

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT OF MULTICOLOUR GRANITE QUARRY

(As per EIA Notification, 2006 dated 14.09.2006 and amendments)

**CATEGORY - B1 - CLUSTER - MINOR MINERAL -
NON-FOREST LAND**

Project Proponent

M/s. G.P. EXPORTS

No.12/128, Thalappatti, K. Pitchampatti,
Karur Taluk, Karur District - 639 118

<i>Proposed Production</i>	<i>Project Site Details</i>
Geological Reserves : 38,61,866 MT	Extent Area : 3.00.0 Ha
Mineable Reserves : 15,38,155 MT	S.F. No : 353/6 (P), etc.,
Production : 3,61,361 MT	K. Pitchampatti Village
Proposed depth : 35m bgl	Karur Taluk, Karur District

Laboratory

ABM Enviro Lab

NIPBASS PLAZA, 4/77-L, Narasothipatti, Salem-636004

NABL Certificate No: **TC-15822/** Valid up to: **01.04.2029**

Baseline Monitoring Period: December, 2025 to February, 2026

EIA Consultant

UIN: ABM/MIN/EIA/2025-26/005/R1/2026

AADHI BOOMI MINING & ENVIRO TECH (P) LTD

(NABET Accredited EIA Organization)

NABET Certificate No: NABET/EIA/24-27/RA 0365/Valid Up to: 23.10.2027
3/216, K.S.V. Nagar, Narasothipatti, Alagapuram (PO).

Salem - 636004, Tamil Nadu

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M/s. G. P. EXPORTS,
No.12/128, Thalappatti,
K. Pitchampatti, Karur Taluk,
Karur District - 639 118,
Tamil Nadu.
+91-9751520324

Date:

To

District Environmental Engineer

Tamil Nadu Pollution Control Board (TNPCB),

No 26, Ramakrishnapuram West,

Karur District- 639 001

Sub: Submission of **Draft Environmental Impact Assessment Report** as per EIA Notification, 2006 dated 14.09.2006 and amendments for the Multicolour Granite Quarry located within cluster area over an extent of 3.00.0 Ha of S.F.No's: 353/6 (P), 353/7 (P), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(P) & 354/B20(P) in K. Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu—reg.

Ref:

1. Precise area communication letter. No: 3419187/MMB.2/2022-1, Dated 05.10.2023
2. Approval of Mining Plan Vide Rc. No.2374/MM2/2022 Dated 09.10.2025
3. ToR Identification No: TO25B0108TN5759940N Dated: 10.02.2026

Dear Sir,

With reference to the above mentioned subject, we herewith submit the hard copy of **Draft Environmental Impact Assessment Report** as per the Terms of Reference vide ToR Identification No: TO25B0108TN5759940N Dated: 10.02.2026 with a Demand Draft of Rs. _____ in favour of DEE, TNPCB, Karur for your kind perusal. Hence, we kindly request you to process our application for Public Hearing as per EIA Notification, 2006 for obtaining Environment Clearance from SEIAA/SEAC, Tamil Nadu as early as possible.

Thanking You,

Yours faithfully,



M/s. G. P. Export
(Project Proponent)

Encl:

Draft EIA Report along with the soft copy.

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M/s. G. P. EXPORTS,
No.12/128, Thalappatti,
K. Pitchampatti, Karur Taluk,
Karur District - 639 118,
Tamil Nadu.
Contact Number- +91-9751520324

Undertaking by Project Proponent

I, **M/s. G.P Exports (G.P. Panneer)**, as **Project Proponent**, hereby give this undertaking to the effect that the conditions laid down in Terms of Reference vide ToR Identification No. TO25B0108TN5759940N Date: 10.02.2026 for our Multicolour Granite Quarry, in SF. No. 353/6 (P), 353/7 (P), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(P) & 354/B20(P), over an extent 3.00.0 Ha in K. Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu, Tamil Nadu have been compiled with the data submitted and the information presented in this report are true to the best of my knowledge.



Signature and seal of the Project Proponent

AADHI BOOMI MINING AND ENVIRO TECH (P) Ltd.

(NABET/QCI Accredited Organisation – 'A' Category)

ISO: 9001:2015 Certified Company

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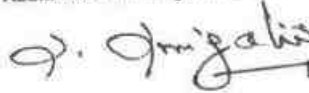
Email: suriyakumarsemban@gmail.com, admin@abmenvirotec.com,Website: www.abmenvirotec.com**Date:****Declaration by the Head of the accredited consultant organization/authorized person**

I, **S. Suriyakumar**, CEO of Aadhi Boomi Mining & Enviro Tech (P) Ltd, hereby confirm that the Draft Environmental Impact Assessment Report has been prepared as per the conditions laid down in Terms of Reference vide ToR Identification No. TO25B0108TN5759940N Date: 10.02.2026 for conducting Public Hearing and obtaining Environment Clearance from SEIAA/SEAC, Tamil Nadu for Multicolour Granite Quarry of M/s. G. P. Exports located in K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu.

I also confirm that I shall be fully accountable for any mis-leading information mentioned in this statement.

Name : **Dr.S.Suriyakumar**

Signature : For Aadhi Boomi Mining And Enviro Tech (P) Ltd.,


 Director
Designation : **Managing Director**Name of the EIA Consultant Organization: **Aadhi Boomi Mining & Enviro Tech Private Limited.**QCI/NABET Accredited Consultant, Certificate No: **NABET/EIA/24-27/RA 0365.**

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT

Proponent: M/s. G.P. Exports, Multicolour Granite Quarry, Karur District

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LIST OF ABBREVIATIONS AND ACRONYMS

AQI	-	Air Quality Index
AAQ	-	Ambient Air Quality
CPCB	-	Central Pollution Control Board
CAPEXIL	-	Chemical and Allied Export Promotion Council of India
CSR	-	Corporate Social Responsibility
DB	-	Decibel
DGM	-	Department of Geology and Mining
DGPS	-	Differential Global Positioning System
EC	-	Environment Clearance
EMP	-	Environment Management Plan
EIA	-	Environmental Impact Assessment
EMC	-	Environmental Management Cell
LEQ	-	Equivalent Noise Level
GOVT	-	Government of Tamil Nadu
GLC	-	Ground Level Concentration
HSE	-	Health, Safety and Environment
HA	-	Hectare
KLD	-	Kilo Liters Per -Day
KM	-	Kilo Meter
MOEF&CC	-	Ministry of Environment Forest and Climate Change
NH	-	National Highway
PH	-	Public Hearing
R&R	-	Rehabilitation & Resettlement
SEIS	-	Seismograph
SEIAA	-	State Environmental Impact Assessment Authority
SEAC	-	State Expert Appraisal Committee
SH	-	State Highway
SPM	-	Suspended Particulate Matter
TNPCB	-	Tamil Nadu Pollution Control Board
TOR	-	Terms of Reference
WQI	-	Water Quality Index

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S. No		TERMS OF REFERENCE		P. No
1. SEAC Conditions - Site Specific				P. No
Cluster Management Committee				
2.1	1	Cluster Management Committee shall be framed which must include all the proponents in the cluster as members including the existing as well as proposed quarry.	Agreed. The Cluster Management Committee will be formed as per SEAC guidance.	-
	2	The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc.,	Agreed. After forming CMC, the all the members will implement environment management plan effectively. Effective plan has been given in chapter – 4.	-
	3	The List of members of the committee formed shall be submitted to AD/Mines before the execution of mining lease and the same shall be updated every year to the AD/Mines.	Agreed. The List of members of the committee formed will be submitted to AD/Mines before the commencing the quarry activity.	-
	4	Detailed Operational Plan must be submitted which must include the blasting frequency with respect to the nearby quarry situated in the cluster, the usage of haul roads by the individual quarry in the form of route map and network.	Certified Blaster will be engaged for blasting having adequate knowledge in Environmental safety aspects. Plan will be included in the EIA report. The usage of haul roads by the individual quarry is attached in EIA report.	-
	5	The committee shall deliberate on risk & emergency management plan, fire safety & evacuation plan and sustainable development goals pertaining to the cluster in a holistic manner especially during natural calamities like intense rain and the mitigation measures considering the inundation of the cluster and evacuation plan.	Risk Management is elaborated in chapter 7 of the EIA report.	-
	6	The Cluster Management Committee shall form Environmental Policy to practice sustainable mining in a scientific and systematic manner in accordance with the law. The role	Agreed. The CMC will form Environmental Policy to practice sustainable mining in a scientific and systematic manner. The same shall be displayed within the cluster area.	-

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	played by the committee in implementing the environmental policy devised shall be given in detail in the EIA Report.		
7	The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner.	The conceptual plan for the quarry area 3.00.0 Ha is attached in the EIA report. After forming CMC, the restoration strategy of individual quarry will be submitted to AD Mines, Karur.	-
8	The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public in the vicinity.	Occupational safety and Health care of the workers are included in Chapter 4 in the EIA report.	-
Agriculture & Agro-Biodiversity			
9	Impact on surrounding agricultural fields around the proposed mining Area.	The impact on surrounding agricultural fields is given in chapter 4.	-
10	Impact on soil flora & vegetation around the project site	The impact on ecology and biodiversity including soil flora and vegetation around the project site is mentioned in chapter 4.	157
11	Details of type of vegetation including no. of trees & shrubs within the proposed mining area and if so, transplantation of such vegetation all along the boundary of the proposed mining area shall committed mentioned in EMP.	As it is multicolour granite quarry there is no trees or plants in quarry area. However, PP planted Neem trees along the boundary of mining lease area. There are only few numbers of Neem trees, coconut trees, palm trees, <i>Prosopis juliflora</i> are found within 500m radius buffer zone. It will not be disturbed during quarrying activity.	-
12	The Environmental Impact Assessment should study the agro-biodiversity, agro-forestry, horti-cultural plantations, the natural ecosystem, the soil micro flora, fauna and soil seed bank sand suggest measures to maintain the natural Ecosystem.	The impact on ecology and biodiversity including the soil micro flora, fauna and soil seed banks around the project site is mentioned in chapter 4.	157
13	Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.	At the end of mining, the quarried-out pit will be used as water storage pond which improves the agricultural activity in the buffer zone. The afforestation plan for five years is given in chapter 4.	164
14	The project proponent shall study and furnish the impact of project on	Anticipated impact on Agriculture, Horticulture and livestock is given chapter 4.	168

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	plantations in adjoining patta lands, Horticulture, Agriculture and livestock.	Refer clause 4.14.	
Forests			
15	The project proponent shall detail study on impact of mining on Reserve forests and free ranging wildlife.	There is No reserve forests located within 10km radius of the project site. There are no wildlife sanctuaries within 10km radius. Refer table 2.2 in page 16 of chapter 2.	18 & 19
16	The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.	There is no endangered species found within 10km radius study area.	-
17	The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection.	As it is newly proposed multicolour granite quarry, no trees and shrubs are present in the quarry area.	-
18	The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site.	There are no protected areas, National Parks, Corridors and Wildlife pathways within 10km radius of the project site. There is no reserve forest located within 10km radius. The impact on reserve forest is given in Chapter 4.	-
Water Environment			
19	Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby water bodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period.	The hydro geology study has been conducted within the study area of project site. Refer pages 73 to 78 in Chapter 3. The details of water bodies in the study area are given chapter 2. Refer page no 17 and 18. The depth of water table identified by Geo resistivity survey is 60m bgl whereas the proposed depth of mining is 35m bgl. Therefore, the mining activity will not intersect ground water table.	-
20	Erosion Control measures.	To control the erosion, the tree sapling will be planted along the mining lease boundary. Garland drainage will be developed around the dump to control the washout of dump due to hydrostatic pressure.	-

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21	Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas.	The impact of mining on the nearby villages and water bodies are given detail in chapter 4.	
22	The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir.	The detailed study of impact on fish habitation and food WEB/ food chain in the water body and reservoir is given in chapter 4. Refer table 4.28.	157
23	The project proponent shall study and furnish the details on potential fragmentation impact on natural environment, by the activities.	The detailed impact studies are given in Chapter 4.	-
24	The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts.	The study and the impact on aquatic plants and animals in water bodies are mentioned in Chapter 4. There are no caves, heritage site, and archaeological site found within 10km radius of project site.	-
25	The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components.	The impact study on soil health and erosion is given in clause 4.7 in chapter 4. The soil physical, chemical components and microbial components are given in Chapter 3.	156
26	The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.	The impact study on surface water bodies and agricultural land is given in chapter 4.	152
27	The EIA shall include the impact of mining activity on the following: a) Hydrothermal/Geothermal effect due to destruction in the Environment. b) Bio-geochemical processes and its foot prints including environmental stress. c) Sediment geochemistry in the surface streams.	Yes, we are including in this part in EIA report.	-
Energy			
28	The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy	Agreed	-

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	shall be furnished		
Climate Change			
29	The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities.	The carbon emission due to proposed mining activity and its mitigation measures are given in Chapter 4.	145
30	The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock, soil health and physical, chemical & biological soil features.	The carbon emission due to proposed mining activity and its mitigation measures are given in Chapter 4.	145
31	Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood.	Impact on the mining pollution we have studied refer chapter 3, and mitigation measures we have included.	-
Mine Closure Plan			
32	Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.	Detailed mine closure plan incorporate in chapter 2 in the EIA report.	46
EMP			
33	Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued and the scope for achieving SDGs.	Detailed Environmental management plan is given in chapter 10.	187
34	The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan.	The Environmental management plan is given chapter 10. The cost for green belt development is mentioned in table 10.2 in chapter 10. Budget for mine closure plan is given in table 10.3 in chapter 10. The disaster management plan is given in chapter 7.	187, 192 & 175
Risk Assessment			

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35	To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.	Risk Assessment and management Plan has been prepared and included in the EIA report. Refer Chapter 7.	175
Disaster Management Plan			
36	To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities covering the entire mine lease period as per precise area communication order issued.	The Disaster management Plan has been prepared and included in the EIA report of chapter 7.	175
Others			
37	The project proponent shall furnish VAO certificate with reference to 300m radius regard to approved habitations, schools, Archaeological sites, Structures, railway lines, roads, water bodies such as streams, odai, vaari, canal, channel, river, lake pond, tank etc.	The project proponent obtained from VAO certificate for 300m radius in the lease area	324
38	As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall address the concerns raised during the public consultation and all the activities proposed shall be part of the Environment Management Plan.	Agreed.	-
39	The project proponent shall study and furnish the possible pollution due to plastic and microplastic on the Environment. The ecological risks and impacts of plastic & microplastics on aquatic Environment and fresh water systems due to activities, contemplated during mining may be investigated and reported.	The study on pollution due to plastic and micro plastic and its ecological risk is mentioned in chapter 7.	179

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SEAC conditions - Site specific (Major Condition)			
1	The PP shall furnish the consent lease agreement for the survey numbers from the patta land owners, during EIA appraisal.	Under process	-
2	The PP shall mark the DGPS reference pillars and shall also erect fencing all around the boundary of the proposed area with gates for entry/exit and shall furnish the latest photographic/videographic proof showing the same during EIA appraisal.	Under process	-
3	The PP shall remove the dump in the proposed site and furnish photographic/videographic proof showing the same during EIA appraisal.	Under process	-
General Condition:			
1	A Cluster Management Committee (CMC) shall be constituted including all the mines in the cluster as Committee Members for the effective management of the mining operation in the cluster through systematic & scientific approach with appointment of statutory personnel, appropriate environmental monitoring, good maintenance of haul roads and village/panchayat roads, authorized blasting operation etc. The PP shall submit the following details in the form of an Affidavit during the EIA appraisal: i. Copy of the agreement forming CMC. ii. The Organization chart of the Committee with defining the role of the members iii. The 'Standard Operating Procedures' (SOP) executing the planned activities.	Under Process.	-
2	The Geo referenced Boundary pillars to be erected on the field as per the mine	Under Process.	-

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		rules and the evidence should be submitted along with the EIA report.		
3		The details of enumeration of structures including schools, colleges, primary health centres should be submitted along with the EIA report.	In this lease area there are no structures including school, college and primary health centre in and around 500m radius	-
4		The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300m & upto 1km shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc. and spell out the mitigation measures to be proposed for the protection of the above structures, if any during the quarrying operations.	The details of nearest habitation in the study area are given chapter 2. Refer table 2.2 in EIA report.	18 & 19
5		The proponent shall furnish photographs of adequate fencing, garland drainage built with siltation tank & green belt along the periphery including replantation of existing trees; maintaining the safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.	Agreed.	-
6		The Proponent shall carry out Bio diversity study as a part of EIA study and the same shall be included in the Report.	The baseline study on Ecology and Biodiversity are given detail in chapter 3. The impact on Ecology and Biodiversity are given in chapter 4.	93 & 159
7		The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.	The EMP for the proposed project is mentioned in Chapter 10 along with EMP cost. The affidavit stating to abide the EMP for the entire life of mine will be attached in the EIA report.	192
8		The PP shall carry out the comprehensive studies on the cumulative environmental impacts of the existing & proposed quarries which included drilling & blasting, loading & hauling on the surrounding village and structures.	The anticipated cumulative impact on various environments such as air, water, soil and noise etc., due to proposed mining activity are given in chapter 4 with appropriate mitigation measures.	133

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9	The PP shall prepare a conceptual working plan accommodating the inclusion of haul road accessibility keeping the benches intact, by ensuring the slope stability of the working benches to be constructed and existing quarry wall.	As it is granite quarry, blasting will be carried out to remove blocks from the parent rock by forming crack. Adequate Blast shield or blast mats will be provided wherever necessary for fly rock protection during blasting, thus to prevent the accident on the nearest farms.	-
10	The PP shall install the CCTV camera for the continuous surveillance of mining activity & furnish the photographic/videographic evidence along with the EIA report.	Under Process	-

2. SEAC Standard Conditions

1	In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following: (i) Original pit dimension (ii) Quantity achieved Vs EC Approved Quantity (iii) Balance Quantity as per Mineable Reserve calculated. (iv) Mined out Depth as on date Vs EC Permitted depth (v) Details of illegal/illicit mining (vi) Violation in the quarry during the past working. (vii) Quantity of material mined out outside the mine lease area (viii) Condition of Safety zone/benches (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m.	It is newly proposed quarry	-
2	Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.	Yes, The Latest habitations detail VAO certificate enclose in pouch	324
3	The proponent is requested to carry out a survey and enumerate on the	The details of nearest habitation in the study area are given table 2.2 in chapter 2.	18 & 19

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	structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc., with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.,		
4	The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the water bodies like lake, water tanks, etc., are located within 1 km of the proposed quarry.	The hydro geology study has been conducted within the study area of project site. Refer chapter 3 in EIA report. The details of water bodies in the study area are given table 2.2 in chapter 2.	79, 18 & 19
5	The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.	The baseline study on Ecology and Biodiversity are given detail in chapter 3. The impact on Ecology and Biodiversity are given in chapter 4.	93 & 159
6	The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.	Not applicable. The mining area does not involve any forest land. Refer table 2.2 in EIA report.	18 & 19
7	In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT Madras, NIT-Dept of Mining Engg, Surathkal,	Slope stability study under preparation and incorporated in final EIA Report.	-

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	and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC.		
8	However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.	Slope stability study under preparation and incorporated in final EIA Report.	-
9	The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.	Agreed. The affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961.	-
10	The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.	As it is granite quarry, blasting will be carried out to remove blocks from the parent rock by forming crack. Adequate Blast shield or blast mats will be provided wherever necessary for fly rock protection during blasting, thus to prevent the accident on the nearest farms.	-
11	The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.	The drone survey will be conducted for this project. The video and photographs included in final EIA report.	-
12	If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,	It is newly proposed quarry	-
13	What was the period of the operation and stoppage of the earlier mines with	It is newly proposed quarry	-

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		last work permit issued by the AD/DD mines?		
14	Quantity of minerals mined out. ❖ Highest production achieved in any one year ❖ Detail of approved depth of mining. ❖ Actual depth of the mining achieved earlier. ❖ Name of the person already mined in that leases area. ❖ If EC and CTO already obtained, the copy of the same shall be submitted. ❖ Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.	It's newly proposed quarry	-	
15	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	The Toposheet showing location of the lease area is attached in Chapter 1. The geology and geomorphology of the 10km radius of proposed area is given in chapter 2. The land use/land cover image is given chapter 3.	6 29 126	
16	The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,	The drone video, fencing and green belt development along the periphery is under process. The photographs will be attached in final EIA Report.	-	
17	The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.	The fencing and green belt development along the periphery is under process. The photographs will be attached in final EIA Report.	-	
18	The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity,	The details of reserves, production capacity and methodology are given in chapter – 2.	41	

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	proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.	The impacts on surrounding environment due to mining activity are given in chapter 4.	160
19	The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.	The employment potential of proposed project is given in chapter 2.	53
20	The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.	The hydro geology study has been conducted within the study area of project site. Refer in Chapter 3. The details of water bodies in the study area are given chapter 2. The depth of water table identified by Geo resistivity survey is 60m bgl whereas the proposed depth of mining is 35m bgl. Therefore, the mining activity will not intersect ground water table.	79 18 & 19 79
21	The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.	The baseline data for the environmental and ecological parameters were collected. Refer chapter 3. Refer pages 54 to 83.	56 to 121
22	The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry	The anticipated cumulative impact on various environments such as air, water, soil and noise etc., due to proposed mining activity are given	133 to 169

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		specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.	in chapter 4 with appropriate mitigation measures. The environmental management plan is given in chapter- 10.	187
23		Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.	The studies on rain water harvesting is given in chapter 7.	178
24		Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.	The land use/land covers of 10km radius of proposed mining lease area are given in chapter 3.	126
25		Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.	Not applicable. All waste and rejects shall be dumped within the lease area of 3.00.0 Ha of GP Exports.	-
26		Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be	No. There is no boundary of critically polluted area found within 10km radius proposed mining lease area.	-

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	considered.		
27	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.	At the end of mining, the quarried-out pit will be used for storing rain water which will enhance agricultural activity around the lease area. The rain harvesting plan is given detail in chapter 7.	178
28	Impact on local transport infrastructure due to the Project should be indicated.	No. The existing roads are available to withstand the traffic generated due to proposed project. Refer fig 2.6 in chapter 2.	22
29	A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.	Only trees such as Neem trees, coconut trees, palm trees, Pungamin tree, Guava tree, Teak tree are found within 500m radius.	-
30	A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.	The mine closure plan for the proposed project is included in the EIA report. Refer fig 2.18 in chapter 2.	46
31	As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.	Agreed. The EIA coordinator will educate the local students on the importance of preserving local flora and fauna.	-
32	The purpose of green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.	Agreed. In consultation with the DFO, State Agriculture University, the green belt will be made around the boundary of lease area to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated	-
33	Taller/one year old Saplings raised in appropriate size of bags, preferably	Agreed. Taller/one year old Saplings will be planted as per the advice of local forest	-

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	ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner	authorities/botanist/ Horticulturist with regard to site specific choices.	
34	A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.	The Disaster management Plan has been prepared and included in the EIA report of chapter 7.	175
35	A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.	Risk Assessment and management Plan has been prepared and included in the EIA report. Refer clause 7.2 in Chapter 7.	174
36	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.	An occupational Health impact of the Project has been anticipated and the appropriate mitigation measures are given in Chapter 4 of EIA report.	166
37	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.	Yes, it is given in EIA report in chapter -4.	166
38	The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and	The study on Socio-economic for the proposed project is mentioned in clause 3.13 of chapter 3.	109 to 121

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	influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.		
39	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.	Not applicable.	-
40	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.	The benefits of the proposed project are given detail in chapter 8.	181 to 184
41	If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.	It's newly proposed quarry	-
42	The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.	The EMP for the proposed project is mentioned in Chapter 10 along with EMP cost. The affidavit stating to abide the EMP for the entire life of mine will be attached in the EIA report.	192
43	Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.	Agreed.	-

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Standard Terms of Reference

S. No	Conditions	Compliance	P. No
1.	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one-year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.	It's newly proposed quarry	-
2.	A copy of the document in support of the fact that the Proponent is the right full lessee of the mine should be given.	The Director of Geology and Mining, Chennai grant of Granite quarry lease Rc. No: 3419187/MMB.2/2022-1, Dated 05.10.2023.	240
3.	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.	Contents in all documents are synchronizing with one another in terms of mine lease area, production levels, waste generation, its management and quarrying technology.	-
4.	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/ topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	The area is bounded by northern latitude of 11°21'44.7411" to 11°21'32.7629" N and eastern longitude of 77°12'20.8758" to 77°12'38.7912" E. Toposheet No. 58E/3. Details are given in Chapter 1. Geomorphology & Geology of the area is given in fig no 2.11 in Chapter 2. Land Use details given in Table 3.18 and also refer fig No.3.24. Land use within the lease area is mentioned in Table No 2.8 in Chapter 2.	6 29 126 & 127 35
5.	Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the	Survey of India Toposheet No. 58E/3 in 1:50,000 scale indicating physical features of geological map of the area, geomorphology of land forms of the area, existing minerals and quarrying history of the area, important water	5 to 6, 29

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	area, important water bodies, streams and rivers and soil characteristics.	bodies, streams and rivers and soil characteristics is given in figs 1.1, 1.2, 3.26, and 3.27.	
6.	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.	The details of land proposed for mining activities are given in Table No 2.8 of Chapter 2.	35
7.	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring in to focus any infringement/deviation/ violation of the environmental or forest norms/conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.	The proponent M/s. G.P. Exports is very much conscious of complying with the Environmental Regulations with systematic mining. The proponent will comply with the EC conditions and Consent to Operate issued by the TNPCB with stipulated time.	-
8.	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.	Quarry Safety pertaining to the failure of pit slope in open cast quarrying is described in Table 7.1 in chapter 7. Safety for blasting is given under Table 10.1 in chapter 10.	175 187
9.	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.	The Study area of the existing mining project comprises of 10km zone around the mining Lease boundary has been prepared. Data like reserves, waste generation up to life of mine have been incorporated in Chapter 2 of the EIA report.	42
10.	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of	Land use of the study area, parks, migratory routes of fauna, water bodies, human settlements, other existing mines/ industrial	123

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	fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.	activity and other ecological features are shown in delineating forest area, agricultural land, grazing land, wildlife sanctuary and national parks. Refer Clause 3.11.6 in Chapter 3. Land use plan of the mine lease area is given in Table No.2.8.	35
11.	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.	Details of the dump design area given in Chapter - 2. The mining operation will not disturb/relocate any villages and hence R & R plan not required. Refer Chapter 7.	48 177
12.	Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.	Not applicable. The mining area does not involve any forest land. Refer Table 2.2 in chapter-2.	18 & 19
13.	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.	Not applicable. The mining area does not involve any forest land.	18 & 19
14.	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.	Not Applicable.	-
15.	The vegetation in the RF / PF areas in the study area, with necessary details, should be	The details of reserve forest located within study area of 10km radius are given in chapter 2. Refer	18 & 19

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	given.	Table No 2.2 in chapter-2. The details of flora within the study area are given detail Refer Clause 3.9 in Chapter 3.	93 to 109
16.	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.	Eco biodiversity (EB) study has been done for the project which details the impact on surrounding wildlife and mitigation measures are discussed and given in Chapter-4.	157
17.	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/ (existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.	There is no National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors and Tiger/ Elephant Reserves within the 10 km radius of the mining lease area. Refer Page No. Refer Table 2.2 in chapter -2.	18 & 19
18.	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.	Details of Flora and Fauna found in the study area are given in Chapter 3 in the EIA Report. No scheduled list of fauna is found in this study area.	93 to 109

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19.	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.	The project site is neither falling under 'Aravalli range' not it is located in proximity to area declared as Critically Polluted Area.	-
20.	Similarly, for Coastal Projects, a CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease with respect to CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).	Not Applicable. Bay of Bengal is located 145 km away from the lease area towards the east side. Hence the project does not attract the C.R.Z. Notification.	18 & 19
21.	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmers prepared and submitted accordingly, integrating the sectoral programme of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.	The multicolour granite quarry project does not involve any kind of displacement of the population since the mining will be concentrated only in the quarry area. Hence, Rehabilitation of settlement is not anticipated under this project as it is not required. The Socio-Economic study detailed in included in Clause 3.10 of Chapter 3.	109 to 121
22.	One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season); December-February	Monitoring data for a period of three months (December 2025– February 2026) on Air quality, Water quality, Noise level, Soil, Flora and Fauna	56 to 121

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	(winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.	in the core and buffer zones is collected and complied data wise in the EIA report. Refer Chapter 3.	
23.	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.	Air quality modeling carried out for prediction of impact of the project on the air quality of the area, which is included in Chapter 4, Refer Clause 4.1. Wind Rose Pattern is shown in fig. 3.1 in Chapter 3.	133 58
24.	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.	The water requirement for the Project is 3.0 KLD; the details are given in Chapter – 2. A detailed water balance is shown in fig 4.4 in Chapter 4.	53 152
25.	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.	The granite quarry project requires water for drinking, dust suppression and plantation. Drinking water is obtained from Mineral water industries. For Dust suppression, green belt and other uses water will be obtained from ordinary	-

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		water vendors through water tank. There is no extraction of ground water within lease area for the quarry activity. So, no clearance from the Competent Authority is required.	
26.	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.	At the end of the project the quarried-out pit will be used as Water storage pond. It will increase the agricultural activity in the surrounding villages. The rainwater harvesting and rate of evaporation is given in Chapter 7.	178
27.	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.	The impacts of the project on the water quality are assessed and necessary safe guard measures will be provided. Refer Clause 4.6 in Chapter 4.	152
28.	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.	The mining operation will not intersect the ground water table. The depth of mining is 35m bgl whereas the depth of water table is 60m bgl. So, No NOC is required from CGWA for the proposed project. However detailed Hydro geological study has been carried out and incorporated in Chapter 3.	79
29.	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.	There is no stream crossing inside the mining lease area and hence there is no need of modification/diversion.	-
30.	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.	Elevation of the quarry area is 316m above MSL. The mining operation will be at a maximum depth of 35m bgl. The ground water table is at 60m bgl from the surface in the adjacent tube well, and mine workings are above groundwater table.	-
31.	A time bound Progressive Greenbelt Development Plan shall be prepared in a	Phase-wise plan of plantation and Compensatory Afforestation and the plant species selected for	164

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	tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.	green belt. The proposed afforestation plan is given in Table 4.29 of Chapter 4.	
32.	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.	The transportation of minerals will be carried out through the existing roadways during day work hours only with no increase in the existing traffic pattern. Refer Chapter 2 in fig no: 2.6.	22
33.	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	Details of the onsite shelter and facilities to be provided to the mine workers are discussed in chapter 2 of clause 2.13.	53
34.	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.	Conceptual mining plan is given in Chapter 2. Refer Fig 2.19.	52
35.	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail.	Occupational Health impacts of the Project are detailed in EIA report. Refer Clause 4.13 of Chapter 4.	166

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	Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.		
36.	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.	All control measure for public health implications, air emission, noise control, and waste management will be duly considered as per norms and the remedial measures are detailed along with budgetary allocation in Chapter 10.	192
37.	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.	Details of community welfare activities to be done for the local community along with proposed budget have been incorporated in EIA Report. Refer Chapter 8.	184
38.	Detailed Environmental Management Plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.	Environmental Management Plan (EMP) for the proposed quarry project has been prepared and incorporated in Chapter 10.	187
39.	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.	Public hearing yet to be conducted in this project.	-
40.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.	No litigation pending against the project.	-
41.	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.	Project Cost – 44.50 L EMP cost- 35.72 L	54

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42.	A Disaster management Plan shall be prepared and included in the EIA/EMP Report.	A detailed Risk and Disaster Management Plan has been prepared and detailed in Chapter 7.	175
43.	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.	Project Benefits have been detailed in Chapter 8.	181
44.	Besides the above, the below mentioned general points are also to be followed: a) Executive Summary of the EIA/EMP Report. b) All documents to be properly referenced with index and continuous page numbering. c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. e) Where the documents provided are in a language other than English, an English translation should be provided. f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA. II (I) dated 4th	Yes, Yes, all the document to be proper referenced with indexed and page no also. Yes, Yes, We are prepared in EIA draft English and Tamil No Yes,	-

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Draft Environmental Impact Assessment Report

Proponent: *M/s. G. P Exports, Multicolour Granite Quarry, Karur District*

	August, 2009, which are available on the website of this Ministry, should be followed. h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the ToR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. i) As per the circular no. J-11011/618/2010-IA. II (I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as maybe applicable. j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.	PH yet to be conducted after any change, we have submitted Form -I and PFR. It's fresh Lease We have included in the surface plan of the area indicating contours of main topographic features, drainage and mining area, geological maps and sections and sections of the mine pit and external dumps.	

CHAPTER 1: INTRODUCTION

1.1. PURPOSE OF THE REPORT

The applicant, M/s. G.P Exports having registered office at No: No. 12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District – 639118, Tamil Nadu have been granted mining lease from the State Government over an extent of 3.00.0 Hectares in S.F. No's: 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part), K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu.

The Additional Chief Secretary to Government, Natural Resource (MMB.2) Department, Secretariat, Chennai has directed the applicant, M/s. G.P Exports, vide his precise area communication letter No. 3419187/MMB.2/2022-1 dated 05.10.2023 obtain Mining Plan and Environmental clearance from the Department of Geology and Mining and State Environment Impact Assessment Authority (SEIAA) as per the EIA Notification, 2006 and its amendments for grant of quarrying lease to multicolour granite quarry in K.Pitchampatti Village, Karur Taluk, Karur District and Tamil Nadu for the period of 20 years (From the date of execution). In continuation, The Director, Department of Geology and Mining, Chennai has directed the applicant/s. G.P Exports to get mining plan is approved vide letter No. 2374/MM.2/2022 dated 09.10.2025 and obtain Environmental clearance from the State Environment Impact Assessment Authority (SEIAA) as per the EIA Notification, 2006 and its amendments for grant of quarrying lease to multicolour granite quarry in K.Pitchampatti Village, Karur Taluk, Karur District and Tamil Nadu for the period of 20 years (From the date of execution).

The mining plan for multicolour granite quarry of applicant has been prepared as per the The Additional Chief Secretary to Government, Natural Resource (MMB.2) Department, Secretariat, Chennai Precise area communication letter under sub-Rule (13) of rule 19-A & 42 of Tamil Nadu Minor Minerals Concession Rules, 1959 for quarrying multicolour granite and it has been approved by the Director, Department of Geology and Mining, Chennai. The project cost is about Rs.44.50 Lakhs and EMP cost is Rs. 35.72 lakhs.

As per the cluster letter issued by Deputy Director, Department of Geology and Mining, Karur vide Rc.No.377/Mines/2021, dated 12.12.2025 for M/s. G.P Export (3.00.0 Ha) the lease

area of above said 4 applicants comes in cluster of 500m radius. The total area of cluster is 13.90.0 Ha. The extents of lease area of all individual as per cluster letter are given below.

Proposed Quarries

1. M/s. G.P Exports – 3.00.0 Ha

Existing Quarries

1. M/s. M.P Granites - 2.43.50 Ha
2. M/s. M.P Granites - 4.01.50 Ha
3. M/s. M.P Granites - 4.45.50 Ha

Abandoned Quarries

Nil

As the projects comes under B1(cluster) category, the applicant made TOR application individually the PARIVESH website for carrying out EIA Studies for obtaining Environmental clearance. The details are given in below table 1.1.

Table 1.1 Details on Terms of Reference

S. No	Name of Applicant	ToR Application No	SEAC and SEIAA Meeting	TOR Identification No
1	M/s. G.P Exports	SIA/TN/MIN/559712/2025, Dated 17/12/2025	668 th SEAC Meeting dated 22.01.2026 & 956 th SEIAA Meeting dated 04.02.2026	TO25B0108TN5759 940N Dated: 10.02.2026

The Draft EIA report has been prepared based on the Terms of Reference issued by SEIAA. The points raised in the public hearing and the commitments of the project proponent will be given detail in the Final EIA Report which will be submitted to SEAC/SEIAA, TN for obtaining environmental clearance. The production achieved by the Lessee since inception of mining activity as against approved Mining plan/Scheme is given below.

1.2. IDENTIFICATION OF PROJECT AND PROJECT PROPONENT

1.2.1. IDENTIFICATION OF PROJECT

Table 1.2 Details on Project and Project Proponent

Particulars	Details
Address of the Project Proponent	Tvl. G. P. Exports, No.12/128, Thalappatti, K.Pitchampatti, Karur Taluk, Karur - 639118 Tamil Nadu

	Mob: +919751520324. Email ID: mpgranite2014@gmail.com
S. F. No	353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part).
Lease Area	3.00.0 Hectares
Site Location	K. Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu
Geographical Co-ordinates	Latitude: 10°46'32.01463"N to 10°46'39.69873"N Longitude: 78°04'56.21001"E to 78°05'04.49494"E
Toposheet No.	58J/1
Precise Area Communication	Rc. No.
Mining Plan Approval	Rc. No. 2374/MM2/2022 Dated 09.10.2025
Period of Lease	20 years
AD Cluster letter	Rc. No. 2374/MM2/2022 Dated 12.12.2025

Table 1.3 Land Particulars

State & District	Taluk	Village	S.F. No.	Total Extent of area (Ha)	Ownership Occupancy
Tamil Nadu & Karur	Karur	K.Pichampatti	353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part)	3.00.0	Own patta land

1.3 BRIEF DESCRIPTION OF THE PROJECT

1.3.1. Nature and Size of the Project

Open cast, mechanized mining will be adopted to extract Granite of required size from the quarry area. Hydraulic excavators and diamond wire saw will be used for cutting the rocks. Close spaced cutting of 1m is adapted along a straight line. The Wire saw cutting is adopted below second bench to recover more granite blocks to increase the rate of recovery.

Geological resources of Granite are estimated as 38,61,866 MT and mineable reserves is estimated at 15,38,155 MT up to depth 35m (Ultimate depth) leaving necessary safety distance from the lease boundary. Production Schedule is proposed as 3,61,361 MT

(47,790 MT of Granite @ 40% of recovery) up to a depth of 35m during the mining plan period of five years.

1.3.2. Location of the Project

The area is accessible from Karur via Palayam to reach Gudalur further travel to 4.5km reach the site. The NH-44 road is situated about 13.7km on the North-western direction, connecting Dindigul- Salem. S.H.74 is situated at a distance of 4.6 km on Northeast direction connecting Dindigul- Karur. The village road is located on the western side.

The area is marked in the survey of India Toposheet No 58J/1. The area lies in the northern latitude of 10°46'32.01463"N to 10°46'39.69873"N and eastern longitude of 78°04'56.21001"E to 78°05'04.49494"E.

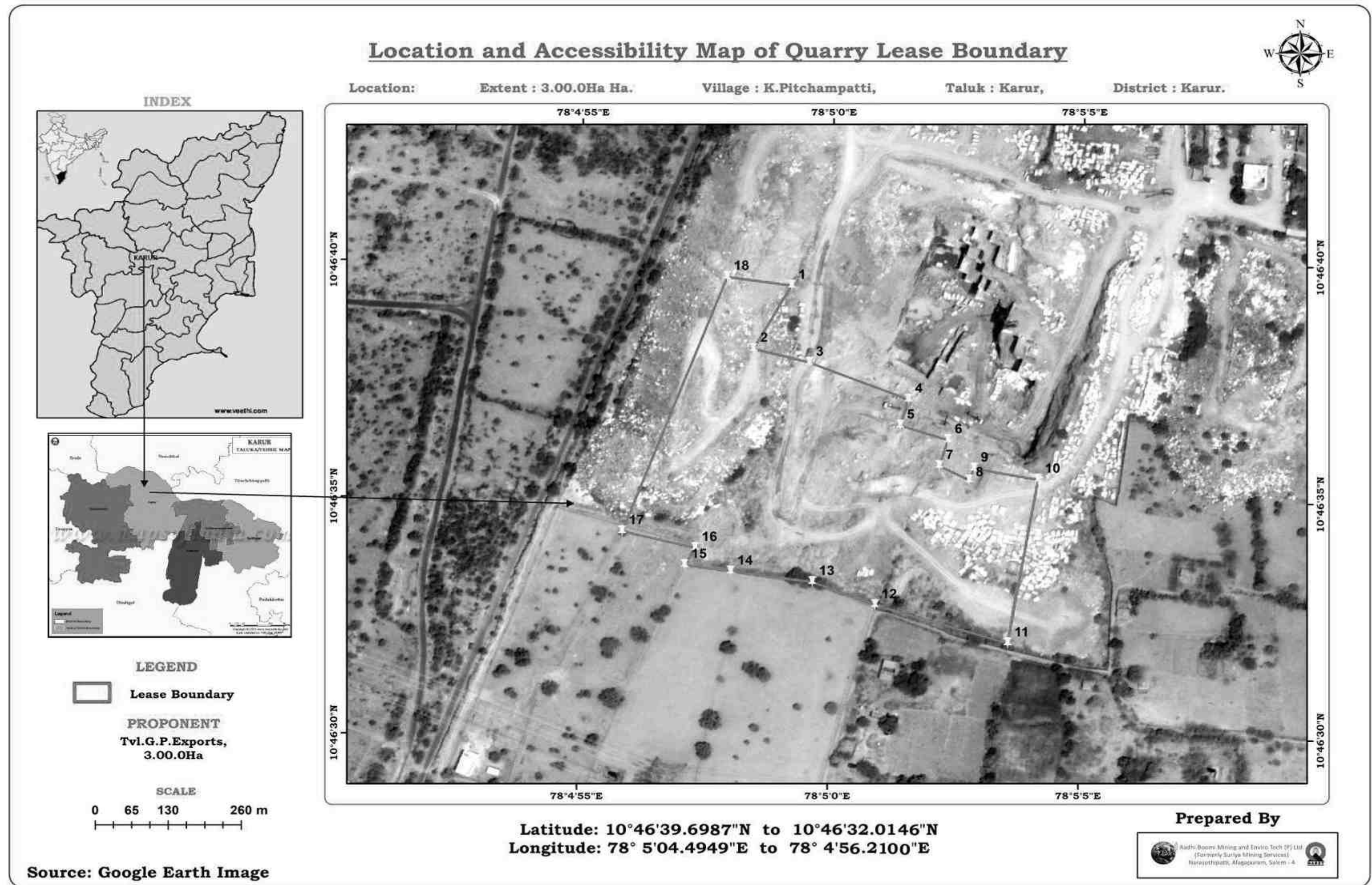


Fig No 1.1 Google earth image showing location and route for existing multi color granite quarry

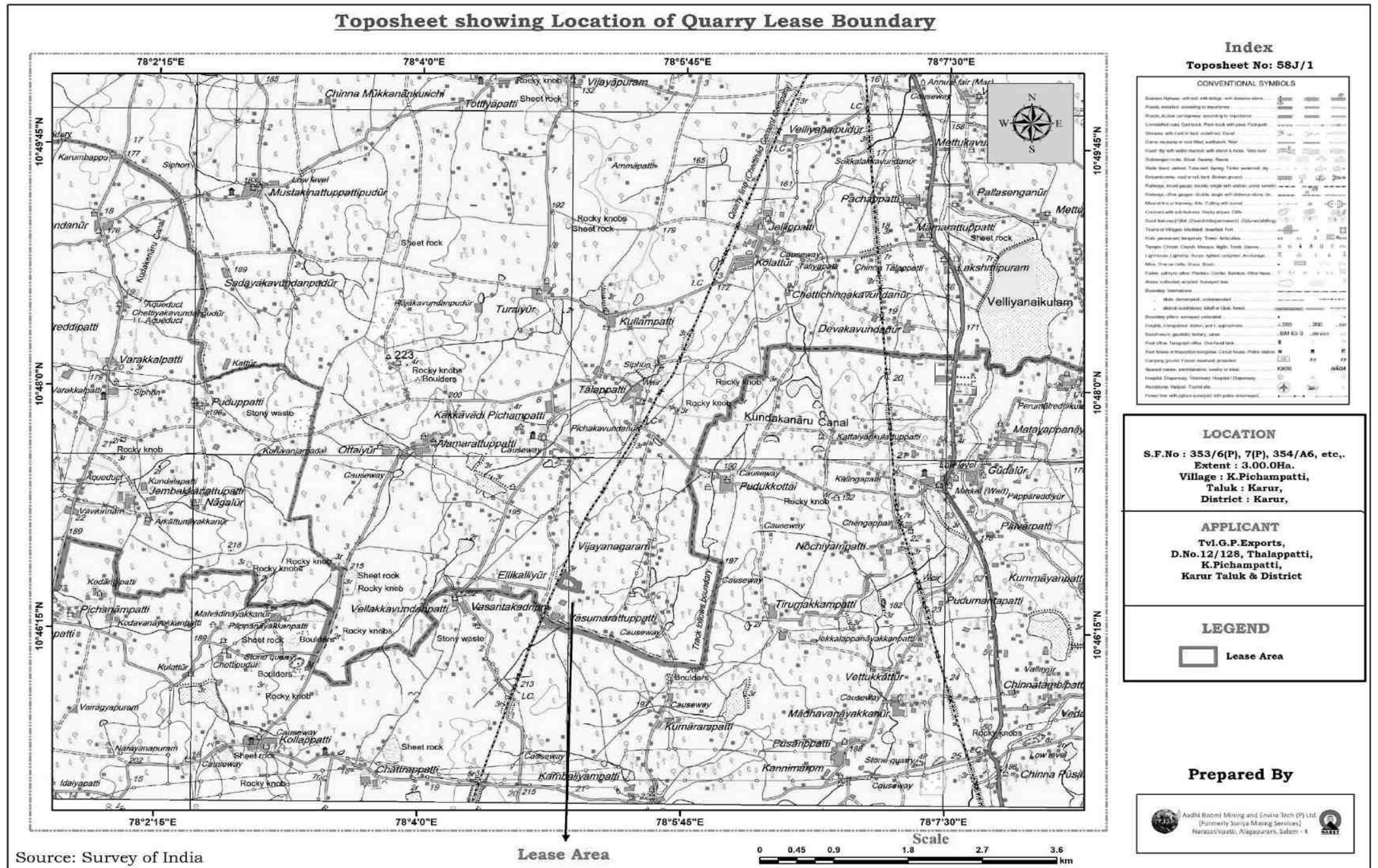


Fig No. 1.2: Toposheet showing Location of the proposed existing multi color granite quarry

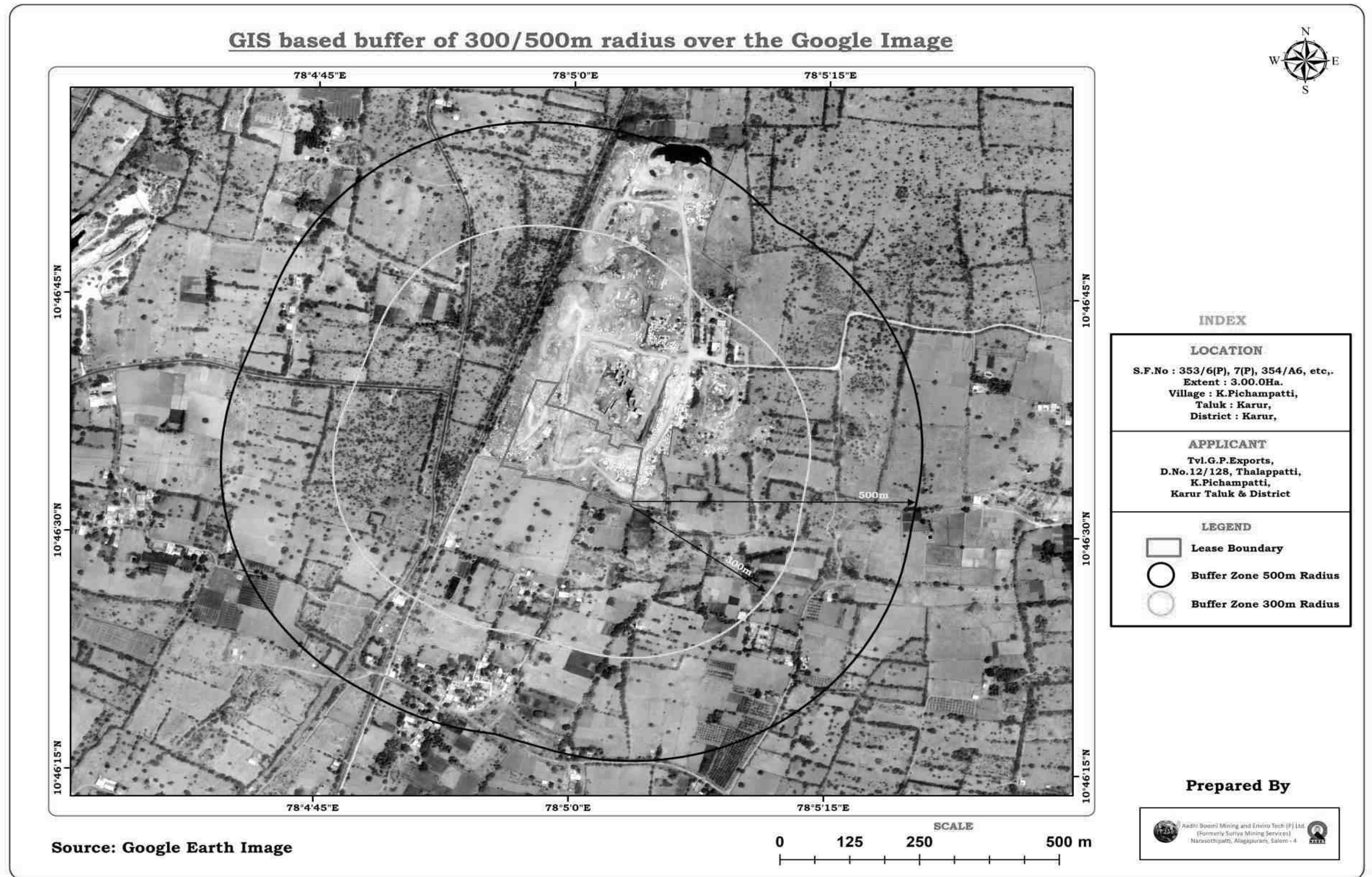


Fig No 1.3 Google earth image showing 300m and 500m radius around mining lease area

1.4. SCOPE OF THE PROJECT

The proposal for Environmental Clearance of existing Multi color Granite Quarry of **Tvl. G.P Exports** requires Environmental Impact Assessment (EIA) to be carried as per with Standard and additional TOR specified by the SEAC. Based on the documents furnished for TOR, the Committee observed that the project falls under the category B1 and schedule 1(a) of the EIA Notification, 2006. This is primarily to ascertain the potential impacts of the mining activity for environmental components, prediction and evaluation of environmental impacts to describe the Environmental Management Plan.

The EIA/EMP report also includes an independent chapter prepared by an Accredited Consultant. The collection and analysis of air, water and soil sample required for preparation of EIA report data will be done by an Environmental Laboratory duly notified under the Environment (Protection) Act, 1986, accredited by NABET/NABL.

The scope of the study includes a detailed characterization of the environment in an area of 10km radius of the mine lease area. The EIA will cover one season (Three months) baseline environmental data, as per the ToR and guidelines of SEIAA, Tamil Nadu.

In order to assess the likely impacts arising out of this project on the surrounding environment and evaluating the quantum of likely negative impacts, if any, from this mine, the proponent has selected Aadhi Boomi Mining and Enviro Tech Pvt. Ltd., Salem as their environmental EIA consultant for this project. ABM prepared an Environmental Impact Assessment (EIA) report and made an effective Environment management Plan (EMP) for various environmental components likely to be affected.

The scope covers all the conditions outlined in the TOR prescribed by SEIAA, Tamil Nadu for this mining project vide Letter No. TO25B0108TN5759940N Dated: 10.02.2026 and their compliance thereof is attached in EIA report.

1.5. METHODOLOGY OF EIA STUDY

The EIA study includes detailed baseline data generation and characterization of existing status of environment in an area of 10 km radius with the project as its center for various environmental components viz. Air, Noise, Water, Land, Biological and Socio-Economic components and other parameters of interest. The envisaged scope of EIA is as follows

- ❖ To assess the present status of air, noise, water, land, biological and socio-economic components of environment.

- ❖ To identify and quantify the significant positive and negative impacts due to various mining operation in various components of the environment through identification and prediction of impacts.
- ❖ To prepare a detailed Environment Management Plan (EMP) for implementation of mitigation measures.
- ❖ To suggest a monitoring program to evaluate the effectiveness of mitigation measures.
- ❖ Post-project environmental quality monitoring program to be followed.
- ❖ To prepare a capital and running cost estimates for Environmental Management Plan (EMP).

The baseline monitoring study has been carried out during the summer season (December 2025 to February 2026) for various environmental components to assess the anticipated impact on the environment and suggest suitable mitigation measures for likely adverse impacts due to the project. Environmental attributes, source and frequency of monitoring are outlined in Table No.1.5.

Table 1.4 Environment Attributes

Attributes	Parameters	Source and Frequency
Meteorology	Temperature, Wind Speed, Wind Direction, Rain fall, Relative Humidity.	Secondary sources of IMD station, Erode, Hourly recorded data for the period of 3 months.
Ambient Air Quality	PM ₁₀ , PM _{2.5} , SO _x , NO _x	24 hourly samples twice a week for three months at 5 locations.
Water Quality	Physical, Chemical and Biological parameters	Grab sampling at 5 locations once during study period.
Noise levels	Noise levels in dB(A)	At 5 locations data monitored once in a Month for three months for 24 hours during EIA study.
Soil Characteristics	Physical and Chemical parameters	Once at 5 locations during study period
Hydrogeology	Drainage area and pattern, nature of streams, aquifer characteristics, recharge and discharge areas	Based on data collected through field investigation devices once in a month.
Land use	Existing land use for different categories	Based on Survey of India Toposheet and Google Earth imagery
Ecology and Biodiversity	Existing terrestrial flora and fauna within 10 km radius circle	Field observation and utilization of Secondary data.
Socio-Economic aspects	Socio-economic and demographic characteristics, worker characteristics	Based on collection of primary data through questionnaire analyses and utilization of Secondary data from census records (2001 -2011), statistical hand books, Toposheets, health records and relevant official records.

Risk assessment and Disaster Management Plan	Identify areas where disaster can occur by fires and explosions and release of toxic substances if any	Based on the findings of Risk Modeling done for the risk associated with explosives, and land-slips.

The impacts of the project activities on environmental components can be quantified through EIA Studies within the impact zone of the project activities. The results of EIA Studies form the basis for the preparation of a viable EMP for mitigation of the adverse impacts.

CHAPTER – 2: PROJECT DESCRIPTION

2.1. NEED FOR THE PROJECT

The applicant, Tvl. G. P. Exports, No. 12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District – 639118 has applied for grant of Granite quarry lease to the secretary to Government, Industries Dept, Fort St. George, Chennai-9 through District Collector, Karur District and Director of Geology and Mining, Chennai for quarrying Multicolour Granite from a patta land over an extent of 3.00.00 Hectares in S.F. Nos: 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part), K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu.

The principal secretary, Govt. of Tamil Nadu directed the applicant Tvl. G. P. Exports, through his precise area communication letter No. 3419187/MMB.2/2022-1, Dated 05.10.2023 to get approved mining plan and obtain Environmental clearance from the Environment Impact Assessment Authority (SEIAA) as per the EIA Notification, 2006 and its amendments for grant of quarrying for Multicolour Granite over an extent of 3.00.00 hectares of patta land in S.F. No's: 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part), K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu for a period of 20 years under Rule 19A of Tamil Nadu Minor Mineral Concession Rules, 1959.

Accordingly, Mining Plan is prepared under Rule 12 & 13 of Granite conservation and development Rules, 1999 for quarrying Multicolour Granite with due consideration of environmental parameters so as to obtain Environmental clearance (EC) from Environment Impact Assessment Authority (SEIAA) vide MoEF&CC Notification S.O 141(E) dated 15th January, 2016. The mining plan was approved by Department of Geology and Mining, Guindy, Chennai vide his letter Roc No. 2374/MM2/2022 Dated 09.10.2025 for the period of 5 years.

The cluster letter issued by Deputy Director, Department of Geology and Mining, Karur vide No.2374/MM2/2022 Dated 12.12.2025 for Tvl. G. P. Exports, (3.00.0 Ha) the lease area of above said there is 3 existing quarries comes under the cluster of 500m radius. Namely M/s. M.P. Granite it's an extent of 4.01.50 Ha, 2.43.5 Ha and 4.45.0 Ha respectively the total area of cluster is 13.90.0Ha. Which is above 5 hectares hence the proposed project comes under

Category B1 as per EIA Notification 2006 and its amendments. Now the application has been made for environmental clearance for carrying out EIA studies. The project cost is about Rs. 44.50 lakhs and EMP cost is Rs. 35.72 lakhs.

Open cast, semi-mechanized mining will be adopted to extract granite of required size from the area for which lease applied for. Before opening a mine, several aspects should be considered like construction of semi-permanent structures, planning for the development / production works, formation of faces, lying of approach road to various benches for Movement of dumpers, recruitment of man power, deployment of machinery, selection of dump sites, stacking yards etc. Top soil/overburden materials shall be removed prior to development of working benches. The bench height should not exceed 5m and the bench width should not less than the bench height. The slope of the benches should not exceed 45° from horizontal.

Geological resources and Mineable reserves: Geological resource of total ROM is estimated to be 38,61,866 MT including the resources of safety zone of which, Multicolour granite is about 4,59,738 MT at the recovery of 40% and granite rejects of 6,89,598 MT (Refer Plate No's. IVA). The mineable reserve of total ROM is estimated to be 15,38,155 MT by deducting the reserve safety zone, block in benches from the total mineable resources of which, Multicolour granite is about 2,13,932 MT at the recovery of 40% and granite rejects are 3,20,885 MT of 60% up to a depth of 50m below the ground level (Refer Plate No's. VIII).

Total proposed production of ROM is about 3,61,361 MT. of which, Multicolour granite is about 47,790 MT at the recovery of 40% and granite rejects are 71,676MT of 60%, up to a depth of 35m below the ground level (Refer Plate No's. VIII & V) for first five years mining plan period. Annual Peak production is 10,256 MT of Multicolour granite (Refer Plate No. VIIIA). Further TOR application through PARIVESH website to carry out EIA Studies for obtaining Environmental clearance.

Granite is one of the important materials for building construction. Granite is used in many outdoor and indoor projects. Outdoor projects like bridges, monuments, buildings, paving etc. Indoor projects like countertops, floor etc. Using granite for kitchen tops, shelves, tabletops etc makes it look elegant. Apart from elegance, it has great strength and is durable. It looks stylish and is easy to clean. Granite sinks like the under-mount sink, angular basin, modern or pedestals sink are some different granite basins available. These are water-resistant and maintenance is also easy. So, it is needy to excavate the granite for economic and infrastructure development of our Nation.

2.2 DEMAND – SUPPLY GAP

As granite rough blocks play a significant role as raw material in the construction sector, the demand exists in the market throughout the year. Thus, quarrying of the mineral finds consumer easily in the local market.

2.3 LOCATION

The area is represented by Survey of India Topo sheet No. 58 J/1. The area lies in the northern latitude of 10°46'32.01463"N to 10°46'39.69873"N and eastern longitude of 78°04'56.21001"E to 78°05'04.49494"E Latitude and Longitude of all boundary Pillars of are given in below Table 2.1.

Table 2.1 Coordinates of Quarry lease Boundary Pillars as taken by DGPS for Geo Referencing of Lease Plan is given as under

ID	Latitude (Global)	Longitude (Global)	Easting (Meter)	Northing (Meter)
1	10° 46' 39.52319" N	78° 04' 59.54221" E	180992.765	1192913.142
2	10° 46' 38.18537" N	78° 04' 58.79492" E	180969.649	1192872.219
3	10° 46' 37.90335" N	78° 04' 59.91003" E	181003.473	1192863.223
4	10° 46' 37.14443" N	78° 05' 1.89106" E	181063.482	1192839.314
5	10° 46' 36.59298" N	78° 05' 1.73642" E	181058.619	1192822.399
6	10° 46' 36.29193" N	78° 05' 2.68877" E	181087.486	1192812.867
7	10° 46' 35.74447" N	78° 05' 2.52017" E	181082.211	1192796.079
8	10° 46' 35.44818" N	78° 05' 3.12043" E	181100.364	1192786.794
9	10° 46' 35.69801" N	78° 05' 3.21925" E	181103.443	1192794.451
10	10° 46' 35.47402" N	78° 05' 4.49494" E	181142.163	1192787.193
11	10° 46' 32.01463" N	78° 05' 3.91857" E	181123.627	1192680.98
12	10° 46' 32.79431" N	78° 05' 1.26410" E	181043.146	1192705.726
13	10° 46' 33.27180" N	78° 05' 0.01223" E	181005.221	1192720.772
14	10° 46' 33.47737" N	78° 04' 58.38108" E	180955.685	1192727.565
15	10° 46' 33.60721" N	78° 04' 57.46293" E	180927.811	1192731.826
16	10° 46' 33.96992" N	78° 04' 57.66957" E	180934.197	1192742.918
17	10° 46' 34.31096" N	78° 04' 56.21001" E	180889.922	1192753.828
18	10° 46' 39.69873" N	78° 04' 58.25204" E	180953.588	1192918.914



Fig No. 2.1 Google image showing lease boundary with its Coordinates

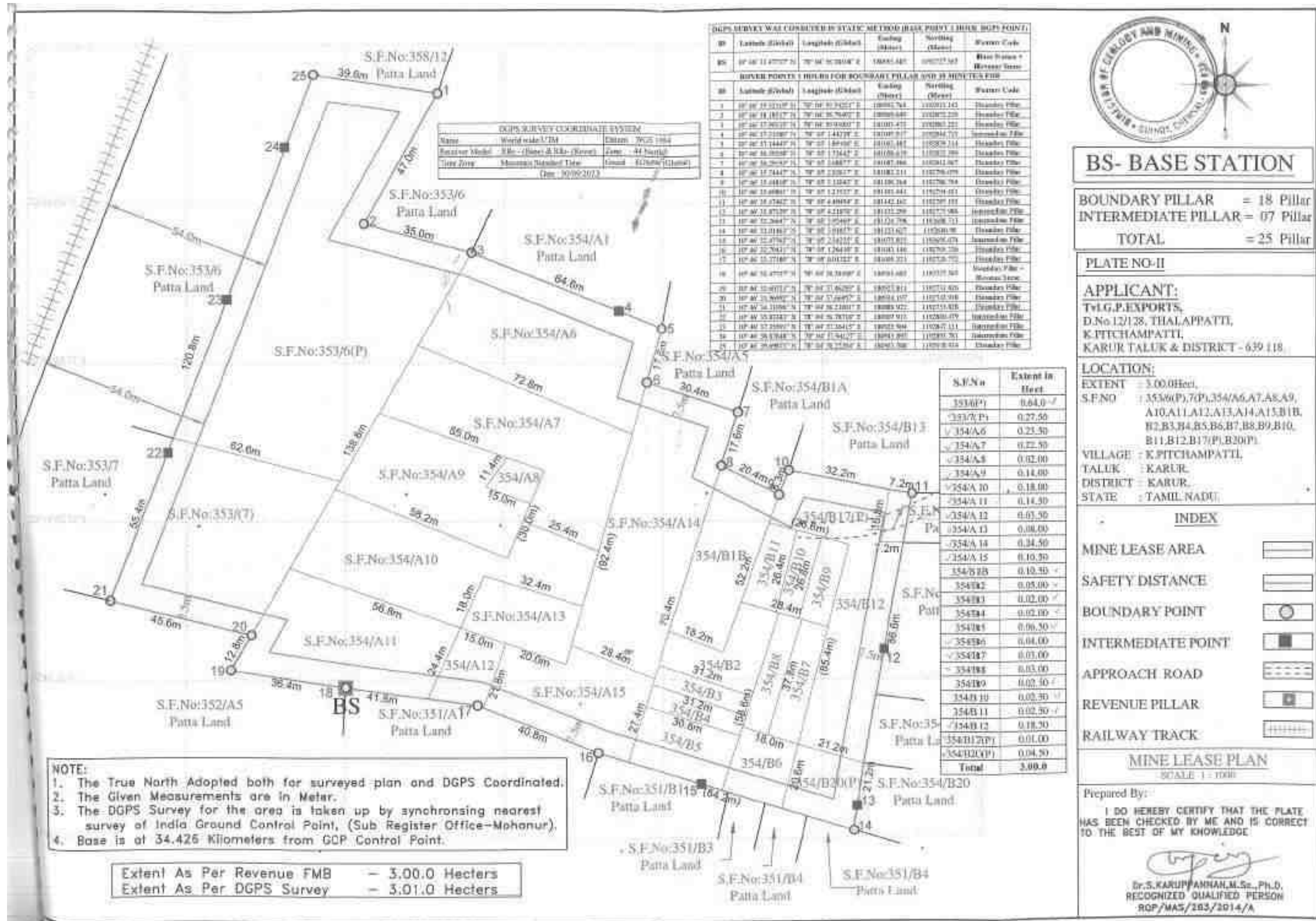


Fig No.2.2 Lease Plan

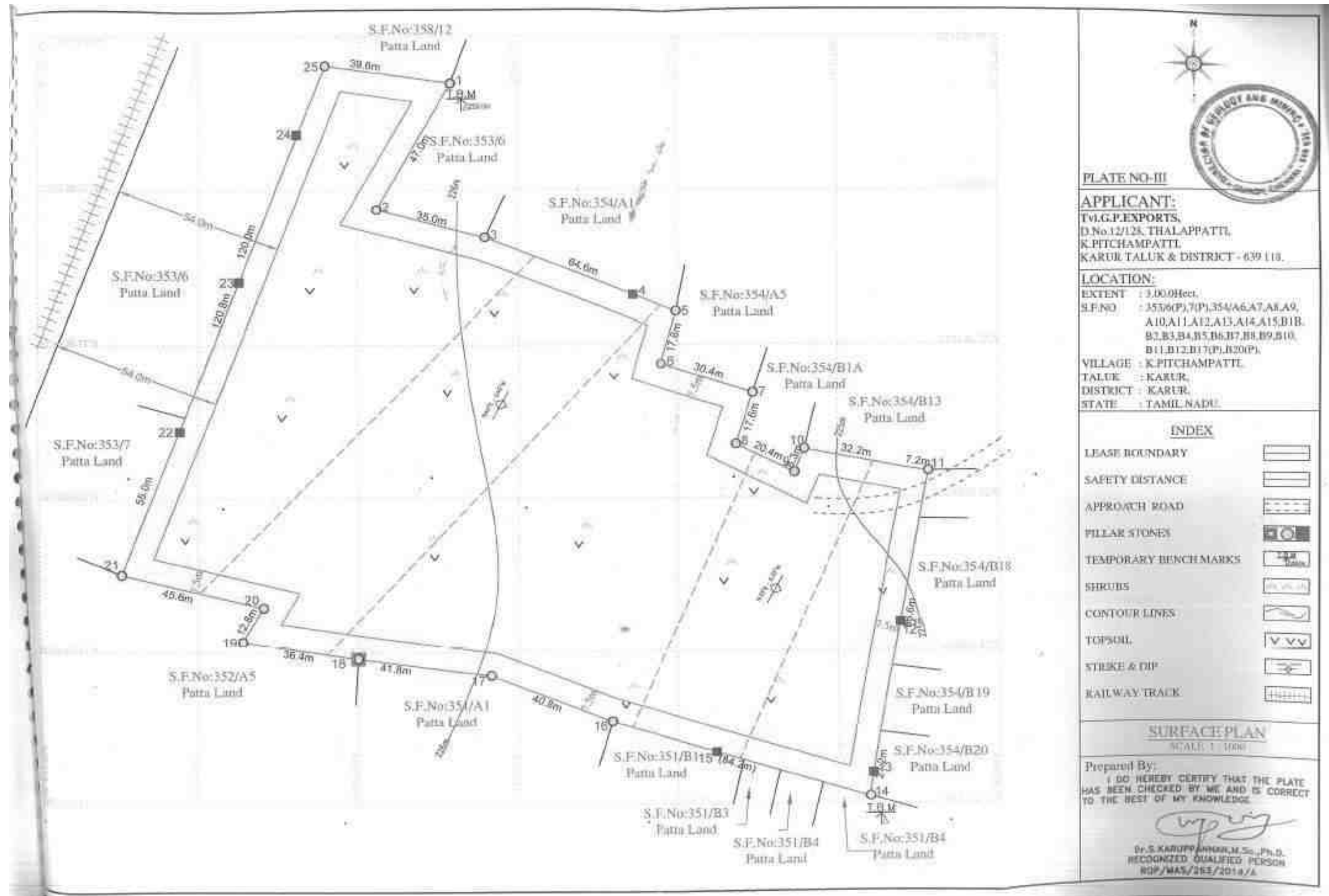


Fig No.2.3 Surface Plan



Fig No. 2.4 Photograph shows general view of the texture of the Multi colour granite.

Table 2.2 Environmental Settings

FEATURE	DETAILS
Name of the Proponent and address	Tvl. G. P. Exports, No.12/128, Thalappatti, K.Pitchampatti, Karur Taluk, Karur District - 639118, Tamil Nadu.
Existing/New Quarry	New
Survey number	353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9,354/A10,354/A11,354/A12,354/A13,354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part),
Geographical features	Latitude: 10°46'32.01463"N to 10°46'39.69873"N Longitude: 78°04'56.21001"E to 78°05'04.49494"E Toposheet No: 58J/1
Site Location	K. Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu.
Type of Project	Multicolour Granite
Category	B1
Mining lease area	3.00.00 Hectares
Depth of Mining	35 m bgl
Water Table	60 m bgl
Method of Mining	Open cast semi mechanized mining
Blasting Pattern	Chemical rock blasting, also known as non-explosive rock blasting, uses a chemical agent that expands when mixed with water, creating pressure that fractures the rock.
Types of Explosives	Chemical explosive is not proposed chemical powder called as Rock breaking powder Ca (OH) ₂ are also used for granite splitting.
Measures proposed to minimize ground vibrations due to blasting	It is an Eco-friendly quarry operation; diamond wire saw cutting method shall be practiced to this quarrying operation. Chemical rock blasting, also known as non-explosive rock blasting No impact on surroundings due to blasting.
Storage of Explosive	Not Applicable
Category	B1
Mining plan approval	Director of Geology and Mining, Chennai vide Rc. No: 2374/MM2/2022 Dated 09.10.2025

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT
Proponent: Tvl. G. P. Exports, Multicolour Granite Quarry, Karur District

Period of Lease	20 years.
Does it attract any general conditions specified in the EIA notification, 2006?	Not applicable
Man Power	20 persons
Water requirement	Total water requirement – 3.5 KLD Drinking water – 0.3 KLD Domestic purposes – 0.7 KLD Water sprinkling – 1.0 KLD, Wet drilling and Green Belt 1.5 KLD. Source: Mineral water supply and nearby bore wells
EMP Cost	Rs. 35.72 Lakhs
Project Cost	Rs. 44.50 Lakhs
Nearest habitation	0.19 km-South
Nearest Village	K. Pitchampatti -0.37 -South
PMHC	P. Kullampatti –3.5km –North
Nearest Town	Velliyanai – 8.2km –NE
Nearest Road	SH 74- 4.6km- NE NH 44 –13.7 km- NW Approach road for the Transportation is located at the north-eastern side.
Nearest Railway station	Velliyanai – 7.8km –NE
Nearest Airport	Tiruchirapalli –68.9km –East
Water bodies	Tank- 0.83km East Erattai kulam -1.3km NW Kodaganar River-10.43km -NW, Amaravathi River-15.8km- NW, Cauvery River -23.7km NE Mayanur check dam -26km NE
Interstate Boundary	Tamil Nadu -Kerala Interstate Boundary –104km (SW)
Coastal Zone	Bay of Bengal – 145km - East
Reserve Forest	No reserve forest around 10km radius from the periphery of the lease applied area.
Wildlife Sanctuary	There is no wild life sanctuary or National Park found within 10km radius Kadavur Slender Loris Sanctuary – 23.0km – SE Vellode Birds Sanctuary–70km- North-western Side

Land use pattern	S. No	Description	Present Area (Ha)	Proposed land use (Ha)
	1	Mine working area	---	0.88.90
	2	Road	---	0.07.00
	3	Safety and Area under plantation	---	0.47.00
	4	Labour shed and office	---	0.03.00
	5	Waste Dump	---	0.53.55
	6	Garland drainage& settling tank	---	0.08.00
	7	Unutilized land	3.00.00	0.92.55
	Total		3.00.00	3.00.00

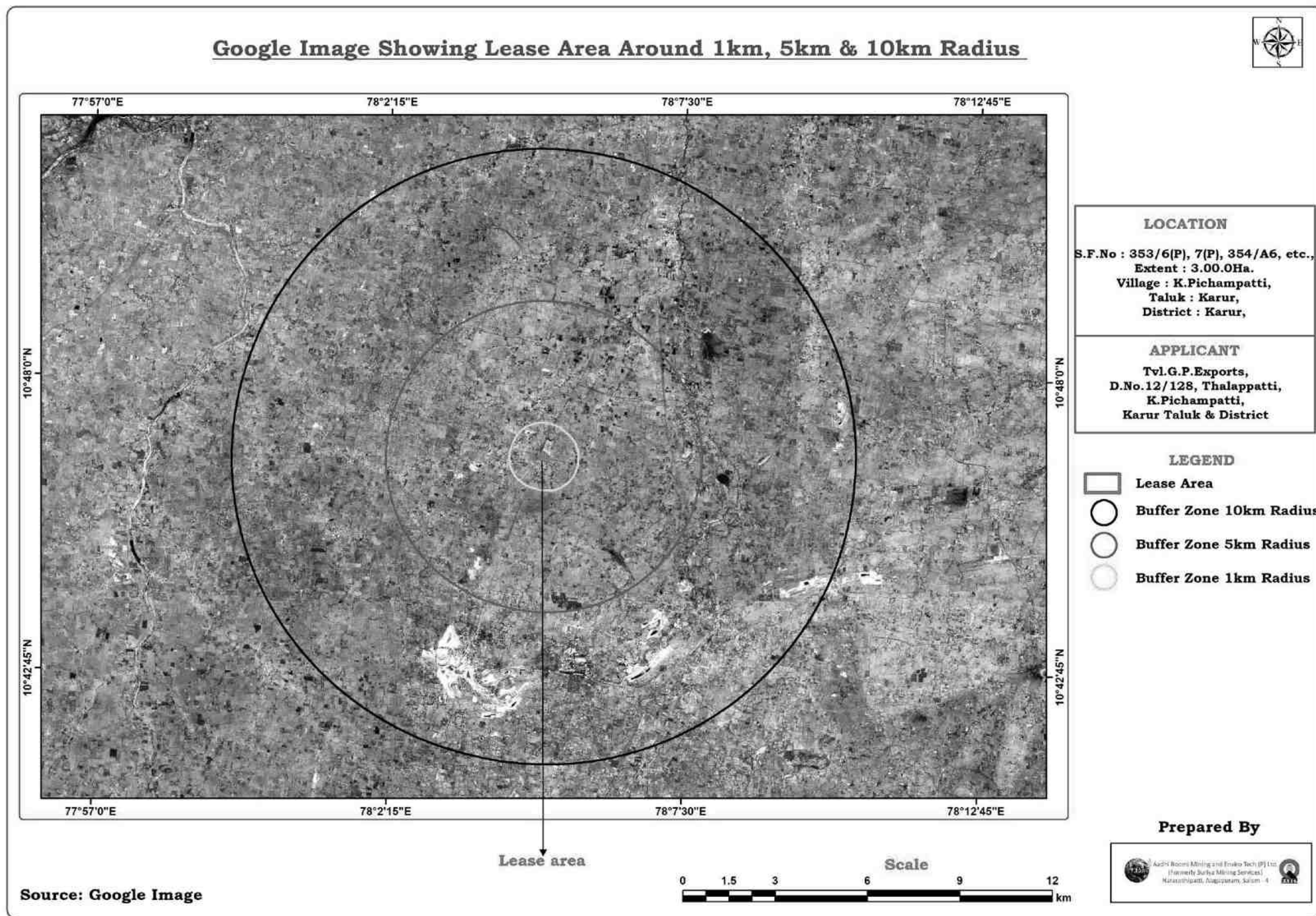


Fig No. 2.5 Google Earth Image showing 1km, 5km and 10 km radius around multicolor granite quarry

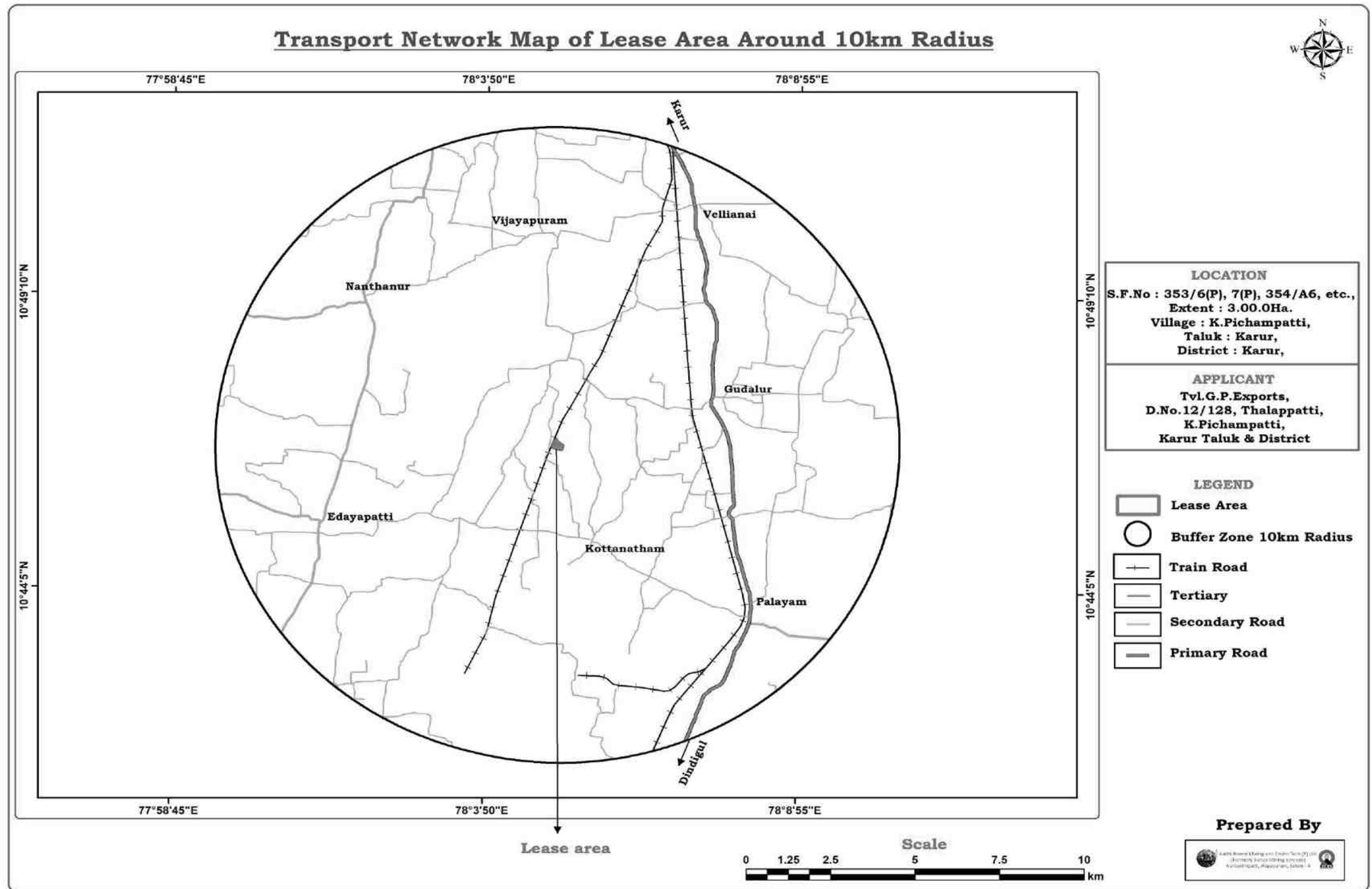


Fig No 2.6 Transport Network of 10 km radius around multicolor granite quarry

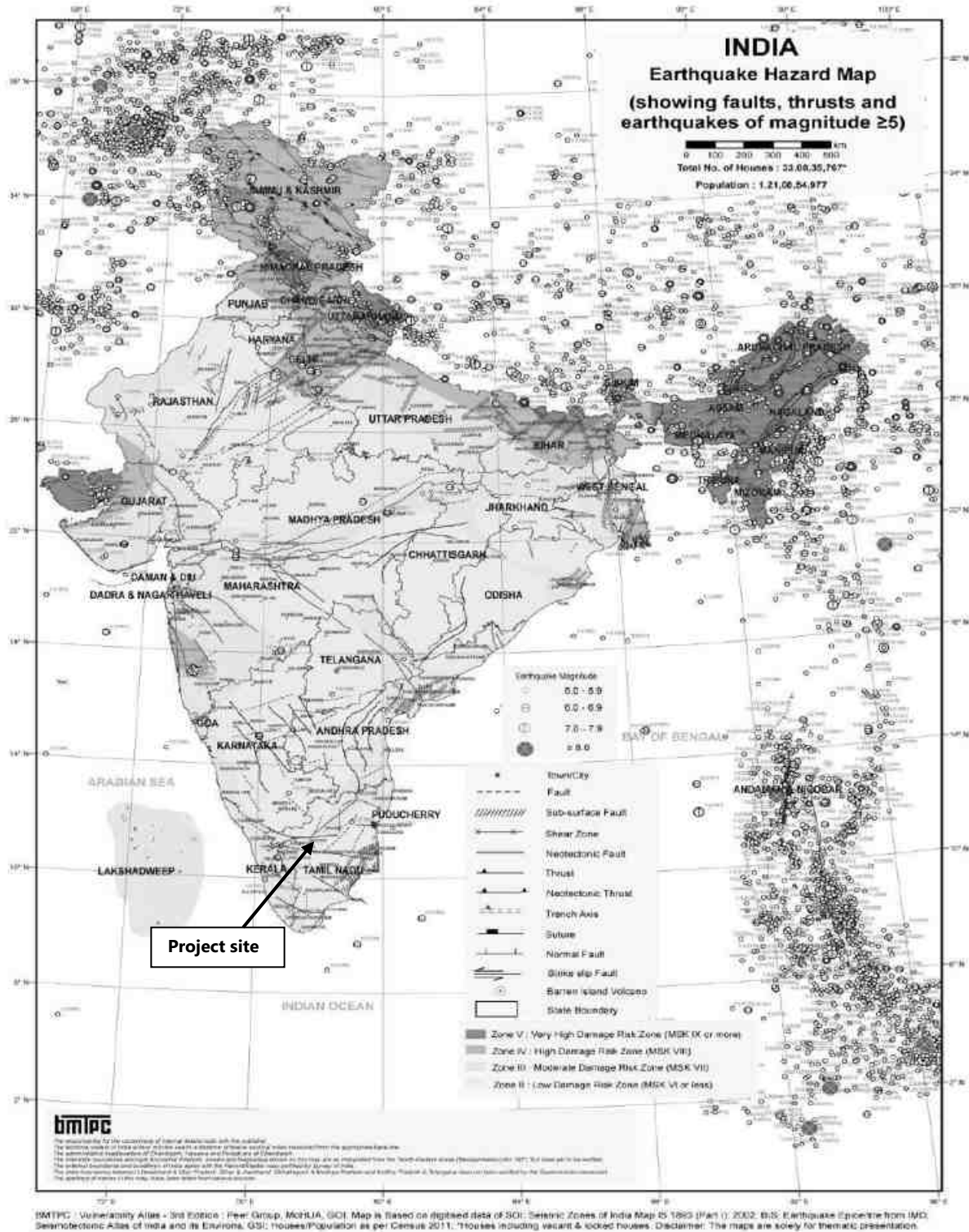
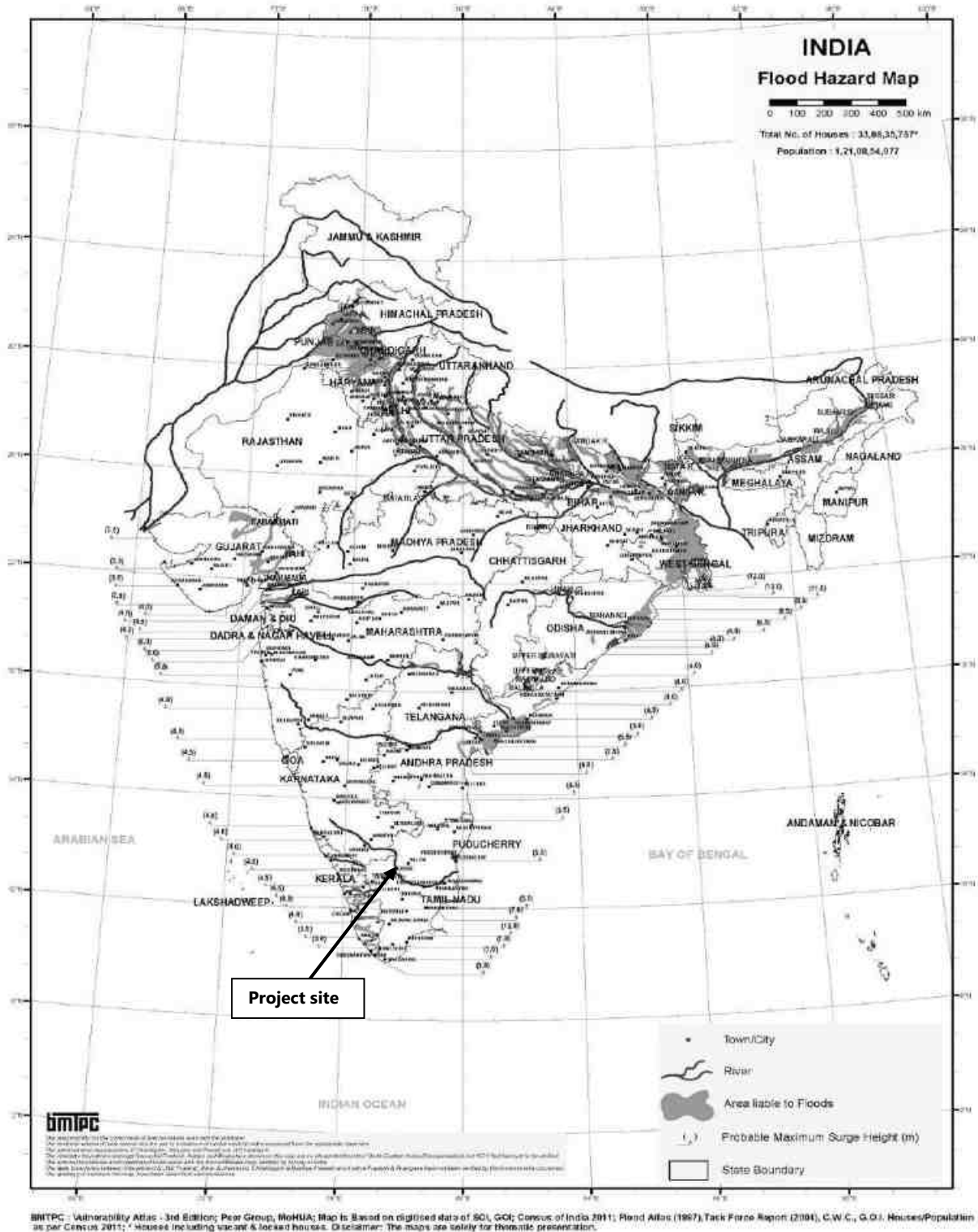


Fig No 2.7 Earthquake Hazard Map

The area falls under Zone-II, low damage risk zone as per BMTPC, Vulnerability atlas Seismic zone of India IS: 1893-2002.

