❖ The required water (5.5 KLD) will be sourced initially from outside agencies. Later the rainwater collected in the mine pit sump will be used for this purpose.</li> <li>❖ Regular water quality will be carried in nearby villages to ensure the water quality is not affected due to the quarrying activities.</li> <li>❖ Domestic sewage from site office &amp; urinals/latrines provided in project area will be discharged through septic tank followed by soak pit system.</li> <li>❖ Only clear and settled water free from silt content will be used for dust suppression and greenbelt development.</li> <li>❖ De-silting will be carried out before and immediately after the monsoon season and the settling tank and drains will be cleaned weekly, especially during monsoons.</li> <li>❖ The dimension of the rain water harvesting pond will be 25m x 20m x20m with capacity of 10000 cu.m (2 Nos.). The rain</li> </ul>
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**EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY OF THIRU. D. BALAJI AT S.F.NO. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B OVER AN EXTENT OF 2.75.0 HECTARES AT PADALUR (EAST) VILLAGE, ALATHUR TALUK, PERAMBALUR DISTRICT, TAMIL NADU STATE**

	water stored in the pond will be utilized for plantation, dust suppression activities.
<b>Air Environment</b>	
<ul style="list-style-type: none"> <li>❖ Generation of Fugitive Dust</li> <li>❖ Dust will be generated mainly during excavation, loading &amp; unloading activities.</li> <li>❖ Reduction in visibility due to dust plumes.</li> <li>❖ Coating of vegetation leading to reduced photosynthesis.</li> <li>❖ Inhibited growth, destroying of foliage, degradation of crops;</li> <li>❖ Increase in health hazards due to inhalation of dust.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Using Wet drilling methods, allowing drilling only with PPE, carrying out blasting only during specified times, avoiding blasting during unfavorable weather conditions, using explosives of good quality, using mist sprayers Regular wetting of transport, Covering the materials carried in tippers with tarpaulin, Proper maintenance of vehicles used for transportation, conducting regular emission tests for vehicles used for transport.</li> <li>❖ Speed restrictions will be imposed to avoid spillage of loaded materials upon the road and to reduce wear and tear of the road.</li> <li>❖ Weekly inspections of the condition of the access road by competent person employed, and immediate action will be taken to address any potholes or damage to the road surface.</li> <li>❖ Development of greenbelt is proposed in the safety zone of 10m and 7.5m barriers in the lease area.</li> <li>❖ Personal Protective Equipment's will be provided to all workers</li> </ul>
<b>Noise &amp; Vibration</b>	
<ul style="list-style-type: none"> <li>❖ The main noise generating source during mining operation and related activities</li> </ul>	<ul style="list-style-type: none"> <li>❖ Usage of sharp drill bits while drilling which will help in reducing noise;</li> </ul>

**EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY OF THIRU. D. BALAJI AT S.F.NO. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B OVER AN EXTENT OF 2.75.0 HECTARES AT PADALUR (EAST) VILLAGE, ALATHUR TALUK, PERAMBALUR DISTRICT, TAMIL NADU STATE**

are drilling, excavation, loading, unloading and transportation.	<ul style="list-style-type: none"> <li>❖ Secondary blasting will be totally avoided and hydraulic rock breaker are utilized for breaking boulders;</li> <li>❖ Controlled blasting with proper spacing, burden, stemming and optimum charge/delay will reduce noise;</li> <li>❖ The blasting will be carried out during favorable atmospheric condition and less human activity timings by using nonelectrical initiation system;</li> <li>❖ Proper maintenance, oiling and greasing of machines will be done every week to reduce generation of noise;</li> <li>❖ Provision of sound insulated chambers for the workers working on machines (HEMM) producing higher levels of noise;</li> <li>❖ Green Belt will be developed around the project areas and along the haul roads. The plantation minimizes propagation of noise;</li> <li>❖ Personal Protective Equipment (PPE) like ear muffs/ear plugs will be provided to the operators of HEMM and persons working near HEMM and their use will be ensured through training and awareness.</li> <li>❖ Regular medical check-up and proper training to personnel to create awareness about adverse noise level effects.</li> </ul>
Ground Vibration	
❖ The vibration due to blasting can cause damage to the nearby structures if appropriate technology and control	❖ Proper quantity of explosive, suitable stemming materials and appropriate

**EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY OF THIRU. D. BALAJI AT S.F.NO. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B OVER AN EXTENT OF 2.75.0 HECTARES AT PADALUR (EAST) VILLAGE, ALATHUR TALUK, PERAMBALUR DISTRICT, TAMIL NADU STATE**

<p>measures are not adopted in the blasting operation.</p> <p>❖ Fly rock is another possible damage causing outcome of blasting.</p>	<p>delay system should be adopted to avoid overcharging and for safe blasting;</p> <p>❖ Adequate safe distance from blasting should be maintained as per DGMS guidelines;</p> <p>❖ Blasting shelter should be provided as per DGMS guidelines;</p> <p>❖ Blasting operations shall be carried out only during day time;</p> <p>❖ The charge per delay shall be minimized and preferably more number of delays will be used per blasts;</p> <p>❖ During blasting, other activities in the immediate vicinity shall be temporarily stopped;</p> <p>❖ Drilling parameters like depth, diameter and spacing will be properly designed to give proper blast;</p> <p>❖ Blasting will be carried out under the supervision of statutory persons as approved by DGMS.</p> <p>❖ A well-defined SOP will be framed under the leadership of top management and the same will be followed for each blasting.</p> <p>❖ Regular PPV monitoring will be carried out to ensure PPV limits i.e., 0.5 mm/s.</p>
Biological Environment	
<p>❖ Direct impacts include land clearance and excavation causing destruction of flora and fauna and loss of habitats.</p>	<p>❖ Only some common herbs, shrubs and grass will be cleared. So, there will be no impact on the biodiversity.</p>

**EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY OF THIRU. D. BALAJI AT S.F.NO. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B OVER AN EXTENT OF 2.75.0 HECTARES AT PADALUR (EAST) VILLAGE, ALATHUR TALUK, PERAMBALUR DISTRICT, TAMIL NADU STATE**

❖ Indirect impacts include habitat degradation due to noise, dust, and human activity.	<ul style="list-style-type: none"> <li>❖ Green belt development with suitable species will enhance the biodiversity of the project area.</li> <li>❖ The core zone or buffer zone does not encompass any threatened flora or fauna species.</li> </ul>
<b>Socio-Economic Environment</b>	
<ul style="list-style-type: none"> <li>❖ Health and safety of workers and the general public.</li> <li>❖ Increase in traffic volumes and sizes of road vehicles.</li> <li>❖ Economic issues, including the increase in employment opportunities.</li> </ul>	<ul style="list-style-type: none"> <li>❖ Around 30 local workers will get employment opportunities along with periodical training to generate local skills.</li> <li>❖ Mine management will contribute for the upliftment of these villages by conducting regular medical camps, assistance in developing necessary infrastructure facilities like maintenance of schools, village roads, drinking water supply, etc.</li> </ul>
<b>Occupational Health &amp; Safety</b>	
<ul style="list-style-type: none"> <li>❖ Exposure to Dust</li> <li>❖ Noise and Vibration Exposure</li> <li>❖ Physical Hazards</li> <li>❖ Respiratory hazards due to Dust exposure</li> </ul>	<ul style="list-style-type: none"> <li>❖ Provision of rest shelters for mine workers with amenities like drinking water etc.</li> <li>❖ All safety measures like use of safety appliances, such as dust masks, helmets, shoes, safety awareness programs, awards, posters, slogans related to safety etc.</li> <li>❖ Training of employees for use of safety appliances and first aid in vocational training center.</li> <li>❖ Weekly maintenance and testing of all equipment as per manufacturers' guidelines.</li> </ul>

**EXECUTIVE SUMMARY FOR PROPOSED ROUGH STONE AND GRAVEL QUARRY OF THIRU. D. BALAJI AT S.F.NO. 124/1A, 124/1B, 124/3A, 124/3C, 124/4A AND 124/4B OVER AN EXTENT OF 2.75.0 HECTARES AT PADALUR (EAST) VILLAGE, ALATHUR TALUK, PERAMBALUR DISTRICT, TAMIL NADU STATE**