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The area falls under Probable Maximum Surge Height of 5m.

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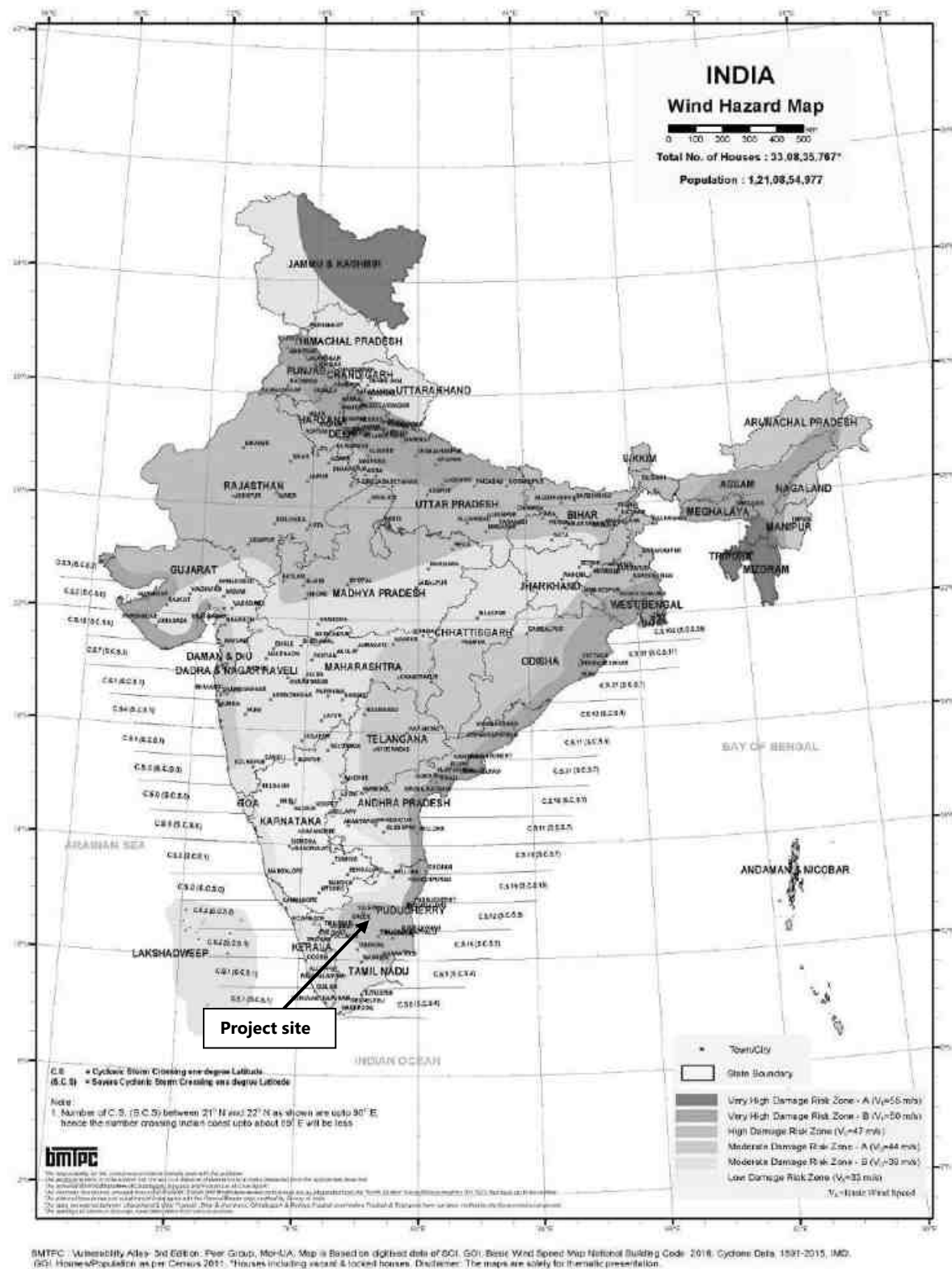


Fig No 2.9 Winds and Cyclone Hazard Map

The area falls Moderate Damage Risk Zone-B ($V_b = 44$ m/s).

2.4 Size or Magnitude of Operation

Table 2.3 Mining Details

Particulars	Details
Method of Mining	Open cast – mechanized mining
Geological resources	38,61,866 MT from which 40% of mineable is calculated as 4,59,738 MT
Mineable reserves	15,38,155 MT from which 40% of mineable is calculated as 2, 13,932MT
Production	3,61,361 MT (47,790 MT of Granite @ 40% of recovery) up to a depth of 35m during the mining plan period of five years
Reject	6,89 598 MT (Rejects60%)
Top soil	1,75,188 MT
Side Burden	24,20 550 MT
Weathered rock	1,16,792 MT
Ore: Waste ratio	1: 5.4
Depth of Mining	32m bgl
Water Table	60mbgl
Road design	1: 10 inside the pit and ramp 1:16 for transport
Overall Pit Slope	45°
Period of Lease	20 years

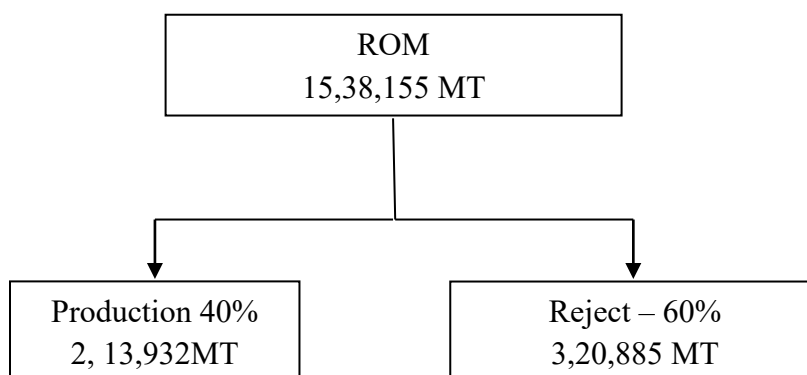


Fig No 2.10 Material Balance

2.5 Proposed schedule for approval and implementation

The proposed activity will be commenced only after obtaining Environment Clearance from SEAC/SEIAA, Tamil Nadu and CTE/CTO from TNPCB and other necessary clearance from concerned departments.

2.6 Technology and process description

2.6.1 Regional Geology

Karur District is comprised of Archaean peninsular gneisses such as Charnockites, Hornblende gneisses, Biotite gneisses, migmatites and limestones pinkish to yellow shades of granites and intruded by younger formations like pegmatite and quartz veins. The peninsular gneiss \ migmatite consists of biotite mica, plagioclase and orthoclase feldspars, Quartz, and accessories like magnetite and garnet are found as sheet rocks running to several km from west to east as a massive rock formation. The granite body found in the applicant's area is a narrow intrusive rock with yellow and brown shades upon polishing.

↑ The order of superposition of geological sequence are given as under,

<u>ERA</u>		<u>GROUP</u>		<u>LITHOLOGY</u>
Quaternary	-	Recent	-	Topsoil-Red soil (1-2m thick)
Proterozoic	-	Acid intrusive-		Pegmatite veins/quartz veins
		Migmatite	-	Granite
Archaean	-	Charnockites	-	Pyroxene Granulites, Charnockites
		Khondalite	-	Calc granulite/Crystalline limestone
				Peninsular gneisses and Schist

The regional rock is Charnockite and Biotite Gneisses. All are high grade metamorphic rocks, into which younger granites found intruded vertically.

2.6.1.1 Exploration

The Systematic geological mapping and demarcation of the commercially viable granite deposit has been prepared with relevant structural features such as Contact of the country rock with commercial Multi colour granite deposit. Different joint pattern and their pattern of repetition etc. have been marked. Based on the features, estimation of geological and minable reserves has been arrived having considered the market potentiality. In the earlier approved mining plan, two core drilling proposal for exploration was given, no core drilling was done due to expected recovery has been achieved however, however the lessee has proposed to drill two

bore holes to ascertain the proved depth persistence of the deposit, colour and texture of formation and possibility of recovery of bigger size blocks in this Scheme period.

The mineralized zone of the deposit is well established but drilling was made randomly and therefore two more bore holes as per plate-III is proposed to be carried out during the next Scheme period.

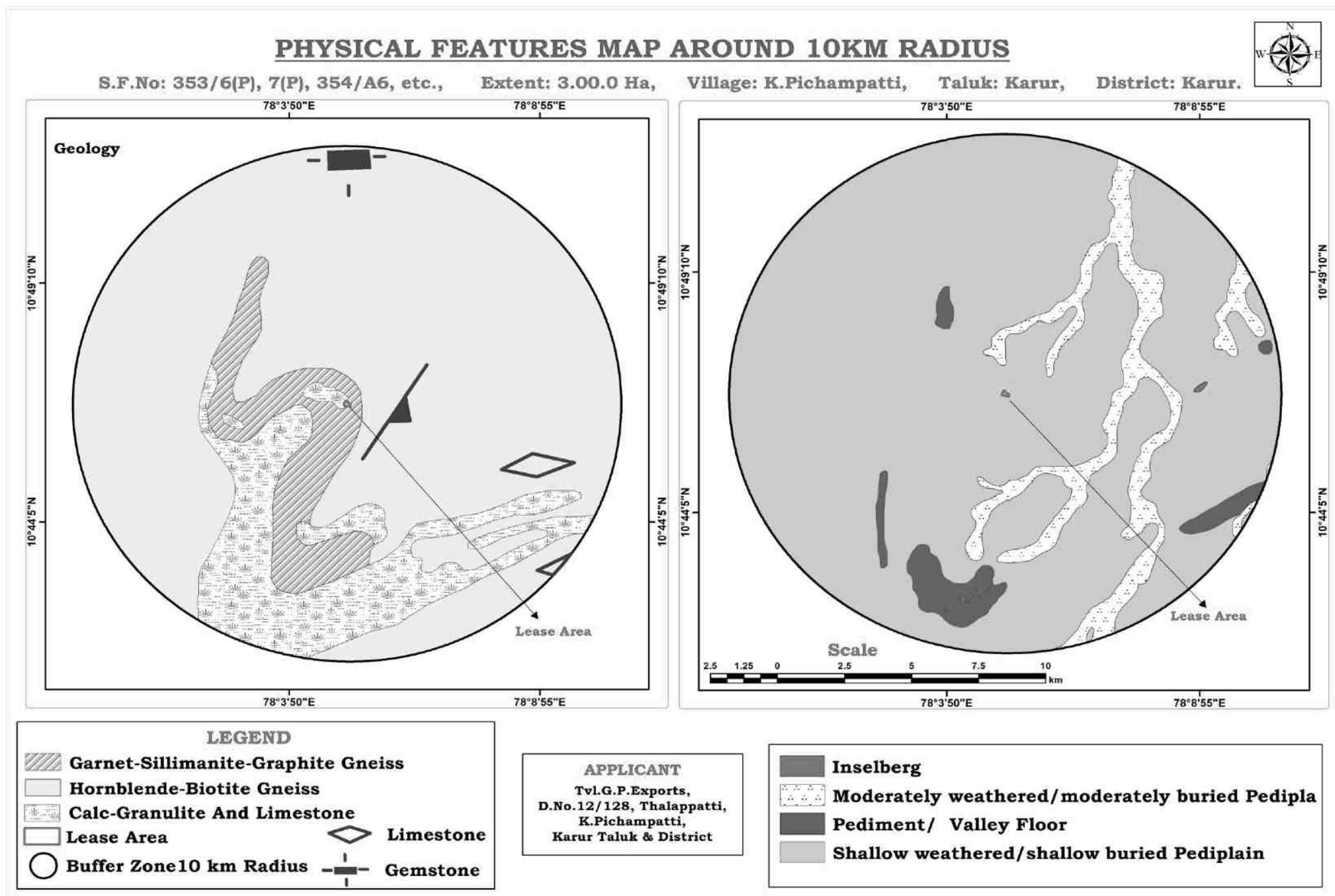


Fig No 2.11 Regional Geology & Geomorphology Map

2.6.2 Method of Mining

a) Open cast working:

The quarry operation will be carried out by open cast mechanized method of mining. Jack hammer drilling and blasting will be adopted to make perfect pre-determined crack to release the block from the parent rock. Hydraulic excavators will be engaged for loading the rejects, top soil and weathered rock and wire saw will be adopted for cutting the rocks. Wire saw cutting is adopted below second bench to recover more granite blocks to increase the rate of recovery. The top soil is found up to 2m depth from surface, below which found hard rock formation. The recovery factor is taken as 40% and it may increase further at deeper levels.

Manpower will be engaged for drilling shot-holes, line drilling, smooth blasting, Jet burner operation, dressing of granite blocks, cutting and removal of small amount waste or rejects and support service labours for operation of machineries. The materials required for manual workings are listed as under,

1. Drill rods - 0.3m, 0.4m, 0.5mm, 0.6m, 0.75m, 1.65m, 2.25m, 3m & 3.6m, Etc.,
2. Steel alloy chains of sufficient lengths with dia. of 12 - 18mm with 'D' shackles.
3. Rubber hose and clamps.
4. Feather and wedges of 6 and 12 utilize for splitting the block from the mother rock. This is an important tool in the operation of a Quarry.
5. Crow bars of 1500 - 1800mm lengths.
6. Spades, Sludge hammers, Iron Pans and chisels.
7. Consumables, such as diesel, Hydraulic oil, grease, abrasive wheels, welding Machines etc.,
8. Stock of essential spare parts of machinery

2.6.3 Extent of Mechanization

The following machinery is proposed to be exclusively for the development and production work at this quarry.

i) Drilling equipment:

Drilling of shot-holes will be carried out using compressor and Jack hammer combination. Depth of holes shall be 2.5m for 3m bench height. The spacing shall be 30 - 40cms and burden from the preface depends upon the size of block. However, it is preferred to have 1 - 2m burden from the preface for effective pulling of blocks.

In case of burden in excess of 1.5m the spacing should be adjusted smaller, less than 30cms. To achieve a correct blasting geometry certain amount of trial blast is pre-requisite to

affect a perfect pre-determined crack to release the block from the parent rock. Details of drilling equipment's are tabulated below,

Table 2.4: Details of drilling equipment

Type	Nos.	Dia. Of Hole	Size/Capacity Make	Motive Power	H.P.
Jack Hammer	4	32mm	Hand held Atlas Copco	Diesel	60 (100 cfm)
Compressor (ELGI)	2	--	ELGI 10.5 Kgs /cm ²	"	450 cfm
Wagon drill or Crawler drill	1	110mm	Atlas copco		450 cfm

ii) Loading Equipment:

Loading of waste and granite rejects shall be done by hydraulic excavator into tippers for clearing of waste and rejects from the working place periodically. One hydraulic excavator with 1.7m³ bucket capacity are engaged for clearing of wastes in the lease area .

Table 2.5: Details of loading equipment

Type	Nos	Size/ Capacity	Make	Motive Power	H.P
Hydraulic Excavator	1	1.7 m ³	Tata Hitachi	Diesel	170

iii) Haulage and Transport Equipment:

Transport of Rejects and waste will be done by Tippers of 15 Tonnes capacity

Table No-2.6: Details of transportation vehicles

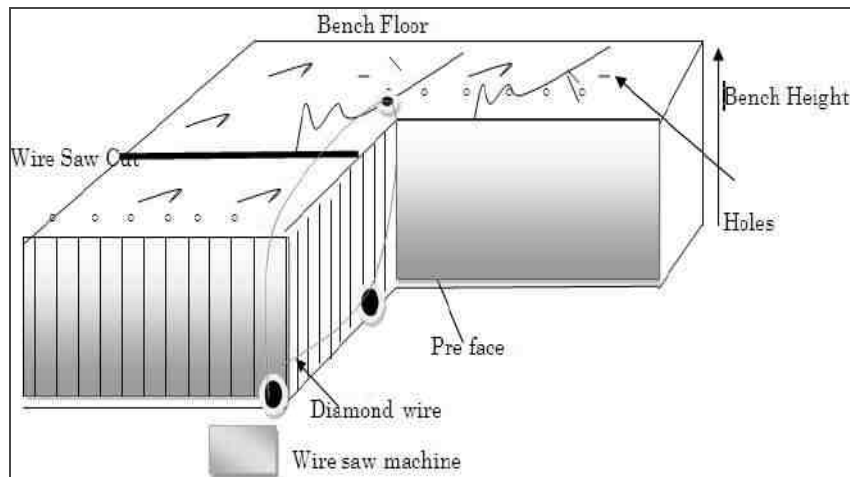
Type	Nos.	Capacity (m ³)	Make	Motive Power	H.P.
Wire saw Machine	2	Port – Black Diamond impregnated wire rope	Stone Tech	Electric Power	60 Each



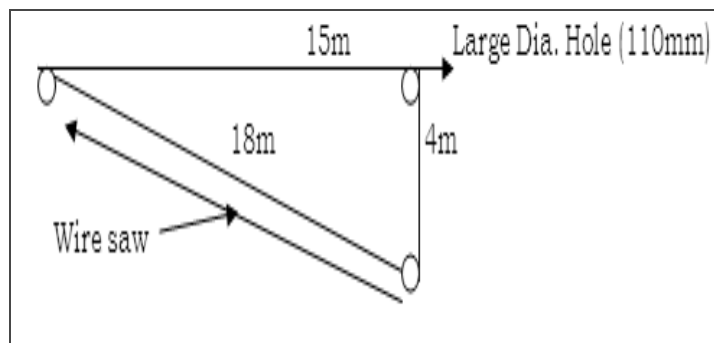
Tipping Truck

iv) Diamond wire saw cutting:

Diamond Wire saw cutting is an eco-friendly method of quarrying with high rate of recovery, thereby the conservation aspects of GCDR, 1999 is perfectly fulfilled.



PLAN VIEW FOR INITIAL WIRE –CUT:



Details of wire saw cutting machine is given as under

Table No 2.7 Details of wire saw cutting machine

Type	Nos.	Capacity (m ³)	Make	Motive Power	H.P.
Wire saw Machine	2	Port – Black Diamond impregnated wire rope	Stone Tech	Electric Power	60 Each

v) Blasting pattern

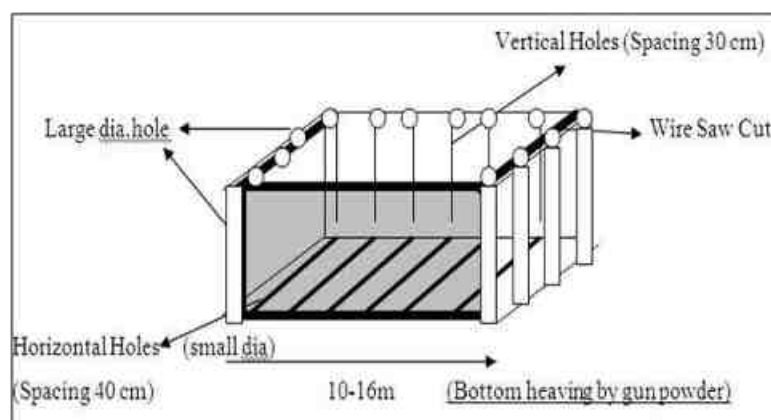
Blasting: A controlled blasting technique is adopted to open a pre-determined crack of the block from the parent body. Shot-hole with 32-40mm dia. which are drilled by line drilling and Jack hammers at a close spaced interval of 30cms will be initiated suitably with any one or more of the following methods

- a) Pre-splitting
- b) Cushing blasting with low strength and very low dia. Cartridges axial priming or standard dia. cartridge with intermittent stemming materials.
- c) Water impulsion with Detonating cords of sufficient power, preferably 10gms per meter to develop cracks along the line of drilling,

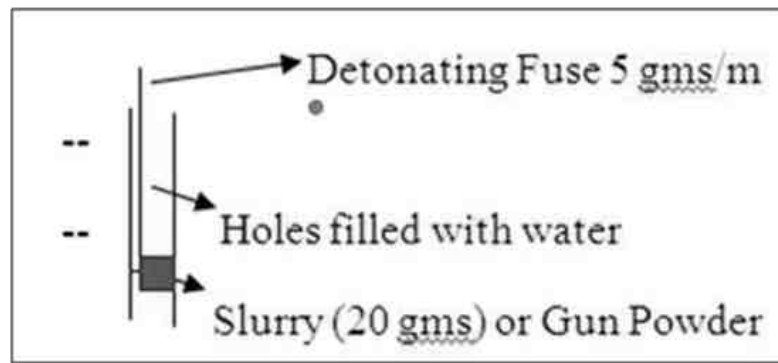
a) Broad Blasting Parameter:

Dia. of the hole = 32 - 36 mm
Spacing = 30cms
Charge per Hole = D.cord with water or 70gms of gun powder or slurry
Depth = 2.5 m

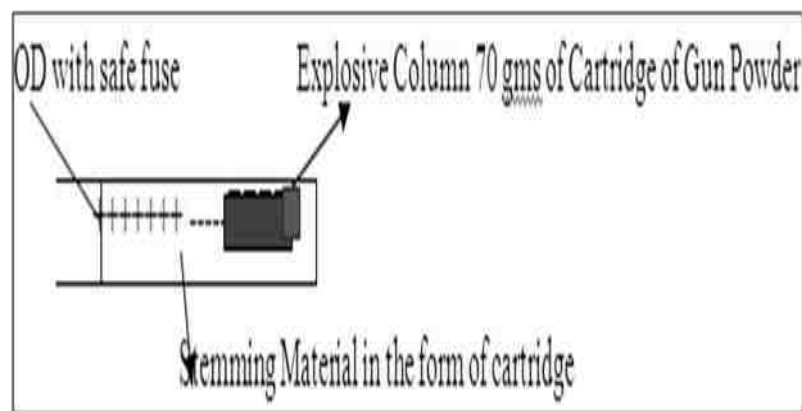
Wire Saw Cut and Drilling Pattern



Charging of Vertical Holes



Charging of Horizontal Holes



In watery holes, the detonating fuse is directly used and water act as a cushion to move the blocks and form a line of crack. In other cases, small vibration created by low explosives open the artificial shear plane \tensional crack formed by a line of drilling. Sometimes wedges are used to cut the major blocks into smaller sizes after drilling of holes to a depth of 30-40cms. Then the blocks are dressed to desire sizes.

b) Type of Explosives:

Common explosives used to develop a line of crack along the line of drilling are,

- i) Detonating Fuse or Cord with 5-10gms of Expl. Permeter,
- ii) Low explosives like Gun powder or 70gms of slurry cartridges,
- iii) Ordinary Detonator, class- 6
- iv) Safety fuse, class -6.

c) Powder factor: The Powder factor for waste rock development shall be 2m^3 or 7 tonnes per Kg. of explosives

d) Storage of explosives

The applicant is advised to store the explosives as per the Indian Explosives Act, 1958. The explosives to be used in mines being a small quantity the District collector may be approached to keep the stocks not exceeding 5 Kgs at time or any other quantity permitted by the concerned authorities in a portable magazine of S & B types.

2.7 Land Use Pattern of the Core Zone

Depth of mining is estimated as 35m based on the working pits of the lease quarry. The Present and proposed land use pattern is given as under, at the time of closure of mine the pit will be backfilled.

Table 2.8 Computation of existing and proposed land use pattern

S. No	Description	Present area (Ha)	Proposed land use	% of Use
1	Mine working area	Nil	0.88.90	29.60%
2	Road	Nil	0.07.00	2.30%
3	Safety and Area under plantation	Nil	0.47.00	15.70 %
4	Labour shed and office	Nil	0.03.00	1.00%
5	Waste Dump	Nil	0.53.55	17.90%
6	Garland drainage& settling tank	Nil	0.08.00	2.70%
7	Unutilized land	3.00.00	0.92.55	30.80%
Total		3.00.00	3.00.00	100

2.8 Mineral Reserves and Resources

2.8.1 Geological Resources and Reserves

Geological resources are estimated as ROM 38,61,866 @40% recovery Multicolour granite is about 4,59,738 MT. and Mineable reserves are estimated as ROM 15,38,155 MT @40% recovery Multicolour granite is about 2,13,932 MT up to a depth of 50m below ground level. A detail of estimation of geological resources and reserves is given in the Table 2.9

Table 2.9 Computation of Geological Reserves

Section	Bench	L (m)	W (m)	D (m)	ROM (m³)	B.D	ROM (MT)	Recovery @40% (MT)	Granite Waste @60% in (MT)	Side Burden (MT)	Top Soil (MT)	weather ed rock
XY-AB	I	127	146	3	55626	2	111252	----			111252	----
		127	146	2	37084	2	74168	----				74168
	II	84	146	5	61320	2.75	168630	----	49910	168630	----	
		43	146	5	31390	2.65	83184	33274	----	----		
	III	84	146	5	61320	2.75	168630	----	49910	168630	----	
		43	146	5	31390	2.65	83184	33274	----	----		
	IV	84	146	5	61320	2.75	168630	----	49910	168630	----	
		43	146	5	31390	2.65	83184	33274	----	----		
	V	84	146	5	61320	2.75	168630	----	49910	168630	----	
		43	146	5	31390	2.65	83184	33274	----	----		
	VI	84	146	5	61320	2.75	168630	----	49910	168630	----	
		43	146	5	31390	2.65	83184	33274	49910	----	----	
	VII	84	146	5	61320	2.65	168630	----	----	168630		
		43	146	5	31390	2.75	83184	33274	49910	----		
	VIII	84	146	5	61320	2.65	168630	----	----	168630		
		43	146	5	31390	2.75	83184	33274	49910	----		
	IX	84	146	5	61320	2.65	168630		----	168630		
		43	146	5	31390	2.75	83184	33274	49910	----		
	X	84	146	5	61320	2.75	168630		----	168630		
		43	146	5	31390	2.65	83184	33274	49910	----		
	TOTAL				927100		2451746	299466	449190	1517670	111252	74168
	I	111	96	3	31968	2	63936	----	----	----	63936	----

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XY-CD		111	96	2	21312	2	42624		----	----	----	42624
	II	76	96	5	36480	2.75	100320	----		100320		
		35	96	5	16800	2.65	44520	17808	26712			
	III	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712			
	IV	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712			
	V	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712			
	VI	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712			
	VII	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712			
	VIII	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712			
	IX	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712			
	X	76	96	5	36480	2.75	100320	----	----	100320		
		35	96	5	16800	2.65	44520	17808	26712	----	----	----
	TOTAL					532800		1410120	160272	240408	902880	63936
GRAND TOTAL					1459900		3861866	459738	689598	2420550	175188	116792

Total Geological resources = 38,61,866 MT
 Total Geological reserves @40% = 4,59,738 MT
 Total Waste @ @60% = 6,89 598 MT
 Side Burden = 24,20 550 MT
 Top Soil = 1,75,188 MT
 Weathered rock = 1,16,792 MT

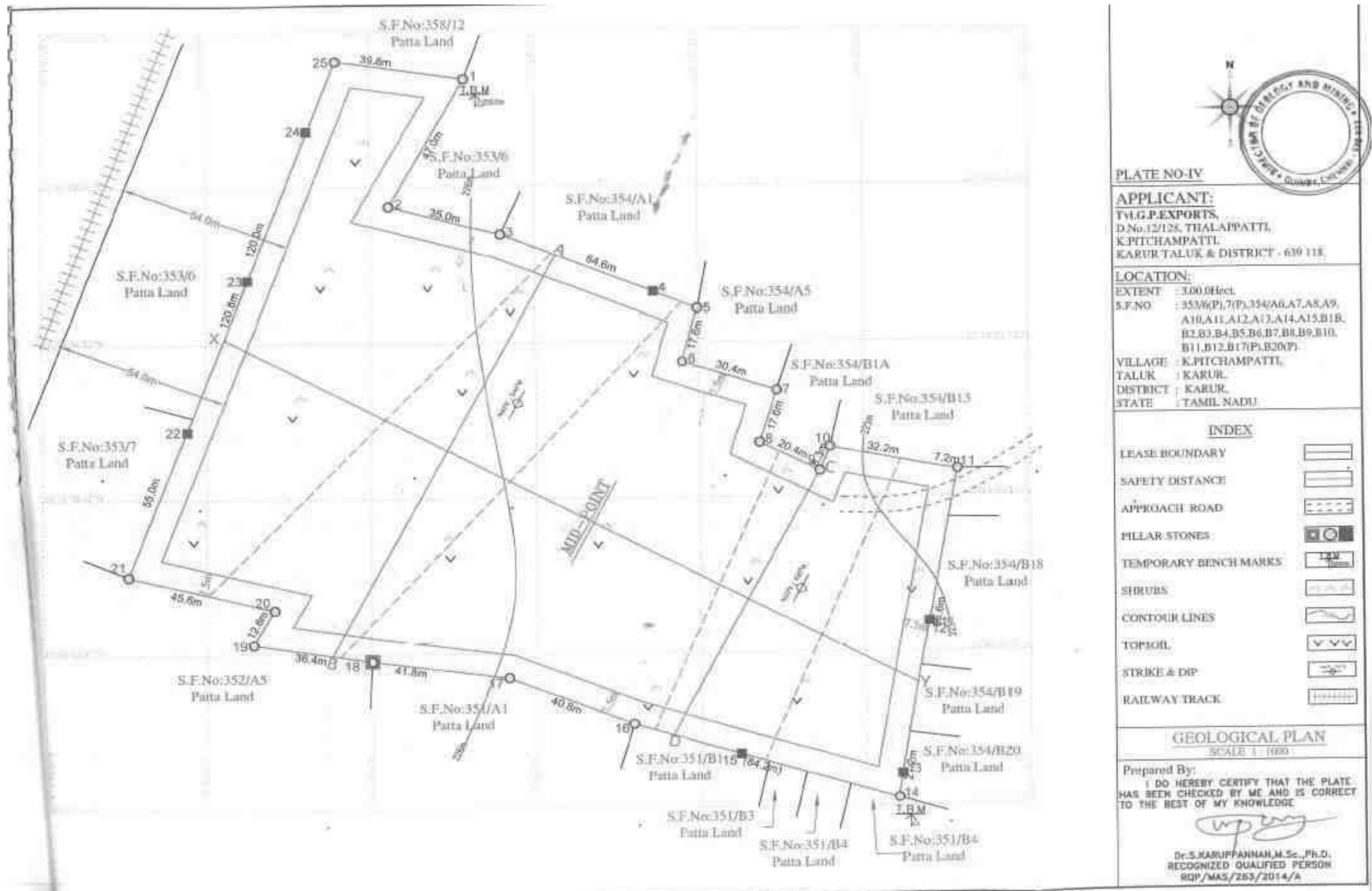


Fig No 2.12 Geological plan

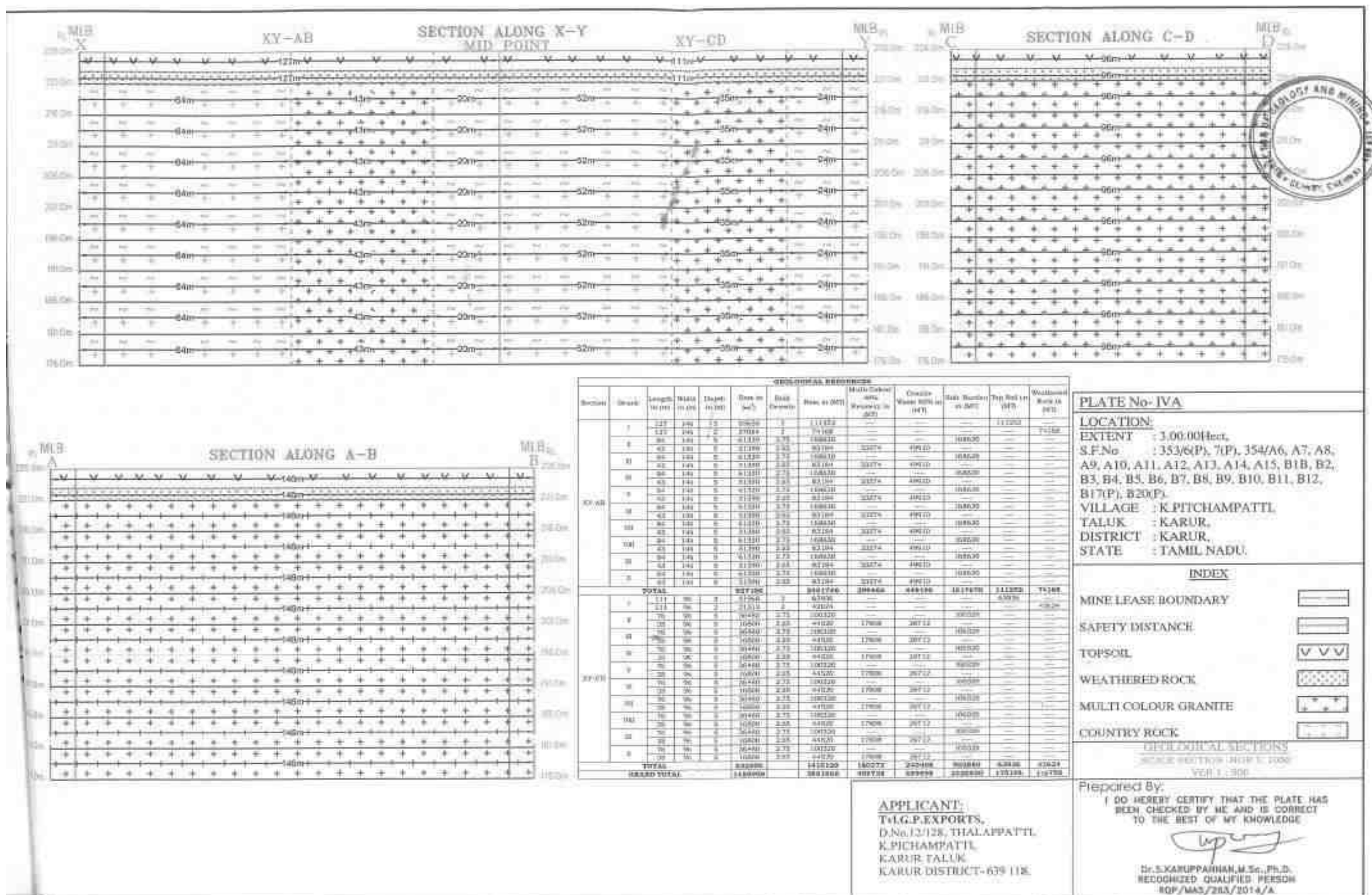


Fig No 2.13 Geological Sections

2.8.2 Mineable /Recoverable Reserves:

The mineable reserve is estimated by the cross-sectional method, taking into account the factors such as the recovery factor, depth of mining and safety barriers. The estimated mineable reserve 15,38,155 MT out which of 2,13,932 MT @40% recovery and rejects as 3,20,885 MT @ 60% to a depth of 50 meters. Further details about the estimation of the mineable reserves are provided below. Details of estimation of mineable reserve are given in Table 2.10.

Table 2.10 Computation of Mineable/Recoverable Reserves

Section	Bench		L (m)	W (m)	D (m)	ROM (m ³)	B. D	ROM (MT)	Recovery @40% (MT)	Granite Waste @60% (MT)	Side Burden (MT)	Top Soil (MT)	weathere d rock
XY-AB	I		120	131	3	47160	2	94320	----	----	----	94320	----
			117	125	2	29250	2	58500	----	----	----	----	58500
	II		72	121	5	43560	2.75	119790	----	----	119790	----	----
			43	121	5	26015	2.65	68940	27576	41364	----	----	----
	III		67	111	5	37185	2.75	102259	----	----	102259	----	
			43	111	5	23865	2.65	63243	25298	37945	----	----	----
	IV		62	101	5	31310	2.75	86103	----	----	86103	----	
			43	101	5	21715	2.65	57545	23018	34527	----	----	----
	V		57	91	5	25935	2.75	71322	----	----	71322	----	
			43	91	5	19565	2.65	51848	20740	31108	----	----	----
	VI		52	81	5	21060	2.75	57915	----	----	57915	----	
			43	81	5	17415	2.65	46150	18460	27690	----	----	----
	VII		47	71	5	16685	2.65	45884	----	----	45884		
			43	71	5	15265	2.75	40453	16182	24271	----	----	----
	VIII		42	61	5	12810	2.65	35228	----	----	35228		
			43	61	5	13115	2.75	34755	13902	20853	----	----	----

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	IX		32	51	5	8160	2.65	22440	----	----	22440		
			43	51	5	10965	2.75	29058	11624	17434	----	----	----
	X		22	41	5	4510	2.75	12403	----	----	12403		
			43	41	5	8815	2.65	23360	9344	14016	----	----	----
XY-CD	TOTAL					434360		1121516	166144	249208	553344	94320	58500
	I		104	81	3	25272	2	50544	----	----	----	50544	----
			104	75	2	15150	2	30300	----	----	----	----	30300
	II		64	71	5	22720	2.75	62480	----		62480	----	----
			35	71	5	12425	2.65	32927	13171	19756	---	----	----
	III		59	61	5	17995	2.75	49487	----	----	49487	----	----
			35	61	5	10675	2.65	28289	11316	16973		----	----
	IV		54	51	5	13770	2.75	37868	----	----	37868	----	----
			35	51	5	8925	2.65	23652	9461	14191	----	----	----
	V		52	41	5	10660	2.75	29315	----	----	29315	----	----
			32	41	5	6560	2.65	17384	6954	10430	-----	----	----
	VI		52	31	5	8060	2.75	22165	----	----	22165	----	----
			27	31	5	4185	2.65	11091	4437	6654	----	----	----
	VII		52	21	5	5460	2.75	15015	----	----	15015	----	----
			22	21	5	2310	2.65	6122	2449	3673	-----	----	----
	TOTAL					164167		416639	47788	71677	216330	50544	30300
	GRAND TOTAL					598527		1538155	213932	320885	769674	144864	88800

Total Mineable reserves (ROM) = 15,38,155 MT
Total Mineable reserves @40% = 2, 13,932MT
Total Reject @ 60% = 3,20,885 MT
Side Burden = 7,69,674 MT
Total Topsoil = 1,44,864 MT
Weathered rock = 88,800 MT

2.9 Year Wise Production and Development

The five years period of production and the generation of waste are described in the year-wise development/production schedule as tabulated for Multicolour Granite in Table-3.5. The five years production is designed up to a depth of 35m. The waste ratio with reference to the production of Multicolour Granite would be 1:6.56. The year-wise development /production plan is shown in Plate No-V-A.

Table 2.11 Computation of Year wise development Plan

Year	Topsoil (MT)	ROM (MT)	Production @40% recovery (MT)	Rejects @ 60% (MT)	Weathered rock (MT)	Side Burden (MT)	Overburden /Multi-colour granite ratio
I	22842	70376	9408	14111	12300	11715	1:7.65
II	27702	151487	10230	15343	17100	81112	1:14.95
III		32914	10256	15383		7275	1:2.18
IV		67706	9488	14231		43987	1:5.97
V		38878	8408	12608		17862	1:3.54
Total	50544	361361	47790	71676	29400	161951	1:6.56

Total quantum of production (ROM)	=	3,61,361MT
Total production for the five years	=	47,790 MT
Total Rejects	=	71,676 MT
Granite to Waste ratio	=	313571/47790
		1: 6.56

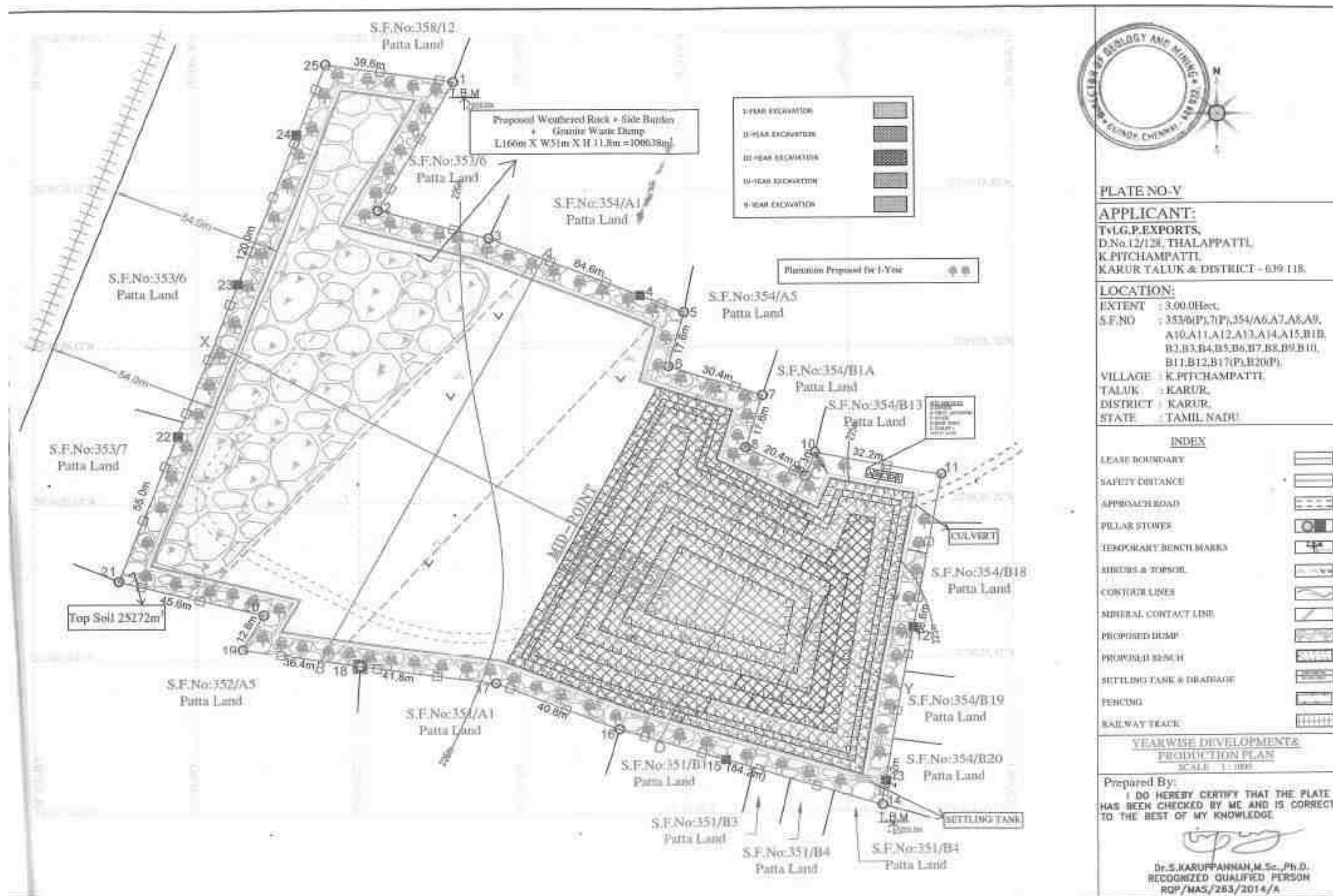
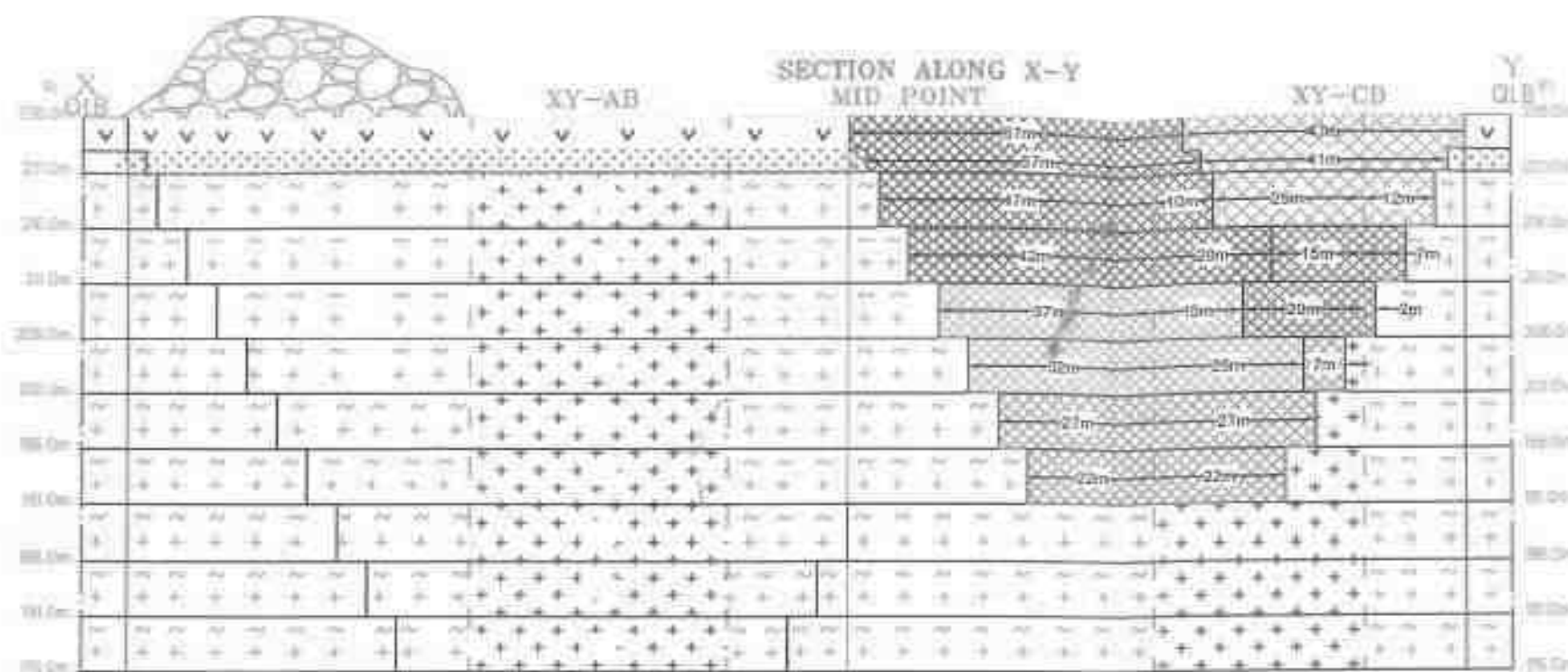
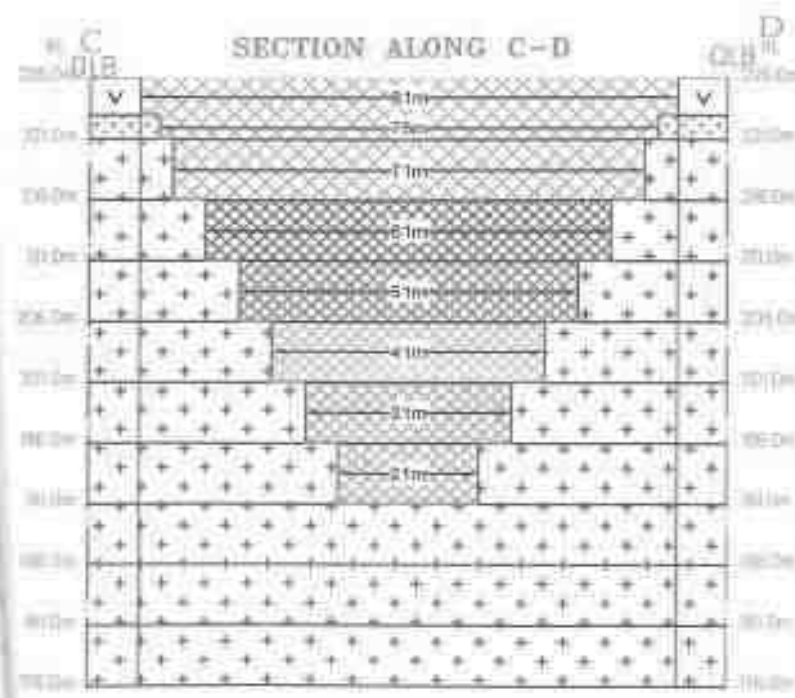


Fig No 2.14 Year Wise Development and Production Plan for 2023-2026



- I - YEAR EXCAVATION
- II - YEAR EXCAVATION
- III - YEAR EXCAVATION
- IV - YEAR EXCAVATION
- V - YEAR EXCAVATION



YEARWISE PRODUCTION														
Section	Year	Bench	Length in (m)	Width in (m)	Depth in (m)	Area in (m ²)	Bulk Density	Run in (MT)	Multi Colour 40% Recovery in (MT)	Country Rock 60% in (MT)	Side Drifts in (MT)	Top Soil in (MT)	Weathered Rock in (MT)	
XY-CD	I-YEAR	I	47	81	3	11421	2	22842	---	---	---	22842	---	
		II	41	75	2	6150	2	12300	---	---	---	---	13800	
		III	13	71	5	4560	2.75	12715	---	---	11715	---	---	
		IV	25	71	5	8875	2.65	23519	9408	14111	---	---	---	
		TOTAL	---	---	---	30706	---	70326	9408	14111	11715	23842	12300	
	II-YEAR	I	57	81	3	13951	2	27902	---	---	---	---	27902	---
		II	57	75	2	8550	2	17100	---	---	---	---	---	17100
		III	47	71	5	16585	2.75	45844	---	---	45844	---	---	
		IV	10	71	5	3550	2.65	9408	2164	9044	---	---	---	
		VI	42	61	5	12810	2.75	35328	---	---	35328	---	---	
		III	20	81	5	8100	2.65	21165	5480	6690	---	---	---	
	III-YEAR	TOTAL	---	---	---	81246	---	151487	10230	15343	81112	27702	17100	
		II	7	81	5	2152	2.75	5917	---	---	5917	---	---	
		III	15	61	5	4575	2.65	12124	4850	7214	---	---	---	
		IV	2	61	5	610	2.75	1403	---	---	1403	---	---	
		IV	20	51	5	5100	2.65	13315	5480	8105	---	---	---	
	IV-YEAR	TOTAL	---	---	---	12320	---	32914	10286	15383	7278	0	0	
		IV	87	81	5	34948	2.75	9647	25947	34547	---	---	---	
		IV	18	61	5	5425	2.65	14127	9055	6062	---	---	---	
		V	32	41	5	6560	2.75	18040	---	---	18040	---	---	
		V	25	41	5	5125	2.65	13382	5433	8148	---	---	---	
	V-YEAR	TOTAL	---	---	---	24948	---	57706	9488	14311	43887	0	0	
		V	7	41	5	1435	2.65	3803	1522	2301	---	---	---	
		VI	27	31	5	4188	2.75	11509	---	---	11509	---	---	
		VI	27	31	5	4188	2.65	11093	4437	6054	---	---	---	
		VII	23	21	5	2310	2.75	6353	---	---	6353	---	---	
		VII	23	21	5	2310	2.65	6122	2449	3673	---	---	---	
		TOTAL	---	---	---	14425	---	38878	8405	12608	17862	0	0	
GRAND TOTAL						148942	261381	47790	71676	161951	50544	29400		

PLATE No- VA
LOCATION:
 EXTENT : 3.00.00Hect.
 S.F.No : 353/6(P), 7(P), 354/A6, A7, A8, A9, A10, A11, A12, A13, A14, A15, B1B, B2, B3, B4, B5, B6, B7, B8, B9, B10, B11, B12, B17(P), B20(P).
 VILLAGE : K.PITCHAMPATTI.
 TALUK : KARUR.
 DISTRICT : KARUR.
 STATE : TAMIL NADU.

- INDEX**
- MINE LEASE BOUNDARY
 - SAFETY DISTANCE
 - TOPSOIL
 - WEATHERED ROCK
 - MULTI COLOUR GRANITE
 - COUNTRY ROCK
 - PROPOSED BENCH
 - DUMP

YEARWISE DEVELOPMENT AND PRODUCTION SECTIONS
 SCALE: SECTION: 1:1000
 DATE: 21.08.2014

APPLICANT:
 Tvl.G.P.EXPORTS,
 D.No.12/128, THALAPPATTI,
 K.PITCHAMPATTI,
 KARUR TALUK & DISTRICT- 639 118.

Prepared By:
 I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE.

 Dr. S. KARUPPANNAN, M.Sc., Ph.D.
 RECOGNIZED QUALIFIED PERSON
 ROP/MAS/263/2014/A

Fig No 2.15 Year Wise Development and Production sections

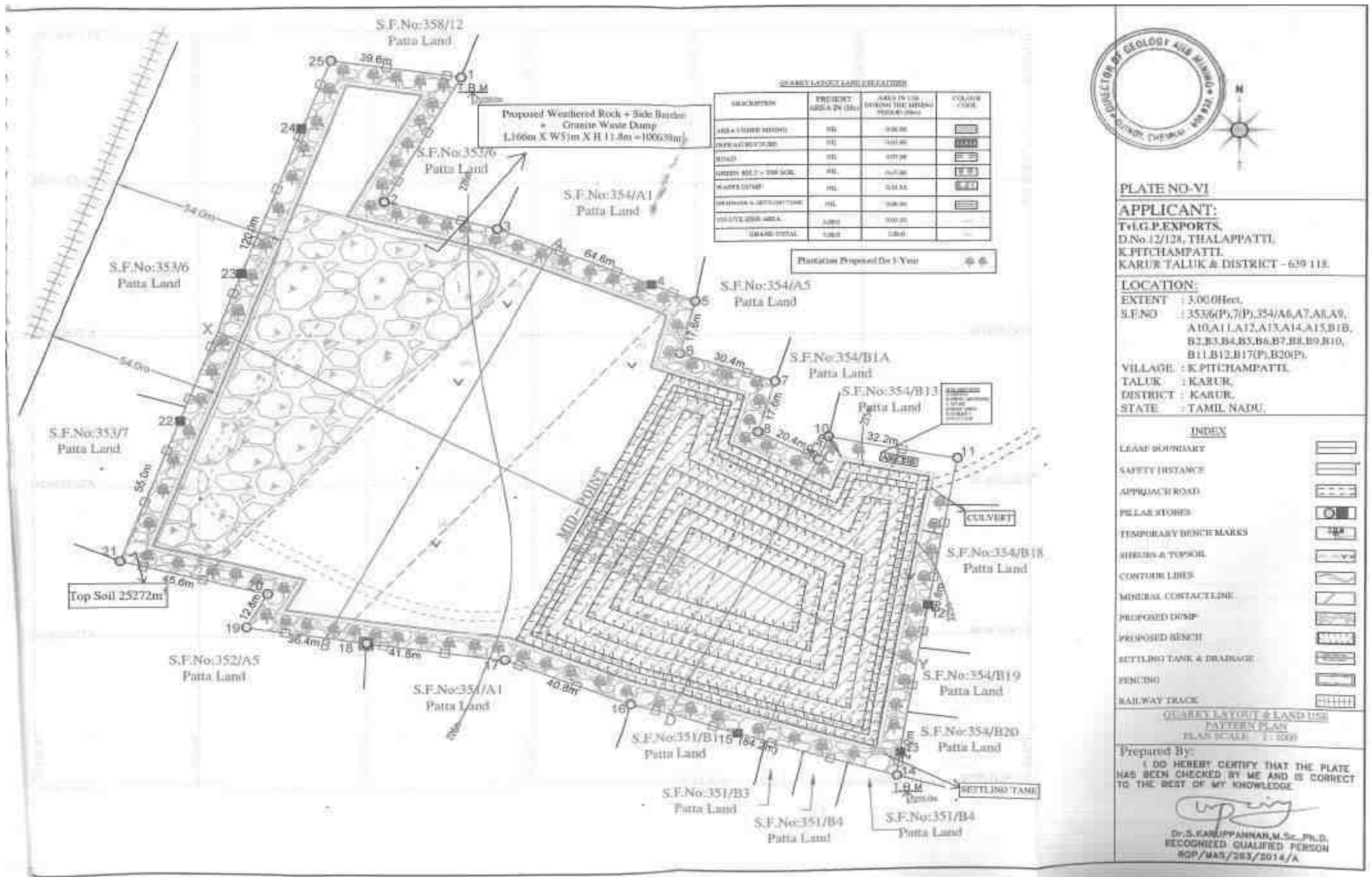


Fig No 2.17 quarry layout and land use pattern

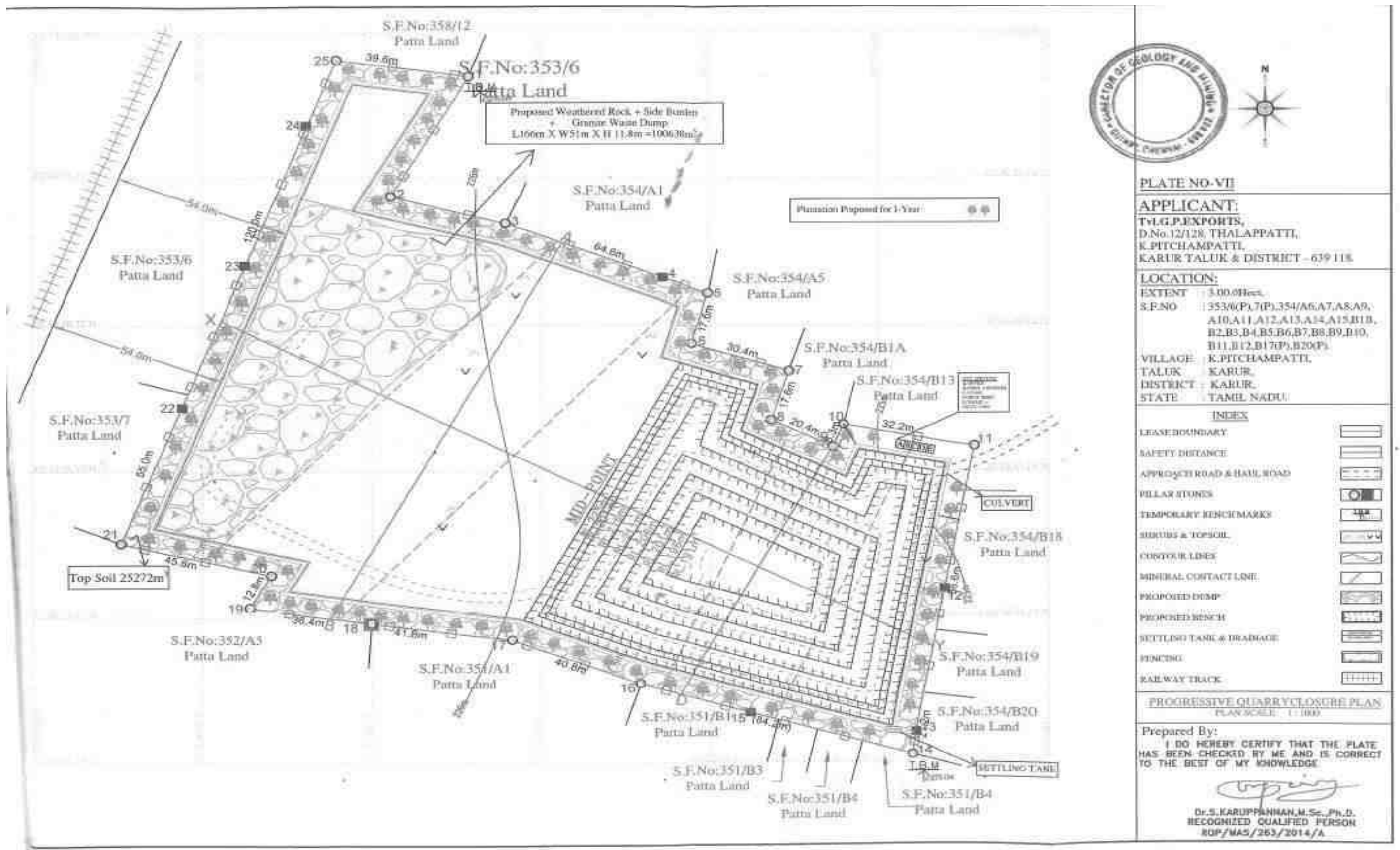


Fig No 2.18 progressive quarry closure plan

2.10 Stacking of Mineral Rejects and Disposal of Waste for the plan period.

The present mining plan period, The proposed reject (60%) side burden and weathered rock are 2,63,027 MT (71676 MT +161951 MT +29400 MT) will be removed and proposed waste dump situated on the western side of the lease area with dimension of 166m (L) X 51m (W) X 11.8m Top soil is 50544MT will be removed and stacked separately along lease boundary as earth bund which will be used for afforestation purposes. All waste and rejects materials dumped western side of the lease boundary and back filled over the mined-out area in future. Total generation of Granite rejects and waste & topsoil for the next five years will be 3,13,571 MT. It is revealed in the final mine closure plan showing the ultimate depth of mining and ultimate pit configuration. Maximum height and spread of dumps for the first five years are given as under.

Table 2.12 Computation of waste and rejects materials

Year	Topsoil (MT)	Rejects @ 60% (MT)	Weathered rock (MT)	Side Burden (MT)	Total
I	22842	14111	12300	11715	60968
II	27702	15343	17100	81112	141257
III		15383		7275	22658
IV		14231		43987	58218
V		12608		17862	30470
Total	50544	71676	29400	161951	313571

For the next five years, all the rejects and weathered rock will be dumped in the northern side of mining lease area as per approved scheme of mining. Top soil will be used for afforestation purposes.

2.11 Conceptual Mining Plan

Conceptual Mining Plan is prepared with an object of long-term systematic development of bench lay - outs, selection of permanent dump so as to avoid re-handling, setting roads, to determine ultimate pit limit, depth of mining and ultimate pit slope, selection of sites for construction of infrastructures, lying of roads etc. Kindly refer Plate No-VIII-A.

The ultimate pit size is so designed based on certain practical factors such as the economical depth of mining, safety zones followed, available area for mining. The Ultimate pit size of the mine in bench-wise arrived and calculated as here under.

2.11.1 Ultimate Pit Dimensions

The ultimate pit size is designed based on certain practical factors such as the economical depth of mining, safety zones, permissible area etc., The Ultimate pit of the mine is given as under

Table 2.14 Ultimate Pit Dimensions (m)

ULTIMATE PIT SECTION (XY-AB)						
Bench	Bench R.L	Period	Overburden/ Mineral	L (m)	W (m)	D (m)
I	R.L.226-223m	Remaining Period	Top Soil	120	131	3
	R.L.223-221m		Weathered Rock	117	125	2
II	R.L.221-216m		Side Burden	72	121	5
			Multi-colour Granite	43	121	5
III	R.L.216-211m		Side Burden	67	111	5
			Multi-colour Granite	43	111	5
IV	R.L.211-206m		Side Burden	62	101	5
			Multi-colour Granite	43	101	5
V	R.L.206-201m		Side Burden	57	91	5
			Multi-colour Granite	43	91	5
VI	R.L-201-196m		Side Burden	52	81	5
			Multi-colour Granite	43	81	5
VII	R.L.196-191m		Side Burden	47	71	5
			Multi-colour Granite	43	71	5
VIII	R.L.191-186m		Side Burden	42	61	5
			Multi-colour Granite	43	61	5
IX	R.L.186-181m			Side Burden	32	51

			Multi-colour Granite	43	51	5
X	R.L.181-176m		Side Burden	22	41	5
			Multi-colour Granite	43	41	5
			Total depth			50m
ULTIMATE PIT SECTION (XY-CD)						
Bench	Bench R.L	Period	Overburden/ Mineral	L (m)	W (m)	D (m)
I	R.L.226-223m	First 5 years	Top Soil	104	81	3
	R.L.223-221m		Weathered Rock	101	75	2
II	R.L.221-216m		Side Burden	63	71	5
			Multi-colour Granite	35	71	5
III	R.L.216-211m		Side Burden	59	61	5
			Multi-colour Granite	35	61	5
IV	R.L.211-206m		Side Burden	54	51	5
			Multi-colour Granite	35	51	5
V	R.L.206-201m		Side Burden	52	41	5
			Multi-colour Granite	32	41	5
VI	R.L.201-196m		Side Burden	52	31	5
			Multi-colour Granite	27	31	5
VII	R.L.196-191m		Side Burden	52	21	5
			Multi-colour Granite	22	21	5
			Total depth			35m

Afforestation has been proposed on all along the boundary barrier by planting trees. All the baseline information studies like air quality monitoring, Noise and vibration monitoring, water analysis studies will be carried out every year as per the MOEF norms.

2.11.2 Restoration, Reclamation of already mined out area

The quarried-out pit will be used as water storage pond which improves the agricultural activity in the buffer zone.

The quarried pit will be fenced by using Barbed wire fencing to prevent inherent entry of public and cattle.

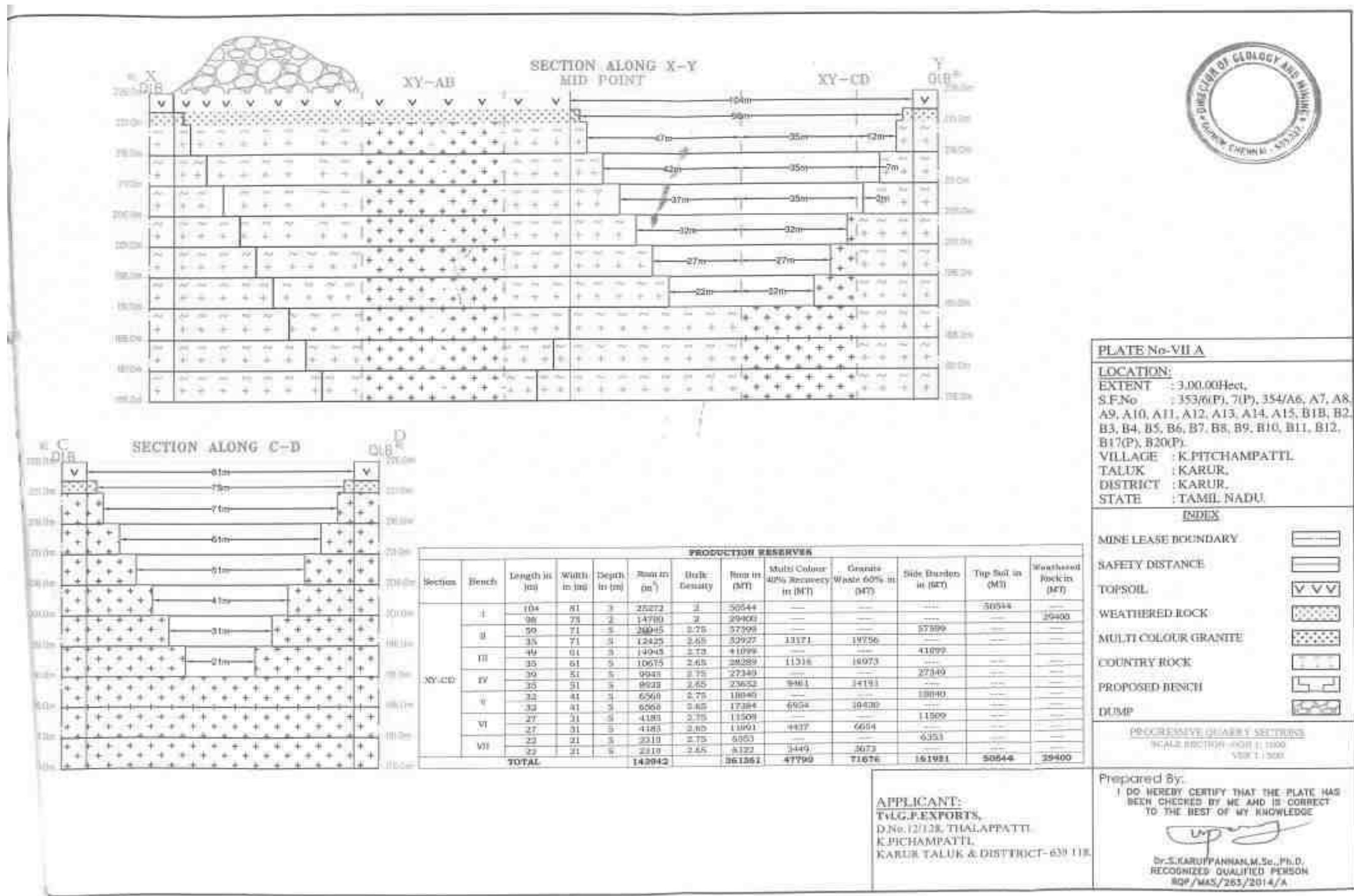


Fig No 2.18 Progressive quarry sections

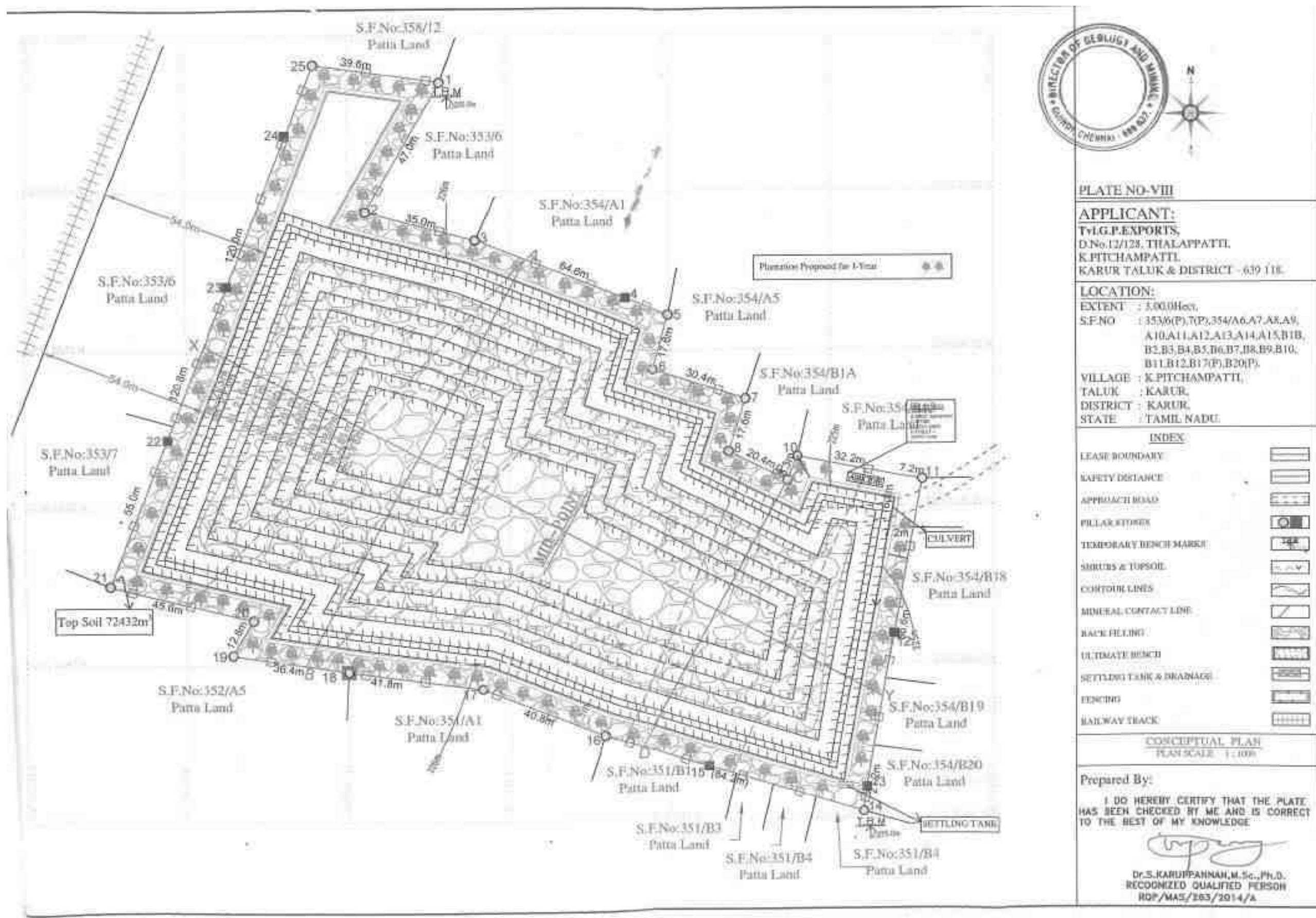


Fig No 2.19 Conceptual mining plan

2.12 Employment Potential (Management & Supervisory personal)

Table 2.16 Employment Potential

Management and supervisory staffs	Manager	1
	Geologist	1
	Accountant cum admin	1
Skilled	Driver	2
	Mechanic	1
Semi-skilled	Helper greaser	1
Unskilled	Musdoor labors	12
	Cleaners	1
Total		20No's

Table No 2.17 Water Requirements (3.5 KLD)

Drinking & Domestic purposes	1.0 KLD
Water sprinkling on haul roads	1.0 KLD
Green Belt	1.0 KLD
Wet drilling	0.5 KLD
Total	3.5KLD
Source	Water Vendors

2.13 Amenities

This is an existing quarry project. Good approach road is already available. All site services such as first-aid room, office, rest room, canteen and toilets will be established outside the lease area. The workers are supplied with helmets, safety boots, ear plugs, masks, gloves, etc., as personal protective devices.

2.13.1 Sanitary facilities

Semi-permanent latrines & urinals shall be maintained at convenient places for use of labours as per the provisions of Rule (33) of the main rules, 1955 separately for males and females. Washing facilities shall also be arranged as per rule (36) of the mines Rules, 1955.

2.13.2 First Aid facility

10 Numbers First aid kit will be made available at site. Better higher facilities are available in and around Namakkal district.

2.13.3 Labour Health

Periodic medical examination has to be made for occupational health once in a year in addition to attending medical treatment of occupational injuries under Rule 45 (A).

2.13.4 Precautionary safety measures to the Labourers

Safety provisions like helmet, goggles, safety belt, safety shoes etc have to be provided as per the circulars and amendments made for Mine labours under guidance of DGMS.

Necessary training will be conducted once in a year to all the employees with the help of qualified and experienced officers to train about the safe and systematic quarrying operation

2.13.5 The Child labour Employment

As per the Mines Act, 1952, no child labours below 18 years of old were engaged for any work in the quarry.

2.13.6 Power Requirement

Only diesel operated mining machinery will be used for quarrying. No power will be required for the proposed project.

2.13.7 Project Cost

A	Fixed Asset Cost	
	1. Land Cost (Consent land)	Rs. 1,00,000/-
	2. Labour Shed	Rs. 3,00,000/-
	3. Sanitary Facility	Rs. 2,50,000/-
	4. Fencing	Rs. 3,00,000/-
	5. Other expenses (Security guard bin etc)	Rs. 5,00,000/-
	Total	Rs. 14,50,000/-
B	B Machinery cost	Rs. 30,00,000/-
C	Total expenditure of EMP cost for five years	
	1. Drinking Water Facility	Rs. 20,0000/-
	2. Sanitary facility & Maintenance	Rs. 1,50,000/-
	3. Permanent water sprinkler	Rs. 5,00,000/-
	4. Afforestation and maintenance	Rs. 1,02,000/-
	5. Safety Kits	Rs. 2,00,000/-
	6. Provision of tyre washing facility	Rs. 1,00,000/-

	7. Surface runoff management structures like garland drain settling pond & Bund (0.08.0Hect or 800Sq.m X 400)	Rs. 3,20,000/-
	8. Blasting material with blast mat cost	Rs. 15,00,000/-
	9. Environment monitoring	Rs. 5,00,000/-
	Total	Rs. 35,72,000/-
D	Total Project Cost (A+B+C)	Rs. 80,22,000/-

2.15 End Use

The applicant does not have the facilities to cut and polish the rough blocks of granite. He proposes to sell the rough blocks directly to the potential buyers of the domestic and world market.

CHAPTER – 3: DESCRIPTION OF THE ENVIRONMENT

3.0 BASELINE ENVIRONMENTAL STATUS

3.1 INTRODUCTION

The chapter describes the existing environmental settings in the study area and is based upon the secondary information collected from the published sources, reconnaissance survey, primary socio-economic and environmental monitoring of air, noise, soil, ground and surface water in the study area.

For the purpose of EIA studies, mine lease area was considered as the core zone and area outside the mine lease boundary up to 10km radius from the lease boundary was considered as buffer zone. Collection of base line data is an integral part of the preparation of environmental impact assessment reports. The baseline monitoring study has been carried out during December 2025 – February 2026 to assess the existing environmental scenario in this area.

The Various environmental components studied as a part of the baseline study are discussed in the following project activities are:

- Air Environment
- Noise Environment
- Soil Environment
- Water Environment
- Flora and Fauna
- Socio-economic
- Land Environment

3.2 METHODOLOGY

The guiding factors of the present baseline study are the requirements laid down by the Central Pollution Control Board (CPCB) and guidelines as per the Environmental Impact Assessment Notification.

- In order to assess the Ambient Air Quality (AAQ), samples of ambient air were collected by installation of Respirable Dust Sampler and Fine Particulate Matter Sample at different locations within the study area and analyzed to find out the existing status of air quality.
- Ground water samples were collected from the existing tube wells, while samples for surface water were collected from river & small ponds. The samples were analyzed

for parameters necessary to determine water quality (based on IS: 10500 criteria) and those, which are relevant from environmental impact point of view of the proposed river bed mining project.

- Soil samples were collected and analyzed for relevant physical and chemical characteristics in order to assess the impact of the proposed mining on soil.
- Inventory of flora and fauna species present in the area was made through field visits and survey by ecologists.
- Socio-economic data was collected from primary sources through village – level surveys and household visits.
- The land use patterns of the study area were assessed through latest satellite imaging and topographical sheets of Survey of India.