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	<ul style="list-style-type: none"><li>❖ Pre placement and Yearly Medical Examination of all workers by a medical Officer.</li><li>❖ First Aid facility will be provided at the mine site.</li><li>❖ Close surveillance of the factors in working environment and work practices which may affect environment and worker's health by the mine's manager employed.</li><li>❖ Working of mine as per approved mining plan and environmental plans.</li></ul>
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## **5. ANALYSIS OF ALTERNATIVES**

There are no alternatives suggested as the proposed mining area has the following advantages:

- ❖ The mineral deposit occurs in a non-forest area.
- ❖ There is no habitation within the applied lease area; hence, no R & R issues exist.
- ❖ There is no river, stream, nallas and water bodies in the or passing through the applied mine lease areas.
- ❖ Mine connectivity through road and rail is good.
- ❖ The proposed mining operations do not intersect the ground water level. Hence, no impact on ground water environment.

## **6. ENVIRONMENTAL MONITORING PROGRAM**

Environmental Monitoring program will be conducted for various environmental components as per conditions stipulated in Environmental Clearance Letter issued by SEIAA & Consent to Operate issued by TNPCB. Post project monitoring program is detailed in Chapter 6.

PP will supervise the overall environmental management plan of the project during operation. The capital cost of Rs. 7.76 Lakhs and the recurring cost of Rs. 29.43 Lakhs have been allocated under the EMP budget which includes Environmental Monitoring Cost.

## **7. ADDITIONAL STUDIES**

### ***Risk Analysis & Disaster Management Plan***

The methodology for the risk assessment has been based on the specific risk assessment guidance issued by the Directorate General of Mine Safety (DGMS). The DGMS risk assessment process is intended to identify existing and probable hazards in the work environment and all operations and assess the risk levels of those hazards in order to prioritize those that need immediate attention.

Further, mechanisms responsible for these hazards are identified and their control measures set to time table are recorded along with pinpointed responsibilities. In the unlikely event that a consequence has occurred, disaster management kicks in. This includes instituting procedures pertaining to a number of issues such as communication, rescue, and rehabilitation. These are addressed in the disaster management plan. Both, the RA and DMP, are living documents and need to be updated whenever there are changes in operations, equipment, or procedures. Assessment is all about preventing accidents and taking necessary steps to prevent it from happening.

The Disaster Management Plan (DMP) is a guide, giving general considerations, directions, and procedures for handling emergencies likely to arise from planned operations. The DMP has been prepared on the basis of the Risk Assessment and related findings covered in the report.

Terms of Reference with Public Hearing (ToR) for the project was issued vide ToR Identification No. TO25B0108TN5982149N dated 03.07.2025. Now, this Draft EIA / EMP Report is prepared for conducting Public Hearing as the projects falls under B1 Category.

Although the individual lease area of this project is less than 5 Ha, the three existing quarries and this proposed quarries within the 500m radius works out to >5 Ha. A Cumulative impact study is conducted to determine the impact of the existing and proposed quarries located within 500m radius on the environment and are detailed in Section 7.4.

### **Cumulative Impact Study**

The baseline monitoring conducted for this project reflects the cumulative impact of the existing quarry and impact of this proposed project on air environment do not exceed the permissible limits set by CPCB for air pollution.

The existing projects provided employment opportunities for 74 people and this proposed will provide direct employment opportunities for 30 people.

This proposed project has allocated Rs. 5.0 Lakhs as the CER budget.

## **8. PROJECT BENEFITS**

### **Financial benefits**

- This project will contribute financially through payment of taxes like royalty, GST, etc
- The project will also contribute via CSR.
- The demands of people during public hearing will also be considered by the project proponent

### **Social benefits**

- This project provides employment to 30 people directly. Local people will be hired for unskilled labour.
- Through CSR, nearby schools, hospitals will be benefitted.



## **9. CONCLUSION**

EIA study was performed as per the approved ToR. Various environmental attributes were studied relating with aspects of mining activities. The related impacts were identified and evaluated. Considering all the possible ways to mitigate the environmental concerns, Environmental Management Plan was prepared and accordingly fund was allocated. The EMP has been dynamic, flexible and subject to periodic review.

The project will increase the revenue of the State Govt. as well as it will help in the social upliftment of the local community. The green belt development programme will help in increasing the green cover in the area. Thus, the proposed project is not likely to affect the environment or adjacent ecosystem adversely.

The Mine Management will be responsible for the project review of EMP and its implementation to ensure that the EMP remains effective and appropriate. Thus, the proper steps will be taken to accomplish all the goals mentioned in the EMP and the project will bring the positive impact in the study area.

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# **ANNEXURE-1**

From

Thiru D.Bernard, M.Sc.,  
Assistant Director,  
Geology and Mining,  
Perambalur.

To

Thiru.D.Balaji,  
S/o.S.Devendiran,  
No. 25, I A S Nagar,  
Thiruverumbur Taluk,  
Tiruchirapalli District-620 013.

**Rc.No.147/2024/G&M****Dated:11.04.2025.**

Sir,

Sub: Mines and Minerals - Minor Mineral - Rough Stone& Gravel-  
Perambalur District - Alathur Taluk -Padalur (East) Village -  
S.F.Nos.124/1A, 124/1B, 124/3A, 124/3C, 124/4A & 124/4B -  
OAE of 2.75.00 hectares of Patta land - Quarry Lease application  
preferred by Thiru. D.Balaji - Recommendations received - Precise  
Area communicated - Reg.

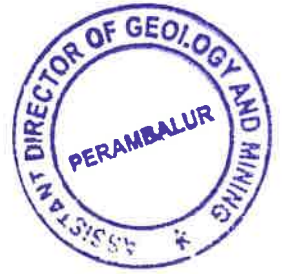
Ref: 1. Thiru.D.Balaji, S/o.S.Devendiran application, dated  
11.11.2024.  
2. The Sub Collector, Perambalur letter Rc.No.  
A1/4199/2024dated: 24.02.2025.  
3. Inspection report of the Assistant Geologist, O/o. the  
Assistant Director of Geology and Mining, Perambalur dated:  
10.03.2025.

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In the reference 1st cited, one Thiru.D.Balaji, S/o.S.Devendiran, No.25, I A S Nagar, Thiruverumbur Taluk, Tiruchirapalli District-620 013, preferred an application for grant of lease to quarry Rough Stone and Gravel in an extent of 2.75.0 hectares of patta lands in S.F.Nos.124/1A (0.46.0), 124/1B(1.14.0), 124/3A(0.24.0), 124/3C(0.10.0), 124/4A(0.69.0) and 124/4B(0.12.0) of Padalur (East) Village, Alathur Taluk, Perambalur District for a period of 10 years under Rule 19 of the Tamil Nadu Minor Mineral Concession Rules, 1959.

2. The Sub Collector, Perambalur in the reference 2<sup>nd</sup> furnished land availability report and recommended for grant of lease to quarry Rough Stone and Gravel over an extent of 2.75.0 hectares of patta lands in S.F.Nos.124/1A, 124/1B, 124/3A, 124/3C, 124/4A and 124/4B of Padalur (East) Village, Alathur Taluk, Perambalur District.

3. The Assistant Geologist, O/o. Assistant Director, Geology and Mining, Perambalur has inspected the area on 10.03.2025 and submitted his report in the reference 3<sup>rd</sup> cited with the recommendation for grant of lease to quarry Rough Stone and Gravel in the above area for a period of 10 years under Rule 19 of the Tamil Nadu Minor Mineral Concession Rules, 1959 subject to certain conditions.



Based on the reports and recommendations of the Sub Collector, Perambalur and Assistant Geologist, O/o. the Assistant Director (Geology and Mining), Perambalur an extent of 2.75.0 hectares of patta lands in S.F.Nos.124/1A (0.46.0), 124/1B(1.14.0), 124/3A(0.24.0), 124/3C(0.10.0), 124/4A(0.69.0) and 124/4B(0.12.0) of Padalur (East) Village, Alathur Taluk, Perambalur District is hereby fixed as Precise Area for grant of permission to quarry Roughstone and Gravel for a period of ten years as per the powers delegated under amended provision of Rule 19(b) of the Tamil Nadu Minor Mineral Concession Rules 1959, subject to the following conditions.