Appropriate methodologies have been followed in preparing the EIA-EMP report. The methodology adopted for the study is outlined below. The sampling locations were selected on the basis of the following:

- Predominant wind directions recorded by the India Meteorological Department (IMD), Karur observatory, Karur district;
- Existing topography;
- Drainage pattern and location of existing surface water bodies like lakes/ponds, rivers and streams;
- Location of villages/towns/sensitive areas, and;
- Areas, which represent baseline conditions;

3.3 METEOROLOGICAL DATA RECORDED AT IMD STATION, KARUR OBSERVATORY, KARUR DISTRICT

The meteorology of the project area plays very important role in dispersion of pollutants and build-up of pollution within the air atmosphere. In the present study, in the month of December 2025 – February 2026 meteorological data for site specific has been taken to find the dispersion of pollutant concentration. The mixing height, which is an important parameter to express the dispersive potential of atmosphere, has been taken from the atlas of hourly mixing height and assimilative capacity of atmosphere in India.

Table No. 3.1: Summary of the Meteorological data for the study period

S. No	Parameters	Months	December 2025	January 2026	February 2026
1	Temperature (°C)	Max	37	36	36
		Min	20	21	23
		Average	28.5	28	29.5
3	Humidity (%)	Average	40	54	76
4	Wind speed (mps)	Average	2.3	2.0	2.5

3.3.1 Wind Rose

Wind speed and wind direction data is useful in identifying the influence of meteorology on the air quality of the area. The observed wind pattern during the study period is described below. In the present study, in the month of December 2025 – February 2026 meteorological data has been taken to find the dispersion of pollutant concentration. Wind-rose diagram for the study period is shown given below in fig. 3.1.

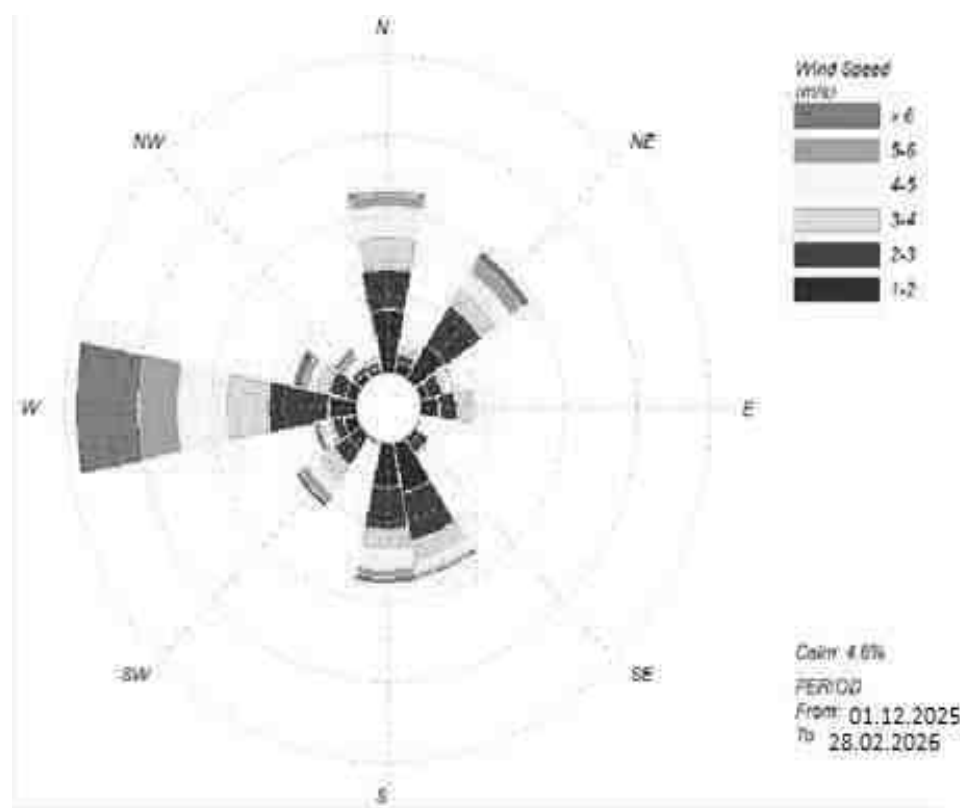


Fig No 3.1 Wind Rose Pattern for the Study period

3.4 AIR ENVIRONMENT

Prevailing air environment i.e. baseline conditions in an area is primarily governed by many factors' activities going on in that area. The pollutant level in atmosphere is also

governed by the meteorology, topography, natural settings in terms of plantation, forest cover, vegetation etc., as these factors in combination with each other are responsible for dispersion, diffusion, transportation and assimilation of pollutants in the local air shed.

3.4.1 Ambient Air Monitoring

The prime objective of baseline air quality study (10km radius) is to assess the existing air quality of the area to form base line information. The study area represents mostly rural environment. Ambient air monitoring was carried out at 5 locations. The locations were identified keeping in view of predominant wind directions prevailing during study period, sensitive receptors, human settlements and mining activities around. The details about sampling locations are mentioned below in fig. 3.2, 3.3 and presented in table 3.2.

The existing Ambient Air Quality status (AAQ) has been monitored for parameters PM₁₀, PM_{2.5}, SO₂ and NO_x. Ambient air quality monitoring was carried out at a frequency of two days per week at each location for three months at 8 hours continuously. Respirable dust samplers have been used for monitoring the existing PM₁₀ status and fine dust samplers are used for monitoring PM_{2.5} status in the study area. Methodologies adopted for sampling and analysis were carried out, as per the approved methods of Central Pollution Control Board (CPCB).

Table No. 3.2: Ambient Air Quality Monitoring Locations

S. No	Sample Location	Station Code	Direction/ Distance (w.r.t. mine)	Core Zone/ Buffer Zone	Latitude	Longitude
1	Core Zone	AAQ-1	--	Core	10°46'34.42"N	78° 4'59.03"E
2	Vellagoundanpatti	AAQ-2	1.0 km (SE)	Buffer	10°46'29.21"N	78° 4'33.76"E
3	Kottanatham	AAQ-3	0.8 km (S)	Buffer	10°46'17.79"N	78° 4'52.44"E
4	K.Pichampatti	AAQ-4	2.4 km (SW)	Buffer	10°47'35.22"N	78° 4'58.25"E
5	Thirumakkam Patti	AAQ-5	1.6 km (NE)	Buffer	10°46'11.77"N	78° 6'25.66"E

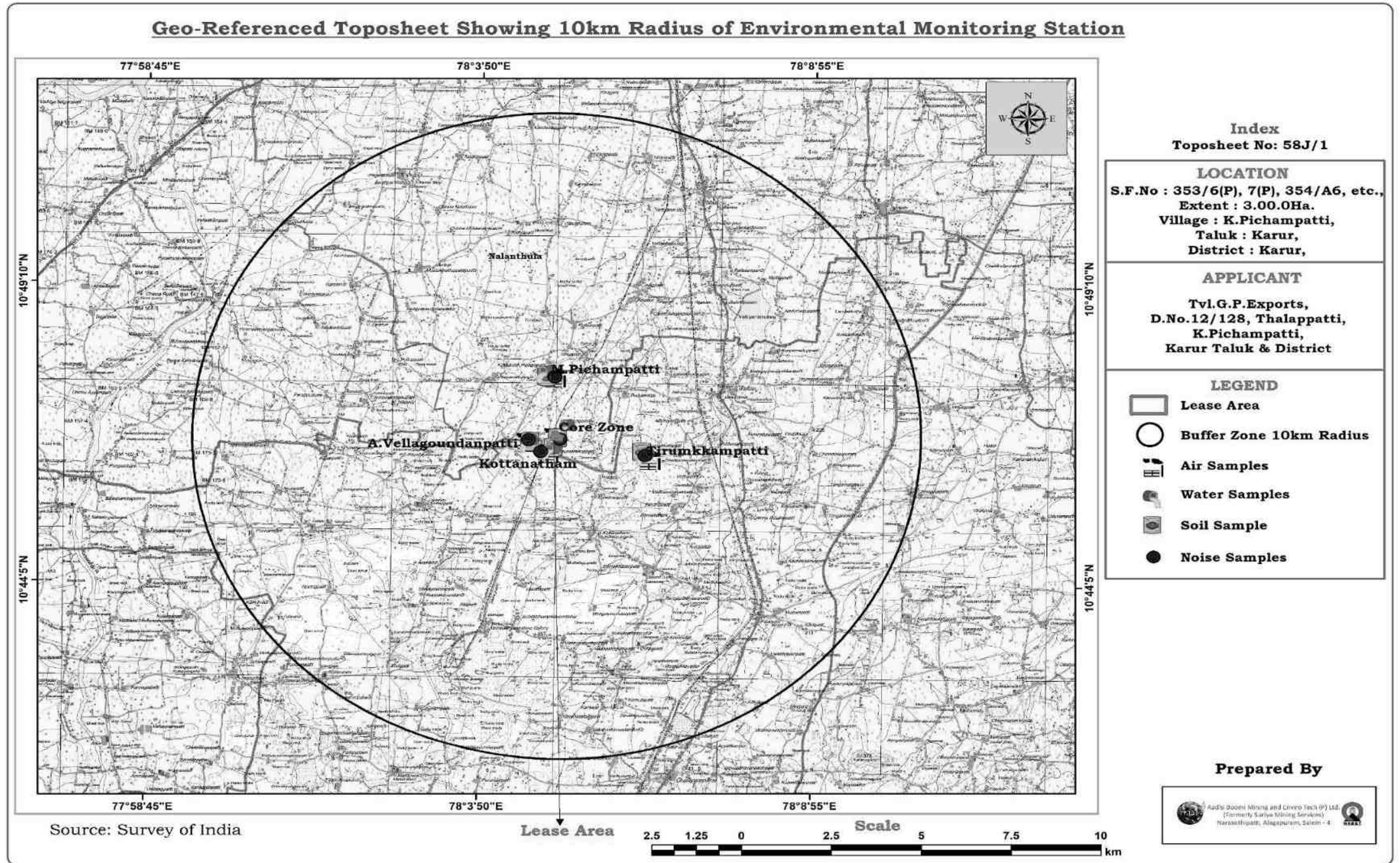


Fig No 3.2 Geo Referenced Toposheet showing Environmental Monitoring station around 10km radius

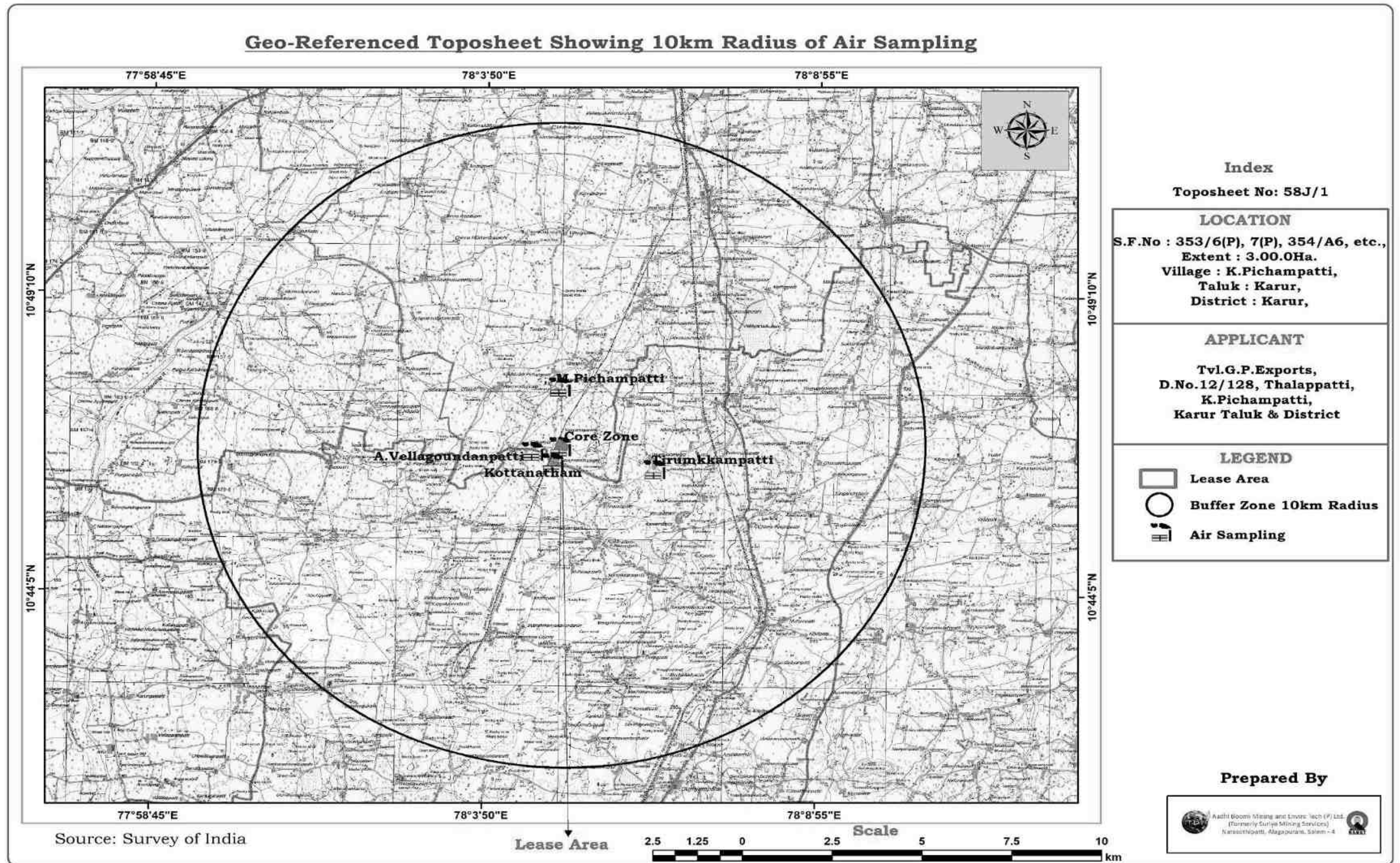


Fig No 3.2a: Geo Referenced Toposheet showing Air Sampling station around 10km radius



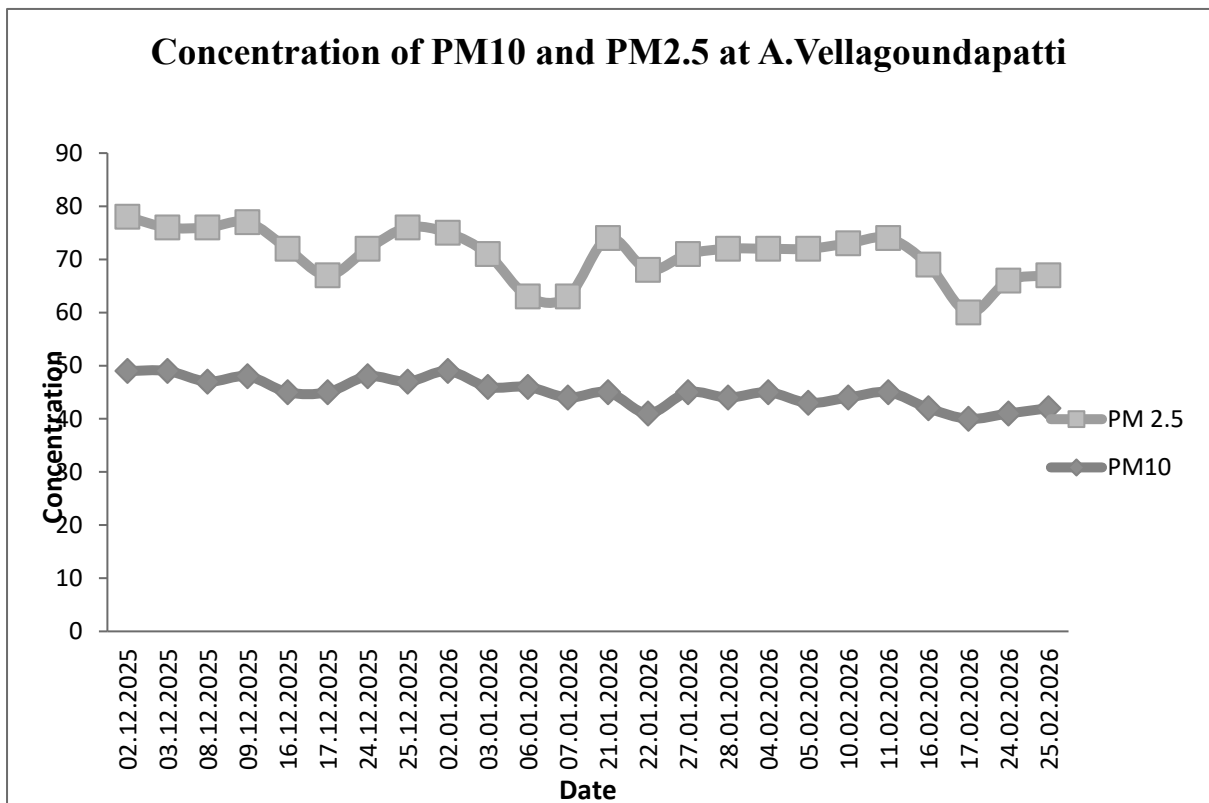
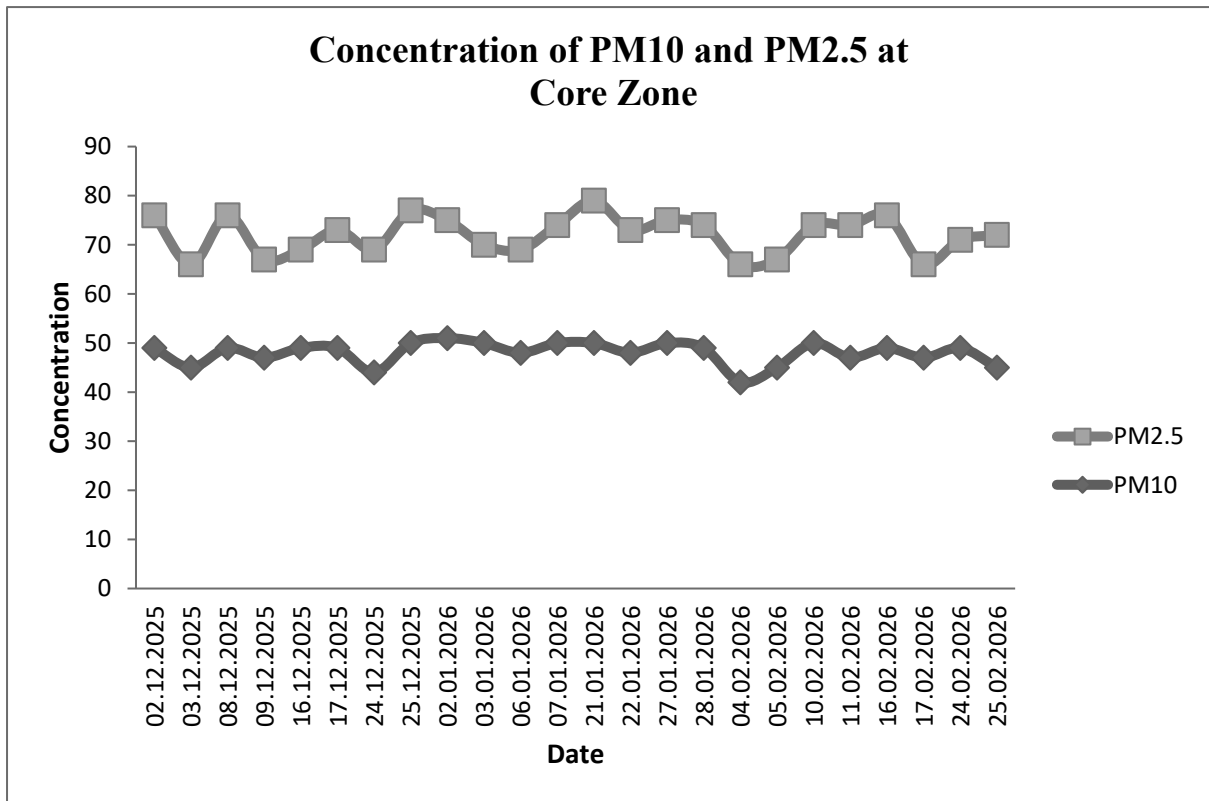
Fig No 3.3 Air Monitoring locations at Core and Buffer Zone

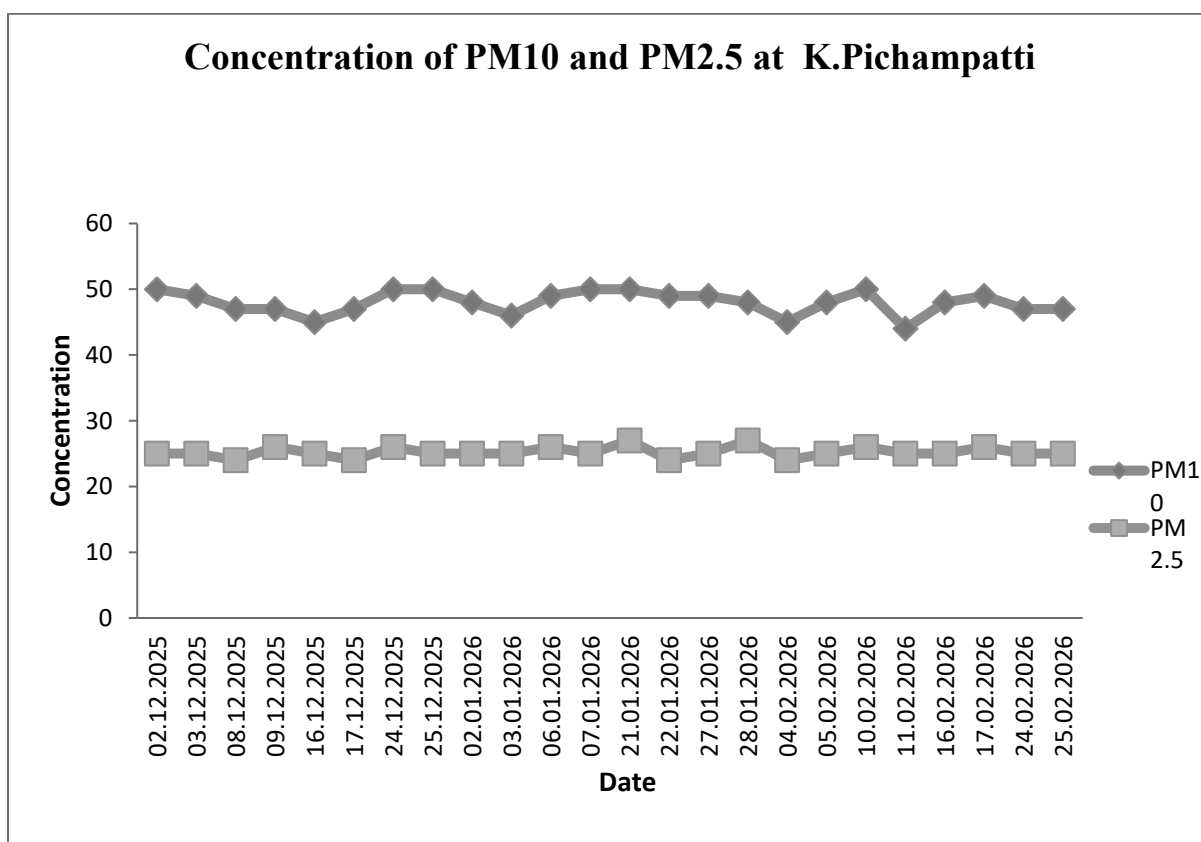
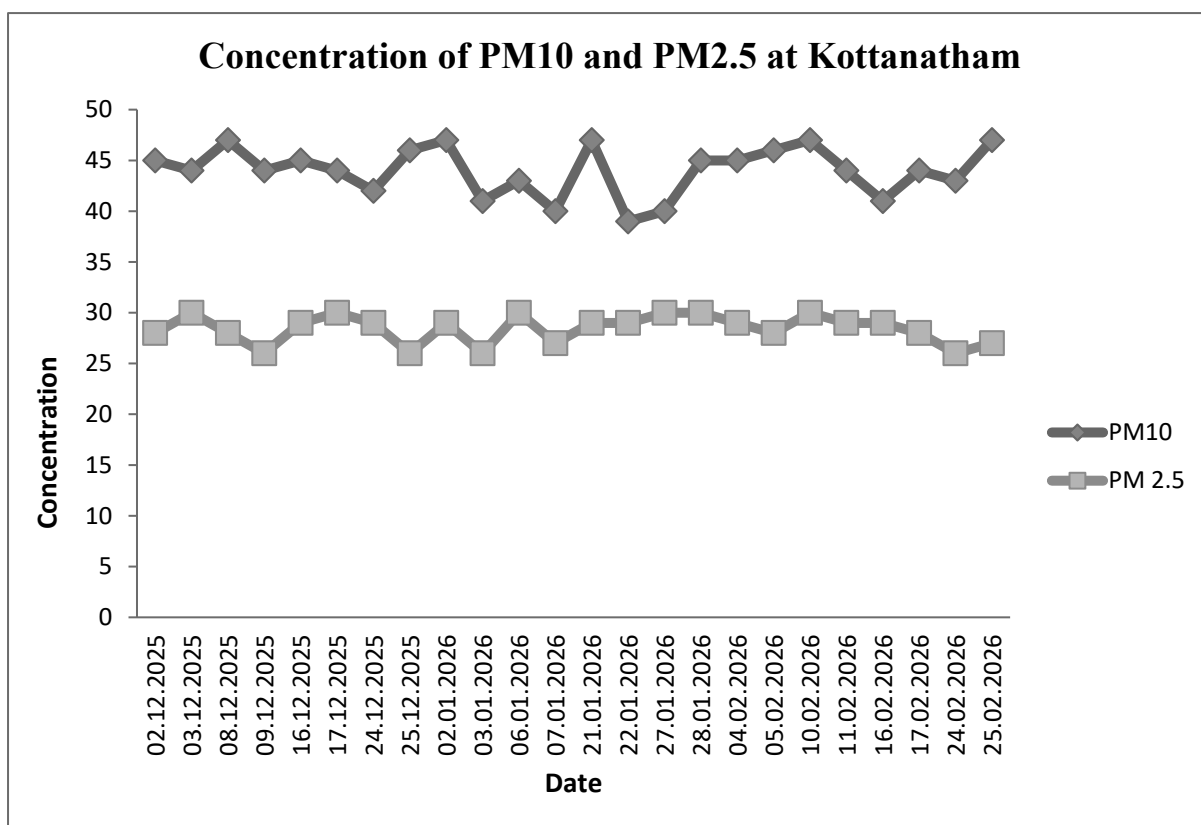
3.4.2 Monitoring Result

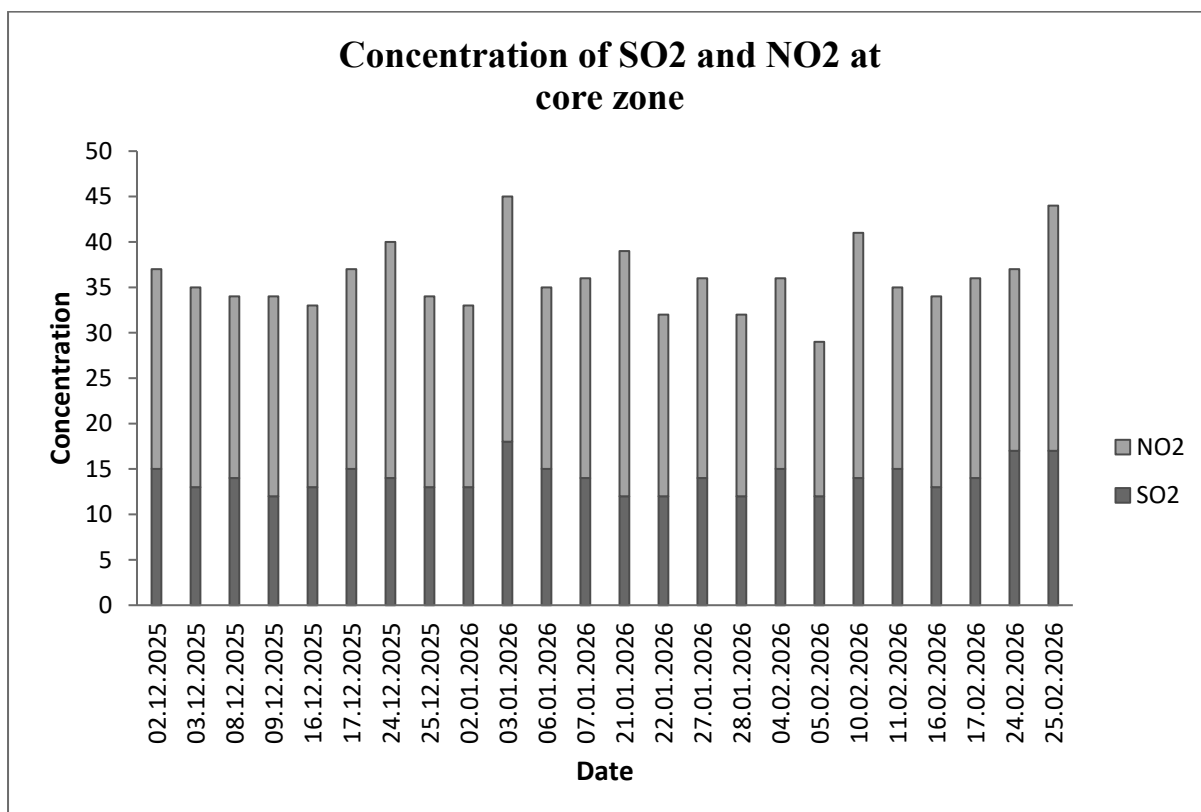
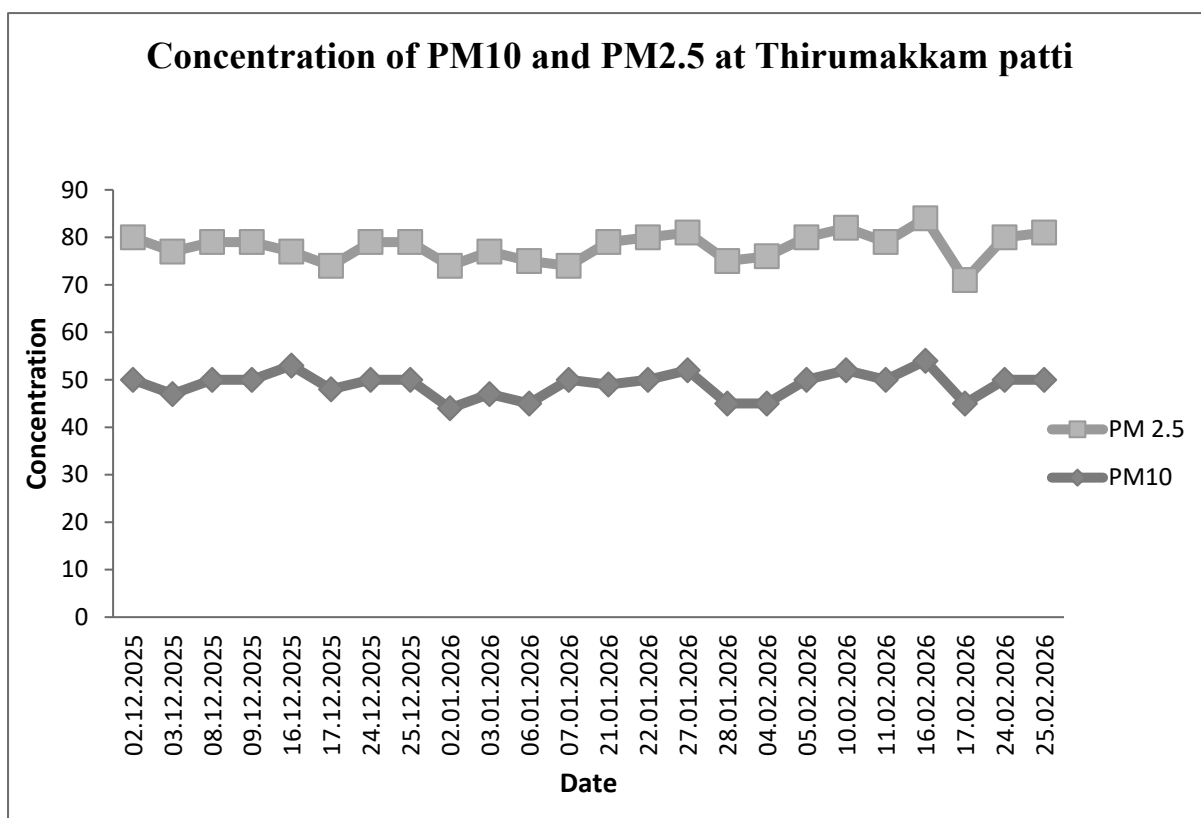
Monitoring station-wise minimum and statistical analysis (minimum, maximum, arithmetic mean) for measured levels of PM₁₀, PM_{2.5}, SO₂, NO_x in study area for the monitoring period are shown parameter wise in table 3.3 and graphical representation of concentration pollutants are showing in fig 3.4.

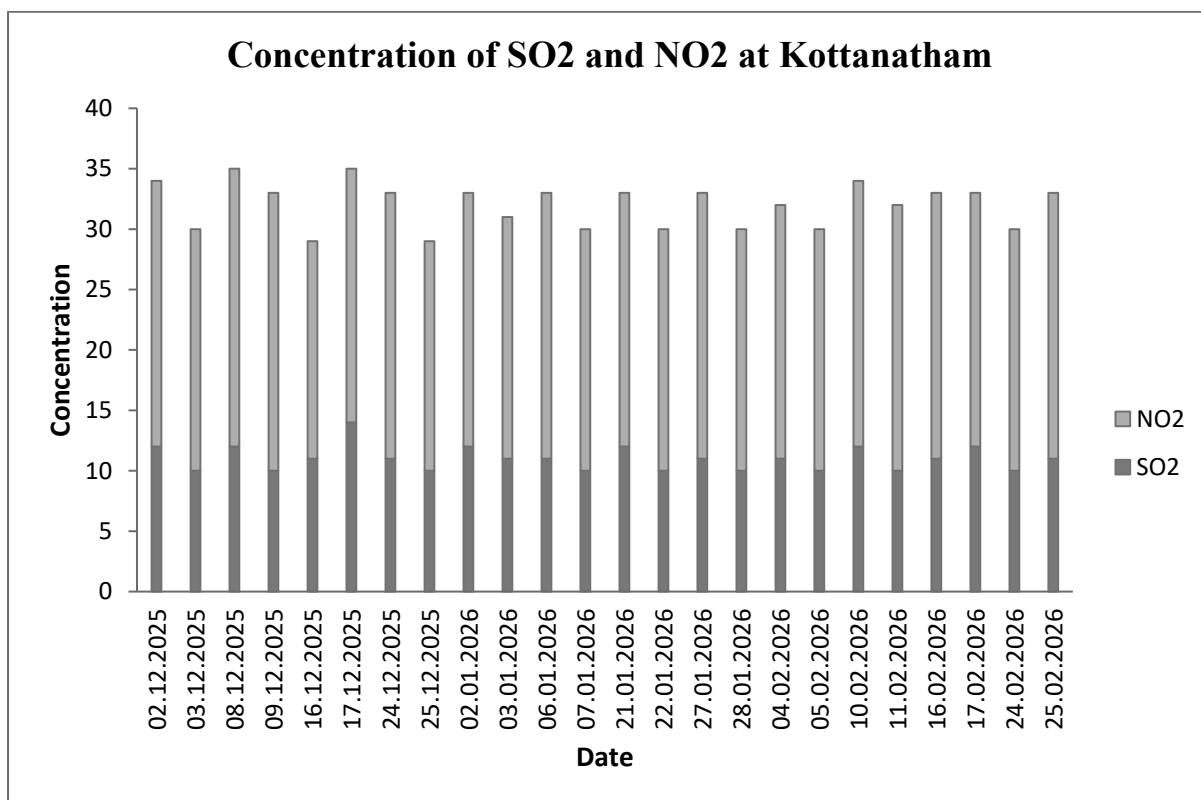
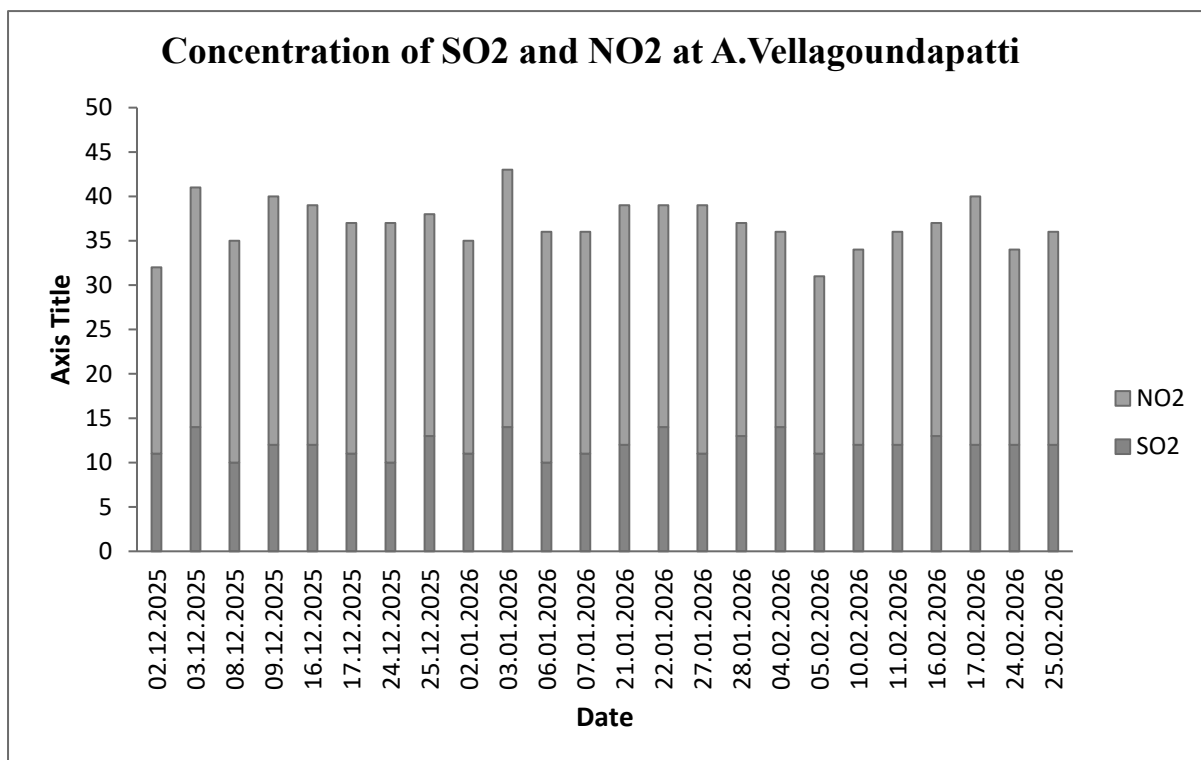
Table No. 3.3: Summaries of Ambient Air Quality Results

Location		Code	PM ₁₀ (µg/m ³)				PM _{2.5} (µg/m ³)				SO ₂ (µg/m ³)				NO _x (µg/m ³)			
			Min	Max	Avg	98%	Min	Max	Avg	98%	Min	Max	Avg	98%	Min	Max	Avg	98%
Core Zone		AAQ-1	42	51	48	50.54	19	30	24	28.08	9	19	14	18	15	28	22	27
Buffer zone	Vellagoundanpatti	AAQ-2	32	50	45	49	15	30	26	29	8	17	12	14	12	30	25	29
	Kottanatham	AAQ-3	35	48	44	47	18	30	28	30	7	14	11	13	11	25	21	23
	K.Pichampatti	AAQ-4	39	51	48	50	18	27	25	27	9	19	15	18	15	27	23	25
	Thirumakkam Patti	AAQ-5	40	54	49	54	19	31	29	31	9	17	13	16	12	25	22	24
NAAQS			100				60				80				80			









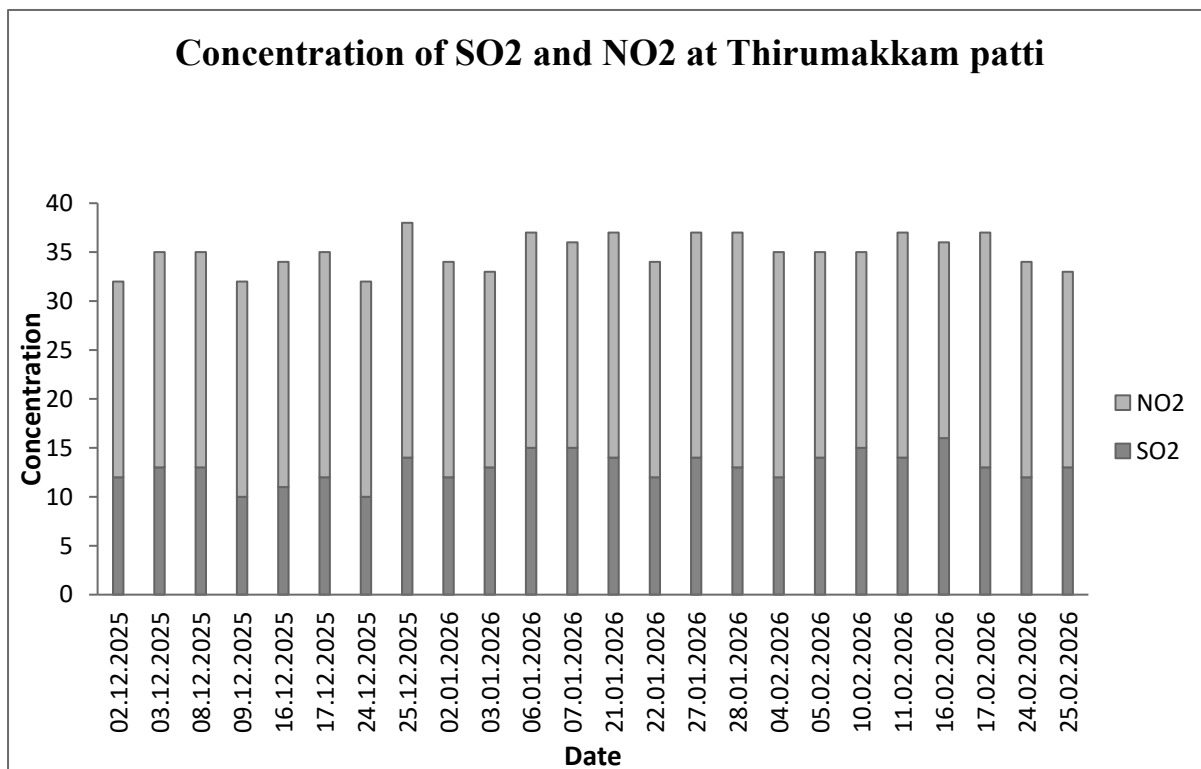
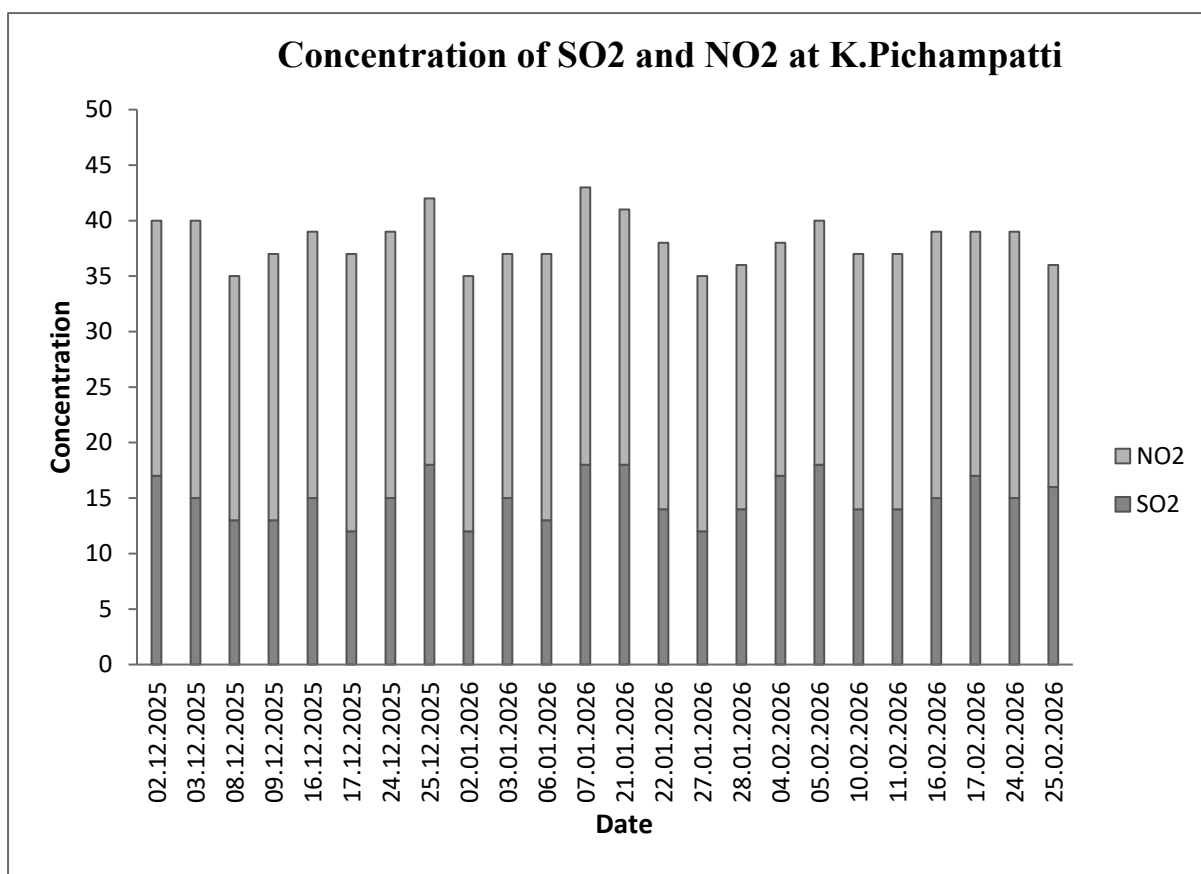


Fig No 3.4 Variation in Concentration of air pollutants

3.4.3 Observations of Primary Data

The area generally has low levels of pollutants in ambient air, which is well within the National Ambient Air Quality Standards for industrial or rural areas. This is due to the absence of any major pollution generating source in the vicinity.

- ✚ Ambient Air Quality Monitoring (AAQM) reveals that the minimum concentration of PM₁₀ for all the 5 stations was found to be 51µg/m³ at Core zone and other one station. The maximum concentration was observed in Thirumakkam Patti as 54µg/m³. The average PM₁₀ level at all stations varies from 44µg/m³ to 49µg/m³.
- ✚ The average PM_{2.5} level at all stations varies from 24µg/m³ to 29µg/m³. The minimum concentrations of PM_{2.5} for all the 5 stations were found to be 15µg/m³ and 19 µg/m³. The maximum concentration was found to be 31µg/m³ at Thirumakkam Patti.
- ✚ The maximum concentrations of SO₂ were found to be 19µg/m³ at K.Pichampatti village. The minimum concentration was found to be 7µg/m³ at Kottanatham village. The average SO₂ level at all stations varies from 11µg/m³ to 15µg/m³
- ✚ The minimum NO_x concentrations were recorded as 11µg/m³ at Kottanatham village. The maximum concentration was found to be 30µg/m³ at Vellagoundanpatti village. The average NO_x level at all stations varies from 21µg/m³ to 25µg/m³. The concentration levels of the above pollutants were observed to be well within the limits of AAQS prescribed by CPCB.

3.5 NOISE ENVIRONMENT

A preliminary reconnaissance was undertaken to identify the major noise generating sources in the area. Nine locations (Core Zone & Buffer Zone) were identified based on the activities in the study area, traffic and sensitive areas like hospitals and schools. The noise monitoring locations are shown in fig 3.5 & 3.6. The sampling locations are shown in table 3.4.

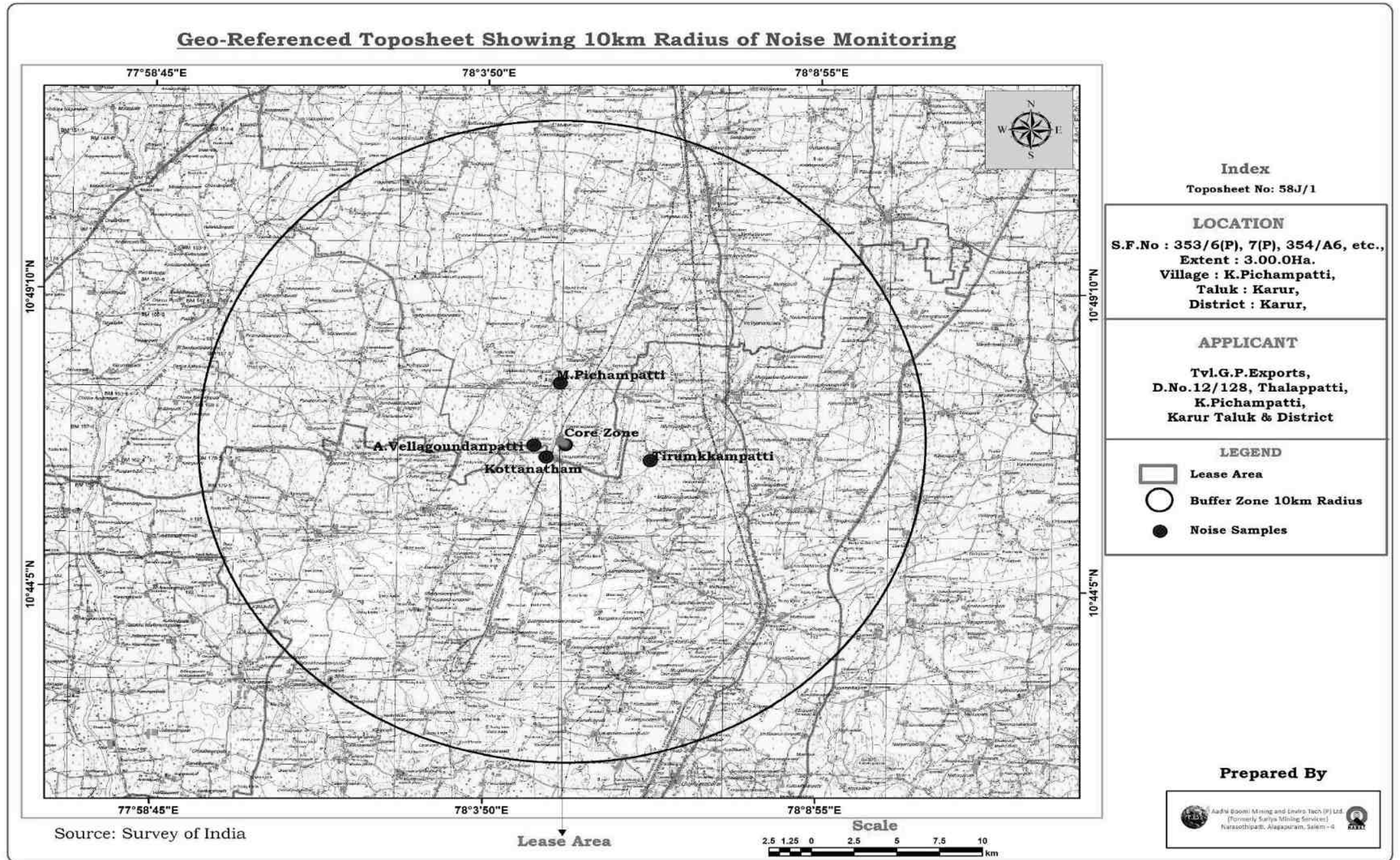


Fig No 3.5 Geo Referenced Toposheet showing Noise sampling stations around 10km radius

Table 3.4 Noise Sampling Locations

Sl. No	Location	Station code	Distance (km)	Direction
1	Core area	NQ1	--	--
	Lease boundary pillar (North)	NQ2	0.1	N
	Lease boundary pillar (South)	NQ3	0.1	S
	Lease boundary pillar (East)	NQ4	0.1	E
	Lease boundary pillar (West)	NQ5	0.1	W
2	Vellagoundanpatti	NQ11	1.0 km	SE
3	Kottanatham	NQ12	0.8 km	S
4	K.Pichampatti	NQ13	2.46 km	SW
5	Thirumakkam Patti	NQ14	1.67 km	NE

3.5.1 Method of Monitoring

One reading per hour was taken for 24 hours. The day time noise levels were monitored during 6 am to 10 pm and night time levels during 10 pm to 6 am at all the monitoring locations within the study area (Table 3.4(a)).

Table 3.4(a) Noise Monitoring Results in Core and Buffer Zone

Sample code	Location	Decibel dB (A)		TNPCB Standards
		Day Time	Night Time	
NQ1	Core area	44.1	42.0	Industrial Day Time- 75 dB(A) Night Time – 70 dB(A) Residential Day Time - 55 dB(A) Night Time - 45 dB(A)
NQ2	Lease boundary pillar (North)	42.9	39.4	
NQ3	Lease boundary pillar (South)	39.9	37.2	
NQ4	Lease boundary pillar (East)	44.5	41.3	
NQ5	Lease boundary pillar (West)	47.2	42.6	
NQ6	Vellagoundanpatti	41.4	38.5	
NQ7	Kottanatham	38.9	35.2	
NQ8	K.Pichampatti	41.3	37.8	
NQ9	Thirumakkam Patti	41.6	37.4	
Remarks	Day Time	Leq (6.00 AM to 10.00 PM)		
	Night Time	Leq (10.00 PM to 6.00 AM)		

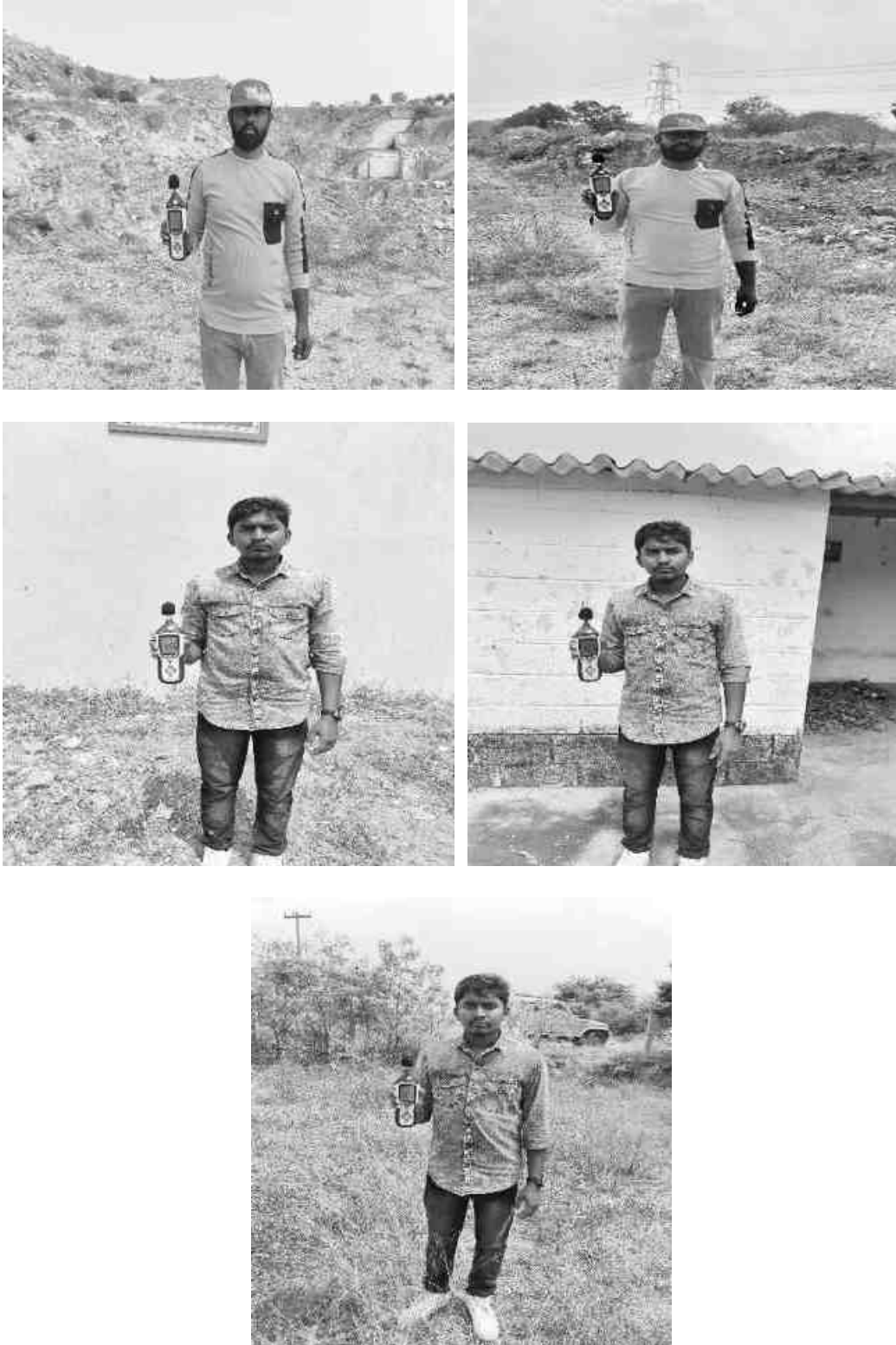


Fig No 3.6 Noise Monitoring at Lease and Buffer

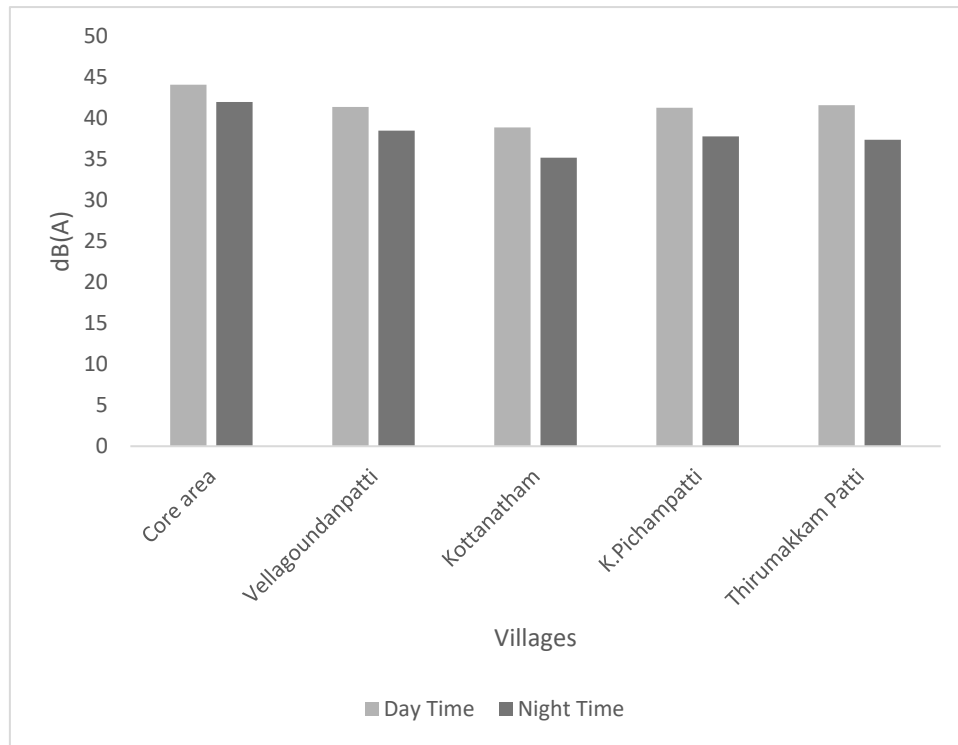


Fig No 3.7 Noise Level of the Study Area

3.5.2 Observations

3.5.2.1 Day Time Noise Levels

Noise Monitoring reveals that the maximum & minimum noise levels at day time were recorded as 41.6 dB (A) at Thirumakkam Patti village & 38.9 dB (A) at Kottanatham village respectively in buffer zone. The minimum and maximum noise level at core area of M/s. G.P Exports is 47.2 dB (A) and 39.9 dB (A). The Noise level measured is found within the permissible limits during day time as specified by CPCB Standard.

3.5.2.2 Night Time Noise Levels

The night time noise levels, the maximum & minimum noise levels at Night time were recorded as 38.5 dB (A) at Vellagoundanpatti village & 35.2 dB (A) at Kottanatham village respectively in buffer zone. The minimum and maximum noise level at core area of M/s. G.P Exports is 42.6 dB (A) and 37.2 dB (A). The Noise level measured is found within the permissible limits during night time as specified by CPCB Standard.

3.6 Water Environment

Assessment of baseline data on Water environment includes:

- a) Identification of surface and ground water sources
- b) Collection of water samples
- c) Analyzing water samples collected for Physico–chemical and biological parameters

3.6.1 Selection of Sampling Stations

The samplings were taken from the identified monitoring locations within the 10km radius of the study area. Water samples were collected to study the water quality of the study area.

3.6.2 Water Quality

Water samples from various locations in and around the project site within 10 km radius were collected for assessment of the physic-chemical and bacteriological quality to know the baseline status of water quality. Parameters for analysis of water quality were selected based on the utility of the particular source of water as per MoEF & CC guidance. Methodologies adopted for sampling and analysis of water in according to the Bureau of Indian Standards. The parameters thus analyzed were compared with IS10500:2012. Details of water sampling locations are present in table 3.5. In addition, water quality details are given in the table 3.6. Locations of Core and Buffer Zone water samples are given in the fig 3.8. The following image of Geo referenced Topomap showing locations of water samples are given in the fig 3.9.

Table 3.5 Water Sampling Locations

Sampling Code	Location	Surface/ Ground water	Latitude	Longitude	Distance (km)	Direction
WQ1	Core Zone	GW	10°46'43.71"N	78° 5'8.77"E	—	—
WQ2	Vellagoundanpatti	GW	10°46'28.36"N	78° 4'35.06"E	1.0	SE
WQ3	Kottanatham	GW	10°46'19.81"N	78° 4'55.45"E	0.8	S
WQ4	K.Pichampatti	GW	10°47'38.80"N	78° 4'49.29"E	2.4	SW
WQ5	Thirumakkam Patti	GW	10°46'16.03"N	78° 6'21.58"E	1.6	NE



Fig No 3.8 Water Sample Collection at Core and Buffer Zone

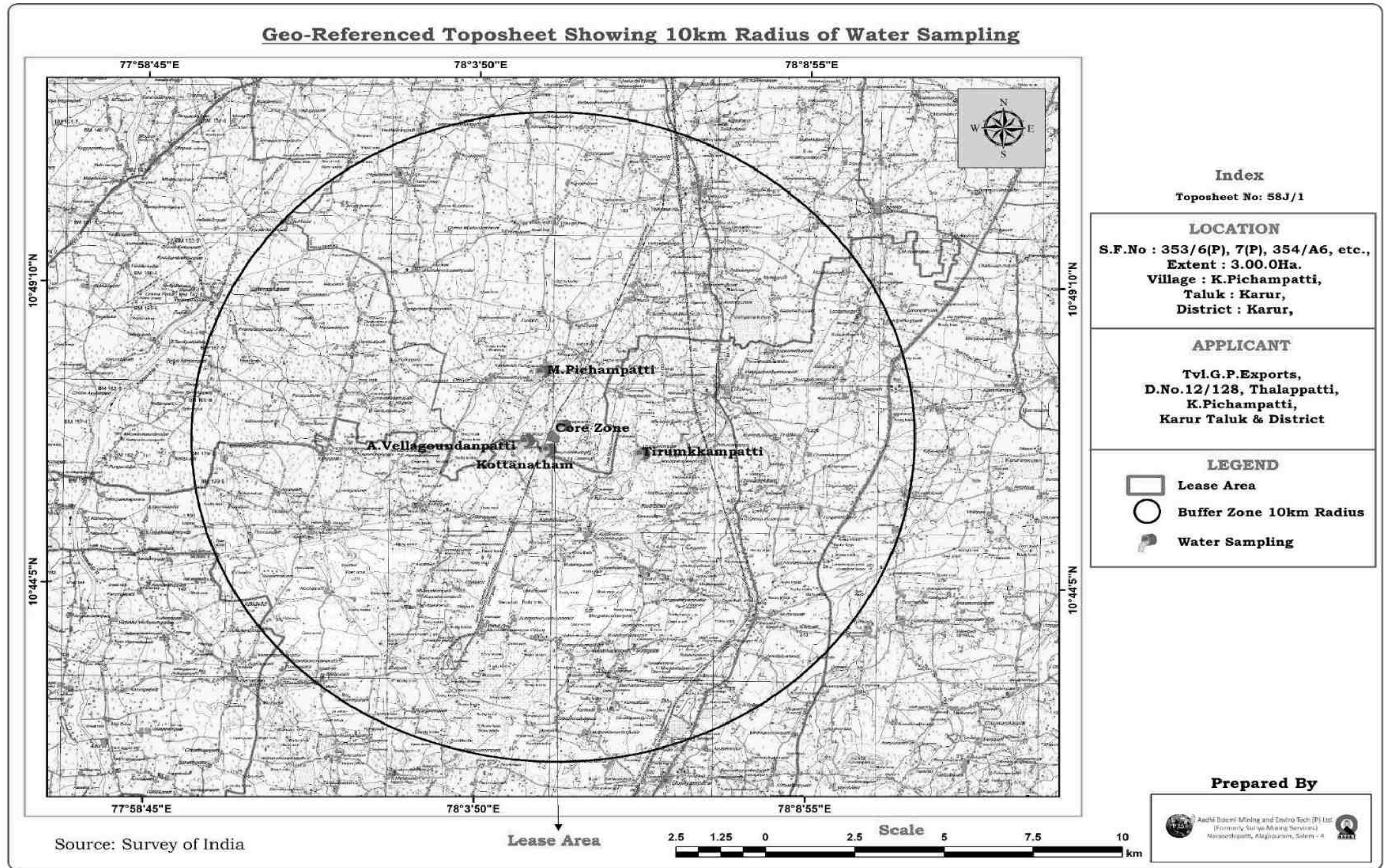


Fig No 3.9 Geo Referenced Toposheet showing water sampling station around 10km radius

Table 3.6 Result of Water Quality Analysis

Sampling Site		Parameters												
		pH	EC μs/cm	Tur (NTU)	TSS (mg/l)	TDS (mg/l)	TH (mg/l)	Ca (mg/l)	Mg (mg/l)	Cl (mg/l)	TA (mg/l)	BOD (mg/l)	SO ₄ ²⁻ (mg/l)	Fe (mg/l)
Core Zone		6.99	1205	4.8	24	724	524	149	37	159	168	12.2	88	0.34
Buffer Zone	Vellagoundanpatti	7.23	1649	5.7	28	988	708	208	46	240	148	14.2	114	0.06
	Kottanatham	6.90	1223	3.8	16	736	496	151	29	142	176	12.6	72	0.02
	K.Pichampatti	7.53	1753	5.9	28	1052	824	223	65	260	144	17.1	106	0.05
	Thirumakkam Patti	7.59	1380	3.8	24	828	584	96	84	207	220	11.8	65	0.03
IS 3025/Ref lab report	AL	6.5-8.5	-	1	-	500	200	75	30	250	200	-	200	0.3
	PL	6.5-8.5	-	5	-	2000	600	200	100	1000	600	-	400	0.3

***Protocol followed by:** APHA 23rd Edition 2017

Tur- Turbidity, **TSS-** Total Suspended Solids, **TDS-** Total Dissolved Solids, **TH-** Total Hardness, **Ca²⁺-** Calcium, **Mg²⁺-** Magnesium, **Cl-** Chloride, **TA-** Total Alkalinity, **Phe-** Phenolphthalein, **SO₄²⁻-** Sulfate and **Fe-** Iron.

AL- Acceptable Limit.

PL- Permissible limit.

3.6.3 Interpretation of Water Quality Data

Water Quality results were compared with acceptable limits for Drinking Water as per the Standard IS 10500:2012. All the parameters of Water samples meet the acceptable limits of IS 10500: 2012 and found to be within the limits.

- pH of the water samples ranged from 6.90-7.59 pH in water samples collected from the locations are within the permissible limit between 6.5-8.5.
- EC of the water samples ranged from 1205 to 1753 Micro mhos/cm in the samples collected.
- Turbidity from the water samples collected from both core and buffer area was observed water samples ranged from 3.8-5.9 NTU.
- Total suspended solids are observed as 16-28 mg/l in all the water samples collected from both core and buffer area.
- Total Dissolved Solids found in the range of 724-1052 mg/l. In all the samples TDS was found beyond the acceptable limit of 500mg/l and maximum value was recorded at K.Pichampatti Village.
- Total Hardness of water sample of all the locations including core and buffer zone was found exceeding in the permissible limit of 500 mg/l. The maximum value of 824 mg/l was found in K.Pichampatti village and minimum value of 496 mg/l was observed in Kottanatham village.
- Calcium value observed in entire buffer locations were in the range of 96-223 mg/l, exceeds the acceptable limit of 75 mg/l as per Drinking water standards. Whereas in core zone the value was observed to be 149 which is well exceeding the limit of 75 mg/l.
- Magnesium value recorded in all the locations including the core zone was within the range of 29-84 mg/l.
- Chlorides in all the water samples were recorded and highest chloride concentration found in Vellagoundanpatti Village. In other villages the values observed were within permissible limits. The observed value was within the range of 142-260 mg/l.
- Iron & Sulfates in water samples collected from both core and buffer location were observed to be well within the limits.

3.7 Hydro Geology

3.7.1 Major Geological formations

Geology: Geologically, the entire district can be broadly classified into hard rock and sedimentary formations. a) Hard rock formations More than 90% of the district is underlain by hard rock of Archaean age. The gneissic type of formation is the major formation among the various types of hard rock's Charnockite occurs in this district as pockets in Karur and Aravakurichi taluks. Quartzites which are resistant to weathering are also seen as patches in charnockite and gneiss varieties. 4 b) Sedimentary formations Recent alluvial deposits such as sand, silt, clay, gravel, etc., which are transported sediments by river are found on either side of Cauvery river in Karur, Krishnarayapuram and Kulithalai blocks. These formations are overlying the hard rock. Drilling of bore holes: The occurrence and movement of groundwater in hard rock formations are restricted to the porous zones of weathered formations and the open systems of fractures, fissures and joints. Generally, in hard rock regions, occurrence of weathered thickness is discontinuous both in space and depth. Karur district is underlain entirely by Archaean Crystalline formations with recent alluvial deposits occurring along the river and streams courses. Weathered, fissured and fractured crystalline rocks and the recent alluvial deposits constitute the important aquifer systems in the district. The porous formations in the district are represented by river alluvium. These alluvial deposits are confined to the Major River and stream courses only. Ground water occurs under phreatic conditions. The maximum saturated thickness of these aquifers is upto 10 m depending upon the topographic conditions. The hard consolidated crystalline rocks of Archaean age represent weathered, fissured and fractured formations of gneisses, granites, charnockites and other associated rocks. Ground water occurs under phreatic conditions in the weathered mantle and under semi-confined conditions in the fractured zones. The thickness of the weathered mantle of the hard rocks is varying from less than a meter to as much as 20.10 m. It is within the depth of 15m in major part of the district. The Specific capacity of large diameter wells tested in crystalline rocks from 31 to 200 lpm / m. of drawdown. The yield characteristics of wells vary considerably depending on the topographic set-up, lithology and the degree of weathering. The yield of bore wells drilled down to a depth of 70 to 100 m, by various state agencies mainly for domestic purposes ranged from 100 to 600 lpm. The aquifer and well parameters of the wells shows wide variation.

3.7.2. Aquifer Parameters

More or less, 90 percent of Karur district is covered by crystalline formation of Archaean age. The thickness of aquifer in hard rock formation varies from 15 to 35 m. The inter granular porosity is essentially depend upon the intensity and degree of weathering and fracture development in the bed rock. Deep weathering is developed in gneissic formations and moderate weathering in charnockite formation. The alluvial formation stretches mainly along the river course of Cauvery. The aquifer parameters of the formations hard rock and alluvium are furnished in the table below.

3.7.3 Geophysical Electrical Resistivity Survey

For understanding subsurface hydrogeological conditions geophysical investigation is carried out. The geophysical investigation is especially useful in the areas where there are no adequate exploratory well data about the aquifer conditions. Electric resistivity method is one of the well-known geophysical methods for delineating lateral as well vertical discontinuities in the resistivity's of the earth's subsurface layers. It is mainly applied to locate aquifers in the field of hydrogeology. The present study makes use of vertical electric sounding (VES) to delineate earth's subsurface layers. The electrical resistivity investigation used four electrodes collinear set up where current is sent through outer electrodes into the ground and the inner electrodes measure the potential difference, as shown in Figure 3.10.

3.7.4 Methodology and Data Acquisition

Geophysical Electrical Resistivity survey conducted in schlumberger Configuration (VES) method using IPI2 win Software. The Schlumberger array is an array where four electrodes are placed in line around a common midpoint. The two outer electrodes, A and B, are current electrodes, and the two inner electrodes, M and N, are potential electrodes placed close together. With the Schlumberger array, for each measurement the current electrodes A and B are moved outward to a greater separation throughout the survey, while the potential electrodes M and N stay in the same position until the observed voltage becomes too small to measure (source). At this point, the potential electrodes M and N are moved outward to a new spacing. As a rule of the thumb, the reasonable distance between M and N should be equal or less than one-fifth of the distance between A and B at the beginning. This ratio goes about up to one-tenth or one-fifteenth depending on the signal strength. The Schlumberger array is commonly used for vertical electrical sounding (VES) for groundwater and aggregate minerals. Vertical electrical sounding (VES) using the Schlumberger array provides better resolution.

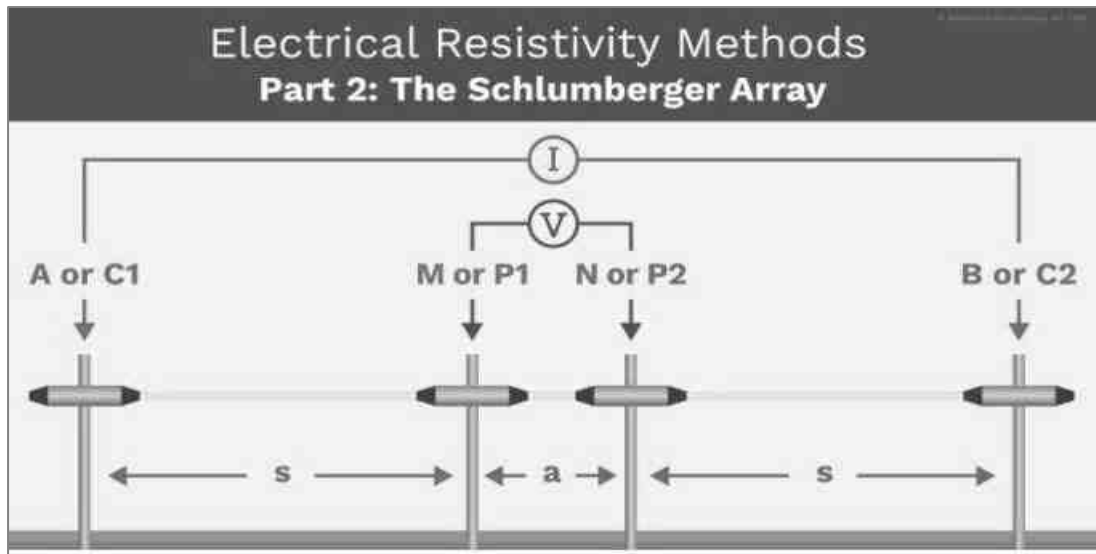


Figure 3.10 Schlumberger Array



Figure 3.11. DDR-3 Electrical Resistivity Meter

The resistivity surveys were carried by the consultants in the site at selected one point at Tested in the proposed Project site. The vertical electrical sounding (VES) using digital resistivity meter is carried out and the apparent resistivity curves are obtained. Ipi2 win software is used and the data are interpreted. The computer output of geo-electric layers are given in Figure 3.13 which gives the Resistivity cross section and Resistivity curve, depth wise resistance and interpreted layers with corresponding resistivity.



Figure 3.12. Photos showing Geophysical survey conducted at proposed project site

The study area of lies in the Northern latitude of $10^{\circ}46'35.78''N$ Eastern longitude $78^{\circ}4'59.29''E$ which is represented by Toposheet No. 58 J/2. The applied area is mostly plain, elevation of 226m above mean sea level.

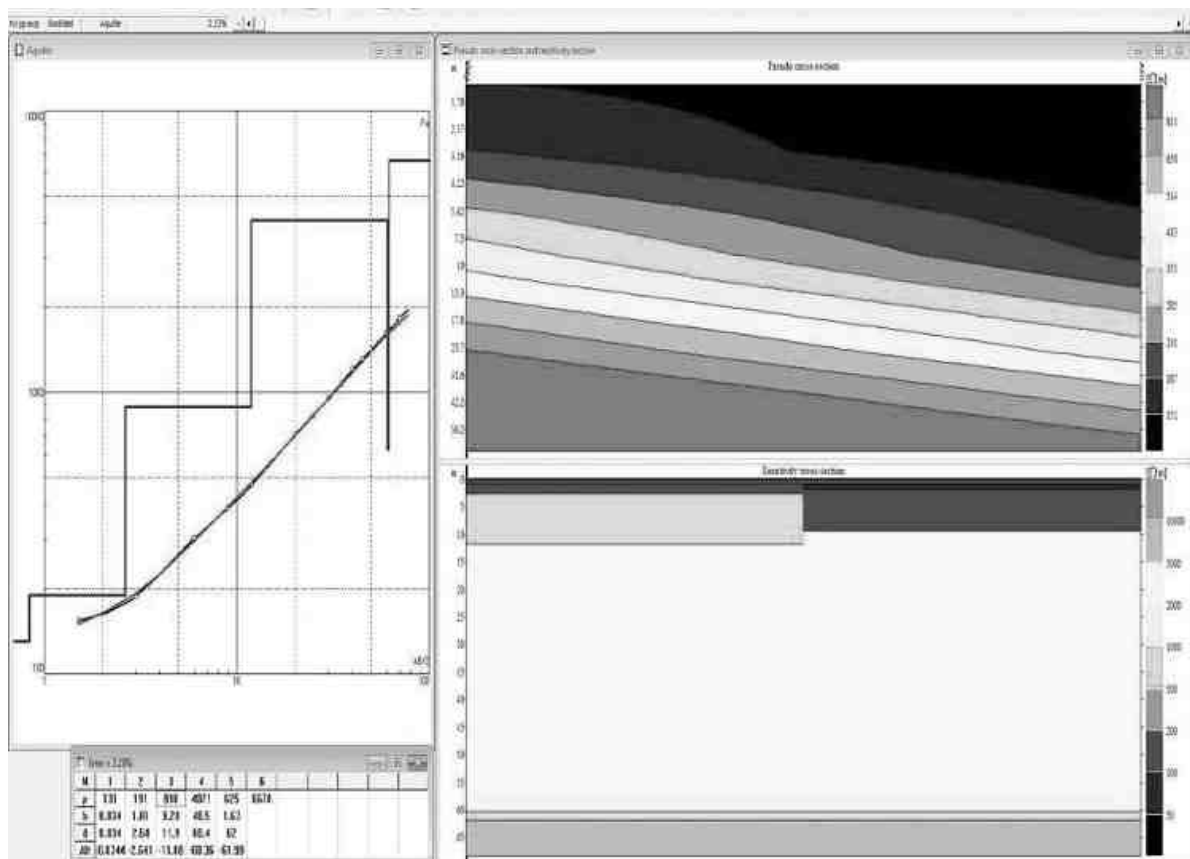


Figure 3.13. Image showing Resistivity cross section and Resistivity curve, depth of data

Table 3.7 Geophysical Vertical Electrical Sounding Data

Geo-Coordinates: Latitude 10°46'35.78"N, Longitude 78° 4'59.29"E					
S.No.	AB/2 (m)	MN/2 (m)	Geometric factor (K)	Resistance Value (R) ohm	Apparent Resistivity Rho ohm-meter
1	1.5	0.5	6.3	25.4	160
2	3	0.5	27.5	5.42	149
3	6	0.5	112.3	1.74	195
4	9	0.5	253.6	0.88	223
5	12	0.5	451.4	0.56	253
6	12	2	109.9	1.98	218
7	15	2	173.5	1.34	232
8	20	2	310.9	0.96	298
9	25	2	487.5	0.76	371
10	30	2	703.4	0.64	450
11	30	6	226.1	1.92	434
12	35	6	311.1	1.72	535
13	40	6	409.2	1.46	597
14	45	6	520.5	1.4	729
15	50	6	644.7	1.24	799
16	60	6	932.6	1.06	989
17	60	10	549.5	1.74	956
18	70	10	753.6	1.52	1145
19	80	10	989.1	1.47	1454
20	90	10	1256	1.43	1796
21	100	10	1554.3	1.4	2176

3.7.5 Geophysical Data Interpretation

0-2.64m: Top soil & Gravel with 191 Ohm. Resistivity

2.64-11.9m weathered rock formation with 890 ohm. Resistivity

11.9-60.4m: massive granite formation with 4231 Ohm. Resistivity

60.4-62m: Resistivity Jointed and fractured rock with about 625ohm. Resistivity

Above 62m: hard massive granite formation with 6670 Ohm. Resistivity

The presence of top soil and Gravel 0-2.64m followed by 2.64-11.9.8m with low resistivity is indicative of the weathered rock formation. 11.9-60.4m massive granite formation. The water table is having curve breaks around 60.4-62m depth with possible water level.

3.7.6 Groundwater Levels and flow direction

As the groundwater moves from the points of highest static groundwater elevation to the points of lowest static groundwater elevation under the influence of gravity, data regarding depth to groundwater levels are essential to infer the direction of groundwater movement within the study area. Knowledge of groundwater flow direction is important for selecting suitable locations for background groundwater quality monitoring wells and for identifying recharge and discharge zones. Therefore, data regarding groundwater elevations were collected from 6 open wells at various locations within 1km radius around the proposed project site for the period from December 2025 to February 2026. The data thus collected from 6 open wells are provided in Table 3.10 According to the data, the three months' average depths to the static water level in open wells range from 13.24 to 15.76m BGL. The depths to static water level and potentiometric surface data were used to calculate static groundwater table and potentiometric surface elevations for open wells, respectively to draw contour lines connecting groundwater elevation (also known as equipotential hydraulic head) to determine the groundwater flow direction perpendicular to the contour lines.