1. 7.5 meters safety distance should be left out for the adjacent patta lands.
2. 10 meters safety distance should be left out for the adjacent Government lands.
3. The applicant shall not make any hindrance to the adjacent lands and public.
4. The applicant should submit approved Mining Plan, Environment Clearance and Consent to Establish (CTE) & Consent to Operate (CTO) issued by competent authorities for grant of quarrying lease in the subject area.

The applicant is directed to submit draft Mining Plan for the above area within 90 days for the approval of the Assistant Director, Geology and Mining, Perambalur and to submit Environment Clearance obtained from SEIAA, Tamil Nadu and CTE & CTO issued by the Tamil Nadu Pollution Control Board subsequently for further action.

*[Signature]*  
Assistant Director,  
Geology and Mining,  
Perambalur.

Copy to:

1. The Chairman,  
SEIAA, PanagalMaligai,  
Saidapet, Chennai.
2. The Commissioner of Geology and Mining,  
Chennai-32.

*[Signature]*  
11/4/24



# **ANNEXURE-2**

From

Thiru D.Bernard, M.Sc.,  
Assistant Director,  
Geology and Mining,  
Perambalur.

To

Thiru.D.Balaji,  
S/o.S.Devendiran,  
No. 25, I A S Nagar,  
Thiruverumbur Taluk,  
Tiruchirapalli District-620 013.

**Rc.No.147/2024/G&M****Dated:23.04.2025.**

Sir,

Sub: Mines and Minerals – Minor Mineral – Rough Stone & Gravel-  
Perambalur District – Alathur Taluk –Padalur (East) Village -  
S.F.Nos.124/1A, 124/1B, 124/3A, 124/3C, 124/4A & 124/4B –  
OAE of 2.75.00 hectares of Patta land – Quarry Lease application  
preferred by Thiru Thiru.D.Balaji - Recommendations received -  
Precise Area communicated - Draft Mining Plan submitted for  
approval – Approved – Reg.

- Ref: 1. Thiru.D.Balaji, S/o.S.Devendiran application, dated  
11.11.2024.
2. The Sub Collector, Perambalur letter Rc.No.  
A1/4199/2024dated: 24.02.2025.
3. Inspection report of the Assistant Geologist, O/o. the  
Assistant Director of Geology and Mining, Perambalur dated:  
10.03.2025.
4. The Assistant Director, Geology and Mining, Perambalur letter  
Rc.No.147/G&M/2024, dated 11.04.2025.
5. Thiru.D.Balaji, S/o.S.Devendiran letter dated 15.04.2025.

\*\*\*\*\*

In the reference 1st cited, one Thiru.D.Balaji, S/o.S.Devendiran, No.25, I A S Nagar, Thiruverumbur Taluk, Tiruchirapalli District- 620 013, preferred an application for grant of lease to quarry Rough Stone and Gravelin an extent of 2.75.0 hectares of patta lands in S.F.Nos.124/1A (0.46.0), 124/1B(1.14.0), 124/3A(0.24.0), 124/3C(0.10.0), 124/4A(0.69.0) and 124/4B(0.12.0) of Padalur (East) Village, Alathur Taluk, Perambalur District for a period of 10 years under Rule 19 of the Tamil Nadu Minor Mineral Concession Rules, 1959.

Based on the reports and recommendations of the Sub Collector, Perambalur and Assistant Geologist, O/o. the Assistant Director (Geology and Mining), Perambalur an extent of 2.75.0 hectares of patta lands in S.F.Nos.124/1A (0.46.0), 124/1B(1.14.0), 124/3A(0.24.0), 124/3C(0.10.0), 124/4A(0.69.0) and 124/4B(0.12.0) of Padalur (East)

Village, Alathur Taluk, Perambalur District was fixed as precise area and communicated to the applicant vide letter in the reference 4<sup>th</sup> cited with a request to submit Mining Plan for the approval of the Assistant Director, Geology and Mining, Perambalur District and Environmental Clearance obtained from SEIAA for further process.