From the maps of groundwater flow direction (Figure 3.14), it is understood that most of the open well groundwater underneath the proposed project site flows towards the open well number 4 located in NE of the proposed project site. On the basis of the groundwater flow information, OW-6 (west) is proposed as the up gradient/background monitoring well, while OW-4 (north-east) is recommended as the down gradient sentinel well for periodic groundwater level and quality monitoring. However, groundwater flow is influenced by factors like the water table's elevation, the permeability of the surrounding soil and rock, and the presence of any geological structures like fractures or faults. Groundwater flows from areas of higher hydraulic head (pressure) to areas of lower hydraulic head, and it can be affected by pumping from bore wells, which can create cones of depression in the water table.

Table 3.10 Water Level of Open Wells within 1 km Radius

Open well ID	Latitude	Longitude	Depth to Static Water Level BGL (m)			
			Dec 2025	Jan 2026	Feb 2026	Average Water Level
OW-1	10°46'25.82"N	78° 5'8.11"E	13.96	14.94	16.35	15.08
OW-2	10°46'36.52"N	78° 5'16.85"E	13.85	14.4	15.87	14.71
OW-3	10°46'20.91"N	78° 5'26.89"E	12.9	13.85	14.93	13.89
OW-4	10°46'44.00"N	78° 5'33.20"E	12.08	13.14	14.5	13.24
OW-5	10°46'56.22"N	78° 5'4.52"E	12.63	13.74	14.8	13.72
OW-6	10°46'36.64"N	78° 4'36.19"E	14.6	15.77	16.92	15.76

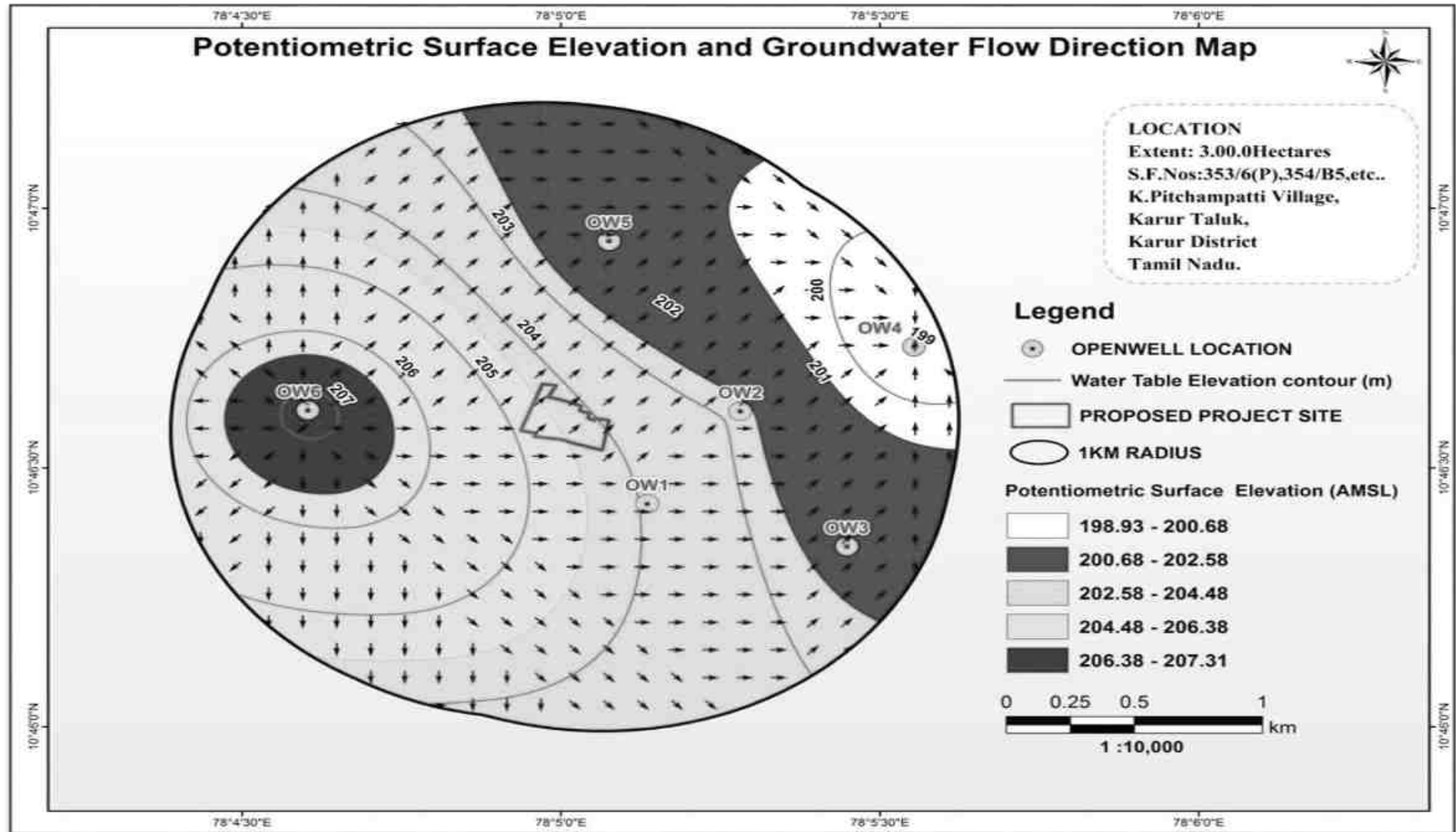
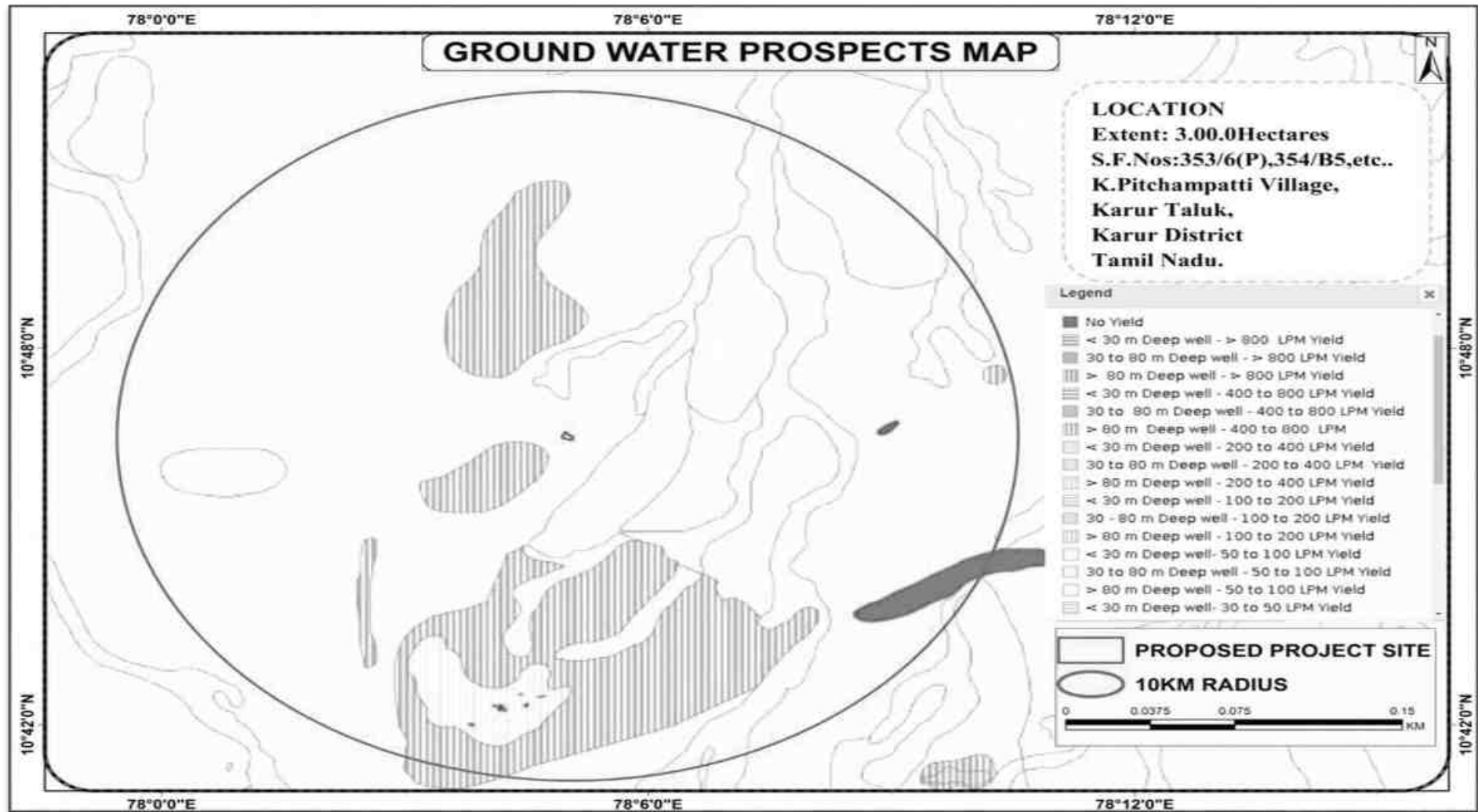


Figure 3.14 Potentiometric Surface Elevations and Groundwater Flow Direction Map within 1 km Radius of the Proposed Project Site



Source <https://bhuvan-app1.nrsc.gov.in/gwis/gwis.php>

Figure 3.15 Ground Water prospects map proposed project site around 10km Radius

3.7.7 Conclusion

The hydro geological, geophysical studies indicate the water bearing aquifer is located at 60-62m below ground level (BGL). The maximum depth of mining proposed project for five years 35m below ground level. Therefore, the mining operation will not affect the aquifer throughout the entire mine life period.

3.8 Soil Environment

The type of soil is an important factor for the growth of plants and crops in any area. The soil system has various criteria to classify the soils of a region such as geology, humidity, rainfall pattern, soil texture, soil salinity etc.

Soil quality study has been carried out at the site and in the study area of 10 km radius around the project site to understand the physical-chemical nature of the soil. Soil sampling was carried out at 3 selected locations.

The frequency and methodology of soil quality sampling process is given in table 3.11. Moreover, Georeferenced soil Map of around 10 km radius is given in fig 3.12. Table 3.12 presents the soil quality monitoring locations of the study area. The sampling was carried out once in the study period.

Table 3.11 Frequency and Methodology for Soil sampling & monitoring

S. No	Particulars	Details
1	Frequency	One sample from each station— once during the Study Period
2	Methodology	Soil Sample has been collected as per the CPCB standard

3.8.1 Methodology of Soil Environment

Soil samples were collected from different depth below the surface. The samples were filled in polythene bags, labeled in the field with number and site name and sent to laboratory for analysis. The samples were homogenized and the quality was reduced using the coning and quartering method to provide a respective sample for analysis. The samples were analyzed as per Indian Standards IS: 2720 (Revised Parts).

- ❖ To determine the baseline soil characteristics of the study area
- ❖ To determine the impact of the project on soil characteristics and
- ❖ To determine the impact on soils more importantly loss of fertility from agricultural productivity point of view.

Table 3.12 Soil Sampling Locations

CODE	Place	Latitude (N)	Longitude (E)	Distance (km)	Direction
SQ1	Core Zone	10°46'34.17"N	78° 5'1.23"E	-	-
SQ2	Vellagoundanpatti	10°46'30.12"N	78° 4'36.14"E	1.0	SE
SQ3	Kottanatham	10°46'24.31"N	78° 4'57.23"E	0.8	S
SQ4	K.Pichampatti	10°47'36.45"N	78° 4'50.80"E	2.4	SW
SQ5	Thirumakkam Patti	10°46'20.38"N	78° 6'18.47"E	1.6	NE

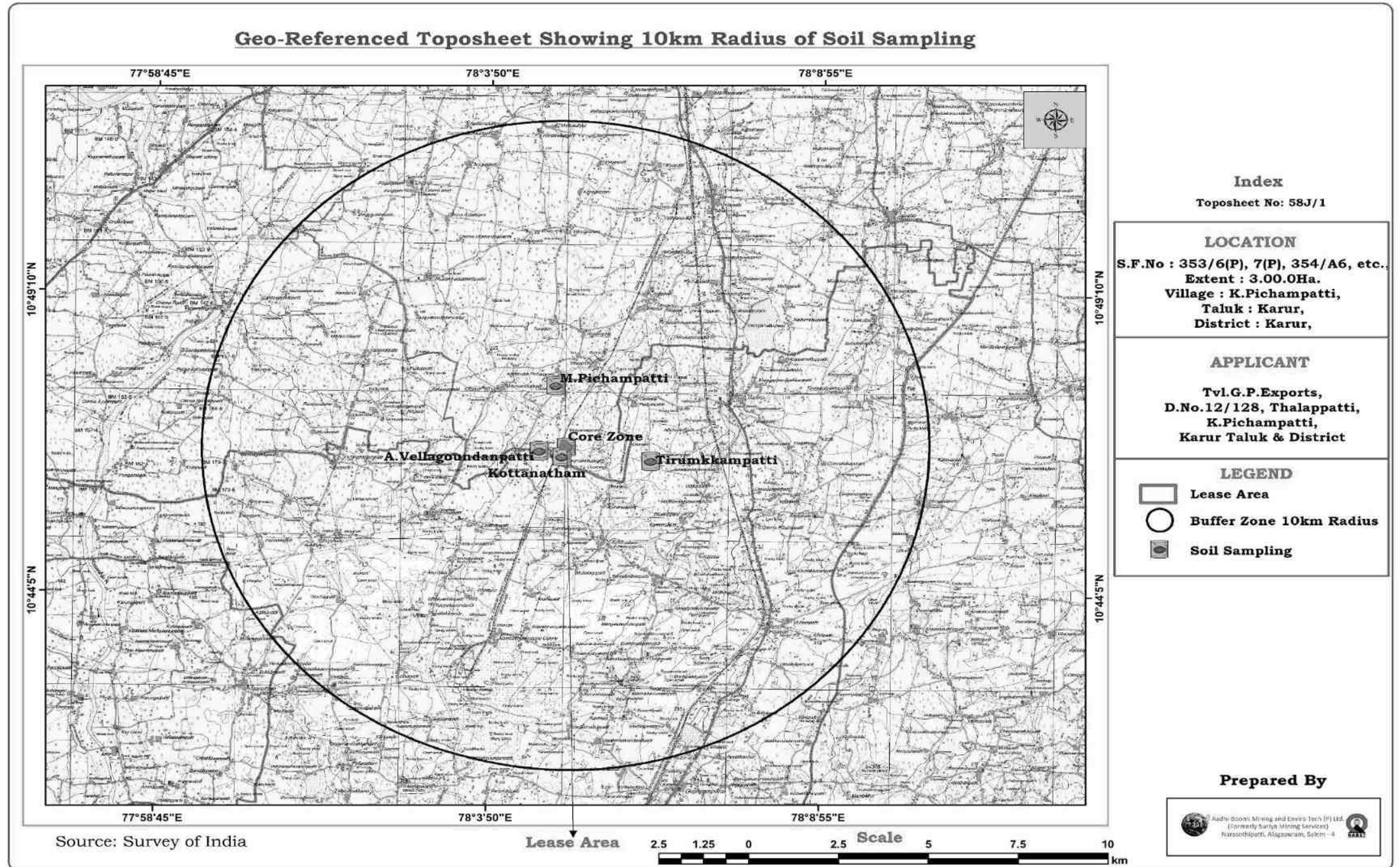


Fig No 3.16 Geo referenced Toposheet showing Soil sampling Locations around 10km radius



Fig No 3.17 Soil Sampling at Core and Buffer Zone

Table 3.9 Result of Soil Sample Analysis

Sample Site		Soil Parameters											
		pH (10%Sol)	EC (10% Sol) µs/cm	M (%)	BD (g/cc)	WHC (%)	Texture (%)			OM (%)	Ca (Meq/l)	Mg (Mqe/ l)	Cl (Meq/l)
							Sand	Silt	Clay				
Core Zone		7.16	258	2.4	1.2	48	48	32	20	0.2	0.8	0.6	0.7
Buffer Zone	Vellagoundanpatti	7.05	297	2.6	1.06	56	54	24	22	0.26	1.2	0.6	0.9
							Sandy Clay Loam						
	Kottanatham	7.16	185	1.9	1.24	64	52	28	20	0.3	1.2	1.0	0.8
							Sandy Loam						
	K.Pichampatti	6.96	215	2.5	1.04	44	48	28	24	0.2	1.8	1.0	1.4
							Sandy Loam						
	Thirumakkam Patti	7.68	294	2.1	1.30	56	52	28	20	0.2	2.2	0.6	1.2
							Sandy Loam						
EC-Electrical Conductivity, M- Moisture, BD- Bulk Density, WHC- Water Holding Capacity, OM- Organic Matter, Ca- Calcium, Mg-Magnesium and Cl-Chloride. BDL = Below the Detectable Limit. DL = Detection Limit.													

3.8.2 Observations

Soil characteristics were delineated through specific parameters viz. moisture, bulk density, texture, water holding capacity, organic matter and other parameters as depicted in table 3.9.

pH is an important parameter indicative of alkaline or acidic nature of soil. It greatly affects the microbial population as well as solubility of metal ions and regulates nutrient availability. The pH varies from 6.96 to 7.68 in the soil samples. In Core area of G.P Exports the pH 7.16 value of soil was neutral.

Electrical conductivity (EC), a measure of soluble salts in the soil was in the range of 185 $\mu\text{S}/\text{cm}$ to 297 $\mu\text{S}/\text{cm}$.

Regular cultivation practices increase the **bulk density** of soils thus inducing compaction. This results in reduction in water percolation rate and penetration of roots through soils. The soils with low bulk density have favorable physical conditions whereas those with high bulk density exhibit poor physical conditions for agriculture crops. The bulk density of the soil samples is in the range of 1.04g/cc to 1.30g/cc respectively, which indicate favorable physical condition for plant growth.

Water holding capacity was found to be in the range of 48% to 64% in all the soil samples collected from core and buffer villages.

Organic matter present in soil influences its physical and chemical properties and is responsible for stability of soil aggregates. Organic matter was found to be in the range of 0.2- 0.3%. This shows that soil was deficient in organic matter content.

Available Chlorides content range of between 0.7 to 11.4 meq/l in both core and buffer villages.

Magnesium level of soil sample in the core zone and buffer zone was found to be 0.6 to 1.0 meq/l in all the soil samples collected.

Calcium content in these soils ranges between 0.8 to 2.2 meq/l thereby indicating that the soils are with low levels of available Calcium content.

3.9 ECOLOGY AND BIOLOGICAL ENVIRONMENT

3.9.1 Description of Karur District Environment

Karur Taluk, which was once a part of Coimbatore district, was merged with Tiruchirappalli district during 1910. Karur District came into existence by the bifurcation of Trichy District as per G.O.(Ms)No.683 Revenue (RA1(1)) Department dated:25.07.1996. It is bounded on the North by Namakkal, South by Dindugal, East by Tiruchirappalli and West by Erode districts. The District is located between 10° 37'N to 11°12' N Latitude, 77° 46' E to 78° 15'E Longitude. Karur town is located on the bank of Amaravathi River. Its area is 2895.6 Sq.Km.

Karur district comprises two divisions of Karur and Kulithalai, seven circles namely Karur, Aravakurichi, Manmangalam, Bukalur, Kulithalai, Krishnarayapuram and Kadavur and 203 revenue villages. The district has 157 panchayats and eight districts namely Karur, Dandoni, Aravakurichi, K.Paramathi, Kulithalai, Krishnarayapuram, Kadavur, Thogamalai. In this district there are two municipalities namely Karur and Kulithalai and eleven municipalities namely Aravakurichi, Krishnarayapuram, Marudur, Nangavaram, Old Jayangkonda Solapuram, Pallapatti, Puliur, Punchai Thotakurichi, Punsai Bukhlur, TNBL Bukhlur, Uppidamangalam.

The average annual rainfall is 652.2 mm. The district receives the rain under the influence of both southwest and northeast monsoons. The major rainfall occurs during north-east monsoon. The southwest monsoon rainfall is highly erratic and summer rains are negligible.

The mean maximum temperature ranges from 26.7 to 38.56 °C and the mean minimum temperature ranges from 18.7°C to 29.3°C. The day time heat is oppressive and the temperature are as high as 43.9°C. The lowest temperature recorded is of the order of 13.9°C.

3.9.2 Agriculture activities in Karur District

Karur district has specifically known for Moringa and Banana cultivation and other prominent crops under cultivation are Tapioca, Gloriosa, Betelvine, Jasmine, Ixora, Coconut and other vegetable crops. Karur district Soils types' clay l red soil dark red soil, the other soil series are Palladam, Palathurai, palaviduthi, Vannapatti and Mixed alluvium.

The principal crops of the district are paddy, millets, pulses, oilseeds, sugarcane and banana. The major paddy area is in Kulithalai and Krishnarayapuram taluks. Pulses are grown in rice fallow areas. In uplands millets like sorghum, pearl millet pulses such as red gram, horse gram oilseeds such as groundnut, gingerly and sunflower are grown both under irrigated and rain fed conditions.

Table No. 3.15: Details of Important crops in Karur District

S. No	Common name	Scientific name	Family
1.	Paddy	<i>Oryza sativa</i>	Poaceae
2.	Cholam	<i>Sorghum bicolor</i>	Poaceae
3.	kambu	<i>Pennisetum glaucum</i>	Poaceae
4.	Ragi	<i>Eleusine coracana</i>	Poaceae
5.	Groundnut	<i>Arachis hypogaea</i>	Fabaceae
6.	Sugarcane	<i>Saccharum officinarum</i>	Poaceae
7.	Black gram	<i>Vigna mungo</i>	Fabaceae
8.	Cotton	<i>Gossypium herbaceum</i>	Malvaceae
9.	Vargu	<i>Paspalum crobiculatum</i>	Poaceae
10.	Maize	<i>Zea mays</i>	Poaceae
11.	Green gram	<i>Vigna radiata</i>	Fabaceae
12.	Red gram	<i>Cajanus cajan</i>	Fabaceae
13.	Castor	<i>Ricinus communis</i>	Euphorbiaceae
14.	Kuthiraivali	<i>Echinochloa frumentacea</i>	Poaceae
15.	Horsegram	<i>Macrotyloma uniflorum</i>	Fabaceae

3.9.3 Forest resources

The forest resources of this district are very meagre when compared to the State as a whole. Karur district has only about 3.11% of its land under forest cover. The total forest area of Karur District is 6187 Hectares. All the forests are degraded forests and tropical dry thorny forests.

3.9.4 Water resources

Major Rivers flowing the district are

- Cauvery
- Amaravathy
- Nanganjiyaaru
- Noyyal

Major part of Karur district is drained by Cauvery River. Amaravathi, Kodavanar and Pungar are the important rivers draining the western part of the district and the river Pungar drains in eastern part of the district. The drainage pattern, in general, is dendritic. All the rivers are seasonal and carry substantial flows during monsoon period. The River Cauvery is flowing on the northern and eastern boundaries.

3.9.5 Study Area Ecology

A survey was conducted to study the flora around 10 km radius. Some of the information was gathered from the local habitants. All the collected data were classified to interpret the impact of pollution on the flora and fauna of that region. Survey of the mild plants as well as cultivated crop plants was made and all the available information was recorded. The primary data collected was compared with the Secondary data collected from Forest Department. There are no ecologically sensitive areas such as Biosphere reserves, Wildlife Sanctuaries, national Parks and other protected areas in or around the project site in a radius of 10 km. Generate Baseline Data from field observations.

3.9.6 Methodology of Sampling

A methodology of Sampling Flora and fauna studies were carried out during the winter season to assess the list of terrestrial plant and animal species that occur in the core area and the buffer area up to 10 km radius from the project site. No damage is created to flora and fauna during the sampling. None of the specimens were collected as voucher specimens and for the herbarium. It is basically done through field observations only. The study of flora is conducted as per the guidelines of the Ministry of Environment Forest and Climate Change (MoEF&CC) and Botanical Survey of India (BSI).

The study involved in the collection of primary data by conducting a survey in the field, examination of flora and fauna records in previously published reports and records. Analysis of the information is the view of the possible alteration in the environment of the project site. For the survey of fauna, both direct and indirect observation methods were used

3.9.7 Flora

The present study on the floral assessment for the existing project activity is based on extensive field survey of the area. The plant species were identified with the help of plant taxonomy manual, literatures and Botanical Survey of India website (efloraindia.nic.in). In addition besides the collection of plant species, information was also collected with vernacular names of plant species made by local inhabitants.

3.9.7.1. Flora in Core Zone

Taxonomically a total of 27 species distributed in 16 families have been recorded from the core mining lease area. Based on habitat classification of the enumerated plants the majority of species were tree 15 (56%) followed by shrubs 6 (22%), herbs 5 (19%) and creeper 1 (3%) Details of flora with the scientific name were mentioned in table 3.16 and fig 3.21. No ecologically sensitive plant species has been reported from this area.

3.9.7.2. Flora in Buffer Zone

Taxonomically a total of 49 species distributed among 30 families have been recorded from the buffer area. Based on habitat classification of the enumerated plants the majority of species were tree 25 (51%) followed by shrubs 12 (24%), herbs 8 (16%) and rest 4 (4%) is a climber. Details of flora with the scientific name were mentioned in table 3.16 and fig 3.21.

3.9.7.3 Crop Pattern in Buffer Zone

The buffer area of mining lease area mostly cultivated for varieties of flowers such as, jasmine, firecracker flower, marigold and crops area mango and groundnut. Details crops with name mentioned in table 3.16.

Table No. 3.11: Floral Diversity in Core and Buffer area

Sl. No.	Common Name	Local Name	Family	Scientific Name	Core	Buffer
TREES						
1.	Pomegranate Tree	Mathulai Maram	Punicaceae	<i>Punica granatum</i>	+	+
2.	Coconut Tree	Tennai Maram	Arecaceae	<i>Coccus nucifera</i>	+	+
3.	Banana Tree	Vaazhai Maram	Musaceae	<i>Musa paradisiaca</i>	-	+
4.	Manila tamarind	Kodukkapuli Maram	Fabaceae	<i>Pithecellobium dulce</i>	+	+
5.	Palmyra palm Tree	Panai Maram	Arecaceae	<i>Borassus flabellifer</i>	+	+
6.	Bamboo Tree	Munkil Maram	Poaceae	<i>Bambusa vulgaris</i>	+	+
7.	Teak Tree	Tekku Maram	Lamiaceae	<i>Tectona grandis</i>	+	+
8.	Southwest Thorn	Seemai karuvellam Maram	Fabaceae	<i>Prosopis juliflora</i>	+	+
9.	Otaheite gooseberry Tree	Siru neli Maram	Phyllanthaceae	<i>Phyllanthus acidus</i>	+	+
10.	Drumstick Tree	Murungai Maram	Moringaceae	<i>Moringa oleifera</i>	+	+
11.	Guava Tree	Koiya Maram	Myrtaceae	<i>Psidium guajava</i>	+	+
12.	Neem Tree	Vempa Maram	Meliaceae	<i>Azadirachta indica</i>	+	+
13.	Papaya Tree	Papali Maram	Caricaceae	<i>Carica Papaya</i>	+	+
14.	Indian date Tree	Elandhai Maram	Rhamnaceae	<i>Ziziphus mauritiana</i>	+	+
15.	Mango Tree	Maa Maram	Anacardiaceae	<i>Mangifera indica</i>	+	+

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16.	Iron wood Tree	Savukku Maram	Casuarinaceae	<i>Casuarina equisetifolia</i>	+	+
17.	Lemon Tree	Ealumichai Maram	Rutaceae	<i>Citrus limon</i>	-	+
18.	Black plum Tree	Naval Maram	Myrtaceae	<i>Syzygium cumini</i>	+	+
19.	Sapodilla Tree	Sappota Maram	Sapotaceae	<i>Manilkara zapota</i>	-	+
20.	Lemon-Scented Gum	Thaila Maram	Myrtaceae	<i>Eucalyptus citriodora</i>	+	+
21.	Chebolicmyrobalan	Kadukkai Maram	Combretaceae	<i>Terminalia chebula</i>	-	+
22.	Pungamin Tree	Pungai Maram	Fabaceae	<i>Pongamia pinnata</i>	+	+
23.	Custard apple	Seethe pazham Maram	Annonaceae	<i>Annona squamosa</i>	+	+
24.	Thorn mimosa	Karuvelam Maram	Mimosaceae	<i>Acacia nilotica</i>	+	+
25.	Tamarind	Puliya Maram	Fabaceae	<i>Tamarindus indica</i>	+	+
26.	Sweet acacia Tree	Kastuurivel Maram	Fabaceae	<i>Vachellia farnesiana</i>	-	+
27.	Bodhi Tree	Arasa Maram	Moraceae	<i>Ficus Religiosa</i>	-	+
28.	Cannonbal tree	Nagalinga Maram	Lecythidaceae	<i>Couroupita guianensis</i>	-	+
29.	Scarlet Wistaria Tree	Aagathikerai Maram	Fabaceae	<i>Sesbania grandiflora</i>	-	+
30.	Banyan Tree	Ala Maram	Moraceae	<i>Ficus benghalensis</i>	-	+
31.	Cluster fig	Aathi Maram	Moraceae	<i>Ficus racemosa</i>	+	+
32.	Portia Tree	Poovarasa Maram	Malvaceae	<i>Thespesia populnea</i>	+	+
SHRUBS						
1.	Sourbush	Vellai karpooravalli	Asteraceae	<i>Pluchea carolinensis</i>	+	+
2.	Spiny broom	Thumbanail	Fabaceae	<i>Calicotome spinosa</i>	+	+
3.	Japanese pittosporum	Kattu sammanki	Pittosporaceae	<i>Pittosporum oreillyanum</i>	+	+

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4.	Prickly pear	Sappathi kalli	Cactaceae	<i>Opuntia ficus indica</i>	+	+
5.	Madagascar Periwinkle	Nithiya kalyani	Apocynaceae	<i>Vinca rosea</i>	+	+
6.	Scarlet jungle flame	Ittili poo/ Sinduram	Rubiaceae	<i>Ixora coccinea</i>	-	+
7.	Henna plant	Maruthani chedi	Lythraceae	<i>Lawsonia inermis</i>	+	+
8.	Gwar patha	Katrazai	Liliaceae	<i>Aloe barbadensis miller</i>	+	+
9.	Peacock flower	Mayil kontai	Fabaceae	<i>Caesalpinia pulcherrima</i>	-	+
10.	Marigold	Samanthi cheedi	Asteraceae	<i>Tagetes erecta</i>	-	+
11.	Firecracker flower	Kanakambaram	Acanthaceae	<i>Crossandra infundibuliformis</i>	-	+
12.	Hibiscus	Cembarutti	Malvaceae	<i>Hibiscus rosanaceae</i>	-	+
13.	Jimson weed	Ummathai cheedi	Solanaceae	<i>Datura stramonium</i>	+	+
14.	Coat buttons	Kenathuppondu	Asteraceae	<i>Tridax porcumbens</i>	-	+
15.	Rose	Rosa	Rosaceae	<i>Rosa rubiginosa</i>	-	+
HERBS & GRASS						
1.	Giant milkweed	Earukkam poo chedi	Apocynaceae	<i>Calotropis gigantea</i>	+	+
2.	Castor bean	Aamanakku	Euphorbiaceae	<i>Ricinus communis</i>	+	+
3.	Comb bushmint	Selvantha chedi	Lamiaceae	<i>Hyptis pectinata</i>	+	+
4.	Bellyache Bush	Aathalai	Euphorbiaceae	<i>Jatropha glandulifera</i>	+	+
5.	Tanner's cassia	Avaram poo Maram	Fabaceae	<i>Senna auriculata</i>	+	+
6.	Majestic Agave.	Aanai katalai	Agavaceae	<i>Agave beauleriana</i>	+	+
7.	Indian Copper leaf	Kuppaimeni chedi	Euphorbiaceae	<i>Acalypha indica</i>	-	+

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8.	Chinese chaste	Nocchi Chedi	Lamiaceae	<i>Vitex negundo</i>	+	+
9.	Bladder cherry	Sodakku thakkali chedi	Solanaceae	<i>Physalis minima</i>	-	+
10.	Black nightshade	Mana thakkali chedi	Solanaceae	<i>Solanum nigum</i>	-	+
11.	Holy basil	Thulasi chedi	Lamiaceae	<i>Ocimum tenuiflorum</i>	-	+
12.	Turkey berry	Sundakkai chedi	Solanaceae	<i>Solanum torvum</i>	-	+
13.	Balloon vine	Mudakattan chedi	Sapindaceae	<i>Cardiospermum halicacabum</i>	+	+
14.	Bitter cassava	Maravali kilanku chedi	Euphorbiaceae	<i>Manihot esculenta C.R</i>	+	+
15.	Palisade grass	Pala pul	Poaceae	<i>Brachiaria ramosa</i>	-	+
16.	Nut grasses	Korai pul	Cyperaceae	<i>Cyperus rotundus</i>	+	+
17.	Indian doab	Arugampul	Poaceae	<i>Cynodon dactylon</i>	+	+
18.	Carrot grass	Mookkuthi poo	Asteraceae	<i>Parthenium hysterophorus</i>	+	+
CREEPERS/CLIMBERS						
1.	Madras Pea Pumpkin	Musumusukkai	Cucurbitaceae	<i>Mukia maderaspatana</i>	+	+
2.	Melothria scabra	Paluvakkai	Cucurbitaceae	<i>Melothria scabra</i>	+	+
3.	Bitter melon	Pavakkai	Cucurbitaceae	<i>Momordica charantia</i>	-	+
4.	Veldt grape	Perandai	Vitaceae	<i>Cissusqua dranquularis</i>	+	+
5.	Ivy gourd	Kovakkai	Cucurbitaceae	<i>Coccinia grandis</i>	-	+



Fig a. *Pluchea carolinensis*



Fig b. *Calicotome spinosa*



Fig c. *Punica granatum*



Fig d. *Psidium guajava*



Fig e. *Mukia maderaspatana*



Fig f. *Pittosporum oreillyanum*



Fig g. *Calotropis gigantea*



Fig h. *Borassus flabellifer*



Fig i. *Senna auriculata*



Fig j. *Psidium guajava*



Fig k. *Hyptis pectinata*



Fig l. *Agave beauleriana*

Fig No 3.18 Photos of Flora in Core and Buffer Area

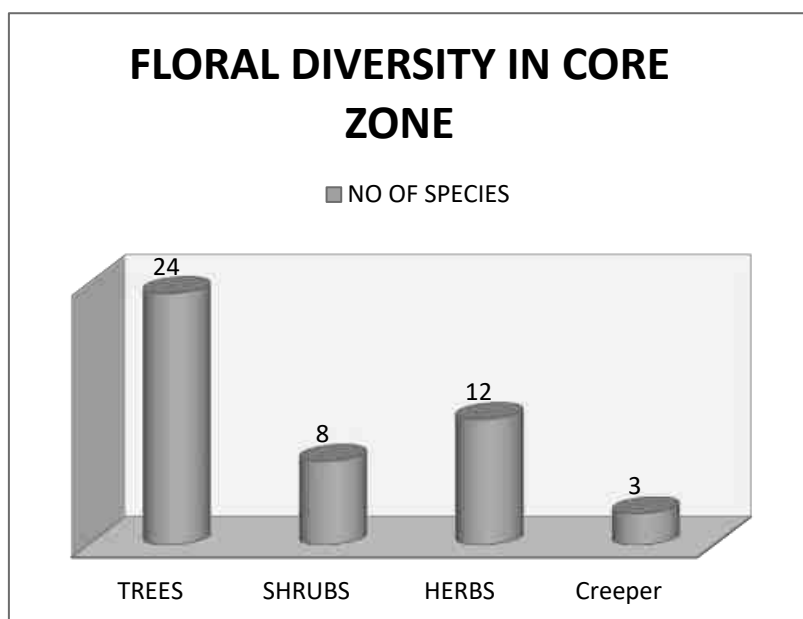


Fig No 3.19 Flora diversity in Core Zone

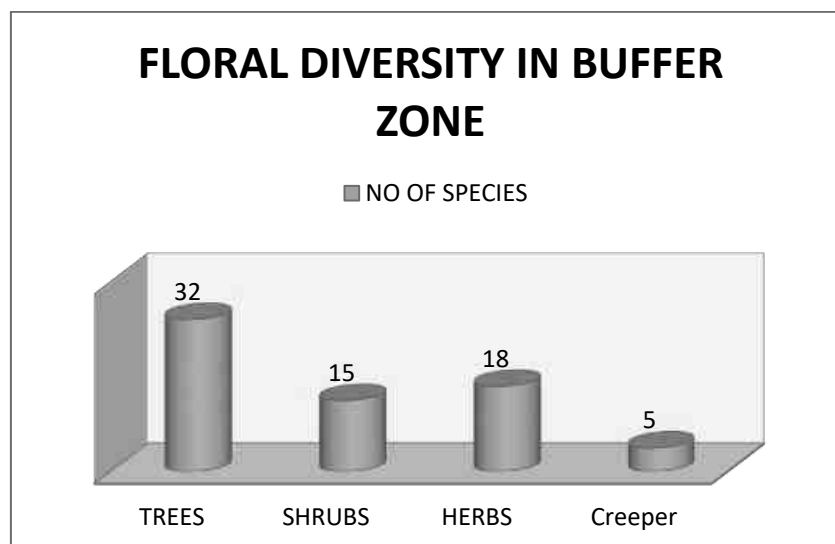


Fig No 3.20 Floral diversity in Buffer Zone

3.9.8. Fauna

The fauna survey has been carried out as per the methodology cited and listed out Mammals, birds, Reptiles, Amphibians, and Butterflies. All the listed species were compared with Red Data Book and Indian Wildlife Protection Act, 1972.

The study of fauna takes a substantial amount of time to understand the specific fauna characteristics of the area. The assessment of fauna has been done on the bases of primary data collected from the lease sites. The presence was also confirmed from the local inhabitants depending on the animal sightings and the frequency of their visits in the project area. In addition, officials, local peoples were another source of information for studying the fauna of the area. Field activities are physical/active search, covering rocks, burrows, hollow inspection and location of nesting sites and habitat assessment etc. Taxonomical identification was done by the field guide book and wildlife envis database (wienvvis.nic.in/Database/Schedule Species Database) and Zoological Survey of India (ZSI).

Table No. 3.12: Methodology applied during survey of fauna

S. No	Taxa	Method of Sampling	References
1	Insects	Random walk, Opportunistic observations	Pollard (1977); Kunte (2000)
2	Reptiles	Visual encounter survey (Direct Search)	Daniel J.C (2002)
3	Amphibians	Visual encounter survey (Direct Search)	
4	Mammals	Tracks and Signs	Menon V (2014)

5	Avian	Random walk, Opportunistic observations	Ali S (1941); Grimmett R (2011); Collins 2015

3.9.8.1. Fauna in Core Zone

Varieties of species were observed in the core zone (0-2km radius) of the Quarry. Number of species decreases towards the mining area this might be due the lack of vegetation and forest cover in mining lease area. None of these species are threatened or endemic. Taxonomically a total of 21 species belonging to 17 families have been recorded from the core mining lease area. Based on habitat classification the majority of species were birds 10 (45%) followed by insects 7 (32%), reptiles 2 (14%) and mammals 2 (9%). Dominant species were mostly birds and insects no amphibians were observed during the extensive field visit. Details of fauna with the scientific name were mentioned in table 3.13.

There are no critically endangered, endangered, vulnerable and endemic species were observed.

3.9.8.2. Fauna in Buffer Zone

Taxonomically a total of 39 species belonging to 28 families have been recorded from the buffer mining lease area. Based on habitat classification the majority of species were birds 16 (41%) followed by insects 14 (36%), reptiles 3 (8%) and mammals 6 (15%). There were no critically endangered, endangered, vulnerable and endemic species were observed. Details of fauna with the scientific name were mentioned in table 3.13.

There were no critically endangered, endangered, vulnerable and endemic species were observed.

Table No. 3.13 Faunal in Core and Buffer area

Sl. No	Common Name	Family Name	Scientific Name	Core Area	Buffer Area	Schedule list wildlife protection act 1972	IUCN Red list data
MAMMALS							
1.	Common mongoose	Herpestidae	<i>Herestes edwardsii</i>	-	+	NL	NL
2.	Palm squirrel	Sciuridae	<i>Funambulus pennantii</i>	+	+	NL	NL
3.	Bat	Pteropodidae	<i>Pteropus medius</i>	+	+	NL	NL
4.	Indian mole rat	Muridae	<i>Bandicota bengalensis</i>	-	+	NL	NL
5.	Indian rat	Muridae	<i>Mus rattus</i>	+	+	NL	NL
6.	Cat	Felidae	<i>Felis catus</i>	+	+	NL	NL
INSECTS							
1.	Blister beetle	Meloidae	<i>Mylabris phalerata</i>	+	+	Schedule IV	LC
2.	Peacock pansy	Nymphalidae	<i>Junonia almana</i>	+	+	NL	
3.	Mottled emigrant	Pieridae	<i>Catopsilia pyranthe</i>	+	+	Schedule IV	LC
4.	Red-veined darter	Libellulidae	<i>Sympetrum fonscolombii</i>	-	+	Schedule IV	LC
5.	Common grass yellow	Pieridae	<i>Eurema brigitta</i>	-	+	Schedule IV	LC
6.	Marbled white	Nymphalidae	<i>Melanargia galathea</i>	-	+	Schedule IV	LC
7.	Banded hairstreak	Lycaenidae	<i>Satyrium calanus</i>	-	+	Schedule IV	NE
8.	Blue basher	Libellulidae	<i>Pachydiplax longipennis</i>	+	+	NL	LC
9.	White butterfly	Pieridae	<i>Pieris rapae</i>	-	+	Schedule IV	LC

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10.	Milkweed butterfly	Nymphalidae	<i>Danaus plexippus</i>	+	+	NL	LC
11.	Red-veined darter	Libellulidae	<i>Sympetrum fonscolombii</i>	+	+	NL	LC
12.	Common Tiger	Nymphalidae	<i>Danans genutia</i>	+	+	NL	NE
13.	Yellow pansy	Nymphalidae	<i>Junonia hierta</i>	+	+	NL	NE
14.	Lime butterfly	Papilionidae	<i>Papilio demoleus</i>	+	+		
REPTILES							
1.	Green Lizard	<u>Chamaeleonidae</u>	<i>Chamaeleon zeylanicus</i>	+	+	NL	NL
2.	Garden Lizard	Agamidae	<i>Calotes verticolor</i>	-	+	NL	NL
3.	Wall Lizard	Gekkonidae	<i>Hemidactylus sps.</i>	+	+	NL	LC
BIRDS							
1.	Common myna	Sturnidae	<i>Acridotheres tristis</i>	+	+	NL	LC
2.	Red vented bulbul	Pycnonotidae	<i>Pycnonotus cafer</i>	-	+	NL	LC
3.	Paddybird	Ardeidae	<i>Ardeola grayii</i>	+	+		
4.	Rock pigeon	Columbidae	<i>Columba livia</i>	-	+	NL	LC
5.	Purple heron	Ardeidae	<i>Ardea purpurea</i>	-	+		
6.	Thick billed warbler	Acrocephalidae	<i>Iduna aedon</i>	+	+	NL	LC
7.	Small mini vert	Campephagidae	<i>Pericrocotus cinnamomeus</i>	-	+	NL	LC
8.	Black kite	Accipitridae	<i>Milvus migrans</i>	+	+	NL	LC
9.	Common cuckoo	Cuculidae	<i>Cuculus canorus</i>	+	+	NL	LC
10.	Streak throated swallow	Hirundinidae	<i>Petrochelidon fluvicola</i>	-	+	NL	LC
11.	House Crow	Corvidae	<i>Corvus splendens</i>	+	+	NL	LC

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12.	koel	Cuculidae	<i>Eudynamys scolopaceus</i>	+	+	NL	LC
13.	Common hen	Phasianidae	<i>Gallus Gallus domesticus</i>	+	+	NL	LC
14.	Indian robin	Muscicapidae	<i>Saxicoloides fulicatus</i>	+	+	NL	LC
15.	Parrot	Psittacidae	<i>Psittacula eupatria</i>	-	+	NL	LC
16.	House sparrow	Passeridae	<i>Passer domesticus</i>	+	+	NL	LC

((+) Symbol indicate presence of Species, (-) Symbol indicate absence of Species, *NL- Not listed, NE- Not evaluated, LC- Least concern)



Fig. a. *Pteropus medius*



Fig. b *Funambulus pennantii*



Fig. c. *Pachydiplax longipennis*



Fig. d. *Ardeola grayii*



Fig.e. *Junonia almana*



Fig.f. *Chamaeleon zeylanicus*



Fig.g. *Ardea purpurea*



Fig.h. *Junonia hierta*

Fig No 3.21 Photos of Fauna in Core Area

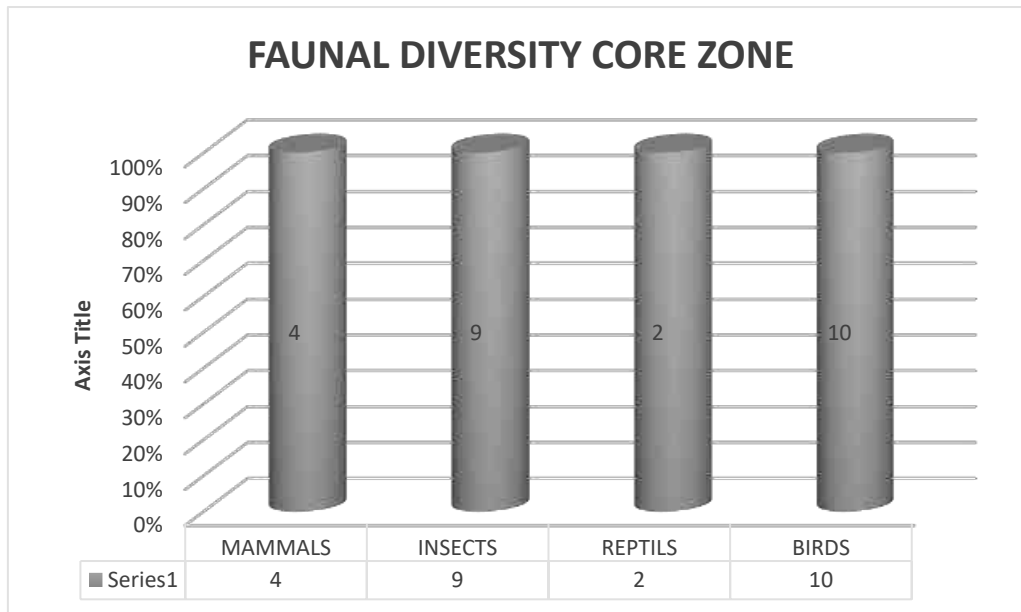


Fig No 3.22 Fauna diversity in Core Zone

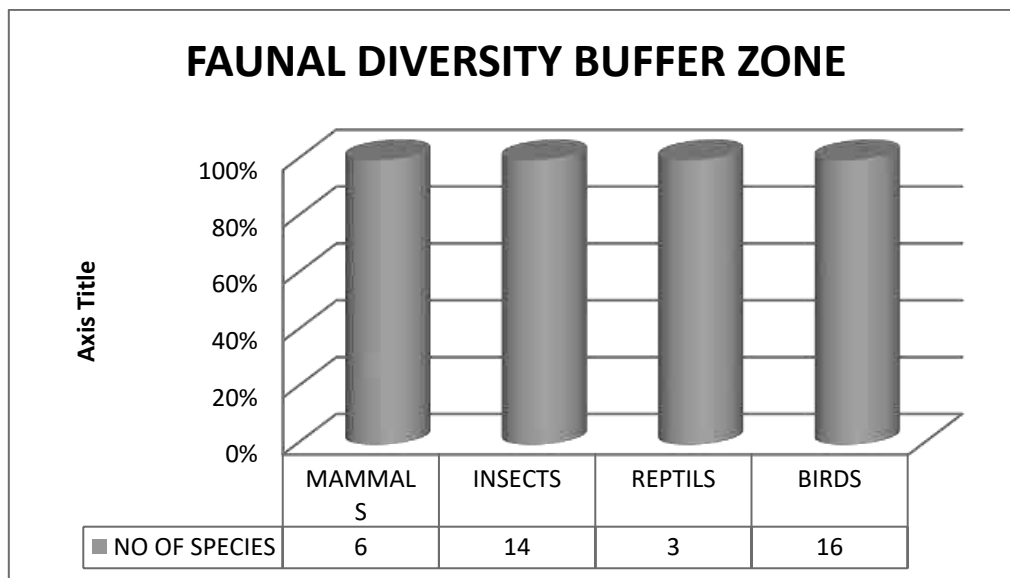


Fig No 3.23 Faunal diversity in Buffer Zone

3.10 SOCIO-ECONOMIC ENVIRONMENT

3.10.1 Introduction

Socio - economic Environment is the creation of new firms is a good indicator of economic development. The socio -economic environment are the external conditions that influence the standard of living, economic opportunities, development of individuals and communities. This section presents an overview of the socio - economic environment within the study area of the proposed Rough Stone and Gravel Quarry project to be undertaken by Tvl. G.P. Exports. The project site is located at S.F. No. Multicolour Granite Quarry over an extent of 3.00.00Ha in S.F.Nos. 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9,

354/A10, 354/A11, 354/A12,354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8,354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20 (Part), K.Pitchampatti Village, Karur, Taluk, Karur District, Tamil Nadu.

Understanding the socio -economic characteristics of the region is essential to assess the potential impacts and benefits of the mining activity on the local community. This section includes an analysis of demographics, literacy, employment, land use, and infrastructure within the 5 km radius of the project area, based primarily on the 2011 Census data and field observations.

3.10.2 Objectives of the Study

The primary objective of this socio -economic assessment is to understand the existing human and economic conditions in the study area and to evaluate the potential social and economic impacts of the proposed quarry project. The specific objectives include:

To assess the demographic profile of the local population, including population size, sex ratio, literacy levels, and age distribution.

To understand the economic structure of the region, with particular focus on employment patterns, income sources, and dependence on agriculture, labor, or industrial activities.

To identify vulnerable and marginalized groups, such as Scheduled Castes (SC), Scheduled Tribes (ST), landless laborers, and women -h eaded households, for inclusive planning and benefit -sharing.

To evaluate the availability and quality of basic infrastructure such as education, healthcare, water supply, sanitation, electricity, and transport facilities in the surrounding villages.

To assess the potential positive and negative impacts of the quarry project on the local community in terms of employment, resource use, displacement (if any), and quality of life.

To conduct stakeholder consultations and document community concerns, expectations, and suggestions related to the project.

To recommend appropriate mitigation measures and CSR strategies to enhance local development and minimize any adverse impacts.

3.10.3 Scope of Work

The scope of the socio -economic study has been defined in alignment with the requirements of the Environmental Impact Assessment (EIA) Notification, 2006, and the

Terms of Reference (ToR) issued by SEIAA, Tamil Nadu. The study covers all relevant socio-economic aspects within the 5 km radius of the project site, ensuring comprehensive understanding of the local environment and people.

3.10.4 Study Area – K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu

The study area for the socio-economic environment assessment has been defined as a 5-kilometre (km) radius buffer zone surrounding the proposed Multicolour Granite Quarry over an extent of 3.00.00Ha in S.F.Nos. 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20 (Part), K.Pitchampatti Village, Karur, Taluk, Karur District, Tamil Nadu.

This area has been delineated based on the guidelines of the Ministry of Environment, Forest and Climate Change (MoEF&CC) for B1 category projects. The study area includes multiple settlements of varying sizes, encompassing rural villages, agricultural zones, minor industries, and associated infrastructure. This area is representative of the direct and indirect impact zone in terms of resource use, transportation, employment, and potential environmental influences.

Table No. 3.14: K.Pitchampatti Village Census 2011 Data

Particulars	Details
Buffer Zone Radius	5 km from the project boundary
Total Villages Covered	Approximately 20 –25 villages
Core Zone (Project Site)	3.00.0 ha in K.Pitchampatti Village, Karur Dt,
Taluk	Karur
District	Karur
Geographical Coordinates	Toposheet -58J/1. Latitude 11° 02' 22.50" N to 11° 02' 26.21" N. Longitude- 77° 01' 52.33E' to 77° 15' 30.24" E
Land Use	Predominantly agricultural, with fallow land and minor rural industries
Nearest Habitation	K.Pitchampatti Village (~1 km)
Nearest Major Town	Karur (~8 km from project site)
Nearest Highway	State Highway SH -19 (~4 km)

3.10.5 Land Use and Settlement Pattern are characterized by

Predominantly agriculture-based rural settlements,

- Moderate population density,

- Villages with basic amenities such as schools, primary health centre's (PHCs), and bus connectivity,
 - Employment dominated by agriculture, stone work, and textile - elated labour.
- K.Pitchampatti Village, where the quarry is located, falls within a developing rural industrial transition zone, and is typical of the regional socio -economic structure of western Tamil Nadu.

Table No. 3.15: Villages within 10 km of the Project Site

S.No	Village Name	Approx. Distance	Notes
1	K. Pitchampatti	Core	Project village; detailed in census data.
2	A.Vellagoundanpatti	2 km	Nearby census village
3	Gudalur	4.80 km	Census-listed, populous village
4	Thirumakkampatti	2 km	Demographic data available
5	S.Pudukottai	2.60 km	Census-recognized village
6	Kottanatham	4.25 km	Census village
7	Alambadi	4.28 km	Detailed demographic profile
8	Venjamangudalur	5 km	Census-listed
9	Kulathur	4.33 km	Census-listed
10	Lakshmipuram	3.23 km	Census-listed

Source: <https://www.census2011.co.in.html>

Demographics (population, literacy, SC/ST).

- Occupational pattern analysis (agriculture, labour)
- Infrastructure audit (schools, healthcare, roads). And Stakeholder consultations and CSR targeting.

3.10.6 K.Pitchampatti Village – Census 2011 (Karur Taluk, Karur District)

Table No. 3.21: K. Pitchampatti Village – Census 2011 (Karur Taluk, Karur District)

S. No	Particulars	Total population	Male	Female
1	Number of Households	No. of HH 1093 TP-3803	1889	1919
2	Total Population	3808	1889	1919
3	Sex Ratio (females per 1,000 males)	369	185	184
4	Literacy Rate (overall) Population	2344	1379	965
5	Illiteracy Population	1464	510	954
6	Scheduled Caste (SC) Population	823	401	402
7	Scheduled Tribe (ST) Population	-	-	-
8	Total Working Population	2408	1278	1130
9	Main Workers	2354	1255	1099
10	Marginal Workers	50	21	29
11	Non-workers	1400	611	789
12	Cultivators	934	478	458
13	Agricultural Labourers	863	383	480

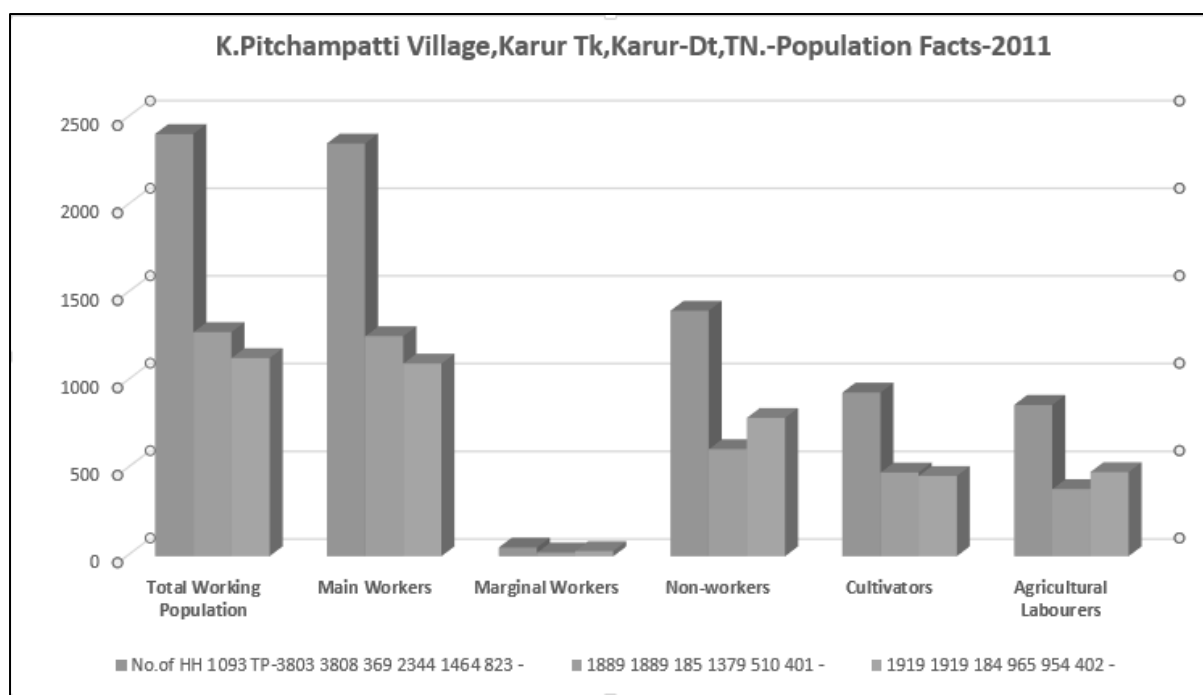


Fig No 3.24 K.Pitchampatti Village Population Facts

The spatial distribution of settlements indicates that K. Pitchampatti Village lies within an interconnected rural cluster comprising Paganatham, Velianai and other nearby villages. Given the short inter-village distances and shared socio-economic activities, the study village functions as part of a broader rural system rather than as an isolated unit. Hence, any changes in land use, employment opportunities, or environmental conditions within K. Pitchampatti may extend their influence to the surrounding villages, necessitating an integrated regional planning and impact assessment approach.

The total population of K. Pitchampatti Village as per Census 2011 was 3808 comprising 1,889 males and 1919 females, indicating a moderate-sized rural settlement. Children (0–6 years) constitute over one-fourth of the total population, reflecting a young age structure and future demand for education and healthcare facilities.

The sex ratio of the village is 963 females per 1,000 males, which is slightly lower than the Tamil Nadu state average, indicating a marginal gender imbalance. The overall literacy rate of the village is Literates: $2344 / 3808 \times 100 = 61.56\%$ Illiterates: $1464 / 3808 \times 100 = 38.44\%$ revealing a noticeable gender gap in educational attainment that requires focused social interventions. Moderate literacy with scope for skill-based employment improvement.

The Scheduled Caste (SC) population accounts for approximately 14.2% of the total population, while no Scheduled Tribe (ST) population is reported. This highlights the importance of inclusive planning, employment opportunities, and CSR initiatives targeted

towards socially vulnerable groups. Scheduled Caste (SC): $823 / 3808 \times 100 = 21.62\%$
Scheduled Tribe (ST): 0% SC population forms a significant social group requiring inclusive development measures.

The total working population (main + marginal workers) is 1,873, representing about 53% of the total population, indicating moderate workforce participation. The remaining 1,639 persons are non-workers, comprising 619 males and 1,020 females, suggesting higher economic dependency among women. Main Workers: $2354 / 2408 \times 100 = 97.76\%$ Marginal Workers: $50 / 2408 \times 100 = 2.08\%$ Employment is largely stable rather than seasonal. Among the main workers, occupational distribution shows that 503 persons are cultivators, followed by 164 agricultural labourers, indicating the dominance of agriculture-based livelihoods. In addition, 282 persons are engaged in household industries, while 903 workers fall under the 'other workers' category, reflecting limited diversification into non-agricultural sectors. Total Workers: $2408 / 3808 \times 100 = 63.22\%$, Non-Workers: $1400 / 3808 \times 100 = 36.78\%$, High workforce participation indicates livelihood dependence on local resources.

Occupational Structure;

(Percentage of total population)

Cultivators:

$934 / 3808 \times 100 = 24.53\%$

Agricultural Labourers:

$863 / 3808 \times 100 = 22.66\%$ Agriculture and allied activities dominate the village economy.

Gender Composition (Share of Total Population)

Male: $1889 / 3808 \times 100 = 49.58\%$

Female: $1919 / 3808 \times 100 = 50.42\%$

Balanced gender composition the socio-economic profile of K. Pitchampatti village indicates that 61.56% of the population is literate, while 63.22% constitutes the working population. Agriculture remains the dominant occupation, with cultivators and agricultural labourer's together accounting for nearly 47% of the total population. Scheduled Caste population forms about 21.62%, highlighting the need for inclusive development planning under the proposed project. Overall, the socio-economic profile of K. Pitchampatti village depicts a predominantly agrarian economy with moderate literacy levels, balanced workforce participation, and identifiable social groups requiring focused development measures, which are relevant while assessing the potential impacts and benefits of the proposed quarry project.

3.10.7 Occupational Characteristics- K.Pitchampatti

The population trend graph for K. Pitchampatti Village indicates a marginal decline in total population between 2001 and 2011. The decrease is more pronounced among the male population compared to females, resulting in a slight improvement in the sex ratio. This pattern suggests out-migration of the working-age male population to urban centres and industrial regions in search of employment. The observed demographic trend reflects rural-urban mobility and changing livelihood dynamics in the study area.

The graph depicting household growth in relation to total population shows an increase in the number of households despite a decline in overall population. This trend indicates a shift from joint family systems towards nuclear family structures, reflecting socio-economic transformation and changes in household composition within the village.

The literacy trend graph reveals a significant increase in the literate population accompanied by a substantial decline in the illiterate population during the study period. This improvement reflects enhanced access to educational facilities, increased enrolment, and growing awareness regarding the importance of education among rural communities.

The occupational structure graph illustrates a notable increase in main workers and a sharp decline in marginal workers between 2001 and 2011. This shift indicates a transition from seasonal and insecure employment to more stable livelihood opportunities. However, the increase in non-workers suggests the influence of education-related non-participation, aging population, and migration-induced demographic changes.

The Scheduled Caste population graph shows a gradual increase over the decade, highlighting the presence of socially vulnerable communities in the study area. This emphasizes the need for inclusive development planning and targeted CSR initiatives focusing on education, skill development, and livelihood enhancement.

**Table No.3.16: Occupational Characteristics of Population –
K.Pitchampatti Village (2001–2011)**

S. No.	Demographic Parameter	2001	2011	Decadal Change (%)
1	Total Population	3912	3808	-2.66
2	Male Population	1956	1889	-3.43
3	Female Population	1956	1919	-1.89
4	Number of Households	1015	1093	+7.68
5	Sex Ratio (females per	356	369	+3.65

	1,000 males)			
6	Literacy Rate (overall) Population	2074	2344	+13.02
7	Illiteracy Population	1838	1464	-20.35
8	Scheduled Caste (SC) Population	749	823	+9.88
9	Scheduled Tribe (ST) Population	0	0	0.00
10	Total Working Population	2615	2408	-7.92
11	Main Workers	1703	2354	+38.24
12	Marginal Workers	912	50	-94.52
13	Non-workers	1297	1400	+7.94

Source: <https://www.census2011.co.in>

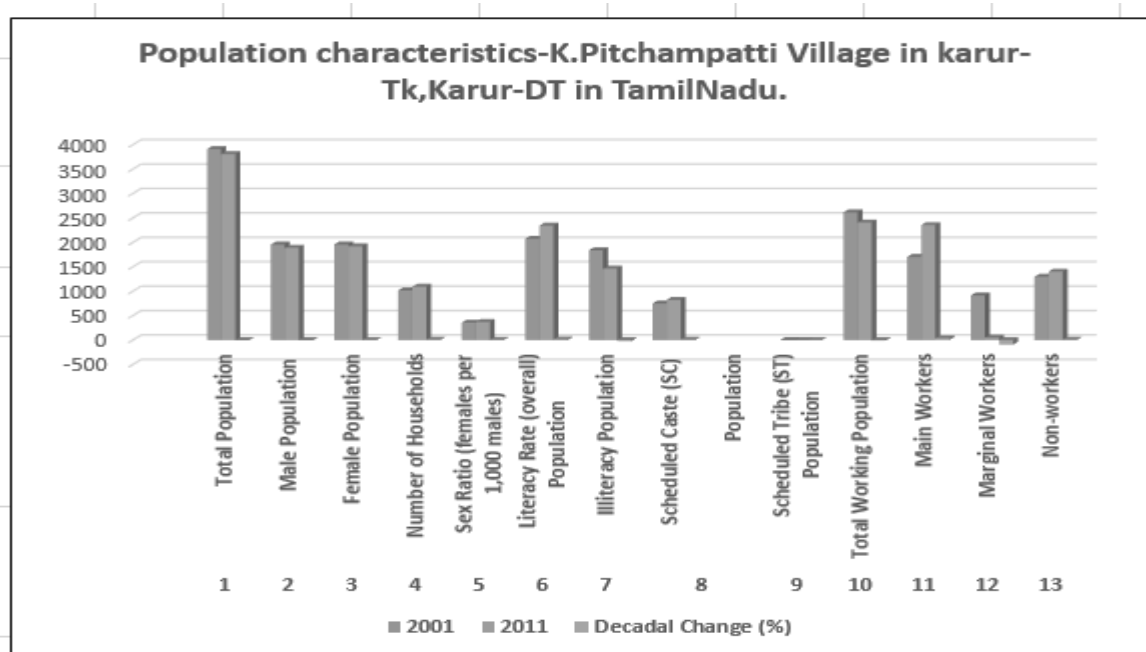


Fig No 3.25 Occupational Characteristics – K.Pitchampatti Village (2001–2011)

3.10.8 Impacts on Socio Economy and Mitigation Measures

Mostly positive impacts result from the long-term quarry unit. In this case, provision of job opportunities, business, transport, communication, laborers etc. are the major outcome due to this project. Thus, this unit highly favors the poor and landless people. Employment generation due to the project has generated direct and indirect employment for 0 persons, out of which no people are on company role and no one contract employees. Preference will be to

the local population for employment in all categories including semi-skilled and unskilled.

The skilled employees are recruited through open recruitment process to meet competency required to operate the quarry. The villages and their inhabitants in the buffer zone will not be disturbed in their settlements due to the quarry operations.

3.10.9 Economic Impacts

Agricultural yield is positively benefitted due to the halt on quarrying. To ascertain the extent of the financial crisis and improvement in agriculture, horticulture, dairy, fishery, handicraft and tourism if any; the following parameters emerged:

There are some people who are engaged in trading of sand, stone and Bajri. Therefore, due to quarrying, the per capita income of local people has been improved. The local people have been provided with either direct employment or indirect employment such as business, contract works and development work like roads, etc. and other welfare amenities such as medical facilities, conveyance, free education, drinking water supply etc. The job/ business opportunities have improved the economic conditions of the persons. They are in a position to utilize this money for purchase of tractors, trucks, jeeps, etc. which may be invested into use for business purposes. Part of money has been utilized in starting of some business as per personal skills.

To conclude, implementing the following measures can significantly reduce the negative impacts of quarry operations on the socio-economic environment:

- ❖ **Employment Opportunities:** Creating jobs and providing training for local residents to enhance their skills and improve their economic status.
- ❖ **Community Engagement:** Establishing open lines of communication with the community to address concerns, ensure transparency, and build trust.
- ❖ **Health and Safety Measures:** Enforcing strict health and safety regulations to protect workers and local residents from quarry-related hazards.
- ❖ **Local Business Support:** Sourcing materials and services from local suppliers to boost the local economy.
- ❖ **Infrastructure Development:** Investing in local infrastructure improvements, such as roads and public facilities, to benefit the community.
- ❖ **Environmental Conservation:** Implementing environmental protection measures to maintain a balance between economic activities and the preservation of natural resources.

- ❖ By adopting these practices, quarry operations can become more socially responsible and economically beneficial for the local community, fostering a sustainable and mutually advantageous relationship.

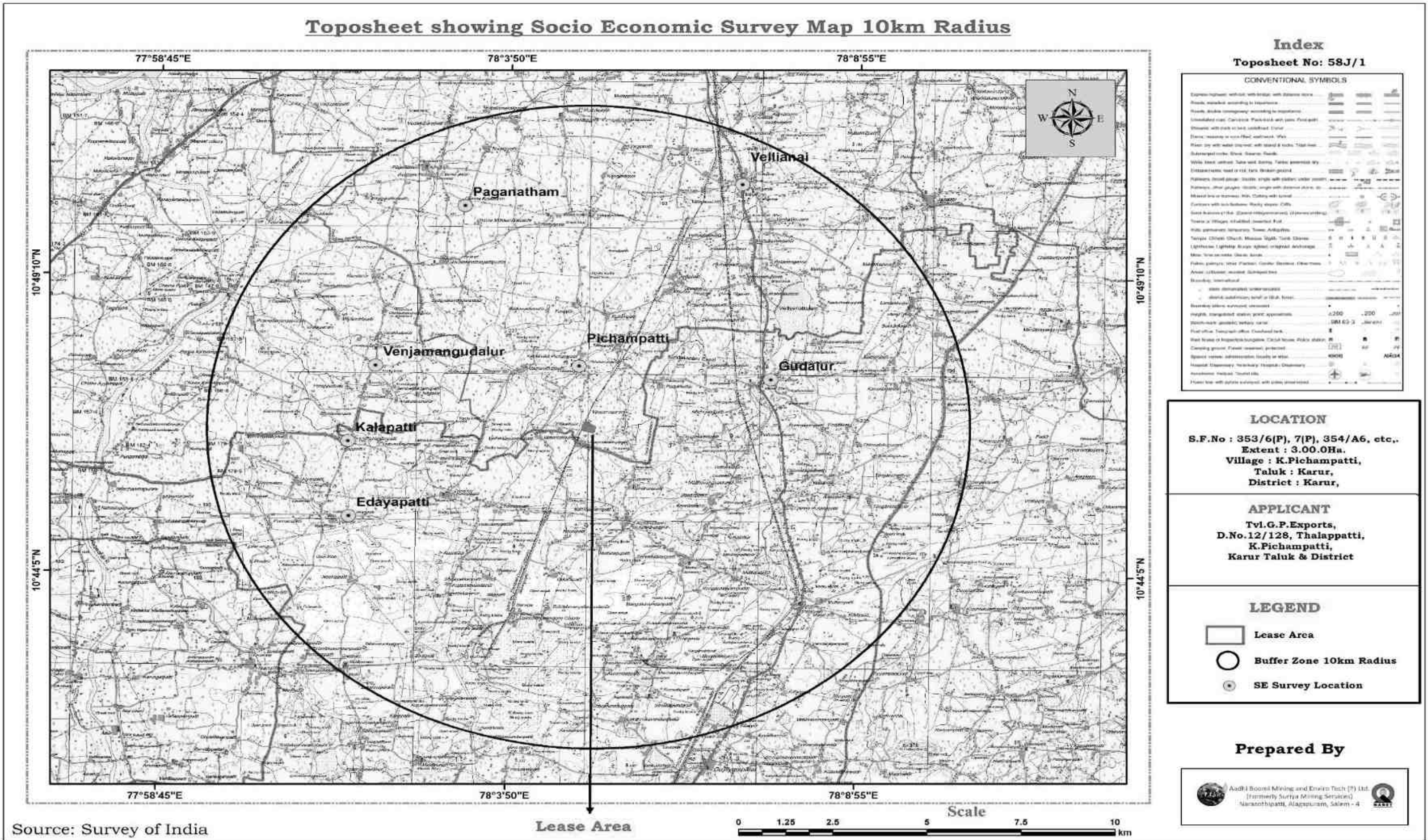


Fig No 3.26 Socioeconomic Survey Location

3.10.10 Summary and Conclusion

From the primary survey, it is found that the basic facilities such as water road, PHSC, schools are available within the surveyed villages. The people stated that they did not get benefits under CER and CSR activities. Also. they suggested that to operate the truck at minimum speed while crossing villages, schools, hospitals. The strongly asked to provide the employment opportunities only to the village people and registered their complaint on employment opportunities to other state people.

The proponent assured that he will improve facilities in government schools and hospitals under CER and CSR Schemes.

The socio-economic wellbeing of the area and its people is represented by the infrastructure and the social assets available in the area. The study area constituted of various infrastructures related to education, health care, communication, transportation, drinking waters etc.

3.11 LAND ENVIRONMENT

3.11.1 Land use of Study Area

The land-use & land cover map of the 10 km radial study area from the periphery of project site has been prepared using Landsat8 having 30 m spatial resolution and date of pass 22nd Sep 2022 satellite image with reference to Google Earth data. In order to strengthen the baseline information on existing land use pattern, the following data covering approx. 10°46'32.01463"N to 10°46'39.69873"N and eastern longitude of 78°04'56.21001"E to 78°05'04.49494"E.

Land use pattern of the study area as well as the catchment area was carried out by standard methods of analysis of remotely sensed data and followed by ground truth collection and interpretation of satellite data. The outcome of land use study is presented below in subsequent tables and figures.

Table No. 3.17: Data Specification Used for Present Study

Satellite Image	Sensor	Spatial Resolution	Date of Acquisition
Landsat8	*OLI & TIRS	30m	22 nd Sep 2022

* Operational Land Imager (OLI) and the Thermal Infrared Sensor (TIRS)

Landsat8 Operational Land Imager (OLI) and Thermal	Bands	Wavelength (Micrometers)	Resolution
	Band 1 - Coastal aerosol	0.43 - 0.45	30
	Band 2 - Blue	0.45 - 0.51	30

Draft Environmental Impact Assessment Report*Proponent: M/s. G.P Exports, Multicolour Granite Quarry, Karur District*

Infrared Sensor (TIRS) Launched February 11, 2013	Band 3 - Green	0.53 - 0.59	30
	Band 4 - Red	0.64 - 0.67	30
	Band 5 - Near Infrared (NIR)	0.85 - 0.88	30
	Band 6 - SWIR1	1.57 - 1.65	30
	Band 7 - SWIR2	2.11 - 2.29	30
	Band 8 - Panchromatic	0.50 - 0.68	15
	Band 9 - Cirrus	1.36 - 1.38	30
	Band 10 - Thermal Infrared (TIRS)1	10.60 – 11.19	100
	Band 11 - Thermal Infrared (TIRS)2	11.50 – 12.51	100

3.11.2. Objective

The objectives of Land use studies are:

- To determine the present land use pattern as per EIA/EMP norms by MoEF.
- To determine the drainage pattern present in the study area.

3.11.3 Data Used

A. Remote sensing data

- Landsat8-30m Resolution, OLI &TIRS (Sensor)

B. Collateral Data

Survey of India Toposheet bearing Toposheet No. 58 J/1 (1:50,000 Scale) and the Toposheet map representing the project site is given in Chapter 1.

3.11.4 Methodology

The land use pattern of the study area was studied by analyzing the available secondary data published in the District Primary Census abstract of the year 2001 & 2011. Salient features of the adopted methodology are given below:

- Acquisition of satellite data
- Preparation of base map from Survey of India Toposheet.
- Data analysis using visual interpretation techniques
- Ground truth studies or field checks using GPS & Digitization using head up vectorization method
- Topology construction in GIS Topography and location of surface water bodies like ponds, canals and rivers;

- Location of villages/towns/sensitive areas;
- Identified pollution pockets, if any within the study area;
- Accessibility, power availability and security of monitoring equipment;
- Areas which represent baseline conditions; and
- Collection, collation and analysis of baseline data for various environmental attributes.
- Area calculation for statistics generation.

The spatial resolution and the spectral bands in which the sensor collects the remotely sensed data are two important parameters for any land use survey. Landsat8 data offers spatial resolution of 30 m and 185 kilometer (115 mile) wide swath of the Earth in 15–30-meter resolution covering wide areas the data is collected in 11 visible bands namely **Band**

Number μ m Resolution

1	0.433–0.453	30 m
2	0.450–0.515	30 m
3	0.525–0.600	30 m
4	0.630–0.680	30 m
5	0.845–0.885	30 m
6	1.560–1.660	30 m
7	2.100–2.300	30 m
8	0.500–0.680	15 m
9	1.360–1.390	30 m
10	10.6–11.2	100 m
11	11.5–12.5	100 m

3.11.5 Topography

Data covering approximately northern latitude of 10°46'32.01463"N to 10°46'39.69873"N and eastern longitude of 78°04'56.21001"E to 78°05'04.49494"E are used as per the project site confined within that area.

3.11.6 Land Use/Land Cover Classification

3.11.6.1 Land use/Land cover within the lease area:

The base maps of the study area were prepared, with the help of Survey of India Toposheet on 1:50,000 scale (fig 3.27). Preliminary interpreted land use and the land cover features boundaries from Landsat8 sensor OLI & TIRS having 30m spatial resolution, False Colour Composite were modified in light of field information and the final thematic details

were transferred onto the base maps. The final interpreted and classified thematic map was cartograph. The cartographic map was categorically differentiated with standard colour coding and described features with standard symbols. All the classes were identified and marked by the standard legend on the map. The following Land Cover classes were derived and classified as under.

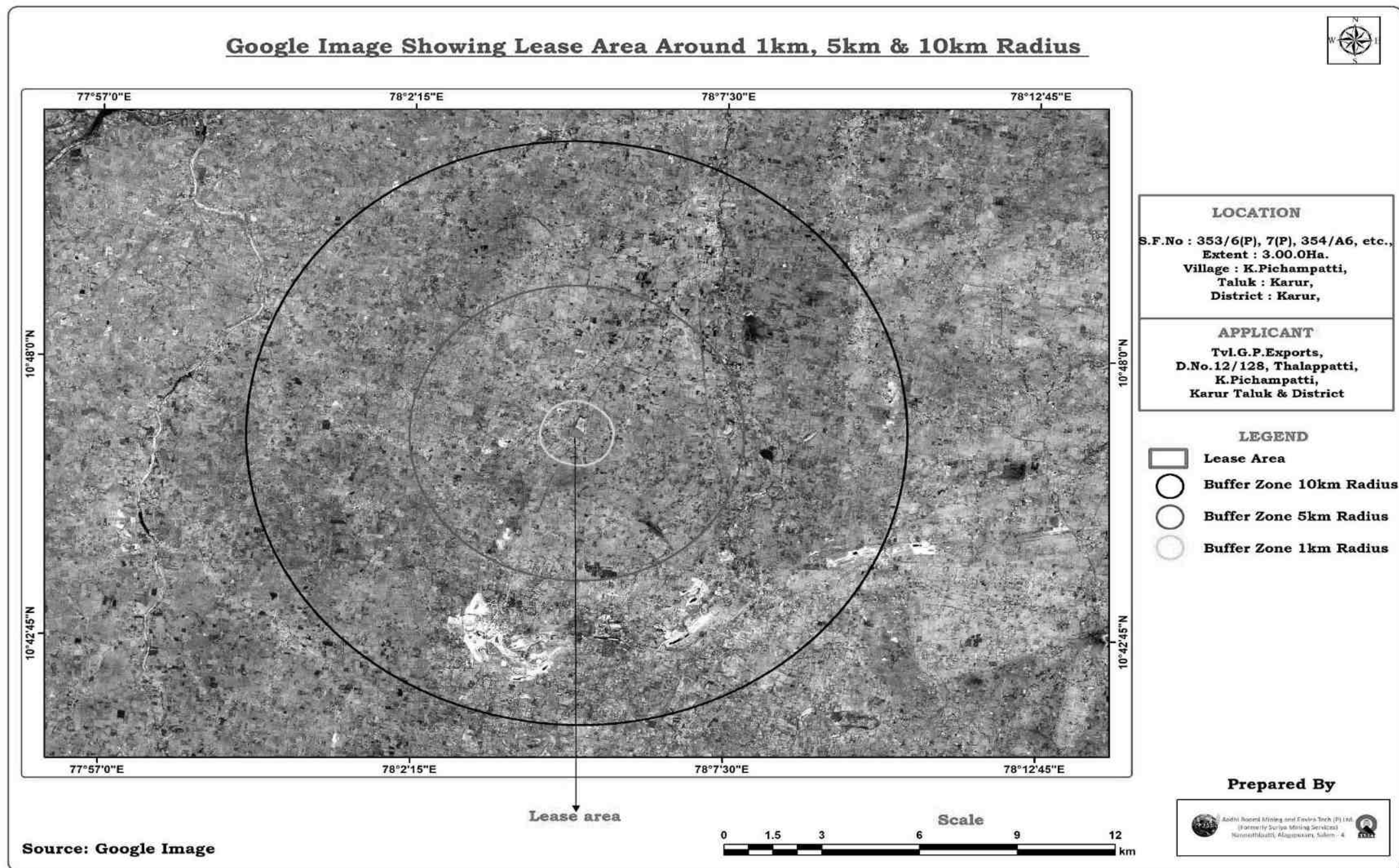


Fig No: 3.27 Google Image Showing Location Lease Boundary around 10km radius

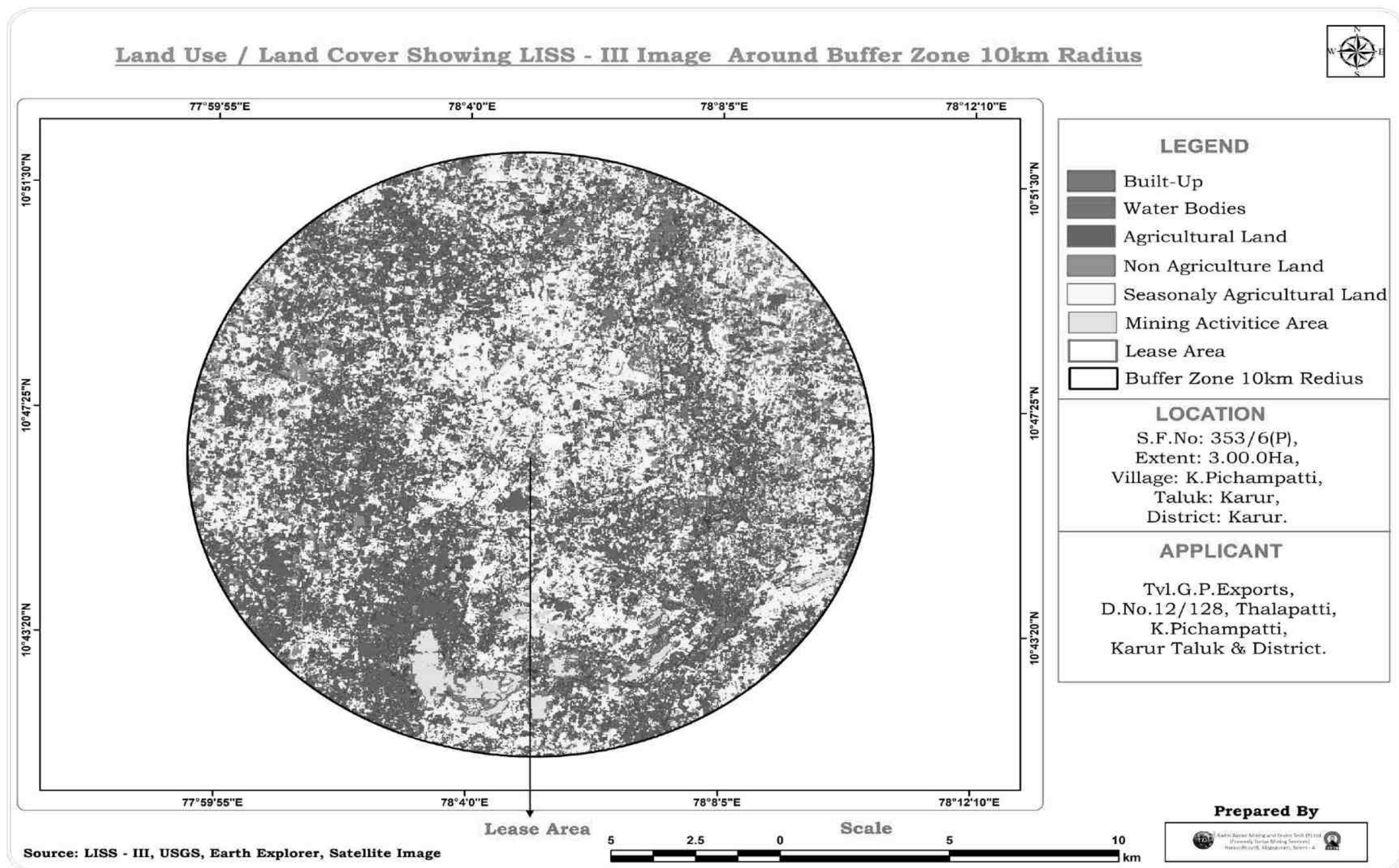


Fig No: 3.28 LANDSAT Image showing Location of Lease area around 10km radius

Table 3.18 Computation of existing and proposed land use pattern

S.No	Name	gridcode	Area (Ha)	%
1	Builtup Land	1	4076.04	11.64
2	Water Bodies	200	75.48	0.23
3	Agri & Vegetation Land	203	12351.54	38.32
4	Non Agricultural Land	204	2117.26	6.57
5	Seasonaly Agricultural Land	318	12524.37	38.85
6	Plantatin Area	394	335.95	1.04
7	Mining Ativities Area	404	754.46	3.34
Total			32235.10	100.00

3.11.7 Drainage Pattern of the Area

Drainage pattern of the area is dendritic with high stream density due to rugged topography. Drainage is mostly westerly and south westerly. Dendritic patterns, which are by far the most common, develop in areas where the rock (or unconsolidated material) beneath the stream has no particular fabric or structure and can be eroded equally easily in all directions. The project site itself is the river body. The drainage pattern of the area is dendritic – sub dendritic.

3.11.8 Contour

Contour lines are the greatest distinguishing feature of a topographic map. Contour lines are lines drawn on a map connecting points of equal elevation, meaning if you physically followed a contour line, elevation would remain constant. Contour lines show elevation and the shape of the terrain in the study area. The slope map was derived from a SRTM data of the study area. Contour interval at 20m, minimum 400m has very hilly with plain landforms and general terrain is quite elevated at maximum 900m above. To make topographic maps easier to read, because it's impractical to mark the elevation of every contour line on the map, the index contour lines are the only ones labeled.

3.11.9 Slope

The slope map was derived from a SRTM data of the study area. The slope of the study area was classified into five classes, such as less than 10 Percent/degree flat to almost flat no meaningful denudation process. Especially landslides that is flat. Slope zone 10-20° gentler, the same as above, but with a higher magnitude of the area, 20-30°, slightly steep, a lot of ground movement and erosion, especially landslides that area flat. 30-40° and above 40° very steep, rocks generally begin to unfold a very intensive denudation process have begun to produce rework material.

3.11.10 Soils

The 10km study area is covered with Alfisols, Entisols, Inceptisols and Hill type soil. The type of soil found in the lease area is Hill soil.

3.11.11 Geology

Fissile Hornblende biotite gneiss, Charnockite, Tiruppur anorthosite, epidote-hornblende Gneiss is found largely found in Erode area. Sedimentary rocks namely Charnockite, Granitoid gneiss, (sand stone mixed clay), and quartz vein. Granitoid gneiss is a composition of primary lateritic capping, basement crystalline complex, and conglomerate, which are found along the middle part of the river valley. The younger alluvium formations are seen predominantly in the northern part of the area and are considered as highly permeable. The storage capacity of the rock formations depends on the porosity of the rock. In the rock formation the water moves from areas of recharge to areas of discharge under the influence of hydraulic gradients depending on the hydraulic conductivity or permeability. The study area contains Gneisses, Granites, Charnockite, and Granitoid gneiss as major geological structure. The entire firka is underlain by the crystalline metamorphic gneiss complex consisting gneisses and granites. Ground water is occurring in phreatic conditions in weathered and fractured gneiss rock formation.

3.11.12 Geomorphology

The prominent geomorphic units identified in the district through interpretation of satellite imagery are structural hills in the southwestern part of the area, denudational land forms like buried pediments in the plains and inselbergs and plateaus represented by conical hills aligned with major lineaments. Erode district forms part of the upland plateau region with many hill ranges and undulating plains. The western part of the district has hill ranges of Mysore plateau with a chain of undulating hills and deep valleys extending in NNE-SSW direction.

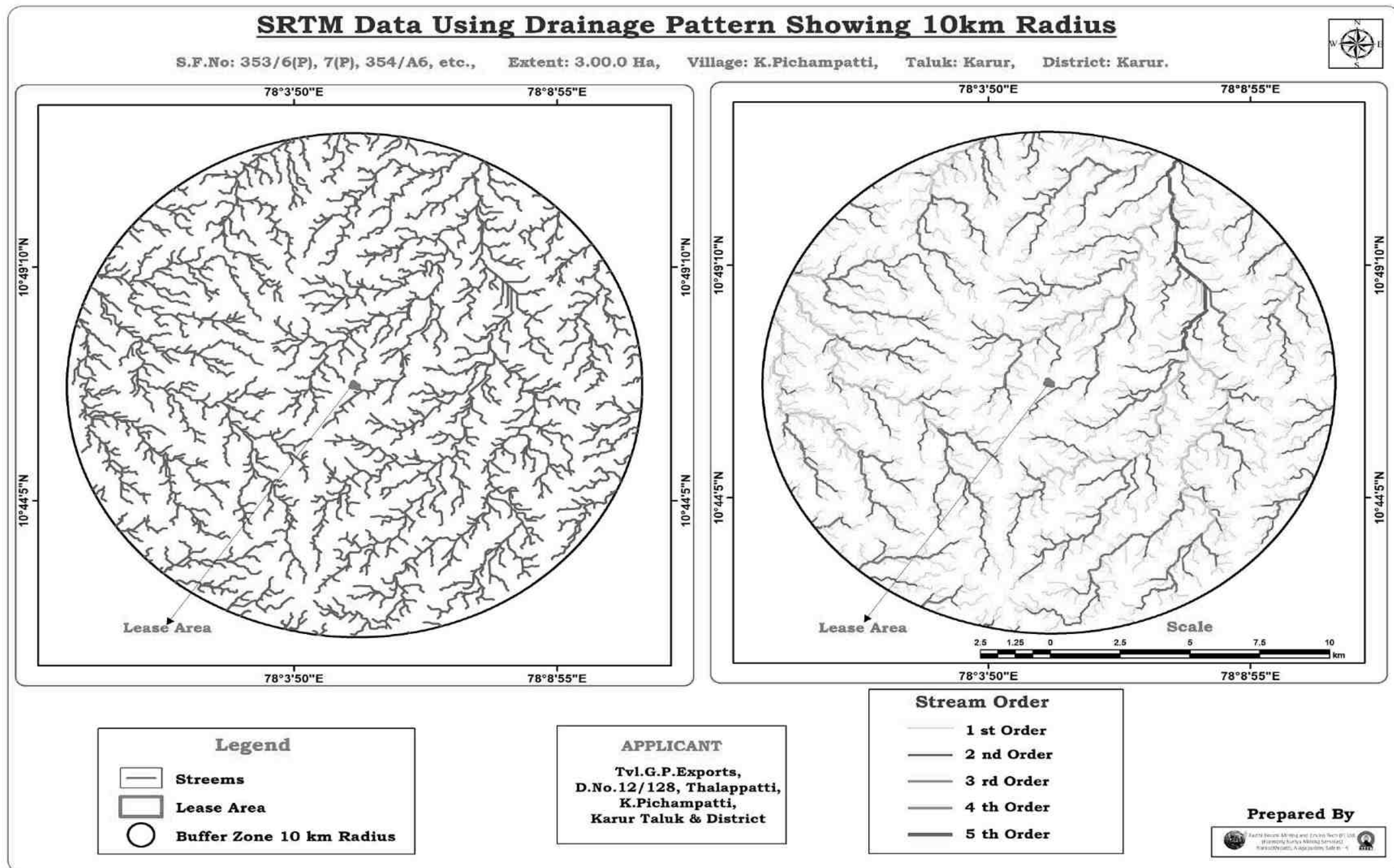


Fig No 3.29 Image Representing the River/Streams (Drainage) of the study area within 10km radius from the project site

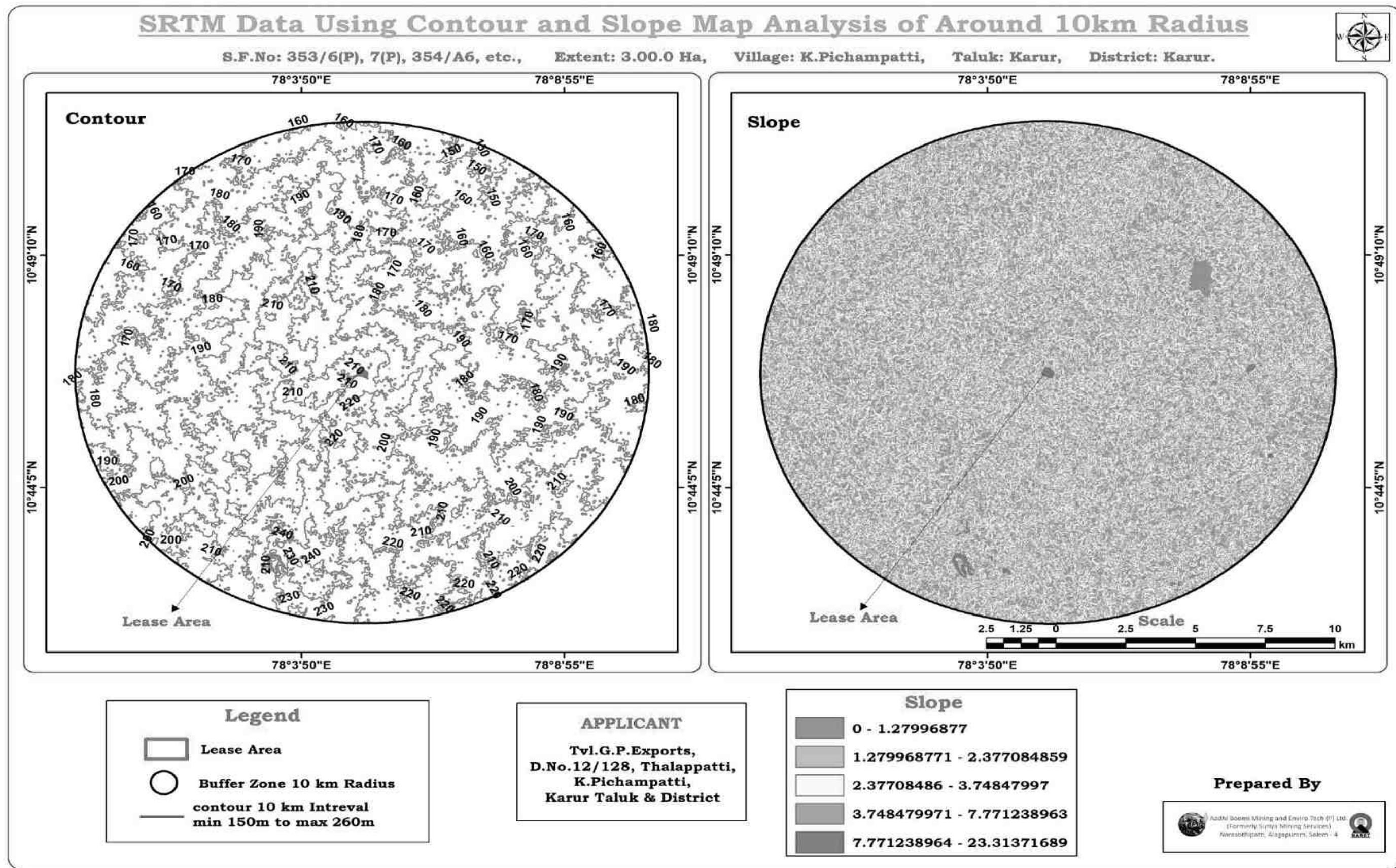


Fig No 3.30 Image Representing Contour and Slope analysis around 10km radius

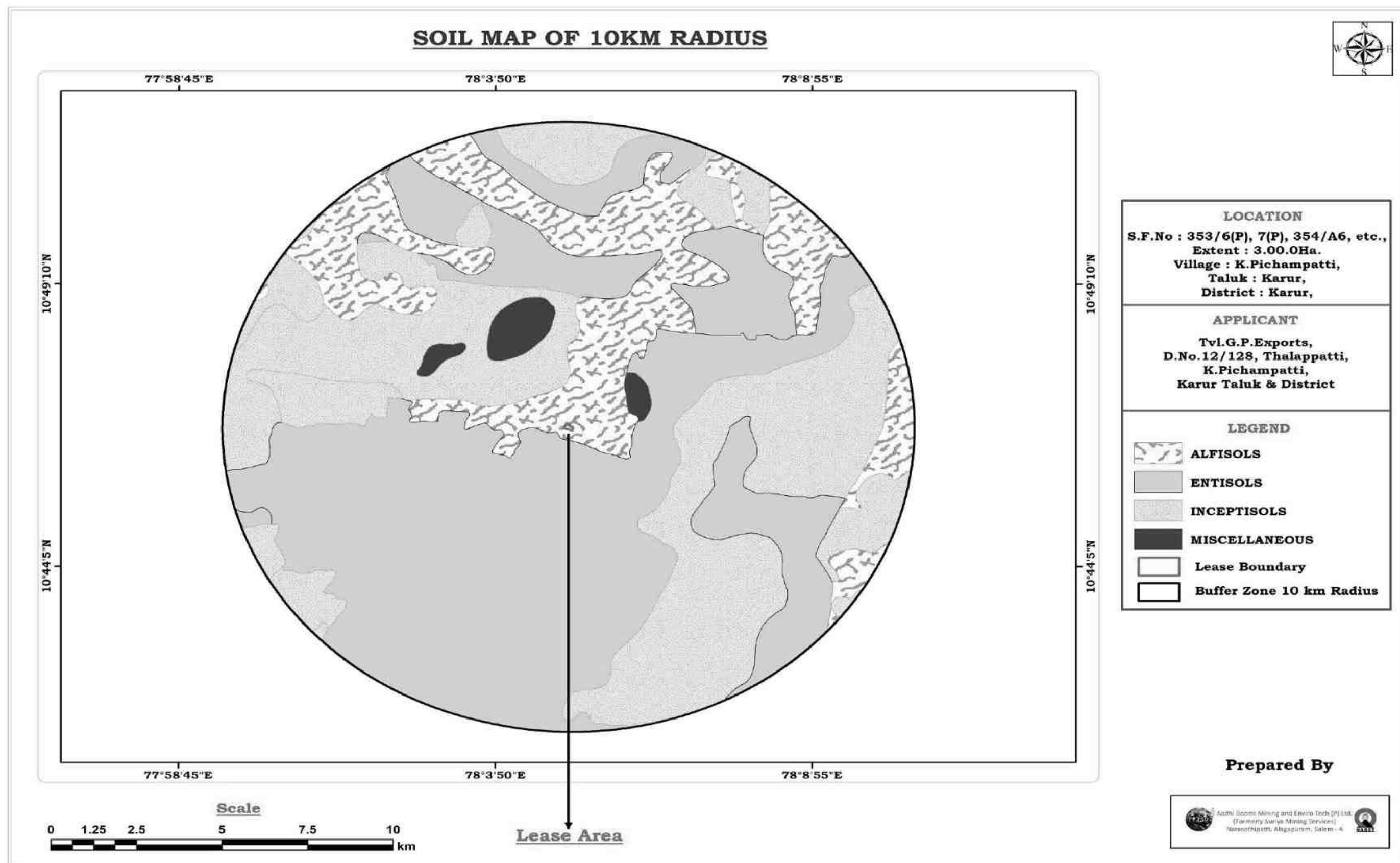


Fig No 3.31 Image Representing the Soil Characteristics around 10km of the Lease area

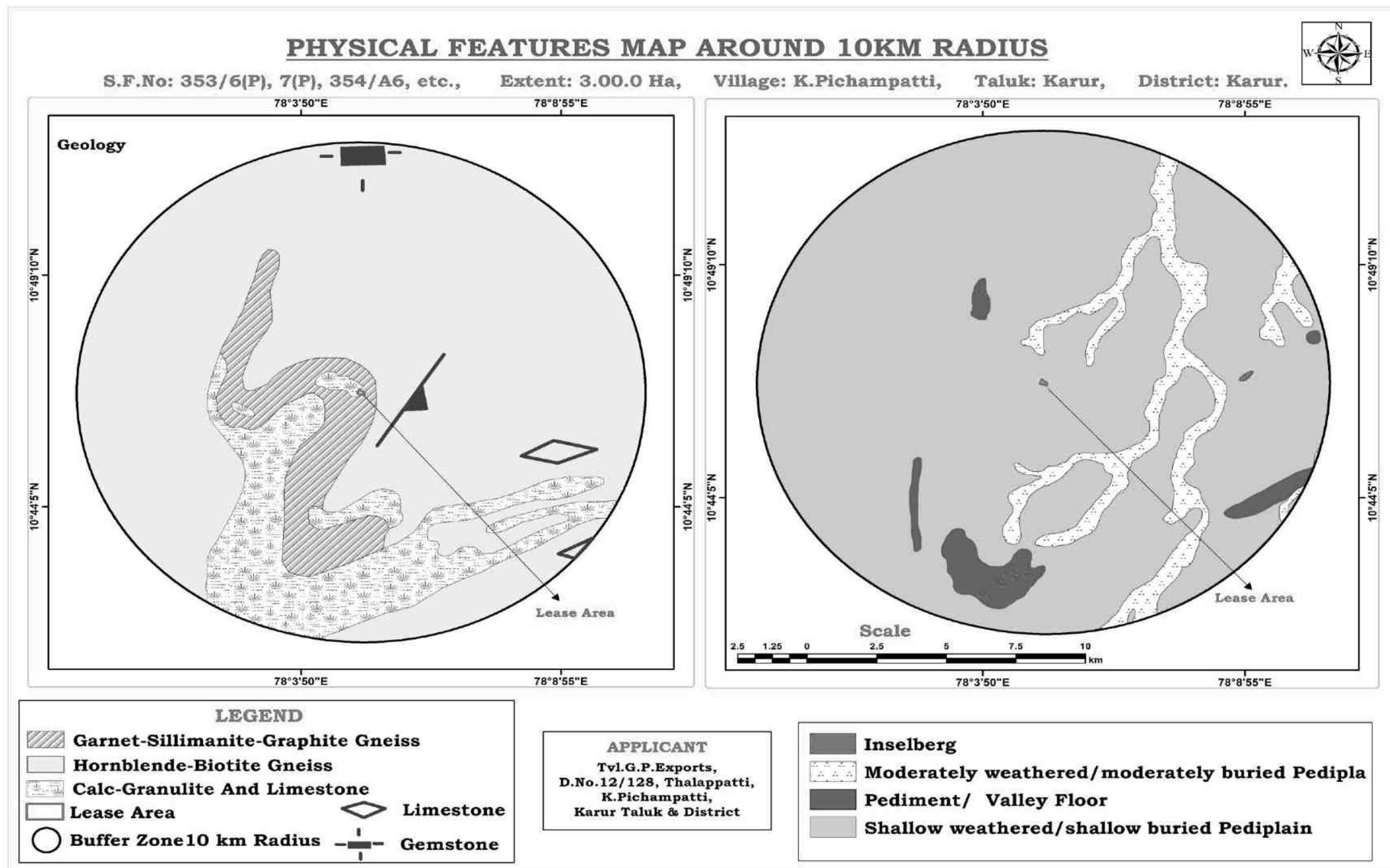


Fig No 3.32 Image Showing Geology and Geomorphology of the lease area

CHAPTER – 4: ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Open cast mining is carried out by using excavators and dumpers combination. Scientific mining with proper benches with width and slope will be enabled as per MMR, 1961. Jackhammers with compressors will be deployed for drilling. Manual labors will be engaged for jack hammer drilling, sorting of waste and excavator will be used for loading the granite into trucks. Primary blasting will be carried out nonel blasting techniques with minimum vibration or detonating card with electric detonator initiation system. Sizing of materials shall be done by rock breakers or muffle blasting or pop shooting to the required size for better loading into trucks.

All these operations can disturb the environment in various ways, such as removal of mass, change of landscape, flora and fauna of the area, surface drainage, and change in air, water and soil quality. Therefore, it is essential to assess the impacts of mining on different environmental parameters before starting the mining operations, so that abatement measures could be planned in advance for eco-friendly mining in the area. The likely impacts on various environmental aspects and mitigation measures are discussed below.

4.1 Air Environment

The air borne particulate matter is the main air pollutant by opencast mining. The mining operation will be carried out by jack hammer drilling, blasting, excavation, loading and transportation.

4.1.1. Anticipated Impact

The air borne particulate matter generated by handling, operations and transportation of granite are the main air pollutant. The emissions of Sulphur dioxide (SO₂), Oxides of Nitrogen (NO₂) contributed by diesel operated excavation/loading equipment and vehicles plying on haul roads are marginal. Prediction of impacts on air environment has been carried out by considering generation of rejects and overburden per annum of the granite quarry 3.00 Ha.

4.1.2 Emissions Details

Drilling, Blasting, Loading, unloading and transportation of granite and wind erosion of the exposed area and movement of light vehicles will be the main polluting source in the mining activities that releasing Particulate Matter (PM₁₀ and PM_{2.5}) affecting ambient air of the area. Emission during blasting, loading and unloading was calculated as the area sources. Transportation of the granite by trucks operated on the haul road was calculated as the line sources. Details of emission during loading/unloading and transportation on the haul road,

wind erosion of the exposed area and road maintenance were discussed and combined impact was predicted in the worst-case scenario under worst meteorological condition given as follows:

4.1.2.1 Drilling

Drilling is the process of making holes in granite to carry out smooth blasting. The drilling is most representative for point source. The rate of emission from the drilling process will be very high when compared to loading, unloading, transporting and blasting. So wet drilling will be proposed for the granite quarry which completely suppresses the dust emitted during drilling process. Also dust extractor will be used over the wet drilling for the effective emission control system.

4.1.2.2. Loading of Granite

Chakraborty et al. (2002) was used to calculate emission of particulate matter released into the atmosphere during loading of mineral.

$$E = \{[(100 - m) (m)^{-1}]^{0.1} \{(s) (100 - S)^{-1}\}^{0.3} h^{0.2} \{(u) (0.2 + 1.05)^{-1}\} \{(xl) (15.4 + 0.87xl)^{-1}\}]$$

Table No. 4.1: Source Parameters (Loading of Granite)

S.No	Description	Symbol	Quantity
1	Moisture content (%)	m	2.4%
2	Silt content (%)	s	0.1(approx)
3	Wind speed (m s ⁻¹)	u	2.5
4	Drop height (m)	h	1m above the tipper body
5	Size of loader (m ³)	l	1.20
6	Frequency of loading(no.h ⁻¹)	x	12 times
7	Area of Source (m ²)	a	8890
8	Controlled emission rate (g s ⁻¹)	CE	0.035

Totally 2 tippers and 1 hydraulic excavator will be proposed for granite quarry. The maximum rate of production per hour is estimated at 3.6 m³. The loading capacity of excavator is 1.20 m³.

x = frequency of loading (no. h⁻¹) = 3.6/1.20 = 3 times.

4.1.2.3 Loading of Overburden (Weathered rock)

Chakraborty et al. (2002) was used to calculate emission of particulate matter released into the atmosphere during loading of gravel.

$$E = [0.018\{(100-m) (m)^{-1}\}^{1.4}\{s (100-s)^{-1}\}^{1.4}(uhxl)^{0.1}]$$

Table No. 4.2: Source Parameters (Loading of Weathered rock)

S.No	Description	Symbol	Quantity
1	Moisture content (%)	m	20
2	Silt content (%)	s	12
3	Wind speed (m)	u	2.5
4	Drop height (m)	h	1m above the tipper body
5	Capacity of tipper (t)	c	1.20
6	Frequency of unloading (no.h ⁻¹)	y	5 times (maximum)
7	Area of Source (m ²)	a	206922 (117631 + 89291)
8	Controlled emission rate (g s ⁻¹)	CE	0.0021

The maximum rate of production of Weathered rock per hour is estimated at 2 m³.
The loading capacity of excavator is 1.20 m³.

x = frequency of loading (no. h⁻¹) = 2/1.20 = 2 times

Emission of PM₁₀ during Weathered rock loading was calculated and found to be 0.035 g/s and 0.0021 g/s respectively based on moisture content 2.4% and 20% respectively and average wind speed was 2.5 m/s as observed with site data.

4.1.2.4 Haul Road

Chaulya (2006) was used to calculate emission of particulate matter released into the atmosphere during transportation of granite by truck operated per hour on haul road.

$$E = \{[(100-m) (m)^{-1}]^{0.35} \{(us) (100-s)^{-1}\}^{0.7} \{0.5 + 0.1(f + 0.42v)\} 10^{-3}$$

Table No. 4.3: Source Parameters (During Vehicle Movement on Haul Road)

S. No	Description	Symbol	Quantity
1	Moisture content (%)	m	70
2	Silt content (%)	s	14
3	Wind speed (ms ⁻¹)	u	2.5
4	Frequency of transporting (no. h ⁻¹)	f	12 times (maximum)
5	Average vehicle speed(ms ⁻¹)	v	4.1
6	Haul road area (m ²)	a	80
7	Controlled emission rate (g s ⁻¹)	CE	0.0004

Emission of PM₁₀ due to transportation of granite and granite waste on haul road was 0.0004 g/s based on assumption that silt content spread on road surface was 14% and average

wind speed of 2.5 m/s as observed with site data. Based on the above consideration there was low emission of PM₁₀ during transportation of granite.

4.1.2.5 Blasting

In another scenario when controlled blasting is carried out at the mine site and all the other activities are brought to halt. Significant amount of PM₁₀ is released during blasting at mining site for very short-term.

$$E = E_f \times Q$$

Table No. 4.4: Source Parameters (During Blasting)

S. No	Description	Symbol	Quantity
1	Uncontrolled Particulate matter emissions rate in pounds per year	UE	61
2	Emission factor in unit of pounds of particulate per ton shifted by blasting	E _f	TSP E _f = 0.0001 pounds/ton PM ₁₀ E _f = 0.0008 pounds/ton PM _{2.5} E _f = 0.0008 pounds/ton
3	Amount of material of all types shifted by blasting during the year in tons	Q	23893
4	Control efficiency (%)	c	30
5	Controlled Particulate matter emissions rate in pounds per year	CE	50

(Reference: Mojave Desert Air Quality Management District, 1403 Park Avenue, Victoria, CA 92392 -2310).

Loading of granite, overburden, movement of trucks on haul roads and open pit source were considered as combined action. So, the emission during loading, unloading and transportation were taken combined and US EPA based Dispersion AERMOD model was used for prediction of impact with 1-h meteorological data of the study period for the assessment of incremental GLC. Then blasting was considered as separate action and US EPA based Dispersion AERMOD model was used for prediction of impact separately.

4.1.2.6 Summary of calculated Emission Rates

Table No. 4.5: Emissions Rates of PM₁₀

Source type	Controlled Emission Rate (g/s/m ²)
Granite loading	2.5 x 10 ⁻⁶
Overburden Loading	1.4 x 10 ⁻⁷
Haul Road	4.5 x 10 ⁻⁶
Blasting	1.7 x 10 ⁻⁷

Table No. 4.6: Emissions Rates of SO₂

Source type	Average Emission rate for HDDV as per EPA	Emission rate (Proposed Project)
Tippers	0.012 g/mile	7.5×10^{-8} g/s/m ²
Excavators	0.012 g/mile	4.2×10^{-7} g/s/m ²
Total Emission Rate		4.9×10^{-7} g/s/m ²

Table No. 4.7: Emissions Rates of NO₂

Source type	Average Emission rate for HDDV as per EPA	Emission rate (Proposed Project)
Tippers	0.725 g/mile	4.5×10^{-6} g/s/m ²
Excavators	0.725 g/mile	2.3×10^{-5} g/s/m ²
Total Emission Rate		2.8×10^{-5} g/s/m ²

4.1.3 Frame work of Computation & Model details

By using the above-mentioned inputs, ground level concentrations due to the mining activities have been estimated to know the incremental rise in ambient air quality and impact in the study area. The effect of air pollutants upon receptors are influenced by concentration of pollutants and their dispersion in the atmosphere. Air quality modeling is an important tool for prediction of dispersion of pollutants with GLC and it is used to find the air pollution control activities which controls the emission rates of different activities.

4.1.3.1 Model Input data

The air pollution modeling carried out represents the normal operating scenarios. As the proposed activity is mining the major source of pollution is particulate matter and gaseous emission. The following data has required as input data for dispersion pattern.

- 1) Baseline data of PM₁₀, SO₂ and NO₂ is needed along with meteorological data. Meteorological data preprocessor (AERMET) needs meteorological data which calculates atmospheric turbulence characteristics, mixing heights, surface heat flux for finding the atmospheric dispersion. Site specific data recorded during post monsoon season (1st December 2025 to 28th February 2026) at project site for executing modeling studies.
- 2) The emission rates of PM₁₀, SO₂ and NO₂ from the various sources was taken.
- 3) Location of the project.

4.1.3.2 Model Results

The Air Quality Impact Prediction has been done by using AERMOD of USEPA".

The main sources of air pollution with regard to the proposed project for the purpose of estimation of increase in PM₁₀, SO₂ and NO₂ are identified due to –

1. Scenario 1 – PM₁₀

- (i) Loading/unloading of granite rejects and overburden
- (ii) Transportation of granite rejects, overburden by trucks on the Haul roads from mining benches.

2. Scenario 2 - PM₁₀

- (i) Due to blasting

3. Scenario 3 – SO₂ and NO₂

- i. From Operation of Excavator and movement of transporting vehicle

Scenario1:

Table No. 4.8: Total predicted GLC of PM₁₀ in core and buffer zone due to combined action of loading, unloading and Transportation of granite by trucks on the haul road, open pit source of the mining lease area.

Location	Location Code	Background value in $\mu\text{g}/\text{m}^3$	Incremental GLC in $\mu\text{g}/\text{m}^3$	Total Predicted GLC in $\mu\text{g}/\text{m}^3$
Mine site	AQ1 - Centre	48	20.07	68.07
Receptor 01	AQ2 – 190m - S	48	2.39	50.39
National Ambient Air Quality Standards (NAAQS)				100

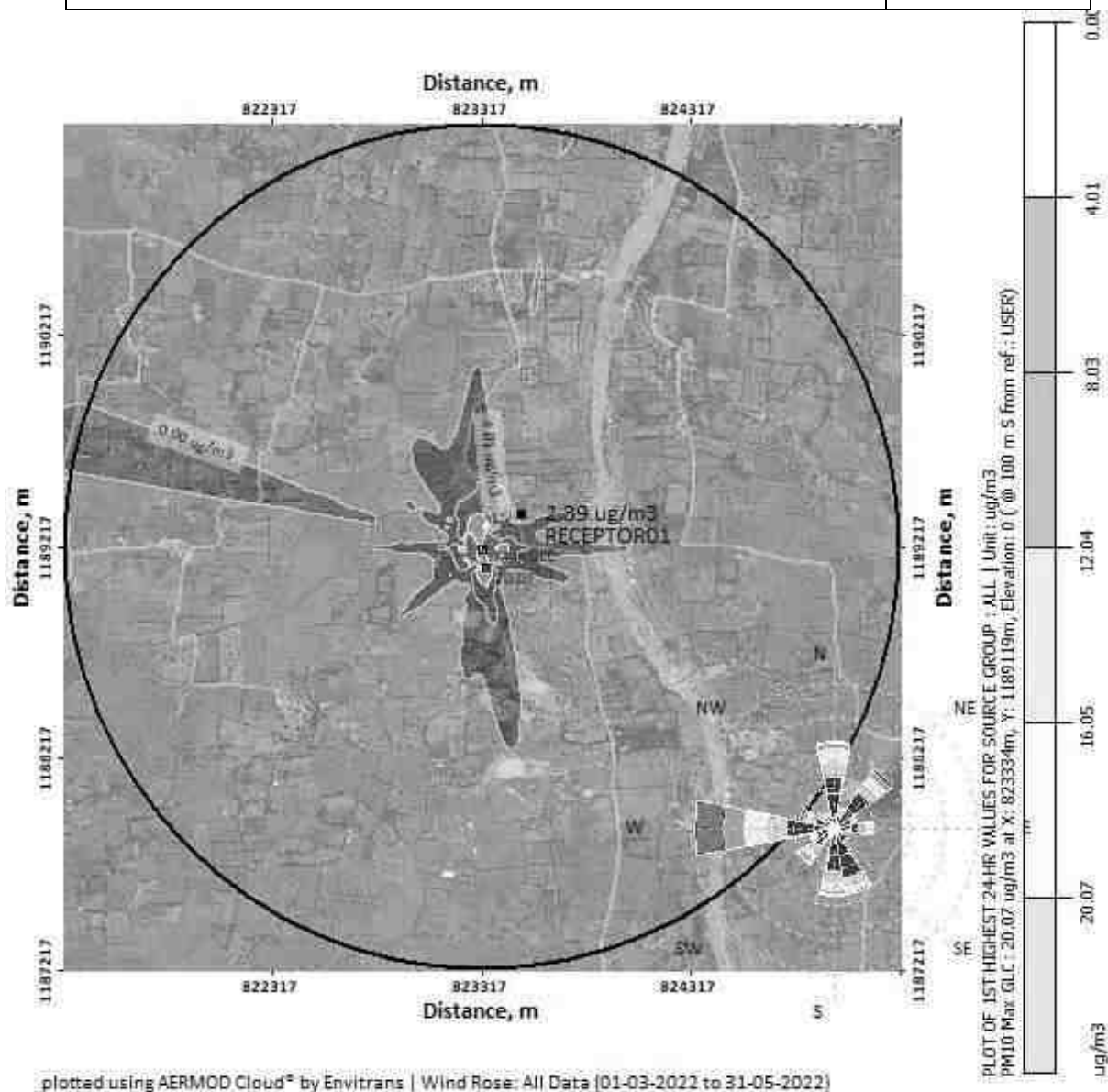


Fig No.4.1: Isopleth indicating Incremental value of PM₁₀ due to combined action of loading, unloading, transportation of granite on haul road

Total predicted 24-h maximum GLC of PM₁₀ at project site for scenario 1 i.e. loading-unloading, transportation and scenario 2 i.e. Blasting was 68.07µg/m³ and 54.18µg/m³ respectively after superposition of base-line value 48µg/m³ over the incremental GLC 20.07µg/m³ and 6.18µg/m³ respectively due to combined impact of loading, unloading, open pit and transportation over the haul road and due to blasting.

Maximum Impact of PM₁₀, SO₂ and NO₂ was observed close to the source within the lease area due to moderate wind speeds.

4.1.3.4 Combined Impact on Air Environment due to proposed quarry and adjacent quarry within 500m radius.

There are two existing quarries namely M.P Granites located within the 500m radius of proposed quarry for G.P Exports multicolor granite quarry. The predicted incremental GLC of PM₁₀, PM_{2.5}, SO₂ and NO₂ due to the proposed mining activity is given in below table.

Table No. 4.12: Incremental GLC of PM₁₀, PM_{2.5}, SO₂ and NO₂ due to the proposed mining activity

S. No	Air Pollutants	Incremental GLC due to proposed quarry (Controlled) µg/m ³
1.	PM ₁₀	20.07
2	SO _x	1.95
3.	NO _x	3.31

Assume that emission rate from the various mining activity in adjacent 2 quarries are same as the proposed quarries. So, the incremental GLC will also be same as proposed quarry. Therefore, the when the proposed quarry and two adjacent quarries are working together, the incremental GLC and total predicted GLC are given below table.

Table No.4.13: Total predicted GLC of PM₁₀, PM_{2.5}, SO₂ and NO₂ due to the combined activity in the cluster

S.No	Air Pollutants	Baseline Value	Incremental GLC due to proposed quarry and two quarries µg/m ³	Total Predicted GLC due to proposed quarry and two adjacent quarry µg/m ³
1.	PM ₁₀	48	60.21	108.21
2.	SO _x	9	5.85	14.85
3.	NO _x	15	9.93	24.93

From the above table it is found that, when the three quarries are working together the Total predicted GLC of SO₂ and NO₂ (Controlled) due to mining activities was found within

the NAAQS in the cluster area. PM₁₀ is slightly beyond the limits which shall be controlled by installation of more number of sprinklers in the lease area.

4.1.4. Air Quality Index

An air quality index is defined as an overall scheme that transforms the weighed values of individual air pollution related parameters (for example, pollutant concentrations) into a single number or set of numbers (Ott, 1978). Air quality standards are the basic foundation that provides a legal framework for air pollution control. The basis of development of standards is to provide a rational for protecting public health from adverse effects of air pollutants, to eliminate or reduce exposure to hazardous air pollutants, and to guide national/ local authorities for pollution control decisions.

The objective of an AQI is to quickly disseminate air quality information (almost in real-time) that entails the system to account for pollutants which have short-term impacts. To present status of the air quality and its effects on human health, the following description categories have been adopted for IND-AQI.

AQI breakpoints for eight pollutant parameters considered for AQI and these are summarized below in Table with color scheme to represent the AQI bands.

Table No. 4.14: AQI and its associated Health Impacts

AQI	Associated Health Impacts
Good	Minimal Impact
Satisfactory	May cause minor breathing discomfort to sensitive people
Moderate	May cause breathing discomfort to the people with lung disease such as asthma and discomfort to people with heart disease, children and older adults
Poor	May cause breathing discomfort to the people on prolonged exposure and discomfort to people with heart disease with short exposure
Very Poor	May cause respiratory illness to the people on prolonged exposure. Effect may be more pronounced in people with lung and heart diseases
Severe	May cause respiratory effects even on healthy people and seious health impacts on people with lung/heart diseases. The health impacts may be experienced even during light physical activity

Table No. 4.15: Proposed Breakpoints for AQI Scale 0-500**(Units: $\mu\text{g}/\text{m}^3$ unless mentioned otherwise)**

AQI Category (Range)	PM ₁₀ 24-hr	PM _{2.5} 24-hr	NO ₂ 24-hr	O ₃ 8-hr	CO 8-hr (mg/m ³)	SO ₂ 24-hr	NH ₃ 24-hr	Pb 24-hr
Good (0-50)	0-50	0-30	0-40	0-50	0-1.0	0-40	0-200	0-0.5
Satisfactory (51-100)	51-100	31-60	41-80	51-100	1.1-2.0	41-80	201-400	0.5-1.0
Moderately polluted (101-200)	101-250	61-90	81-180	101-168	2.1-10	81-380	401-800	1.1-2.0
Poor (201-300)	251-350	91-120	181-280	169-208	10-17	381-800	801-1200	2.1-3.0
Very poor (301-400)	351-430	121-230	281-400	209-748*	17-34	801-1600	1200-1800	3.1-3.5
Severe (401-500)	430+	230+	400+	748+*	34+	1600+	1800+	3.5+

*One hourly monitoring (for mathematical calculation only)

4.1.4.1. Interpretation of Air quality using IND-AQI:**Table No. 4.16: Computation of AQI with Baseline data**

Air pollutants	Total Predicted GLC due to proposed quarry $\mu\text{g}/\text{m}^3$	AQI	Associated Health Impacts
PM ₁₀	68.07	Satisfactory (51-100)	May cause minor breathing discomfort to sensitive people
SO ₂	10.95	Good (0-50)	Minimal Impact
NO ₂	17.31	Good (0-50)	Minimal Impact

The above table shows the AQI quality due to total predicted GLC of quarry in core area. PM₁₀ is between 51-100 and 31-60 of AQI which is satisfactory and may cause minor breathing discomfort to sensitive people. SO₂ and NO₂ are between 0-40 of AQI which is good and may cause Minimal Impact. When all the quarries in the cluster area are working together the incremental GLC will be high and it may cross the prescribed limits by NAAQS. To overcome such situation, cluster committee should be formed and adopt the environmental management plan effectively as per EIA report.

4.1.5. Mitigation Measures

The pollutants from nearby ongoing mining activities, residential and commercial activities are the primary sources of air pollution. However, in the study area adequate control measures will be implemented in future at the time of mining operation. Mitigate measures suggested for air pollution controls are based on the baseline ambient air quality of the area. From the point of view of maintenance of an acceptable ambient air quality in the region, it is desirable that air quality is monitored on a regular basis to check compliance of standards as prescribed by regulatory authorities. However, to further minimize the pollutant

concentration especially PM₁₀, the following control measure should be adopted by the project proponent.

- ❖ Regular water sprinkling on haul roads, blasted heaps, service roads and overburden dumps at regular intervals will help in reducing considerable dust pollution
- ❖ 1.0 KLD of water will be used for dust suppression of the quarried.
- ❖ Use of Sharp drill bits for drilling holes and charging the holes by using optimum charge and using time delay detonator.
- ❖ Conventional low explosives are being used.
- ❖ The scale of blasting is however very less considering the rate of production.
- ❖ Covering of material when transport through trucks/dumper
- ❖ The drilling and blasting are being carried out as per the proposals laid down in the approved plan.
- ❖ Proposed to follow up muffle blasting so as to prevent fly rock fragments
- ❖ Avoiding blasting during high windy periods and temperature inversion periods
- ❖ Delay blasting under unfavorable wind and atmospheric conditions
- ❖ Use of appropriate explosives for blasting and avoiding overcharging of blast holes
- ❖ The vehicles and machinery will be kept in well maintained condition so that emissions will minimize
- ❖ Provision of green belt all along the periphery of the lease area for control of dust
- ❖ Information on wind direction and meteorology will be considered while planning, so that pollutants, which cannot be fully suppressed by engineering technique, will be prevented from reaching the residential areas
- ❖ Cabins for shovel and dumpers and dust masks to workmen will be provided
- ❖ The dust respirators should be provided to all workers working in dusty environment
- ❖ Regular health check-up of workers and nearby villagers in the impacted area should be carried out and also regular occupational health assessment of employees should be carried out as per the Factories Act
- ❖ Ambient Air Quality Monitoring will be conducted on regular basis to assess the quality of ambient air.

As discussed above under each activity, there will be increase in terms of dust load and gaseous emissions. However, it can be stated that these incremental contributions will remain within the prescribed limits/norms. Further, the mitigation measures will further bring down these concentrations making the mining activities more eco-friendly.

4.2 Carbon emission and carbon sinks due to proposed mining activity**4.2.1 Carbon emissions**

There are both natural and human sources of carbon dioxide emissions. Natural sources include decomposition, ocean release and respiration. Human sources come from industrial activities such as cement production, deforestation as well as the burning of fossil fuels like coal, oil and natural gas.

4.2.1.1 Carbon emission due to natural activity in project site and carbon sinks**a) Carbon from decomposition**

As the proposed mining activity is carried out in existing mining pit, there will be no need of cutting of any trees or plants. So, the process of decomposition will not take place which emits carbon dioxide into the atmosphere.

b) Carbon from respiration

The carbon dioxide we exhale does not contribute to global warming for the simple reason. Since all the carbon dioxide we exhale captured by plants during photosynthesis, we are not disturbing the carbon dioxide content of the atmosphere by breathing.

4.2.1.2 Carbon emission due to human activity in project site and carbon sinks**a) Carbon from Vehicles**

The proposed method of mining is semi mechanized which involves activity of excavator and tippers. The burning of fossil fuels used for the tippers and excavators' releases carbon monoxide, carbon dioxide and nitrogen oxide into the atmosphere. When those gases are emitted into the atmosphere it affects the amount of greenhouse gases, which are linked to climate change and global warming. In average based on the production per day, two tippers can travel 21 miles within the lease area for transporting the granite. Plants not only absorb carbon dioxide but also absorb other gases and remove the impurities from it.

Table No. 4.17: Emission of carbon monoxide carbon dioxide from vehicle

Source type	Average Emission rate of CO for HDDV as per EPA	Emission rate of CO
Tippers	2.311 g/mile	0.05 kg/day
Excavators	2.311 g/mile	0.23 kg day
Total Emission Rate		0.28 kg/day

Remediation

The project proponent proposed to plant nearly 500 numbers of one-year taller tree sapling along the safety zone of mining lease area to overcome the emission of carbon gases and other gases by vehicles in the quarry. Moreover, they will plant trees along the village

road and government schools under CER and CSR schemes. BS –VI model of tippers are proposed to use in the quarry for the controlled emission of gases.

4.3 Soil Carbon stock

Soil carbon sequestration is a process in which CO₂ is removed from the atmosphere and stored in the soil carbon pool. This process is primarily mediated by plants through photosynthesis, with carbon stored in the form of SOC. Carbon is the main component of soil organic matter and helps give soil its water-retention capacity, its structure, and its fertility.

The dense carbon stocks below and above the soil are mostly seen in dense forest where more process of photosynthesis takes place and tons of leaves, branches gets decomposed. The agricultural activity in field can degrade and deplete the SOC levels during the process of tillage in paddy, sugarcane turmeric crop field.

The No Reserve Forest and Wildlife Sanctuaries within 10km Radius and this area do not fall under Wildlife Conservation Act.,

As it is mining project which is carried out within lease area it will not affect any soil carbon stock in the nearest reserve forest.

4.4 Noise Environment

Noise survey has been conducted in the study area to assess the background noise levels in different zones. The anticipated noise level due to proposed mining activity has been assessed considering baseline noise level, distance involving mining site to nearest village and noise generated due to proposed mining activity. Following are the sources of noise in the proposed open cast granite quarry project.

- Drilling;
- Blasting;
- Vehicular Movement.

The drilling operation is being carried out by Jack hammer operated by compressor mounted with tractor. The noise levels in the working environment are being and will be maintained within the standards prescribed by Occupational Safety and Health Administration (OSHA). These standards were established with the emphasis on reducing the hearing loss. The permissible limits, as laid down by CPCB, are presented in below in table 4.18.

Noise generated from blasting is always instantaneous. The noise produced by blasting is for extremely short duration of around 0.5 seconds, though with a high intensity. Blasting time is generally fixed at lunch interval or after the working shift taking. Noise of blast is site specific and depends on type, quantity of explosives, dimensions of drill holes,

degree of compaction of explosive in the hole and rock. Blasting, in addition to easing the hard strata, generates ground vibrations and instantaneous noise. The noise levels in many situations will be above Threshold Limit Value. Exposure to noise levels, above Threshold Limit Value may have detrimental effect on the workers' health. The adverse effects of high noise levels on exposed workers may result in Annoyance, Fatigue, Temporary shift of threshold limit of hearing, Permanent loss of hearing and Hypertension and high blood cholesterol, etc.

Noise pollution poses a major health risk to the mine workers. When noise in the form of waves impinges the eardrum, it begins to vibrate, stimulating other delicate tissues and organs in the ear. If the magnitude of noise exceeds the tolerance limits, it is manifested in the form of discomfort leading to annoyance and in extreme cases to loss of hearing. Detrimental effects of noise pollution are not only related to sound pressure level and frequency, but also on the total duration of exposure and the age of the person.

Table No. 4.18: Permissible Exposures in Cases of Continuous Noise (CPCB)

Sound Level (dB A)	Continuous Duration (Hours)
85	8
88	4
91	2
94	1
97	0.5
100	0.25

Table No. 4.19: Noise Exposure Levels & Its Effects

Noise Levels dB(A)	Exposure Time	Effects
85	Continuous	Safe
85-90	Continuous	Annoyance and Irritation
90-100	Short term	Temporary shift in hearing threshold, generally with complete recovery
Above 100	Continuous	Permanent loss of hearing
100-110	Several years	Permanent deafness
110-120	Few months	Permanent deafness
120	Short term	Extreme discomfort
140	Short term	Discomfort with actual pain
150 and above	Single exposure	Mechanical damage to the ear

Source: Hand Book of EIA, Rao & Wooten

4.4.1 Anticipated Impacts due to Noise in cluster core zone

During the operation phase of mining, movement of HEMM also add some noise level whose impact is being minimized by continuous maintenance of vehicle. The likely generations of noise levels due to operation of HEMM are given in table 4.20.

Table No. 4.20: Expected Noise Levels

Equipment's	Expected Noise Levels dB(A)
Mining	
Drilling	90-100
Shovel	75-80
Tipper	75-80
Dozers	85-90
Crusher	85-95

The mine site where heavy earth moving machinery will operate, noise level will be within the stipulated 90 dB (A) norm of DGMS. The protection measures for the operators of this equipment will reduce the impact/exposure.

Predicted noise levels due to mining operations using Mathematical Equations

$L_2 = L_1 - 20 \log_{10} (R_2/R_1)$ Where L_1 dB (A) = Noise level at a distance R_1 (m)

L_2 dB (A) = Noise level at a distance R_2 (m) &

$L = 10 \log_{10} (10^{L_1/10} + 10^{L_2/10} + \dots + 10^{L_n/10})$

Where L_1 , L_2 and L_n are noise level dB (A)

Table No. 4.21: Predicted Noise levels in Core Zone and buffer zone

Location Code	Distance, km	Source Noise Level, dB (A)	L (Day) dB (A)	L (Night) dB(A)	Noise level at Receptor from Mining sources, dB(A)	Resultant noise level, dB(A) day time	Resultant noise level, dB(A) Night time
Core Zone	--	100	44.1	42.0	100	100	42.0
Vellagoundanpatti	1.0	100	41.4	38.5	39.2	44.6	38.5
Kottanatham	0.8	100	38.9	35.2	43.5	45.2	35.2
K.Pichampatti	2.4	100	41.3	37.8	39.1	44.4	37.8
Thirumakkam Patti	1.6	100	41.6	37.4	43.4	47.7	37.4

Green colour- Baseline Value, **Red Colour** – Noise level due to mining,

Blue colour- Baseline + Noise level due to mining

Although the noise level due to the operation of various mining machineries is 100dB(A), the noise level at different receptors is lower due to the distance involved and other topographical features adding to the noise attenuation. The calculated values at the receptors and resultant noise level are based on the mathematical formula as mentioned above.

The anticipated noise level in buffer villages due to mining activity is calculated by considering operation of one quarry only. **When all the quarries in the cluster work together in same time, the resultant noise level may increase up to 5 decibels.**

To overcome the noise pollution due to operation of quarries in the cluster area the following mitigation measure should be followed.

4.4.2 Mitigation measures for Control of Noise

The following noise mitigation measures are proposed for control of Noise.

- ❖ Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas.
- ❖ Limiting time exposure of workers to excessive noise.
- ❖ Proper and regular maintenance of vehicles, machinery and other equipments.
- ❖ The noise generated by the machinery will be reduced by proper lubrication of the machinery and other equipments.
- ❖ Speed of trucks entering or leaving the mine will be limited to moderate speed to prevent undue noise from empty vehicles.
- ❖ Carrying out blasting only during day time and not on cloudy days.
- ❖ Noise levels will be controlled by using optimum explosive charge, proper delay detonators and proper stemming to prevent blow out of holes.
- ❖ Providing proper noise proof enclosure for the workers separated from the noise source and noise prone equipment
- ❖ Provision of Quiet areas, where employees can get relief from workplace noise.
- ❖ The development of green belts around the periphery of the mine to attenuate noise.
- ❖ Regular medical check-up and proper training to personnel to create awareness about adverse noise level effects.

4.5 Ground Vibrations

Ground vibration due to mining activities in the area are anticipated due to operation of mining machines like excavators, wheel loaders, drilling and blasting, transportation vehicles, etc. However, the major source of ground vibration from this mine is blasting. Another impact due to blasting activities is fly rocks. These may fall on the houses or agriculture fields nearby the mining lease area and may cause injury to persons or damage to the structures. The nearest major habitation, K.Pitachampatti village is located in northeast Side. The study area does not involve any mining activity so anticipated impact has been assessed using the empirical equation. The empirical equation used for assessment of peak particle velocity (PPV) is:

$$V = 417.8 \{D / (Q^{0.5})\}^{-1.265}$$

Where,

V= Peak particle velocity in mm/s

D= Distance between location of blast and gauge point in m

Q=Quantity of explosive per blasting in kg.

The standards for safe limit of PPV are established by Directorate General of Mines Safety for safe level criteria through Circular No. 7 dated 29/8/1997. Permissible standards of Ground vibration due to blasting as per guidelines of Director General of Mines Safety (DGMS), Dhanbad are given in table 4.23.

Table No. 4.22: Estimated Peak Particle velocities for different Explosive Charges

Nearest Habitation	Quantity of Explosive/Blast, Kg	PPV, mm/s
190m -S	7	2.6
370m -S	7	1.7

Quantity of broken rock per hole = $0.45 \times 2.6 = 1.17 \text{ m}^3$

Blasting efficiency @ 90% = $1.17 \times 90\% = 1.05 \text{ m}^3/\text{hole}$

Charge per hole = 140gm of 25mm dia. Ctg

Quantity of rock broken per day = 29 m^3 or 80 M.T

Requirement of explosive per day = 6kg @ 7 M.T per kg of expl.

No. of holes to be drilled per day = $80 / 1.05 = 53$ holes

Table No. 4.23: Permissible Peak Particle Velocities (mm/s)

S. No	Type of Structure	Dominant excitation Frequency		
		< 8 Hz	8 – 25 Hz	> 25 Hz
A)	Buildings/structures not belonging to the owner			
1	Domestic houses/structures (Kuchcha brick and cement)	5	10	15

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Proponent: M/s. G.P Exports, Multicolour Granite Quarry, Karur District

2	Industrial Buildings (RCC and framed structures)	10	20	25
3	Objects of historical importance and sensitive structure	2	5	10
B)	Buildings belonging to the owner with limited life span			
1	Domestic houses/structures (Kuchcha brick and cement)	10	15	25
2	Industrial buildings (RCC & framed structures)	15	25	50

Source: DGMS Circular No. 7 dated 29/08/1997

From the above results in table 4.22, it can be seen that the charge per blast of 7kg is well below the Peak particle Velocity of 5mm/s for the habitation located at the distance of 190m.

4.5.1 Mitigation measures for Control of Vibration

Blasting is the major source of vibration and fly rocks. The following mitigation measures are proposed for control of vibration and fly rocks.

- ❖ Specific charge pattern has to be designed by proper trial vibration studies with varying charge ratios.
- ❖ Milli second detonators shall be used preferably 25–50ms per delay to control vibrations.
- ❖ Inclined holes shall minimize back brake and intensive shocks.
- ❖ In case of development work if any, cushion blasting and Deck loading system shall be adopted to minimize throw of fragments and ground vibration.
- ❖ Air blast due to usage of Detonating Cord with 10gms/m shall be reduced to 5gms/m to minimize air reverberation.
- ❖ If the vibration still exceeds the limit a long Trench to a depth of 6m may cut in the direction of wave's movement to break longitudinal waves which travel close to surface, preferably near mine buffer zone.
- ❖ No deep hole blasting shall be practiced.
- ❖ Heavy machineries with high ground pressure shall not be used in the mines.
- ❖ Proper warning signals should be used.
- ❖ In spite of all measures periodical testing of vibration and noise using approved seismograph by DGMS has to be followed as a part of Environmental monitoring.

Though all mitigation measures are pointed out, as such no adverse effects on human life, wild life and other biotic system.

4.6 Water Environment

Mining operations can affect groundwater quality in several ways. The most obvious occurs in mining below the water table, either in underground workings or open pits. This provides a direct conduit to aquifers. Groundwater quality is also affected when waters (natural or process waters or wastewater) infiltrate through surface materials (including overlying waste or other material) into ground water.

Whereas Impacts on surface water include the build-up of sediments or other toxic products, short and long-term reductions in pH levels (particularly for lakes and reservoirs), destruction or degradation of aquatic habitat, and contamination of drinking water supplies and other human health issues. The water balance for the proposed project is presented in fig 4.3.

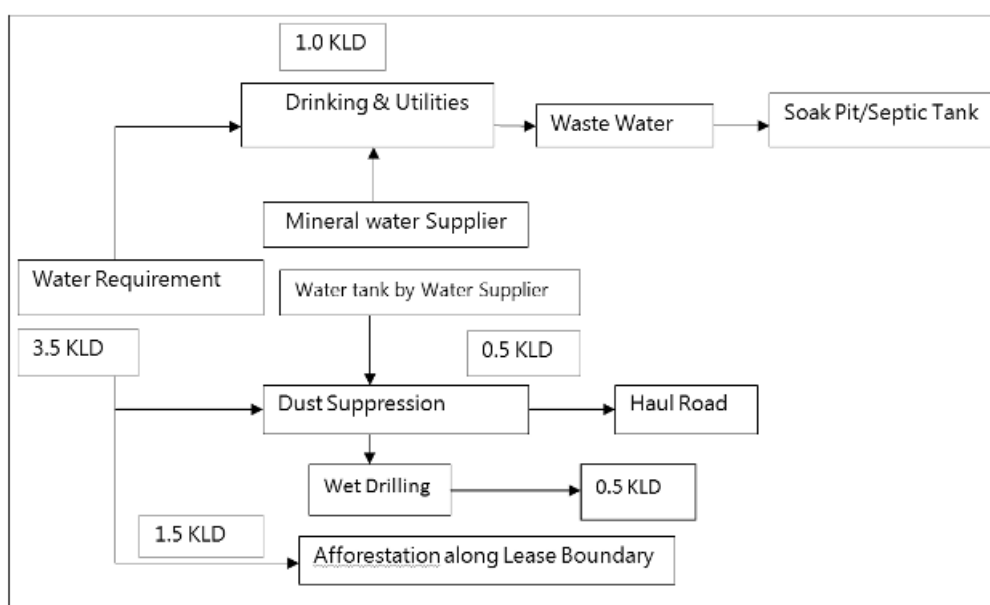


Fig. No. 4.3: Water Balance chart for proposed quarry

Drinking & Utilities = 1.0 KLD

Wastewater = (1.0 KLD * 75%) = 0.75 KLD

Water required For Dust Suppression, Green Belt, wet drilling = 2.5 KLD

Total Water Requirement = 3.5 KLD

There are no probable sources of liquid effluents in this project. The 0.75 KLD of domestic effluent/ wastewater generated from office will be discharged into soak pit via septic tank.

4.6.1. Anticipated Impact on Surface Water body due to proposed projects

There is no nalla or water body location within the leasehold area. From the Drainage Pattern Map, it is found that the 3rd order stream connects the lease area of M/s. G.P Exports in located in Karur. So, the probability of siltation in that stream due to dumping of rejects

within the lease area is high. So, the following mitigation shall be followed to overcome the pollution of surface water bodies due to mining activity.

4.6.1.1 Mitigation Measures:

- i. The garland drainage will be provided around the dump to prevent the escape of runoff along with silt and stone from the dump.
- ii. The repair works of the machineries are strictly prohibited within the lease area to prevent the spillage of grease, oil etc.

4.6.2 Anticipated Impact on Ground water due to proposed project

The water table in this region is about 50. The proposed depth of mining for quarry is 35m bgl. Thus, the mining activity will not intersect ground water table. No chemical having toxic elements will be used for carrying out mining activity. Also, granite does not contain any kind of toxic element which can contaminate the water. So, the rain water or water used for drilling purposes which infiltrates into the ground in the lease area does not affect the quality of ground water.

4.6.3 Management of rain water in the pit during Monsoon Season

During monsoon season, the rain water gets stored in the quarried-out pit. For the working purpose, rain water will be pumped and allowed to store in the surface setting tank constructed outside the lease area to remove suspended solids if any. After the sedimentation process, the water from the settling tank will be used for dust suppression, and green belt development within the lease area.

4.6.4 Water Quality Index

Water Quality Index value has been calculated for the observed values and compared with drinking water specification as per IS 10500:2012 and results were discussed. The WQI has been calculated by using the standards of drinking water quality recommended by the World Health Organization (WHO), Bureau of Indian Standards (BIS) and Indian Council for Medical Research (ICMR). The weighted arithmetic index method (Brown et. al.,) has been used for the calculation of WQI of the water body.

$$\text{Water Quality Index} = \frac{\sum q_n W_n}{\sum W_n}$$

Further quality rating or sub-index (q_n) was calculated using the following expression.

$$q_n = 100 * [V_n - V_{io}] / [S_n - V_{io}] \text{ Where,}$$

q_n = Quality rating for the nth water quality parameter.

V_n = Estimated value of the nth parameter at a given sampling station.

S_n = Standard permissible value of the nth parameter.

V_{io} = Ideal value of nth parameter in a pure water.

Ideal value in most cases $V_{io} = 0$ except in certain parameters like PH and dissolved oxygen.

V_{io} for PH = 7 and V_{io} for DO = 14.6

W_n = Unit weight for the nth parameter.

The overall Water Quality Index (W.Q.I.) was calculated by aggregating the quality rating with the unit weight linearly.

Table No. 4.24: Unit weight of the water quality parameters

Parameters	Water quality standard (WHO/BIS)	Assigned weight (AW)	Unit weight (UW)
pH	6.5-8.5 (8)	3.66	0.1628
EC ($\mu\text{S}/\text{cm}$)	250	2.50	0.1112
TDS (mg/l)	500	3.33	0.1481
TH (mg/l)	200	3.33	0.1481
Ca^{2+} (mg/l)	75	3.0	0.1334
Mg^{2+} (mg/l)	30	2.66	0.1183
Cl^- (mg/l)	250	4.0	0.1779
Total	-	22.48	1.0

Table No. 4.25: Water quality index of water samples

Sampling Site Name	Water Quality Index Value	Water Quality Index Status
Cluster Core	147.5	Unfit for Drinking
Vellagoundanpatti	65.7	Poor water quality
Kottanatham	80.9	Very Poor water quality
K.Pichampatti	218.4	Unfit for Drinking
Thirumakkam Patti	301.4	

Note: Water Quality is calculated only for Physical and Chemical Parameters

Table No. 4.26: Water quality scale

Water quality	WQI Yadav et al 2016	WQI Ramakrishnaiah 2004	WQI Mohanty 2001
Excellent	0–25	<50	<50
Good	26–50	50–100	50–100
Poor	51–75	100–200	100–200
Very Poor	76-100	100–200	200–300
Unsuitable	Above 100	<300	<300

Note: Water Quality is calculated only for Physical and Chemical Parameters

The WQI of the samples collected from the study area are given in table 4.25. It can be seen that the study area has water quality index value ranging from 65.7 to 301.4 which reflects the Poor water quality to unfit for drinking status of the groundwater quality. The findings demonstrate the varying consistency of groundwater at different locations. All the groundwater samples under poor to unfit for drinking category; it may be due to the absorption of fertilisers, geological condition, channel water, solid waste, sewer drainage, septic tanks, and agricultural waste. The water should be treated by reverse osmosis to reduce dissolved solids and total hardness to the required rate.

4.6.5 Impact on Hydrogeology

In general, the groundwater prospects are less in hard rock areas, especially in Hard rock terrains. The deeper aquifers in hard rock terrains have potential only when they are fed by fractures and thick weathered layer. In the present study, to know the subsurface Lithology and layer thickness of groundwater potential zone were carried out vertical electrical soundings (VES). The resistivity signal dimensions were collected by using DDR-3 model resistivity meter. AB/2 electrode spacing of 100m is used by Schlumberger configuration. The data were analyzed by curve matching techniques. From the apparent resistivity data, the interpreted resistivity curve obtained using the software it is observed that 3-layer curves shown in the fig 4.4. Data collection is another important factor for the success of resistivity method. The interpretation of resistivity data four-layer master curve matching technique has been used. Interpreted Resistivity and layer thickness of various layers shown in table 4.27.

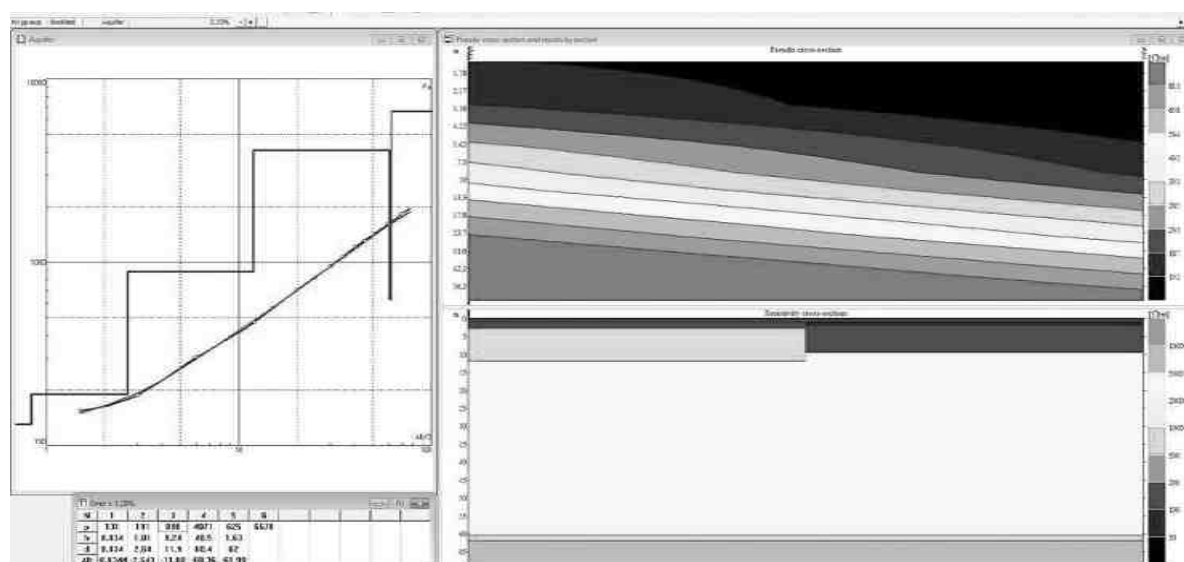


Fig No. 4.4: Interpreted resistivity curve matching technique

0-2.64m: Top soil & Gravel with 191 Ohm. Resistivity

2.64.11.9m weathered rock formation with 890 ohm. Resistivity

11.9-60.4m: massive granite formation with 4231 Ohm. Resistivity

60.4-62m: Resistivity Jointed and fractured rock with about 625ohm. Resistivity

Above 62m: hard massive granite formation with 6670 Ohm. Resistivity From the results of Resistivity Survey, it is understood that the study area is composed of granite deposit, with little geological disturbances by folding. There is no any seepage in this lease area.

4.7 Soil Environment

4.7.1 Impact on Soil Environment

For the mining plan period of five years, the generation of top soil is estimated at 31590 m³. It will be dumped along mining lease boundary as earth bund and it will be utilized for green belt development within the lease area. No chemical or toxic elements will be used during mining activity. So, the health of soil in and around the quarry will not be affected.

4.7.2 Mitigation measures for Soil Conservation

- ❖ Low height retaining wall will be provided along the toe of dumps to prevent the soil along the slopes being carried away by the rain water.
- ❖ Top soil should not be mixed with other waste or reject materials. It should be conserved by judicious utilization in the mine premises.

4.8 Waste Dump Management

The proposed rate of production of granite for five years is about 47790 MT at the rate of 40% recovery up to permissible depth. The 60% reject of 71676 MT. The rejects materials are dumped along lease and backfilled at the end of mine life.

4.8.2 Mitigation measures

The mineral rejects and waste shall be dumped systematically with proper repose angle and stabilization as given below,

- ❖ The rejects\ waste dump shall be properly terraced in to 1.5m benches with proper repose angle and then the top soil shall be spread over the dumps and slope to make them humus for some time, after the soil suitable for water retention, trees will be planted at the top, slope and toe of the stabilized dumps to form vegetation.
- ❖ Gradation of dump shall be done automatically as coarser materials go to the bottom and finer at the top and therefore drain of rain water flow freely to the bottom without endangering the stability of dump,

- ❖ More over the dump height shall be less than 6m with natural repose angle and hence dump will be more stable.
- ❖ Garland drainage around dump shall prevent under wash of dump by hydrostatic pressure to be developed by surface water and control wash outs and collapse.
- ❖ The runoff from the slopes of dump will be collected by garland drainage around the dump and it will be taken up to settling tank to settle down the suspended solids. After that the water will be used for greenbelt development and dust suppression purposes.

4.9 Municipal solid waste management

The human waste shall be treated by temporarily built septic tank and soak pit within the mine lease area. The municipal solid waste generated by workers will be properly segregated into biodegradable and non-biodegradable and disposed through garbage collector of particular location in Karur District.

4.10 Ecology and Biodiversity

4.10.1 Impact on Ecology and Biodiversity

The details and list of flora, fauna, reserved forest and cropping pattern within the 10km radius of study area is given in chapter 3. The impact on ecology and biodiversity due to the proposed mining activity has to be studied in detail to prepare the management plan to safeguard the flora, fauna, forest products and aquatic living organism etc.

A detailed anticipated impact of Ecology and Biodiversity due to mining activity is described in table 4.28 & 4.29.

Table No. 4.28: Ecological Impact Assessments and Its Mitigations -Part 1

Sl. No	Issues	Assessment	Mitigations
1	Proximity to national park/ wildlife sanctuary / reserve forest / mangroves / coastline/estuary/sea	No forests are situated within 10km radius. The proposed project does not attract Forest Conservation Act, 1980. There is no wild life sanctuaries found around 10km radius. Quarry area is 145km (E) away from the Bay of Bengal. Hence the area does not attract Wildlife Protection Act, 1972 and C.R.Z. Notification, 1991.	-
2	Activities of the project affects the breeding/nesting sites of birds and animals	No breeding and nesting site was identified in mining lease site. The fauna sighted mostly migrated from buffer area. The fauna in the buffer	The noise due to the mining activity will be controlled developing green belt all along the

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		zone may be affected by noise generated due to mining activity.	lease boundary, regular maintenance of tippers, excavators, transporting the empty tipper within the speed the 20 km/hr.
3	Located near an area populated by rare or endangered species	No endangered, critically endangered, vulnerable species sighted in core mining lease area and also in buffer zone.	Nil
4	Proposed project restricts access to waterholes for wildlife	No waterholes are in core zone. No Wild life sanctuary within 10km radius.	Nil
5	Proposed mining project impact surface water quality that also provide water to wildlife	'NO' scheduled or threatened wildlife animal sighted regularly in core area.	Nil
6	Proposed mining project increase siltation that would affect nearby Biodiversity area.	Yes, the runoff from the dump which carries the solid materials may get silt in the adjacent agricultural land and affect the cropping pattern. Also, it may get silt in the adjacent river bed and reduce its water carrying capacity	Garland drainage will be excavated around the dump to arrest the runoff from dump. The drainage will be desilted after every precipitation.
7	Risk of fall/slip or cause death to wild animals due to project activities	'NO'. No Wild life sanctuary within 10km radius.	Nil
8	The project release effluents into a water body that also supplies water to a wildlife	As the proposed project is mining activity there will be no possibilities of release of effluents. Also, no Wild life sanctuary within 10km radius.	Nil
9	Mining project effect the forest-based livelihood/ any specific forest production which local livelihood depended	No reserve forest around 10km radius from the periphery of the lease applied area. Hence the proposed mining activity will not affect the nearest forest.	-
10	Project likely to affect migration routes	No migration route observed during monitoring period.	Nil
11	Project likely to affect flora of an area, which have medicinal value	No flora having medicinal value found within the lease area	The flora such as neem having medicinal value found in the study area of buffer zone. Those floras will not be affected by the

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			proposed mining activity at it will be carried out only within the lease area.
12	Forestland is to be diverted, has carbon high sequestration	'NO'. There is no forest land within the lease area.	Nil
13	The project likely to affect wetlands, fish breeding grounds, marine ecology	'NO'. No wetland, fish breeding grounds, marine ecology present in core mining area.	Nil

(Format Source: EIA Guidance Manual-Mining and Minerals, 2010)

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT*Proponent: M/s. G.P Exports, Multicolour Granite Quarry, Karur District***Table No. 4.29: Ecological Impact Assessments – Part 2**

Ecological Criteria	Identified Impacts	Ecological significance of Impact	Magnitude	Duration /Timing/ Frequency	Reversibility	Mitigation	Cumulative Impact
Zone of Influence	Project site Habitat due to Site Clearance.	The proposed mining lease is located in K.Pitachampatti Village. Since it is a fresh area, some shrubs will be cleared before the commencement of the project. The fauna which depends on the shrubs for habitat will be disturbed. No clearance of vegetation in the buffer zone	Low Impact	-	Irreversible in quarry area	During the clearance, it will find the alternate habitat in the buffer zone. During the operation of quarry, the proponent will develop the green belt along the lease boundary. This afforestation will provide the habitat for the migrated fauna.	No Cumulative Impact
Zone of Influence	Ecological Impact Surrounding habitat due to fugitive emission	The fugitive emission due to the mining activities such as drilling, blasting, loading and transportation on the haul road will be deposited on the flora and crop field in the buffer zone which affects growth and its productivity.	Temporary Impact	During the mining plan period	Reversible	Before loading the granite will be moisturized to minimize the emission. The sprinkling of water over the haul road will be done. Then completely wet drilling will be take place. The transportation vehicles	No Cumulative Impact

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						will be maintained and serviced Properly.	
Accessibility	Ecological Impact due to road construction	No Road construction is required to assess the project site. The existing village road connects the project site to the existing MDR road.	No Impact		-	-	No Impact
Zone of Influence	Ecological Impact On Surrounding/ Eco sensitive habitat due to waste water generated from the project activity.	Since the proposed project is a mining activity no waste water generation is expected. Human waste and municipal solid waste will be generated due to the workers.	No Impact	-	-	Human waste will be properly treated by septic tank and soak pit in the lease area and dispose periodically. The municipal solid waste generated by workers will be properly segregated into biodegradable and non-biodegradable and disposed through garbage collector of Coimbatore Corporation.	No Impact

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Zone of Influence	Ecological Impact on Surrounding / Eco sensitive habitat due to Noise generated from the project activity.	During drilling or blasting, transportation of granite, noise will be generated and it may slightly affect the movement of fauna around the lease area.	Temporary impact	Only during drilling, blasting operation and transportation period. (5 years)	No	Avenue trees will be planted along the lease area to minimize the noise level. Milli second detonators shall be used preferably 25–50ms per delay to control vibrations. Regular maintenance of vehicles and driving the empty tipper within 20km/hr speed also control the noise generations.	No Impact
Zone of Influence	Ecological Impact On Surrounding/ Eco sensitive habitat due to Transportation	There is no eco sensitive habitat found around the lease area. The fugitive emission from drilling, blasting, vehicle movement will form layer in leaves thus reducing the gaseous exchange process. This Ultimately affects the growth of plants. The animals like dog, cattle may get accident due to truck movement.	Temporary impact	During Operation Phase	No	The truck driver will be advised to drive the vehicle within 20km/hr inside the lease area and 40km/hr outside the lease area. Before loading the granite will be moisturized to minimize the emission. The sprinkling of water over the haul road will	No Impact

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						be done. Then completely wet drilling will be take place.	
Zone of Influence	Ecological Impact on Natural ecosystem, the soil micro flora and fauna and soil seed banks.	There are no forests and wild life sanctuary within 10km radius of the project site. The Kodaganar river is located at the distance of 10.43 km in NW direction. During raining season, the runoff from the lease may affect the habitants in the river and reduce river carrying capacity	Temporary Impact	Nil	--	The garland drainage will be around the quarry pit and dump to prevent the escape of runoff from the lease area to the river. The maintenance of vehicle will be strictly prohibited in the lease area to prevent the spillages of oil, grease.	No Impact
Zone of Influence	Fish habitats and the Food web/food chain in the water body and Reservoir	The Kodaganar river is located at the distance of 10.43 km in NW direction.	No Impact	Nil	--	The garland drainage will be around the quarry pit and dump. The maintenance of vehicle will be strictly prohibited in the lease area	No Impact

Table No. 4.30: Afforestation Plan of proposed quarry

Year	Place	Type of Trees	Number	Spacing	Rate of survival
I	Lease Boundary	Neem, Panai,casuarinas and other regional trees	30	5m X 5m	80%
II	Lease Boundary	Neem, Panai,casuarinas and other regional trees	30	5m X 5m	80%
III	Lease Boundary	Neem, Panai,casuarinas and other regional trees	30	5m X 5m	80%
IV	Lease Boundary	Neem, Panai,casuarinas and other regional trees	30	5m X 5m	80%
V	Lease Boundary	Neem, Panai,casuarinas and other regional trees	30	5m X 5m	80%

4.11 Socio Economic**4.11.1 Anticipated Impact**

This project will generate direct and indirect employment for more than 100 persons. Preference will be given to the local population for employment in all categories including semi-skilled and unskilled. The villages and their inhabitants in the buffer zone will not be disturbed from their settlements due to the mining operations.

It is obvious to assume that the activities of the mining operations will improve the socio-economic levels in the study area. The anticipated impact of this project on various aspects is described in the following sections

- Impact on human settlement: Overall, due to employment generation and economic progress, there will be positive changes in the socio-economic condition of the people residing in the vicinity of the project site. The local population will have preference to get an employment. No resettlement has occurred due to mining activity. Built up land has been increased marginally.
- Impact on Population Growth: Population rate grows annually and demand of primary needs and employment will increase due to population growth. It will provide some direct and indirect employment to the people in and around the villages.
- Impact on Vegetation: No decline in agricultural land. It has been increased over a period of time by utilizing the water stored in the working pits. No deforestation will be happened.

Therefore, due to mining, per capita income of local people will be improved. The local people have been provided with either direct employments or indirect employment such as business, contract works and development work like roads, etc. and other welfare amenities such as Sanitary facilities, Solar Lighting to Govt school, Health Care to the villages in buffer zone, Maintenance of village road or Providing funds to local body or Prime minister's fund on Socio economic Development and relief measures. The job/business opportunities will improve the economic condition of the persons. They are in a position to utilize this money for purchase of tractors, trucks, etc. which may be put into use for business purposes. Many **positive impacts** can be resulted from a long-term mine unit. In this context, provision of job opportunities, business, transport and communication, laborer etc are the major ones. Thus, this unit is highly favorable to poor and landless people.

4.11.2 Mitigation Measures

- Good maintenance practices will be adopted for plant machinery and equipment, which will help to avert potential noise problems.
- Green belt will be developed in and around the project site as per Central Pollution Control Board (CPCB) guidelines.
- Drilling, blasting etc at specified location will be followed with proper schedule.
- Appropriate air pollution control measure will be taken so as to minimize the environmental impact within the core zone.
- For the safety of workers, personal protective appliances like hand gloves, helmets, safety shoes, goggles, aprons, nose masks and ear protecting devices has been provided which meet 'BIS' (Bureau of Indian Standards).

Thus, no significant impact on health and safety will be occurred due to this project.

4.12 Land Environment

4.12.1 Anticipated Impact on Land Use / Land Cover

Granite quarry project will result in disturbance of the land use pattern of the mine lease area. The impact on the topography in the form of changed landscape is unavoidable during mining activities like excavation, overburden dumping, soil extraction etc. Land requirement for the project has been assessed considering functional needs. So, reclamation of mined out land will be given due importance as a step for sound land resource management. There is no release of toxic elements into the ground. No adverse impact is anticipated on land use of buffer zone associated due to the mining activity, as all the activities will be confined within the project site. The mining operations will impact the land usage and land aesthetics of quarry lease area.

The land use analyses show that the Tree plantation was done around the mining lease area of M/s. G.P Exports. The rate of plantation increases over a period of time due to quarry activity. At the end of the project, the quarried pit will be act as water storage pond. The stored water will be used for developing Tree plantation around the mining lease area. It will improve the livelihood of village people. The evaporation rate of the water in the pit is given detail in the report.

4.12.2 Mitigation measures

- ❖ The restoration of the degraded land would cover backfilling and terracing with the overburden / wastes and surfacing the same with top soil.
- ❖ Provision of Garland drainage around the dumps
- ❖ Fast growing trees and other native shrubs would be planted to stabilize the reclaimed land
- ❖ Appropriate measures will be taken for Green belt development.
- ❖ The rain water will be stored in the pit which will recharge the ground water as a part of rain water harvesting scheme for irrigating the nearby agricultural lands.

4.13 Occupational Health Risks

4.13.1 Anticipated Impact

Occupational health and safety hazards occur during the operational phase of mining. The problem of occupational health, in the operation and maintenance phases is primarily due to dust, which could affect breathing. Health and Safety Measures to control dust inhalation; precautions would be adopted to prevent dust generation at site and dispersing in the environment. Long-term exposure to silica dust may cause silicosis. Workers are likely to get exposed to excessive noise levels during mining activities. Occupational Safety hazards related to blasting activities may result in accidental explosions, if not properly mitigated.

4.13.2 Anticipated occupational and safety hazards

- ❖ Health Impact due to Physical activity, Extremes of age, poor physical condition, fatigue, Cardiovascular disease, Skin disorders
- ❖ Noise
- ❖ Burns and shocks due to electricity
- ❖ Respiratory hazards due to Dust exposure
- ❖ Physical hazards
- ❖ Explosives
- ❖ Fire

4.13.3 Anticipated health impacts on people in nearby villages

The mining activity not only causes health hazards to quarry workers but also affect the health of nearby village people. The fugitive emission during heavy wind period travel along the predominant wind direction and people in village located along predominant wind direction gets affected. The chances of changing water quality in villages due to mining activities lead to causes various diseases in the nearby village people.