Accordingly, in the reference 5<sup>th</sup> cited, the applicant has submitted 3 copies of Draft Mining Plan prepared by Qualified Person for the above area. The draft Mining Plan submitted by Thiru.D.Balaji, has been scrutinized as per extant rules and guide lines / instructions issued by the Commissioner of Geology and Mining, Chennai in the letter Rc.No.3868/LC/2012 dated.19.11.2012. The following observations were made in scrutiny.

- a. 7.5-meter safety distance is earmarked for the adjacent patta lands.
- b. The Geological reserve has been assessed as 1,09,872 metric tonnes of Gravel and 37,76,850 metric tonnes of Roughstone upto a depth of 52 m below ground level.
- c. The mineable reserve has been computed as 86,328 metric tonnes of Gravel and 1285762metric tonnes of Roughstone upto a depth of 52 m below ground level.
- d. The roughstone and Gravel quarry lease was proposed for 10 years. The mining plan has been prepared for the proposed to production of 86,328 metric tonnes of Gravel & 7,29,589 metric tonnes of Roughstone upto a depth of 47m BGL during the first five years and remaining mineable quantity of 556173 metric tonnes of Roughstone in the second five years of lease period.
- e. The depth of water table in the subject area is reported as 78m BGL and workable depth has been proposed to 47m BGL in the mining plan. Hence, the quarrying operation will not affect the water table in the area.
- f. Drilling and blasting using jack hammers and shot hole blasting are proposed. Small dia, 25 mm slurry explosives are proposed to be used for shattering and heaving effect for removal and winning of roughstone. No deep hole drilling or primary blasting is proposed.
- g. It has been proposed adopt controlled blasting measures for minimizing ground vibration and fly rocks.
- h. Machineries like Tractor mounted compressor attached with Jack hammers, excavators with rock breaker attachment are proposed for quarrying operation. Tippers of 5/10 Tons capacity are proposed for transportation.

4) The Mining Plan is prepared in accordance with the guidelines / instructions issued and tallies with the field conditions. The special conditions imposed in the precise area communication letter have been incorporated in the Mining Plan. Therefore, the draft mining plan is hereby approved subject to the following conditions.

- i. That the Mining Plan is approved without prejudice to any other laws applicable to the quarry area from time to time whether made by the Central Government, State Government or any other authority.
- ii. That the approval of the Mining Plan does not in any way imply the approval of the Government in terms of any other provisions of the Mines and Minerals (Regulations and Development) Amendment Act 2015 or Mineral (other than Atomic and Hydrocarbon Energy Minerals) concession Rules 2016, or Tamil Nadu Minor Mineral Concession Rules, 1959 or any other laws including Forest (Conservation) Act 1980, Forest Conservation Rule, 1981, Environment Protection Act, 1980 and the rules made there under.
- iii. That the Mining plan is approved without prejudice to any other order or directions from any court of competent jurisdiction.
- iv. That the approval of Mining Plan does not confer any rights for the renewal of quarry lease.
- v. The approval is valid up to the subsistence of the lease period only.

**Encl:** 2copies of approved Mining Plan.

*[Signature]*  
Assistant Director,  
Geology and Mining,  
Perambalur.

Copy to:

1. The Chairman,  
SEIAA, Panagal Maligai,  
Saidapet, Chennai.
2. The Commissioner of Geology and Mining,  
Chennai-32.

*[Signature]*  
23/4/25





# **ANNEXURE-3**

From

Thiru D.Bernard, M.Sc.,  
Assistant Director,  
Dept of Geology and Mining,  
Perambalur.

To

Thiru.D.Balaji,  
S/o.S.Devendiran,  
No. 25, I A S Nagar,  
Thiruverumbur Taluk,  
Tiruchirapalli District-620 013.

**Rc.No.147/G&M/2024**      **Dated: 14.05.2024**

Sir,

Sub: Mines and Minerals – Minor Mineral – Rough Stone & Gravel– Perambalur District – Alathur Taluk –Padalur (East) Village -S.F.Nos.124/1A, 124/1B, 124/3A, 124/3C, 124/4A & 124/4B – OAE of 2.75.00 hectares of Patta land – Quarry Lease application preferred by Thiru.D.Balaji - Recommendations received - Precise Area communicated - Draft Mining Plan submitted for approval- Approved -Details of quarries situated within 500 mts radial distance requested – furnished - Reg.