4.13.4 Mitigation measures

For the safety of workers at site, the following mitigation measures are proposed

- ❖ Excavators, dumpers, drills other automated equipments will be enclosed
- ❖ Use of personal breathing protection will be made compulsory
- ❖ Spraying with water on all working faces & haul roads, by water-sprinkler
- ❖ Regular health monitoring of workers once in 6months for silicosis
- ❖ Random health check up village people around the lease area for identify diseases if any due to mining activity
- ❖ No employee will be exposed to a noise level greater than 75 dB(A) for a duration of more than 8 hours per day without hearing protection
- ❖ Ear muffs provided will be capable of reducing sound levels at the ear to at least 75 dB(A).
- ❖ During mining operations, all the statutory provisions of the Indian Electricity Rules 1956, and Indian Standards for installation and maintenance of electrical equipment etc. will be observed.
- ❖ Care will be taken to evacuate the mining area completely at the time of blasting operations.
- ❖ A blasting SIREN will be used at the time of blasting for audio signal
- ❖ Before blasting and after blasting, red and green flags will be displayed as visual signals.
- ❖ Warning notice boards indicating the time of blasting and NOT TO TRESSPASS are displayed prominently.
- ❖ First-aid facilities as per provisions under Rule (44) of Mines Rules 1955
- ❖ Initial and Periodical medical examination shall be conducted for the employees under Rule 29B & 45 (A).
- ❖ Insurance will be taken in the name of the labourers working in the mines.

4.14 Agricultural Environment

4.14.1 General

The general impacts on agricultural lands will be dust pollution, as volume of dust is discharged into the air during the process of quarrying. Dust gets deposited on the leaves of plants, flowers and soil. This affects the photosynthetic and fruiting ability of the crops. Silt from the excavation, screening process and reject during monsoon season gets washed and chokes the agricultural fields, rendering them useless for the growth of crops. Due to blasting, fly rocks may fall on agricultural fields making it difficult for the farmer to cultivate.

There is a need for dust control on haul road movements. Vehicles emit fugitive gases during transportation of materials. Those gases enter the plants through the stomata pores; it destructs chlorophyll and affects photosynthesis leading to stunted growth or death of crops. The pumping of water from the ground for the mining activity will reduce the availability of water for the agricultural purposes.

4.14.2 Anticipated Impacts of Proposed project on Agriculture, Horticulture and livestock

The land use analyst sighted that the agricultural land is surrounded around the project site. Field crops such as maize, groundnuts are cultivated and the plantation crops such as coconut trees are planted within 1km radius of the project site. The field crop paddy is cultivated along the Amaravathi River which is located more 8k away from project site. Other than coconut plantation, maize, groundnuts mostly shrubs are identified within 1km.

As the villages are located around the project site, the people in the villages are farming animals like goat, cow, and sheep for their livelihood. The above-mentioned impact may be observed on the nearest agricultural farm during the quarrying activity. So, the following mitigation measures will be suggested to protect the nearest farm. The requirement of water for the proposed project will be taken from bottom of the existing pit and water vendors. The ground water for the proposed project site will not be extracted at the same place and the proposed mining activity is 4-10m above ground water table. So, the proposed mining activity does affect the ground water resource.

4.14.3 Mitigation Measures

- Spraying of water on the haul roads will be done to suppress the dust in the source itself. Interval of sprinkling depends on the environmental factors such as temperature, rainfall and humidity of the proposed site.
- The trees having tolerance to different air pollutants will be planted along the boundary to prevent the escape of dust to the surroundings.

- Garland drainage will be provided around the lease area to prevent the leach of silt into the farm.
- Regular check and proper maintenance of Vehicles will be carried out to minimize the emission of pollutants.
- Adequate Blast shield or blast mats will be provided wherever necessary for fly rock protection during blasting, thus to prevent the accident on the nearest farms.
- During monsoon season the dust deposited on the surface of plant body is washed out naturally.
- Making two bore holes which have direct conduit with the water table in the lease area will help ground water recharge during monsoon seasons. It helps the agricultural activity in the buffer area of project site.

4.15 Post COVID Health Management Plan

- The vaccinated persons only will be given employment.
- The labors and other skilled, semi-skilled employees will be given a new mask daily.
- The body temperature of the labors will be checked using the temperature monitoring gun while getting into the quarry and getting out from the quarry.
- The labors will be advised to maintain the social distance of at least 10m and also advised to sanitize the hand.
- The general awareness program will be conducted about the handling of COVID-19 in two weeks once.
- The board referring the “Wear mask” and “Maintain social distance” will be placed in two sides of entrance of the quarry in local language.



Fig No. 4.5: Maintain social distance of 2m in work place

CHAPTER – 5: ANALYSIS OF ALTERNATIVES (TECHNOLOGY AND SITE)

Consideration of alternatives to a project proposal is a requirement of the EIA process. During the scoping process, alternatives to a proposal can be considered or refined, either directly or by reference to the key issues identified. A comparison of alternatives helps to determine the best method of achieving the project objectives with minimum environmental impacts or indicates the most environment friendly and cost-effective options. Analysis of alternatives should be similar to the content of the approved mining plan.

The selection of the site is based on the following considerations which are feasible in terms of location, deposit characteristics, availability of reserves, percentage recovery, road facilities, labor availability, requirement of health and safety and environmental concerns, production scheduling, scope of mechanization/automation, land reclamation, and operating and capital cost estimates.

CHAPTER – 6: ENVIRONMENTAL MONITORING PROGRAMME

Environmental Monitoring program is mandatory to check the impact of the mining activity in the core and buffer zone. Hence regular monitoring of various environmental parameters helps in maintaining sound operating practices of the mining in line with mining and environmental regulations. 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.

6.1 Measurement methodologies

The following instruments will be used for environment monitoring for various environmental parameters.

Table No: 6.1 Instruments used for Monitoring

S. No	Instruments	Purpose of Monitoring
1	Respirable Dust Sampler	Air Pollution
2	Fine Particulate Sampler	Air Pollution
3	Sound level meter	Noise level
4	Digital Seismograph	Vibration monitoring
5	Water level indicator	Water level
6	Geophysical Instruments (DDR3)	Water table
7	Camera, Binocular & Lens	Flora, Fauna
8	GPS & DGPS	For fixing the coordinates of sampling location
9.	Electronic Total station	Reduced level & topography monitoring

In addition to the above, Primary data on land use, socio economics will be collected by visiting the field and secondary data will be collected from Government Department and other sources.

6.2 Monitoring Schedule and Frequency

The sampling and analysis of the environmental attributes will be as per the guidelines of Central Pollution Control Board (CPCB). Monitoring program will be followed till the mining operation ceases as per the schedule below.

Table 6.2: Monitoring Schedule

S. No.	Environment Attributes	Location	Monitoring		Remarks
			Duration	Frequency	
1	Meteorology and Air Quality	Continuous monitoring weather station in core zone/ nearest IMD station	24 hours	Monthly Once	Wind speed, direction, Temperature, Relative humidity and Rainfall.
2	Air Pollution Monitoring – PM _{2.5} , PM ₁₀ , SO ₂ and NO _x	6 locations (One station in the core zone and at least one in nearby residential, area, one in the upwind, two station on the downwind direction and one in cross wind direction).	8 hours	Six months once	Fine Dust Sampler and Respirable Dust Sampler
3	Water Pollution Monitoring	Mine effluents, Set of grab samples during pre and post monsoon for ground and surface water in the vicinity.	–	Six months once	Physico–chemical, microbiological characteristics
4	Hydrogeology	Water level in open wells in buffer zone around 1km at specific wells	-	Six months once	Water level monitoring devices may be used.
5	Noise	Mine Boundary, high noise generating areas within the lease and at the nearest residential area	24 hours	Monthly Once	Sound level meter
6	Vibration	At the nearest habitation (in case of reporting)	–	During blasting operation	Digital Seismograph
7	Soil	Core Zone and Buffer zone (Grab samples)	–	Six months once	Physical and Chemical characteristics

6.3 Data Analysis

Data analysis will be done by MoEFCC/NABL approved laboratory as per CPCB guidelines & compliance reports shall be submitted to concerned authority (specified in Environment Clearance Letter issued by SEIAA, Tamil Nadu and Consent issued by TNPCB, Namakkal) on regular basis.

6.4 Emergency procedures

The mines manager monitors the emergencies that may occur in opencast mining operations and prepares an emergency plan to deal with emergency situations during the operation of the mine. Preparation of a preventive maintenance schedule program based on recommendations given and maintenance schedules for all equipments and instruments as per recommendations of the manufacturer's user manuals.

6.5 Detailed Budget

Detailed budgetary provisions for monitoring program are detailed in the following Table No 6.3.

Table No 6.3 Environment monitoring budget

S. No	Environmental Monitoring Program	No. of samples per year	Cost per sample	Cost
1	Ambient Air Quality monitoring	2	Rs 5000	Rs 10, 000
2	Water quality	2	Rs 4000	Rs 8, 000
3	Soil quality	2	Rs 4000	Rs 8, 000
4	Noise monitoring	10	Rs 1000	Rs 10, 000
5	Hydro geology	5	Rs 2000	Rs 10, 000
	Total			Rs 46, 000

CHAPTER – 7: ADDITIONAL STUDIES

7.1. Public Consultation

The present Draft EIA report is for Public Consultation only. The proceedings of the Public Consultation will be included in the Final EIA report.

7.2 Risk assessment and Disaster Management Plan

Risk Assessment is all about prevention of accidents and to take necessary steps to prevent it from happening. The mining operation is carried out under the management control and direction of a qualified mines manager. The DGMS have been issuing a number of standing orders, model standing orders and circulars to be followed by the mine management in case of disaster, if any.

To overcome such risks, help/aid would be sought from emergency services providers like Police station, fire station, Hospital, Ambulance services in the vicinity of the mine site. Their telephone numbers and communication facilities are to be provided and displayed on the board at the mine office as well as mine site. Responsibility of coordinating rescue activities is entrusted to quarry-in-charge at the quarry site in addition to quarry-in-charge is also looking after statutory obligatory under Mines Act, 1952. Name and Address of Contact Person coordinating in case of Eventuality is stated below:

Name and Address of the Proponent	M/s. G. P. Exports, No.12/128, Thalappatti, K.Pitchampatti, Karur Taluk, Karur District - 639118 Tamil Nadu. Mob: +919751520324. Email ID: mpgranite2014@gmail.com

However, the following natural/industrial hazards may occur during normal operations.

- i. Operational Phase,
- ii. Inundation of mine pit due to flood/excessive rains,
- iii. Accident due to transport & other equipments, Safety and Environmental aspects.

Table 7.1 Risk Assessment and Disaster Management Plan

S. No	Hazards	Mitigation measures
1	Surface Fire	➤ Fire Extinguishers ➤ Sand Buckets
2	Explosives/Blasting	➤ The applicant is directly purchasing explosives from an authorized dealer and they are blasting with help of certified blaster. Agreement is made with License holder in Form-22 for store, use and sale of explosives. ➤ Shot holes blasting using compressor and Jack Hammers combination are adopted to release the mineral.
3	Flooding of Rain water	➤ Escape Routes will be provided to prevent inundation of storm water ➤ Garland drains will be provided at the toe of dump
4	Radioactive hazard	➤ Not Anticipated
5	Failure of Mine Benches and Pit Slope	➤ Ultimate or over all pit slope shall be 45° and each bench height shall be 6m height equal to the boom height of excavator and vertical. ➤ During working normally 3-6m will be maintained as per the plan.
6	Failure of Waste Dumps	➤ Stabilization of dump with top soil and tree plantation shall make the dump more stable. ➤ Garland drainage around dump shall prevent under wash of dump by hydrostatic pressure to be developed by surface water and control wash outs and collapse.
7	Dust	➤ Periodical wetting of land by spraying solutions. ➤ Regular water sprinkling on haulage roads ➤ Provision of Dust mask to workers ➤ Green Belt shall be carried out within the mine premises by planting trees, to improve the aesthetics of the area and also to reduce the pollution outside the activity area
8	Noise	➤ Rotation of workers to minimize exposure time of noise ➤ The equipments and machineries shall be maintained properly

		➤ Provision of earmuffs to workers
9	Transportation	➤ Convex mirrors should be kept at all corners ➤ All vehicles should be fitted with reverse horn with one spotter at every tipping point ➤ Loading according to the vehicle capacity ➤ Regular checking of brakes to avoid failures ➤ Periodical maintenance of vehicles
10	General measures	➤ No entry for any unauthorized persons ➤ S1 type fencing as per DGMS circulars ➤ Quarrying as per Approved Plans only ➤ Provision of Personal Protective Equipments ➤ In case of any closure of mine the compensation under Industrial Dispute Act will be paid as per law

7.2.1 Care and Maintenance during temporary discontinuance

Watch and ward are provided permanently in the Mine premises to monitor the Mine openings to prevent inadvertent entry. Top soil bund is made partly and Stone fencing is proposed all around lease boundary to safe guard the mine and the adjacent livings. Temporary discontinuance will be minimal as there is good demand for this material in construction work.

7.2.2 Economic repercussions of closure of mine and manpower retrenchments

7.2.2.1 Number of local residents employed in the mine, status of continuation of family occupation and scope of joining occupation back

There are 20 person employed in the quarry. Most of labors are Agriculturist. In case of closure of mine, they may continue their own work.

7.2.2.2 Compensation given or to be given to the employees connecting with sustenance of himself and their family members

In case of any closure of mine the compensation under Industrial Dispute Act will be paid as per law. All workers shall get retrenchment benefits as per labour laws under enforcement.

7.2.2.3 Satellite occupations connected to the mining industry – number of persons engaged therein – continuance of such business after mine closes

The quarrying activity shall lead to development of several ancillary units and business, which are explained below:

- i. Other than mine employment, workshops, spare parts, hotels, tea shop and related several self-employment opportunities.
- ii. Several shops and service providers shall grow in the public adjacent to mines.
- iii. Schools and city development shall also be possible owing to the fact of economic growth in the village.

7.2.2.4 Continued engagement of employees in the rehabilitate status of mining lease area and any other remnant activities.

In the event of closure of mine, the mine worker shall get alternate work or business like agriculture etc. No serious repercussions envisaged in the event of cessation of mining activity, as they will be provided employment in other mines belong to the company.

7.2.2.5 Envisaged repercussions on the expectation of the society around due to closure of mine

Persons on roll at the time of closure will get benefit as per State Govt. guidelines as applicable at the time of retrenchment.

7.2.3 Time Scheduling for abandonment

The following works are scheduled before abandoning the mine,

- i. Parapet wall of 2m height will be constructed around the pit,
- ii. Planting and monitoring of Afforestation program.

There is no proposal for closure of mine for the next 10 years. The parapet and plantations will be done during operation of mine. In case of any abandonment the following time is required,

Activities	Days for schedule
Time schedule for fencing	6 months
Time schedule for reclamation of mined out area	1 year

7.3 Social Impact Assessment, R&R Action Plans

The Multicolour Granite quarry project of **M/s. G.P Exports** does not involve any kind of displacement of the population since the mining will be concentrated only in the mining area only. Not much disturbance in respect of fauna, flora and human settlement of the villages. The impact of mining activity on the population will be insignificant. Hence, Rehabilitation of settlements is not anticipated under this project as it will not be required. Thus R&R Action Plans not proposed.

The project proponent will help in uplifting the poor section of the society as part of CSR activity by undertaking social welfare programs. The Project proponent contributes 2.5% of

profit towards CSR activities. This project will have a positive impact on the socio economic as it will provide considerable employment to the families in the nearby villages. Improved health care facilities are expected to come-up in the area for catering to the health needs of the miners. The impact of mining on the civic amenities will be substantial after the commencement of mining activities. The local people who are currently depending on forest and agriculture will have new avenue from the mine.

7.4 Detail study of Rainwater harvesting after the completion of project.

I.	Total Pit Area	= 8890m ²
II.	Annual rainfall of the area	= 0.652 m
III.	Total rainwater available to store in pit area	= 5796.28m ³
IV.	Total volume of quarried pit	= 311150m ³

Since the rainwater directly getting stored in the quarried pit, the runoff will not take place. The Quarried Pit will be act as **Artificial Ground Water Recharge Pond**.

After the rainwater getting stored in quarried pit, the water slowly infiltrates into the ground and reaches the ground water table. This will greatly increase the ground water table around the lease area.

By electrical resistivity survey it is found that there is massive rock formation at 35m bgl. So, the infiltration rate of rain water is very less. If the rain water stored in pit for long period the evaporation loss will take place.

Meyer's Formula (1915) is used to find the loss of water in pit due to natural evaporation process.

Meyer's Formula (1915)

$$E_L = K_M (e_w - e_a) (1 + u/16)$$

Where

- E_L = Evaporation Rate (mm/day)
- e_w = the saturation vapor pressure at the water temperature in mm of mercury
- e_a = the actual vapor pressure in the air in mm of mercury
- u = monthly mean wind velocity in km/h at about 9m above ground
- K_M = coefficient accounting for various other factors with a value of 0.36 for large deep and 0.50 for small shallow waters.

Here,

$e_w = 29.77$ mm of Hg (considered average temperature in Karur district during summer season)

$e_a = 0.61 \times 29.77 = 18.15$ mm of Hg. (0.61 is Humidity)

$u_1 = 10.6$ km/hr

$u_9 = 10.6(9)^{1/7} = 13.7$ km/hr

Substitute the above parameters in Meyer's equation,

$E_L = 0.36 (29.77 - 18.15) (1 + 13.7/16)$

$E_L = 7.73$ mm/day or 0.0077m/day

Evaporated Volume per day = $8890 \times 0.0077 = 68.45\text{m}^3/\text{day}$ or 68 KLD

The total quantity of rain water to be stored in quarried pit is 5796.28m^3 . The evaporation rate of water per day is 68.45m^3 based on the average temperature in Karur District. It takes nearly 4 months for the complete evaporation of water. Before that the stored water will be used to irrigate the crop around the quarry area.

Other benefits are that the water will be used for the domestic purposes after the water properly treated by Sedimentation-Filtration processes. A higher quantity of about 20 liters per capita per day should be assured to take care of basic hygiene needs and basic food hygiene.

Thereby the Proposed quarry benefits the daily needs of water to so many families around the quarry area for every year. This is very important positive impact of the proposed Multicolour Granite Quarry of GP Exports Granites.

7.5 Plastic/Microplastic waste Management Plan

This is proposed Multi Colour Granite quarry. So, the project does not need any plastic related material for quarry operations. The plastic materials will be used by the employee and labours in the form of carry bags, water bottles, etc. To avoid such situations the employees and labours will be strictly instructed to avoid the plastic materials in the lease area. Moreover, they will be advised to use cloth bags, jute bags and bring the food by Steel tiffin box.

Water will be provided by the project proponent for both drinking and domestic purposes. So, the dustbins will not be needed in the quarry. To manage the unavoidable situations, Dustbins will be placed in the quarry for both decompose and non-decompose waste separately of Municipal solid waste. The collected waste will be disposed periodically as instructed by TNPCB. The board with the instruction "**Avoid plastics**" is placed in the two sides of quarry and awareness program will be conducted to the labours monthly once.

Microplastics are small pieces of plastics less than 5mm. As usage of plastics is totally devoid in the quarry premise, the chance of Microplastic pollution is negligible inside the lease area.



CHAPTER – 8: PROJECT BENEFITS

Mining activity will help in improving the socio-economic benefits in areas like employment, communication and infrastructure development etc.

8.1 Physical Infrastructure

The Multicolour Granite project located in K.Pitchampatti Village of Karur District has well established roads, communications and other facilities. The impact on the civic amenities will be substantial after increasing the mining capacity.

The following physical infrastructure facilities will further improve due to mine.

- ❖ Afforestation
- ❖ Road Transport facilities
- ❖ Communications
- ❖ Housing facilities
- ❖ Water supply and sanitation
- ❖ Medical, Educational and social benefits will be made available to the nearby civilian population in addition to the workmen employed in the mine.

Under plantation program, it is suggested to develop green belt further all along the boundary of mining lease area. The species to be grown in the areas will be dust tolerant and fast growing species so that a permanent green belt is created. Apart from the green belts and aesthetic plantation for eliminating fugitive emission and noise control, all other massive plantation efforts will be executed with the assistance of experts and cooperation of the local community.

8.2. Social Infrastructure

The mining activity will create rural employment. It has been observed that local people mainly depend upon agricultural, where the income is irregular and low. The mining activity in the region will have positive impact on the social economic condition of the area by way of providing employment to the local in-habitants; wages paid to them will increase the per capita income, housing, education, medical and transportation facilities, economic status, health and agriculture by improving the life style of the people. A major part of the labour force will be mainly from local villagers who are expected to engage themselves both in agriculture and mining activities. Part of the royalty is given to local bodies by the State Govt. for the welfare and development of the village. District Mineral Fund @30% of the Royalty shall be given to the Dept. of Geology and Mining, Karur District. The State

Government will also benefit directly from the mine, through increased revenue from royalties, excise duty and etc.,

8.3 Employment Potential

The proponent employed about 20 persons for carrying out the mining operations of which 12 are skilled, 6 semi-skilled, 2 unskilled worker personnel. In addition, there will be indirect employment to many more people in the form of contractual jobs like construction of infrastructural facilities, transportation of Granite to destinations, sanitation, supply of goods and services to the mine and other community services, etc., The local population will have preference to get an employment. The economic status of the local people will be enhanced due to mining project.

8.4 Other tangible benefits

8.4.1 Corporate Social Responsibility

Corporate Social Responsibility (CSR) refers to voluntary actions undertaken by the project proponent either to improve the living conditions (economic, social, environmental) of local communities or to reduce the negative impacts of mining activity. By definition, voluntary actions are those that go beyond legal obligations, contracts, and license agreements.

CSR programs usually invest in infrastructure (potable water, electricity, schools, roads, hospitals, hospital equipment, drainage repairs, etc.), building social capital (providing high-school and university education, providing information on HIV prevention, workshops on gender issues, information on family planning, improving hygiene, etc.), and building human capital (training local people to be employed by the mining enterprise or to provide outsourced services, promote and provide skills on micro business, aquaculture, crop cultivation, animal rearing, textile production, etc.)

8.4.2 CSR activities

The following activities which may be included by companies in their Corporate Social Responsibility Policies are notified as CSR activities under Schedule VII ((See section 135) of the Companies Act 2013:

- i. Eradicating extreme hunger and poverty;
- ii. Promotion of education;
- iii. Promoting gender equality and empowering women;
- iv. Reducing child mortality and improving maternal health;
- v. Combating human immunodeficiency virus, acquired immune deficiency Syndrome, malaria and other diseases;

- vi. Ensuring environmental sustainability;
- vii. Employment enhancing vocational skills;
- viii. Social business projects;
- ix. Contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government or the State Governments for socio-economic development and relief and funds for the welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women; and
- x. Such other matters as may be prescribed.

The Board of every company referred to in sub-section (1), shall ensure that the company spends, in every financial year, at least 2% of the average net profits of the company made during the three immediately preceding financial years, in pursuance of its Corporate Social Responsibility Policy. Provided that the company shall give preference to local area and areas around it, where it operates for spending the amount earmarked for Corporate Social Responsibility activities. Provided further that if the company fails to spend such amount, the Board shall report under clause (o) of sub-section (3) of section 134, specify the reasons for not spending the amount.

Explanation: For the purposes of this section “average net profit” shall be calculated in accordance with the provisions of section 198.

8.4.2.1 CSR Cost Estimation

CSR activities will be taken up in the nearby villages mainly contributing to education, health, training of women self-help groups and contribution to infrastructure etc., CSR budget is allocated as 2.5% of the profit.

Under this programme, the project proponents will take-up following activities for social and economic development of villages through local panchayat.

- ✚ Employment to eligible persons during operational phase of the mine
- ✚ Conducting Medical Camps
- ✚ Infrastructure Development like repair of roads, renovation of ponds, rainwater harvesting schemes, etc.,
- ✚ Financial grant to the existing educational institutions for development of physical infrastructures
- ✚ Training for Self-Employment
- ✚ Plantation in villages and all along roads.
- ✚ Providing solar lamps to nearby schools and villages by going eco-friendly.

8. 4.3 Corporate Environment Responsibility (CER)

CER Activity	Project Cost (Rs. In Lakhs)	Cost allocated for CER activity (Rs. In Lakhs)
Developing Sanitary facilities and Library Facilities, RO Water supply system, tree plantation and environmental awareness sign Boards to Government High School, K.Pitchampatti Village.	44.50	5
Total Cost Allocation	44.50	5

CHAPTER – 9: ENVIRONMENTAL COST BENEFIT ANALYSIS

9.0 PROJECT COST

After making exhaustive study, it is considered that the mining project may be implemented.

Project cost for the existing Multicolour Granite Quarry of M/s. G.P Exports over an area of 3.00.0 Ha falling in K.Pitchampatti village in Karur district is Rs. 3,37,20,000/- and EMP Cost is Rs. 14,25,000/-

- This project provides direct employment to 20 people and indirect employment to nearly 20 people. In a family 5 persons, totally 215 persons will get benefit because of the project.
- Surrounding people will get benefit as they get Granite for construction purposes with less transportation cost.
- The Management will ensure good production and in turn there will be good revenue to the Government of Tamil Nadu and Government of India through taxes. The industry is an asset to the nation.
- At the end of the project the pit will act as rain water harvesting tank which is useful for agricultural purpose. Thereby it will increase the survival of people around the quarry.

CHAPTER - 10: ENVIRONMENTAL MANAGEMENT PLAN

The **Environment Management Plan (EMP)** is required to ensure sustainable development in the study area. Hence it needs to be a comprehensive plan for which the industry, Government, regulating agencies likes Pollution Control Board working in the region and more importantly the population of the area need to extend their co-operation and contribution.

It has been evaluated that the project area will not be affected significantly due to mining activity. Mitigation measures at the source level and an overall Management Plan at the site level are elicited so as to improve the surrounding environment.

Table 10.1 Environmental Management Plan			
S. No	Parameters	Mining Activity	Mitigation measures
1	Air Environment	Drilling	○ Dust extractor or wet drilling to be followed to control dust at source of emission ○ Use of Sharp drill bits for drilling holes and charging the holes by using optimum charge and using time delay detonator
		Blasting	○ Regular water sprinkling on blasted heaps at regular intervals will help in reducing considerable dust pollution
		Loading	○ Water sprinkling be done before loading by making it moist
		Transportation	○ Water sprinklers along the sides of haul road shall be fixed to control fly of dust while transporting minerals and waste ○ Overloading will be prevented ○ Trucks/Dumpers covered by tarpaulin covers
		DG Sets	○ DG sets will be used only during power failure ○ Adequate stack height for DG sets will be provided as per CPCB norms
		General measures	○ Avenue trees along roads around ML boundary shall be planted as per the norms of MoEF to control fly of dust. ○ Labours engaged in such dust prone areas should be provided with safety devices like ear muff, mask, and goggles as per the MMR, 1961 amendments and circulars of DGMS. ○ Regular health check-up of workers and nearby villagers in the impacted area should be carried out and also regular occupational health assessment of employees should be carried out as per the Factories Act ○ Ambient Air Quality Monitoring will be conducted on regular basis to assess the quality of ambient air.
2	Water Environment	Surface water	○ Wastewater discharge from mine if any will be treated in settling tanks before using for dust suppression and tree plantation purposes.

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Proponent: M/s. G.P Exports, Multicolour Granite Quarry, Karur District

		Ground water	○ The mining activity will not intersect the ground water table ○ De silting will be carried out before and immediately after the monsoon season
		Storm water	○ Pit will be used for Storage of rainwater ○ Rain water will be collected in sump in the mining pit and will be allowed to store and pumped out to surface setting tank of 15 m x 10m x 3m to remove suspended solids if any. This collected water will be judiciously used for dust suppression onwards and such sites where dust likely to be generated and for developing green belt. ○ The proponent will collect and judiciously utilize the rainwater as part of rain water harvesting
		General measures	○ Regular monitoring and analyzing the quality of water
3	Noise Environment	Drilling	○ Limiting time exposure of workers to excessive noise
		Blasting	○ Carrying out blasting only during day time and not on cloudy days ○ Noise levels will be controlled by using optimum explosive charge, proper delay detonators and proper stemming to prevent blow out of holes. ○ Providing proper noise proof enclosure for the workers separated from the noise source and noise prone equipment
		Transportation	○ Proper and regular maintenance of vehicles, machinery and other equipments. ○ The noise generated by the machinery will be reduced by proper lubrication of the machinery and other equipments. ○ Speed of trucks entering or leaving the mine will be limited to moderate speed to prevent undue noise from empty vehicles. ○ Adequate silencers will be provided in all the diesel engines of vehicles. ○ Minimum use of horns and speed limit of 10 km/hr in the village area.

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT
Proponent: M/s. G.P Exports, Multicolour Granite Quarry, Karur District

			○ It will be ensured that all transportation vehicles carry a valid PUC Certificates
		General measures	○ Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas ○ Provision of Quiet areas, where employees can get relief from workplace noise. ○ The development of green belts around the periphery of the mine to attenuate noise. ○ Regular medical check-up and proper training to personnel to create awareness about adverse noise level effects.
4	Vibration	Blasting	○ No deep holes blasting envisaged. ○ Small dia shot holes are used for breaking boulders. ○ Specific charge pattern has to be designed by proper trial vibration studies with varying charge ratios. ○ If the vibration still exceeds the limit a long Trench to a depth of 6m may cut in the direction of wave's movement to break longitudinal waves which travel close to surface, preferably near mine buffer zone ○ In spite of all measures periodical testing of vibration and noise using approved seismograph by DGMS has to be followed as a part of Environmental monitoring
5	Soil Environment	Topsoil	○ Humus top soil shall be preserved for reuse in afforestation and agriculture ○ Top soil should not be mixed with other waste or reject materials. It should be conserved by judicious utilization in the mine premises ○ Garland drains will be provided around the mine and dumps to arrest any soil from the mine area being carried away by the rain water. This will also avoid the soil erosion and siltation in the mining pits and maintaining the stability of the benches

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT
Proponent: M/s. G.P Exports, Multicolour Granite Quarry, Karur District

6	Waste Dump	Stabilization of Dumps	○ The rejects\ waste dump shall be properly terraced in to 1.5m benches with proper repose angle and then the top soil shall be spread over the dumps and slope to make them humus for some time, after the soil suitable for water retention trees will be planted at the top, slope and toe of the stabilized dumps to form vegetation. ○ Garland drainage around dump shall prevent under wash of dump by hydrostatic pressure to be developed by surface water and control wash outs and collapse ○ Dump should be terraced for every 5m height and stabilized
7	Plantation	Mine lease boundary and waste dump	○ Provision of green belt all along the periphery of the lease area for control of dust and to attenuate noise ○ Stabilization of Dump with plantation ○ It is strongly recommended that the loss of plant in each year will be counted and again planted in subsequent plantation. ○ The plant should be planted taken from nursery, where the survival rate is high.
8	Land Environment		○ The restoration of the degraded land would cover backfilling and terracing with the overburden / wastes and surfacing the same with top soil. ○ Provision of Garland drainage around the dumps ○ Fast growing trees and other native shrubs would be planted to stabilize the reclaimed land ○ Appropriate measures will be taken for Green belt development. ○ The rain water will be stored in the pit which will recharge the ground water as a part of rain water harvesting scheme for irrigating the nearby agricultural lands.
9	Socio Economic		○ Good maintenance practices will be adopted for machinery and equipment, which will help to avert potential noise problems.

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT
Proponent: M/s. G.P Exports, Multicolour Granite Quarry, Karur District

		○ Green belt will be developed in and around the project site as per Central Pollution Control Board (CPCB) guidelines. ○ Drilling, blasting etc at specified location will be followed with proper schedule. ○ Appropriate air pollution control measure will be taken so as to minimize the environmental impact within the core zone. ○ An emergency preparedness plan will be prepared in advance, to deal with firefighting, evacuation and local communication. ○ For the safety of workers, personal protective appliances like hand gloves, helmets, safety shoes, goggles, aprons, nose masks and ear protecting devices has been provided which meet 'BIS' (Bureau of Indian Standards). ○ As a part of CSR activities, community welfare activities will be undertaken by the proponent which leads to socio economic development
10	Occupational Health	○ First-aid facilities as per provisions under Rule (44) of Mines Rules 1955 ○ Initial and Periodical medical examination shall be conducted for the employees under Rule 29B & 45 (A). ○ Insurance will be taken in the name of the labourers working in the mines ○ Workers involved in mining work shall be provided protective equipments such as Thick Gloves, Goggles, ear plugs, safety boot wears, etc...

10.1 Description of the administrative aspects of ensuring that mitigative measures are implemented and their effectiveness monitored, after approval of the EIA

In order to maintain the environmental quality within the standards, regular monitoring network to maintain environmental quality will be implemented.

Table 10.2 EMP Budget for Plan period

S. No	Description	Budget
1.	Personal protective equipment	Rs 1,00,000
2.	Environmental Monitoring	Rs 2,25,000
3.	Occupation Health	Rs 1,00,000
4.	Green Belt & Dust suppression	Rs. 4,00,000
	Total	Rs. 8,25,000

Table 10.3 Budget Allocation for Mine Closure Plan as per ToR

S. No	Description	Budget
1.	Parapet wall around dump (1m = Rs 500)	Rs 1,00,000
2.	Fencing around mines	Rs 2,00,000
3.	Making Pit for pond after the activity of mines	Rs 50,000
4.	Green belt development	Rs 1,00,000
	Total	Rs 4,50,000

CHAPTER – 11: SUMMARY AND CONCLUSIONS

11.0 Introduction

The applicant, M/s. G.P Exports having registered office at No: No. 12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District – 639118, Tamil Nadu have been granted mining lease from the State Government over an extent of 3.00.0 Hectares in S.F. No's: 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part), K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu.

The Additional Chief Secretary to Government, Natural Resource (MMB.2) Department, Secretariat, Chennai has directed the applicant, M/s. G.P Exports, vide his precise area communication letter No. 3419187/MMB.2/2022-1 dated 05.10.2023 obtain Mining Plan and Environmental clearance from the Department of Geology and Mining and State Environment Impact Assessment Authority (SEIAA) as per the EIA Notification, 2006 and its amendments for grant of quarrying lease to multicolour granite quarry in K.Pitchampatti Village, Karur Taluk, Karur District and Tamil Nadu for the period of 20 years (From the date of execution). In continuation, The Director, Department of Geology and Mining, Chennai has directed the applicant/s. G.P Exports to get mining plan is approved vide letter No. 2374/MM.2/2022 dated 09.10.2025 and obtain Environmental clearance from the State Environment Impact Assessment Authority (SEIAA) as per the EIA Notification, 2006 and its amendments for grant of quarrying lease to multicolour granite quarry in K.Pitchampatti Village, Karur Taluk, Karur District and Tamil Nadu for the period of 20 years (From the date of execution).

The mining plan for multicolour granite quarry of applicant has been prepared as per the The Additional Chief Secretary to Government, Natural Resource (MMB.2) Department, Secretariat, Chennai Precise area communication letter under sub-Rule (13) of rule 19-A & 42 of Tamil Nadu Minor Minerals Concession Rules, 1959 for quarrying multicolour granite and it has been approved by the Director, Department of Geology and Mining, Chennai. The project cost is about Rs.44.50 Lakhs and EMP cost is Rs. 35.72 lakhs.

As per the cluster letter issued by Deputy Director, Department of Geology and Mining, Karur vide Rc.No.377/Mines/2021, dated 12.12.2025 for M/s. G.P Export (3.00.0 Ha) the lease area of above said 4 applicants comes in cluster of 500m radius. The total area

of cluster is 13.90.0 Ha. The extents of lease area of all individual as per cluster letter are given below.

Proposed Quarries

1. M/s. G.P Exports – 3.00.0 Ha

Existing Quarries

1. M/s. M.P Granites - 2.43.50 Ha
2. M/s. M.P Granites - 4.01.50 Ha
3. M/s. M.P Granites - 4.45.50 Ha

Abandoned Quarries

Nil

As the projects comes under B1(cluster) category, the applicant made TOR application individually the PARIVESH website for carrying out EIA Studies for obtaining Environmental clearance. The details are given in below table 1.1.

Table 1.1 Details on Terms of Reference

S. No	Name of Applicant	ToR Application No	SEAC and SEIAA Meeting	TOR Identification No
1	M/s. G.P Exports	SIA/TN/MIN/559712/2025, Dated 17/12/2025	668 th SEAC Meeting dated 22.01.2026 & 956 th SEIAA Meeting dated 04.02.2026	TO25B0108TN5759 940N Dated: 10.02.2026

The Draft EIA report has been prepared based on the Terms of Reference issued by SEIAA. The points raised in the public hearing and the commitments of the project proponent will be given detail in the Final EIA Report which will be submitted to SEAC/SEIAA, TN for obtaining environmental clearance. The production achieved by the Lessee since inception of mining activity as against approved Mining plan/Scheme is given below.

1.2. IDENTIFICATION OF PROJECT AND PROJECT PROPONENT

1.2.1. IDENTIFICATION OF PROJECT

Table 1.3 Details on Project and Project Proponent

Particulars	Details
Address of the Project Proponent	Tvl. G. P. Exports, No.12/128, Thalappatti, K.Pitchampatti, Karur Taluk, Karur - 639118 Tamil Nadu Mob: +919751520324.

	Email ID: mpgranite2014@gmail.com
S. F. No	353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part).
Lease Area	3.00.0 Hectares
Site Location	K. Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu
Geographical Co-ordinates	Latitude: 10°46'32.01463"N to 10°46'39.69873"N Longitude: 78°04'56.21001"E to 78°05'04.49494"E
Toposheet No.	58J/1
Precise Area Communication	Rc. No.
Mining Plan Approval	Rc. No. 2374/MM2/2022 Dated 09.10.2025
Period of Lease	20 years
AD Cluster letter	Rc. No. 2374/MM2/2022 Dated 12.12.2025

Table 1.4 Land Particulars

State & District	Taluk	Village	S.F. No.	Total Extent of area (Ha)	Ownership Occupancy
Tamil Nadu & Karur	Karur	K.Pichampatti	353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part)	3.00.0	Own patta land

1.3 BRIEF DESCRIPTION OF THE PROJECT

1.3.1. Nature and Size of the Project

Open cast, mechanized mining will be adopted to extract Granite of required size from the quarry area. Hydraulic excavators and diamond wire saw will be used for cutting the rocks. Close spaced cutting of 1m is adapted along a straight line. The Wire saw cutting is adopted below second bench to recover more granite blocks to increase the rate of recovery.

Geological resources of Granite are estimated as 38,61,866 MT and mineable reserves is estimated at 15,38,155 MT up to depth 35m (Ultimate depth) leaving necessary safety distance from the lease boundary. Production Schedule is proposed as

3,61,361 MT (47,790 MT of Granite @ 40% of recovery) up to a depth of 35m during the mining plan period of five years.

11.2 SCOPE OF THE PROJECT

The proposal for Environmental Clearance of Multicolour Granite quarry of M/s. G.P Exports requires EIA/EMP Report as per Terms of Reference for conducting public hearing and obtaining environmental clearance from SEAC/SEIAA.

11.3 ENVIRONMENTAL SETTINGS & MINING DETAILS

FEATURE	DETAILS
Name of the Proponent and address	Tvl. G. P. Exports, No.12/128, Thalappatti, K.Pitchampatti, Karur Taluk, Karur District - 639118, Tamil Nadu.
Existing/New Quarry	New
Survey number	353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part),
Geographical features	Latitude: 10°46'32.01463"N to 10°46'39.69873"N Longitude: 78°04'56.21001"E to 78°05'04.49494"E Toposheet No: 58J/1
Site Location	K. Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu.
Type of Project	Multicolour Granite
Category	B1
Mining lease area	3.00.00 Hectares
Depth of Mining	35 m bgl
Water Table	60 m bgl
Method of Mining	Open cast semi mechanized mining
Blasting Pattern	Chemical rock blasting, also known as non-explosive rock blasting, uses a chemical agent that expands when mixed with water, creating pressure that fractures the rock.
Types of Explosives	Chemical explosive is not proposed chemical powder called as Rock breaking powder Ca (OH) ₂ are also used for granite splitting.
Measures proposed to minimize ground vibrations due to blasting	It is an Eco-friendly quarry operation; diamond wire saw cutting method shall be practiced to this quarrying operation. Chemical rock blasting, also known as non-explosive rock blasting

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	No impact on surroundings due to blasting.
Storage of Explosive	Not Applicable
Category	B1
Mining plan approval	Director of Geology and Mining, Chennai vide Rc. No: 2374/MM2/2022 Dated 09.10.2025
Period of Lease	20 years.
Does it attract any general conditions specified in the EIA notification, 2006?	Not applicable
Man Power	20 persons
Water requirement	Total water requirement – 3.5 KLD Drinking water – 0.3 KLD Domestic purposes – 0.7 KLD Water sprinkling – 1.0 KLD, Wet drilling and Green Belt 1.5 KLD. Source: Mineral water supply and nearby bore wells
EMP Cost	Rs. 35.72 Lakhs
Project Cost	Rs. 44.50 Lakhs
Nearest habitation	0.19 km-South
Nearest Village	K. Pitchampatti -0.37 -South
PMHC	P. Kullampatti –3.5km –North
Nearest Town	Velliyanai – 8.2km –NE
Nearest Road	SH 74- 4.6km- NE NH 44 –13.7 km- NW Approach road for the Transportation is located at the north-eastern side.
Nearest Railway station	Velliyanai – 7.8km –NE
Nearest Airport	Tiruchirapalli –68.9km –East
Water bodies	Tank- 0.83km East Erattai kulam -1.3km NW Kodaganar River-10.43km -NW, Amaravathi River-15.8km- NW, Cauvery River -23.7km NE Mayanur check dam -26km NE
Interstate Boundary	Tamil Nadu -Kerala Interstate Boundary –104km (SW)
Coastal Zone	Bay of Bengal – 145km - East
Reserve Forest	No reserve forest around 10km radius from the periphery of the lease applied area.
Wildlife Sanctuary	There is no wild life sanctuary or National Park found within 10km radius Kadavur Slender Loris Sanctuary – 23.0km – SE Vellode Birds Sanctuary–70km- North-western Side

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Land use pattern	S. No	Description	Present Area (Ha)	Proposed land use (Ha)
	1	Mine working area	---	0.88.90
	2	Road	---	0.07.00
	3	Safety and Area under plantation	---	0.47.00
	4	Labour shed and office	---	0.03.00
	5	Waste Dump	---	0.53.55
	6	Garland drainage & settling tank	---	0.08.00
	7	Unutilized land	3.00.00	0.92.55
	Total		3.00.00	3.00.00

Table 2.3 Mining Details

Particulars	Details
Method of Mining	Open cast – mechanized mining
Geological resources	38,61,866 MT from which 40% of mineable is calculated as 4,59,738 MT
Mineable reserves	15,38,155 MT from which 40% of mineable is calculated as 2, 13,932MT
Production	3,61,361 MT (47,790 MT of Granite @ 40% of recovery) up to a depth of 35m during the mining plan period of five years
Reject	6,89 598 MT (Rejects 60%)
Top soil	1,75,188 MT
Side Burden	24,20 550 MT
Weathered rock	1,16,792 MT
Ore: Waste ratio	1: 5.4
Depth of Mining	35m bgl
Water Table	60mbgl
Road design	1: 10 inside the pit and ramp 1:16 for transport
Overall Pit Slope	45°
Period of Lease	20 years

11.4 Description of the environment**11.4.1 Base line environmental study**

Collection of base line data is an integral part of the preparation of environmental impact assessment reports. The baseline monitoring study has been carried out during

December, 2025 – February, 2026 to assess the existing environmental scenario in the area. For the purpose of EIA studies, mine lease area was considered as the core zone and area outside the mine lease boundary up to 10km radius from the lease boundary was considered as buffer zone.

Table No 11.6 Baseline Data

Particulars	Details	Standards
Meteorology (December, 2025 – February, 2026)		
Rainfall (Avg.)	37.4 mm	--
Temperature (Avg.)	20-37°C	--
Wind speed	2.5 m/s	--
Wind Direction	From east to west directions	
Ambient Air Quality (NAAQS)		
PM ₁₀	32-54 µg/m ³	100 µg/m ³
PM _{2.5}	15 – 31 µg/m ³	60 µg/m ³
SO ₂	7 - 19 µg/m ³	80 µg/m ³
NO _x	11 - 30 µg /m ³	80 µg/m ³
Noise Level (CPCB Standards)		
Day time (6:00 am - 10:00 pm)	Core zone – 39.9 – 47.2 dB (A) Buffer zone – 37.2- 42.6 dB (A))	Industrial Area Day Time - 75 dB (A) Residential Area Day Time – 55 dB (A)
Night time (10:00 pm - 06:00 am)	Core zone – 38.9 – 41.6 dB (A) Buffer zone – 35.2 – 38.5 dB(A)	Industrial Area Night Time – 70 dB(A) Residential Area Night Time – 45 dB (A)
Water Quality IS 10500:2012 (Desirable limits)		
pH	6.90 – 7.59	6.5 to 8.5
TDS	724-1052 mg/l	500 mg/l
Electrical conductivity at 25°C	1205-1753 micromhos/cm	
Total Hardness as CaCO ₃	496-824 mg/l	200 mg/l
Total suspended solids	16 - 28 mg/l	IS 3025:P.17: 1984: R. 2017
Chlorides Cl	142 - 260mg/l	250
Total iron Fe	0.02 – 0.34	0.3mg/l
Sulfates SO ₄	65-114mg/l	200 mg/l
Soil Quality		
pH	7.05 – 7.68	Neutral to slightly alkaline
Bulk density	1.04-1.30 g/cc	Favorable physical condition for plant growth.
EC	185 – 297 µs/cm	-

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Organic Matter	0.2 – 0.3 %	-
Hydro Geology		
Water Table	60 m bgl	

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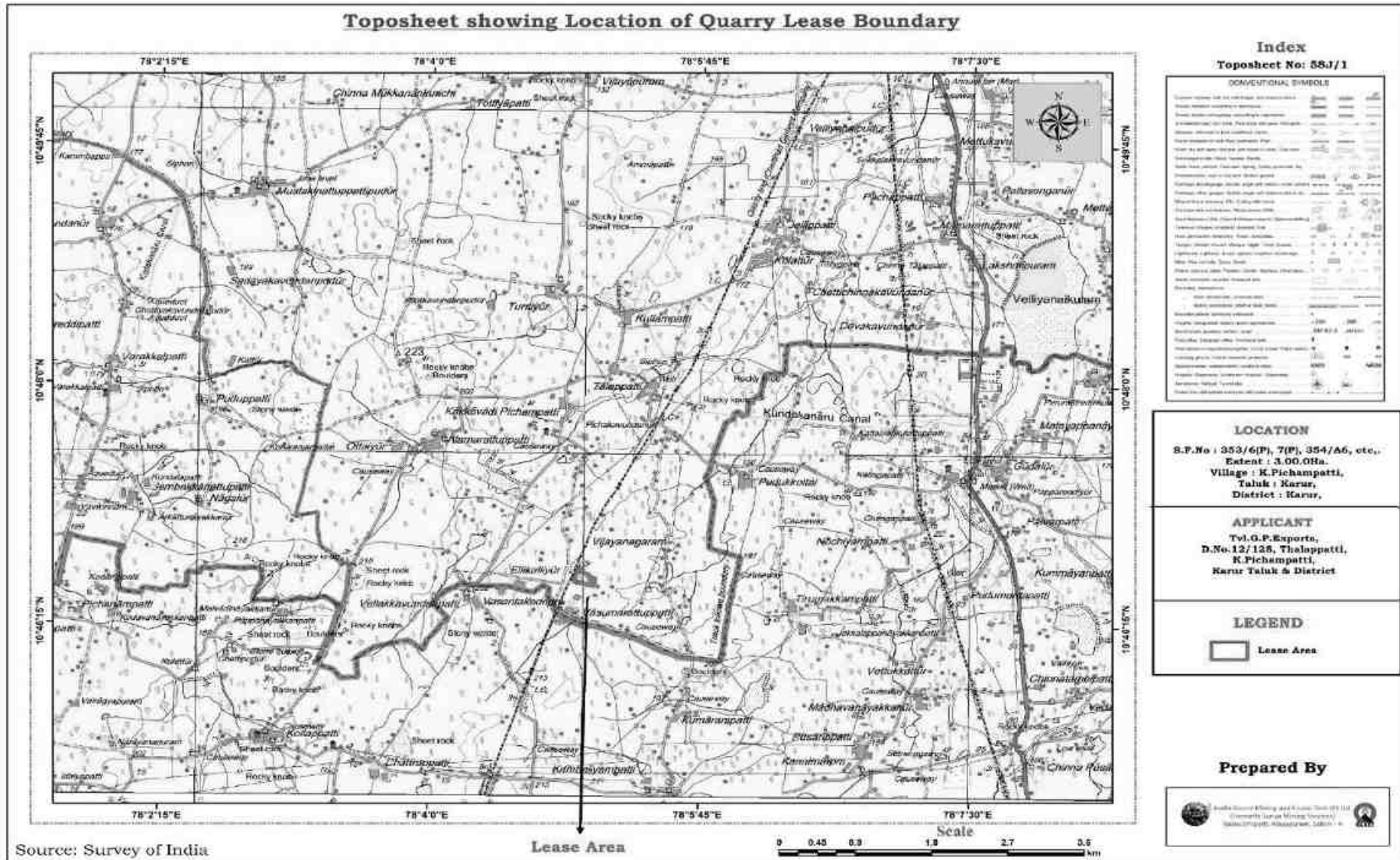


Fig No 11.1 Toposheet showing location of the lease area

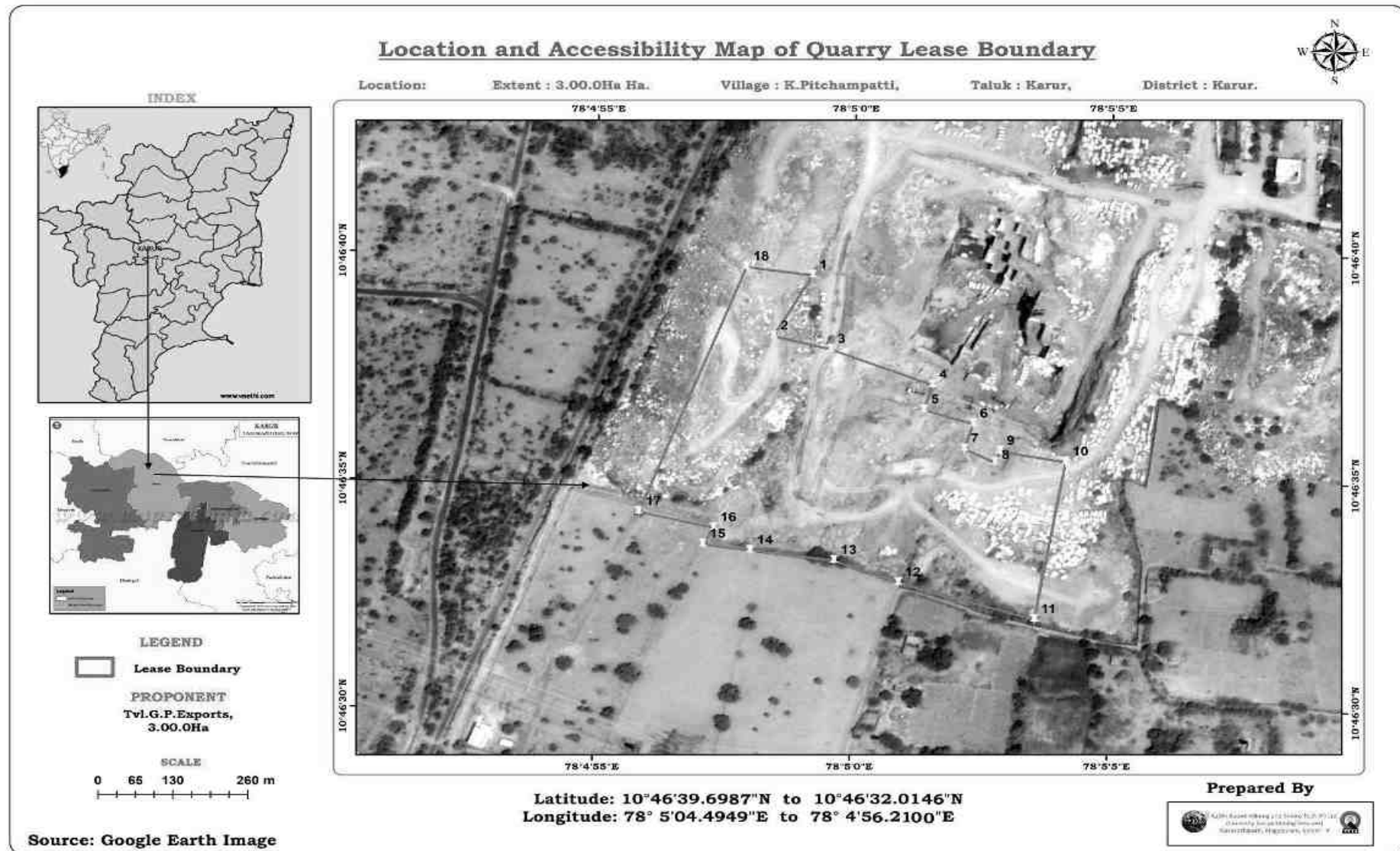


Fig No 11.2 Map Showing the Location and Accessibility of Quarry Lease Boundary

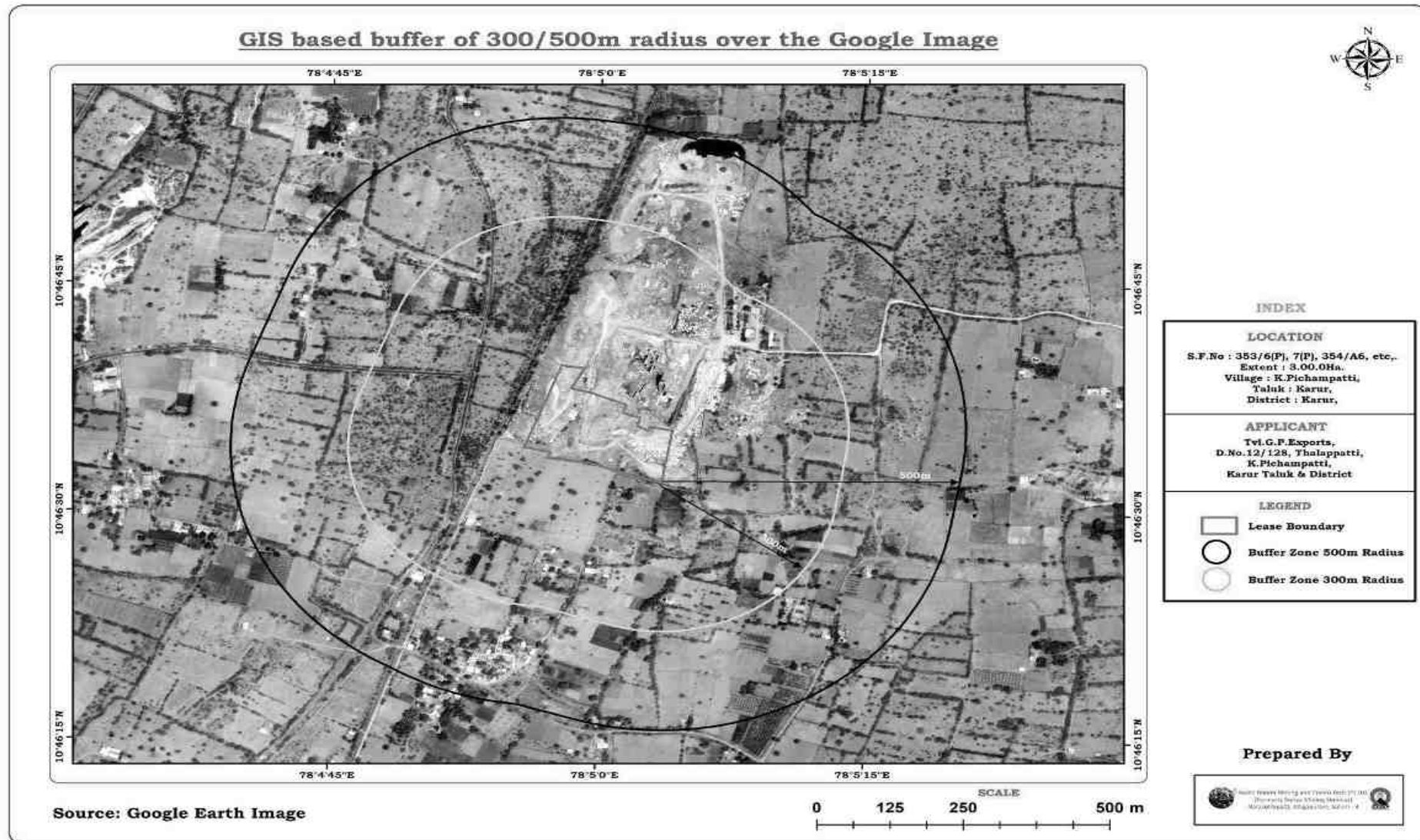


Fig No 11.3 Google Earth Image showing 300m and 500m radius around lease area

11.5 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

11.5.1 Air Environment

The air borne particulate matter is the main air pollutant by opencast mining. The mining operation will be carried out by adopting semi-mechanized methods which involves Jack Hammer drilling and blasting, excavation, loading and transportation.

Total predicted 24-h maximum GLC of PM₁₀ at project site for scenario 1 i.e. loading-unloading, transportation and scenario 2 i.e. Blasting was 68.07µg/m³ and 54.18µg/m³ respectively after superposition of base-line value 48µg/m³ over the incremental GLC 20.07µg/m³ and 6.18µg/m³ respectively due to combined impact of loading, unloading, open pit and transportation over the haul road and due to blasting.

Maximum Impact of PM₁₀, SO₂ and NO₂ was observed close to the source within the lease area due to moderate wind speeds.

11.5.2 Noise Environment

Noise pollution poses a major health risk to the mine workers. The sources of noise in the proposed open cast granite quarry are such as Drilling, Blasting, and during movement of vehicles.

The noise generated by the mining activity is dissipated within the core zone. This is because of distance involved and other topographical features adding to the noise attenuation. From the results, it can be seen that the ambient noise levels (day time and night time) at all the locations will remain within permissible limits prescribed by CPCB and 90dB (A) norms of DGMS. At present there is no mining activity carried out. However, the expected noise levels are not likely to have any effect. Precaution will be made to keep down the noise exposure level of 85 dB (A) to the operating personnel for 8 hrs duration.

11.5.3 Ground Vibration

From the above results, it can be seen that the charge per blast of 7 kg is within the Peak Particle Velocity of 5mm/s for the habitation located at the distance of 190m. So, the project proponent if any changes for the production (G.P Exports) is recommended to adopt delay detonators to keep PPV of ground vibration below 5mm/s.

11.5.4 Water Environment

Mining operations can affect groundwater quality in several ways. The most obvious occurs in the mining below the water table, either in underground workings or open pits. This

provides a direct conduit to aquifers. Groundwater quality is also affected when waters (natural or process waters or wastewater) infiltrate through surface materials (including overlying waste or other material) into ground water. But this multicolour granite quarry mine is devoid of any such impacts.

The WQI of the samples collected from the study area are given in table 4.25. It can be seen that the study area has water quality index value ranging from 65.7 to 301.4 which reflects the Poor water quality to unfit for drinking status of the groundwater quality. The findings demonstrate the varying consistency of groundwater at different locations. All the groundwater samples under poor to unfit for drinking category; it may be due to the absorption of fertilisers, geological condition, channel water, solid waste, sewer drainage, septic tanks, and agricultural waste. The water should be treated by reverse osmosis to reduce dissolved solids and total hardness to the required rate.

11.5.5 Soil Environment

The generation of top soil is estimated as 31590 m³. It will be dumped along mining lease boundary as earth bund and it will be utilized for green belt development within the lease area. No chemical or toxic elements will be used during mining activity. So, the health of soil in and around the quarry will not be affected.

11.5.6 Waste Dump

The proposed rate of production of multicolour granite for five years is about 47790 MT at the rate of 40% recovery up to permissible depth. The 60% reject of 71676 MT shall be dumped over existing dump in South west side and on virgin barren land in east side as per approved scheme of mining. During monsoon seasons, the runoff from the dump will carry silts and small stones and it affect the land use around the project site which means it may affect the carrying capacity of stream, water holding capacity of lakes and affect nearest agricultural lands.

11.5.7 Biological Environment

There are no notified endangered species in the area, which may be affected due to the quarry activities; therefore, the biological environment will not have significant impact due to quarrying activity. The impact on the biological environment due to amount of dust generation is minimized by well-developed green belt in and around the quarry lease area.

11.5.8 Land Environment

Multi colour granite Quarry project will result in disturbance of the land use pattern of the mine lease area. The impact on the topography in the form of changed landscape is unavoidable during mining activities like excavation, overburden dumping, soil extraction etc. Land requirement for the project has been assessed considering functional needs. So, reclamation of mined out land will be given due importance as a step for sound land resource management. There is no release of toxic elements into the ground. No adverse impact is anticipated on land use of buffer zone associated due to the mining activity, as all the activities will be confined within the project site. The mining operations will impact the land usage and land aesthetics of quarry lease area. The rate of plantation increases over a period of time due to quarry activity. At the end of the project, the quarried pit will be act as water storage pond. The stored water will be used for developing mango plantation around the mining lease area. It will improve the livelihood of village people. The evaporation rate of the water in the pit is given detail in the report.

11.5.9 Socio Economic Environment

The quarrying activity will definitely increase the employment opportunity (directly as well as indirectly) in the project area. Some of these impacts would be beneficial. The expectation of the people of area is concerned towards employment, education, road and health facilities. The literacy rate may be increased with the economic benefits which may arise from the quarrying activities.

Direct Employment – 20 persons

Indirect Employment - 20 persons

Table 11.7 Environmental Management Plan

S. No	Parameters	Mining Activity	Mitigation measures
1	Air Environment	Drilling	○ Dust extractor or wet drilling to be followed to control dust at source of emission ○ Use of Sharp drill bits for drilling holes and charging the holes by using optimum charge and using time delay detonator
		Blasting	○ Regular water sprinkling on blasted heaps at regular intervals will help in reducing considerable dust pollution
		Loading	○ Water sprinkling be done before loading by making it moist
		Transportation	○ Water sprinklers along the sides of haul road shall be fixed to control fly of dust while transporting minerals and waste ○ Overloading will be prevented ○ Trucks/Dumpers covered by tarpaulin covers
		DG Sets	○ DG sets will be used only during power failure ○ Adequate stack height for DG sets will be provided as per CPCB norms
		General measures	○ Avenue trees along roads around ML boundary shall be planted as per the norms of MoEF to control fly of dust. ○ Labours engaged in such dust prone areas should be provided with safety devices like ear muff, mask, goggles as per the MMR, 1961 amendments and circulars of DGMS. ○ Regular health check-up of workers and nearby villagers in the impacted area should be carried out and also regular occupational health assessment of employees should be carried out as per the Factories Act ○ Ambient Air Quality Monitoring will be conducted on regular basis to assess the quality of ambient air.

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2	Water Environment	Surface water	Wastewater discharge from mine will be treated in settling tanks before using for dust suppression and tree plantation purposes.
		Ground water	- The mining activity will not intersect the ground water table - Desilting will be carried out before and immediately after the monsoon season
		Storm water	- Pit will be used for Storage of rainwater - Rain water will be collected in sump in the mining pit and will be allowed to store and pumped out to surface setting tank of 15 m x 10m x 3m to remove suspended solids if any. This collected water will be judiciously used for dust suppression onwards and such sites where dust likely to be generated and for developing green belt. - The proponent will collect and judiciously utilize the rainwater as part of rain water harvesting
		General measures	Regular monitoring and analyzing the quality of water
3	Noise Environment	Drilling	Limiting time exposure of workers to excessive noise
		Blasting	- Carrying out blasting only during day time and not on cloudy days - Noise levels will be controlled by using optimum explosive charge, proper delay detonators and proper stemming to prevent blow out of holes. - Providing proper noise proof enclosure for the workers separated from the noise source and noise prone equipment
		Transportation	- Proper and regular maintenance of vehicles, machinery and other equipments. - The noise generated by the machinery will be reduced by proper lubrication of the machinery and other equipments. - Speed of trucks entering or leaving the mine will be limited to moderate speed to prevent undue noise from empty vehicles.

			○ Adequate silencers will be provided in all the diesel engines of vehicles. ○ Minimum use of horns and speed limit of 10 km/hr in the village area. ○ It will be ensured that all transportation vehicles carry a valid PUC Certificates
		General measures	○ Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas ○ Provision of Quiet areas, where employees can get relief from workplace noise. ○ The development of green belts around the periphery of the mine to attenuate noise. ○ Regular medical check-up and proper training to personnel to create awareness about adverse noise level effects.
4	Vibration	Blasting	○ Specific charge pattern has to be designed by proper trial vibration studies with varying charge ratios. ○ Milli second detonators shall be used preferably 25–50ms per delay to control vibrations ○ If the vibration still exceeds the limit a long Trench to a depth of 6m may cut in the direction of wave's movement to break longitudinal waves which travel close to surface, preferably near mine buffer zone ○ In spite of all measures periodical testing of vibration and noise using approved seismograph by DGMS has to be followed as a part of Environmental monitoring
5	Soil Environment	Topsoil	○ Humus top soil shall be preserved for reuse in afforestation and agriculture ○ Top soil should not be mixed with other waste or reject materials. It should be conserved by judicious utilization in the mine premises ○ Garland drains will be provided around the mine and dumps to arrest any soil from the mine area being carried away by the rain water. This will

			also avoid the soil erosion and siltation in the mining pits and maintaining the stability of the benches
6	Waste Dump	Stabilization of Dumps	○ The rejects\ waste dump shall be properly terraced in to 1.5m benches with proper repose angle and then the top soil shall be spread over the dumps and slope to make them humus for some time, after the soil suitable for water retention trees will be planted at the top, slope and toe of the stabilized dumps to form vegetation ○ Garland drainage around dump shall prevent under wash of dump by hydrostatic pressure to be developed by surface water and control wash outs and collapse
7	Plantation	Mine lease boundary and waste dump	○ Provision of green belt all along the periphery of the lease area for control of dust and to attenuate noise ○ Stabilization of Dump with plantation ○ It is strongly recommended that the loss of plant in each year will be counted and again planted in subsequent plantation. ○ The plant should be planted taken from nursery, where the survival rate is high.
8	Land Environment		○ The restoration of the degraded land would cover backfilling and terracing with the overburden / wastes and surfacing the same with top soil. ○ Provision of Garland drainage around the dumps ○ Fast growing trees and other native shrubs would be planted to stabilize the reclaimed land ○ Appropriate measures will be taken for Green belt development. ○ The rain water will be stored in the pit which will recharge the ground water as a part of rain water harvesting scheme for irrigating the nearby agricultural lands.
9	Socio Economic		○ Good maintenance practices will be adopted for machinery and

			equipment, which will help to avert potential noise problems. ○ Green belt will be developed in and around the project site as per Central Pollution Control Board (CPCB) guidelines. ○ Drilling, blasting etc at specified location will be followed with proper schedule. ○ Appropriate air pollution control measure will be taken so as to minimize the environmental impact within the core zone. ○ An emergency preparedness plan will be prepared in advance, to deal with firefighting, evacuation and local communication. ○ For the safety of workers, personal protective appliances like hand gloves, helmets, safety shoes, goggles, aprons, nose masks and ear protecting devices has been provided which meet 'BIS' (Bureau of Indian Standards). ○ As a part of CSR activities community welfare measures will be taken by Proponent through local Panchayat
10	Occupational Health		○ First-aid facilities as per provisions under Rule (44) of Mines Rules 1955 ○ Initial and Periodical medical examination shall be conducted for the employees under Rule 29B & 45 (A). ○ Insurance will be taken in the name of the labourers working in the mines ○ Workers involved in mining work shall be provided protective equipments such as Thick Gloves, Goggles, ear plugs, safety boot wears, etc.,

11.6 Analysis of Alternatives

The quarrying site is dependent on the geology and mineral deposition of the area. Hence, this project is, mineral and site specific and no alternative site considered for this project.

11.7 Environmental Monitoring Program

Success of any environmental management programme depends upon the efficiency of the organizational set up responsible for the implementation of the programme. Regular monitoring of the various environmental parameters is also necessary to evaluate the effectiveness of the management programme. Environmental Monitoring Programme will be conducted for various environmental components as per conditions stipulated in the Environmental Clearance Letter issued by SEIAA & Consent to Operate issued by TNPCB.

Table No: 11.8 Post Project Environmental Monitoring Program

S. No.	Environment Attributes	Location	Monitoring		Remarks
			Duration	Frequency	
1	Meteorology and Air Quality	Continuous monitoring weather station in core zone/ nearest IMD station	24 hours	Monthly Once	Wind speed, direction, Temperature, Relative humidity and Rainfall.
2	Air Pollution Monitoring – PM _{2.5} , PM ₁₀ , SO ₂ and NO _x	5 locations (One station in the core zone and at least one in nearby residential, area, one in the upwind, two station on the downwind direction and one in cross wind direction)	8 hours	Once in six months	Fine Dust Sampler and Respirable Dust Sampler
3	Water Pollution Monitoring	Mine effluents, Set of grab samples during pre and post monsoon for ground and surface water in the vicinity.	–	Once in six months	Phyiso–chemical, microbiological characteristics
4	Hydrogeology	Water level in open wells in buffer zone around 1km at specific wells	-	Once in six months	Water level monitoring devices may be used.
5	Noise	Mine Boundary, high noise generating	24 hours	Monthly Once	Sound level meter

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		areas within the lease and at the nearest residential area			
6	Vibration	At the nearest habitation (in case of reporting)	–	During blasting operation	Digital Seismograph
7	Soil	Core Zone and Buffer zone (Grab samples)	–	Once in six months	Physical and Chemical characteristics

11.8 Project Benefits

The proponent, **M/s. G.P Exports** is very much conscious of his obligations to society at large. Under plantation programme, it is suggested to develop greenbelt further all along the boundary of the quarry lease area. Apart from the green belts and aesthetic plantation for eliminating fugitive emissions and noise control, all other massive plantation efforts will be executed with the assistance of experts and cooperation of the local community. The quarrying activity will create rural employment. In addition, there will be indirect employment to many more people in the form of contractual jobs like construction of infrastructural facilities, transportation of Granite and gravel to destinations, sanitation, supply of goods and services to the quarry and other community services etc. The local population will have preference to get an employment. The proponent will help in socio economic development of the village by providing educational facilities to children, and welfare amenities like drinking water to school; road and medical facilities to villages and employment opportunities to nearby villagers. CSR budget is allocated as 2.5% of the profit.

11.9 Conclusion

As discussed, it is safe to mention that the project is not likely to cause significant impacts on the ecology and environment of the area, as adequate preventive measures will be adopted to contain the pollutants within permissible limits. The total operations shall be carried out with ease & minimum risk to the workers. The proposed Environmental Management Plan will keep the area in a safe environment with negligible impact on the environment. Plantation will substantiate the impact due to the quarrying activity. Quarrying activity will help in improving the socio-economic benefits in areas like employment, communication and infrastructure development.

CHAPTER - 12: DISCLOSURE OF CONSULTANTS ENGAGED

AADHI BOOMI MINING AND ENVIRO TECH (P) LTD, a QCI/NABET Accredited EIA Consultant Organization having it's Registered Office at Salem and Branch at Porur, Chennai were promoted by a team of professional Geologists\ Mining\ Environment\ Civil\ Mechanical\ Chemical Engineers\Scientists. The company has vast experience in various disciplines including Exploration and mining of minerals and was incorporated in 2002 in the name of Suriya Mining Services providing expert advice and solutions for clients' requirement in the field of Mineral prospecting, Exploration, Mining, Geo-technical, Techno economic Feasibility reports\evaluation, Mineral Engineering, Environment Impact Assessment (EIA), Environment Management Plan (EMP), Environment Monitoring and related liaison jobs like Environment Clearance, Wild life and Forest clearance from DEIAA/SEIAA/NBWL/CRZ, MoEF&CC etc., of all accredited sectors.

12.1 SCOPE

- EIA & EMP for all accredited sectors and monitoring as per SPCB/CPCB/MoEF&CC
- Environment/ Wild life/ CRZ/ Forest Clearance
- Social Impact Analysis (SIA) and Eco-Biodiversity studies for Mine Closure Plan
- Remote Sensing & GIS including Satellite data processing, ASTER, DEM etc for application in Forest, Agriculture, Disaster, Mineral Exploration, Environment Modelling, Town planning etc.,
- Geological Surveying, Mapping, Exploration and Project Management
- Geophysical, Geochemical & Geotechnical studies to locate concealed deposit\ formation including structural studies
- Noise and Vibration studies as per DGMS\MoEF&CC to design controlled blasting where inhabitations are located within 300m
- Mine Design and costing, selection of Machineries and Project Evaluation
- Statutory Mine Plans & Sections, Mining Plan and other mandatory projects
- Design and development of Mineral Beneficiation Plant including mineral separation studies.

12.2 INFRASTRUCTURE

- Our Human resources are well expertise in all functional areas as per Ver. 3 of NABET\QCI. Our Hi-Tech ISO certified Office and Lab are accredited by NABL and MoEF&CC.

- And have latest field Investigation devices like Respirable and Fine Dust Samplers, Digital Seismograph, DDR3 Resistivity Meter, Echo sounder, DGPS, Total Station, Water level monitoring meters, GPS 62S, Sound Level Meter etc.

12.3 DISCLOSURE OF CONSULTANT FOR EIA STUDY

The applicants, **M/s. G. P. Exports** appointed **Aadhi Boomi Mining and Enviro Tech Private Ltd**, having its office at 3/216, K.S.V Nagar, Narasothipatti, Alagapuram, Salem – 636 004, Tamil Nadu, for preparation of EIA/EMP report for obtaining Environment Clearance from SEIAA/SEAC, Tamil Nadu.

Aadhi Boomi Mining and Enviro Tech Private Ltd has MOU with **EKDANT Enviro Services (P) Ltd** laboratory at Chennai and has own Laboratory named **ABM Enviro Lab, accredited by NABL** for sampling and testing of air, water, noise and soil samples. Ekdant Enviro Services are recognized by the Ministry of Environment and Forests, Government of India under the relevant provision of Environment (Protection) Act 1986 and Accredited by NABL and NABET, Quality Council of India, New Delhi.

S. No.	Study	Consultants/LAB
1	Generation of Base Line Data	ABM Enviro Lab, Salem
2	Remote Sensing and Land use/Land cover Studies	Aadhi Boomi Mining & Enviro Tech P Ltd, Salem
3	Preparation of EIA and EMP Report	Aadhi Boomi Mining & Enviro Tech P Ltd, Salem

12.4 DECLARATION OF EXPERTS INVOLVED IN THE EIA REPORT PREPARATION

Names of the EIA coordinator, Functional Area Experts and other Team Members engaged and nature of consultancy rendered is provided in NABET Annexure –VII of EIA report. The multidisciplinary team comprises of Environmental Engineers, Geologists and Geographers who involved in preparation of Environmental Impact Assessment Report and Environment Management Plan for various functions like Air quality, Water quality, Noise levels, Soil Conservation, Hydro geology, Ecology and bio-diversity, Land use and Socio–Economics.

Declaration by Experts Contributing to the EIA/EMP

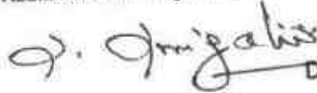
Declaration by experts contributing to the EIA/EMP for Multicolour Granite Quarry of M/s. G.P Exports over an extent of 3.00.0 Ha in K.Pitchampatti Village, Karur Taluk, Karur District of Tamil Nadu. It is also certified that information furnished in the above EIA study are true and correct to the best of our knowledge. I, hereby, certify that I was a part of the EIA team in the following capacity that developed the EIA/EMP Report.

Name : Dr.S.Suriyakumar

Designation : EIA Coordinator

Signature :

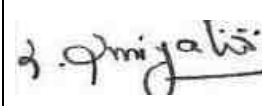
For Aadhi Boomi Mining And Enviro Tech (P) Ltd.,


Director

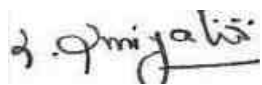
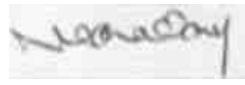
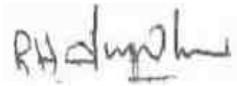


Period of Involvement : December, 2025 to till date

Functional Area Experts Engaged in this Project

S. No	Name of the Expert	Cat.	Functional Areas	Involvement	Signature
1	Dr.S.Suriyakumar	A	SC	- Study of soil profile. - Assessing the impact on soil environment and proposed mitigation measures for soil conservation.	
			SHW	- Waste disposal method evaluation - Providing dump management plan	
			RH	Management plan for safety	
2	Mrs. S. Santhi	B	LU	- Collection of Remote sensing satellite data to study the land use pattern. - Construction of Land use Map. - Impact of project on surrounding land use.	
			SE	- Identification of villages in the study area and finalization of demographic profile of the villages within the study area - Revision in secondary data as per Census of India, 2011.	

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT
Proponent: M/s. G.P. Exports, Multicolour Granite Quarry, Karur District

3	R.R Prakash Babu	B	AP	• Identification of different sources of air pollution due to the proposed mine activity. • Identification of Impacts & suggestion of mitigation measures.	
4	S. Sagath Srikrishnan	B	WP	• Study of the monitored data with respect to the applicable standards. • Identification of Water requirement & Source. • Preparation of water balance diagram. • Impact of the project on the water quality, both surface and groundwater. • Suggestion of Mitigation measures to control water pollution.	
5	S. Sagath Srikrishnan	B	AQ	• Identifying different source of emissions and propose predictions of incremental GLC using AERMOD. • Recommending mitigations measures for EMP.	
6	Dr.S.Suriyakumar	B	NV	• Predict the noise level and vibration level due to proposed mining operation based on scientific evaluation. • Suggesting the Mitigation measures to control noise pollution, Suggesting the Mitigation measures to control ground vibration.	
	R.R Prakash Babu				
7	Mr. K. Manuraj	A	HG	• Interpretation of ground water table and predict impact and propose mitigation measures. • Analysis and description of aquifer Characteristics. • Study about impact on the hydrology due to mining operation	
	Dr. Nallathambi Varadarajan				
8	Mr. K. Velmurugan	B	Geo	• Field Survey for assessing the regional and local geology of the area. • Study of geology of the ML area and the surrounding areas. • Provide details about Mineral composition	
	Dr. Nallathambi Varadarajan				
9	Gyaneswar Bhuyan	B	EB	• Collection the primary data from project site and compare the secondary data from local DFO office.	

DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT
Proponent: M/s. G.P. Exports, Multicolour Granite Quarry, Karur District

List of FAA/Team Members Engaged in this Project

S. No	Name of the Expert	Cat.	Functional Areas	Involvement	Signature
1	Mrs.S. Sri Vidhya	B	WP, AQ	• Site Visit with FAE. • Analyse & provide inputs and assist FAE with meteorological data, emission estimation, AERMOD modelling and suggesting control measures	
2	Dr.M.Selvakumar	B	AP, AQ	• Site Visit with FAE. • Assisting FAE on sources of Air pollution, its impacts and suggest control measures.	
3	Mrs.V.Kalaivani	B	WP	• Site Visit with FAE. • Assisting FAE on sources of water pollution, its impacts and suggest control measures	
4	Mr.A. Jagadeesh Kumar	B	AQ, NV	• Site Visit with FAE. • Assist FAE with prediction modelling. • Assist FAE and provide inputs on impacts due to proposed mine activity and suggest mitigation measures.	



File No: 13171
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA),
TAMIL NADU)



Dated: 10/02/2026



To,

Thiru. Panneer Palanisamy
 2/276-834 TNHB-1 Phase, Kattikanapalli, Krishnagiri District - 635001. TAMIL NADU.
 mpgranite2014@gmail.com

Subject: Grant of Terms of Reference along with Public Hearing under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

Sub: SEIAA, Tamil Nadu – Proposed Multicolour Granite Quarry over an extent of 3.00.00Ha in S.F.Nos. 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20 (Part), K.Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu by Tvl. G.P. Exports - under project category – “B1” and Schedule S.No. 1(a) – “Mining of Minerals” – **ToR issued along with Public Hearing-** preparation of EIA report – Regarding.

Ref: 1. Online proposal No. SIA/TN/MIN/559712/2025, Dated 17/12/2025.
 2. Minutes of the 668th meeting of SEAC-II held on 22.01.2026.
 3. Minutes of the 956th meeting of SEIAA held on 04.02.2026.

2. The particulars of the proposal are as below:

(i) TOR Identification No.	TO25B0108TN5759940N
(ii) File No.	13171
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	K. Pitchampatti Village Multicolour Granite Quarry (Extent: 3.00.0 Ha)
(viii) Name of Company/Organization	Panneer palanisamy
(ix) Location of Project (District, State)	KARUR, TAMIL NADU
(x) Issuing Authority	SEIAA
(xi) Applicability of General Conditions	no
(xii) Applicability of Specific Conditions	no

1. In view of the particulars given in the Para 1 above, the project proposal inter alia including Form-1 (Part A and B) were submitted to the SEIAA for an appraisal by the SEAC under the provision of EIA notification 2006 and its subsequent amendments.
2. The above-mentioned proposal has been considered by SEIAA in the meeting held on 04.02.2026. The minutes of the meeting and all the Application and documents submitted [viz. Form-1 Part A, Part B] are available on PARIVESH portal which can be accessed by scanning the QR Code above.
3. The State Expert Appraisal Committee (SEAC), based on the information & clarifications provided by the project proponent and after detailed deliberations on all technical aspects recommended the proposal for grant of Terms of Reference with public hearing under the provision of EIA Notification, 2006 and as amended thereof subject to the stipulation of specific and general conditions as detailed in Annexure (2).
4. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the SEAC hereby decided to issue the following Terms of Reference with public hearing for instant proposal of **Tvl. G.P. Exports** under the provisions of EIA Notification, 2006 and as amended thereof.
5. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.
6. The Terms of Reference with public hearing to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes, as applicable, to the project.
7. This issues with the approval of the Competent Authority.
8. The TORs with public hearing prescribed shall be valid for a period of three years from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(I)(part) dated 29th August, 2017.

Copy To

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. The Additional Chief Secretary to Government, Environment and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary to Government, Natural Resources Department, Tamil Nadu.
4. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
5. The Chairperson, TNPC Board, 76, Mount Salai, Guindy, Chennai-32
6. The District Collector, Karur District
7. The Commissioner of Geology and Mines, Guindy, Chennai-32
8. The Assistant Director, Department of Geology & Mining, Karur District
9. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
10. Integrated Regional office of MoEF&CC, Sastri Bhawan, Nungambakkam, Chennai
11. File Copy

Annexure 1

Specific Terms of Reference s for (Mining Of Minerals)

1. Seiaa Specific Conditions :

S. No	Terms of Reference
1.1	After detailed discussions, the Authority accepts the recommendation of SEAC and decided to grant Terms of Reference (ToR) along with Public Hearing for the quantity of 1,19,466MT of ROM which includes 47,790MT of Multi Colour Granite Recovery @40% and 71,676MT of Granite waste @60% upto the depth of 35m BGL and the annual peak shall not exceed 10,256 MT of Granite Recovery @ 40% with as per the approved mining plan, under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC & normal conditions & the

S. No	Terms of Reference
	SEIAA Standard conditions.

2. Seiaa Standard Conditions :

S. No	Terms of Reference
2.1	<u>Cluster Management Committee</u> 1. Cluster Management Committee shall be framed which must include all the proponents in the cluster as members including the existing as well as proposed quarry. 2. The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc., 3. The List of members of the committee formed shall be submitted to AD/Mines before the execution of mining lease and the same shall be updated every year to the AD/Mines. 4. Detailed Operational Plan must be submitted which must include the blasting frequency with respect to the nearby quarry situated in the cluster, the usage of haul roads by the individual quarry in the form of route map and network. 5. The committee shall deliberate on risk & emergency management plan, fire safety & evacuation plan and sustainable development goals pertaining to the cluster in a holistic manner especially during natural calamities like intense rain and the mitigation measures considering the inundation of the cluster and evacuation plan. 6. The Cluster Management Committee shall form Environmental Policy to practice sustainable mining in a scientific and systematic manner in accordance with the law. The role played by the committee in implementing the Environmental policy devised shall be given in detail in the EIA Report. 7. The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner. 8. The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public in the vicinity. <u>Agriculture & Agro-Biodiversity</u> 9. Impact on surrounding agricultural fields around the proposed mining Area. 10. Impact on soil flora & vegetation around the project site. 11. Details of type of vegetation including no. of trees & shrubs within the proposed mining area and. If so, transplantation of such vegetation all along the boundary of the proposed mining area shall committed mentioned in EMP. 12. The Environmental Impact Assessment should study the agro-biodiversity, agro- forestry, horti-cultural plantations, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem. 13. Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services. 14. The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock. <u>Forests</u> 15. The project proponent shall detailed study on impact of mining on Reserve forests and free ranging wildlife. 16. The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna. 17. The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection. 18. The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site. <u>Water Environment</u>

S. No	Terms of Reference
	19. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period. 20. Erosion Control measures. 21. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas. 22. The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir. 23. The project proponent shall study and furnish the details on potential fragmentation impact on natural Environment, by the activities. 24. The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts. 25. The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components. 26. The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites. 27. The EIA shall include the impact of mining activity on the following: - Hydrothermal/Geothermal effect due to destruction in the Environment. - Bio-geochemical processes and its foot prints including Environmental stress. - Sediment geochemistry in the surface streams. <u>Energy</u> 28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished. <u>Climate Change</u> 29. The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities. 30. The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock, soil health and physical, chemical & biological soil features. 31. Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood. <u>Mine Closure Plan</u> 32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued. <u>EMP</u> 33. Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued and the scope for achieving SDGs. 34. The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan. <u>Risk Assessment</u> 35. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining. <u>Disaster Management Plan</u> 36. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/untoward accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities

S. No	Terms of Reference
	covering the entire mine lease period as per precise area communication order issued. Others 37. The project proponent shall furnish VAO certificate with reference to 300m radius regard to approved habitations, schools, Archaeological sites, Structures, railway lines, roads, water bodies such as streams, odai, vaari, canal, channel, river, lake pond, tank etc. 38. As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall address the concerns raised during the public consultation and all the activities proposed shall be part of the Environment Management Plan. 39. The project proponent shall study and furnish the possible pollution due to plastic and microplastic on the Environment. The ecological risks and impacts of plastic & microplastics on aquatic Environment and fresh water systems due to activities, contemplated during mining may be investigated and reported.



SEAC conditions - Site specific

Major Condition:

1. The PP shall furnish the consent lease agreement for the survey numbers from the patta land owners, during EIA appraisal.
2. The PP shall mark the DGPS reference pillars and shall also erect fencing all around the boundary of the proposed area with gates for entry/exit and shall furnish the latest photographic/videographic proof showing the same during EIA appraisal.
3. The PP shall remove the dump in the proposed site and furnish photographic/videographic proof showing the same during EIA appraisal.

General Condition:

1. **A Cluster Management Committee (CMC) shall be constituted including all the mines in the cluster as Committee Members for the effective management of the mining operation in the cluster through systematic & scientific approach with appointment of statutory personnel, appropriate environmental monitoring, good maintenance of haul roads and village/panchayat roads, authorized blasting operation etc. The PP shall submit the following details in the form of an Affidavit during the EIA appraisal:**
 - (i) **Copy of the agreement forming CMC.**
 - (ii) **The Organisation chart of the Committee with defining the role of the members**
 - (iii) **The 'Standard Operating Procedures' (SoP) executing the planned activities.**
2. The Geo referenced Boundary pillars to be erected on the field as per the mine rules and the evidence should be submitted along with the EIA report.
3. The details of enumeration of structures including schools, colleges, primary health centres should be submitted along with the EIA report.
4. The structures within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300m & upto 1km shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc. and spell out the mitigation measures to be proposed for the protection of the above structures, if any during the quarrying operations.
5. The proponent shall furnish photographs of adequate fencing, garland drainage built with siltation tank & green belt along the periphery including replantation of existing

trees; maintaining the safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.

6. The Proponent shall carry out Bio diversity study as a part of EIA study and the same shall be included in the Report.
7. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
8. The PP shall carry out the comprehensive studies on the cumulative environmental impacts of the existing & proposed quarries which included drilling & blasting, loading & hauling on the surrounding village and structures.
9. The PP shall prepare a conceptual working plan accommodating the inclusion of haul road accessibility keeping the benches intact, by ensuring the slope stability of the working benches to be constructed and existing quarry wall.
10. The PP shall install the CCTV camera for the continuous surveillance of mining activity & furnish the photographic/videographic evidence along with the EIA report.

SEAC Standard conditions

1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following:
 - (i) Original pit dimension
 - (ii) Quantity achieved Vs EC Approved Quantity
 - (iii) Balance Quantity as per Mineable Reserve calculated.
 - (iv) Mined out Depth as on date Vs EC Permitted depth
 - (v) Details of illegal/illicit mining
 - (vi) Violation in the quarry during the past working.
 - (vii) Quantity of material mined out outside the mine lease area
 - (viii) Condition of Safety zone/benches
 - (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m.
2. Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site.
3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it

belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc.

4. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry.
5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.
6. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site.
7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC.
8. However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level.
9. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent.
10. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site.
11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences.

12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines,
 - Highest production achieved in any one year
 - Detail of approved depth of mining.
 - Actual depth of the mining achieved earlier.
 - Name of the person already mined in that leases area.
 - If EC and CTO already obtained, the copy of the same shall be submitted.
 - Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
13. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?
14. Quantity of minerals mined out.
 - Highest production achieved in any one year
 - Detail of approved depth of mining.
 - Actual depth of the mining achieved earlier.
 - Name of the person already mined in that leases area.
 - If EC and CTO already obtained, the copy of the same shall be submitted.
 - Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.
15. All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc.,
17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.
18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same.
19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.

20. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided.
21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study.
22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind.
23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.
24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
25. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided.
26. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered.

27. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
28. Impact on local transport infrastructure due to the Project should be indicated.
29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.
30. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.
31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible.
32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner.
33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner
34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.
36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB.
42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine.
43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

STANDARD TERMS OF REFERENCE

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of

the lessee.

- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.
- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.

- 12) Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should

be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.

- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for Coastal Projects, a CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease with respect to CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- 22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- 23) Air quality modeling should be carried out for prediction of impact of the project on

the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.

- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under

plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.

- 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 38) Detailed Environmental Management Plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by

any Court of Law against the Project should be given.

- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 44) Besides the above, the below mentioned general points are also to be followed:-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the ToR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may

be applicable.

- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

In addition to the above, the following shall be furnished:-

The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information on following points:

1. Project name and location (Village, District, State, Industrial Estate (if applicable)).
2. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
3. Measures for mitigating the impact on the environment and mode of discharge or disposal.
4. Capital cost of the project, estimated time of completion.
5. The proponent shall furnish the contour map of the water table detailing the number of wells located around the site and impacts on the wells due to mining activity.
6. A detailed study of the lithology of the mining lease area shall be furnished.
7. Details of village map, "A" register and FMB sketch shall be furnished.
8. Detailed mining closure plan for the proposed project approved by the Geology of Mining department shall be submitted along with EIA report.
9. Obtain a letter /certificate from the Assistant Director of Geology and Mining standing that there is no other Minerals/resources like sand in the quarrying area within the approved depth of mining and below depth of mining and the same shall be furnished in the EIA report.
10. EIA report should strictly follow the Environmental Impact Assessment Guidance Manual for Mining of Minerals published February 2010.
11. Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas.
12. The EIA study report shall include the surrounding mining activity, if any.
13. Modeling study for Air, Water and noise shall be carried out in this field and incremental increase in the above study shall be substantiated with mitigation measures.
14. A study on the geological resources available shall be carried out and reported.
15. A specific study on agriculture & livelihood shall be carried out and reported.

16. Impact of soil erosion, soil physical chemical and biological property changes may be assumed.
17. Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10km other industries, forest, eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
18. Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
19. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
20. Likely impact of the project on air, water, land, flora-fauna and nearby population
21. Emergency preparedness plan in case of natural or in plant emergencies
22. Issues raised during public hearing (if applicable) and response given
23. CER plan with proposed expenditure.
24. Occupational Health Measures
25. Post project monitoring plan
26. The project proponent shall carry out detailed hydro geological study through intuitions/NABET Accredited agencies.
27. A detailed report on the green belt development already undertaken is to be furnished and also submit the proposal for green belt activities.
28. The proponent shall propose the suitable control measure to control the fugitive emissions during the operations of the mines.
29. A specific study should include impact on flora & fauna, disturbance to migratory pattern of animals.
30. Reserve funds should be earmarked for proper closure plan.
31. A detailed plan on plastic waste management shall be furnished. Further, the proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throw away plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986. In this connection, the project proponent has to furnish the action plan.

Besides the above, the below mentioned general points should also be followed:-

- a. A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.

- b. All documents may be properly referenced with index, page numbers and continuous page numbering.
- c. Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
- d. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF& CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
- e. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. In this regard circular no F. No.J -11013/77/2004-IA-II(I) dated 2nd December, 2009, 18th March 2010, 28th May 2010, 28th June 2010, 31st December 2010 & 30th September 2011 posted on the Ministry's website <http://www.moef.nic.in/> may be referred.
- After preparing the EIA (as per the generic structure prescribed in Appendix-III of the EIA Notification, 2006) covering the above mentioned points, the proponent will take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.
 - The final EIA report shall be submitted to the SEIAA, Tamil Nadu for obtaining Environmental Clearance.
 - The TORs with public hearing prescribed shall be **valid for a period of three years** from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(I)(part) dated 29th August, 2017.



From

To

Dr.P.Jayapal M.Sc., Ph.D.,
Deputy Director,
Geology and Mining,
Karur.

Tvl.G.P. Exports,
Door No.12/128,
Thalappatti,
K.Pitchampatti,
Karur District & Taluk.

Rc.No.377/Mines/2021, Dated:21.11.2023.

Sir,

Sub: Mines and Minerals – Multicolour Granite- Karur District – Karur Taluk – K.Pitchampatti Village - S.F.Nos. 353/6 (Part) 0.64.00 hect, 353/7 (P) 0.27.50 hect, 354/A6 (0.23.50 hect), 354/A7 (0.22.50 hect), 354/A8 (0.02.00 hect), 354/A9 (0.14.00 hect), 354/A10 (0.18.00 hect), 354/A11 (0.14.50 hect), 354/A12 (0.03.50 hect), 354/A13 (0.08.00 hect), 354/A14 (0.24.50 hect), 354/A15 (0.10.50 hect), 354/B1B (0.10.50 hect), 354/B2 (0.05.00 hect, 354/B3 (0.02.00 hect), 354/B4 (0.02.00 hect), 354/B5 (0.06.50 hect), 354/B6 (0.04.00 hect), 354/B7 (0.03.00 hect), 354/B8 (0.03.00 hect), 354/B9 (0.02.50 hect), 354/B10 (0.02.50 hect), 354/B11 (0.02.50 hect), 354/B12 (0.18.50 hect), 354/B17(Part) (0.01.00 hect), 354/B20(Part) (0.04.50 hect) over an extent of 3.00.00 hectares – patta lands - Granite quarry lease application preferred by Tvl.G.P.Exports - Precise area communicated by the Government - Mining Plan submitted for approval – requested to re - submit the Mining Plan - Reg.

- Ref:
1. Granite Quarry lease application of Tvl.G.P.Exports, Door No.12/128, Thalappatti, K.Pitchampatti, Karur District & Taluk, Dated: 01.09.2021.
 2. Revenue Divisional Officer, Karur Report Rc.No.A1/3314/2021, Dated:03.01.2022.
 3. The Deputy Director, Geology and Mining, Karur, Technical report, Dated:23.02.2022
 4. The District Collector, Karur Note File No.377/Mincs/2021, dated 08.04.2022, Single file system with other connected documents.
 5. The Additional Chief Secretary to Government (FAC) letter No.3419187/MMB.2/2022-1, Dated:05.10.2023
 6. Tvl.G.P.Exports letter dated:09.10.2023.



Kind attention is invited to the references cited above.

2) In the reference 1st cited Tvl.G.P.Exports, Karur has preferred an application for the grant of quarry lease for multi coloured Granite over an extent of 3,00.0 hec in S.F.No.s. 353/6 (Part) 0.64.00 hec, 353/7 (P) 0.27.50 hec, 354/A6 (0.23.50 hec), 354/A7 (0.22.50 hec), 354/A8 (0.02.00 hec), 354/A9 (0.14.00 hec), 354/A10 (0.13.00 hec), 354/A11 (0.14.50 hec), 354/A12 (0.03.50 hec), 354/A13 (0.03.00 hec), 354/A14 (0.24.50 hec), 354/A15 (0.10.50 hec), 354/B1B (0.10.50 hec), 354/B2 (0.03.00 hec), 354/B3 (0.02.00 hec), 354/B4 (0.02.00 hec), 354/B5 (0.06.50 hec), 354/B6 (0.04.00 hec), 354/B7 (0.03.00 hec), 354/B8 (0.03.00 hec), 354/B9 (0.02.50 hec), 354/B10 (0.02.50 hec), 354/B11 (0.02.50 hec), 354/B12 (0.13.50 hec), 354/B17(Part) (0.01.00 hec), 354/B20(Part) (0.04.50 hec) of K.Pitchampatti village, Karur Taluk and District under rule 19 A of Tamil Nadu Minor Mineral Concession Rules 1959.

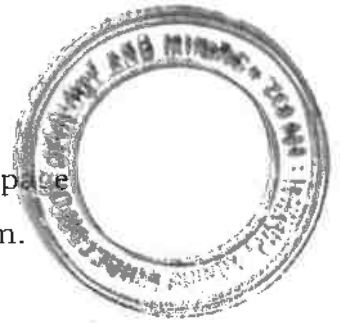
3) In the reference 4th cited above, the District Collector, Karur has recommended and forwarded the quarry lease application of Tvl.G.P.Exports, Karur to the Government through the Director of Geology and Mining, Chennai for the grant of quarry lease for multi coloured Granite for a period of 20 years under rule 19 A of Tamil Nadu Minor Mineral Concession Rules 1959.

4) The Additional Chief Secretary to Government (FAC) communicated precise area for the subject area under sub-rule (13) of Rule 19 A of for TNMMCR-1959. Further, requested the applicant firm to furnish the approved mining plan within a period of 3 months.

5) Accordingly, the applicant firm, have submitted six copies of draft mining plan for approval in the reference 6th cited. Subsequently mining plan has been examined in detail and found following discrepancies.

- i. As per the 6th condition of the precise area letter, the applicant not cleared the existing dump in the lease applied area before submission of mining plan.

- ii. The Pattadhar names are wrongly mentioned in page no.15 and 16 of the submitted draft mining plan.



In view of the above, the applicant firm is requested to rectify the above said discrepancies as pointed out and re-submit the same to this office to forward the same to the Commissioner of Geology and Mining for kind approval.

[Signature]
21/4/23

Deputy Director,
Geology and Mining,
Karur.

[Signature]
21/11/2023



Natural Resources (MMB.2)
Department,
Secretariat, Chennai-600 009

E.mail: indusmmb@tn.gov.in



Letter No.3419187/MMB.2/2022-1, Dated 05.10.2023

From

Thiru K. Phanindra Reddy, I.A.S.,
Additional Chief Secretary to Government (FAC).

To

Tvl.G.P.Exports,
D.No.12/128, Thalappatti,
K.Pitchampatti,
Karur Taluk and District -639 118.

Sir,

Sub: Natural Resources – Minor Mineral – Multicolour Granite - Quarry lease application preferred by Tvl.G.P.Exports for quarrying of Multicolour Granite over an extent of 3.00.00 hectares of patta lands in S.F.Nos.353/6 (Part) (0.64.00 hectare), 353/7 (Part) (0.27.50 hectare), 354/A6 (0.23.50 hectare), 354/A7 (0.22.50 hectare), 354/A8 (0.02.00 hectare), 354/A9 (0.14.00 hectare), 354/A10 (0.18.00 hectare), 354/A11 (0.14.50 hectare), 354/A12 (0.03.50 hectare), 354/A13 (0.08.00 hectare), 354/A14 (0.24.50 hectare), 354/A15 (0.10.50 hectare), 354/B1B (0.10.50 hectare), 354/B2 (0.05.00 hectare), 354/B3 (0.02.00 hectare), 354/B4 (0.02.00 hectare), 354/B5 (0.06.50 hectare), 354/B6 (0.04.00 hectare), 354/B7 (0.03.00 hectare), 354/B8 (0.03.00 hectare), 354/B9 (0.02.50 hectare), 354/B10 (0.02.50 hectare), 354/B11 (0.02.50 hectare), 354/B12 (0.18.50 hectare), 354/B17 (Part) (0.01.00 hectare) and 354/B20 (Part) (0.04.50 hectare) of K.Pitchampatti Village, Karur Taluk and District – Precise area communicated - Approved Mining Plan and Environmental Clearance – Called for.

- Ref: 1. Your Quarry Lease Application dated 25.08.2021.
2. From the District Collector, Karur, Note File No.377/Mines/2021, Dated 08.04.2022.

P.T.O



3. From the Commissioner of Geology and Mining, Chennai, Note File No.2374 MM2/2022, Dated 26.10.2022

I am directed to invite attention to the references second and third cited, wherein the District Collector, Karur and the Commissioner of Geology and Mining, Chennai have recommended and forwarded your quarry lease application for grant of quarry lease for quarrying of Multicolour Granite over an extent of 3.00.00 hectares of patta lands in S.F.Nos.353/6 (Part) (0.64.00 hectare), 353/7 (Part) (0.27.50 hectare), 354/A6 (0.23.50 hectare), 354/A7 (0.22.50 hectare), 354/A8 (0.02.00 hectare), 354/A9 (0.14.00 hectare), 354/A10 (0.18.00 hectare), 354/A11 (0.14.50 hectare), 354/A12 (0.03.50 hectare), 354/A13 (0.08.00 hectare), 354/A14 (0.24.50 hectare), 354/A15 (0.10.50 hectare), 354/B1B (0.10.50 hectare), 354/B2 (0.05.00 hectare), 354/B3 (0.02.00 hectare), 354/B4 (0.02.00 hectare), 354/B5 (0.06.50 hectare), 354/B6 (0.04.00 hectare), 354/B7 (0.03.00 hectare), 354/B8 (0.03.00 hectare), 354/B9 (0.02.50 hectare), 354/B10 (0.02.50 hectare), 354/B11 (0.02.50 hectare), 354/B12 (0.18.50 hectare), 354/B17 (Part) (0.01.00 hectare) and 354/B20 (Part) (0.04.50 hectare) of K.Pitchampatti Village, Karur Taluk and District for a period of 20 years under rule 19-A of the Tamil Nadu Minor Mineral Concession Rules, 1959.

2. The Government carefully examined the recommendations of the District Collector, Karur and the Commissioner of Geology and Mining, to communicate precise area for quarrying Multicolour Granite over an extent of 3.00.00 hectares of patta lands in S.F.Nos.353/6 (Part) (0.64.00 hectare), 353/7 (Part) (0.27.50 hectare), 354/A6 (0.23.50 hectare), 354/A7 (0.22.50 hectare), 354/A8 (0.02.00 hectare), 354/A9 (0.14.00 hectare), 354/A10 (0.18.00 hectare), 354/A11 (0.14.50 hectare), 354/A12 (0.03.50 hectare), 354/A13 (0.08.00 hectare), 354/A14 (0.24.50 hectare), 354/A15 (0.10.50 hectare), 354/B1B (0.10.50 hectare), 354/B2 (0.05.00 hectare), 354/B3 (0.02.00 hectare), 354/B4 (0.02.00 hectare), 354/B5 (0.06.50 hectare), 354/B6 (0.04.00 hectare), 354/B7 (0.03.00 hectare), 354/B8 (0.03.00 hectare), 354/B9 (0.02.50 hectare), 354/B10 (0.02.50 hectare), 354/B11 (0.02.50 hectare), 354/B12 (0.18.50 hectare), 354/B17 (Part) (0.01.00 hectare) and 354/B20 (Part) (0.04.50 hectare) of K.Pitchampatti Village, Karur Taluk and District and accordingly, the Government hereby communicate Precise Area for the above said area under sub-rule (13) of Rule 19-A of the Tamil Nadu Minor Mineral Concession Rules, 1959 for grant of quarry lease.

3. I therefore request you to furnish the Approved Mining Plan for the above-mentioned Precise Area through the Commissioner of Geology and Mining within a period of 3 months as per sub-rule (13) of Rule 19-A of the Tamil Nadu Minor Mineral Concession Rules, 1959 and to produce Environmental Clearance obtained from the competent authority for the above said area for grant of quarry lease subject to the following conditions to the Government: -

1. The applicant firm should obtain no objection certificate from



the power grid office for the high-tension power lines passing at distance of 100 meters in the southern side of the lease applied area before execution of lease deed.

2. The applicant firm should shift the two low tension power lines are situated in the southern side of the lease applied area 50 meters away from the outer boundary of the proposed lease area before the execution of the lease deed.
3. Thiru P.Panneer, the proprietor of the applicant firm should produce the latest mining dues clearance certificate obtained from the District Collectors of concerned district viz. Karur, Krishnagiri and Namakkal districts before the grant of quarry lease.
4. A safety distance of 7.5 meters and 10 meters should be provided to the adjacent patta and poramboke lands respectively.
5. A safety distance of 50 meters should be maintained to the Chettinad railway track passing in North-South direction at a distance of 46 meters from the western boundary of the applied area.
6. The existing dump in the lease applied area should be cleared before the submission of the Mining Plan.
7. Granite waste materials should be dumped within the quarry lease area and should not be dumped in the outside lands.
8. Environmental Clearance should be obtained from the competent authority in respect of the subject area as per rule 42 of the Tamil Nadu Minor Mineral Concession Rules, 1959 and as per the notification of the Ministry of Environment and Forest and any other clearances if any.
9. The four boundaries of the applied area are fixed and the quarrying activity should be restricted within the area granted on lease.
10. The applicant firm should fence the lease granted area with barbed wire before the execution of lease deed as follows: -
 - (i) The applicant firm shall at his own expenses erect, maintain and keep in repair all the boundary pillars.
 - (ii) The pillar post shall be firmly grounded with concrete foundation of height not less than 2 meters with a distance between two pillars shall not be more than 3 meters.



- (iii) The applicant firm shall incorporate all the Geo Co-ordinates taken by the DGPS for the entire boundary pillars of the area and the same should be clearly shown in the Mining Plan.
 - (iv) A soft copy of the digitalized map with the Geo Co-ordinates of the boundary pillar and shape file of the lease boundary should be submitted in the CD form to the Assistant / Deputy Director, (G&M), Karur and the Commissioner of Geology and Mining
11. Barbed wire fencing or Compound wall should be erected all along the boundary of the lease granted area.
 12. The applicant firm should use mild explosives during quarrying.
 13. Child labour should not be engaged in the quarry works.
 14. The applicant firm should ensure that while starting the quarry work, all the quarry workers working under their control are registered in the Labour Welfare Board and also enrolled in the ongoing insurance scheme.
 15. The conditions mentioned in G.O. (Ms) No.79, Industries (MMC.1) Department, dated 06.04.2015 should be complied with.
 16. The applicant firm should comply with the conditions stipulated in the Government of India, Ministry of Mines order No.11/02/2020, dated 14.01.2020 issued as per the orders of the Hon'ble Supreme Court of India dated 08.01.2020 that, "the mining leaseholders shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to this mining activities and restore the land to a condition which is fit for growth of fodders, flora and fauna etc."
 17. A Green belt should be constructed to prevent sound and air pollution due to the proposed quarrying activity by planting at least 500 seedlings of Neem and Pungan all around the area.
 18. The applicant firm shall strictly adhere to the statutory and safety requirements.
 19. Quarrying shall be done as per the approved Mining Plan and that the mining plan is approved without prejudice to any other law applicable to the quarry lease from time to time whether such laws are made by the Central Government, State Government or any other authority.



20. The applicant firm shall submit scheme of mining; mine closure plan and other statutory requirements within the time stipulated for submission of the above, as per rules.
21. If any violation is found during quarrying operation, the penal provisions of the Tamil Nadu Minor Mineral Concession Rules, 1959 and other rules and act in force will attract.
22. As per rule 12 (v) of the Mineral (other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, the applicant firm shall at his own expense, erect, maintain and keep in repair all boundary pillars.
23. Quarrying activity should be carried out from 07.00 AM to 05.00 PM only.
24. The District Collector, Karur shall obtain a sworn-in-affidavit from the applicant / firm, containing the above conditions before execution of lease deed and also ensure that the instructions issued in Government Letter No.12789/MMB.2/2002-7, Industries Department, dated 09.01.2003 are complied with.

Yours faithfully,

for Additional Chief Secretary to Government (FAC).

5.10.2023

Copy to:

The Commissioner of Geology and Mining, Guindy, Chennai-600 032.
The District Collector, Karur District.

ANNEXURE -IV



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 2831

உரிமையாளர்கள் பெயர்

பழனிச்சாமி

மகன்

பன்னீர்

புல எண்	உப்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
341	A2	0 - 53.00	1.06	-	-	-	-	R234/14-- 26-07-2001
341	A4	0 - 21.50	0.43	-	-	-	-	R234/14-- 26-07-2001
343	6	0 - 1.50	0.06	-	-	-	-	R234/14-- 26-07-2001
344	A3	0 - 10.00	0.28	-	-	-	-	R234/14-- 26-07-2001
344	B4	0 - 16.00	0.45	-	-	-	-	R234/14-- 26-07-2001
354	A5	0 - 6.50	0.18	-	-	-	-	R234/14-- 26-07-2001
354	B14	0 - 1.50	0.06	-	-	-	-	R234/14-- 26-07-2001
354	B17	0 - 11.50	0.32	-	-	-	-	R234/14-- 26-07-2001
354	B19	0 - 6.00	0.17	-	-	-	-	R234/14-- 26-07-2001
354	B6	0 - 4.00	0.11	-	-	-	-	R234/14-- 26-07-2001
		1 - 31.50	3.12					

குறிப்பு 2 :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/02831/20424 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 02-10-2023 அன்று 12:00:14 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

வட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 2835

உரிமையாளர்கள் பெயர்

பழனிச்சாமி

மகன்

பன்னீர்

புள்ளி எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	
342	B2	0 - 65.50	0.91	-	-	-	-	R233/14-- 26-07-2001
342	B4	0 - 56.00	0.78	-	-	-	-	R233/14-- 26-07-2001
343	4	0 - 4.50	0.09	-	-	-	-	R233/14-- 26-07-2001
343	5	0 - 2.50	0.06	-	-	-	-	R233/14-- 26-07-2001
343	7	0 - 2.50	0.06	-	-	-	-	R233/14-- 26-07-2001
354	A2	0 - 6.50	0.18	-	-	-	-	R233/14-- 26-07-2001
354	A4	0 - 7.00	0.19	-	-	-	-	R233/14-- 26-07-2001
354	B13	0 - 14.00	0.39	-	-	-	-	R233/14-- 26-07-2001
354	B15	0 - 2.00	0.06	-	-	-	-	R233/14-- 26-07-2001
354	B18	0 - 24.50	0.67	-	-	-	-	R233/14-- 26-07-2001
354	B20	0 - 11.00	0.31	-	-	-	-	R233/14-- 26-07-2001
354	B7	0 - 3.00	0.08	-	-	-	-	R233/14-- 26-07-2001
358	4	0 - 28.00	0.56	-	-	-	-	R233/14-- 26-07-2001
358	6	0 - 12.00	0.24	-	-	-	-	R233/14-- 26-07-2001
		2 - 39.00	4.58					

குறிப்பு 2 :



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 2834

உரிமையாளர்கள் பெயர்

பழனிச்சாமி		மகன்		பன்னீர்				
புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்டே - ஏர்	ரூ - பை	ஹெக்டே - ஏர்	ரூ - பை	ஹெக்டே - ஏர்	ரூ - பை	
342	A2	1 - 22.00	1.67	-	-	-	-	R235/14--- 26-07-2001
343	8	0 - 3.50	0.07	-	-	-	-	R235/14--- 26-07-2001
344	A1	0 - 14.00	0.39	-	-	-	-	R235/14--- 26-07-2001
344	B1	0 - 17.50	0.48	-	-	-	-	R235/14--- 26-07-2001
354	A3	0 - 6.50	0.18	-	-	-	-	R235/14--- 26-07-2001
354	B12	0 - 18.50	0.51	-	-	-	-	R235/14--- 26-07-2001
354	B16	0 - 2.50	0.07	-	-	-	-	R235/14--- 26-07-2001
354	B21	0 - 5.00	0.14	-	-	-	-	R235/14--- 26-07-2001
354	B8	0 - 3.00	0.08	-	-	-	-	2020/0103/14/149862--- 08-12 2020
		1 - 92.50	3.59					

நிப்பு2 :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/02834/20457 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 02-10-2023 அன்று 12:03:12 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 3123

உரிமையாளர்கள் பெயர்

1. எம்.பி.கிரானைட் நிறுவனத்திற்காக, பங்குதாரருமான, பழனிச்சாமி

மகன் பன்னீர்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
353	7	0 - 48.00	1.33	-	-	-	-	2018/0103/14/074901- -- 16-11-2018
354	A1	0 - 33.00	0.91	-	-	-	-	2018/0103/14/074901- -- 16-11-2018
354	A11	0 - 14.50	0.40	-	-	-	-	2018/0103/14/074901- -- 16-11-2018
354	A13	0 - 8.00	0.22	-	-	-	-	2021/0103/14/166669- -- 26-06-2021
354	A14	0 - 24.50	0.67	-	-	-	-	2018/0103/14/074901- -- 16-11-2018
354	A15	0 - 10.50	0.29	-	-	-	-	2018/0103/14/074901- -- 16-11-2018
354	A7	0 - 22.50	0.62	-	-	-	-	2018/0103/14/074901- -- 16-11-2018
354	A8	0 - 2.00	0.06	-	-	-	-	2021/0103/14/164571- -- 15-06-2021
354	A9	0 - 14.00	0.39	-	-	-	-	2021/0103/14/164571- -- 15-06-2021
355	B4	0 - 49.00	0.99	-	-	-	-	2018/0103/14/074901- -- 16-11-2018
		2 - 26.00	5.88					

குறிப்பு2 :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/03123/30459 என்ற குறிப்பு எண்ணை உள்ளிட்டு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 02-10-2023 அன்று 12:03:52 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 3230

உரிமையாளர்கள் பெயர்

1. - எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக பழனிச்சாமி மகன் பன்னீர்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
354	A10	0 - 18.00	0.50	-	-	-	-	2020/0103/14/143775- -- 03-11-2020
354	A12	0 - 3.50	0.09	-	-	-	-	2020/0103/14/143775- -- 03-11-2020
354	A6	0 - 23.50	0.64	-	-	-	-	2020/0103/14/143775- -- 03-11-2020
		0 - 45.00	1.23					

குறிப்பு2 :



1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/03230/30418 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 02-10-2023 அன்று 12:05:07 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 3122

உரிமையாளர்கள் பெயர்

1. எம்.பி.கிராணைட் நிறுவனத்திற்காக, பங்குதாரருமான, பழனிச்சாமி

மகன் பன்னீர்

2. எம்.பி.கிராணைட் நிறுவனத்திற்காக, நிறுவனத்தின் பங்குதாரருமான பன்னீர்

மனைவி மாதவி

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பீரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்ட - ஏர்	ரூ - பை	ஹெக்ட - ஏர்	ரூ - பை	ஹெக்ட - ஏர்	ரூ - பை	
353	6	1 - 38.50	3.83	--	--	--	--	2019/0103/14/080917- -- 01-02-2019
		1 - 38.50	3.83					

குறிப்பு2 :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/03122/30438 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 02-10-2023 அன்று 12:06:06 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 3282

உரிமையாளர்கள் பெயர்

1. -எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
354	B10	0 - 2.50	0.07	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
354	B11	0 - 2.50	0.07	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
354	B18	0 - 10.50	0.29	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
354	B2	0 - 5.00	0.14	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
354	B3	0 - 2.00	0.06	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
354	B4	0 - 2.00	0.06	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
354	B5	0 - 6.50	0.18	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
354	B9	0 - 2.50	0.07	-	-	-	-	2021/0103/14/164572- -- 17-06-2021
		0 - 33.50	0.94					

குறிப்பு 2 :



1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/03282/30435 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 02-10-2023 அன்று 12:08:42 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

அ-பதிவேடு விவரங்கள்



பாவட்டம் : கரூர்

பட்டம் : கரூர்

பிராமம் : க.பிச்சம்பட்டி

1. புல எண்	353	9. மண் வயனமும் ரகமும்	8 - 2
2. கட்டிரிவு எண்	6	10. மண் தரம்	4
3. பழைய புல கட்டிரிவு எண்	353 ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 38.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	3.83
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	3122
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இற போகமா	-	16. பெயர்	1.பன்னீர் 2.மாதவி

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30438 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பாஸ்ட்டம் : கரூர்

பட்டம் : கரூர்

கிராமம் : க.பிச்சம்பட்டி

புல எண்	353	9. மண் வயனமும் ரகமும்	8 - 2
உட்பிரிவு எண்	7	10. மண் தரம்	4
புலமைய புல உட்பிரிவு எண்	353 ,	11. தீர்வை (ரூ - ஹெ)	2.77
பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 48.00
சரக / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.33
தலத்தின் வகை	பஞ்சை	14. பட்டா எண்	3123
பாசன ஆதாரம்	-	15. குறிப்பு	-
கூடு போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பார்வட்டம் : கருர்

வட்டம் : கருர்

இராமம் : க.பிச்சம்பட்டி

1. புல எண்	354	* 9. மண் வயனமும் ரகமும்	8 - 2
2. கட்டிரிவு எண்	A7	10. மண் தரம்	4
3. பகுப்பு புல கட்டிரிவு எண்	354-A,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 22.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.62
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	3123
7. பஞ்சை ஆதாரம்	-	15. குறிப்பு	-
8. இது போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நுகர்வோர் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



தாலுக்கை : கரூர்

பட்டம் : கரூர்

சுராமம் : க.பிச்சம்பட்டி

1. புல எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. கட்டிரிவு எண்	A8	10. மண் தரம்	4
3. பண்ட புல கட்டிரிவு எண்	354-A ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 2.00
5. தரம் / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.06
6. இவற்றின் வகை	பஞ்சை	14. பட்டா எண்	3123
7. பள்ள ஆகாரம்	-	15. குறிப்பு	சதுர கிணறு 1
8. துறைபாடு	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பலபட்டம் : கரூர்

பட்டம் : கரூர்

பிராமம் : க.பிச்சம்பட்டி

புல எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
கட்டிரிவு எண்	A9	10. மண் தரம்	4
புலமய புல கட்டிரிவு எண்	354-A ,	11. தீர்வை (ரூ - ஹெ)	2.77
பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 14.00
கரக / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.39
மீலத்தின் வகை	பஞ்சை	14. பட்டா எண்	3123
பாசன ஆதாரம்	-	15. குறிப்பு	-
புற போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற
குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பாஸ்ட்டம் : கரூர்

பாட்டம் : கரூர்

பாடம் : க.பிச்சம்பட்டி

1. புது எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. கட்டிரிவு எண்	A10	*10. மண் தரம்	4
3. மண்மய புல கட்டிரிவு எண்	354-A ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 18.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.50
6. பிவத்தின் வகை	புஞ்சை	14. பட்டா எண்	3230
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. தகவலாகமா	-	16. பெயர்	1.எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக பழனிச்சாமி மகன் பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30418 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பலகை எண் : கருநர்

பலகை எண் : கருநர்

பலகை எண் : க.பிச்சம்பட்டி

பலகை எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
பலகை பிரிவு எண்	A11	10. மண் தரம்	4
பலகை முழு புல பிரிவு எண்	354-A ,	11. தீர்வை (ரூ - ஹெ)	2.77
பலகை பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 14.50
பலகை / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.40
பலகைத்தின் வகை	புஞ்சை	14. பட்டா எண்	3123
பலகை ஆதாரம்	-	15. குறிப்பு	ஒட்டு வீடு 1
பலகை போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பாபட்டம் : கரூர்

பட்டம் : கரூர்

பிராமம் : க.பிச்சம்பட்டி

பட்ட எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
பட்டிரிவு எண்	A12	* 10. மண் தரம்	4
பட்டிய புல	354-A ,	11. தீர்வை (ரூ - ஹெ)	2.77
பட்டிரிவு எண்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 3.50
பட்டம்	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.09
பட்டம் / ரயத்துவாரி	புஞ்சை	14. பட்டா எண்	3230
பட்டம் வகை	-	15. குறிப்பு	-
பட்டம் ஆதாரம்	-	16. பெயர்	1.எம்.பி.இராஜன்டஸ் நிறுவனத்திற்காக பழனிச்சாமி மகன் பன்னீர்
பட்டம் போகமா	-		

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30418 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பட்டம் : கரூர்

பட்டம் : கரூர்

பட்டம் : க.பிச்சம்பட்டி

1. பட்ட எண்	354	9. மண்-வயனமும் ரகமும்	8 - 2
2. பட்ட எண்	A13	10. மண் தரம்	4
3. பட்ட எண்	354-A,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பட்ட எண்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 8.00
5. பட்ட எண் / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.22
6. பட்ட எண் வகை	பஞ்சை	14. பட்ட எண்	3123
7. பட்ட எண் ஆகாரம்	-	15. குறிப்பு	-
8. பட்ட எண் போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

பாங்கு : கருநர்

பாங்கு : கருநர்

பாங்கு : க.பிச்சம்பட்டி



1. பூர்வ எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	A14	10. மண் தரம்	4
3. பழைய பூர்வ எண்	354-A,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பதிவு எண்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 24.50
5. அரக / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.67
6. தீர்வின் வகை	பஞ்சை	14. பட்டா எண்	3123
7. மான ஆதாரம்	-	15. குறிப்பு	-
8. கரு போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

வட்டாட்சியர் அலுவலக இணைய சேவை - அ-பதிவேடு விவரங்களை பார்வையிட

அ-பதிவேடு விவரங்கள்

புறப்பட்டம் : கரூர்

பட்டம் : கரூர்

பெயர் : க.பிச்சம்பட்டி



1. புறப்பட்டம்	354	9. மண் வயனமும்	8 - 2
2. பட்டம்	A15	10. மண் தரம்	4
3. புறப்பட்டம்	354-A ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பட்டம்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 10.50
5. அரை / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.29
6. மொத்த வகை	புஞ்சை	14. பட்டா எண்	3123
7. மொத்த அடாரம்	-	15. குறிப்பு	-
8. மொத்த பாகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30449 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பட்டம் 1 கருர்

பட்டம் 1 கருர்

பட்டம் 1 க.பிச்சம்பட்டி

1. பட்டம்	354	9. மண் வயனமும்	8 - 2
2. பட்டம்	B1B	10. மண் தரம்	4
3. பட்டம்	354-B1	11. தீர்வை (ரூ - ஹெ)	2.77
4. பட்டம்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 10.50
5. பட்டம் / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.29
6. பட்டம்	புஞ்சை	14. பட்டா எண்	3282
7. பட்டம்	-	15. குறிப்பு	-
8. பட்டம்	-	16. பெயர்	1.எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி

பட்டம் 1



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30435 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

பட்டம் : கரூர்

பட்டம் : கரூர்

பட்டம் : க.பிச்சம்பட்டி



1. பட்ட எண்	354	9. மண் வயனமும்	8 - 2
2. பட்ட எண்	B2	10. மண் தரம்	4
3. பட்ட எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பட்ட எண்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 5.00
5. பட்ட எண் / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.14
6. பட்ட எண் வகை	பஞ்சை	14. பட்டா எண்	3282
7. பட்ட எண் ஆதாரம்	-	15. குறிப்பு	-
8. பட்ட எண்	-	16. பெயர்	1.எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி

பதிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30435 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பெயர் : கருநர்

பெயர் : கருநர்

பெயர் : க.பிச்சம்பட்டி

பெயர்	354	9. மண் வயனமும் ரகமும்	8 - 2
பெயர்	83	10. மண் தரம்	4
பெயர்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
பெயர்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 2.00
பெயர் / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.06
பெயர்	பஞ்சை	14. பட்டா எண்	3282
பெயர்		15. குறிப்பு	-
பெயர்	-	16. பெயர்	1.எம்.பி.கிராணைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி

பெயர் : 1:

1.	மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் http://eservices.tn.gov.in என்ற இணைய தளத்தில் 30435 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.



அ-பதிவேடு விவரங்கள்



பாட்டம் : கரூர்

பாட்டம் : கரூர்

பிரதமம் : க.பிச்சம்பட்டி

1. பட்டம் எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. பட்டியல் எண்	84	10. மண் தரம்	4
3. பட்டியல் புல 4. பட்டியல் எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
5. பட்டம்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 2.00
6. கால / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.06
7. இவற்றின் வகை	பஞ்சை	14. பட்டா எண்	3282
8. பட்டம் ஆதாரம்	-	15. குறிப்பு	-
9. இவ் போகமா	-	16. பெயர்	1.எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி

பதிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30435 என்ற
குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

பட்டம் : கரூர்

பட்டம் : கரூர்

இலாபம் : க.பிச்சம்பட்டி



1. பட்ட எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. உபபிரிவு எண்	B5	*10. மண் தரம்	4
3. பழைய பல் உபபிரிவு எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 6.50
5. தாங்க / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.18
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	3282
7. பஞ்சை ஆதாரம்	-	15. குறிப்பு	-
8. துது போகமா	-	16. பெயர்	1.எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30435 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



பதிவேட்டம் : கரூர்

பதிவேட்டம் : கரூர்

பதிவேட்டம் : க.பிச்சம்பட்டி

பதிவேட்டம்	354	9. மண் வயனமும் ஏக்கமும்	8 - 2
பதிவேட்டம்	B6	*10. மண் தரம்	4
பதிவேட்டம்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
பதிவேட்டம்	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 4.00
பதிவேட்டம் / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.11
பதிவேட்டம் வகை	புஞ்சை	14. பட்டா எண்	2831
பதிவேட்டம் ஆதாரம்	-	15. குறிப்பு	-
பதிவேட்டம்	-	16. பெயர்	1.பன்னீர்

பதிவேட்டம் 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30424 என்ற
குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

தாலுக்கை : கரூர்

பட்டம் : கரூர்

பிரதமம் : க.பிச்சம்பட்டி



1. பட்ட எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	B7	* 10. மண் தரம்	4
3. பட்டியல் புல உட்பிரிவு எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 3.00
5. தரக / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.08
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	2835
7. பள்ள ஆதாரம்	-	15. குறிப்பு	-
8. இலாபாகாரம்	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30468 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

தலவட்டம் : கரூர்

பட்டம் : கரூர்

தரமம் : க.பிச்சம்பட்டி



1. பட்ட எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. பட்டிரிவு எண்	B7	* 10. மண் தரம்	4
3. பட்டியல் புல பட்டிரிவு எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பட்டி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 3.00
5. தகவல் / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.08
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	2835
7. முகன் அடாரம்	-	15. குறிப்பு	-
8. இலாபகாரம்	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30468 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

பாவட்டம் : கரூர்

பட்டம் : கரூர்

கிராமம் : க.பிச்சம்பட்டி



1. புல எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. கட்டிரிவு எண்	B9	10. மண் தரம்	4
3. பழைய புல கட்டிரிவு எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 2.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.07
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	3282
7. பாசன ஆதாரம்	-	15. குறிப்பு	1.எம்.பி.கிராண்ட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி
8. இறு போகமா	-	16. பெயர்	

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30435 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



மாவட்டம் : கரூர்

வட்டம் : கரூர்

பிராமம் : க.பிச்சம்பட்டி

1. புல எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. கட்டிரிவு எண்	B10	10. மண் தரம்	4
3. பழைய புல கட்டிரிவு எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 2.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.07
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	3282
7. பரபர ஆதாரம்	-	15. குறிப்பு	-
8. இது போகமா	-	16. பெயர்	1.எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதவி

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30435 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



நாவட்டம் : கரூர்

வட்டம் : கரூர்

கிராமம் : க.பிச்சம்பட்டி

1. புல எண் 354

2. உட்பிரிவு எண் B11

3. பழைய புல உட்பிரிவு எண் 354-B ,

4. பகுதி P

5. அரசு / ரயத்துவாரி ரயத்துவாரி

6. நிலத்தின் வகை புஞ்சை

7. பாசன ஆதாரம் -

8. கிடை போகமா -

9. மண் வயனமும் ரகமும் 8 - 2

10. மண் தரம் 4

11. தீர்வை (ரூ - ஹெ) 2.77

12. பரப்பு (ஹெக்டேர் - ஏர்) 0 - 2.50

13. மொத்த தீர்வை (ரூ - பை) 0.07

14. பட்டா எண் 3282

15. குறிப்பு -

16. பெயர் -

1.எம்.பி.கிராணைட்ஸ்
நிறுவனத்திற்காக
நிறுவனத்தின்
பங்குதாரருமான பன்னீர்
மனைவி மாதவி

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30435 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



மாவட்டம் : கரூர்

வட்டம் : கரூர்

பிராமம் : க.பிச்சம்பட்டி

1. புல எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	812	10. மண் தரம்	4
3. பழைய புல உட்பிரிவு எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 18.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.51
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	2834
7. மனை ஆதாரம்	-	15. குறிப்பு	-
8. இறு போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30457 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்

மாவட்டம் : கரூர்

வட்டம் : கரூர்

இராமம் : க.பிச்சம்பட்டி



1. புல எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. உட்பிரிவு எண்	B17	10. மண் தரம்	4
3. பழைய புல உட்பிரிவு எண்	354-B,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 11.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.32
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	2831
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இறு போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30424 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள்



நாவட்டம் : கரூர்

வட்டம் : கரூர்

பிராமம் : க.பிச்சம்பட்டி

1. புல எண்	354	9. மண் வயனமும் ரகமும்	8 - 2
2. கட்டபிரிவு எண்	B20	10. மண் தரம்	4
3. பண்டிய புல கட்டபிரிவு எண்	354-B ,	11. தீர்வை (ரூ - ஹெ)	2.77
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 11.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.31
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	2835
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இந் போகமா	-	16. பெயர்	1.பன்னீர்

குறிப்பு 1:



1.

மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
இவற்றை தாங்கள் <http://eservices.tn.gov.in> என்ற இணைய தளத்தில் 30468 என்ற
குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.

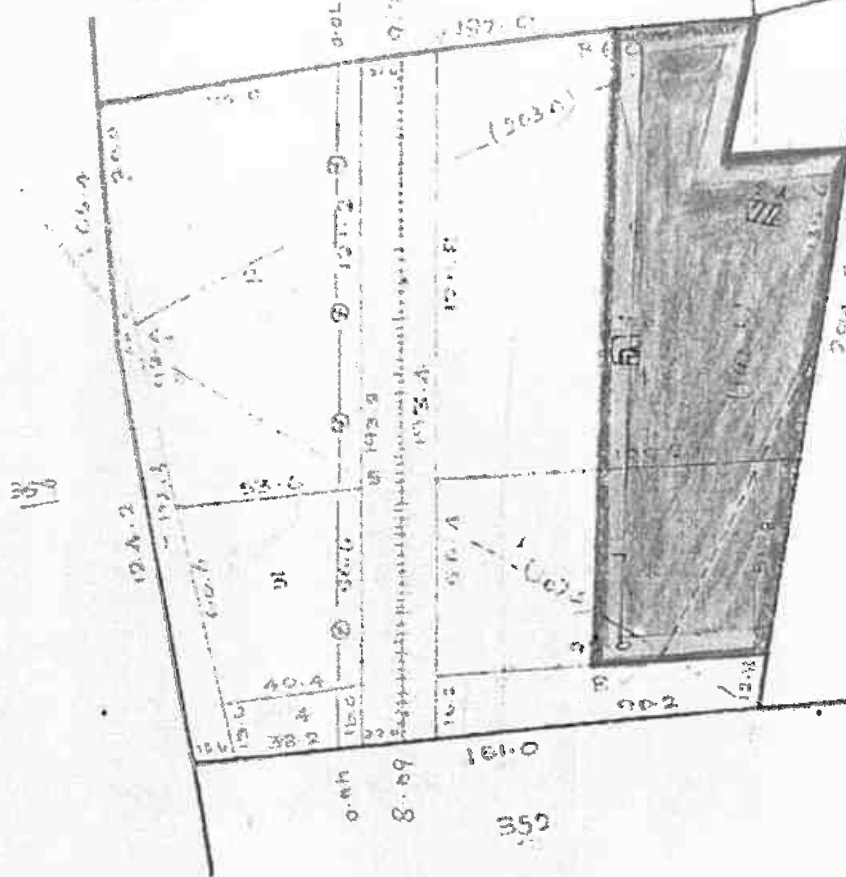
ANNEXURE -VI

புள்ளி எண்

புள்ளி எண்

புள்ளி எண்

-  - Lease applied area
-  - Safety Zone
-  - Granite Band
-  - Country Road



/2-ம்/0010 பக்கம்/

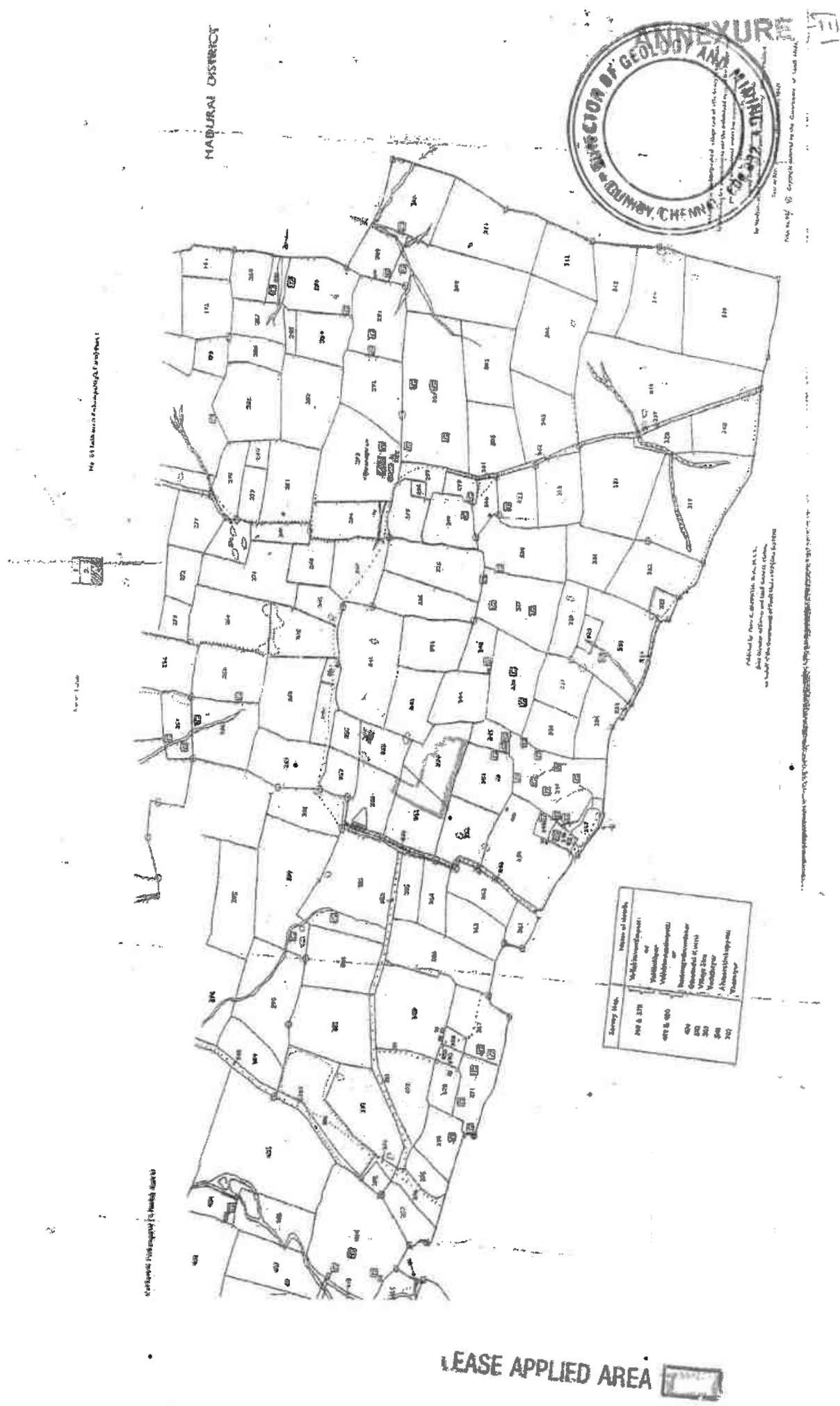
LEASE APPLIED AREA 

சு. சிவசுந்தரன் 02/08/2022
 கிராம நிர்வாக அலுவலர்
 18-கா. பிச்சம்பட்டி கிராமம்,
 கஞர் வட்டம், கஞர் மாவட்டம்.

புள்ளி எண்
 1/2/15
 Dhan

அளவு. 1 ம.நீ. = 2000. க.நீ.

Checked
 02.08.22



BK-T 3723/2022 TP/127567537/2022



தமிழ்நாடு தமிழ்நாடு TAMILNADU

CM 470990

27.7.2022

Rs 100/-

G.P. வங்கி
சென்னைN. SHANMUGAM
STAMP VENDOR,
VELLIANAI,
L.No. 19/97 KRR

குத்தகை ஆவணம்
Lease Agreement

2022-ம் ஆண்டு ஆகஸ்ட் மாதம் 01-ம் தேதி கருநர் மாவட்டம், கருநர் வட்டம், K.பிச்சம்பட்டி கிராமம், தாழைப்பட்டி நெ.12/128 என்கிற விலாசத்தில் ஸ்தாபிதம் செய்யப்பட்டிருக்கும் "G.P.Exports" என்ற நிறுவனத்திற்காக, மேற்படி நிறுவனத்தின் உரிமையாளரும்,

For G.P. EXPORTS,

Proprietor.

For M.P GRANITE

Partner

முத்தகம்	3723	ஆவணம்
20	தாள்களைக் கொண்டு	
+	வரு தாள்	
	பதிவு அட்டவணை	



தமிழ்நாடு தமிழ்நாடு TAMILNADU

CM 470991

27.7.2022

₹100/-

G.P. பன்னி N. SHANMUGAM
STAMP VENDOR,
VELLIANAI,
L.No. 19/97 KRR

2.

மதுரை-625020, கே.கே.நகர், இளங்கோ அடிகள் தெரு, 31 நிர் வீட்டில் வசித்து
வரும் திரு.M.பழனிச்சாமி அவர்களின் குமாரர் திரு.G.P.பன்னிர் ((ஆதார் அட்டை
எண்.6881 6133 0075,Cell No.9791666394) ஆகியவர் 1-வது பார்ட்டி இவர் இந்த
ஆவணத்தில் குத்தகைக்கு பெறுபவர் என்று அழைக்கப்படுவார்)

For G.P. EXPORTS,

Gppannan
Proprietor.

For M.P. GRANITE

Gppannan
Partner

புத்தகம்	2022	ம வருடத்தில்	23	ஆவணம்
20	தாள்களைக் கொண்டது			
2	வது தாள்கள்			
				பதிவு அலுவலர்





.3.

நாமிக்கல் மாவட்டம், திருச்செங்கோடு வட்டம், சித்தாளந்தூர் அஞ்சல், பழைய புளியம்பட்டி கதவு எண்.3/173-C-ல் ஸ்தாபிதம் செய்யப்பட்டிருக்கும் "M.P.GRANITE"(PAN No.AAVFM5233A) என்ற நிறுவனத்திற்காக மேற்படி நிறுவனத்தின் பங்குதாரரும், M.பழனிச்சாமி அவர்கள் குமாரருமான திரு.G.P.பன்னீர் ((ஆதார் அட்டை எண். 6881 6133 0075, Cell No.9791666394) ஆகியவர் 2-வது பார்ட்டி (இவர் இந்த ஆவணத்தில் குத்தகைக்கு கொடுப்பவர் என்று அழைக்கப்படுவார்) நாமிருபர்ட்டியும் சேர்ந்து எழுதிக்கொண்ட குத்தகை ஆவணம் (Lease Agreement) என்னவென்றால்,

நம்மில் 2-வது பார்ட்டி G.P.பன்னீர் அவர்கள் பெயரில் ஷை "M.P.GRANITE" என்ற நிறுவனத்திற்காக சென்ற 11.08.2017-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.935/2017, சா.ப.அ.வெள்ளியணை) யும்,

சென்ற 24.01.2019-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.190/2019, சா.ப.அ.வெள்ளியணை) யும்,

சென்ற 14.12.2020-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.5005/2020, சா.ப.அ.வெள்ளியணை)யும்,

For G.P. EXPORTS,

Proprietor.

For M.P GRANITE

Partner

புத்தகம் 2022-23-ம் ஆவணம்
நாள்களைக் கொண்டது
வது தாள்
பதிவு அலுவலர்



.4.

சென்ற 20.05.2019-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.1352/2019, சா.ப.அ.வெள்ளியணையும்,

சென்ற 16.12.2020-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.5060/2020, சா.ப.அ.வெள்ளியணையும் சர்வ கதந்திரப் பாத்தியப்பட்டும் நம்மில் 2-வது பார்ட்டி முழு உரிமையுடன் அனுபவித்து வருகிற இதனடியில் கண்ட சொத்துக்களை இன்று முதல் நம்மில் 1-வது பார்ட்டி "G.P.Exports" என்ற நிறுவனத்திற்காக, இன்று முதல் வருடம் (1) ஒன்றுக்கு ரூ.800/- இந்த ரூபாய் எட்டு நூறு வீதம் 25 (இருபத்து ஐந்து) வருட தவணைக்கு குத்தகைக்கு விட ஒப்புக் கொண்டதின் பேரில் இன்று நம்மில் 1-வது பார்ட்டியிடமிருந்து 2-வது பார்ட்டி மொத்த குத்தகை தொகை ரூ.20,000/- இந்த ரூபாய் இருபதாயிரத்தை நம்மில் 2-வது பார்ட்டி பெயரில் நம்மில் 1-வது பார்ட்டி ரொக்கமாகப் கொடுத்துள்ளதிற்படி நம்மில் 2-வது பார்ட்டி ஷை குத்தகை தொகை ரூ.20,000/-(ரூபாய் இருபதாயிரம் மட்டும்) பெற்றுக் கொண்டு விட்டார்.

For G.P. EXPORTS,

Proprietor.

For M.P GRANITE

Partner

முதலாம் பக்கம்	223	ஆவணம்
00	தாள்களைக் கவனப்படுத்து	
4	வநா தாள்	
		பதிவு அலுவலர்



.5.

ஆகவே இதனடியில் கண்ட சொத்துக்களை 1-வது பார்ட்டி இன்று முதல் (25) இருபத்து ஐந்து வருட காலத்திற்கு . அரசு சட்ட திட்டங்களின்படி மேற்படி "G.P.Exports" நிறுவனம் நடத்தி குத்தகை பாத்தியமாய் அனுபவித்துக் கொள்ள வேண்டியது. இதனடியில் கண்ட சொத்துக்களுக்கு ஏற்படும் தீர்வை வரிவகையை நம்மில் 2-வது பார்ட்டியே செலுத்திக்கொள்ள வேண்டியது. மேற்படி (25) இருபத்து ஐந்து வருடம் நிறைவடைந்தவுடன் 1-வது பார்ட்டி 2-வது பார்ட்டியிடம் இதனடியில் கண்ட சொத்துக்களை ஒப்படைக்க வேண்டியது. இந்த குத்தகைக்கு முன்பணம் ஏதுமில்லை. இந்தப்படி நாயிருபார்ட்டியும் மனம் ஒப்பி எழுதிக்கொண்ட குத்தகை ஆவணம் ((Lease Agreement) இதுவாகும்.

சொத்து விபரம்.

கரூர் பதிவு மாவட்டம், வெள்ளியணை சார்பதிவகம், கரூர் வட்டம், தாந்தோணி யூனியன், K.பிச்சம்பட்டி பஞ்சாயத்துக்குட்பட்ட K.பிச்சம்பட்டி கிராமத்தில்,

வ.எண்.	சர்வே எண்.	மொத்த ஹெக்டேர்	பங்கு ஹெக்டேர்	ஏக்கர் செ.	பட்டா எண்.
1.	353/6	1.38.5	0.64.0	1.58	2700
2.	353/7	0.48.0	0.27.5	0.68	2629
3.	354/A6	0.23.5	0.23.5	0.58	1174

For G.P. EXPORTS.

G. Prasad
Proprietor

For M.P GRANITE

G. Prasad
Partner

பத்திரம் 2072 3723 ஆவணம்
25 ஏக்கர்களைக் கொண்டது
5 வது தரம்
பதிவு அலுவலர்



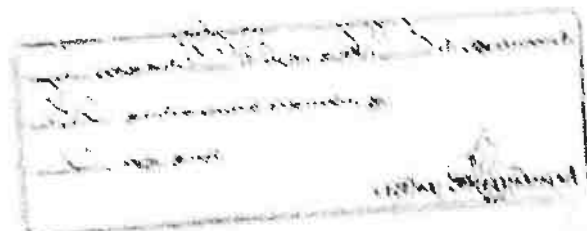
1	100	100	100	100
2	100	100	100	100
3	100	100	100	100
4	100	100	100	100
5	100	100	100	100
6	100	100	100	100
7	100	100	100	100
8	100	100	100	100
9	100	100	100	100
10	100	100	100	100
11	100	100	100	100
12	100	100	100	100
13	100	100	100	100
14	100	100	100	100
15	100	100	100	100
16	100	100	100	100
17	100	100	100	100
18	100	100	100	100
19	100	100	100	100
20	100	100	100	100

By G. S. KENNEDY

Special Agent

Washington

THE U. S. GEOLOGICAL SURVEY





.7.

19.	354/B10	0.02.50	0.02.50	0.06	3282
20.	354/B11	0.02.50	0.02.50	0.06	3282
21.	354/B12	0.18.5	0.18.5	0.46	2834
ஆக மொத்தம்				7.03.1/2	

For G.P. EXPORTS,

Gpamm
Proprietor.

For M.P. GRANITE

Gpamm
Partner

சாட்சிகள்.

1. *பி.பி.சுந்தரன்*

(பழனிச்சாமி) த/பெ. சாமியப்பன், வாககமரன்பட்டி, கா.பிச்சம்பட்டி கிராமம், கருந் வட்டம், கருந் மாவட்டம் (ஆதார் அட்டை எண்.3128 4970 0562).

2. *பி.பி.சுந்தரன்*

(இராஜேந்திரன்), த/பெ. பெருமாள், உப்புக்குட்டை, சிக்கழுவத்தி, கிருஷ்ணகிரி, கிருஷ்ணகிரி மாவட்டம் (ஆதார் அட்டை எண்.6240 1328 6355).

சான்று செய்தவர்.



A.ராஜேந்திரன்
A.ராஜேந்திரன், B.Sc,
மட்டிப்பள்ளம், தாந்தோணிமலை (P.O),
கருந்-5. L.No.A / 732 /99/KRR.
செல்-9442109089.

1	முதலாம்	2023	ஆவணம்
2	தாள்களைக் கொண்டது		
7	வது நாள்		
			பதிவு அலுவலர்

R/வெள்ளியனை/புத்தகம்-1/3723/2022

2012 ஆம் ஆண்டு ஆகஸ்ட் மாதம் 04ம் தேதி பி.ப. 04:18 மணியளவில் வெள்ளியனை சார்புதிவாணி அலுவலகத்தில் தாக்கல் செய்து கட்டணம் ரூ. 550/- செலுத்தியவர்

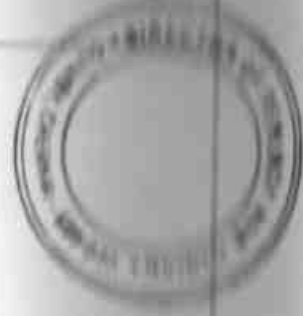
இடது பெருவிரல்



For G.P. EXPORTS,

G. Panneer
Proprietor.

கருதுல் விவரங்கள் ஆவண வாசகத்தில் உள்ளபடி



எழுதிக் கொடுத்ததாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



For M.P GRANITE

G. Panneer
Partner

சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம் என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆணையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண் UKC:7799603b4849f05ffa49e3b420ac8f5b5fd67b (Details from UIDAI : Panneer Palanisamy S/O: Palanisamy, 29-05-1962, xxxxxxxx0075)



எழுதி வாங்கியதாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



For G.P. EXPORTS,

G. Panneer
Proprietor.

சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம் என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆணையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண் UKC:12056134d73e81645b4d71b295334066adcae4 (Details from UIDAI : Panneer Palanisamy S/O: Palanisamy, 29-05-1962, xxxxxxxx0075)



2022 ஆம் ஆண்டு ஆகஸ்ட் மாதம் 1ம் நாள்

G. Panneer
வாரியத் துறை
சார்புதிவாணி
அலுவலகம்

புத்தகம்	2025	323	ஆவணம்
1	தாக்கல் செய்து கொண்டுவர		
2	வாரியத் துறை		
			பதிவு அலுவலர்

R/வெள்ளியனை/புத்தகம்-1/3723/2022

R/வெள்ளியனை/புத்தகம்-1/3723/2022 எண்ணரகம் பதிவு செய்யப்பட்டது

நாள் 01/08/2022

வெள்ளியனை

Leaf

வள்ளுமதி ரவி

சார்பதிவாளர்



புத்தகம்	2500	3723	ஆணை
தாள்களைக் கொண்டது			
வது தாள்			
பதிவு	அனுவரை		





சொத்தானது நீர்நிலை பகுதியில் அமையப் பெறவில்லை என்பதற்கான

சான்று/ உறுதுமொழி (Declaration)

(நீதிபேராணை எண்.22163/2018-ல் வழங்கப்பட்ட தீர்ப்புரையை காண்க)

இந்த ஆவணத்தில் கண்ட சொத்தானது நீர் நிலைகள், நீர்வழிப்பாதைகள், நீர் பிடிப்பு பகுதிகளில் கட்டுப்படவில்லை என சான்றுளிக்கிறோம்.

மேலும், இதனில் தங்களுக்கு தவறான தகவல் அல்லது சான்று அளிக்கப்பட்டதாக பின்னாளில் கண்டுபிடிக்கப்பட்டால் அதனால் நான்/ நாங்கள் சட்ட பூர்வ நடவடிக்கைகளுக்கு உட்படுத்தப்படுவோம் என்பதையும் அறிவேன்/அறிவோம்.

For G.P. EXPORTS,

Gpmmu
Proprietor.

For M.P GRANITE

Gpmmu
Partner

புத்தகம்	2522	ஆவணம்
தாள்களைக் கொண்டது	20	
வது நாள்	15	
பதிவு அலுவலர்		



தமிழக அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 3123

உரிமையாளர்கள் பெயர்

1. எம்.பி.கிராண்ட் நிறுவனத்திற்காக, பங்குதாரருமான, பழனிச்சாமி

மகன் பன்மீர்

புல எண்	உட்பிரிவு	புள்ளி		நுள்ளி		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	
353	7	0 - 48.00	1.33	--	--	--	--	2018/0103 /14/074901--- -- 16-11-2018
354	A1	0 - 33.00	0.91	--	--	--	--	2018/0103 /14/074901--- -- 16-11-2018
354	A11	0 - 14.50	0.40	--	--	--	--	2018/0103 /14/074901--- -- 16-11-2018
354	A13	0 - 8.00	0.22	--	--	--	--	2021/0103 /14/166669--- -- 26-06-2021
354	A14	0 - 24.50	0.67	--	--	--	--	2018/0103 /14/074901--- -- 16-11-2018
354	A15	0 - 10.50	0.29	--	--	--	--	2018/0103 /14/074901--- -- 16-11-2018
354	A7	0 - 22.50	0.62	--	--	--	--	2018/0103 /14/074901--- -- 16-11-2018
354	A8	0 - 2.00	0.06	--	--	--	--	2021/0103 /14/164571--- -- 15-06-2021
354	A9	0 - 14.00	0.39	புத்தகம் 2013 ம் ஆவணம் 20 நாள் தவிர்த்து கொடுக்கப்பட்டது 11 வது தரம்				2021/0103 /14/164571--- -- 15-06-2021
355	B4	0 - 49.00	0.99					2018/0103 /14/074901--- -- 16-11-2018
		2 - 26.00	5.88	பதிவு அலுவலர்				

குறிப்பு 2 :



1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தரங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/03123/30449 என்ற குறிப்பு எண்ணை உள்ளிட்டு செய்து உறுதி செய்துகொள்ளவும்.

2. இத் தகவல்கள் 01-08-2022 அன்று 02:30:28 PM நேரத்தில் அச்சடிக்கப்பட்டது.

3. மகப்பேசி கேபர்லின் 2D barcode படிப்பான மூலம் படித்து 3G/GPRS வழி இலாபத்தளத்தில் எரிபாக்கவும்

For M.P GRANITE

Gpprmm

For G.P EXPORTS.

Gpprmm
Proprietor.



நாடுமுதலு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இல. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி.

பட்டா எண் : 3282

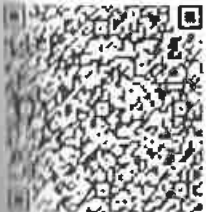
உரிமையாளர்கள் பெயர்

1. - எம்.பி.கிரானைட்ஸ் நிறுவனத்திற்காக நிறுவனத்தின் பங்குதாரருமான பன்னீர் மனைவி மாதலி

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மறிதலை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	
354	B10	0 - 2.50	0.07	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
354	B11	0 - 2.50	0.07	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
354	B18	0 - 10.50	0.29	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
354	B2	0 - 5.00	0.14	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
354	B3	0 - 2.00	0.06	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
354	B4	0 - 2.00	0.06	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
354	B5	0 - 6.50	0.18	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
354	B9	0 - 2.50	0.07	--	--	--	--	2021/0103 /14/164572--- -- 17-06-2021
		0 - 33.50	0.94					

புத்தகம் 2022 ம் வருத்தம் 2022 ஆவணம்
நாடுகளைக் கொண்டது
12 வருத்தம்
பதிவு செய்துள்ளார்

குறிப்பு 2 :



1. மேற்கண்ட தகவல் / சான்றுதழ் தகவல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தரங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/032000/30435 என்ற குறிப்பு எண்ணை உள்ளிட்டு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 01-08-2022 அன்று 02:34:00 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. அகப்பேசி கேயராவில் 2D barcode படிப்பதன் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

For M.P GRANITE

Signature

Partner

For G.P. EXPORTS,

Signature

Proprietor.





தமிழக அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 3122

உரிமையாளர்கள் பெயர்

1. எம்.பி.கிராண்ட் நிறுவனத்திற்காக, பங்குதாரருமான, பழனிச்சாமி

மகன் பள்ளி -

2. எம்.பி.கிராண்ட் நிறுவனத்திற்காக, நிறுவனத்தின் பங்குதாரருமான பள்ளி

மனைவி மாதவி -

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	
353	6	1 - 38.50	3.83	--	--	--	--	2019/0103 /14/080917--- -- 01-02-2019
		1 - 38.50	3.83					

குறிப்பு 2 :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை காங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/03122 /30438 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 01-08-2022 அன்று 02:29:38 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

For G.P EXPORTS,

Gpssam
Proprietor.

For M.P GRANITE

Gpssam
Partner

புதிதாகப் பெறப்பட்ட பட்டா எண் 3122 ம் ஆவணம்
தாங்களாகக் கொண்டது
வறு தாள்
பதிவு அலுவலர்



தமிழக அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கரூர்

வட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 2834

உரிமையாளர்கள் பெயர்

பழனிச்சாமி

மகன்

பள்ளிர்

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	
342	A2	1 - 22.00	1.67	--	--	--	--	R235/14--- -- 26-07-2001
343	8	0 - 3.50	0.07	--	--	--	--	R235/14--- -- 26-07-2001
344	A1	0 - 14.00	0.39	--	--	--	--	R235/14--- -- 26-07-2001
344	B1	0 - 17.50	0.48	--	--	--	--	R235/14--- -- 26-07-2001
354	A3	0 - 6.50	0.18	--	--	--	--	R235/14--- -- 26-07-2001
354	B12	0 - 18.50	0.51	--	--	--	--	R235/14--- -- 26-07-2001
354	B16	0 - 2.50	0.07	--	--	--	--	R235/14--- -- 26-07-2001
354	B21	0 - 5.00	0.14	--	--	--	--	R235/14--- -- 26-07-2001
354	B8	0 - 3.00	0.08	--	--	--	--	2020/0103 /14/149862--- -- 08-12-2020
		1 - 92.50	3.59					

பிரிவு 2 :



1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தரங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/02834/20457 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 01-08-2022 அன்று 02:35:49 AM. நேரத்தில் அச்சடிக்கப்பட்டது.
3. நகப்பேரி கேமராவின 2D barcode பதிப்பின் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

புத்தாளம் 2022-2023 ம் வருடத்தின் அடிப்படையில்
நாள்கணவைக் கொண்டது
வது தாள்
பதிவு அலுவலர்

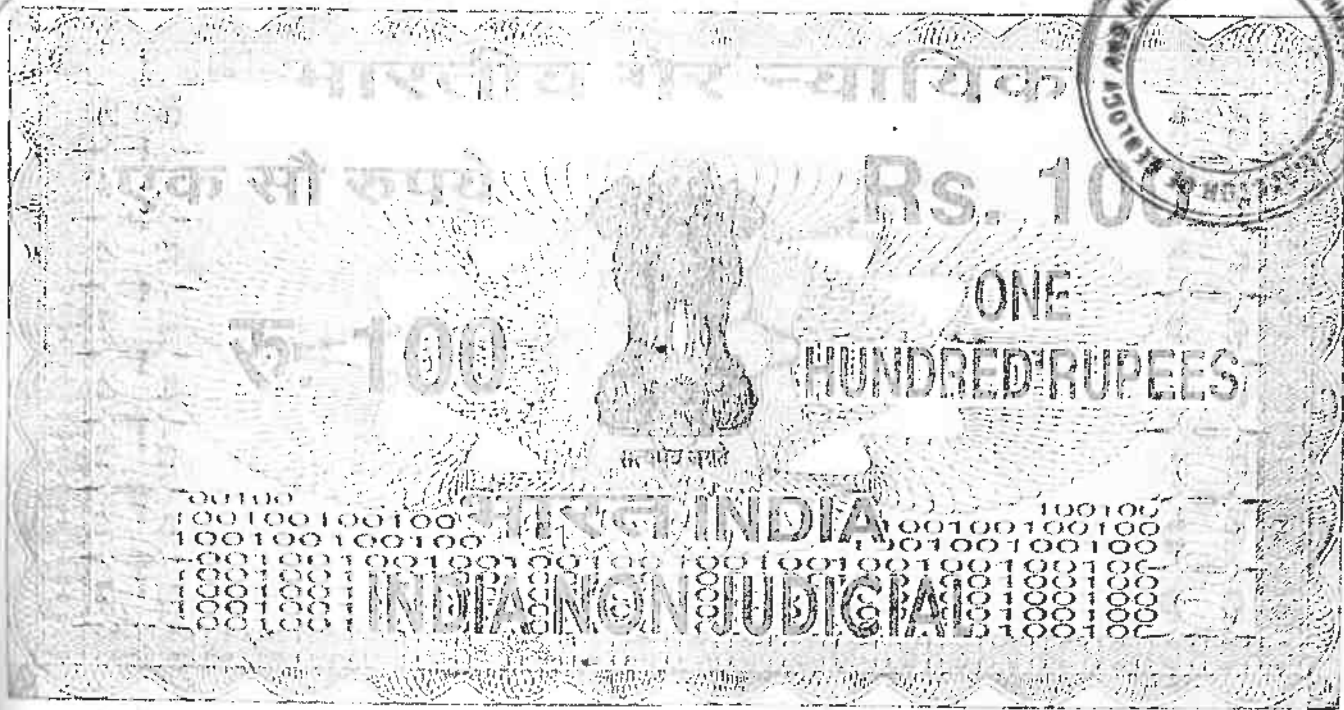
For G.P. EXPORTS,

Proprietor

For M.P GRANITE

Partner

BK-I 3724 / 2022 TPI12757493



தமிழ்நாடு தமில்நாடு TAMILNADU

CM 470989

27.7.2022

ரு/100/

G.P. Vellianai

N. SHANMUGAM
STAMP VENDOR,
VELLIANAI,
L.No. 19/97 KRR

2
குத்தகை ஆவணம்
Lease Agreement

2022-ம் ஆண்டு ஆகஸ்ட் மாதம் 01-ம் தேதி கரூர் மாவட்டம், கரூர் வட்டம், K.பிச்சம்பட்டி கிராமம், தாழைப்பட்டி நெ.12/128 என்கிற விலாசத்தில் ஸ்தாபிதம் செய்யப்பட்டிருக்கும் "G.P.Exports" என்ற நிறுவனத்திற்காக, மேற்படி நிறுவனத்தின் உரிமையாளரும்,

For G.P. EXPORTS,

Gppanner
Proprietor.

1	பதிவு செய்யப்பட்டிருக்கிற 3724 ம் ஆவணம்
14	தொடர்வாக உள்ள பதிவுகள்
1	பதிவு செய்யப்பட்டிருக்கிற
	பதிவு செய்யப்பட்டிருக்கிற



.2.

மதுரை-625020, கே.கே.நகர், இளங்கோ அடிகள் தெரு, 31 நிர் வீட்டில் வசித்து வரும் திரு.ம.பழனிச்சாமி அவர்களின் குமாரர் திரு.கே.பி.பன்னீர் ((ஆதார் அட்டை எண்.6881 6133 0075, Cell No.9791666394) ஆகியவர் 1-வது பார்ட்டி இவர் இந்த ஆவணத்தில் குத்தகைக்கு பெறுபவர் என்று அழைக்கப்படுவார்)

மதுரை-20, K.K.நகர் நெ.31, இளங்கோ அடிகள் தெரு என்கிற விலாசத்தில வசிக்கும் திரு.ம.பழனிச்சாமி அவர்கள் குமாரர் திரு.கே.பி.பன்னீர் ((ஆதார் அட்டை எண். 6881 6133 0075, Cell No.9791666394) ஆகியவர் 2-வது பார்ட்டி இவர் இந்த ஆவணத்தில் குத்தகைக்கு கொடுப்பவர் என்று அழைக்கப்படுவார்) நாமிருபார்ட்டியும் சேர்ந்து எழுதிக்கொண்ட குத்தகை ஆவணம் (Lease Agreement) என்னவென்றால்,

நம்மில் 2-வது பார்ட்டி கே.பி.பன்னீர் அவர்கள் பெயரில் கயராஜித வகையில் சென்ற 01.10.2013-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.1978/2013, சா.ப.அ.வெள்ளியணை)யும்,

சென்ற 07.10.2013-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.2015/2013, சா.ப.அ.வெள்ளியணை) யும்,

Gpp mmu

For G.P. EXPORTS,

Gpp mmu
Proprietor

புத்தகம்	2013	3724	ம் ஆவணம்
தாள்களின் எண்ணிக்கை			
பதிவு தாள்			
பதிவு குறுவரை			



.3.

சென்ற 06.11.2013-ம் தேதியில் ஏற்பட்ட கிரையப் பத்திரப்படி (1-வது புத்தகம், ஆவண எண்.2205/2013, சா.ப.அ.வெள்ளியணை)யும், சர்வ சுதந்திரப் பாத்தியப்பட்டும் நம்மில் 2-வது பார்ட்டி முழு உரிமையுடன் அனுபவித்து வருகிற இதனடியில் கண்ட சொத்துக்களை இன்று முதல் நம்மில் 1-வது பார்ட்டி "G.P.Exports" என்ற நிறுவனத்திற்காக, இன்று முதல் வருடம் (1) ஒன்றுக்கு ரூ.400/- இந்த ரூபாய் நான்கு நூறு வீதம் 25 (இருபத்து ஐந்து) வருட தவணைக்கு குத்தகைக்கு விட ஒப்புக் கொண்டதின் பேரில் இன்று நம்மில் 1-வது பார்ட்டியிடமிருந்து 2-வது பார்ட்டி மொத்த குத்தகை தொகை ரூ.10,000/- இந்த ரூபாய் பத்தாயிரத்தை நம்மில் 2-வது பார்ட்டி பெயரில் நம்மில் 1-வது பார்ட்டி ரொக்கமாகப் பெற்றுக் கொண்டுள்ளதிற்படி நம்மில் 2-வது பார்ட்டி ஷை குத்தகை தொகை ரூ.10,000/-(ரூபாய் பத்தாயிரம் மட்டும்) பெற்றுக் கொண்டு விட்டார்.

ஆகவே இதனடியில் கண்ட சொத்துக்களை 1-வது பார்ட்டி இன்று முதல் (25) இருபத்து ஐந்து வருட காலத்திற்கு அரசு சட்ட திட்டங்களின்படி மேற்படி "G.P.Exports" நிறுவனம் நடத்தி குத்தகை பாத்தியமாய் அனுபவித்துக் கொள்ள வேண்டியது.