- Ref:
1. Thiru.D.Balaji, S/o.S.Devendiran application, dated 11.11.2024.
  2. The Sub Collector, Perambalur letter Rc.No. A1/4199/2024dated: 24.02.2025.
  3. Inspection report of the Assistant Geologist, O/o.the Assistant Director of Geology and Mining, Perambalur dated: 10.03.2025.
  4. The Assistant Director, Geology and Mining, Peraambalur letter Rc.No.147/G&M/2024, dated 11.04.2025.
  5. Thiru.D.Balaji, S/o.S.Devendiran letter dated.15.04.2025.
  6. Thiru.D.Balaji, S/o.S.Devendiran letter dated.07.05.2025.

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The applicant Thiru.D.Balaji, S/o.S.Devendiran in the reference 6<sup>th</sup> cited has requested to provide the details of quarries situated within 500 mts radius distance from the proposed lease area.

Hence the details of existing quarries situated within 500 mts radial distance from the subject area are furnished as follows,

**1)Existing quarries:**

Sl. No	Name of the Owner	Taluk / Village	S.F.Nos	Extent	Proc. No.	Lease Period
1	Thiru.D.Manjunath, S/o.Devendiran, No.25, I.A.S. Nagar, Thiruverumbur, Trichy District 620 013	Therani, Alathur Taluk	122/1 (Block-5)	1.00.0	Rc.No.149/G&M /2019 dated 17.08.2022	17.08.2022 to 16.08.2027
2	Tmt.P.Dhanalakshmi, W/o. G.R.perumal pillai,1/24, sivan kovil street, (kaliyamman kovil street), Therani (po), Alathur (Tk), Perambalur.	Padalur (E) Alathur	125/3A, 124/3B	1.00.0	Rc.No.88/G&M/ 2019 dated 29.04.2022	29.04.2022 to 28.04.2027

3	Thiru.S.Pitchai, S/o.Thiru. Subbaiya, No.3/173, West Street, Koothanur Village, 85, seedevimangalam, Alathur Taluk, Perambalur District-04	Therani, Alathur	122/1 (Block- 5A	1.00.0	R.C.No.150/G& M/2019 dated:10.12.202 0	18.12.2020 to 17.12.2025
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**2)Proposed quarries:**

Sl. No	Name of the Owner	Taluk / Village	S.F.Nos.	Extent	Lease Period	Remarks
1	Thiru.D.Balaji, S/o.S.Devendiran, No. 25, I A S Nagar, Thiruverumbur Taluk, Tiruchirapalli District-620 013.	Alathur / Padalur (East)	124/1A, 124/1B, 124/3A, 124/3C, 124/4A & 4B	2.75.0	-	Presently proposed

**3) Expired quarries**

Sl. No	Name of the Owner	Taluk / Village	S.F.Nos.	Extent	Lease Period
1	Nil				

**4) Abandoned quarries:**

Sl. No	Name of the Owner	Taluk /Village	S.F.Nos.	Extent	Lease period
1	T.S.Chandramohan, S/o. Subramaniyan, 11, Raja Colony, Collector's Road, Tiruchirappalli.	Alathur / Padalur (E),	123 Part Block 2 ,	1.00.0	29.03.2006 to 28.03.2016
2	N.Mahamurthy, S/o.Thiru Narayanasamy, Door No.1/166, Middle Street, Kanakiliya Nallur Post, Lagudi Taluk, Trichy.	Padalur(East), Alathur	125/1,125/2A, 125/2B, 126/2,129/1B, 129/5A2,129/ 5B1	2.95.5	28.11.2018 to 27.11.2023
3	Thiru.P.S.Jayaraman S/o.Sivasamy, No.32, periyar nagar, 1 <sup>st</sup> street, Ariyalur District.	Padalur(East), Alathur	122/1,122/2B	2.10.5	28.11.2018 to 27.11.2023

*[Signature]*  
Assistant Director,  
Geology and Mining,  
Perambalur.

*[Signature]*  
14/12/25