Gppmmu

For G.P. EXPORTS,

Gppmmu
Proprietor.

தேதி	2013	27/11/2013	ஆவணம்
புள்ளி	புள்ளி		
வது தரன்	பதிவு		



.4.

இதனடியில் கண்ட சொத்துக்களுக்கு ஏற்படும் தீர்வை வரிவகையை நம்மில் 2-வது பார்ட்டியே செலுத்திக்கொள்ள வேண்டியது. மேற்படி (25) இருபத்து ஐந்து வருடம் நிறைவடைந்தவுடன் 1-வது பார்ட்டி 2-வது பார்ட்டியிடம் இதனடியில் கண்ட சொத்துக்களை ஒப்படைக்க வேண்டியது. இந்த குத்தகைக்கு முன்பணம் ஏதுமில்லை. இந்தப்படி நாமிருபார்ட்டியும் மனம் ஒப்பி எழுதிக்கொண்ட குத்தகை ஆவணம் ((Lease Agreement) இதுவாகும்.

சொத்து விபரம்.

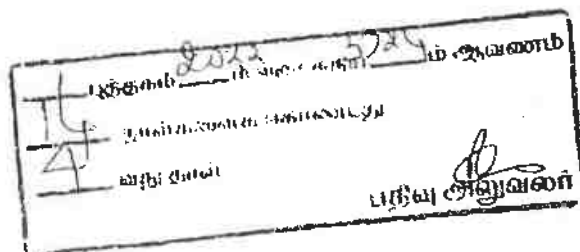
கடூர் பதிவு மாவட்டம், வெள்ளியணை சார்பதிவகம், கடூர் வட்டம், தாந்தோணி யூனியன், K.பிச்சம்பட்டி பஞ்சாயத்துக்குட்பட்ட K.பிச்சம்பட்டி கிராமத்தில்,

வ.எண்.	சர்வே எண்.	மொத்த ஹெக்டேர்	பங்கு ஹெக்டேர்	ஏக்கர் செ.	பட்டா எண்.
1.	354/B6	0.04.0	0.04.0	0.10	2831
2.	354/B7	0.03.0	0.03.0	0.07	2835
3.	354/B8	0.03.0	0.03.0	0.07.1/2	2834
4.	354/B17	0.11.5	0.01.0	0.02.1/2	2831

Gppm

For G.P. EXPORTS.

Gppm
Proprietor





.5.

5.	354/B20	0.11.0	0.04.5	0.11	2835
		ஆக மொத்தம்	0.38		

Gpmm

For G.P. EXPORTS,

Gpmm
Proprietor.

சாட்சிகள்.

1. S. பழனிச்சாமி. (பழனிச்சாமி) த/பெ. சாமியப்பன், வாககமரன்பட்டி, காமிச்சம்பட்டி கிராமம், கரூர் வட்டம், கரூர் மாவட்டம் (ஆதார் அட்டை எண்.3128 4970 0562).

2. P. ராஜேந்திரன். (இராஜேந்திரன்), த/பெ. பெருமாள், உப்புக்குட்டை, சிக்கபூவத்தி, கிருஷ்ணகிரி, கிருஷ்ணகிரி மாவட்டம் (ஆதார் அட்டை எண்.6240 1328 6355).

சான்று செய்தவர்.



A. ராஜேந்திரன்.

A.ராஜேந்திரன், B.Sc,
மட்டிப்பள்ளம், தாந்தோணிமலை (P.O),
கரூர்-5. L.No.A / 732 /99/KRR.
செல்-9442109089.

பதிவு எண்	1572
பதிவு செய்யப்பட்ட நாள்	15/07/2015
பதிவு செய்யப்பட்ட இடம்	கரூர்
பதிவு செய்யப்பட்ட காரணம்	பதிவு எண் 1572
பதிவு செய்யப்பட்ட இடம்	கரூர்
பதிவு செய்யப்பட்ட காரணம்	பதிவு எண் 1572

R/வெள்ளியனை/புத்தகம்-1/3724/2022

2022 ஆம் ஆண்டு ஆகஸ்ட் மாதம் 01ம் தேதி பிப் 04:21 மணியளவில் வெள்ளியனை சார்பதிவாளர் அலுவலகத்தில் தாக்கல் செய்து கட்டணம் ₹ 3600/- செலுத்தியவர்

இடது பெருவிரல்



For G.P. EXPORTS,

Gpnnu
Proprietor.

கூடுதல் விவரங்கள் ஆவண வாககத்தில் உள்ளபடி



எழுதிக் கொடுத்ததாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



Gpnnu

“சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம்” என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆணையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண்
UKC:5872510be3a0b33e694a5195cd02068a1cba0d
(Details from UIDAI : Panneer Palanisamy S/O: Palanisamy, 29-05-1962, xxxxxxxx0075)



எழுதி வாங்கியதாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



For G.P. EXPORTS,

Gpnnu
Proprietor.

“சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம்” என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆணையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண்
UKC:4864756f3b850af42e45d99b9afe56262a006c
(Details from UIDAI : Panneer Palanisamy S/O: Palanisamy, 29-05-1962, xxxxxxxx0075)



2022 ஆம் ஆண்டு ஆகஸ்ட் மாதம் 1ம் நாள்

புத்தகம் 2022-23-ம் ஆவணம்
பார்வைக்காகப் பயன்படும்
வழி, நாள்
பதிவு அலுவலர்

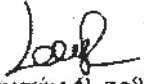
Leaf
வளர்மதி ரவி
சார்பதிவாளர்
வெள்ளியனை

R/வெள்ளியனை/புத்தகம்-1/3724/2022

R/வெள்ளியனை/புத்தகம்-1/3724/2022 எண்ணாசைப் பதிவு செய்யப்பட்டது

நாள் 01.08.2022
வெள்ளியனை




வளர்மதி ரவி
கார்படுவாளர்

புத்தகம் 2022 324 ம ஆவணம்
பதிவு செய்யப்பட்டது
பதிவு அலுவலர்



சொத்தானது நீர்நிலை பகுதியில் அமையப் பெறவில்லை என்பதற்கான

சான்று/ உறுதுமொழி (Declaration)

(நீதிபேராணை எண்.22163/2018-ல் வழங்கப்பட்ட தீர்ப்புரையை காண்க)

இந்த ஆவணத்தில் கண்ட சொத்தானது நீர் நிலைகள், நீர்வழிப்பாதைகள், நீர்
பிடிப்பு பகுதிகளில் கட்டுப்படவில்லை என சான்றளிக்கிறோம்.

மேலும், இதனில் தங்களுக்கு தவறான தகவல் அல்லது சான்று
அளிக்கப்பட்டதாக பின்னாளில் கண்டுபிடிக்கப்பட்டால் அதனால் நான்/ நாங்கள்
சட்ட பூர்வ நடவடிக்கைகளுக்கு உட்படுத்தப்படுவோம் என்பதையும்
அறிவேன்/அறிவோம்.

Gpmmur

For G.P. EXPORTS,

Gpmmur

Proprietor.

பத்தகம்	2022	225	ஆவணம்
நாளைக்காலக வகாண்டது			
வது தால்			
			பதிவு அலுவலர்





தமிழக அரசு

வருவாய்துறை

நிலை நிலைம விவரங்கள் : இ. எண் 10(1) / 2014

மாஸ்டர் : 2001

மாஸ்டர் : 2001

வருவாய் நிர்வாக : கமிஷனரின்

மா.ந.எ.எண் : 2831

சு. நிலையாகக் கொடுக்கப் பெற்ற



புற எண்	புற எண்	புற எண்		புற எண்		புற எண்		குறிப்புக்கள்
		பாப்பு	நிலை	பாப்பு	நிலை	பாப்பு	நிலை	
		தெற்கு - ஏர்	கு - மப	தெற்கு - ஏர்	கு - மப	தெற்கு - ஏர்	கு - மப	
341	A2	0 - 53.00	1.06	--	--	--	--	R234/14--- 26-07-2001
341	A4	0 - 21.50	0.43	--	--	--	--	R234/14--- 26-07-2001
343	6	0 - 1.50	0.06	--	--	--	--	R234/14--- 26-07-2001
344	A3	0 - 10.00	0.28	--	--	--	--	R234/14--- 26-07-2001
344	B4	0 - 16.00	0.45	--	--	--	--	R234/14--- 26-07-2001
354	A5	0 - 6.50	0.18	--	--	--	--	R234/14--- 26-07-2001
354	B14	0 - 1.50	0.06	--	--	--	--	R234/14--- 26-07-2001
354	B17	0 - 11.50	0.32	--	--	--	--	R234/14--- 26-07-2001
354	B19	0 - 6.00	0.17	--	--	--	--	R234/14--- 26-07-2001
354	B6	0 - 4.00	0.11	--	--	--	--	R234/14--- 26-07-2001
		1 - 31.50	3.12					

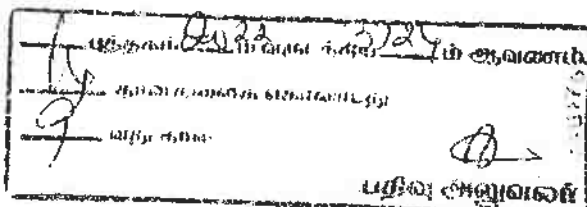
பின்பு 2 :



1. மத்திய தகவல் / சான்றிதழ் தகவல் விவரங்கள் பின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/02831/20424 என்ற குறிப்பு எண்ணை உள்ளிட்டு செப்டிம்பர் 2022-ல் செய்து கொள்ளவும்.
2. இந் தகவல்கள் 01-08-2022 அன்று 02:18:56 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. மகப்பேரி கோவாவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

Gpprman

For G.P. EXPORTS,
Proprietor,





தமிழ்நாடு அரசு

வசூலாக்கத் துறை

நில உரிமை விவரங்கள் : இல. எண் 10(1) பிரிவு

பட்டம் : கரூர்

பட்ட எண் : 2035

உரிமையாளர்கள் பெயர்

மாலைட்டன் : கரூர்

வசூலாக்கத் துறை : கமிஷனரின் அலுவலகம்



பல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புகள்
		பரப்பு	தீர்மானம்	பரப்பு	தீர்மானம்	பரப்பு	தீர்மானம்	
		தெற்கு - ஏர்	பு - கப	தெற்கு - ஏர்	பு - கப	தெற்கு - ஏர்	பு - கப	
342	B2	0 - 65.50	0.91	--	--	--	--	R233/14--- 26-07-2001
342	B4	0 - 56.00	0.78	--	--	--	--	R233/14--- 26-07-2001
343	4	0 - 4.50	0.09	--	--	--	--	R233/14--- 26-07-2001
343	5	0 - 2.50	0.06	--	--	--	--	R233/14--- 26-07-2001
343	7	0 - 2.50	0.06	--	--	--	--	R233/14--- 26-07-2001
354	A2	0 - 6.50	0.18	--	--	--	--	R233/14--- 26-07-2001
354	A4	0 - 7.00	0.19	--	--	--	--	R233/14--- 26-07-2001
354	B13	0 - 14.00	0.39	--	--	--	--	R233/14--- 26-07-2001
354	B15	0 - 2.00	0.06	--	--	--	--	R233/14--- 26-07-2001
354	B18	0 - 24.50	0.67	--	--	--	--	R233/14--- 26-07-2001
354	B20	0 - 11.00	0.31	--	--	--	--	R233/14--- 26-07-2001
354	B7	0 - 3.00	0.08	--	--	--	--	R233/14--- 26-07-2001
358	4	0 - 28.00	0.56	--	--	--	--	R233/14--- 26-07-2001
358	6	0 - 12.00	0.24	--	--	--	--	R233/14--- 26-07-2001
		2 - 39.00	4.58	--	--	--	--	

பதிவு செய்துள்ள பதிவு எண் 3724 ம் உவணம்
பதிவு செய்துள்ள பதிவு எண் 14/01/044/02835/20468 எண் குறிப்பு எண்ணை
பதிவு செய்துள்ள பதிவு எண் 10 வகுதி தான்
பதிவு செய்துள்ள பதிவு எண் 10 வகுதி தான்

பகுதி 2 :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/02835/20468 எண் குறிப்பு எண்ணை உள்நின்று செய்து உறுதி செய்துகொள்ளவும்.
- இந்த தகவல்கள் 01-08-2022 அன்று 02:21:36 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

Gppr...

10/1/2022

For G.P. EXPORTS,
Proprietor.

தமிழக அரசு

வருவாய்த் துறை

தமிழ்நாடு சட்டமன்றக் கூடுதல் : இ. எண் 10(1) பி.சி.டி.

மாவுட்டம் : கருதி

மேட்டம் : அ.ஞாந்

வகுவாய் திராசுதல் : க.பிச்சம்பட்டி

பட்ட எண் : 2834

உ. ரிமையாசுளர்க்குப் பெயர்



1. **ပဋ္ဌာန်းခံစားရမည်**

६. उत्तराखण्ड

பயன்தரீ

புல எண்	உட்பிரிவு	புள்ளிகள்		நட்செய்		மற்றவை		குறிப்புகள்
		பரப்பு	நீர்வை	பரப்பு	நீர்வை	பரப்பு	நீர்வை	
		மெடிக் - ஏர்	சூ - ஸ்ப	மெடிக் - ஏர்	சூ - ஸ்ப	மெடிக் - ஏர்	சூ - ஸ்ப	
342	A2	1 - 22.00	1.67	--	--	--	--	R235/14--- -- 26-07-2001
343	B	0 - 3.50	0.07	--	--	--	--	R235/14--- -- 26-07-2001
344	A1	0 - 14.00	0.39	--	--	--	--	R235/14--- -- 26-07-2001
344	B1	0 - 17.50	0.48	--	--	--	--	R235/14--- -- 26-07-2001
354	A3	0 - 6.50	0.18	--	--	--	--	R235/14--- -- 26-07-2001
354	B12	0 - 18.50	0.51	--	--	--	--	R235/14--- -- 26-07-2001
354	B16	0 - 2.50	0.07	--	--	--	--	R235/14--- -- 26-07-2001
354	B21	0 - 5.00	0.14	--	--	--	--	R235/14--- -- 26-07-2001
354	B8	0 - 3.00	0.08	--	--	--	--	2020/0103 /14/149862--- -- 08-12-2020
		1 - 92.50	3.59					

சுதிரிப்பு2 :



1. மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவசாயிகள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாயகம் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/02834/20457 என்ற குறிப்பு எண்ணை உள்ளிட்டு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 01-08-2022 அன்று 02:23:07 PM நேரத்தில் அச்சடிக்கப்பட்டது.
3. ஸ்கான்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படிந்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்.

Gyproom

For G.P. EXPORTS.

Сурттан

Proprietor.

1. பதிகாரம் _____ ம் ஆவணம்
 2. தாளம் _____
 3. எழுத்து _____
 4. பதிவு அலுவலர்





தமிழக அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

உட்டம் : கரூர்

மாவட்டம் : கரூர்

வருவாய் கிராமம் : க.பிச்சம்பட்டி

பட்டா எண் : 2835

உரிமையாளர்கள் பெயர்

1. பழனிச்சாமி

புல எண்	உட்பிரிவு	புன்செய்		நுள்செய்		மற்றவை		குறிப்புகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		தெற்கு - ஏர்	கு - பை	தெற்கு - ஏர்	கு - பை	தெற்கு - ஏர்	கு - பை	
342	B2	0 - 65.50	0.91	--	--	--	--	R233/14--- 26-07-2001
342	B4	0 - 56.00	0.78	--	--	--	--	R233/14--- 26-07-2001
343	4	0 - 4.50	0.09	--	--	--	--	R233/14--- 26-07-2001
343	5	0 - 2.50	0.06	--	--	--	--	R233/14--- 26-07-2001
343	7	0 - 2.50	0.06	--	--	--	--	R233/14--- 26-07-2001
354	A2	0 - 6.50	0.18	--	--	--	--	R233/14--- 26-07-2001
354	A4	0 - 7.00	0.19	--	--	--	--	R233/14--- 26-07-2001
354	B13	0 - 14.00	0.39	--	--	--	--	R233/14--- 26-07-2001
354	B15	0 - 2.00	0.06	--	--	--	--	R233/14--- 26-07-2001
354	B18	0 - 24.50	0.67	--	--	--	--	R233/14--- 26-07-2001
354	B20	0 - 11.00	0.31	--	--	--	--	R233/14--- 26-07-2001
354	B7	0 - 3.00	0.08	--	--	--	--	R233/14--- 26-07-2001
358	4	0 - 28.00	0.56	--	--	--	--	R233/14--- 26-07-2001
358	6	0 - 12.00	0.24	--	--	--	--	R233/14--- 26-07-2001
		2 - 39.00	4.50	--	--	--	--	

பதிவு செய்துள்ள பதிவு எண் 2835
பதிவு செய்துள்ள பதிவு எண் 2835
பதிவு செய்துள்ள பதிவு எண் 2835
பதிவு செய்துள்ள பதிவு எண் 2835

குறிப்பு 2 :



- மேற்கண்ட தகவல் / சான்றிதழ் தகவல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தரங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 14/01/044/02835/20468 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 01-08-2022 அன்று 02:23:51 PM தேர்தலில் அறிவிக்கப்பட்டது.
- மாகப்பேரி கோமாவின் 2D barcode டிடிப்பான் மூலம் பதிவு 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

Gpprmmu

For G.P. EXPORTS,
Proprietor.



भारत सरकार
GOVERNMENT OF INDIA



பன்னீர் பழனிசாமி
Panneer Palanisamy
பிறந்த நாள்/DOB :
29-05-1962
ஆண் / Male



6881 6133 0075



भारतीय विशिष्ट पहचान प्राधिकरण
UNIQUE IDENTIFICATION AUTHORITY OF INDIA

முதலரி: S/O பழனிசாமி,
எண் 31, இளங்கோ அடிகள்
பெரு, கே கே நகர்,
ஆலவந்தான், காந்தி நகர்
(மா), மதுரை வடக்கு, மதுரை,
தமிழ் நாடு, 625020

Address: S/O. Palanisamy,
NO 31, ILNAGO ADIKAI,
STREET, K K NAGAR,
Alavandan, Gandhi Nagar
(ma), Madurai North,
Madurai, Tamil Nadu,
625020



ஆதார் சாதாரண மனிதனின் வகிகாரம்

1947 1800 300 1947 help@uidai.gov.in www.uidai.gov.in P.O. Box No. 1947 Bangalore 560 001

For G.P. EXPORTS,

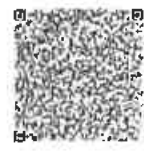
Gpamm
Proprietor.



भारत सरकार
GOVERNMENT OF INDIA



பன்னீர் பழனிசாமி
Panneer Palanisamy
பிறந்த நாள்/DOB :
29-05-1962
ஆண் / Male



6881 6133 0075



भारतीय विशिष्ट पहचान प्राधिकरण
UNIQUE IDENTIFICATION AUTHORITY OF INDIA

முதலரி: S/O பழனிசாமி,
எண் 31, இளங்கோ அடிகள்
பெரு, கே கே நகர்,
ஆலவந்தான், காந்தி நகர்
(மா), மதுரை வடக்கு, மதுரை,
தமிழ் நாடு, 625020

Address: S/O: Palanisamy,
NO 31, ILNAGO ADIKAI,
STREET, K K NAGAR,
Alavandan, Gandhi Nagar
(ma), Madurai North,
Madurai, Tamil Nadu,
625020



ஆதார் சாதாரண மனிதனின் வகிகாரம்

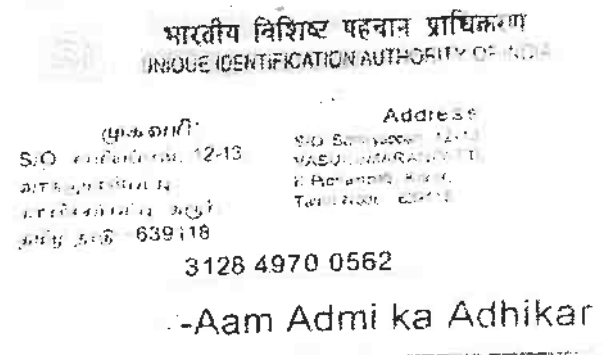
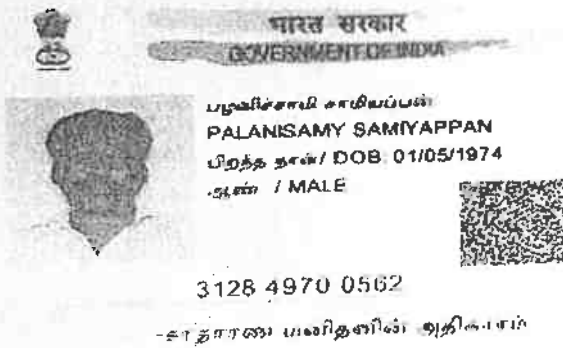
1947 1800 300 1947 help@uidai.gov.in www.uidai.gov.in P.O. Box No. 1947 Bangalore 560 001

Gpamm

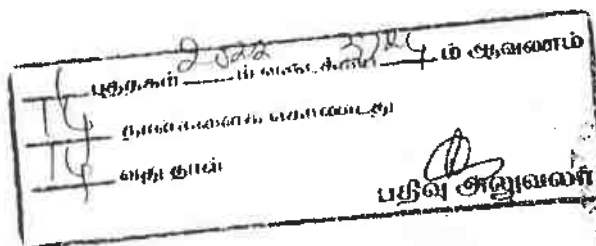
பெயர்: பன்னீர் பழனிசாமி
தேயு.பெயர்: பன்னீர் பழனிசாமி
பிறந்த நாள்: 29-05-1962
பதிவு: 6881 6133 0075



Handwritten signature



Handwritten signature





PHOTOCOPY OF THE APPLIED LEASE AREA

Field photos in respect of Multi-colour granite quarry lease in S.F.No : S.F.No's: 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20 (Part) - over an extent of 3.00.0hectares - Patta land - K.Pitchampatti Village - Karur Taluk - Karur District - Tamil Nadu State belongs to Tvl.G.P.Exports,





आयकर विभाग
INCOME TAX DEPARTMENT

भारत सरकार
GOVT. OF INDIA

स्थायी लेखा संख्या कार्ड
Permanent Account Number Card
ALKPP9902D


नाम / Name
PANNEER PALANISAMY

पिता का नाम / Father's Name
PALANISAMY

जन्म की तिथि /
Date of Birth
29/05/1962


Signature



2811300

इस कार्ड को खोने/चुनने का कृपया सूचित करें/नोट करें।

अथवा फिर से (फॉटो, पदचिह्न) के साथ

नवीन कार्ड बनवाएं, वही प्रयोग करें।

फॉर्म No. 341, भाग II, अंक 1/3,

अंतरा-राज्यीय, श्री अरवि मोदी भवन,

पिन - 411 016.

*If this card is lost / someone's lost card is found,
please inform / return to :*

Income Tax PAN Services Unit, SSCIE,

4th Floor, Mantri Sterling,

Plot No. 341, Survey No. 9713,

Model Colony, Near Deep Bangalow Chowk,

Pune - 411 016.

Tel: 91-20-2721 8880, Fax: 91-20-2721 8881

e-mail: tinudis@ndli.co.in

DIRECTORATE OF GEOLOGY AND MINING

From
Thiru.D.Mohan, I.A.S.,
Directorate of Geology and Mining,
Industrial Estate, Guindy,
Chennai - 600 032.

To
Tvl. G.P. Exports,
D.No. 12/128, Thalappatti,
K.Pitchampatti,
Karur Taluk and District- 639118.

Rc.No. 2374/MM2/2022 Dated. 09.10.2025

Sir,

Sub: Mines and Minerals – Multi-colour Granite – Karur District and Taluk – K.Pitchampatti Village – S.F.Nos.353/6 (Part), 353/7 (P) etc., – over an extent of 3.00.0 hec. of Patta land – Precise area communicated to Tvl.G.P.Exports – Mining Plan recommended and forwarded by the Assistant Director, Karur – revised precise area Communicated by the Government - Approval accorded - Regarding.

- Ref:
1. Granite Quarry lease application of Tvl.G.P.Exports, Door No.12/128, Thalappatti, K.Pitchampatti, Karur District, dated: 01.09.2021.
 2. District Collector, Karur Note File.No.377/Mines/2021, dated 08.04.2022.
 3. Commissioner of Geology and Mining, Chennai in Note File No. 234/MM2/2022, dated 26.10.2022.
 4. Government Letter No. 3419187/MMB.2/2022-1, dated 05.10.2023.
 5. Assistant Director, Karur letter in RC. No. 37/Mines/202, dated 19.11.2024.
 6. This office letter in Rc. No. 2374/MM2/2022 dated 06.03.2025.
 7. Assistant Director, Karur letter in Rc.No. 377/Mines/2021, dated 29.04.2025.
 8. This Office letter Rc.No. 2374/MiM2/2022 addressed to Government dated 04.07.2025.
 9. Government letter No. 3419187/MMB.2/2022-1, dated 17.09.2025.

Kind attention is invited to the references cited above.

2) In the reference 1st cited, Tvl.G.P.Exports, preferred an application for quarrying of Multi Coloured Granite over an extent of 3.00.0 Hectares of patta lands in SF.Nos. S.F.Nos.353/6 (Part), 353/7 (P), etc., of K.Pitchampatti village, Karur Taluk and District under Rule 19-A of Tamil Nadu Minor Mineral Concession Rules, 1959 for 20 years.

3) In the reference 4th cited, the Government communicated precise area to the applicant with a direction to submit the approved mining plan and environmental clearance on the proposal recommending for grant of multi-coloured quarry lease subject to certain conditions. Accordingly, vide reference 5th cited, the Assistant Director, Karur has submitted draft mining plan for the approval of the Commissioner of Geology and Mining.

4) In the reference 6th cited, the Assistant Director, Karur has been requested to furnish remarks on points revised therein and accordingly vide reference 7th cited, the same has been furnished by the Assistant Director, Karur and also re-submitted the Mining plan for the approval of Commissioner of Geology and Mining.

5) In the reference 6th cited, Assistant Director (G&M), Karur reported that the details provided for Mineable Reserves in a separate plate, existing waste dump removed from the lease applied area, and all of the conditions laid down in the precise area communication are incorporated in the mining plan. Finally, the Assistant Director (G&M), Karur has recommended and forwarded the draft mining plan submitted by the applicant Tvl.G.P.Exports for approval of the Commissioner of Geology and Mining.

6) Further, vide reference 8th cited, the Commissioner of Geology and Mining have requested the Government to communicate revised precise area to the applicant firm since the period of three months for submission of approved mining plan as well as the possible extendable period of 3 months that could be granted by the Government also have been lapsed. Accordingly, the Government have communicated the revised Precise area vide reference 9th cited.

7) The mining plan already submitted by the applicant is in complete shape. Hence, the same is scrutinized. On perusal of the same it is observed that the applicant has submitted draft mining plan in accordance with the precise area communicated by the Government.

8) Based on the recommendation of the Assistant Director (G&M), Karur, the draft Mining plan submitted by Tvl. G.P.Exports is hereby approved subject to the following conditions in addition to the conditions stipulated in the precise area communication issued by the Government:

- i. The applicant firm should obtain no objection certificate from the power grid office for the high-tension power lines passing at distance of 100 meters in the southern side of the lease applied area before execution of lease deed.
- ii. The applicant firm should shift the two low tension power lines are situated in the southern side of the lease applied area 50 meters away from the outer boundary of the proposed lease area before the execution of the lease deed.
- iii. Thiru P.Panneer, the proprietor of the applicant firm should produce the latest mining dues clearance certificate obtained from the District Collectors of concerned district viz. Karur, Krishnagiri and Namakkal districts before the grant of quarry lease.
- iv. A safety distance of 7.5 meters and 10-meters should be provided to the adjacent patta and poramboke lands respectively.
- v. A safety distance of 50 meters should be maintained to the Chettinad railway track passing in North-South direction at a distance of 46 meters from the western boundary of the applied area.
- vi. This mining plan is approved without prejudice to any other Law applicable to the quarry lease from time to time whether such Laws are made by the Central Government, State Government or any other authority.
- vii. 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 (Development and Regulation) Act 1957, or any other connected laws including Forest (Conservation) Act, 1980, Forest Conservation Rules, 1981, Environment Protection Act, 1980, Indian Explosives Act, 1884 (Central Act IV of 1884) and the rules made there under and the Tamil Nadu Minor Mineral Concession Rules, 1959.
- viii. This mining plan including Progressive mine closure plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.
- ix. Provisions of the Mines Act, 1952 and the Rules and Regulations made thereunder including submission of notice of opening, appointment of manager and other statutory officials as required under Mines Act, 1952 shall be complied with.
- x. Provisions made under Mines and Minerals (Development & Regulation) Act, 1957, and Granite Conservation and Development Rules, 1999 made there under shall be complied with.
- xi. The quarrying operation should be restricted only in the area granted on lease.
- xii. Granite waste materials should be dumped within in the quarry lease area and should not be dumped in the outside lands.
- xiii. The applicant firm should not disturb the adjoining patta lands and agricultural activities.

- xiv. No encroachment shall be allowed in the adjacent poromboke lands during quarrying operation.
- xv. Environmental Clearance should be obtained from the competent authority in respect of the subject area as per rule 42 of the Tamil Nadu Minor Mineral Concession Rules, 1959 and as per the notification of the Ministry of Environment and Forest and also obtain any other clearances, if any, required as per the notifications.
- xvi. The applicant firm shall at his own expenses erect, maintain and keep in repair all the boundary pillars.
- xvii. The boundaries of the proposed area for the grant of Multi-coloured Granite quarry lease should be fixed and the District Administration/ Geology and Mining Department should ensure that the quarrying operation shall be restricted only in the area granted on lease.
- xviii. Quarrying activity should be carried out from 06.00 AM to 06.00 PM only.
- xix. No hindrance should be caused to the adjacent pattadars and public while quarrying and transportation of minerals from the subject area.
- xx. Relaxation to be obtained under Rule 106(2)(a) & (b) of Metalliferous Mines Regulations, 1961 from the Director of Mines Safety, if necessary.
- xxi. A Green belt should be constructed to prevent sound and air pollution due to the proposed quarrying activity by planting at least 300 seedlings of Neem and Pungan all around the area.
- xxii. Child labour should not be engaged.

Approved Mining Plan is sent herewith for further necessary action.

Encl: Approved Mining Plan.

Sd/-D.Mohan,
Director of Geology and Mining

Forwarded/By Order

[Signature]
Joint Director

Copy Submitted to:

The Additional Chief Secretary
to Government(FAC),
Natural Resources Department,
Secretariat, Chennai-9.

[Signature]
9/10/20

Copy to

1. The Director of Mines Safety,
Lapis Lagoon, AA Block,
Shanthi Colony, Anna Nagar,
Chennai-40. (With AMP)
2. The District Collector,
Karur.
3. Assistant Director,
Geology and Mining,
Karur (With AMP).

From
Dr.P.Jayapal M.Sc., Ph.D.,
Deputy Director,
Geology and Mining,
Karur.

To
Tvl.G.P.Exports,
Door No.12/128,
Thalappatti,
K.Pitchampatti,
Karur Taluk,
Karur District.

Rc.No.377/Mines/2021, Dated: 12.12.2025

Sir,

Sub: Mines and Minerals – Minor Mineral – Granite -Karur District – Karur Taluk – K.Pitchampatty Village – S.F.Nos. 353/6 (Part) 0.64.00 hect, 353/7 (P) 0.27.50 hect, 354/A6 (0.23.50 hect), 354/A7 (0.22.50 hect), 354/A8 (0.02.00 hect), 354/A9 (0.14.00 hect), 354/A10 (0.18.00 hect), 354/A11 (0.14.50 hect), 354/A12 (0.03.50 hect), 354/A13 (0.08.00 hect), 354/A14 (0.24.50 hect), 354/A15 (0.10.50 hect), 354/B1B (0.10.50 hect), 354/B2 (0.05.00 hect, 354/B3 (0.02.00 hect), 354/B4 (0.02.00 hect), 354/B5 (0.06.50 hect), 354/B6 (0.04.00 hect), 354/B7 (0.03.00 hect), 354/B8 (0.03.00 hect), 354/B9 (0.02.50 hect), 354/B10 (0.02.50 hect), 354/B11 (0.02.50 hect), 354/B12 (0.18.50 hect), 354/B17(Part) (0.01.00 hect), 354/B20(Part) (0.04.50 hect) over an extent of 3.00.0 hectares - Quarry lease application preferred by Tvl.G.P.Exports for quarrying Multicoloured Granite – Precise area communicated by the Government – Mining plan submitted by the applicant for approval – Mining Plan approved - requested for the details of Existing/ Proposed/Expired and Abandoned quarries situated within 500 mts radial distance - furnished – Regarding.

- Ref: 1. Granite Quarry lease application of Tvl.G.P.Exports, Door No.12/128, Thalappatti, K.Pitchampatti, Karur District & Taluk, Dated: 01.09.2021.
2. Government letter No. 3419187/MMB.2/2022-1 Dated:17.09.2025
3. Draft mining plan submitted by the applicant dated:23.08.2024

4. Director, Geology and Mining, Chennai, Mining Plan approved letter Rc.No.2374/MM2/2022, Dated:09.10.2025.

5. Tvl.G.P.Exports, letter Dated:01.12.2025

In the reference 1st cited Tvl.G.P.Exports, has preferred an application for the grant of a multicoloured Granite quarry lease over an extent of 3.00.0 hectares of patta lands in S.F.Nos. 353/6 (Part) 0.64.00 hect, 353/7 (P) 0.27.50 hect, 354/A6 (0.23.50 hect), 354/A7 (0.22.50 hect), 354/A8 (0.02.00 hect), 354/A9 (0.14.00 hect), 354/A10 (0.18.00 hect), 354/A11 (0.14.50 hect), 354/A12 (0.03.50 hect), 354/A13 (0.08.00 hect), 354/A14 (0.24.50 hect), 354/A15 (0.10.50 hect), 354/B1B (0.10.50 hect), 354/B2 (0.05.00 hect, 354/B3 (0.02.00 hect), 354/B4 (0.02.00 hect), 354/B5 (0.06.50 hect), 354/B6 (0.04.00 hect), 354/B7 (0.03.00 hect), 354/B8 (0.03.00 hect), 354/B9 (0.02.50 hect), 354/B10 (0.02.50 hect), 354/B11 (0.02.50 hect), 354/B12 (0.18.50 hect), 354/B17(Part) (0.01.00 hect), 354/B20(Part) (0.04.50 hect) of K.Pitchampatti village, Karur Taluk in Karur District for the grant of quarry lease for a period of 20 years under the provisions of rule 19-A of Tamilnadu Minor Mineral Concession Rules 1959 and the same had been recommended and forwarded to the government through the Commissioner of Geology and Mining, Chennai. Precise area was communicated by the Government for the proposed lease area vide reference 2nd cited.

Accordingly, the applicant Tvl.G.P.Exports has submitted the 5 copies of Mining Plan and the same was approved by the Director, Geology and Mining, Chennai vide reference 4th cited.

In the reference 5th cited, the applicant has requested to the Deputy Director of Geology and Mining, Karur to provide the details of existing, proposed, expired and abandoned quarries situated within 500 meter radial distance from the subject area and the same has been furnished as detailed below:-

I. Existing Quarries: -

Sl No.	Name of the lessee/firm it holder	Taluk & Village	S.F.No.	Extent (hect)	Lease Period
1.	M/s M.P.Granite No.131/29 R.R.Complex Kollapatti Animoor Post Tiruchengodu Taluk Namakkal District.	Karur Taluk K.Pitchampatti Village	343/1B, 343/2, 343/3, 343/4, 343/5, 343/6, 343/7, 343/8, 343/9, 343/10 (P), 343/11B(P) 344/A1 354/A2 354/A3 354/A4 354/A5 354/B1A 354/B13 354/B14 354/B15 354/B16	2.43.5	15.02.2016 to 14.02.2036
2.	M/s M.P.Granite No.131/29 R.R.Complex Kollapatti Animoor Post Tiruchengodu Taluk Namakkal District.	Karur Taluk K.Pitchampatti Village	260/A1, 260/A2, 260/A3, 260/B1, 260/B2, 260/B3, 260/C, 262/A3 (P) 262/A4(P) 262/A5(P) 262/A6(P) 262/A7 262/A8 (P) 262/B1 262/B2	4.01.5	18.08.2017 to 17.08.2037
3.	M/s M.P.Granite No.131/29 R.R.Complex Kollapatti Animoor Post Tiruchengodu Taluk Namakkal District.	Karur Taluk K.Pitchampatti Village	353/6(P), 354/A1, 355/A, 355/B1, 355/B2, 355/B3, 355/B4 356/1 356/2 356/3 357/4 358/9(P)	4.45.0	28.09.2022 to 27.09.2042

II. Proposed Quarries: -

Sl No.	Name of the lessee/firm it holder	Taluk & Village	S.F.No.	Extent (hect)	Lease Period
1	Tvl.G.P.Exports, Door No.12/128, Thalappatti, K.Pitchampatti, Karur Taluk, Karur District.	Karur Taluk K.Pitchampatti Village	353/6(P), 353/7(P), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2 354/B3 354/B4 354/B5 354/B6 354/B7 354/B8 354/B9 354/B10 354/B11 354/B12 354/B17(P) 354/B20(P)	2.93.0	-

III. Lease Expired Quarries : -

Sl No.	Name of the lessee/firm it holder	Taluk & Village	S.F.No.	Extent (hect)	Lease Period
1.	Nil				

IV. Abandoned Quarries : -

Sl No.	Name of the lessee/firm it holder	Taluk & Village	S.F.No.	Extent (hect)	Lease Period
1.	Nil				

[Signature]
12/12/25
Deputy Director,
Geology and Mining,
Karur.

[Signature]
12/12/25

சான்று

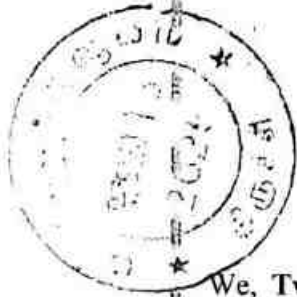
கரூர் மாவட்டம் கரூர் வட்டம் கே.பிச்சம்பட்டி, தாழைப்பட்டி கிராம முகவரியில் இயங்கும் **GP EXPORTS** என்ற பெயரில் கனிமம் வெட்டி எடுக்க விண்ணப்பித்துள்ள மேற்படி கரூர் மாவட்டம், வட்டம் கே.பிச்சம்பட்டி கிராம புல எண்கள் 353/6(P)- 0.64.0, 353/7(P)-0.27.5, 354/A6-0.23.5 etc. மொத்தம் 3.00.0 ஹெக்டர் நிலப்பரப்பை சுற்றி 300 மீட்டர் சுற்றளவில் புராதன சின்னங்களோ கோவில்களோ மற்றும் தேசிய நெடுஞ்சாலைகளோ அரசு அங்கீகரிக்கப்பட்ட வீட்டுமனைகளோ சரணாலயங்கள் மற்றும் ஆறுகள் எதுவும் இல்லை என்று சான்றளிக்கிறேன். (இது சுற்றுசூழல் அனுமதி பெற மட்டும் பொருந்தும்)

கி.டி.என் No 191/26
கிராமநிலர்வழி அலுவலர்
18-கா. பிச்சம்பட்டி கிராமம்,
கரூர் வட்டம், கரூர் மாவட்டம்.



தமிழ்நாடு தமிழ்நாடு TAMILNADU 12.12.2025 ரூ 100

DX 714790



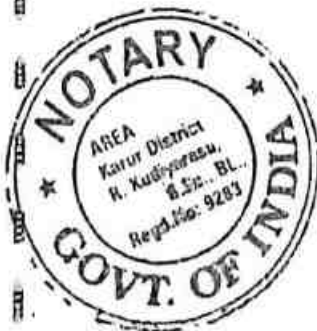
G.p. Exports
K. Pitchampatti

மா.மாரிமுத்து
உ.எ 3/97 வ.அ.மு.தா.வி
வட்டாட்சியர் அலுவலக வளாகம்
மணப்பாறை. தமிழ்நாடு.

AFFIDAVIT TO SEIAA, TAMIL NADU

We, Tvl. G.P. Exports, having an address No. 12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District - 639118, Tamil Nadu state do here by solemnly declare and sincerely affirm that,

I have applied for getting environmental clearance to SEIAA Tamil Nadu for quarry lease for Multicolour Granite quarry in S.F. Nos: 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part), K. Pitchampatti Village, Karur Taluk, Karur District, Tamil Nadu.



R. KUDIYARASU, B.Sc., B.L.,
ADVOCATE & NOTARY PUBLIC,
Reg. No. 9283, Govt. of India,
No. 40, Bharathi Nagar,
THANTHONIMALAI,
KARUR.

1. I swear to state that within 10kms radius of the mines which I have applied for environmental clearance, none of the followings are situated as per the General Conditions of EIA Notification, 2006.

- Protected areas notified under the Wildlife (Protection) Act, 1972
- Critically polluted area as identified by CPCB constituted under Water (Prevention and Control of Pollution) Act, 1974
- Eco Sensitive areas identified by the Forest Dept/State Govt
- Interstate boundaries and International boundaries

2. I will complete the following Corporate Environment Responsibility (CER) activities before commencement of the quarrying activities in addition to CSR and EMP.

CER Activity	Project Cost (Rs. In Lakh)	CER Cost 2% of Project Cost (Rs in Lakh)
Developing Sanitary and Library Facilities, Tree plantation and environmental awareness sign boards to Government High school in K. Pitchampatti Village.	44.50	1.0
Total Cost Allocation	44.50	1.0

G. Prameen



R. Kudiyarasu
R. KUDIYARASU, B.Sc., B.L.,
 ADVOCATE & NOTARY PUBLIC,
 Reg. No. 9283, Govt. of India,
 No. 40, Bherathi Nagar,
 THANTHONIMALAI,
 KARUR.

3. There are Quarries located within 500m radius from the periphery of our quarry.

Proposed Quarries

S. No	Name of the owner	Village & S.F. No	Extent (in Ha.)	Lease status
1.	Tvl.G.P. Export, No: 12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District	K. Pitchampatti, and S.F. No: 353/6 (Part), 353/7 (Part), 354/A6, 354/A7, 354/A8, 354/A9, 354/A10, 354/A11, 354/A12, 354/A13, 354/A14, 354/A15, 354/B1B, 354/B2, 354/B3, 354/B4, 354/B5, 354/B6, 354/B7, 354/B8, 354/B9, 354/B10, 354/B11, 354/B12, 354/B17(Part) & 354/B20(Part)	3.00	-
Total Extent			11.47.0	-

Gp...



12/12/2025
R. KUDIYARASU, B.L., B.L.
 ADVOCATE & NOTARY PUBLIC,
 Reg.No.9283, Govt. of India,
 No.40, Bharathi Nagar,
 THANTHONIMALAI,
 KARUR.

Existing Quarries

S. No	Name of the owner	Village & S.F. No	Extent (in Ha.)	Lease status
1.	M/s M.P. Export No. 131/29, R.R. Complex, Kollapatti Animoor Post, Tiruchengodu Taluk, Namakkal District	K. Pitchampatti, and S. F. No: 343/1B, 343/2, 3, 4, 5, 6, 7, 8, 9, 10(P), 343/11B(P), 344/A1, 354/A2, 354/A3, 354/A4, 354/A5, 354/B1A, 354/B13, 354/B14, 354/B15 and 354/B16	2.43.50	15.02.2016 to 14.02.2036
2.	M/s M.P. Export No. 131/29, R.R. Complex, Kollapatti Animoor Post, Tiruchengodu Taluk, Namakkal District	K. Pitchampatti, and S. F. No: 260/A1, 260/A2, 260/A3, 260/B1, 260/B2, 260/B3, 260/C, 262/A3 (P), 262/A4(P), 262/A6(P), 262/A7, 262/A8(P), 262/B1, and 262/B2	4.01.50	18.08.2017 to 17.08.2037
3.	M/s M.P. Export No. 131/29, R.R. Complex, Kollapatti Animoor Post, Tiruchengodu Taluk, Namakkal District	K. Pitchampatti, and S. F. No: 353/6(P), 354/A1, 355/A, 355/B2, 355/B3, 355/B4, 356/1, 356/2, 356/3, 357/4 and 358/9(P)	4.45.0	28.09.2022 to 27.09.2042
Total Extent			10.90.0	



R. Kudiyarasu
R. KUDIYARASU, B.Sc., B.L.,
 ADVOCATE & NOTARY PUBLIC,
 Reg. No. 9283, Govt. of India,
 No. 40, Bharathi Nagar,
 THARTHOMMALAI,
 KARUR.

Abandoned or Expired Quarries

Sl. No	Name of the owner	Village & S.F. No	Extent (in Ha.)	Lease status
-	-	-	-	-

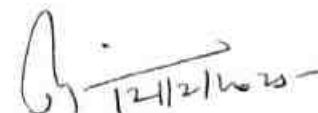
4. There will not be any hindrance or disturbance to the people living on enroute / nearby my quarry site while transporting the mined out materials and due to quarrying activities.
5. There are no habitations / villages located within 300 meters radius from the periphery of my quarry.
6. I swear that afforestation will be carried out during the course of quarrying operation and maintained.
7. The required insurance will be taken in the name of the labourers working in my proposed quarry.
8. The existing road from the main road to the quarry is in good condition and the same will be maintained and utilized for transportation of materials.
9. I will not engaging any child labour at my mines and I aware that engaging child labour is punishable under the Law.
10. All types of safety/protective equipments will be provided to all the laborers working in my quarry.
11. No permanent structures, temples etc are located within 500m from the periphery of my quarry.
12. The quarrying activity has not yet commenced and it will be carried out only after obtaining environmental clearance.

Solemnly and sincerely affirmed and
Signed before the Notary Public on
the day of 12/12 2025

Deponent


Tvl. G.P. Exports
(G P,PANNEER)




R. KUDIYARASU, B.Sc., B.L.,
ADVOCATE & NOTARY PUBLIC,
Reg. No. 9263, Govt. of India,
No. 40, Bharathi Nagar,
THANTHONIMALAI,
KARUR.

ABM ENVIRO LAB

(A Unit of Aadhi Boomi Mining and Enviro Tech (P) Ltd.,)



NIPBASS PLAZA
4/77-L, Indrani Nagar, Santhai Road
Narasothipatti, Salem - 636004, Tamil Nadu
Mob: 9842729655, 9443290855



suriyakumarsemban@gmail.com / abmenvirotech@gmail.com

TEST REPORT

Report Number: ABMEL/TR-30/2025-2026		Report Date:21.02.2026	
Customer Name /Address	M/s. G.P. EXPORTS No.12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	Core Zone	Sample Code	ABMEL/W/30(a)
Date of Sampling	16.02.2026	Sample Description	Colourless liquid
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Liter

Discipline		Chemical Testing		
Product Name		Bore Water		
S.no	Parameters	Protocol	Unit	Result
1	pH	IS 3025 (Part 11)	-	6.99
2	Electrical Conductivity (EC)	IS 3025(Part 14)	µs/cm	1205
3	Turbidity	IS 3025 (Part 10)	NTU	4.8
4	Temperature	IS3025 (Part 9)	°C	25.1
5	Total Suspended Solids (TSS)	IS 3025 (Part17)	mg/l	24
6	Total Dissolved Solids (TDS)	IS 3025 (Part16)	mg/l	724
7	Chemical Oxygen Demand as COD	IS 3025 (Part 58)	mg/l	72
8	Biological Oxygen Demand at 27°C 3 days (BOD)	IS 302 (Part 44)	mg/l	12.2
9	Total Hardness as CaCO ₃	IS 3025 (Part21)	mg/l	524
10	Calcium as Ca	IS 3025 (Part 40)	mg/l	149

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ABM ENVIRO LAB

(A Unit of Aadhi Boomi Mining and Enviro Tech (P) Ltd.,)



NIPBASS PLAZA
4/77-L, Indrani Nagar, Santhal Road
Narasothipatti, Salem - 636004, Tamil Nadu
Mob: 9842729655, 9443290855



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11	Magnesium as Mg	IS 3025 (Part 46)	mg/l	37
12	Chloride as Cl ⁻	IS 3025 (Part 32)	mg/l	159
13	Total Alkalinity as CaCO ₃	IS 3025 (Part 23)	mg/l	168
14	Total Phosphorus as P	IS 3025 (Part 31)	mg/l	0.924
15	Nitrate as NO ₃	IS 3025 (Part 34)	mg/l	2.9
16	Nitrite as NO ₂	IS 3025 (Part 34)	mg/l	2.6
17	Ammonical Nitrogen	IS 3025 (Part 34)	mg/l	3.2
18	Sulphate	IS 3025 (Part 24)	mg/l	88
19	Iron	IS 3025 (Part 53)	mg/l	0.048
20	Fluoride as F ⁻	IS 3025 (Part 60)	mg/l	0.342
21	Silica as SiO ₂	IS 3025 (Part 35)	mg/l	3.4

BDL = Below Detectable Limit; DL = Detection Limit

Doel. A.
Verified BY

A. Nagadevi

TECHNICAL MANAGER
ABM ENVIRO LAB

----- End of the Report -----

Page 1 of 2



For ABM ENVIRO LAB

S. Suriya Kumar
Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory

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TEST REPORT

Report Number: ABMEL/TR-30/2025-2026		Report Date:21.02.2026	
Customer Name /Address	M/s. G.P. EXPORTS No.12/128, Vellagoundanpatti, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	BUFFER- I	Sample Code	ABMEL/W/30(a)
Date of Sampling	16.02.2026	Sample Description	Colourless liquid
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Liter

Discipline		Chemical Testing		
Product Name		Bore Water		
S.no	Parameters	Protocol	Unit	Result
1	pH	IS 3025 (Part 11)	-	7.23
2	Electrical Conductivity (EC)	IS 3025(Part 14)	µs/cm	1649
3	Turbidity	IS 3025 (Part 10)	NTU	5.7
4	Temperature	IS3025 (Part 9)	°C	25.4
5	Total Suspended Solids (TSS)	IS 3025 (Part17)	mg/l	28
6	Total Dissolved Solids (TDS)	IS 3025 (Part16)	mg/l	988
7	Chemical Oxygen Demand as COD	IS 3025 (Part 58)	mg/l	88
8	Biological Oxygen Demand at 27°C 3 days (BOD)	IS 302 (Part 44)	mg/l	14.2
9	Total Hardness as CaCO ₃	IS 3025 (Part21)	mg/l	708
10	Calcium as Ca	IS 3025 (Part 40)	mg/l	208

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NIPBASS PLAZA
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TC-16922

11	Magnesium as Mg	IS 3025 (Part 46)	mg/l	46
12	Chloride as Cl ⁻	IS 3025 (Part 32)	mg/l	240
13	Total Alkalinity as CaCO ₃	IS 3025 (Part 23)	mg/l	148
14	Total Phosphorus as P	IS3025 (Part 31)	mg/l	0.984
15	Nitrate as NO ₃	IS 3025 (Part 34)	mg/l	3.2
16	Nitrite as NO ₂	IS 3025 (Part 34)	mg/l	2.8
17	Ammonical Nitrogen	IS 3025 (Part 34)	mg/l	3.6
18	Sulphate	IS 3025 (Part 24)	mg/l	114
19	Iron	IS 3025 (Part 53)	mg/l	0.066
20	Fluoride as F	IS 3025 (Part 60)	mg/l	0.446
21	Silica as SiO ₂	IS 3025 (Part 35)	mg/l	3.0

BDL = Below Detectable Limit; DL = Detection Limit

Deepa
Verified BY

A. Nagadevi

TECHNICAL MANAGER
ABM ENVIRO LAB

----- End of the Report -----



For ABM ENVIRO LAB

S. S. Sriniva Kumar
Authorized Signatory

Reviewed & Authorized by
Mr. S. SRINIVA KUMAR
Quality Manager
Authorized Signatory

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TEST REPORT

Report Number: ABMEL/TR-30/2025-2026		Report Date:21.02.2026	
Customer Name /Address	M/s. G.P. EXPORTS No.12/128, Kottanatham, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	BUFFER - II	Sample Code	ABMEL/W/30(a)
Date of Sampling	16.02.2026	Sample Description	Colourless liquid
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Liter

Discipline		Chemical Testing		
Product Name		Bore Water		
S.no	Parameters	Protocol	Unit	Result
1	pH	IS 3025 (Part 11)	-	6.90
2	Electrical Conductivity (EC)	IS 3025 (Part 14)	µs/cm	1223
3	Turbidity	IS 3025 (Part 10)	NTU	3.8
4	Temperature	IS 3025 (Part 9)	°C	25.2
5	Total Suspended Solids (TSS)	IS 3025 (Part 17)	mg/l	16
6	Total Dissolved Solids (TDS)	IS 3025 (Part 16)	mg/l	736
7	Chemical Oxygen Demand as COD	IS 3025 (Part 58)	mg/l	64
8	Biological Oxygen Demand at 27°C 3 days (BOD)	IS 302 (Part 44)	mg/l	12.6
9	Total Hardness as CaCO ₃	IS 3025 (Part 21)	mg/l	496
10	Calcium as Ca	IS 3025 (Part 40)	mg/l	151

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11	Magnesium as Mg	IS 3025 (Part 46)	mg/l	29
12	Chloride as Cl ⁻	IS 3025 (Part 32)	mg/l	142
13	Total Alkalinity as CaCO ₃	IS 3025 (Part 23)	mg/l	176
14	Total Phosphorus as P	IS3025 (Part 31)	mg/l	0.810
15	Nitrate as NO ₃	IS 3025 (Part 34)	mg/l	2.6
16	Nitrite as NO ₂	IS 3025 (Part 34)	mg/l	2.2
17	Ammonical Nitrogen	IS 3025 (Part 34)	mg/l	2.4
18	Sulphate	IS 3025 (Part 24)	mg/l	72
19	Iron	IS 3025 (Part 53)	mg/l	0.029
20	Fluoride as F	IS 3025 (Part 60)	mg/l	0.246
21	Silica as SiO ₂	IS 3025 (Part 35)	mg/l	2.0

BDL = Below Detectable Limit; DL = Detection Limit

Verified By
A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB

----- End of the Report -----



For ABM ENVIRO LAB

Authorized Signatory
Reviewed & Authorized by
Mr. S. SURYA KUMAR
Quality Manager
Authorized Signatory

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TC-18822

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TEST REPORT

Report Number: ABMEL/TR-30/2025-2026		Report Date:21.02.2026	
Customer Name /Address	M/s. G.P. EXPORTS No.12/128, K.Pichampatti, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	BUFFER - III	Sample Code	ABMEL/W/30(a)
Date of Sampling	16.02.2026	Sample Description	Colourless liquid
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Liter

Discipline		Chemical Testing		
Product Name		Bore Water		
S.no	Parameters	Protocol	Unit	Result
1	pH	IS 3025 (Part 11)	-	7.53
2	Electrical Conductivity (EC)	IS 3025(Part 14)	µs/cm	1753
3	Turbidity	IS 3025 (Part 10)	NTU	5.9
4	Temperature	IS3025 (Part 9)	°C	25.3
5	Total Suspended Solids (TSS)	IS 3025 (Part17)	mg/l	28
6	Total Dissolved Solids (TDS)	IS 3025 (Part16)	mg/l	1052
7	Chemical Oxygen Demand as COD	IS 3025 (Part 58)	mg/l	96
8	Biological Oxygen Demand at 27°C 3 days (BOD)	IS 302 (Part 44)	mg/l	17.1
9	Total Hardness as CaCO ₃	IS 3025 (Part21)	mg/l	824
10	Calcium as Ca	IS 3025 (Part 40)	mg/l	223

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11	Magnesium as Mg	IS 3025 (Part 46)	mg/l	65
12	Chloride as Cl ⁻	IS 3025 (Part 32)	mg/l	260
13	Total Alkalinity as CaCO ₃	IS 3025 (Part 23)	mg/l	144
14	Total Phosphorus as P	IS3025 (Part 31)	mg/l	0.914
15	Nitrate as NO ₃	IS 3025 (Part 34)	mg/l	2.6
16	Nitrite as NO ₂	IS 3025 (Part 34)	mg/l	2.4
17	Ammonical Nitrogen	IS 3025 (Part 34)	mg/l	2.3
18	Sulphate	IS 3025 (Part 24)	mg/l	106
19	Iron	IS 3025 (Part 53)	mg/l	0.052
20	Fluoride as F	IS 3025 (Part 60)	mg/l	0.416
21	Silica as SiO ₂	IS 3025 (Part 35)	mg/l	2.8

BDL = Below Detectable Limit; DL = Detection Limit

Deepa A
Verified By

A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB

End of the Report

Page 1 of 2



For ABM ENVIRO LAB

S. Suriya Kumar

Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory

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TC-18022

TEST REPORT

Report Number: ABMEL/TR-30/2025-2026		Report Date:21.02.2026	
Customer Name /Address	M/s. G.P. EXPORTS No.12/128, Thirumakkampatti, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	BUFFER - IV	Sample Code	ABMEL/W/30(a)
Date of Sampling	16.02.2026	Sample Description	Colourless liquid
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Liter

Discipline		Chemical Testing		
Product Name		Bore Water		
S.no	Parameters	Protocol	Unit	Result
1	pH	IS 3025 (Part 11)	-	7.59
2	Electrical Conductivity (EC)	IS 3025(Part 14)	µs/cm	1380
3	Turbidity	IS 3025 (Part 10)	NTU	3.8
4	Temperature	IS3025 (Part 9)	°C	25.2
5	Total Suspended Solids (TSS)	IS 3025 (Part17)	mg/l	24
6	Total Dissolved Solids (TDS)	IS 3025 (Part16)	mg/l	828
7	Chemical Oxygen Demand as COD	IS 3025 (Part 58)	mg/l	64
8	Biological Oxygen Demand at 27°C 3 days (BOD)	IS 302 (Part 44)	mg/l	11.8
9	Total Hardness as CaCO ₃	IS 3025 (Part21)	mg/l	584
10	Calcium as Ca	IS 3025 (Part 40)	mg/l	96

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11	Magnesium as Mg	IS 3025 (Part 46)	mg/l	84
12	Chloride as Cl ⁻	IS 3025 (Part 32)	mg/l	207
13	Total Alkalinity as CaCO ₃	IS 3025 (Part 23)	mg/l	220
14	Total Phosphorus as P	IS3025 (Part 31)	mg/l	0.826
15	Nitrate as NO ₃	IS 3025 (Part 34)	mg/l	2.7
16	Nitrite as NO ₂	IS 3025 (Part 34)	mg/l	2.5
17	Ammonical Nitrogen	IS 3025 (Part 34)	mg/l	2.9
18	Sulphate	IS 3025 (Part 24)	mg/l	65
19	Iron	IS 3025 (Part 53)	mg/l	0.036
20	Fluoride as F	IS 3025 (Part 60)	mg/l	0.312
21	Silica as SiO ₂	IS 3025 (Part 35)	mg/l	2.4
BDL = Below Detectable Limit; DL = Detection Limit				

Devi P
Verified BY

A. nagadevi

TECHNICAL MANAGER
ABM ENVIRO LAB



For ABM ENVIRO LAB

S. Surin Kumar
Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIN KUMAR
Quality Manager
Authorized Signatory

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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address	M/s. G.P. EXPORTS No.12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	Core Zone	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

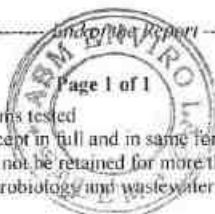
DISCIPLINE		CHEMICAL TESTING		
PRODUCT NAME		SOIL		
S.NO	PARAMETERS	PROTOCOL	UNIT	RESULT
1	Water Content (Moisture)	IS 2720 (Part 2)	%	2.4
2	pH	IS 2720 (Part 26)	----	7.16
3	Electrical Conductivity	IS14767	µmho/cm	258
4	Bulk Density	ABMEL/CH/S/SOP/04: (Issue No: 01, Issue Date: 03.06.2024)	g/cc	1.2
5	Water Holding capacity	ABMEL/CH/S/SOP/05: (Issue No: 01, Issue Date: 03.06.2024)	%	48
6	Water Soluble Calcium (as Ca) in saturation extract	ABMEL/CH/S/SOP/07: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	0.8
7	Water Soluble Magnesium (Mg) in saturation extract	ABMEL/CH/S/SOP/08: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	0.6
8	Water Soluble Chlorides (as Cl-) in saturation extract	ABMEL/CH/S/SOP/09: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	0.7
9	Organic Matter	IS 2720 (Part 22)	%	0.2
10	Calcium Carbonate	IS 2720 (Part 23)	%	12.48
11	TKN	IS 14684	mg/kg	598
12	Water Soluble Sodium (as Na) in saturation extract	ABMEL/CH/S/SOP/13: (Issue No: 01, Issue Date: 03.06.2024)	%	2.4
13	Water Soluble Potassium (as K) in saturation extract	ABMEL/CH/S/SOP/14: (Issue No: 01, Issue Date: 03.06.2024)	%	0.63

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For ABM ENVIRO LAB

Verified BY
A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB

S. Suriya Kumar
Authorized Signatory
Reviewed & Approved by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory



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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Vellagoundanpatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-I	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE		CHEMICAL TESTING		
PRODUCT NAME		SOIL		
S.NO	PARAMETERS	PROTOCOL	UNIT	RESULT
1	Water Content (Moisture)	IS 2720 (Part 2)	%	2.6
2	pH	IS 2720 (Part 26)	---	7.05
3	Electrical Conductivity	IS14767	µmho/cm	297
4	Bulk Density	ABMEL/CH/S/SOP/04: (Issue No: 01, Issue Date: 03.06.2024)	g/cc	1.06
5	Water Holding capacity	ABMEL/CH/S/SOP/05: (Issue No: 01, Issue Date: 03.06.2024)	%	56
6	Water Soluble Calcium (as Ca) in saturation extract	ABMEL/CH/S/SOP/07: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	1.2
7	Water Soluble Magnesium (Mg) in saturation extract	ABMEL/CH/S/SOP/08: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	0.6
8	Water Soluble Chlorides (as Cl-) in saturation extract	ABMEL/CH/S/SOP/09: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	0.9
9	Organic Matter	IS 2720 (Part 22)	%	0.26
10	Calcium Carbonate	IS 2720 (Part 23)	%	11.95
11	TKN	IS 14684	mg/kg	564
12	Water Soluble Sodium (as Na) in saturation extract	ABMEL/CH/S/SOP/13: (Issue No: 01, Issue Date: 03.06.2024)	%	2.3
13	Water Soluble Potassium (as K) in saturation extract	ABMEL/CH/S/SOP/14: (Issue No: 01, Issue Date: 03.06.2024)	%	0.43

BDL = Below Detectable Limit ; DL = Detection Limit

For ABM ENVIRO LAB

Deep A
Verified BY

A. Nagadevi

TECHNICAL MANAGER
ABM ENVIRO LAB



S. Surja Kumar
Authorized Signatory
Reviewed & Authorized by
Mr. S. SURYA KUMAR
Quality Manager
Authorized Signatory

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✉ suriyakumarsemban@gmail.com / abmenvirotech@gmail.com

TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Kottanatham, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-II	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE		CHEMICAL TESTING		
PRODUCT NAME		SOIL		
S.NO	PARAMETERS	PROTOCOL	UNIT	RESULT
1	Water Content (Moisture)	IS 2720 (Part 2)	%	1.9
2	pH	IS 2720 (Part 26)	---	7.16
3	Electrical Conductivity	IS14767	µmho/cm	185
4	Bulk Density	ABMEL/CH/S/SOP/04: (Issue No: 01, Issue Date: 03.06.2024)	g/cc	1.24
5	Water Holding capacity	ABMEL/CH/S/SOP/05:(Issue No: 01, Issue Date: 03.06.2024)	%	64
6	Water Soluble Calcium (as Ca) in saturation extract	ABMEL/CH/S/SOP/07: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	1.2
7	Water Soluble Magnesium (Mg) in saturation extract	ABMEL/CH/S/SOP/08: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	1.0
8	Water Soluble Chlorides (as Cl-) in saturation extract	ABMEL/CH/S/SOP/09: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	0.8
9	Organic Matter	IS 2720 (Part 22): 1972	%	0.3
10	Calcium Carbonate	IS 2720 (Part 23): 1976	%	12.05
11	TKN	IS 14684	mg/kg	548
12	Water Soluble Sodium (as Na) in saturation extract	ABMEL/CH/S/SOP/13: (Issue No: 01, Issue Date: 03.06.2024)	%	2.8
13	Water Soluble Potassium (as K) in saturation extract	ABMEL/CH/S/SOP/14: (Issue No: 01, Issue Date: 03.06.2024)	%	0.49

BDL = Below Detectable Limit ; DL = Detection Limit

For ABM ENVIRO LAB

Verified BY
A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB



Authorized Signatory
S. Suriya Kumar
Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory

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The date of issue of test report (exceptional for microbiology and wastewater for which retaining time 7 days)

ABM ENVIRO LAB

(A Unit of Aadhi Boomi Mining and Enviro Tech (P) Ltd.)



NIPBASS PLAZA
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Narasothipatti, Salem - 636004, Tamil Nadu
Mob: 9842729655, 9443290855



✉ suriyakumarsembun@gmail.com / abmenvirotech@gmail.com

TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, K.Pichampatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-III	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE		CHEMICAL TESTING		
PRODUCT NAME		SOIL		
S.NO	PARAMETERS	PROTOCOL	UNIT	RESULT
1	Water Content (Moisture)	IS 2720 (Part 2)	%	2.5
2	pH	IS 2720 (Part 26)	----	6.96
3	Electrical Conductivity	IS14767	µmho/cm	215
4	Bulk Density	ABMEL/CH/S/SOP/04: (Issue No: 01, Issue Date: 03.06.2024)	g/cc	1.04
5	Water Holding capacity	ABMEL/CH/S/SOP/05: (Issue No: 01, Issue Date: 03.06.2024)	%	44
6	Water Soluble Calcium (as Ca) in saturation extract	ABMEL/CH/S/SOP/07: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	1.8
7	Water Soluble Magnesium (Mg) in saturation extract	ABMEL/CH/S/SOP/08: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	1.0
8	Water Soluble Chlorides (as Cl-) in saturation extract	ABMEL/CH/S/SOP/09: (Issue No: 01, Issue Date: 03.06.2024)	meq/l	1.4
9	Organic Matter	IS 2720 (Part 22)	%	0.2
10	Calcium Carbonate	IS 2720 (Part 23)	%	11.55
11	TKN	IS 14684	mg/kg	537
12	Water Soluble Sodium (as Na) in saturation extract	ABMEL/CH/S/SOP/13: (Issue No: 01, Issue Date: 03.06.2024)	%	3.1
13	Water Soluble Potassium (as K) in saturation extract	ABMEL/CH/S/SOP/14: (Issue No: 01, Issue Date: 03.06.2024)	%	0.51

BDL = Below Detectable Limit ; DL = Detection Limit

For ABM ENVIRO LAB

A. Nagadevi
Verified BY

S. Suriya Kumar
Authorized Signatory

A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB



Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory

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ABM ENVIRO LAB

(A Unit of Aadhi Biocon Mining and Enviro Tech (P) Ltd.)

NIPRASS PLAZA

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✉ suriyakumarsenban@gmail.com / abmenvirotech@gmail.com



TEST REPORT

Report Number :ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Core Zone	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE			CHEMICAL TESTING		
PRODUCT NAME			SOIL		
S.NO	PARAMETERS		PROTOCOL	UNIT	RESULT
1	Texture	Sand	IS 10317	%	48
		Silt		%	32
		Clay		%	20
					Sandy Loam
BDL = Below Detectable Limit ; DL = Detection Limit					

Deepa A
Verified BY
A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB

For ABM ENVIRO LAB
S. Suresh Kumar
Authorized Signatory
Reviewed & Approved by
Mr. S. SURESH KUMAR
Quality Manager
Authorized Signatory



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ABM ENVIRO LAB

(A Unit of Aadhi Broom Mining and Enviro Tech (P) Ltd.)

NIPBASS PLAZA

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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Vellagoundanpatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-I	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE			CHEMICAL TESTING		
PRODUCT NAME			SOIL		
S.NO	PARAMETERS		PROTOCOL	UNIT	RESULT
1	Texture	Sand	IS 10317	%	54
		Silt		%	24
		Clay		%	22
		Sandy Clay Loam			
BDL = Below Detectable Limit ; DL = Detection Limit					

Verified BY

A. Nagadevi

TECHNICAL MANAGER
ABM ENVIRO LAB

For ABM ENVIRO LAB

Authorized Signatory

Reviewed & Authorized by
Mr. S. SURYA KUMAR
Quality Manager
Authorized Signatory

End of the Report



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ABM ENVIRO LAB

(A Unit of Andhra Pradesh Mining and Enviro Tech (P) Ltd.)

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Mob: 9842729655, 9443290855

suriyakumarsemban@gmail.com / abmenvirotech@gmail.com



TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Kottanatham, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-II	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE			CHEMICAL TESTING		
PRODUCT NAME			SOIL		
S.NO	PARAMETERS		PROTOCOL	UNIT	RESULT
1	Texture	Sand	IS 10317	%	52
		Silt		%	28
		Clay		%	20
					Sandy Loam
BDL = Below Detectable Limit ; DL = Detection Limit					

Deef.A
Verified BY
A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB

For ABM ENVIRO LAB

S. Suresh Kumar
Authorized Signatory

Reviewed & Authorized by
Mr. S. SURESH KUMAR
Quality Manager
Authorized Signatory



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ABM ENVIRO LAB

(A Unit of Aadhi Room Mining and Enviro Tech (P) Ltd.)

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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, K.Pichampatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-III	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE			CHEMICAL TESTING		
PRODUCT NAME			SOIL		
S.NO	PARAMETERS		PROTOCOL	UNIT	RESULT
1	Texture	Sand	IS 10317	%	48
		Silt		%	28
		Clay		%	24
					Sandy Loam
BDL = Below Detectable Limit ; DL = Detection Limit					

A. Nagadevi
Verified BY
TECHNICAL MANAGER
ABM ENVIRO LAB

For ABM ENVIRO LAB

S. S. Kumar
Authorized Signatory

Reviewed & Authorized by
Mr. S. S. KUMAR
Quality Manager
Authorized Signatory



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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Thirumakkampatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-IV	Sample Code	ABMEL/S/30(b)
Date of Sampling	16.02.2026	Sample Description	Brown
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	1Kg

DISCIPLINE			CHEMICAL TESTING		
PRODUCT NAME			SOIL		
S.NO	PARAMETERS		PROTOCOL	UNIT	RESULT
1	Texture	Sand	IS 10317	%	52
		Silt		%	28
		Clay		%	20
					Sandy Loam
BDL = Below Detectable Limit ; DL = Detection Limit					

Verified BY
A. Nagadevi
TECHNICAL MANAGER
ABM ENVIRO LAB

For ABM ENVIRO LAB
S. Suriya Kumar
Authorized Signatory
Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory



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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address	M/s. G.P. EXPORTS No.12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	Core Zone	Sample Code	ABMEL/A/30(c)
Date of Sampling	16.02.2026	Sample Description	Ambient Air
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	Filter Paper, 25ml Absorbing Solution

Discipline		Chemical Testing		
Product Name		Atmospheric Pollution		
S.no	Parameters	Protocol	Unit	Result
1	Particulate Matter (less than 2.5-micron size particles as PM _{2.5})	IS 5182 (Part 24)	µg/m ³	27
2	Respirable Particulate Matter (less than 10-micron size particles as PM ₁₀)	IS 5182 (Part 23)	µg/m ³	49
3	Sulphur dioxide(SO ₂)	IS 5182 (Part 2)	µg/m ³	15
4	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6	µg/m ³	22
5	Ozone (O ₃)	IS 5182(Part 9)	µg/m ³	35
6	Ammonia (NH ₃)	IS 5182 (Part 25)	µg/m ³	29
7	Lead	IS 5182 (Part 22)	µg/m ³	BDL(DL:0.1)
8	Nickel	IS 5182 (Part -26)	ng/m ³	BDL(DL:0.1)

BDL = Below Detectable Limit; DL = Detection Limit

Verified BY

(V. Kalai Veeni)

For ABM ENVIRO LAB

Authorized Signatory

Reviewed by

Mr. S. S. SURESH Kumar

Quality Manager

Authorized Signatory

----- End of the Report -----

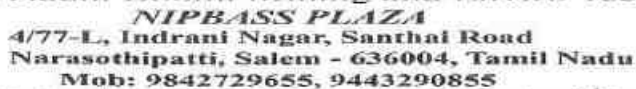


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 suriyakumarsemban@gmail.com / abmenyvirotech@gmail.com

TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address	M/s. G.P. EXPORTS No.12/128, Vellagoundanpatti, K. Pitchampatti, Karur Taluk, Karur District.		
Sample Mark	Buffer Zone-I	Sample Code	ABMEL/A/30(c)
Date of Sampling	16.02.2026	Sample Description	Ambient Air
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	Filter Paper, 25ml Absorbing Solution

Discipline Product Name		Chemical Testing Atmospheric Pollution		
S.no	Parameters	Protocol	Unit	Result
1	Particulate Matter (less than 2.5-micron size particles as PM _{2.5})	IS 5182 (Part 24)	µg/m ³	28
2	Respirable Particulate Matter (less than 10-micron size particles as PM ₁₀)	IS 5182 (Part 23)	µg/m ³	44
3	Sulphur dioxide(SO ₂)	IS 5182 (Part 2)	µg/m ³	12
4	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6	µg/m ³	25
5	Ozone (O ₃)	IS 5182(Part 9)	µg/m ³	32
6	Ammonia (NH ₃)	IS 5182 (Part 25)	µg/m ³	26
7	Lead	IS 5182 (Part 22)	µg/m ³	BDL(DL:0.1)
8	Nickel	IS 5182 (Part -26)	ng/m ³	BDL(DL:0.1)

BDL = Below Detectable Limit; DL = Detection Limit

For ABM ENVIRO LAB

D. Prigalis
Authorized Signatory

Reviewed and Approved by
Mr. S. J. ... KOSMAR
Quality Manager
Authorized Signatory

Verified BY *V. S. Singh*

(v. kəkrivahi)



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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Kottanatham, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-II	Sample Code	ABMEL/A/30(c)
Date of Sampling	16.02.2026	Sample Description	Ambient Air
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	Filter Paper, 25ml Absorbing Solution

Discipline		Chemical Testing		
Product Name		Atmospheric Pollution		
S.no	Parameters	Protocol	Unit	Result
1	Particulate Matter (less than 2.5-micron size particles as PM _{2.5})	IS 5182 (Part 24)	µg/m ³	24
2	Respirable Particulate Matter (less than 10-micron size particles as PM ₁₀)	IS 5182 (Part 23)	µg/m ³	48
3	Sulphur dioxide(SO ₂)	IS 5182 (Part 2)	µg/m ³	11
4	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6	µg/m ³	21
5	Ozone (O ₃)	IS 5182(Part 9)	µg/m ³	30
6	Ammonia (NH ₃)	IS 5182 (Part 25)	µg/m ³	24
7	Lead	IS 5182 (Part 22)	µg/m ³	BDL(DL:0.1)
8	Nickel	IS 5182 (Part -26)	ng/m ³	BDL(DL:0.1)
BDL = Below Detectable Limit; DL = Detection Limit				

Verified BY
(V. Kalairani)



For ABM ENVIRO LAB

Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory

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suriyakumarsemban@gmail.com / abmenvirotech@gmail.com



TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, K.Pichampatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-III	Sample Code	ABMEL/A/30(c)
Date of Sampling	16.02.2026	Sample Description	Ambient Air
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	Filter Paper, 25ml Absorbing Solution

Discipline		Chemical Testing		
Product Name		Atmospheric Pollution		
S.no	Parameters	Protocol	Unit	Result
1	Particulate Matter (less than 2.5-micron size particles as PM _{2.5})	IS 5182 (Part 24)	µg/m ³	29
2	Respirable Particulate Matter (less than 10-micron size particles as PM ₁₀)	IS 5182 (Part 23)	µg/m ³	46
3	Sulphur dioxide(SO ₂)	IS 5182 (Part 2)	µg/m ³	13
4	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6	µg/m ³	23
5	Ozone (O ₃)	IS 5182(Part 9)	µg/m ³	36
6	Ammonia (NH ₃)	IS 5182 (Part 25)	µg/m ³	30
7	Lead	IS 5182 (Part 22)	µg/m ³	BDL(DL:0.1)
8	Nickel	IS 5182 (Part -26)	ng/m ³	BDL(DL:0.1)

BDL = Below Detectable Limit; DL = Detection Limit

Verified BY

CV Kalai Vani



For ABM ENVIRO LAB

S. Suriya Kumar

Authorized Signatory

Reviewed & Authorized by

Mr. S. SURIYA KUMAR

Quality Manager

Authorized Signatory

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ABM ENVIRO LAB

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Narasothipatti, Salem - 636004, Tamil Nadu
Mob: 9842729655, 9443290855

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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Thirumakkampatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-IV	Sample Code	ABMEL/A/30(d)
Date of Sampling	16.02.2026	Sample Description	Ambient Air
Sample Received on	17.02.2026	Sampling Method	ABMEL/QSP/20
Test Commenced on	17.02.2026	Sample BY	Customer
Test Completed on	21.02.2026	Sample Quantity	Filter Paper, 25ml Absorbing Solution

Discipline		Chemical Testing		
Product Name		Atmospheric Pollution		
S.no	Parameters	Protocol	Unit	Result
1	Particulate Matter (less than 2.5-micron size particles as PM _{2.5})	IS 5182 (Part 24)	µg/m ³	31
2	Respirable Particulate Matter (less than 10-micron size particles as PM ₁₀)	IS 5182 (Part 23)	µg/m ³	47
3	Sulphur dioxide(SO ₂)	IS 5182 (Part 2)	µg/m ³	14
4	Oxides of Nitrogen (NO ₂)	IS 5182 Part 6	µg/m ³	24
5	Ozone (O ₃)	IS 5182(Part 9)	µg/m ³	34
6	Ammonia (NH ₃)	IS 5182 (Part 25)	µg/m ³	27
7	Lead	IS 5182 (Part 22)	µg/m ³	BDL(DL:0.1)
8	Nickel	IS 5182 (Part -26)	ng/m ³	BDL(DL:0.1)
BDL = Below Detectable Limit; DL = Detection Limit				

Verified BY

(V. Karthikeyan)

For ABM ENVIRO LAB

Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory



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The date of issue of test report (exceptional for microbiology and wastewater for which retaining time 7 days)

ABM ENVIRO LAB

(A Unit of Aadhi Boomi Mining and Enviro Tech (P) Ltd.)



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TC-18822

TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Thalappatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Core Zone	Sample Code	ABMEL/N/30(d)
Date of Sampling	16.02.2026	Sample Description	Sound Level
Data Received on	17.02.2026	Sampling Method	ABMEL/QSP/20

DISCIPLINE		CHEMICAL TESTING			
PRODUCT NAME		NOISE			
S.NO	PARAMETERS	PROTOCOL	UNIT	LOCATION	RESULT
1	Sound Level	IS 9989	dB(A)	N	42.9
2				W	47.2
3				E	44.5
4				S	39.9
5				Core Zone	44.1
BDL = Below Detectable Limit; DL = Detection Limit					

N. Long
Verified By

C.V. Kalavani

For ABM ENVIRO LAB

Authorized Signatory

Reviewed & Approved by

Mr. S. SUBRAMANIAM
Quality Manager
Authorized Signatory



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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Vellagoundanpatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-I	Sample Code	ABMEL/N/30(d)
Date of Sampling	16.02.2026	Sample Description	Sound Level
Data Received on	17.02.2026	Sampling Method	ABMEL/QSP/20

DISCIPLINE		CHEMICAL TESTING			
PRODUCT NAME		NOISE			
S.NO	PARAMETERS	PROTOCOL	UNIT	LOCATION	RESULT
1	Sound Level	IS 9989	dB(A)	Vellagoundanpatti	41.4
BDL = Below Detectable Limit; DL = Detection Limit					

For ABM ENVIRO LAB

Verified By

C. K. Kalaiyanni

Authorized Signatory

Reviewed & Authorized by

Mr. S. SURIYA KUMAR

Quality Manager

Authorized Signatory



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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, Kottanatham, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-II	Sample Code	ABMEL/N/30(d)
Date of Sampling	16.02.2026	Sample Description	Sound Level
Data Received on	17.02.2026	Sampling Method	ABMEL/QSP/20

DISCIPLINE		CHEMICAL TESTING			
PRODUCT NAME		NOISE			
S.NO	PARAMETERS	PROTOCOL	UNIT	LOCATION	RESULT
1	Sound Level	IS 9989	dB(A)	Kottanatham	38.9
BDL = Below Detectable Limit; DL = Detection Limit					

Verified By

(V. Kalaiarani)

For ABM ENVIRO LAB

(Signature)
Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory



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TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, K.Pichampatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-III	Sample Code	ABMEL/N/30(d)
Date of Sampling	16.02.2026	Sample Description	Sound Level
Data Received on	17.02.2026	Sampling Method	ABMEL/QSP/20

DISCIPLINE		CHEMICAL TESTING			
PRODUCT NAME		NOISE			
S.NO	PARAMETERS	PROTOCOL	UNIT	LOCATION	RESULT
1	Sound Level	IS 9989	dB(A)	K.Pichampatti	41.3
4BDL = Below Detectable Limit; DL = Detection Limit					

For ABM ENVIRO LAB

Verified By

(V. Kalairani)

Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory



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TC-15822

TEST REPORT

Report Number : ABMEL/TR-30/2025-2026		Report Date: 21.02.2026	
Customer Name/Address		M/s. G.P. EXPORTS No.12/128, ThirumakkamPatti, K. Pitchampatti, Karur Taluk, Karur District.	
Sample Mark	Buffer Zone-IV	Sample Code	ABMEL/N/30(d)
Date of Sampling	16.02.2026	Sample Description	Sound Level
Data Received on	17.02.2026	Sampling Method	ABMEL/QSP/20

DISCIPLINE		CHEMICAL TESTING			
PRODUCT NAME		NOISE			
S.NO	PARAMETERS	PROTOCOL	UNIT	LOCATION	RESULT
1	Sound Level	IS 9989	dB(A)	ThirumakkamPatti	41.6
4BDL = Below Detectable Limit; DL = Detection Limit					

Verified By

C. V. Kalai Vani

For ABM ENVIRO LAB

S. Suriya Kumar
Authorized Signatory

Reviewed & Authorized by
Mr. S. SURIYA KUMAR
Quality Manager
Authorized Signatory



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